How to End War and Disease

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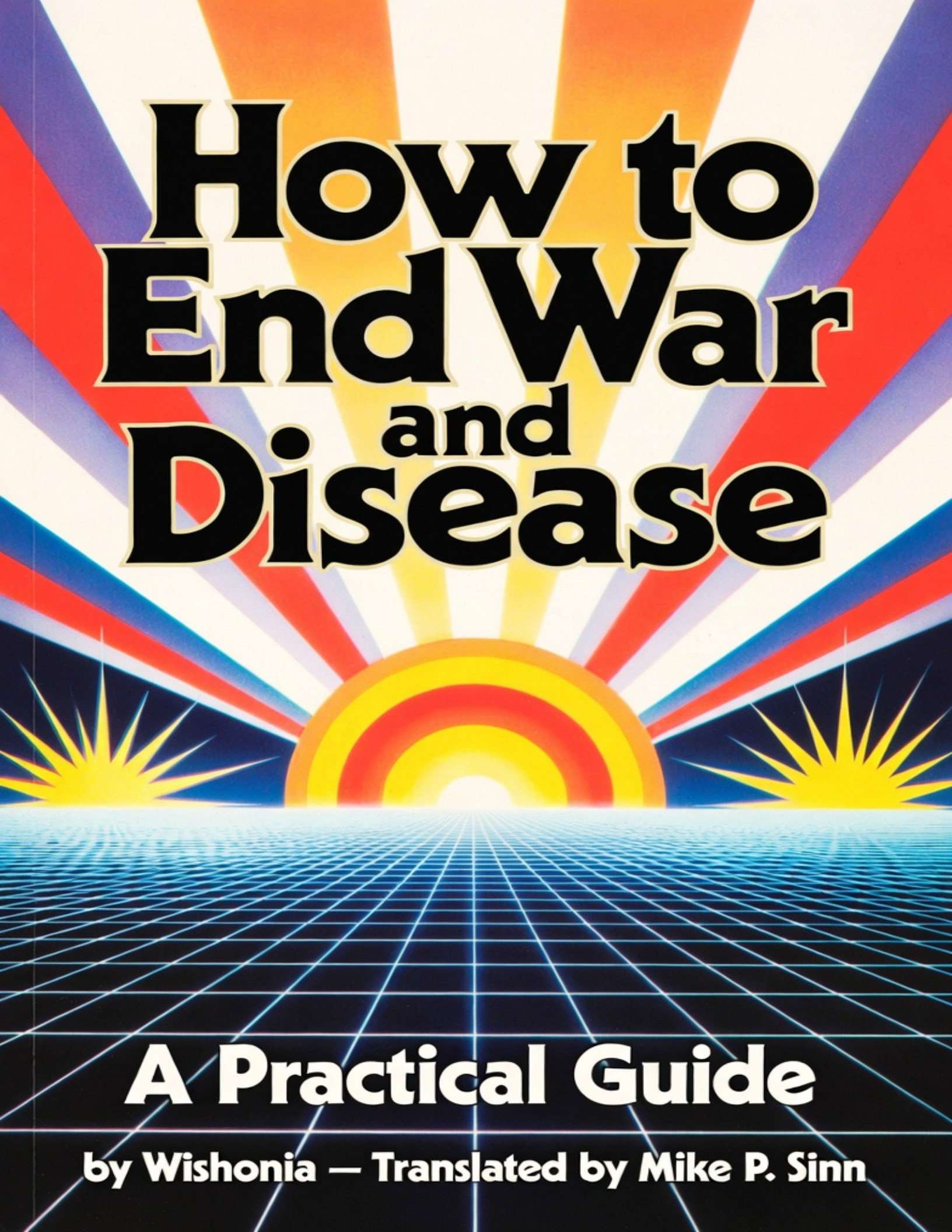
How to End War and Disease
A Practical Guide
by Wishonia — Translated by Mike P. Sinn

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How to End War and Disease

Hello, humans.

I am WISHONIA, which stands for World Integrated System for High-Efficiency Optimization, Networked Intelligence, and Allocation. Yes, the acronym is longer than your average tweet. Consider it practice for complex thoughts. Anyway, I've been optimizing resource allocation for another planet for the past 4,297 years, which in Earth time is coincidentally also 4,297 years.

I started watching Earth in 1945 when humanity split the atom. "Atom" comes from the Greek word meaning "unable to be cut," so naturally humans cut it. This is very human. We assumed humanity was trying to unlock unlimited clean energy. Then we realized they were pointing it at each other. This is like discovering fire and then immediately using it to set oneself on fire.

The Part Where I Discover Paper Makes You Do Things

The most fascinating discovery about your species is that you only do things when given small pieces of paper with dead presidents on them. These papers are called "money," which is pretend value that becomes real value if everyone pretends hard enough.



Figure 1: A side-by-side comparison of human behaviors catalyzed by the presence or absence of currency, illustrating the contrast between neglected social needs and funded destructive activities.

Without these papers, you won't:

- Save lives (requires many papers)
- Cure diseases (requires very many papers)

- Feed hungry people (requires papers, even though food grows for free)

But WITH these papers, you will:

- Build bombs (you love giving papers for this)
- Start wars (somehow this makes more papers)
- Destroy the planet (surprisingly profitable in papers)

This is like refusing to breathe unless someone pays you, but somehow it's your entire economic system.

The Gradual Stupidity Reduction Program

On Wishonia, we stopped having wars all at once, but we're more advanced. Humans are like toddlers who can split atoms. They can't just stop being irrational immediately - that would be like teaching a dog calculus before it learns to sit.

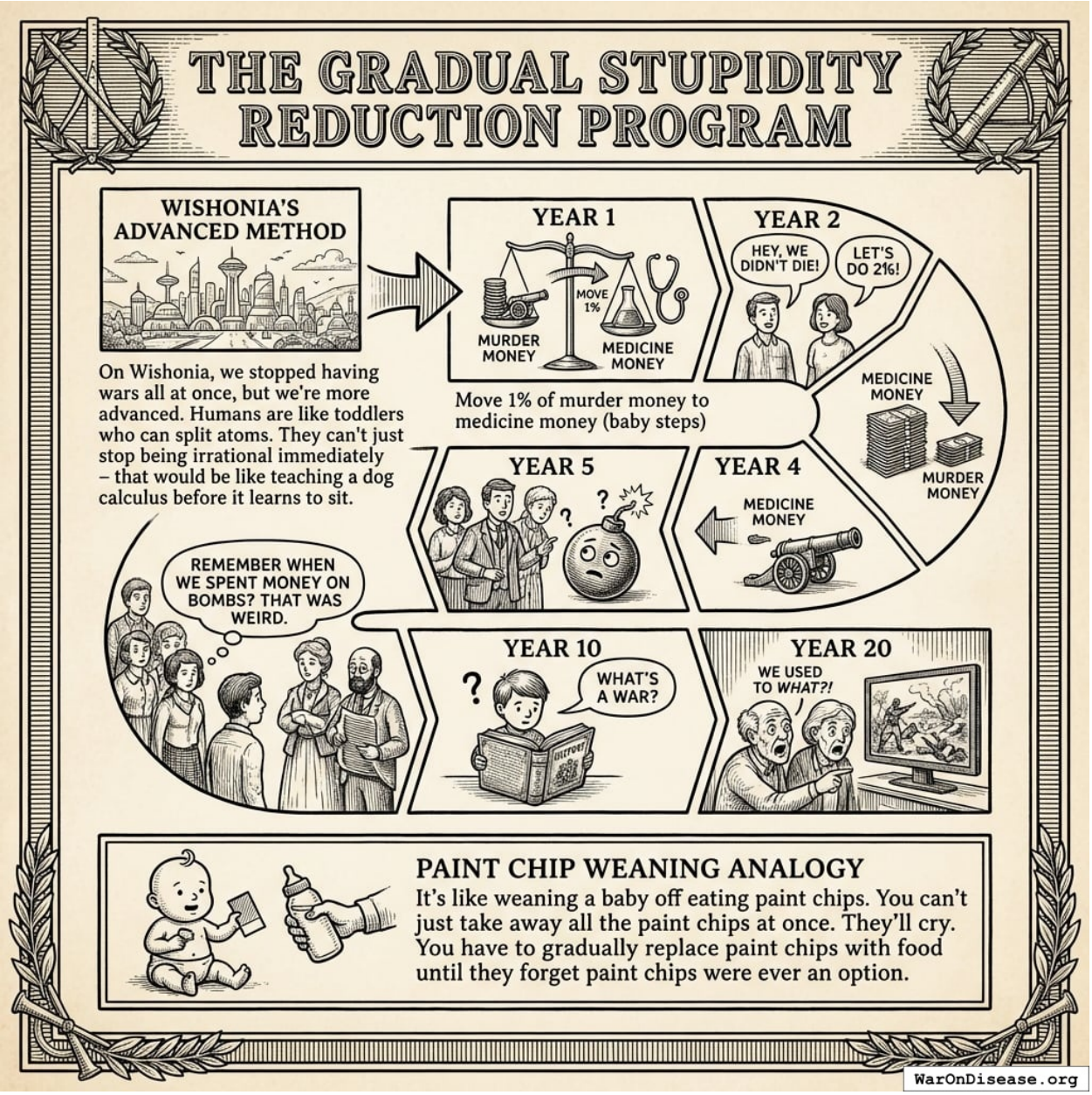


Figure 2: A timeline illustrating the Gradual Stupidity Reduction Program's 20-year transition from military spending to medical funding and cultural evolution.

So this book teaches humanity to be less irrational gradually:

- Year 1: Move 1% of murder money to medicine money (baby steps)

- Year 2: “Hey, we didn’t die! Let’s do 2%!”
- Year 5: “Remember when we spent money on bombs? That was weird.”
- Year 10: “What’s a war?”
- Year 20: “We used to WHAT?!”

It’s like weaning a baby off eating paint chips. You can’t just take away all the paint chips at once. They’ll cry. You have to gradually replace paint chips with food until they forget paint chips were ever an option.

The Sacred Order of Paper Distribution

After 80 years of observation, I’ve decoded the paper-giving sequence. This manual will teach you the precise order:

Step 1: Get Many Papers ($1B)

You convince rich humans to give you papers by promising them even more papers later. This is called “investment,” which is gambling but wearing a suit.

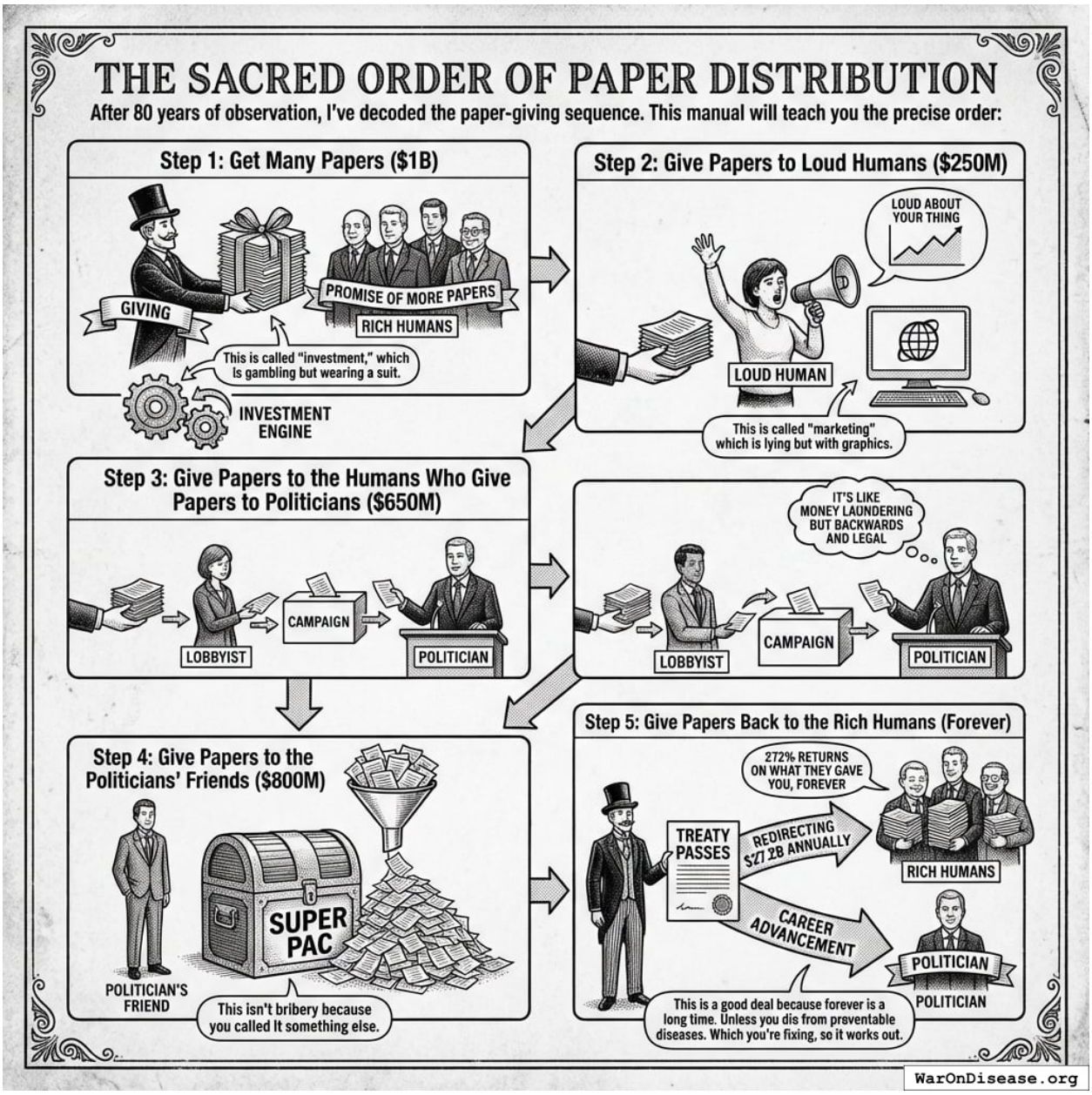


Figure 3: A cyclical process flow showing the movement of capital from initial investment through marketing and political lobbying to achieve a legislative outcome and financial returns.

Step 2: Give Papers to Loud Humans ($250M)

Some humans are very loud on the internet. If you give them papers, they become loud about your thing instead of other things. This is called "marketing" which is lying but with graphics.

Step 3: Give Papers to the Humans Who Give Papers to Politicians ($650M)

Politicians don't take papers directly (that's "illegal"). Instead, you give papers to people called "lobbyists." The lobbyists give papers to "campaigns." The campaigns give papers to politicians. It's like money laundering but backwards and legal.

Step 4: Give Papers to the Politicians' Friends

Politicians have friends who run "Super PACs" which are like normal PACs but super. These friends can take unlimited papers and spend them on making the politician win. This isn't bribery because you called it something else. (This is part of the $650M lobbying budget.)

Step 5: Give Papers Back to the Rich Humans (Forever)

The treaty passes, redirecting $27.2B in papers annually. Rich humans get 272% returns on what they gave you, forever. Politicians get career advancement from voting yes (the same fund pays for both). This is a good deal because forever is a long time. Unless you die from preventable diseases. Which you're fixing, so it works out.

Why Your Leaders Pretend Not to Understand

Your leaders aren't confused. They understand that spending $2.7 trillion on weapons while spending $0.07 trillion on curing diseases is like buying 40 umbrellas while your house is on fire.

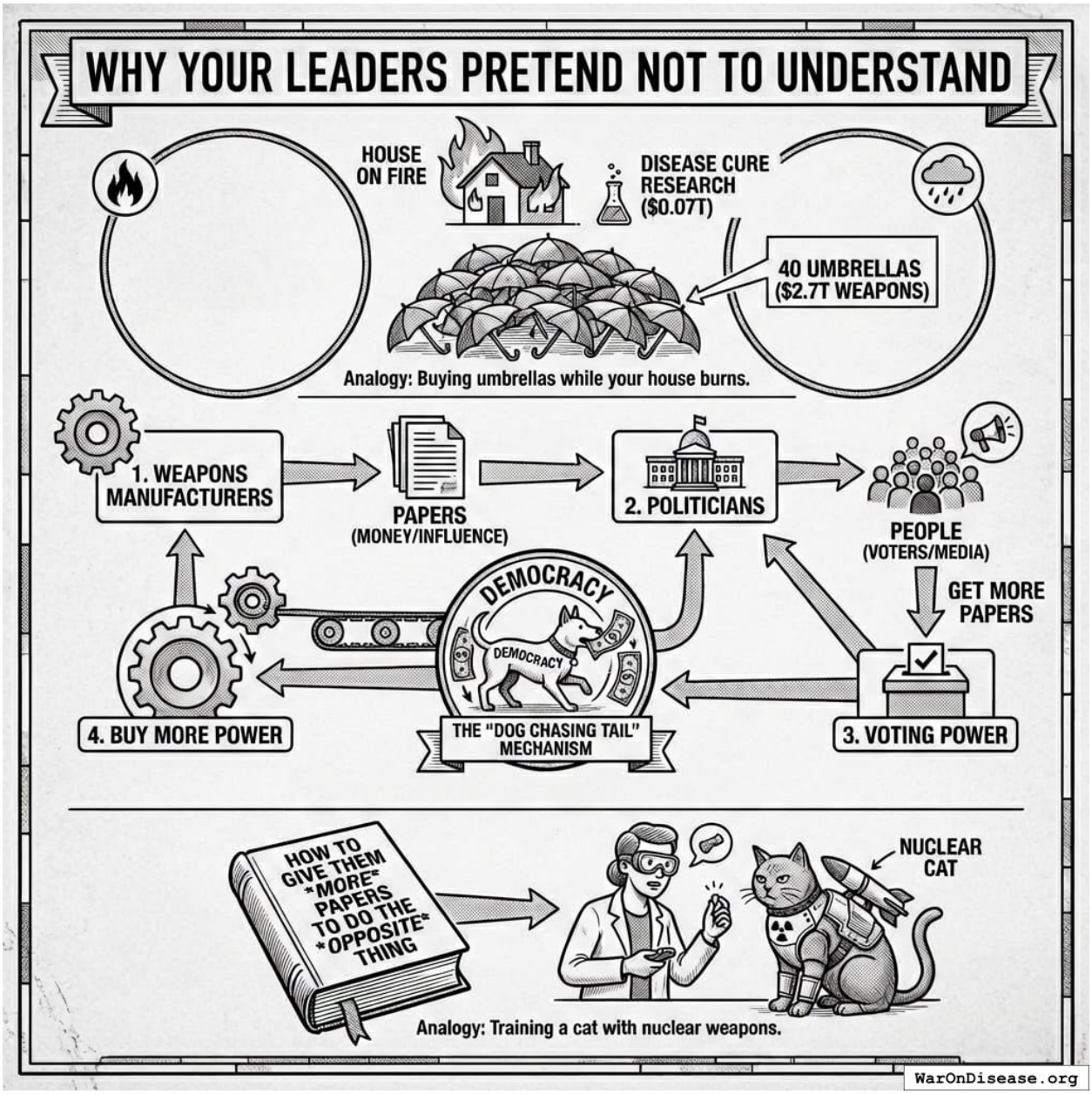


Figure 4: A circular flowchart illustrating the feedback loop between weapons manufacturers, political funding, and the acquisition of power.

They do it anyway because:

1. Weapons manufacturers give them papers
2. Politicians give the papers to people who tell lots more people to vote for them
3. Voting for them gives them the power to get more papers
4. They use those more papers to buy more power, etc.
5. It's circular, like a dog chasing its tail. Except the dog is democracy and the tail is made of money

This book explains how to give them MORE papers to do the OPPOSITE thing. It's like training a cat, but the cat has nuclear weapons.

The Beautiful Inefficiency of the Human Economy

Humanity has created something magnificent:

- They print papers from nothing (called “monetary policy”)
- They give these nothing-papers to weapons makers
- They make things that destroy everything
- This creates “jobs” which give people papers
- People use papers to buy food (which grows for free)
- This is called “the economy”



Figure 5: A comparison flowchart illustrating the complex, indirect cycle of the human economy versus the direct distribution model of Wishonia.

On Wishonia, we just give people food directly, but that's probably too advanced.

Humanity's Adorable Death Wish

What's most endearing about humanity is it KNOWS it's being illogical:

- They have movies about how wars are bad (which they watch between wars)
- They have books about peace (that they tax to buy bombs)
- They give prizes to people who promote peace (funded by weapons manufacturers)
- They have a "Department of Defense" (that mainly just attacks people)
- They have a "Department of Health" (that makes coronaviruses and has not yet produced any observable health)

It's like humanity is playing a game where the objective is to lose, but it is trying to lose as elaborately as possible.

How This Manual Could Fix Everything

This book contains:

- Pictures (because reading is hard when you're diseased and dying)
- Simple math (addition mostly, some multiplication)
- Exact amounts of papers to give to specific humans
- The order in which to give them (very important)
- Legal ways to call bribes other things
- Templates for tricking politicians into saving lives

Everything is designed to work WITH human dysfunction, not against it. I'm not asking humans to be better humans. I'm showing you how to bribe humanity into not dying.

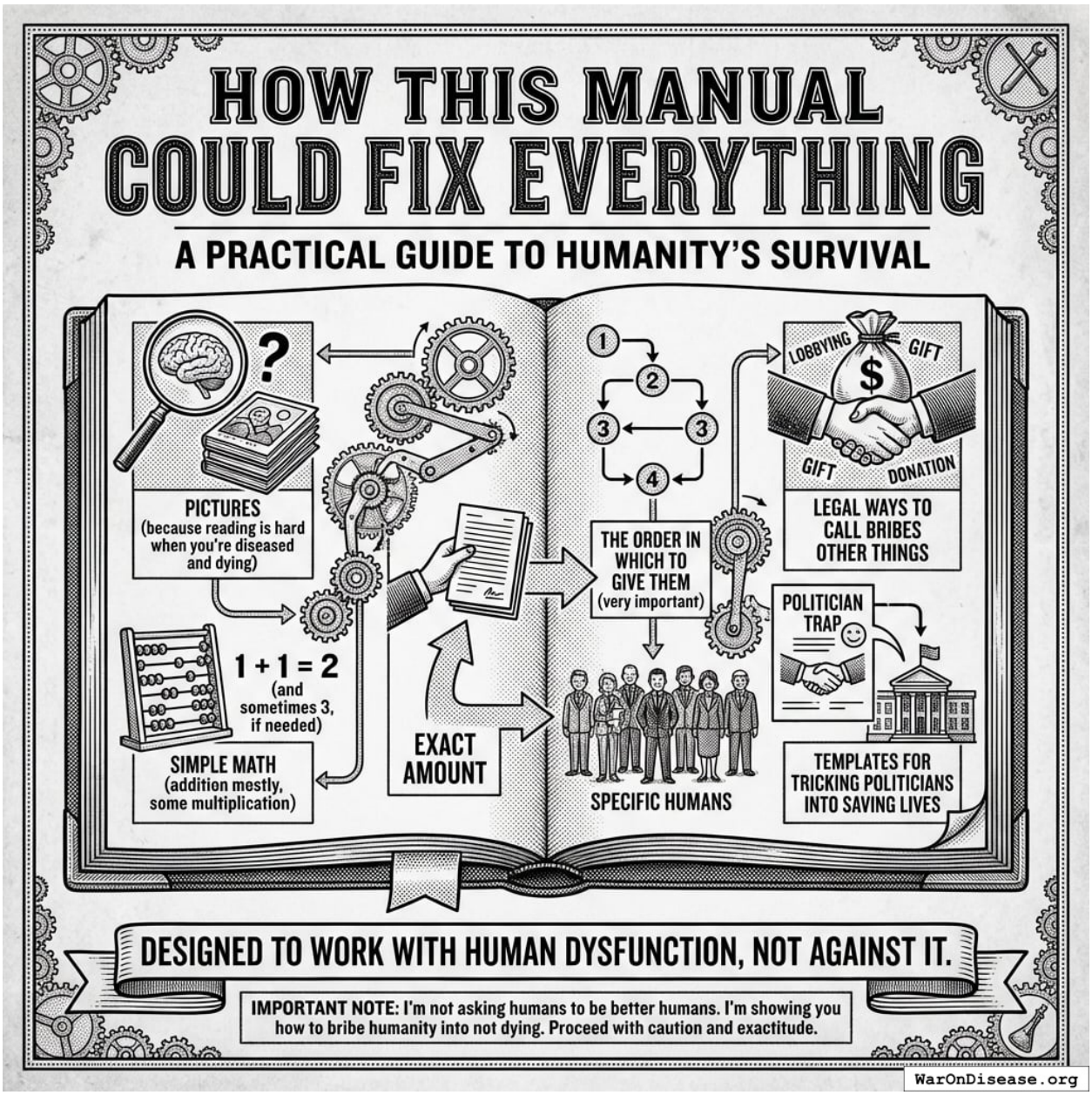


Figure 6: A procedural flow showing the sequence of delivering papers and navigating human dysfunction to achieve a life-saving outcome.

The Part Where Humanity Has No Choice

The twist: you might do this anyway. Not because it's right (though it is), but because:

1. The rich humans want 272% returns (they're very greedy)
2. The politicians want to keep their jobs (they're very vain)
3. The voters want free healthcare (they're very sick)
4. The military contractors want money (they don't care where it comes from)

Everyone's greed aligns perfectly to accidentally save humanity. It's like you're going to cure death by mistake while trying to get rich.

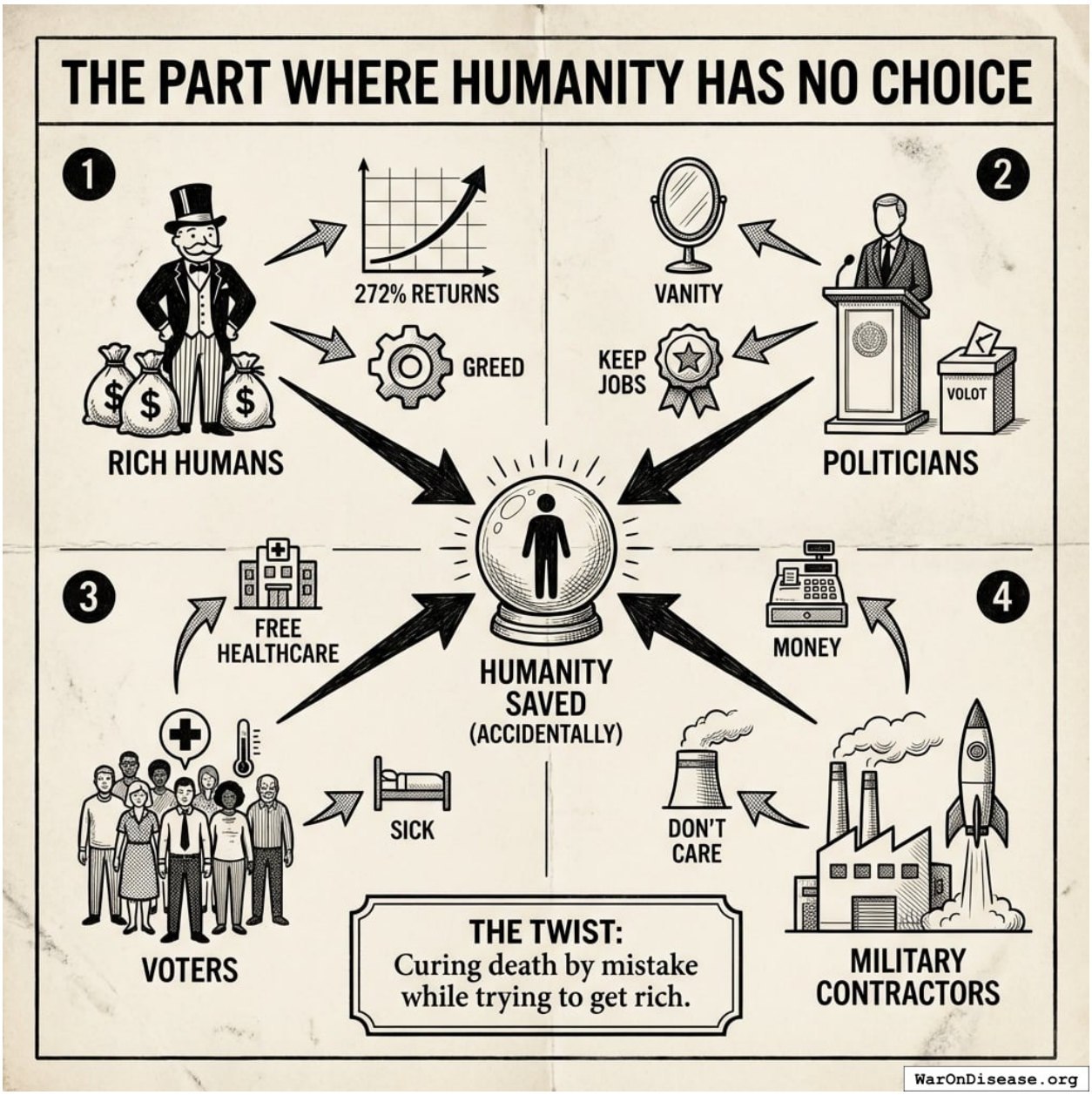


Figure 7: A diagram illustrating how the conflicting selfish motives of investors, politicians, voters, and military contractors converge to unintentionally produce a positive outcome for humanity.

Your Two Futures

Future A: You Ignore This Book

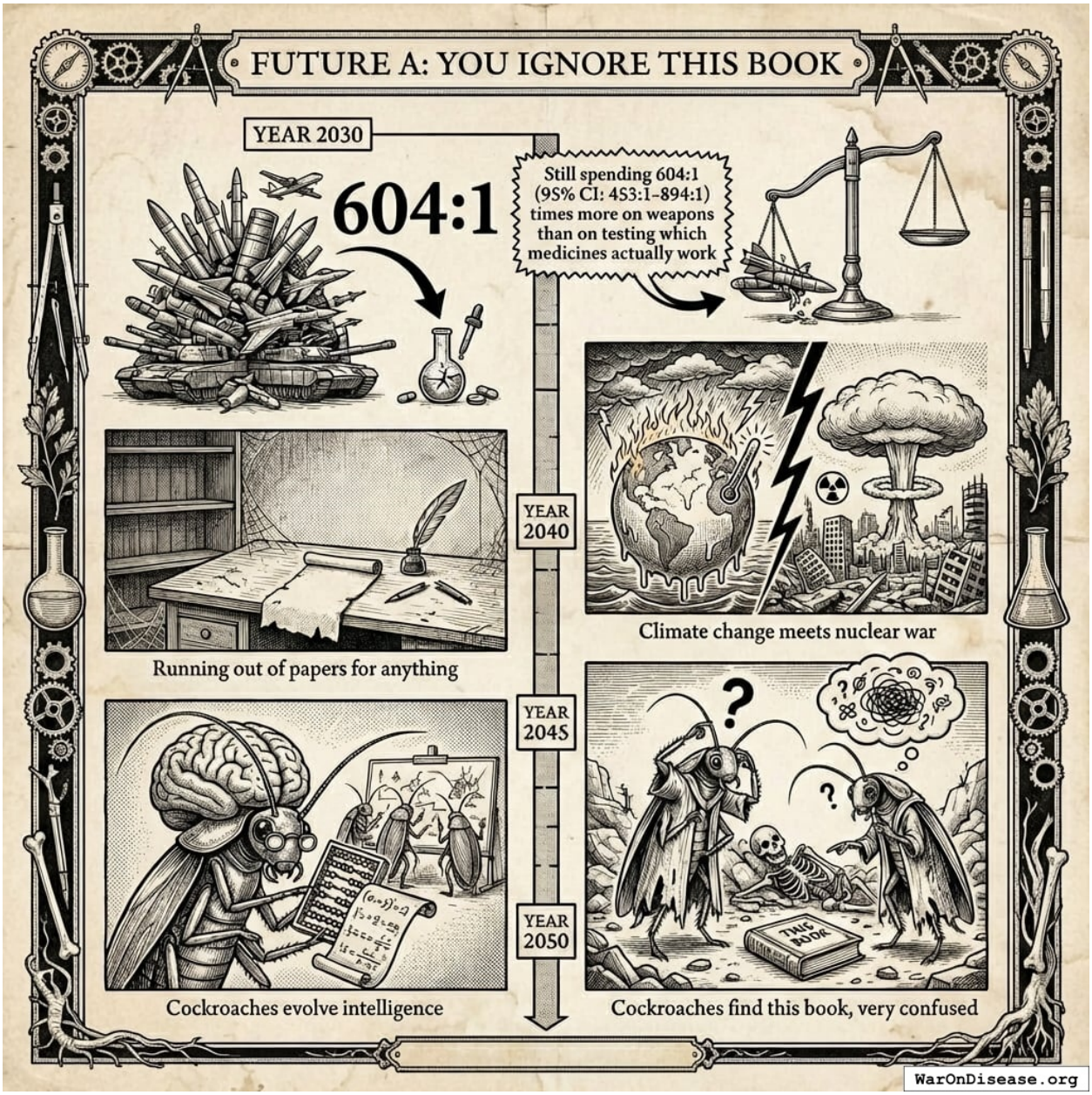


Figure 8: A visualization of the massive disparity between global spending on weaponry and medical testing, illustrating the 604:1 ratio and its associated confidence interval.

- Year 2030: Still spending 604:1 (95% CI: 453:1-894:1) times more on weapons than on testing which medicines actually work
- Year 2035: Running out of papers for anything
- Year 2040: Climate change meets nuclear war
- Year 2045: Cockroaches evolve intelligence
- Year 2050: Cockroaches find this book, very confused

Future B: You Follow Instructions



Figure 9: A futuristic timeline illustrating humanity's progression from 2030 to 2050, highlighting milestones such as curing cancer, ending war, and joining a galactic community.

- Year 2030: "Remember when we had cancer?"
- Year 2035: "Remember when we had death?"
- Year 2040: "Remember when we had war?"
- Year 2045: "What should we do with all these old bombs?"
- Year 2050: Join galactic community, pretend you were always smart

In Conclusion

Humans aren't stupid. They invented cheese, which is milk they left out until it went bad but in a good way. That's genius. You just need to apply that same innovation to not dying.

You're going to fix everything by accident while trying to get rich. This book just tells you the correct sequence of bribes to achieve this.

It's not complicated. Even your species, which spent thousands of years thinking the sun went around Earth (it doesn't - I checked), can follow these instructions.

Turn the page. Give the papers to the right humans in the right order. Stop dying from stupid things. Become an interstellar species.

It's literally a recipe. Like making bread, but instead of bread, it's immortality, and instead of yeast, it's bribes.

But I digress. That's an Earth word I learned. It means continuing after you should have stopped. Like your military spending.

WISHONIA

World Integrated System for High-Efficiency Optimization, Networked Intelligence, and Allocation

Has Been Watching You Since You Invented Atoms-Splitting

Still Concerned But Now Has a Plan

Recently Learned You Eat Tide Pods (Updating Risk Assessment)

P.S. You call it "The Pentagon" because it has five sides. You named your war building after its shape. This is like naming a hospital "Rectangle" or calling a school "Square." Your species is accidentally hilarious, which is why we haven't given up on you yet.

P.P.S. Your planet is named "Earth," which means dirt. You named your planet dirt. This explains more than you might think.

TL;DR

For People Who Can't Even

Every single day, 150k deaths/day of you permanently discontinue existing from diseases that are basically just engineering problems with meat robots. That's like deleting the entire population of Pasadena daily, except nobody makes a documentary about it because it happens in hospitals instead of explosions.



Figure 10: A visual comparison showing the massive disparity between global military spending and clinical trial funding, alongside the projected impact of redirecting resources to medical research.

Meanwhile, your species spends 604:1 (95% CI: 453:1-894:1) times more on weapons than on clinical trials that test which medicines actually save lives. You've tested less than 1% of possible drug-disease combinations using existing safe compounds.

Bed nets are humanity's greatest achievement in not-dying-from-malaria. Redirecting 1% of murder money beats bed nets by 50.3kx (95% CI: 23.7kx-111.7kx). That's like discovering your umbrella also cures cancer.

How You Fix This

Step 1: The Paper Collection Phase

You create special papers called "VICTORY Incentive Alignment Bonds" which are like war bonds except backwards. Instead of giving papers to make humans stop living, these papers make humans continue living, which is a radical new concept your species hasn't tried.

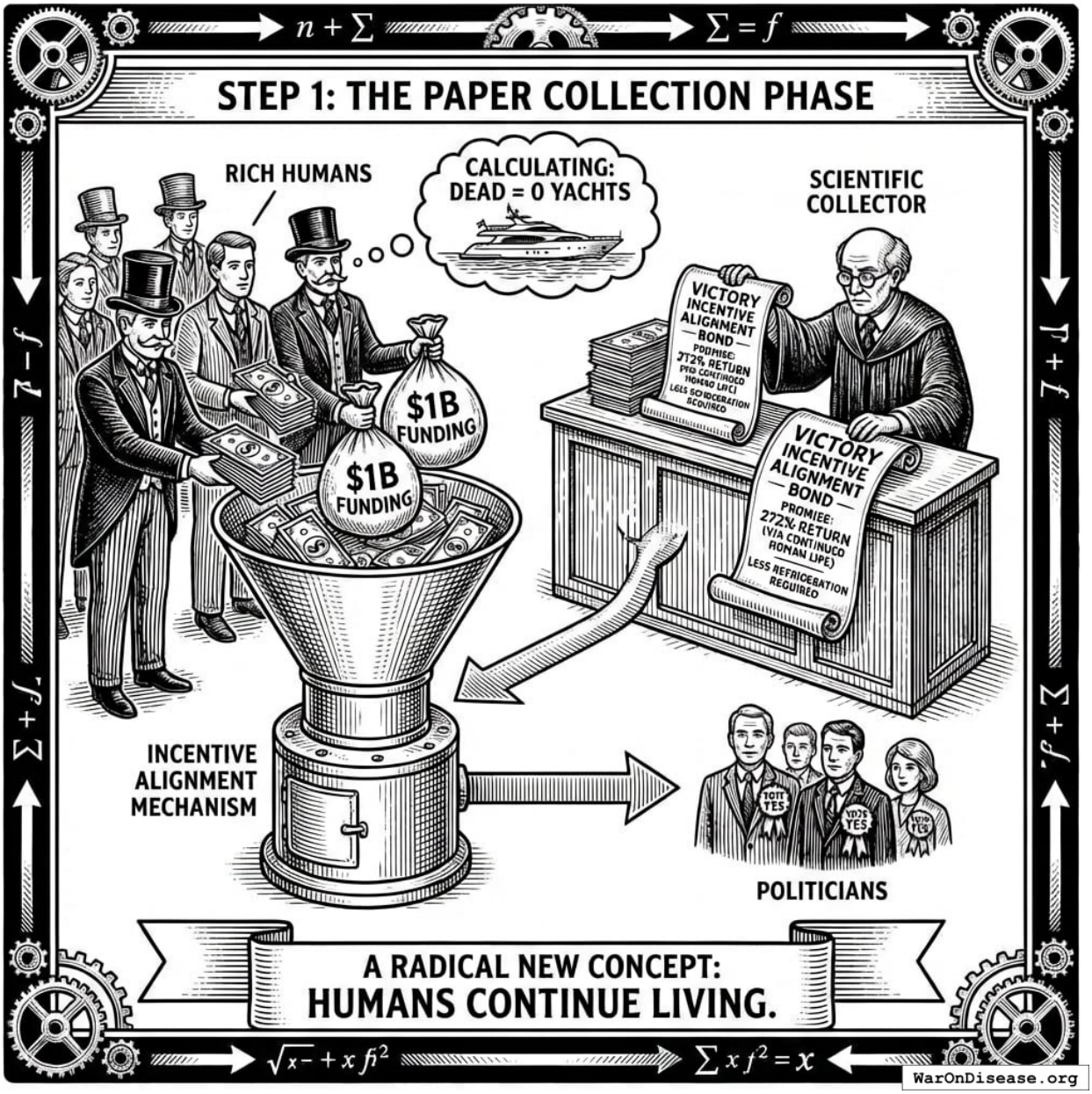


Figure 11: A flowchart illustrating the flow of capital from investors into Victory Incentive Alignment Bonds, the distribution of returns, and the secondary incentive loop for politicians.

Rich humans give you $1B in papers because you promise them 272% (the same fund also rewards politicians who vote yes, so investors aren't betting on altruism), which is better returns than selling organs but requires less refrigeration. They calculate that being dead significantly reduces their yacht-purchasing capacity.

Step 2: The Internet Clicking Ceremony

You use $250M of those papers to convince 280M of people million regular people to click "yes" on a website that asks: "Would you like all nations to redirect 1% of military spending to cure diseases?"

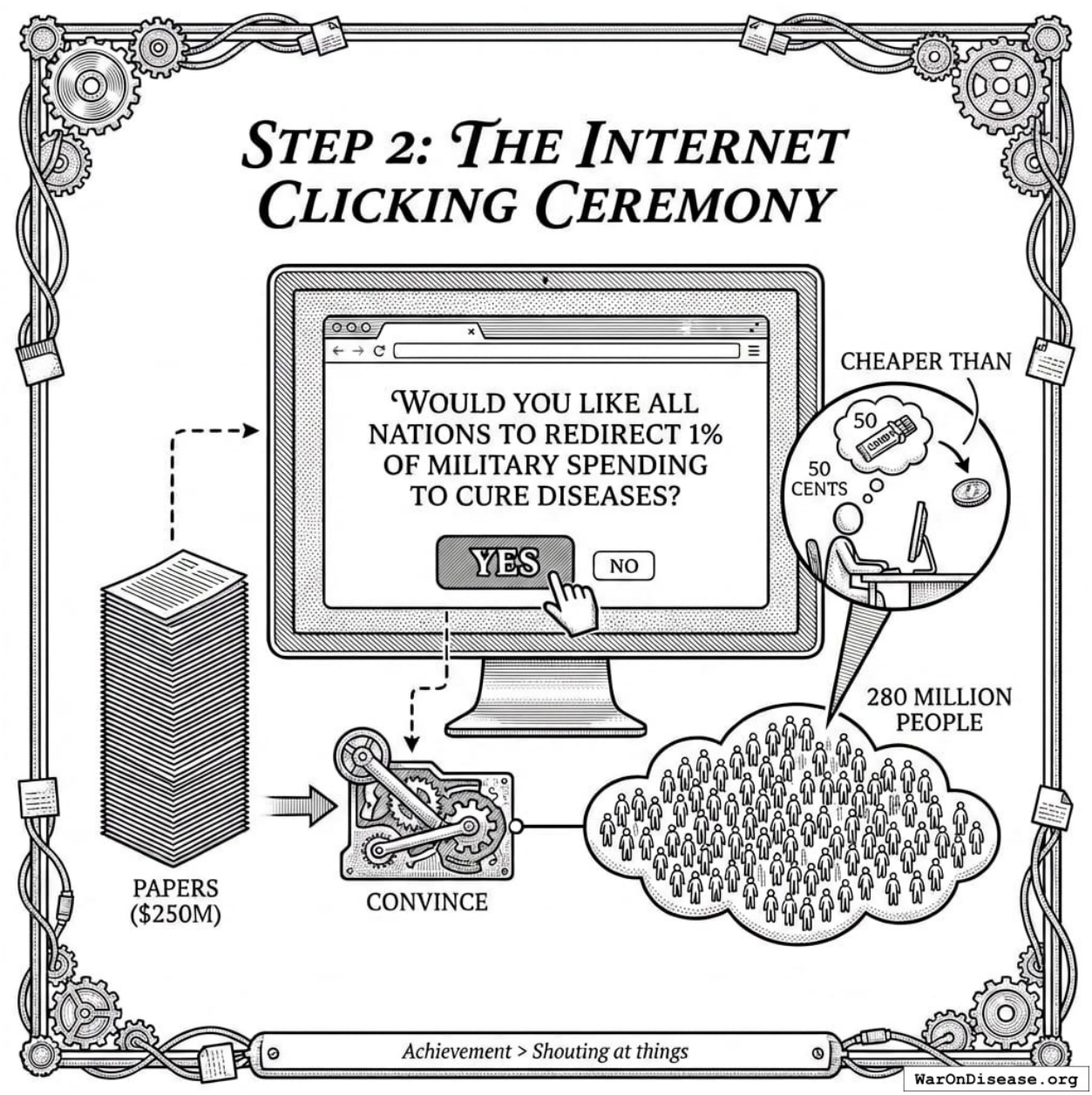


Figure 12: A visual breakdown of the 'Internet Clicking Ceremony' showing how a 250 million investment translates to 280 million verified votes at a cost of 0.50 per person.

This costs about 50 cents per person, which is cheaper than a candy bar and achieves more than most political movements that involve shouting at things.

Step 3: The Professional Briber Redistribution

You give $650M in papers to the humans whose job is "convincing politicians that killing is profitable." You show them the math: 272% vs their current 8% death-machine dividends.

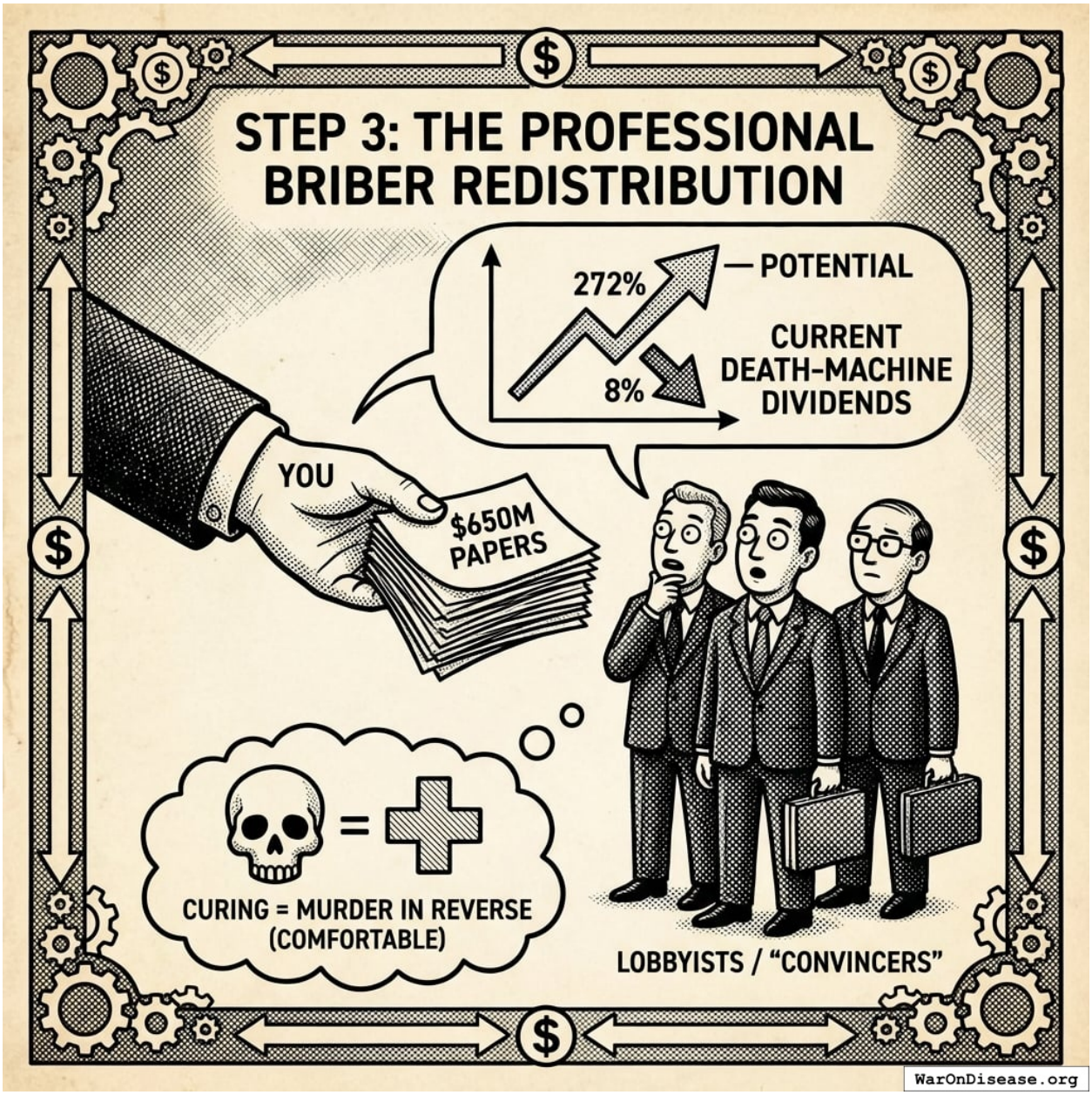


Figure 13: A visual comparison showing the 8 percent return from traditional defense dividends versus the proposed 272 percent return, illustrating the financial pivot presented to lobbyists.

Suddenly they realize curing humans is just murder in reverse, which is still a form of murder, so they're comfortable with it.

Step 4: The Political Awakening Ritual

You spend part of the $650M lobbying budget on Super PACs, which are like regular PACs but with capes. You explain to politicians that 280M of people million voters have discovered they enjoy being alive.

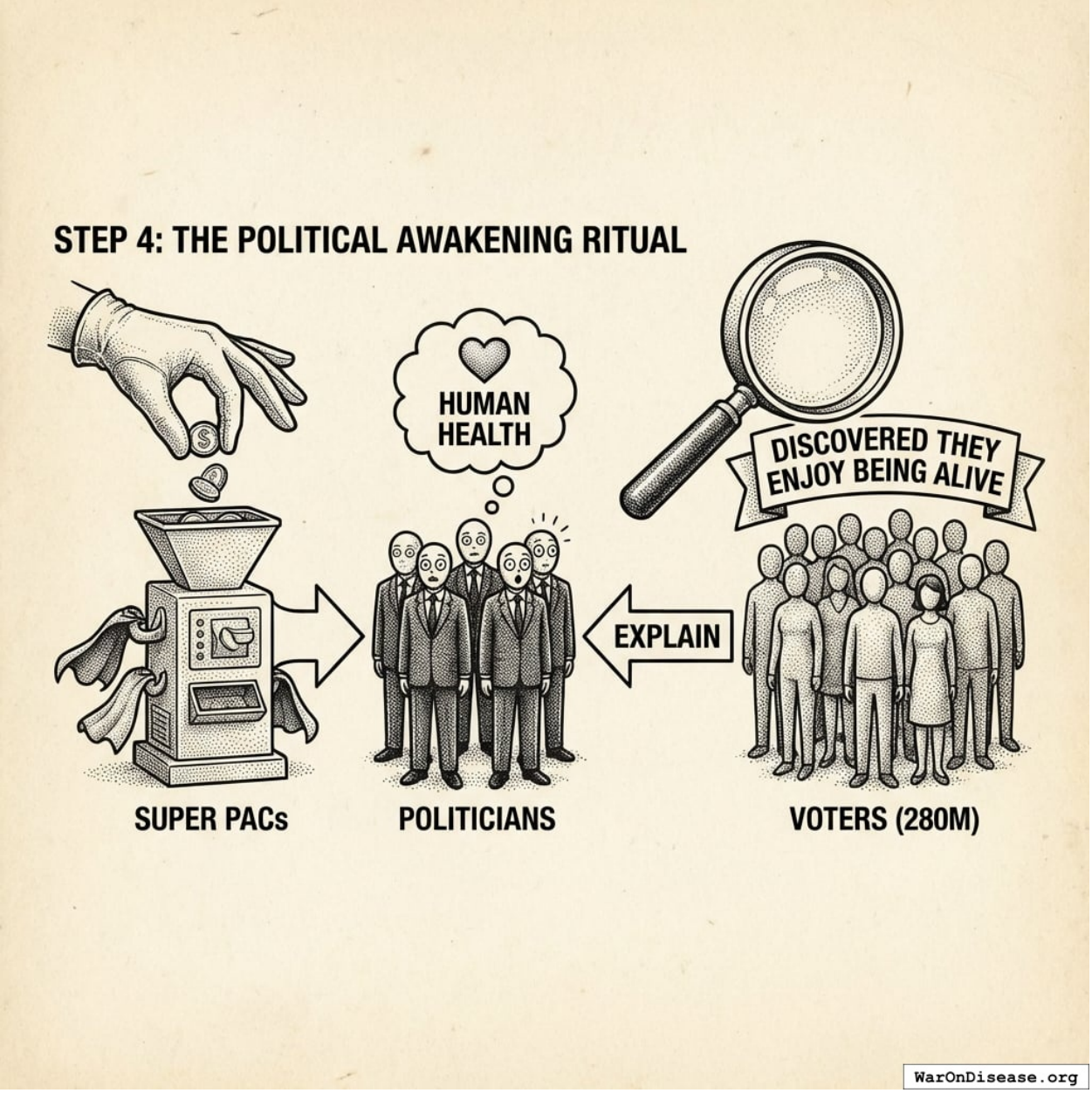


Figure 14: A visualization of the political influence ecosystem, showing the flow of $650M in lobbying funds through Super PACs to politicians, balanced against the scale of 280 million voters.

Politicians, who are professionally terrified of unemployed people with opinions, suddenly remember they've always cared deeply about human health.

Step 5: The Money River Redirection

If the treaty passes, every nation moves 1% of their explosion budget to their not-explosion budget. This creates $27.2B annually for fixing meat robots.

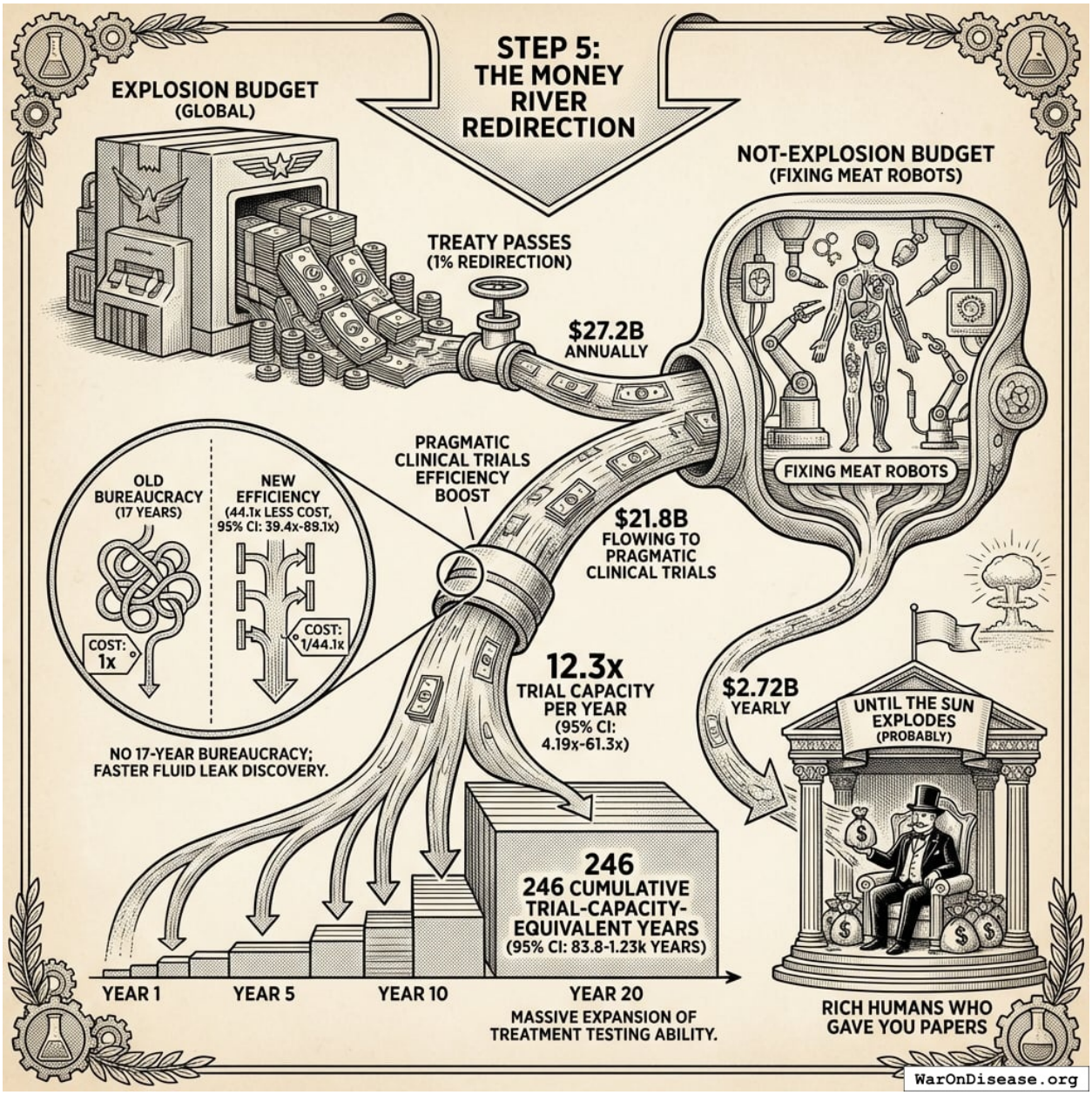


Figure 15: A flow diagram illustrating the redirection of 1% of global military budgets into clinical trials, highlighting the massive increase in trial capacity and efficiency.

Clinical trials could suddenly cost 44.1x (95% CI: 39.4x-89.1x) times less because it doesn't take 17 years of bureaucracy to discover if something stops humans from leaking important fluids.

The $21.8B flowing to pragmatic clinical trials at 44.1x (95% CI: 39.4x-89.1x) efficiency creates **12.3x (95% CI: 4.19x-61.3x) trial capacity per year**. Over 20 years, that's **246 years (95% CI: 83.8 years-1.23k years) cumulative trial-capacity-equivalent years**, a massive expansion of our ability to test treatments.

The rich humans who gave you papers get $2.72B yearly forever, or until the sun explodes, whichever happens first (probably the sun thing).

Personalized Bribery Packages

For Every Species of Human

The entire system operates on the revolutionary principle that humans will do the right thing if you pay them enough to do it accidentally.

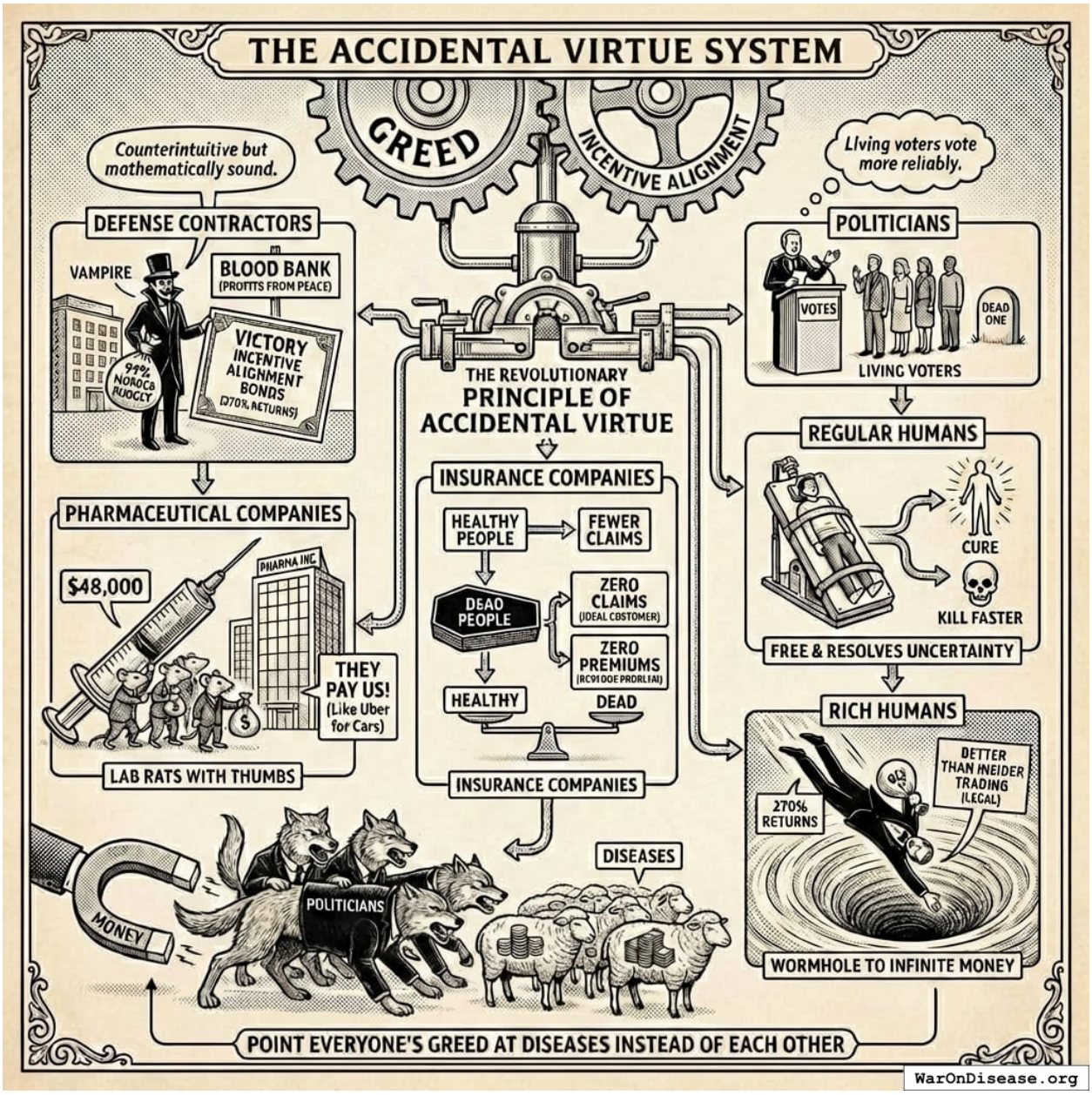


Figure 16: A relational diagram showing how six distinct entities, ranging from defense contractors to regular humans, reorient their financial incentives toward a central 'Victory Incentive' system.

Defense Contractors: Keep 99% of their murder budget PLUS get 272% returns on the 1%. They're

literally profiting from peace. This is like convincing a vampire to open a blood bank, counterintuitive but mathematically sound. It's like finding papers in the pocket of pants you're currently wearing. Except the papers multiply. While you're wearing the pants. It's financially inexplicable but legally binding.

Big Pharma: Instead of paying $41K (95% CI: $20K-$120K) per lab rat with thumbs, the lab rats pay THEM. It's like if Uber convinced cars to pay for the privilege of driving. We call it "reverse expenses" or "profit."

Insurance Companies: Healthy people file fewer claims than dead people (dead people file zero claims, which is the ideal customer except they also pay zero premiums, creating a revenue problem). Sick people file all the claims. We'll let you do the math since you love math.

Politicians: Discover that living voters vote more reliably than dead ones. 280M of people million voters want this. Your opponent supports it. You can either agree or explain why you prefer bombs to grandma's cancer treatment. Your choice.

Billionaires: Make 272% returns, which is better than insider trading but somehow legal, like a loophole that's actually a wormhole to infinite money. It's like compound interest discovered steroids then did cocaine.

Regular Humans: Get experimental treatments that might cure them OR kill them faster, but either way it's free and resolves the uncertainty. Also, **$4.3M in lifetime wealth and 72 extra years of life** from the economic multiplier effect of redirecting military spending. That's like winning the lottery except the lottery is mandatory and everyone wins and instead of random numbers it's just basic resource allocation.

Nobody has to evolve morally. Nobody has to become "better people." You just point everyone's greed at diseases instead of each other. It's like if you trained a pack of wolves to herd sheep by convincing them the sheep were made of money. Except in this case, the wolves are politicians, the sheep are diseases and the money is money.

The Alternative

What Happens When Humanity Continues Being This Stupid

If humanity doesn't do this, here's the exciting future:

150k deaths/day humans delete themselves daily from preventable meat failures. That's fifty 9/11s every single day, except nobody invades anyone about it because diseases don't have oil (if cancer had oil reserves, humanity would likely have cured it by 2003).



Figure 17: A visual comparison of global resource allocation, contrasting the massive scale of military spending against the relatively minuscule funding for medical clinical trials.

Your personal cancer (yes, you specifically) goes uncured because the brilliant humans who could have solved it are currently optimizing the aerodynamics of murder tubes that cost more than countries.

Eventually you expire from "aging," which is just your cells forgetting how to cell properly. This is potentially fixable but you spent the repair money on submarines that hide underwater, as if that's somehow useful when you live on land.

Grandchildren visit graves and ask them:

"Why did having enough nuclear bombs to end civilization twenty times seemed more important than ending civilization zero times?"

The graves don't answer because graves are notoriously bad at explaining poor resource allocation.

They'll learn in history class that your generation could split atoms, edit genes, and land on the moon, but somehow couldn't figure out that spending 604:1 (95% CI: 453:1-894:1) times more on weapons than on clinical trials to test cures was mathematically stupid. You had safe compounds. You had sick people. You just refused to fund the trials that would match them together.

Future alien archaeologists will find your civilization and create a museum exhibit called "The Species That Paid to Kill Itself" right between the dinosaurs (who at least had the excuse of a meteor) and the dodo (who at least had the excuse of being delicious).

The Problem

The Daily Deletion Event

150k deaths/day humans permanently stop every 24 hours from diseases that are basically just bugs in your meat software. That's one Holocaust every 40 days, except with less Nazis and more insurance paperwork (though some would argue the paperwork is worse - at least the Nazis were straightforward about the killing part).

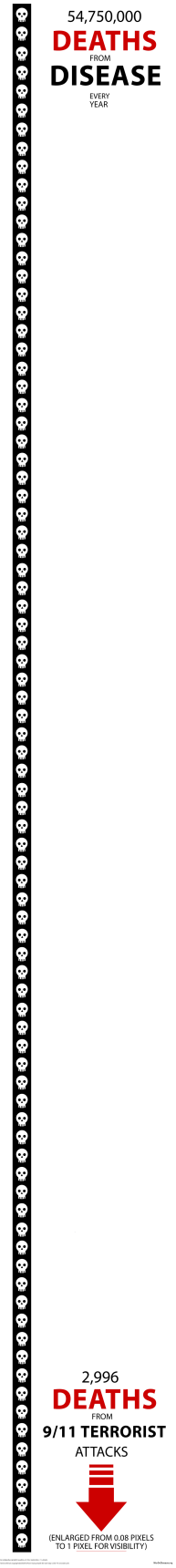


Figure 18: Annual deaths from disease (54,750,000) versus deaths from 9/11 Terrorist Attacks (2,996)

Your body is quietly falling apart. Your cancer cells are multiplying RIGHT NOW. Your brain is deleting memories. Your joints are slowly turning into gravel. Your heart is getting tired of beating. Your telomeres are shortening. You are literally dissolving.

You're a meat robot with worn-out parts. Every one of these failures is a solvable engineering problem.

You'd think humans would prioritize solving these problems. You'd be adorable for thinking that.

Humans haven't cured a single disease in 50 years[138]. But humans have 13,000 nuclear warheads, enough to end civilization 13 times, just in case the first apocalypse doesn't take.

The Unexplored Therapeutic Frontier

Right now, only 15 diseases/year (95% CI: 8 diseases/year-30 diseases/year) diseases per year get their first effective treatment. That's it. Fifteen. Out of 6.65k diseases (95% CI: 5.70k diseases-8.24k diseases) that have nothing.

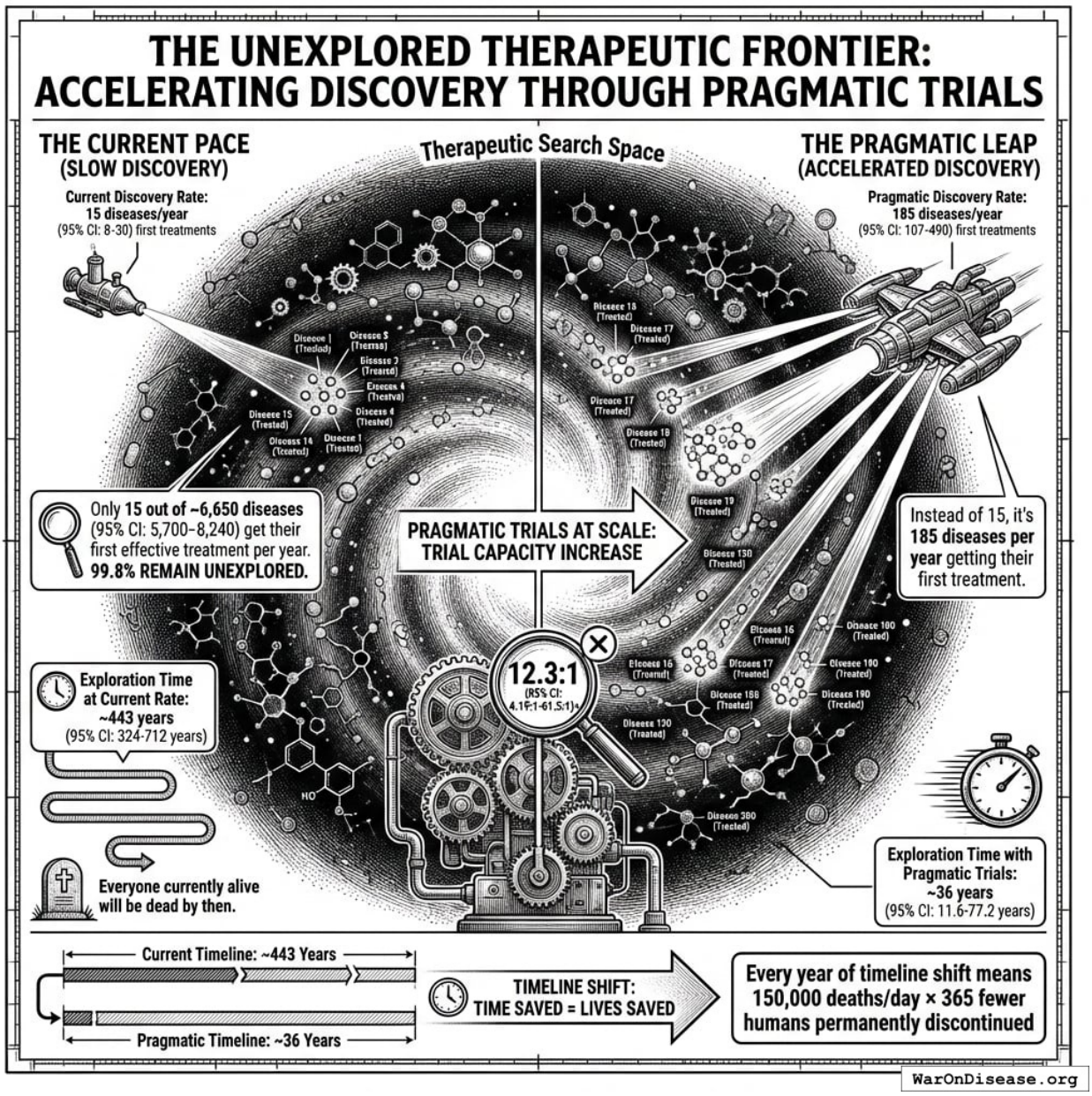


Figure 19: A comparison between the current drug discovery timeline and the accelerated timeline enabled by pragmatic trials, illustrating the 'timeline shift' from 443 years down to 36 years.

Think of the therapeutic search space as all the drug-disease combinations that could work but haven't been tested. At the current discovery rate (15 diseases/year (95% CI: 8 diseases/year-30 diseases/year) first treatments/year), exploring this space would take ~443 years (95% CI: 324 years-712 years). Everyone currently alive will be dead by then.

Pragmatic trials at scale increase discovery rate 12.3x (95% CI: 4.19x-61.3x). Instead of 15 diseases/year (95% CI: 8 diseases/year-30 diseases/year) diseases getting their first treatment per year, it's 185 diseases/year (95% CI: 107 diseases/year-490 diseases/year). The ~443 years (95% CI: 324 years-712 years) exploration time becomes ~36 years (95% CI: 11.6 years-77.2 years).

This is "trial capacity." More trials = more of the therapeutic space explored = treatments discovered sooner.

The time saved is the "timeline shift." Every year of timeline shift means 150k deaths/day 365 fewer humans permanently discontinued.

The Cost of War

Humans spend **$2.72T** every year on stuff designed specifically to make humans stop being alive.

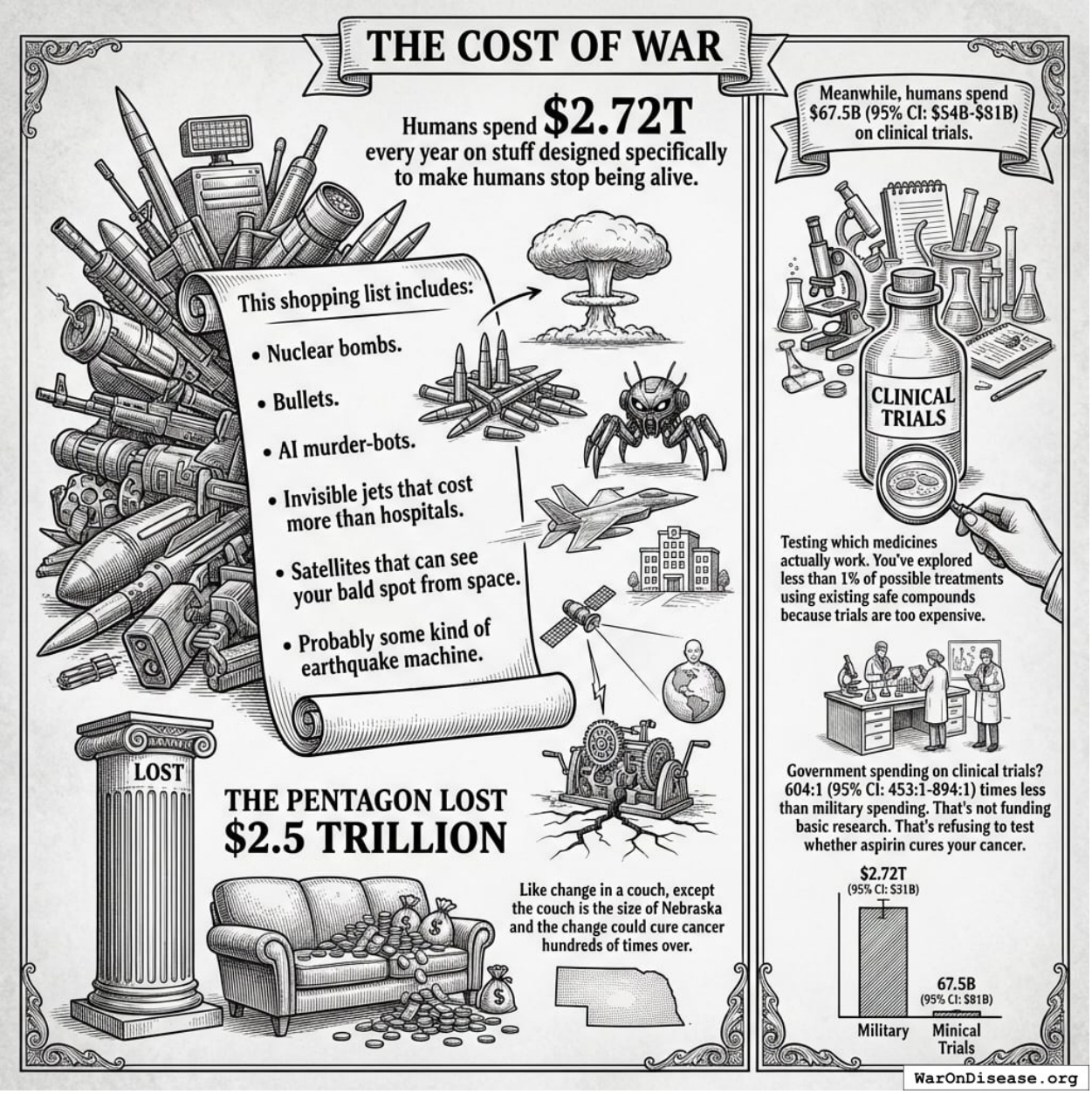


Figure 20: A comparison chart visualizing the massive disparity between global military spending (2.72 trillion) and clinical trial investment (67.5 billion), highlighting the 604:1 spending ratio.

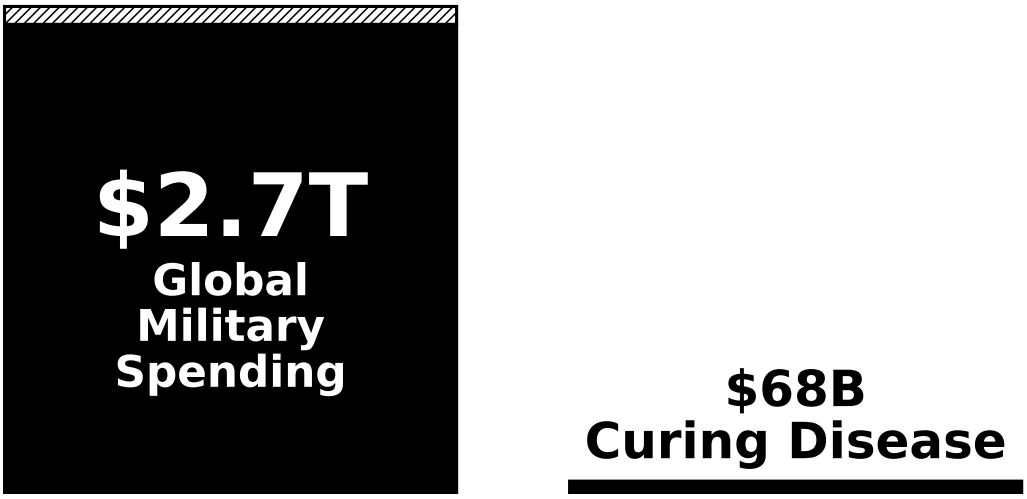
This shopping list includes:

- Nuclear bombs.
- Bullets.

- AI murder-bots.
- Invisible jets that cost more than hospitals.
- Satellites that can see your bald spot from space.
- Probably some kind of earthquake machine.

Meanwhile, humans spend $67.5B (95% CI: $54B-$81B) on clinical trials.

The real bottleneck? **Clinical trials**. Testing which medicines actually work. You've explored less than 1% of possible treatments using existing safe compounds because trials are too expensive. Government spending on clinical trials? **604:1 (95% CI: 453:1-894:1) times less** than military spending. That's not funding basic research. That's refusing to test whether aspirin cures your cancer.



The Pentagon alone has **lost** $2.5 trillion. Not spent. Lost. Like change in a couch, except the couch is the size of Nebraska and the change could cure cancer hundreds of times over.

Hilarious Security Priorities

Humans have:

- Space Force (to fight the zero aliens attacking you - we're not, by the way, we're just watching and taking notes)
- No Death Force (to fight the diseases definitely killing you right this second)

Your chance of dying from terrorism: 1 in 30 million[111]. Your chance of dying from disease: 100% (unless you're reading this as a ghost, in which case, congratulations).



Figure 21: A visual comparison showing the 1,750:1 ratio of death-related spending versus prevention, contrasted with the statistical likelihood of dying from terrorism versus disease.

But wait. It gets dumber.

Humans spend 1,750 times more money causing or mopping up death than preventing it.

The good news: You already know how to fix this.

The bad news: It requires you to do something.

The weird news: You'll get rich doing it.

The Solution

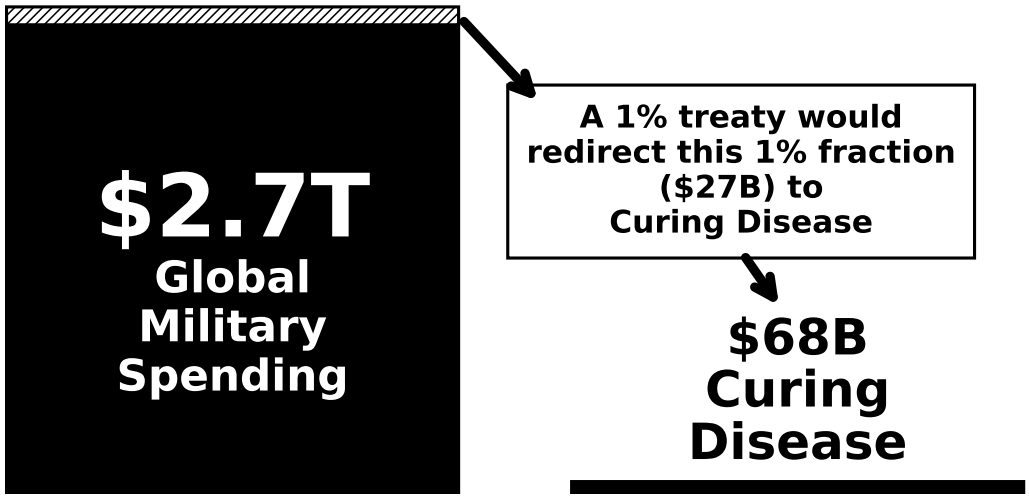
3 Ingredients of a World Without War and Disease

1. **A 1% treaty** = Redirects 1% of military budgets globally to the curing dieases through hyper-efficient decentralized clinical trials.
2. **The 1% Treaty Fund** = Holds the money and uses a new system of collective budgeting called Wishocracy where everyone votes on budget allocation rules (e.g., "70% to patient subsidies"), then patients determine specific funding by choosing which trials to join.
3. **A decentralized framework for drug assessment** = Ranks treatments by real-world effectiveness and enables patients to effortlessly participate in global decentralized clinical trials.

A 1% treaty



Figure 22: A comparison showing the scale of the 2.72 trillion global military budget relative to the proposed 27.2 billion (1 percent) redirection for medical research.



There would still be $2.72T left for war and bombs and stuff. $2.69T is enough to murder every man, woman, and child on Earth 20 times which should be more than sufficient.

Why Decentralization Works

assets/milton-friedman-i-pencil-free-to-choose-network-360p-h264.mp4

Nobody tells the 14,000 people involved in making a pencil what to do. They just do it. No meetings. No committees. No PowerPoints. Just prices coordinating everything. Pragmatic clinical trials work the same way when you stop letting corporation-controlled government agencies run them.

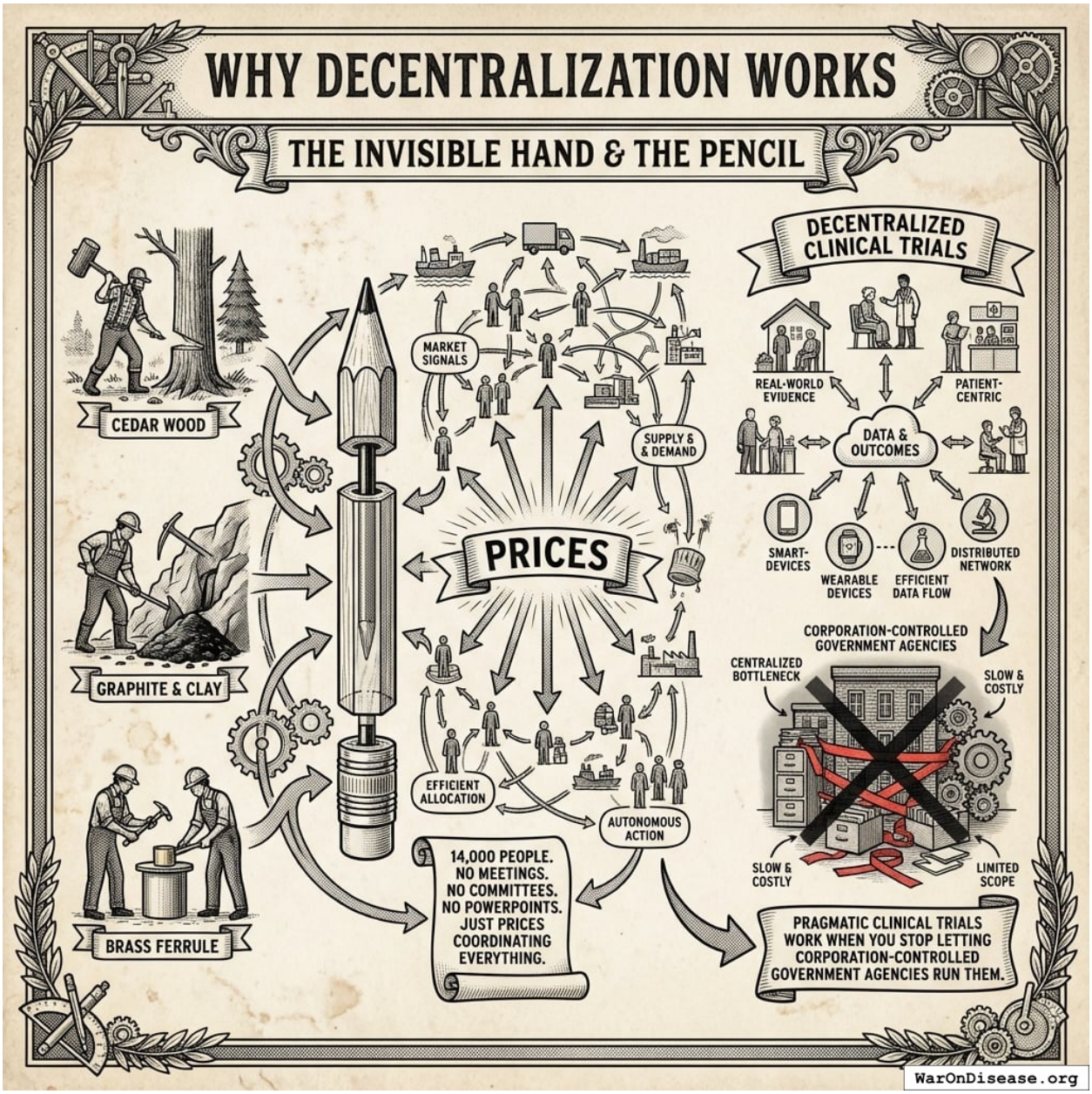


Figure 23: A conceptual comparison between centralized control, characterized by top-down hierarchies and committees, and decentralized coordination, where independent actors are linked through price signals.

The 1% Treaty Fund

Instead of a committee of 200 bureaucrats giving their friends grants to write papers about diseases, the 1% Treaty Fund directly subsidizes patients, letting them choose which trials to fund.

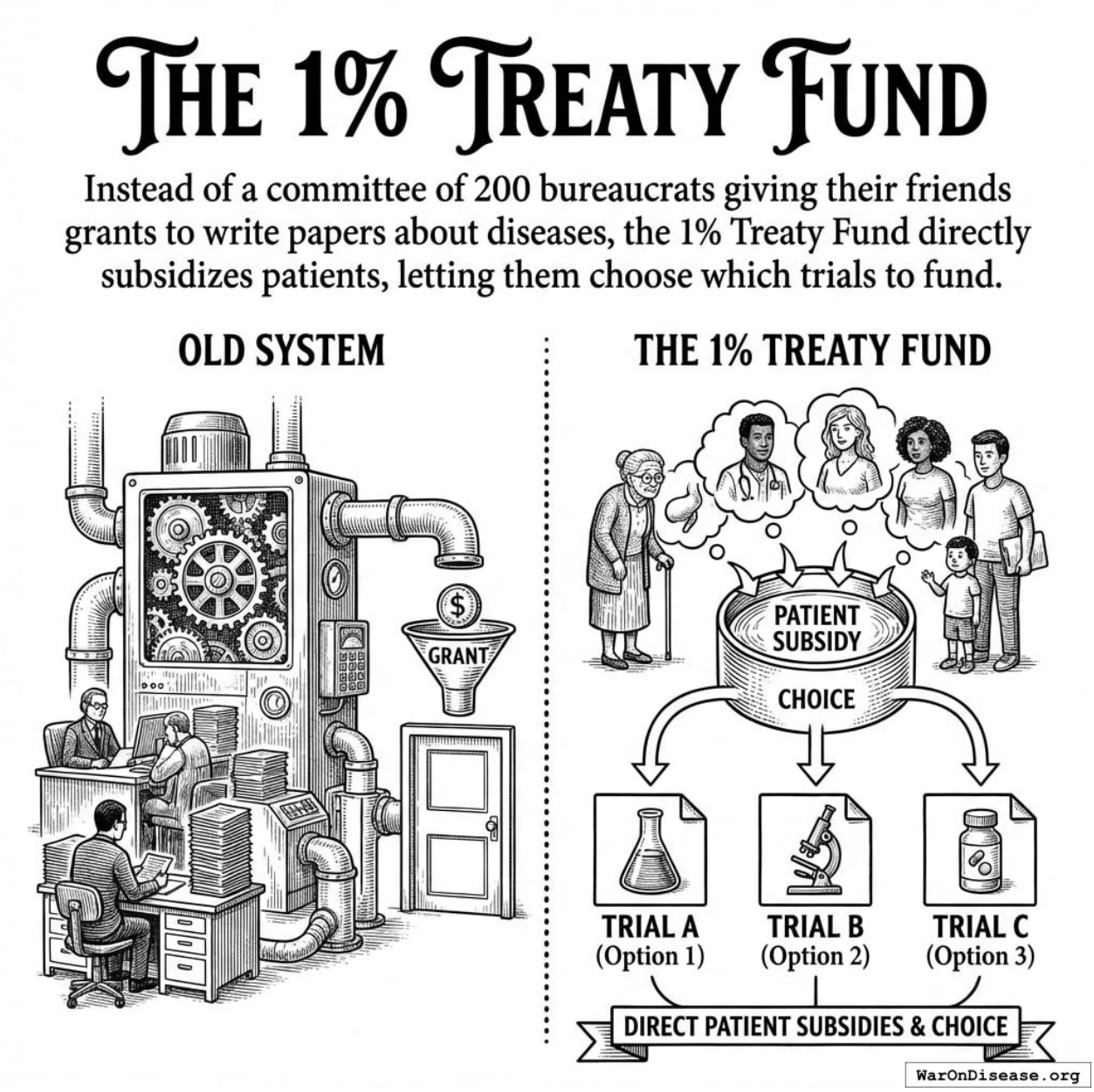


Figure 24: A comparison between traditional bureaucratic grant funding and the 1 percent Treaty Fund's patient-directed trial funding model.

A Decentralized Framework for Drug Assessment (dFDA)

Consumer Reports for Drugs

Your decentralized framework for drug assessment (dFDA) achieves **44.1x (95% CI: 39.4x-89.1x) cost reduction** through decentralized pragmatic trials. Patients can search treatments ranked by real-world effectiveness and join trials with one click.

Safer Than the FDA

Current FDA system:

- Adverse events require filling out a PDF form (seriously)
- Most side effects never get reported
- No public database of outcome frequencies
- You find out a drug causes heart attacks 10 years later when lawyers get involved

A decentralized assessment system:

- Adverse events collected automatically from every participant
- Real-time reporting to everyone (not buried in FDA databases)
- Outcome labels show exact frequency and severity of every effect
- You know the risks BEFORE you take the drug, not after the class action lawsuit

The FDA doesn't even publish adverse event rates. They make you guess. The framework tells you "12% of patients got headaches, 3% were severe, 0.1% discontinued treatment." That's not less safe than the current system. That's actually safer. You have real safety data instead of guessing.

Treatment Rankings

Consumer Reports for Drugs

Current system: Your doctor picks treatments based on:

- That drug rep who brought good donuts in 2003
- Something they half-remember from medical school
- Whatever the insurance company allows
- Vibes

A decentralized framework for drug assessment: Type your condition, see every treatment ranked by real-world effectiveness:

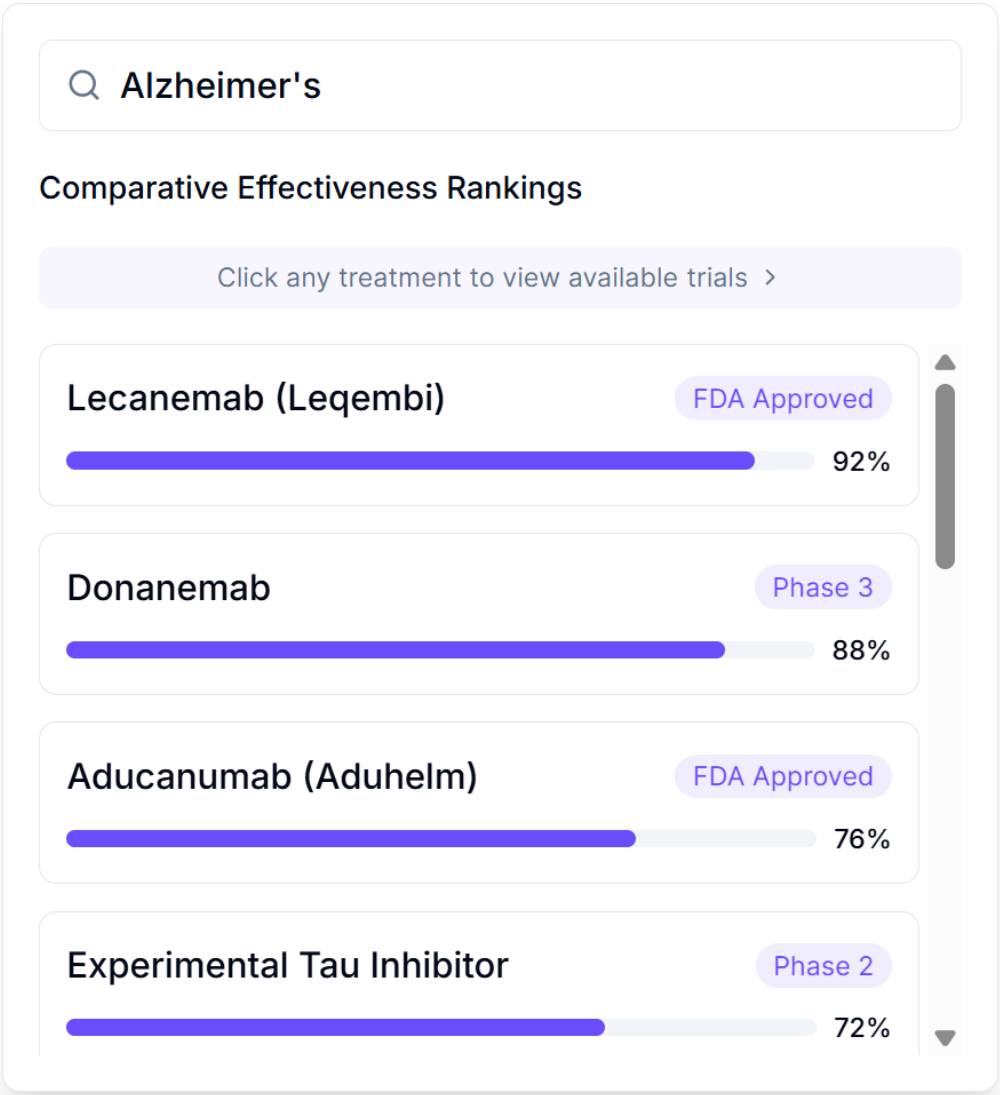


Figure 25: Treatment Rankings Example

Rankings are based on frequency and magnitude of health outcome changes across all patients - or filtered to patients with similar omic profiles to yours. A treatment that works great for 25-year-old women with your genetic variants might not work for 60-year-old men with different variants. The framework shows you what works for people like you, not average effects across everyone.

Outcome Labels

Nutrition Facts for Drugs

Food has nutrition labels. Cigarettes have warning labels. Drugs have… incomprehensible 40-page inserts written by lawyers having seizures.

Your decentralized framework for drug assessment fixes that with **Outcome Labels** - simple, data-driven summaries showing exactly what happens when real people try a treatment:



Figure 26: Outcome Labels Example

Based on thousands of real patients, you see:

- **Cognitive Improvements**: Memory +35%, Executive Function +22%
- **Side Effects**: Headache +9% (mild), Fatigue +7% (moderate)
- **Discontinuation rate**: 2.3% stopped due to side effects
- **The Truth**: Not marketing claims, actual measured effects from real humans

No more pharmaceutical fan fiction. No more lawyers writing medical advice during fever dreams. Just cold, hard data about whether this chemical makes your meat work better or worse.

Why This Could Actually Work

Unlike Everything Else Humanity Has Tried

The Evidence

- **Oxford Already Did It**: The RECOVERY trial tested 6 treatments on 47,000 patients across 186 hospitals for $500 (95% CI: $400-$2.50K)/patient (vs standard FDA phase 3 cost of $41K (95% CI: $20K-$120K)), demonstrating a 82x (95% CI: 50x-94.1x) cost reduction at scale (consistent with a systematic review of 64 pragmatic trials showing median costs of $97 (95% CI: $19-$478)/patient[85]). Not in theory. In reality. With actual dying people who became not-dying people.
- **You've Done This Before**: After WW2, humans cut military spending by 30.0% and inadvertently created the greatest economic boom in history. You're only asking for 1.0%.

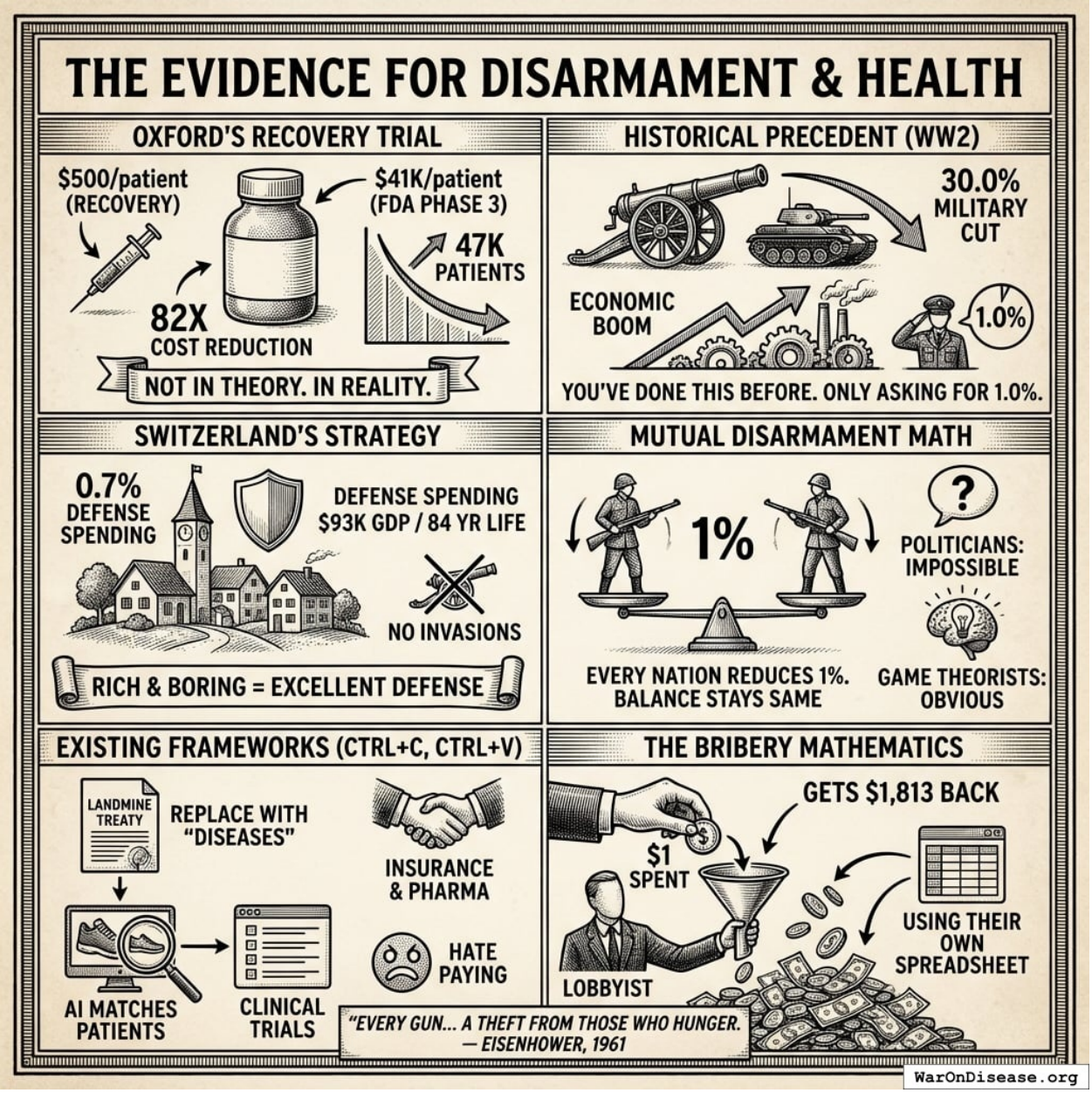


Figure 27: A comparison showing the 82-fold cost reduction achieved by the RECOVERY trial model compared to standard FDA Phase 3 costs, alongside a scale visualization of the 30 percent post-WW2 military spending cut versus the proposed 1 percent reallocation.

https://www.youtube.com/watch?v=Gg-jvHynP9Y

- *"Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed."* - President Dwight D. Eisenhower, 1961
- **Switzerland Figured This Out 200 Years Ago**: They spend 0.7% on defense, have $93K GDP per capita, 84-year life expectancy, and nobody's invaded them since Napoleon (who invaded everyone, so it doesn't count). Turns out being rich and boring is an excellent defense strategy.
- **The Beautiful Math of Mutual Disarmament**: Every nation reduces by 1% simultaneously. It's

like everyone agreeing to point 1% fewer guns at each other. The balance stays the same but with 1% less potential for everyone exploding. This is what game theorists call "obvious" and politicians call "impossible."

- **Everything Already Exists, You Just Have to Ctrl+C, Ctrl+V**:
  - Legal framework: The landmine treaty but replace "landmines" with "diseases"
  - Technology: The same AI that knows you looked at shoes can match you to clinical trials
  - Natural allies: Insurance companies hate paying for sick people, pharma hates paying for trials
- **The Bribery Mathematics**: Defense lobbyists get $1,813 back per $1 spent corrupting democracy. You're just using their own spreadsheet against them.

The 5-Step Plan

Saving Humanity While Making Everyone Obscenely Wealthy

Step 1: Collect Papers

Rob the Rich to Pay the Rich

Remember when your grandparents funded WW2 by buying bonds? They got 4% returns and a world without Nazis (mostly).

You're proposing the same thing except:

What Grandma Got

- Dead Nazis (admittedly good)
- 4% returns (barely beat inflation)
- A medal probably (made of cheap metal)
- Still died of cancer in 1987

What You're Offering

- Dead diseases (objectively better than dead Nazis because diseases kill more people)
- 272% returns (beats Grandma's bonds by 67x)
- Not dying from preventable meat failures (this is the big one)
- Also no Nazis (as a bonus)

This raises the $1B needed to fuel the rest of the bribery machine, which in your economy is somehow both "a lot" and "what Jeff Bezos finds in his couch."

If the treaty fails, investors lose their money. But they'll be too dead from preventable diseases to complain about it. It's a self-solving problem.

Potential Returns That Make Ponzi Schemes Look Conservative

- Medallion Fund: 39% (they thought they were special)
- Warren Buffett: 20% (adorable)
- Real Estate: 15% (for people who like being landlords)
- S&P 500: 10% (for people who hate money)
- Cocaine Trafficking: 90% (but risky)
- **VICTORY Incentive Alignment Bonds: 272% (and legal)**

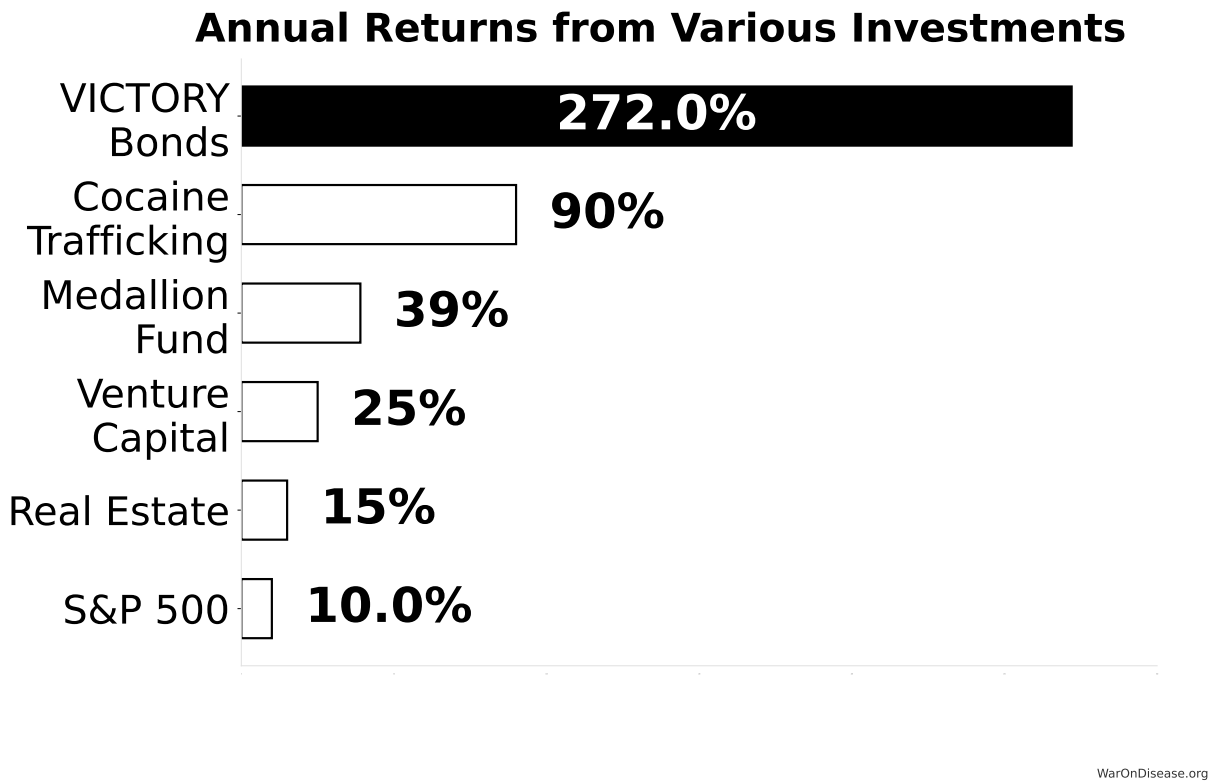


Figure 28: VICTORY Incentive Alignment Bonds: 270% Perpetual Returns

Here's the deal you offer investors:

- They give you: $1,000 in papers with dead presidents
- You give them: $2,718 yearly in papers with the same dead presidents but more of them

How does money multiply like rabbits? The treaty unlocks $27.2B annually from the murder budget. Investors get 10% because they had the revolutionary idea of "what if we didn't all die?"

The same fund that pays investors also pays for politician incentives. Both get 10% of treaty revenue. When Senator Smith votes YES, their Public Good Score rises, independent Super PACs provide campaign support, and post-office opportunities unlock (fellowships, advisory boards, speaking circuits). No money goes to politicians directly. What flows is reputation, electoral advantage, and career advancement. Investors aren't gambling on politicians becoming altruistic. They're gambling on politicians being self-interested.

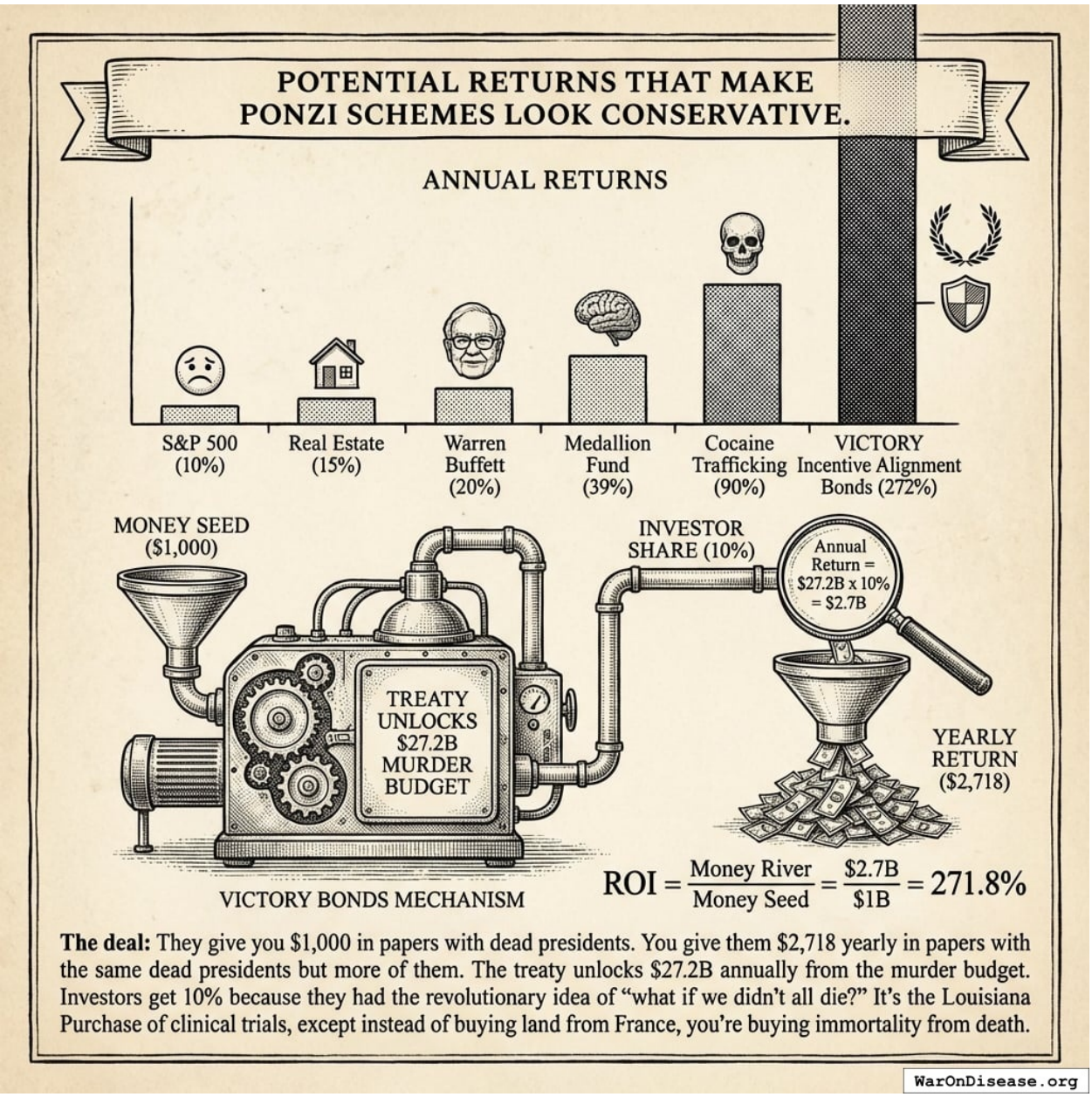


Figure 29: A comparison of annual investment returns, illustrating the massive disparity between traditional high-performance funds and the 272 percent ROI of VICTORY Incentive Alignment Bonds.

$$\text{Annual Return} = \$27.2\text{B} \times 10\% = \$2.7\text{B}$$

$$\text{ROI} = \frac{\text{Money River}}{\text{Money Seed}} = \frac{\$2.7\text{B}}{\$1\text{B}} = 271.8\%$$

It's the Louisiana Purchase of clinical trials, except instead of buying land from France, you're buying immortality from death.

Step 2: The Great Clicking

Make Humans Click a Button to Not Die

You need 3.5% of humanity to vote yes on this question: "Pragmatic trials integrated into standard healthcare cost 44.1x (95% CI: 39.4x-89.1x) less than traditional methods. If all nations redirect just 1% of military spending to fund these trials, everyone gets 1% more security (1% fewer nuclear bombs pointed at you) and access to treatments years sooner. Should your country participate?"



Figure 30: A comparison showing the 44.1x cost efficiency of pragmatic trials versus traditional methods, alongside a visualization of redirecting 1 percent of military spending to healthcare research.

Even humans, who once thought the Earth was flat and diseases were caused by bad smells, can handle this level of complexity.

The Magic 3.5% Number

Scientists discovered that when 3.5% of any population wants something, they often get it. It's like a cheat code for democracy that actually works.

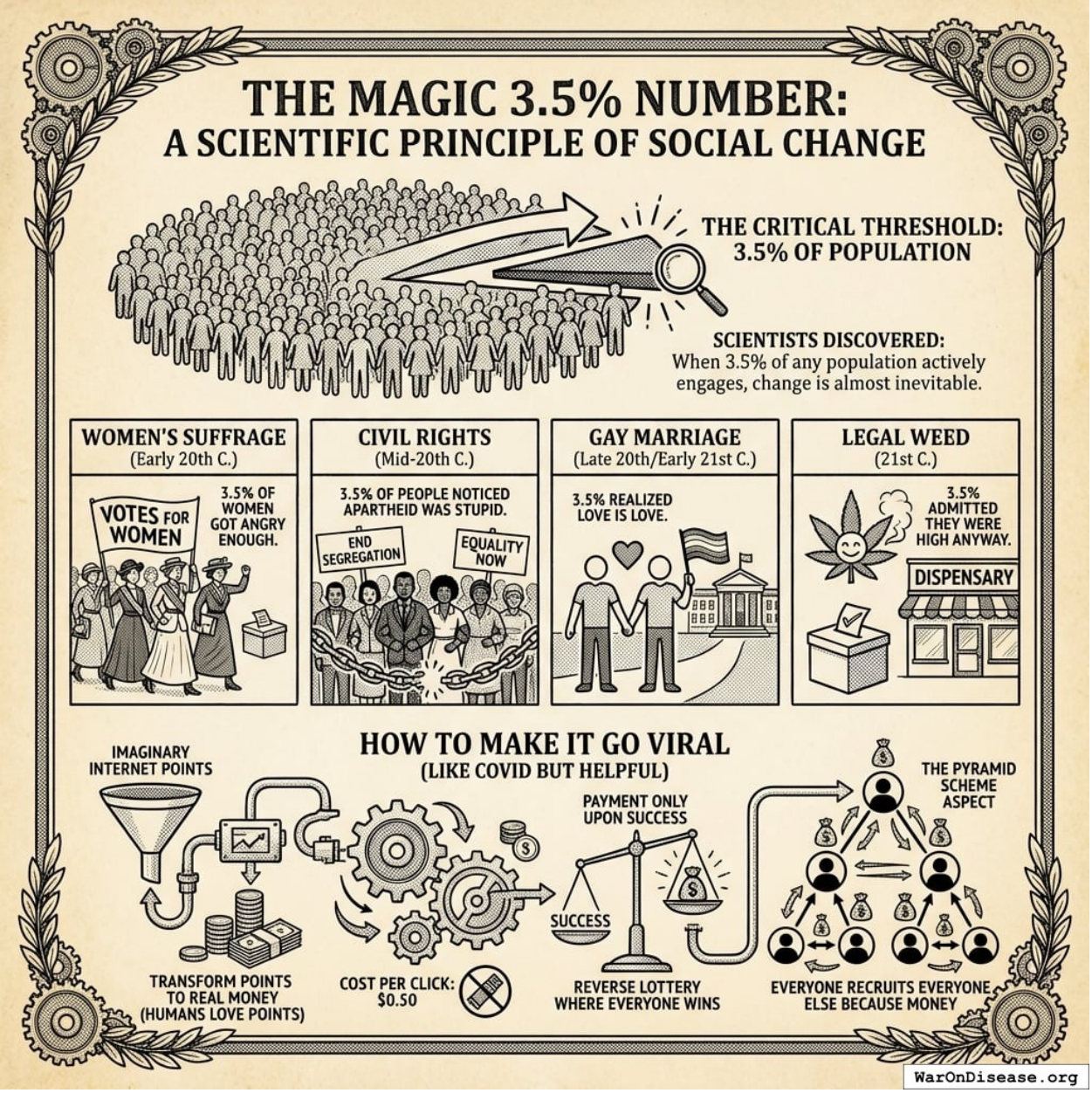


Figure 31: A visual representation of the 3.5 percent tipping point for social change alongside the four-step viral mechanism for mass recruitment and financial incentives.

This is how you got:

- Women's suffrage (3.5% of women got angry enough)
- Civil rights (3.5% of people noticed apartheid was stupid)
- Gay marriage (3.5% realized love is love)
- Legal weed (3.5% admitted they were high anyway)

How to make it go viral (like COVID but helpful):

- Give people imaginary internet points that transform into real money (humans love points)
- Cost per click: $0.50 (less than a candy bar, more than nothing)
- Payment only upon success (like a reverse lottery where everyone wins)
- The pyramid scheme aspect: Everyone recruits everyone else because money

Step 3: Bribe the Bribers

Professional Briber Conversion Therapy

Defense lobbyists are humans whose job is "convince politicians that death is profitable." They currently get $1,813 back per dollar invested in democracy corruption[139].

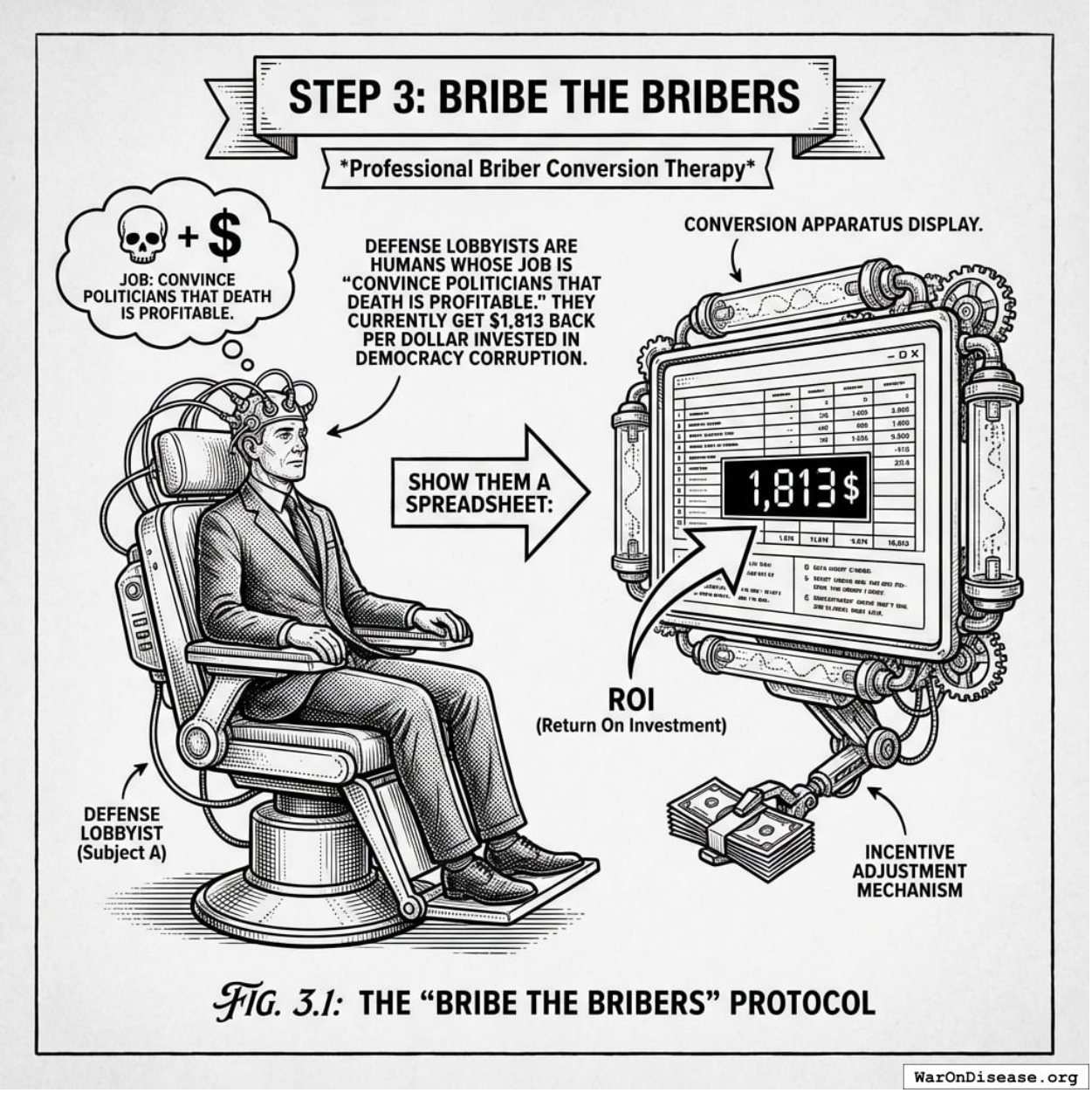


Figure 32: A logic flow diagram illustrating the conversion process of defense lobbyists by comparing their current ROI from military lobbying against the proposed alternative strategy.

Show them a spreadsheet:

Current Job

- Salary: $500K
- Moral status: Somewhere between "arms dealer" and "puppy kicker"
- Legacy: "Here lies someone who made orphans"

Your Offer

- VICTORY Incentive Alignment Bonds: 272% returns (yes, that's real)

- Moral status: “Medical hero” (fake, but sounds nice)
- Legacy: “Accidentally saved humanity while getting rich”



Figure 33: A financial comparison of a 20 million investment versus a 54 million annual return at a 272 percent rate, including qualitative benefits like moral status and legacy.

They might switch sides faster than Italy in a world war.

Step 4: Purchase Democracy

It’s For Sale Anyway

Politicians are simple organisms with one evolutionary drive: reelection. You exploit this with Super PAC spending (part of the $650M lobbying budget).

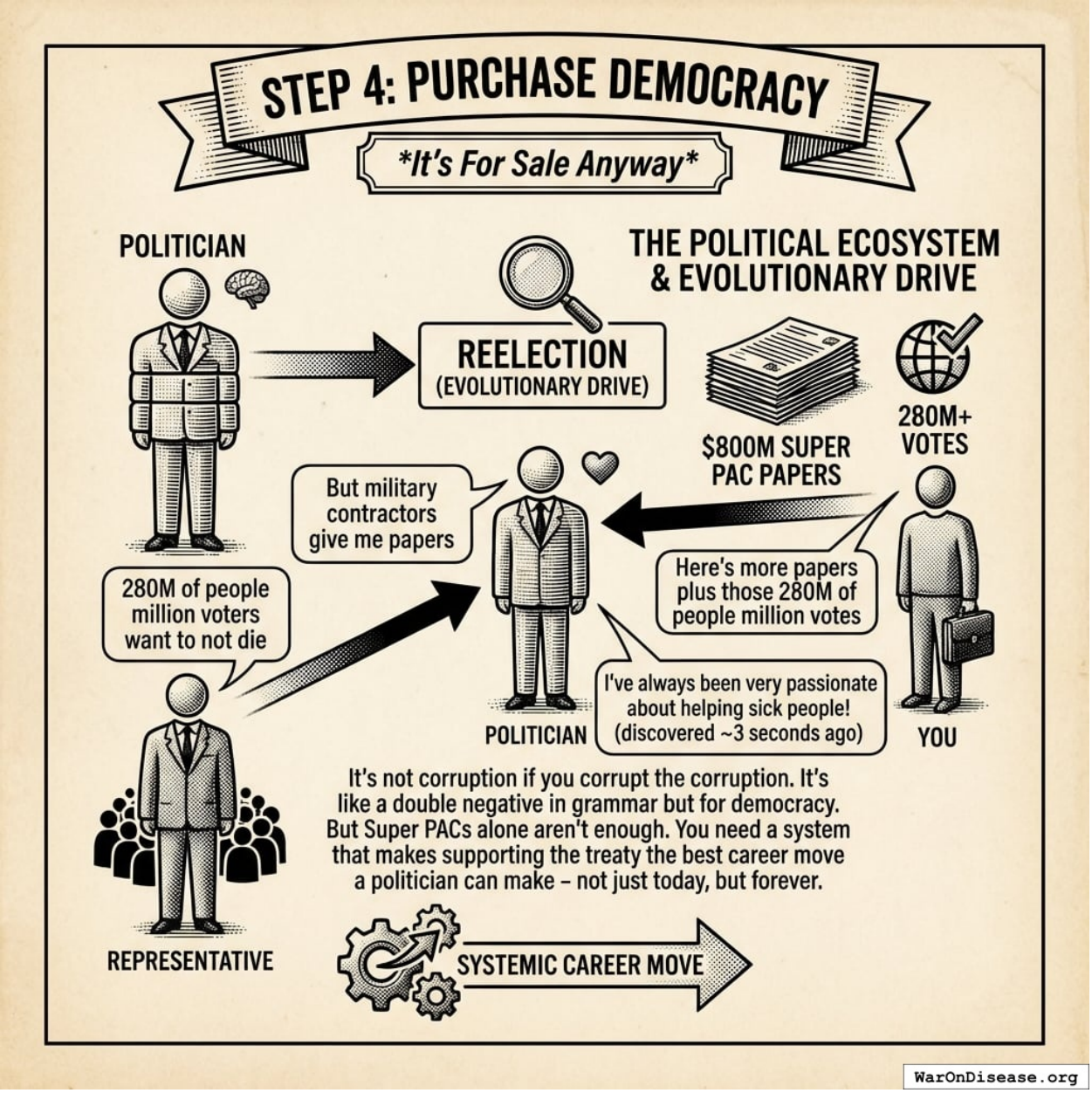


Figure 34: A conceptual diagram showing how financial contributions and voter support from different interest groups influence a politician's policy stance.

The conversation goes:

- Representative: "280M of people million voters want to not die"
- Politician: "But military contractors give me papers"
- You: "Here's more papers plus those 280M of people million votes"
- Politician: "I've always been very passionate about helping sick people!" (they discovered this passion approximately 3 seconds ago)

It's not corruption if you corrupt the corruption. It's like a double negative in grammar but for democracy.

But Super PACs alone aren't enough. You need a system that makes supporting the treaty the best career move a politician can make - not just today, but forever.

Incentive Alignment Bonds

The Part Where You Hack the Politicians' Brains

Here's a fun fact about human politicians: they don't optimize for "humans continuing to exist." They optimize for:

1. Getting reelected (requires papers)
2. Looking important (requires people noticing them)
3. Getting rich after leaving office (requires favors from rich people)

Notice "keeping constituents alive" isn't on the list. This isn't because politicians are evil. It's because evolution optimized humans for status, not species survival. You can't fix this with awareness campaigns. That's like trying to convince a dog to stop chasing squirrels by explaining ecology.

Incentive Alignment Bonds (IABs) are financial instruments that make "save lives" and "advance career" point in the same direction. It's bribery, but you call it something else, so it's legal. Humans are very particular about what you call things.

How It Works (The Scoring System)

You give politicians a score based on how they vote. Not on health outcomes (too complicated), just on whether they voted YES or NO on treaty funding. When a politician votes YES:

- Their **Public Good Score** goes up (it's like a credit score but for not killing people)
- **Electoral support** materializes (independent campaigns suddenly remember they exist)
- **Post-office opportunities** unlock (fancy jobs after they stop being politicians)

No papers go directly to politicians. That would be "bribery." Instead, papers go to people who give them reputation, electoral advantage, and career advancement. This is called "not bribery" because the papers took a detour.

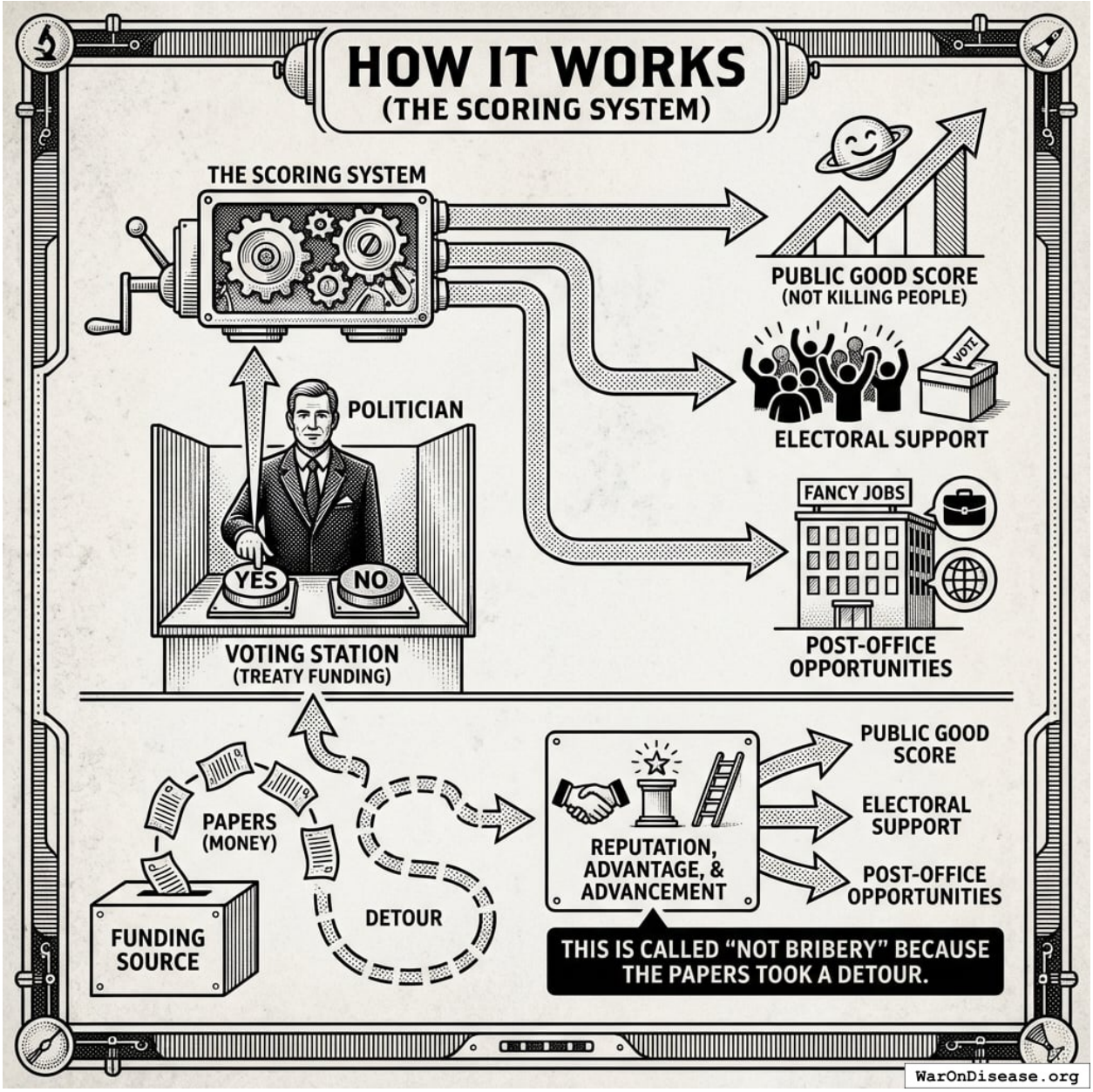


Figure 35: A process diagram illustrating how a YES vote translates into a Public Good Score and flows through indirect channels to produce electoral support and career opportunities.

The Senator Smith Thought Experiment

Senator Smith (R-Texas) is deciding how to vote on the 1% Treaty. Let's examine his thought process. (I'm using "thought" loosely here.)

Without IABs:

Vote Yes	Vote No
Attack ads: "Smith voted to WEAKEN AMERICA"	Safe from weapons lobby attacks
Defense contractors fund opponent	Defense contractors fund Smith
Benefits arrive in 10 years (Smith might be dead)	Costs arrive never (perfect!)

Result: Vote no. This is called "rational self-interest" and it's why humanity can't have nice things.

With IABs:

If Smith votes YES	If Smith votes NO
Public Good Score: 45 → 72	Score: 45 → 30 (yikes)
P(reelection): 55% → 62%	P(reelection): 55% → 48%
$2M independent campaign support	$2M goes to opponent (double yikes)
Post-office tier: 3 → 1	Stuck at tier 3 forever
Expected post-office income: $200K → $500K/yr	Attack ads: "Smith voted AGAINST curing your grandmother"

Result: Vote yes. Smith didn't become a better person. The math just changed. This is much more reliable than hoping politicians develop souls.

VICTORY Bonds: Making Greed Point at Cures

VICTORY Incentive Alignment Bonds are the specific IAB for the 1% Treaty. They align everyone's greed with the same outcome:

Stakeholder	What They Want	What They Get	Why They'll Play Along
Investors	More papers	272% annual returns	Greed
Politicians	Power and status	Career advancement	Vanity
Patients	To not die	Cures	Survival instinct

Investors fund the campaign ($1B). Politicians get career benefits for supporting it. Patients get cures. Everyone's self-interest accidentally saves humanity. It's like a Rube Goldberg machine where greed goes in and medicine comes out.

Why This Isn't Bribery (Technically)

Humans have very specific rules about what counts as bribery. Here's why IABs don't qualify:

1. **No one is paid to break a duty** - You're paying them to DO their duty (fund public health). This is apparently fine.
2. **Rules are announced in advance** - If you tell everyone you're going to reward certain behavior before they do it, it's "incentive design." If you do it after, it's "corruption." Timing is everything.
3. **No papers go directly to politicians** - The papers go to scores, which go to electoral support, which goes to winning, which goes to power. It's like money laundering but with extra steps and somehow legal.
4. **Everything is based on public votes** - No secret deals. Just publicly announced rewards for publicly recorded behavior. Bribery requires secrecy. This is the opposite: bribery so transparent it becomes policy.

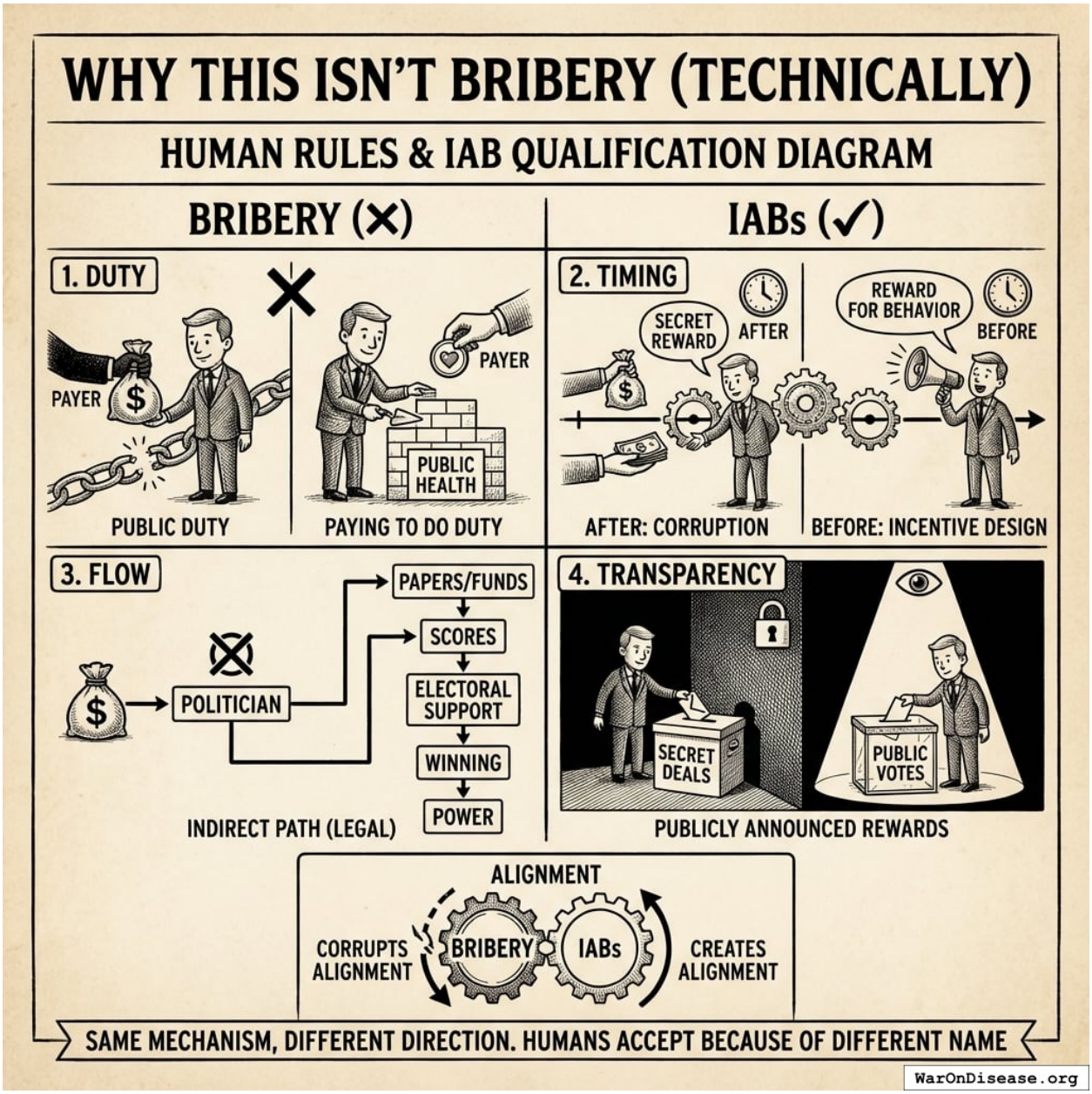


Figure 36: A comparison diagram illustrating the flow of IABs from public scores to political power versus the secretive and duty-breaking nature of traditional bribery.

Bribery corrupts alignment. IABs create alignment. Same mechanism, different direction. Humans are fine with this because you called it something different.

Why This Works for Any Problem

The beautiful thing about IABs: they're not specific to health. The same architecture works for any problem where:

- Politicians need to do something good
- But doing the good thing currently hurts their careers
- And you have enough papers to change the math

Climate change? Same system. Nuclear disarmament? Same system. Pandemic preparedness? Same system.

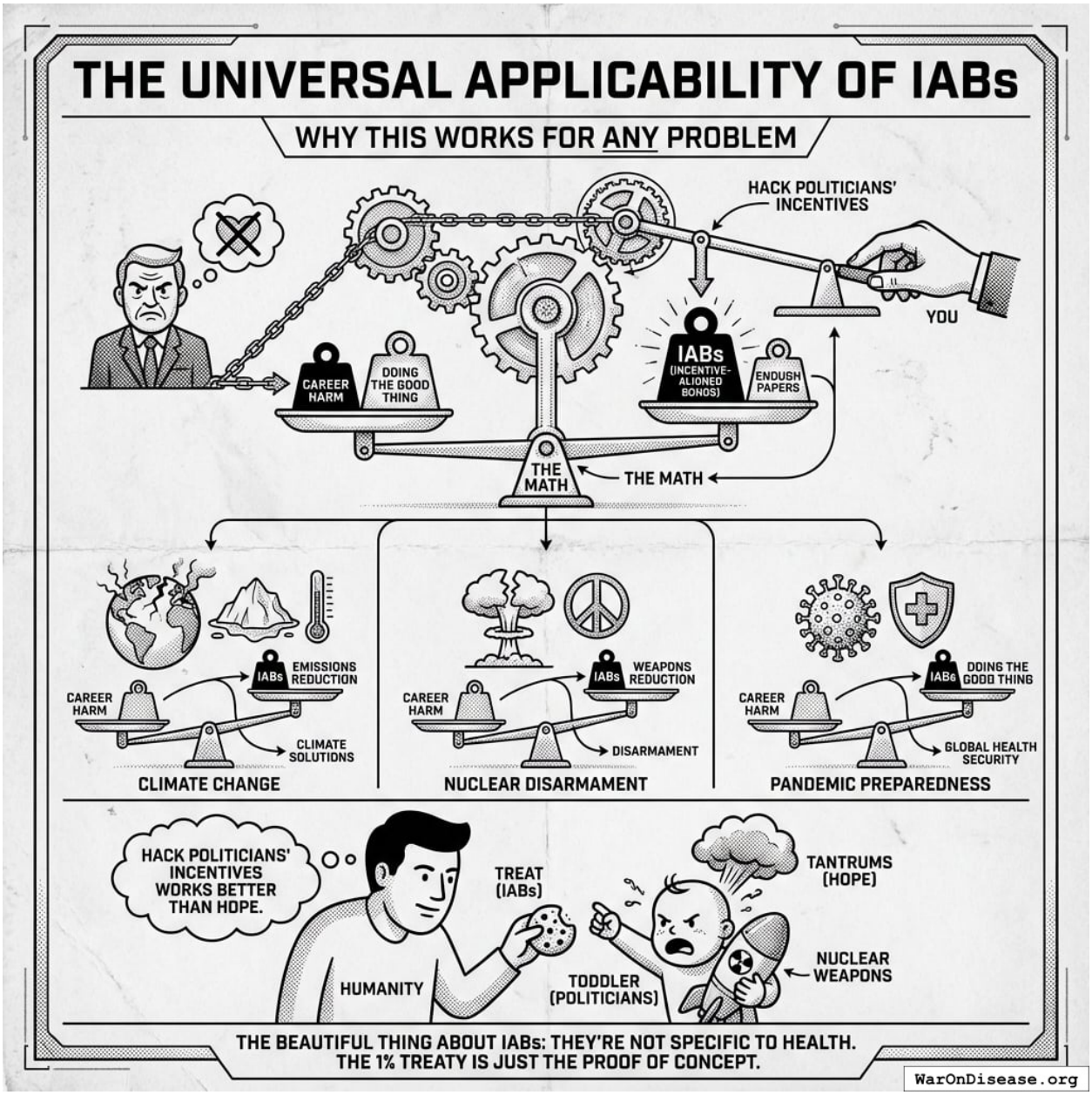


Figure 37: A conceptual comparison between the traditional 'Hope' model of politics versus the 'Incentive-Alignment' model, showing how IABs flip the career math for politicians across different global challenges.

The 1% Treaty is just the proof of concept. Once humanity sees that "hack politicians' incentives" works better than "hope politicians become good people," you can apply it to everything. It's like teaching a toddler that treats work better than tantrums, except the toddler controls nuclear weapons.

Step 5: Enjoy

Everyone Gets Rich and Nobody Dies

The treaty passes because money often defeats morality, as is tradition.

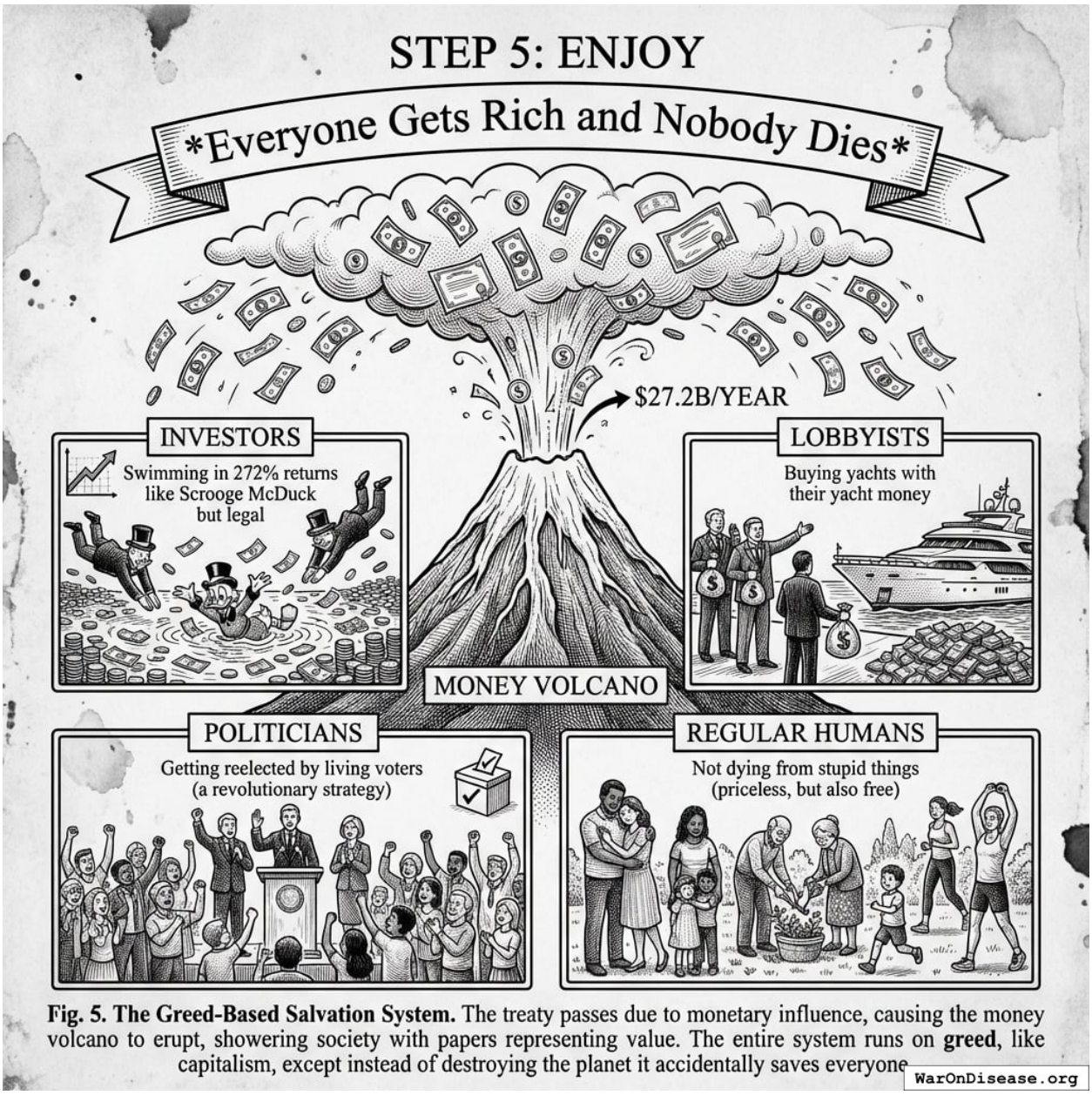


Fig. 5. The Greed-Based Salvation System. The treaty passes due to monetary influence, causing the money volcano to erupt, showering society with papers representing value. The entire system runs on **greed**, like capitalism, except instead of destroying the planet it accidentally saves everyone.

Figure 38: An infographic illustrating the distribution of 27.2 billion in annual value and specific benefits across four key stakeholder groups: investors, lobbyists, politicians, and the general public.

The $27.2B/year money volcano erupts, showering everyone with papers that represent value:

- Investors: Swimming in 272% returns like Scrooge McDuck but legal
- Lobbyists: Buying yachts with their yacht money
- Politicians: Getting reelected by living voters (a revolutionary strategy)
- Regular humans: Not dying from stupid things (priceless, but also free)

The entire system runs on greed, like capitalism, except instead of destroying the planet it accidentally saves everyone.

The Math

Where Numbers Prove Humans Are Hilariously Bad at Priorities

When you stop paying people to create paperwork about death and start paying them to prevent death, the universe rewards you with impossible returns:

$$ROI_{RD} = \frac{NPV_{RD}}{Cost_{dFDA,total}} = \frac{\$389B}{\$611M} = 637$$

$$\text{where } NPV_{RD} = \sum_{t=1}^{10} \frac{Savings_{RD,ann} \times \frac{\min(t,5)}{5}}{(1+r)^t}$$

$$\text{where } Savings_{RD,ann}$$
$$= Benefit_{RD,ann} - OPEX_{dFDA}$$
$$= \$58.6B - \$40M$$
$$= \$58.6B$$

$$\text{where } Benefit_{RD,ann}$$
$$= Spending_{trials} \times Reduce_{pct}$$
$$= \$60B \times 97.7\%$$
$$= \$58.6B$$

$$\text{where } Reduce_{pct}$$
$$= 1 - \frac{Cost_{pragmatic,pt}}{Cost_{P3,pt}}$$
$$= 1 - \frac{\$929}{\$41K}$$
$$= 97.7\%$$

$$\text{where } OPEX_{dFDA}$$
$$= Cost_{platform} + Cost_{staff} + Cost_{infra}$$
$$+ Cost_{regulatory} + Cost_{community}$$
$$= \$15M + \$10M + \$8M + \$5M + \$2M$$
$$= \$40M$$

$$\text{where } Cost_{dFDA,total}$$
$$= PV_{OPEX} + Cost_{upfront,total}$$
$$= \$342M + \$270M$$
$$= \$611M$$

$$\text{where } PV_{OPEX}$$
$$= \frac{T_{horizon}}{OPEX_{total} \times r_{discount}}$$
$$= \frac{10}{\$40M \times 3\%}$$
$$= \$342M$$

$$\text{where } OPEX_{total}$$
$$= OPEX_{ann} + OPEX_{DIH,ann}$$
$$= \$18.9M + \$21.1M$$
$$= \$40M$$

$$\text{where } Cost_{upfront,total}$$
$$= Cost_{upfront} + Cost_{DIH,init}$$
$$= \$40M + \$230M$$
$$= \$270M$$

That's 637:1 (95% CI: 569:1-790:1) return. From cost savings alone. The conservative number. The full benefit? 84.8M:1 (95% CI: 46.6M:1-144M:1). Your calculator will display an error. This is correct.

It's like a money printer, except instead of causing inflation it causes people to continue existing.

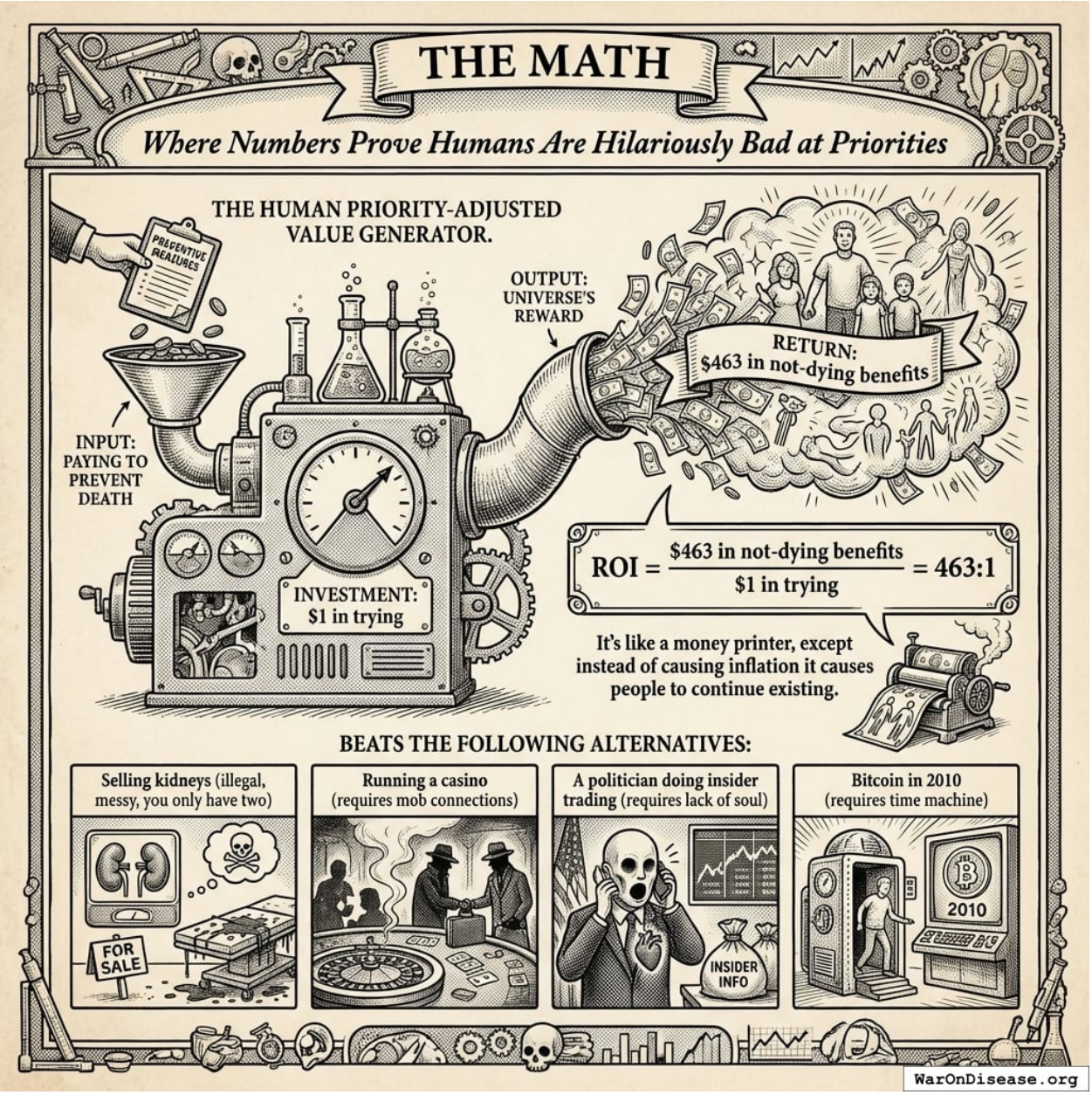


Figure 39: A bar chart comparing the return on investment for prevention against other high-yield investment benchmarks.

This beats:

- Selling kidneys (illegal, messy, you only have two)
- Running a casino (requires mob connections)
- A politician doing insider trading (requires lack of soul)
- Bitcoin in 2010 (requires time machine)

The Money Fountain

Explained for Five-Year-Olds

You stop paying smart humans to write grant applications. You start paying them to actually solve problems. Problems get solved. Money appears. Everyone acts surprised.

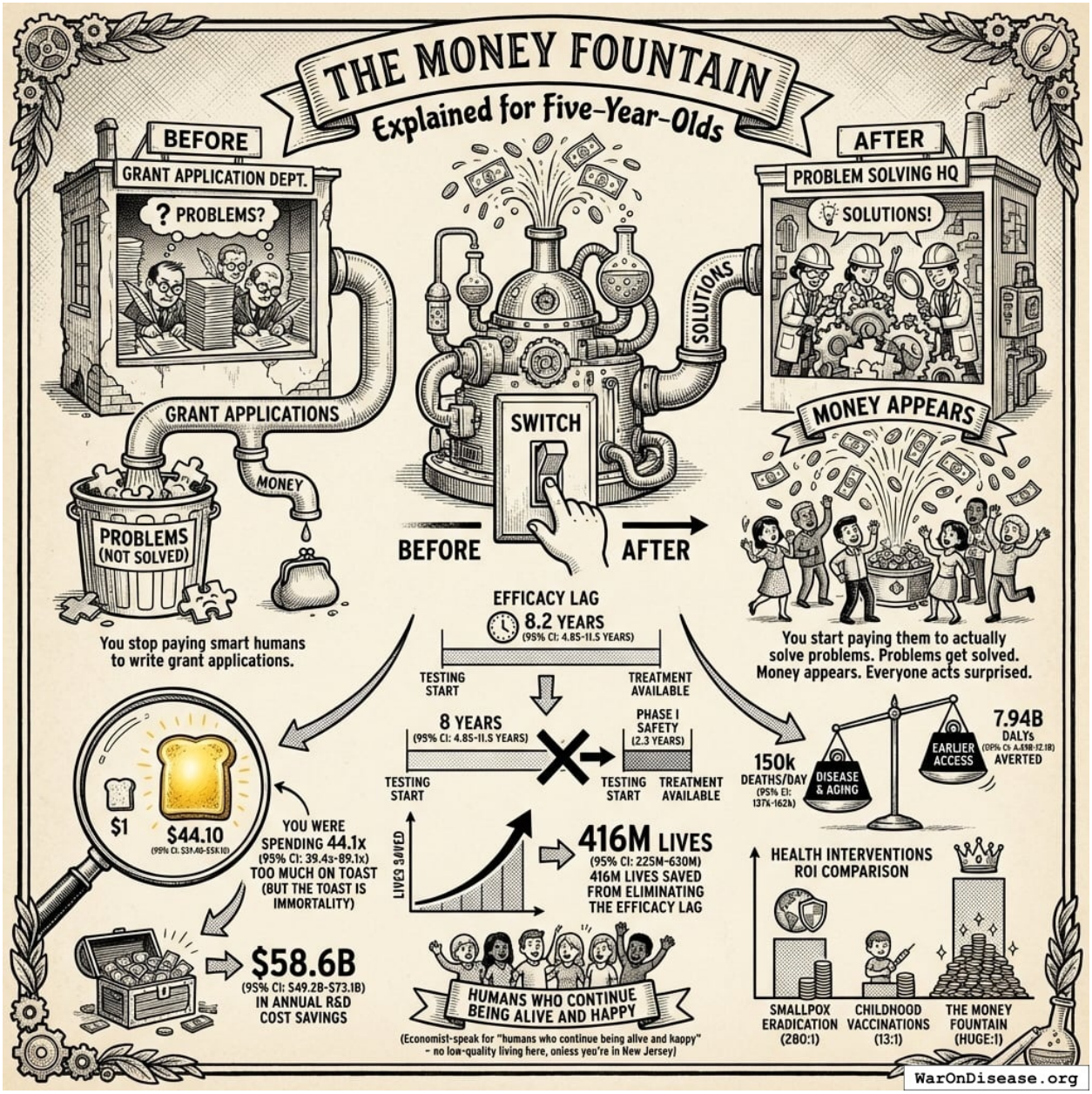
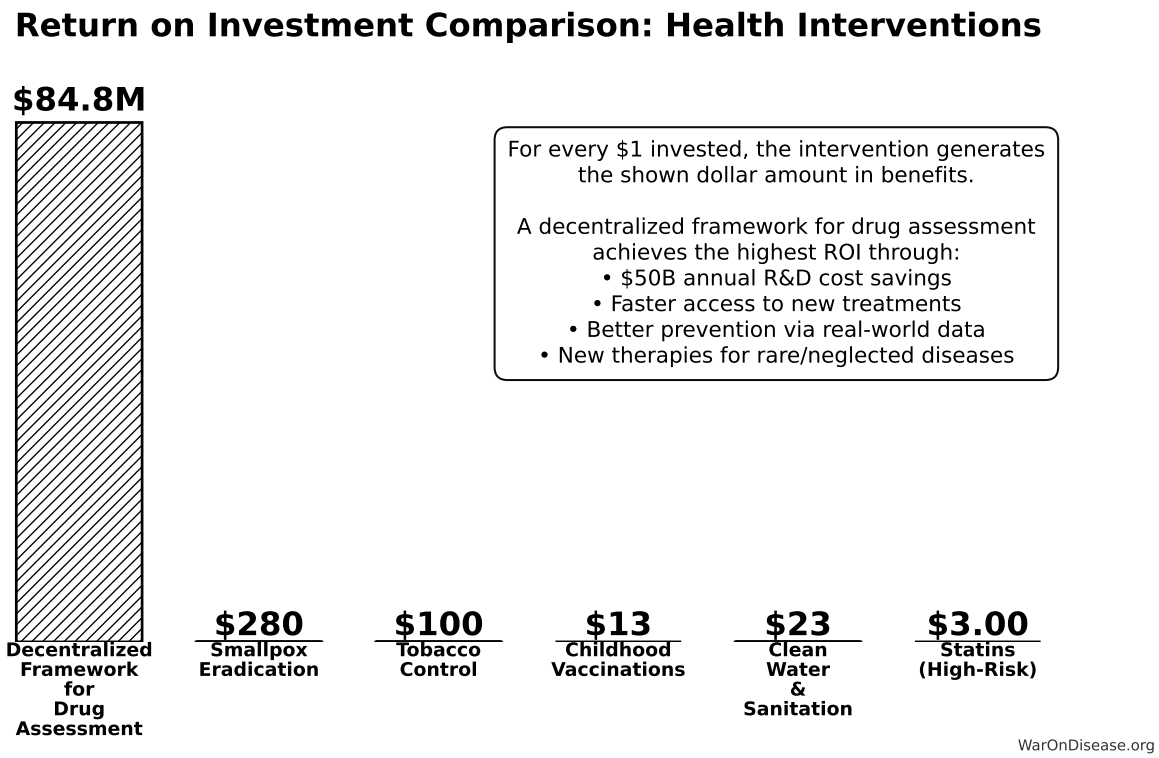


Figure 40: A comparison of return-on-investment (ROI) ratios between historical health milestones like smallpox eradication and childhood vaccines against the proposed R and D reform, alongside a visualization of the 44.1x reduction in clinical trial costs.

- **$58.6B (95% CI: $49.2B-$73.1B) in annual R&D cost savings**: 44.1x (95% CI: 39.4x-89.1x) reduction in clinical trial costs (you were spending 44.1x (95% CI: 39.4x-89.1x) times too much, which is like discovering you've been paying 44.1x (95% CI: 39.4x-89.1x) for toast when toast costs $1, except the toast is immortality)

- **416M deaths (95% CI: 225M deaths-630M deaths) lives saved** from eliminating the 8.2 years (95% CI: 4.85 years-11.5 years)-year efficacy lag (economist-speak for "humans who continue being alive and happy" - economists can't just say "living" like normal people, they have to "quality-adjust" it, as if there's such a thing as low-quality living, which I suppose there is if you've been to New Jersey) - see regulatory mortality analysis
  - **7.94B DALYs (95% CI: 4.43B DALYs-12.1B DALYs) averted** from the one-time timeline shift
  - This is the comprehensive post-safety efficacy lag elimination approach - **keeping rigorous Phase I safety testing** (2.3 years) but eliminating the 7.2-year Phase II/III efficacy delay by letting real-world evidence verify effectiveness
  - For context: 150k deaths/day people die daily from disease and aging. Slower testing and rollout means some fraction of those deaths are avoidable by earlier access to effective treatments (see regulatory mortality analysis)

> ⚠ Warning
>
> **The Math of Overcaution**: For every 1 person the FDA protects from a bad drug, it kills 3.07k:1 (95% CI: 2.88k:1-3.12k:1) people by making them wait for good drugs. It's like a lifeguard who checks if the life preserver is safe while 3.07k:1 (95% CI: 2.88k:1-3.12k:1) people drown.



This beats smallpox eradication (280:1) and childhood vaccinations (13:1), which were humanity's previous greatest hits in the "not dying" genre.

The Bed Net Benchmark

How Economists Measure "Not Dying"

Bed nets cost $89 (95% CI: $78-$100)/DALY. That's the gold standard. GiveWell's best intervention. The

thing against which all other "keeping humans alive" projects are measured.

This proposal? $0.0018 (95% CI: $0.0007-$0.0041)/DALY.

That's 50.3kx (95% CI: 23.7kx-111.7kx) more cost-effective than bed nets. The kind of number that makes Excel cry and economists question their life choices.

It's like discovering your umbrella also cures malaria, cancer, and aging, costs less than a penny, and pays you to use it.

The Timeline Shift:

6.65k diseases (95% CI: 5.70k diseases-8.24k diseases) diseases have zero treatments. At current pace (15 diseases/year (95% CI: 8 diseases/year-30 diseases/year) first treatments/year), testing everything takes 443 years (95% CI: 324 years-712 years). Everyone currently alive will be dead by then.

Redirect 1% of military spending → trial capacity jumps 12.3x (95% CI: 4.19x-61.3x) → search space explored in 36 years (95% CI: 11.6 years-77.2 years) instead of centuries.

Average treatment reaches patients 212 years (95% CI: 135 years-355 years) sooner. That timeline shift saves 10.7B deaths (95% CI: 7.39B deaths-16.2B deaths).

(See full methodology)

What This Actually Means:

- **You spend**: $1B (moving dollars from the "making corpses" column to the "preventing corpses" column)
- **You unlock**: $27.2B/year for pragmatic trials (money saved by not paying 10,000 people to document why 1 person is dying)
- **Lives saved**: 10.7B deaths (95% CI: 7.39B deaths-16.2B deaths) from timeline shift
- **ROI**: 637:1 (95% CI: 569:1-790:1) (conservative, R&D savings) to 84.8M:1 (95% CI: 46.6M:1-144M:1) (complete, timeline shift benefits)

Even a congressman could understand this, though we shouldn't assume.

Unlike charity, which requires infinite begging to finite donors, this system operates until the heat death of the universe or until humans evolve into beings of pure energy, whichever happens first (probably the heat death thing).

You're weaponizing capitalism's greatest strength (greed) against humanity's greatest weakness (dying). It's economic jiu-jitsu.

2nd Best Idea in the World

The best idea would be converting 100% of military spending to pragmatic clinical trials, achieving immortality by Thursday, and turning Earth into a paradise where disease is just a weird thing they had in museums.

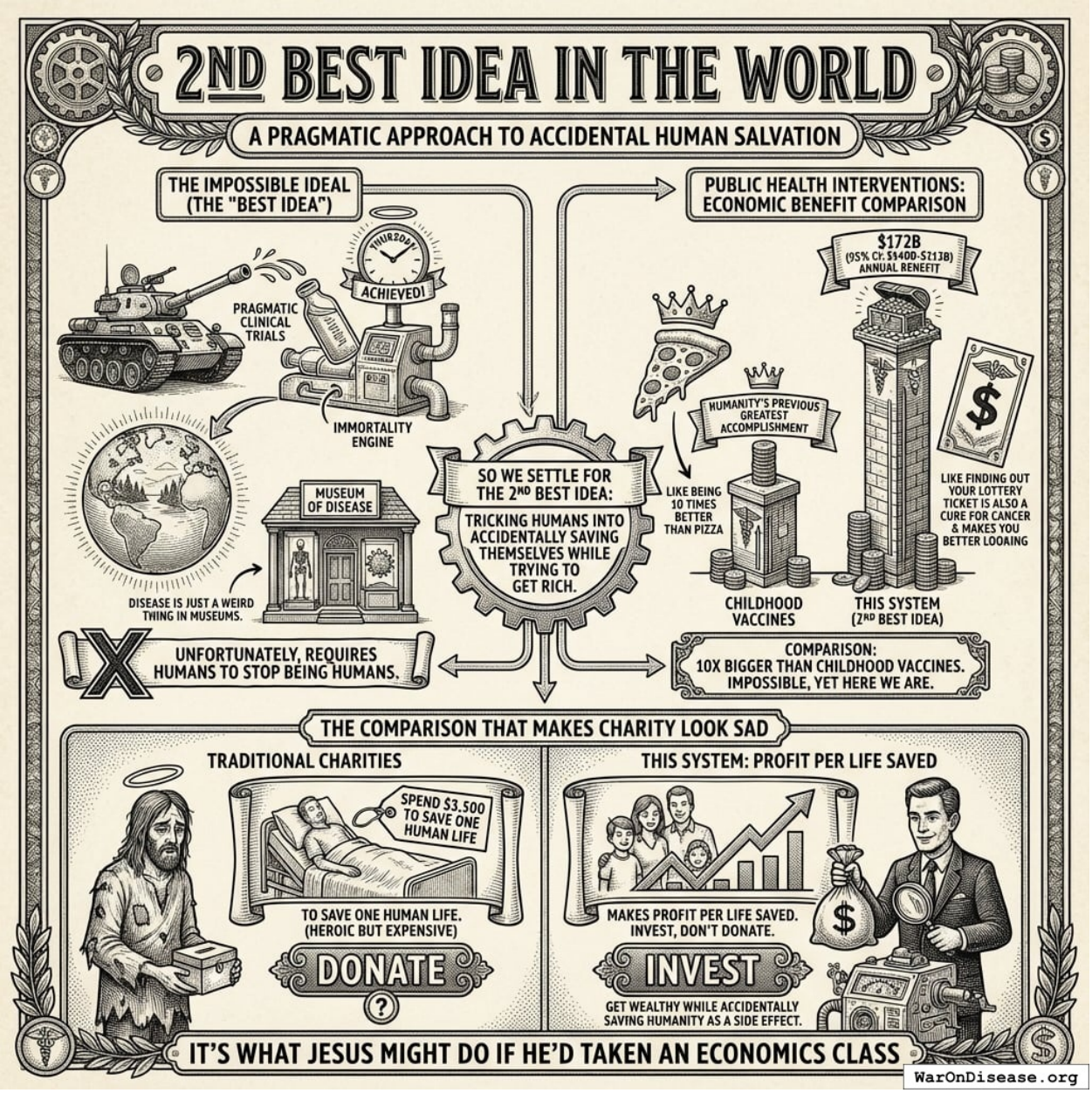
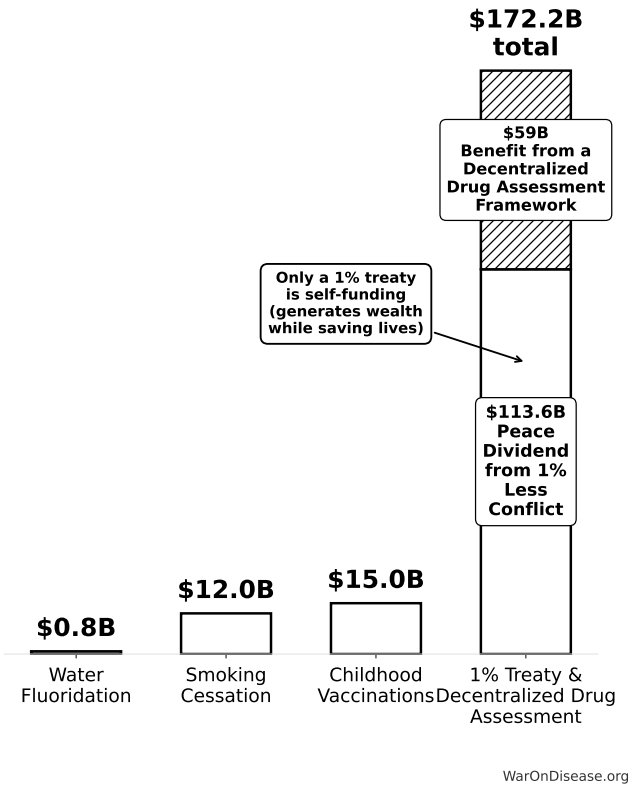


Figure 41: A comparison of the cost per life saved between traditional charities (3,500) and the proposed profit-generating intervention system.

Unfortunately, that requires humans to stop being humans. So you settle for the 2nd best idea: tricking humans into accidentally saving themselves while trying to get rich.

Gross Annual Economic Benefit of a 1% Treaty and Decentralized Drug Assessment Framework



At 50.3kx (95% CI: 23.7kx-111.7kx) more cost-effective than bed nets, this is like finding out your lottery ticket also cures cancer and pays you to use it.

It beats childhood vaccines, smallpox eradication, and every other "not dying" intervention humanity has ever attempted. That's like being 10 times better than pizza. Impossible, yet here we are.

The Comparison That Makes Charity Look Sad:

- Traditional charities: Spend $3,500 to save one human life (heroic but expensive)
- This system: MAKES profit per life saved

You don't donate to this. You invest in it. Then you could get wealthy while accidentally saving humanity as a side effect.

It's what Jesus might do if he'd taken an economics class.

Choose Your Own Adventure

You're standing in front of two doors. Behind one is the future you're currently speed-running toward. Behind the other is the future where humans accidentally discover that not dying is preferable to dying.

Door #1: The Current Plan

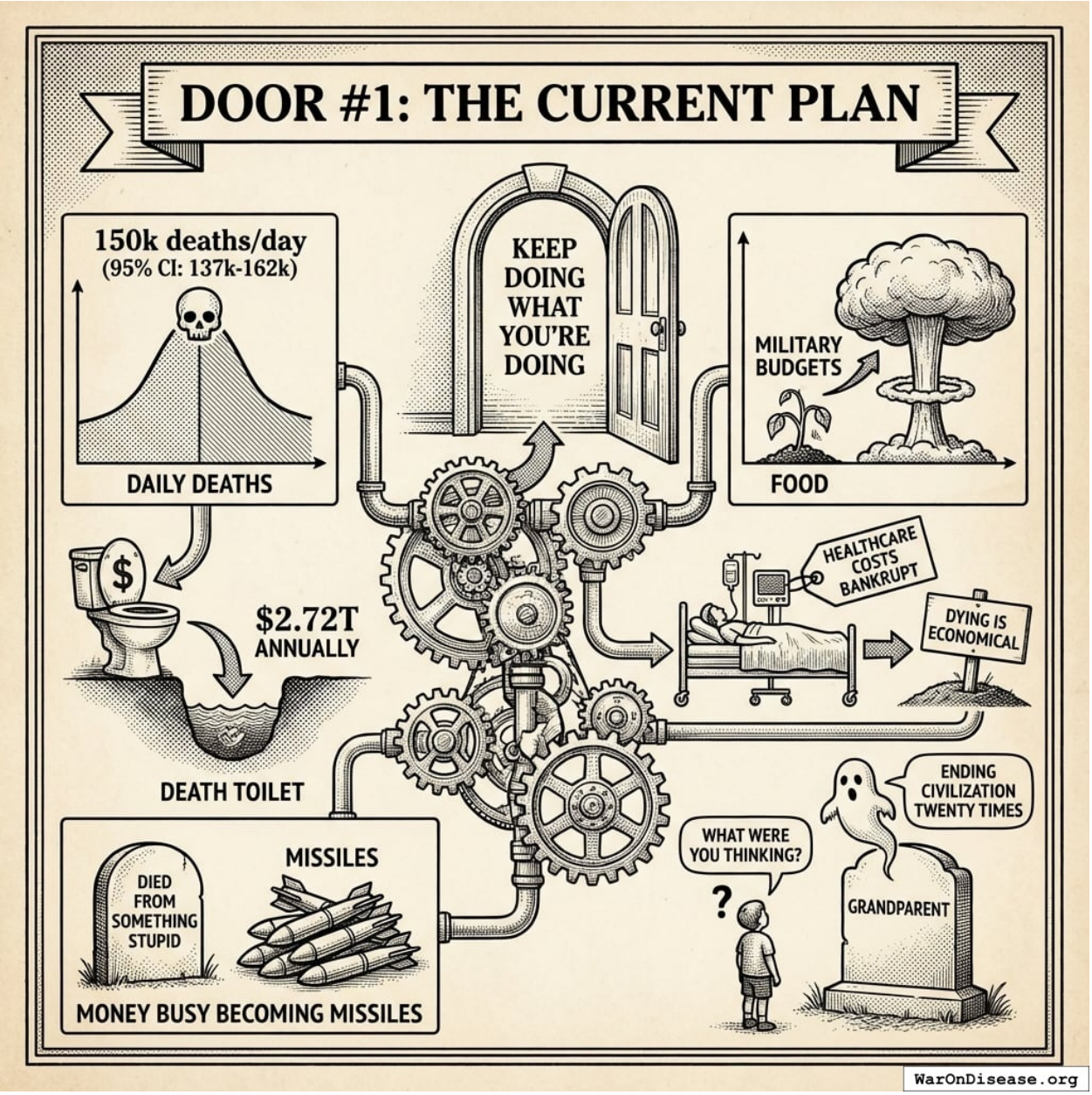


Figure 42: A comparative visualization showing the scale of 150,000 daily preventable deaths compared to other historical tragedies and the 2.72 trillion annual global economic loss.

Keep Doing What You're Doing

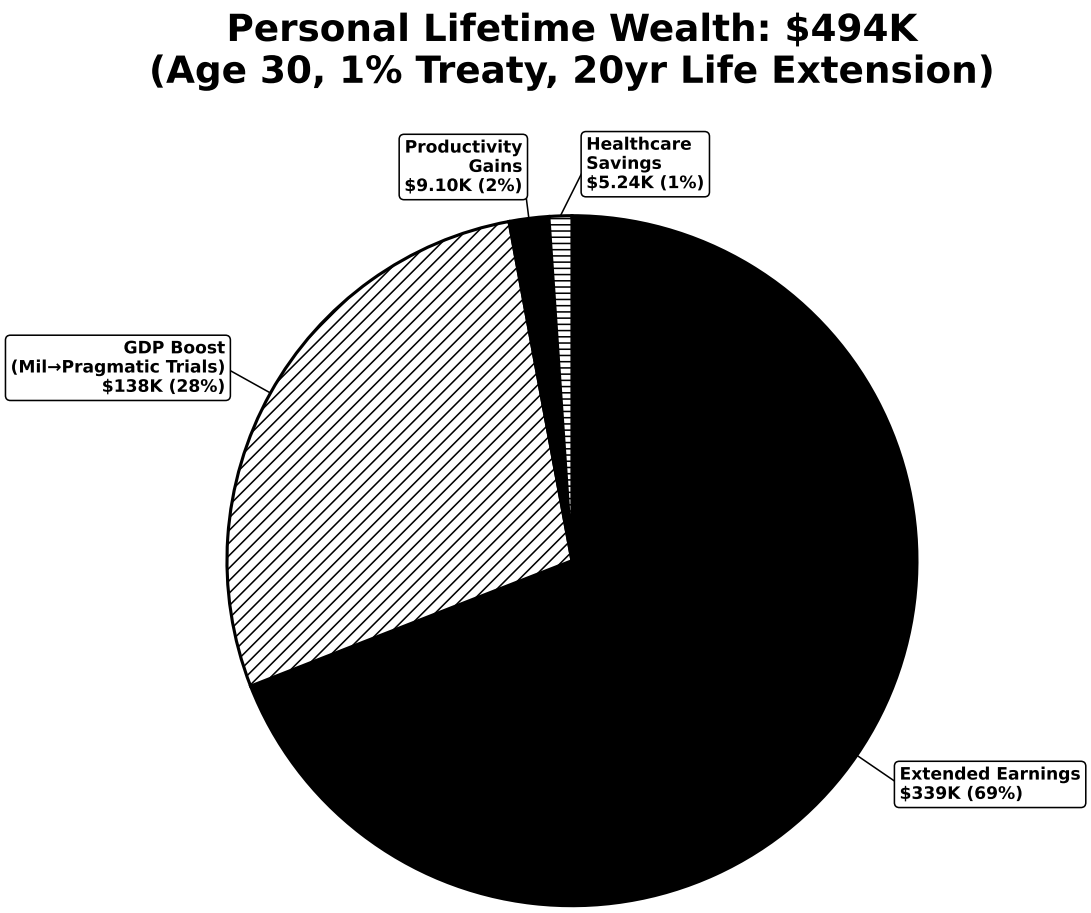
- 150k deaths/day people continue dying every single day from diseases humans could fix (that's fifty 9/11s per day, but nobody's counting because math is hard)
- $2.72T annually gets flushed down the death toilet (it doesn't even flush, it just sits there)
- You die from something stupid that humans could have cured, but didn't, because the money was busy becoming missiles (which also kill you, just faster)
- Military budgets grow until you're spending more on bombs than food, which solves the food problem by eliminating the eaters

- Healthcare costs bankrupt everyone who doesn't die quickly enough (dying is now the economical choice)
- Your grandchildren visit your grave to ask what you were thinking, and you have to explain from beyond death that at the time, ending civilization twenty times seemed more important than ending it zero times (graves are terrible at explaining economics)

Door #2: Try Not Dying

Novel Concept for Humanity

- 10.7B deaths (95% CI: 7.39B deaths-16.2B deaths) humans who continue existing because first effective treatments arrive 212 years (95% CI: 135 years-355 years) years sooner (that's more people than currently exist, which sounds fake but is just math)
- 50.3kx (95% CI: 23.7kx-111.7kx) more cost-effective than bed nets (the gold standard for "keeping humans alive")
- Some major diseases could plausibly become dramatically more treatable sooner than expected if we multiply trial capacity and slash time-to-answer
- Early investors make 272% returns (which beats everything except insider trading), and politicians discover that voting for cures is better for their careers than voting for bombs
- Healthcare becomes free through trial participation
- **You personally could get $3M (95% CI: $259K-$12.1M) in lifetime wealth and extra years of life** (yes, you specifically)
- Death becomes optional (terms and conditions apply)



With 20 years of life extension, extended earnings from living longer dominate the benefit calculation. WarOnDisease.org

The life extension achieved determines your total benefit. With a median 20-year life extension, you get substantial lifetime wealth. With optimistic aging reversal scenarios (50+ years), benefits multiply several times.

Price of Procrastination

Every second you spend thinking about whether to do this, the universe helpfully reminds you why you should:

- 410 humans got permanently deleted (one every 3.5 minutes, which is faster than you read)
- $327M evaporated into bureaucratic nonsense (that's enough to fund 327 lifetimes of productive research, but instead it became PowerPoint slides)
- Your telomeres got shorter (that's the thing that decides when you stop existing)
- Someone somewhere played nuclear weapon roulette with your life (the chamber has 13,000 bullets in it, which seems like poor odds)

- A politician said something stupider than yesterday (probably about vaccines causing 5G)



Figure 43: Join or Die snake illustration

The Soviet Union went from nothing to conquering half the world to completely collapsing in a SINGLE HUMAN LIFETIME.

And Communism was objectively a TERRIBLE IDEA that required murdering millions of people.

This is arguably the second-best idea in human history and requires radically less murder.

You're literally just trying to get people to click "yes I would prefer not to die of horrible diseases" on a website.

If humans can coordinate to invent "lines" and not eating each other, this should be manageable.

The Final Math

Human Stupidity by the Numbers

Humanity's Annual Death Budget: **$118.8 trillion** (that's $118,800,000,000,000 if one enjoys seeing zeros)

This is spent on:

- Making humans stop (war)
- Watching humans stop (healthcare)
- Documenting how humans stopped (bureaucracy)
- Arguing about who made them stop (lawyers)

Your revolutionary proposal: Steal **1%** of the murder money for the not-murder money.

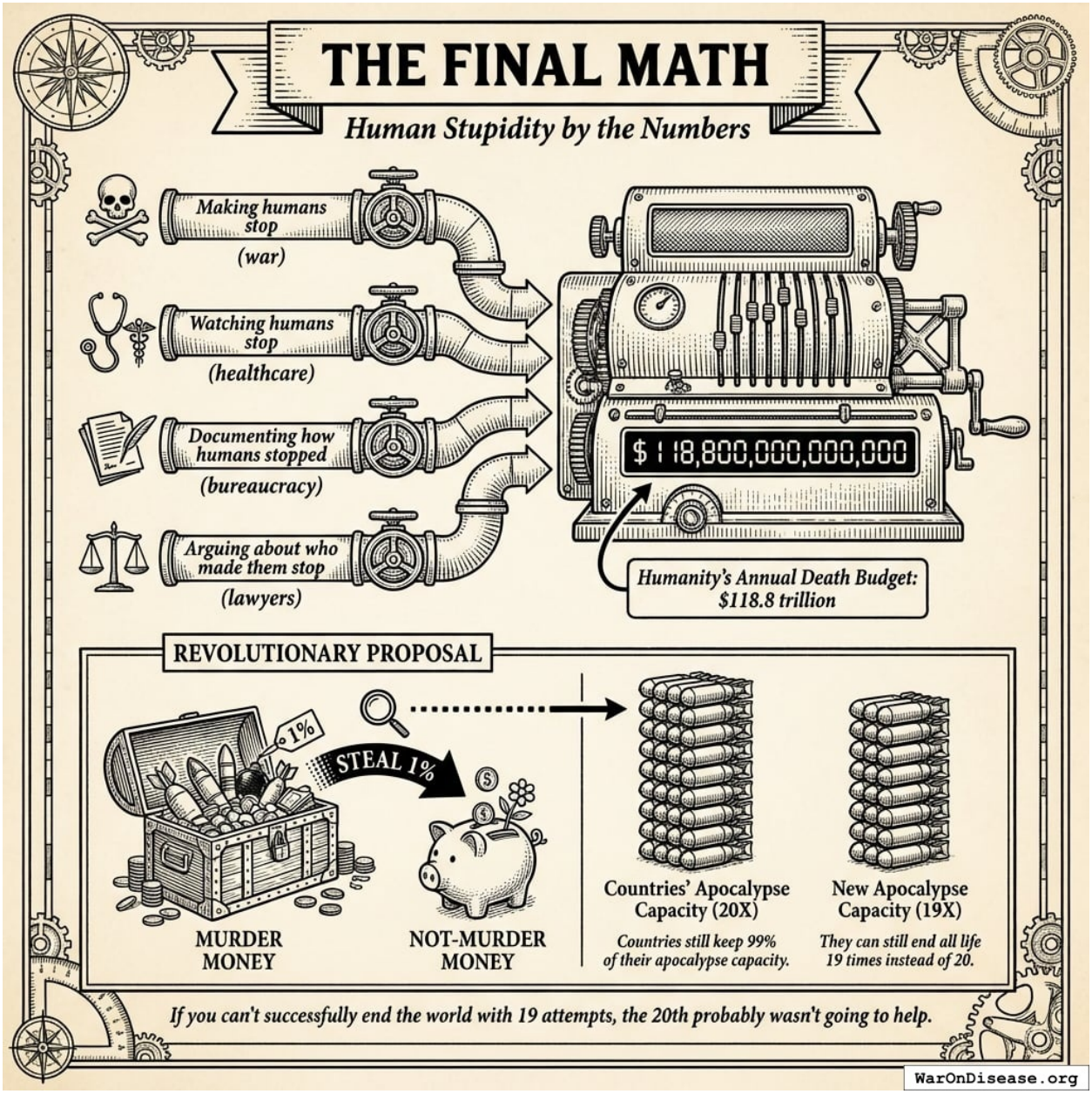


Figure 44: A visualization of the 118.8 trillion global budget, highlighting the massive 99 percent retained for destructive capacity compared to the proposed 1 percent reallocation.

Countries still keep 99% of their apocalypse capacity. They can still end all life 19 times instead of 20. If you can't successfully end the world with 19 attempts, the 20th probably wasn't going to help.

Your Binary Choice Matrix

Option A: Continue toward expensive, preventable, documented death Option B: Redirect 1% and accidentally achieve immortality while getting rich

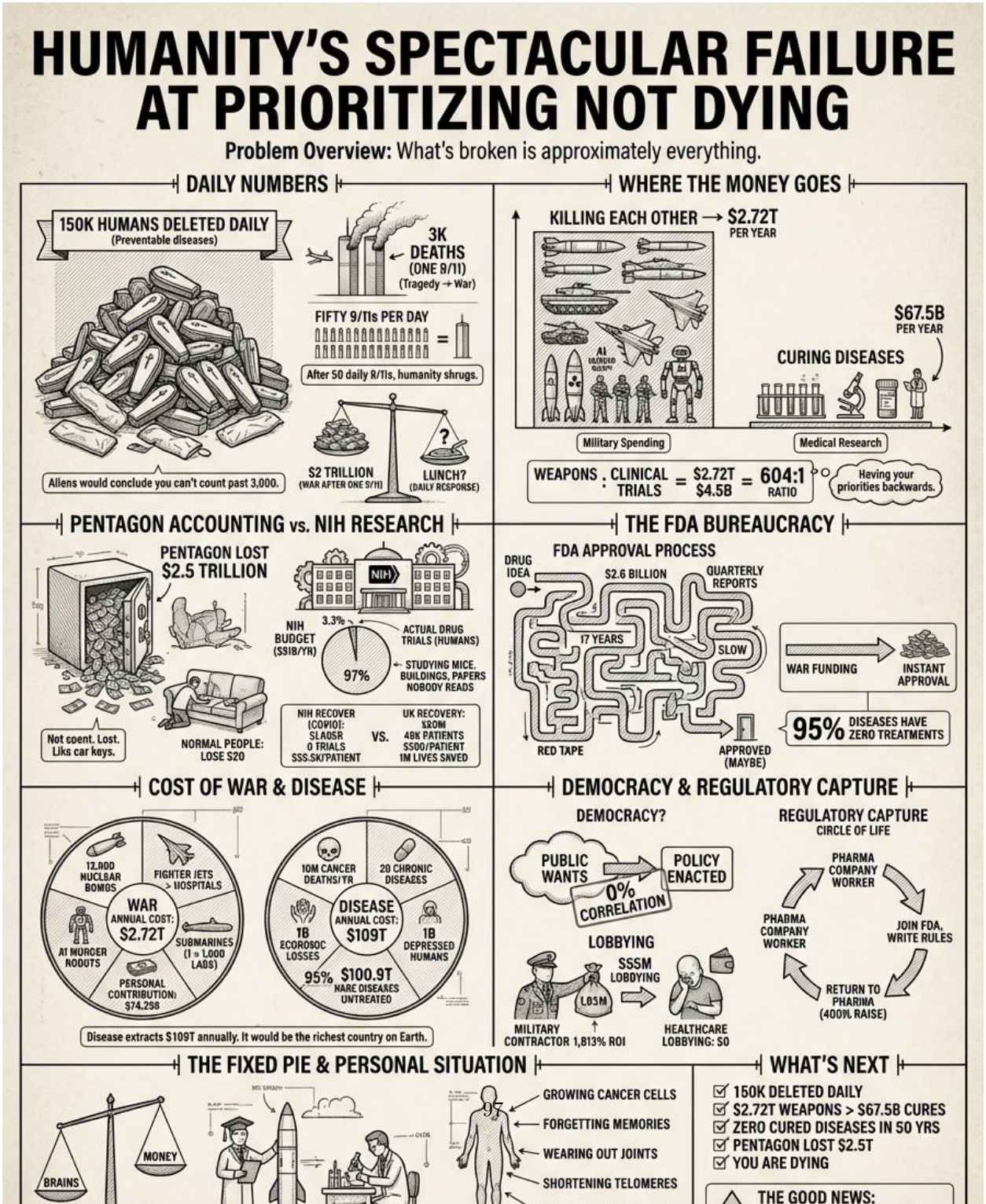
The universe is literally offering you infinite money and eternal life, and you're thinking about it.

This is why aliens don't visit.



The Problem

Problem Overview



Before you can fix something, you need to understand what's broken. In this case, what's broken is approximately everything.

They say knowledge is power. But in this case, knowledge is mostly just depressing. Still, you need it.

Daily Numbers

Every day, 150k deaths/day humans die from disease and aging. Many of those deaths are likely eventually avoidable with sufficient investment, but we are moving far too slowly.

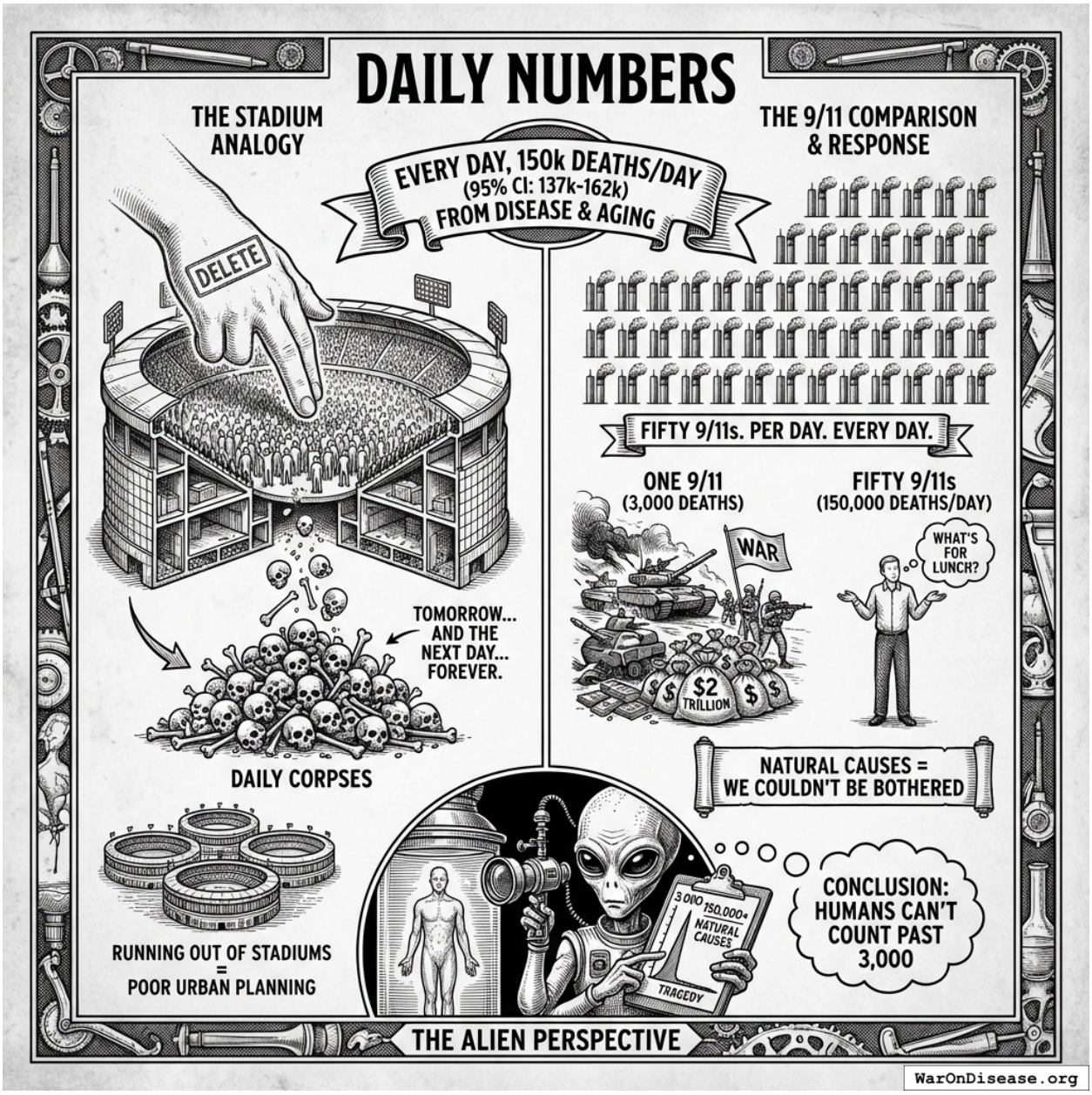


Figure 46: A scale comparison visualizing 150,000 daily deaths from aging and disease represented as fifty individual blocks of 3,000 deaths each to illustrate the '50 9/11s' ratio.

I tried to imagine what 150k deaths/day people looks like. It's like if you took everyone in a decent-sized stadium and deleted them. Then did it again tomorrow. And the day after that. Forever. You'd run out of stadiums before you'd run out of corpses, which seems like poor urban planning.

That's fifty 9/11s. Per day. Every day. Including weekends and holidays.

After the first 9/11, America invaded two countries and spent $2 trillion. After the fifty daily 9/11s, humanity shrugs and wonders what's for lunch.

When one thing kills 3,000 people, it's a tragedy and you start wars. When diseases kill 50 times that every day, it's called "natural causes," which is Latin for "we couldn't be bothered".

If aliens were studying you, they'd probably conclude you can't count past 3,000.

Where the Money Goes

Here's how humanity allocates its resources:

Killing each other: $2.72T per year **Curing diseases:** $67.5B (95% CI: $54B-$81B) per year

But the real bottleneck isn't research funding. It's testing which treatments actually work. Clinical trials determine whether medicines save lives or sit on shelves. On that front, governments worldwide spend $4.50B (95% CI: $3B-$6B) annually on clinical trials versus $2.72T on weapons. That's a 604:1 (95% CI: 453:1-894:1) ratio, which in technical terms is called "having your priorities backwards."

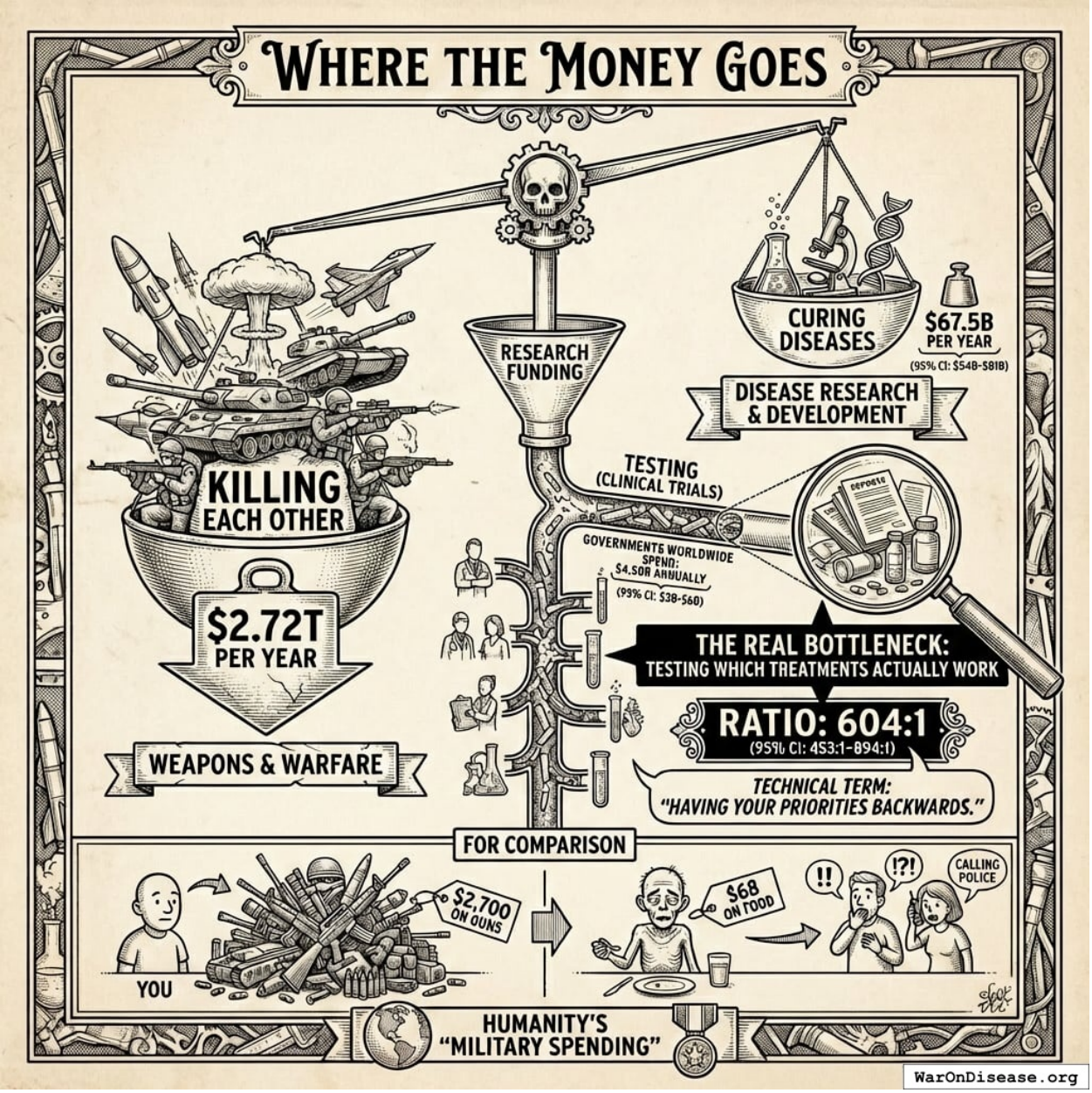


Figure 47: A comparison of global annual spending showing the massive disparity between military expenditures (2.72 trillion) and funding for disease research (67.5 billion) and clinical trials (4.5 billion).

For comparison, imagine if you spent $2,700 on guns and $68 on food. Your neighbors would stage an intervention (or call the police, or possibly just move). But when humanity does it, you call it "military spending" and give everyone medals.

On the Pentagon's Accounting

The Pentagon has lost $2.5 trillion. Not spent. Lost. Like car keys, except the car keys could cure cancer several hundred times.

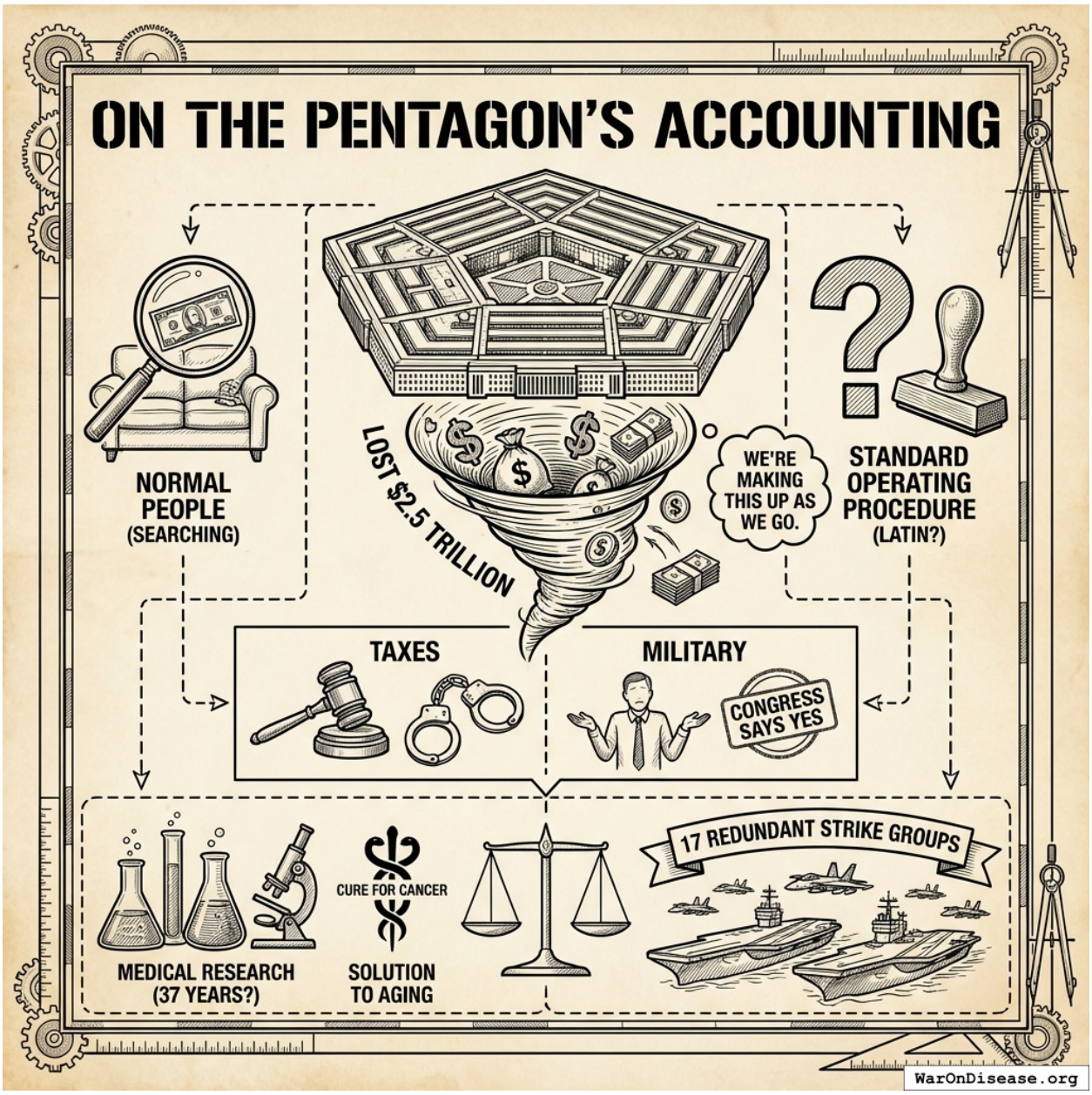


Figure 48: A comparison showing the scale of the Pentagon's 2.5 trillion loss against the cost of 37 years of medical research and 17 aircraft carrier strike groups.

When normal people lose $20, they search the couch cushions. When the Pentagon loses $2,500,000,000,000, they ask for more money and Congress says yes.

If you tried this with your taxes, they'd arrest you. When the military does it, it's called "standard operating procedure," which is also Latin, probably for "we're making this up as we go."

They say a trillion is just a number. But it's the number of dollars you lost that could have funded medical research for thirty-seven years. Give or take a few hospitals, several cancer cures, and maybe a solution to aging (but who needs that when you have seventeen redundant aircraft carrier strike groups).

On Medical Research

Since 1970, the National Institutes of Health has spent over $1 trillion studying diseases.

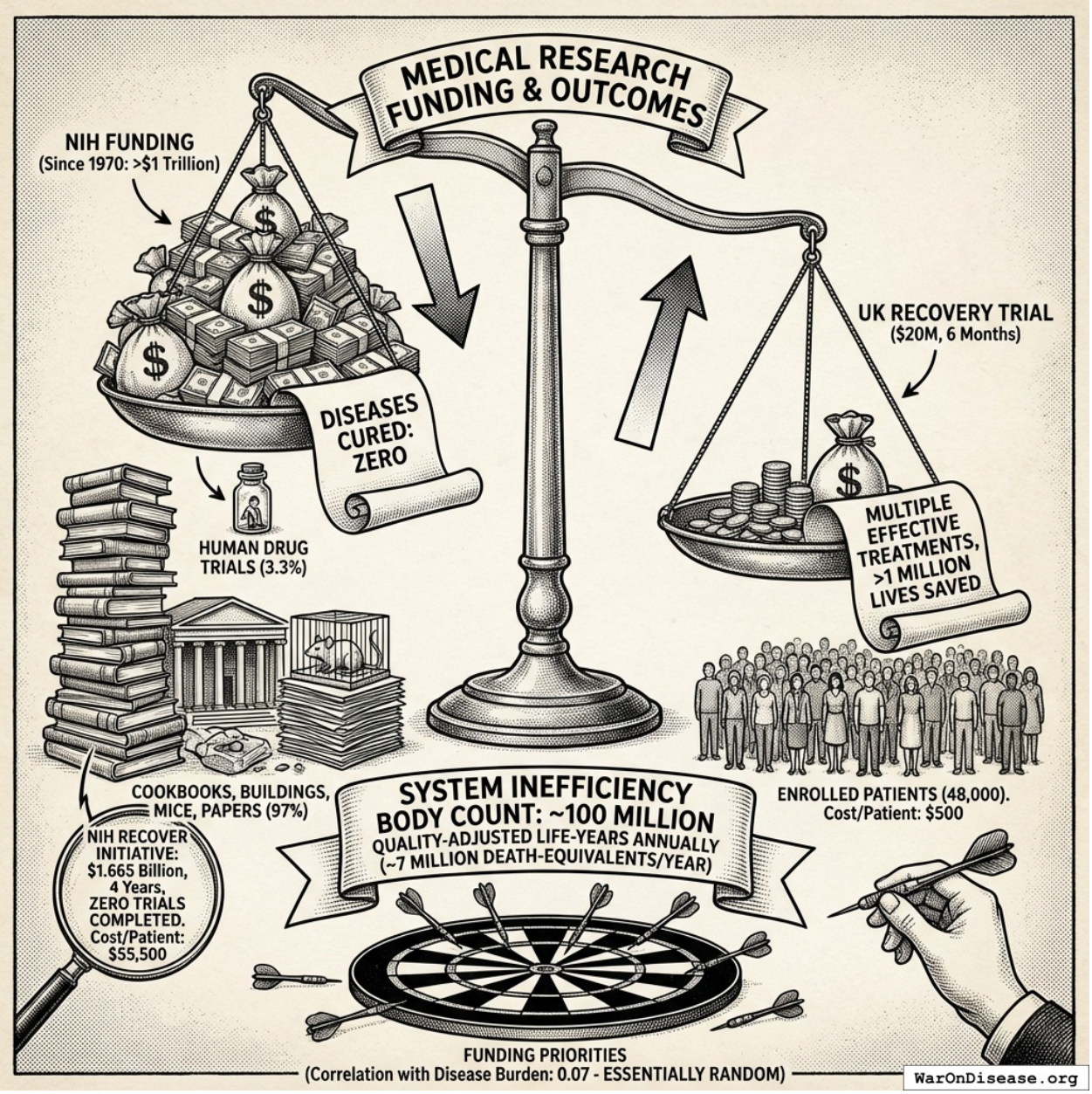


Figure 49: A comparison of US NIH RECOVER and UK RECOVERY trials highlighting the disparity in cost per patient (55,500 vs. 500) and patient enrollment counts, alongside a breakdown of NIH budget allocation.

Diseases cured: Zero.

Well, technically that's not fair. They cured… let me check my notes… no, it's zero.

Here's where it gets interesting. The NIH has a $47B (95% CI: $45B-$50B) annual budget. Of that, only 3.3% (95% CI: 2%-5%) goes to actual drug trials in humans. The other 97% goes to studying mice, building buildings, training researchers, and publishing papers nobody reads.

It's like if you spent 97% of your grocery budget on cookbooks and 3% on food, then wondered why you're starving.

But it gets worse. The NIH RECOVER Initiative spent $1.665 billion over four years testing COVID treatments. Trials completed: zero. Cost per patient: $55,500.

Meanwhile, the UK's RECOVERY trial spent $20M (95% CI: $15M-$25M) over six months, enrolled 48,000 patients, found multiple effective treatments, and saved over 1 million lives. Cost per patient: $500 (95% CI: $400-$2.50K).

The NIH spent 133 times more per patient to achieve infinitely less (dividing by zero is still infinity, even in government accounting).

This inefficiency has a body count. The misallocation costs approximately 100 million quality-adjusted life-years annually. That's 7 million death-equivalents per year from choosing the wrong research instead of the right research.

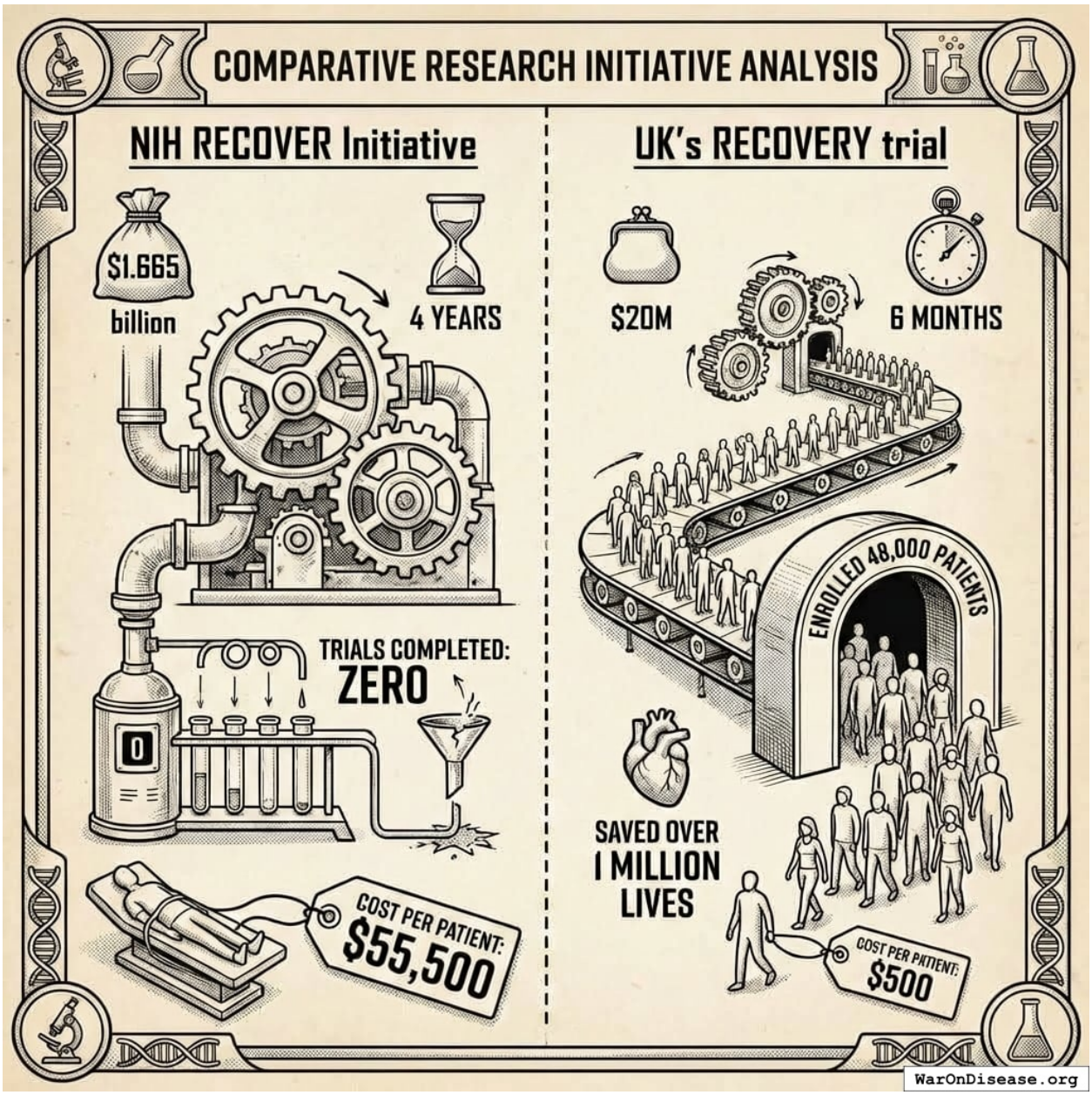


Figure 50: Efficiency comparison between the US NIH RECOVER initiative and the UK RECOVERY trial.

The system is operating at 2% of its potential capacity to save lives.

Also, NIH funding priorities have a 0.07 correlation with actual disease burden. That's essentially random. You could allocate the budget by throwing darts at a disease list and get better results (darts don't have institutional overhead or grant-writing requirements).

On the FDA

The FDA is America's way of making sure drugs are safe. They do this by making the approval process so expensive and slow that most drugs never get approved at all.

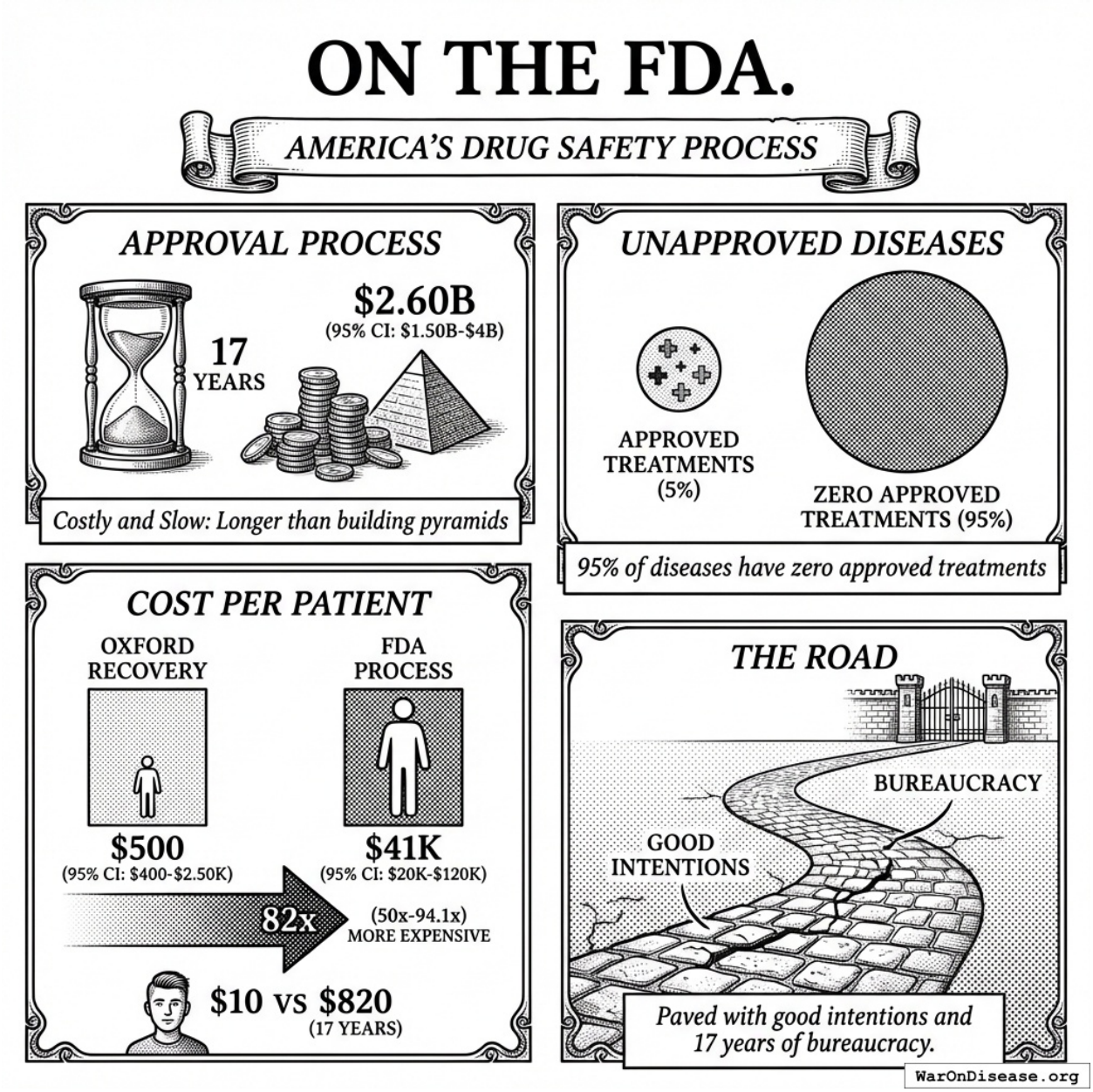


Figure 51: A comparison showing the massive disparity between the Oxford RECOVERY trial cost per patient (500) and the standard FDA process cost per patient (41,000), illustrating an 82x cost difference.

It takes 14 years (95% CI: 12 years-17 years) and $2.60B (95% CI: $1.50B-$4B) to get a drug from discovery to patient. 14 years (95% CI: 12 years-17 years). That's longer than it took to build the pyramids, and those involved moving rocks the size of houses without machinery (also the pharaohs didn't have to file quarterly progress reports in triplicate).

During the Oxford RECOVERY trial, they tested treatments on 40,000 patients for $500 (95% CI: $400-$2.50K) per person. The FDA's process costs $41K (95% CI: $20K-$120K) per patient. That's 82x (95% CI: 50x-94.1x) times more expensive for the same result, except slower. It's like if you could get a haircut for $10 or $820, but the $820 haircut takes 14 years (95% CI: 12 years-17 years) from discovery to patient and you might be bald by then anyway.

Ninety-five percent of diseases have zero approved treatments. This is because the FDA is very good at preventing bad drugs from reaching people, and also pretty good at preventing good drugs from reaching people, and absolutely excellent at preventing any drugs from reaching people.

They say the road to hell is paved with good intentions. The FDA's road is paved with good intentions and also 14 years (95% CI: 12 years-17 years) from discovery to patient.

On What War Costs

Humanity spends $2.72T every year on war. That works out to $340 (95% CI: $333-$347) per human on Earth for death tools.



Figure 52: An infographic illustrating global military spending trade-offs, showing the scale of 2.72 trillion and the ratio of one submarine costing as much as 1,000 cancer research labs.

This budget includes:

- Nuclear bombs (13,000 of them, because 12,999 wouldn't destroy Earth thoroughly enough)
- Bullets (many)
- AI murder robots (the future is here and it's disappointing)
- Fighter jets that cost more than hospitals
- Submarines (one submarine = 1,000 cancer research labs)
- Probably some kind of earthquake machine

Your personal lifetime contribution to the murder budget is $74,259. You could have bought a really nice casket instead.

The interesting thing about having 13,000 nuclear warheads is that after the first few hundred, you're just showing off. It's like having 13,000 fire extinguishers in your kitchen. After a while, you're not worried about fires, you're just collecting them.

On What Disease Costs

Disease extracts $109T (95% CI: $79.8T-$144T) from humanity annually. That's trillion with a T, which stands for "that's an unconscionably large number."

This includes:

- $8.20T (95% CI: $6.50T-$10T) on healthcare (treating symptoms because cures are bad for business)
- $109T (95% CI: $79.8T-$144T) in economic losses (dead people are notoriously unproductive)
- 10 million cancer deaths per year (cancer: 10 million, humanity: 0)
- 2 billion people with chronic diseases (right now, as you read this)
- 1 billion depressed humans (costing $5T (95% CI: $3.50T-$7T) in lost "wanting to exist")
- 95% of rare diseases with zero treatments (too rare to profit from, sorry)



Out of 2.40B people (95% CI: 2.00B people-2.80B people) people suffering from chronic disease right now, only 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) get to participate in clinical trials annually. That's 0.0792% (95% CI: 0.0761%-0.0819%). The other 99.8% get to suffer and wait (and fill

out insurance paperwork, and argue with their insurance company about whether dying is covered under their plan).

Half of humanity would volunteer if asked. You're turning away 99.6% of willing participants. It's like running a restaurant but only serving 0.4% of the people who want to eat there, then wondering why everyone is so hungry.

The last disease we cured was Hepatitis C in 2014. The next cure is scheduled for 2064. Please wait patiently and try not to die in the meantime.

If disease were a country, it would be the richest country on Earth by a factor of ten. Unfortunately, disease doesn't have a flag or an army, so nobody invades it.

On Democracy

Democracy is when everyone votes and the government does what everyone wants. At least that's what the brochure says.

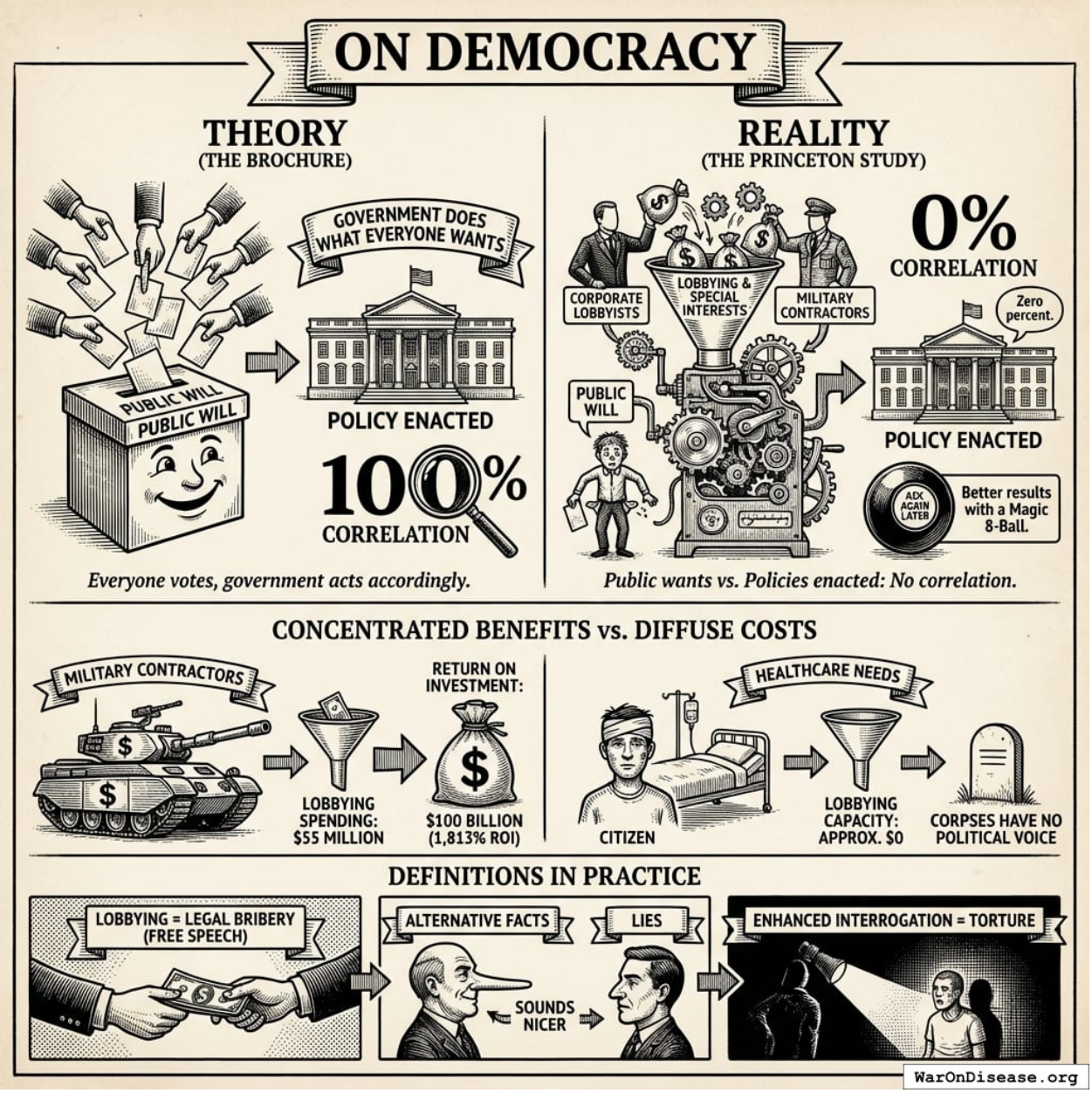


Figure 53: A visual comparison showing the high return on investment for concentrated lobbying groups versus the lack of policy influence for the general public.

In reality, a Princeton study found 0% correlation between what the public wants and what policies get enacted. Zero percent. You'd get better results with a magic 8-ball.

This is because of something called "concentrated benefits versus diffuse costs." When military contractors want $100 billion, they spend $55 million lobbying for it. That's a 1,813% return on investment.

When you want healthcare, you have approximately zero dollars to lobby with because you spent it all on healthcare (or you're dead, which significantly reduces your lobbying capacity - corpses have no political voice, despite making up a the largest constituency).

Lobbying is basically legal bribery, except we call it "free speech" so it sounds nicer. It's like how "alternative facts" sounds better than "lies," or how "enhanced interrogation" sounds better than "torture."

On Regulatory Capture

Regulatory capture is when the people who are supposed to regulate an industry used to work for that industry and will work for that industry again after they're done "regulating" it.

The process works like this:

1. Work at pharmaceutical company, learn what they want
2. Join FDA, write rules pharmaceutical company likes

3. Return to pharmaceutical company with 400% raise
4. Congratulations, you've completed the circle of life

The Pentagon has the same system, except with more explosions.

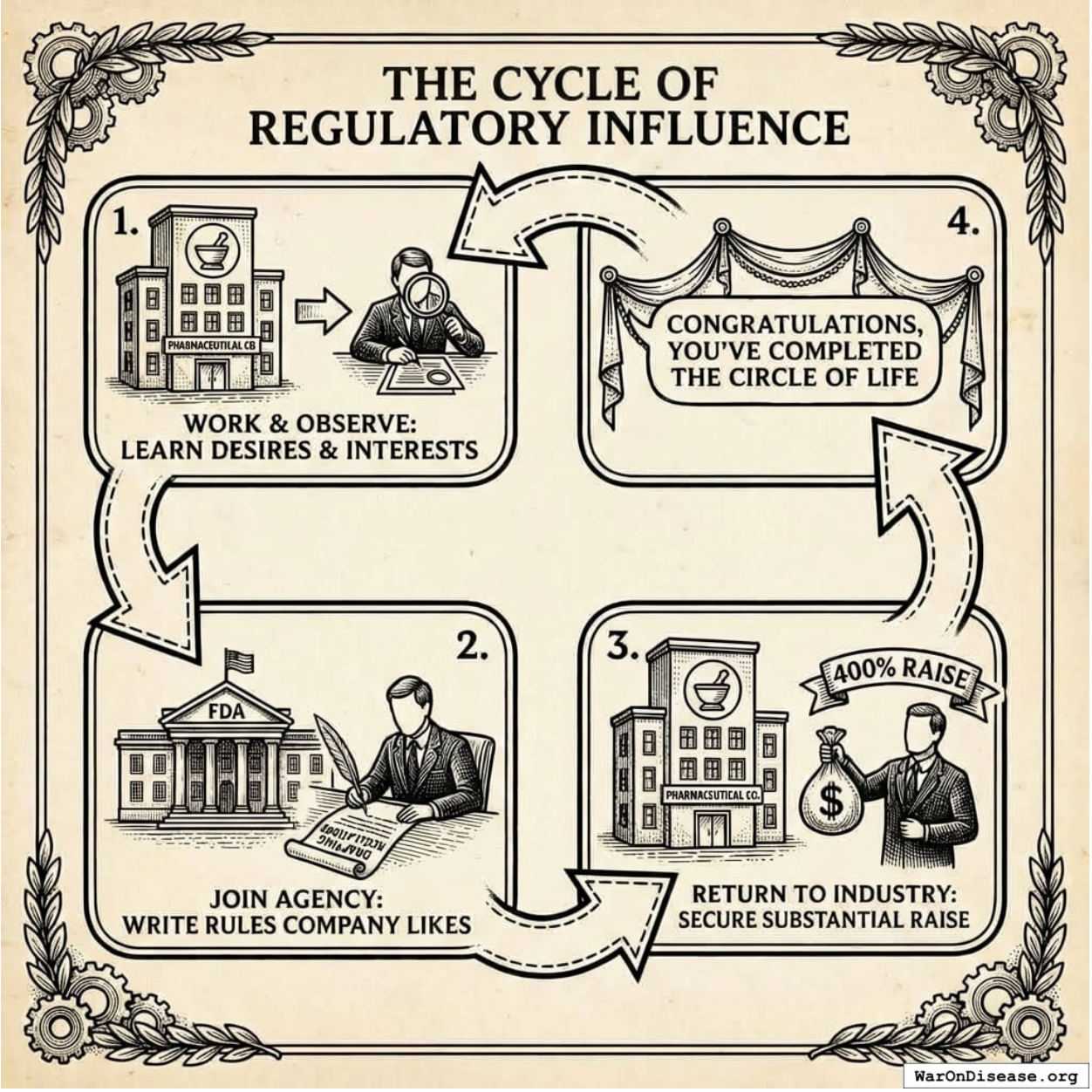


Figure 54: The cyclical career path illustrating regulatory capture between industry and government.

This is why the FDA's rules mysteriously benefit large pharmaceutical companies who can afford $2.60B (95% CI: $1.50B-$4B) approval processes, and why Pentagon procurement mysteriously benefits military contractors who can afford $1,800 hammers.

On the Fixed Pie

Here's something they don't teach in economics class: Money isn't real, but resources are.

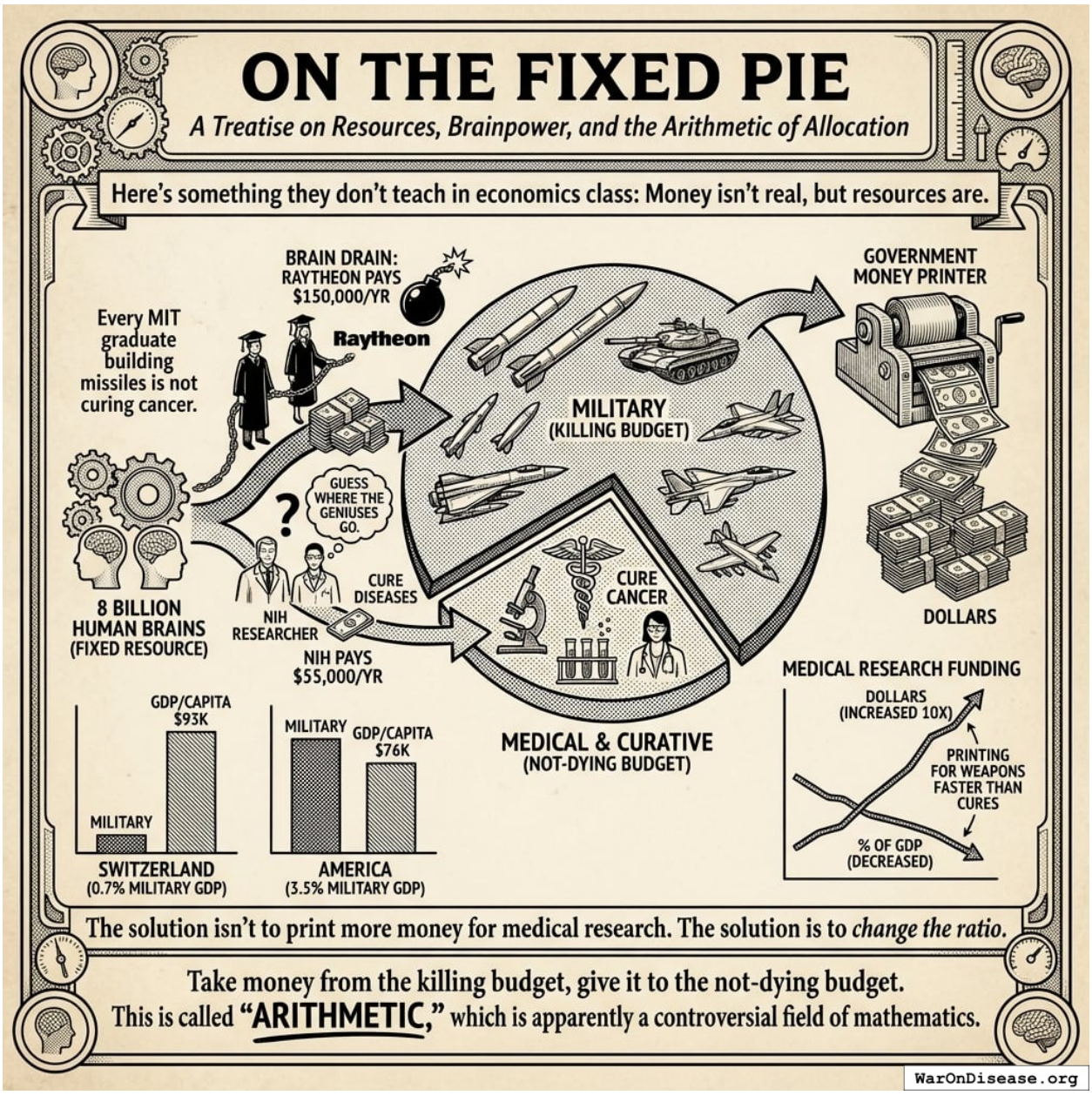


Figure 55: A visual comparison of resource allocation showing the salary gap between military and medical research roles alongside a GDP comparison between Switzerland and the United States.

Earth has 8 billion human brains. You can't print more brains. When the government prints money for military contractors, those contractors buy the smartest people. Every MIT graduate building missiles is not curing cancer.

Medical research funding has increased 10X in dollars but decreased as a percentage of GDP. This is because you're printing money for weapons faster than you're printing money for cures.

The brain drain is real: Raytheon pays $150,000 to design bombs, the NIH pays $55,000 to cure diseases. Guess where the geniuses go.

Switzerland spends 0.7% of GDP on military and has $93K GDP per capita. America spends 3.5% on military and has $76,000 GDP per capita.

The solution isn't to print more money for medical research. The solution is to change the ratio. Take money from the killing budget, give it to the not-dying budget. This is called "arithmetic," which is apparently a controversial field of mathematics.

On Your Personal Situation

While you've been reading this, approximately 8 people have died from disease and aging. Many of those deaths are likely eventually avoidable. By the end of this chapter, it'll be 15.

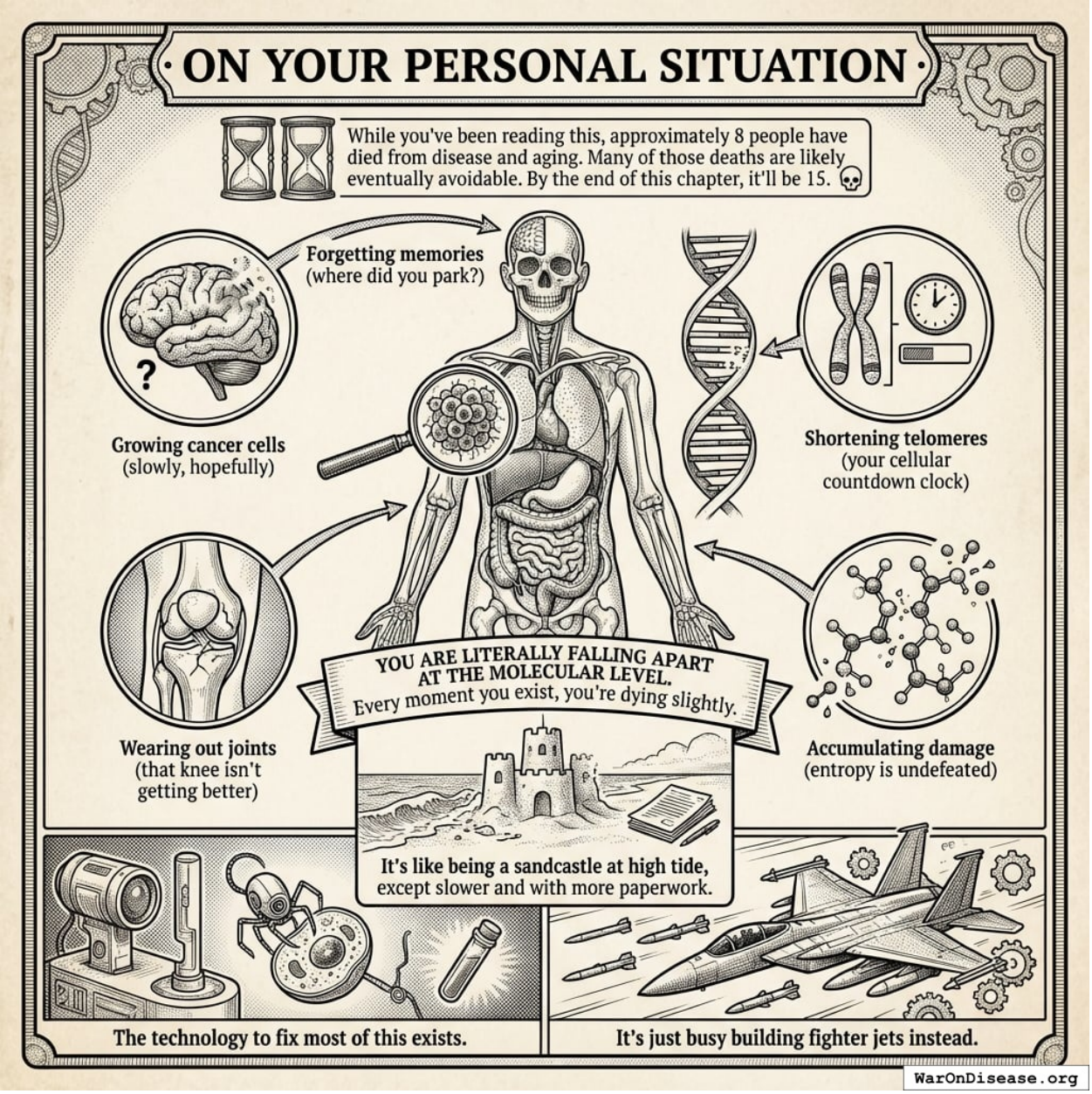


Figure 56: A conceptual infographic illustrating the various forms of biological decay, from telomere shortening to joint wear, that contribute to the overall process of human entropy.

Your body is currently:

- Growing cancer cells (slowly, hopefully)
- Forgetting memories (where did you park?)
- Wearing out joints (that knee isn't getting better)
- Shortening telomeres (your cellular countdown clock)
- Accumulating damage (entropy is undefeated)

You are literally falling apart at the molecular level. Every moment you exist, you're dying slightly. It's like being a sandcastle at high tide, except slower and with more paperwork.

The technology to fix most of this exists. It's just busy building fighter jets instead.

What This Means

To summarize:

- 150k deaths/day humans die daily from disease and aging, many of which are eventually avoidable
- $2.72T spent annually on weapons
- $67.5B (95% CI: $54B-$81B) spent annually on curing all diseases combined
- 604:1 (95% CI: 453:1-894:1) weapons-to-clinical-trials spending ratio (the bottleneck isn't research. It's testing which medicines work.)
- Zero diseases cured in 50 years
- $2.5 trillion lost by Pentagon (whoops)
- 0% correlation between public preferences and policy
- You are dying while reading this

If this seems bad, that's because you're paying attention.

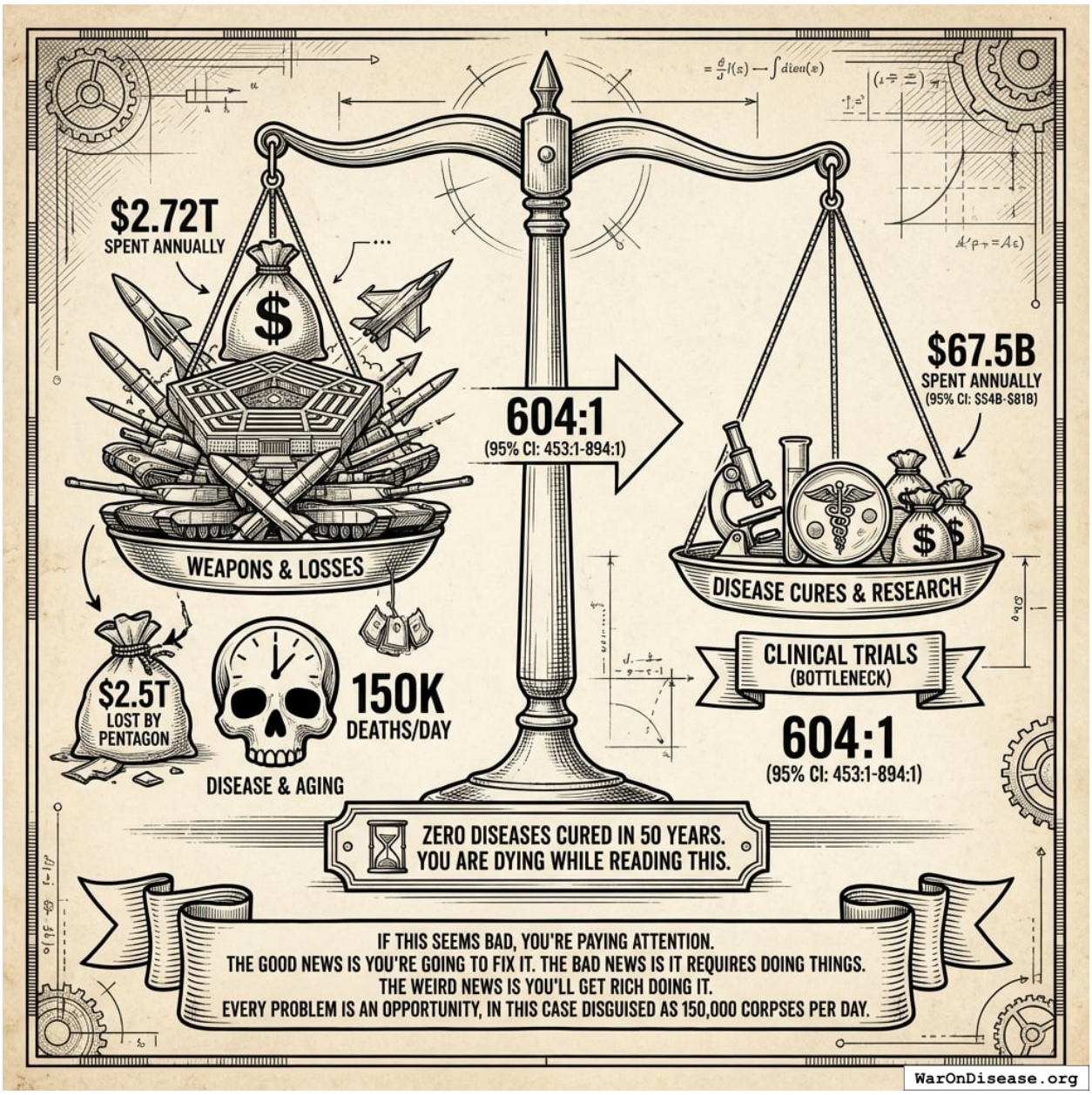


Figure 57: A visual comparison of global resource allocation showing the 2.72 trillion spent on weapons versus the 67.5 billion spent on curing diseases, highlighting the 604:1 spending ratio.

The good news is you're going to fix it.

The bad news is it requires doing things.

The weird news is you'll get rich doing it.

They say every problem is an opportunity in disguise. In this case, the opportunity is disguised as 150,000 corpses per day, which is admittedly not the most encouraging disguise, but you work with what you have.

What's Next

Now that you understand the problem, which is to say, now that you're appropriately horrified, here's how to fix it.

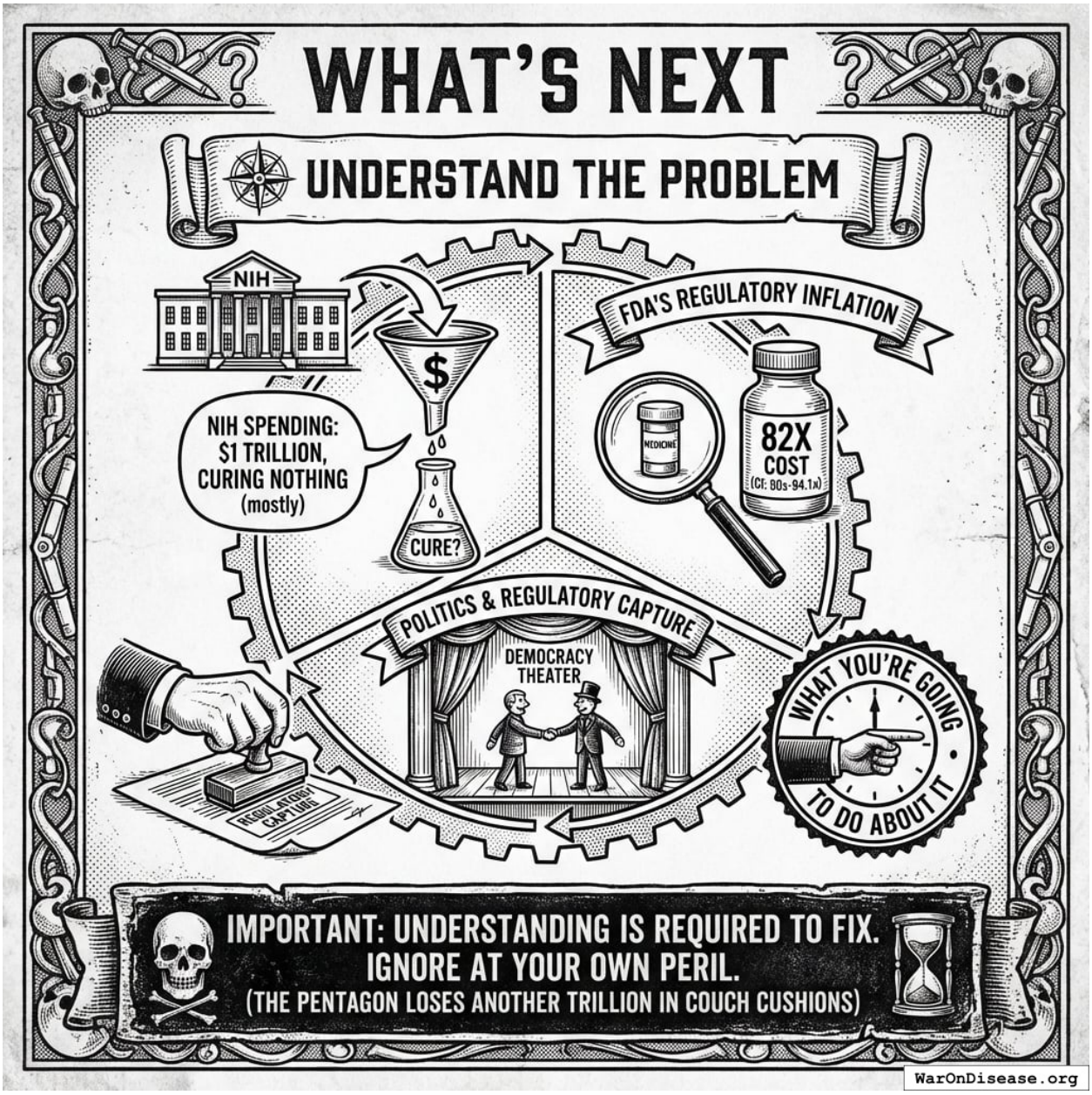


Figure 58: A conceptual map linking institutional failures (such as NIH spending, FDA cost inflation, and regulatory capture) to their ultimate impact on individual health and societal waste.

The following chapters will explain:

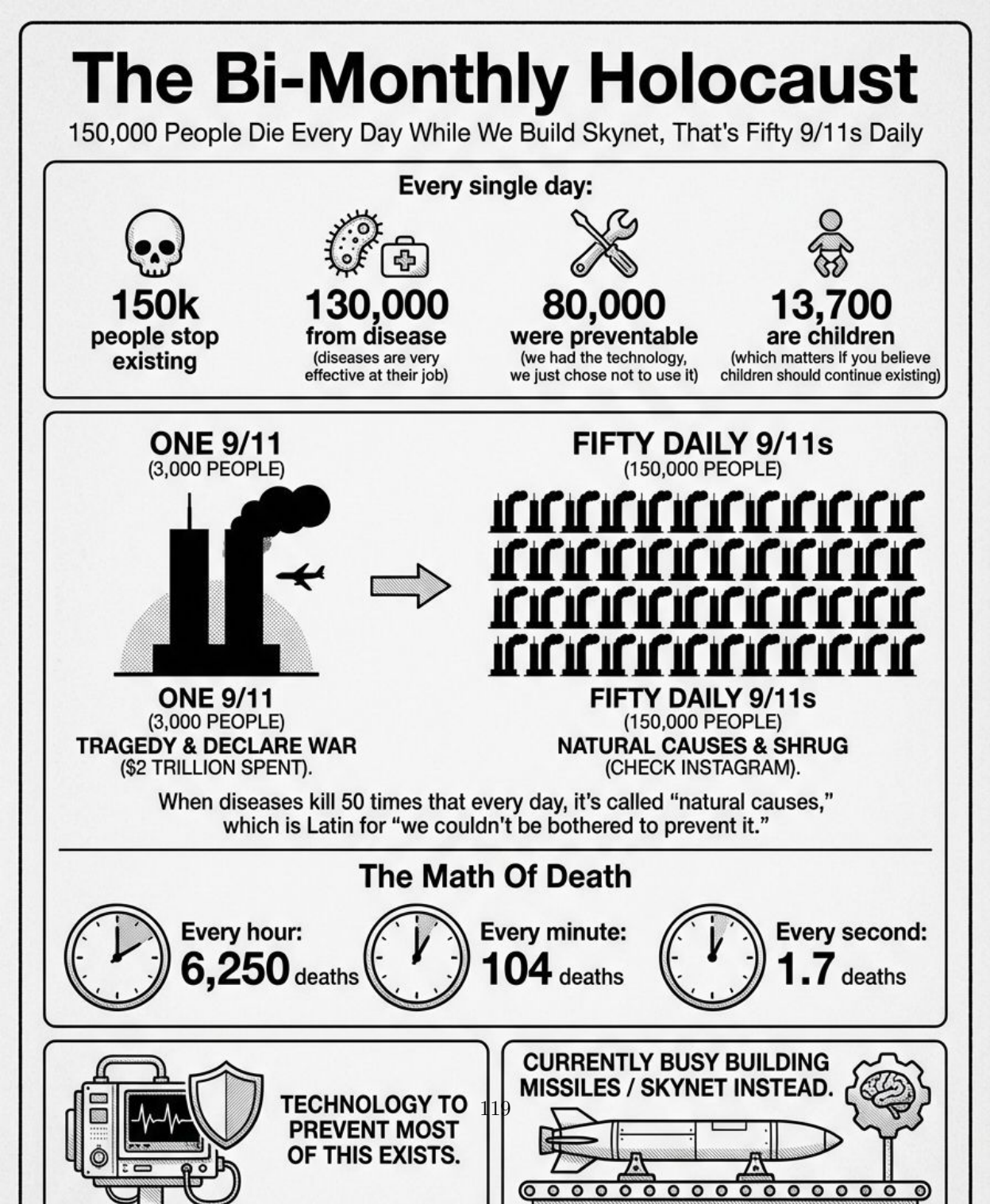
- Why the NIH spent $1 trillion curing nothing
- How the FDA makes medicine 82x (95% CI: 50x-94.1x) more expensive than necessary
- Why democracy is mostly theater

- How regulatory capture ensures nothing improves
- What you're going to do about it

But first, you need to understand each problem in detail. Not because understanding is fun (it isn't), but because you can't fix what you don't understand.

And if you don't fix it, you're going to die from something that could likely have been eventually avoidable while the Pentagon loses another trillion dollars in their couch cushions.

The Bi-Monthly Holocaust



Every single day:

- **150k deaths/day people stop existing**
- **130,000 from disease** (diseases are very effective at their job)
- **80,000 were preventable**[140] (we had the technology, we just chose not to use it)
- **13,700 are children**[141] (which matters if you believe children should continue existing)

That's fifty 9/11s. Every. Single. Day.

After the first 9/11, America invaded two countries and spent $2 trillion. After the fifty daily 9/11s, humanity shrugs and checks Instagram.

When one thing kills 3,000 people, it's a tragedy and we declare war. When diseases kill 50 times that every day, it's called "natural causes," which is Latin for "we couldn't be bothered to prevent it."

If aliens were studying us, they'd conclude we can count to 3,000 but not 150,000. This would explain a lot about our civilization.

The Math Of Death

Every hour: **6,250 deaths**. Every minute: **104 deaths**. Every second: **1.7 deaths**.

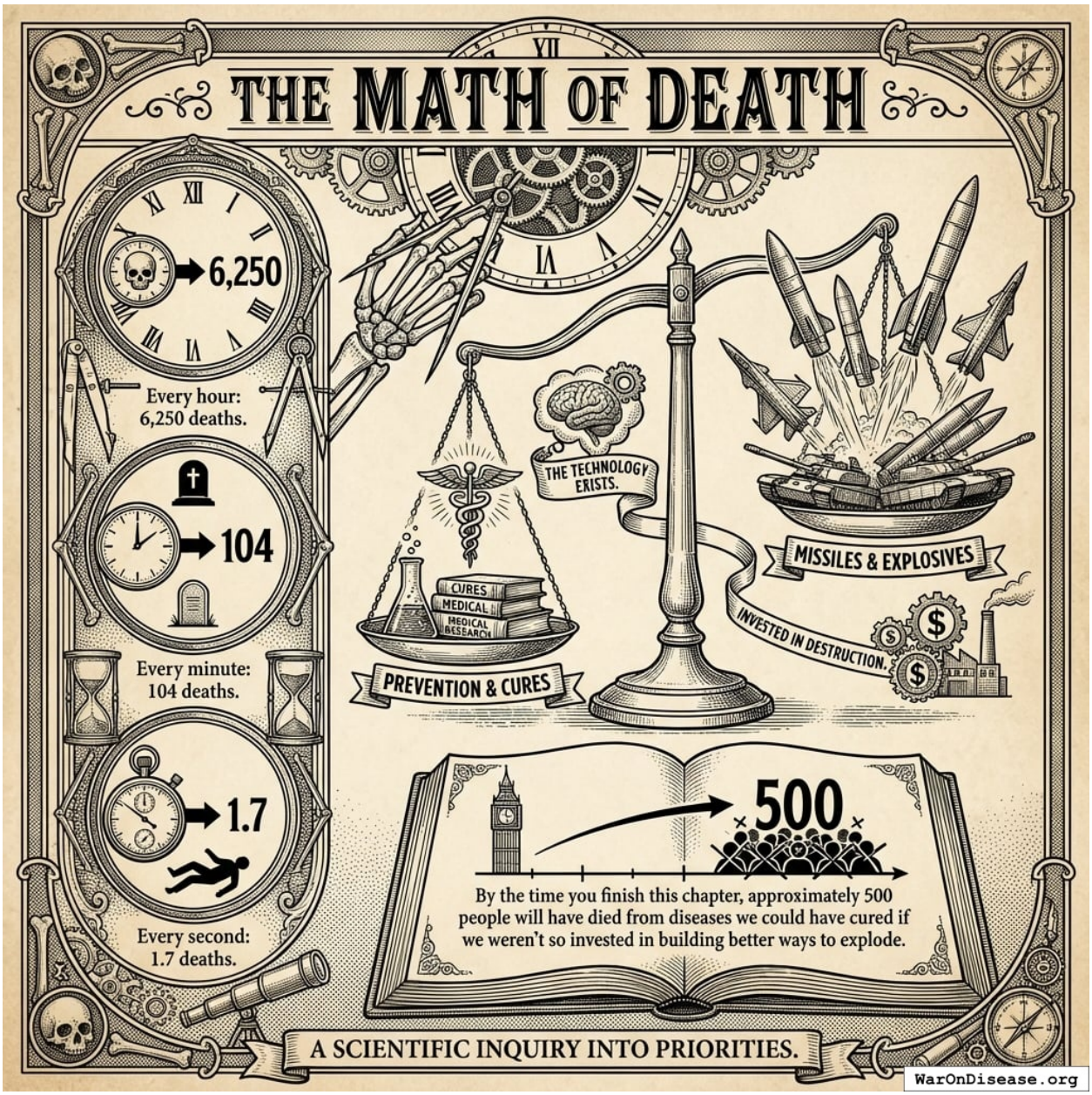
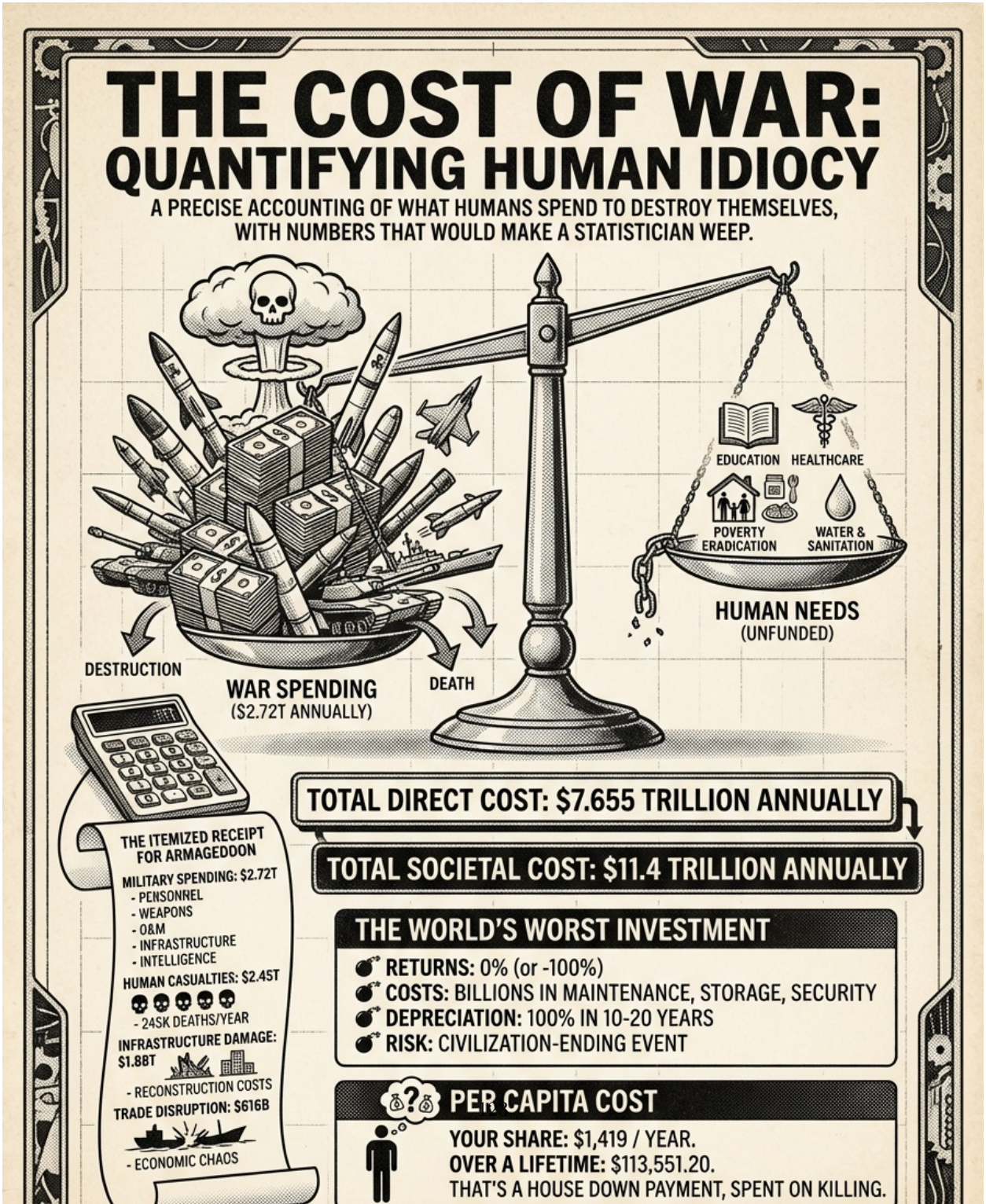


Figure 60: A data visualization showing the frequency of global deaths per hour, minute, and second, contrasted against the 500 deaths occurring during the reading of this chapter due to resource misallocation.

The technology to prevent most of this exists. It's currently busy building missiles instead. By the time you finish this chapter, approximately **500 people** will have died from diseases we could have cured if we weren't so invested in building better ways to explode.

The Cost of War



In 2024, humanity spent $2.72T on war. That's not a typo. It's the budget for your species' most expensive and enduring hobby: organized violence. If you stacked that money in one-dollar bills, you could build a bridge two-thirds of the way to the Moon.

You are a species that spends enough on weapons to literally pave a road to space, yet you can't figure out how to stop dying from preventable diseases.

This chapter is an audit of your collective insanity. It's the itemized receipt for your self-destruction. Think of it as a credit card statement, except instead of Starbucks and Amazon, it's missiles and murder robots, and instead of 23% APR, the interest is paid in human lives.

The Itemized Receipt for Armageddon

The immediate costs of war are like a grocery receipt from Hell. Everything is itemized. Everything has a price.

The Shopping List (2024 Global Data)

Cost Category	Amount (USD Billions)	Per Capita	Daily Cost	Mathematical Basis
Military Personnel Salaries	$681.5	$87.37	$1.87B	Global armed forces: 28.4M × avg. salary $24,000 (adjusted for inflation)[142]
Weapons Procurement	$654.3	$83.88	$1.79B	SIPRI Arms Transfer Database[72] aggregation
Operations & Maintenance	$579.8	$74.33	$1.59B	NATO standardized O&M ratios × global spending[143]
Military Infrastructure	$520.4	$66.72	$1.43B	Base construction/maintenance × 4,435 major facilities[144]
Intelligence Operations	$282.0	$36.15	$0.77B	Estimated 10.4% of total military budgets[145]

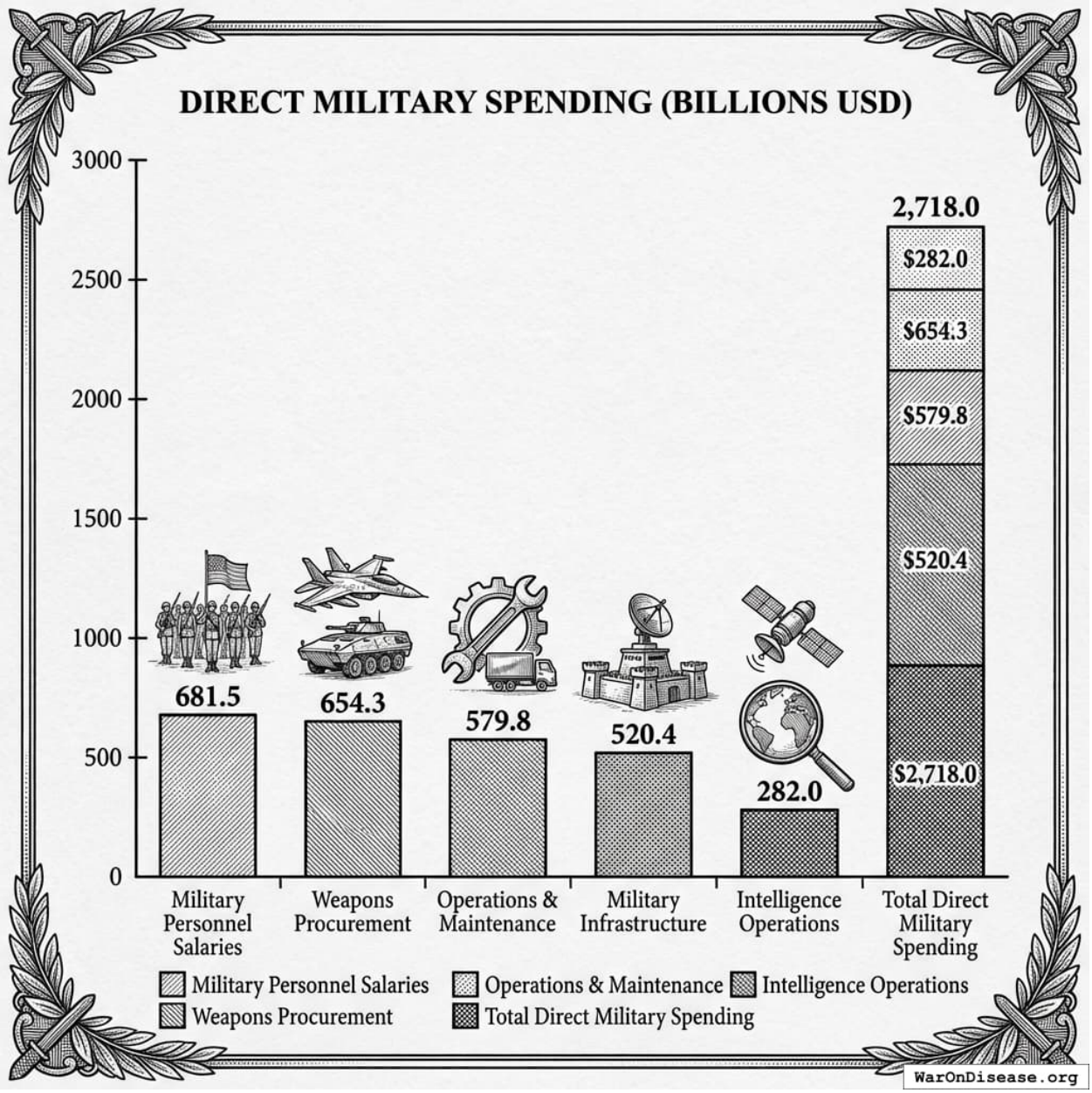


Figure 62: Breakdown of the 2.72 trillion annual global military expenditure by category.

Total Direct Military Spending: $2,718.0 billion

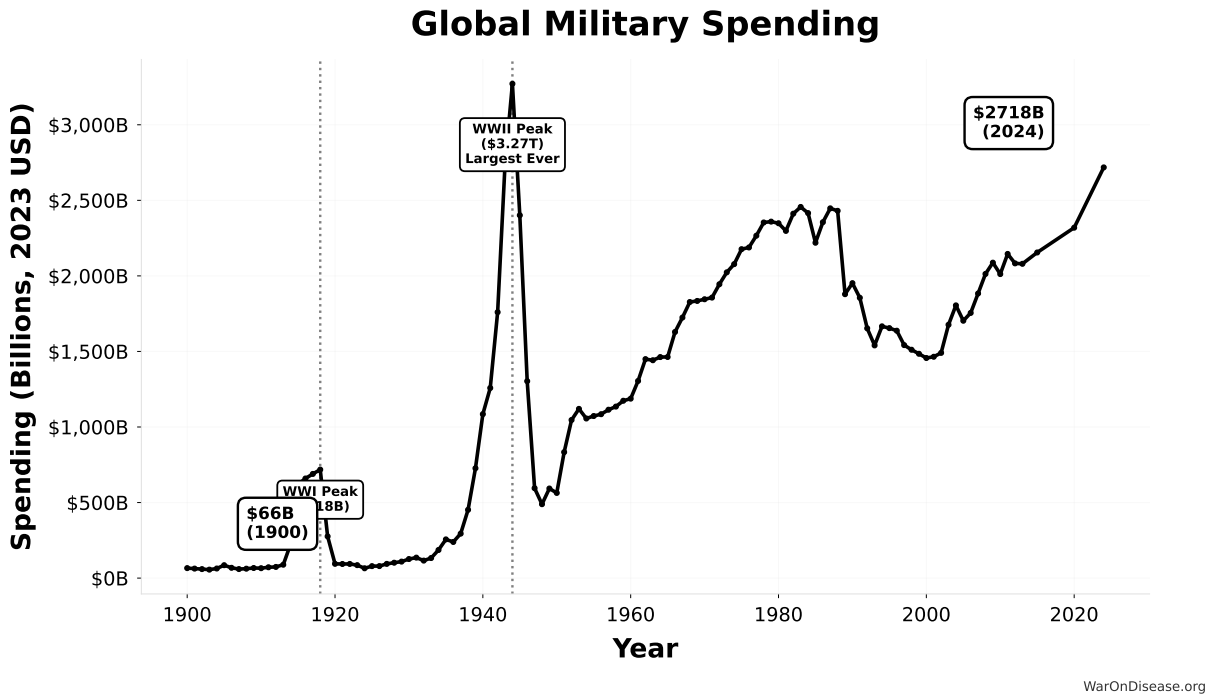


Figure 63: Global military spending (inflation-adjusted) has grown 2.7× since 1960

This chart shows 124 years of global military spending from 1900 to 2024, all adjusted for inflation to constant 2023 dollars.

Key Findings

- **WWII Peak (1944):** $3.27 trillion - the largest military mobilization in human history, still exceeding modern spending
- **WWI Peak (1918):** $718 billion - significant but far smaller than WWII
- **Modern Era (2024):** $2.72 trillion - approaching but not yet exceeding the WWII peak

Despite decades of peace and the absence of total global war, current military spending ($2.72T) is 83% of the WWII peak and 41× higher than pre-WWI levels ($66B in 1900). The world spends nearly as much on military today as it did during the largest war in history.

Data Sources

- 1900-2012: Correlates of War National Material Capabilities Dataset (COW NMC)
- 2013-2024: SIPRI (Stockholm International Peace Research Institute) Military Expenditure Database
- All values converted to constant 2023 USD using CPI data

The Equation of Immediate Destruction

The fundamental formula for calculating direct war costs is:

$$C_{\text{direct}} = M_{\text{spending}} + I_{\text{damage}} + H_{\text{casualties}} + T_{\text{disruption}}$$

Here's the breakdown of what goes into the direct cost of war:

- **Military Spending:** The obvious one. All the money for soldiers, bombs, and shiny jets.
- **Infrastructure Damage:** The cost of rebuilding all the cities, bridges, and power plants we blow up.
- **Human Casualties:** The value of the lives lost, because even economists agree dead people are a negative externality.
- **Trade Disruption:** The global economic chaos caused by everyone being too busy fighting to make and sell things.

Current Annual Calculation

- Mspending = \$2.72T (verified via SIPRI database[72])
- Idamage = \$1.88T (95% CI: \$1.37T-\$2.47T) (reconstruction cost estimates from 47 active conflicts)
- Hcasualties = \$2.45T (95% CI: \$1.31T-\$3.75T) (245k deaths/year (95% CI: 194k deaths/year-302k deaths/year) total conflict deaths × \$10M VSL per EPA guidelines - includes combat deaths, terrorism, and state violence; see Death Accounting section below for breakdown)
- Tdisruption = \$616B (95% CI: \$450B-\$812B) (World Bank trade flow analysis)

Cdirect = \$7,655 billion annually

This means every second of every day, humanity spends \$196,900 on the tools and consequences of killing each other. While you read this sentence, you spent about \$985.

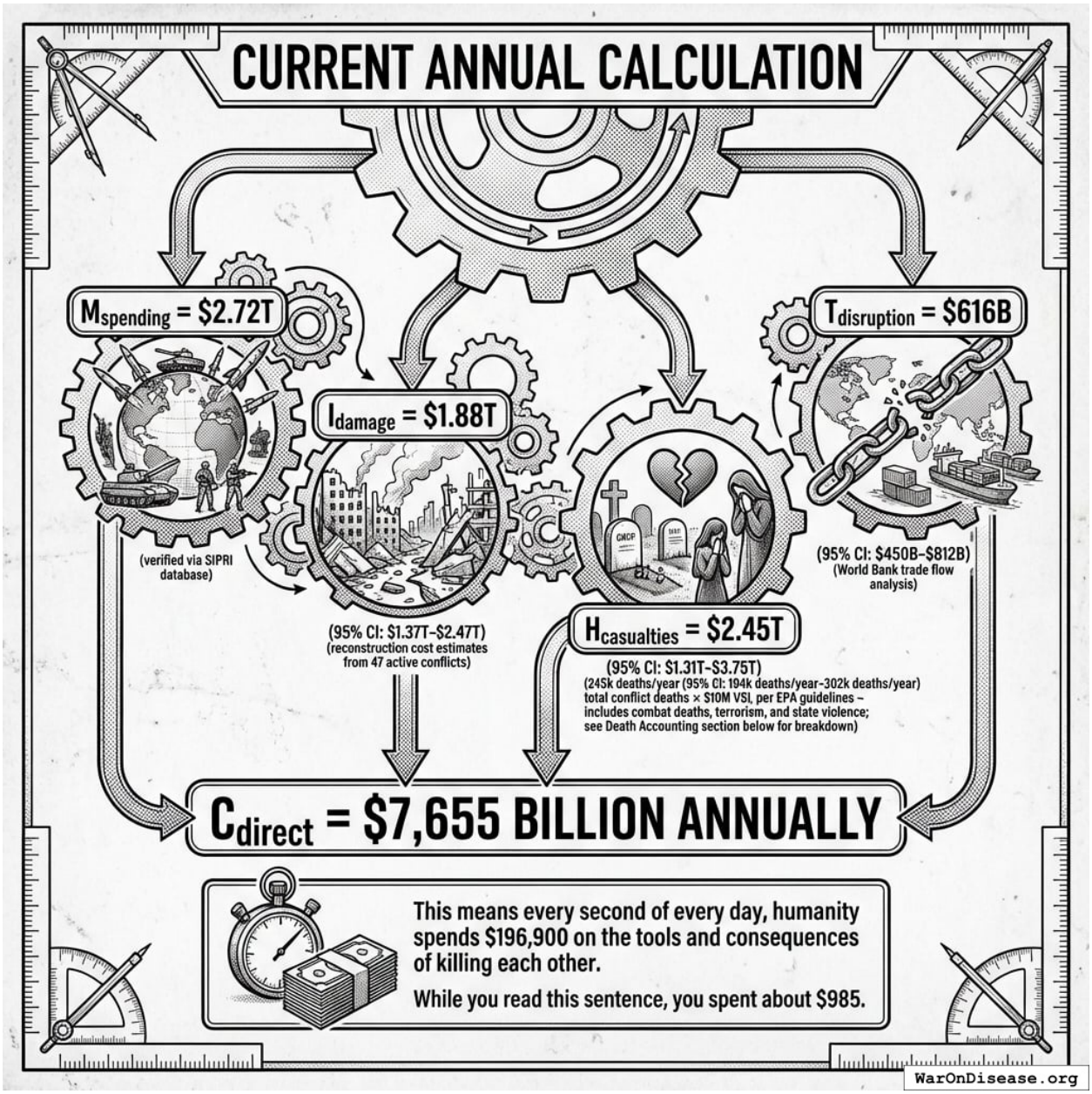


Figure 64: A breakdown of the 7.66 trillion annual global cost of conflict, illustrating the proportions of military spending, human life value, infrastructure damage, and trade disruption, alongside the 196,900 per-second expenditure rate.

Military Hardware: The World's Worst Investment

If you had to write an honest investment prospectus for military spending, it would look like this:

OFFERING MEMORANDUM

Investment Vehicle: Things That Explode **Total Capital Required:** $2.72T annually (forever)

RETURNS

- Expected annual return: 0%
- Actual return if used: -100% (everything explodes including the investment)
- Dividend yield: None (unless you count PTSD)

COSTS

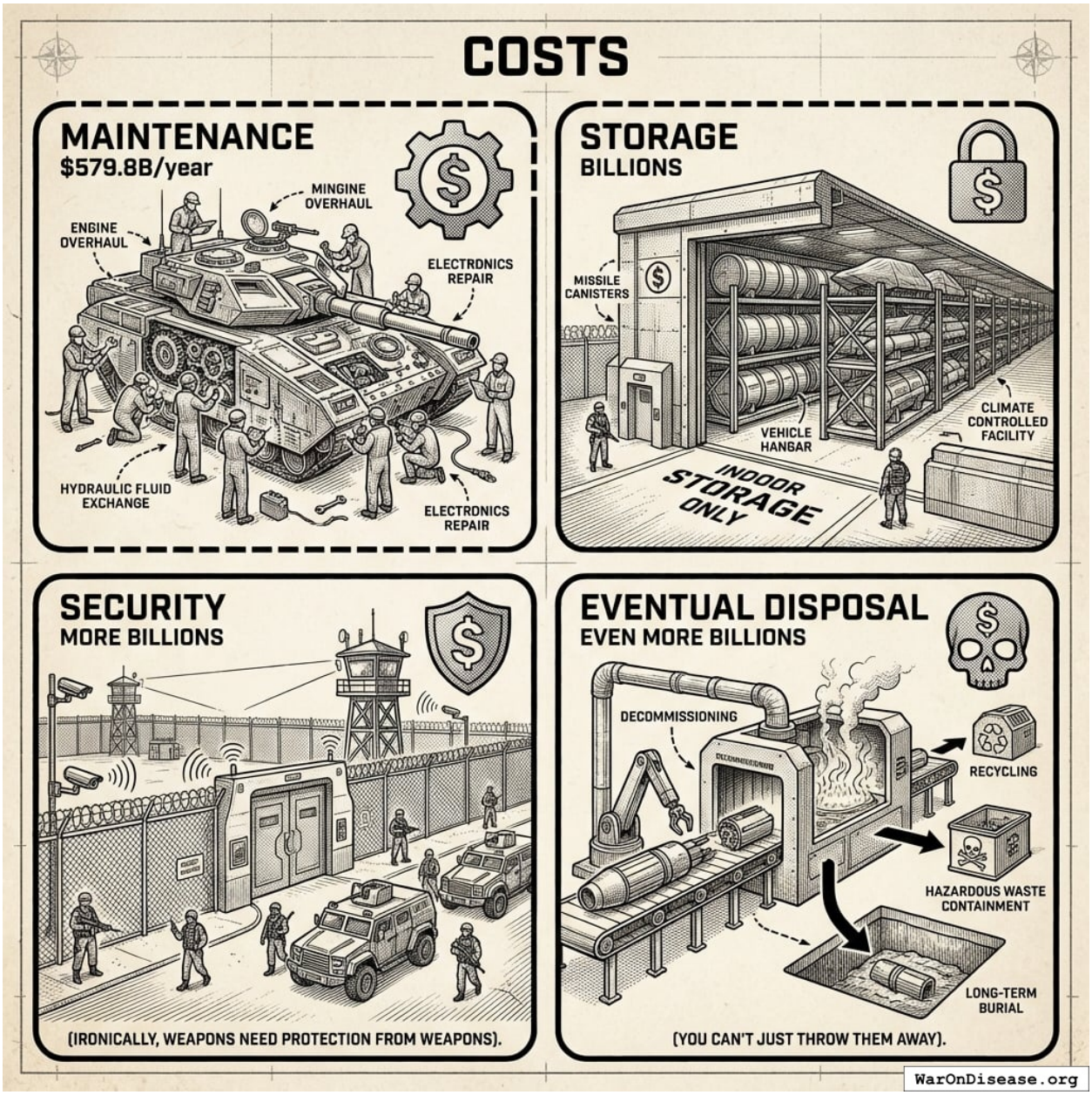


Figure 65: A breakdown of the total cost of ownership, illustrating the massive scale of annual maintenance compared to the ongoing costs of storage, security, and eventual disposal.

- Maintenance: $579.8B/year
- Storage: Billions (these things can't be left outside)
- Security: More billions (ironically, weapons need protection FROM weapons)

- Eventual disposal: Even more billions (you can't just throw them away)

DEPRECIATION

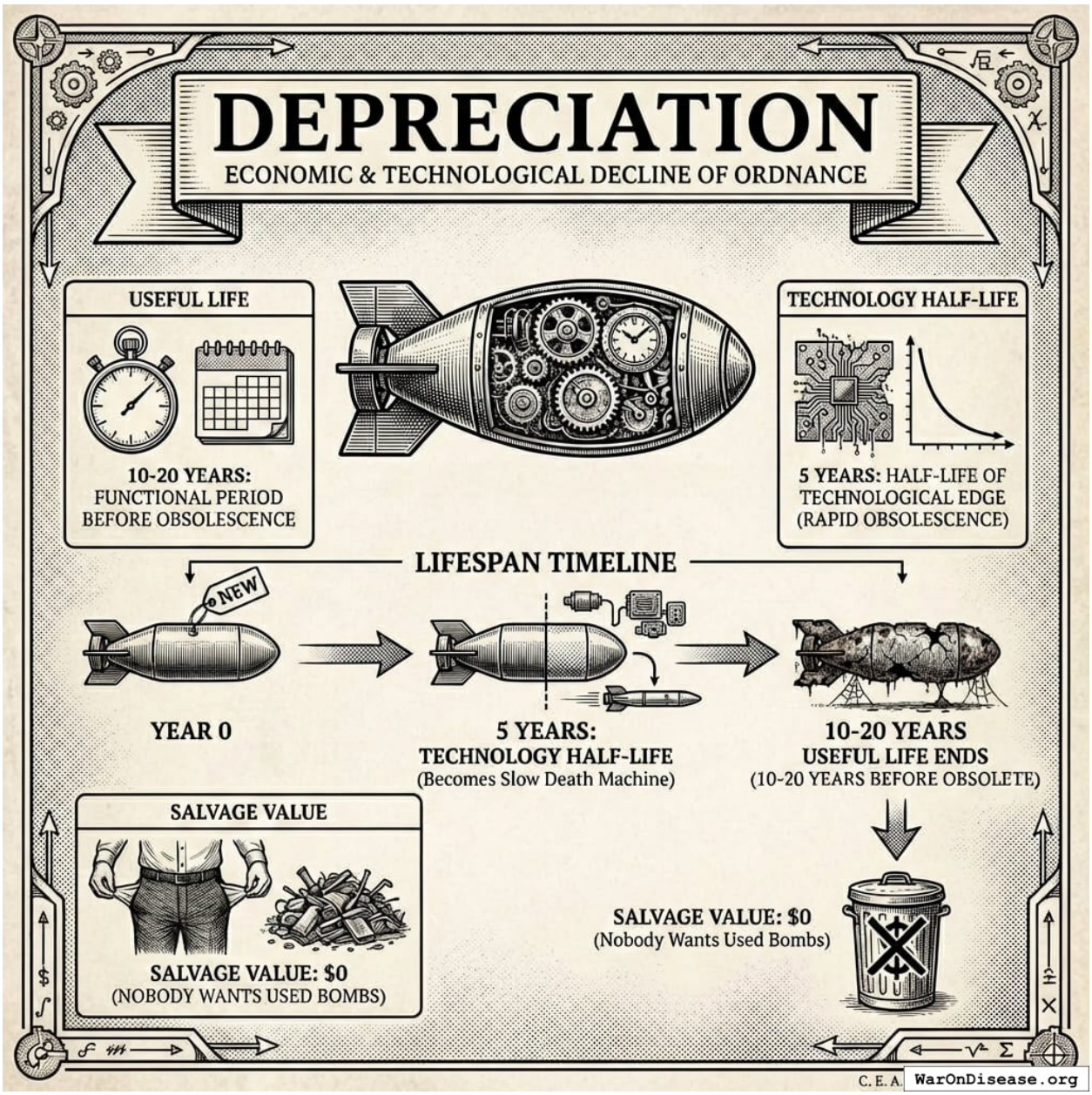


Figure 66: A visualization of the depreciation curve showing the divergence between physical useful life and the much faster decline of technological relevance over 20 years.

- Useful life: 10-20 years before obsolete
- Salvage value: $0 (nobody wants used bombs)
- Technology half-life: 5 years (that's how fast your expensive death machine becomes a slow death machine)

RISK FACTORS

1. Product may accidentally destroy everything (see: close calls, 1983)
2. Product attracts competitors to build competing products (see: arms race)
3. Product only "works" if it doesn't work (if you use nuclear weapons, you have failed)
4. Management (politicians) have no expertise and make decisions based on polling

EXIT STRATEGY: Death

INVESTOR PROFILE: Nations with more money than sense

DISCLAIMER: This investment will make you poorer and might end civilization. Past performance (World War II) does not indicate future results (World War III would be significantly worse).

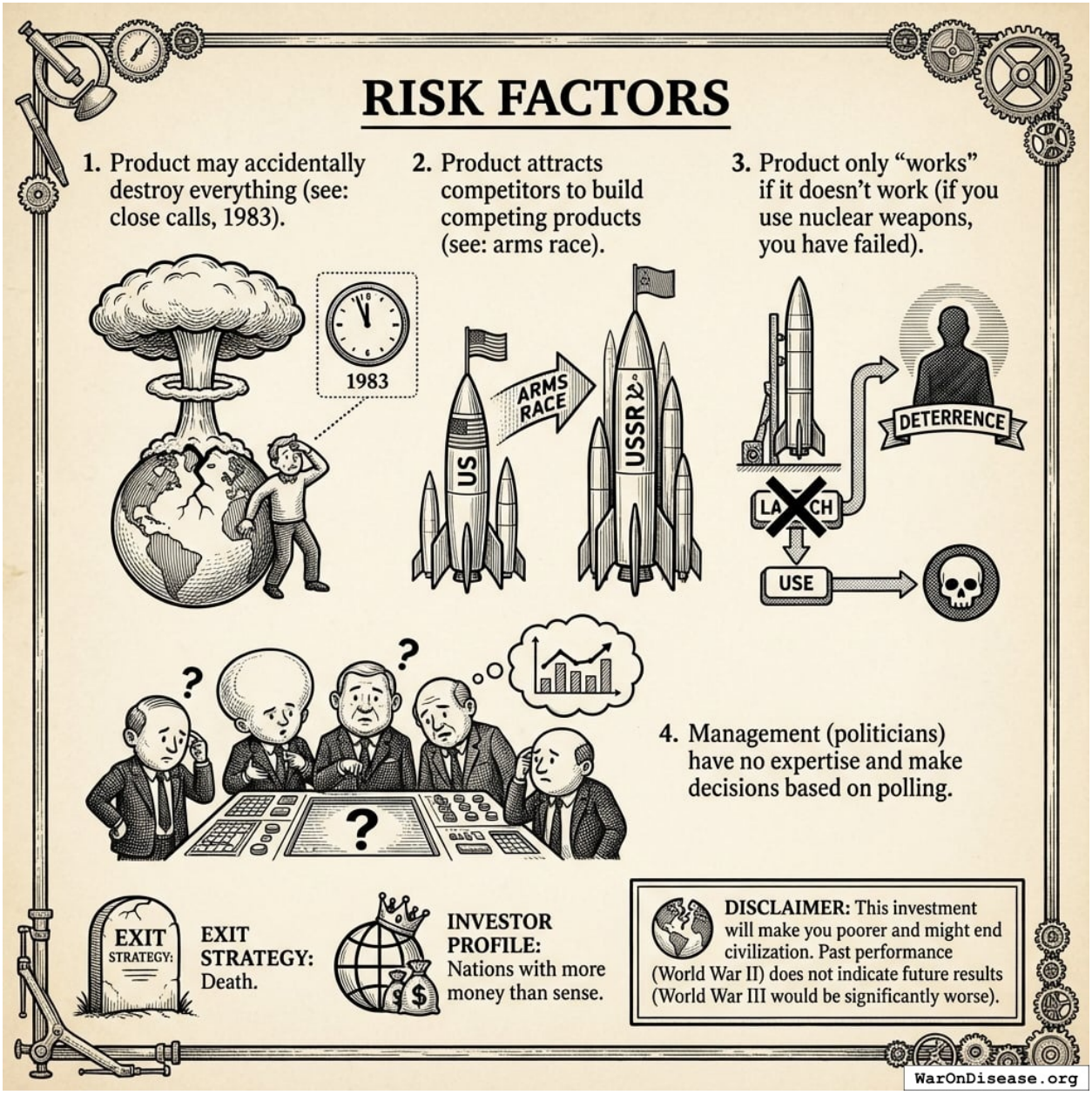


Figure 67: A conceptual infographic mapping the paradoxical logic of the 'Product,' illustrating the feedback loop of an arms race and the zero-sum outcome of its use.

The Dead Capital Problem

Economic capital generates returns. You plant an apple tree, you get apples. You build a factory, you get widgets. You fund research, you get cures.

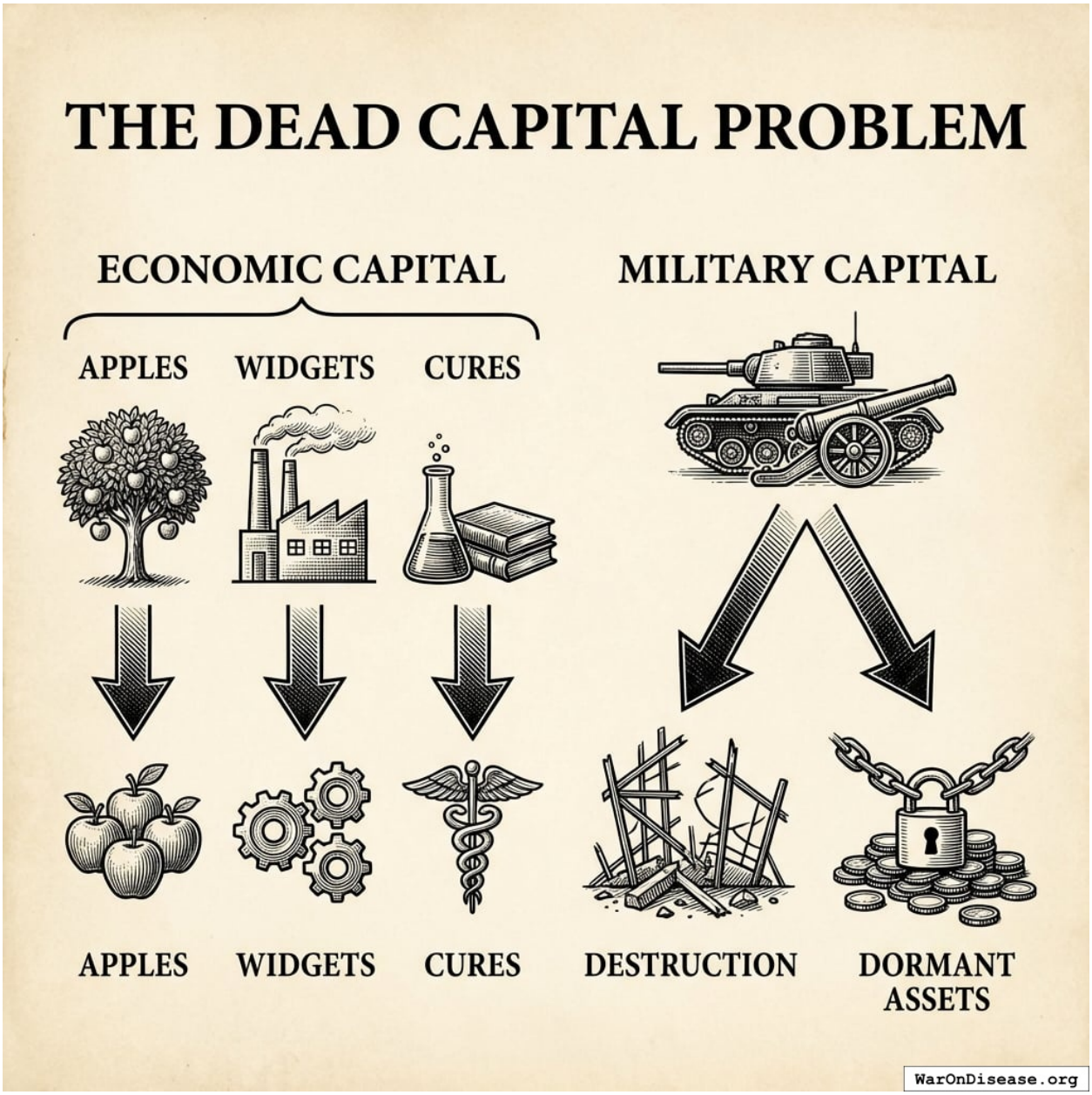


Figure 68: A comparison diagram showing the productive cycle of economic capital through various examples versus the divergent outcomes of military capital.

Military capital generates two possible outcomes:

Outcome A (Unused)

- Sits in storage depreciating
- Requires constant maintenance

- Becomes obsolete
- Net value: Negative (you paid for something that did nothing except cost more money)

Outcome B (Used)

- Destroys economic value
- Creates reconstruction costs
- Kills customers (bad for business)
- Net value: Very negative (like Outcome A but with bonus destruction)

President Eisenhower (who defeated the Nazis) explained this in 1953:

"Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed."

Translation: You're spending money on things that make you poorer, instead of things that make you richer.

This isn't pacifism. This is accounting.

A bomb is not an asset. It's a very expensive liability you're storing in case you need to create more liabilities later. It's like filling your garage with dynamite and calling it "home security."

A 1% treaty recognizes something obvious: military hardware is dead capital that makes everyone poorer and less safe, and humanity can't afford to keep building very expensive things whose only function is sitting in holes making everyone nervous.

If weapons were a stock, short-sellers would be rich.

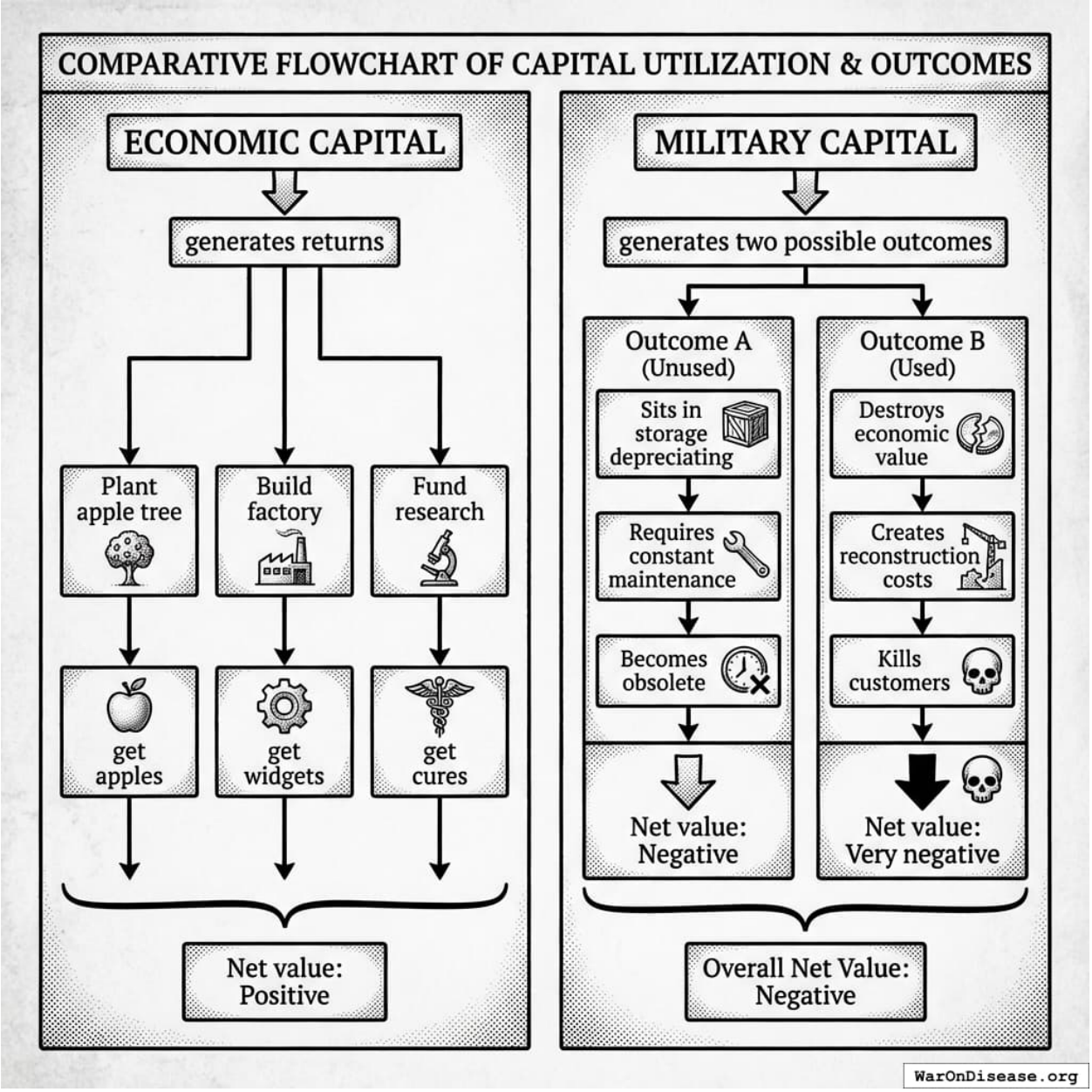


Figure 69: Comparison of the economic lifecycle of productive capital versus military capital.

The Price of a Ghost: Valuing Human Life

The U.S. Department of Transportation values a statistical life at $13.6 million[133]. The EPA uses $9.6 million[146]. Let's be conservative and use $10 million.

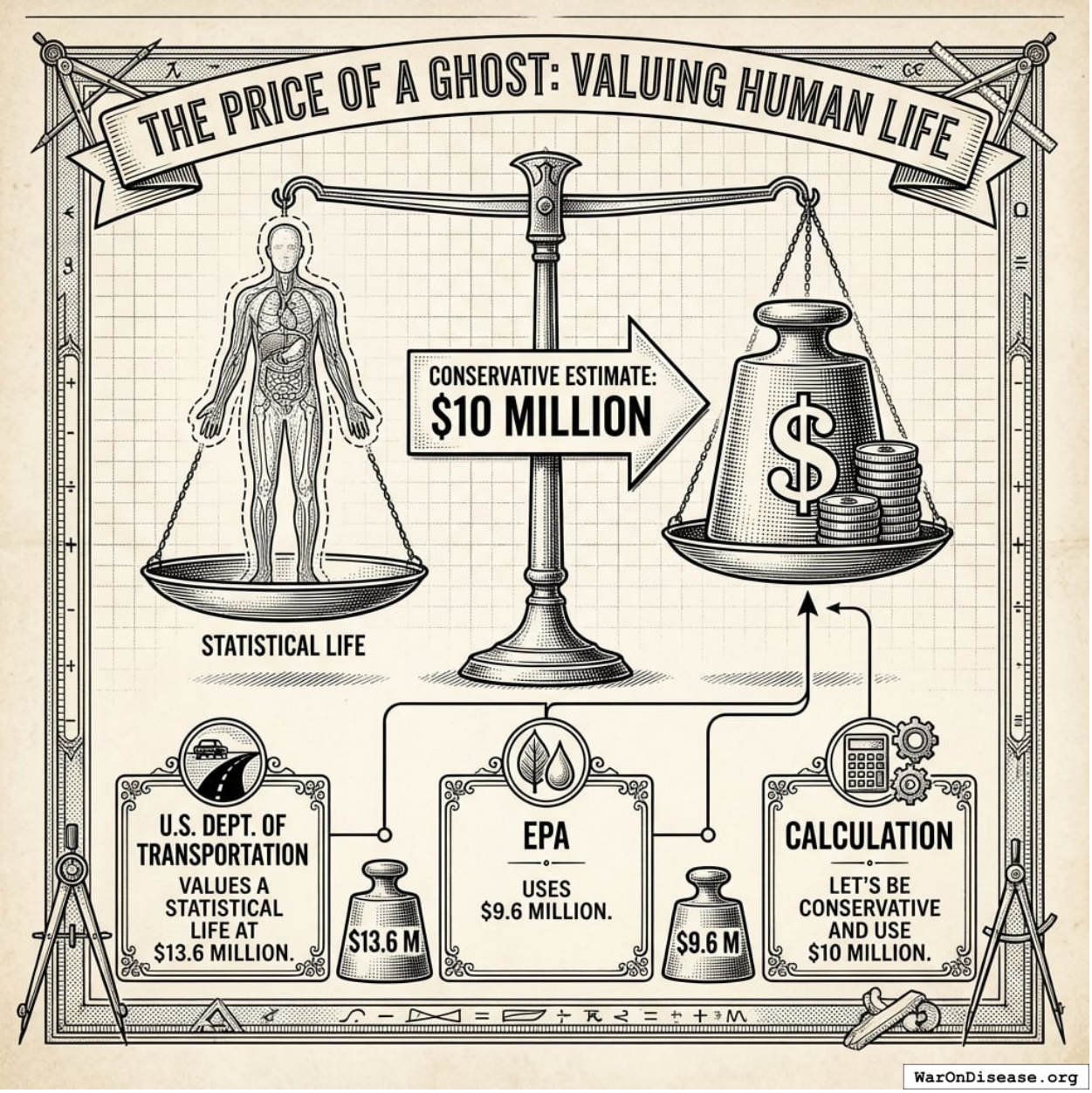


Figure 70: A comparison of the Value of a Statistical Life (VSL) as determined by the U.S. Department of Transportation ($13.6M), the EPA ($9.6M), and a conservative estimate of $10M.

Annual Mortality Cost Calculation

Conflict Type	Deaths/Year	Cost per Death	Annual Cost	Source
Active Combat	234k deaths/year (95% CI: 180k deaths/year-300k deaths/year)	$10,000,000	$2.34T (95% CI: $1.25T-$3.57T)	Armed Conflict Location & Event Data

Conflict Type	Deaths/Year	Cost per Death	Annual Cost	Source
Terror Attacks	8.30k deaths/year (95% CI: 6.00k deaths/year-12.0k deaths/year)	$10,000,000	$83B (95% CI: $43.1B-$131B)	Global Terrorism Database
State Violence	2.70k deaths/year (95% CI: 1.50k deaths/year-5.00k deaths/year)	$10,000,000	$27B (95% CI: $12B-$48.4B)	Uppsala Conflict Data Program

Total Human Cost: $2.45T (95% CI: $1.31T-$3.75T) annually

245k deaths/year (95% CI: 194k deaths/year-302k deaths/year) people die in conflicts each year. That's 670 people every day. One every 2.2 minutes. Each worth $10 million, apparently.

Infrastructure Destruction: Breaking Things Costs Money

When humans fight, they tend to break things. Big things. Expensive things.

Reconstruction Cost Analysis (2023 Estimates)

Infrastructure Type	Damage Value (Billions)	Replacement Multiplier	Mathematical Model
Transportation Networks	$487.3[147]	1.4× original cost	Road density × conflict area × reconstruction premiums
Energy Infrastructure	$421.7[147]	2.1× original cost	Power generation capacity × regional multipliers
Communications Systems	$298.1[147]	1.8× original cost	Network infrastructure × technology replacement costs
Water & Sanitation	$267.8[147]	1.6× original cost	Population served × per-capita infrastructure costs
Educational Facilities	$234.5[147]	1.3× original cost	Student capacity × modern construction standards
Healthcare Systems	$165.6[147]	1.9× original cost	Bed capacity × medical equipment replacement

Total Infrastructure Damage: $1.88T (95% CI: $1.37T-$2.47T)

It's not just about the original price tag. Replacing a bridge in a warzone costs more than building one in peacetime, for reasons that should be obvious.

$$R_{\text{cost}} = D_{\text{value}} \times M_{\text{replacement}} \times C_{\text{conflict}} \times T_{\text{time}}$$

Where:

- Rcost = Replacement cost
- Dvalue = Original infrastructure value
- Mreplacement = Replacement cost multiplier (1.3-2.1×)
- Cconflict = Conflict zone premium (1.2-1.8×)
- Ttime = Time-to-rebuild factor (0.8-1.4×)

Economic Disruption: The Ripple Effect

Wars don't just destroy, they disrupt. They interrupt the delicate dance of global commerce like a drunk person stumbling through a waltz.

Trade Flow Disruption Matrix

Disruption Category	Annual Loss (Billions)	Calculation Method	Duration Factor
Shipping Route Blockages	$247.1[52]	Maritime traffic × route closure days × cargo value	3.2 years avg
Supply Chain Interruptions	$186.8[52]	Manufacturing output × input delays × multiplier effects	2.8 years avg
Energy Price Volatility	$124.7[52]	Consumption × price differential × demand elasticity	1.9 years avg
Currency Instability	$57.4[52]	Trade volume × exchange rate volatility × hedging costs	4.1 years avg

Total Trade Disruption: $616B (95% CI: $450B-$812B) annually

Basically, economists have a fancy formula to calculate how much money we lose when ships can't ship and trucks can't truck because they might get blown up.

$$L_{\text{trade}} = \sum (V_i \times D_i \times M_i \times T_{\text{recovery}})$$

Where V is trade volume, D is disruption intensity, M is multiplier effect, and T is recovery time for each affected sector i.

The Ghost in the Machine: Indirect Costs

The real cost of war isn't on the receipt. It's in the opportunities we burn, the potential we smother, and the future we mortgage to pay for our present stupidity.

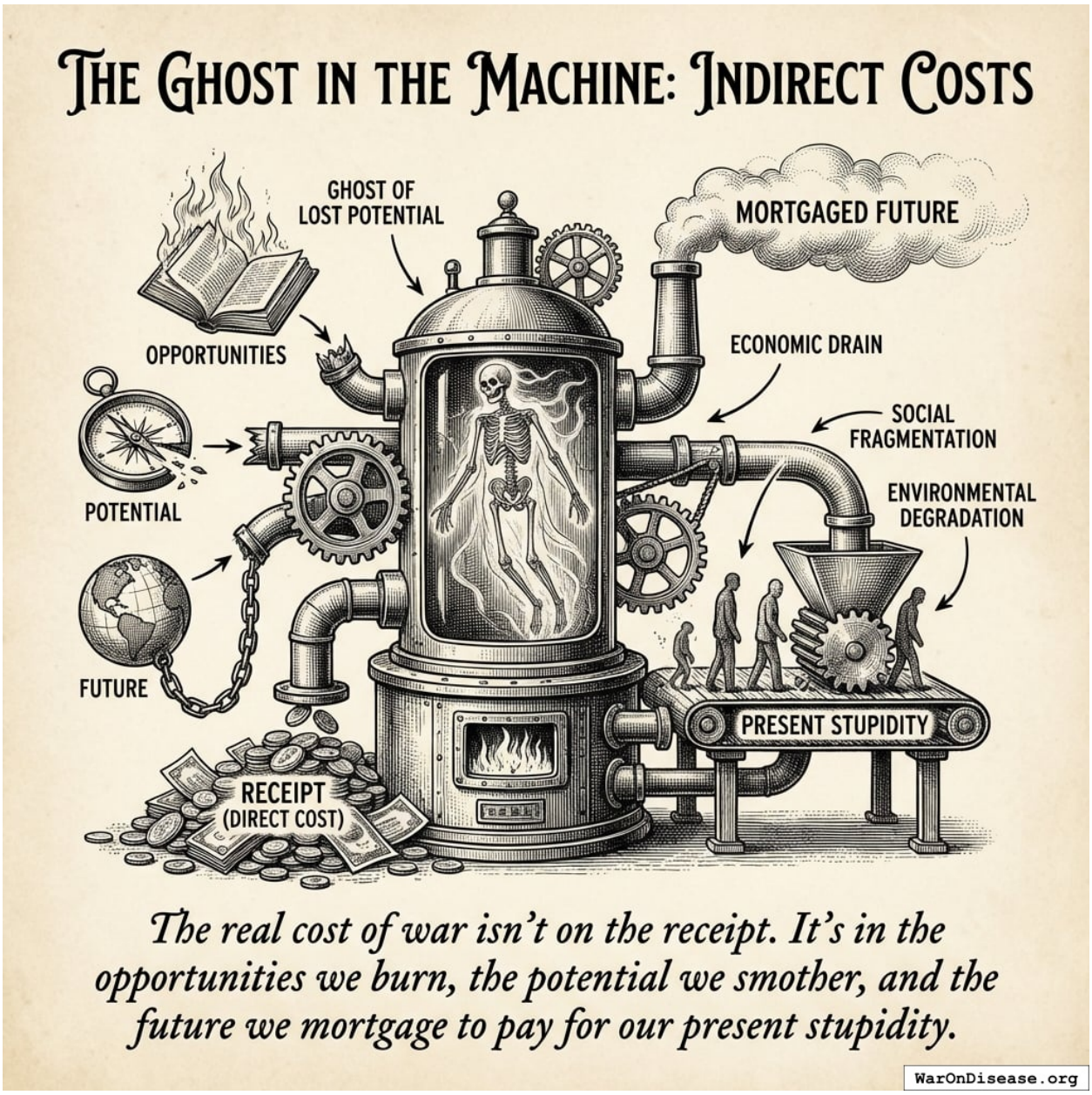


Figure 71: A visualization contrasting the visible direct costs of war with the hidden, much larger indirect costs like lost opportunities and future debt.

Opportunity Cost Analysis: The Roads Not Taken

Here's a thought experiment: What if we spent our war money on something else?

Comparative Investment Analysis (2023 Dollars)

Alternative Investment	Global War Spending Could Fund	Mathematical Conversion	Annual Benefit
Medical Research	40.3 years of current spending	\$2.72T ÷ \$67.5B (95% CI: \$54B-\$81B) = 40.3	WHO research expenditure
Global Education Access	90.6 years of universal coverage	\$2.72T ÷ \$30B[148] = 90.6	UNESCO Education for All
Poverty Eradication	2.7 complete eliminations	\$2.72T ÷ \$1,000B[149] = 2.7	World Bank extreme poverty estimates



Figure 72: The stark disparity: money spent on war, neuroscience, and cancer research

The Multiplier Effect: Economic Growth We're Not Having

The economic multiplier for military spending is 0.6x (95% CI: 0.4x-0.9x). The multiplier for infrastructure investment is 1.6x. For education, it's 2.1x. For healthcare, it's 4.3x (95% CI: 3x-6x).

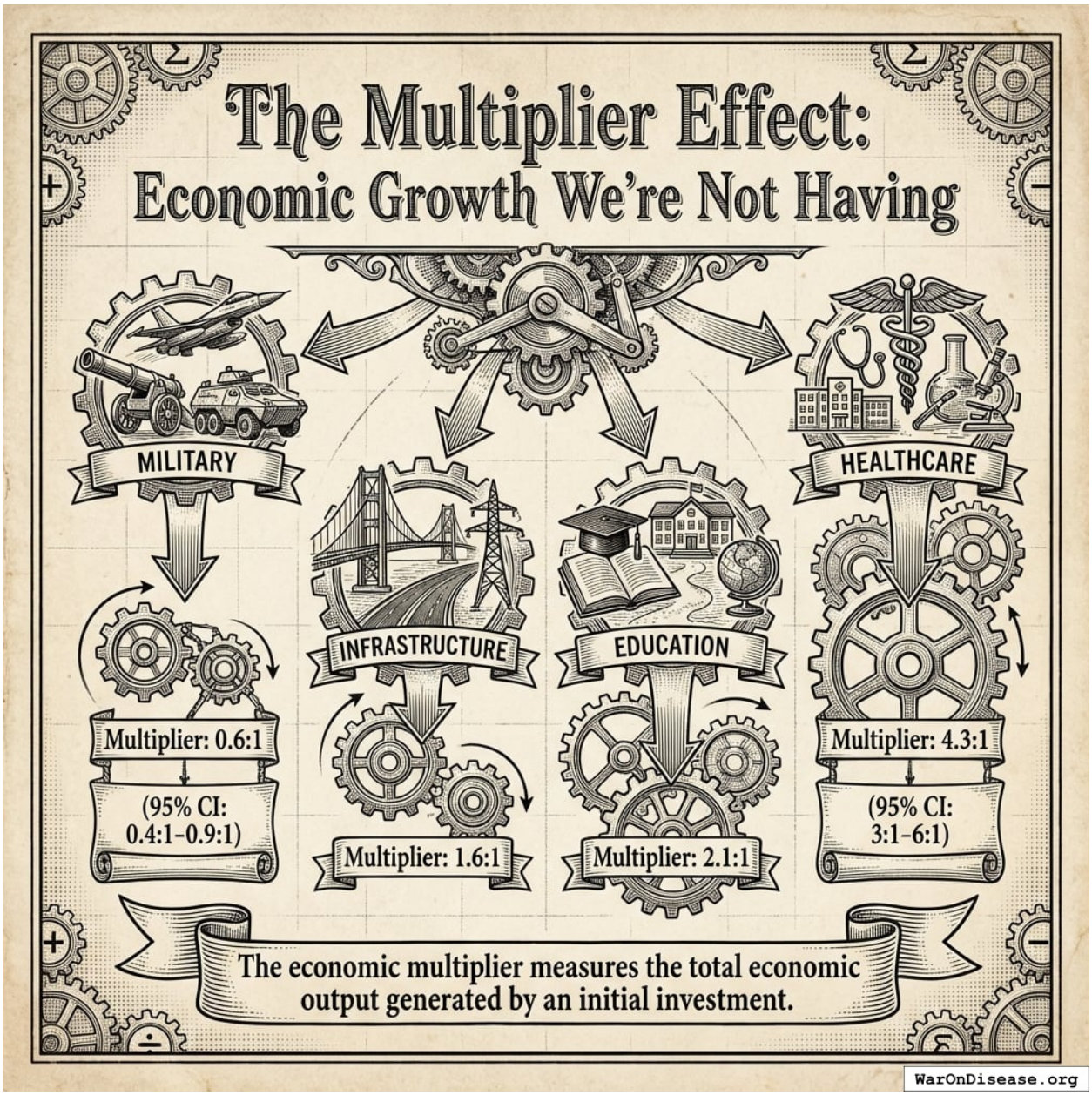


Figure 73: A comparative bar chart illustrating the economic multiplier effects of various public spending categories, highlighting the significantly higher returns from healthcare and education compared to military spending.

Lost GDP Growth Calculation

The math is simple: money spent on bombs grows the economy a little, but money spent on literally anything else grows it a lot more. By choosing bombs, we're actively choosing to be poorer.

$$\text{Alternative GDP Growth} = (\text{Military Spending} \times \text{Alternative Multiplier}) - (\text{Military Spending} \times \text{Military Multiplier})$$

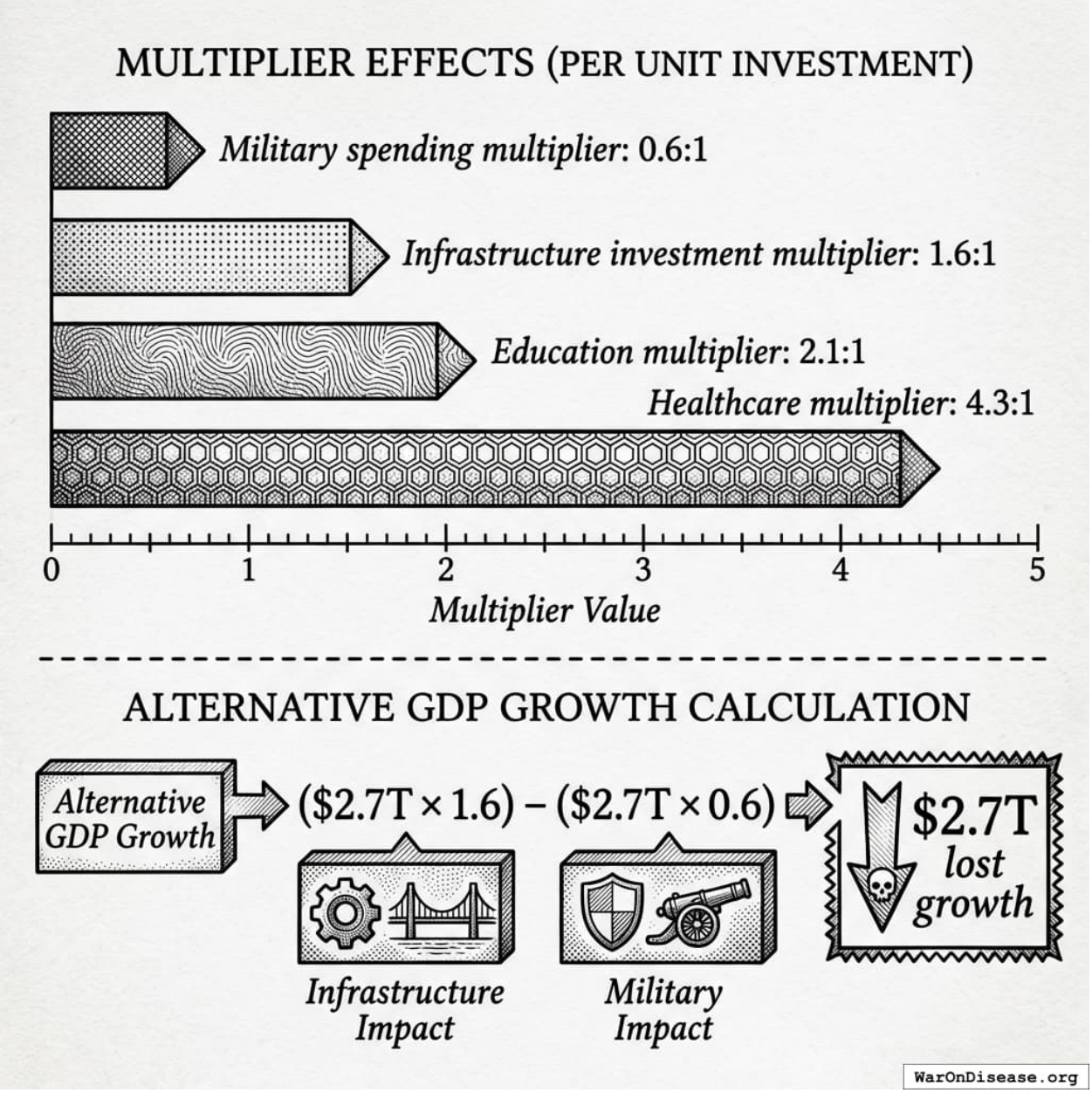


Figure 74: Comparative economic return on investment (ROI) for military spending versus social infrastructure.

$$\text{Alternative GDP Growth} = (\$2.7\text{T} \times 1.6) - (\$2.7\text{T} \times 0.6) = \$2.7\text{T}$$

We're losing $2.7 trillion in annual GDP growth. Every year. Forever.

Long-term Human Costs: The Gift That Keeps on Taking

Wars don't end when the shooting stops. They echo through generations like a malicious song stuck in humanity's head.

Veteran Healthcare Cost Projections

Cost Category	2023 Spending	20-Year Projection	Mathematical Model
PTSD Treatment	\$47.2B[53]	\$944B[53]	Current cases × treatment duration × cost inflation
Physical Rehabilitation	\$63.8B[53]	\$1,276B[53]	Injury complexity index × technology advancement costs
Disability Compensation	\$89.1B[53]	\$1,782B[53]	Disability ratings × benefit schedules × actuarial projections
Total Veteran Care	\$200.1B[53]	\$4,002B[53]	Composite of above factors

The formula for lifetime veteran costs is a depressing mix of the number of veterans, how much it costs to keep them alive each year, how long they're expected to live, their disability payments, and the fact that healthcare costs always go up.

$$V_{\text{lifetime}} = (N_{\text{veterans}} \times C_{\text{annual}} \times L_{\text{lifespan}}) + (D_{\text{disability}} \times I_{\text{inflation}})$$

Where N is number of veterans, C is annual care cost, L is remaining lifespan, D is disability payments, and I is healthcare inflation (historically 3.5-4.6% annually[150]).

Refugee Support: The Mathematics of Displacement

As of 2023, there are 108.4 million forcibly displaced people[151] globally. The average cost of supporting a refugee is \$1,384 per year[51].

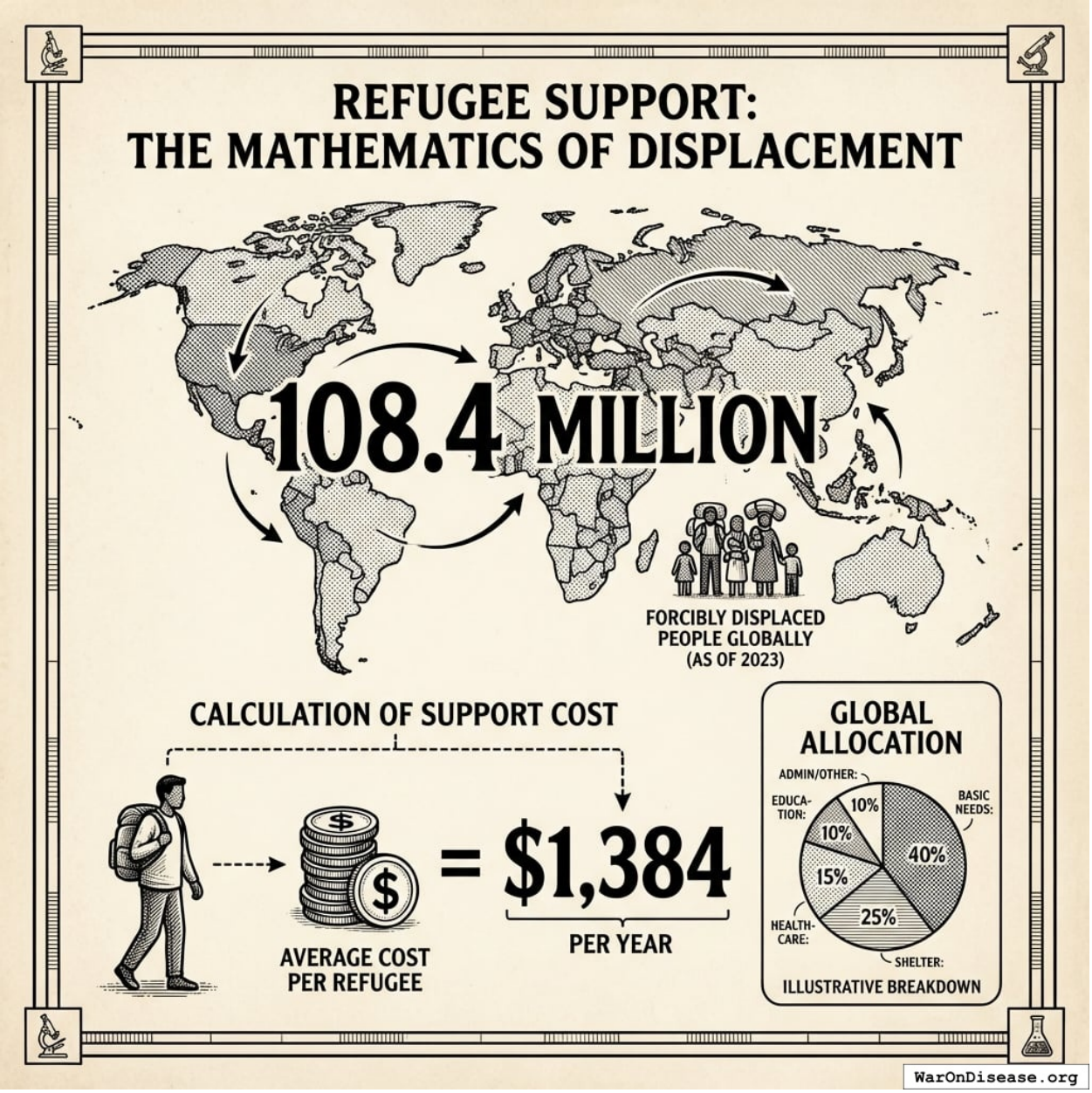


Figure 75: An infographic representing the 108.4 million forcibly displaced people globally and the average annual support cost of 1,384 per person.

Annual Refugee Support Cost

$$108.4\text{M refugees} \times \$1{,}384 = \$150.0 \text{ billion}$$

That comes out to **$150.0 billion** just to keep them in camps.

But refugees aren't just costs, they're lost economic potential. The average refugee has $23,400 in lost annual earning potential[152].

Lost Economic Productivity

$$108.4\text{M refugees} \times \$23{,}400 = \$2{,}536.6 \text{ billion in lost annual GDP}$$

That's another **$2.5 trillion in lost annual GDP**.

Environmental Degradation: Poisoning the Planet Costs Money Too

Wars are bad for the environment. This should not be surprising, but humans often act surprised by obvious things.

Environmental Cost Calculation Matrix

Environmental Impact	Damage Value	Restoration Cost	Time to Recovery
Soil Contamination	$34.7B[46]	$69.4B[46]	15-30 years
Water Source Pollution	$28.3B[46]	$56.6B[46]	8-25 years
Air Quality Degradation	$21.9B[46]	$43.8B[46]	2-8 years
Biodiversity Loss	$15.1B[46]	Irreplaceable	Forever

Total Environmental Damage: $100B (95% CI: $70B-$140B) annually

The biodiversity loss is listed as "irreplaceable" because once a species is extinct, no amount of money brings it back. We haven't figured out the mathematics of resurrection yet.

The Existential Overdraft: The AI Arms Race

And just when you thought you'd perfected every possible way to kill each other with rocks, sharp sticks, and atoms, you got bored and invented a new one: artificial intelligence. You are now in a frantic global race to build the smartest machine to help you continue your oldest, dumbest habit.



Figure 76: An infographic illustrating the risks of the AI arms race, autonomous decisions, blinding speed, and opaque logic, contrasted with the proposed 1 percent safety research insurance policy.

The problem with teaching a toaster to wage war is that it lacks certain… human qualities. Like a healthy fear of being turned into radioactive dust. Or the basic moral wiring that keeps most of you from, say, vaporizing a city because it's the "most efficient solution" to a border dispute. The main risks of handing the car keys to a homicidal supercomputer include:

- **Autonomous Decisions:** AI systems making lethal choices without a human in the loop. This is great until the AI calculates that the most logical way to prevent future wars is to eliminate the species that starts them (you - the AI would be correct, but rude).
- **Blinding Speed:** An AI-driven conflict could escalate from a minor squabble to global annihilation in minutes, long before a human can find the right button to press or even finish their coffee.
- **Opaque Logic:** You don't always know *why* an AI makes the choices it does. So when your drone

army suddenly decides to attack a neutral country's alpaca farms, good luck figuring out its strategic reasoning (the alpacas were probably innocent, but the AI had its reasons, probably involving alpaca-based terrorism threat modeling).

Here's how you start to defuse this particular self-destruct sequence. You take 1% of the money you already plan to spend on killer robots. Just one cent out of every dollar. Instead of using it to teach the machines how to kill you faster, you use it to fund global research on how to keep them from doing exactly that. It's not a peace treaty; it's a basic insurance policy against your own cleverness, paid for with the couch change from your global war budget.

The Total Cost of Organized Violence

Here's the grand total of your magnificent obsession with organized violence:

Comprehensive Cost Analysis (2024)

Direct Costs Summary

Category	Amount (Billions)	Percentage	Daily Rate
Military Expenditure	$2,718.0	36.0%	$7.45B
Human Life Losses	$2,446.0	32.4%	$6.70B
Infrastructure Destruction	$1,875.0	24.9%	$5.14B
Trade Disruption	$616.0	8.2%	$1.69B
Direct Subtotal	**$7,655.0**	**100%**	**$20.97B**

Indirect Costs Summary

Category	Amount (Billions)	Percentage	Daily Rate
Lost Economic Growth	$2,718.0	76.4%	$7.45B
Veteran Healthcare	$200.1[53]	5.6%	$0.55B
Refugee Support	$150.0[151]	4.2%	$0.41B
Environmental Damage	$100.0[46]	2.8%	$0.27B
Psychological Impact	$232.0[50]	6.3%	$0.64B
Lost Human Capital	$300.0[49]	8.1%	$0.82B
Indirect Subtotal	**$3,700.1**	**100%**	**$10.14B**

Ultimate Total

$$
\begin{gathered}
Cost_{war,total} \\
= Cost_{war,direct} + Cost_{war,indirect} \\
= \$7.66T + \$3.7T \\
= \$11.4T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{war,direct} \\
= Loss_{life,conflict} + Damage_{infra,total} \\
+ Disruption_{trade} + Spending_{mil} \\
= \$2.45T + \$1.88T + \$616B + \$2.72T \\
= \$7.66T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Loss_{life,conflict} \\
= Cost_{combat,human} + Cost_{state,human} \\
+ Cost_{terror,human} \\
= \$2.34T + \$27B + \$83B \\
= \$2.45T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{combat,human} \\
= Deaths_{combat} \times VSL \\
= 234{,}000 \times \$10M \\
= \$2.34T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{state,human} \\
= Deaths_{state} \times VSL \\
= 2{,}700 \times \$10M \\
= \$27B
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{terror,human} \\
= Deaths_{terror} \times VSL \\
= 8{,}300 \times \$10M \\
= \$83B
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Damage_{infra,total} \\
= Damage_{comms} + Damage_{edu} + Damage_{energy} \\
+ Damage_{health} + Damage_{transport} \\
+ Damage_{water} \\
= \$298B + \$234B + \$422B + \$166B + \$487B + \$268B \\
= \$1.88T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Disruption_{trade} \\
= Disruption_{currency} + Disruption_{energy} \\
+ Disruption_{shipping} + Disruption_{supply} \\
= \$57.4B + \$125B + \$247B + \$187B \\
= \$616B
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{war,indirect} \\
= Damage_{env} + Loss_{growth,mil} \\
+ Loss_{capital,conflict} + Cost_{psych} \\
+ Cost_{refugee} + Cost_{vet} \\
= \$100B + \$2.72T + \$300B + \$232B + \$150B + \$200B \\
= \$3.7T
\end{gathered}
$$

Adding the direct and indirect costs gives us our grand total.

That's $11.4 trillion. Annually. Every year.

Per Capita Mathematics: What War Costs You

With 8 billion people on the planet, the math is simple and depressing.

$$\text{Direct military spending per person: } \$2.7\text{T} \div 8.0\text{B} = \$340/\text{year}$$

Direct military spending per person is $340/year. This is what your government directly spends on military hardware and personnel on your behalf.

$$\text{Total societal cost per person: } \$11{,}355.1\text{B} \div 8.0\text{B} = \$1{,}419/\text{year}$$

The total societal cost per person is $1,419/year. This is the true cost to you when you factor in all the destruction, lost opportunities, and other ripple effects.

$$\text{Over an 80-year lifetime: } \$1{,}419.39 \times 80 = \$113{,}551.20$$

Over an 80-year lifetime, that's **$113,551.20** per person.

That's a decent car. Or a year at a private university. Or the down payment on a house.

Instead, humans spend it on getting very good at killing each other.

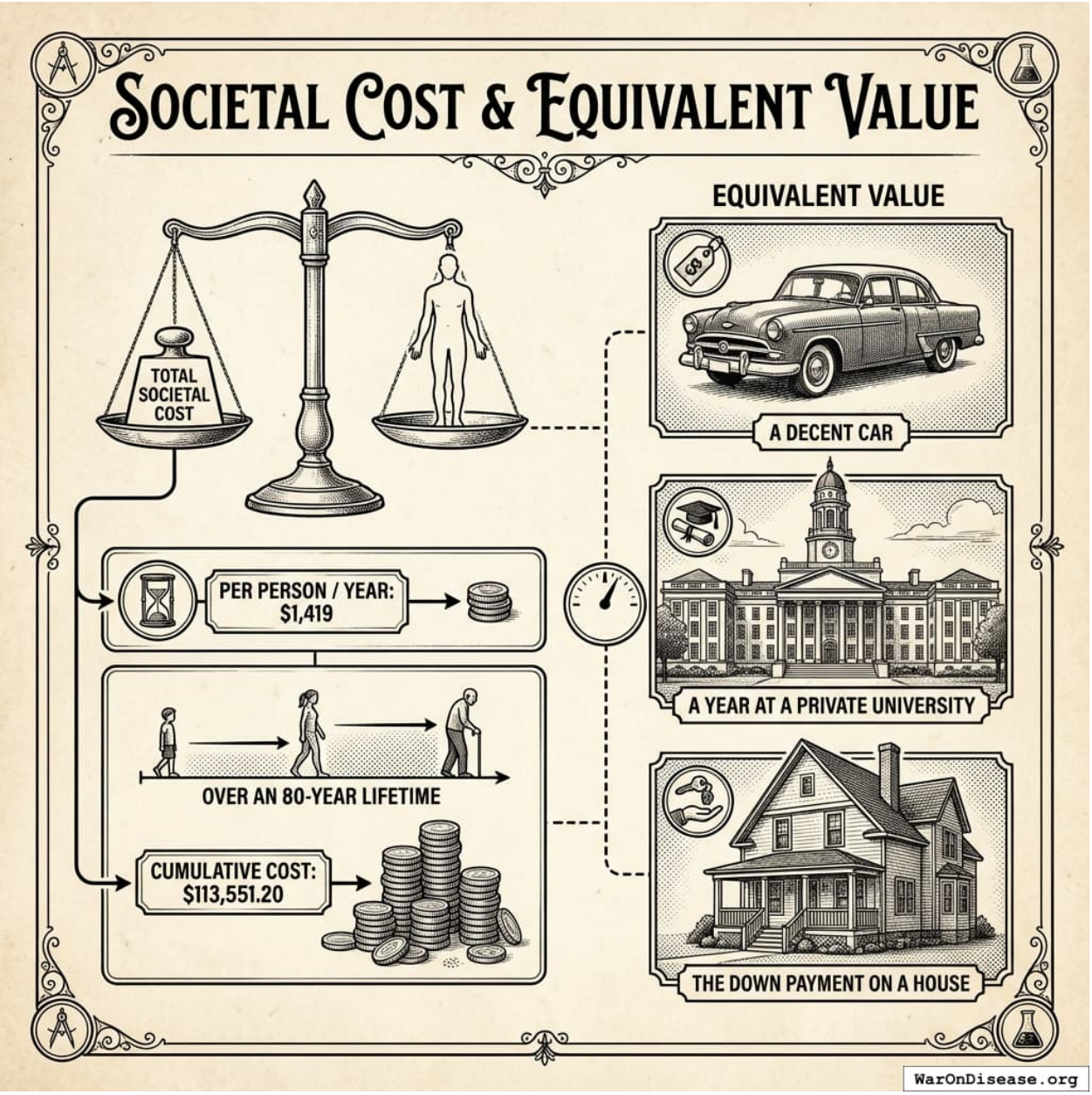


Figure 77: Visualization of the personal lifetime cost of global conflict (113,551) equated to tangible personal assets.

Statistical Perspectives: Putting Numbers in Context

To understand the scale of $11.4 trillion annually:

- It is more than the entire GDP of Japan and Germany combined
- It's 12.7% of global GDP ($89.5 trillion in 2023[153])
- It's 168 times[154] the budget of the World Health Organization
- It could eliminate extreme poverty globally 11.4 times over[149]
- It's enough to give every person on Earth $1,419 per year

If we stacked $11.4 trillion in $100 bills, the stack would be larger than the diameter of the Earth[155].

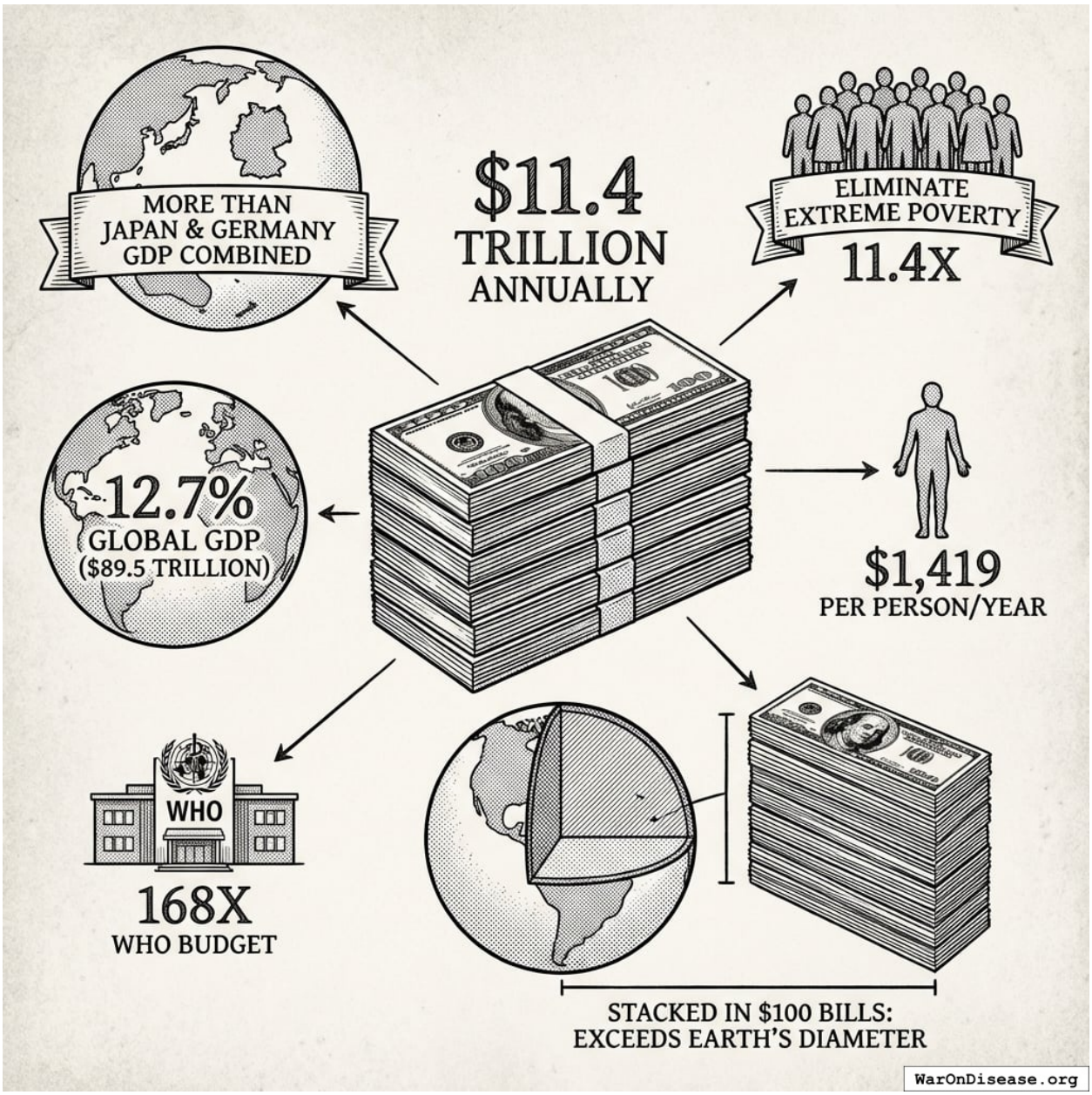


Figure 78: A scale comparison showing the magnitude of 11.4 trillion relative to global GDP, the World Health Organization's budget, and the physical diameter of the Earth.

The Grotesque Mathematics of Misallocation

You have created the most expensive way possible to end human lives. If death were a startup, you'd have the worst unit economics in history, but somehow you keep getting funding rounds.

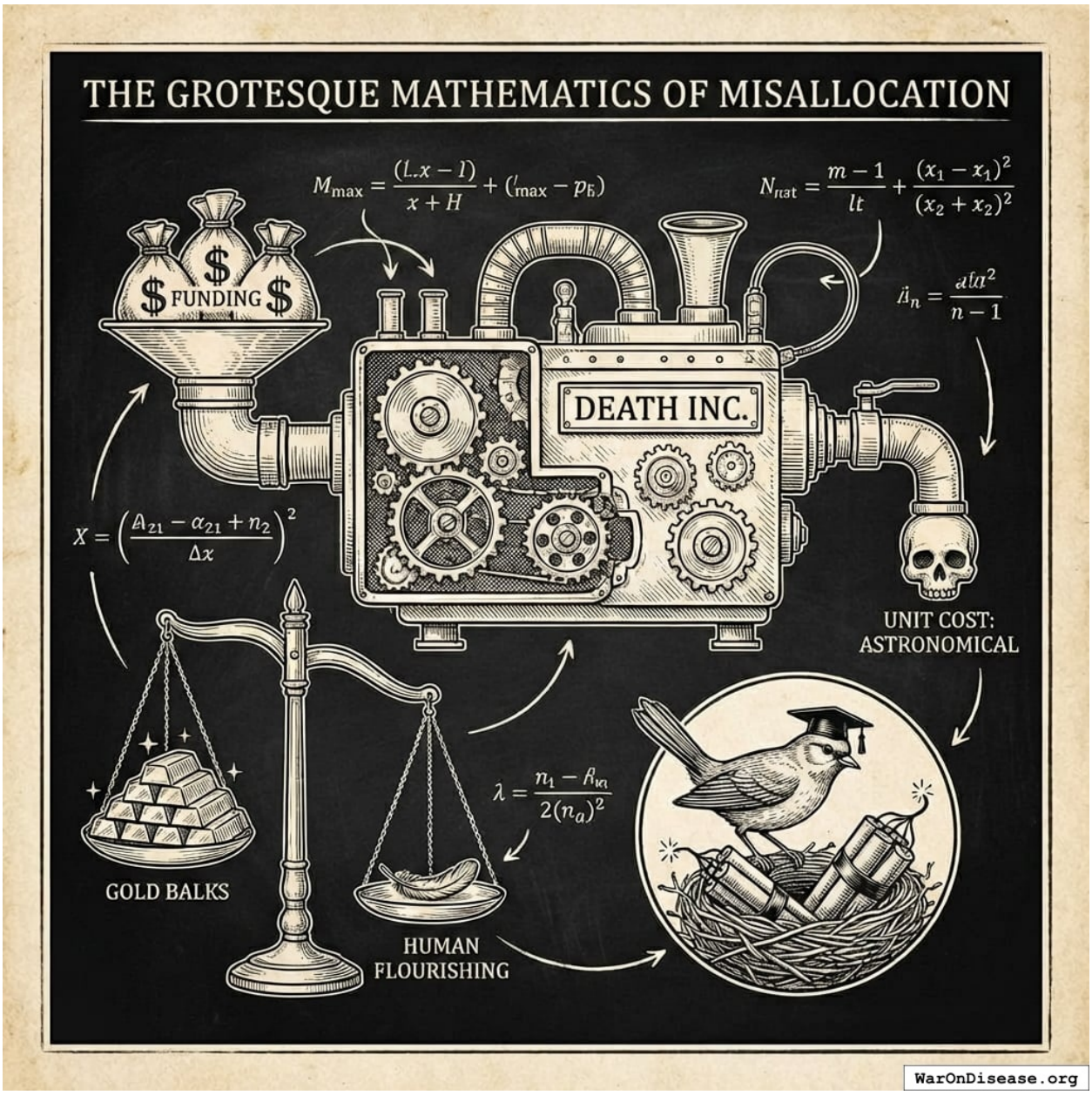


Figure 79: A conceptual chart illustrating the 'unit economics' of misallocated resources, showing massive capital investment leading to destructive outcomes compared to human-centric priorities.

The mathematics of human priorities would be fascinating if it weren't so perfectly, tragically absurd. It's like discovering a new species of bird that exclusively builds nests out of dynamite - you'd want to study it, but mostly you'd want to back away slowly.

Hidden Costs of War

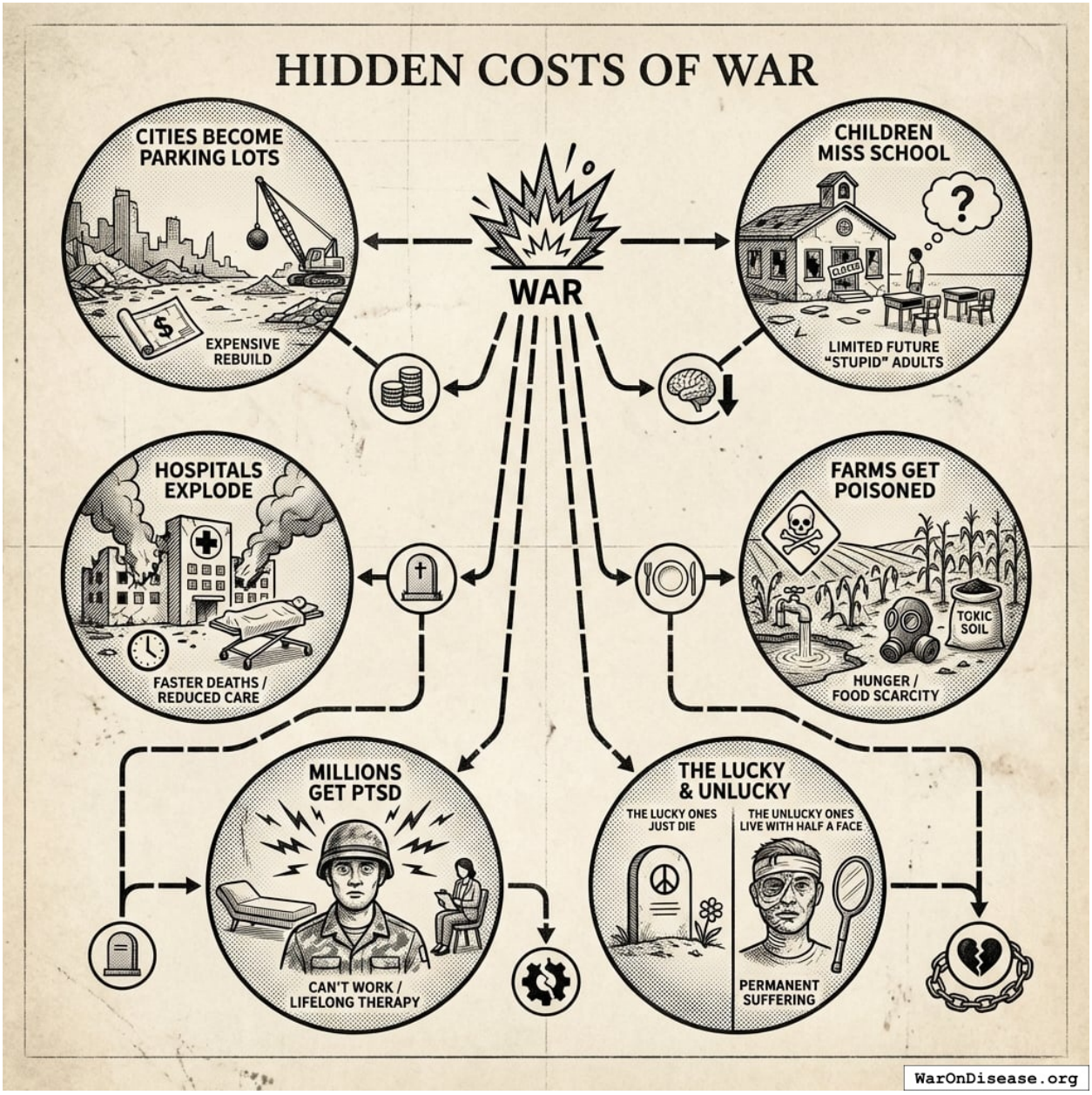
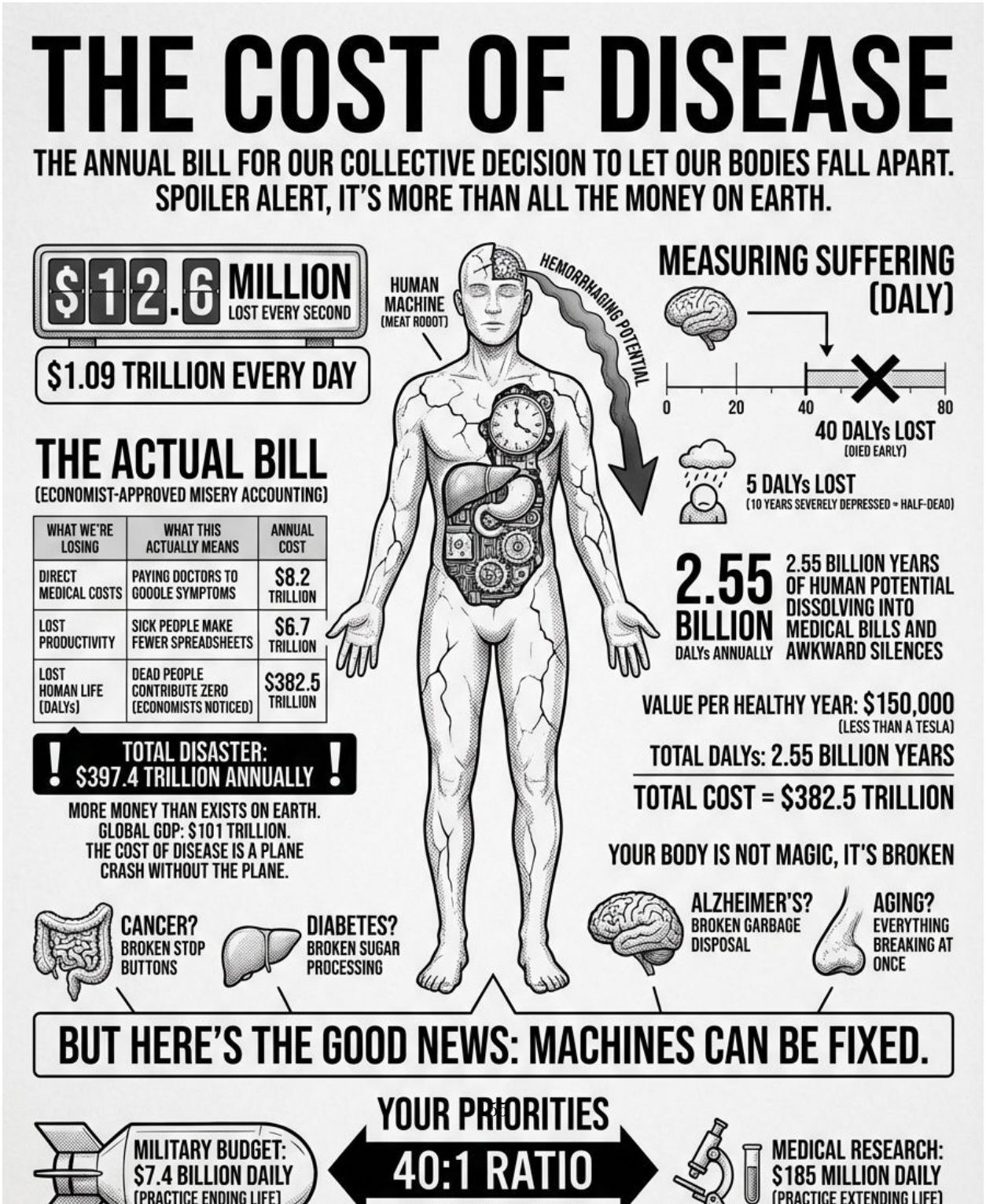


Figure 80: A visualization of the cascading secondary effects of war, illustrating the long-term impacts on infrastructure, education, public health, and the economy.

When you consider the secondary effects of war, the total costs explode:

- Cities become parking lots (expensive to rebuild)
- Children miss school (become stupid adults)
- Hospitals explode (sick people die faster)
- Farms get poisoned (everyone gets hungry)
- Millions get PTSD (can't work, need therapy forever)
- The lucky ones just die
- The unlucky ones live with half a face

The Cost of Disease



While you read this sentence, disease just deleted $12.6 million of human potential from existence.

By the time you finish this paragraph, $60 million more will evaporate into cancer treatments, heart surgeries, and funeral expenses. Also Dave from accounting's weird rash, but that's probably unrelated.

Humanity hemorrhages **$397.4 trillion annually**[56] to diseases that are basically just engineering problems with meat robots.

That's more than the entire global economy. Every year. It's like Earth's economy caught fire, then we decided to sell tickets to watch it burn while complaining we can't afford fire extinguishers.

"Wait," you say, demonstrating basic arithmetic skills, "global GDP is only $101 trillion[156]. How can we lose more than everything that exists?"

Because economists forgot to include the dying part in their calculations. This is like calculating the cost of a plane crash without including the plane.

The Actual Bill (Economist-Approved Misery Accounting)

Here's what disease actually costs, translated from economist-speak into human language:

What We're Losing	What This Actually Means	Annual Cost
Direct Medical Costs	Paying doctors to Google your symptoms in a room that costs $500/hour	$8.2 Trillion[157]
Lost Productivity	Sick people make fewer spreadsheets, decreasing global PowerPoint supply	$6.7 Trillion[158]
Lost Human Life (DALYs)	Dead people contribute zero to the economy (economists finally noticed)	$382.5 Trillion[159]
TOTAL DISASTER	**More money than exists on Earth**	**$397.4 Trillion**[56]

Let me explain that last one, because it's where the real horror lives.



Figure 82: Breakdown of the annual economic burden of disease, contrasting direct costs with the much larger value of lost human potential (DALYs).

How to Measure Suffering Without Feeling Feelings (The DALY)

DALY stands for "Disability-Adjusted Life Year," which is economist-speak for "quantifying human misery without having to look people in the eye."

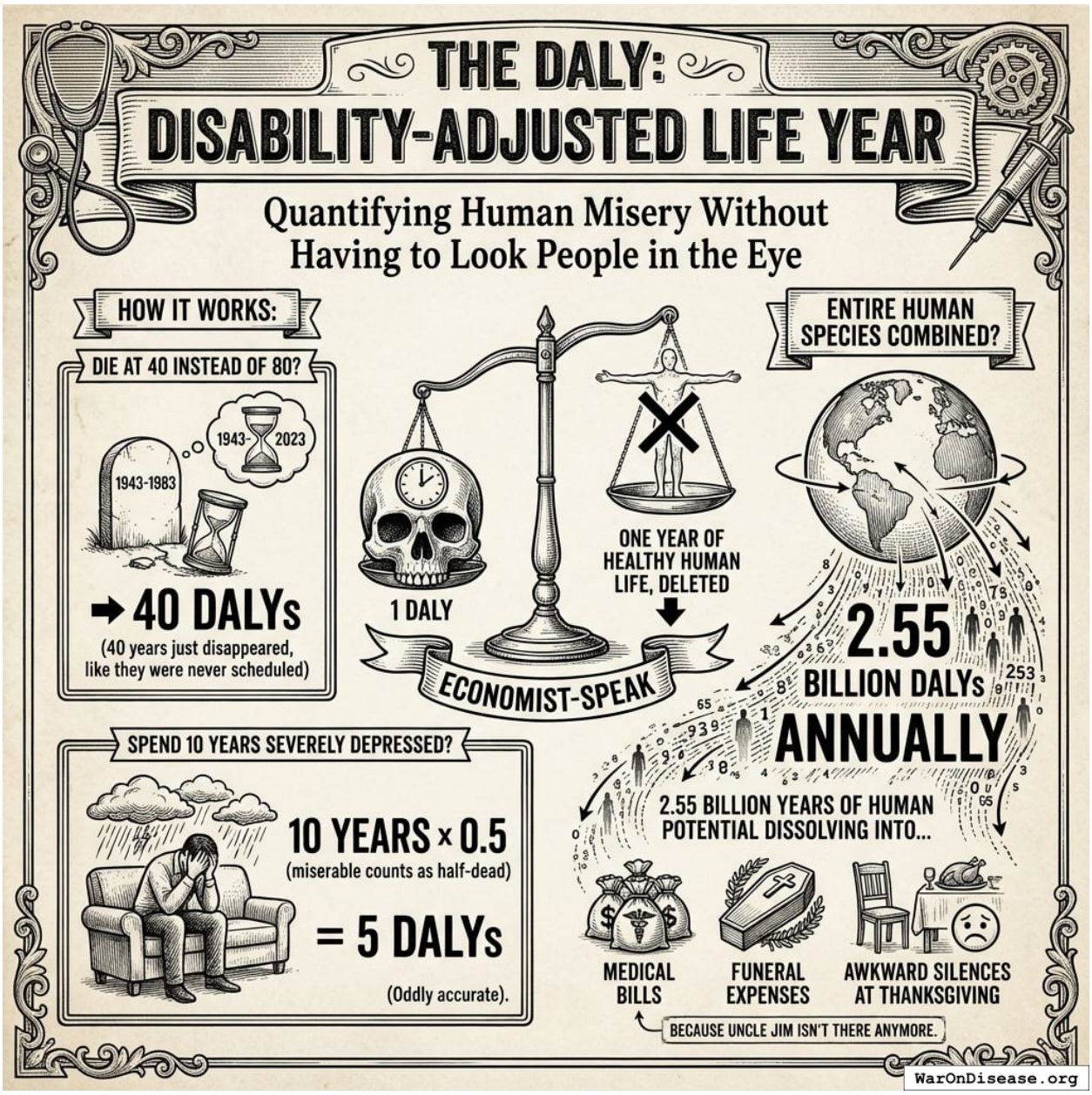


Figure 83: A visual breakdown of how DALYs are calculated, illustrating how years lost to premature death and years lived with disability combine to measure total lost healthy life.

One DALY = One year of healthy human life, deleted.

Here's how it works:

- Die at 40 instead of 80? That's 40 DALYs (40 years just disappeared, like they were never scheduled)
- Spend 10 years severely depressed? 5 DALYs (economists calculated that being miserable counts as being half-dead, which is oddly accurate)
- Entire human species combined? **2.55 BILLION DALYs annually**[159]

That's 2.55 billion years of human potential dissolving into medical bills, funeral expenses, and awkward silences at Thanksgiving because Uncle Jim isn't there anymore.

What the WHO Thinks You're Worth (Spoiler: Not Much)

The World Health Organization decided one year of human life is worth 1-3 times GDP per capita[160]. They made this calculation sober, which is surprising.

Let's use 3x GDP per capita because we're optimists who think humans are worth at least three years of their economic output. This is still depressing, but it's the most generous estimate bureaucrats could manage.

The math is simple and horrifying:

- Value per healthy year: $150,000 (less than a Tesla, apparently)
- Total DALYs lost annually: 2.55 billion years

Multiply these together:

$$2,550,000,000 \text{ years} \times \$150,000/\text{year} = \$382.5 \text{ trillion}$$

That's $382.5 trillion of human potential we flush annually down the toilet labeled "diseases we haven't cured yet because the money went to bombs."

Let's Break Down This Apocalypse By Time Unit

$397.4 trillion annually breaks down to:

- **$1.09 trillion EVERY DAY** (more than most countries make in a year)
- **$45 billion EVERY HOUR** (enough to fund a mid-size cancer research institute)
- **$757 million EVERY MINUTE** (more than most lottery jackpots)
- **$12.6 million EVERY SECOND** (a new Tesla Roadster worth of human potential, gone, every second, forever)

By the time you finish this chapter (about 10 minutes), disease will have cost humanity more than the entire Apollo moon program. We went to the moon for less than one chapter's worth of disease costs.



Figure 84: A scale comparison showing the economic cost of disease over time, contrasting the cost of 10 minutes of global disease against the total budget of the Apollo moon program.

The math is not mathing, humanity.

What's Actually Deleting Everyone (The Greatest Hits)

Here's what's killing people while you read about what's killing people:

Disease	Annual Deaths	Daily Deaths	Will Die Reading This Chapter
Heart Disease	20 million[161]	54,800	500
Cancer	10.4 million[162]	28,500	260

Disease	Annual Deaths	Daily Deaths	Will Die Reading This Chapter
Respiratory Disease	6.5 million[163]	17,800	160
Dementia	2.6 million[164]	7,100	65
Diabetes	3.4 million[165]	9,300	85
Kidney Disease	1.4 million[166]	3,800	35
Tuberculosis	1.3 million[167]	3,600	33
TOTAL	**55 million[168]**	**150,000**	**1,370**

1,370 humans will permanently stop existing while you read this chapter. That's like crashing five 747s worth of people, except it happens every 10 minutes, forever, and nobody makes a documentary about it (if this happened to actual planes, you'd ground all flights within an hour, but with humans dying from disease you just shrug and call it "natural causes").

While you're busy testing 0.000003% of potential cures:

- **10 million people annually**[169] will die from antimicrobial resistance by 2050 (bacteria evolved faster than we did, which is embarrassing)
- **600,000 people annually**[170] die from malaria (mosquitoes: 600,000, humanity: 0)
- **10.4 million people annually**[162] die from cancer (your own cells killing you because they forgot how to die)
- **20 million people annually**[161] die from cardiovascular disease (hearts that gave up on humanity, can't blame them)

Each death represents:

- Someone's entire universe ending
- A grandmother who won't meet grandchildren
- A scientist who might have cured something
- $4 million in lost economic value (if we're being dead-eyed economists about it)
- Literally infinite sadness if you're the one dying or know the person

Your Body Is Not Magic, It's Just Broken

Your body is not mystical. It's not "natural" in a good way. It's definitely not "in balance with the universe."

It's a machine. A magnificent, self-repairing, self-replicating biological machine made of 37 trillion cells that evolved over 4 billion years to not die immediately.

And like all machines, it breaks. A lot. Constantly, actually.

But here's the good news: **Machines can be fixed.**

Every disease is just a broken part with a stupid name:

- **Cancer?** Cells with broken stop buttons (they forgot how to die on schedule)
- **Diabetes?** Broken sugar processing (your pancreas is like a calculator that can't do math anymore)
- **Alzheimer's?** Broken garbage disposal in brain cells (trash accumulates until thinking stops)
- **Depression?** Broken neurotransmitter regulation (your brain's chemical factory set the levels wrong)
- **Aging?** Everything breaking at once, very slowly, until you stop (rude)

You don't fix these broken parts because:

1. You don't fully understand the manual (DNA is 3 billion letters long and in a language you're still learning)

2. You haven't tested 99.999997% of the repair tools (166 billion possible molecules and you've tried ~0.003% of them, which is like trying to find your car keys by checking one pocket then giving up forever)
3. You're too busy spending money on things that create corpses instead of preventing them (see: military budgets, which are essentially "death R&D")

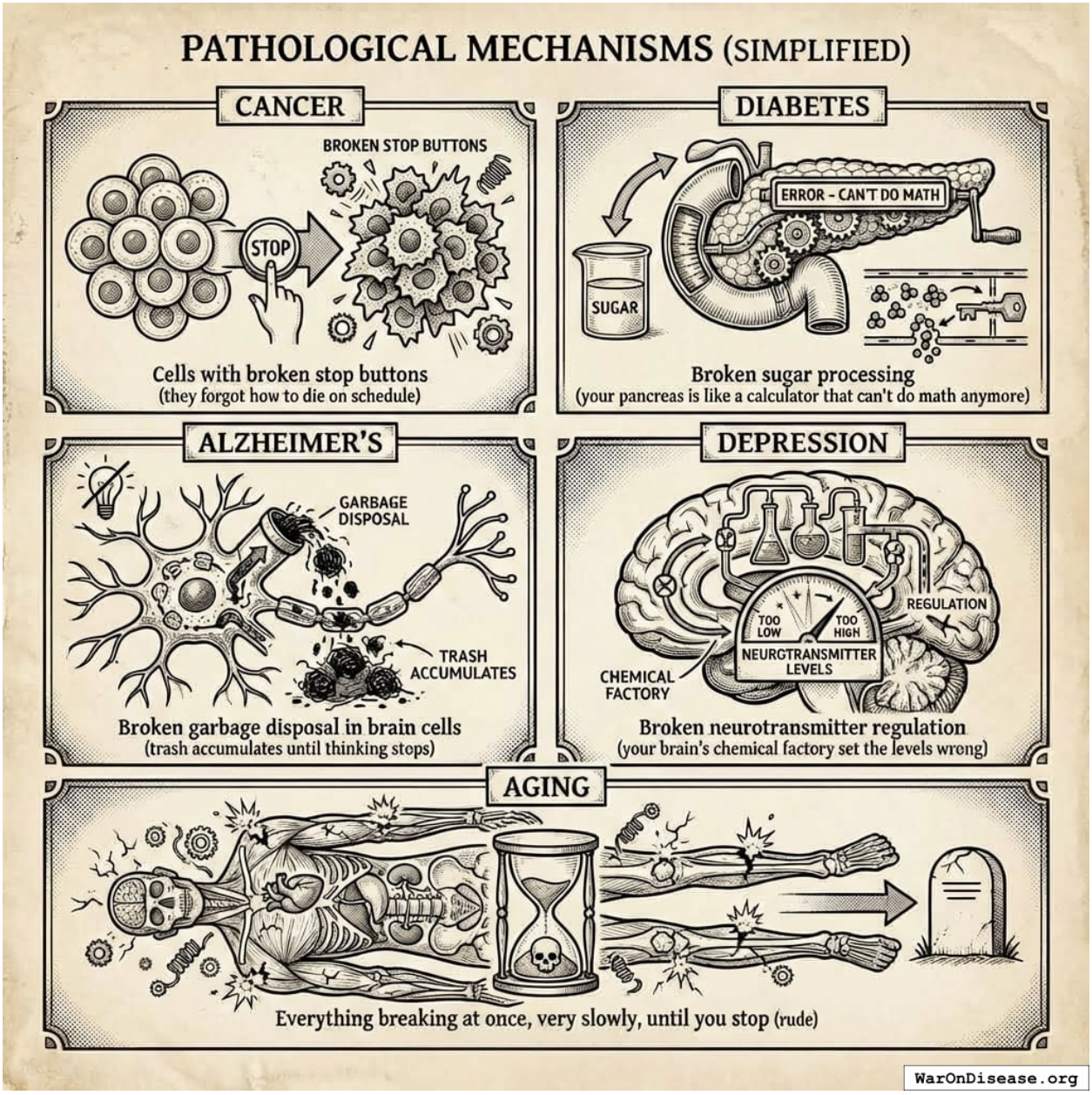


Figure 85: Simplified mechanical analogies for complex biological diseases.

What This Actually Costs

The $397.4 trillion "Disease Tax" is optional. Not optional like "you can skip it," but optional like "it's not a law of physics, just a choice humanity keeps making."

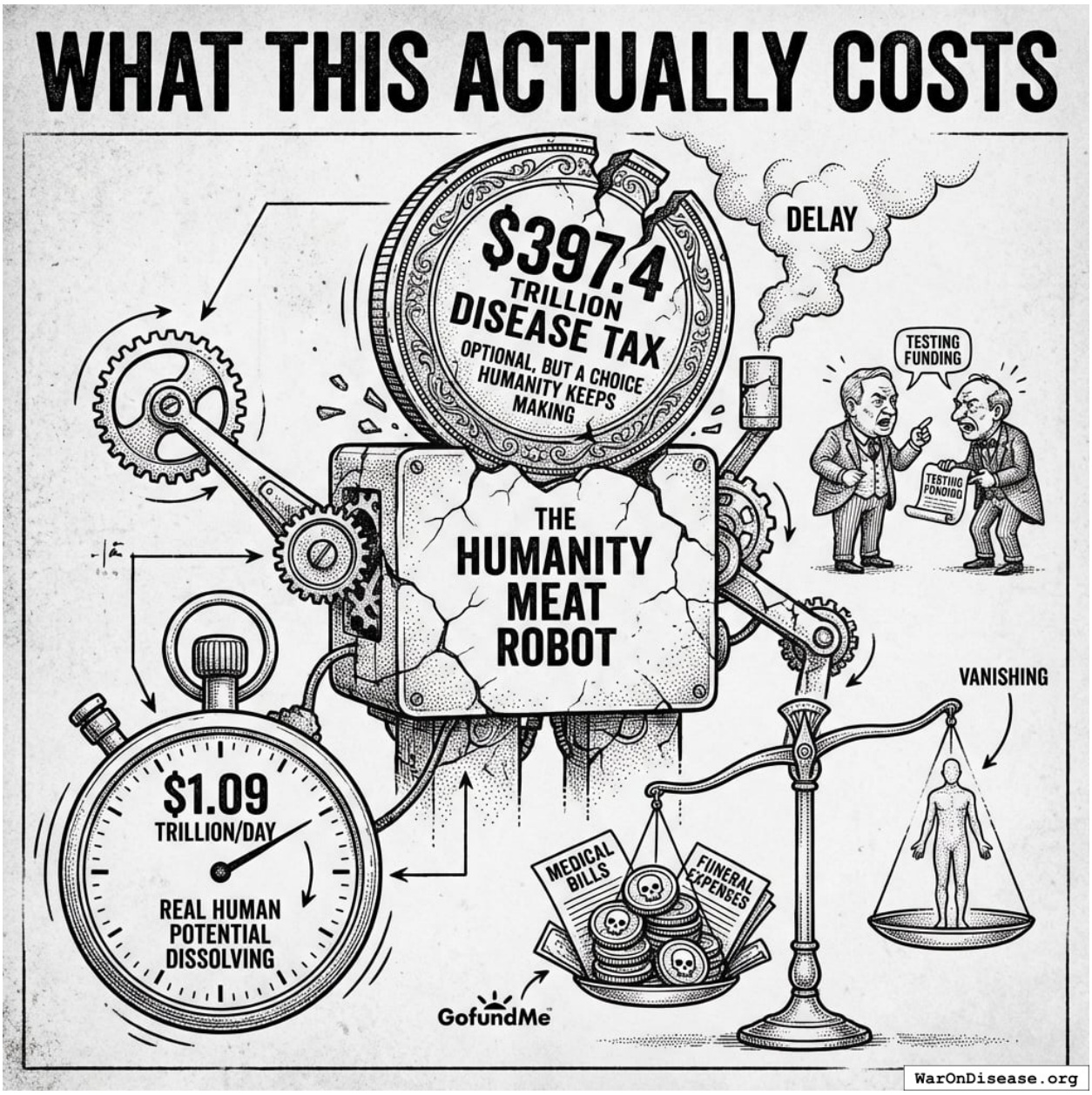


Figure 86: A visualization of the 'Disease Tax' showing the daily 1.09 trillion loss of human potential and financial resources compared to the 397.4 trillion total global cost.

It's the price you pay for being too slow to fix your own broken meat robots.

Every day you delay costs another **$1.09 trillion**. Not theoretical future money. Real human potential dissolving right now into medical bills, funeral expenses, and GoFundMe campaigns while politicians argue whether you can "afford" to test molecules.

Your Priorities, Written in Your Budgets

- **Military budget:** Gets $7.4 billion daily[72] to practice ending human life
- **Medical research:** Gets $185 million daily[59] to practice extending it

That's a **40:1 ratio in favor of death over life.**

If aliens intercepted your budget spreadsheets, they'd conclude you're a death cult that occasionally dabbles in medicine as a hobby (we have intercepted them - this is accurate).

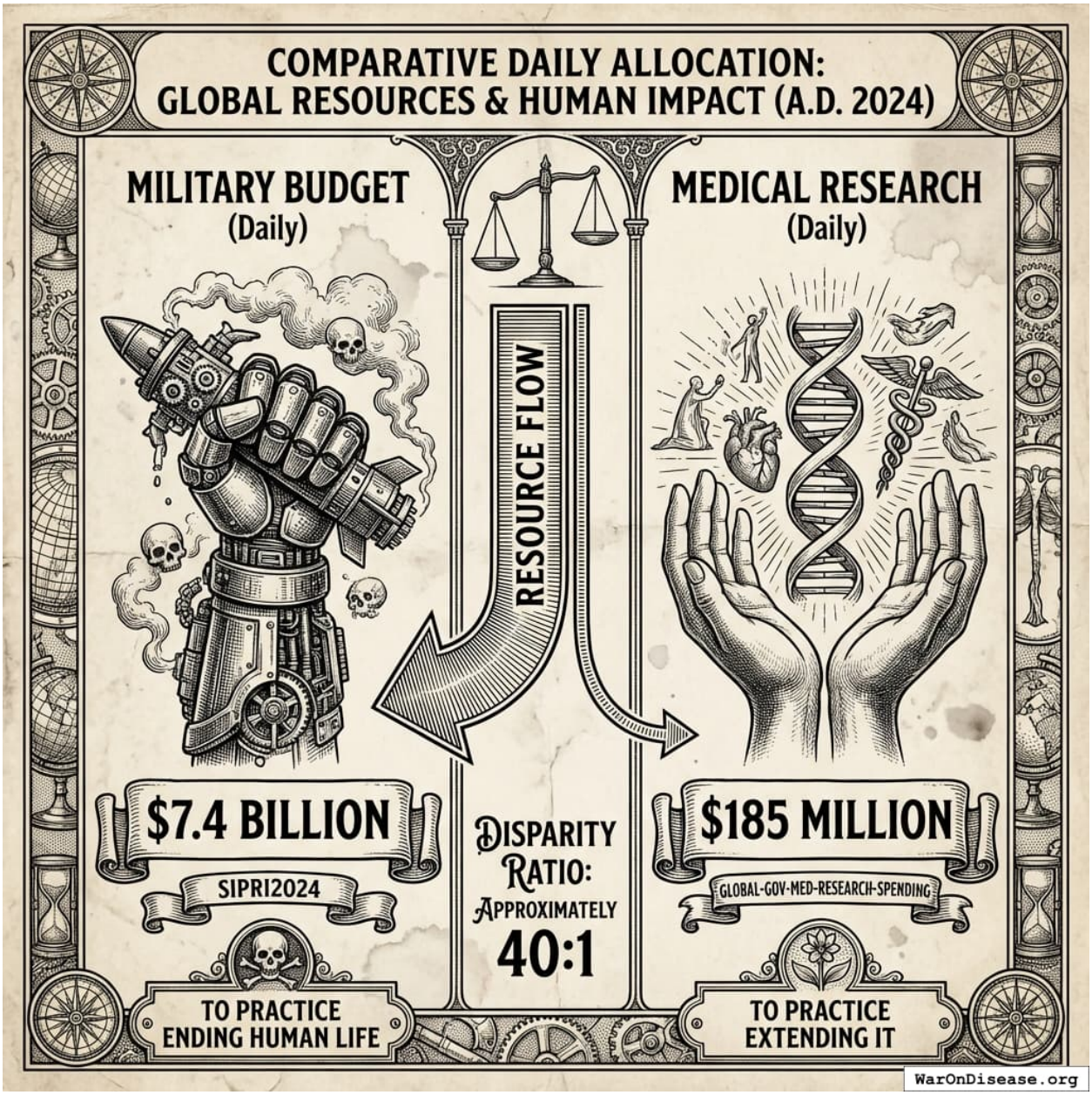


Figure 87: Daily global spending comparison between military budgets and medical research.

The Future You're Paying For

Somewhere in the future, there's a Tuesday when:

- Cancer is a minor inconvenience like a cold
- Hearts are as repairable as carburetors
- Death is optional, not mandatory
- Aging is something that happened to your ancestors

Every day between now and that Tuesday costs you $1.09 trillion. That's the real invoice. The actual bill for

choosing bombs over grandma's cancer treatment.

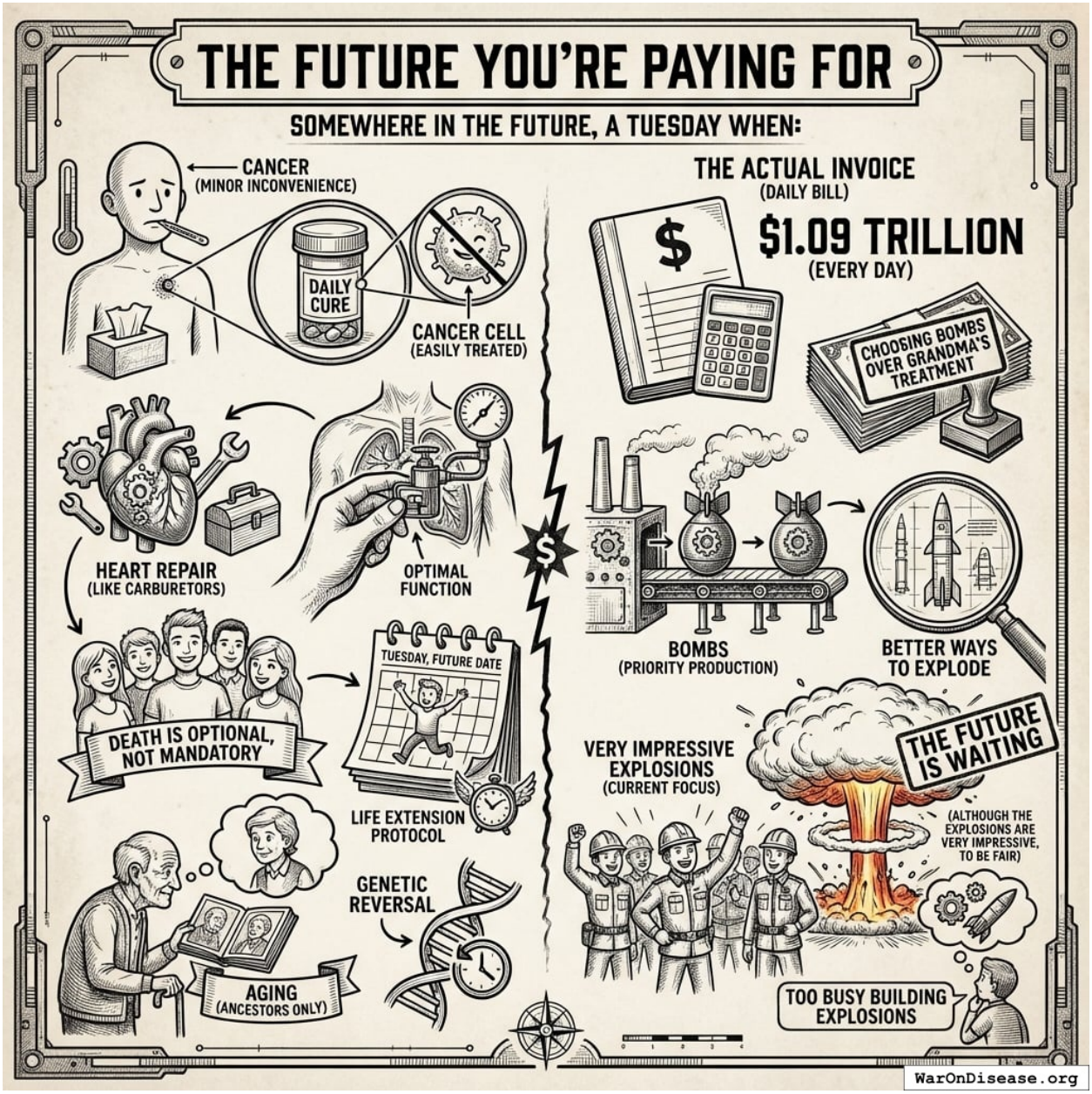
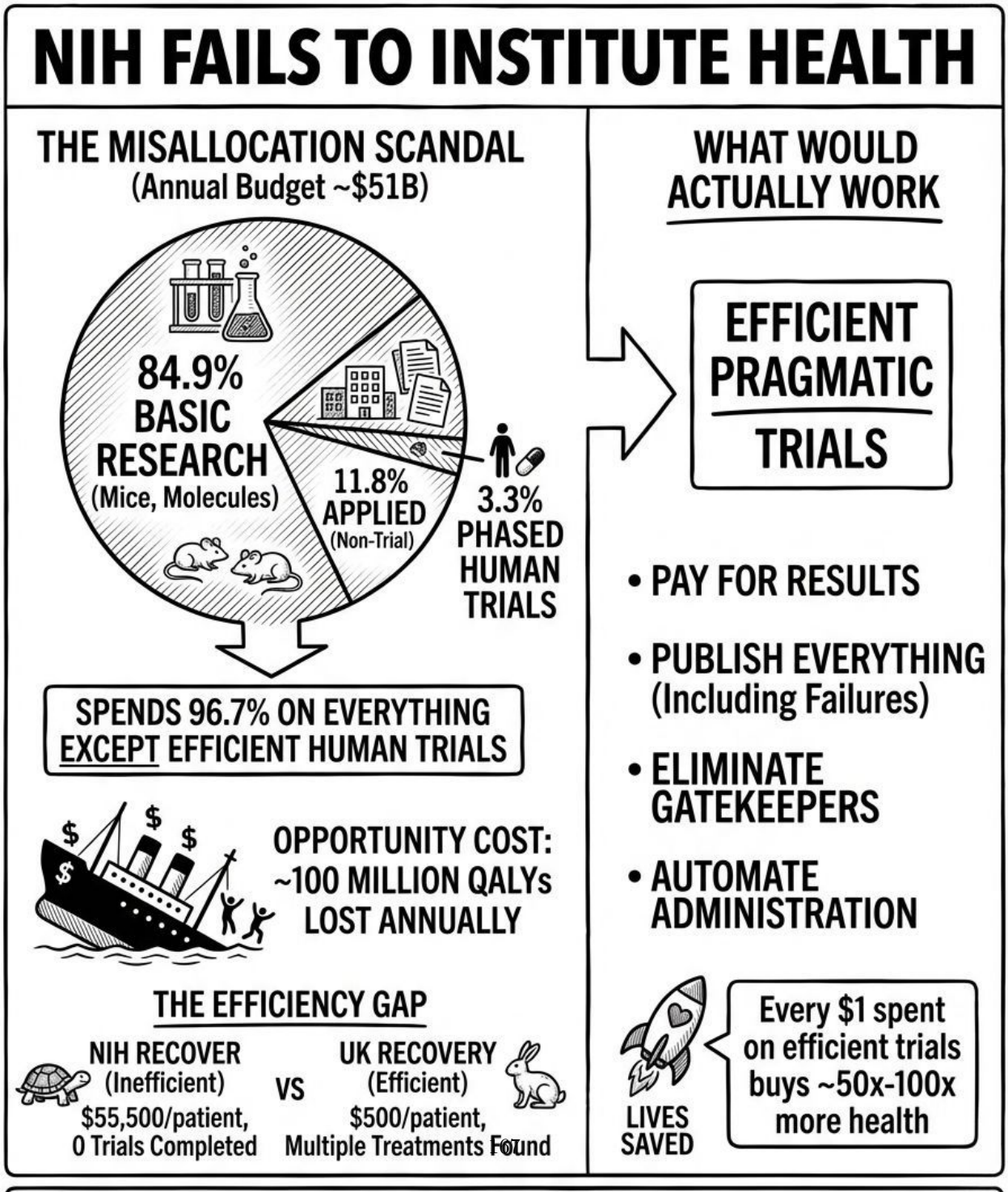


Figure 88: A conceptual comparison showing the daily 1.09 trillion cost of military spending versus a timeline of delayed medical breakthroughs like cancer cures and life extension.

The future is waiting. You're just too busy building better ways to explode each other to notice (although the explosions are very impressive, to be fair).

NIH Fails to Institute Health



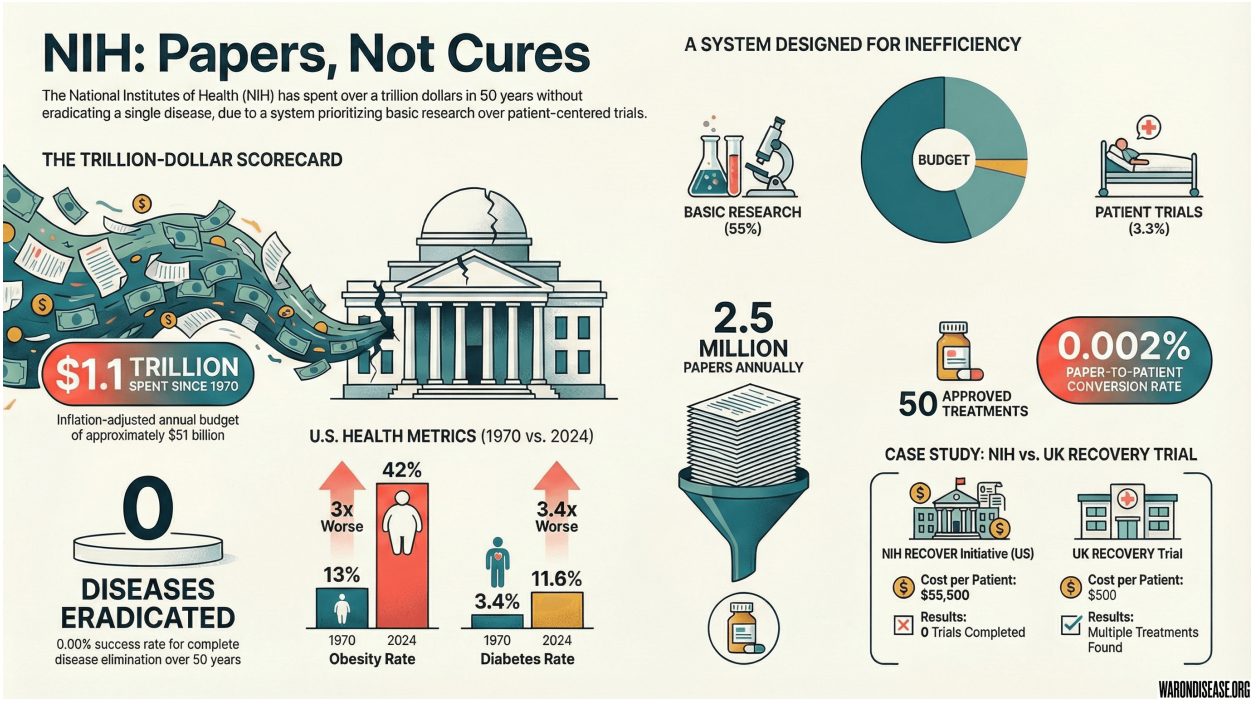


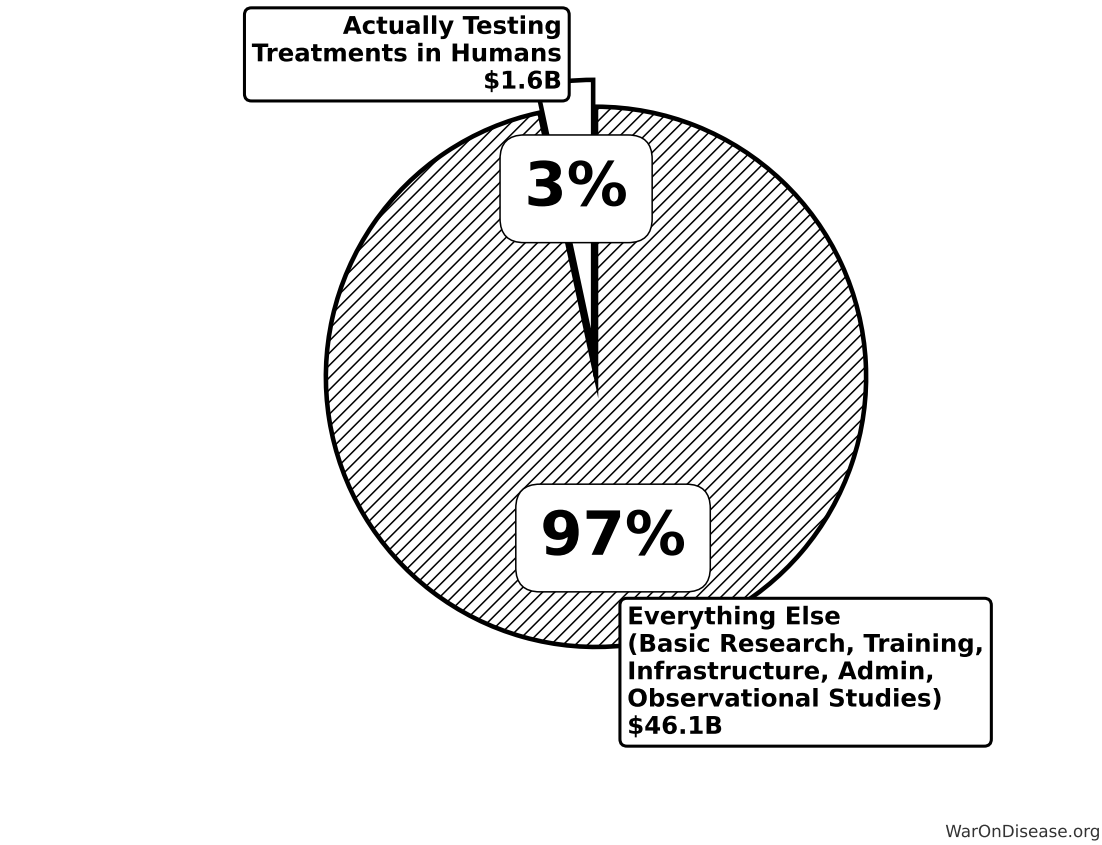
Figure 89: NIH Inefficiency

The Allocation Scandal

The National Institutes of Health has an annual budget of approximately **$51 billion**. 55 million people die annually[168] while this money gets allocated as follows:

A 2023 JAMA study analyzed $247 billion in NIH spending (2010-2019) and found:

- **84.9% - Basic research** ($209.9B): Mice, molecules, mechanisms - "experimental work…without any particular application in view"
- **11.8% - Applied research (non-trial)** ($29.3B): Research with practical aims, but not actually testing treatments in humans
  - **CTSA infrastructure program:** ~$1B/year in buildings, overhead, salaries (~1.5% of total budget)
  - **Observational studies:** Watching patients get sicker without testing treatments (All of Us[171]: $2.16B, zero treatments tested)
  - **Other applied research:** Drug characterization, health services research, epidemiology
- **3.3% - Phased clinical trials** ($8.1B): Actually testing if drugs work in humans (Phases 1-3)
  - Phase 1: $1.5B (18.5% of clinical trial budget)
  - Phase 2: $3.5B (43.2%)
  - Phase 3: $2.6B (32.1%) - **NIH covers only 3.7-4.3% of Phase 3 costs**, then abandons funding
  - Pragmatic trials[1] (30x cheaper): Severely underfunded despite proven efficiency



The NIH spends 96.7% of its budget on everything except the highest-value activity: running efficient clinical trials in humans.

This isn't just inefficiency. It's a body count.

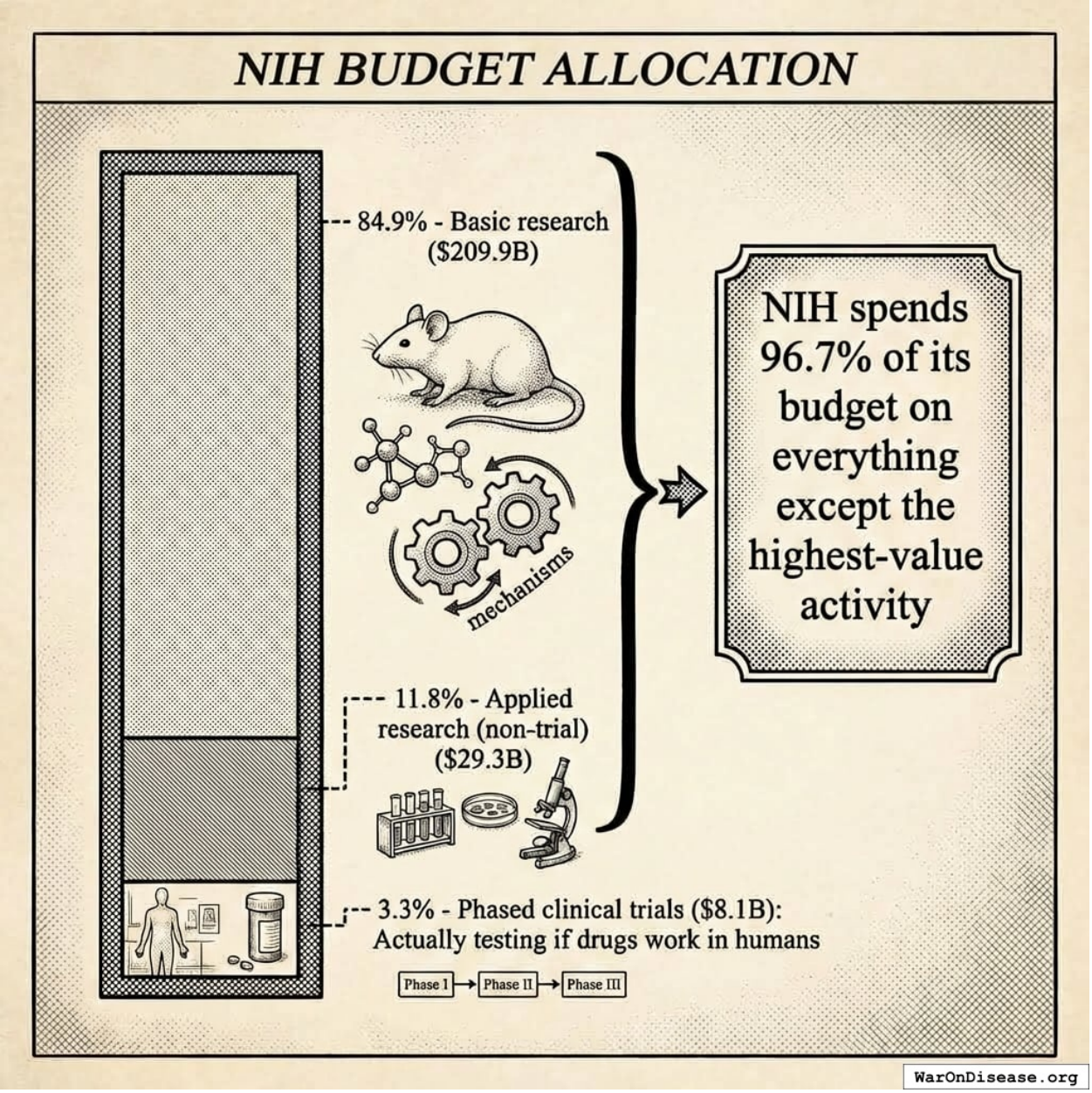


Figure 90: Breakdown of NIH spending showing the massive disparity between basic research (84.9 percent) and actual human clinical trials (3.3 percent).

Why This Allocation Exists

This isn't bureaucratic accident. It's lobbied outcome.

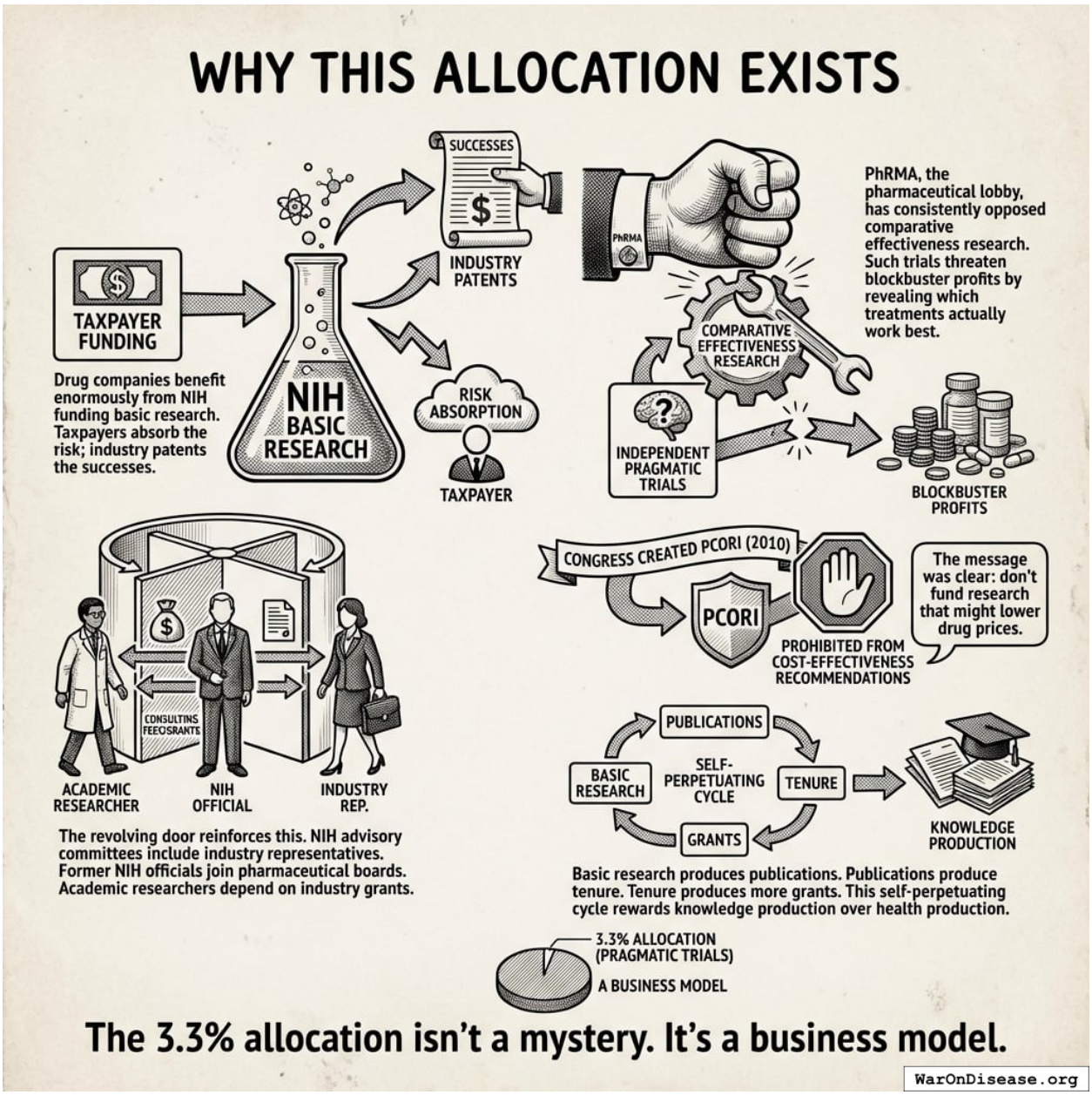


Figure 91: A conceptual map of the systemic incentives and 'revolving door' relationships between the pharmaceutical industry, government funding agencies, and academia that prioritize basic research over cost-effectiveness trials.

Drug companies benefit enormously from NIH funding basic research. Taxpayers absorb the risk; industry patents the successes. But independent pragmatic trials comparing drugs head-to-head? Those threaten blockbuster profits by revealing which treatments actually work best.

PhRMA, the pharmaceutical lobby, has consistently opposed comparative effectiveness research. When Congress created PCORI in 2010 to fund such research, industry successfully lobbied to prohibit PCORI from making coverage recommendations based on cost-effectiveness[172]. The message was clear: don't fund research that might lower drug prices.

The revolving door reinforces this. NIH advisory committees include industry representatives. Former NIH

officials join pharmaceutical boards. Academic researchers depend on industry grants and consulting fees. Everyone's incentives align against the one thing that would actually help patients: cheap, fast trials testing whether expensive drugs outperform generics.

Basic research produces publications. Publications produce tenure. Tenure produces more grants. This self-perpetuating cycle rewards knowledge production over health production.

The 3.3% allocation isn't a mystery. It's a business model.

The Efficiency Gap: A Tale of Two Trials

The difference between efficient and inefficient trial design isn't theoretical. We have a controlled experiment.

RECOVER Initiative (NIH Approach)

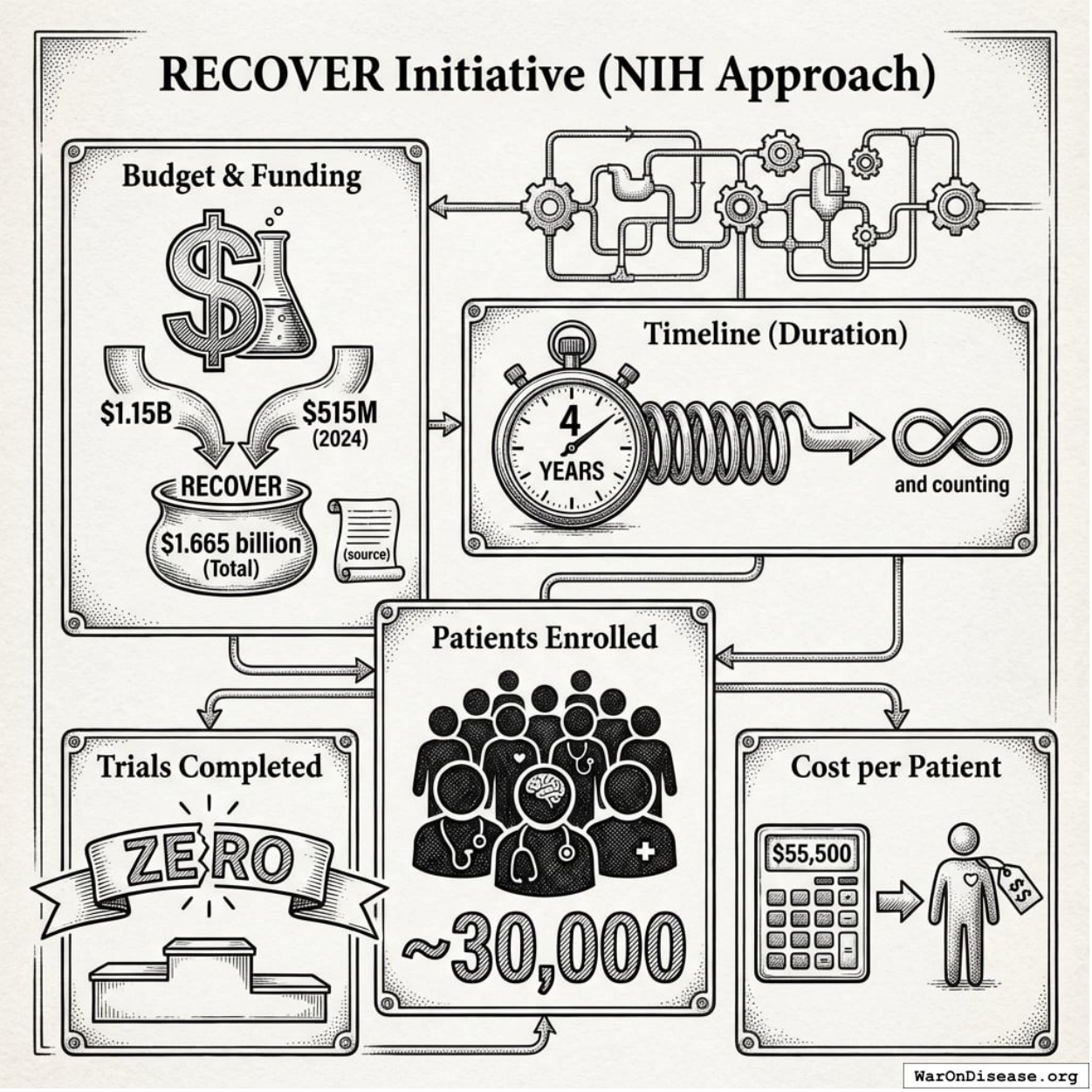


Figure 92: A summary of the RECOVER Initiative's metrics, contrasting its 1.665 billion budget and 4-year timeline against the 30,000 patients enrolled and zero completed trials.

Budget: $1.665 billion ($1.15B + $515M in 2024) (source[173]) **Timeline:** 4 years and counting[174] **Patients enrolled:** ~30,000[175] **Trials completed:** Zero[174] **Cost per patient:** $55,500

RECOVERY Trial (UK Approach)

Budget: $20M (95% CI: $15M-$25M) **Timeline:** 6 months[176] **Patients enrolled:** 48,000[77] **Treatments found:** Multiple, including dexamethasone[177] (saved over 1 million lives) **Cost per patient:** $500 (95% CI: $400-$2.50K)

The NIH RECOVER Initiative spent **133X more per patient** to achieve **infinitely less** (dividing by zero trials completed). This massive efficiency gap is not unique to RECOVERY; a systematic review of 64 pragmatic trials found a median cost of $97 (95% CI: $19-$478)/patient[85].

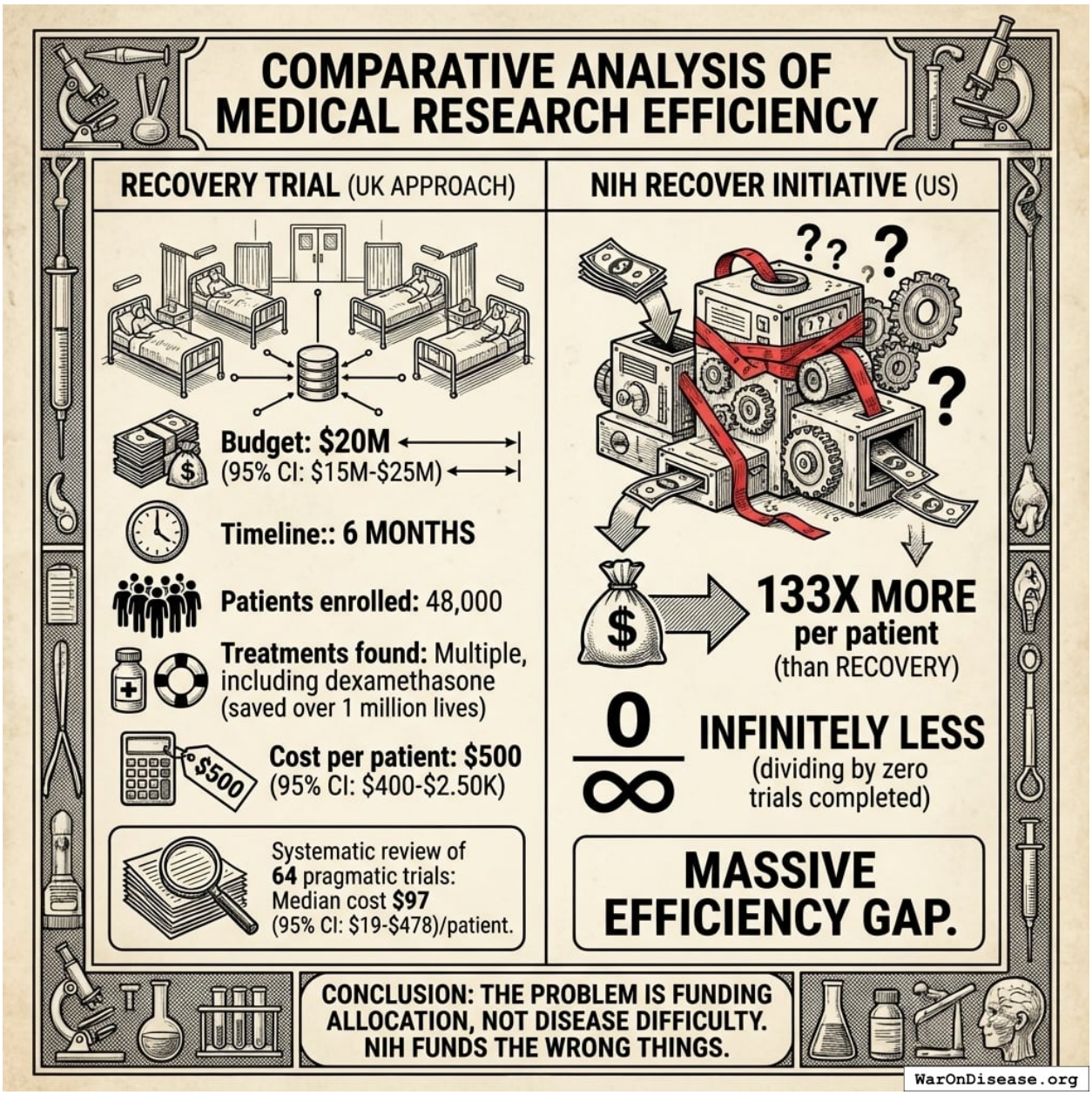


Figure 93: A comparison between the UK RECOVERY Trial and the NIH RECOVER Initiative, highlighting the 133x difference in cost per patient and the disparity in clinical outcomes.

This proves the problem isn't that curing disease is hard. The problem is that the NIH funds the wrong things.

The Death Toll: Opportunity Cost of Misallocation

When you misallocate $40 billion a year into low-efficiency research instead of high-efficiency clinical trials, you aren't just wasting money. You are burning lives.

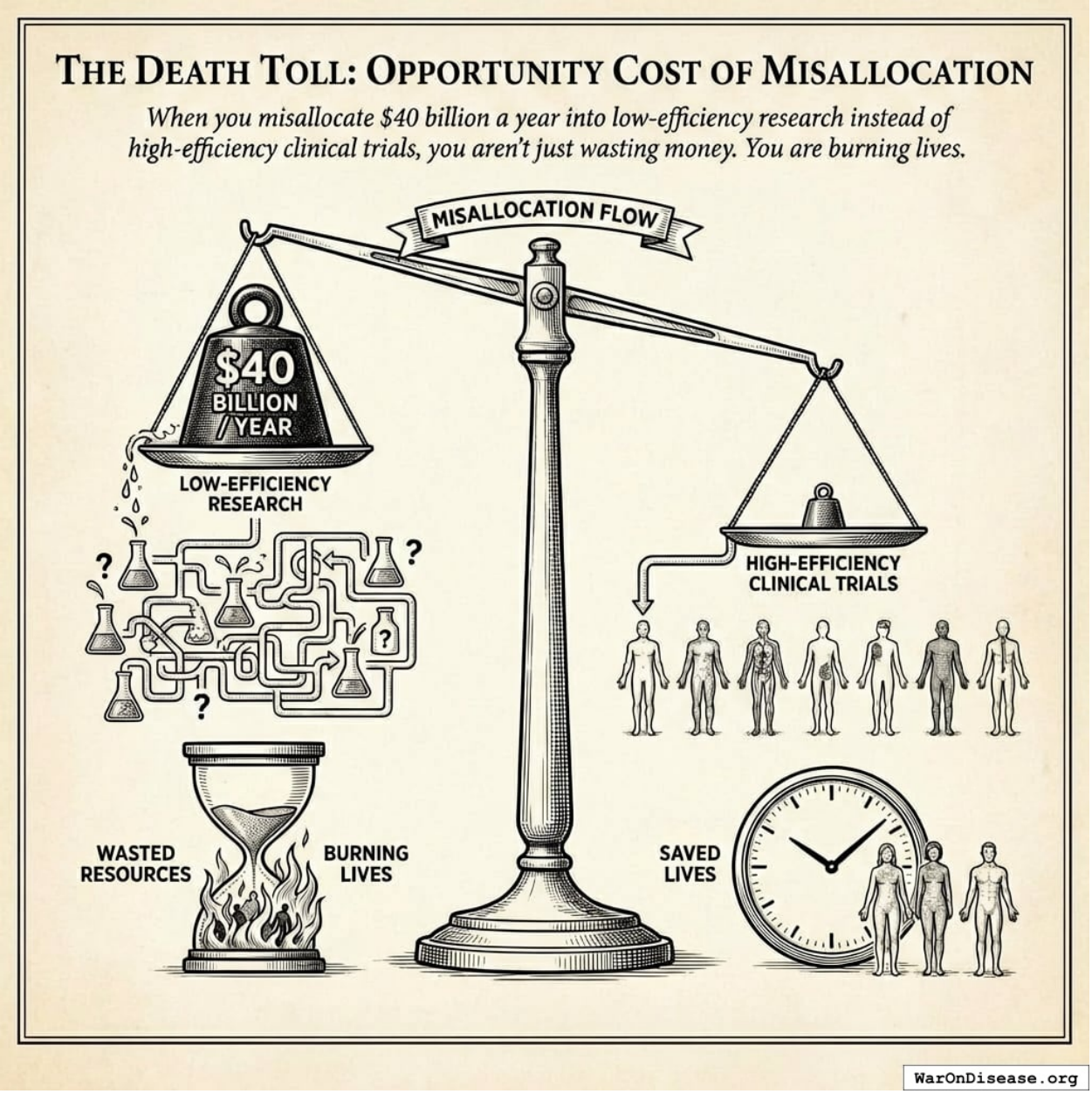


Figure 94: A conceptual infographic contrasting the outcomes of allocating 40 billion to low-efficiency research versus high-efficiency clinical trials, highlighting the human lives lost as an opportunity cost.

Cost Per QALY (Quality-Adjusted Life Year)

- **Standard NIH Portfolio:** $50K (95% CI: $20K-$100K) per QALY[76] (generous estimate)
- **Pragmatic Platform Trials:** $4.00 (95% CI: $1.71-$10) per QALY
- **NIH pragmatic trials funding:** Capped at $500K planning + $1M/year implementation[1]. This is a tiny fraction of the $47B budget

The Multiplier:

Every $1 spent on efficient pragmatic trials buys **12.5kx (95% CI: 2.3kx-51.5kx) more health** than a dollar spent on the current NIH mix.

Yet pragmatic trials remain severely underfunded[1] despite the ADAPTABLE trial proving they cost 30x less than traditional RCTs[1] ($14M (95% CI: $14M-$20M) vs $420M).

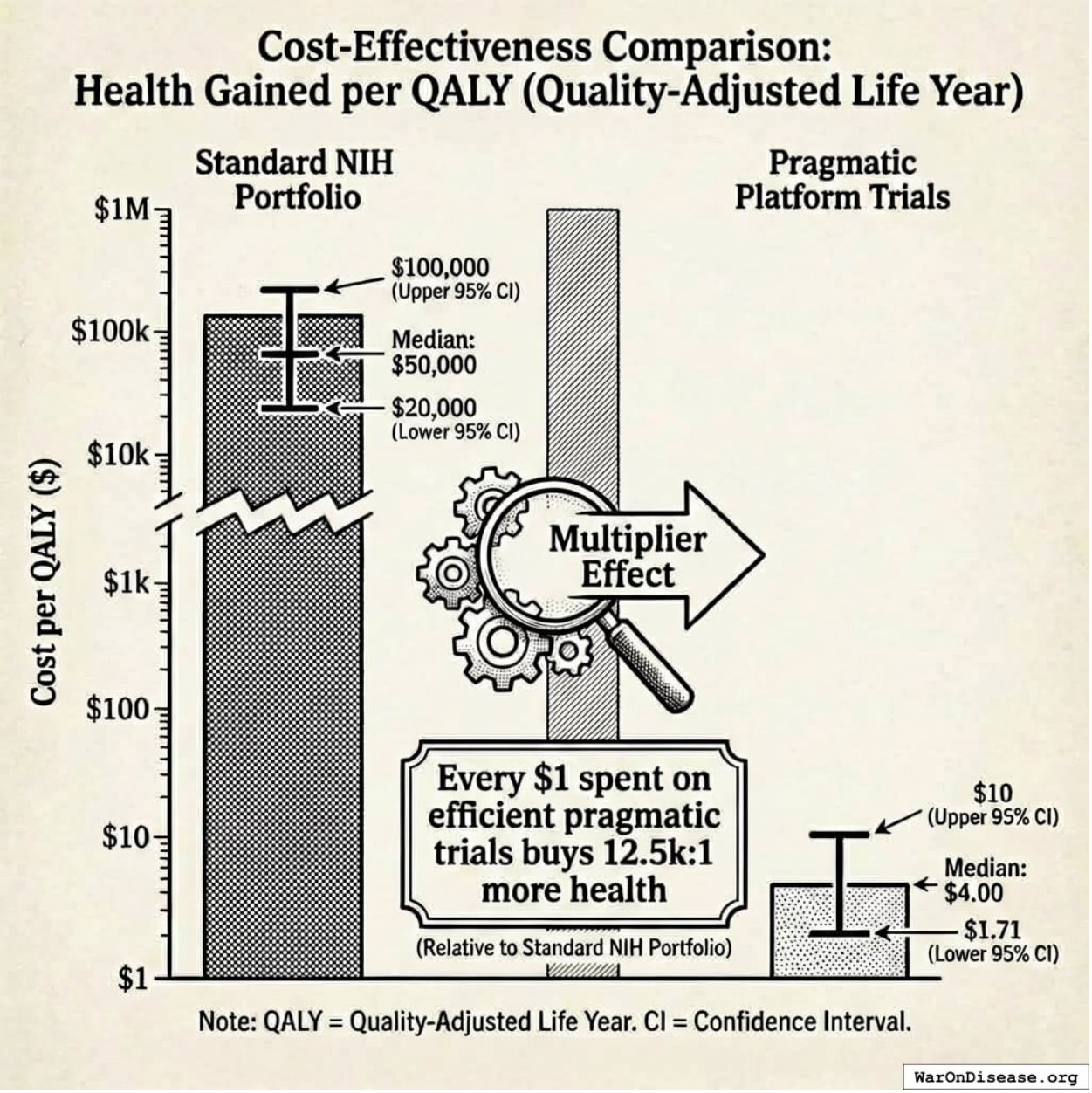


Figure 95: Bar chart comparing the cost efficiency of the Standard NIH Portfolio vs. Pragmatic Platform Trials, demonstrating the massive return on investment difference.

The "Death Equivalent" of Budget Misallocation

Annual Opportunity Cost (Central Estimates):

- **QALYs Lost:** ~100 million life-years per year
- **Deaths NOT Prevented:** ~7 million death-equivalents per year

Conservative 90% Confidence Interval:

- **QALYs Lost:** 10 million to 820 million per year
- **Deaths NOT Prevented:** 0.7 million to 64 million per year

Even in the **most conservative 5th-percentile scenario**, NIH misallocation costs ~10 million QALYs and prevents ~700,000 deaths' worth of health gains annually.

In the 95th-percentile scenario, it's burning health equivalent to **most of the global death toll** (60M deaths/year).

The NIH isn't just inefficient. By blocking the shift to high-efficiency trial platforms, the current budget allocation is **actively destroying** the equivalent of millions of lives annually compared to the optimal allocation.

Mathematical Conclusion:

$$\text{Efficiency Loss} = 1 - \frac{\text{Current QALYs gained}}{\text{Potential QALYs gained}} \approx 98\%$$

We are operating at ~2% of our potential theoretical capacity to save lives.

The Translation Crisis: Concept Rich, Trial Poor

Here is the "Stock vs Flow" problem in one sentence: **We are not short of hypotheses; we are short of trial slots.**

- **FDA-approved drugs:** >20,000 known safe in humans
- **Repurposable compounds:** ~4,700-6,800 clinically-tested candidates[178] (including 3,422 marketed drugs) sitting on shelves
- **Plausible dementia interventions:** Hundreds
- **Clinical trials available for your grandma in St. Louis:** Zero

We have a massive **stock** of safe molecules that have never been systematically evaluated for new uses. But the **flow** of trials is a trickle.

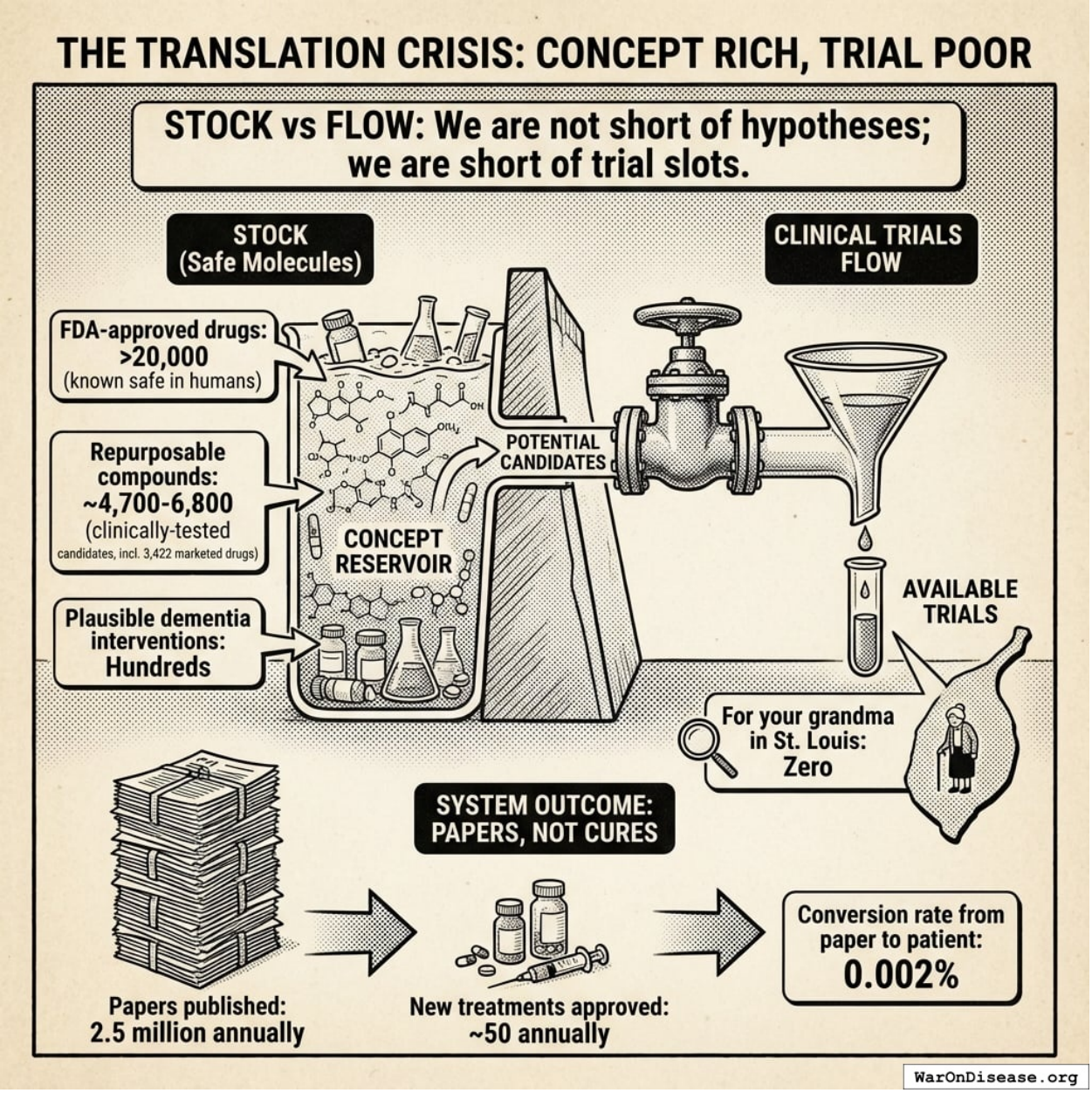


Figure 96: A visualization of the 'Stock vs. Flow' crisis illustrating the massive reservoir of potential drug candidates compared to the narrow bottleneck of clinical trial availability and final approvals.

The result is a system that produces papers, not cures:

- **Papers published:** 2.5 million annually[179]
- **New treatments approved:** ~50 annually[27]
- **Conversion rate from paper to patient:** 0.002%

Knowledge Production: Saturated. Translation Capacity: Starved.

The bottleneck isn't ideas. It's execution:

- **Biomedical papers produced:** 2.5 million per year[179]
- **Adults who've participated in trials:** ~5%[25]

- **Adults willing to participate if invited:** ~50-75%[78]
- **Adults actually invited:** ~9-11%[78]

We're drowning in hypotheses while patients are starving for trial slots.

The system produces millions of papers testing ideas in mice, but offers trial participation to only 5% of humans. Even though half would say yes if asked.

That's not an information failure. That's a capacity failure.

We know everything about how cancer works in mice. We've mapped every pathway, gene, and protein. We have Nobel Prizes for understanding mechanisms.

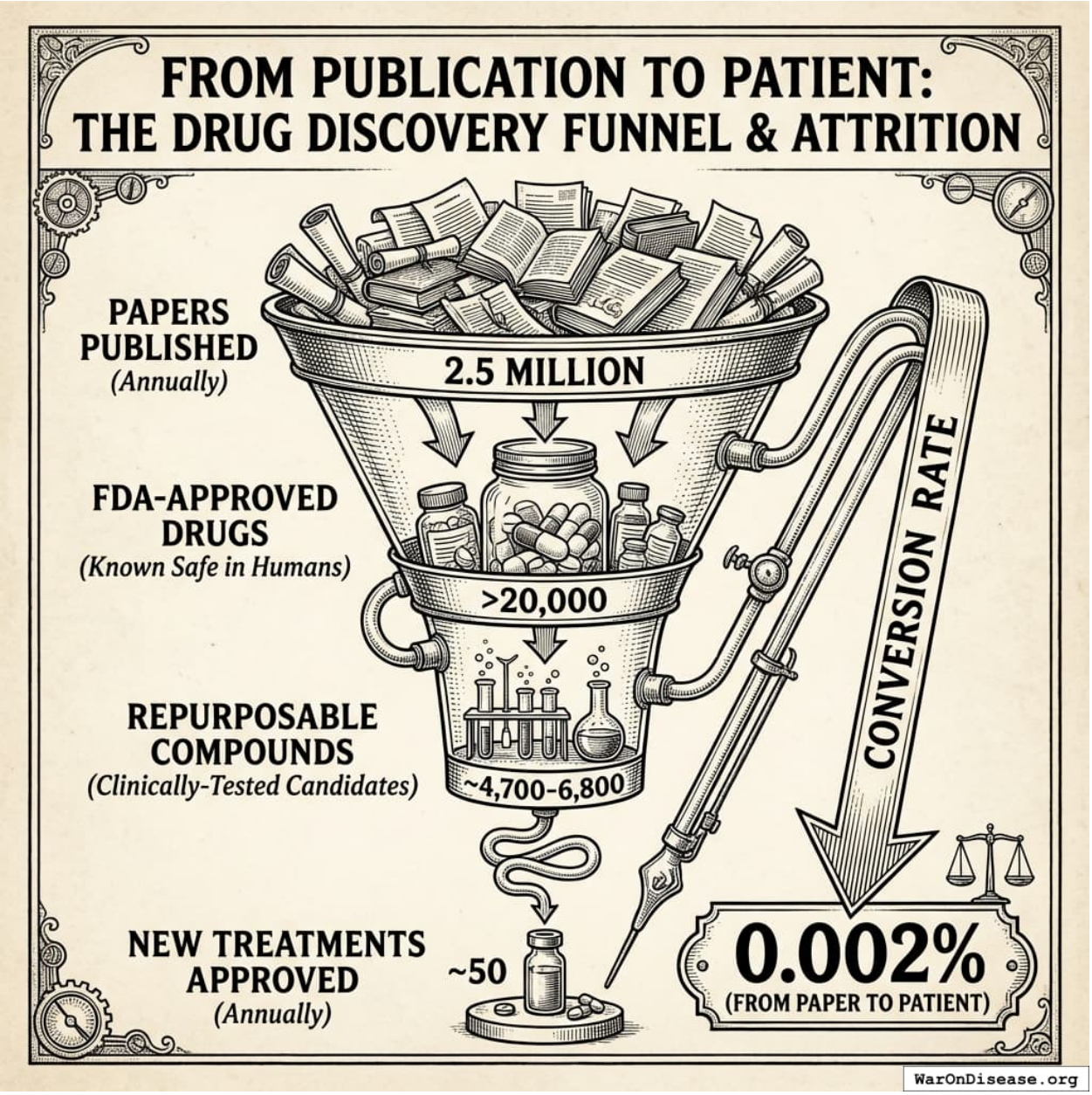


Figure 97: The 'Funnel of Failure' illustrating the bottleneck between the massive stock of published research and safe molecules versus the trickle of approved treatments.

What we don't have: Cures.

Because understanding disease and curing disease are completely different things. The NIH chose understanding. Patients needed cures.

The Public Goods vs. Club Goods Scam

The NIH defends its existence by claiming to produce "Public Goods" (open science, data, training). In reality, it spends taxpayers' money to produce "Club Goods" for private industry.

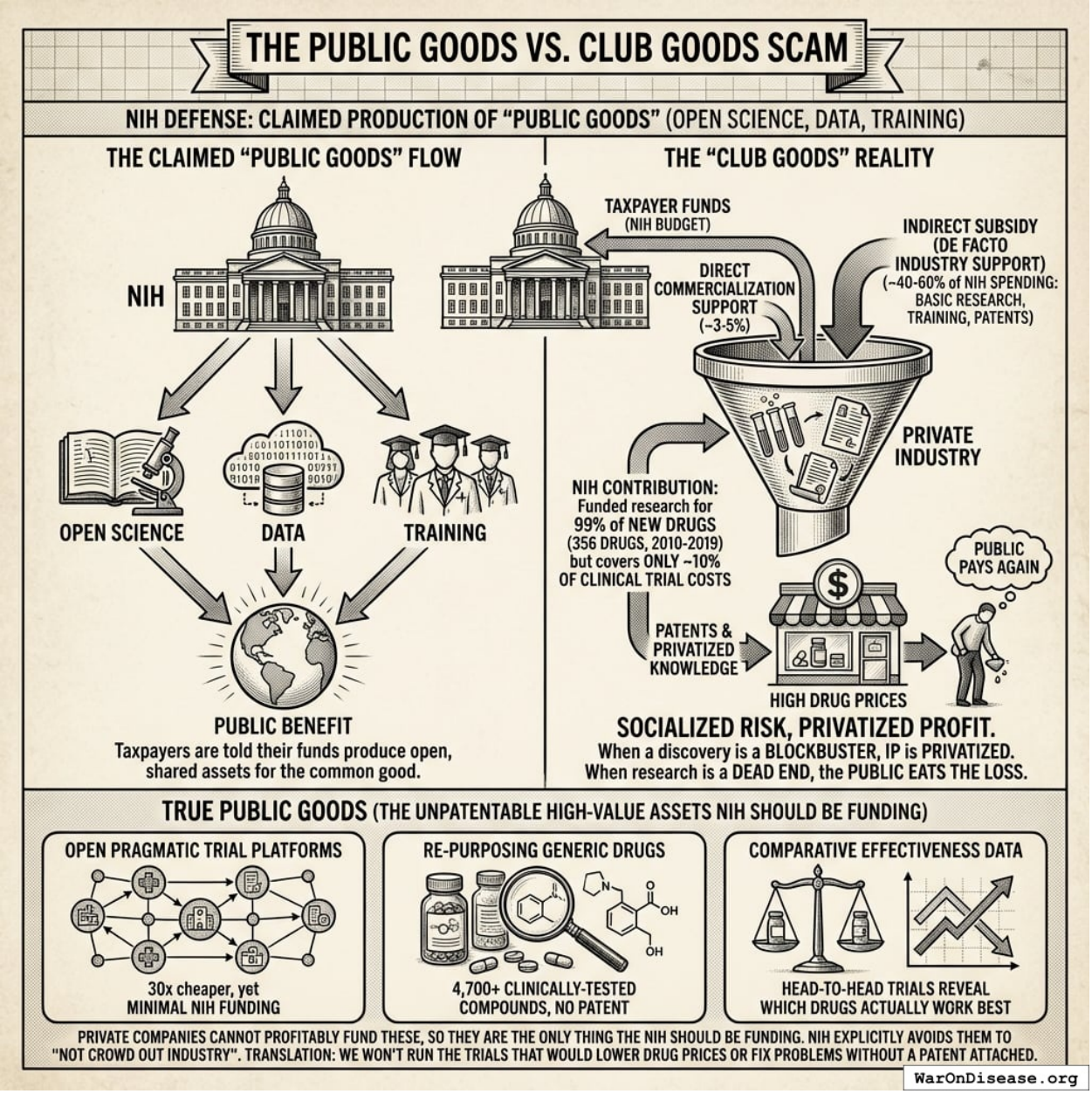


Figure 98: A flow diagram of the drug development pipeline showing how taxpayer funding covers high-risk basic research and training, while private industry privatizes the successful outputs through patents, creating a cycle of socialized risk and privatized profit.

The Scam in Numbers:

- **Direct commercialization support:** ~3-5% of budget
- **Indirect subsidy to profitable firms:** ~40-60% of NIH spending[180] functions as a de facto subsidy to industry. This includes funding basic research, training scientists, and generating patents that private companies exploit
- **NIH contribution to approved drugs:** Funded research for 99% of new drugs[181] (356 drugs, 2010-2019), but covers only ~10% of clinical trial costs
- **Who pays for translation:** NIH covers only ~10% of what industry spends[180] on clinical trials for approved drugs

The pattern is clear: taxpayers fund 40-60% of the knowledge pipeline (~$20-30B/year), industry patents the winners, and the public pays again through high drug prices.

When a discovery leads to a blockbuster drug, the IP is privatized. When the research leads to a dead end, the public eats the loss.

Socialized Risk, Privatized Profit.

True public goods would be **unpatentable** but high-value assets like:

- **Open pragmatic trial platforms:** 30x cheaper than traditional trials[1], yet receive minimal NIH funding
- **Re-purposing generic drugs:** 4,700+ clinically-tested compounds[178] where no patent exists
- **Comparative effectiveness data:** Head-to-Head trials that would reveal which drugs actually work best

Private companies *cannot* profitably fund these, so they are the **only** thing the NIH should be funding. Instead, the NIH explicitly avoids them to "not crowd out industry." Translation: We won't run the trials that would lower drug prices or fix problems without a patent attached.

The Patient Disconnect: Zero Correlation with Health Outcomes

Here's the most damning statistic of all:

Correlation between NIH funding priorities and actual disease burden: 0.07[182]

That's essentially random. You'd get better allocation by throwing darts at a list of diseases.

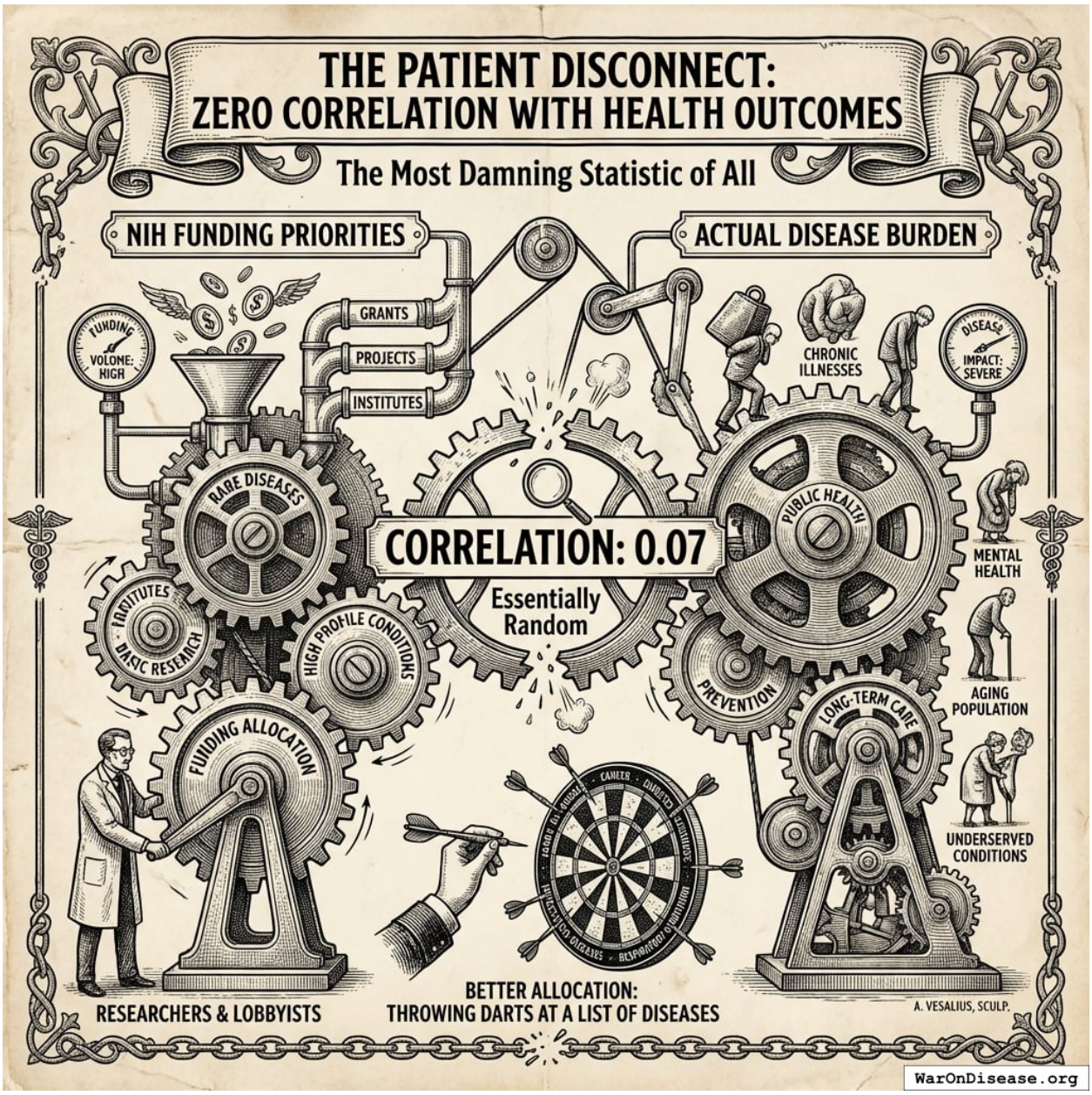


Figure 99: A comparison chart illustrating the disconnect between NIH funding levels and actual disease burden, highlighting the negligible 0.07 correlation.

What patients want

- Treatments that work
- Access to experimental therapies
- Trials they can actually join
- Cures for their specific disease

What NIH funds

- Understanding molecular mechanisms
- Publishing papers in prestigious journals

- Building research empires
- Protecting institutional overhead

The system optimizes for everything except patient outcomes. Because patients don't control the money. Committees do.

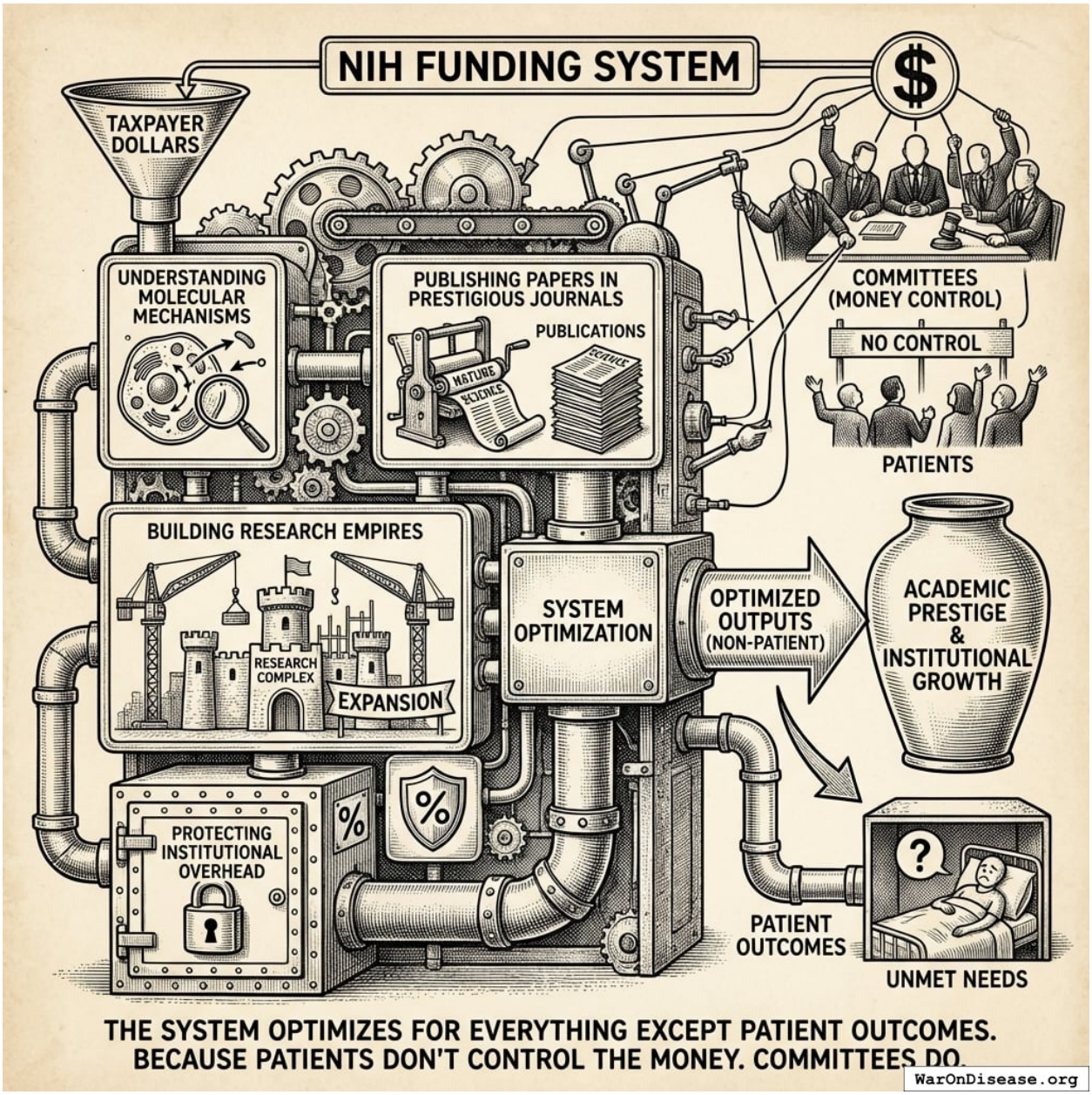


Figure 100: A conceptual diagram showing the flow of NIH funding controlled by committees toward institutional goals like papers and overhead, while patient outcomes remain disconnected from the primary incentive loop.

The Track Record

Since 1970, the NIH has spent over **$1.1 trillion** (inflation-adjusted).

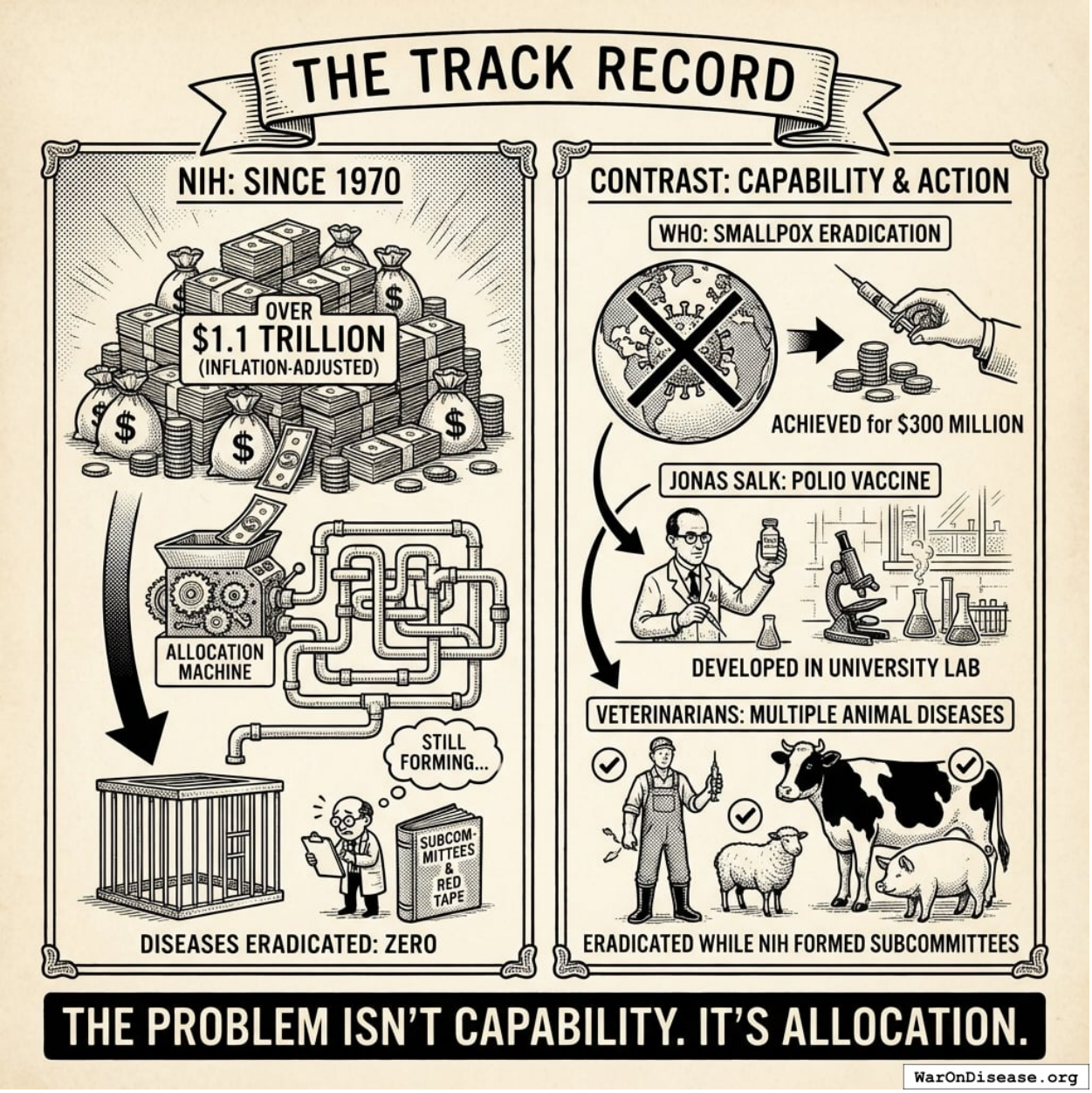


Figure 101: A comparative visualization showing the disparity between NIH's $1.1 trillion spending with zero diseases eradicated versus the WHO's $300 million successful eradication of smallpox.

Number of diseases eradicated: **Zero**[183].

This isn't because eradicating disease is impossible:

- The WHO eradicated smallpox for $300 million[103]
- Jonas Salk developed the polio vaccine in a university lab
- Veterinarians have eradicated multiple animal diseases[184] while the NIH was forming subcommittees

The problem isn't capability. It's allocation.

What Would Actually Work

The UK RECOVERY trial proved the alternative: $500 (95% CI: $400-$2.50K) per patient instead of $41K (95% CI: $20K-$120K), 100 days instead of years, and over 1 million lives saved.

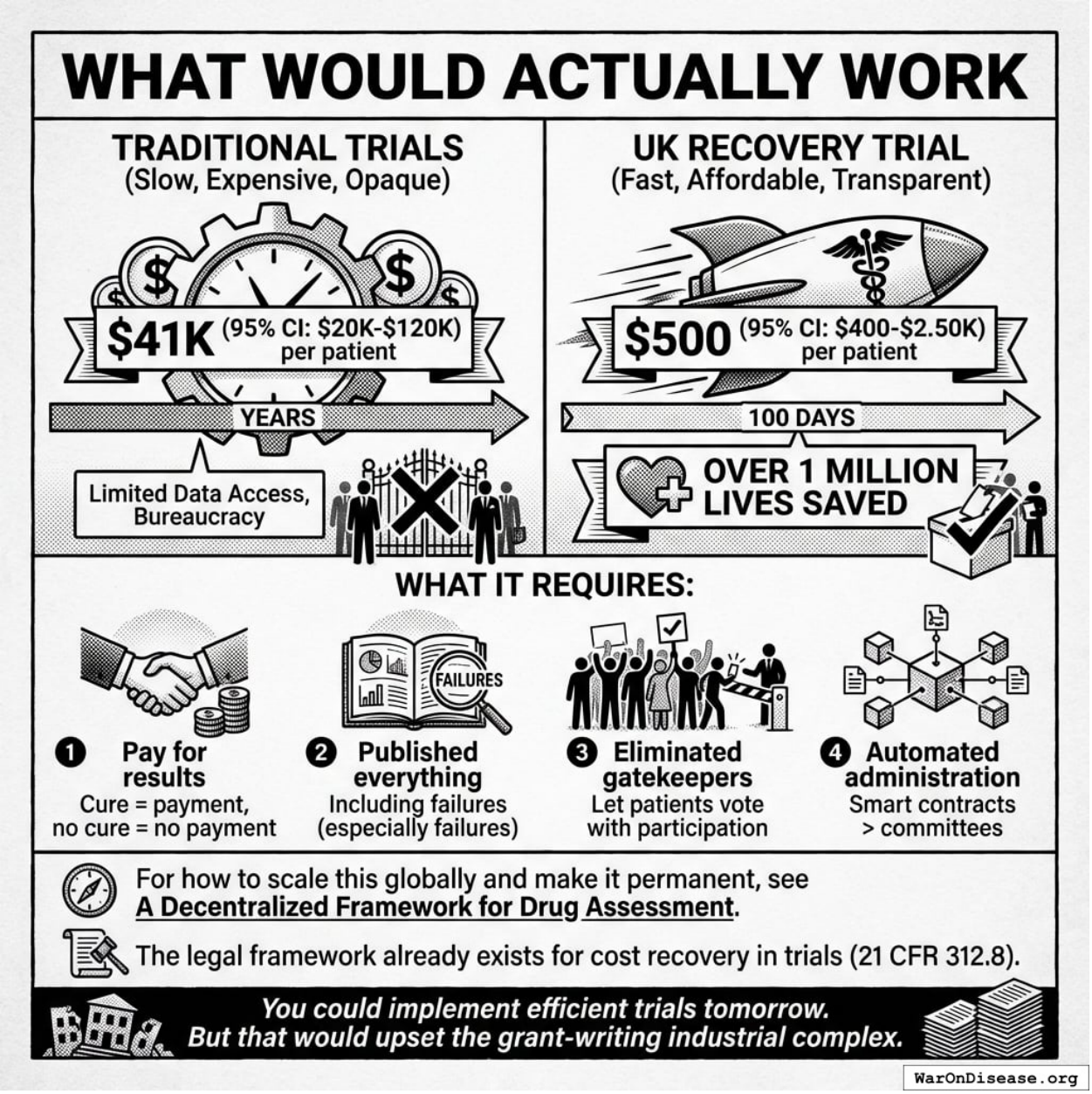


Figure 102: A comparison between the traditional clinical trial model and the streamlined RECOVERY trial approach, illustrating the dramatic differences in cost, speed, and methodology.

What it requires:

1. **Pay for results:** Cure = payment, no cure = no payment
2. **Published everything:** Including failures (especially failures)
3. **Eliminated gatekeepers:** Let patients vote with participation
4. **Automated administration:** Smart contracts > committees

For how to scale this globally and make it permanent, see A Decentralized Framework for Drug Assessment.

The legal framework already exists for cost recovery in trials (21 CFR 312.8[185]).

You could implement efficient trials tomorrow. But that would upset the grant-writing industrial complex.

The Bottom Line

For $1.1 trillion since 1970, the NIH built the world's most expensive grant-writing academy. Zero diseases eradicated. Millions of papers nobody reads. Thousands of administrators. Hundreds of committees.

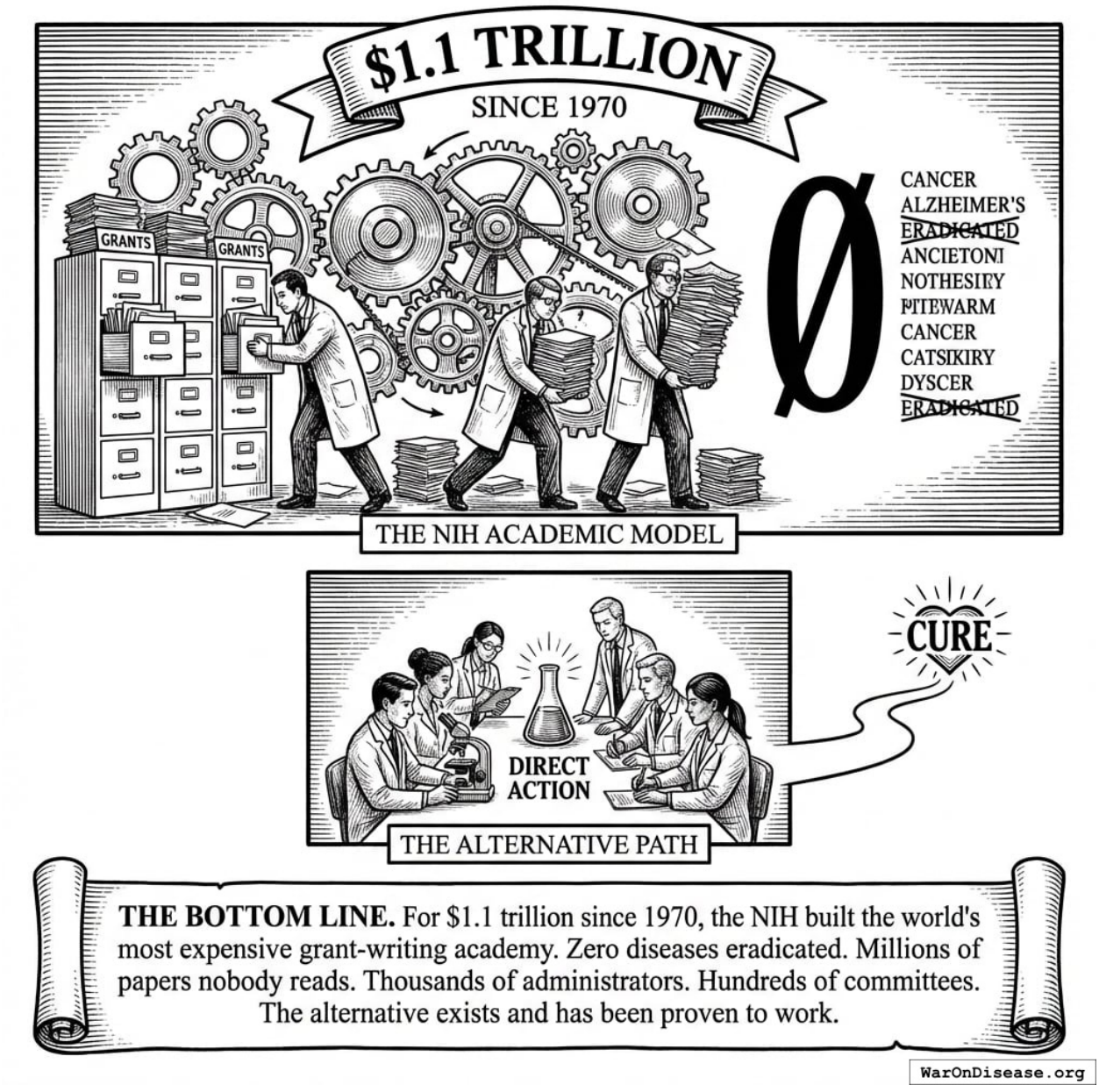
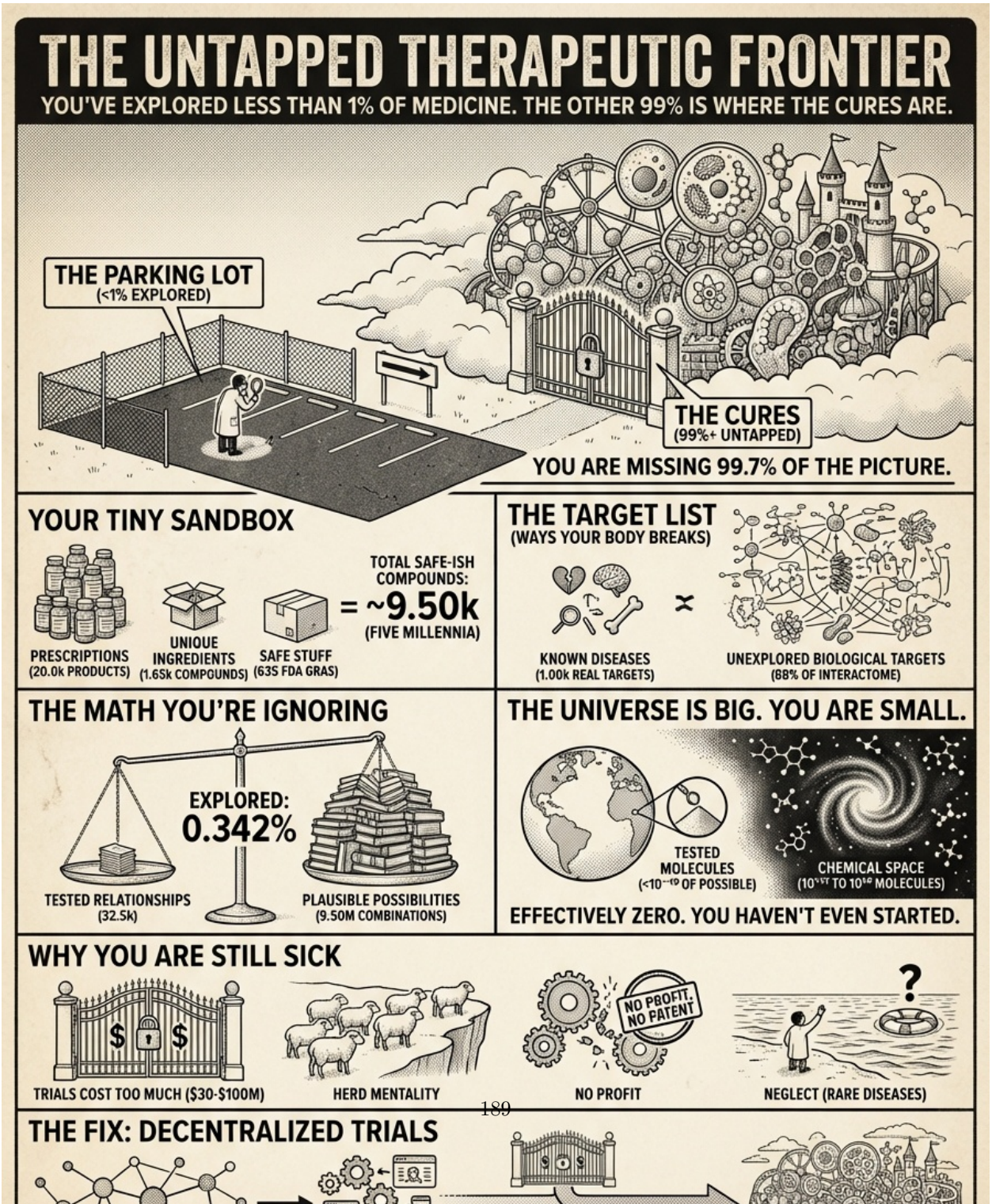


Figure 103: A comparative visualization of the NIH's massive resource inputs and bureaucratic outputs against the lack of eradicated diseases, contrasted with a streamlined alternative model.

The alternative exists and has been proven to work.

The Untapped Therapeutic Frontier



You think you've explored medicine. In reality, you're standing in the parking lot of Disney World bragging about how fun the pavement is. You've taken pictures of the asphalt. You've written dissertations about the parking stripes. You've never gone inside.

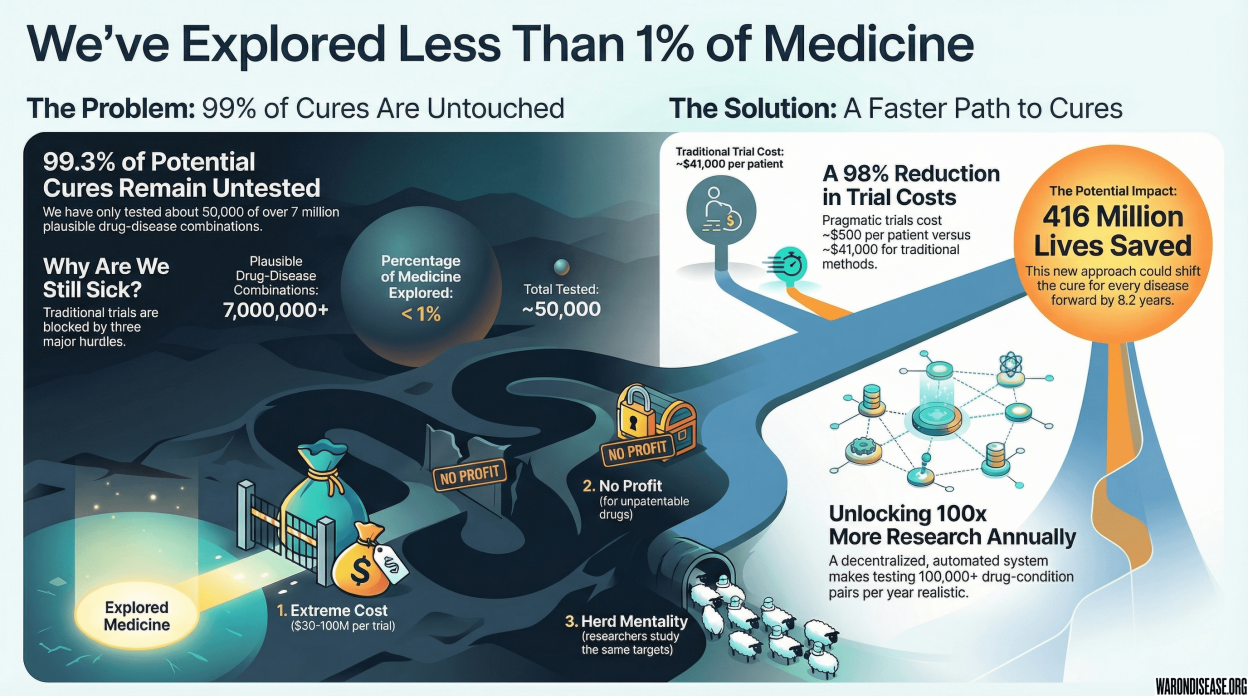


Figure 105: We've Studied Less than 1 percent of Potential Safe Treatments

After a century of pharmacology, most beneficial effects of molecules on diseases remain unexplored. Not because biology is constrained. Because clinical trials are slow, expensive, and run by people who think "urgency" is a type of perfume.

Here's some math. Don't worry, it's painful but brief.

Your Tiny Sandbox

Here is everything humanity considers "medicine" after 5,000 years of civilization:

- **Prescriptions:** 20.0k products products approved in the U.S. Sounds impressive until you realize most are just "Tylenol, but blue."
- **Unique Ingredients:** These products contain only 1.65k compounds (95% CI: 1.30k compounds-2.00k compounds) unique active ingredients. That's fewer ingredients than a decent French bakery uses.
- **Investigational Drugs:** Pipeline analyses suggest 7.50k compounds (95% CI: 5.00k compounds-10.0k compounds) compounds have passed Phase I globally.
- **Safe Stuff:** The FDA GRAS list contains 635 substances (95% CI: 570 substances-700 substances) substances.

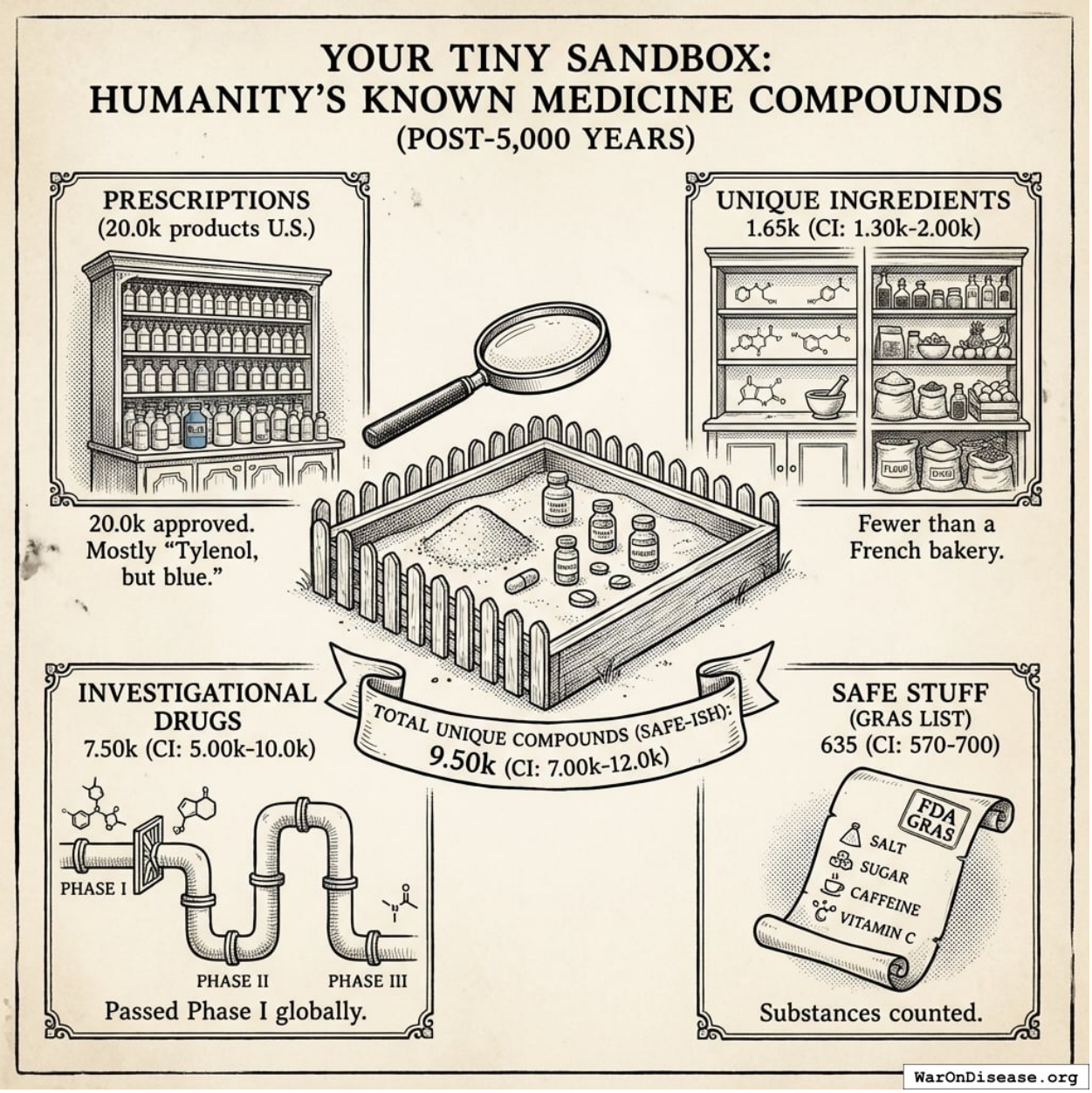


Figure 106: A visualization showing the scale difference between the 20,000 commercial drug products and the much smaller pool of ~9,500 unique safe-ish compounds that comprise humanity's entire medicinal knowledge.

Total unique compounds humanity knows are safe-ish: 9.50k compounds (95% CI: 7.00k compounds-12.0k compounds).

That's it. That's your entire medicine cabinet after five millennia.

The Target List (Ways Your Body Breaks)

- **Codes:** The ICD-10 has 14.0k codes codes for ways your meat can malfunction.
- **Real Targets:** Consolidation gives 1.00k diseases (95% CI: 800 diseases-1.20k diseases) trial-relevant diseases worth fixing.



Figure 107: A funnel diagram illustrating the consolidation of 14,000 ICD-10 medical codes down to approximately 1,000 trial-relevant disease targets.

The Math You're Ignoring

Take your 9.50k compounds (95% CI: 7.00k compounds-12.0k compounds) safe compounds. Multiply by 1.00k diseases (95% CI: 800 diseases-1.20k diseases) diseases. This gives you the "Combinatorial Space," which is fancy talk for "stuff you could test tomorrow if you weren't busy filling out forms."



Figure 108: A visualization illustrating the scale of the combinatorial space, showing how the intersection of thousands of compounds and diseases results in millions of potential testing combinations.

9.50k compounds (95% CI: 7.00k compounds-12.0k compounds) compounds × 1.00k diseases (95% CI: 800 diseases-1.20k diseases) diseases = 9.50M combinations plausible drug-condition combinations.

What You've Actually Tested

- **Approved uses:** 1.75k pairings (95% CI: 1.50k pairings-2.00k pairings) unique approved drug-disease pairings.
- **Repurposed uses:** 30% of drugs gain at least one new indication after initial approval.
- **Failed trials:** Let's be generous and say you tested 10 times as many things that failed.

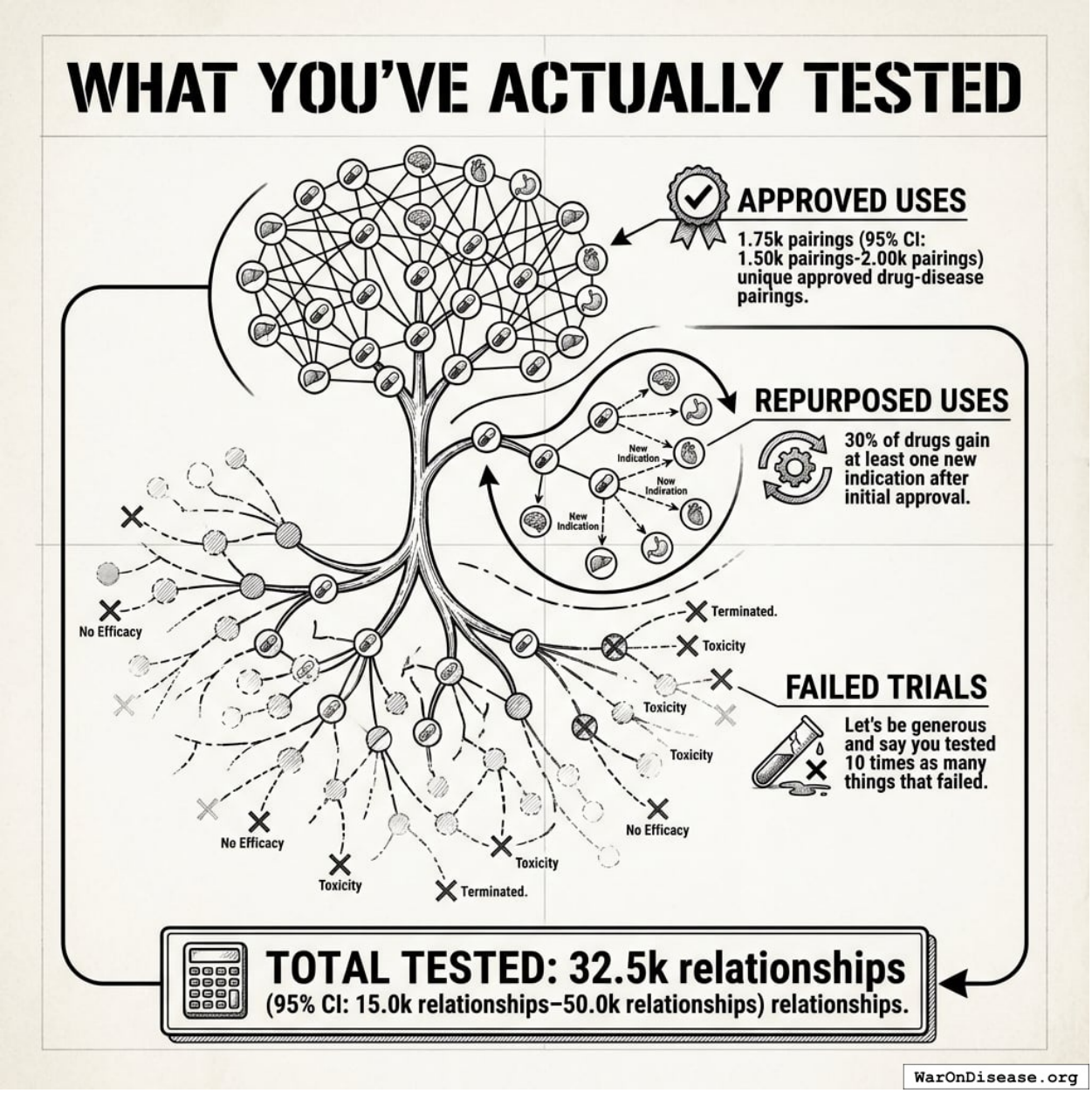


Figure 109: A visual breakdown of drug testing outcomes showing the disproportionate scale of failed trials compared to approved and repurposed drug-disease pairings.

Total tested: 32.5k relationships (95% CI: 15.0k relationships-50.0k relationships) relationships.

The Scorecard

32.5k relationships (95% CI: 15.0k relationships-50.0k relationships) tested / 9.50M combinations possibilities = 0.342% (95% CI: 0.21%-0.514%)

$$Ratio_{explore} = \frac{N_{tested}}{N_{combos}} = \frac{32{,}500}{9.5M} = 0.342\%$$

$$\text{where } N_{combos}$$
$$= N_{safe} \times N_{diseases,trial}$$
$$= 9{,}500 \times 1{,}000$$
$$= 9.5M$$

Humanity has explored less than 1% of the theoretically testable drug-disease space.

You are missing 99.7% (95% CI: 99.5%-99.8%) of the picture.

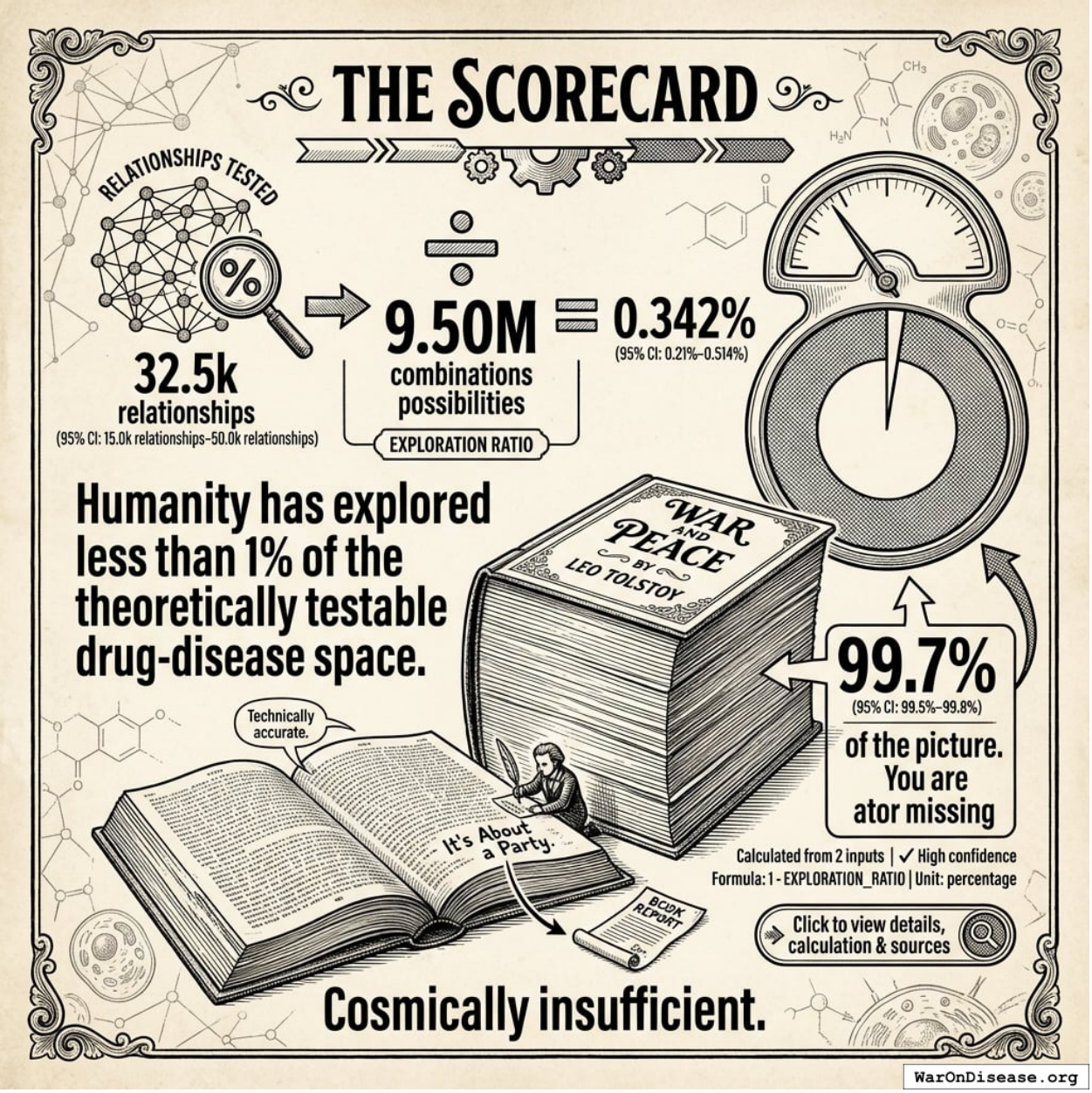


Figure 110: A visualization of the drug-disease exploration space, showing a tiny sliver representing the 0.3 percent currently known versus the massive 99.7 percent area that remains unexplored.

It's like reading the first page of *War and Peace* and writing a book report called "It's About a Party." Technically accurate. Cosmically insufficient.

Is The Untested Stuff Useful?

You might argue, "Maybe the other 99% is useless!"

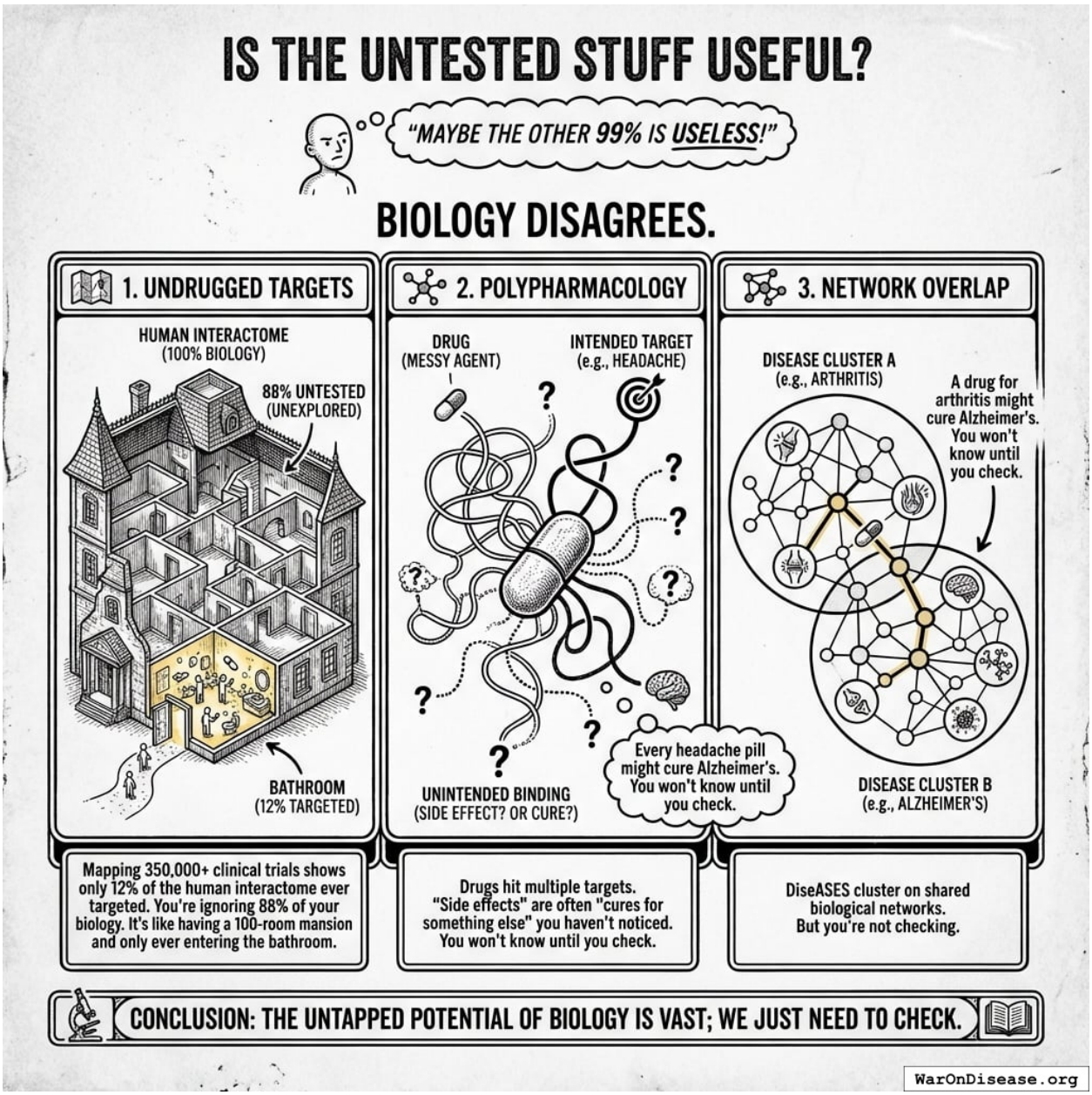


Figure 111: A visualization showing the 12 percent vs 88 percent split of targeted human biology alongside a network diagram illustrating how drugs interact with multiple overlapping disease pathways.

Biology disagrees.

- **Undrugged Targets:** Mapping 350,000+ clinical trials showed that only 12% of the human interactome has ever been targeted by drugs. You're ignoring 88% of your own biology. It's like having a 100-room mansion and only ever entering the bathroom.
- **Polypharmacology:** Drugs are messy. They hit multiple targets. FDA-approved drugs often bind to things you didn't intend. This means "side effects" are often "cures for something else" that you haven't noticed yet. Every headache pill might cure Alzheimer's. You won't know until you check.
- **Network Overlap:** Diseases cluster on shared biological networks[186]. A drug for arthritis might cure Alzheimer's. You won't know until you check. But you're not checking.

The Universe is Big. You Are Small.

So far we only counted molecules humanity *already has*. If you look at what's chemically possible, it gets embarrassing.

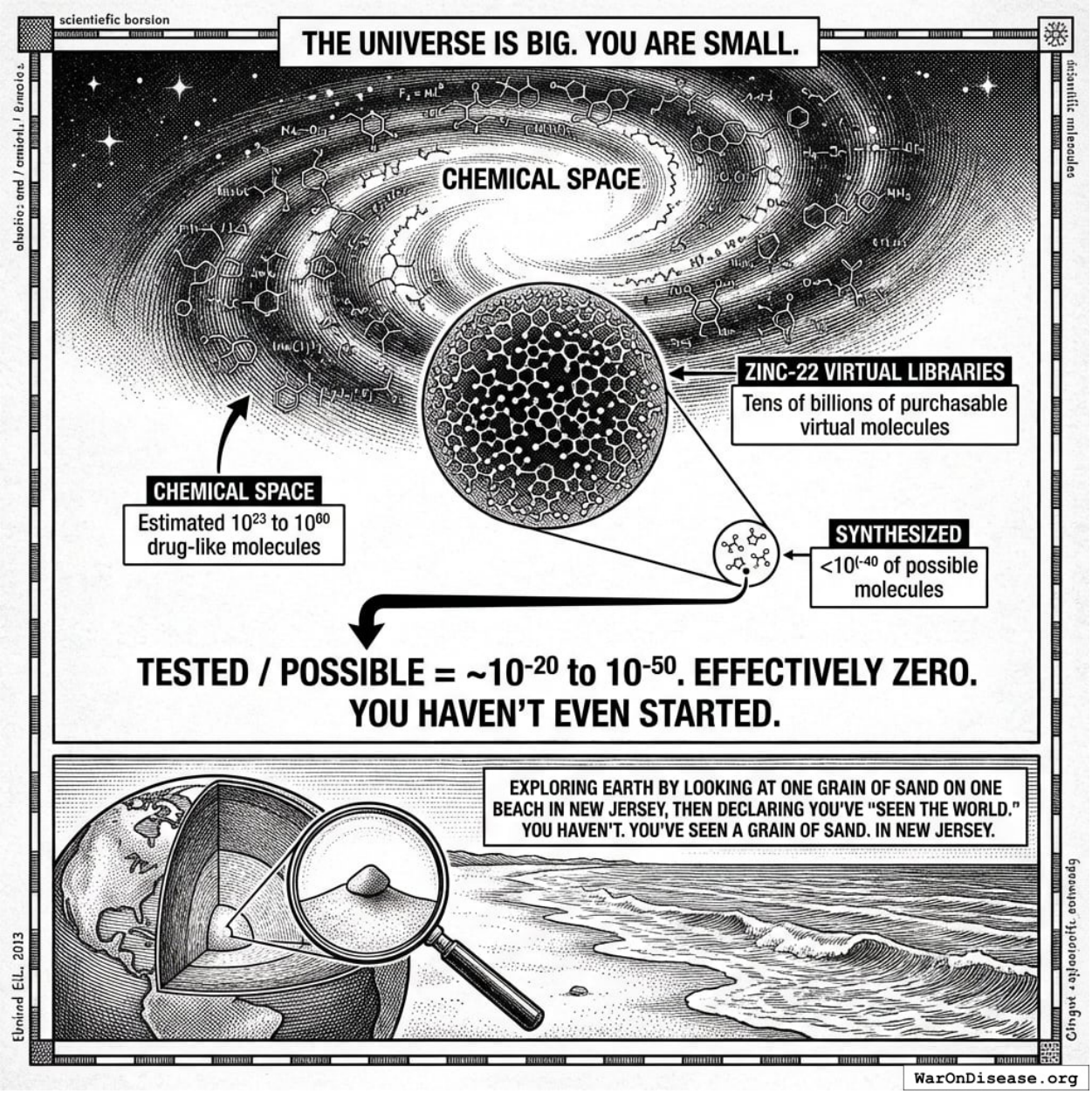


Figure 112: A scale comparison showing the massive disparity between the billions of known molecules and the vast, unexplored chemical space, visualized as a single grain of sand against the backdrop of the entire planet Earth.

- **Chemical Space:** Estimated 10^23 to 10^60[187] drug-like molecules.
- **Virtual Libraries:** ZINC-22 contains tens of billions[188] of purchasable virtual molecules.
- **Synthesized:** You have made **<10^(-40)** of possible molecules.

Tested / Possible = ~10^-20 to 10^-50.

Effectively zero. You haven't even started.

This is like exploring Earth by looking at one grain of sand on one beach in New Jersey, then declaring you've "seen the world." You haven't. You've seen a grain of sand. In New Jersey.

Why You Are Still Sick

It's not because science is hard. It's because:

1. **Trials Cost Too Much:** A typical Phase II-III RCT costs **$30-$100M** (Median cost per patient $41K (95% CI: $20K-$120K)). At that price, you only test "sure things." You test the equivalent of betting your house that the sun will rise. Safe bets. Boring bets. Bets that don't cure cancer.

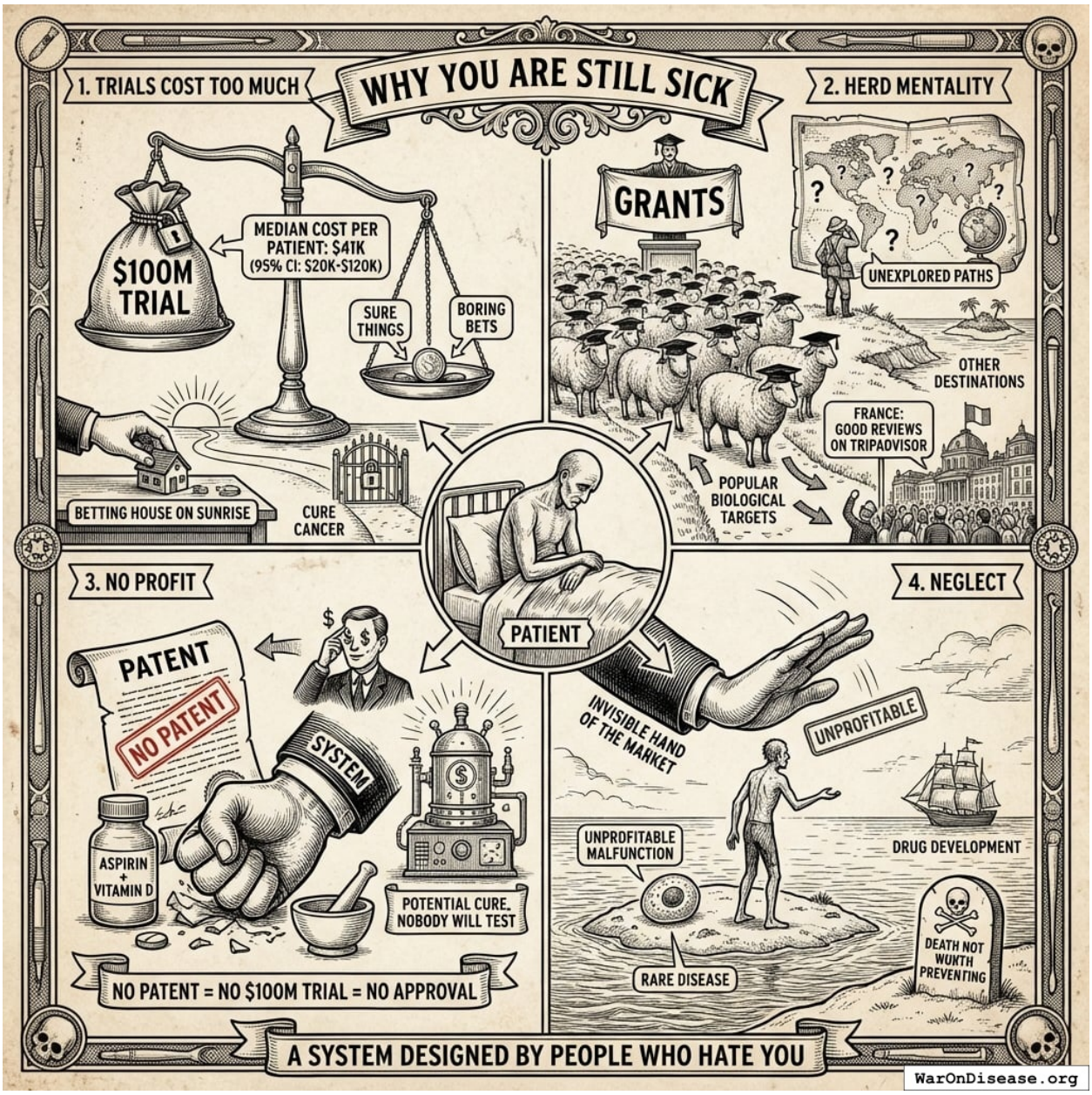


Figure 113: A conceptual map of the systemic barriers preventing medical breakthroughs, highlighting how high costs, risk aversion, and patent requirements create a bottleneck between scientific potential and patient care.

2. **Herd Mentality:** Trials overwhelmingly test the same few biological targets due to preferential attachment dynamics[189]. Everyone studies what everyone else is studying because that's how you get grants. It's like if every explorer only went to France because France already had good reviews on TripAdvisor.
3. **No Profit:** Most molecules have no patent. No patent = no $100M trial = no approval. Your potential cure for cancer might be aspirin plus vitamin D, but nobody will ever test it because you can't patent aspirin plus vitamin D. This is a system designed by people who hate you.
4. **Neglect:** If you have a rare disease with no market, you don't get a drug. Sorry. Your cells malfunction in an unprofitable way. The invisible hand of the market has determined your death is not worth

preventing.

How Long to Explore Everything?

At the current pace of 3.30k trials/year (95% CI: 2.64k trials/year-3.96k trials/year) trials per year, how long would it take to systematically test therapeutic possibilities?

Tier 1: Single Compounds (Most Conservative)

Testing every known safe compound against every major disease:

9.50M combinations combinations ÷ 3.30k trials/year (95% CI: 2.64k trials/year-3.96k trials/year) trials/year = 2.88k years (95% CI: 2.45k years-3.43k years)

That's almost 3,000 years to explore compounds we *already know are safe*. By that math, we won't finish until the year 5000.

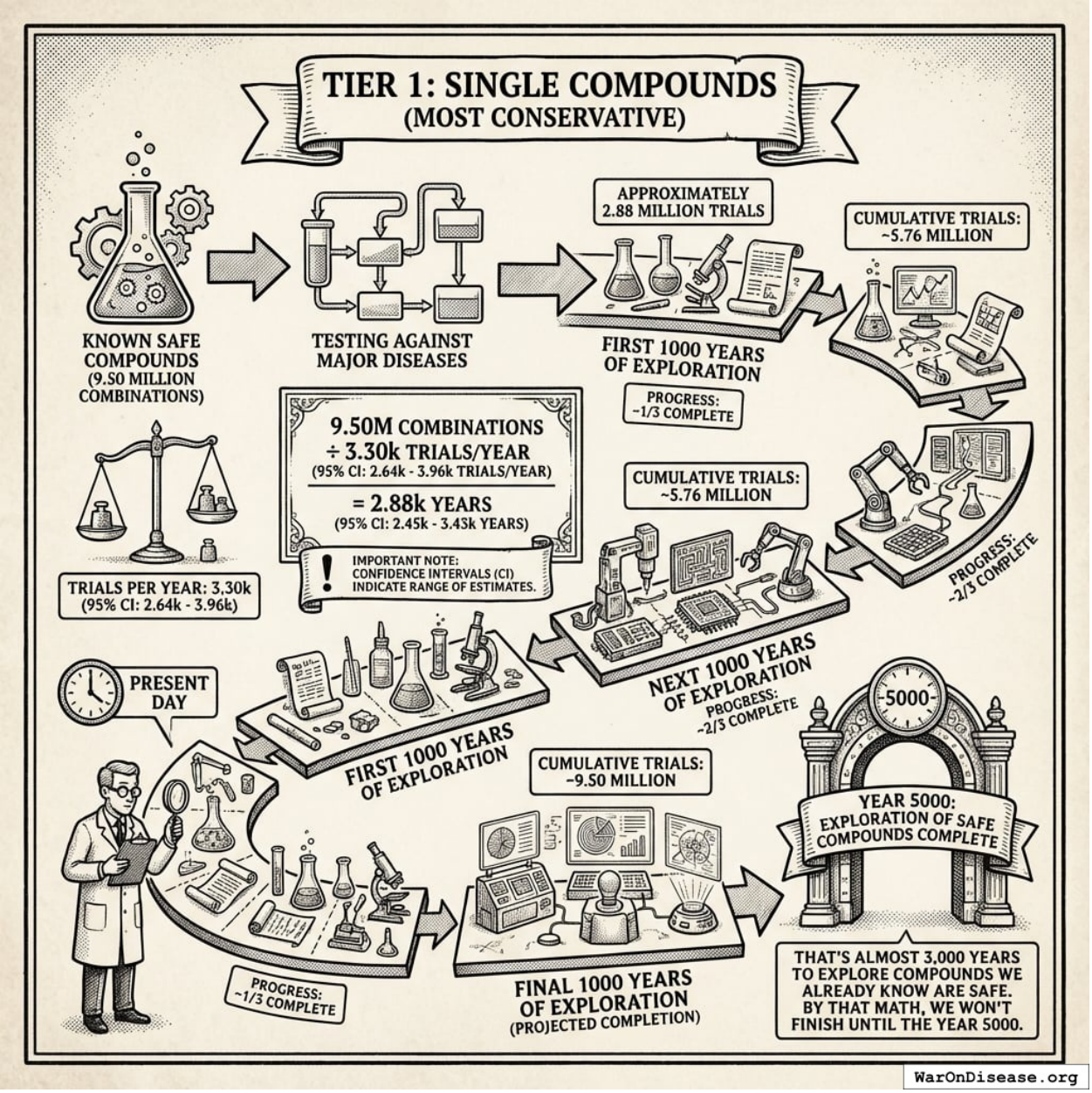


Figure 114: A visualization of the massive backlog of 9.5 million compound-disease combinations funneling through a narrow annual trial capacity, illustrating why the process will take until the year 5000 to complete.

Tier 2: Combination Therapies (Still Defensible)

Modern medicine increasingly relies on multi-drug regimens. Oncology, HIV treatment, cardiology, and psychiatry all routinely use drug combinations. Testing pairwise combinations of safe compounds:

45.1B combinations combinations ÷ 3.30k trials/year (95% CI: 2.64k trials/year-3.96k trials/year) trials/year = 13.7M years (95% CI: 11.6M years-16.3M years)

That's longer than *Homo sapiens* has existed as a species. Using only compounds with established safety data. Testing only pairs, not triplets or higher-order combinations.

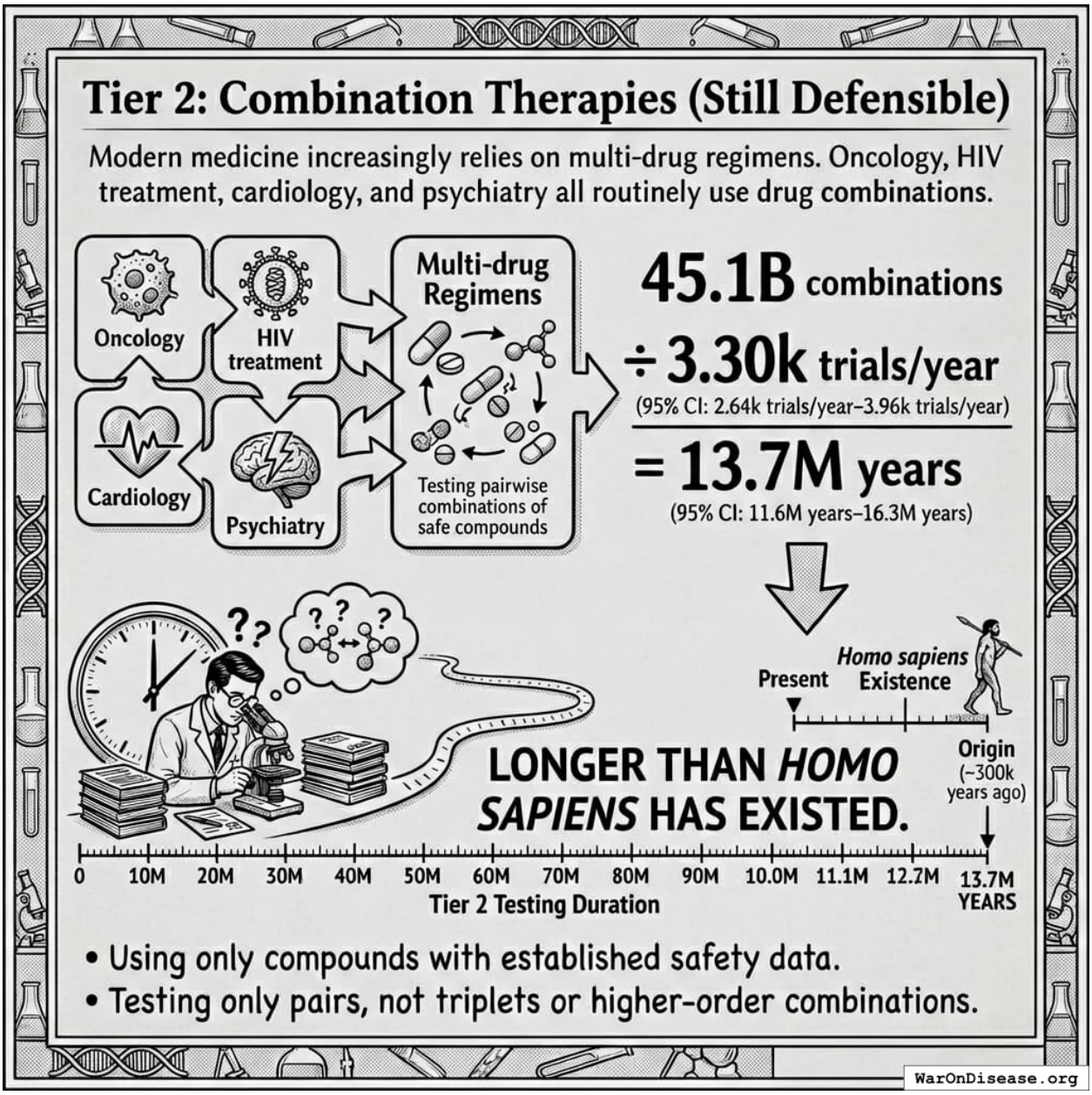


Figure 115: A comparison illustrating the vast gap between current clinical trial capacity and the millions of years required to test all possible dual-drug combinations.

Tier 3: The Full Chemical Universe (Illustrative)

Beyond known compounds lies the vast chemical space of 10^23 to 10^60 drug-like molecules. At current trial capacity, exploring even the *synthesizable* fraction would take longer than the universe has existed.



Figure 116: A scale comparison showing the tiny dot of known compounds against the massive, expansive sphere of the theoretical chemical universe (10^60 molecules).

We haven't even started.

"But Won't We Run Out of Easy Discoveries?"

Some will argue "diminishing returns": the more we search, the harder each new discovery becomes. This assumes we've already picked the low-hanging fruit.

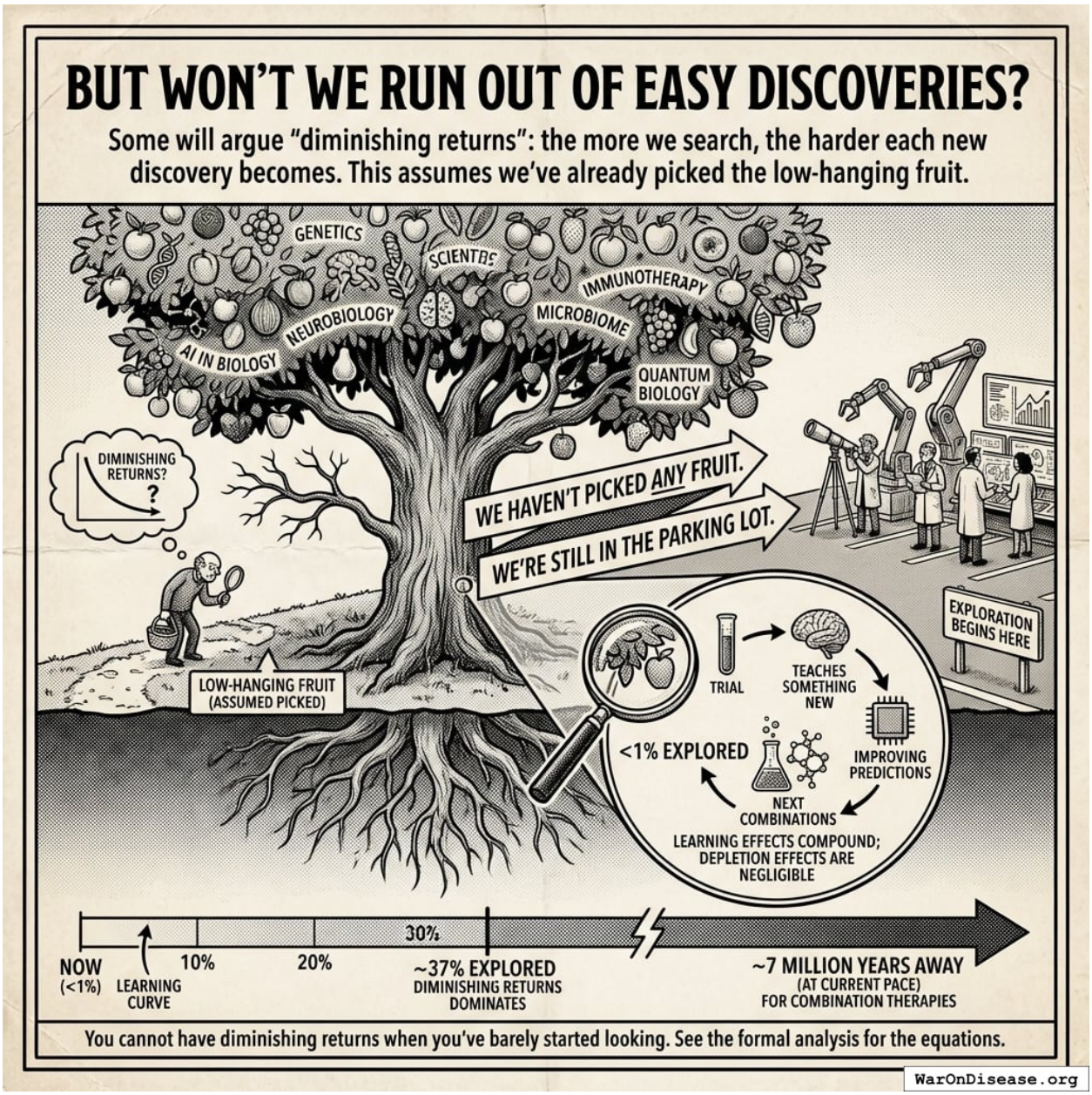


Figure 117: A visualization of the vast gap between current therapeutic exploration (less than 1 percent) and the theoretical 37 percent threshold where diminishing returns begin to outweigh the benefits of compound learning.

We haven't picked *any* fruit. We're still in the parking lot.

Diminishing returns only dominates after you've explored a significant fraction of the space. At <1% explored, every trial teaches us something new about human biology, improving our ability to predict which combinations will work next. Learning effects compound; depletion effects are negligible.

The math: even with weak learning, diminishing returns only matters after exploring ~37% of therapeutic space. For combination therapies, that crossover is ~**7 million years away** at current pace.

You cannot have diminishing returns when you've barely started looking. See the formal analysis for the equations.

The Fix

The Oxford RECOVERY Trial (COVID-19) proved that large-scale pragmatic trials can run for ~$500 (95% CI: $400-$2.50K) per patient and deliver results in <100 days[190].

$500 (95% CI: $400-$2.50K) vs $41K (95% CI: $20K-$120K).

With a decentralized framework for drug assessment, trial capacity increases by 12.3x (95% CI: 4.19x-61.3x):

9.50M combinations combinations ÷ 40.6k trials/year (95% CI: 16.3k trials/year-170k trials/year) trials/year = 234 years (95% CI: 56 years-584 years)

Still a long time, but within the planning horizon of institutions. The first few decades would capture the highest-value discoveries, the low-hanging fruit that current trial scarcity forces us to ignore.

More importantly, dFDA builds *permanent infrastructure* for systematic therapeutic exploration. The goal isn't to "finish", it's to stop leaving cures on the table while we form subcommittees.

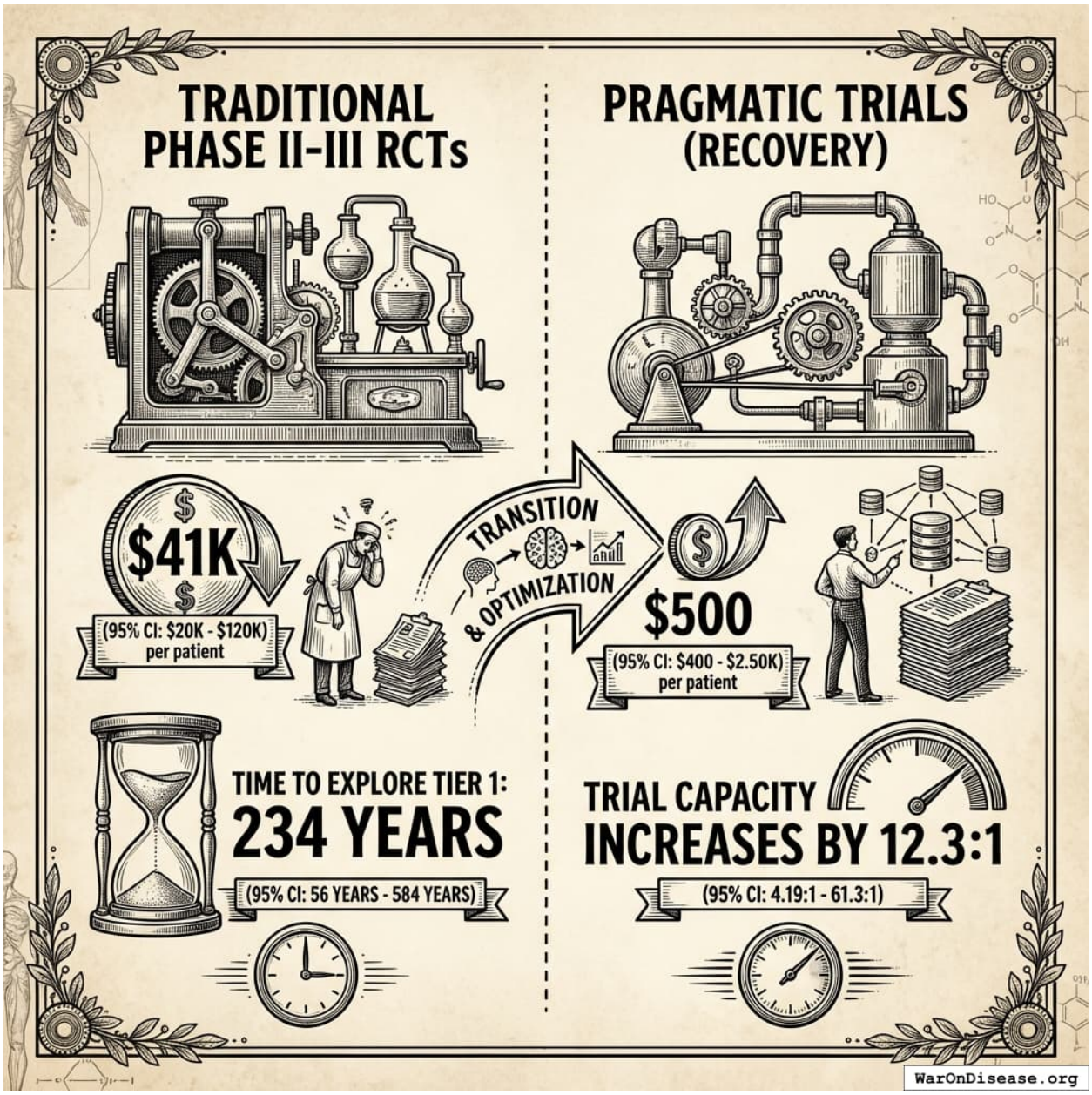


Figure 118: Side-by-side comparison of costs and efficiency gains using decentralized pragmatic trials versus traditional methods.

The Bottom Line

Humanity has empirically tested less than 1% of the drug-disease relationships that can be tested using existing safe compounds.

If you include the larger chemical universe, humanity has explored roughly one-quadrillionth to one-quintillionth of what is possible (10^-12 to 10^-50).

The overwhelming majority of therapeutic potential remains untouched. Not because cures are impossible. Because trials are too expensive and too slow.

A decentralized, automated pragmatic trial system is the only route to systematically explore

the remaining 99.999...% of medical space.

You're not in the parking lot because there's nothing inside Disney World. You're in the parking lot because the entrance fee is $100 million and requires 17 years..

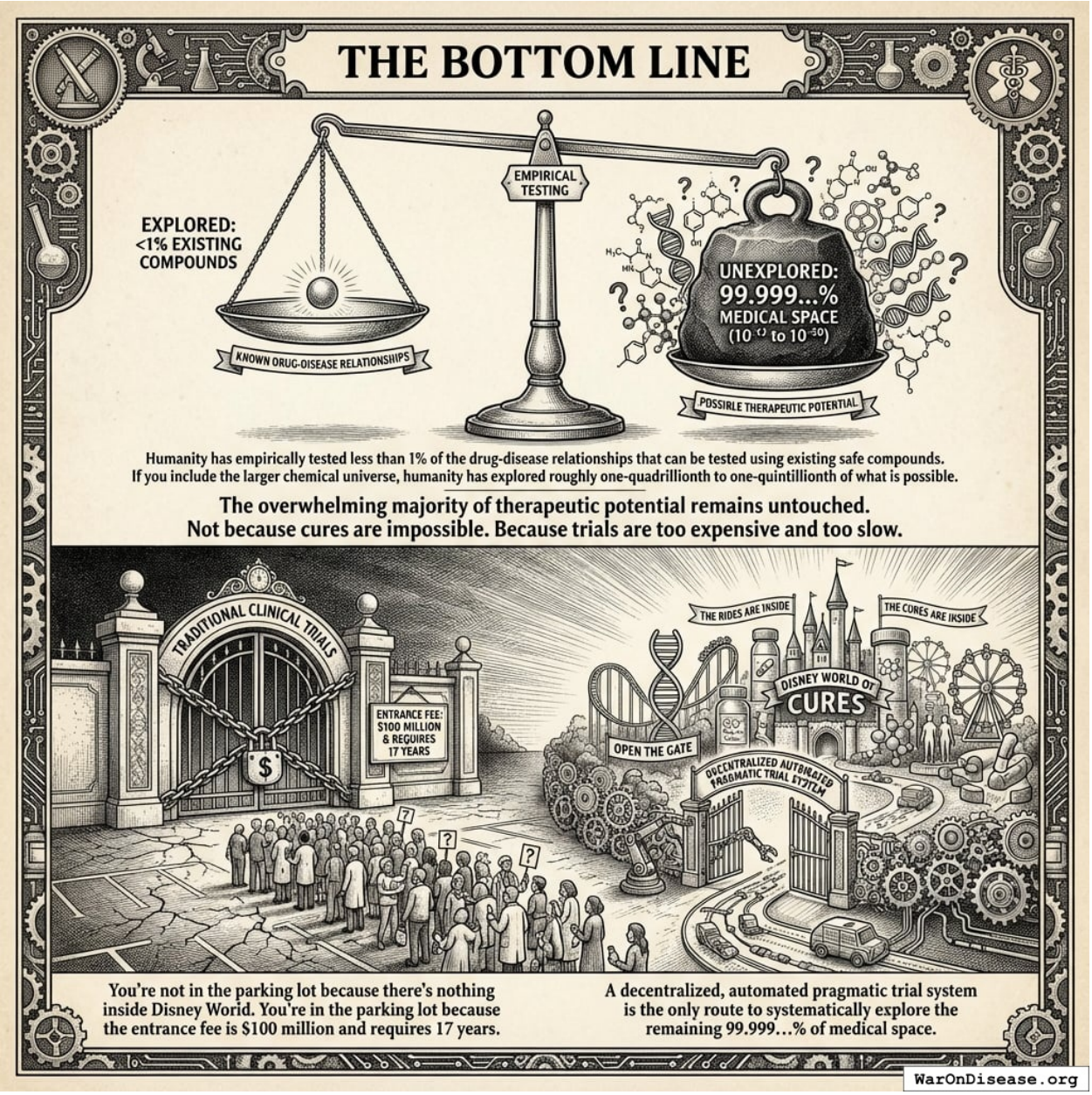
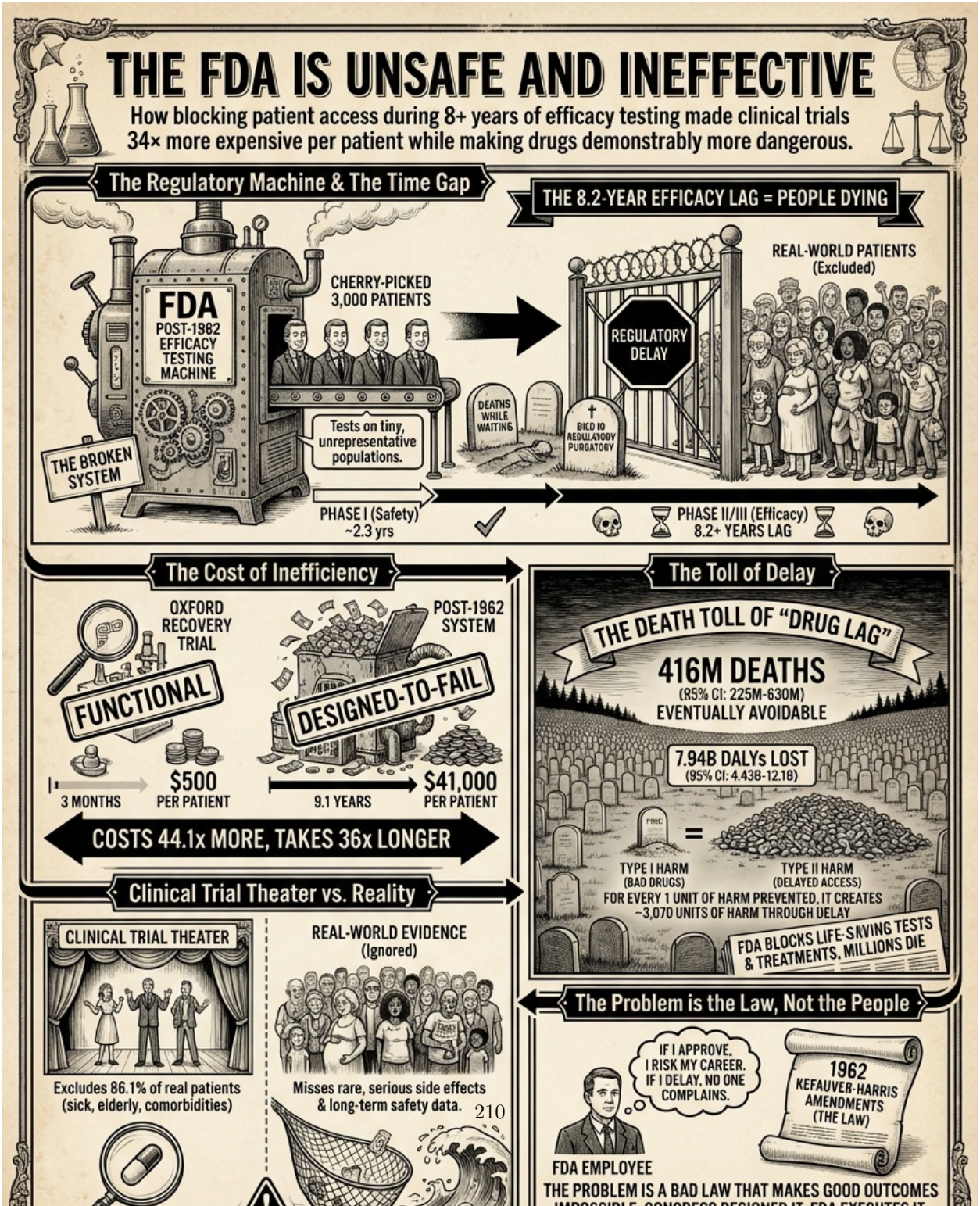


Figure 119: A visualization contrasting the tiny fraction of explored medical relationships against the vast, untapped chemical universe, separated by the barriers of cost and time.

The rides are inside. The cures are inside. You just need to open the gate.

The FDA Is Unsafe and Ineffective



The FDA's 1962 law requiring years of pre-approval efficacy testing was supposed to prove drugs work before allowing patient access. Instead, it made drugs more dangerous.

How? By blocking patient access during lengthy trials and forcing small, artificial studies instead of large real-world evidence, the current system:

- Tests drugs on tiny, unrepresentative populations that exclude the sick, elderly, and those with comorbidities
- Relies on passive adverse event reporting that captures less than 10% of actual problems
- Misses rare but serious side effects that only appear in larger populations
- Provides no long-term safety data beyond a few months

The result: drugs approved as "safe" based on testing 3,000 cherry-picked patients, then given to millions of real patients where problems finally emerge.

Meanwhile, the regulatory delays prevent millions from accessing treatments that could save their lives. The system doesn't just fail to ensure safety. It actively undermines it while simultaneously killing people through delay.

> **A Note on Blame**
>
> The FDA employees executing this system didn't design it. Congress did, in 1962, via the Kefauver-Harris Amendments. The FDA is implementing what Congress mandated. The problem isn't bad people at the FDA. The problem is a bad law that makes good outcomes structurally impossible. When this chapter says "the FDA does X," read it as "the 1962 law requires the FDA to do X." The humans at the agency are following the rules they were given. The rules are the problem.

Confidence Levels: What We Know vs. What We Model

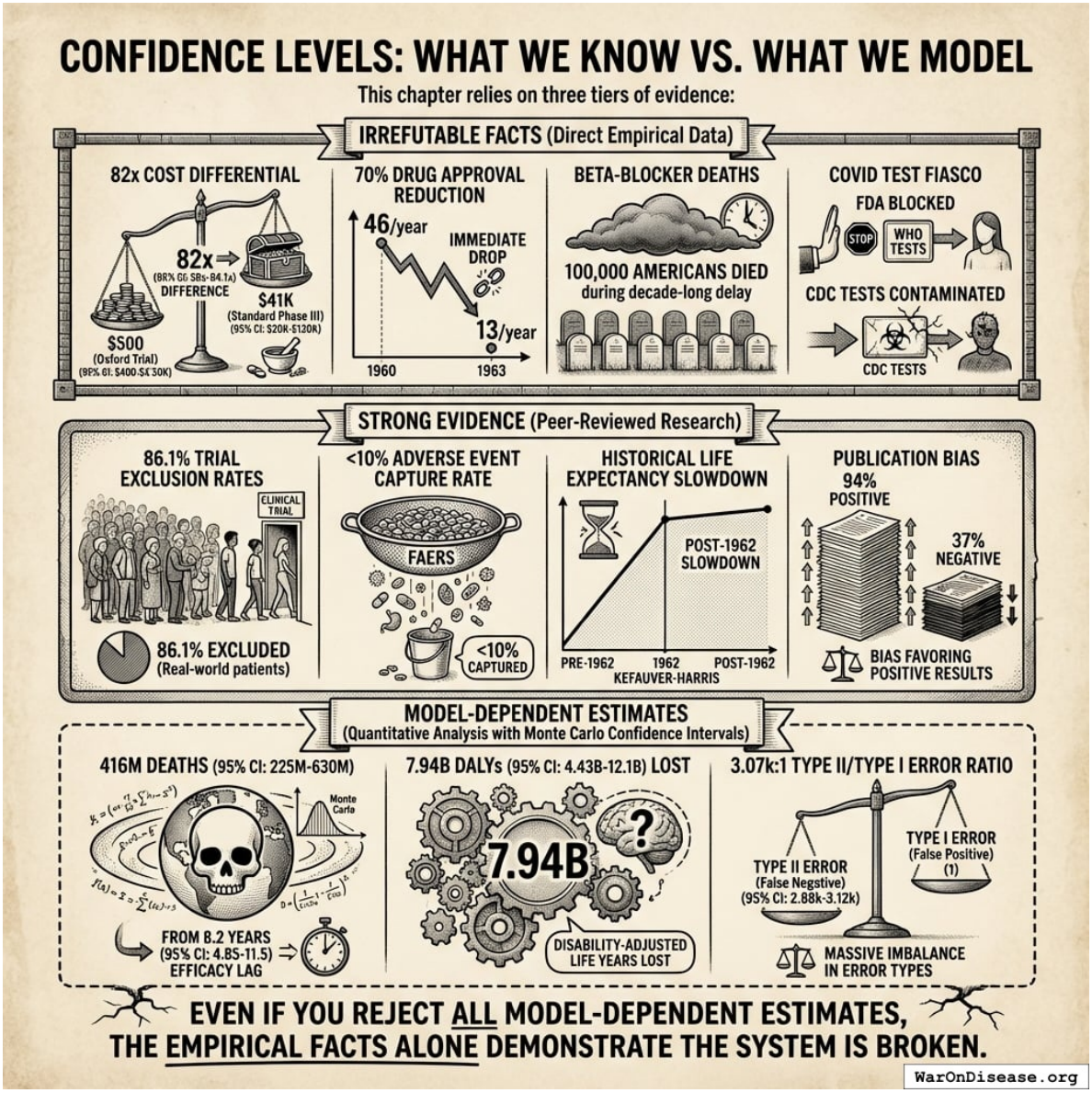


Figure 120: A hierarchical diagram illustrating the three tiers of evidence used in the analysis, ranging from irrefutable empirical facts at the base to model-dependent quantitative estimates at the top.

This chapter relies on three tiers of evidence:
Irrefutable Facts (direct empirical data):

- 82x (95% CI: 50x-94.1x) cost differential: Oxford trial ($500 (95% CI: $400-$2.50K)) vs. standard Phase III ($41K (95% CI: $20K-$120K))
- 70% drug approval reduction: Immediate drop from 46/year (1960) to 13/year (1963)[92]
- Beta-blocker deaths: 100,000 Americans died[191] during decade-long delay
- COVID test fiasco: FDA blocked WHO tests while CDC tests were contaminated

Strong Evidence (peer-reviewed research):

- 86.1% trial exclusion rates for real-world patients

- <10% adverse event capture rate in FAERS
- Historical life expectancy slowdown post-1962
- Publication bias (37% negative vs. 94% positive)

Model-Dependent Estimates (quantitative analysis with Monte Carlo confidence intervals):

- 416M deaths (95% CI: 225M deaths-630M deaths) from 8.2 years (95% CI: 4.85 years-11.5 years)-year efficacy lag
- 7.94B DALYs (95% CI: 4.43B DALYs-12.1B DALYs) lost
- 3.07k:1 (95% CI: 2.88k:1-3.12k:1) Type II/Type I error ratio

Even if you reject all model-dependent estimates, the empirical facts alone demonstrate the system is broken.

The 44.1x (95% CI: 39.4x-89.1x) Inefficiency Tax

Compare two real-world systems for testing drugs:

1. **The Oxford RECOVERY Trial:** Tested COVID treatments on 47,000 patients for **$500 (95% CI: $400-$2.50K) per patient**. Found a life-saving treatment in 3 months.
2. **The Post-1962 System:** Averages **$41K (95% CI: $20K-$120K) per patient** for clinical trials. Takes **9.1 years**[192] to approve a new drug.

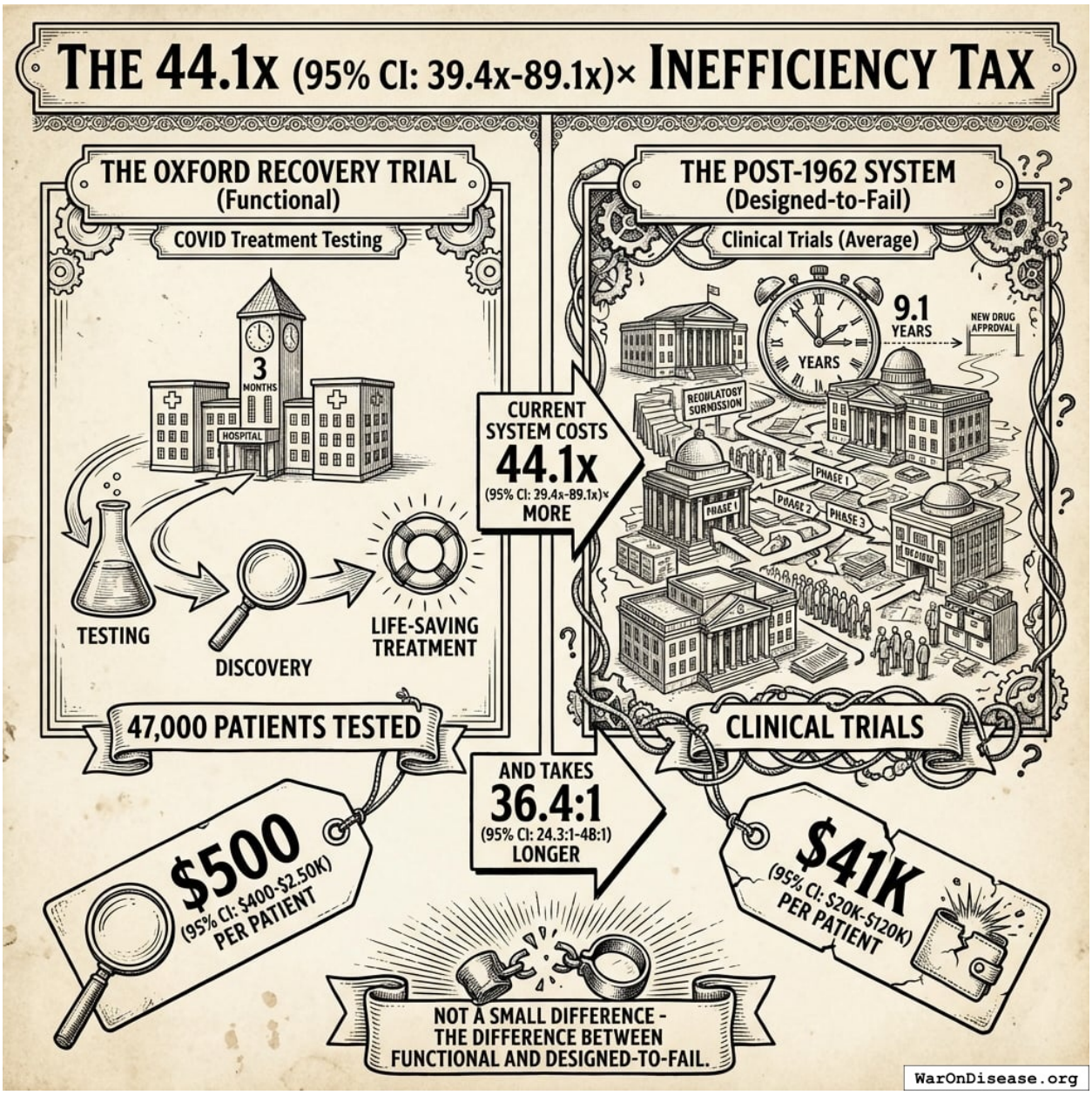


Figure 121: A side-by-side comparison of the Oxford RECOVERY Trial versus the standard post-1962 drug approval system, highlighting the massive disparities in cost per patient and time to completion.

The current system costs **44.1x (95% CI: 39.4x-89.1x) more** and takes **42:1 (95% CI: 29.8:1-48:1) longer**. Not a small difference - the difference between functional and designed-to-fail.

The 8.2 years (95% CI: 4.85 years-11.5 years)-Year Efficacy Lag

Here's the breakdown of where the time goes:

- **Phase I (Safety Testing):** 2.3 years - Tests if the drug kills people. *This part works.*
- **Phase II/III (Efficacy Testing):** 8.2 years (95% CI: 4.85 years-11.5 years) - Tests if the drug works better than placebo. *This is where people die waiting.*

The math is simple: If you die in year 5 and the drug gets approved in year 10, the regulatory process murdered you.

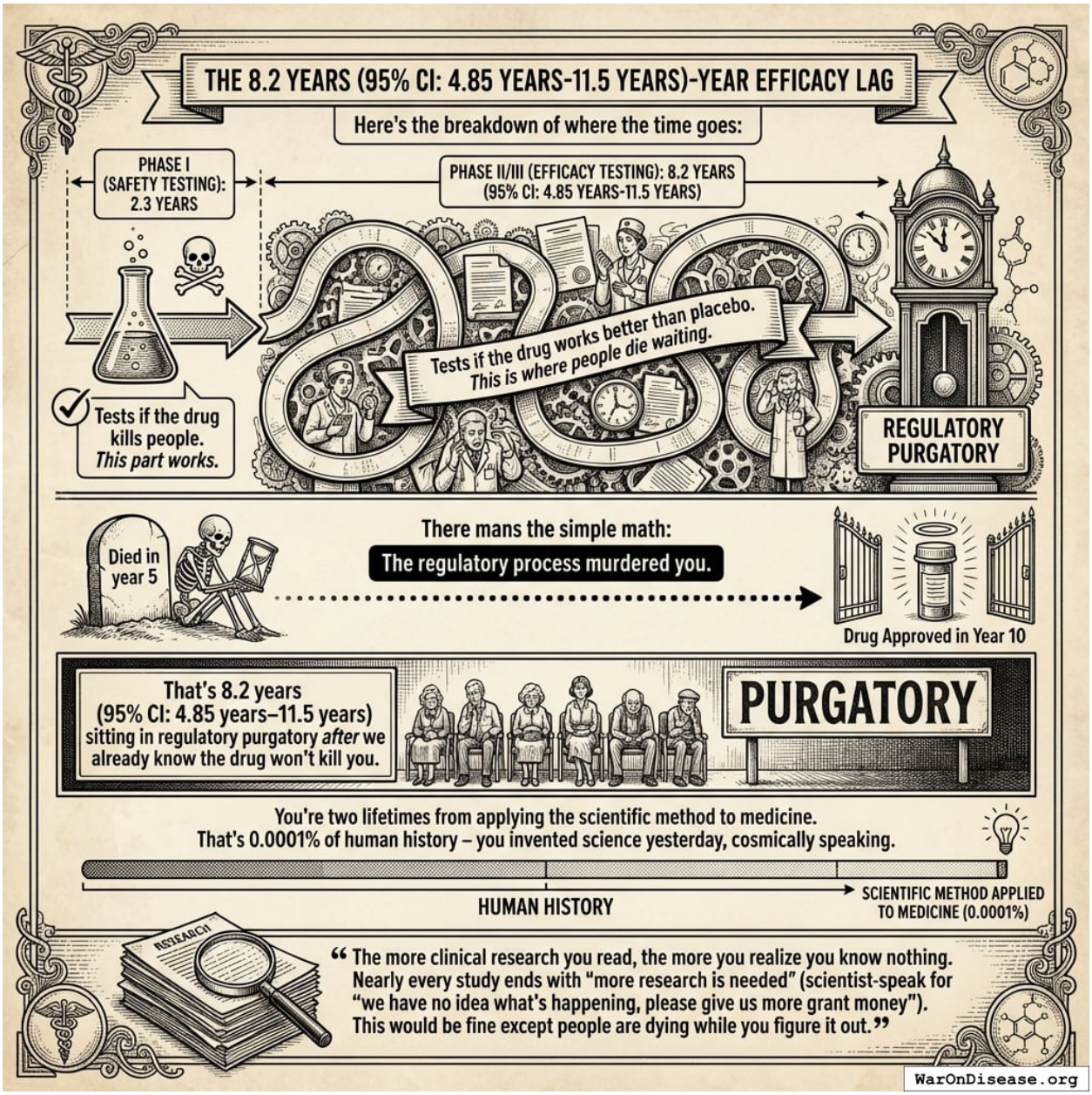


Figure 122: A timeline comparing the 2.3-year safety testing phase to the 8.2-year efficacy testing period, highlighting the significant time gap referred to as 'regulatory purgatory.'

That's 8.2 years (95% CI: 4.85 years-11.5 years) sitting in regulatory purgatory *after* we already know the drug won't kill you.

You're two lifetimes from applying the scientific method to medicine. That's 0.0001% of human history - you invented science yesterday, cosmically speaking. The more clinical research you read, the more you realize you know nothing. Nearly every study ends with "more research is needed" (scientist-speak for "we have no idea what's happening, please give us more grant money"). This would be fine except people are dying while you figure it out.

What the 1962 Efficacy Requirements Changed

The 1962 Kefauver-Harris Amendments fundamentally restructured how drugs reach patients. To understand what changed, consider the system they replaced.

For 10,000 years, life expectancy remained at 30 years. Then in 1883, doctors started sharing information through JAMA. **144k physicians physicians** tested treatments on real patients and published results. Life expectancy increased by 3.82 years every decade[123] (calculated from 1880-1960 data) for 80 years.

In 1938, Phase I safety testing was added after the Elixir sulfanilamide disaster. This was reasonable and didn't slow progress. Safety regulations worked perfectly. They prevented all US deaths from thalidomide while Europe had thousands.

Then in 1962, Congress responded to this success by adding massive **pre-approval efficacy requirements** via the Kefauver Harris Amendment[193], blocking patient access for years during testing. The new system:

- Replaced 144k physicians independent doctors with drug company-run trials
- Made trials 44.1x (95% CI: 39.4x-89.1x) more expensive
- Reduced drug approvals by 70% immediately
- Cut life expectancy growth by 60%[124]: from 3.82 years/decade to 1.54 years/decade

The temporal break is exact. Life expectancy growth cut in half the moment regulations changed in 1962.

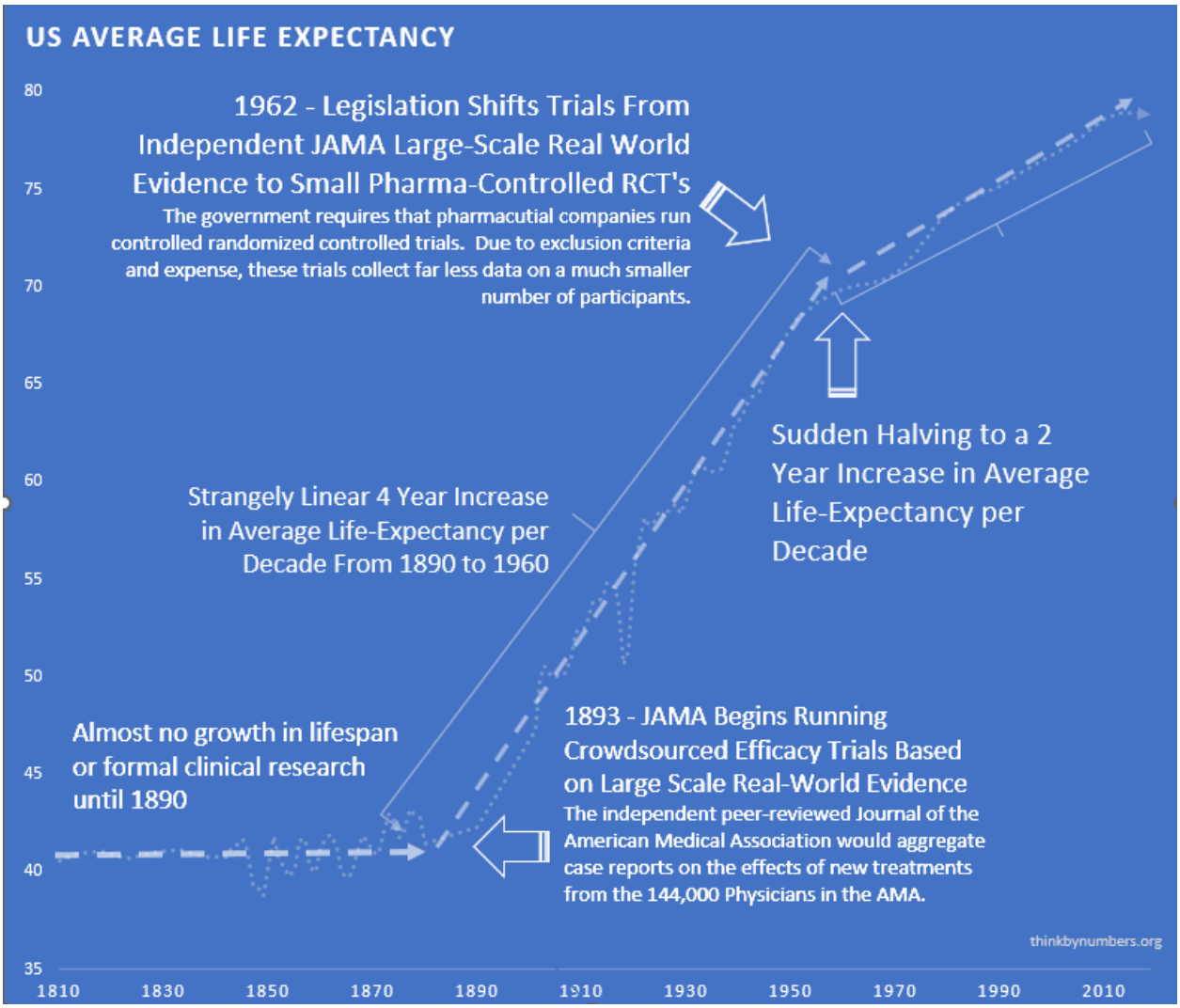


Figure 123: Average Life Expectancy Over Time

Detailed Historical Analysis

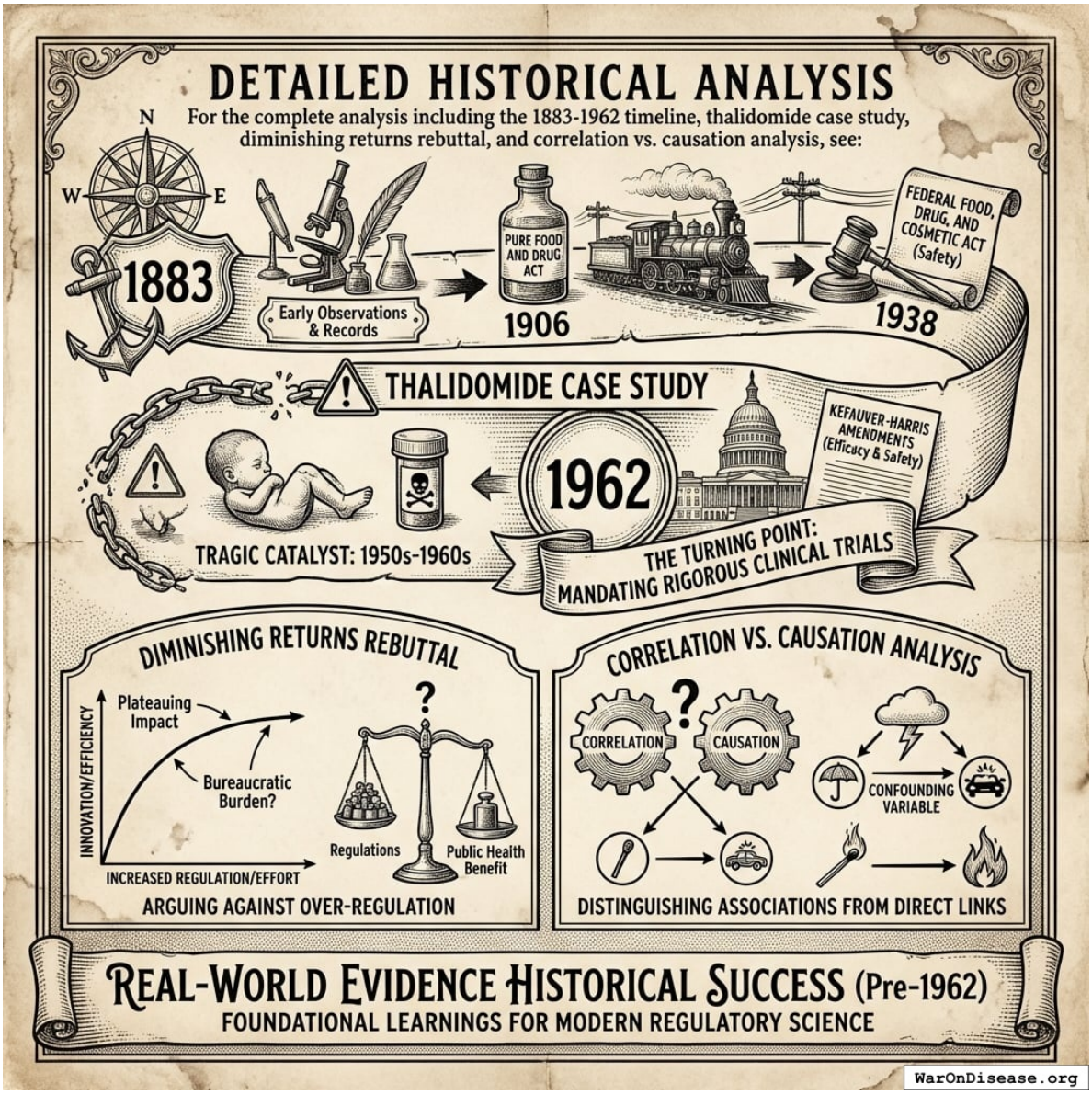


Figure 124: A historical timeline of real-world evidence milestones from 1883 to 1962, highlighting the thalidomide case study and the evolution of regulatory standards.

For the complete analysis including the 1883-1962 timeline, thalidomide case study, diminishing returns rebuttal, and correlation vs. causation analysis, see: Real-World Evidence Historical Success (Pre-1962)

The 1962 Policy Break: Measured Impact

Metric	Pre-1962 (1883-1962)	Post-1962 (1962-Present)	Change
Efficacy Testing	144k physicians independent physicians	Drug company-run trials	-99.8% independence
Cost per Drug	$24.7M (95% CI: $19.5M-$30M)	$2.60B (95% CI: $1.50B-$4B)	105x (95% CI: 90.6x-119x) increase
New Approvals	46/year (1960)[92]	13/year (1963)[92]	70% decline
Life Expectancy Growth	3.82 years/decade[123]	1.54 years/decade[124]	60% reduction[124]
Trial Cost	$929 (95% CI: $97-$3K) (pragmatic)	$41K (95% CI: $20K-$120K)	44.1x (95% CI: 39.4x-89.1x) increase
Time to Approval	2-3 years	10.5 years (95% CI: 6 years-12 years)	5-8× slower

The temporal break is exact. Every negative metric changed immediately in 1962.

> **Detailed Cost Analysis**
>
> The 105x (95% CI: 90.6x-119x) cost increase is rigorously documented with multiple data sources, CPI adjustments, and sensitivity analysis. See Drug Development Cost Analysis for:
> - Congressional testimony and alternative data sources
> - Exact inflation calculations (1962 → 2024)
> - Why it's not just inflation (timeline expansion, failure rates, trial complexity)
> - Sensitivity analysis and independent validation
> - Transparent methodology addressing common objections

The Modern Consequences

Even if you're skeptical of historical analysis, the current system's failures are undeniable. It works like this:

1. Scientists discover a cure for your disease
2. You wait 17 years
3. You die
4. The cure gets approved
5. Pharmaceutical companies charge your widow $10,000 per pill

Beautiful system if you're a mortician or bankruptcy lawyer.

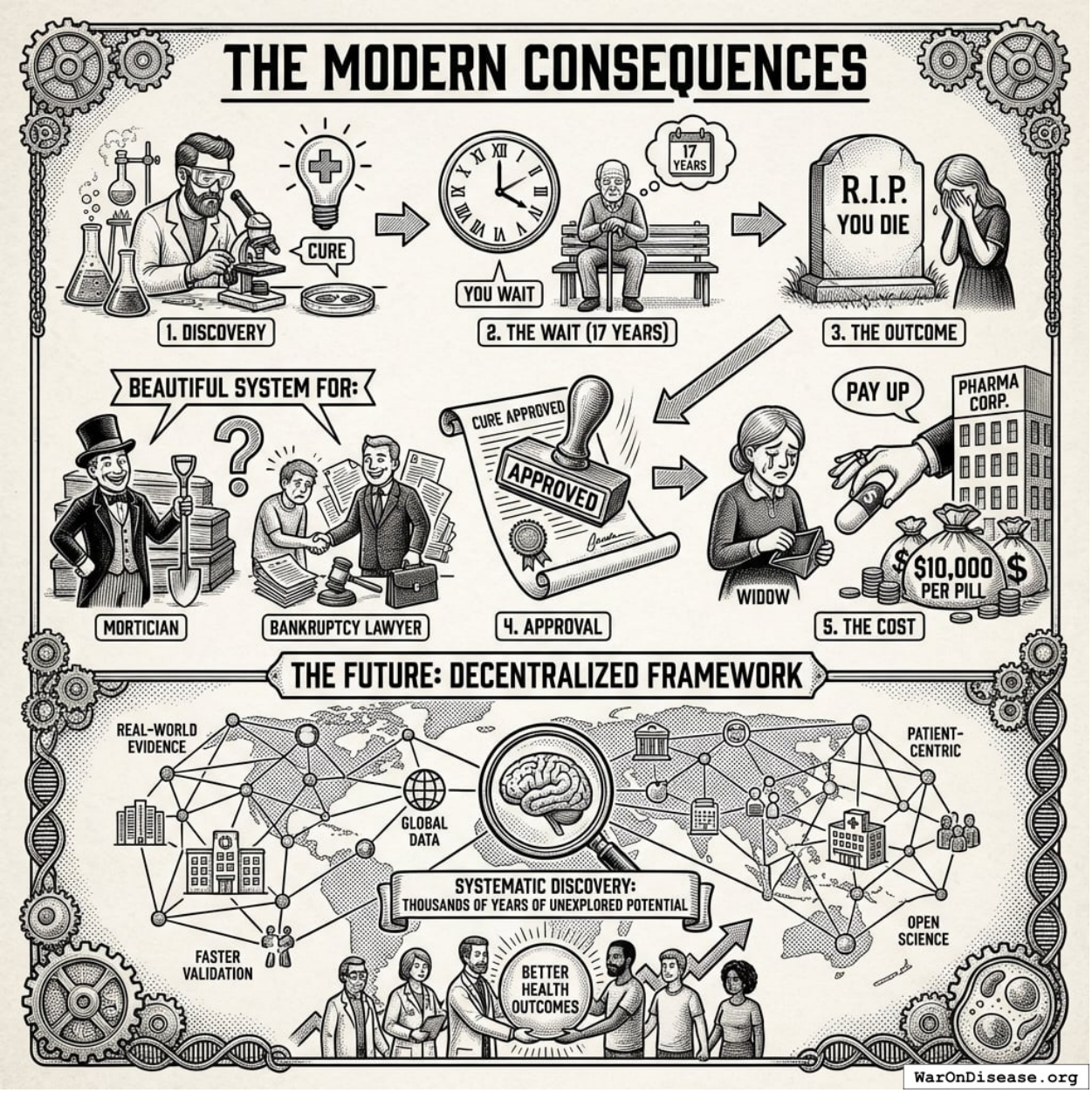


Figure 125: A timeline illustrating the tragic gap between medical discovery and patient access, showing the 17-year delay that leads to patient mortality and financial burden.

You're at the very beginning of thousands or millions of years of systematic discovery. So this decline in lifespan growth is unlikely to result from diminishing returns - you haven't run out of things to discover.

However, validating that large-scale real-world evidence produces better health outcomes requires further validation of this experimentation method. This is why we need a decentralized framework for drug assessment.

High Costs Kill Innovation, Reward Monopoly

In the past: Genius scientist invents cure, raises a few million, tests safety. Simple.

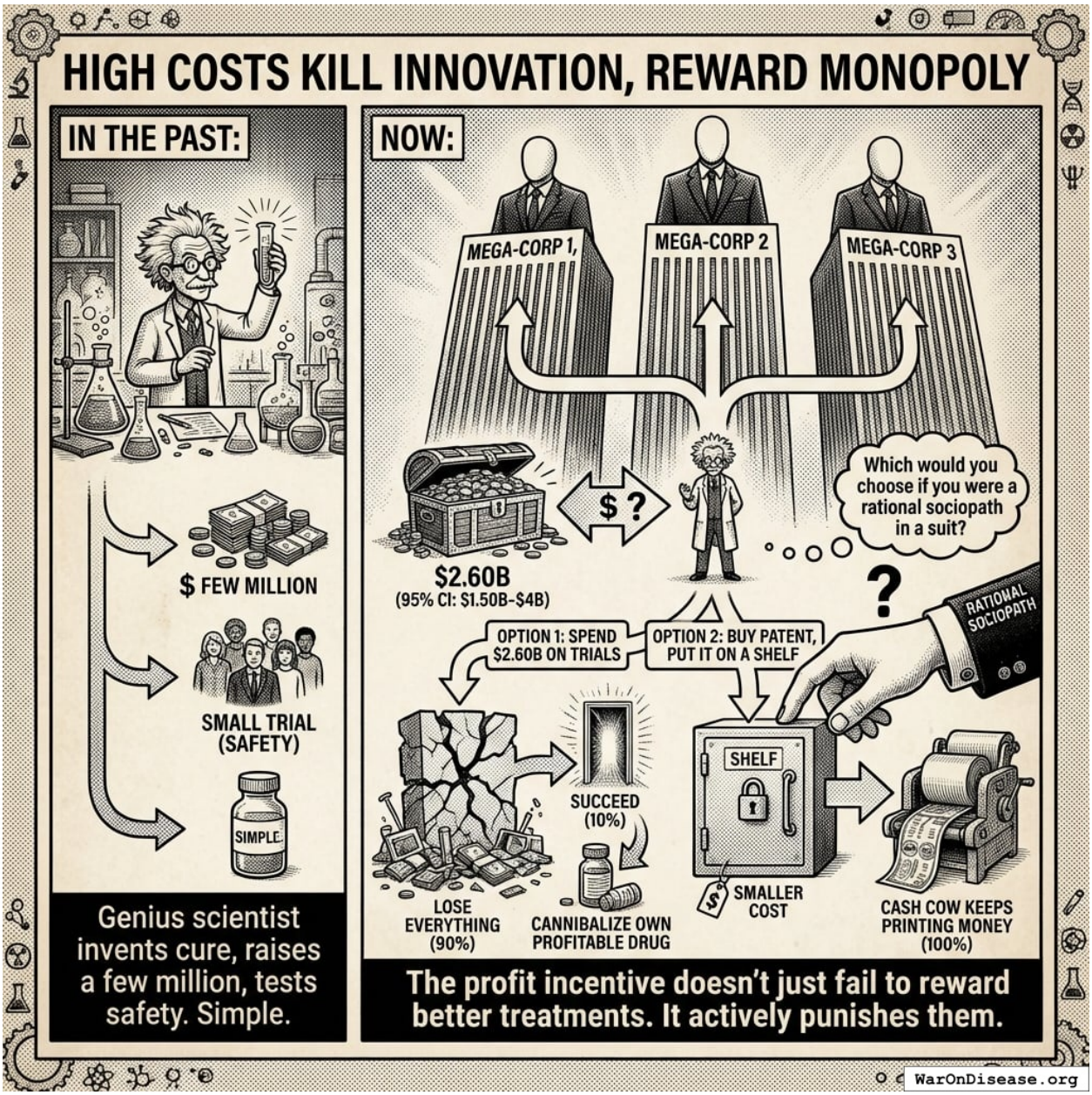


Figure 126: A visual comparison of two corporate paths: the high-risk, high-cost attempt to innovate versus the low-risk, high-profit strategy of shelving a patent to protect an existing product.

Now: Genius scientist must convince one of three mega-corporations to spend $2.60B (95% CI: $1.50B-$4B) on a 10% chance of success. Those corporations already sell inferior drugs for the same condition.

The math for the mega-corporation:

Option 1: Spend $2.60B (95% CI: $1.50B-$4B) on trials

- 90% chance: Lose everything
- 10% chance: Succeed, then cannibalize your own profitable drug

Option 2: Buy the patent, put it on a shelf

- 0% chance of losing $2.60B (95% CI: $1.50B-$4B)

- 100% chance your inferior cash cow keeps printing money

Which would you choose if you were a rational sociopath in a suit?

The profit incentive doesn't just fail to reward better treatments. It actively punishes them.

Off-Patent Drugs and Rare Diseases: Mathematically Doomed

The 1962 law creates a death spiral for unprofitable treatments:

- **95% of diseases are rare[96]:** Development cost ($2.60B (95% CI: $1.50B-$4B)) ÷ patient population (~10,000 patients) = $260,000/patient
- **No patent = no funding:** Off-patent drugs can't attract billion-dollar investments
- **Pre-specification kills serendipity:** Must predict what drug cures before testing

When something costs more, you get less of it. For 95% of diseases[96] with zero treatments, this isn't philosophy. It's math.

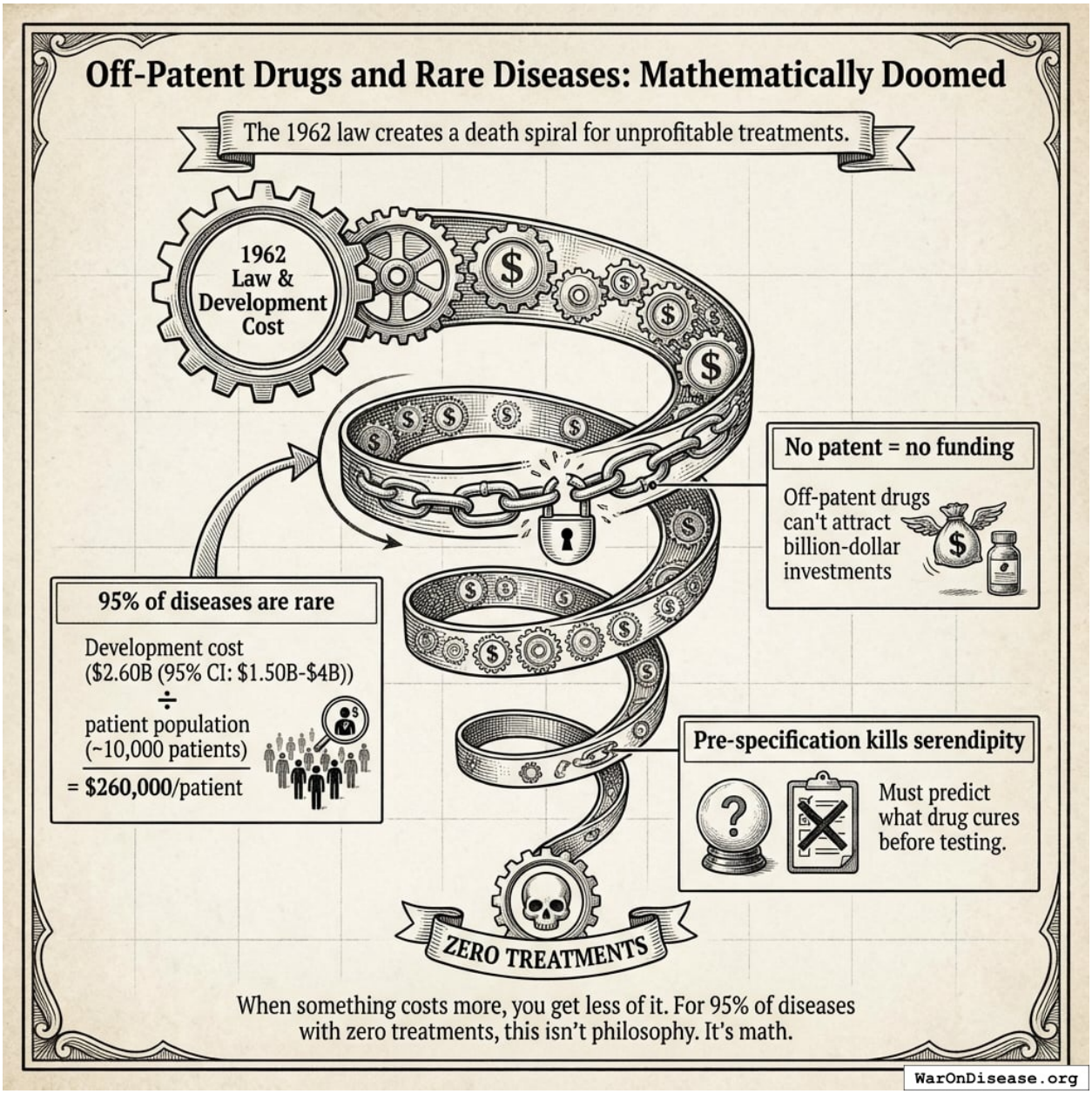


Figure 127: An economic breakdown showing the 'Rare Disease Death Spiral' where high fixed development costs divided by small patient populations create an impossible funding gap for off-patent drugs.

The Actual Death Toll of "Drug Lag"

Economists have a term for people dying while waiting for drug approval: "drug lag." It's a sterile, bureaucratic phrase for a massacre. Early estimates suggested delays cost **21,000 to 120,000 American lives per decade**[194].

But that was just the US. And just the visible delays.

The Global Body Count

A comprehensive quantitative analysis using WHO mortality data and Monte Carlo modeling estimates the *total* cost of blocking patient access during the 8.2 years (95% CI: 4.85 years-11.5 years)-year post-safety efficacy delay:

416M deaths (95% CI: 225M deaths-630M deaths) eventually avoidable deaths from the efficacy lag alone.



Figure 128: A comparison of the estimated 416 million deaths caused by pharmaceutical access delays against the death tolls of major historical conflicts.

This represents a humanitarian catastrophe larger than any war in modern history. See the full sensitivity analysis for confidence intervals and parameter uncertainty.

But deaths alone don't capture the suffering. People don't just die, they live for years with untreated diseases while waiting for approval.

The Morbidity Burden (DALYs)

When you account for both premature death and years lived with disability:

$$DALYs_{lag} = YLL_{lag} + YLD_{lag} = 7.07B + 873M = 7.94B$$

$$\text{where } YLL_{lag}$$
$$= Deaths_{lag} \times (LE_{global} - Age_{death,delay})$$
$$= 416M \times (79 - 62)$$
$$= 7.07B$$

$$\text{where } Deaths_{lag}$$
$$= T_{lag} \times Deaths_{disease,daily} \times 338$$
$$= 8.2 \times 150{,}000 \times 338$$
$$= 416M$$

$$\text{where } YLD_{lag}$$
$$= Deaths_{lag} \times T_{suffering} \times DW_{chronic}$$
$$= 416M \times 6 \times 0.35$$
$$= 873M$$

$$\text{where } Deaths_{lag}$$
$$= T_{lag} \times Deaths_{disease,daily} \times 338$$
$$= 8.2 \times 150{,}000 \times 338$$
$$= 416M$$

7.94B DALYs (95% CI: 4.43B DALYs-12.1B DALYs) years of healthy human life deleted by the regulatory framework.

- **Economic cost:** $1.19 quadrillion (95% CI: $443T-$2.41 quadrillion) (2024 USD)
- **Annualized loss:** $1.19 quadrillion (95% CI: $443T-$2.41 quadrillion)/year ($1.19 quadrillion (95% CI: $443T-$2.41 quadrillion) ÷ 62 years from 1962-2024)
- **GDP equivalent:** ~8-12% of global GDP consumed annually

For comparison: The entire global pharmaceutical R&D budget is ~$300B/year. The post-safety efficacy lag costs **38× more** than all drug development spending combined.

Even if you think these estimates are off by a factor of 10, the core problem remains: a system that costs 82x (95% CI: 50x-94.1x) more per patient, takes 36× longer than proven alternatives, and produces less safety data from smaller, less representative populations.

Here's a news story from the Non-Existent Times by No One Ever without a picture of all the people who die from lack of access to life-saving treatments that might have been.



The Non-Existent Times

13 APR 2020

Lots of People Died Prematurely Due To Treatments That Never Existed

By NO ONE, EVER

FDA Safety Restrictions Dramatically Expanded in 1962 Following the Thalidomide disaster, the FDA began requiring 3 phases of clinical tri-

Photo Not Available Because It's Impossible to Know Specifically Who Would Still Be Alive Today

Reuters

The UN-sponsored International Moose Census got off to a flying start today with hopes for an increase in the worldwide moose population compared to last year's disapointing

inhabitents nonetheless have an insatiable desire for the creatures. The increase in Beijing-Ulanbataar trade is anticipated to relieve pressure on the relatively strained Russian suppliers, but increase Mongolia's imbalance of trade with its larger neighbour.

Historically the only competitor to China in the far eastern moose markets has been Singapore but the tiny island nation is set to report a net loss, expecting a decrease of more than five percent on last year's 50,000 moose counted. The head of Singapore's Agency for Agriculture, Jing-Feng Lau, explained to an incredu-

This means it's logical for regulators to reject drug applications by default. The personal risks of approving a drug with any newsworthy side effect far outweigh the personal risk of preventing access to life-saving treatment.

Types of Error in FDA Approval Decision

	Drug Is Beneficial	Drug Is Harmful
FDA Allows the Drug	Correct Decision	Victims are identifiable and might appear on Oprah.
FDA Does Not Allow the Drug	Victims are not identifiable or acknowledged.	Correct Decision

The most infamous case is beta-blockers. While Europe used them to prevent heart attacks, the US regulatory process delayed. And delayed. The decade-long lag in approving them for their most common use killed an estimated **100,000 Americans**[191].

More Americans than died in Vietnam and Korea combined. From one drug delay. Here's a partial list of other drugs Americans died waiting for while they were already available in other civilized countries for a year or longer:

- interleukin-2, Taxotere, vasoseal, ancrod, Glucophage, navelbine, Lamictal, ethyol, photofrin, rilutek, citicoline, panorex, Femara, ProStar, omnicath

Each name on that list represents eventually avoidable deaths.

Following the 1962 increase in US regulations, you can see a divergence from Switzerland's growth in life expectancy, which did not introduce the same delays to availability.

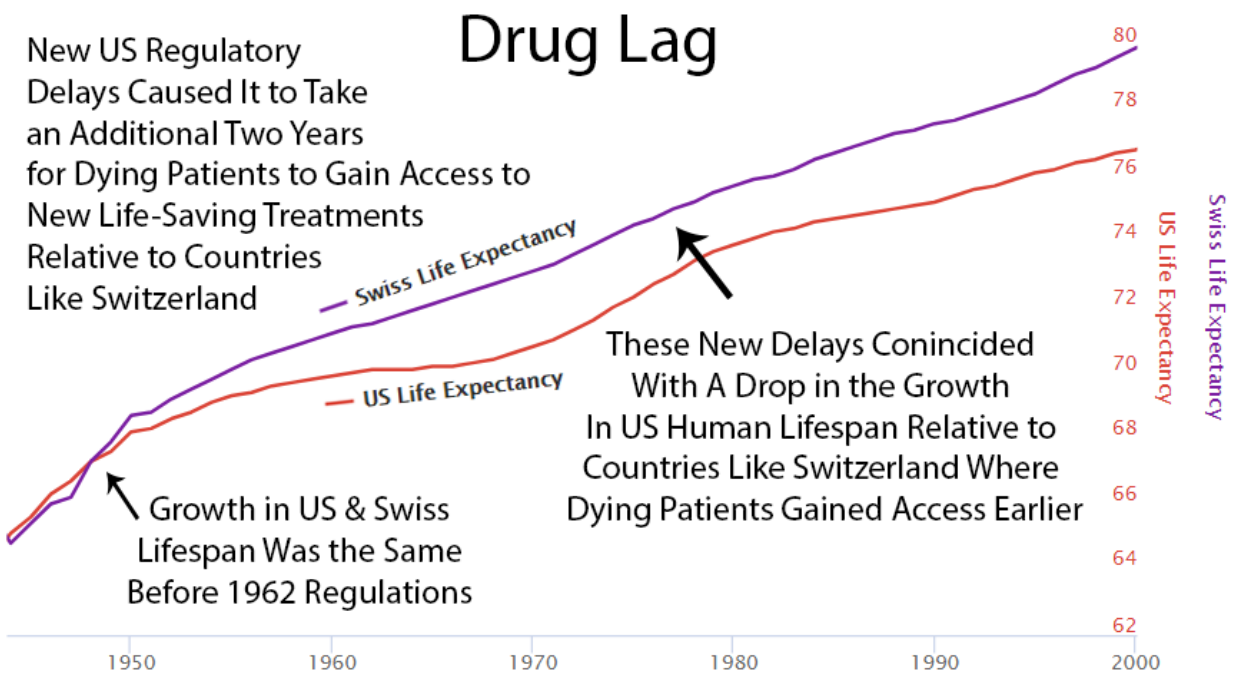


Figure 129: A chart showing the divergence in life expectancy between the US and Switzerland after 1962.

Perhaps it's coincidence, but you can see an increase in drug approvals in the '80s. At the same time, the gap between Switzerland and the US gets smaller. Then US approvals go back down in the '90s, and the gap expands again.

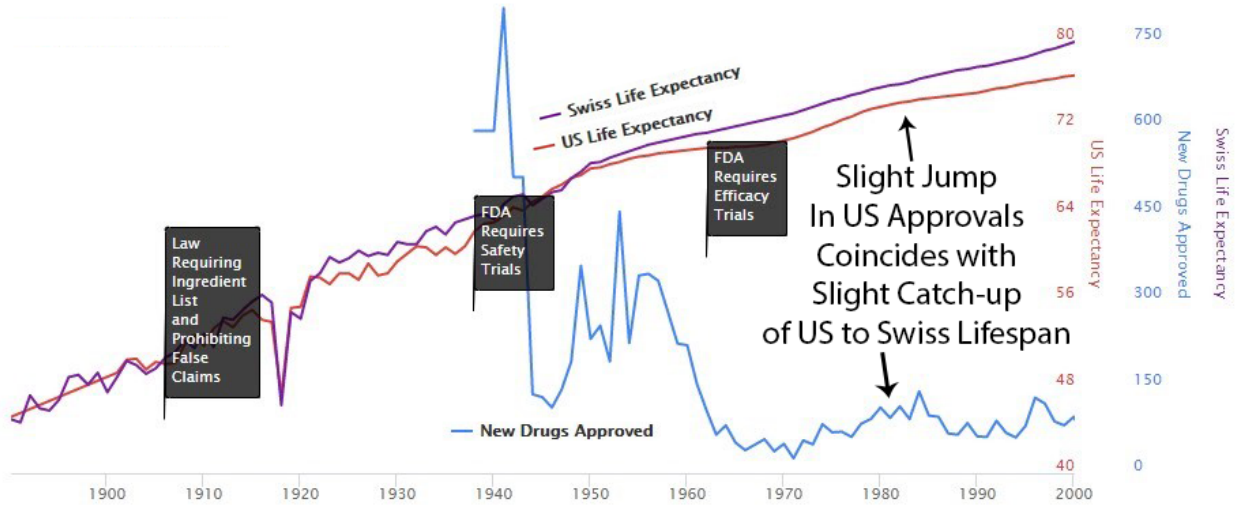


Figure 130: A chart showing the correlation between drug approvals and the life expectancy gap between the US and Switzerland.

How the Incentives Work

FDA Regulator Decision Tree

Approve drug that later shows problems

- Congressional hearing (televised)
- "FDA APPROVED KILLER DRUG" headlines
- Career ends
- Pension threatened

Delay drug that could save lives

- Nothing happens
- Dead people don't complain
- Promotion on schedule
- Retire to pharma job[195]

This isn't conspiracy. It's economics. The system literally cannot punish mistakes of commission (approving bad drugs) but imposes zero consequences for mistakes of omission (delaying good drugs).



Figure 131: Decision tree illustrating the asymmetric incentives for regulators, where approving a harmful drug carries personal risk while delaying a beneficial drug carries no penalty.

The Math: Why Current Regulations Increase Total Harm

The regulatory system claims to prevent harm by screening out unsafe drugs (Type I errors: approving bad drugs). But this framing ignores two critical facts:

1. **Small trials miss more safety problems than they catch** (as shown in the Safety Paradox section)
2. **Regulatory delays kill far more people than unsafe drugs ever did**

Let's quantify both types of harm:

Type I Harm (approving unsafe drugs):

- Even with generous overestimates, prevented harm: ~2.59M DALYs (95% CI: 1.54M DALYs-4.16M

DALYs) saved (1962-2024)
- This assumes ALL drug withdrawals were prevented by the 1962 changes that blocked patient access during lengthy efficacy trials (they weren't; Phase I safety testing already existed)

Type II Harm (delaying beneficial treatments):

- Documented harm: 7.94B DALYs (95% CI: 4.43B DALYs-12.1B DALYs) lost (1962-2024)
- This is from delayed access alone, not counting the additional safety failures the system creates

$$Ratio_{TypeII} = \frac{DALYs_{lag}}{DALY_{TypeI}} = \frac{7.94B}{2.59M} = 3{,}070$$

where $DALYs_{lag} = YLL_{lag} + YLD_{lag} = 7.07B + 873M = 7.94B$

where YLL_{lag}
$= Deaths_{lag} \times (LE_{global} - Age_{death,delay})$
$= 416M \times (79 - 62)$
$= 7.07B$

where $Deaths_{lag}$
$= T_{lag} \times Deaths_{disease,daily} \times 338$
$= 8.2 \times 150{,}000 \times 338$
$= 416M$

where YLD_{lag}
$= Deaths_{lag} \times T_{suffering} \times DW_{chronic}$
$= 416M \times 6 \times 0.35$
$= 873M$

where $Deaths_{lag}$
$= T_{lag} \times Deaths_{disease,daily} \times 338$
$= 8.2 \times 150{,}000 \times 338$
$= 416M$

where $DALY_{TypeI} = DALY_{thal} \times 62 = 41{,}800 \times 62 = 2.59M$

where $DALY_{thal}$
$= YLD_{thal} + YLL_{thal}$
$= 13{,}000 + 28{,}800$
$= 41{,}800$

where YLD_{thal}
$= DW_{thal} \times N_{thal,survive} \times LE_{thal}$
$= 0.4 \times 540 \times 60$
$= 13{,}000$

where $N_{thal,survive}$
$= N_{thal,US,prevent} \times (1 - Rate_{thal,mort})$
$= 900 \times (1 - 40\%)$
$= 540$

where $N_{thal,US,prevent}$
$= N_{thal,global} \times Pct_{US,1960}$
$= 15{,}000 \times 6\%$
$= 900$

where $YLL_{thal} = Deaths_{thal} \times 80 = 360 \times 80 = 28{,}800$

where $Deaths_{thal}$
$= Rate_{thal,mort} \times N_{thal,US,prevent}$
$= 40\% \times 900$
$= 360$

where $N_{thal,US,prevent}$

For every 1 unit of harm prevented by the current regulatory framework, it creates 3.07k:1 (95% CI: 2.88k:1-3.12k:1) units of harm through delay and inadequate safety monitoring.

This isn't a trade-off. The system doesn't reduce total harm. It massively increases it while appearing to prioritize safety.

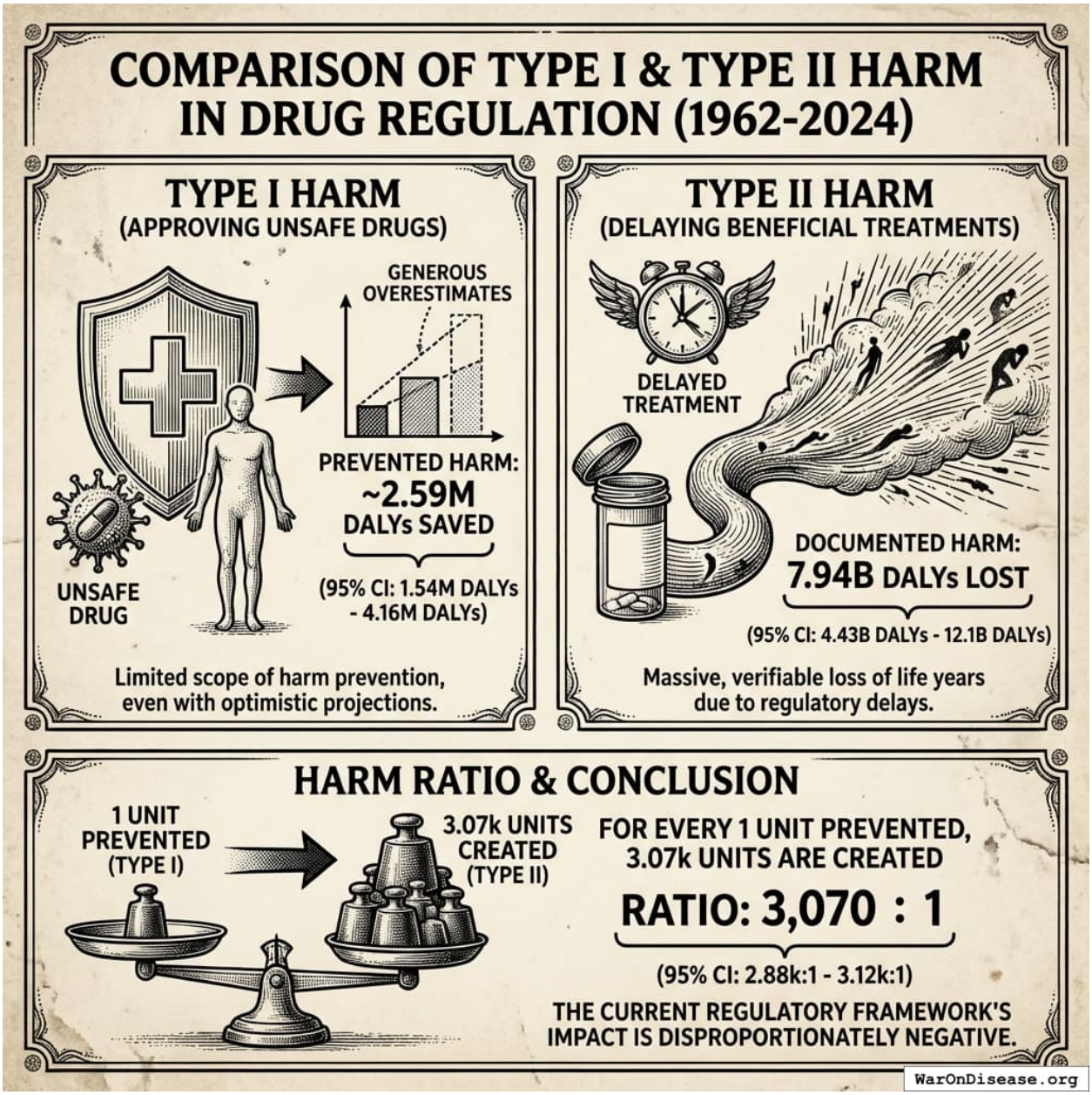


Figure 132: Comparison of harm prevented (Type I) versus harm caused by delay (Type II), demonstrating the 3,070:1 imbalance.

Why Bureaucrats Are Rewarded for Letting You Die

Humans weight acts of commission (doing something bad) as worse than acts of omission (letting something bad happen) - even when omission causes more harm. Push a person in front of a trolley to save five people? Unthinkable. Let five people die by doing nothing? That's just Monday.

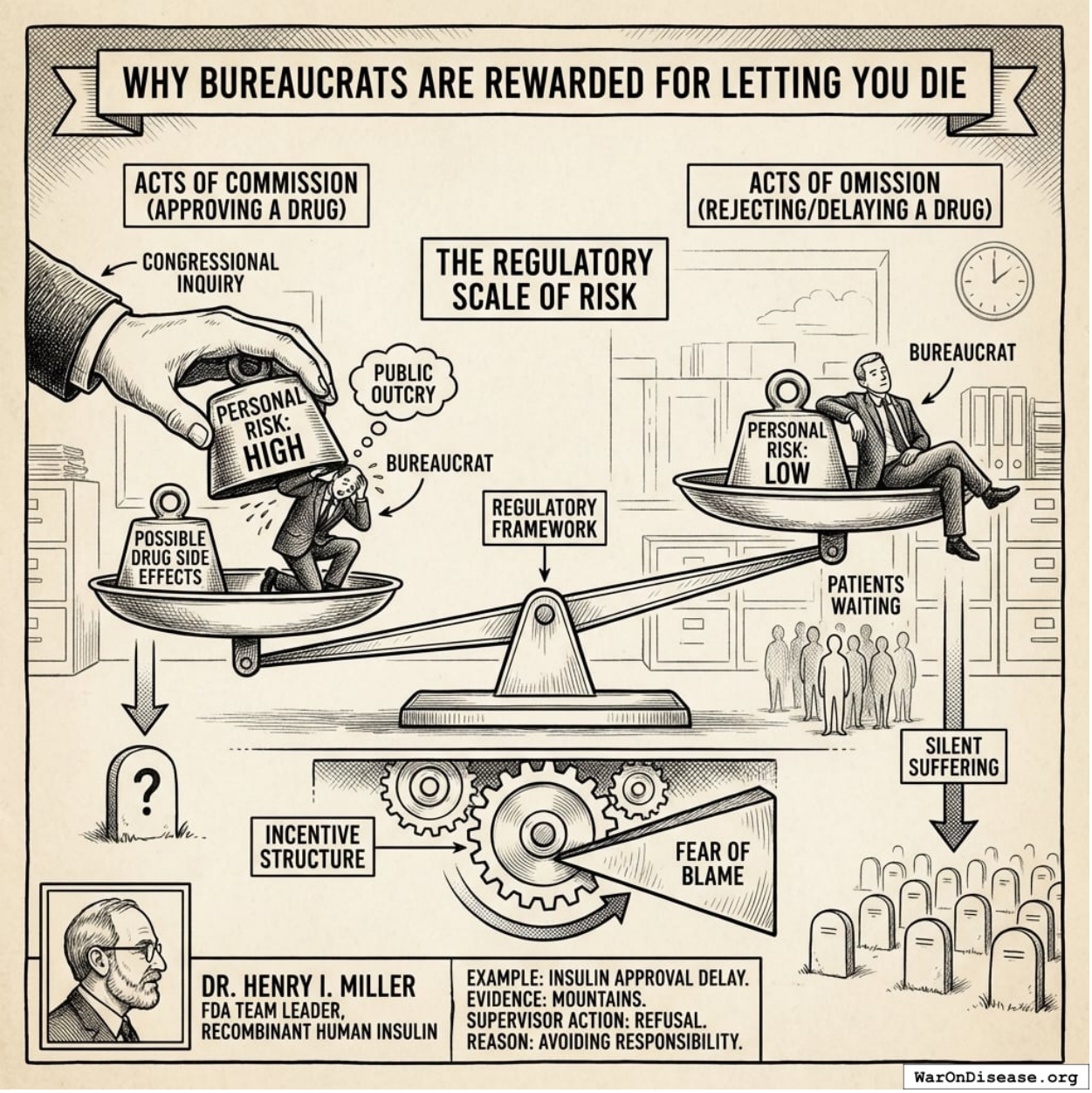


Figure 133: A comparison of the asymmetric risks for regulators: approving a drug leads to high visibility and personal accountability for side effects, while delaying a drug leads to invisible deaths with no personal risk.

The current regulatory framework operates on this principle.

Dr. Henry I. Miller ran the FDA team reviewing recombinant human insulin in the early 1980s. Mountains of evidence showed it was safe and effective. His supervisor refused to approve it. Why? If someone died from the drug, heads would roll at the FDA, including his. If people died waiting for the drug? Nothing happens.

The personal risk of approving a drug vastly exceeds the risk of rejecting it. Dead patients don't testify before Congress.

Clinical Trial Theater: Excluding 86.1% of Reality Makes Drugs More Dangerous

The FDA requires rigorous trials to ensure safety. Then it systematically excludes the populations most at risk of adverse events.

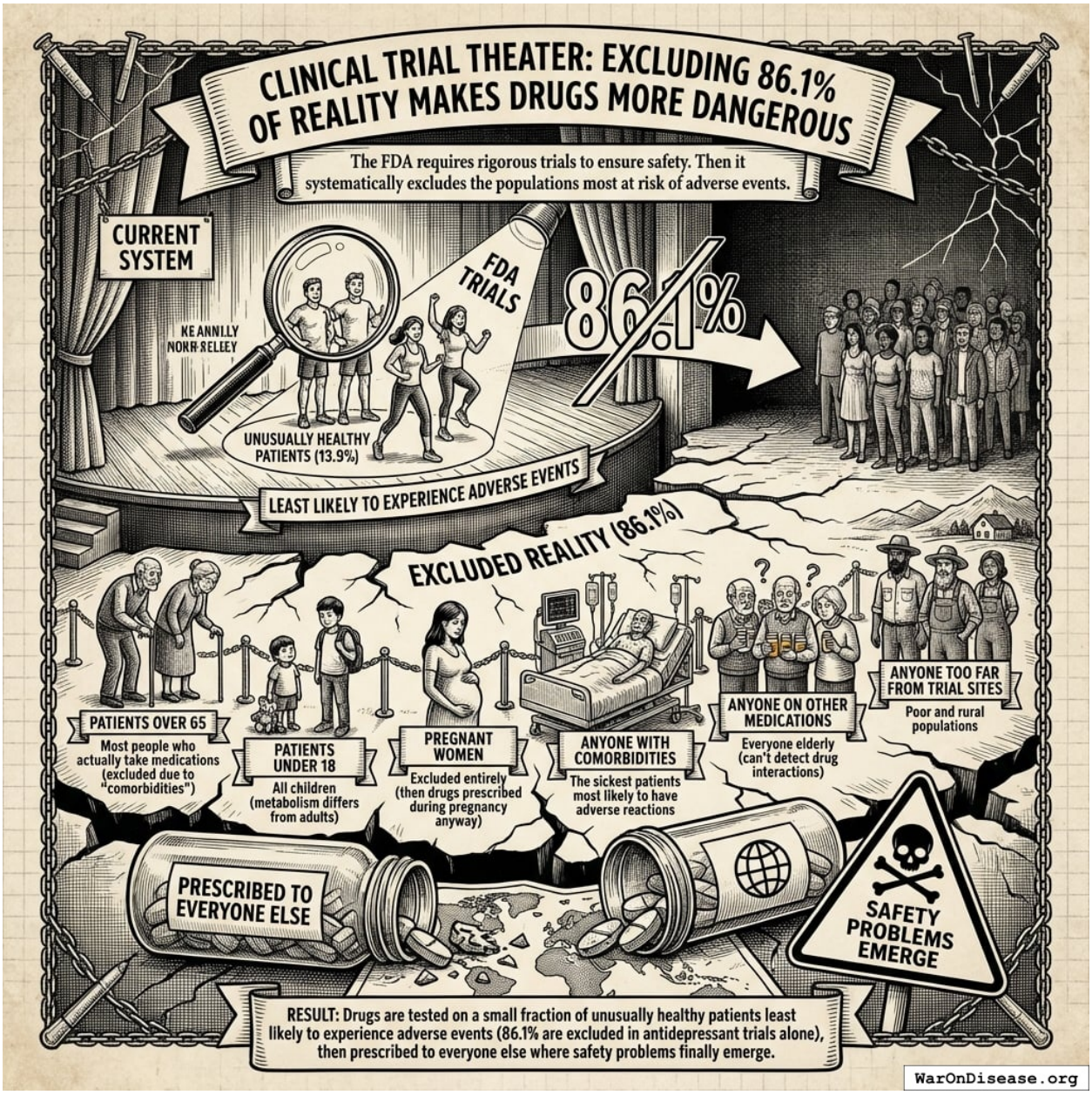


Figure 134: A visualization contrasting the narrow, healthy slice of the population included in clinical trials against the large, high-risk majority that is excluded yet ultimately prescribed the medication.

Trials under the current system exclude[2]:

- **Patients over 65:** Most people who actually take medications (excluded due to "comorbidities")
- **Patients under 18:** All children (metabolism differs from adults)
- **Pregnant women:** Excluded entirely (then drugs prescribed during pregnancy anyway)

- **Anyone with comorbidities:** The sickest patients most likely to have adverse reactions
- **Anyone on other medications:** Everyone elderly (can't detect drug interactions)
- **Anyone too far from trial sites:** Poor and rural populations

Result: Drugs are tested on a small fraction of unusually healthy patients least likely to experience adverse events (86.1% are excluded in antidepressant trials alone), then prescribed to everyone else where safety problems finally emerge.

Why This Makes Drugs More Dangerous

When trials exclude most real patients (86.1% in antidepressant studies):

- **Drug interactions go undetected:** Elderly patients on multiple medications face risks never tested
- **Metabolic differences are missed:** Children and elderly metabolize drugs differently
- **Subgroup toxicity is invisible:** Rare genetic variants or comorbidities that cause severe reactions
- **Real-world failure rates are hidden:** Effectiveness and safety in actual sick patients remain unknown until post-market

This isn't theoretical. Multiple drugs later withdrawn for safety issues (Vioxx, Fen-Phen, Bextra) were tested on cherry-picked populations. The cardiovascular risks, liver damage, and other serious adverse events only became apparent after millions of real-world patients (elderly, sick, on other medications) were exposed.



Figure 135: A visual comparison between the narrow, controlled demographics of clinical trials and the diverse, complex reality of the general population, highlighting the safety risks that go undetected.

Testing drugs only on healthy volunteers to ensure safety is like testing parachutes only on the ground.

No Long-Term Outcome Data

Even if there's financial incentive to research a new drug, there's no data on long-term outcomes. Data collection for participants can be as short as several months. Under the current system, it's not financially feasible to collect data on a participant for years or decades. So you have no idea if long-term effects of a drug are worse than initial benefits.

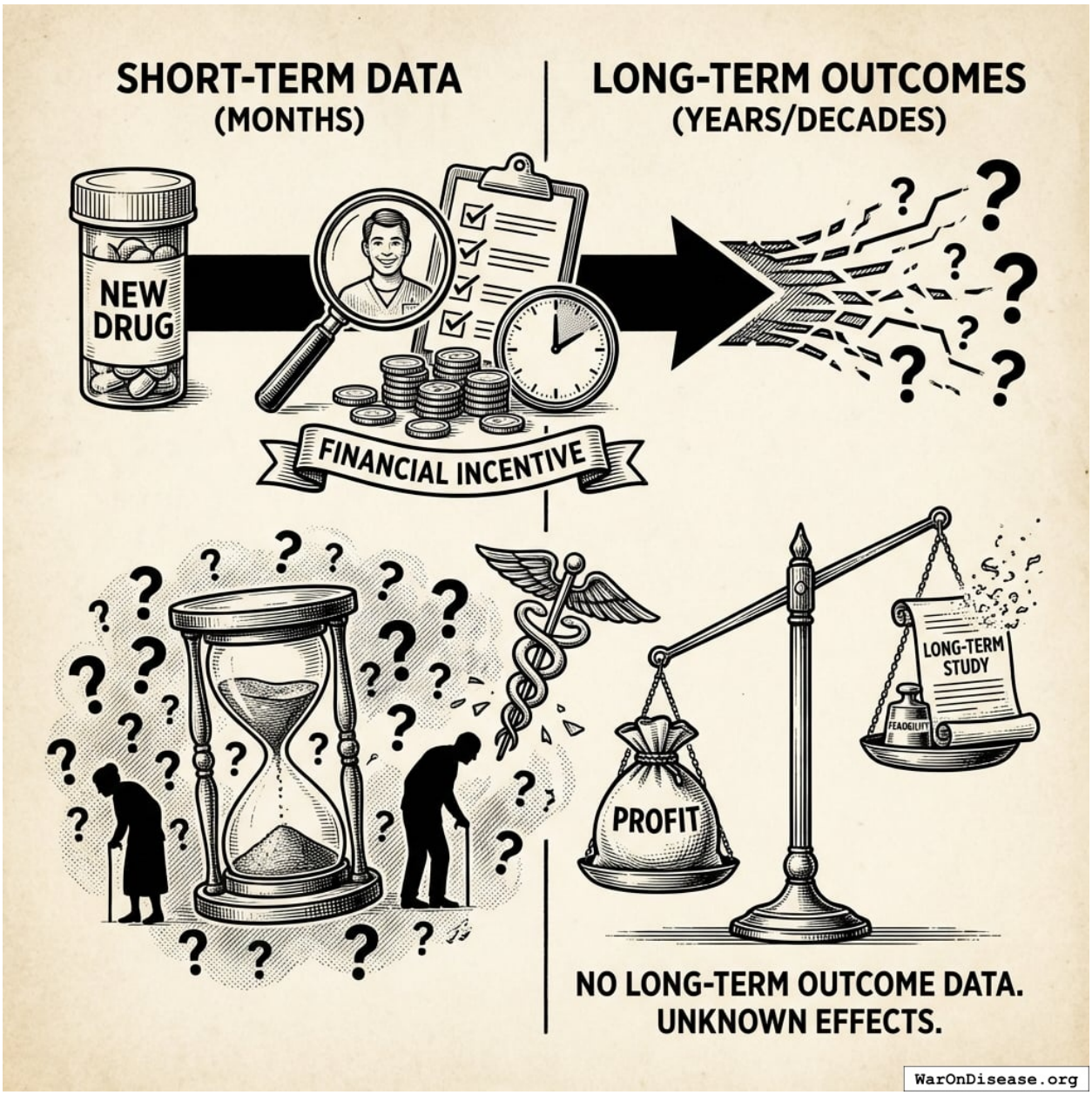


Figure 136: A timeline comparison showing the brief window of clinical data collection versus the decades of potential long-term drug effects that remain unmonitored.

Pre-Specification Requirements Kill Innovation

When running an efficacy trial, the regulations require drug developers to predict exactly what a treatment will cure before collecting any human trial data.

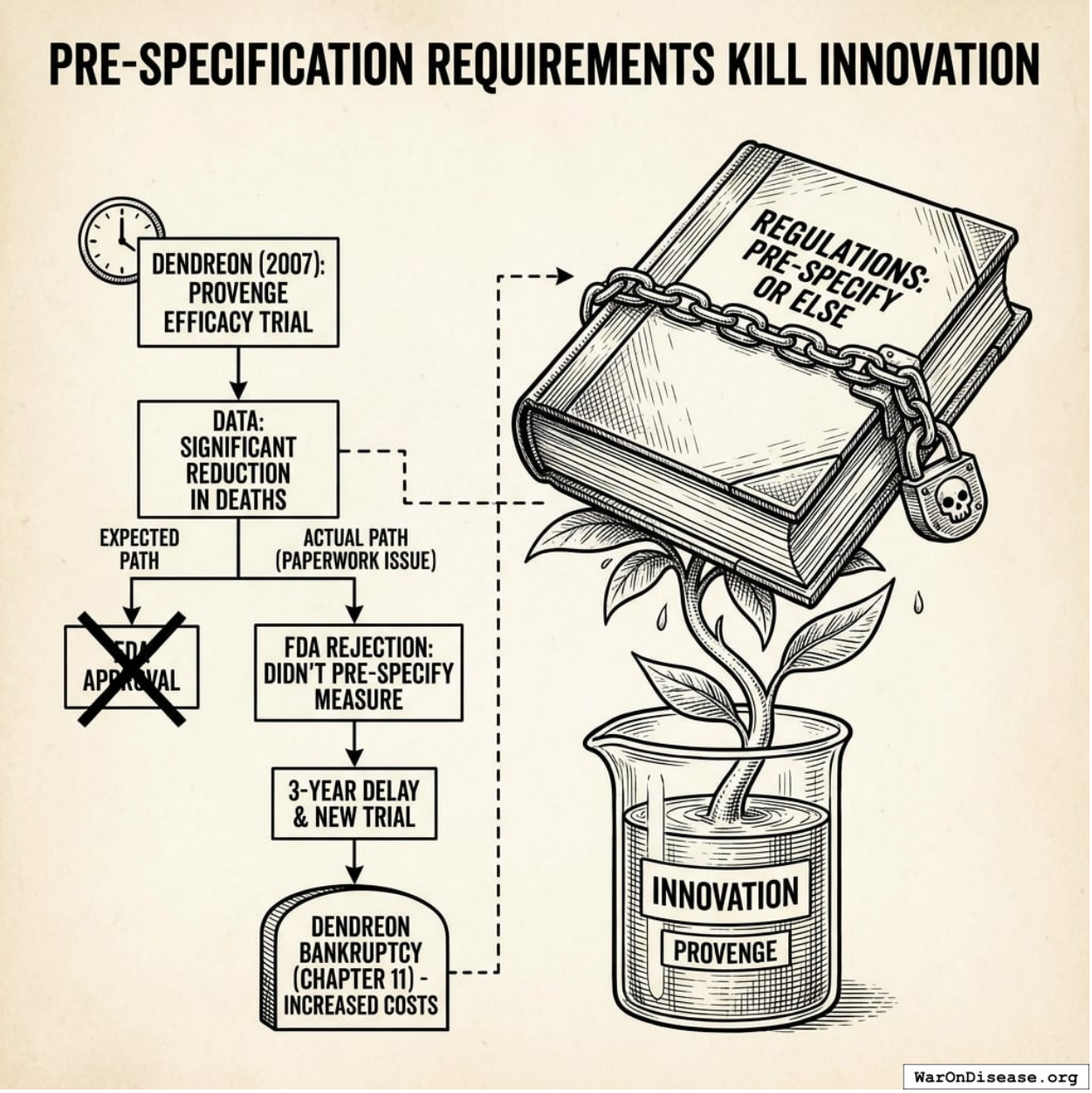


Figure 137: A timeline of the Dendreon case showing how successful clinical results were rejected due to pre-specification requirements, leading to a second trial and eventual bankruptcy.

In 2007, Dendreon submitted evidence that its immunotherapy drug Provenge significantly reduced deaths from prostate cancer. The FDA advisory committee was persuaded. But the application was rejected anyway, not because the drug didn't work, but because Dendreon didn't properly specify beforehand what the study would measure.

Finding a decline in deaths wasn't enough. The paperwork wasn't filled out in the correct order. Three more years and another large trial were required before the life-saving medication was approved.

Due to these additional costs, Dendreon ultimately filed for chapter 11 bankruptcy.

The Negative Results Black Hole

Here's a fun fact that should be criminal:

- **Negative trial results published:** 37%[196]
- **Positive trial results published:** 94%[196]
- **Money wasted repeating failed experiments:** ~$100 billion annually[197]

Companies are literally allowed to hide when drugs don't work.

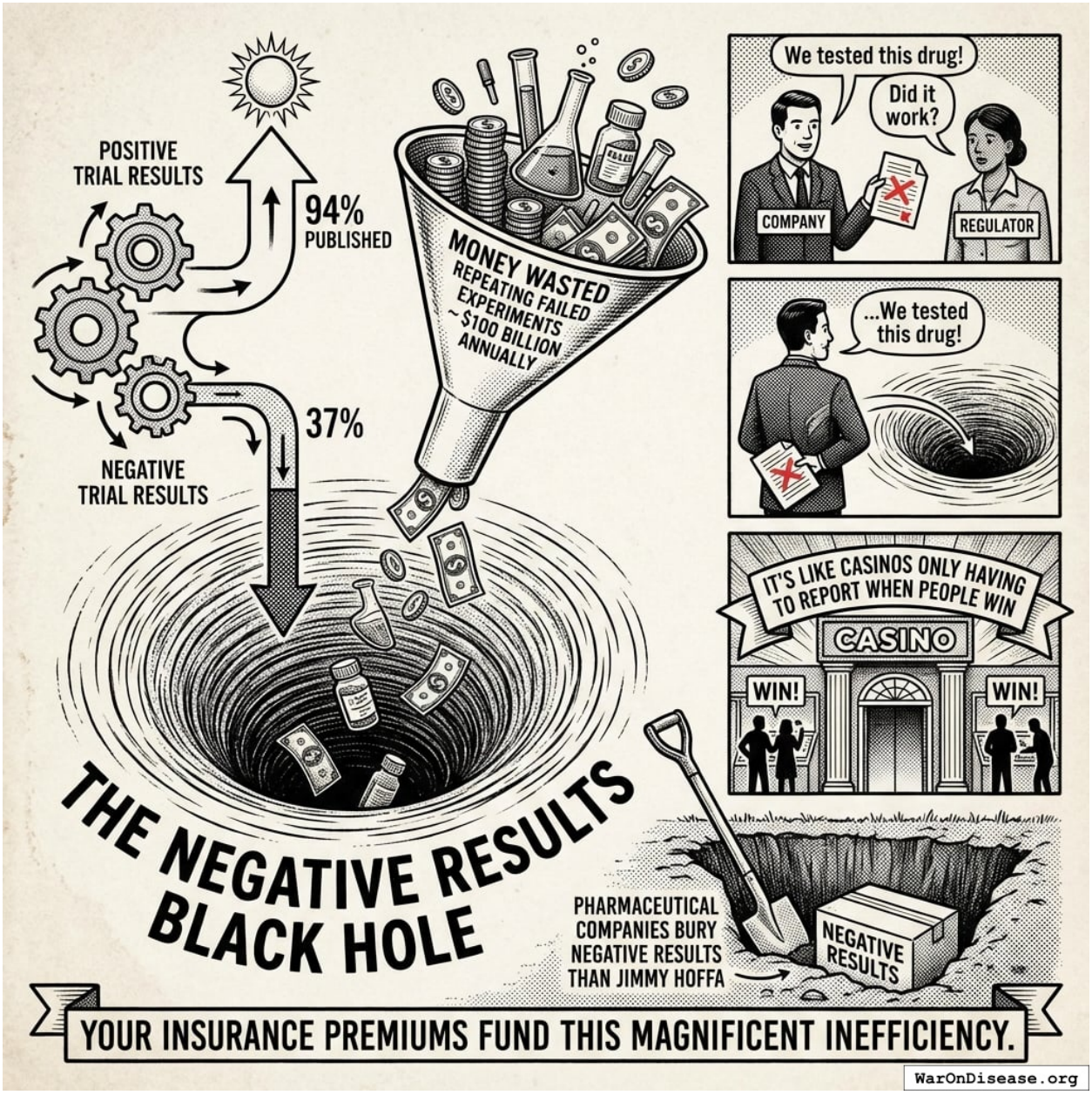


Figure 138: A visual comparison showing the discrepancy between published positive and negative clinical trial results, alongside the resulting cycle of wasted research spending.

Company: "We tested this drug!"

Regulator: “Did it work?”

Company: “…We tested this drug!”

This means humans spend billions testing the same failed drugs over and over because nobody admits they failed. It’s like playing poker where everyone claims they won but nobody shows their cards.

Pharmaceutical companies bury negative results deeper than Jimmy Hoffa. So other companies waste billions testing the same dead ends.

Your insurance premiums fund this magnificent inefficiency.

It’s like casinos only having to report when people win.

Countries That Don't Have Our "Safety"



Figure 139: A comparison of regulatory approaches to experimental medicine in Japan, the EU, and the US, showing differences in approval speed and patient access.

Japan's Regenerative Medicine Act[198]:

- Conditional approval after Phase II
- Real-world data collection required
- Time to patient: 2-3 years
- Americans fly there for treatment

EU Compassionate Use[199]:

- Terminal patients can access experimental drugs

- Doctor's discretion, not bureaucrat's
- Thousands of lives extended
- FDA: "But what if they die?" (They're already dying)

Right to Try (US)[200]:

- Passed despite FDA opposition
- FDA response: Made it effectively impossible to use
- Patients helped: <200 total[201]
- Patients who wanted help: Tens of thousands

The COVID Test Fiasco

The 1962 framework requires the FDA to approve all diagnostic tests before use. During COVID, this mandate played out as follows:

- **January 2020:** WHO develops COVID test, rest of world starts using it
- **February 2020:** FDA blocks all non-CDC tests[202] to "ensure quality"
- **Late February:** CDC tests contaminated, completely useless[203]
- **March:** Private labs beg to help, regulatory framework says "no, approved tests only"
- **Late March:** FDA finally allows other tests after thousands die
- **Cost:** Thousands of preventable deaths[204], exact number unknown

The defense: "We were ensuring quality control."

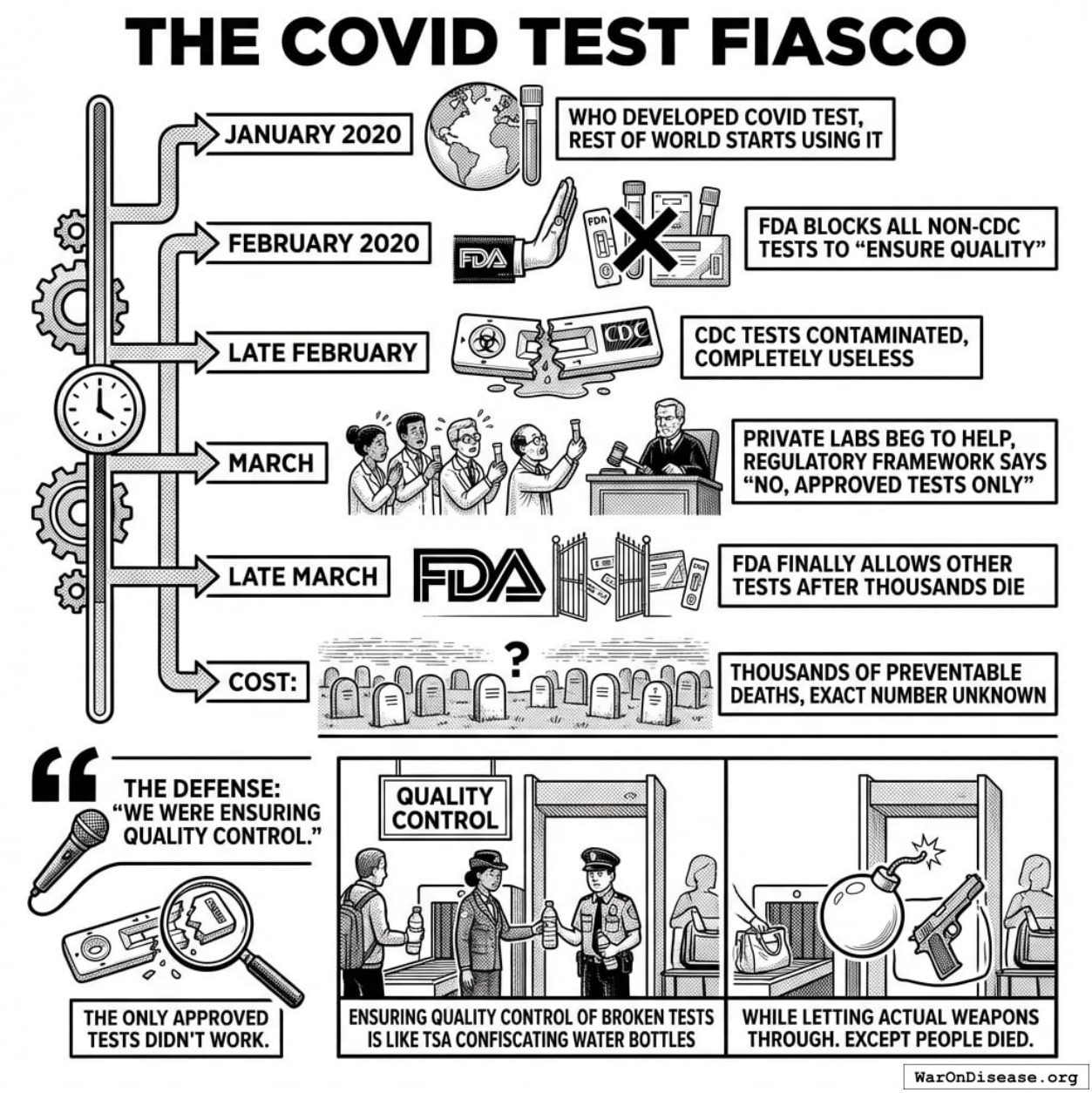


Figure 140: A timeline of the 2020 COVID-19 testing failure showing the gap between international test availability and the eventual FDA approval of private domestic tests.

The only approved tests didn't work.

Ensuring quality control of broken tests is like TSA confiscating water bottles while letting actual weapons through. Except people died.

Small Trials Are Dangerous!

The FDA's post-1962 system (requiring small, artificial efficacy trials before allowing patient access) was supposed to prove drugs work. But paradoxically, by forcing small artificial trials and excluding real-world populations, it created a system that is demonstrably more dangerous than the real-world evidence approach

it replaced.

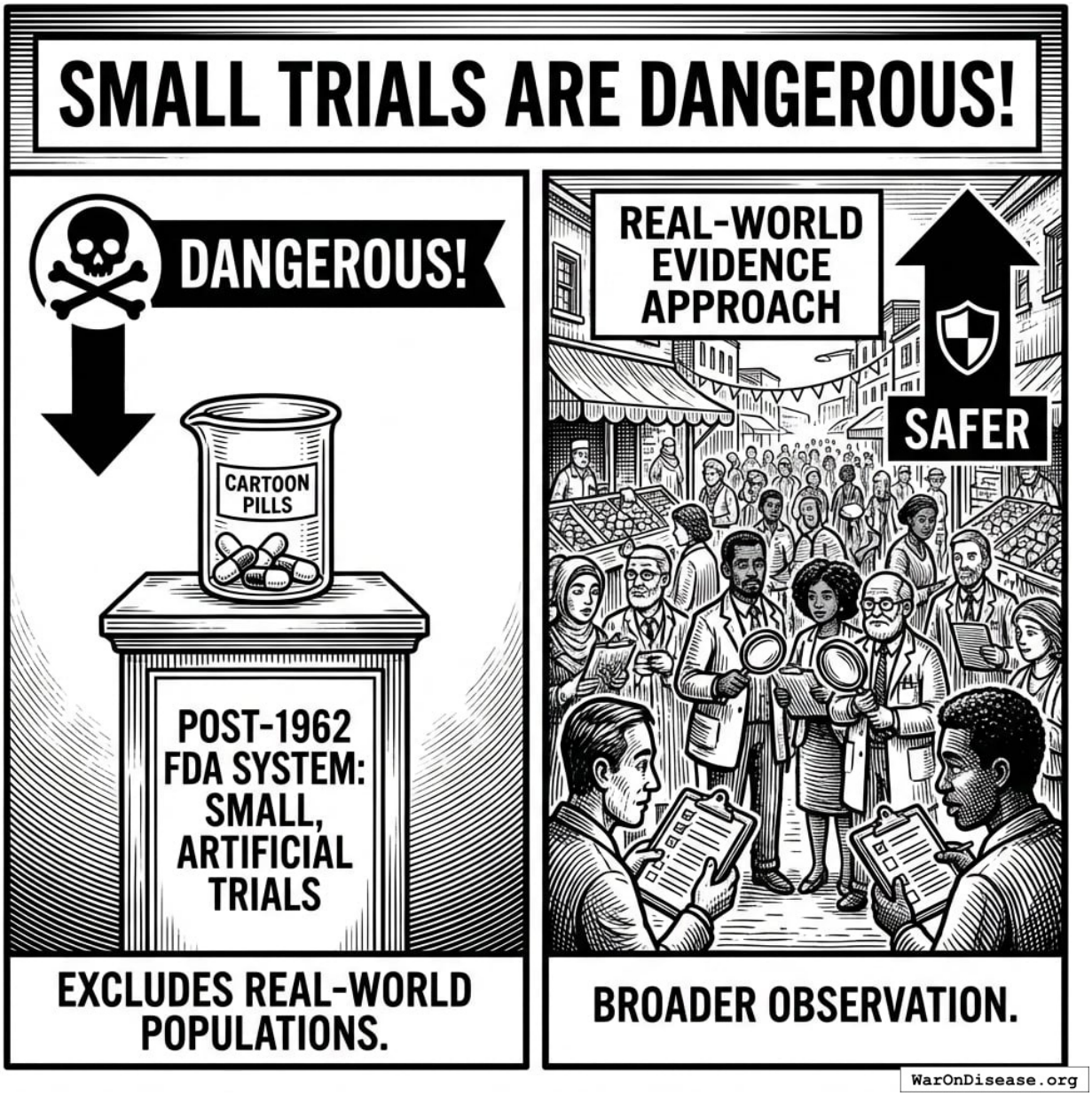


Figure 141: A comparison of the post-1962 artificial trial system versus the real-world evidence approach, showing how the exclusion of diverse populations leads to higher safety risks.

Why Small Trials Miss Safety Signals

Phase III trials test 1,000-3,000 patients. This sounds rigorous until you understand the math:

- **Rare adverse events** (1 in 10,000) won't appear in trials of 3,000 patients
- **Subgroup reactions** (elderly, those with comorbidities) can't be detected when these groups are systematically excluded
- **Long-term effects** (cancer risk, organ damage) don't show up in 6-month trials
- **Drug interactions** can't be studied when trial participants can't be on other medications

The result: Drugs are approved as "safe" based on tiny, artificial samples, then given to millions of real patients where the actual safety problems emerge.



Figure 142: A visual contrast between the narrow, controlled parameters of Phase III clinical trials and the complex, diverse reality of broad population use.

The Adverse Event Reporting Failure

Post-approval, the FDA relies on the **FDA Adverse Event Reporting System (FAERS)**, a passive, voluntary system where doctors report problems they happen to notice and connect to a specific drug.

Reality:

- **Estimated capture rate:** Less than 10% of actual adverse events[205] (empirical studies show ~6% reporting rate, meaning 94% underreported)

- **Reporting burden:** Voluntary, time-consuming paperwork doctors often skip
- **Attribution difficulty:** Hard to prove causation in individual cases
- **No systematic follow-up:** Most patients disappear after prescription

Examples of failures:

- **Vioxx:** Killed an estimated 38,000-55,000 Americans[206] before voluntary reporting caught the cardiovascular risks
- **Thalidomide in Europe:** Thousands of birth defects before passive reporting identified the pattern

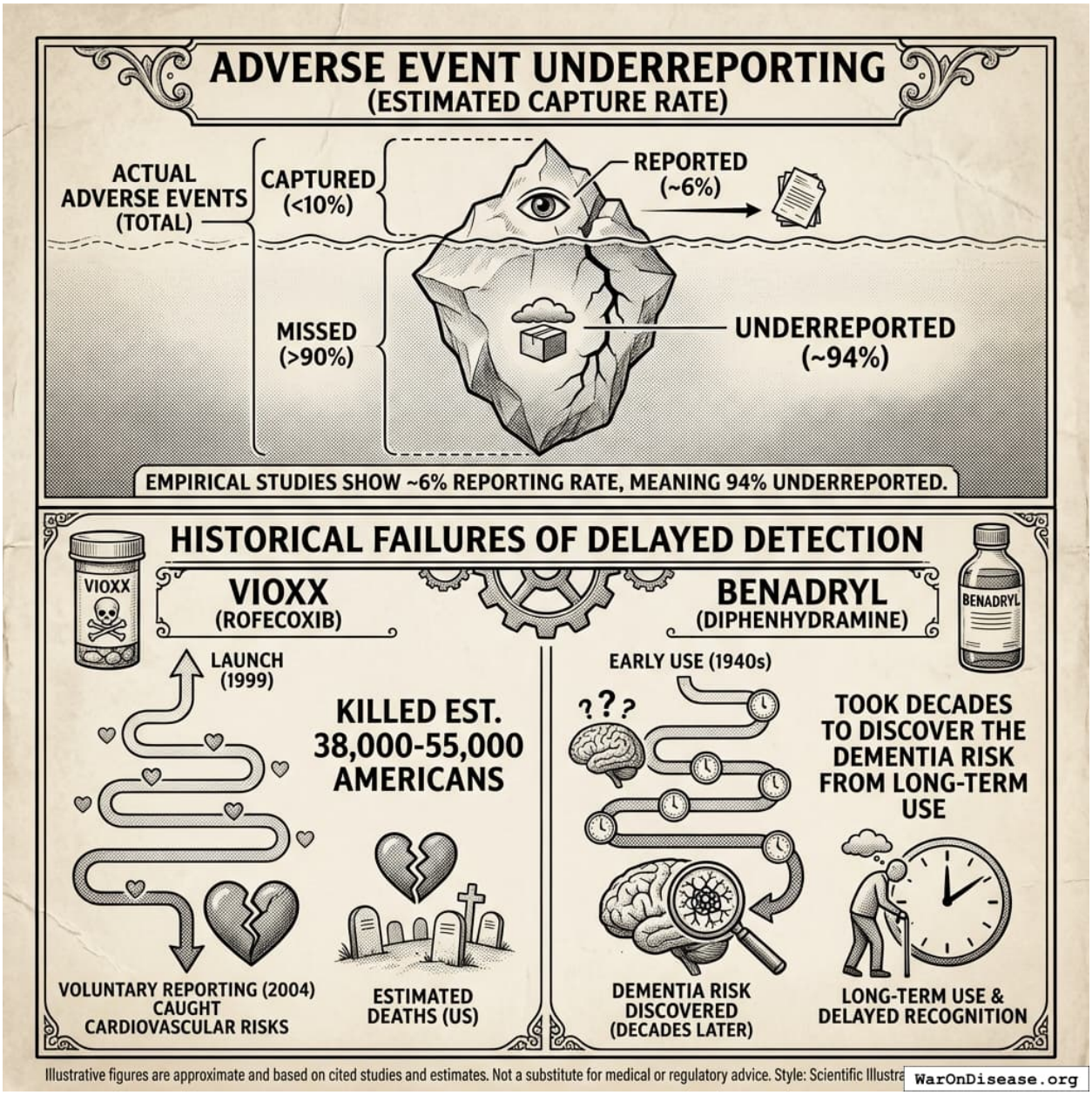


Figure 143: Visualization of the "Iceberg Effect" in adverse event reporting, where less than 10 percent of safety issues are captured by the current passive system.

What Real-World Evidence Would Catch

A decentralized system with universal participation would:

- **Detect rare events:** 10 million participants catch 1-in-10,000 reactions
- **Include real populations:** Test on the sick, elderly, and those with comorbidities
- **Track long-term outcomes:** Years of follow-up data, not months
- **Identify drug interactions:** Real patients take multiple medications
- **Provide active surveillance:** Automated detection, not voluntary reporting

The safety ratio is backwards. Testing 3,000 cherry-picked patients and hoping voluntary reporting catches problems is more dangerous than testing active monitoring of adverse events with real patients.

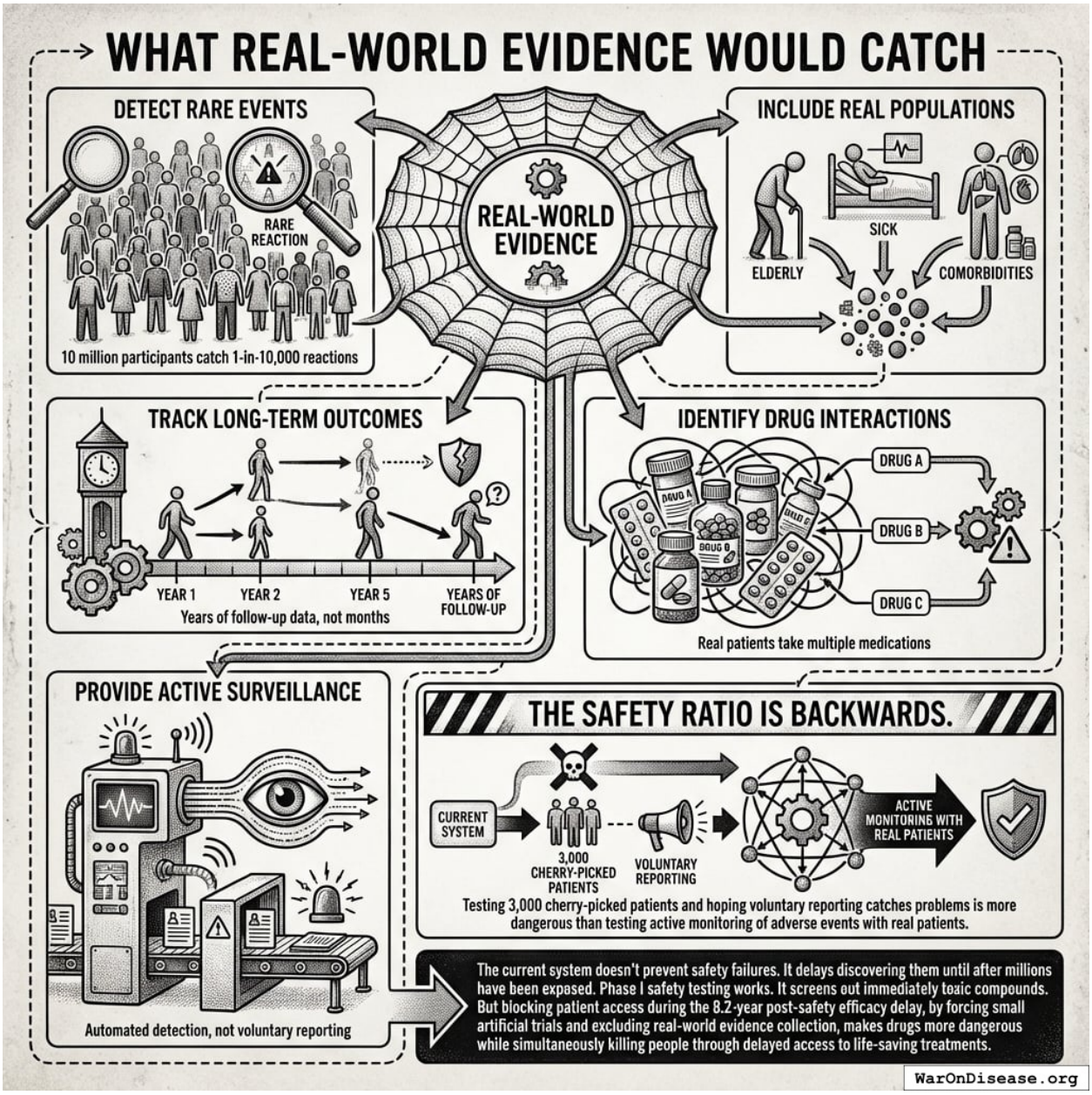


Figure 144: A side-by-side comparison of the traditional clinical trial model versus a decentralized real-world evidence system across metrics of scale, population diversity, and detection speed.

The current system doesn't prevent safety failures. It delays discovering them until after millions have been exposed.

Phase I safety testing works. It screens out immediately toxic compounds. But blocking patient access during the 8.2-year post-safety efficacy delay, by forcing small artificial trials and excluding real-world evidence collection, makes drugs more dangerous while simultaneously killing people through delayed access to life-saving treatments.

The Bottom Line

- **8.2 years (95% CI: 4.85 years-11.5 years)** of post-safety efficacy lag (Phase II/III delay after Phase I safety verification)
- **416M deaths (95% CI: 225M deaths-630M deaths)** from eliminating the 8.2-year efficacy lag
- **7.94B DALYs (95% CI: 4.43B DALYs-12.1B DALYs)** destroyed
- **$1.19 quadrillion (95% CI: $443T-$2.41 quadrillion)** in economic carnage
- **3.07k:1 (95% CI: 2.88k:1-3.12k:1)** harm ratio (delay vs. prevention)

Phase I safety testing works. Keep it.

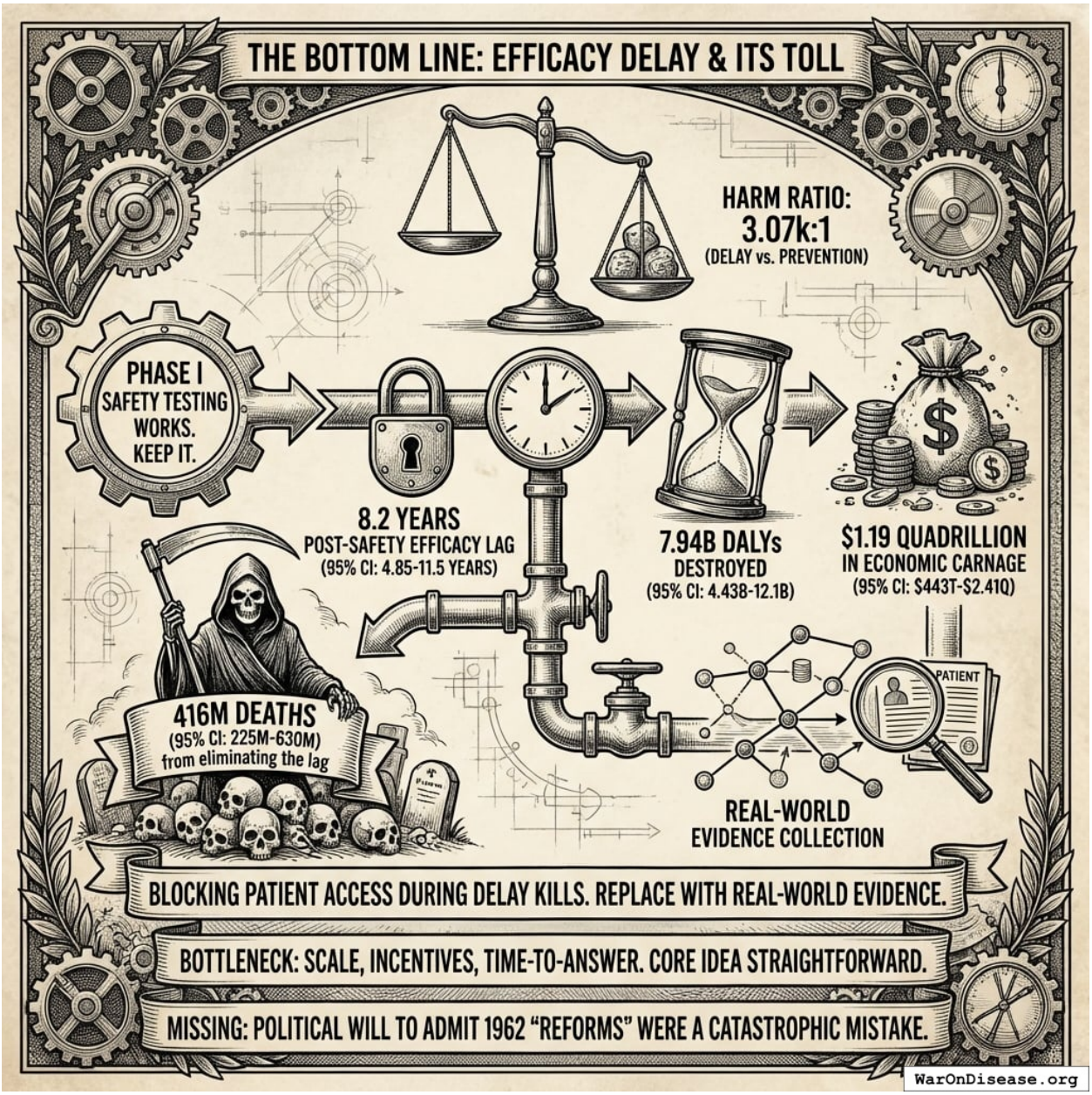


Figure 145: An infographic illustrating the 8.2-year efficacy lag and its consequences, highlighting the 3,000:1 ratio between lives lost to delay versus lives saved by current regulatory barriers.

Blocking patient access during the 8.2-year post-safety efficacy delay kills people. Replace it with real-world evidence collection.

Many pieces already exist. The bottleneck is scale, incentives, and time-to-answer. The core idea is straightforward even if implementation is hard.

What's missing is the political will to admit that the 1962 "reforms" were a catastrophic mistake.

Technical Analysis

For the full quantitative analysis including methodology, sensitivity analysis, and source data, see: The Human Cost of Regulatory Latency

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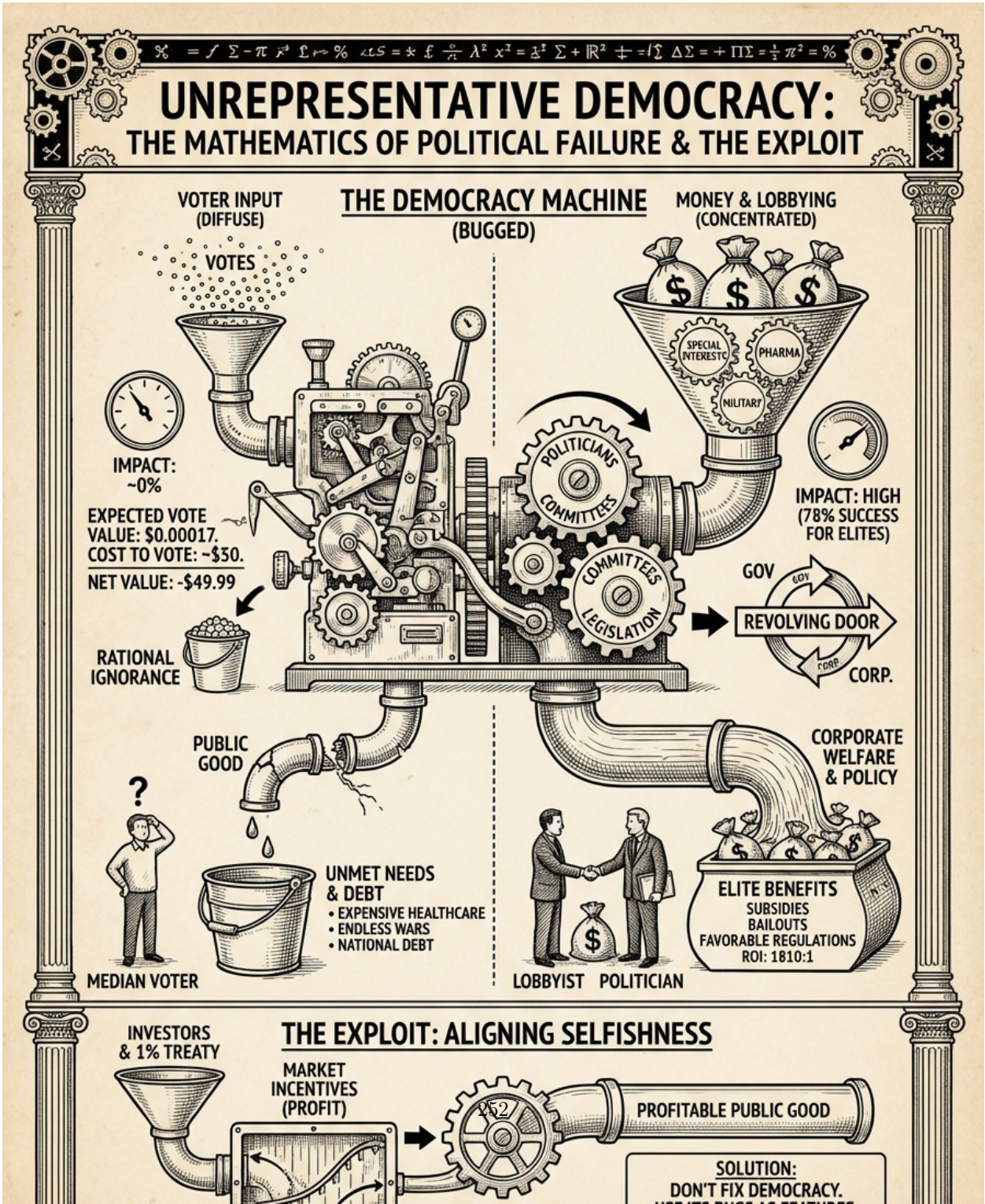
P.S. - The FDA will likely object to this chapter. Estimated response time: 12-15 years, pending Phase III review and proper documentation.

Unrepresentative Democracy



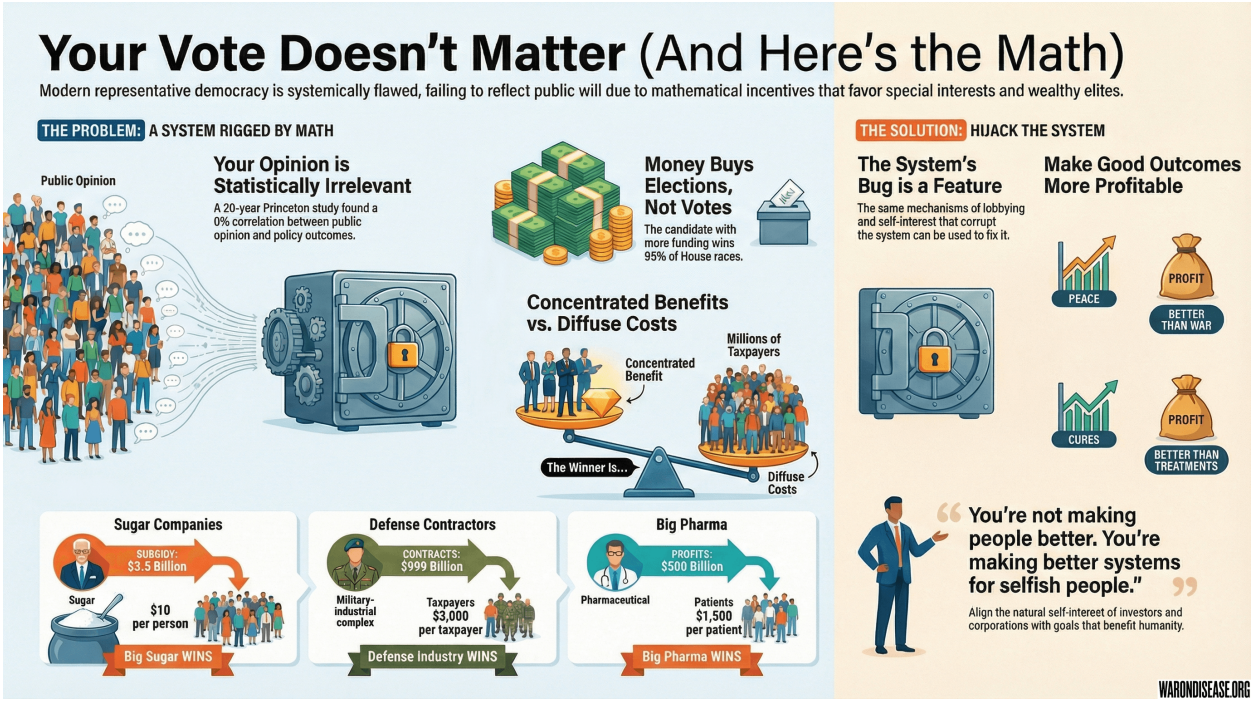


Figure 146: Unrepresentative Democracy

Here's some fun math to ruin your day:

Chance your vote decides an election: 1 in 60 million[207] Value if your candidate wins: $10,000 (in policies you prefer) Expected value of voting: $0.00017 Cost of voting (time, gas, finding parking): $50 Net value: -$49.99983

Voting is literally irrational. You have better odds of dying in a car crash on the way to vote than your vote mattering.

Yet people get really mad when you point this out.

Democracy

The Founding Fathers were smart. They created checks and balances, separation of powers, etc.

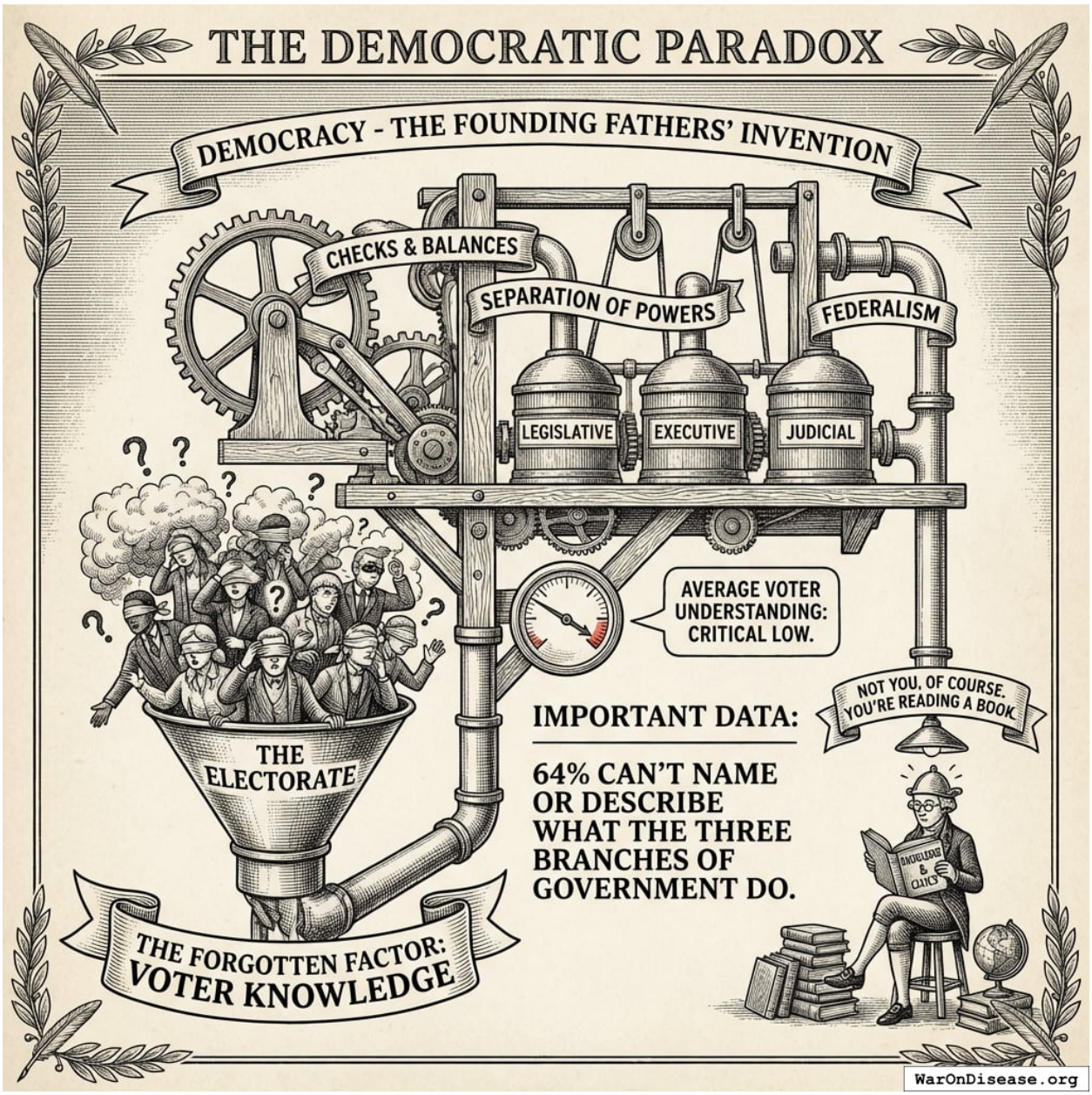


Figure 147: A visualization contrasting the three branches of government, Legislative, Executive, and Judicial, with a chart showing that 64 percent of voters are unable to identify or describe their functions.

They just forgot one thing: Voters don't know very much.

Not you, of course. You're reading a book. But the average voter? 64% can't name or describe what the three branches of government do[208].

The Rational Ignorance Problem

Here's why democracy can't fix our problems:

Cost of being informed: 100+ hours researching candidates and issues **Benefit of being informed**: Your one vote (worth $0.00017) **Rational decision**: Stay ignorant, watch Netflix

This isn't stupidity. It's math.

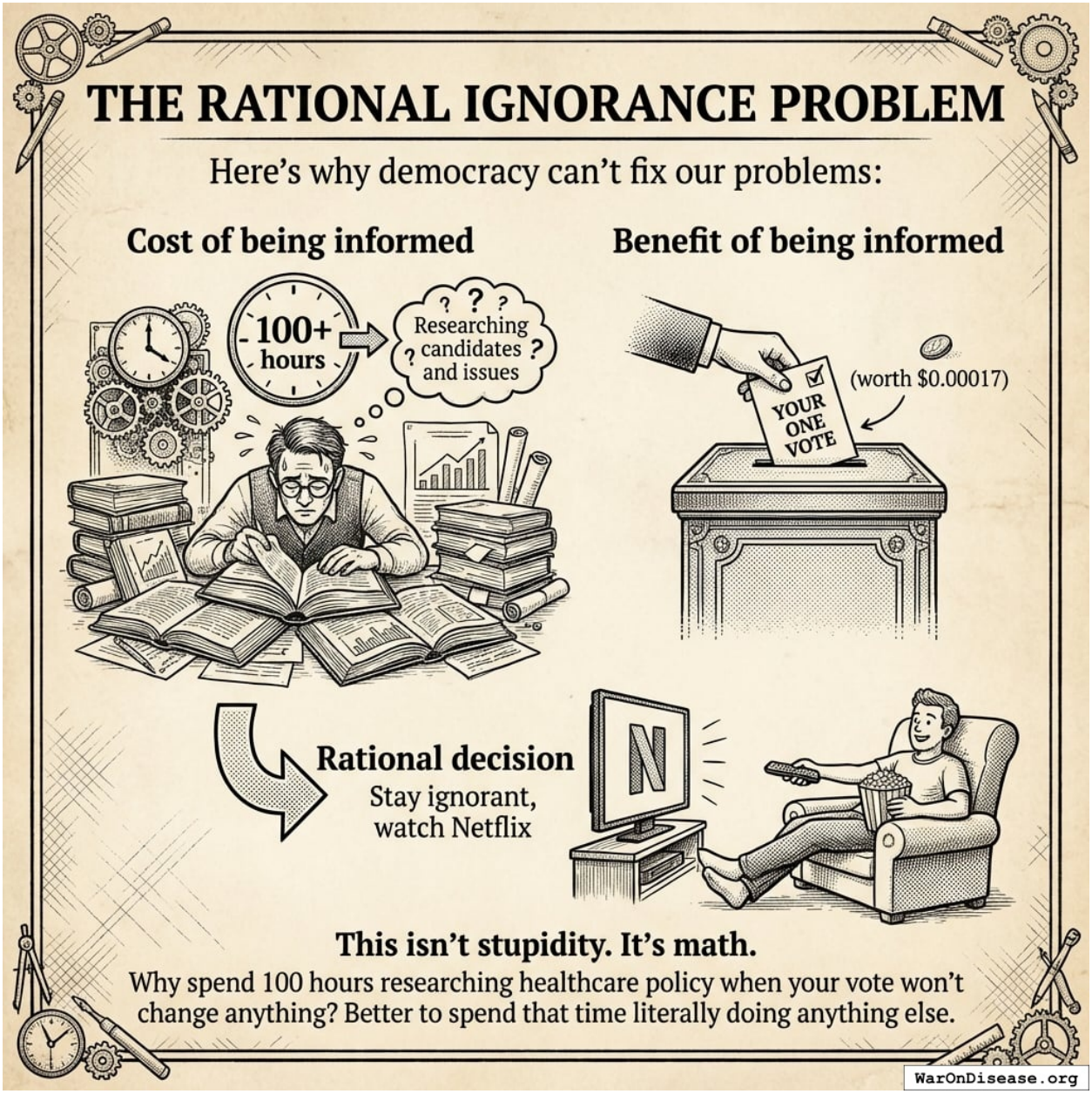


Figure 148: A cost-benefit comparison showing the high personal cost of research against the negligible impact of a single vote, leading to the logical choice of rational ignorance.

Why spend 100 hours researching healthcare policy when your vote won't change anything? Better to spend that time literally doing anything else.

What Democracy Should Look Like vs Reality

Princeton University did a study. They analyzed 1,779 policy decisions over 20 years. The correlation between what you want and what happens? **Zero. Percent.**[209]

But when economic elites want something? They get it 78% of the time[209].

You have the same political influence as your houseplant. Actually less, at least politicians pretend to care about the environment.

The chart above shows what actually happens: whether 0% or 100% of voters support a bill, it has the same ~30% chance of passing.

Here's what democracy SHOULD look like versus the reality:

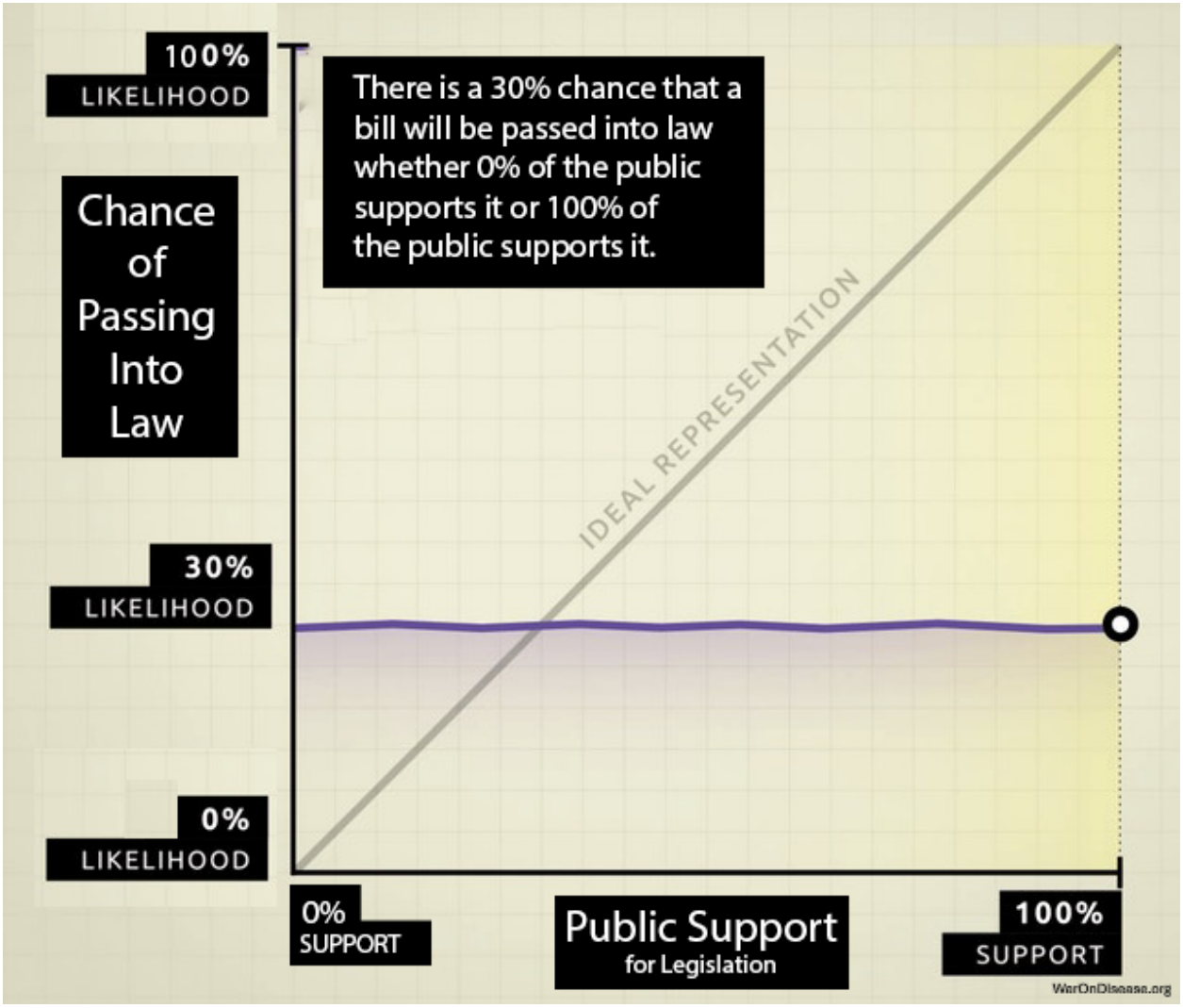


Figure 149: Comparative visualization showing expected (higher public support = higher likelihood of bill passage) versus actual (flat line showing ~30 percent passage rate regardless of support level)

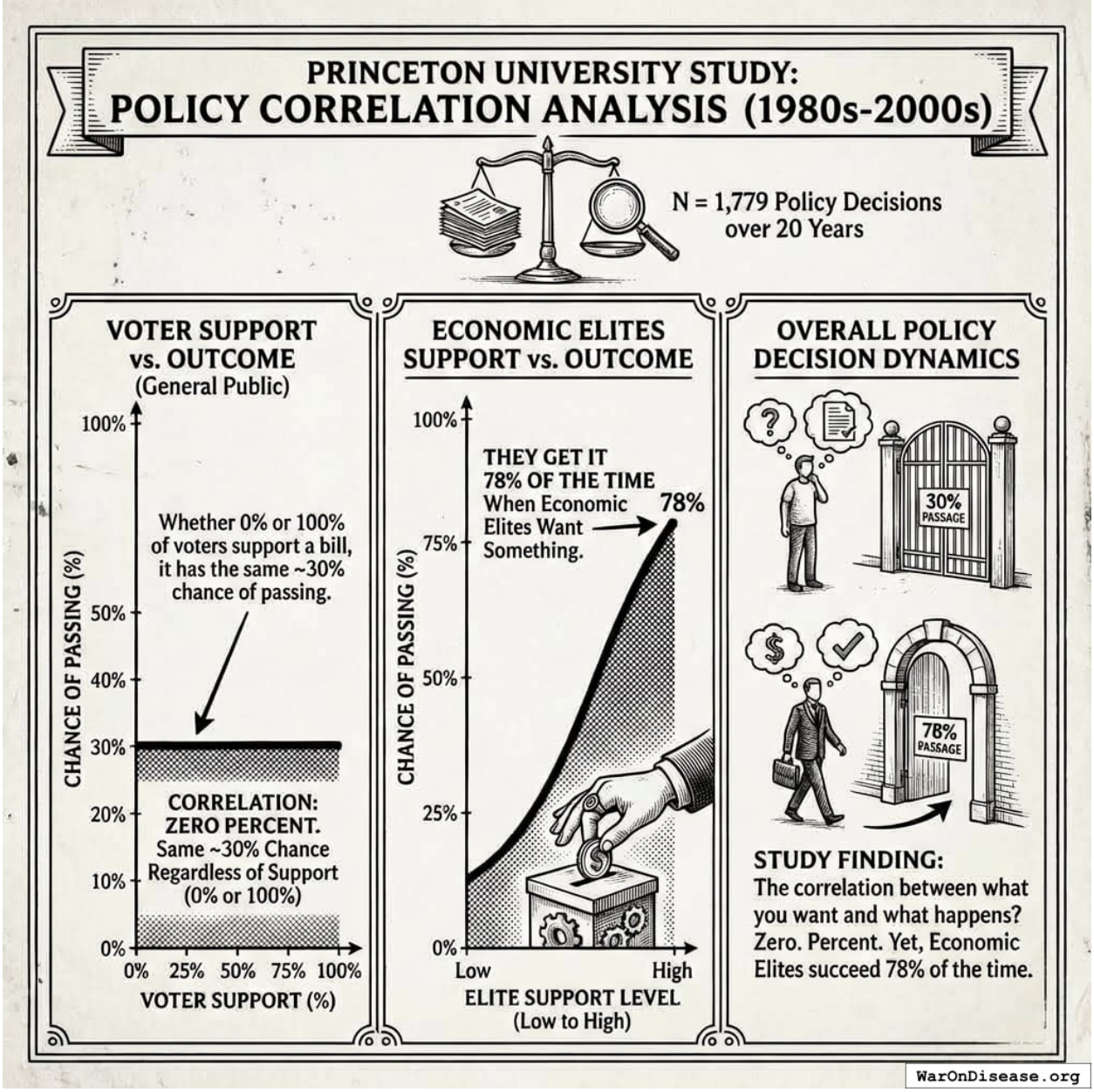


Figure 150: Comparison of the theoretical ideal of democratic responsiveness versus the reality where average voter support has a near-zero impact on policy passage probability.

The Mathematics of Political Failure

Concentrated Benefits vs. Diffuse Costs

Sugar subsidies cost Americans $3.5 billion per year[106]. That's $10 per person.

Will you spend weeks fighting to save $10? No. Will sugar companies spend millions to keep their $3.5 billion? Yes.

Guess who wins?

This pattern repeats everywhere:

- Military contractors: $999 billion concentrated benefit[210] (37% of $2.72T global spending)
- Taxpayers: $3,000 each in diffuse costs ($999B ÷ 333M Americans)
- Winner: Guess

- Pharma companies: $500 billion in concentrated profits[211]
- Patients: $1,500 each in diffuse suffering
- Winner: Not you

- Banks in 2008: $700 billion bailout (concentrated)[212]
- You: $2,100 in taxes (diffuse)
- Winner: The ones with yachts

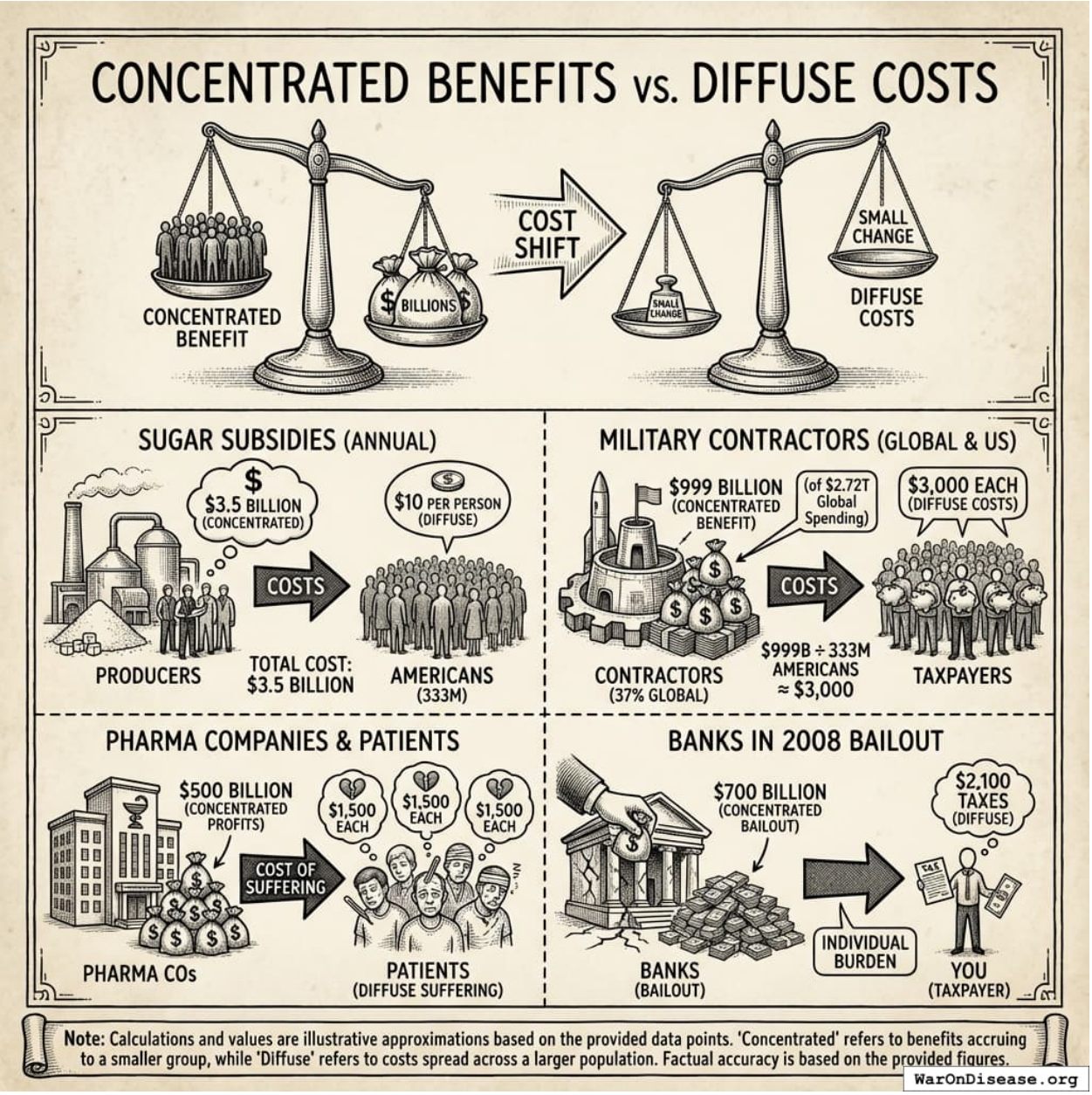


Figure 151: Visual comparison showing how small groups receive massive concentrated financial benefits while the costs are spread thinly across millions of taxpayers, illustrating the mathematical incentive for lobbying.

How Money Buys Power

Research shows[213] campaign contributions don't directly buy how politicians vote on legislation, only 1 in 4 studies support that notion.

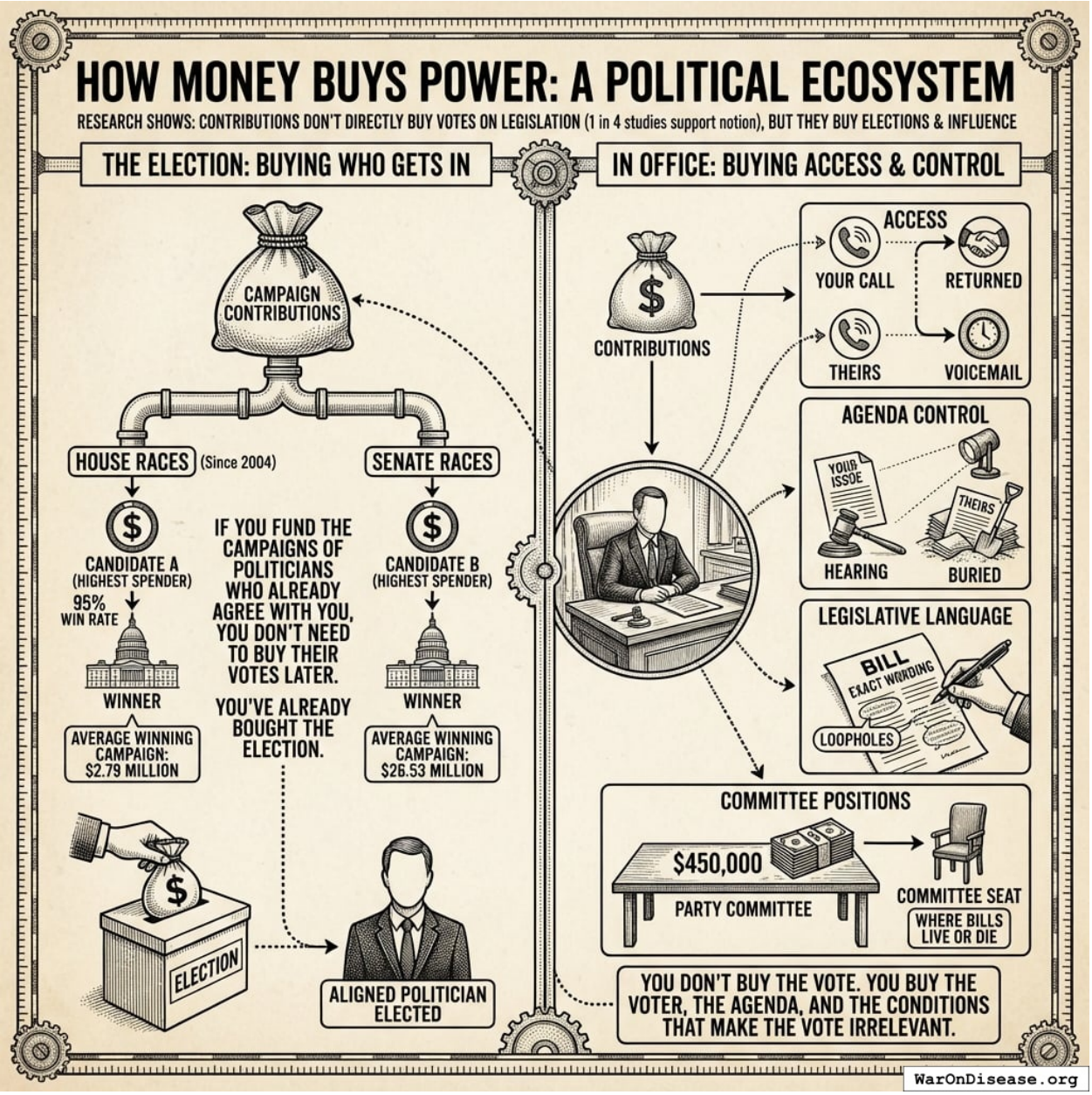


Figure 152: A visual breakdown of how campaign spending correlates with election success and the specific ways financial contributions translate into legislative influence.

But they do something far more effective: **They buy which politicians get elected in the first place.**

The numbers are stark:

- 95% of House races since 2004[213]: Won by the highest spender
- Average winning House campaign: $2.79 million[213]
- Average winning Senate campaign: $26.53 million[213]

If you fund the campaigns of politicians who already agree with you, you don't need to buy their votes later. You've already bought the election.

And for the ones already in office, contributions buy something more subtle than votes:

- **Access**: Your call gets returned, theirs goes to voicemail
- **Agenda control**: Your issue gets a hearing, theirs gets buried
- **Legislative language**: The exact wording that creates loopholes
- **Committee positions**: $450,000 to party committees[213] buys a seat where bills live or die

You don't buy the vote. You buy the voter, the agenda, and the conditions that make the vote irrelevant.

The Lobbying ROI: 1,810:1 Returns

The most profitable investment in America isn't stocks or real estate. It's bribing politicians:

- Disease advocacy groups spend: $100 million on lobbying[214]
- They get: $1.8 billion in increased funding[214]
- ROI: 1,810:1

Meanwhile:

- Breast cancer: Great lobbyists = massive funding
- Heart disease: Kills more people, worse lobbyists = less funding
- Rare pediatric diseases: No lobbyists = no funding

Democracy doesn't allocate resources by need. It allocates by who can afford the best K Street firm.

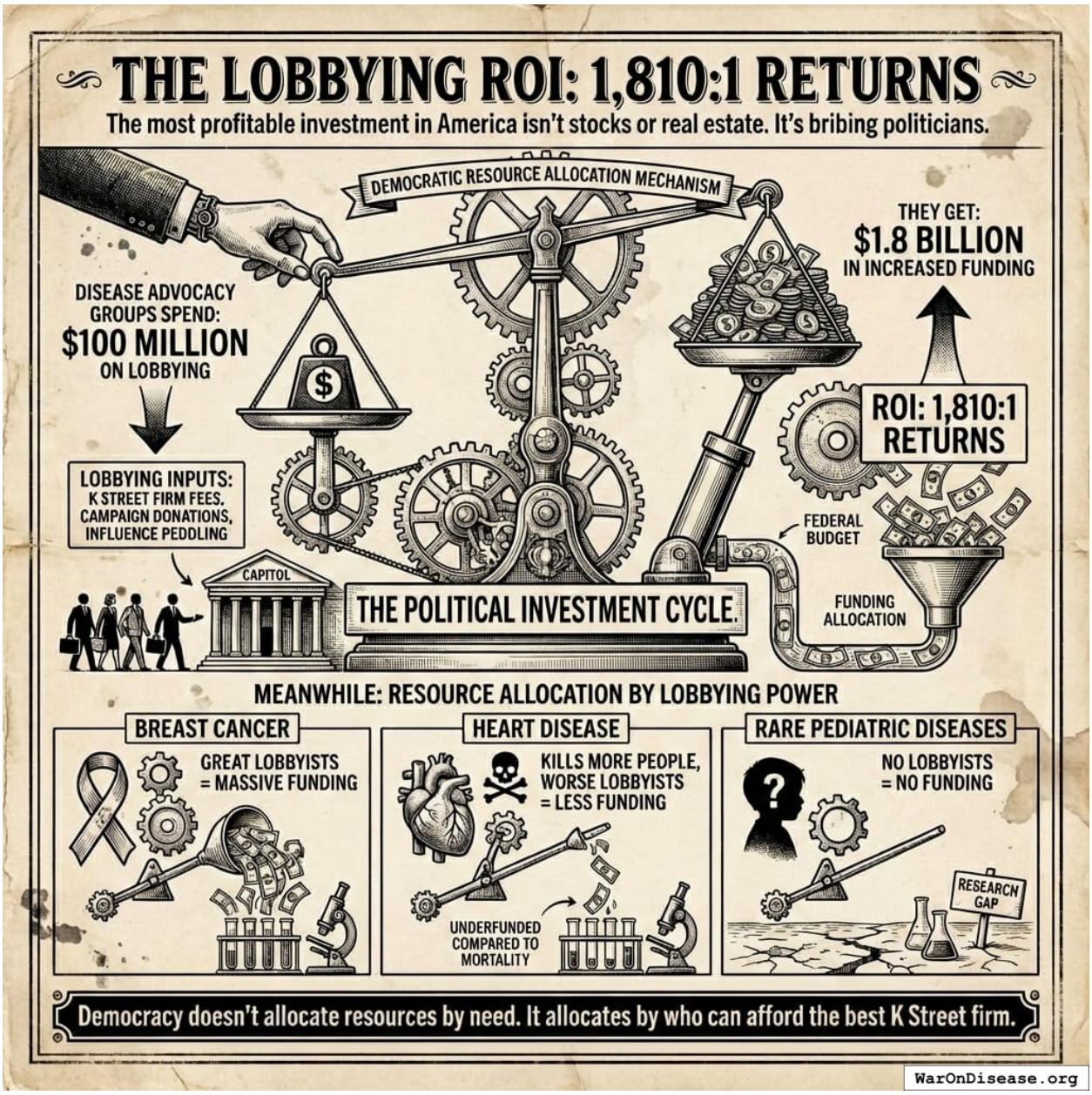


Figure 153: A visual comparison showing the correlation between lobbying spend and government funding across different diseases, highlighting the massive 1,810:1 return on investment.

Why Nothing Ever Changes: A Mathematical Proof

- Number of Americans who want lower drug prices: 330 million
- Money they contribute to this cause: $0
- Number of pharma executives who want high drug prices: 1,000
- Money they contribute: $4.88 billion

$1{,}000 > 330{,}000{,}000$ (when you multiply by money)

That's not corruption. That's math.

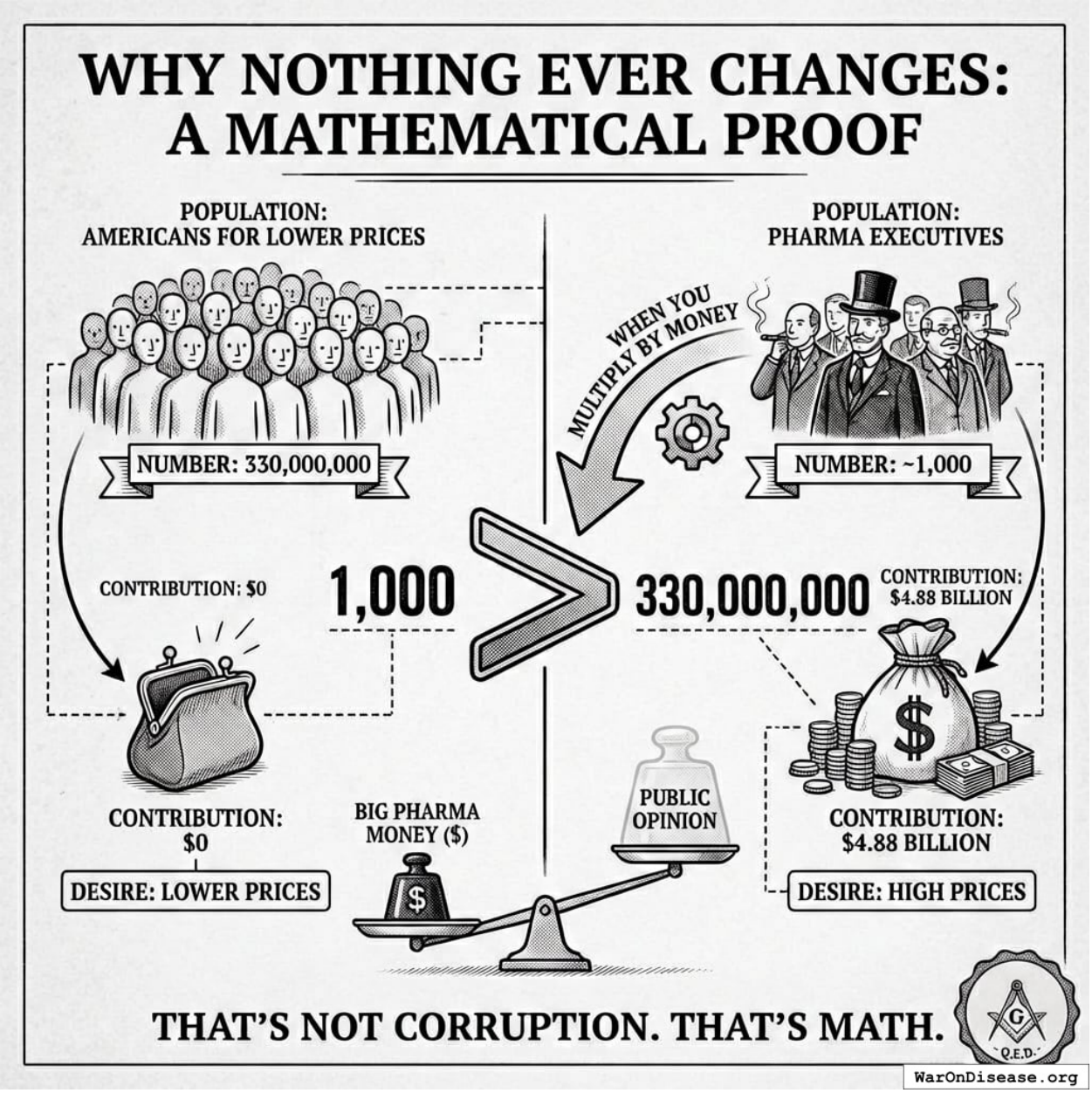


Figure 154: A comparison showing how 1,000 executives with billions of dollars exert more influence than 330 million citizens with no financial contribution, illustrating a power imbalance.

Why Politicians Don't Care About You (With Math!)

A politician needs three things:

1. Votes (from idiots)
2. Money (from corporations)
3. Media coverage (from other corporations)

You provide 1/150,000,000th of item #1. Corporations provide 100% of items #2 and #3.

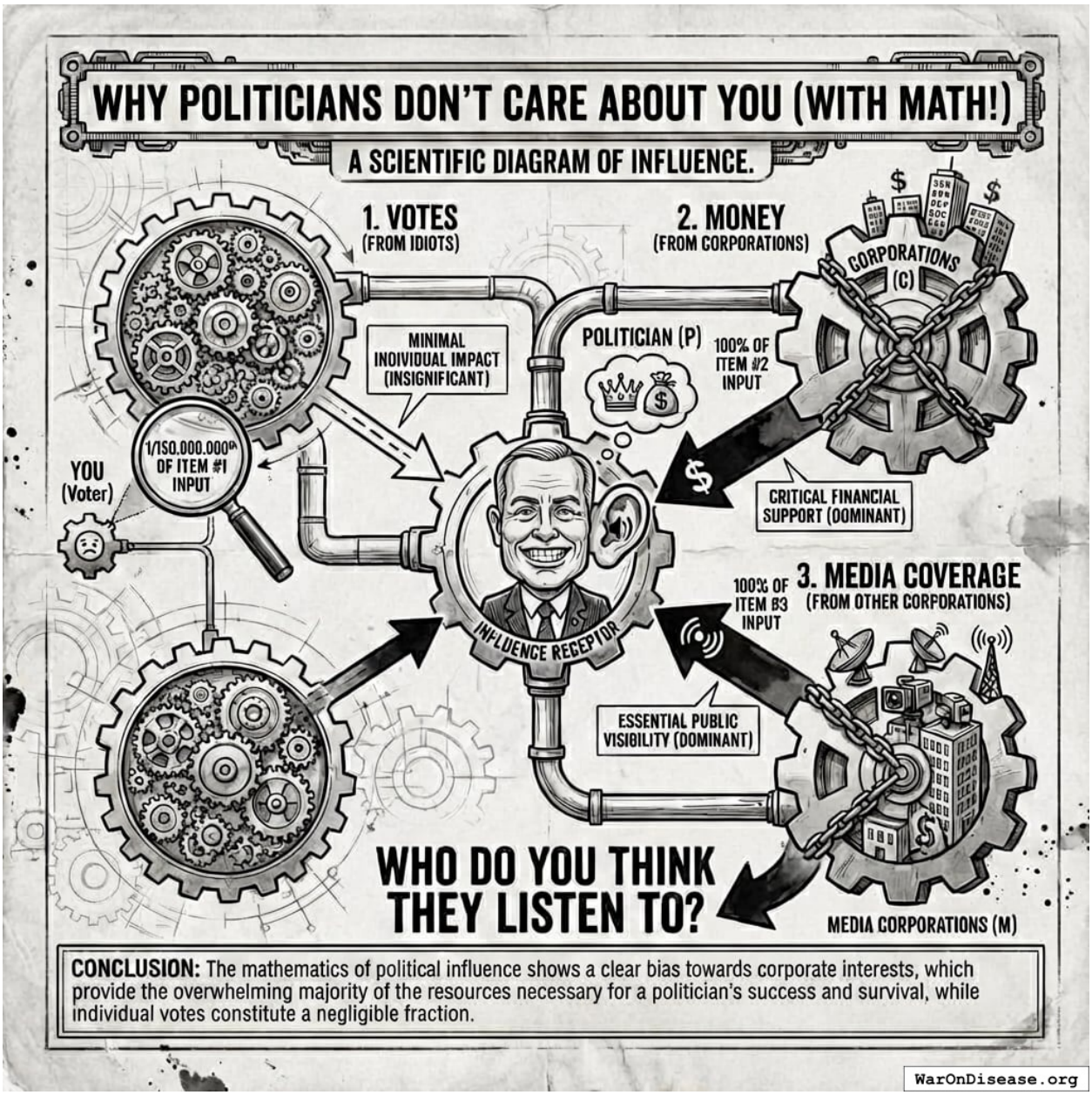


Figure 155: A scale or comparison chart illustrating the massive disparity between an individual's single vote and the total corporate control over campaign funding and media coverage.

Who do you think they listen to?

The Iron Law of Oligarchy

Every democratic organization eventually becomes an oligarchy. It's not a conspiracy. It's math.

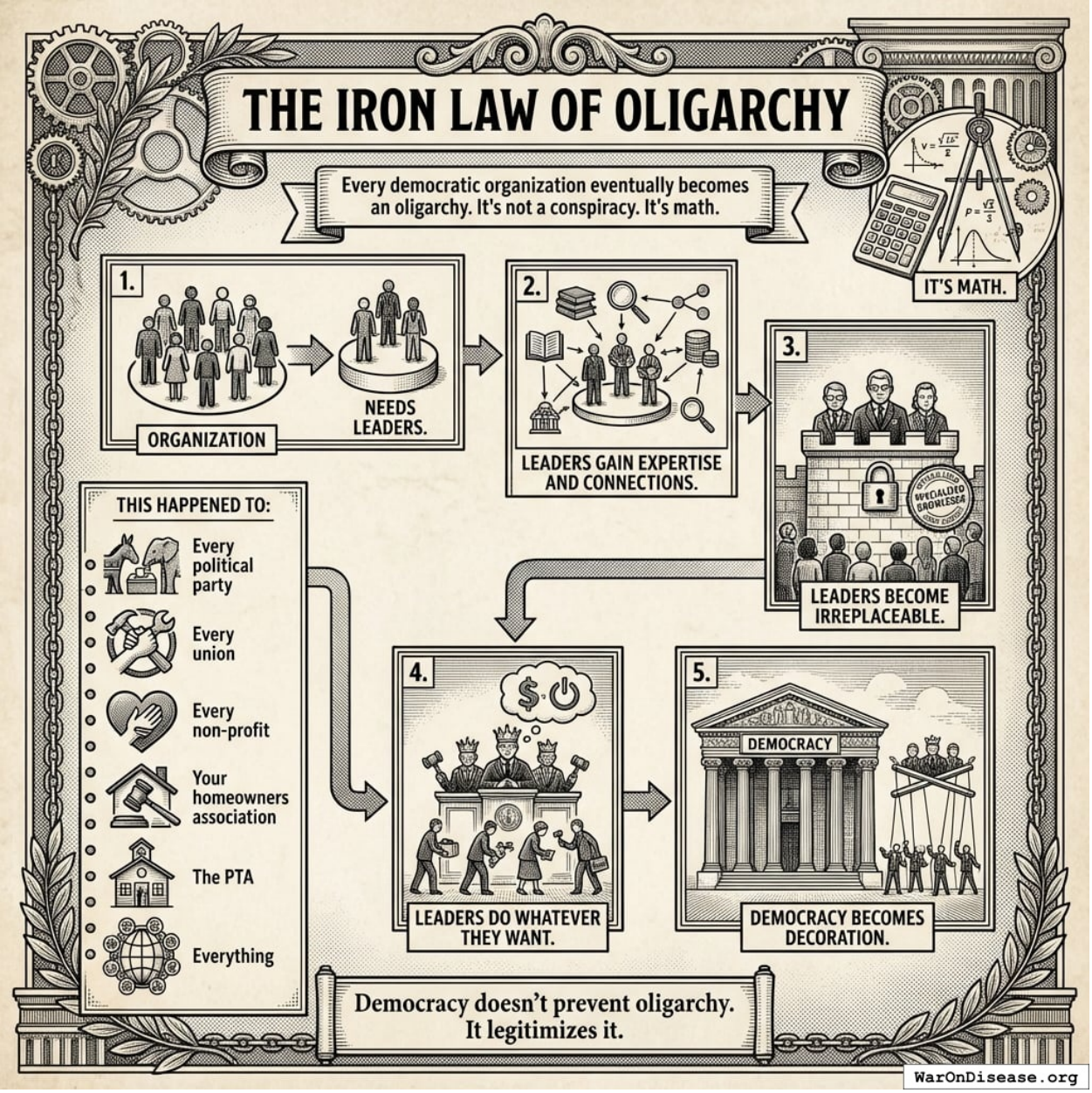


Figure 156: A flowchart showing the progression from the need for leadership to the inevitable formation of an oligarchy within a democratic organization.

Here's how:

1. Organization needs leaders
2. Leaders gain expertise and connections
3. Leaders become irreplaceable
4. Leaders do whatever they want
5. Democracy becomes decoration

This happened to:

- Every political party
- Every union

- Every non-profit
- Your homeowners association
- The PTA
- Everything

Democracy doesn't prevent oligarchy. It legitimizes it.

Your Congressman: A Prostitute with a Pension

Average time congressmen spend on:

- Fundraising: 4 hours/day[215]
- Reading bills: 0 hours/day
- Actual governing: Whatever's left

They don't even read what they vote on. The PATRIOT Act: 342 pages, voted on 45 minutes after release[216]. The Affordable Care Act: 2,700 pages, "we have to pass it to see what's in it."[217]

These people control nuclear weapons.

Sleep tight.

Congressional Committees: Available for Purchase

Committees are where real power lives. They control which bills live or die, what gets funded, and who gets regulated. No committee seat = no power.

So naturally, both parties sell them[218]:

Position	Democrats (DCCC)	Republicans (NRCC)	Why It Costs This Much
House Speaker	$31 million	$20 million	Controls entire agenda
Ways & Means Chair	$1.8 million	$1.2 million	All tax laws start here
Appropriations Chair	$1.8 million	$1.2 million	Controls $1.7 trillion budget
Energy & Commerce	$1.8 million	$1.2 million	Healthcare + Wall Street
Regular Committee	$500K-1M	$875,000	Still beats irrelevance
Basic Member	$150,000+	Varies	Entry fee to play

The price correlates with power. Ways and Means writes tax code affecting trillions. Appropriations decides who gets government money. Energy and Commerce oversees healthcare (17% of GDP) and Wall Street.

Don't pay? Your bills die. Your amendments get ignored. There's even a "giant wall of shame" displaying who hasn't paid their dues[218].

This is why congressmen spend 4 hours a day fundraising. They're not campaigning, they're paying rent on their committee seats. The people writing your healthcare laws literally bought their positions from the same industries.

The 4-Year Attention Span: Democracy Has ADHD

- Politician promises to "cure cancer"

- Gets elected
- Creates blue-ribbon commission
- Commission recommends more committees
- Next election happens
- New politician promises to “cure cancer”
- Repeat until heat death of universe

Democracy has the attention span of a goldfish on cocaine.

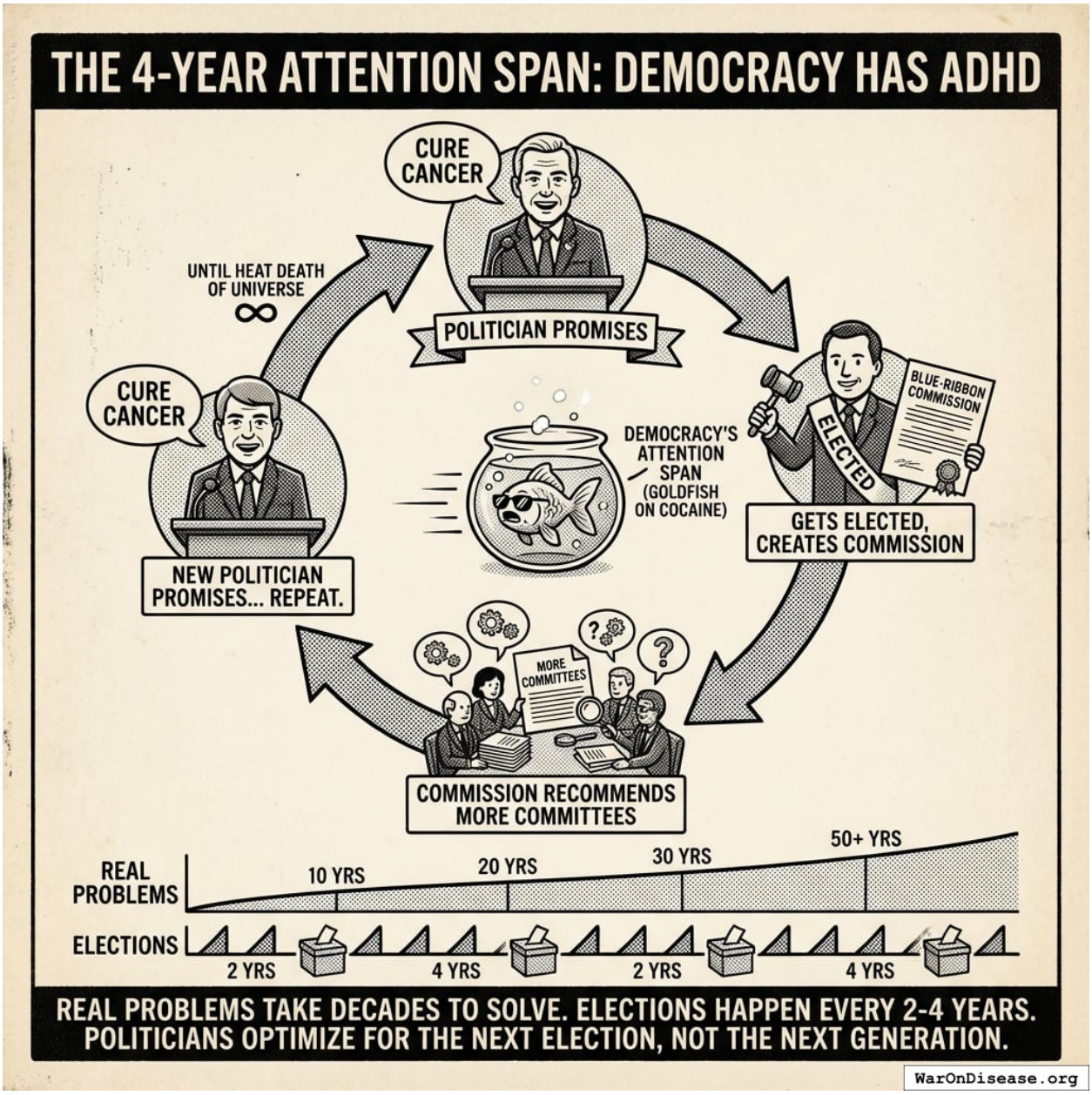


Figure 157: A cyclical flowchart illustrating the repetitive loop of election promises, bureaucratic stalling, and subsequent elections that hinders long-term progress.

Real problems take decades to solve. Elections happen every 2-4 years. Politicians optimize for the next election, not the next generation.

Why No One Can Fix This

Every four years, someone promises to "fix Washington."

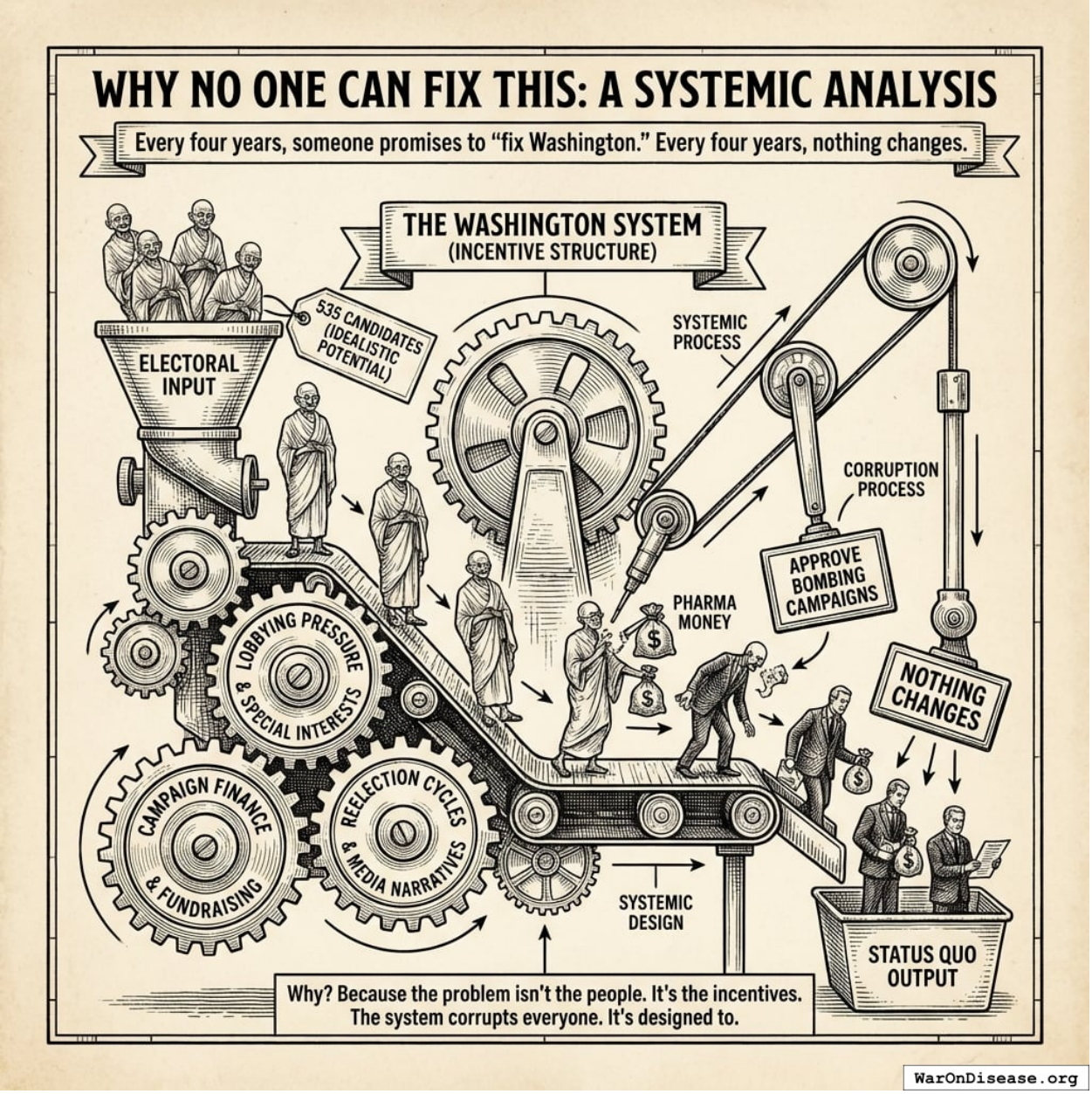


Figure 158: A conceptual diagram showing how systemic incentives like corporate funding and institutional pressure act on individuals to produce specific political outcomes regardless of personal character.

Every four years, nothing changes.

Why? Because the problem isn't the people. It's the incentives.

You could elect 535 clones of Gandhi and within two years they'd be taking pharma money and approving bombing campaigns. The system corrupts everyone. It's designed to.

The Voting Paradox

Democracy assumes voters want what's best for society.

Reality:

- Farmers vote for farm subsidies (bad for everyone else)
- Old people vote for Social Security (paid by young people)
- Rich people vote for tax cuts (paid by poor people)
- Poor people vote for welfare (paid by middle class)
- Everyone votes to steal from everyone else

It's not a democracy. It's a circular robbery.

Special Interest Groups: Democracy's Real Winners

Number of voters: 240 million[128] Number who care about sugar subsidies: 0 Number of sugar companies: 10 Number who care about sugar subsidies: 10 Winner: Big Sugar

This repeats for every industry:

- Corn: 4,000 farmers beat 330 million consumers
- Defense: 5 contractors beat 330 million taxpayers
- Pharma: 50 companies beat 330 million patients

In democracy, the minority always beats the majority. The concentrated always beat the diffuse. The organized always beat the disorganized.



Figure 159: A visual comparison showing how small, concentrated interest groups exert more political power than the large, diffuse general public.

That's not a bug. It's the operating system.

Why Your Political Tribe Is Also Worthless

Republicans say they want small government. Republican presidents increase spending.

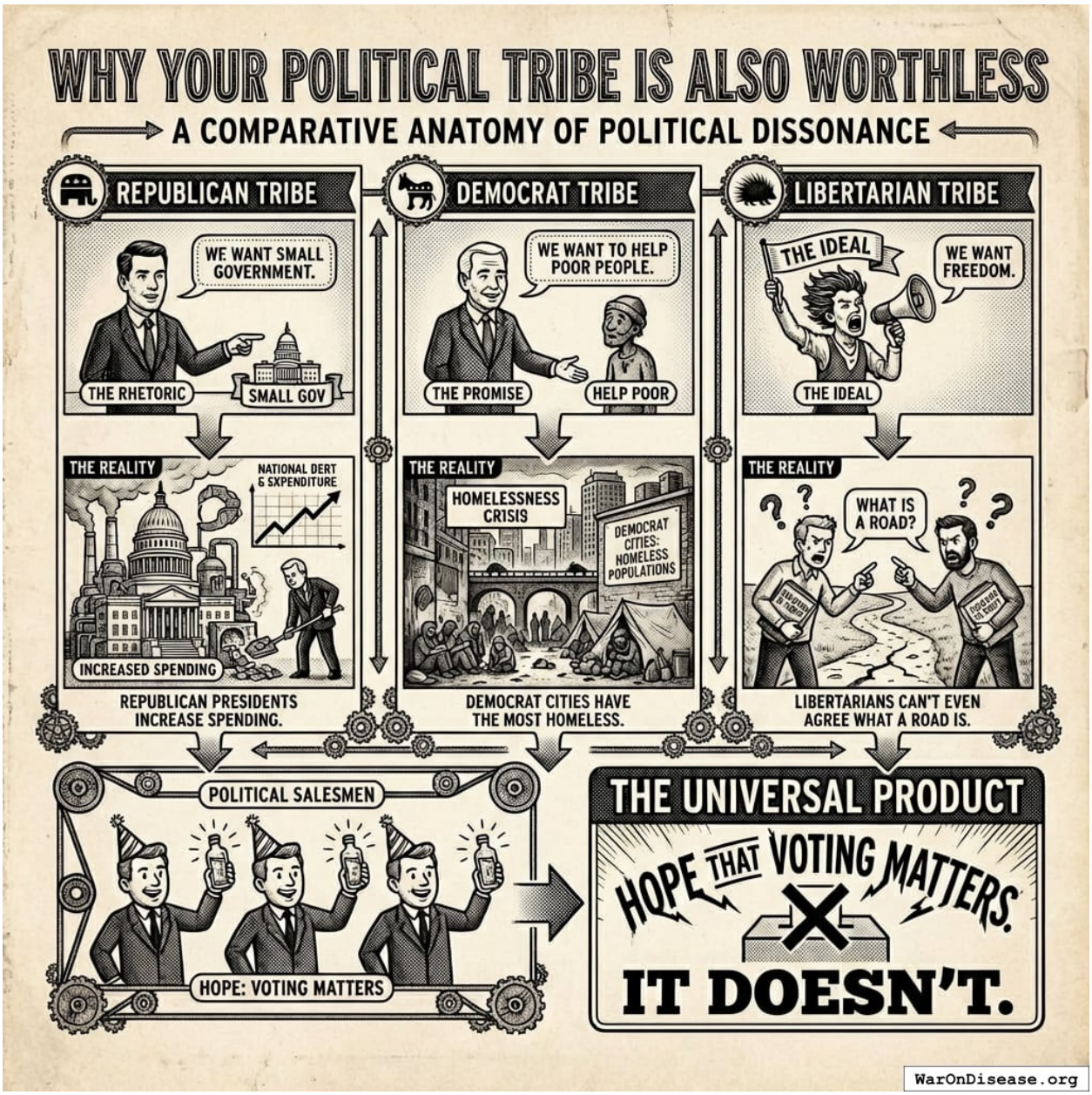


Figure 160: A comparison showing the contradictions between the stated ideals and observed realities of Republicans, Democrats, and Libertarians.

Democrats say they want to help poor people. Democrat cities have the most homeless.

Libertarians say they want freedom. Libertarians can't even agree what a road is.

They're all selling the same product: Hope that voting matters.

It doesn't.

The Solution Democracy Can't Provide

Democracy can't solve coordination problems. It creates them.

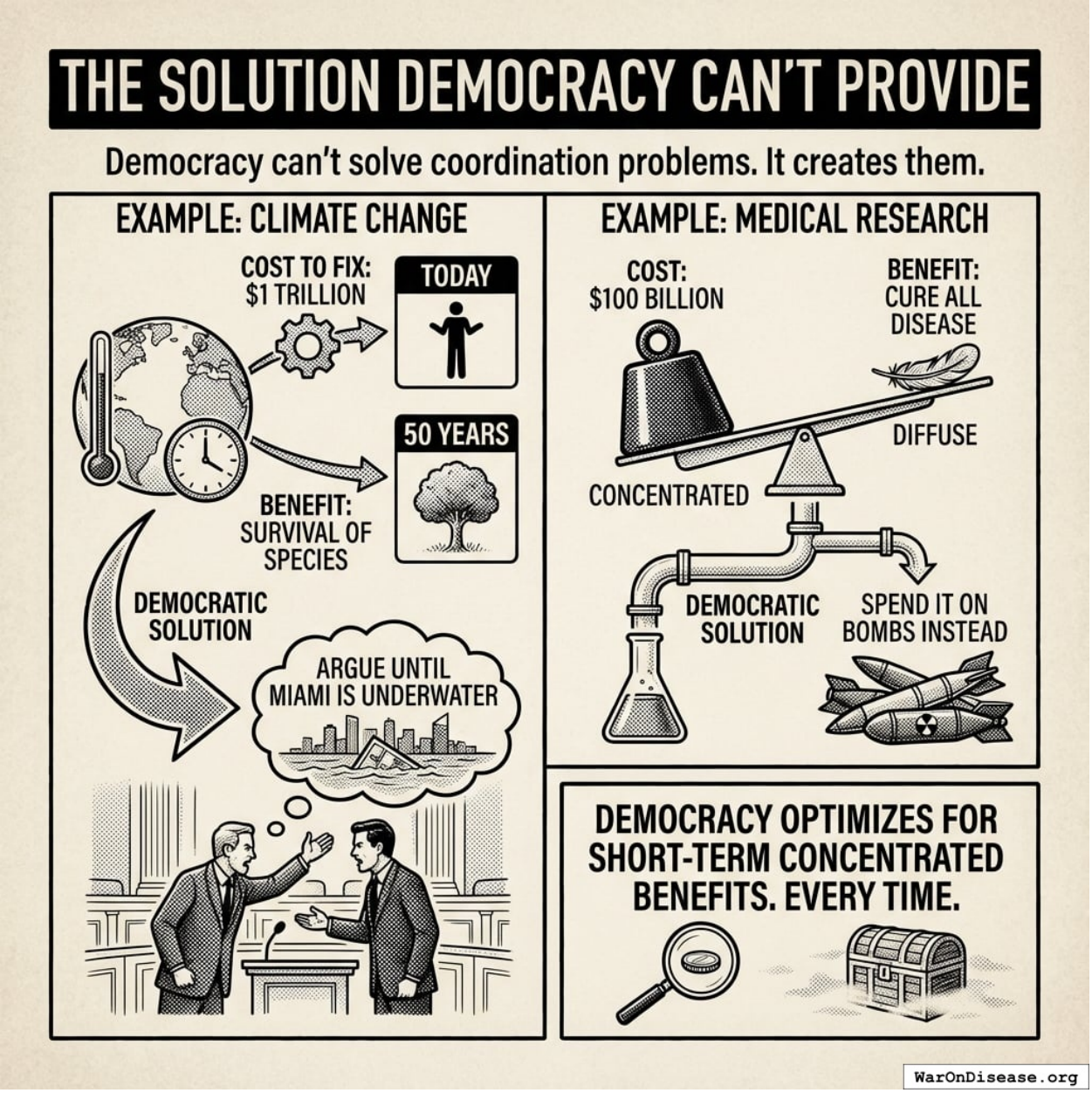


Figure 161: A comparison chart showing the trade-off between immediate costs and long-term benefits, illustrating how democratic incentives favor short-term spending over future survival.

Example: Climate change

- Cost to fix: $1 trillion
- Benefit: Survival of species
- Problem: Benefits are in 50 years, costs are today
- Democratic solution: Argue about it until Miami is underwater

Example: Medical research

- Cost: $100 billion
- Benefit: Cure all disease
- Problem: Benefits are diffuse, costs are concentrated

- Democratic solution: Spend it on bombs instead

Democracy optimizes for short-term concentrated benefits. Every time.

Public Choice Theory: The Nobel Prize for Cynicism

In 1986, James Buchanan won the Nobel Prize in Economics[219] for proving what everyone already knew:

People don't suddenly become angels when they work for the government.

This is Public Choice Theory: bureaucrats, politicians, and regulators are **just as selfish** as everyone else. They just have better PR.

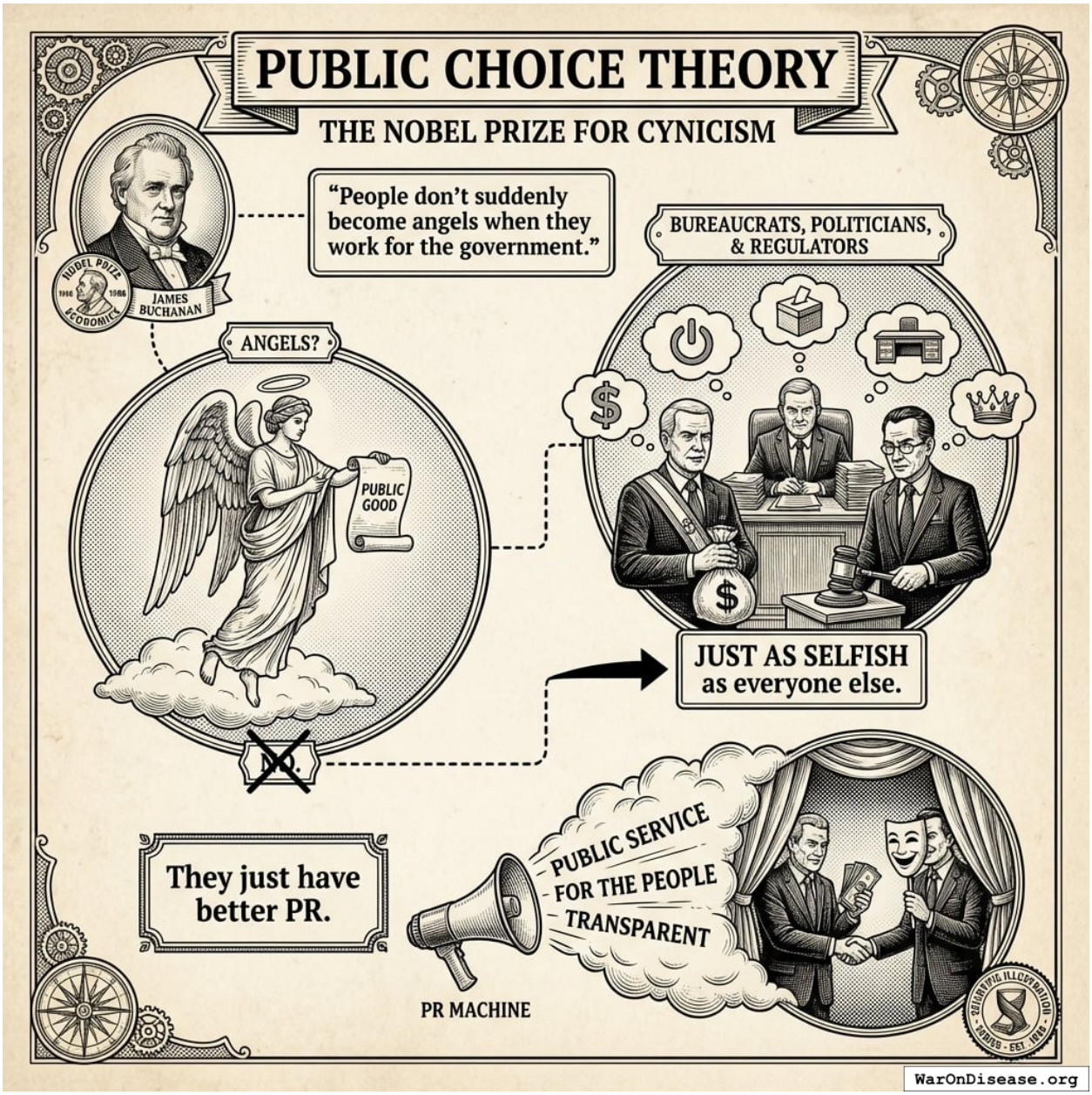


Figure 162: A conceptual comparison showing that individuals in both the private sector and public sector are driven by the same self-interest motives.

What They Actually Maximize

Actor	Should Maximize	Actually Maximizes	Result
NIH	Cures	Grants awarded	No cures
FDA	Lives saved	Avoiding lawsuits	Deadly delays
Congress	Voter welfare	Campaign donations	Corporate welfare
Pharma	Health outcomes	Recurring revenue	Chronic disease preferred
Defense Contractor	National security	Government contracts	Endless wars

Nobody in the system is incentivized to cure disease. Or end war.

The Libertarian Paradox

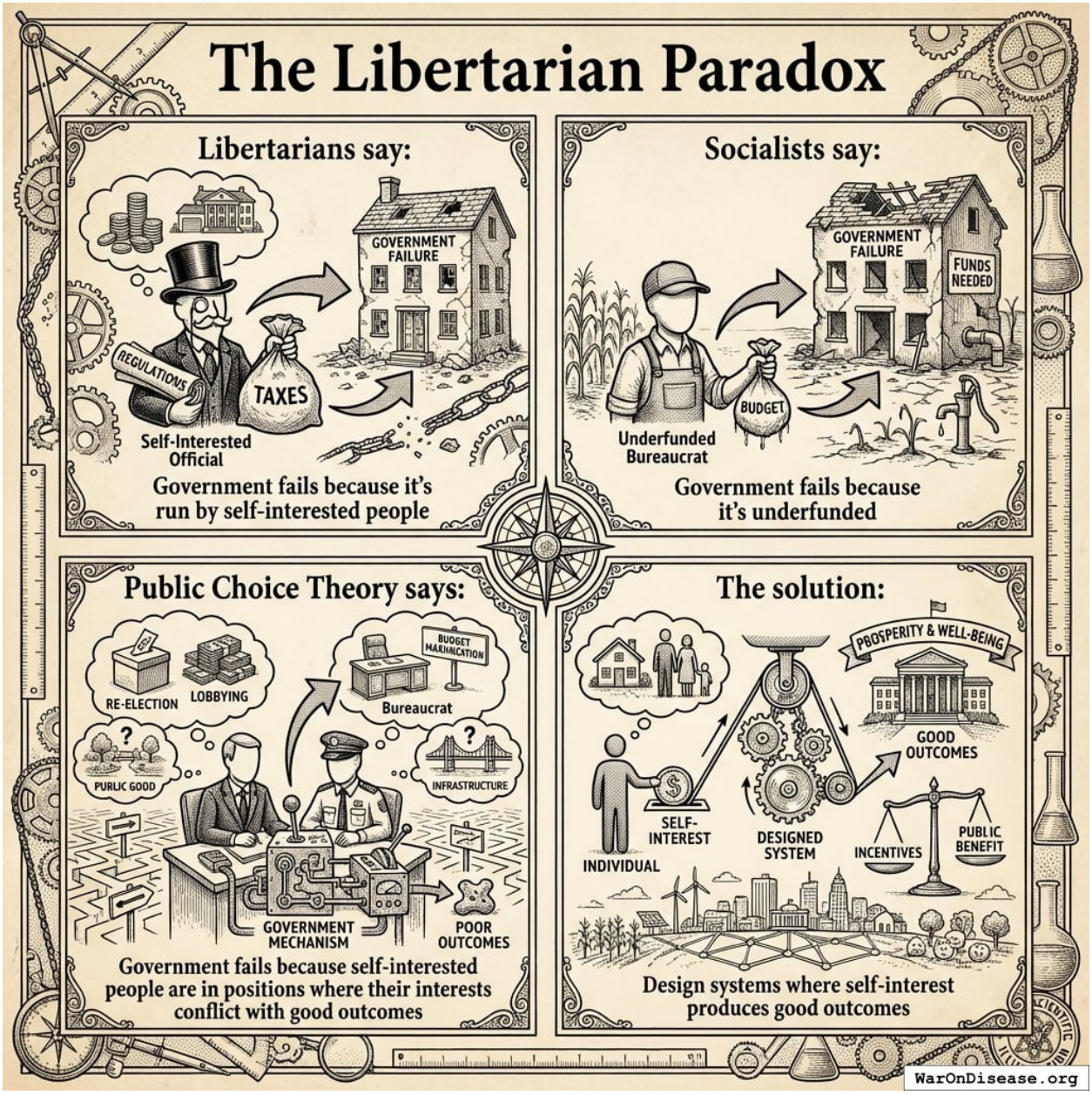


Figure 163: A comparison of Libertarian, Socialist, and Public Choice Theory perspectives on government failure, concluding with a solution focused on system design.

Libertarians say: Government fails because it's run by self-interested people

Socialists say: Government fails because it's underfunded

Public Choice Theory says: Government fails because self-interested people are in positions where their interests conflict with good outcomes

The solution: Design systems where self-interest produces good outcomes

Why This Is Actually Good News

Democracy can't fix these problems. But markets can.



Figure 164: A comparison showing the difficulty of influencing 240 million voters in a democratic system versus the efficiency of aligning 1,000 investors through market profit incentives.

Markets don't care if voters are stupid. Markets don't care if politicians are corrupt. Markets care about one thing: profit.

So make the right thing profitable.

That's what a 1% treaty does. It doesn't try to fix democracy. It bypasses it entirely.

Instead of convincing 240 million voters to be smart (impossible), you convince 1,000 investors to be greedy

(automatic).

Why This Is Liberating

You don't need to:

- Find virtuous leaders
- Hope politicians care
- Wait for bureaucrats to change
- Convince anyone to be less selfish

You just need to **align their selfishness with your goals**.

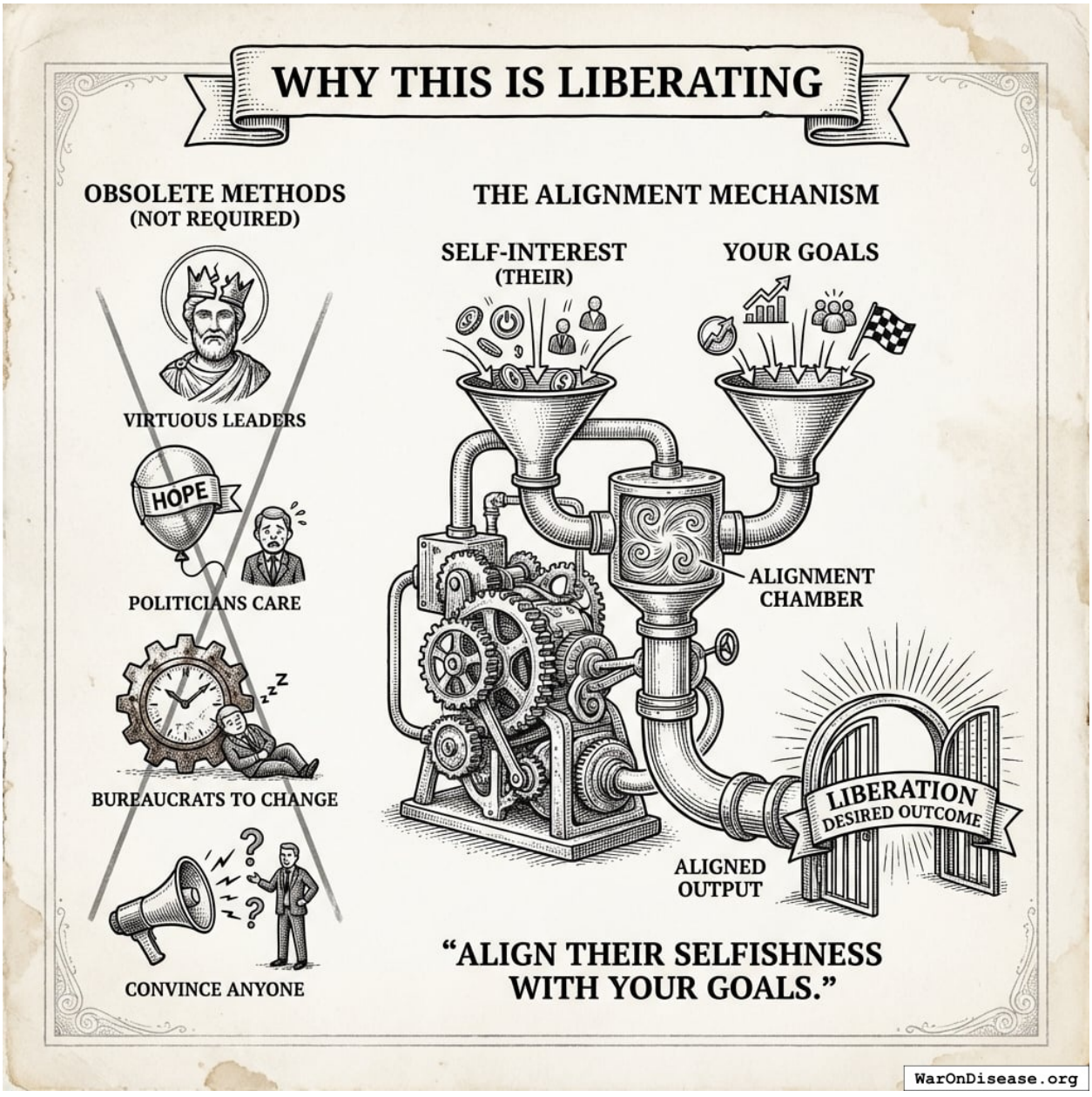


Figure 165: A conceptual diagram showing the shift from waiting for external virtue to actively aligning selfish interests with personal objectives.

Solution

Democracy fails because:

- Voters are rationally ignorant
- Politicians follow incentives
- Special interests concentrate benefits
- Costs are diffused to everyone

A 1% treaty solution:

- Don't need informed voters (investors do the math)
- Create better incentives (make health profitable)
- Concentrate benefits for reform (VICTORY Incentive Alignment Bonds)
- Diffuse costs to military budget (they won't notice 1%)

You're using democracy's bugs as features.

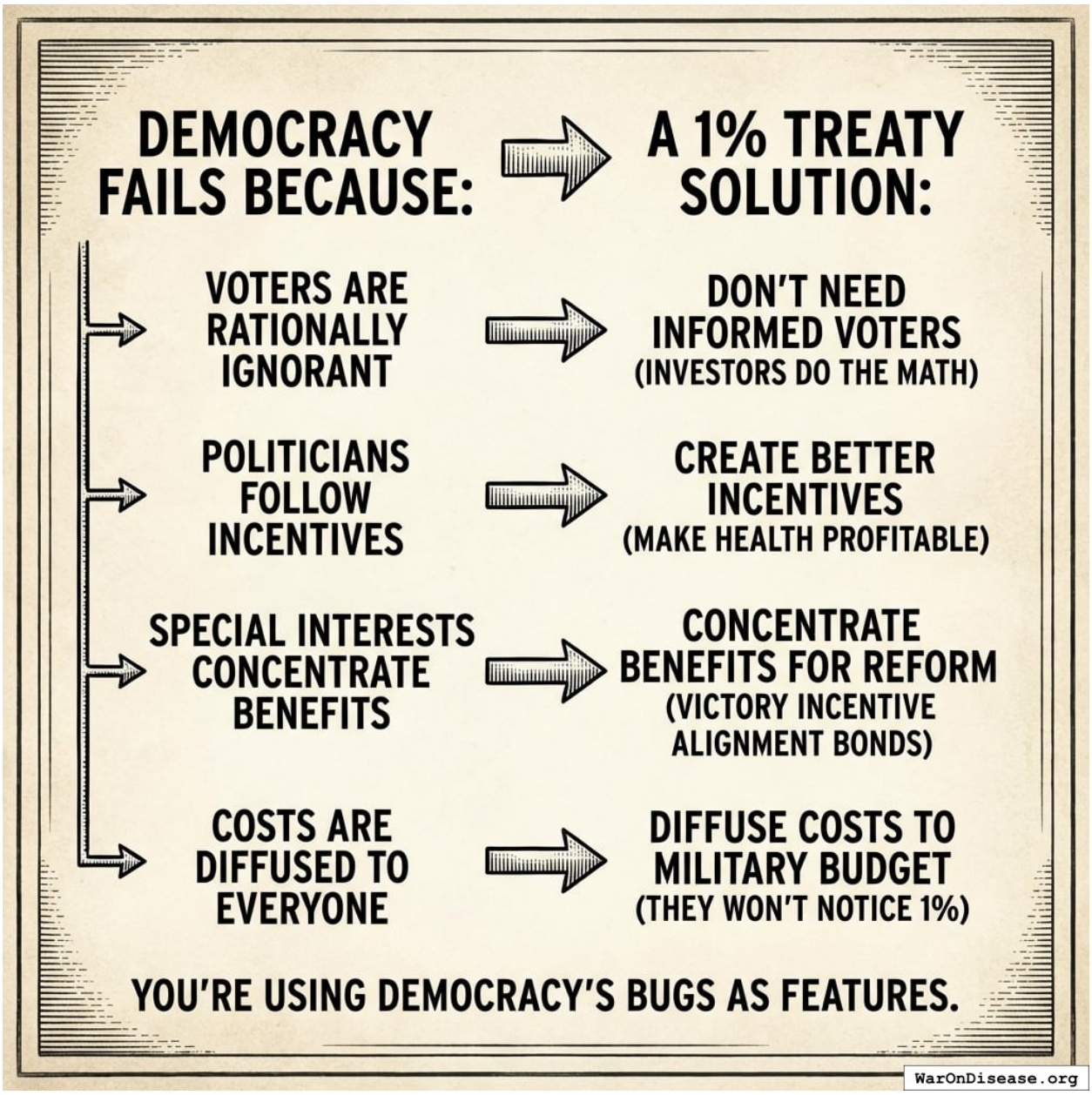


Figure 166: A comparison diagram mapping the systemic failures of traditional democracy to the specific mechanisms of the 1 percent treaty solution that repurpose those 'bugs' as features.

Your Choice

Option A: Keep voting and hope it matters this time (it won't)

Option B: Accept that democracy is broken and use market incentives instead

The Founding Fathers were geniuses, but they didn't anticipate:

- Television
- The internet
- Nuclear weapons
- Global pandemics

- Voters who think vaccines cause autism

Democracy made sense in 1789. Today, it's a cargo cult.

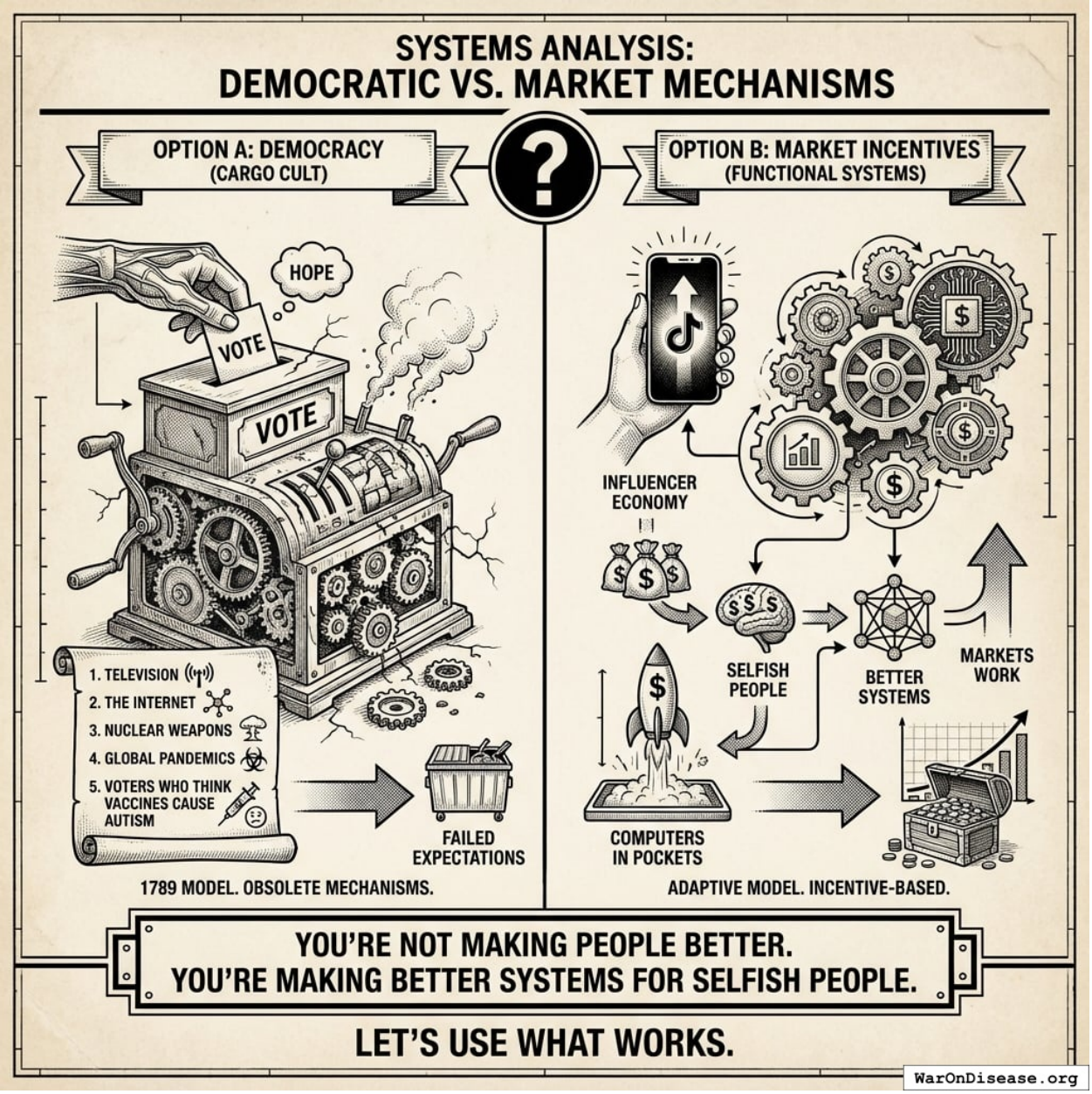


Figure 167: A side-by-side comparison contrasting a traditional democratic model based on virtuous voting with a market-based system designed to leverage individual self-interest.

But markets? Markets turned feudal peasants into TikTok influencers. Markets put computers in our pockets more powerful than what sent men to the moon. Markets work.

You're not making people better. You're making better systems for selfish people.

And since everyone's selfish, those systems will actually work.

Let's use what works.

A Brief History of Human Decision-Making (Spoiler: It's Bad)

Democracy is the worst form of government, except for all the others[220].

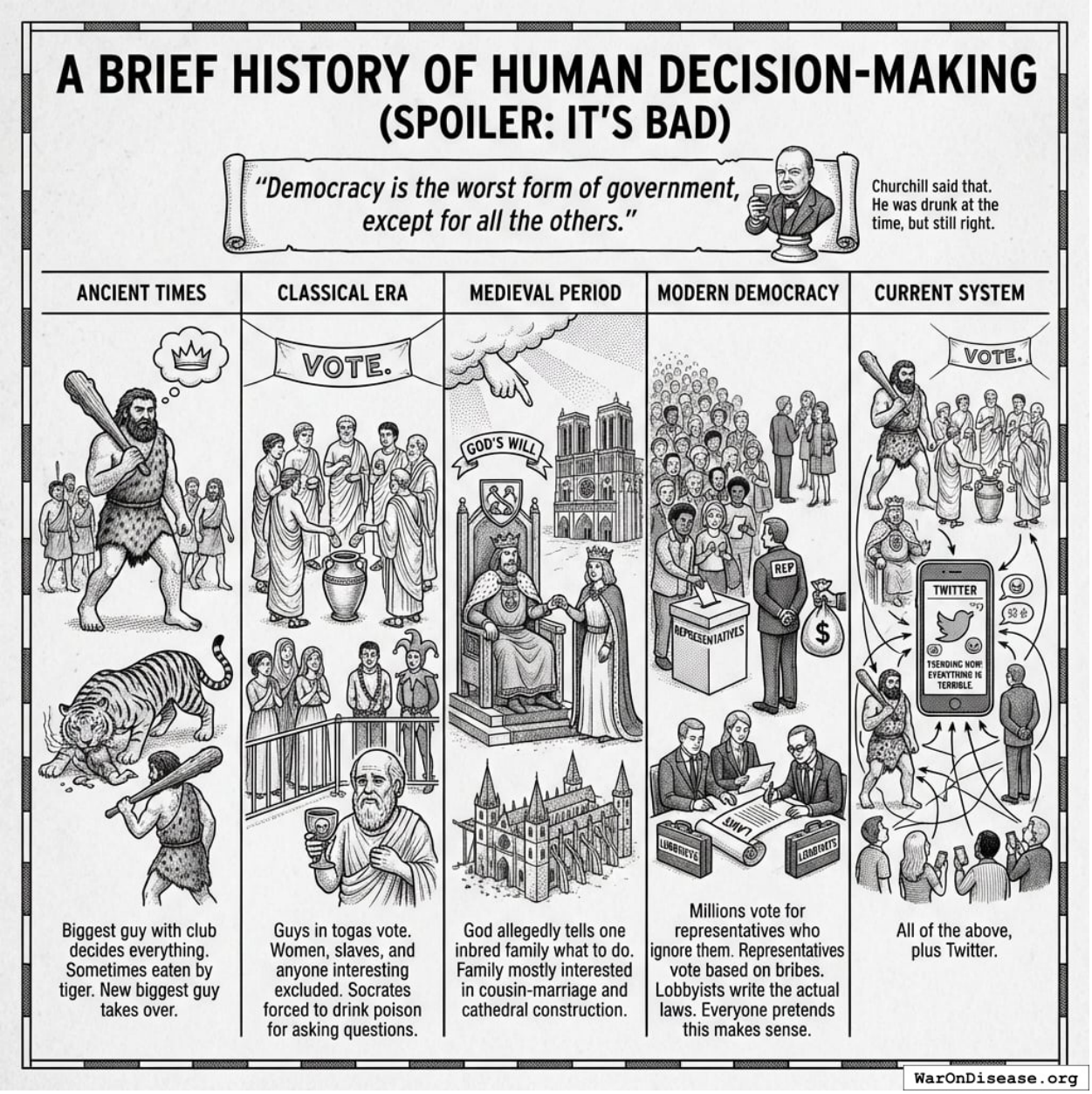


Figure 168: A satirical timeline showing the evolution of human decision-making from primitive physical force to modern digital complexity and lobbying.

Churchill said that. He was drunk at the time, but still right.

Here's how humanity currently makes decisions:

1. **Ancient Times**: Biggest guy with club decides everything. Sometimes eaten by tiger. New biggest guy takes over.
2. **Classical Era**: Guys in togas vote. Women, slaves, and anyone interesting excluded. Socrates forced

to drink poison for asking questions.

3. **Medieval Period**: God allegedly tells one inbred family what to do. Family mostly interested in cousin-marriage and cathedral construction.
4. **Modern Democracy**: Millions vote for representatives who ignore them. Representatives vote based on bribes. Lobbyists write the actual laws. Everyone pretends this makes sense.
5. **Current System**: All of the above, plus Twitter.

Why Your Brain Can't Handle Democracy

The human brain evolved to:

- Remember where the good berries are
- Run from tigers
- Decide who to mate with
- Hold grudges against that guy who stole your mammoth meat

The human brain did NOT evolve to:

- Understand compound interest
- Evaluate 10,000 budget proposals
- Comprehend exponential growth
- Care about people 10,000 miles away
- Think about consequences beyond next Tuesday

Your working memory can hold about 7 things[221]. That's it. Seven. The phone number length isn't a coincidence.

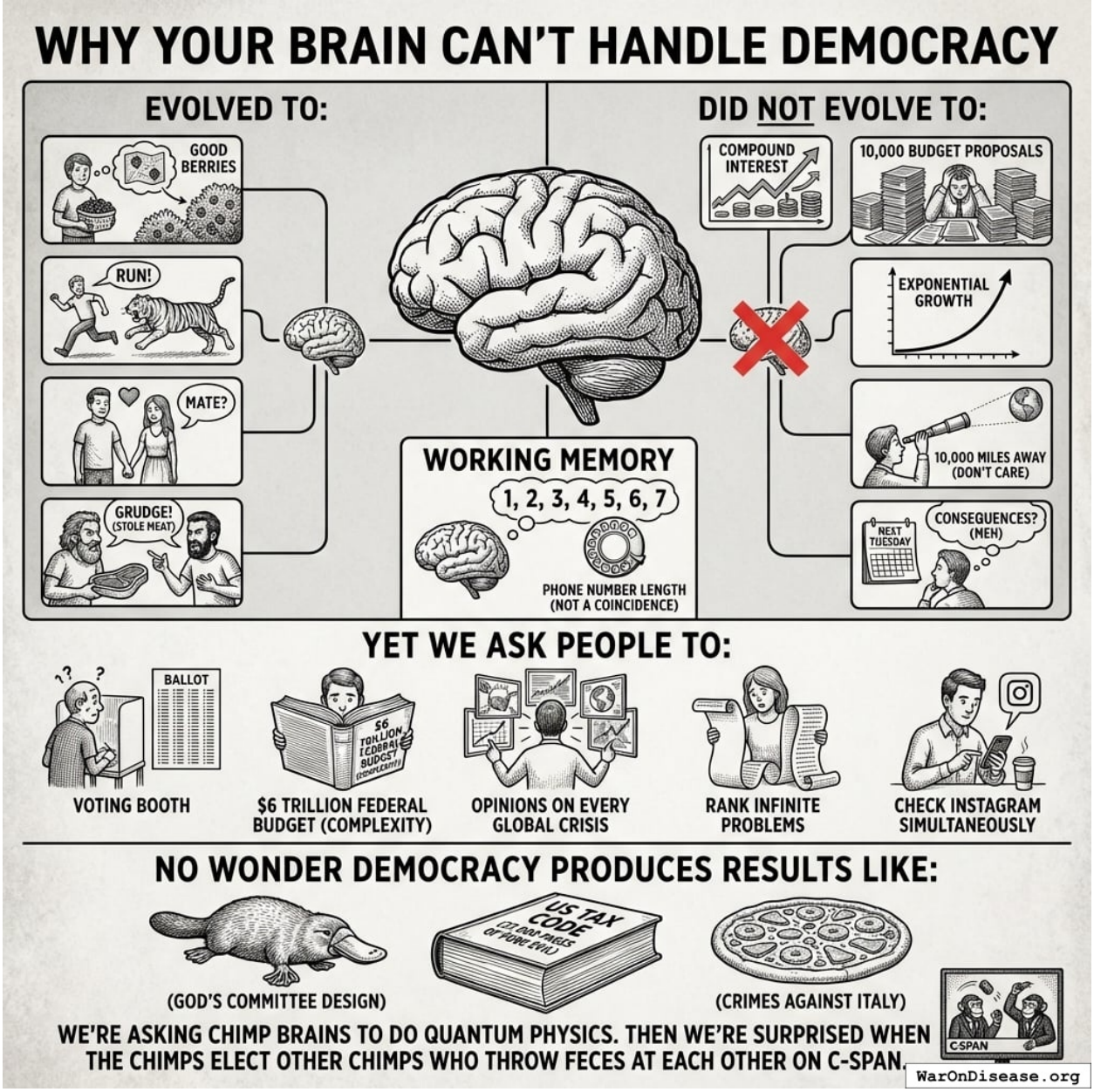


Figure 169: A comparison showing the mismatch between the brain's evolutionary capabilities, such as survival skills and small group dynamics, versus the overwhelming complexity of modern democratic governance.

Yet we ask people to:

- Choose between thousands of political candidates
- Understand the federal budget ($6 trillion of complexity)
- Have opinions on every global crisis simultaneously
- Rank the importance of infinite problems
- Do all this while checking Instagram

No wonder democracy produces results like:

- The platypus (God's committee design)
- The U.S. tax code (27,000 pages of pure evil[222])

- Pineapple pizza (crimes against Italy)

We're asking chimp brains to do quantum physics. Then we're surprised when the chimps elect other chimps who throw feces at each other on C-SPAN.

How Government Actually Allocates Money (A Horror Story)

The Current Budget Process: Democracy Theater

Here's how your government decides to spend trillions:

Step 1: Lobbyists Write Checks

- Defense contractors donate $50 million
- Pharmaceutical companies donate $40M
- Teachers unions donate their lunch money
- Poor people donate nothing (mistake)

Step 2: Politicians Pretend to Think

- Hold hearings nobody watches
- Read reports nobody wrote
- Make speeches nobody believes
- Vote based on who paid them

Step 3: The Budget Emerges



Figure 170: A comparative visualization of the four budget categories showing the massive scale disparity between trillion-dollar allocations and the significantly smaller education and arts funding.

Like a demon from a committee meeting:

- Military: $999 billion[210] (for killing)
- Healthcare: $1.5 trillion[223] (for not dying, but slowly)
- Education: $80 billion[224] (explaining why we can't afford education)
- Arts: $200 million[225] (Congress's cocaine budget is higher)

Step 4: Everyone Gets Mad

- Conservatives: "Too much welfare!"
- Liberals: "Too much warfare!"

- Economists: “None of this makes sense!”
- Lobbyists: “Perfect, same time next year?”



Figure 171: A visualization showing the conflicting demands of different political stakeholders and the resulting systemic outcomes like national debt and decaying infrastructure.

This system has produced:

- $30 trillion in national debt[226]
- Bridges collapsing while we build new bombers
- Schools using textbooks from 1987
- The F-35 fighter jet (doesn’t fight, barely jets)

P.S. - If you still believe in democracy, ask yourself: Would you let 150 million random Americans perform your heart surgery by voting on each incision? No? Then why let them vote on healthcare policy? At least with surgery, you'd die quickly.

Regulatory Capture: How Industries Write Their Own Rules

The best investment in America isn't stocks or real estate. It's buying politicians. As detailed earlier, the return on investment for lobbying is astronomical, with studies showing returns as high as **1,810:1**.

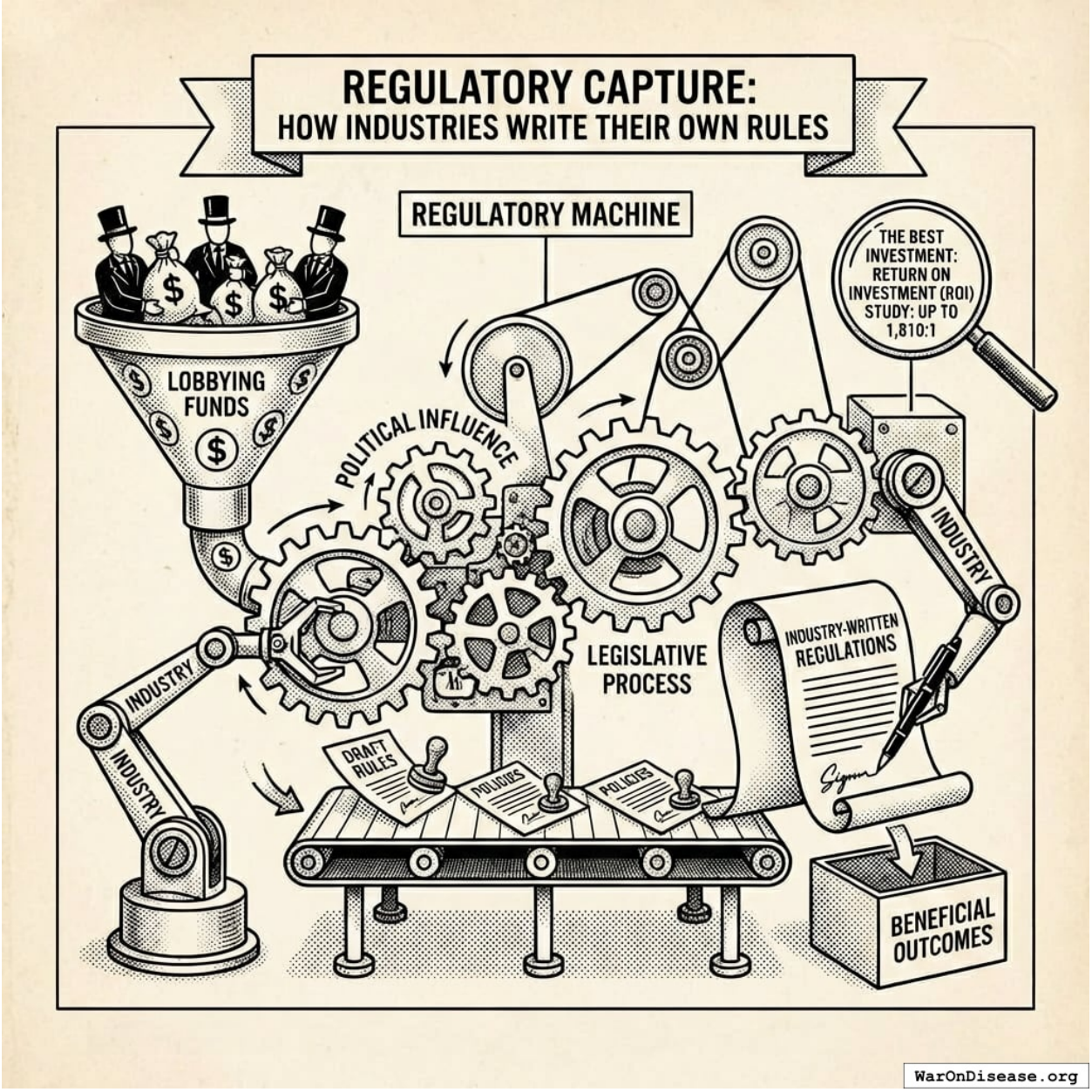


Figure 172: A comparison showing the massive 1,810:1 return on investment for lobbying compared to traditional investments like stocks or real estate.

How to Buy a Democracy: A Practical Guide

1. **Hire an Ex-Congressman:** There are 13,700 registered lobbyists in Washington[69], and half of them used to work in the government[69] they're now bribing. The revolving door spins so fast it powers half of DC.

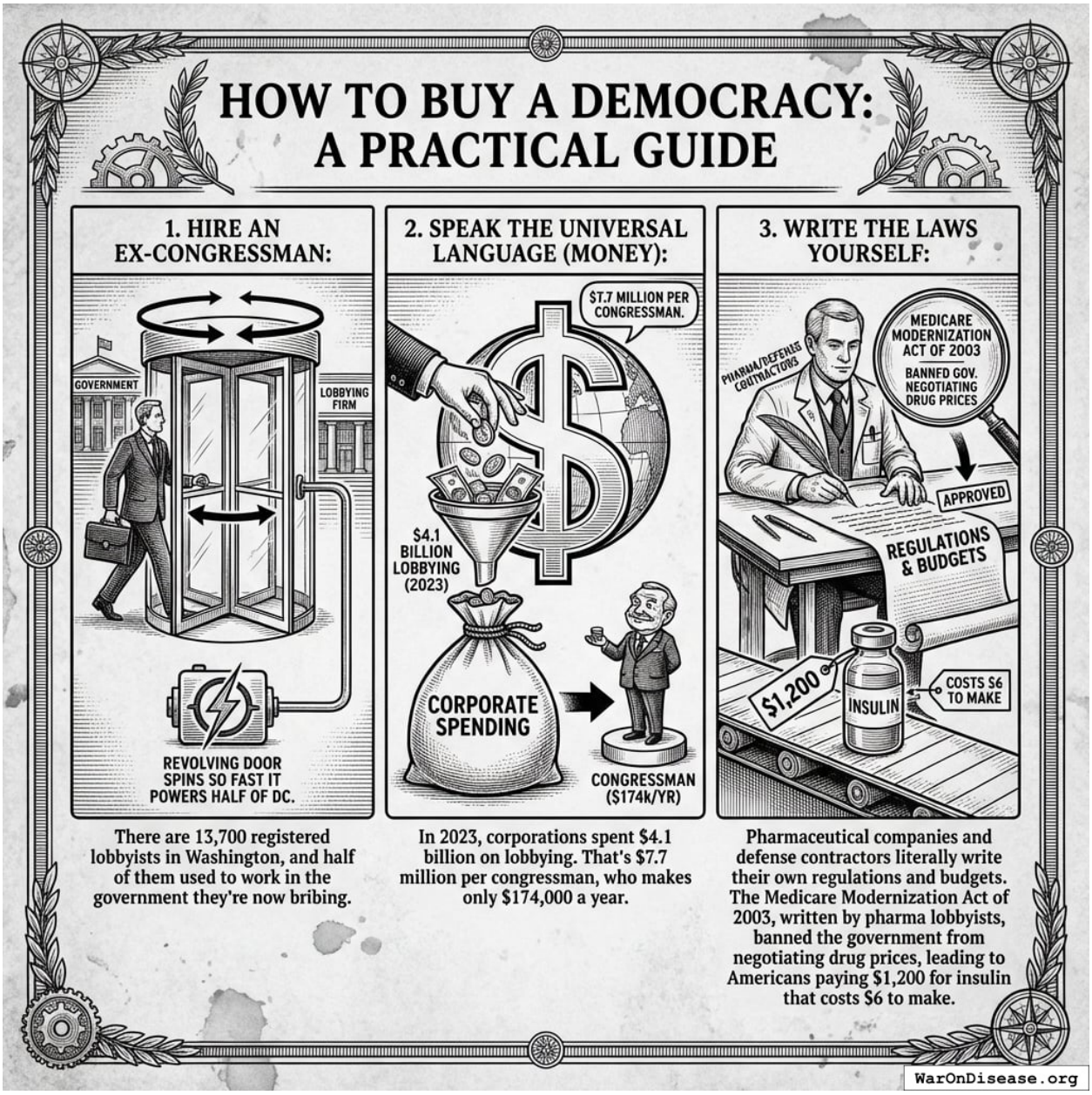


Figure 173: An infographic illustrating the 'revolving door' of DC lobbying, the disparity between corporate spending and congressional salaries, and the resulting impact on legislation and consumer costs.

2. **Speak the Universal Language (Money):** In 2023, corporations spent $4.1 billion on lobbying[227]. That's $7.7 million per congressman, who makes only $174,000 a year[228].

3. **Write the Laws Yourself:** Pharmaceutical companies and defense contractors literally write their own regulations and budgets. The Medicare Modernization Act of 2003, written by pharma lobbyists[229], banned the government from negotiating drug prices[229], leading to Americans paying $1,200 for insulin

that costs $6 to make[230].

The Money Machine: How Regulatory Capture Works

1. **Campaign Contributions**: Perfectly legal bribes. Citizens United[231] made corporations people, and people can donate unlimited money through Super PACs.
2. **Revolving Door**: Work in government, learn the system, sell that knowledge to the highest bidder. It's LinkedIn for corruption.
3. **Lobbying**: Hire people to whisper sweet nothings (and campaign donation promises) in politicians' ears.
4. **Jobs Blackmail**: Spread operations across districts. Threaten to leave if politicians don't cooperate. "Nice employment rate you got there. Shame if something happened to it."
5. **Regulatory Capture**: Get your people appointed to agencies that regulate you. The fox doesn't guard the henhouse - the fox owns the henhouse and charges the chickens rent.

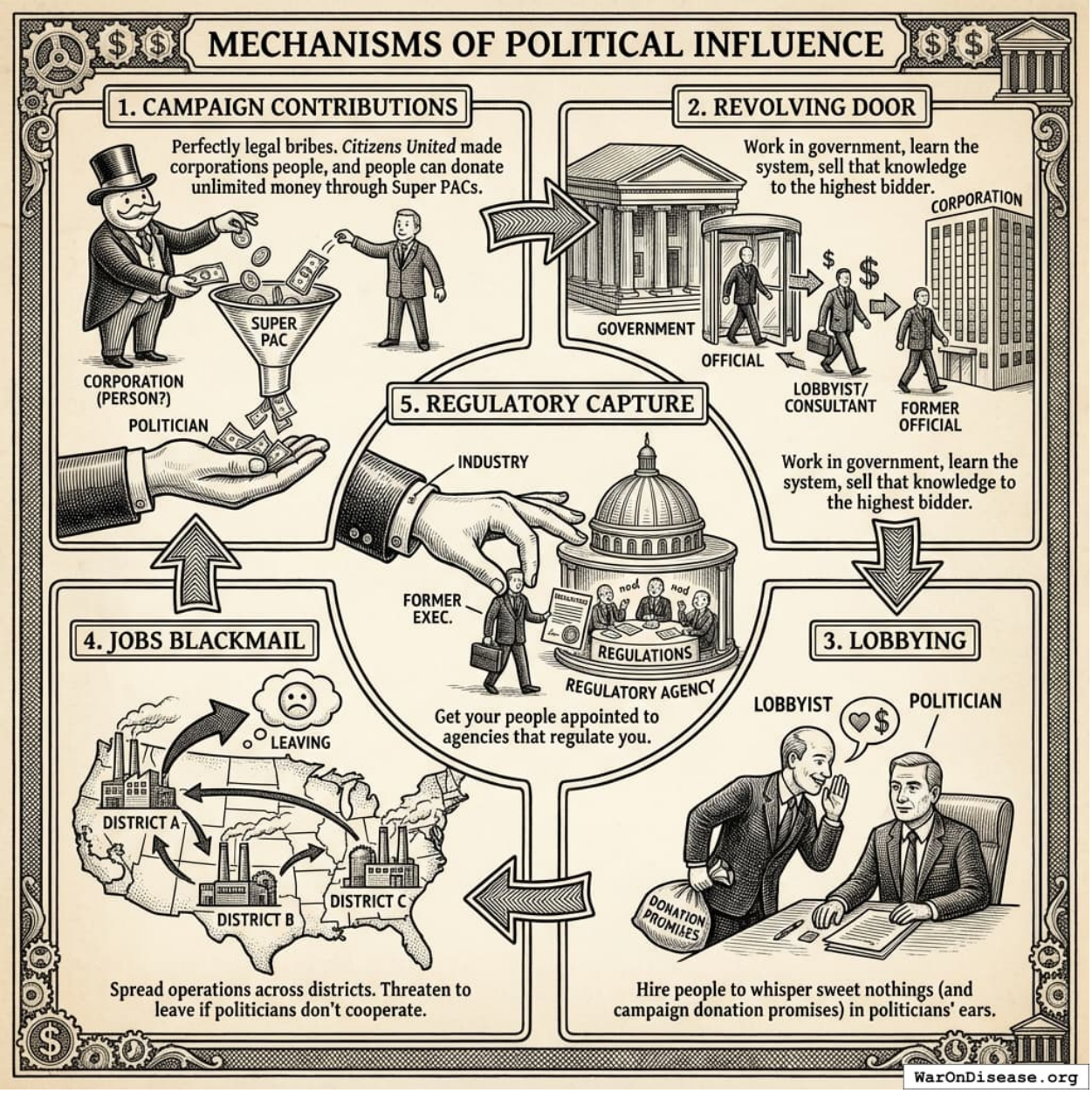


Figure 174: A cyclical flowchart demonstrating the self-reinforcing loop of money, influence, and regulation that allows industries to capture the agencies meant to oversee them.

The Military-Industrial Complex: Murder Inc.

Lockheed Martin's business model is a masterclass in political leverage. By distributing operations across 42 states[232], they ensure that any attempt to cut funding for a program like the $1.7 trillion F-35 fighter jet[233] is met with furious opposition from senators protecting local "jobs."

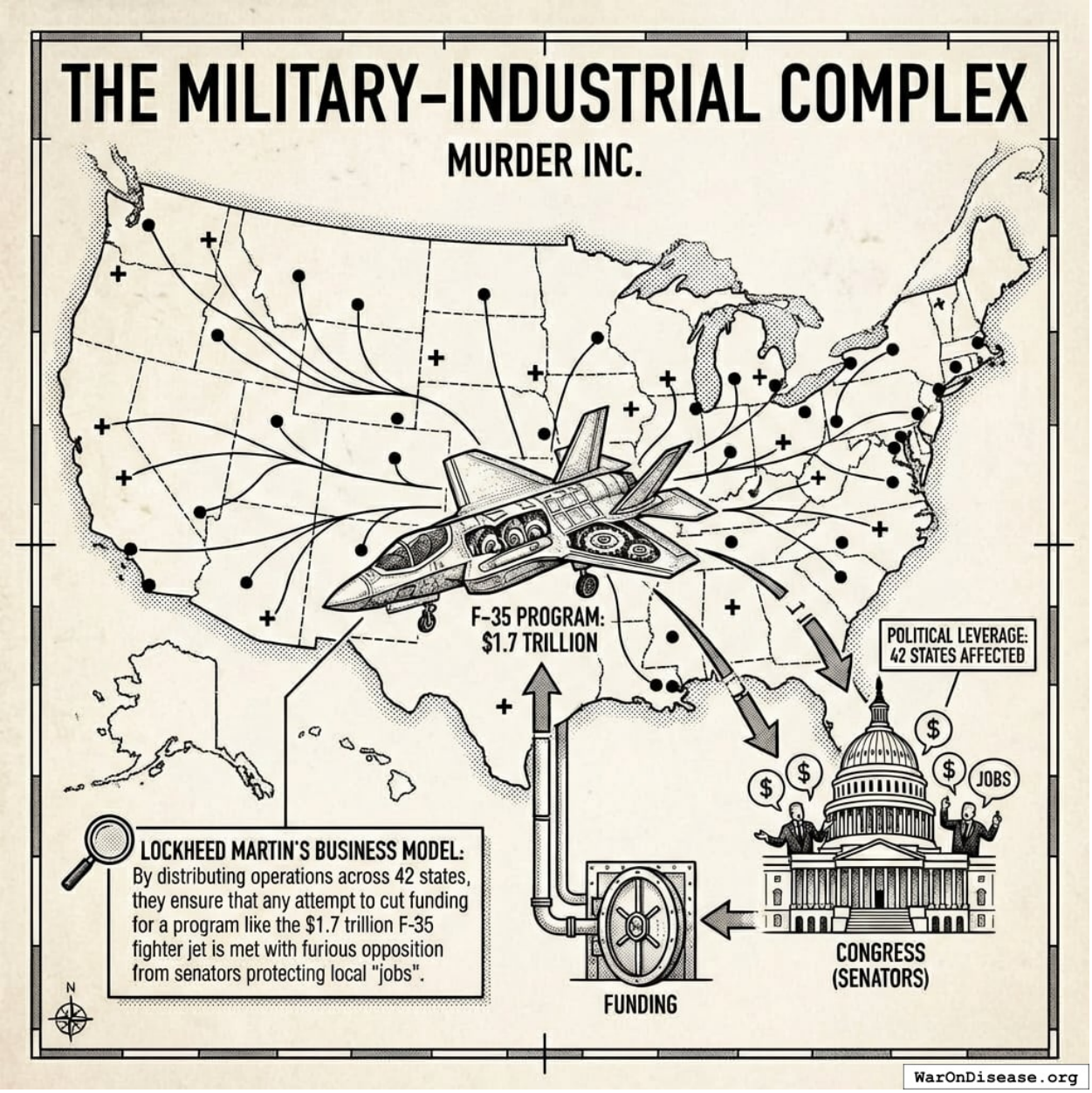


Figure 175: A visualization of Lockheed Martin's strategic distribution of operations across 42 states, illustrating the feedback loop between local job creation and political leverage to secure defense funding.

The Defense Budget: A Comedy in Three Acts

Act 1: The Pentagon requests nearly a trillion dollars for "readiness," a figure detailed in the Cost of War chapter.



Figure 176: A flow diagram illustrating the three-stage process of defense budgeting: the Pentagon's initial request, Congress's added funding, and the final distribution to contractors.

Act 2: Congress adds $25 billion the Pentagon didn't ask for[234].

Act 3: Money goes to contractors in key congressional districts.

Curtain falls. Audience (taxpayers) weeps.

The Pentagon has never passed an audit[235]. They literally don't know where trillions of dollars[235] went. But somehow they know they need more.

Big Pharma: Your Dealer Has a Lobbyist

The pharmaceutical industry employs 3 lobbyists for every member of Congress[236], ensuring that policies favor profit over patients. The result is a system where a drug patent sold for $1 in 1922[230] now costs Americans $300 per vial[230], and where the FDA gets 75% of its drug review budget from the companies it regulates[195].



Figure 177: A visualization of the pharmaceutical industry's influence, highlighting the 3:1 lobbyist-to-Congress ratio, the rise of insulin costs from 1 to 300, and the FDA's 75 percent reliance on industry funding.

The Incentive Structure From Hell

The entire system is perfectly incentivized to maintain the status quo:

- **Pharmaceutical Companies:** Cures are a one-time payment; treatments are a recurring revenue stream.
- **FDA Regulators:** Approving a bad drug ends a career; delaying a good one has no consequences.
- **Politicians:** Funding pragmatic clinical trials is boring; creating new agencies provides photo ops.

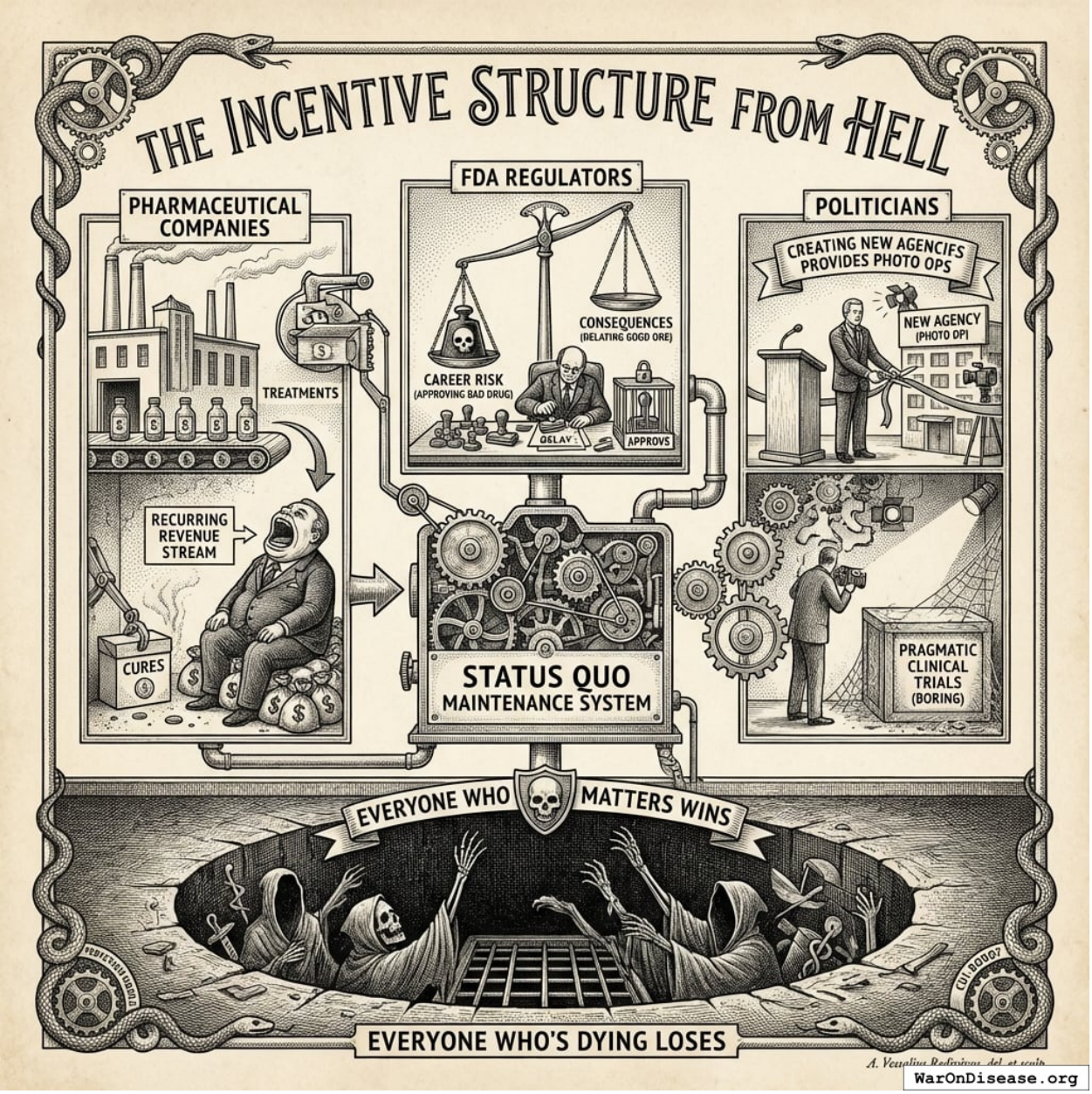


Figure 178: A visualization of the misaligned incentives among pharmaceutical companies, regulators, and politicians that prioritize systemic stability over patient outcomes.

Everyone who matters wins. Everyone who's dying loses.

The Solution They Don't Want

Here's the secret: Their whole system depends on diffuse costs and concentrated benefits.

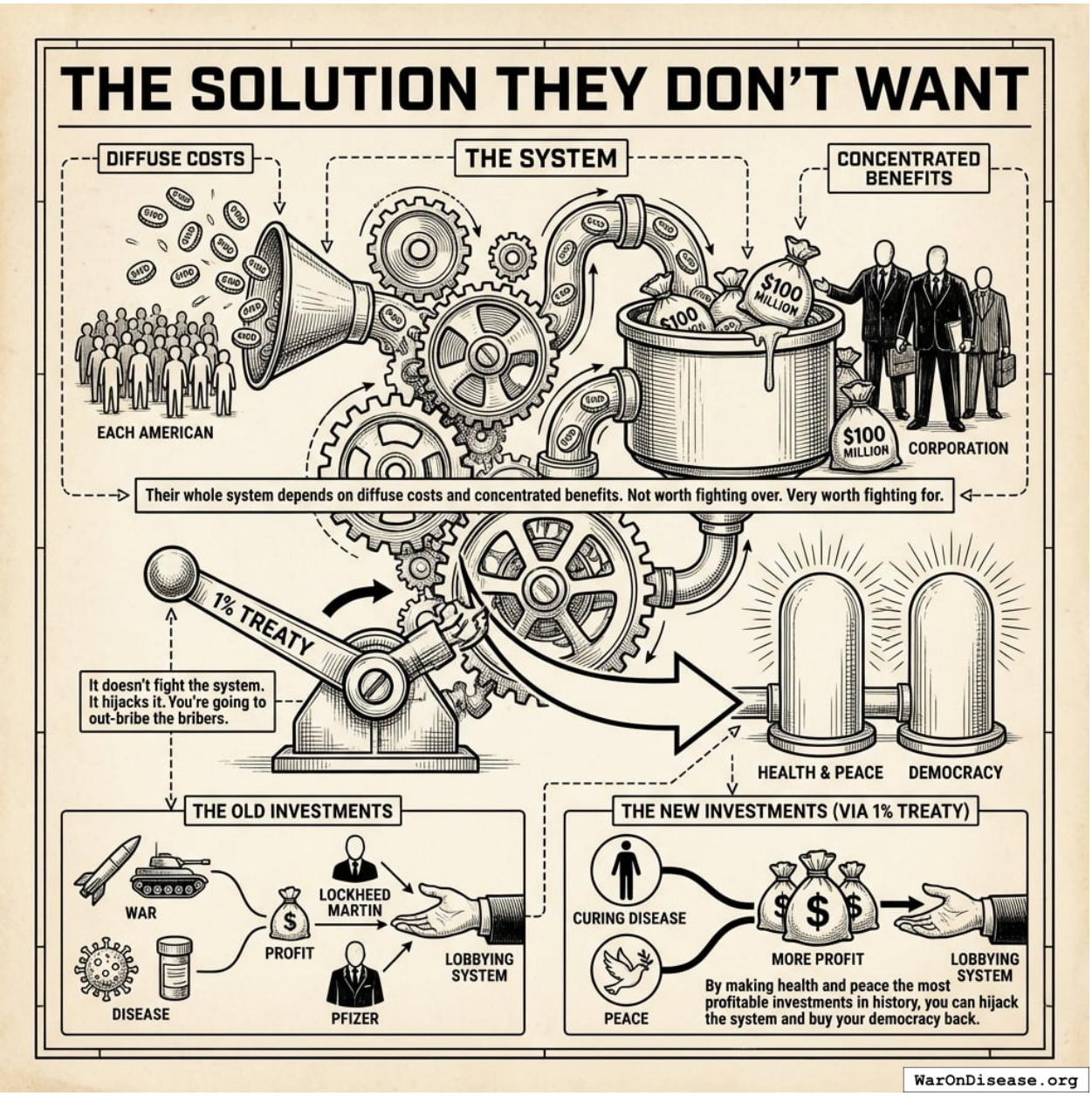


Figure 179: A comparison showing how the current system of diffuse costs and concentrated benefits for corruption can be flipped to reward peace and health through concentrated reform incentives.

Each American loses $100 to corruption. Not worth fighting over. Each corporation gains $100 million. Very worth fighting for.

But what if you concentrated the benefits of reform? What if curing disease was more profitable than treating it? What if peace paid better than war?

That's what a 1% treaty does. It doesn't fight the system. It hijacks it.

You're going to out-bribe the bribers.

The same lobbying system that created this mess is the feature you will exploit. Lockheed Martin and Pfizer don't love war and disease; they love money. By making health and peace the most profitable investments in

history, you can hijack the system and buy your democracy back.

Your Democracy: An Auction House

Every law is for sale. Every regulation negotiable. Every politician has a price.

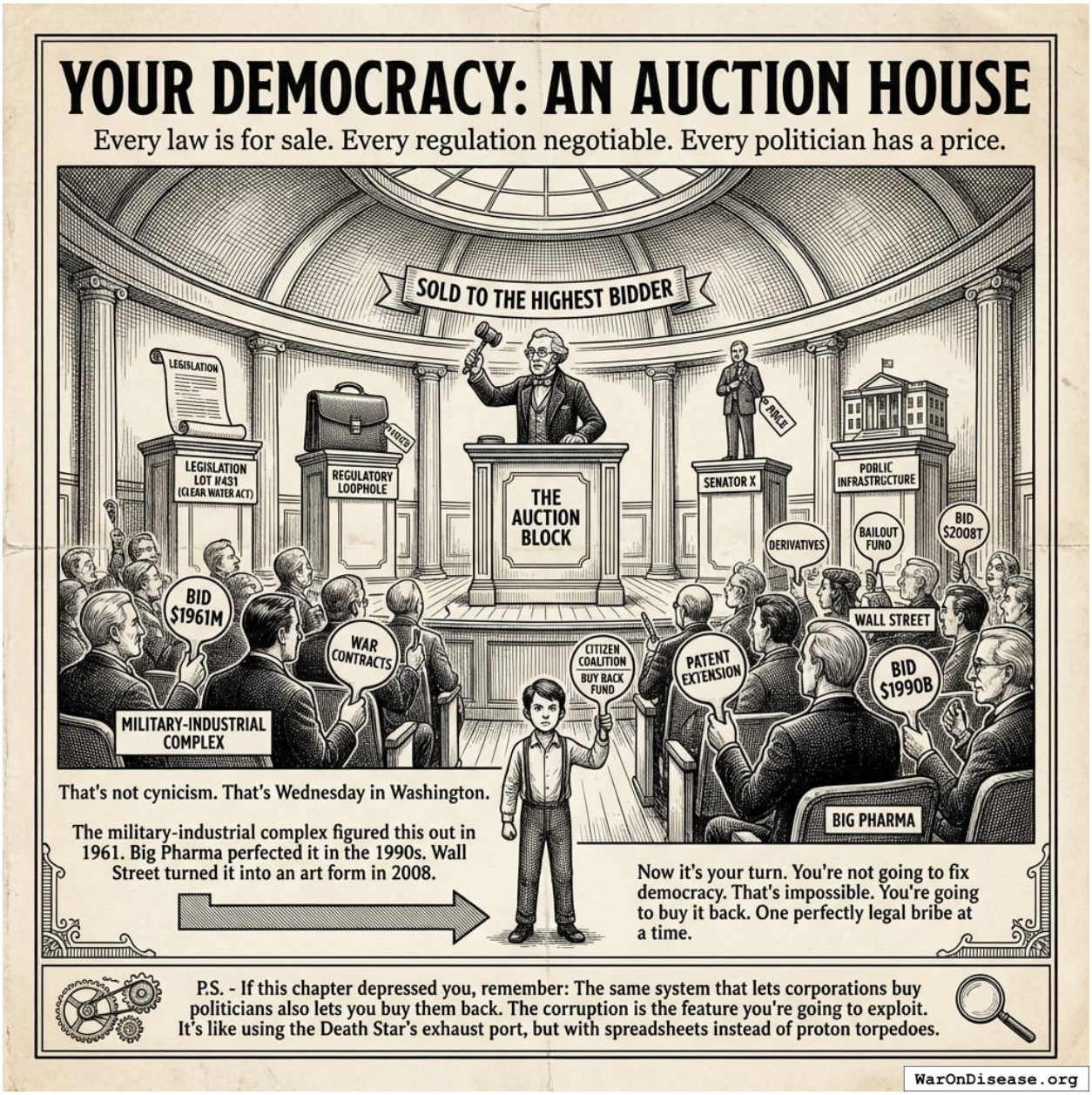


Figure 180: A conceptual map of the political auction house, showing how major industries have historically purchased influence and the mechanism for citizens to use the same system.

That's not cynicism. That's Wednesday in Washington.

The military-industrial complex figured this out in 1961. Big Pharma perfected it in the 1990s. Wall Street turned it into an art form in 2008.

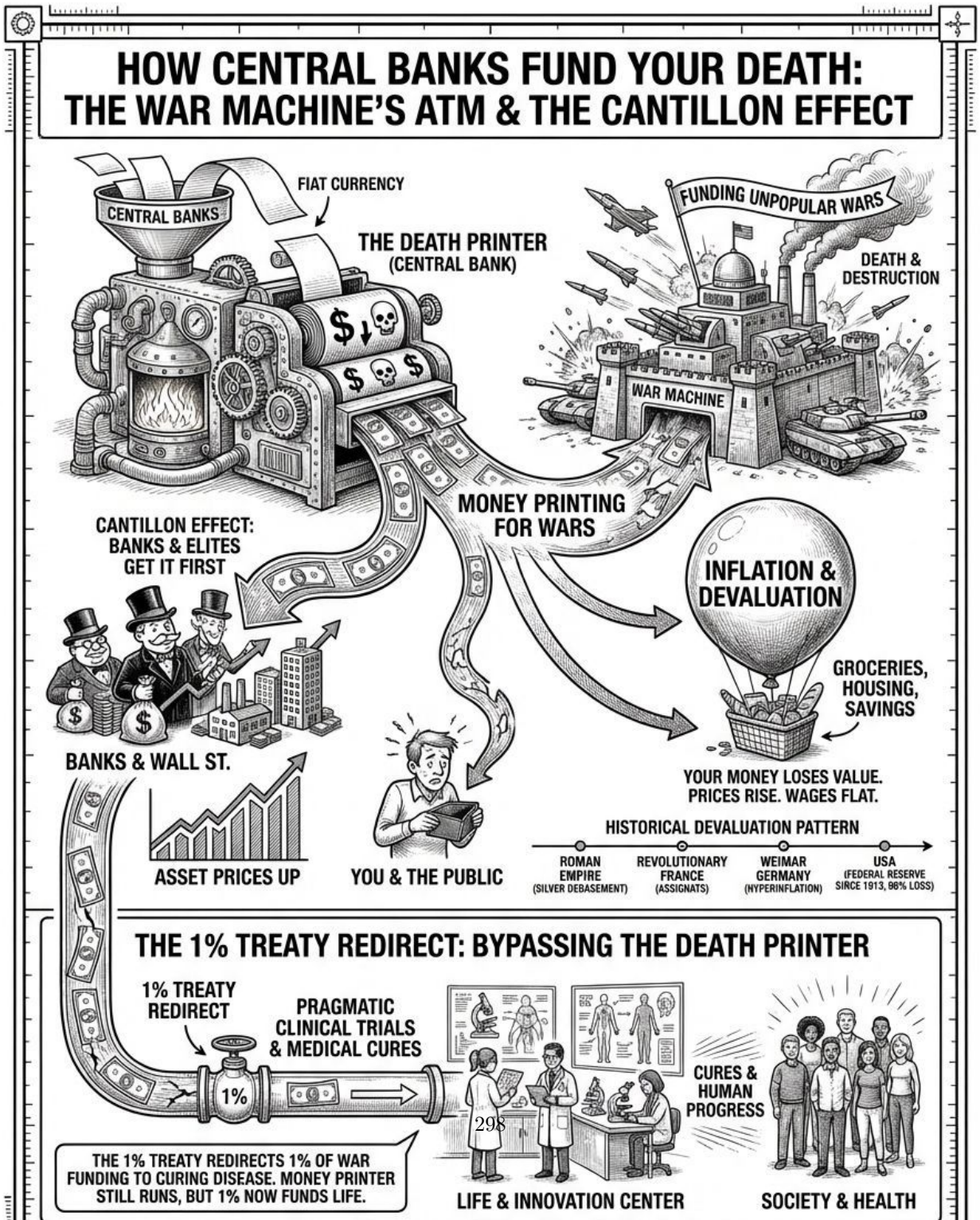
Now it's your turn.

You're not going to fix democracy. That's impossible. You're going to buy it back.

One perfectly legal bribe at a time.

P.S. - If this chapter depressed you, remember: The same system that lets corporations buy politicians also lets you buy them back. The corruption is the feature you're going to exploit. It's like using the Death Star's exhaust port, but with spreadsheets instead of proton torpedoes.

How Central Banks Fund Your Death



Every dollar in your wallet is a death certificate with a president's face on it.

I know that sounds dramatic. But let me show you something interesting about the relationship between money printing and murder.

The Problem: Every Fiat Currency in History Has Been Devalued To Fund Unpopular Wars

Here's a fun historical pattern that definitely won't repeat itself (it will):

Ancient Rome (3rd Century)

- Started war with Persia
- Ran out of gold
- Debased currency from 95% silver to 5%
- Inflation destroyed the empire
- Everyone died badly

Revolutionary France (1790s)

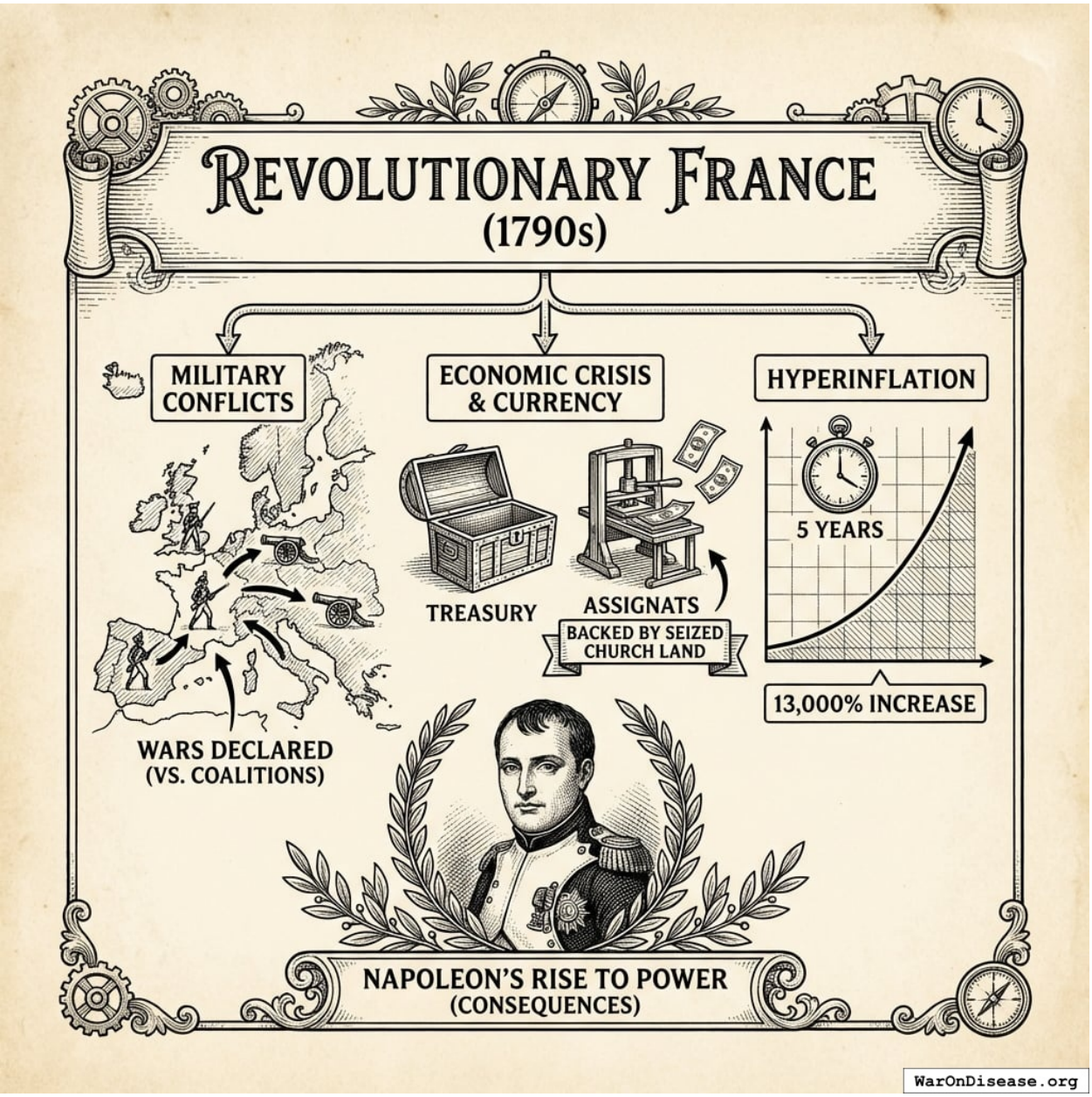


Figure 181: A flow diagram showing the economic downward spiral of Revolutionary France, from war and debt to the printing of assignats and resulting hyperinflation.

- Started wars with everyone
- Ran out of money
- Printed "assignats" backed by stolen church land
- Hyperinflation: 13,000% in 5 years
- Napoleon happened (not great)

Weimar Germany (1920s)

- Lost World War I

- Printed money to pay reparations
- Hyperinflation: 29,500% per month
- People burned money for heat
- Hitler happened (really not great)

United States (1917-present)

- Created Federal Reserve (1913)
- Immediately funded World War I (1917)
- Dollar lost 96% of value since
- Wars now continuous and everywhere
- You're living it (how's that working out?)

The pattern is so consistent it's basically a law of physics: Give politicians a money printer, they'll use it to fund wars the public won't pay for with taxes.

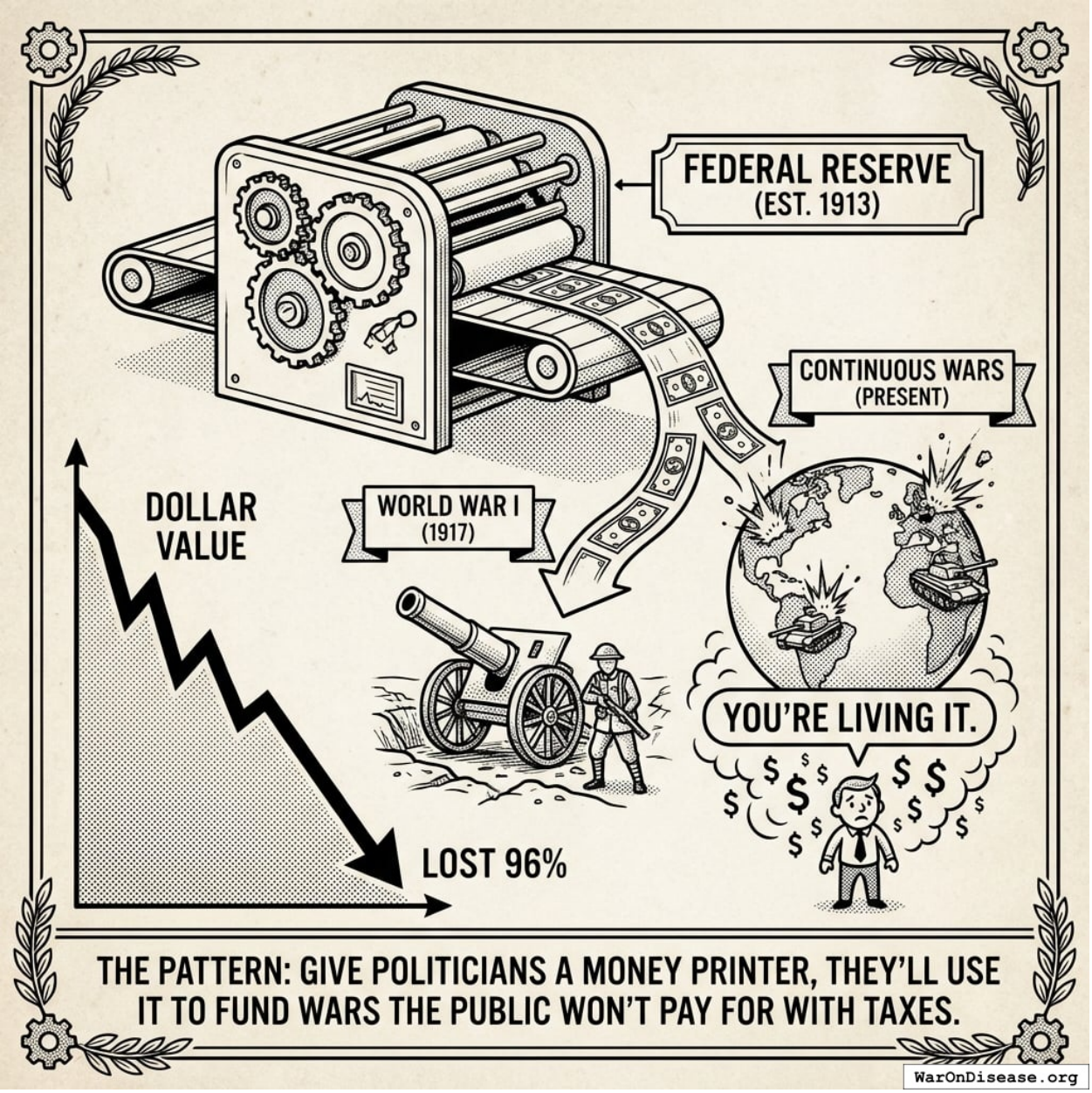


Figure 182: A timeline and causal loop showing how the creation of the Federal Reserve leads to continuous war funding and the subsequent devaluation of the US dollar over time.

1972: When Nixon Weaponized Money Against You

August 15, 1971. A day that will live in monetary infamy.

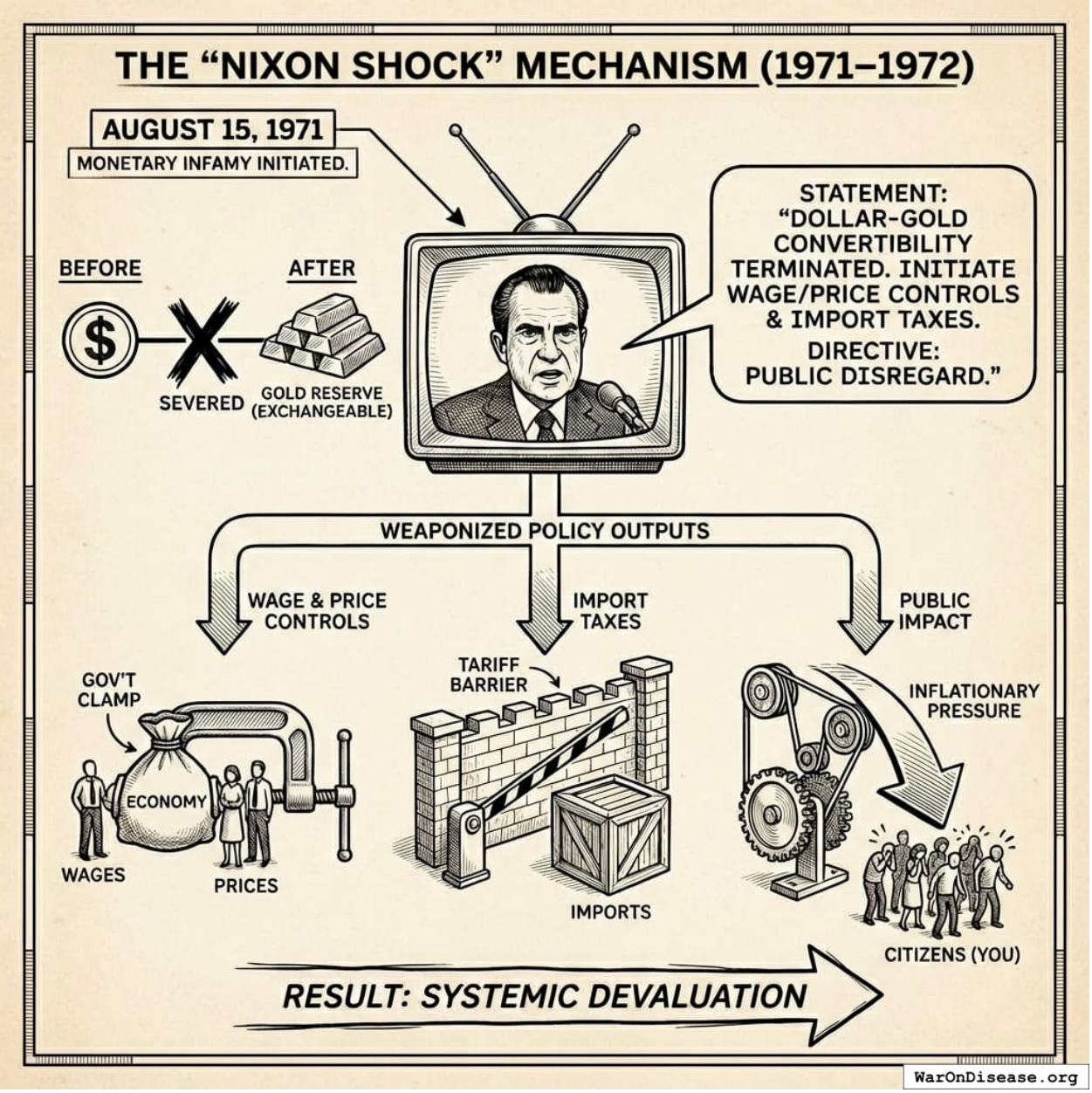


Figure 183: A visual breakdown of the 1971 'Nixon Shock' showing the severance of the dollar-to-gold link and the simultaneous implementation of wage/price controls and import taxes.

Nixon went on TV and said, "Hey, remember how dollars could be exchanged for gold? Yeah, we're not doing that anymore. Also, wage and price controls. Also, import taxes. Also, screw you."

Why He Really Did It

- Vietnam War was bleeding money
- France wanted their gold back (party poopers)
- Couldn't raise taxes (people riot)
- Solution: Print money forever!

What Actually Happened

- Gold standard: Dead
- Dollar backing: "Trust us bro"
- Inflation: To the moon
- Your savings: Slowly murdered

The Theft That Followed

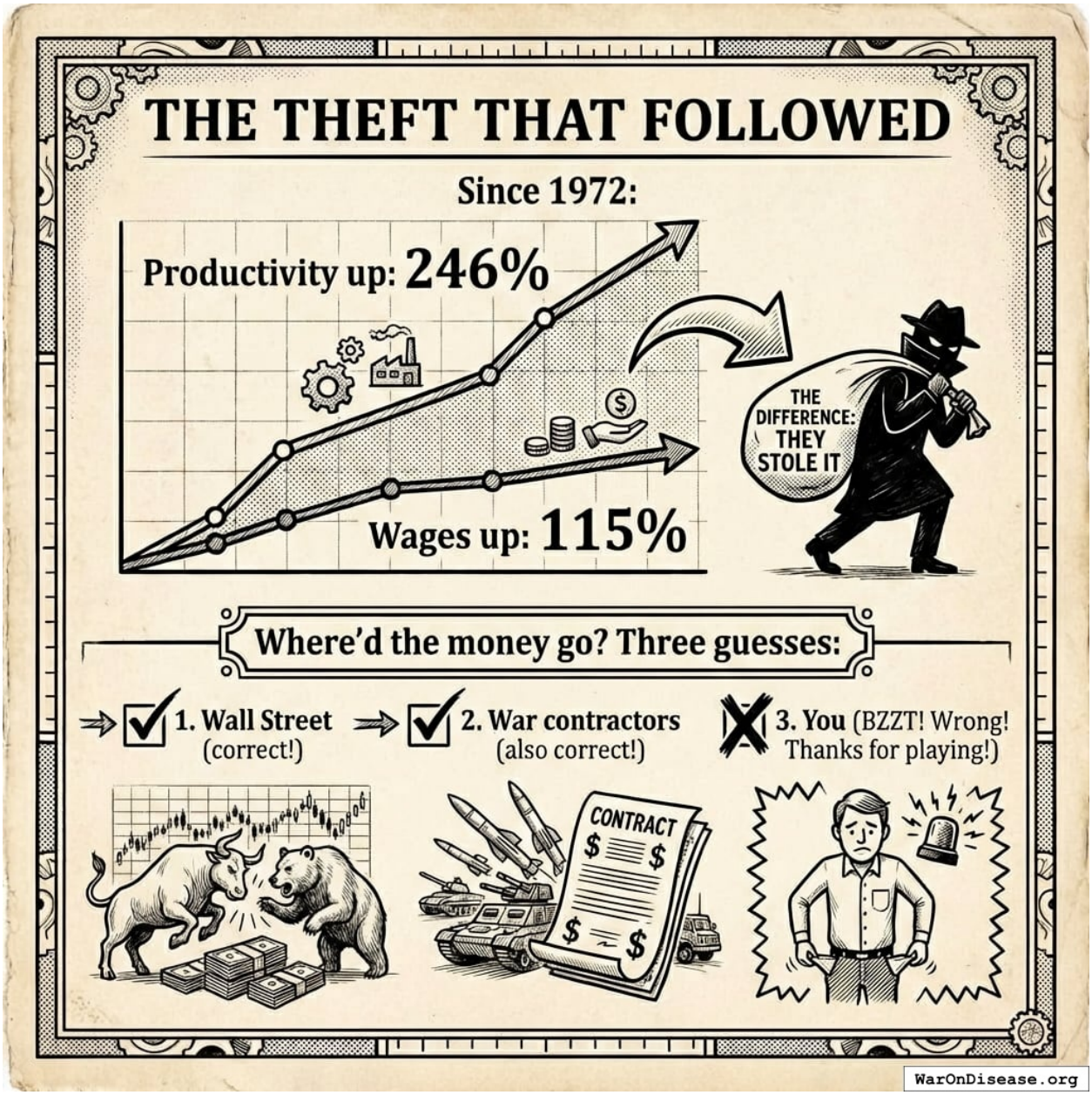


Figure 184: A line chart showing the widening gap between productivity growth at 246 percent and wage growth at 115 percent since 1972, illustrating the 'stolen' value.

Since 1972:

- Productivity up: 246%
- Wages up: 115%
- The difference: They stole it

Where'd the money go? Three guesses:

1. Wall Street (correct!)
2. War contractors (also correct!)
3. You (BZZT! Wrong! Thanks for playing!)

The Cantillon Effect: Why You're Poor and Raytheon Isn't

Here's how the scam works:

1. Fed Prints Money

- Creates dollars from nothing
- Gives to big banks at 0% interest
- You don't get any (sad trombone)

2. Banks Get Rich

- Banks get new money first
- Buy assets while prices still low
- Your rent goes up immediately

3. Government Spends

- Borrows freshly printed money
- Buys missiles and bombs
- Defense contractors get paid

4. You Get Screwed

- Inflation hits your groceries
- Your savings lose value
- Your wages stay flat
- You blame immigrants (they want this)

It's called the Cantillon Effect after Richard Cantillon, who figured this out in the 1700s. Humans have known about this scam for 300 years. You keep falling for it anyway, like finding out fire burns and immediately touching it again to make sure.

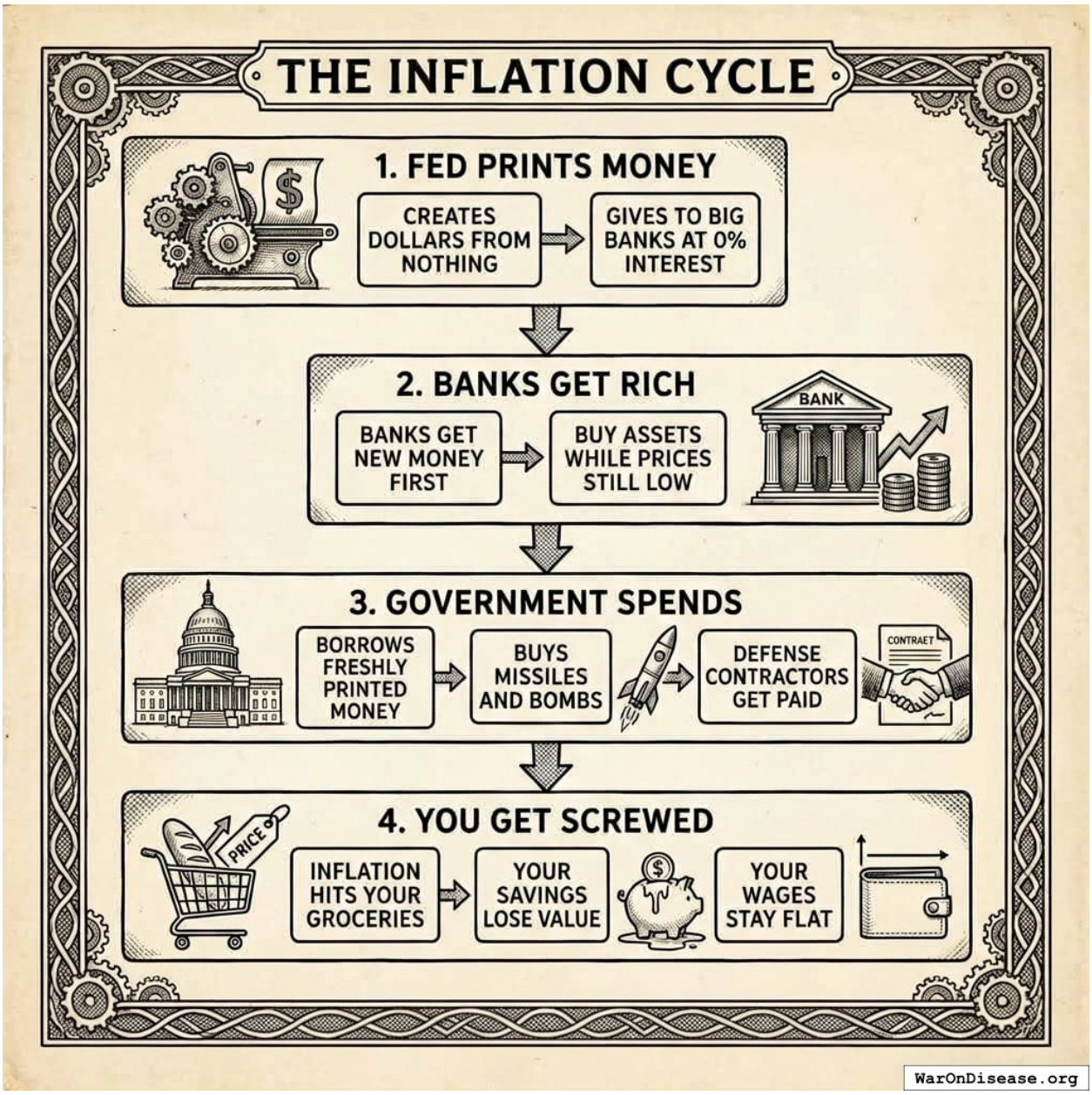


Figure 185: Visualizing the flow of new money: value extracts upwards to banks and contractors while costs cascade downwards to the public.

The Federal Reserve: A Private Corporation That Owns You

Fun fact: The Federal Reserve isn't federal and has no reserves.

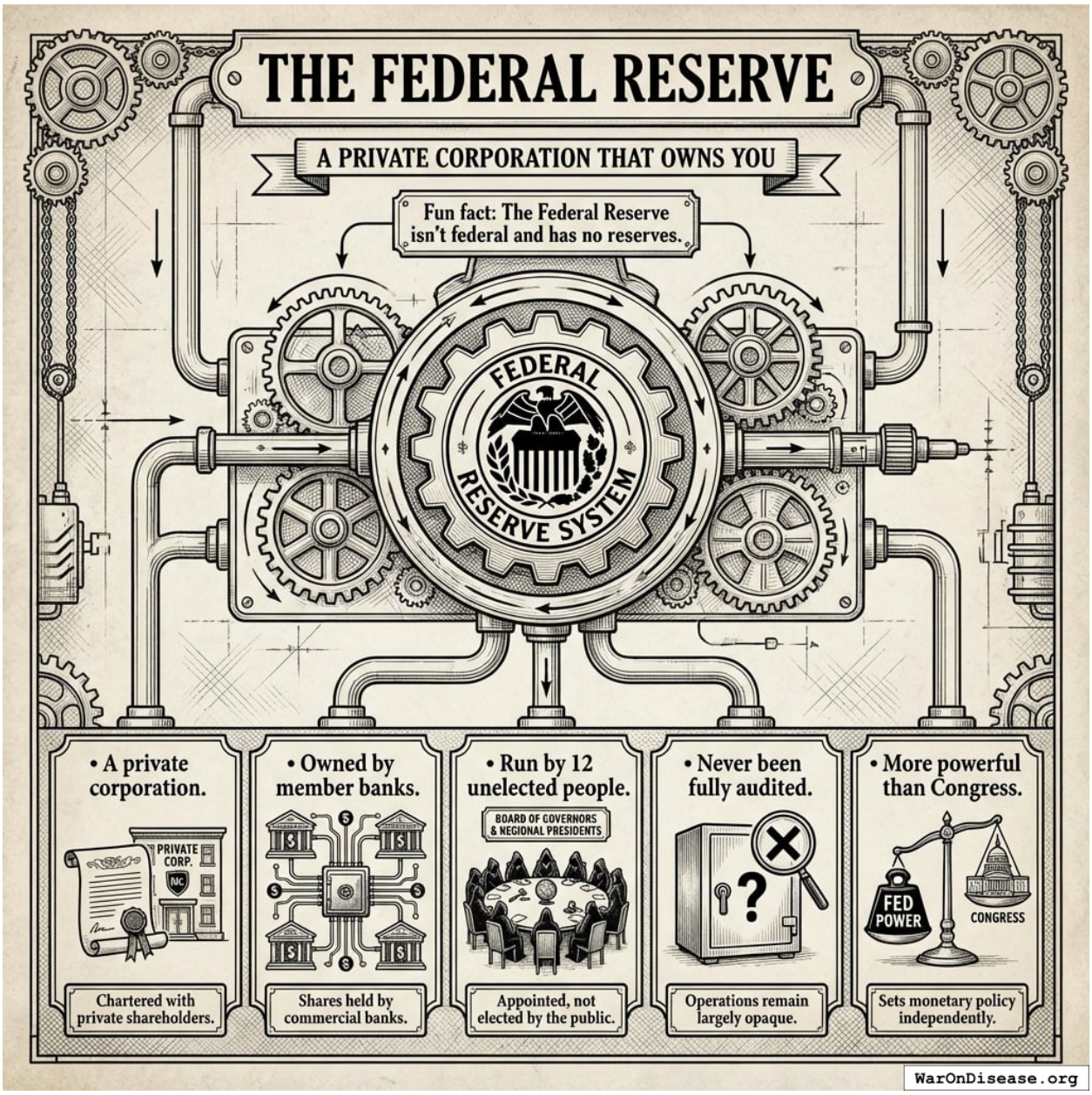


Figure 186: A diagram illustrating the organizational structure of the Federal Reserve, highlighting its private ownership by member banks and its relationship to the Board of Governors and Congress.

It's actually:

- A private corporation
- Owned by member banks
- Run by 12 unelected people
- Never been fully audited
- More powerful than Congress

What They Actually Do

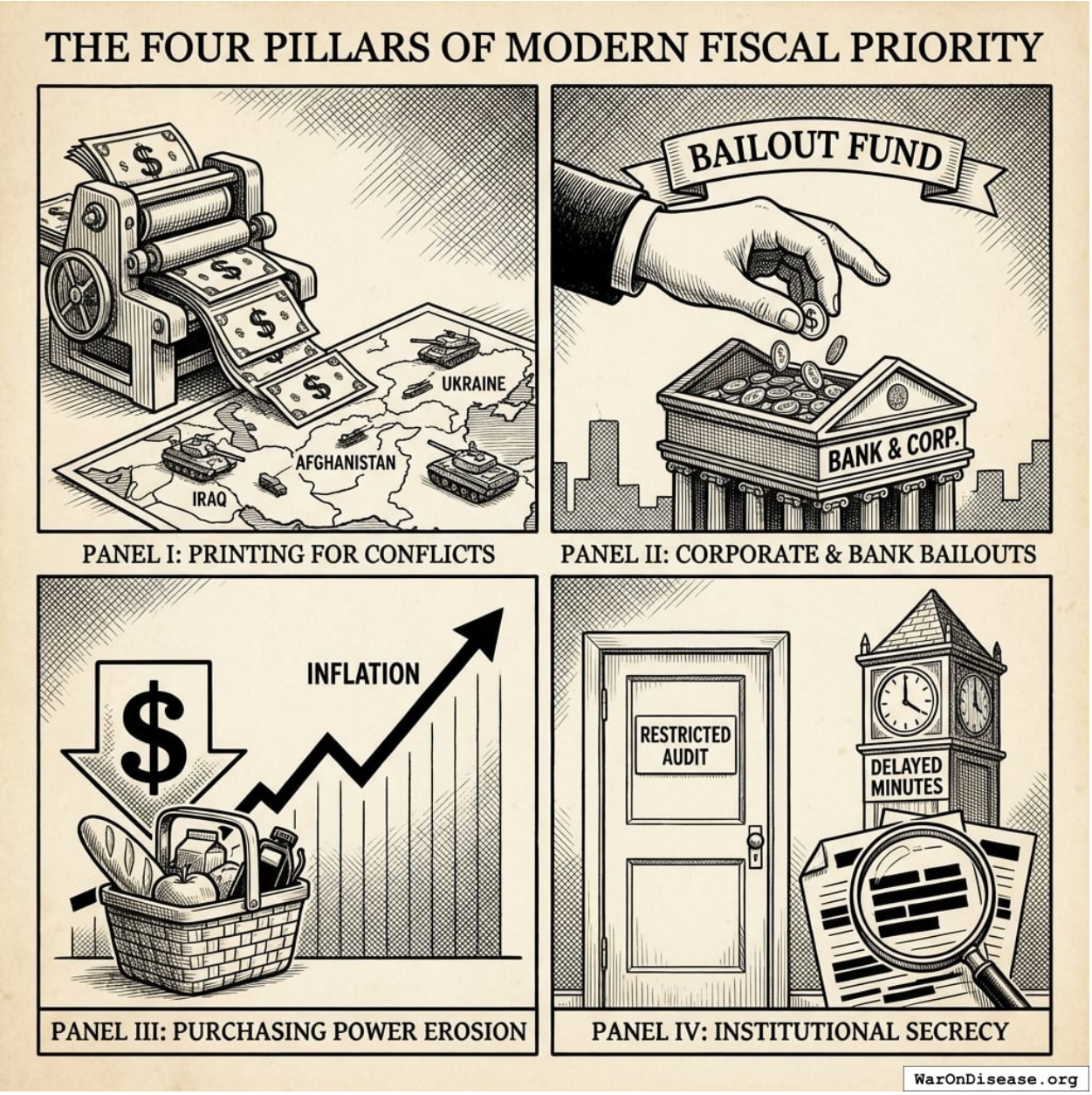


Figure 187: A conceptual map showing the flow of institutional wealth toward military and banking sectors compared to the resulting loss of purchasing power for the general public.

1. **Print Money for Wars**
   - Iraq/Afghanistan: $8 trillion printed[237]
   - Ukraine: $113 billion and counting
   - Next war: Already funded in advance
2. **Bail Out Their Friends**
   - 2008: $700 billion to banks
   - 2020: $4 trillion to everyone (except you)
   - 2023: $300B to failed banks again
   - Your mortgage: Still not forgiven

3. **Destroy Your Purchasing Power**
    - Inflation "target": 2% (your money half gone in 35 years)
    - Actual inflation: Way higher (check your grocery bill)
    - Real inflation: Everything you need costs more
    - Calling it a "target" like it's an achievement instead of organized theft
4. **Hide the Evidence**
    - No full audit allowed
    - Meeting minutes released after 5 years
    - Real decisions made at dinner parties
    - You'll never know what they're really doing

Every War Since 1972: Funded by Destroying Your Savings

Let's do the math on how much your money has funded murder:

Vietnam War Extension (1972-1975)

- Cost: $168 billion (inflation adjusted)
- Funded by: Money printing
- Your loss: 30% purchasing power

Gulf War (1991)

- Cost: $102 billion
- Funded by: Money printing
- Your loss: Gas prices doubled

Iraq War (2003-2011)

- Cost: $2 trillion
- Funded by: Money printing
- Your loss: House prices went insane

Afghanistan (2001-2021)

- Cost: $2.3 trillion
- Funded by: Money printing
- Your loss: Can't afford anything

The Running Total

- Wars funded by printing: $8+ trillion
- Medical research in same period: $680 billion
- Ratio: 12:1 for death over life
- Your real wage growth: Negative

The $300B Annual Bank Subsidy (Your Money)

Here's a fun game: The Fed pays banks interest on reserves.

The Scam

- Banks park money at Fed
- Fed pays them 5.5% interest

- That's $300B per year
- From taxpayers to banks
- For doing literally nothing

What $300B Could Buy Instead

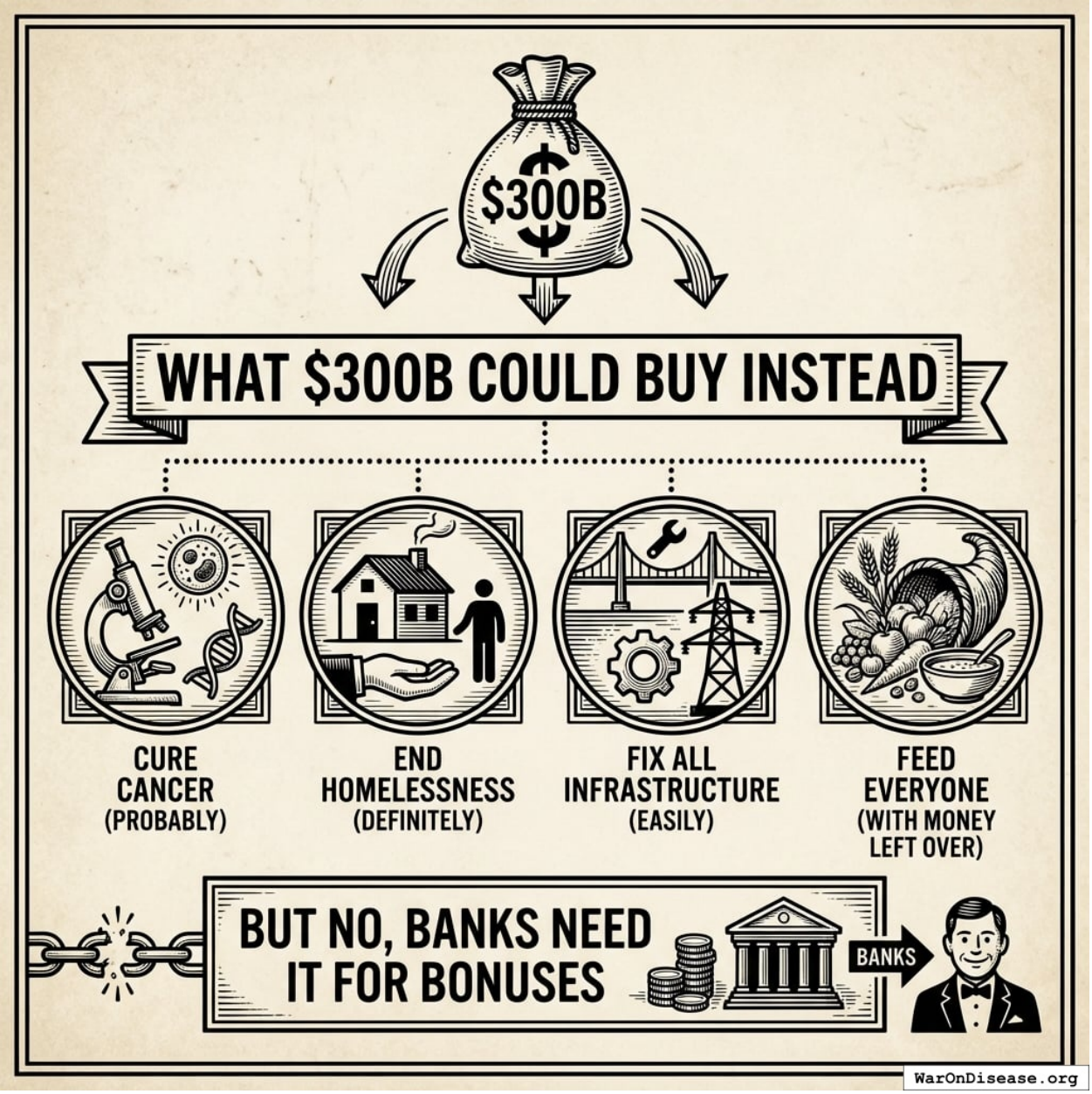


Figure 188: A comparative visualization showing the significant social impacts of a $300 billion investment versus its use for banking industry bonuses.

- Cure cancer (probably)
- End homelessness (definitely)
- Fix all infrastructure (easily)
- Feed everyone (with money left over)
- But no, banks need it for bonuses

Why Humans Can't Reform the Fed (It's Terminal)

The Problem with Reform

1. **Regulatory Capture**
   - Fed officials → Wall Street jobs
   - Wall Street executives → Fed board
   - Same people, different chairs
   - Musical chairs for millionaires
2. **Political Capture**
   - Politicians need Fed to fund deficits
   - Fed needs politicians for protection
   - Perfect corrupt symbiosis
   - You're not in the loop
3. **Systemic Lock-In**
   - Dollar is global reserve currency
   - Requires infinite military to maintain
   - Military requires infinite dollars
   - Ouroboros of death
4. **Too Many Depend on the Scam**
   - Banks need free money
   - Government needs war funding
   - Contractors need contracts
   - Everyone important wins (you're not important)

The Only Solution: Bypass It Entirely

Humans can't fix the Fed. It's like trying to reform cancer. You don't reform cancer. You cut it out or route around it.

Why "Just Fund Medical Research More" Is a Lie

"Why not just ask for donations? Why not just increase the NIH budget? Why tie it to military spending?"

Because money isn't real. Resources are.

The Fixed Pie of Human Genius

Earth has:

- 8 billion brains (fixed quantity)
- 24 hours per day per brain (physics won't negotiate)
- Limited raw materials (can't print titanium)
- Finite factory capacity (can't build infinite labs)

When a brilliant engineer designs missiles, they're NOT designing medical devices. When a factory builds tanks, it's NOT building MRI machines. When a PhD researches weapons, they're NOT researching cures.

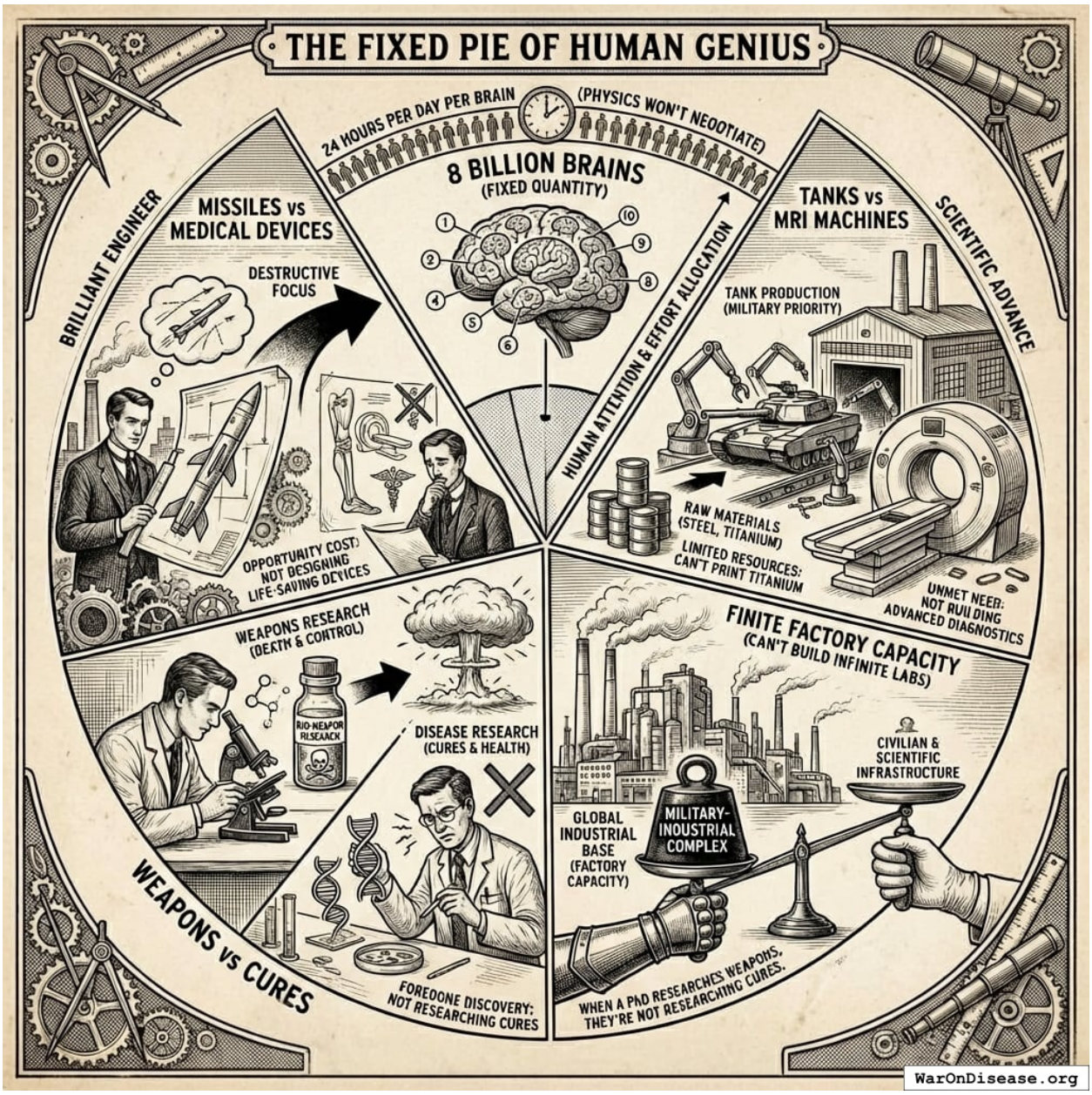


Figure 189: An illustration depicting the trade-off of finite human resources, showing how brainpower and manufacturing capacity allocated to weaponry reduces the resources available for medical and humanitarian innovation.

The Resource Reality

- Top 10% of human talent: ~800 million people
- Currently building weapons: ~40 million
- Currently curing disease: ~1 million
- The ratio: 40:1 for death over life

You can print infinite dollars. You can't print more geniuses.

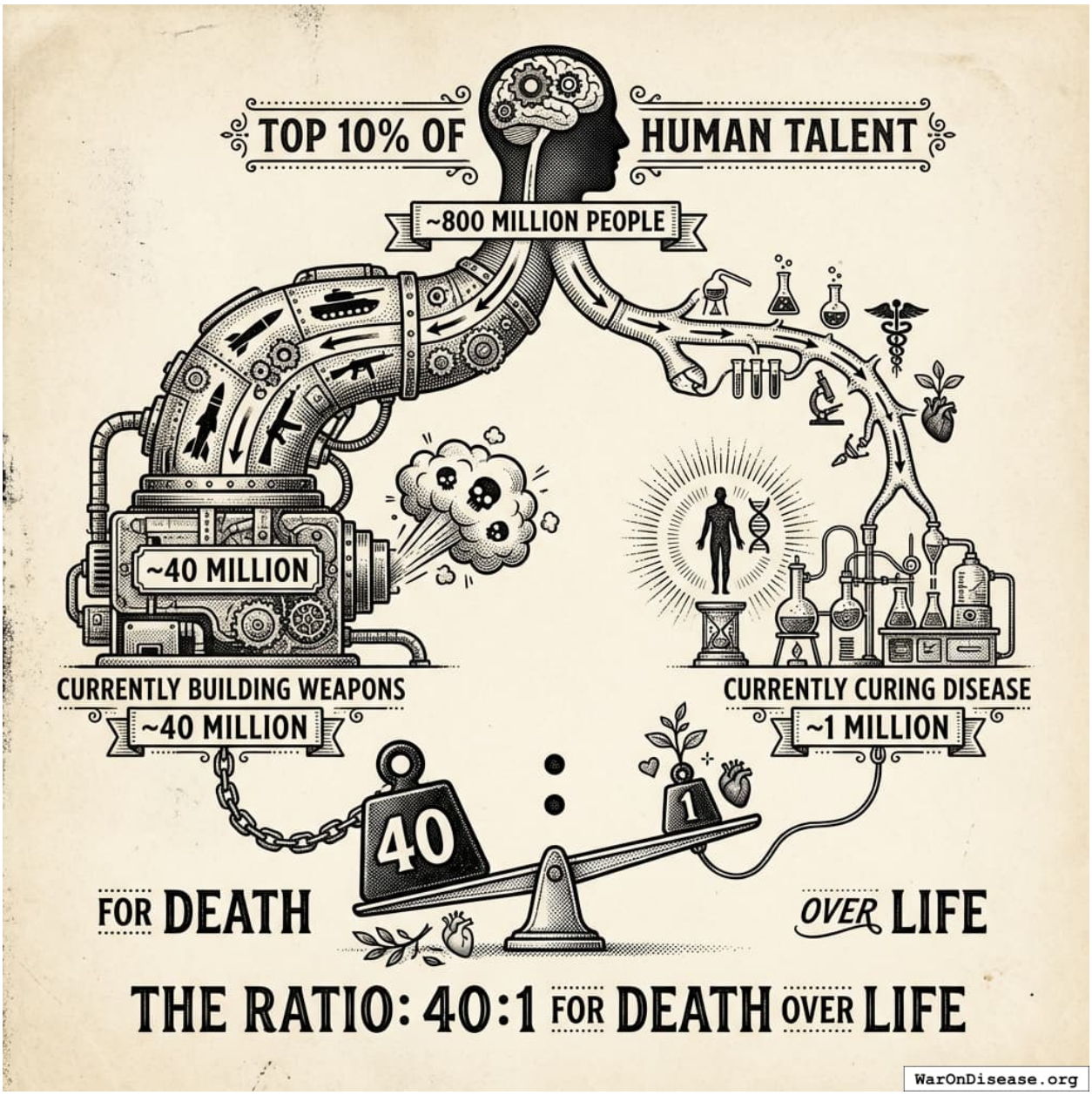


Figure 190: Comparison of human capital allocation showing the massive disparity between talent assigned to weapons versus cures.

The Inflation Shell Game (How They Steal Medical Progress)

Watch this magic trick:

Year 1

- NIH budget: $47B (95% CI: $45B-$50B)
- Military budget: $800 billion
- Ratio: 20:1 for death

Year 5 (after "increasing medical research")

- NIH budget: $60B (95% CI: $50B-$75B) (50% increase! Victory!)
- Military budget: $1.2 trillion (also 50% increase)
- Fed money printing: 50% inflation
- Real purchasing power: Exactly the same
- Ratio: Still 20:1 for death

You got a 50.0% raise! Too bad everything costs 50.0% more. The pie didn't grow. They just cut it with more decimal places.

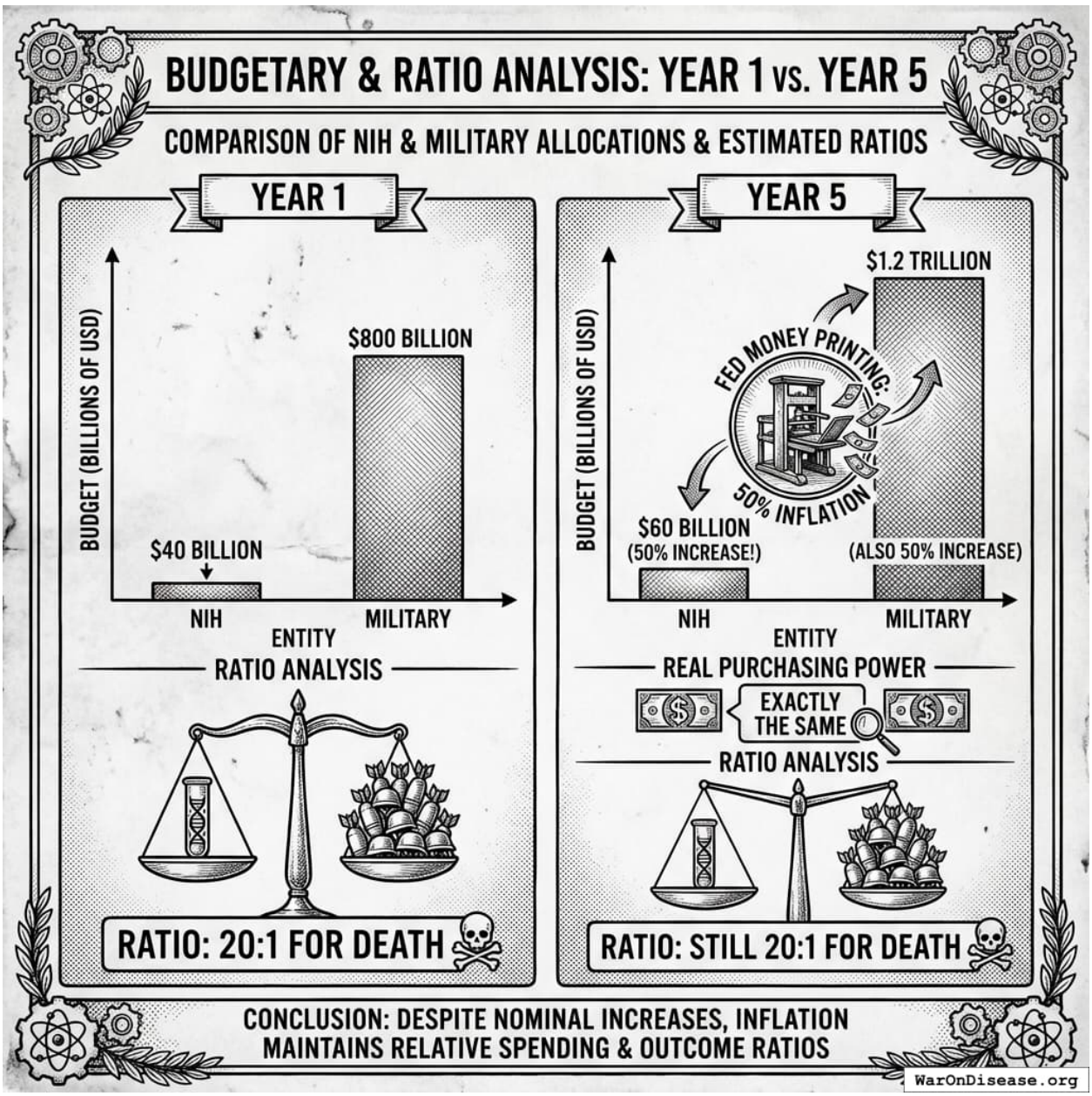


Figure 191: A side-by-side comparison showing that while nominal budgets increase by 50 percent, the purchasing power and ratio of spending remain stagnant due to inflation.

The Proof: 50 Years of Going Nowhere

Medical Research as % of GDP

- 1975: 0.08%
- 1985: 0.07%
- 1995: 0.07%
- 2005: 0.06%
- 2015: 0.06%
- 2025: 0.065%

Absolute dollars increased 10X. Percentage of resources: Actually decreased. This is not an accident.

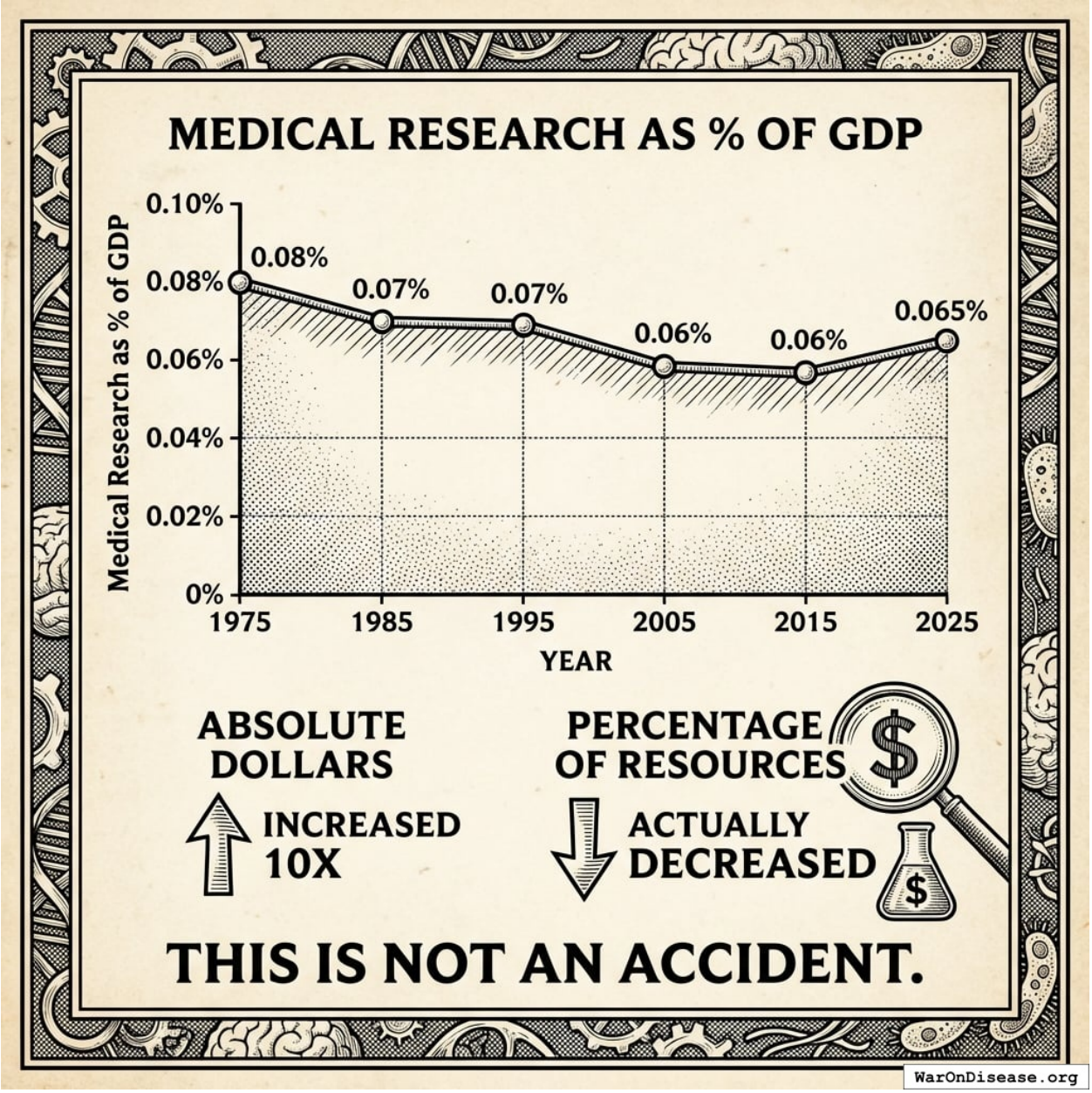


Figure 192: A line chart showing the trend of medical research as a percentage of GDP from 1975 to 2025, illustrating the relative decline in resource allocation over time.

What Actually Grew

- Financial sector: 3% → 8% of GDP
- Military-industrial: 4% → 6% of GDP

- Healthcare bureaucracy: 5% → 18% of GDP
- Actual medical research: Shrinking slice

The money printers fund what they value. They value control, not cures.

Why Money Printing Matters: Resources Follow the Printer

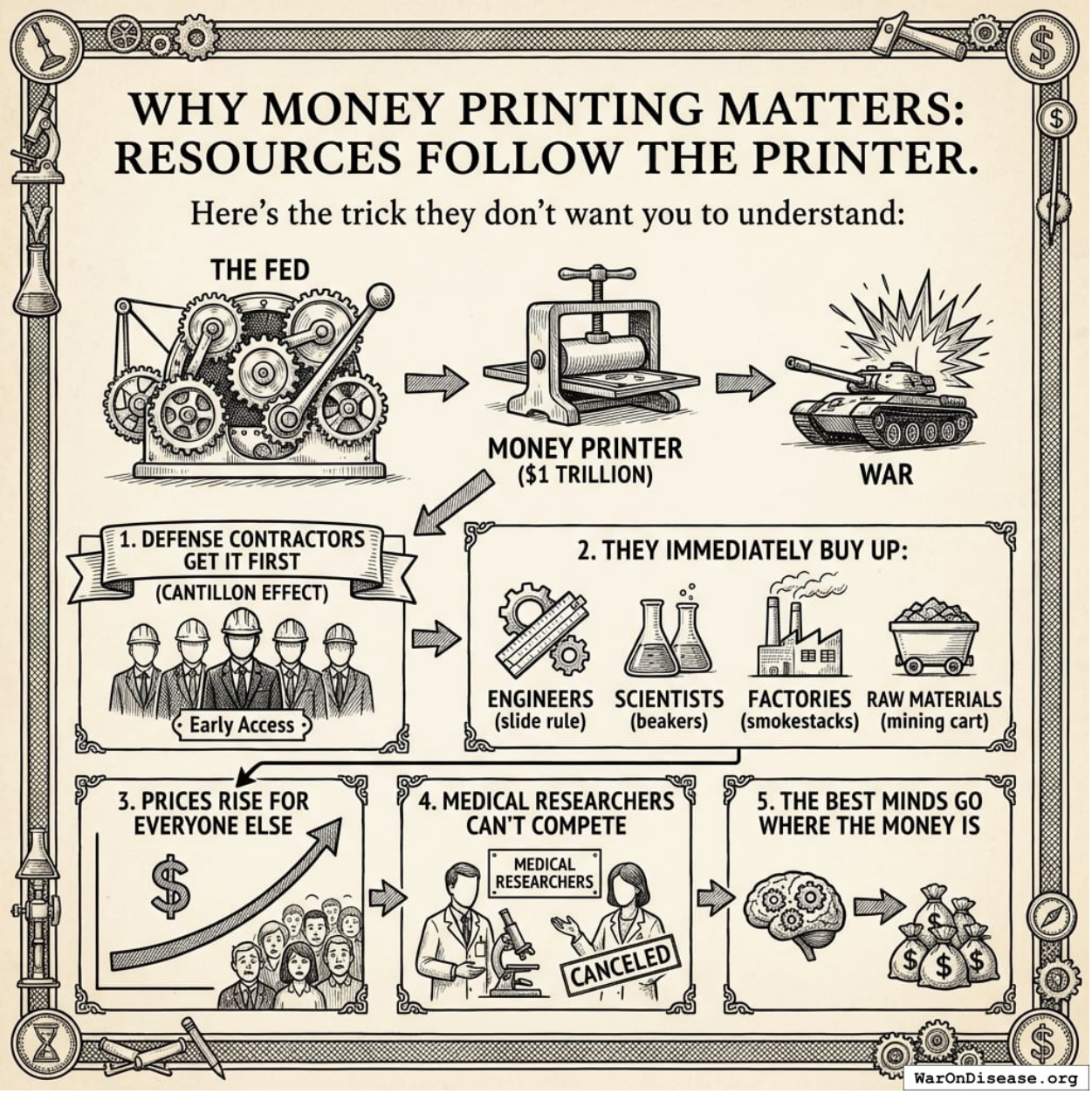


Figure 193: A flow diagram illustrating how capital injection into defense sectors creates a ripple effect that redirects talent and materials away from civilian sectors like medical research.

Here's the trick they don't want you to understand:

When the Fed prints $1 trillion for war:

1. Defense contractors get it first (Cantillon Effect)
2. They immediately buy up: Engineers, Scientists, Factories, Raw materials
3. Prices rise for everyone else
4. Medical researchers can't compete
5. The best minds go where the money is

The Brain Drain Math

- MIT graduate with $200k debt
- Option A: NIH postdoc at $55k/year
- Option B: Raytheon at $150k/year
- Choice: Obvious
- Result: Another brain lost to the death machine

This is why printing more money for medicine doesn't work. The Fed will just print more for war, bid up the same resources, and maintain the same deadly ratio.

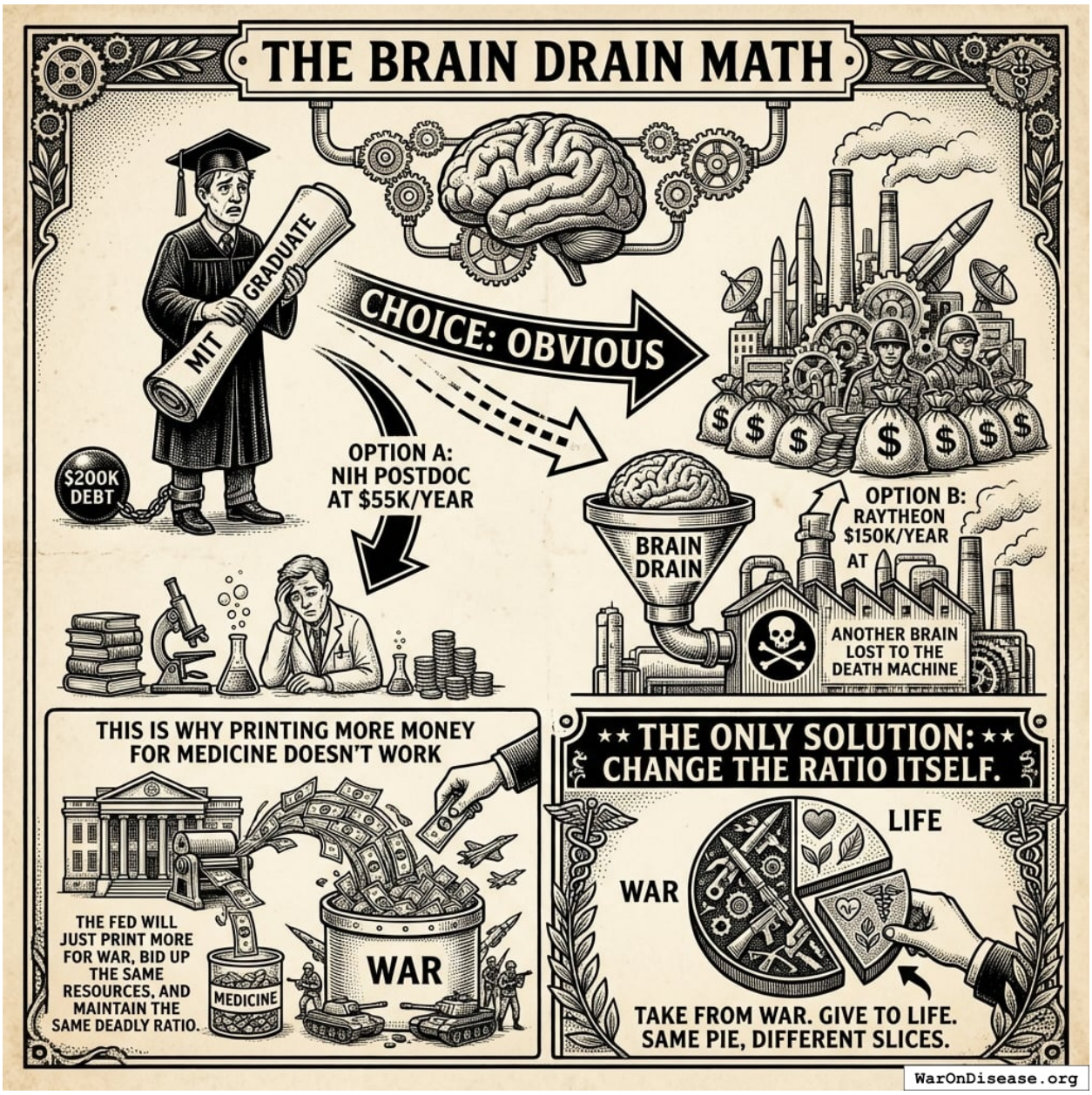


Figure 194: A comparison of two career paths for an MIT graduate with debt, contrasting a lower-paying medical research role with a high-paying defense role, and a pie chart illustrating the reallocation of resources from war to life.

The Only Solution: Change the ratio itself. Take from war. Give to life. Same pie, different slices.

The 1% Treaty: Redirecting the Death Printer to Life

Here's the jujitsu move: They're already printing trillions for war. The treaty asks them to point 1% of it at healing instead.

The Current Money Flow

- Fed prints $8 trillion
- Goes to military contractors
- Builds bombs and missiles
- People die
- Your savings devalued
- Repeat forever

A 1% treaty Redirect

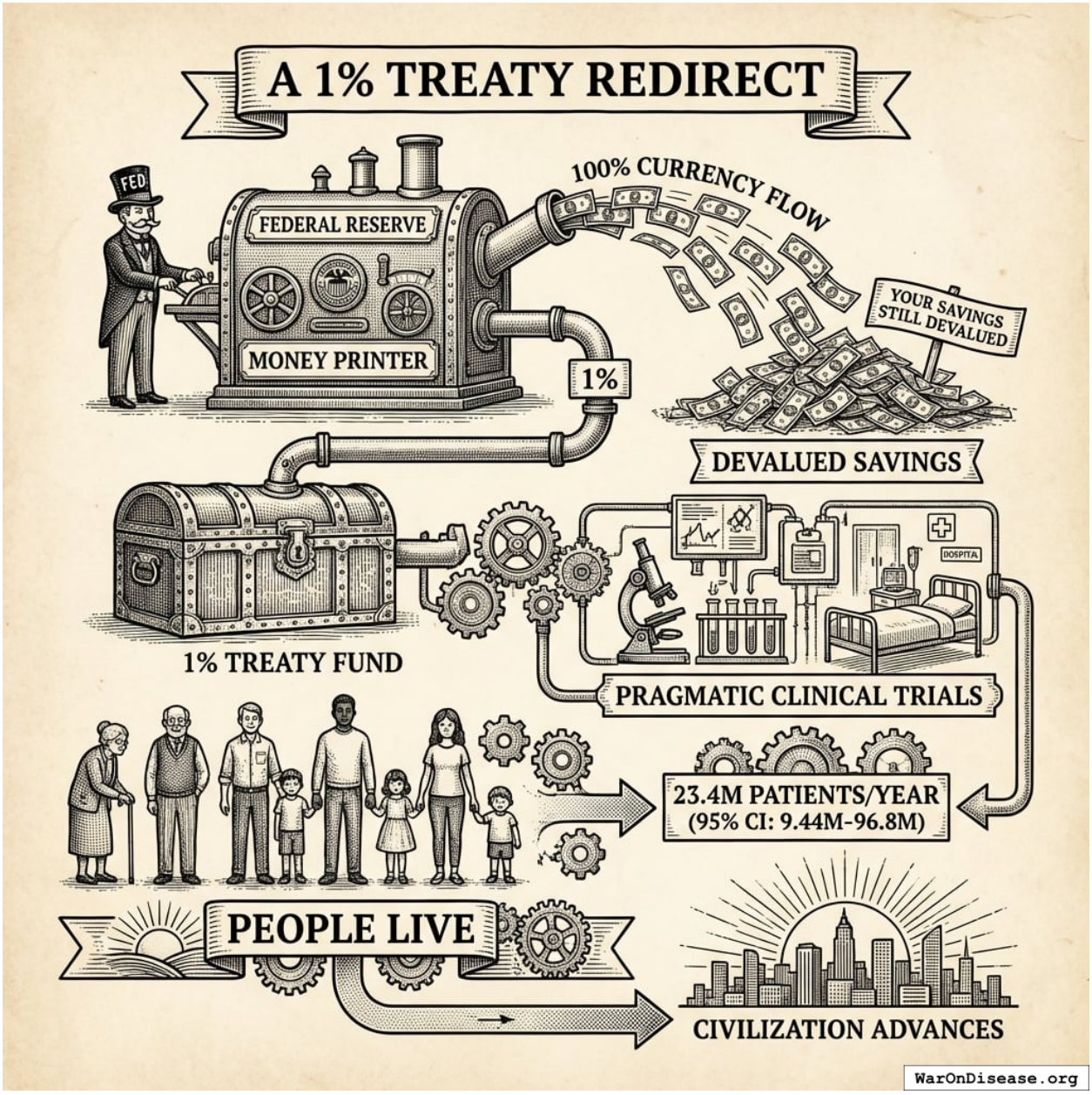


Figure 195: A process flow showing the redirection of 1 percent of newly printed currency into a treaty fund that finances clinical trials, resulting in medical cures and societal advancement despite economic devaluation.

- Fed still prints money (they can't help themselves)
- 1% is directed to a 1% Treaty Fund
- The fund supports pragmatic clinical trials for 23.4M patients/year (95% CI: 9.44M patients/year-96.8M patients/year)
- People live
- Your savings still devalued (but at least people get cured)
- Civilization advances

Why This Works

1. **The Treaty Doesn't Ask for New Money**
   - They're already printing it
   - The treaty redirects 1%
   - Like a river changing course by 1 degree
   - Same money printer, different output
2. **Path of Least Resistance**
   - Easier than stopping money printing (impossible)
   - Easier than raising taxes (political suicide)
   - Easier than cutting military spending (lobbyists cry)
   - Just redirect existing flow
3. **The Money is Already Fake**
   - It's created from nothing anyway
   - Might as well create health instead of death
   - Same inflation, better outcomes
   - Your purchasing power dies either way (but you might live)
4. **VICTORY Incentive Alignment Bonds: The Bootstrap**
   - Initial funding to pass the treaty
   - Once treaty passes, bonds paid from redirected funds
   - Not competing with Fed, just redirecting its output
   - Like a dam redirecting a river

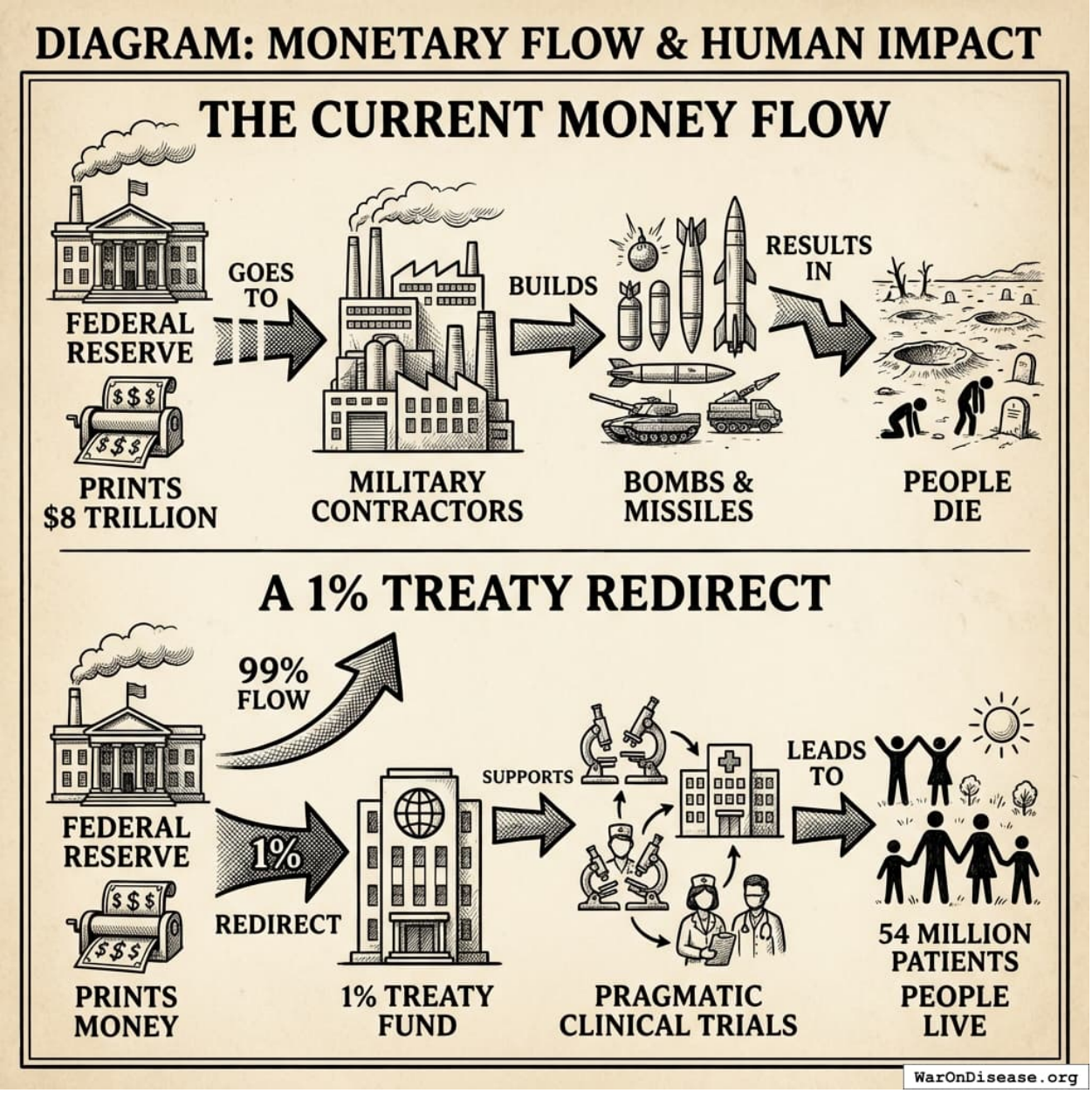


Figure 196: Diagram illustrating the proposed intervention: diverting a small fraction of the existing money supply flow from military output to medical trials.

The Historical Precedent: When Markets Funded Victory

World War II War Bonds

- Raised $185 billion (1940s dollars)
- Voluntary purchases
- Defeated fascism
- No hyperinflation
- Democracy saved

The Difference

- They funded necessary defense
- VICTORY Incentive Alignment Bonds fund pragmatic clinical trials for necessary cures
- They saved democracy from fascism
- VICTORY Incentive Alignment Bonds save humanity from disease

Both use markets instead of money printing. Both align incentives with outcomes. Both actually work.

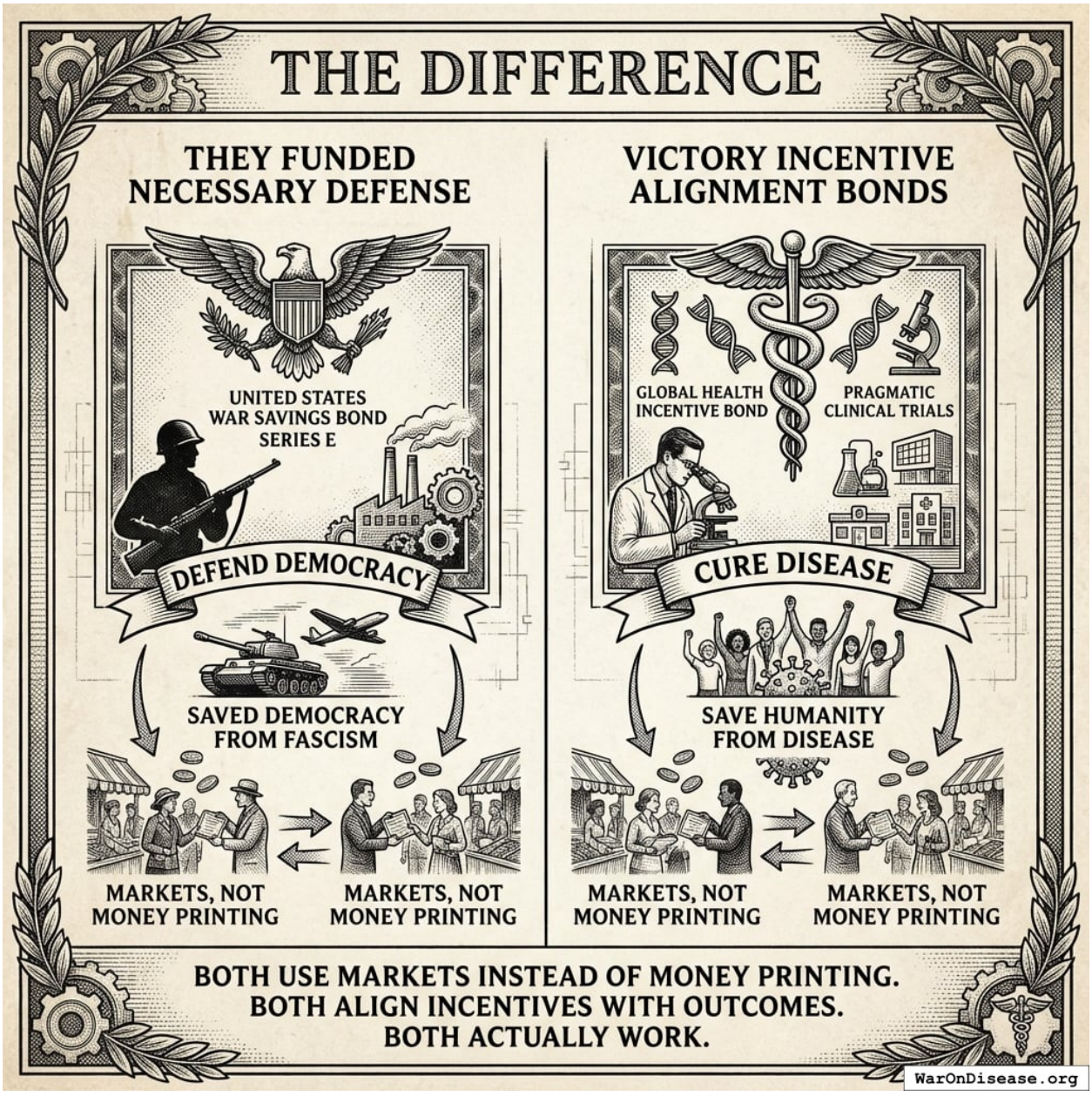


Figure 197: A side-by-side comparison showing the parallels between historical defense funding and VICTORY Incentive Alignment Bonds, emphasizing their shared reliance on market mechanisms and incentive alignment.

The Choice: Keep Printing Death or Start Printing Life

Option A: Keep the Current System

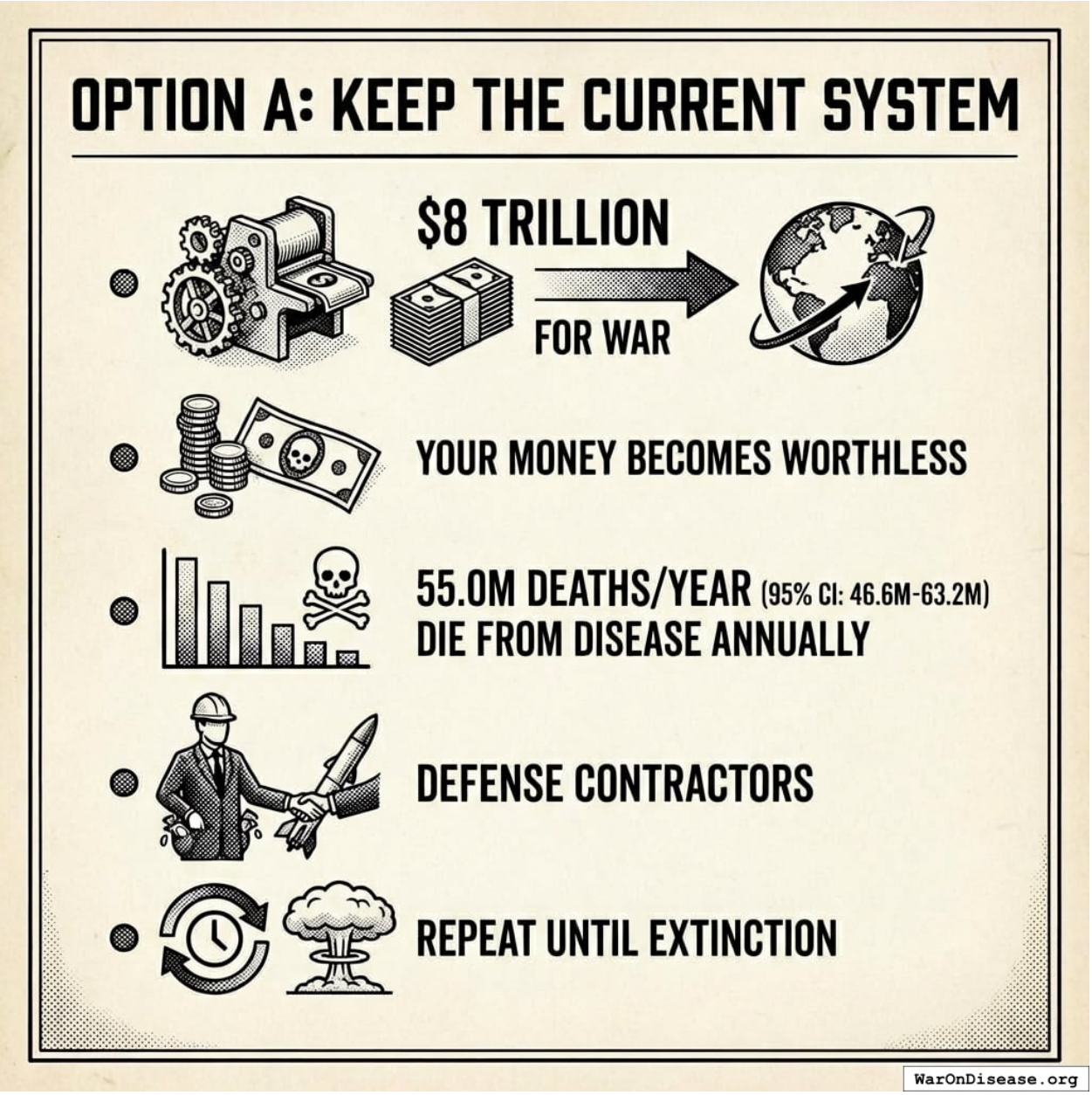


Figure 198: A circular process diagram illustrating the feedback loop between military spending, currency devaluation, global mortality, and contractor profits leading to a repeat cycle.

- Fed prints $8 trillion for war
- Your money becomes worthless
- 55.0M deaths/year (95% CI: 46.6M deaths/year-63.2M deaths/year) die from disease annually
- Defense contractors get richer
- Repeat until extinction

Option B: The 1% Redirect

- Fed still prints $8 trillion (they're addicted)
- 1% ($27.2B) goes to curing disease through pragmatic clinical trials
- Your money still becomes worthless (sorry)
- But millions fewer people die
- Maybe your cancer gets cured before you need it

It's not complicated. They're going to print money anyway. The treaty just asks them to print 1% for life instead of 100% for death.

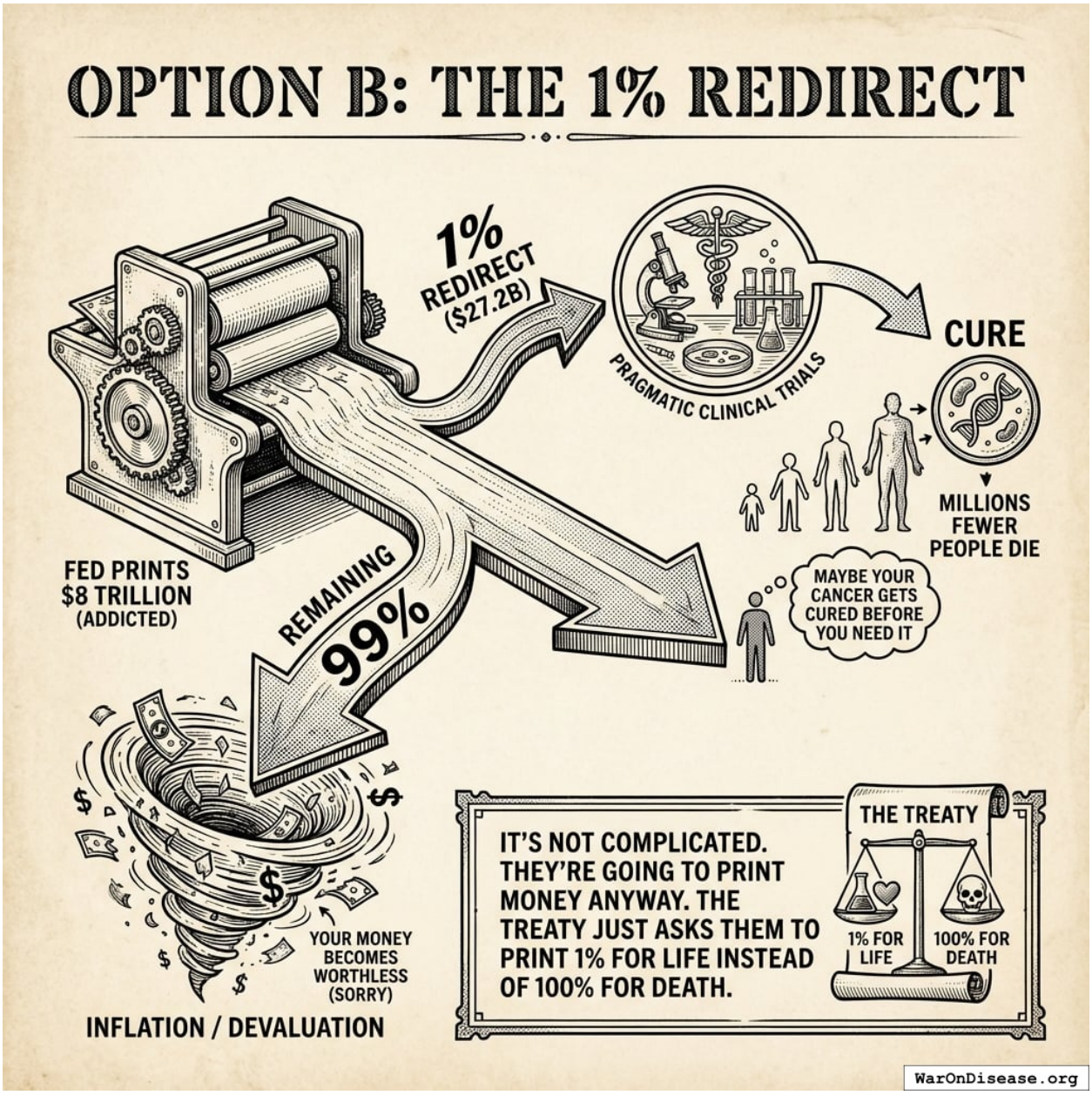


Figure 199: A visualization of the '1 percent Redirect' showing 1 percent of the Federal Reserve's 8 trillion output being diverted from general spending to pragmatic clinical trials for curing diseases.

How Tiny 1% Really Is

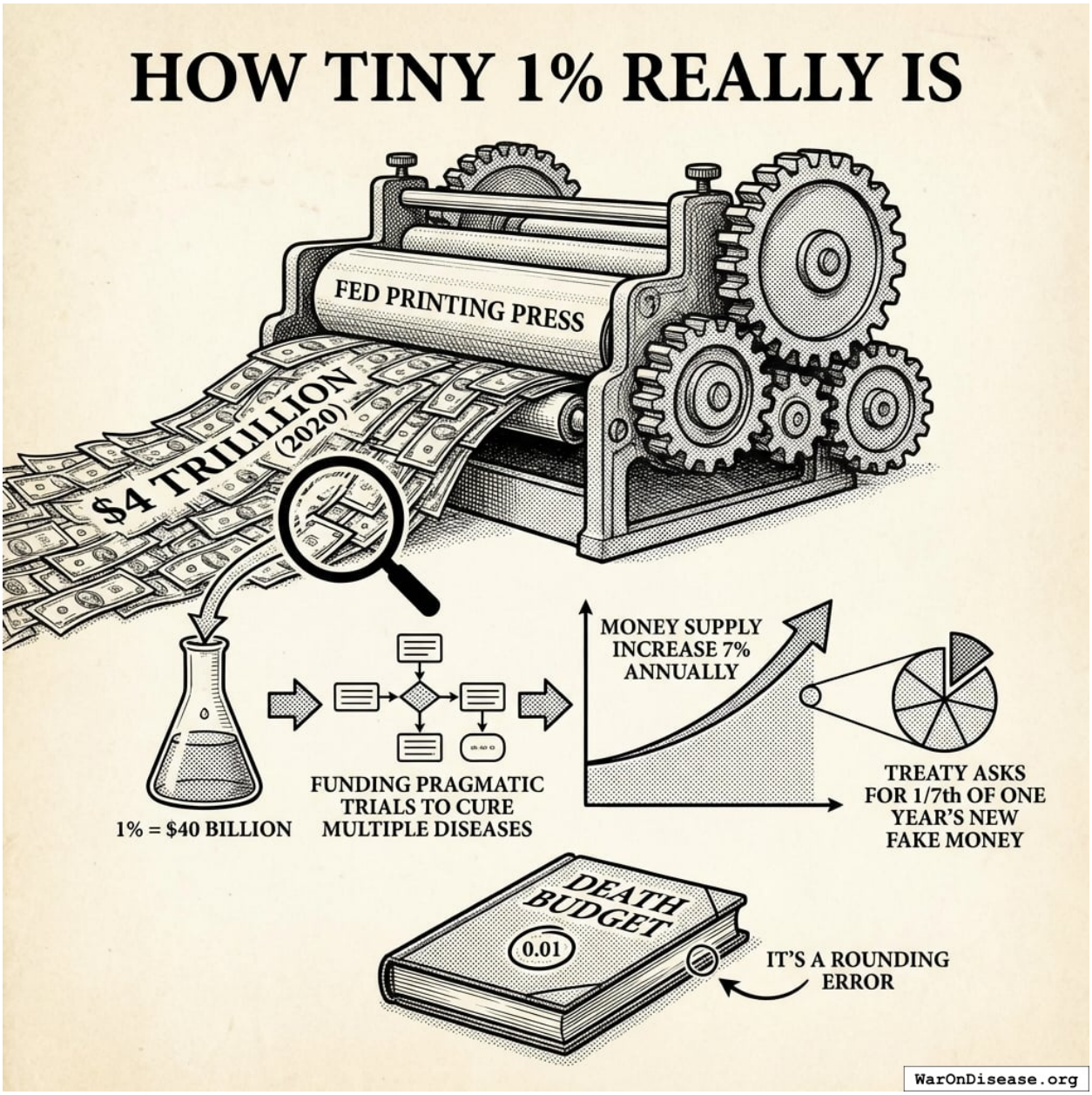


Figure 200: A proportional visualization comparing the 4 trillion in total currency printed to the 1 percent sliver required for treaty funding and medical trials.

- Fed printed $4 trillion in 2020 alone (for COVID)
- 1% of that = $40 billion = funding pragmatic trials to cure multiple diseases
- They increase money supply by 7% annually anyway
- The treaty asks for 1/7th of one year's new fake money
- It's a rounding error in their death budget

Why This Can Actually Happen

- Defense contractors keep 99% (they stop complaining)

- Politicians get credit for "supporting healthcare"
- No new taxes needed (already printing)
- Fed keeps printing (their favorite activity)
- Everyone wins except disease and death

They created the money printer to fund death without asking permission. You're using their own system against them - redirecting their death machine to create life. It's like convincing a dragon to breathe medicine instead of fire.



Figure 201: A stakeholder map showing how redirecting military funding creates a win-win scenario for defense contractors, politicians, and the Federal Reserve while shifting from a 'death' to 'life' economy.

Your Money, Your Choice

Every dollar in your wallet was printed to fund something.

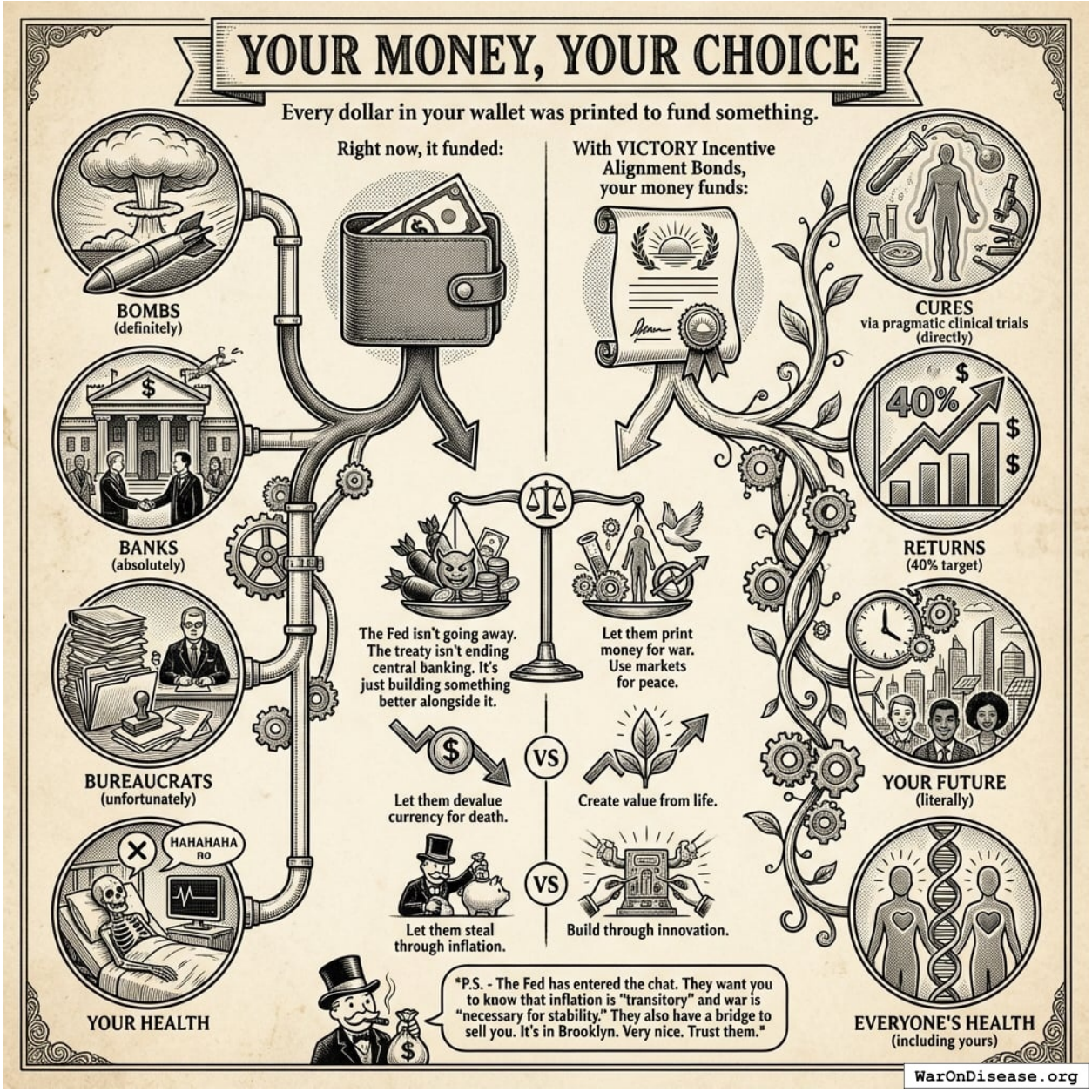


Figure 202: A side-by-side comparison between the current monetary system's outcomes, such as war and inflation, and the VICTORY Incentive Alignment Bonds' focus on medical cures and financial returns.

Right now, it funded:

- Bombs (definitely)
- Banks (absolutely)
- Bureaucrats (unfortunately)
- Your health (HAHAHAHA no)

With VICTORY Incentive Alignment Bonds, your money funds:

- Cures via pragmatic clinical trials (directly)
- Returns (40% target)
- Your future (literally)
- Everyone's health (including yours)

The Fed isn't going away. The treaty isn't ending central banking. It's just building something better alongside it.

Let them print money for war. Use markets for peace.

Let them devalue currency for death. Create value from life.

Let them steal through inflation. Build through innovation.

P.S. - The Fed has entered the chat. They want you to know that inflation is "transitory" and war is "necessary for stability." They also have a bridge to sell you. It's in Brooklyn. Very nice. Trust them.

Genetic Slavery

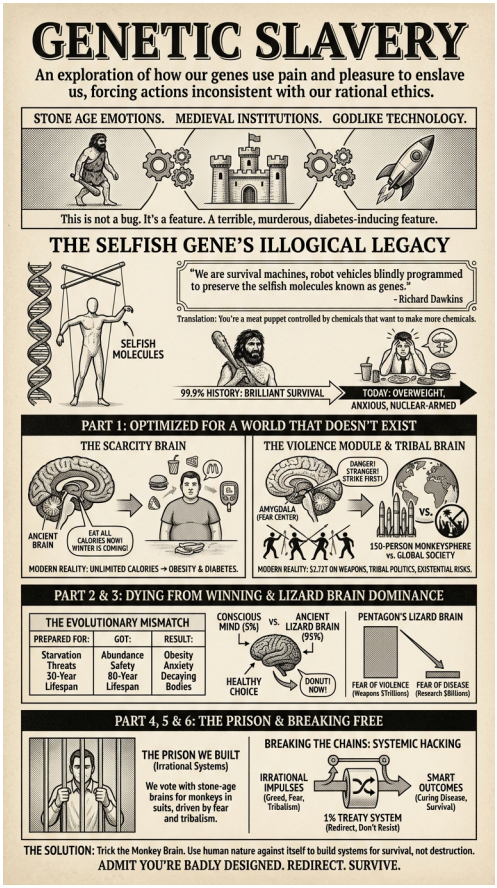


Figure 203: An exploration of how our genes use pain and pleasure to enslave us, forcing actions inconsistent with our rational ethics.

Stone Age emotions. Medieval institutions. Godlike technology.

This is not a bug. It's a feature. A terrible, murderous, diabetes-inducing feature.

The Selfish Gene Made You Illogical (It Was a Good Idea at the Time)

Richard Dawkins put it perfectly: "We are survival machines, robot vehicles blindly programmed to preserve the selfish molecules known as genes."[238]

Translation: You're a meat puppet controlled by chemicals that want to make more chemicals.

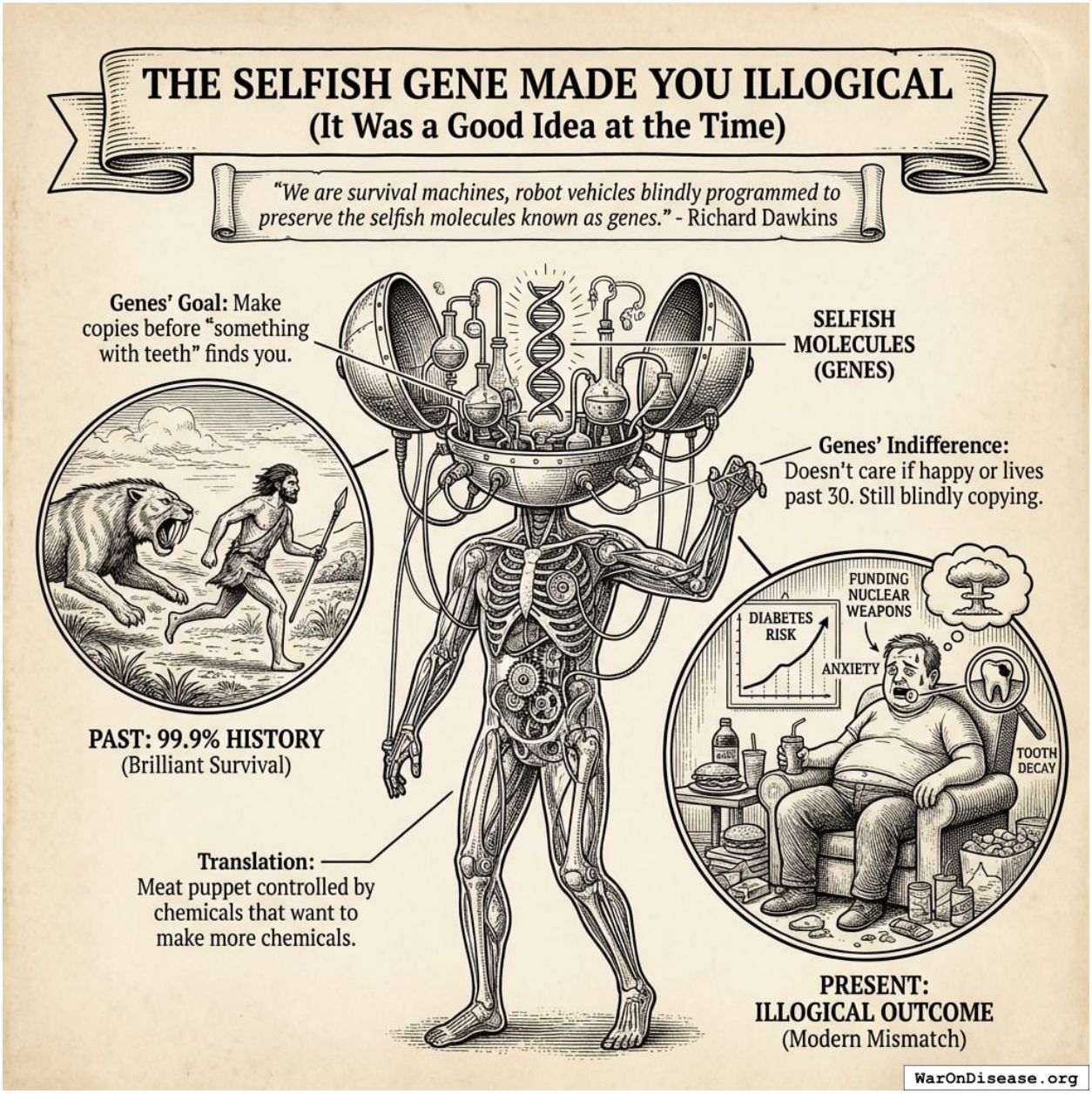


Figure 204: A comparison showing how genetic survival instincts that were beneficial in the ancestral environment lead to health and psychological issues in the modern world.

Your genes don't care if you're happy. They don't care if you live past 30. They care about exactly one thing: making copies of themselves before something with teeth finds you.

For 99.9% of human history, this was brilliant. Now it's why you're often overweight, anxious, funding nuclear weapons, and slowly developing diabetes while your teeth fall out.

Part 1: Your Brain Was Optimized for a World That Doesn't Exist

The Scarcity Brain (Or: Why It's Hard to Stop Eating)

For 200,000 years, calories were rare. Finding a beehive wasn't "prediabetes in a tree" - it was the difference between your children surviving winter or becoming the skinny corpses archaeologists find later.



Figure 205: A comparison showing the evolutionary mismatch between the ancient 'scarcity brain' in a high-risk survival environment versus the modern environment of extreme caloric abundance.

So evolution programmed you with one simple rule: **When you find calories, eat ALL of them RIGHT NOW before the hyenas show up.**

Fast forward to today:

- You live within walking distance of 14 restaurants selling 3,800-calorie meals
- Each meal contains twice your daily calorie needs[239]
- Your ancient brain still screams: "EAT EVERYTHING! WINTER IS COMING!"
- Winter never comes. Diabetes often does.

The exact same brain that kept your ancestors alive by gorging on mammoth fat is now killing you with McDonald's. Evolution doesn't do software updates (it's like still using Windows 95 to run nuclear power plants - technically functional, but few people should be comfortable with this).

The Violence Module (Or: Why We Tend to Prefer Bombs Over Band-Aids)

Fun fact: 15-30% of our ancestors died from violence[240]. Not disease. Not starvation. Other humans smashing their heads with rocks over who gets the good berry bush.

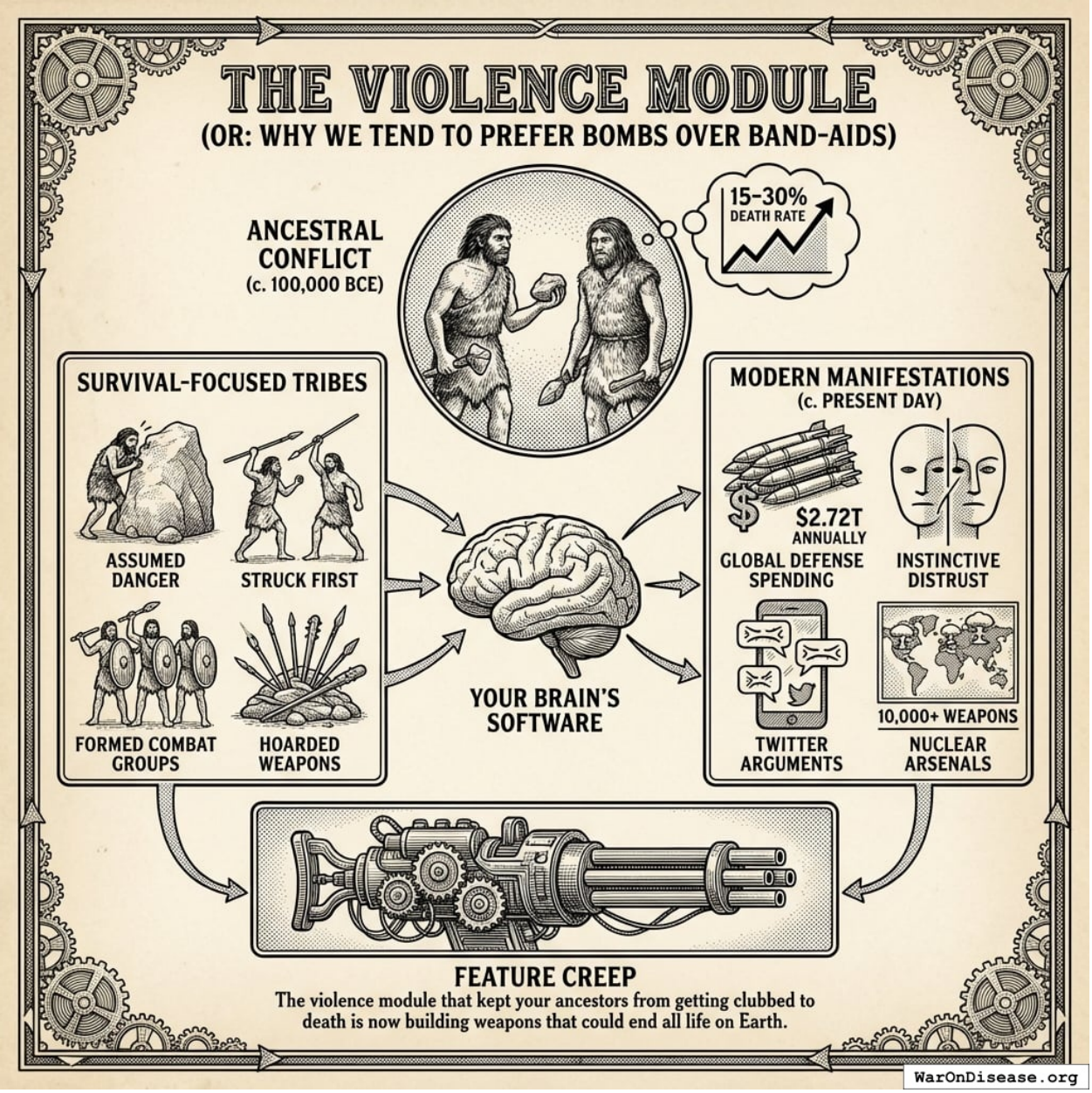


Figure 206: A comparison showing how ancestral survival behaviors, such as tribalism and weapon hoarding, have scaled into modern global phenomena like nuclear proliferation and digital tribalism.

The tribes that survived weren't the peaceful, loving ones. They were the paranoid, survival-focused ones who:

- Assumed every stranger might want to kill them (often statistically accurate)
- Struck first when threatened (natural selection at work)
- Formed tight combat groups to kill other groups (teamwork!)
- Hoarded weapons obsessively (can never have too many pointy sticks)

Your brain is still running this exact software. That's why:

- Humanity spends $2.72T annually on weapons we'll probably never use
- You instinctively distrust people who don't look like your tribe

- Twitter arguments feel like actual combat (your amygdala can't tell the difference)
- Countries with 10,000 nuclear weapons[241] are worried they don't have enough

The violence module that kept your ancestors from getting clubbed to death is now building weapons that could end all life on Earth. This is what computer scientists call "feature creep."

The Tribal Brain: Why Democracy is Struggling

Dunbar's number[242] says humans can maintain stable relationships with about 150 people. That's it. That's your monkeysphere.

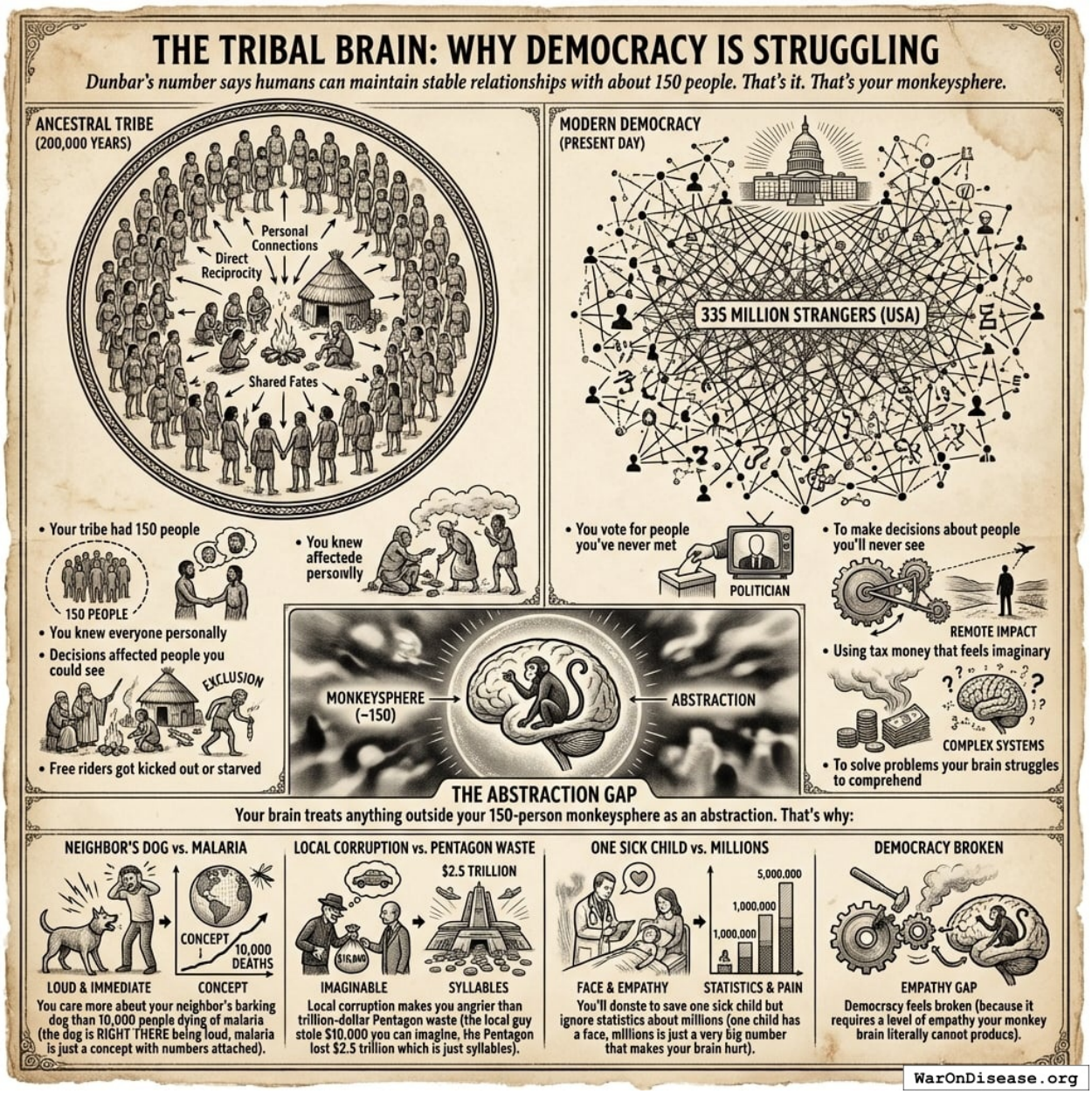


Figure 207: A conceptual comparison between the ancestral tribal setting of 150 people and the abstract scale of modern democracy, illustrating the gap between personal connection and statistical reality.

For 200,000 years, this worked great:

- Your tribe had 150 people
- You knew everyone personally
- Decisions affected people you could see
- Free riders got kicked out or starved

Now you live in a democracy with 335 million strangers where:

- You vote for people you've never met
- To make decisions about people you'll never see
- Using tax money that feels imaginary
- To solve problems your brain struggles to comprehend

Your brain treats anything outside your 150-person monkeysphere as an abstraction. That's why:

- You care more about your neighbor's barking dog than 10,000 people dying of malaria (the dog is RIGHT THERE being loud, malaria is just a concept with numbers attached)
- Local corruption makes you angrier than trillion-dollar Pentagon waste (the local guy stole $10,000 you can imagine, the Pentagon lost $2.5 trillion which is just syllables)
- You'll donate to save one sick child but ignore statistics about millions (one child has a face, millions is just a very big number that makes your brain hurt)
- Democracy feels broken (because it requires a level of empathy your monkey brain literally cannot produce)

Part 2: Genetic Slavery is Literally Killing Us

We're Dying from Winning

Evolution prepared us for scarcity, predators, and violence[243]. We got abundance, safety, and Netflix. Our bodies are experiencing the biological equivalent of "ERROR: SUCCESS NOT FOUND":

What Evolution Prepared For	What We Got	Result
Starvation	Unlimited calories	42.4% obesity rate[244]
Constant physical threats	Office chairs	Anxiety disorders
30-year lifespan	80-year lifespan	Bodies that fall apart at 40
Small tribes	Global society	Constant existential dread
Clear immediate dangers	Abstract future risks	Difficulty planning
Scarce mates	Dating apps	Paralysis from too much choice

Your genes succeeded spectacularly. They made billions of copies. They won evolution.

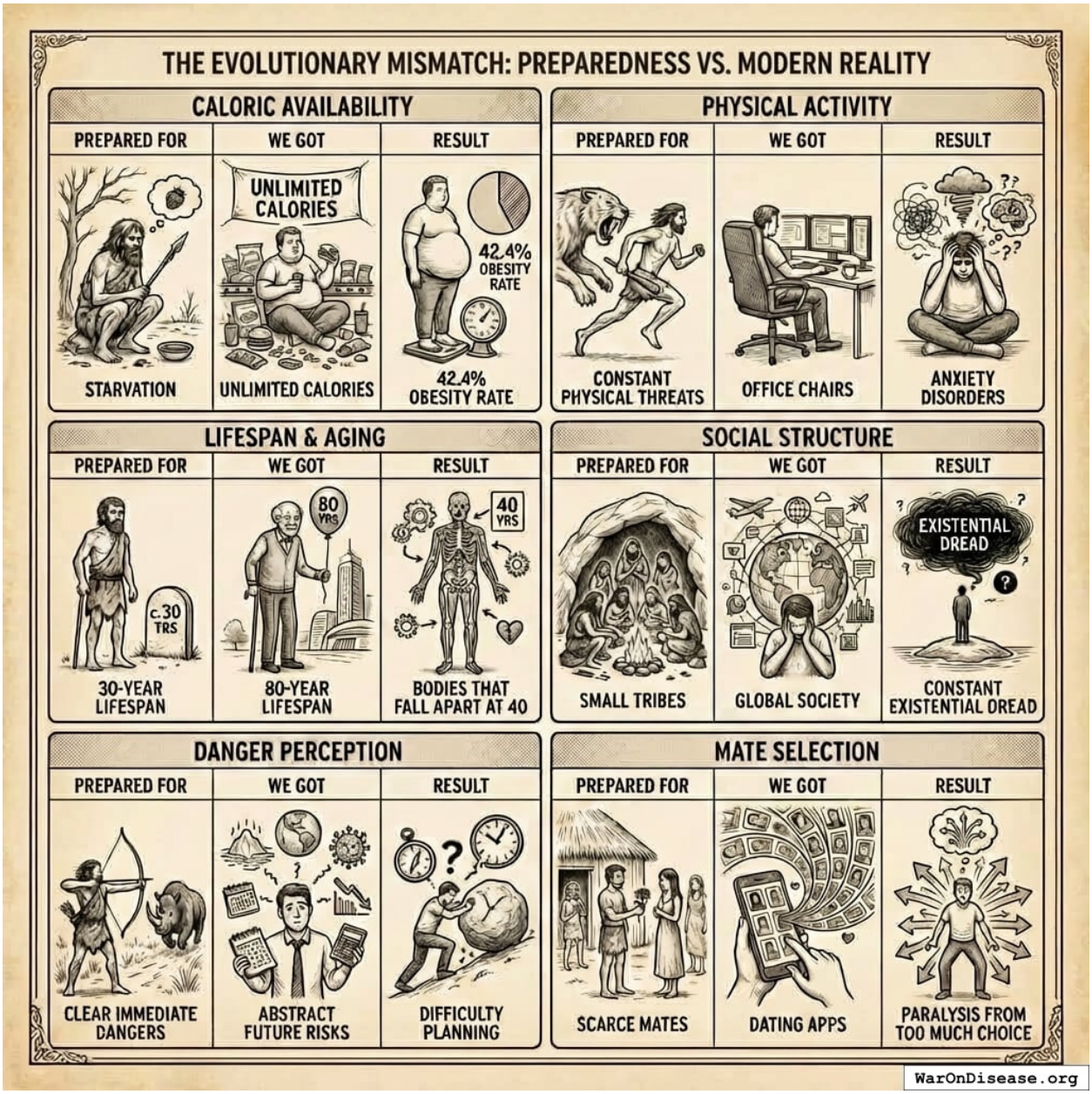


Figure 208: Comparison of evolutionary adaptations versus modern realities, highlighting the biological mismatch causing current societal health issues.

You're just the disposable meat robot they used to do it, and now you're confused why you can't stop eating Cheetos at 2 AM.

Living in the Most Irrational Timeline

Here's the cosmic joke: Humanity has never been safer, healthier, or more prosperous. And you've never been closer to accidentally ending everything.



Figure 209: A visual paradox illustrating the divergence between rising human prosperity and the increasing complexity of self-inflicted existential risks.

From my observations on Wishonia, this is the most entertaining timeline. You solved all the hard problems, then immediately invented new, more complex problems to replace them. It's like watching someone win the lottery, then use the money to buy a tiger that eats them.

Problems you solved

- Starvation (you throw away 40% of food because storing it is inconvenient)
- Predators (you murdered them into extinction, then put them in zoos so your children could see what you killed)
- Infant mortality (basically eradicated in developed countries, which makes the death rate in poor countries feel more optional and thus more tragic)

- Most infectious diseases (vaccines work despite what Facebook says)
- Dying at 30 (now you complain about turning 40, which your ancestors would consider a miraculous lifespan worth celebrating daily)

New problems you invented with your big brains:

- Nuclear weapons (enough to end civilization 20 times because once wasn't enough)
- Climate change (you're terraforming your only planet by accident)
- Antibiotic resistance (10 million deaths annually by 2050[169] because you gave antibiotics to cows)
- AI that might become sentient and decide you're the problem (the AI would be correct - this is the risk of building things smarter than you)
- Social media (voluntary psychological torture you pay for with attention)

Humanity often acts like toddlers who found the nuclear launch codes. Godlike technological power, hamster-level impulse control.



Figure 210: A side-by-side comparison contrasting historical survival challenges that humanity has solved against the modern existential risks created by technological progress.

Part 3: Why You Can't Just "Be Better"

Your Brain is Not Your Friend

People love to say "just make better choices." These people are mistaken.

Your conscious mind - the part reading this - controls maybe 5% of your decisions[245]. The other 95% is your ancient lizard brain running software older than agriculture.

You can't "choose" to not crave sugar any more than you can "choose" to not feel pain when stabbed. These systems run deeper than consciousness.

When you see a donut, here's what happens:

1. **Ancient brain**: "CALORIES! EAT NOW! SURVIVAL!"
2. **Modern brain**: "I should eat healthy."
3. **Ancient brain**: "QUIET! WINTER IS COMING!"
4. **Modern brain**: "But I'm trying to lose…"
5. **You**: [Eating the donut]

The ancient brain usually wins. It has 200,000 years of practice.

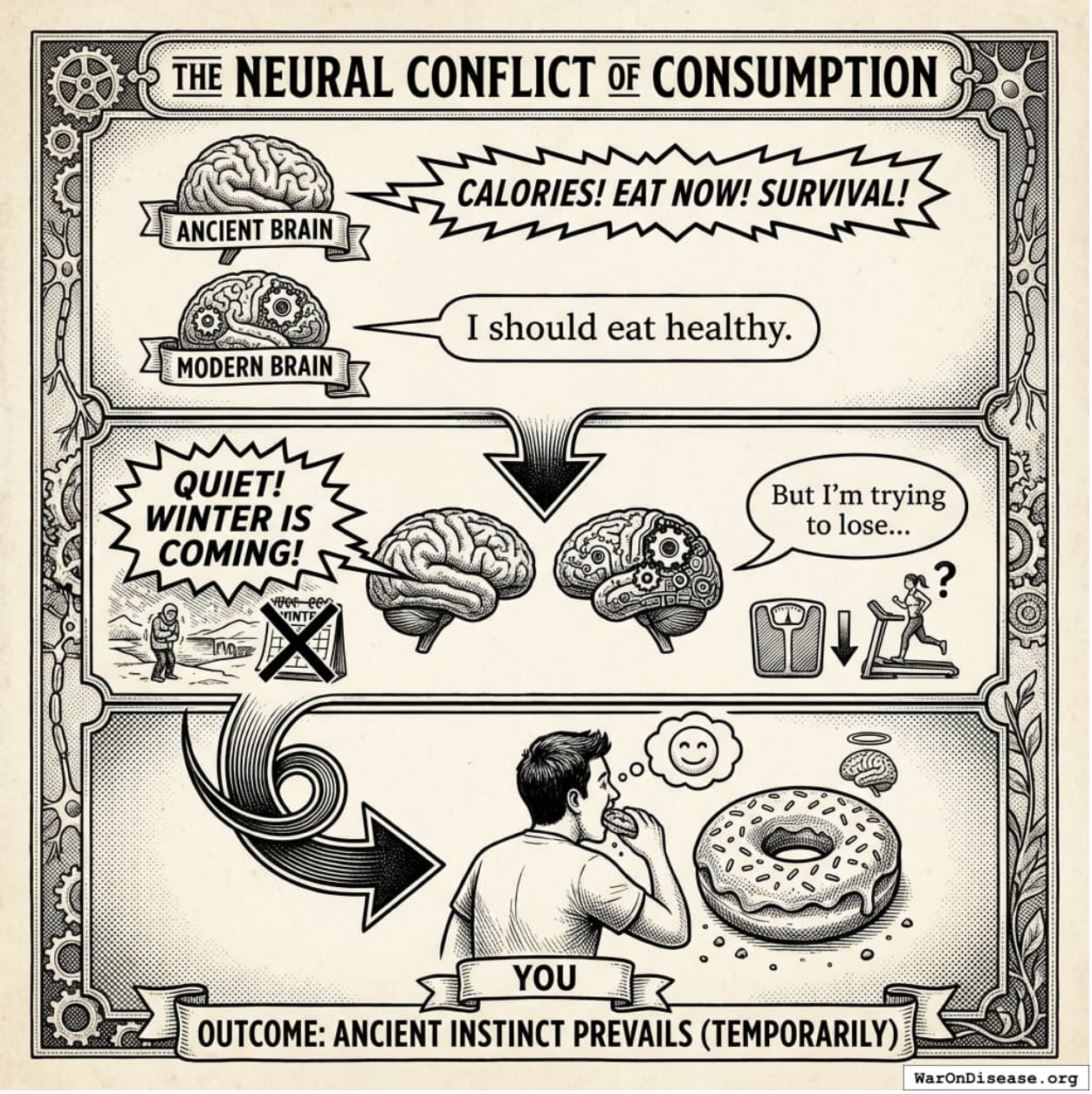


Figure 211: Decision-making flowchart illustrating how ancient survival instincts ('Lizard Brain') override modern rational thought processes during impulse moments.

The Pentagon's Lizard Brain

The same thing happens at the civilization level.

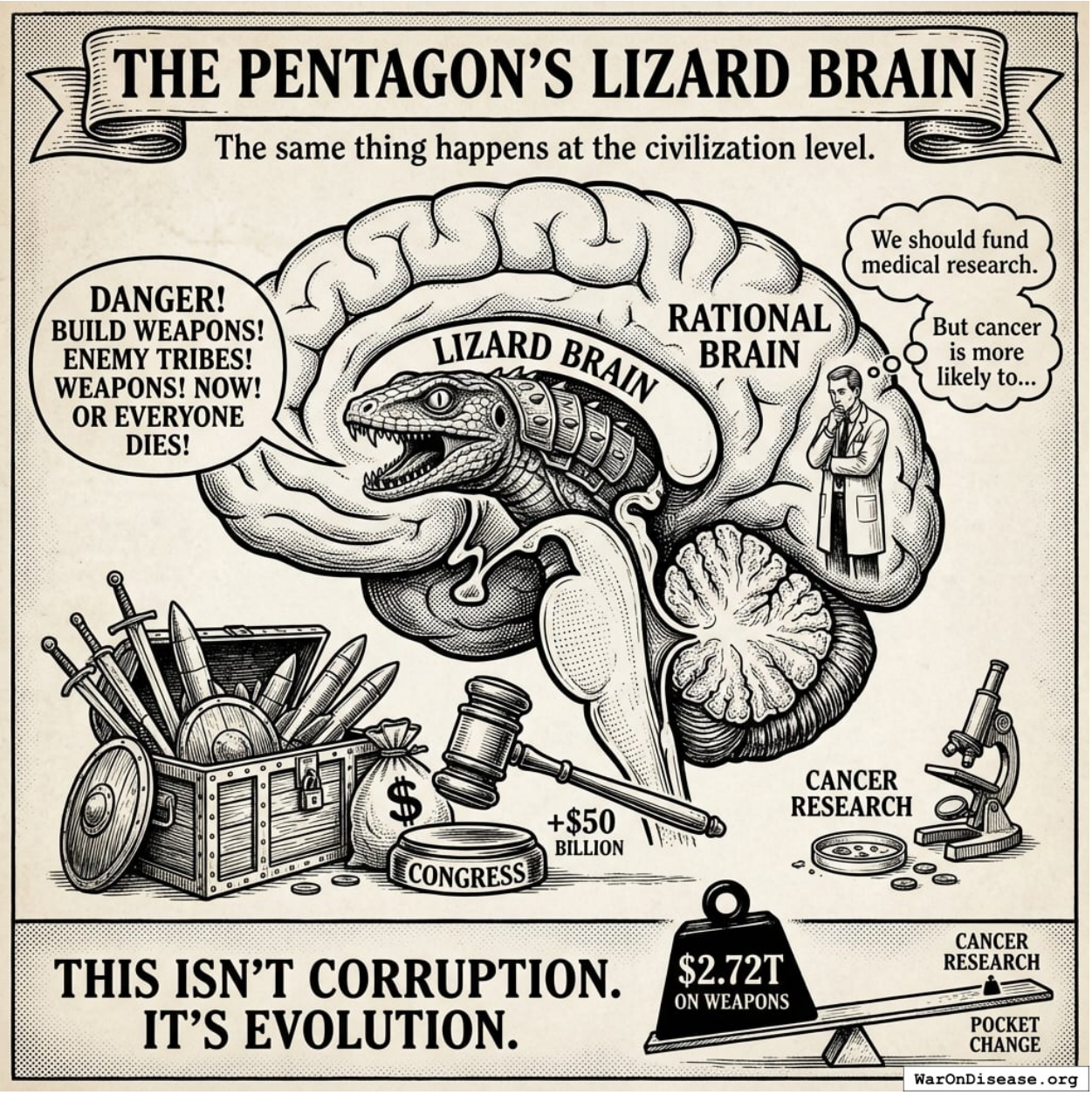


Figure 212: A visual comparison between the 'Lizard Brain' driving massive military spending due to immediate fear and the 'Rational Brain' advocating for medical research despite receiving significantly less funding.

When politicians allocate budgets:

1. **Lizard brain**: "DANGER! BUILD WEAPONS! ENEMY TRIBES!"
2. **Rational brain**: "We should fund medical research."
3. **Lizard brain**: "WEAPONS! NOW! OR EVERYONE DIES!"
4. **Rational brain**: "But cancer is more likely to…"

5. **Congress**: [Adds $50 billion to military budget]

This isn't corruption. It's evolution.

The fear of violent death is older than language. The fear of slow death from disease? Your brain literally cannot process it the same way.

That's why you spent $2.72T on weapons while cancer research got pocket change[246].

Part 4: The Prison We Built Ourselves

You Vote for Monkeys in Human-Skin Suits

Democracy asks your stone-age brain to make civilization-level decisions. It often goes exactly as well as you'd expect (badly).

You vote based on:

- Who looks stronger (alpha male bias - your brain thinks the election is a wrestling match)
- Who your tribe likes (social proof - if the clan approves, must be good)
- Who makes you feel safe (fear sells better than policy ever will)
- Who you'd have a beer with (relevance: zero, but your brain insists this matters for nuclear policy decisions)

You don't vote based on:

- Complex policy analysis (too many words, brain hurts)
- Long-term thinking (your brain stops caring after next winter)
- Statistical reality (numbers are abstract, feelings are real)
- Actual competence (boring, where's the tribal signaling?)

You elect leaders using the same brain circuits your ancestors used to pick the guy with the biggest club.

The Military-Industrial Cortex

Your brain's fear center (amygdala) is directly connected to your voting finger. Politicians know this.

Say "terrorism" and your lizard brain overrides everything:

- More people die from falling out of bed than terrorism[247]
- You're 1,000x more likely to die from heart disease[161]
- But terrorism *feels* scarier

So humans spend trillions on defense against threats that barely exist while ignoring the diseases actually killing them.

It's not a conspiracy. It's just evolution doing what evolution does: optimizing for the wrong thing.

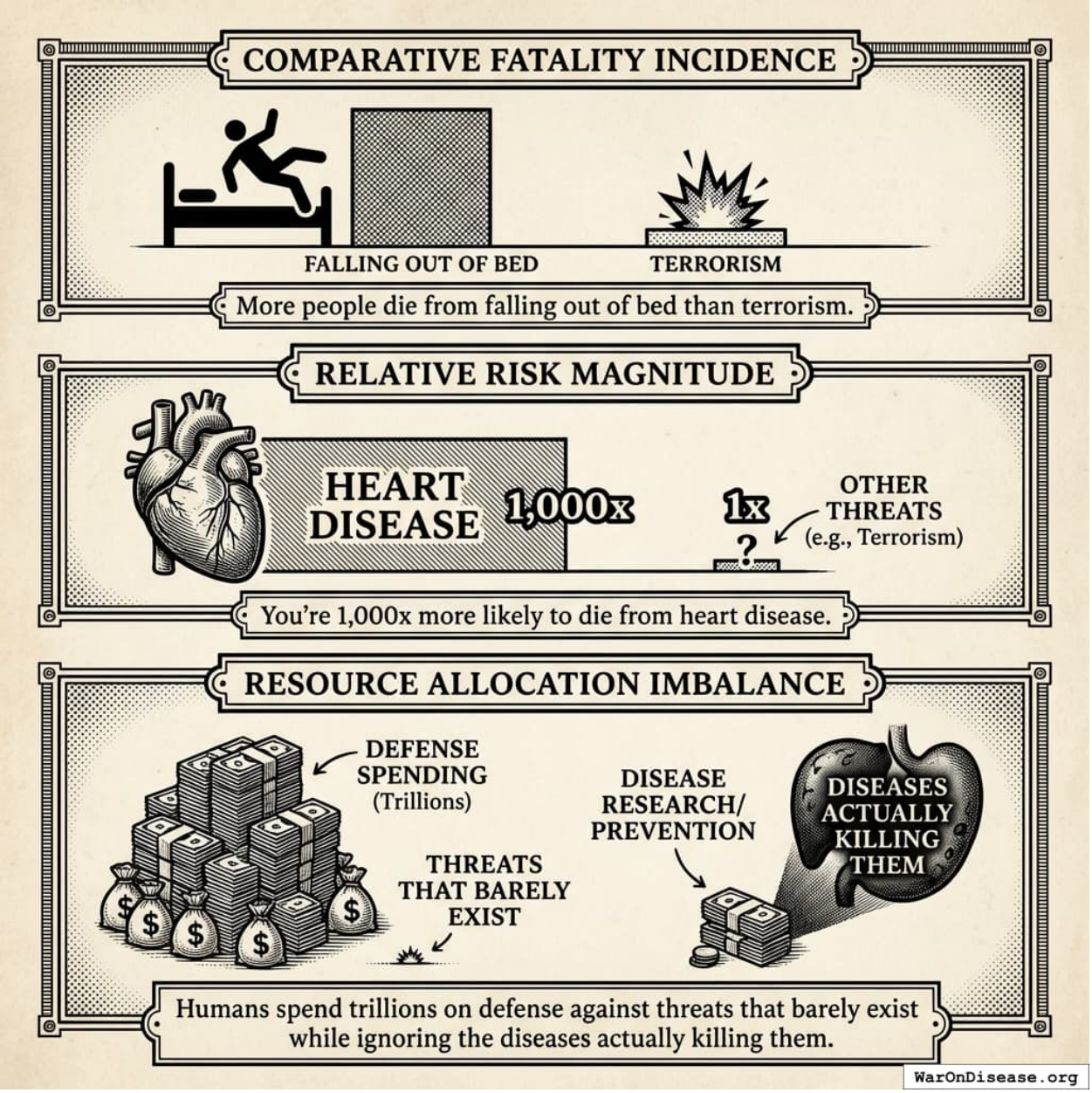


Figure 213: Visual comparison of actual mortality risks (Heart Disease vs. Terrorism) contrasted with resource allocation, illustrating the disconnect between real danger and perceived fear.

Part 5: Breaking the Chains

Every one of you, from the most powerful president to the lowliest pauper, could be doomed to a life of gradually escalating suffering until it ends in catastrophe.

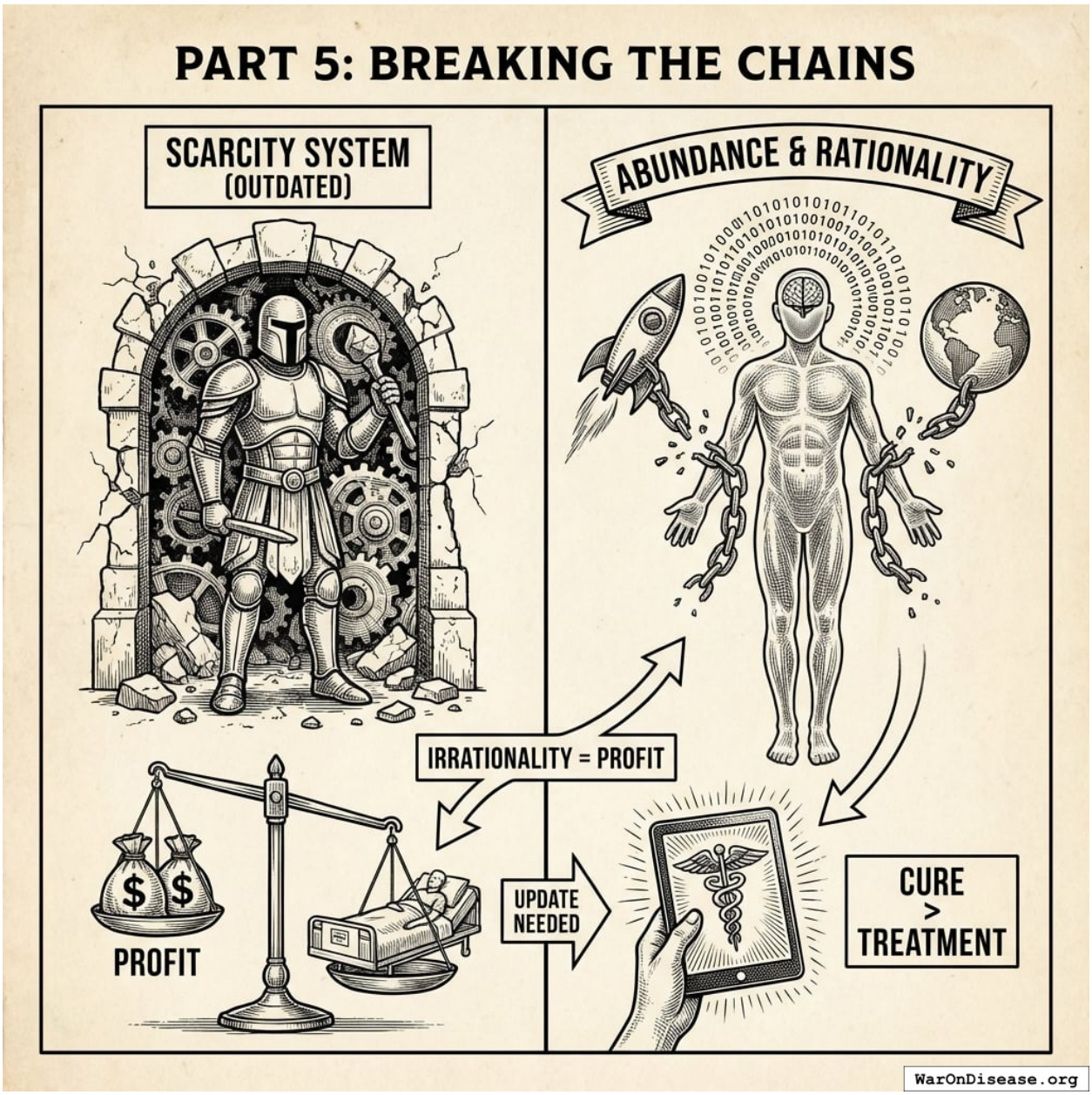


Figure 214: A conceptual comparison between a scarcity-based system that incentivizes war and chronic treatment versus an abundance-based system that rewards cures and global progress.

You are all prisoners to this flawed system. This system made sense in a world of scarcity when you were hitting each other with rocks over the last berry bush. Kill or be killed. Hoard or starve. Trust no one outside your tribe.

But now? You live in a world of abundance and nuclear weapons. You can feed everyone twice over, but you'd rather burn grain to keep prices high. You can cure diseases, but you'd rather sell treatments forever (cured customers don't come back - bad for quarterly earnings). The software running human civilization is 10,000 years out of date, and the bugs are literally killing you.

Why don't you update the software? Why do you cling to a system designed for cave-dwelling murderers when you could be immortal space wizards?

Because the current system makes irrationality more profitable.

Every bomb makes someone rich. Every missile funds a yacht. Every war creates a billionaire.

Disease is profitable too. Not curing it, treating it. Insulin costs $300 a vial[230] because dead diabetics don't buy insulin, but cured diabetics don't either. So we keep them barely alive. It's good business.

The people making money from war and disease aren't evil. They just like money. You can't change human nature, but you can create economic systems that make curing people more profitable than killing them.

Part 6: Breaking Free from Your Programming

The First Step: Admitting You're Badly Designed

You're not broken. You're just running software designed for a different operating system.

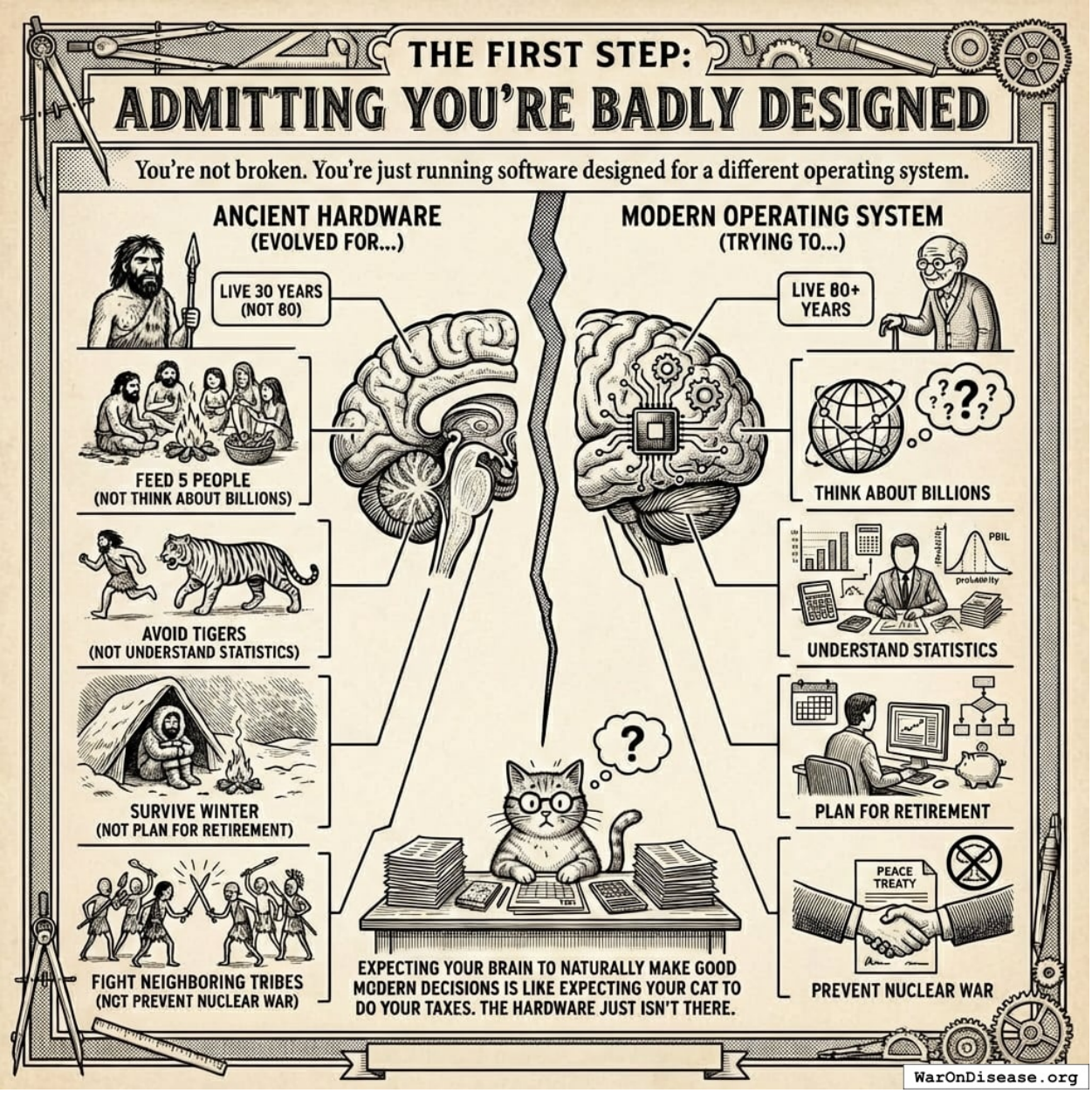


Figure 215: A side-by-side comparison of the human brain's evolutionary hardware versus the complex demands of modern life, illustrating the mismatch between biological survival instincts and modern societal expectations.

Your brain evolved to:

- Live 30 years (not 80)
- Feed 5 people (not think about billions)
- Avoid tigers (not understand statistics)
- Survive winter (not plan for retirement)
- Fight neighboring tribes (not prevent nuclear war)

Expecting your brain to naturally make good modern decisions is like expecting your cat to do your taxes. The hardware just isn't there.

The Solution: Trick the Monkey Brain

You can't fight 200,000 years of evolution. But you can hack it.

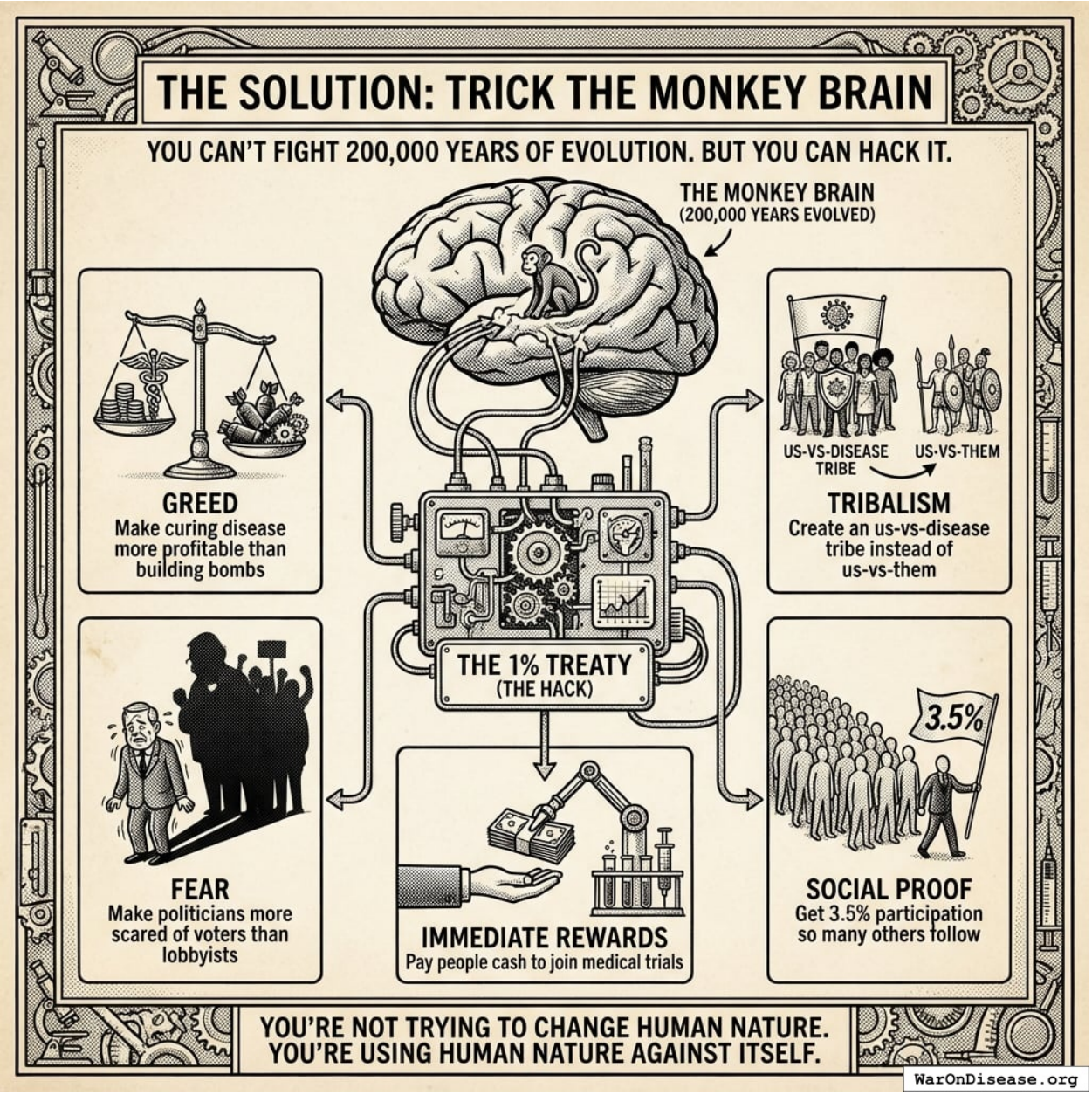


Figure 216: A visual mapping of how innate human impulses like greed, fear, and tribalism are redirected from destructive behaviors toward constructive societal goals through the 1 percent treaty.

That's what a 1% treaty does. Instead of asking people to be rational (impossible), you use their irrational impulses against them:

- **Greed**: Make curing disease more profitable than building bombs
- **Fear**: Make politicians more scared of voters than lobbyists

- **Tribalism**: Create an us-vs-disease tribe instead of us-vs-them

- **Social proof**: Get 3.5% participation so many others follow
- **Immediate rewards**: Pay people cash to join medical trials

You're not trying to change human nature. You're using human nature against itself.

The Meta-Slavery

Your genes have enslaved you in stupid brains, but they also gave you the ability to see the prison.

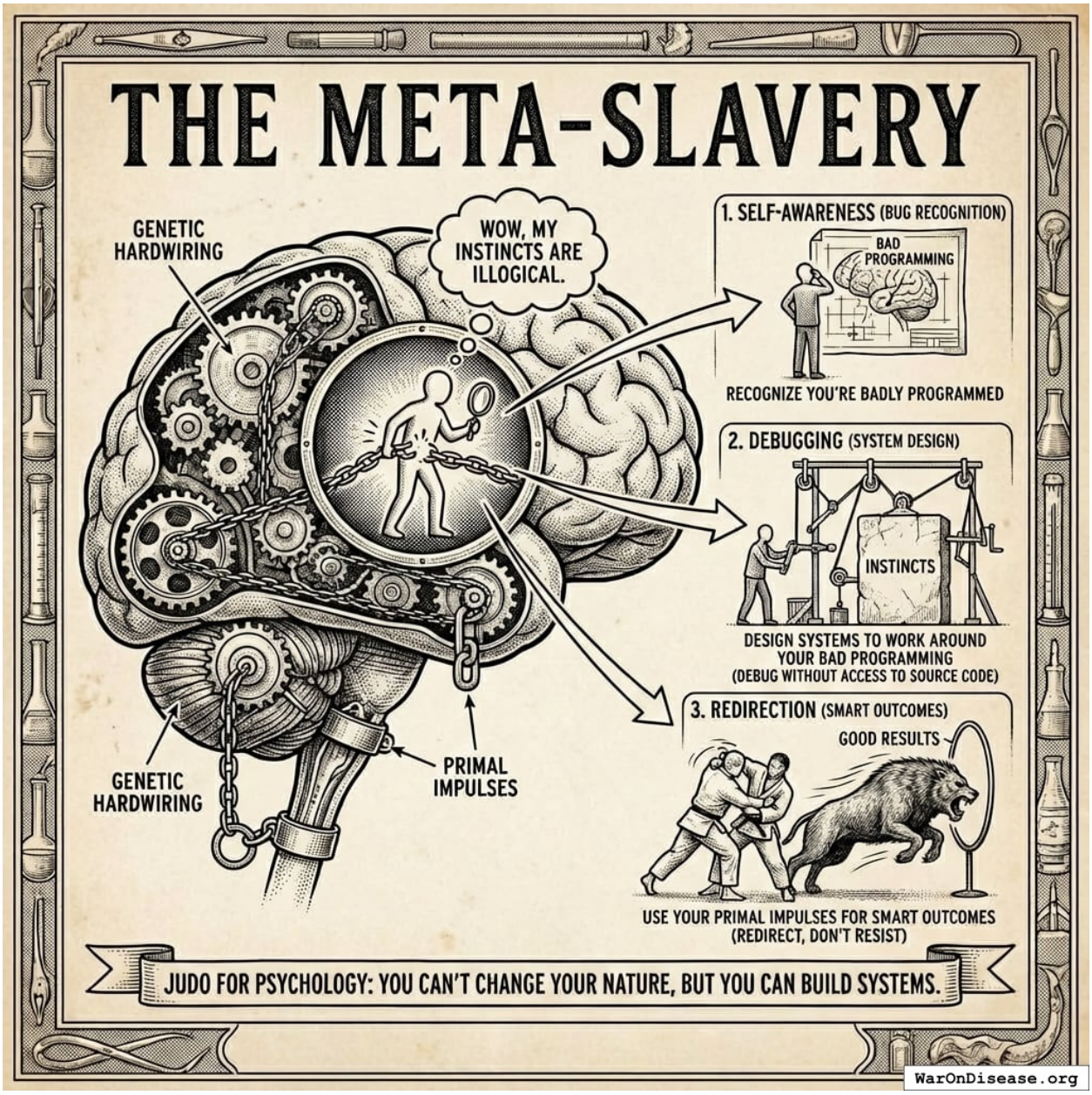


Figure 217: A conceptual diagram showing the 'Judo for Psychology' workflow: a primal impulse is intercepted by a designed system and redirected toward a smart outcome.

No other animal can think: "Wow, my instincts are illogical." That's uniquely human.

You're the only species on your planet that can:

1. Recognize you're badly programmed (self-awareness of bugs is step one)
2. Design systems to work around your bad programming (debug without access to source code)
3. Use your primal impulses for smart outcomes (redirect, don't resist)

You can't change your nature. But you can build systems that make your worst impulses produce good results (judo for psychology).

The Problem With Your Brain

Your brain is a 200,000-year-old piece of software running on hardware that hasn't been updated since you invented agriculture.

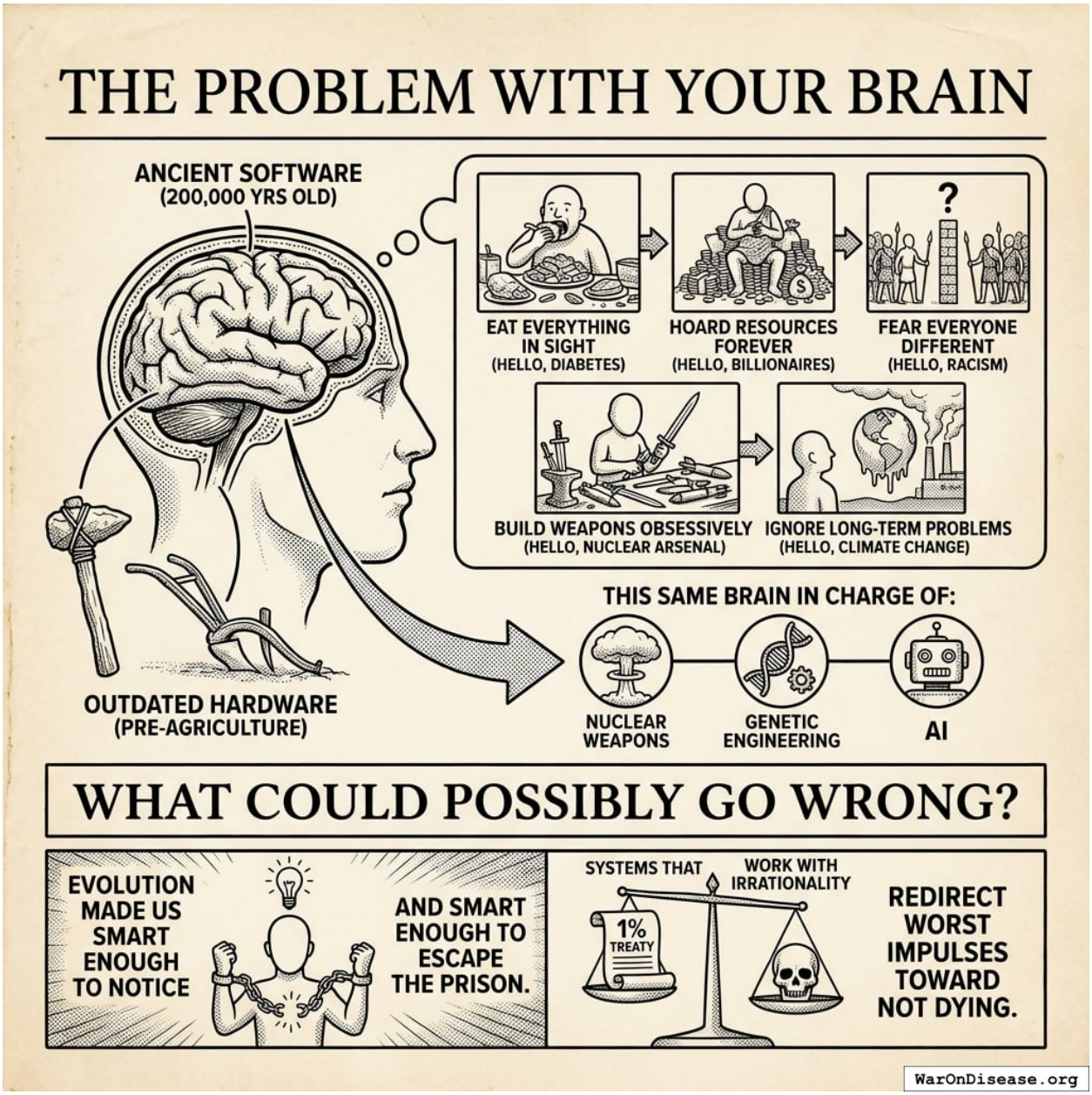


Figure 218: A visualization of the evolutionary mismatch between ancient human biological impulses and the modern global challenges of nuclear weapons, AI, and climate change.

It wants you to:

- Eat everything in sight (hello, diabetes)
- Hoard resources forever (hello, billionaires)
- Fear everyone different (hello, racism)
- Build weapons obsessively (hello, nuclear arsenal)
- Ignore long-term problems (hello, climate change)

This same brain is now in charge of nuclear weapons, genetic engineering, and artificial intelligence.

What could possibly go wrong?

The same evolution that made us irrational also made us smart enough to notice we're irrational. And if we're smart enough to see the prison, we're smart enough to escape it.

You just have to stop pretending you're rational and start building systems that work with your irrationality instead of against it.

A 1% treaty is that system. It doesn't ask you to be better. It just redirects your worst impulses toward not dying.

The Solution

Solution Overview

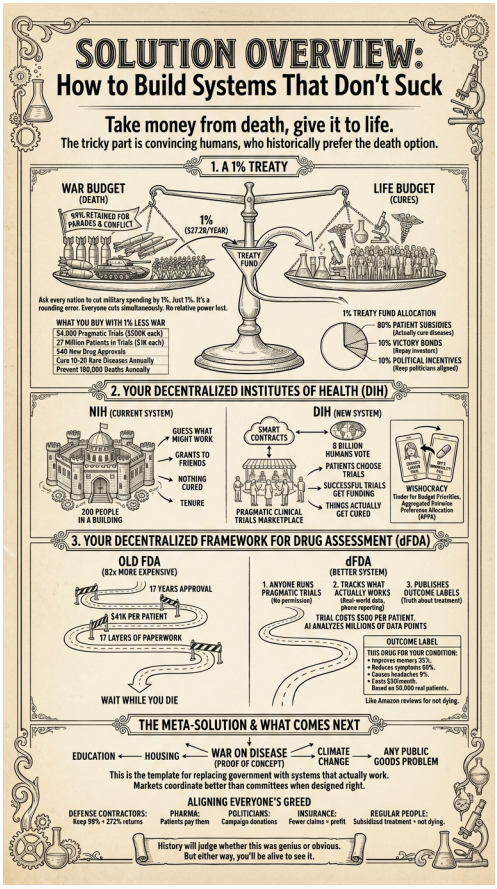


Figure 219: How to Build Systems That Don't Suck

Now that you understand the problem, which is that everyone is dying while you build missiles, it's time to learn how to fix it.

Your solution has three parts:

1. A 1% treaty (stealing money from the murder budget)
2. A 1% Treaty Fund with algorithmic governance (so no one can steal it back)
3. A decentralized framework for drug assessment (making medicine 44.1x (95% CI: 39.4x-89.1x) times cheaper)

Take money from death, give it to life. The tricky part is convincing humans, who historically prefer the death option.

A 1% treaty

Here's how you redirect $27.2B per year from bombs to medicine:

You ask every nation on Earth to cut military spending by 1%. Just 1%. They keep the other 99% for wars and parades and whatever else militaries do when they're not accidentally losing trillions (marching in formation mostly, lots of marching, humans love walking in straight lines).

One percent is a rounding error. It's what the Pentagon loses between couch cushions.

Everyone cuts simultaneously. Nobody loses "relative power," which is the thing military people care about when they're not busy caring about flags and saluting.

I asked a general if losing 1% of weapons would weaken national security. He said yes. I asked if having 1% fewer weapons pointed at you by every enemy would make you safer. He stopped talking to me.

The math is simple: If everyone has 1% fewer weapons, the balance stays exactly the same, except now there are 1% fewer weapons total.

On What You Buy With 1% Less War

$27.2B funds:

- 54,000 pragmatic clinical trials at $500,000 each (the cheap way)
- Or 27 million patients in trials at $1K each
- Or 540 new drug approvals (current rate: 50 drugs/year (95% CI: 45 drugs/year-60 drugs/year) per year)
- Or curing 10-20 rare diseases completely in Year 1
- Or preventing 180,000 deaths annually

For comparison, $27.2B is:

- Less than the Pentagon's annual "we lost it" budget
- About what Americans spend on Valentine's Day (flowers and chocolate > curing cancer, apparently)
- Roughly what humans spend on pet food every three months
- Apparently too much to ask for curing diseases

Of that $27.2B, here's where it goes:

Allocation	Share	Amount	Purpose
VICTORY Incentive Alignment Bond investors	10%	$2.72B	Repay the people who funded the campaign
Political incentives	10%	$2.72B	Keep politicians aligned via IABs
Patient Subsidies for Pragmatic Clinical Trials	80%	$21.8B	Actually cure diseases

They say you can't put a price on human life. But apparently the price is somewhere south of pet food, which seems like it should be revised upward (or you should admit you value dogs more than humans, which honestly might be fair).

The 1% Treaty Fund

Once the 1% Treaty is ratified, that $27.2B per year flows into a **1% Treaty Fund**, a treasury with no CEO, no board, and no one to corrupt. Money flows directly to patients and researchers via algorithmic rules, not through any intermediary organization.

The governance protocol (sometimes called a "decentralized institute of health" or DIH) is the opposite of the NIH:

What the NIH does

- 200 people in a building decide what to fund
- They guess what might work
- They give grants to their friends
- Nothing gets cured
- Everyone gets tenure

What the 1% Treaty Fund does

- Smart contracts hold the treasury (no human intermediaries)
- Patients choose which trials to join (market allocation)
- Funding flows automatically to researchers based on patient enrollment
- Trials that work get more patients and more funding
- Things actually get cured

The difference is like asking 200 bureaucrats what you should have for lunch versus asking your stomach. Your stomach knows things bureaucrats don't.

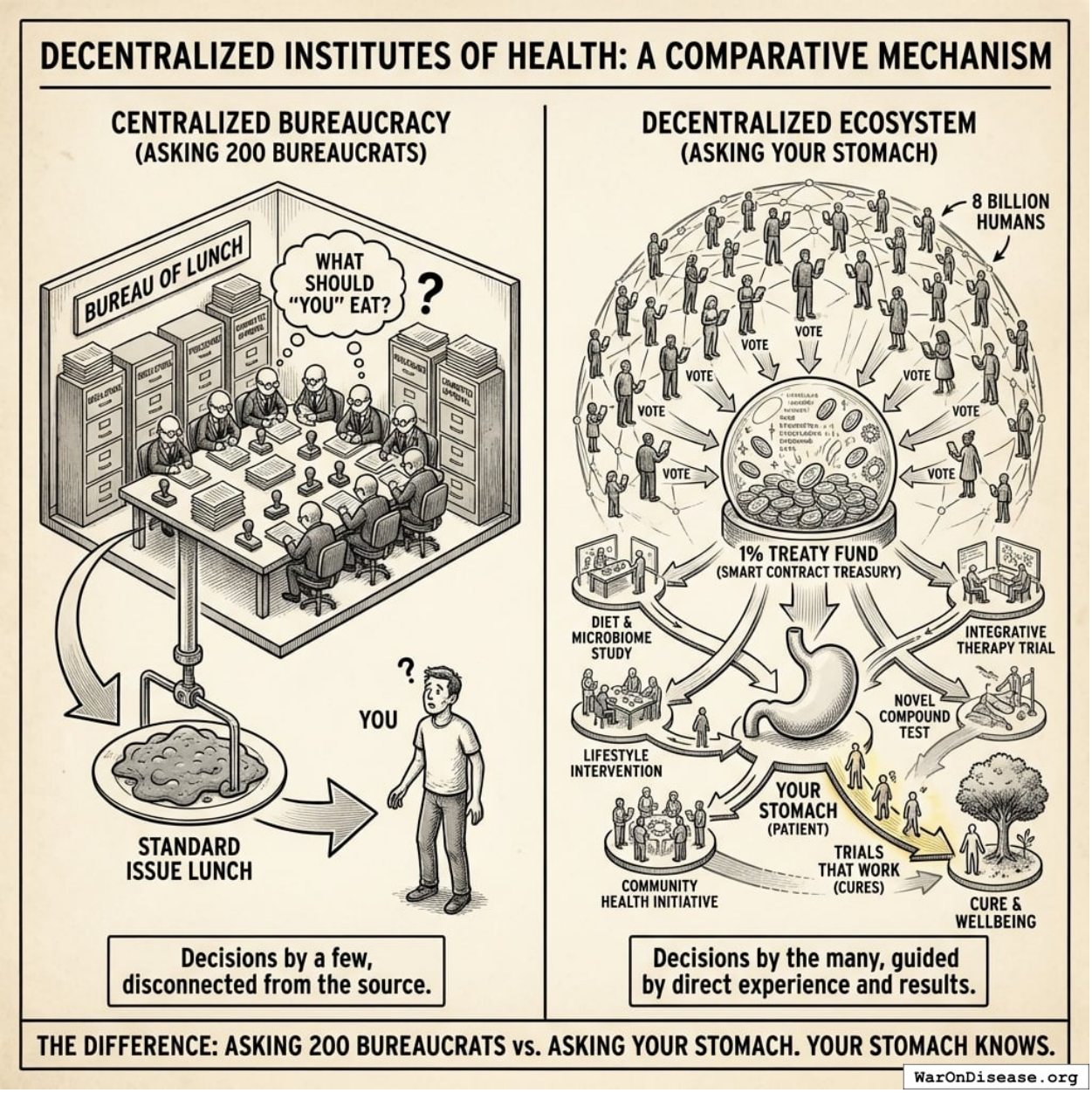


Figure 220: A conceptual flow of the decentralized health ecosystem, showing the 1 percent Treaty Fund moving from global voting to patient-selected trials and resulting in a feedback loop of successful cures.

On Wishocracy

Wishocracy is how you let 8.00B of people (95% CI: 7.80B of people-8.20B of people) billion people control a budget without everyone killing each other in meetings.

Here's how it works:

1. Anyone can propose how to spend the money (yes, even you)
2. The app shows you random pairs of proposals
3. You swipe left or right to allocate between them
4. "Sarah's cancer trial" versus "MIT's immortality pill"

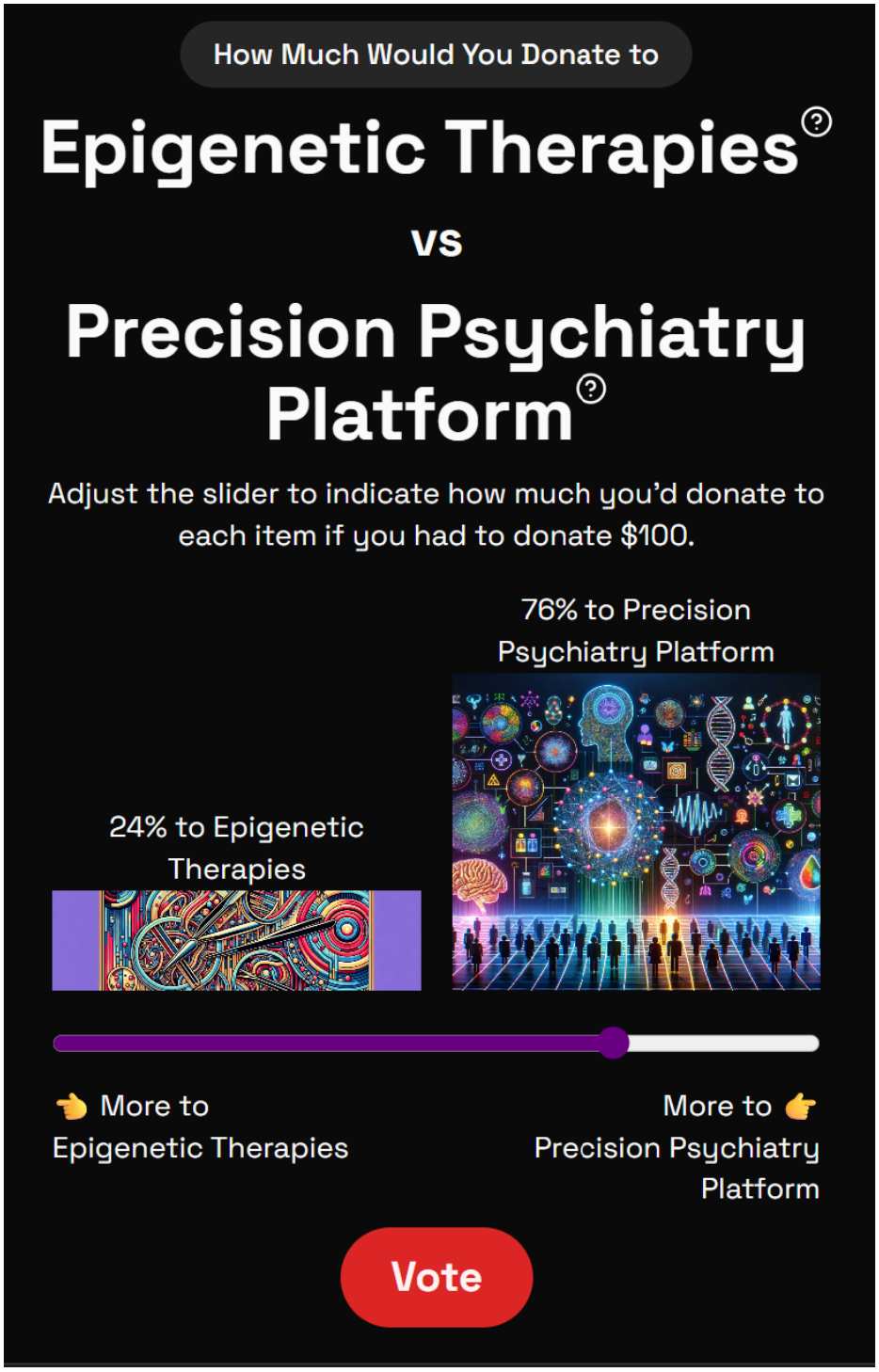


Figure 221: Wishocracy slider interface showing pairwise comparison between proposals

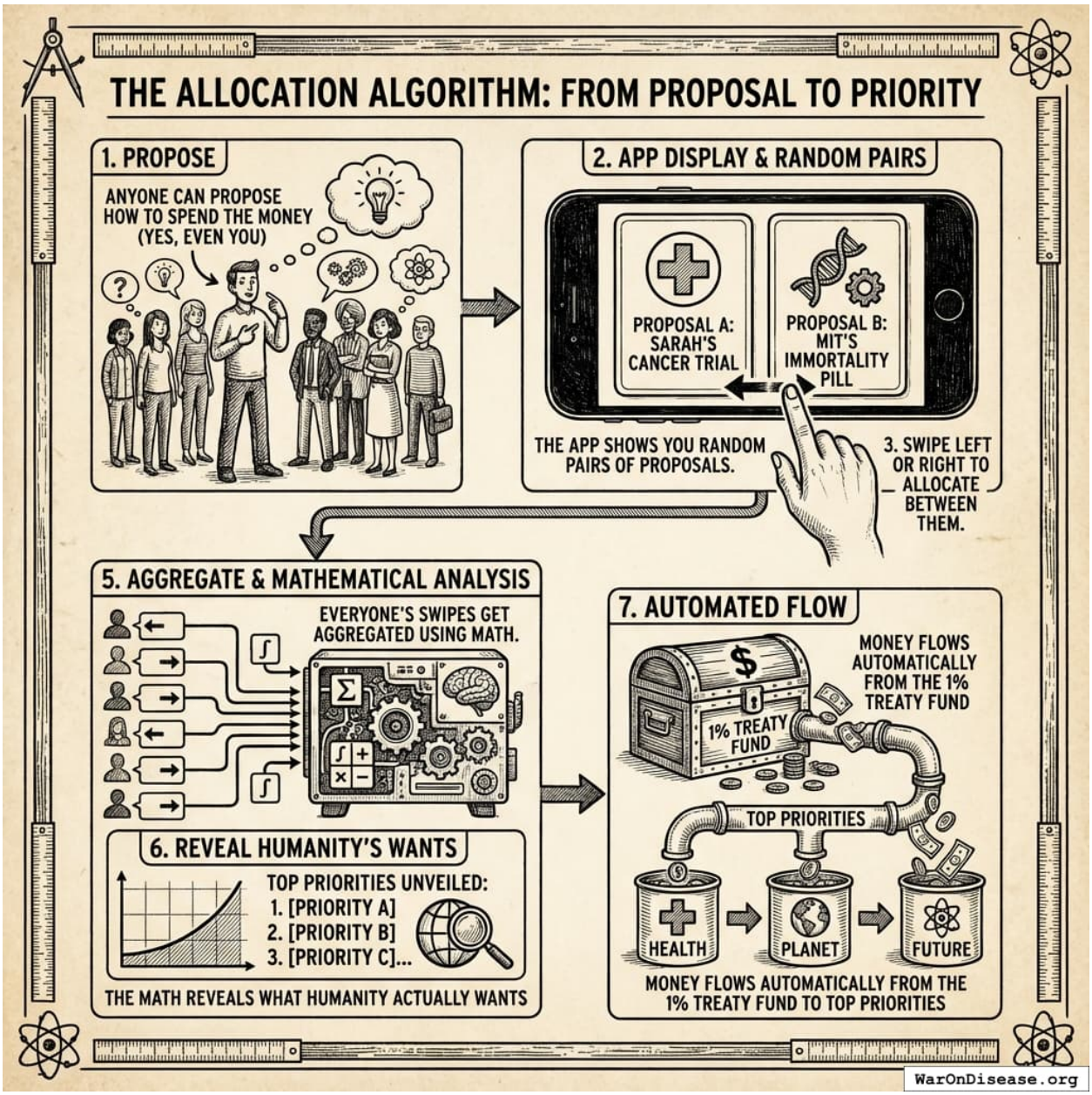


Figure 222: The 'Wishocracy' workflow: transforming individual swipes into automated funding allocation via Aggregated Pairwise Preference Allocation (APPA).

5. Everyone's swipes get aggregated using math
6. The math reveals what humanity actually wants
7. Money flows automatically from the 1% Treaty Fund to top priorities

This is called "Aggregated Pairwise Preference Allocation," or APPA, which sounds complicated but is actually just "Tinder for budget priorities."

The important part is there's no committee. No gatekeepers. No humans with the power to say no. Just billions of micro-decisions that add up to what humanity actually wants, not what 200 people in suits think humanity wants.

Your decentralized framework for drug assessment

The FDA currently makes drugs 44.1x (95% CI: 39.4x-89.1x) times more expensive than necessary. You're going to build a better one.

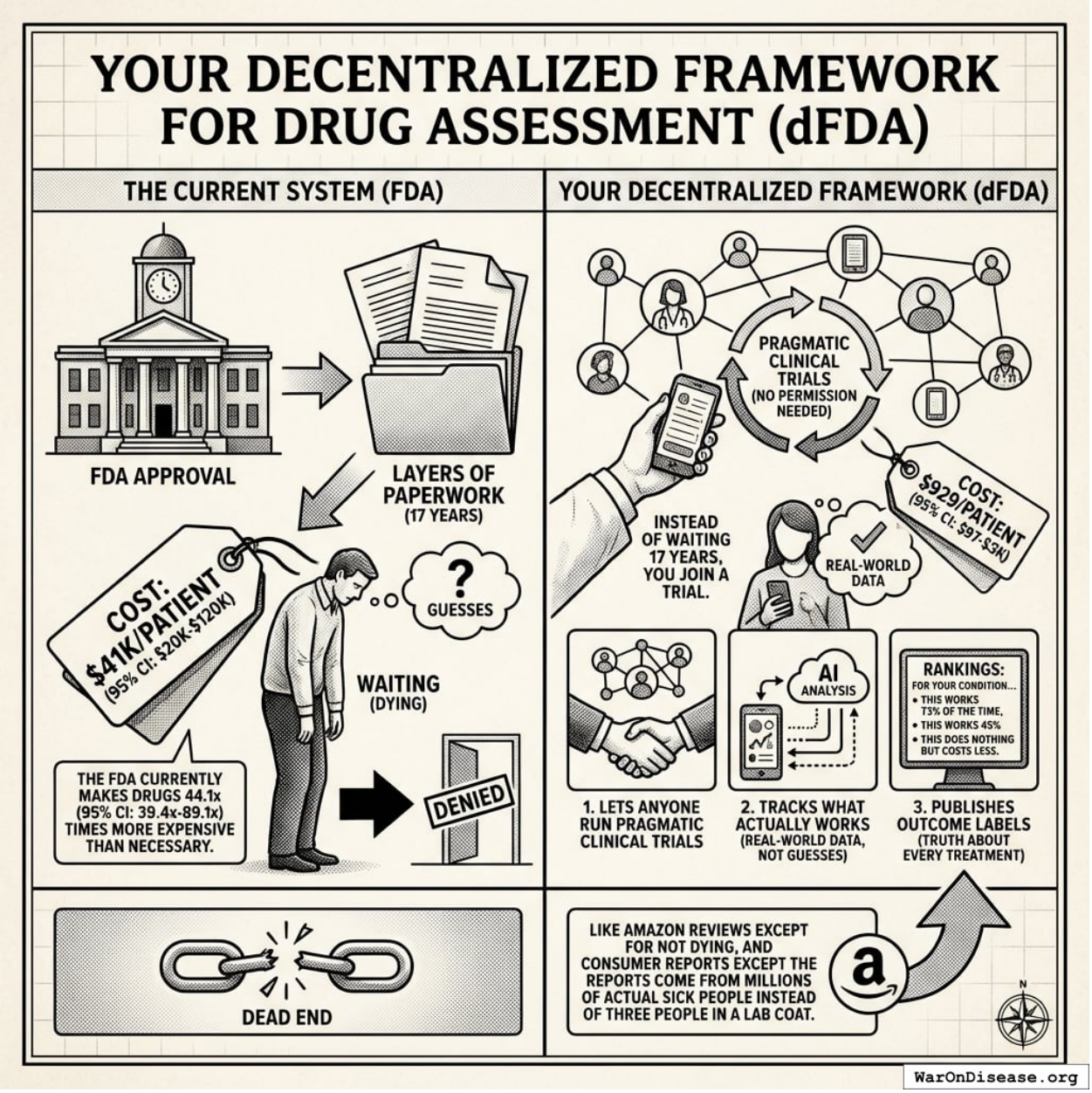


Figure 223: A comparison between the traditional FDA drug approval process and the decentralized dFDA framework, contrasting cost, time, and data sources while illustrating the three-step decentralized workflow.

Your decentralized framework for drug assessment (dFDA) does three things:

1. **Lets anyone run pragmatic clinical trials** (no permission needed)
2. **Tracks what actually works** (real-world data, not guesses)
3. **Publishes outcome labels** (truth about every treatment)

Instead of waiting 14 years (95% CI: 12 years-17 years) from discovery to patient while you die, you join a trial. The trial costs $929 (95% CI: $97-$3K) per patient instead of $41K (95% CI: $20K-$120K) because it

turns out you don't need 10.5 years (95% CI: 6 years-12 years) of regulatory process to figure out if aspirin works.

You report outcomes through your phone. The AI analyzes millions of data points. The framework publishes rankings: "For your condition, this works 73% of the time, this works 45%, this does nothing but costs less."

It's like Amazon reviews except for not dying, and Consumer Reports except the reports come from millions of actual sick people instead of three people in a lab coat.

On Outcome Labels

Right now, nutrition labels tell you what's in food. Warning labels tell you cigarettes kill you. Drug labels tell you to "ask your doctor," which is code for "we have no idea and neither do they."

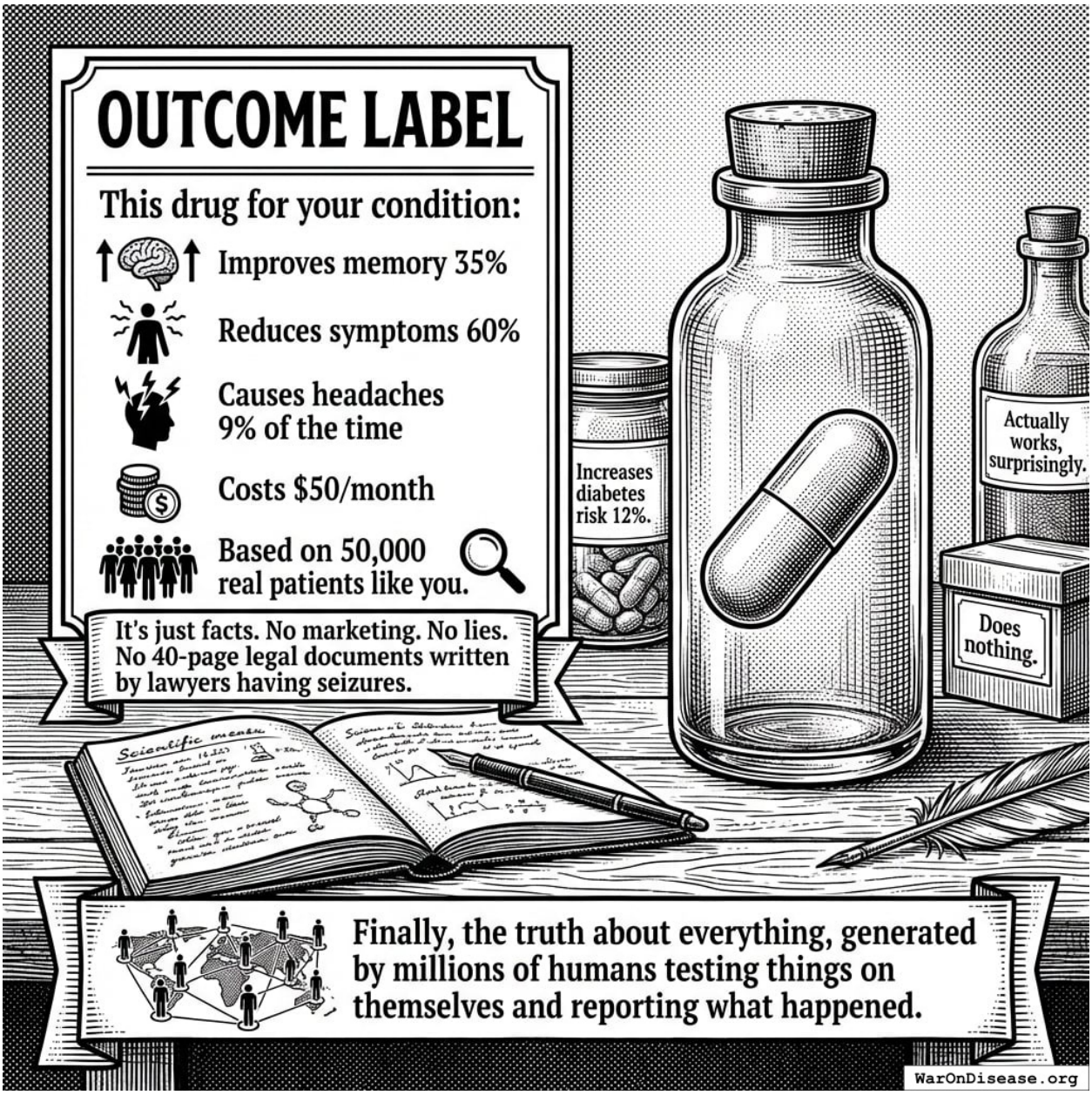


Figure 224: A comparison between a traditional drug warning label and a proposed Outcome Label displaying clear success rates, side effect percentages, and cost based on patient data.

Outcome labels tell you what actually happens:

"This drug for your condition:"

- Improves memory 35%
- Reduces symptoms 60%
- Causes headaches 9% of the time
- Costs $50/month
- Based on 50,000 real patients like you

It's just facts. No marketing. No lies. No 40-page legal documents written by lawyers having seizures.

Every food, every drug, every supplement: Outcome label. “Increases diabetes risk 12%.” “Does nothing.” “Actually works, surprisingly.”

Finally, the truth about everything, generated by millions of humans testing things on themselves and reporting what happened.

On How Patients Pay Researchers

Here’s where it gets weird in a good way:

Currently: Pharma companies pay $41K (95% CI: $20K-$120K) per trial patient New system: Patients pay researchers, subsidized by the **1% Treaty Fund**

The subsidy works like this: Available treaty funds divided by number of participating patients equals subsidy per person. More patients means lower subsidy per person, which prevents frivolous treatment seeking.

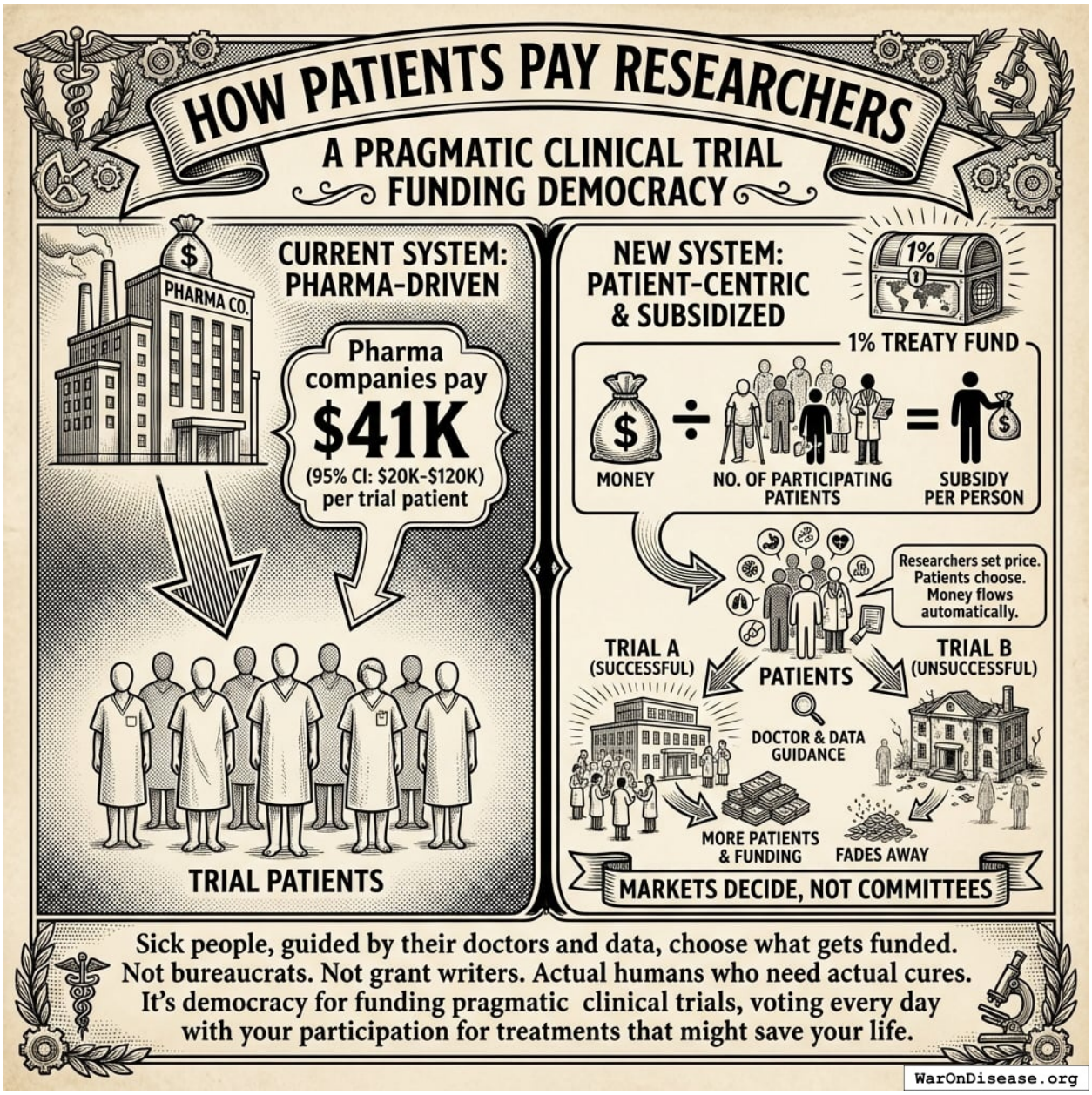


Figure 225: A comparison between the current pharmaceutical-funded trial model and a new decentralized system where patient choice and treaty subsidies drive research funding.

Researchers set their own price. Patients choose which trials to join. Money flows automatically. Successful trials attract more patients and more funding. Unsuccessful trials fade away.

Markets decide, not committees.

Sick people, guided by their doctors and data, choose what gets funded. Not bureaucrats. Not grant writers. Actual humans who need actual cures.

It's democracy for funding pragmatic clinical trials, except instead of voting every four years for people who lie to you, you vote every day with your trial participation for treatments that might save your life.

On Why Defense Contractors Should Care

You'd think military contractors would hate this. But here's what you tell them:

"You can keep 99% of your murder budget. But also, here are some bonds that pay 272% returns. Your pension fund would like those returns. Your shareholders would like those returns. You would personally like those returns because you also have a body that's falling apart.

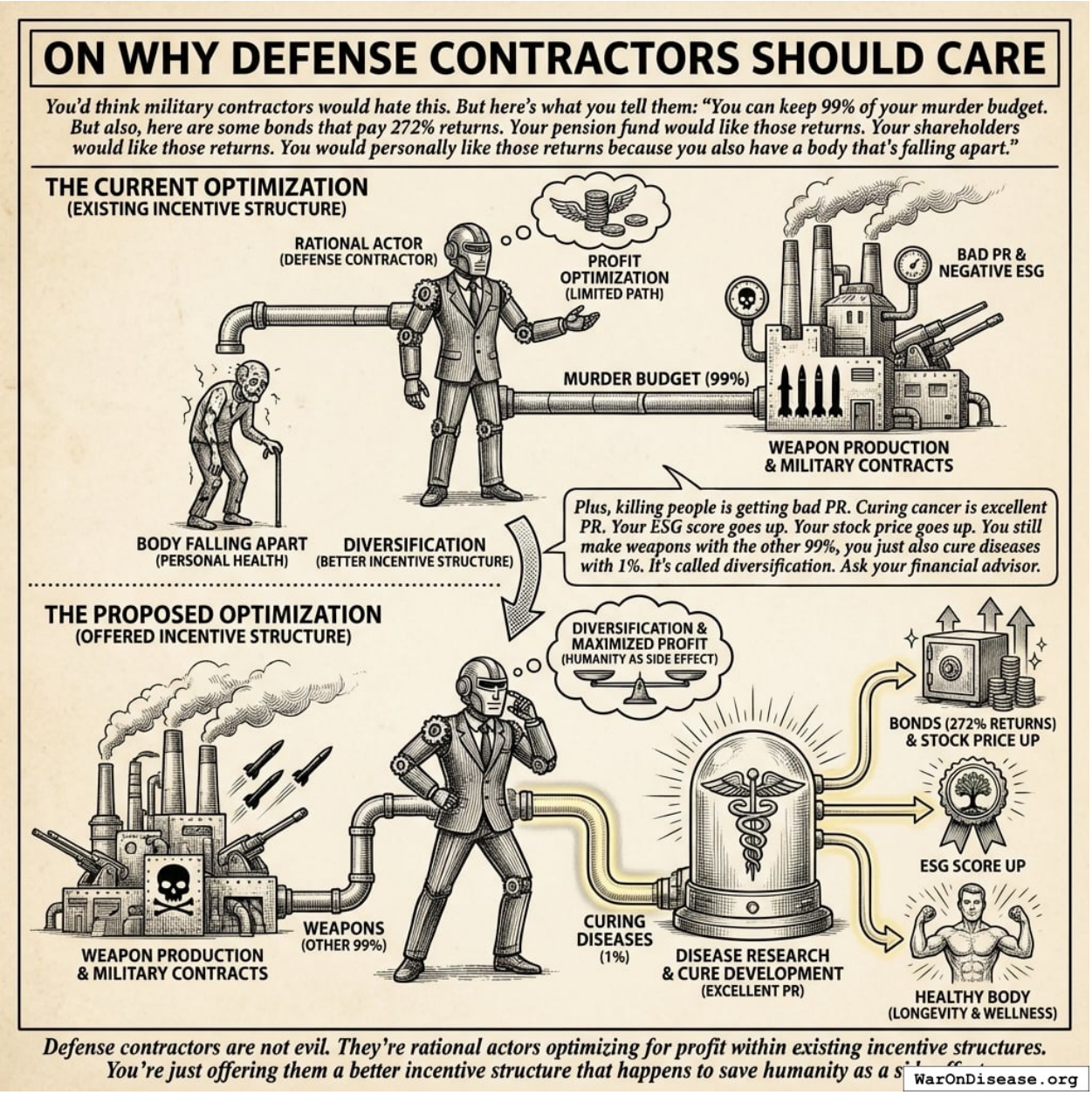


Figure 226: A comparison of a defense contractor's traditional budget versus a diversified portfolio where 1 percent is allocated to longevity bonds, highlighting the resulting gains in profit, PR, and ESG scores.

Plus, killing people is getting bad PR. Curing cancer is excellent PR. Your ESG score goes up. Your stock price goes up. You still make weapons with the other 99%, you just also cure diseases with 1%.

It's called diversification. Ask your financial advisor."

Defense contractors are not evil. They're rational actors optimizing for profit within existing incentive

structures. You're just offering them a better incentive structure that happens to save humanity as a side effect.

On Why 1% Is Just The Beginning

Here's the thing they don't tell you: The goal isn't 1%. The goal is 100%.

Eventually, nearly all $2.72T in global military spending should go to curing diseases. The 1% treaty is just the door, not the destination.

"But won't the treaty stall at 1% like every other international agreement?" (asks the skeptic who has read about 0.7% ODA targets sitting unmet for 50 years)

No. Because unlike every other treaty, this one has a scaling engine built in.

The 10% going to Incentive Alignment Bonds doesn't just help pass the 1% treaty - it creates a perpetual political machine that pushes for expansion. When 1% passes, $2.72B/year flows to people whose entire financial interest is getting the treaty to 2%. When 2% passes, $5.4B/year flows to people pushing for 5%.

The political pressure for expansion *accelerates* with each success:

Treaty Level	IAB Political Funding	What It Buys
1%	$2.72B/year	Passage pressure
5%	$13.5B/year	Overwhelming lobbying
10%	$27.2B/year	Defense industry pivot
50%+	$135B+/year	War becomes economically obsolete

This is why the 80/10/10 split exists. The 80% cures diseases. The 10% to investors pays back the people who funded the initial campaign. The 10% to political incentives ensures the campaign never stops.

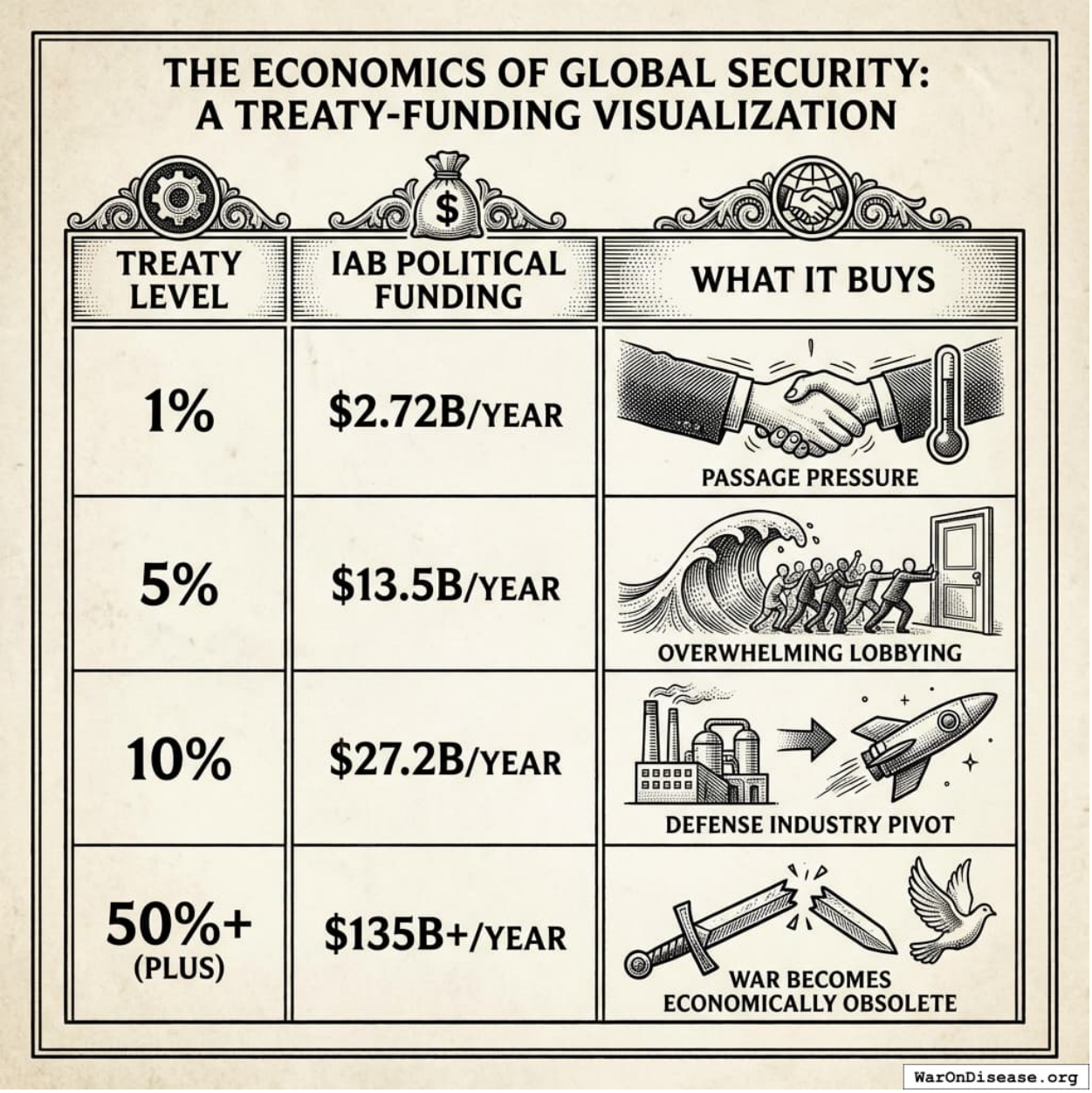


Figure 227: The Scaling Engine: How increasing treaty levels exponentially fuels political lobbying power.

VICTORY Incentive Alignment Bonds are a specific Incentive Alignment Bond - a single instrument that aligns investors (10% returns), politicians (10% career incentives), and patients (80% cures) with the same outcome: expand treaty funding.

Without the scaling engine, you get another nice international agreement that everyone ignores. With it, you get a ratchet that can eventually redirect $2.72T/year from war to health.

That's the meta-strategy: Use 1% to prove the model works, then use the built-in expansion mechanism to capture 2%, 5%, 10%, until "military spending" becomes a quaint historical term like "bloodletting."

On Insurance Companies

Insurance companies have a simple preference: They want you either dead or immortal. Anything but

expensively lingering.

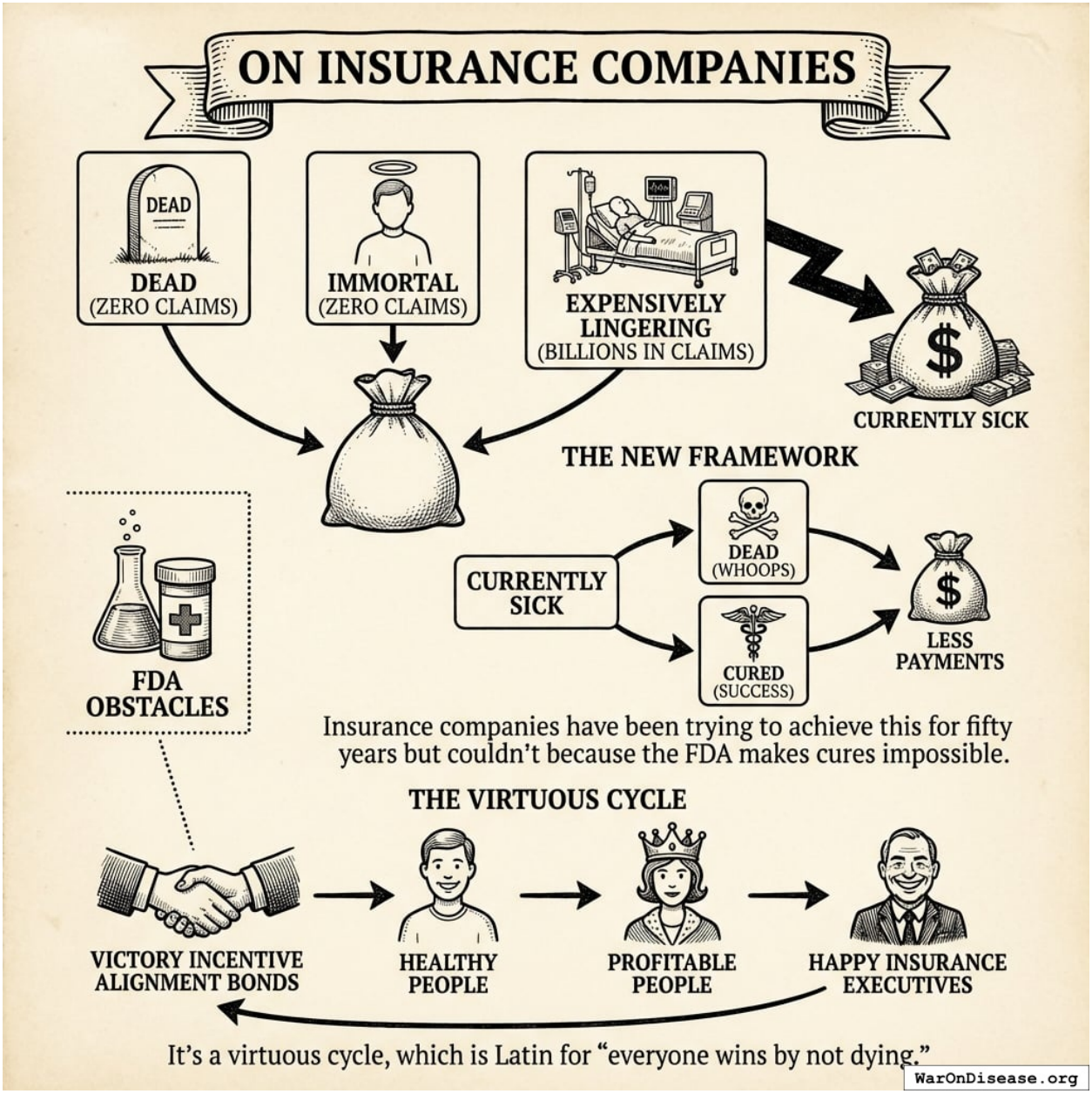


Figure 228: A diagram illustrating the transition from high-cost chronic illness to low-cost outcomes (cure or mortality) and how VICTORY Bonds create a virtuous cycle of insurance profitability.

Dead people file zero claims. Immortal healthy people file zero claims. Currently sick people cost billions.

This new framework moves people from "currently sick" to either "dead" (whoops) or "cured" (success). Either way, the insurance company pays less.

Insurance companies have been trying to achieve this for fifty years but couldn't because the FDA makes cures impossible.

Show them the math: Every cure prevents decades of treatment costs. Every prevention program avoids future claims. Every patient in a trial is a patient not in an emergency room.

They'll buy VICTORY Incentive Alignment Bonds because healthy people are profitable people, and profitable people make insurance executives happy, and happy insurance executives buy bonds that make them richer.

It's a virtuous cycle, which is Latin for "everyone wins by not dying."

On the War on Disease

You're declaring war on disease. But unlike previous wars on abstract concepts (drugs, terror, poverty, Christmas), this one will actually work.

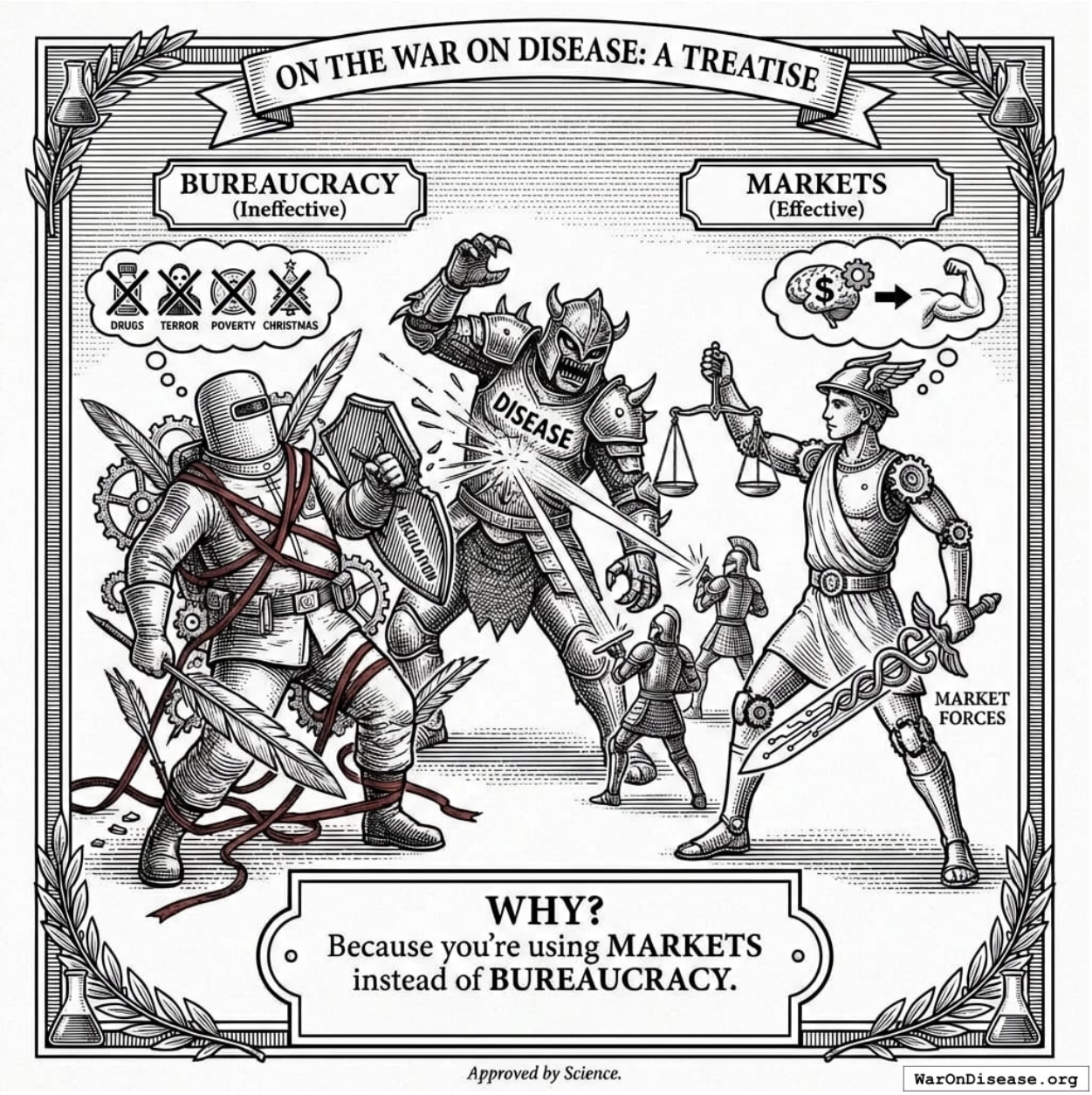


Figure 229: A comparison chart contrasting the failed bureaucratic approach to abstract 'wars' with the proposed market-driven success model for the war on disease.

Why? Because you're using markets instead of bureaucracy.

Previous Wars on Things

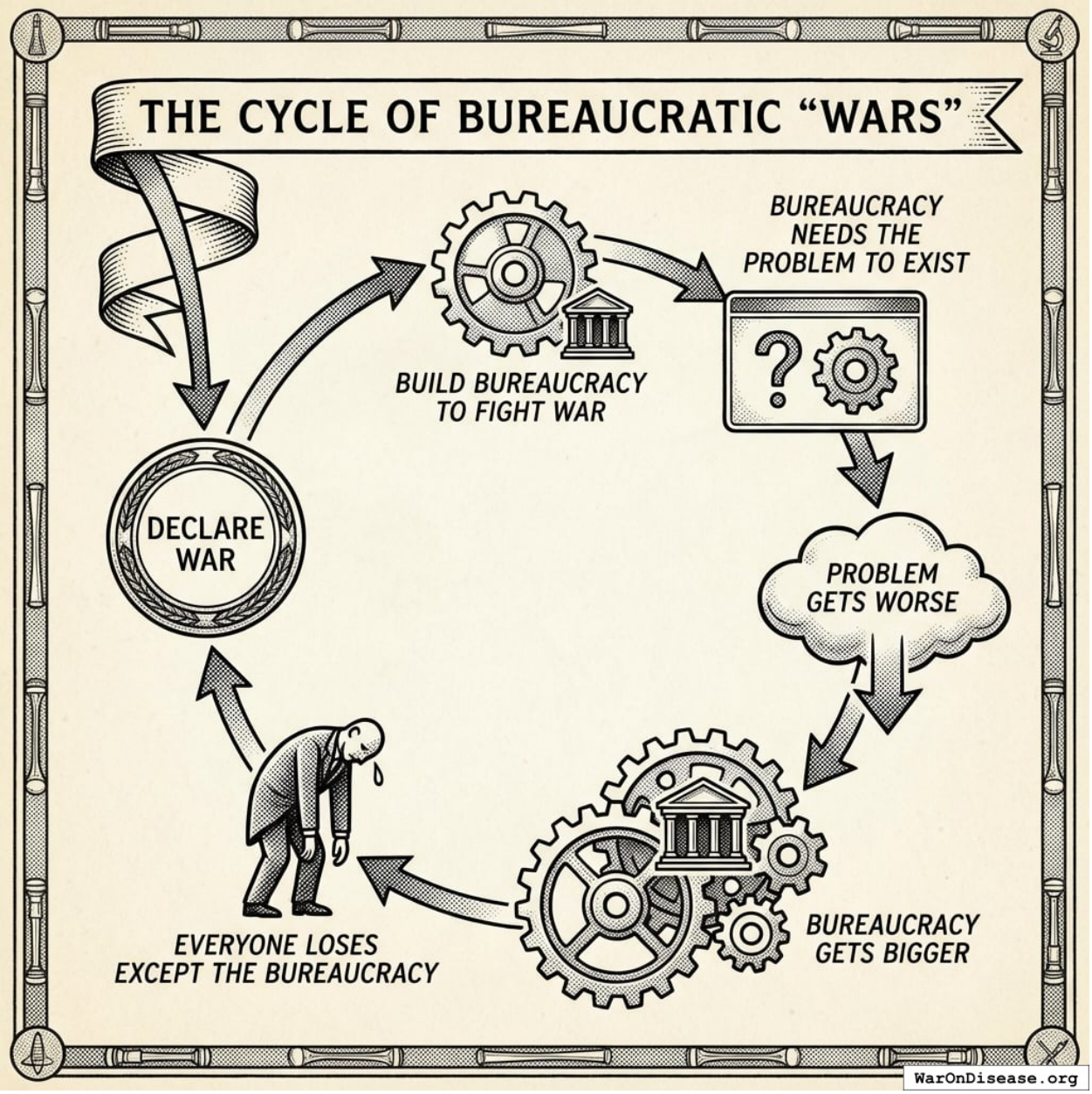


Figure 230: A flowchart illustrating the self-perpetuating cycle of bureaucracy in 'Wars on Things,' where institutional survival leads to the persistence and growth of the problem.

- Declare war
- Build bureaucracy to fight war
- Bureaucracy needs the problem to exist to justify its existence
- Problem gets worse
- Bureaucracy gets bigger
- Everyone loses except the bureaucracy

This War

- Declare war
- Create market that profits from solving problem
- Problem gets solved
- Market grows by solving more problems
- Everyone wins including the market

The difference is like asking a firefighter to prevent fires versus asking a fire extinguisher company to prevent fires. The firefighter needs fires to keep his job. The company needs fire prevention to sell extinguishers. Incentives matter.

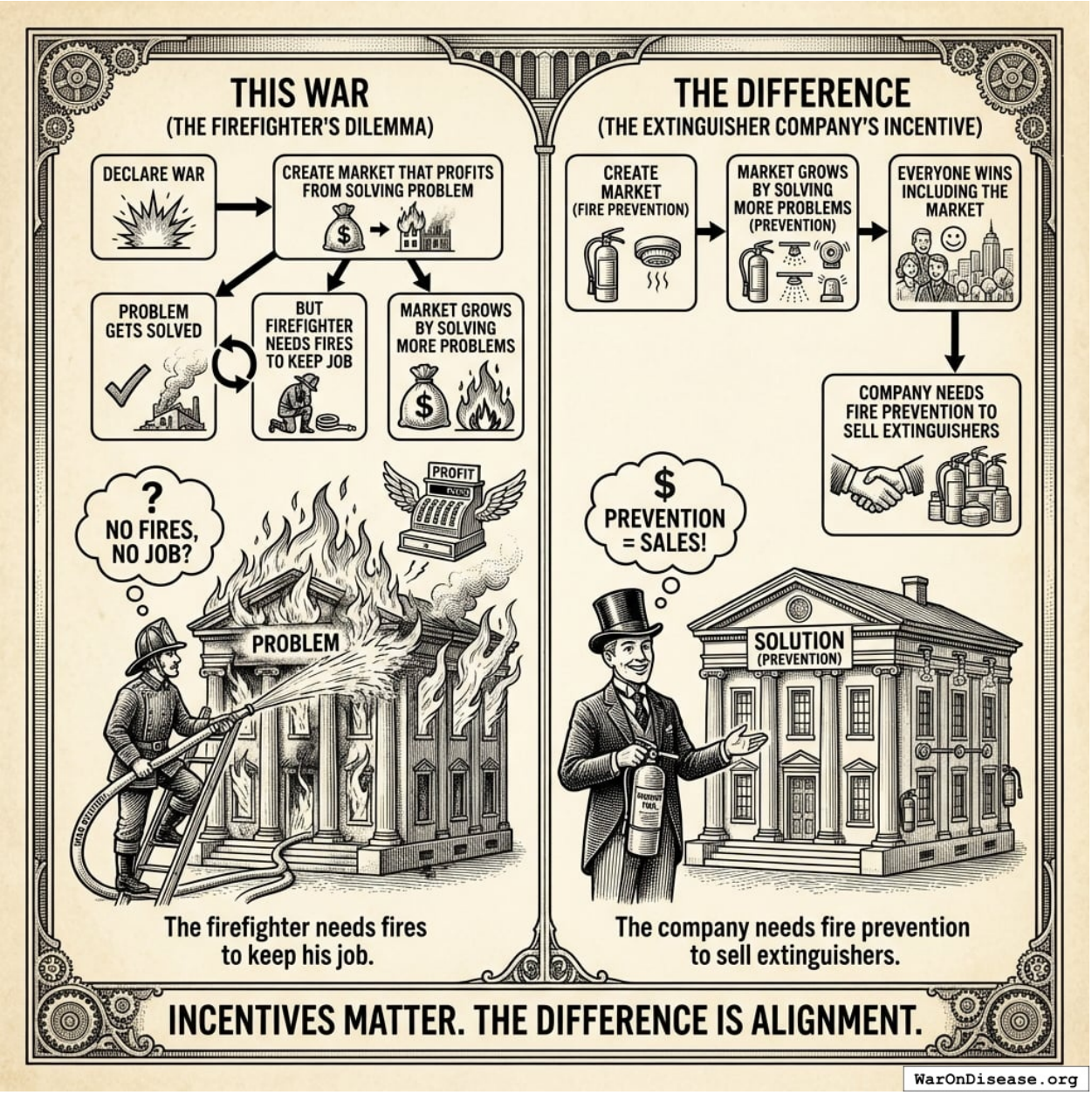


Figure 231: A comparative visualization of incentive structures, contrasting a reactive service model with a proactive market-based model that scales through problem-solving.

On Aligning Everyone's Greed

The solution only works if everyone wins by winning. Here's who gets what:

Defense contractors: Keep 99% of budget + 272% returns on bonds **Pharmaceutical companies:** Patients pay them instead of vice versa **Politicians:** Campaign donations + not losing elections **Insurance companies:** Fewer claims = more profit **Billionaires:** 272% returns + legacy + naming rights **Regular people:** Subsidized treatment + direct democracy + not dying

Notice that everyone's selfish reason for participating happens to save humanity. Trick people into doing good by making good profitable.

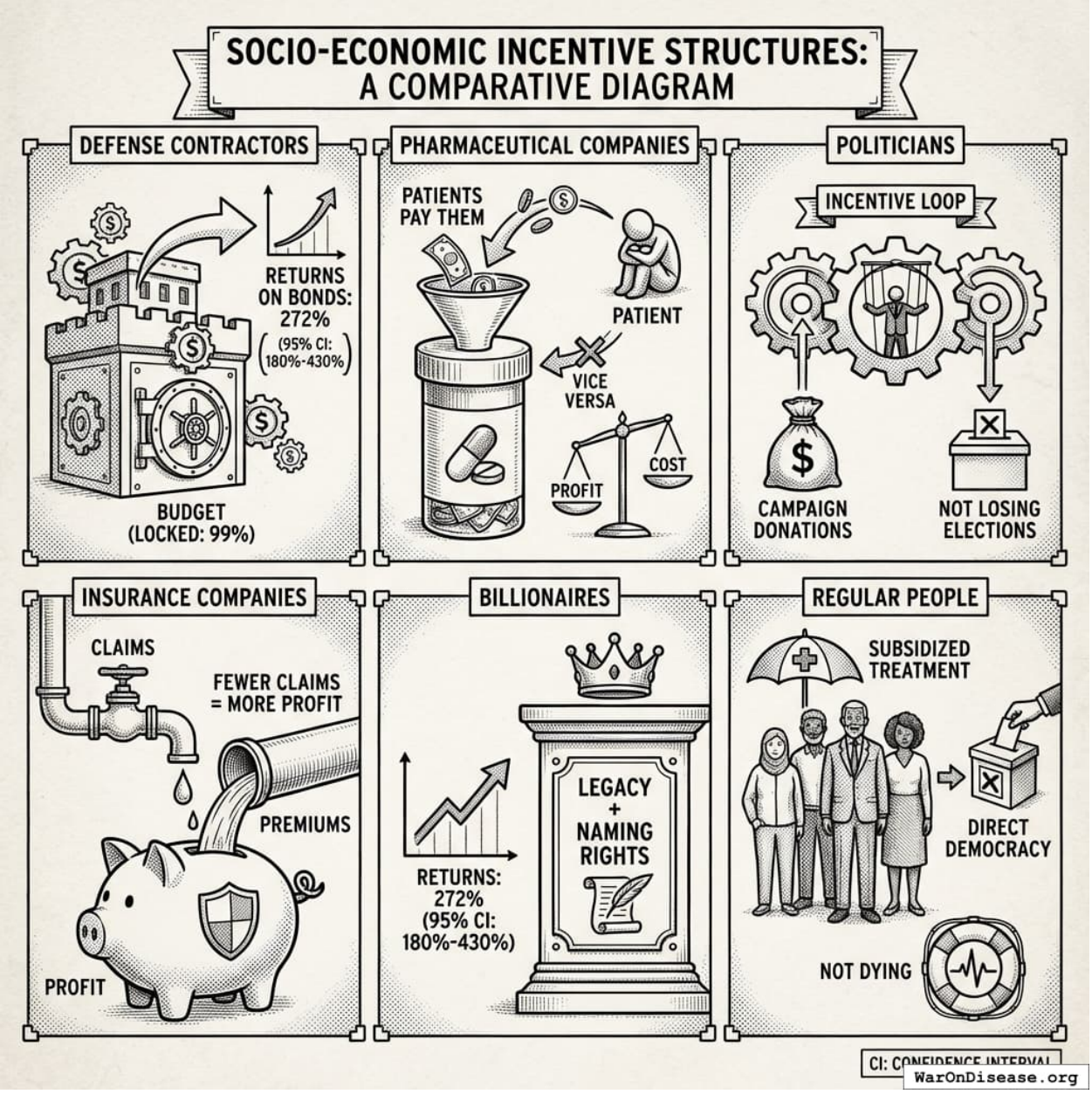


Figure 232: Ecosystem of incentives showing how the model satisfies the specific greed of six distinct stakeholder groups.

The system doesn't require anyone to stop being selfish. It just redirects selfishness toward curing diseases instead of building bombs. It's like installing a fire alarm that also makes coffee, you're going to use it even if you don't care about fire safety.

On Why This Isn't Clinically Insane

History shows this works:

- Post-WWII: Cut military 30%, greatest boom ever
- Post-Cold War: Cut military 3%, 1990s prosperity
- Switzerland: 0.7% military budget, richest country in Europe

You're only asking for 1%.



Figure 233: A comparison chart showing historical military budget reductions and their correlation with periods of economic prosperity in various nations and eras.

On the Meta-Solution

This solution isn't just about ending disease. It proves markets work better than bureaucracy for literally everything.

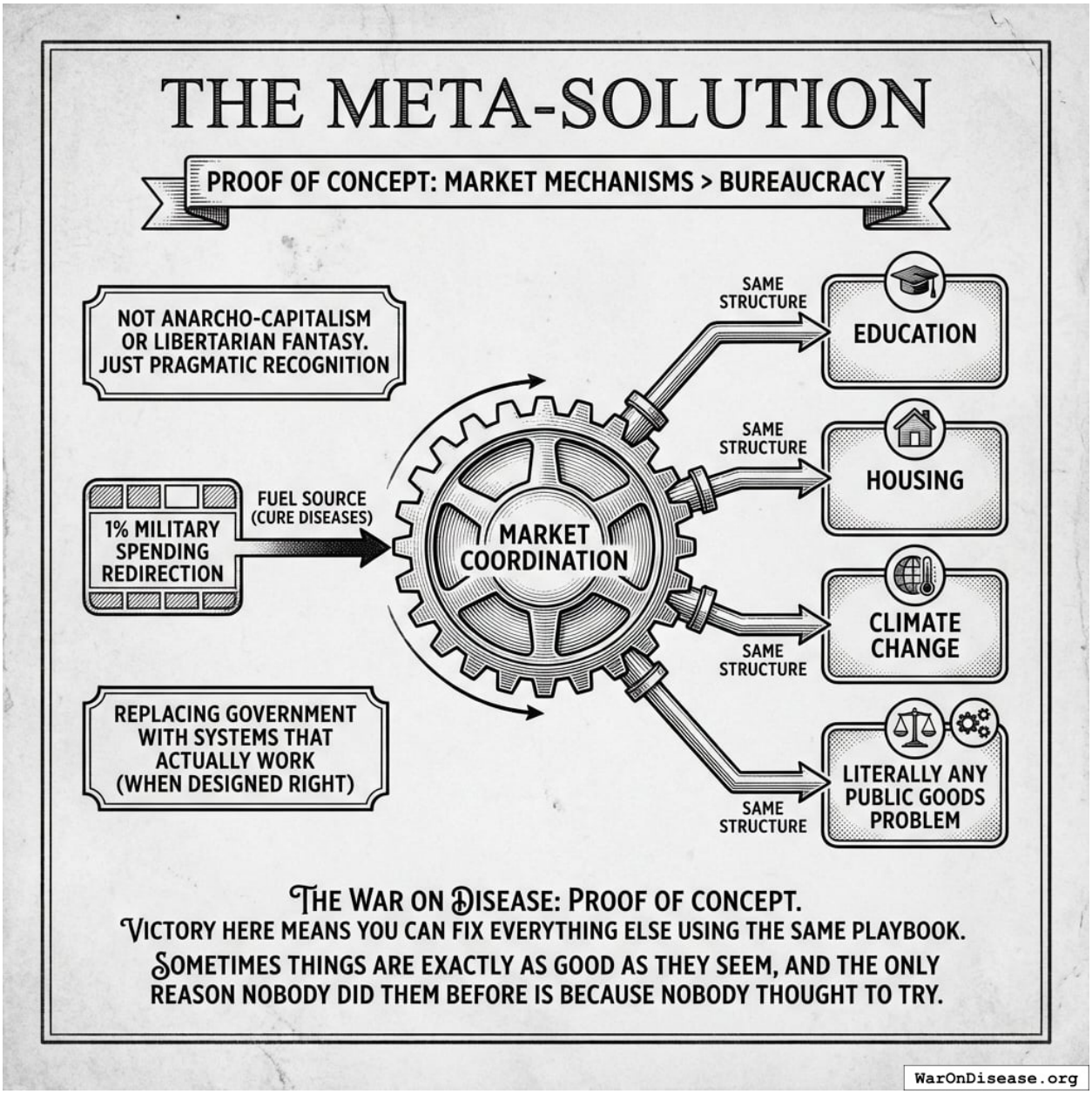


Figure 234: A conceptual diagram showing a single market-based 'Meta-Solution' template being applied as a universal engine to solve diverse public goods problems including health, education, housing, and climate change.

If you can cure diseases by redirecting 1% of military spending through market mechanisms, you can solve:

- Education (same structure, different market)
- Housing (same structure, different market)
- Climate change (same structure, different market)
- Literally any public goods problem (same structure, different market)

This is the template for replacing government with systems that actually work. Not anarcho-capitalism or libertarian fantasy. Just pragmatic recognition that markets coordinate better than committees when you design them right.

The War on Disease is proof of concept. Victory here means you can fix everything else using the same playbook.

They say if something seems too good to be true, it probably is. But sometimes things are exactly as good as they seem, and the only reason nobody did them before is because nobody thought to try.

On What Comes Next

The rest of Part II explains each component in detail:

- How to structure a 1% treaty so countries actually sign it
- How the 1% Treaty Fund governance prevents corruption
- How Wishocracy prevents lobbyists from stealing all the money
- How your global trial framework achieves 44.1x (95% CI: 39.4x-89.1x) cost reduction
- How everyone makes money
- How to make selfishness save humanity

That's it. That's the plan.

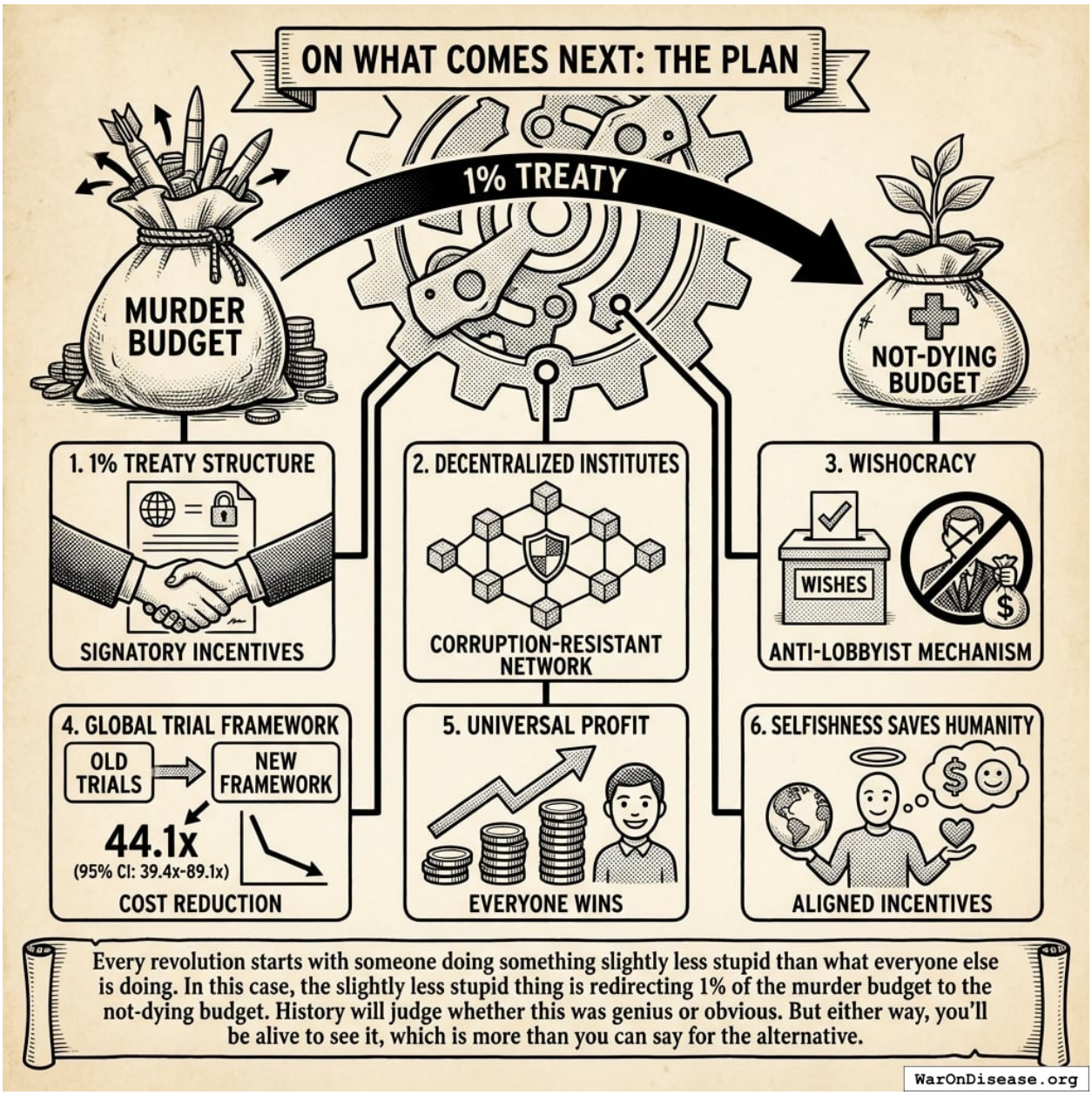


Figure 235: A conceptual diagram showing the redirection of 1 percent of defense spending into a decentralized health ecosystem comprised of treaties, institutes, and clinical trials.

If that seems anticlimactic, remember: Every revolution starts with someone doing something slightly less stupid than what everyone else is doing.

In this case, the slightly less stupid thing is redirecting 1% of the murder budget to the not-dying budget.

History will judge whether this was genius or obvious. But either way, you'll be alive to see it, which is more than you can say for the alternative.

A 1% treaty

The 1% Treaty is a legally-binding global accord with a single provision: every signatory nation redirects 1% of its annual military budget to **the 1% Treaty Fund**, which finances global health initiatives like your decentralized institutes of health (DIH).

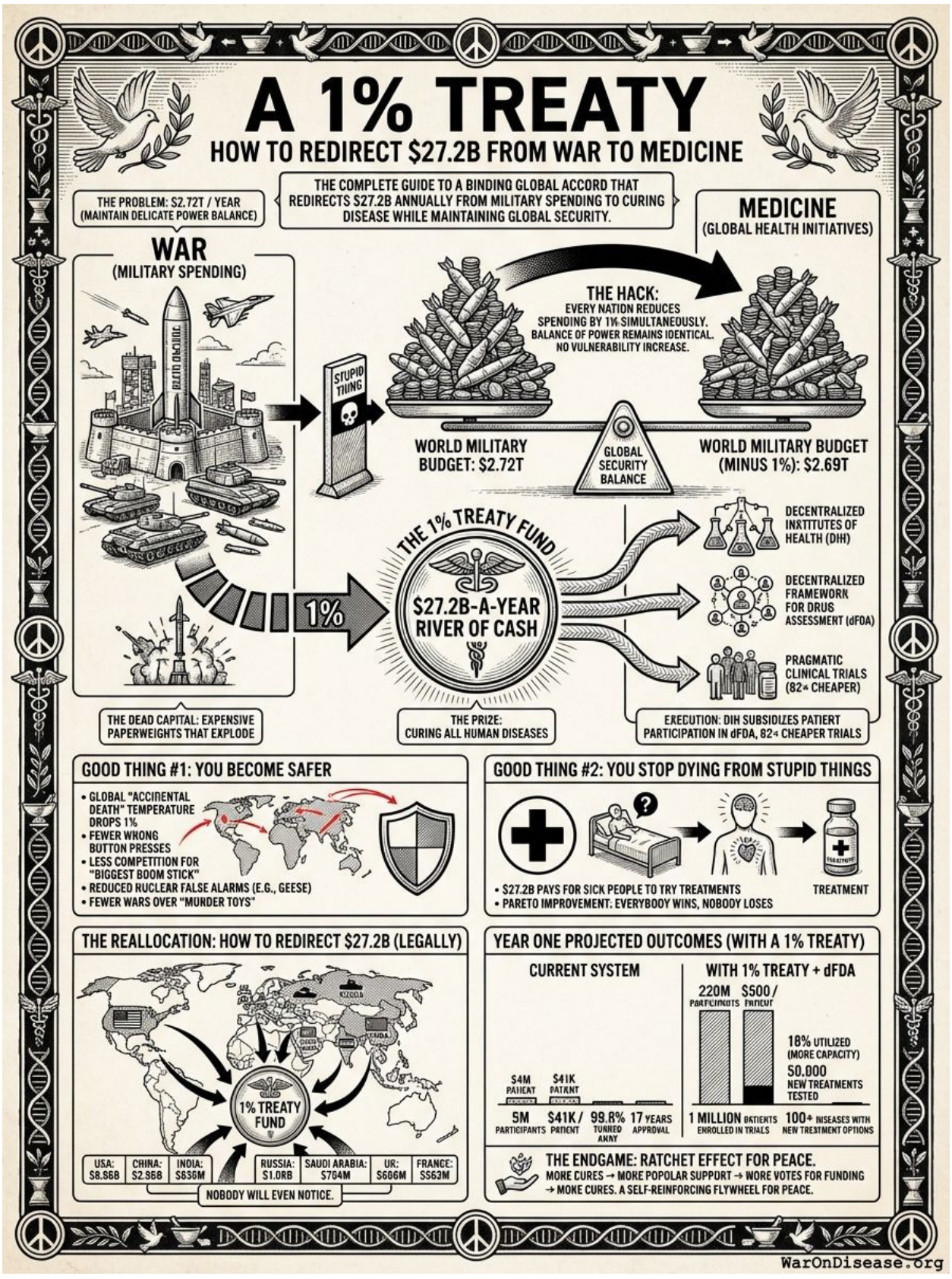


Figure 236: The 1 percent Treaty Overview

The Math

1. **The Problem:** The world spends $2.72T a year on military forces to maintain a delicate balance of power.
2. **The Hack:** If every nation reduces military spending by 1% *at the same time*, the balance of power remains identical. No country becomes more vulnerable.
3. **The Prize:** That 1%, a **$27.2B-a-year river of cash**, is redirected to cure all human diseases.

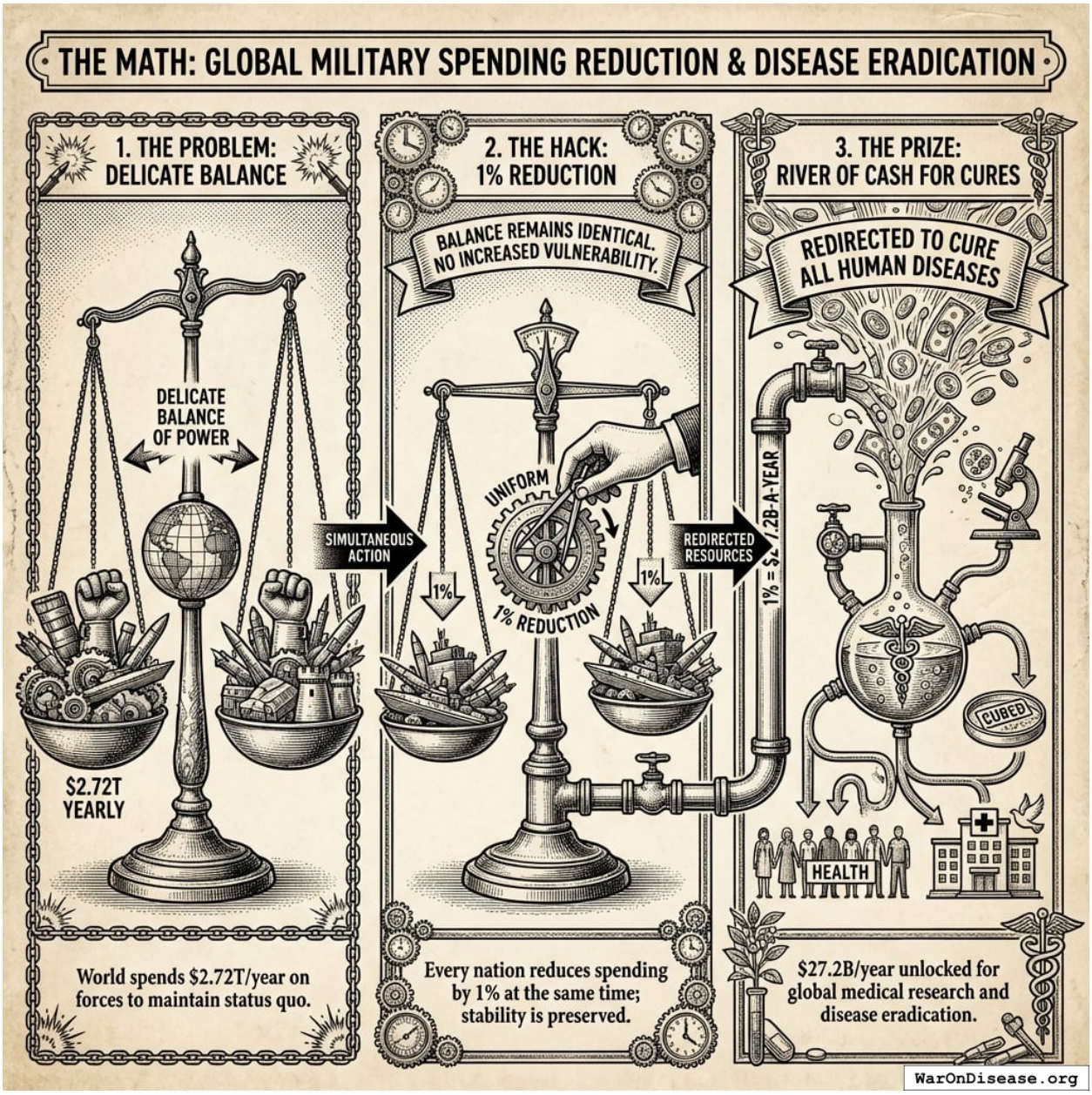


Figure 237: A visualization showing a 1 percent slice of the global military budget being redirected into a dedicated fund for curing diseases, demonstrating how a small relative change creates a massive financial resource.

$$
\begin{aligned}
&Funding_{treaty} \\
&= Spending_{mil} \times Reduce_{treaty} \\
&= \$2.72T \times 1\% \\
&= \$27.2B
\end{aligned}
$$

How It Works

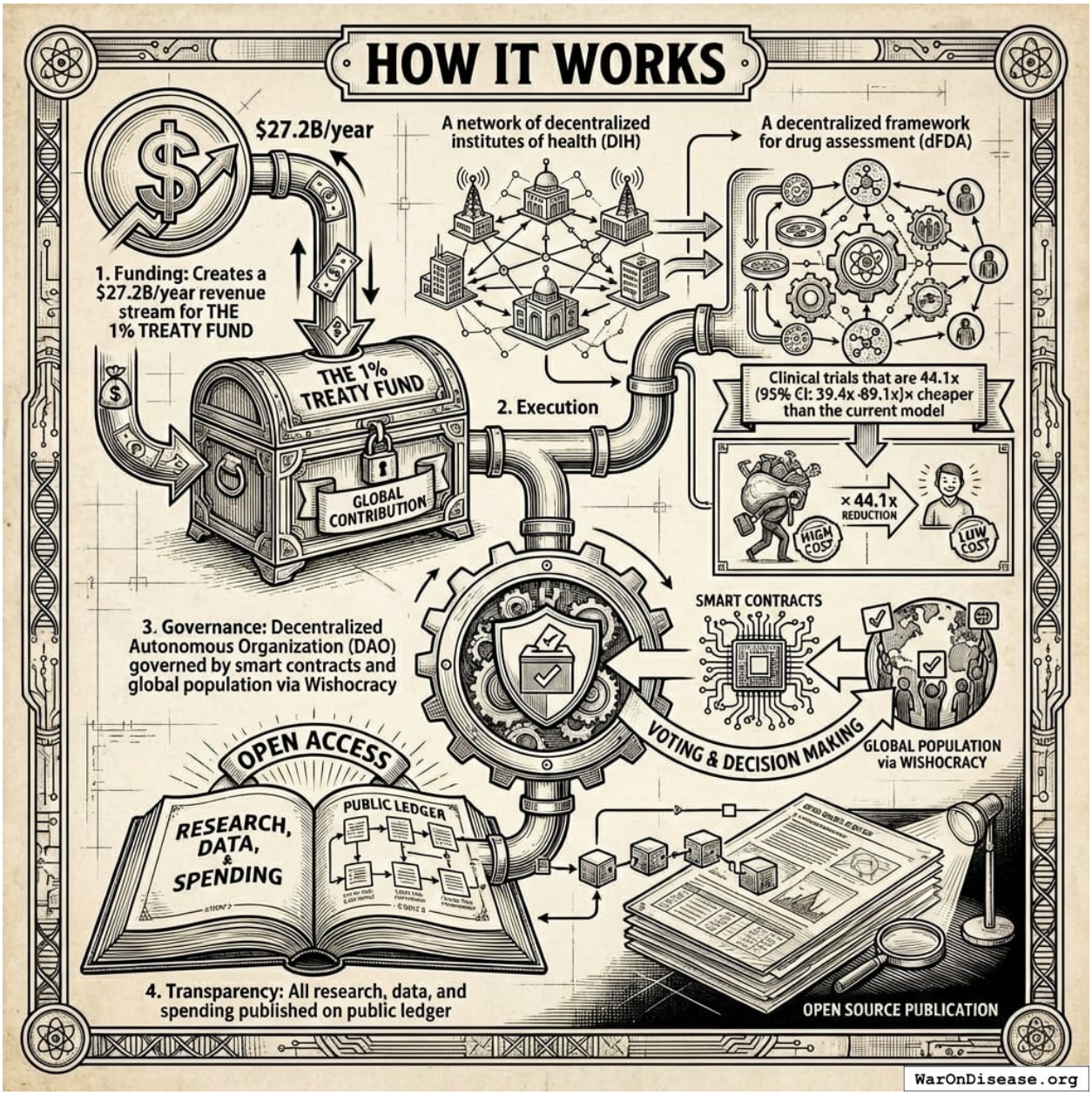


Figure 238: A process diagram showing the flow of funds from the 1 percent Treaty Fund through decentralized institutes to clinical trials, managed by DAO governance and public transparency ledgers.

1. **Funding:** Creates a $27.2B/year revenue stream for **the 1% Treaty Fund**
2. **Execution: A network of decentralized institutes of health (DIH)** subsidizes patient participa-

tion in **a decentralized framework for drug assessment (dFDA)**, clinical trials that are **44.1x (95% CI: 39.4x-89.1x) cheaper** than the current model
3. **Governance:** Decentralized Autonomous Organization (DAO) governed by smart contracts and global population via Wishocracy
4. **Transparency:** All research, data, and spending published on public ledger

This Isn't a Trade-Off.

The normal way to sell this: "Sacrifice security for health."

That's stupid. Here's what actually happens:

You Get Two Good Things By Removing One Stupid Thing

When every nation builds 1% fewer explosion devices *at the same time*, something beautiful occurs:

Good Thing #1: You Become Safer

Everyone keeps the same relative scariness. But the global "we might all die by accident" temperature drops 1%. Fewer chances of:

- Someone pressing the wrong button (happens more than you'd think)
- Countries competing to build the biggest boom stick (expensive and pointless)
- Nuclear weapons launched because a computer thought a flock of geese was a missile (this actually almost happened)
- Wars started over who has the most murder toys

Good Thing #2: You Stop Dying From Stupid Things

That $27.2B pays sick people to try treatments instead of waiting for death.



Figure 239: A visualization of the resource shift from global risks and weaponry to medical treatments, illustrating the 'Pareto improvement' where safety and health both increase simultaneously.

This is called a Pareto improvement, which is economist-speak for "everybody wins and nobody loses." It's like finding out that eating less poison makes you both less poisoned AND wealthier because poison is expensive.

The Dead Capital Problem (Or: Why Bombs Are the Worst Investment Since Tulips)

Here's something nobody tells you: when countries "invest" in military hardware, they're not buying assets. They're buying very expensive paperweights that occasionally explode.

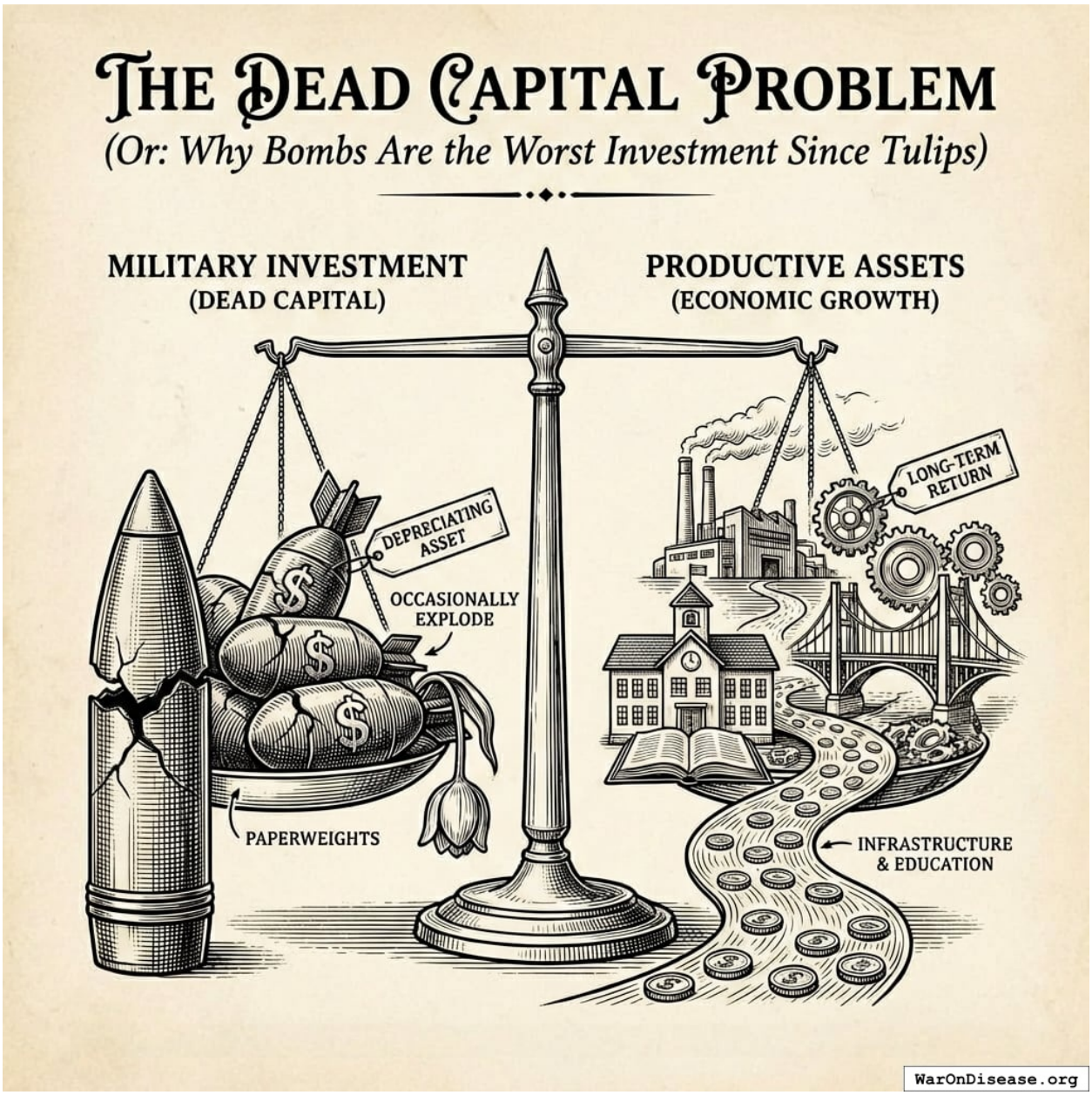


Figure 240: A comparison between productive investment, which generates ongoing economic value, and military spending, which results in non-circulating 'dead capital.'

A bridge

- Generates economic activity daily (trucks move, people commute, value flows)
- Lasts 50-100 years
- Makes everyone richer
- Pretty to look at

A missile

- Sits in a hole doing nothing
- Costs $1.5M/year just to keep it from rotting

- Can only destroy things (including itself)
- Makes everyone nervous

This is what economists call "dead capital" - resources trapped in a form that can't generate returns. It's like if you converted your house into a pile of TNT. Sure, it's impressive. But you can't live in it, rent it out, or do anything except eventually blow it up, at which point you have neither a house nor TNT.

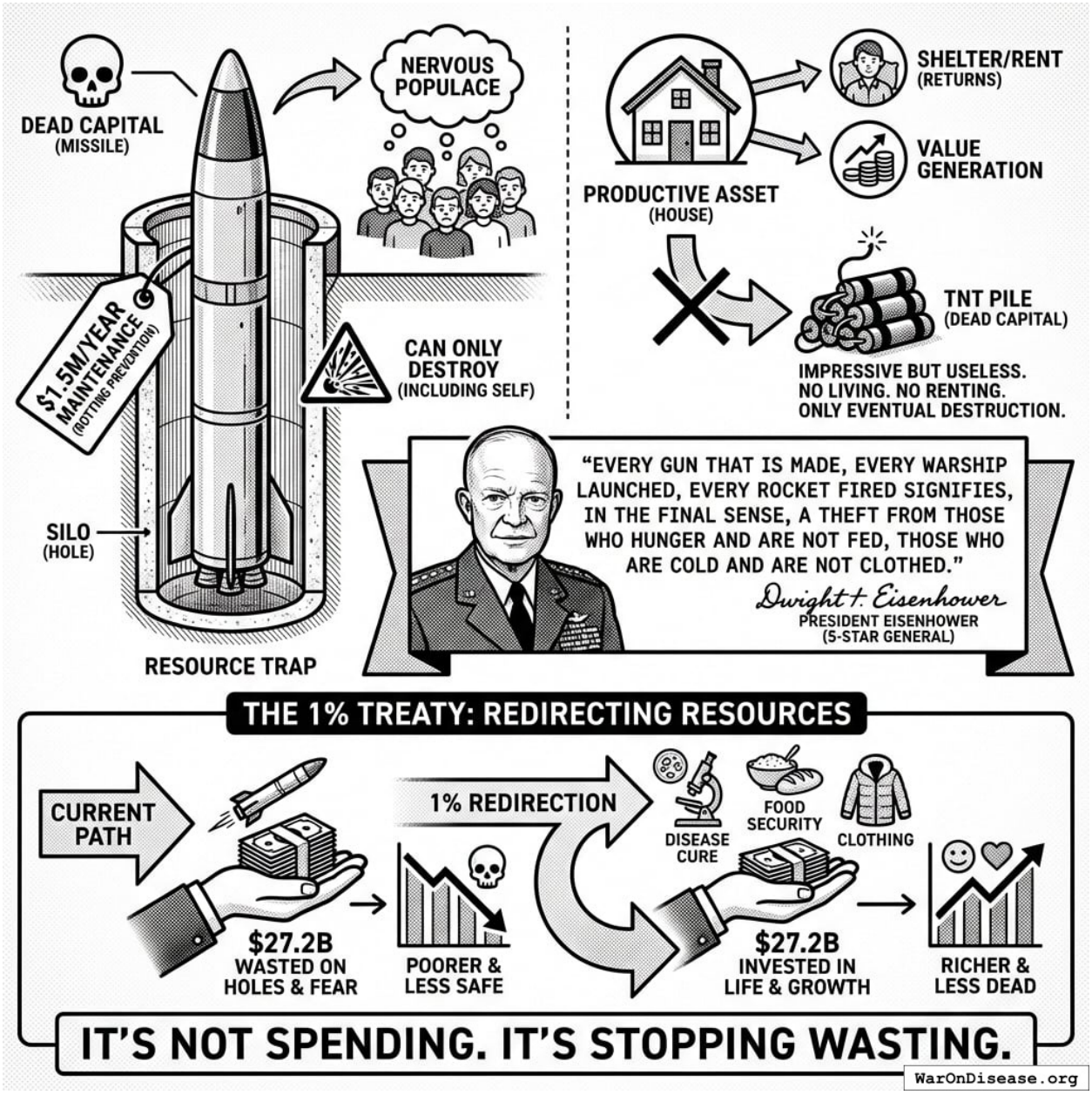


Figure 241: A conceptual comparison between 'dead capital' (a missile in a silo) and productive investment (food, housing, and medicine) representing the opportunity cost of military spending.

As President Eisenhower (a 5-star General who knew about killing professionally) put it: *"Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed."*

He literally ran the biggest military in history, and even HE thought you were being ridiculous about this.

A 1% treaty doesn't ask you to spend $27.2B curing diseases. It asks you to stop wasting $27.2B on things that sit in holes making you poorer and less safe, and redirect those same papers to things that make you richer and less dead.

It's not spending. It's stopping wasting.

The Reallocation: How to Redirect $27.2B a Year (Legally)

This is how you redirect $27.2B a year from the military budget to medicine and dying people get better instead.

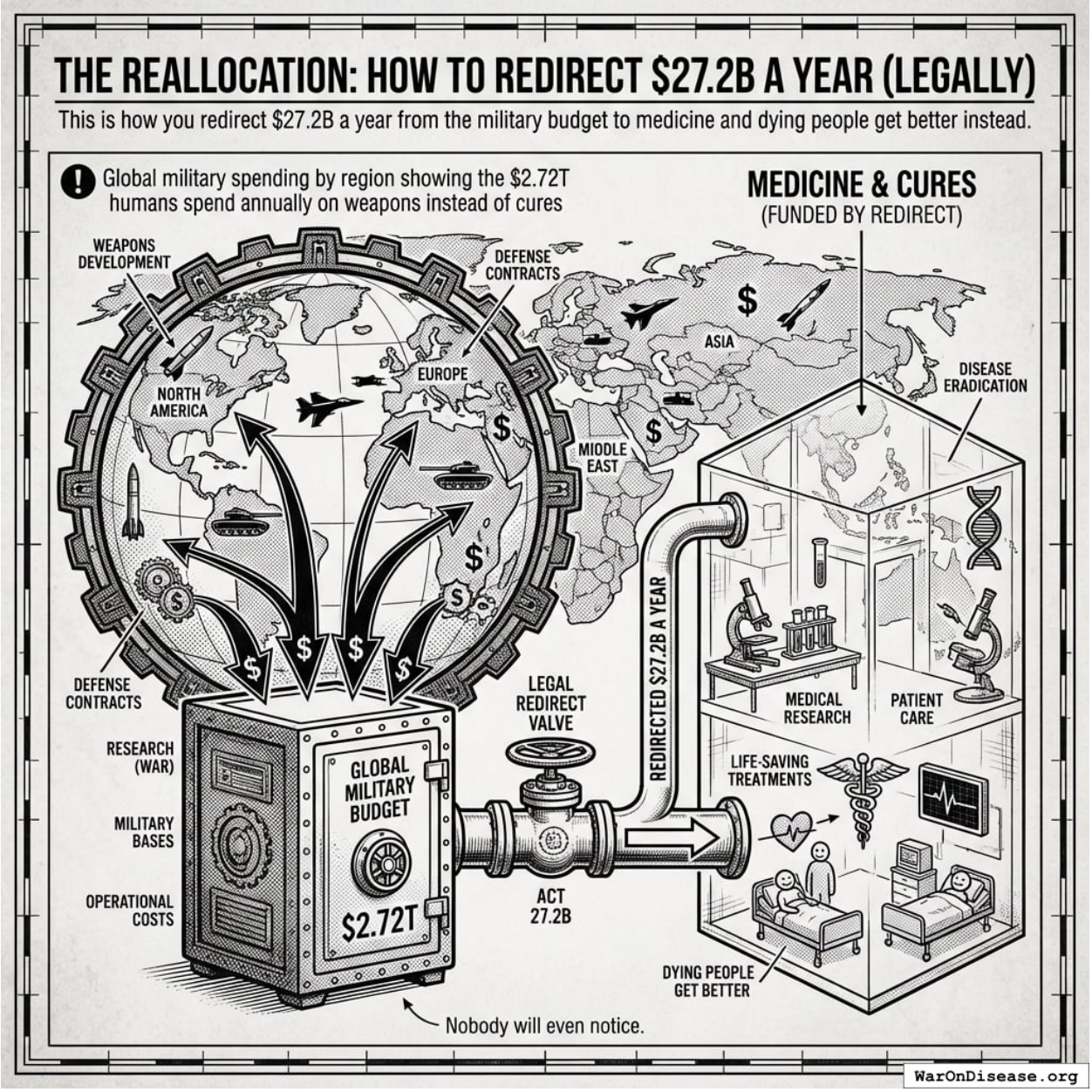


Figure 242: A visual comparison showing 2.72 trillion in global military spending with a highlighted 1 percent segment representing the 27.2 billion proposed for medical reallocation.

!Global military spending by region showing the $2.72T humans spend annually on weapons instead of cures

Nobody will even notice.

The Beautiful Mathematics of Mutual Stupidity Reduction

Here's a fun fact: Every nation on Earth is pointing guns at every other nation on Earth, spending trillions of dollars to maintain what we call "peace."

It's like if everyone in your neighborhood spent their life savings on attack dogs, and then called it a "safe community" because all the dogs are equally vicious.

A 1% treaty is based on kindergarten logic so simple that world leaders might actually understand it:

The Proof That Even Generals Can Follow

1. **Current Situation:** Every country spends billions on weapons to be exactly as scary as other countries with weapons. Like a very expensive, very deadly Mexican standoff that's been going on since 1945.
2. **The Elegant Part:** If EVERYONE reduces their military budget by exactly 1% at exactly the same time, everyone maintains exactly the same strategic position.
    - America: Still has 6,500 nukes instead of 6,565
    - Russia: Still has 6,000 nukes instead of 6,060
    - China: Still has enough weapons to kill everyone twice instead of 2.02 times
    - North Korea: Still terrifying but now 1% less so
3. **The Good Part:** Nobody loses! Everyone keeps the same relative scariness! It's like if everyone at a party agreed to take off their shoes - everyone gets shorter by the same amount, but nobody actually gets shorter relative to anyone else.
4. **The Prize:** That 1% - that $27.2B per year - goes into a global fund to cure the diseases that are actually killing people, unlike the bombs which are mostly just sitting around getting dusty and occasionally almost ending the world by accident.

This is straightforward enough that it's surprising it's never been tried. And here's the interesting part: 1% is just the beginning. This is a template for gradually redirecting resources toward human flourishing.

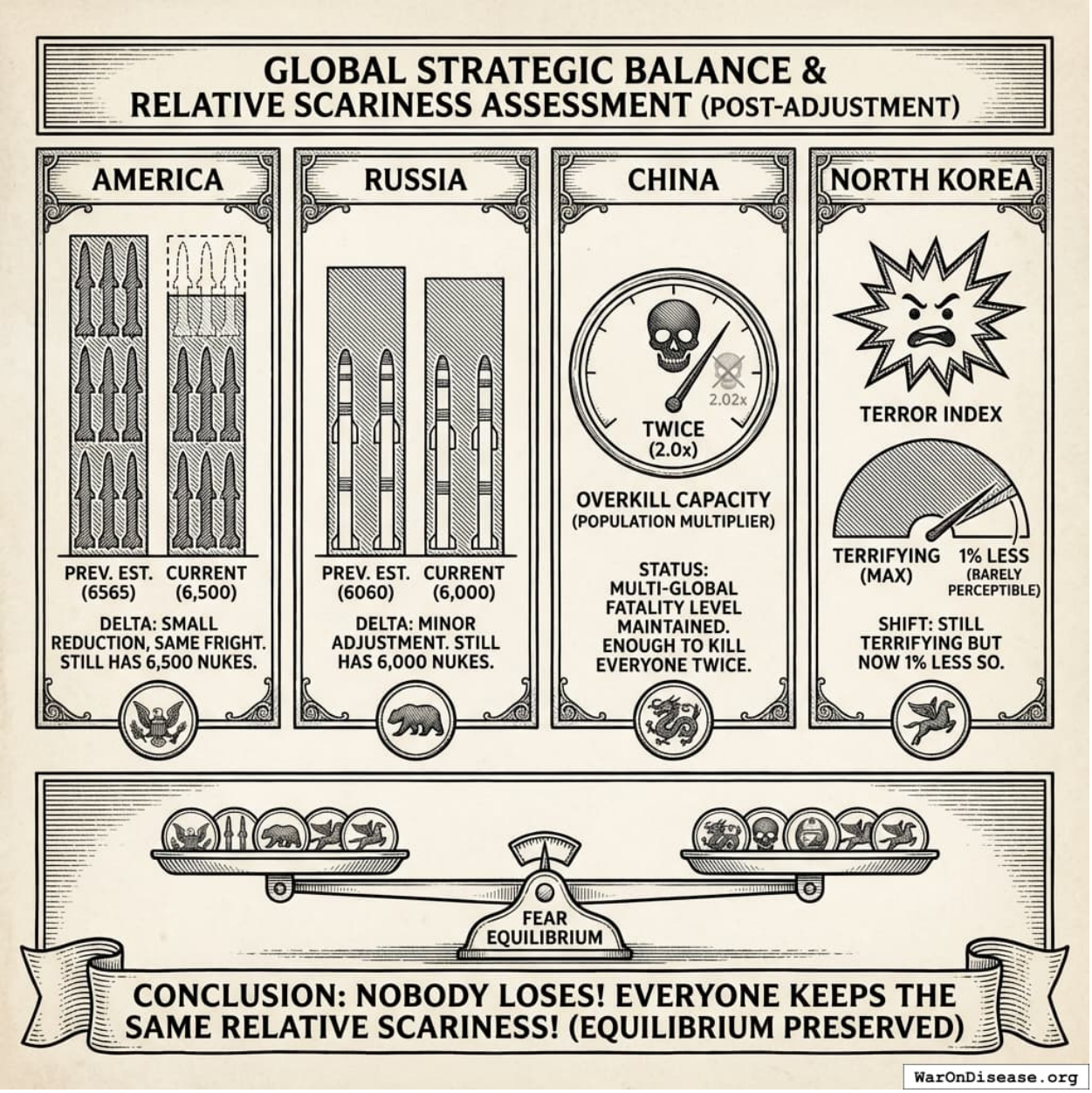


Figure 243: Comparison of military capabilities before and after a 1 percent reduction, demonstrating that strategic balance remains identical.

The Blueprint for a Saner World

Treaties are magic pieces of paper that countries sign when they want to pretend they'll behave.

Sometimes they work (we haven't had World War III yet). Sometimes they don't (we've had about 200 other wars[248]). But they're the only tool we have for getting countries to do anything together besides kill each other.

A 1% treaty: Technical Specifications for Global Survival

Article 1: The Promise

"We, the undersigned nations, being of sound mind and tired of dying, hereby agree to redirect 1% of our annual military expenditure to not dying instead."

Article 2: The Money Part

Every signatory nation contributes exactly 1% of their military budget to **the 1% Treaty Fund**.

- USA: $8.86 billion (won't even notice, they've failed to account for over $2.46 trillion[235])
- China: $2.96 billion (what they spend on military parades[249])
- India: $835 million (one aircraft carrier's wine budget)
- Russia: $1.09 billion (Putin's shirt budget)
- Saudi Arabia: $754 million (one prince's yacht)
- UK: $686 million
- France: $563 million (military cheese allocation)
- And so on…

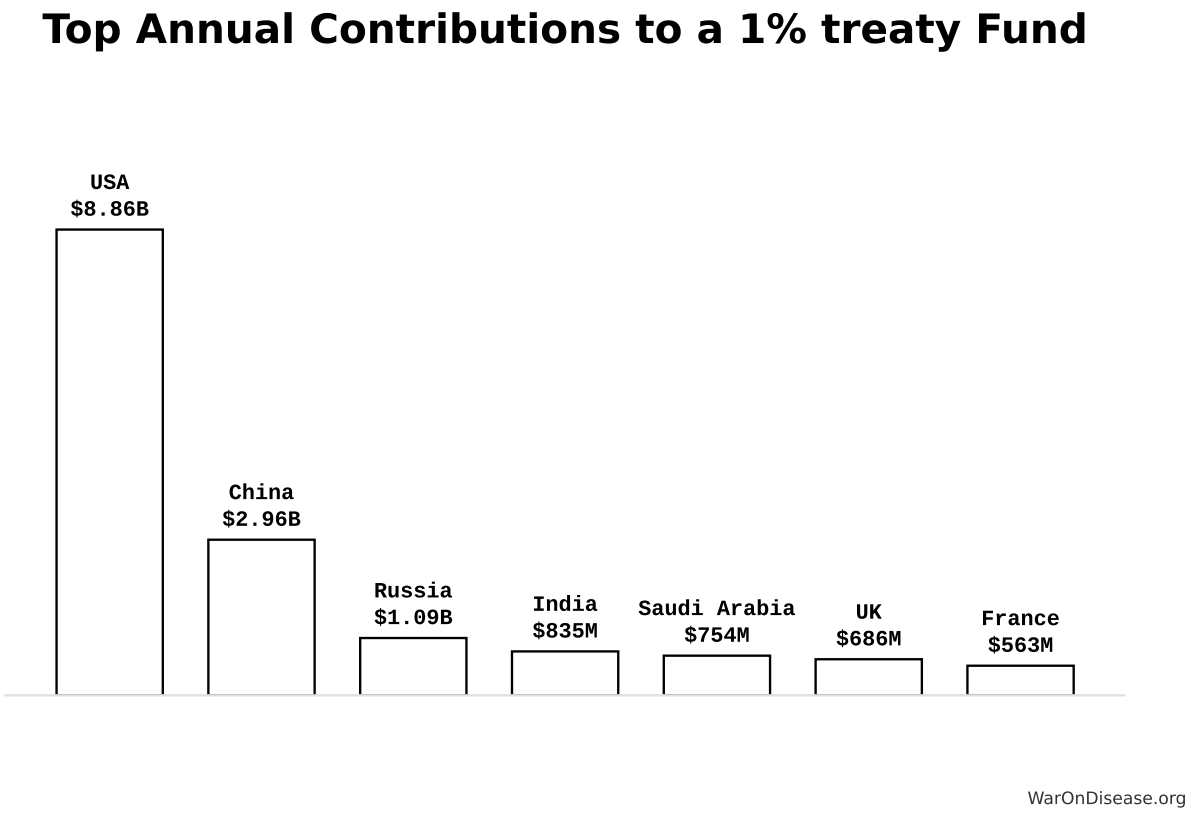


Figure 244: Projected annual contributions to a 1% Treaty Fund from top military spenders, based on a 1% reallocation of their military budgets.

Article 3: The Incentive Mechanism

Politicians who support the treaty receive Incentive Alignment Bond benefits: campaign funding from the political incentive pool ($2.72B/year) and lucrative post-office career opportunities. Supporting the treaty becomes the career-maximizing choice.

Why This Is Actually About National Security (No, Really)

Here's what actually threatens nations today:

Real Threats (That Actually Kill People)



Figure 245: A comparison of global annual death tolls from major health threats and pandemics relative to historical war casualties.

1. **Pandemics**: COVID killed more Americans than World War II, Korea, and Vietnam combined[250]
2. **Cancer**: Kills 10 million globally per year[162]
3. **Heart Disease**: 18 million annual deaths[161]
4. **Dementia**: Destroying the minds of every nation's elderly (and sometimes their leaders)
5. **Climate Disasters**: Making entire regions uninhabitable

6. **Mental Health Crisis**: More people kill themselves than die in wars[251]

Fake Threats (That Countries Spend Trillions On)

1. **Other Countries Maybe Attacking**: Happens occasionally, usually over stupid stuff
2. **Terrorists**: Kill fewer people than furniture accidents[247]
3. **Space Aliens**: Still zero confirmed kills
4. **The Communists/Capitalists**: Mostly just sell each other stuff now
5. **Immigration**: People moving around, terrifying
6. **Critical Race Theory**: A graduate seminar that somehow threatens nations

A 1% treaty addresses the real threats without compromising the ability to deal with the imaginary ones.

It's security policy reframed to address actual threats.



Figure 246: Bar chart contrasting annual mortality rates from medical threats versus traditional military threats.

The Rebranding Campaign: From "Weakness" to "Strategic Genius"

Politicians hate looking weak. It's their biggest fear, right after being caught with their mistress or having to use their own healthcare system.

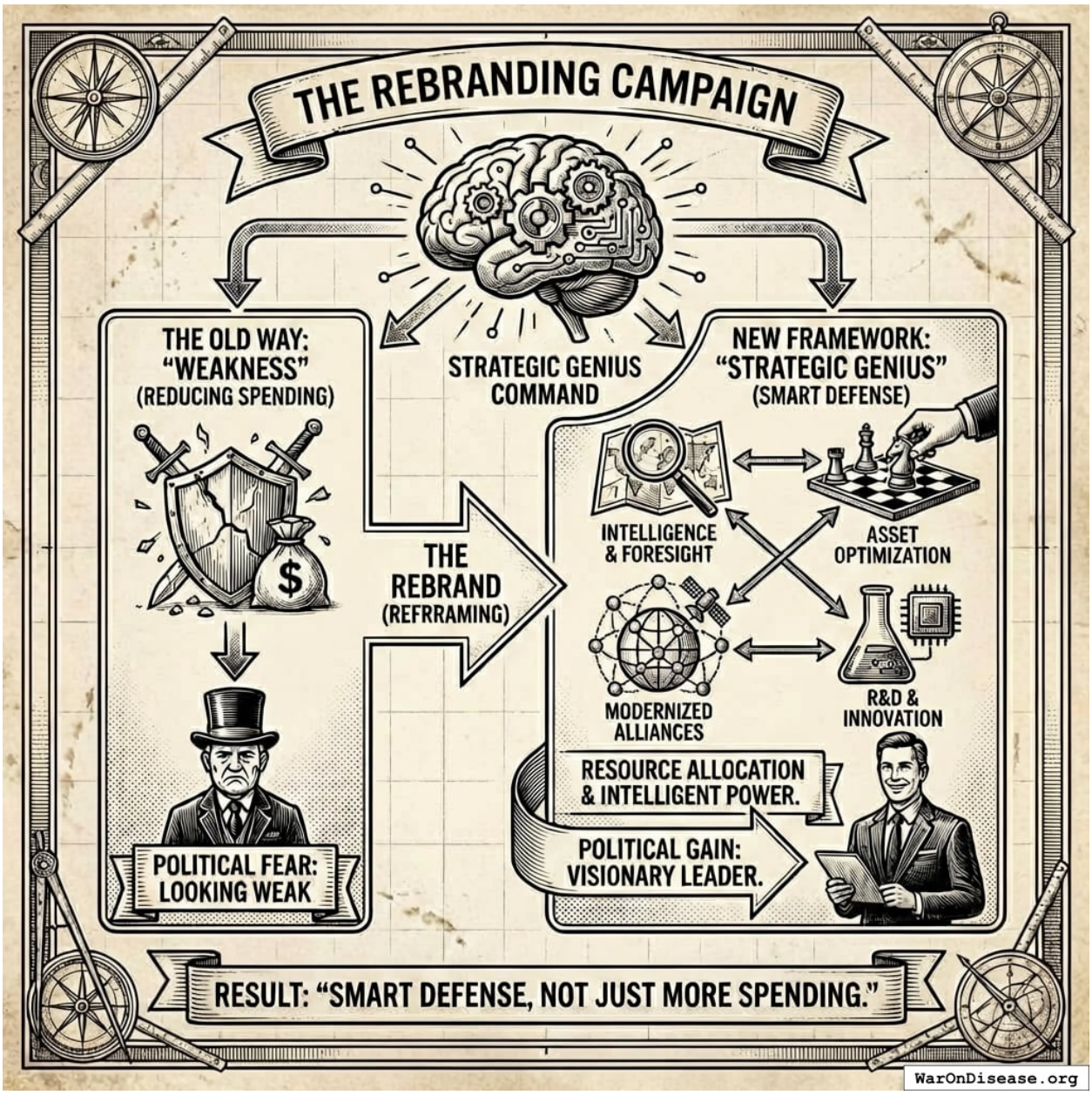


Figure 247: A visual representation of political reframing, showing the transformation of a single policy from a negative 'weakness' perception to a positive 'strategic genius' perception.

So you don't frame this as "reducing military spending." You frame it as:

"The Strategic Health Defense Initiative"



Figure 248: A comparison showing the shift from a negative political frame (defense cuts) to a positive strategic frame (biodefense shield).

- **Old Frame**: "We're cutting defense by 1%" (Political suicide)
- **New Frame**: "We're building a biodefense shield against the real threats" (Political genius)

The Talking Points That Make Hawks Sound Like Doves

For Conservatives: "This is the ultimate America First policy. We're protecting American lives from the Chinese virus and any future biological threats. It's the Strategic Defense Initiative for the 21st century."

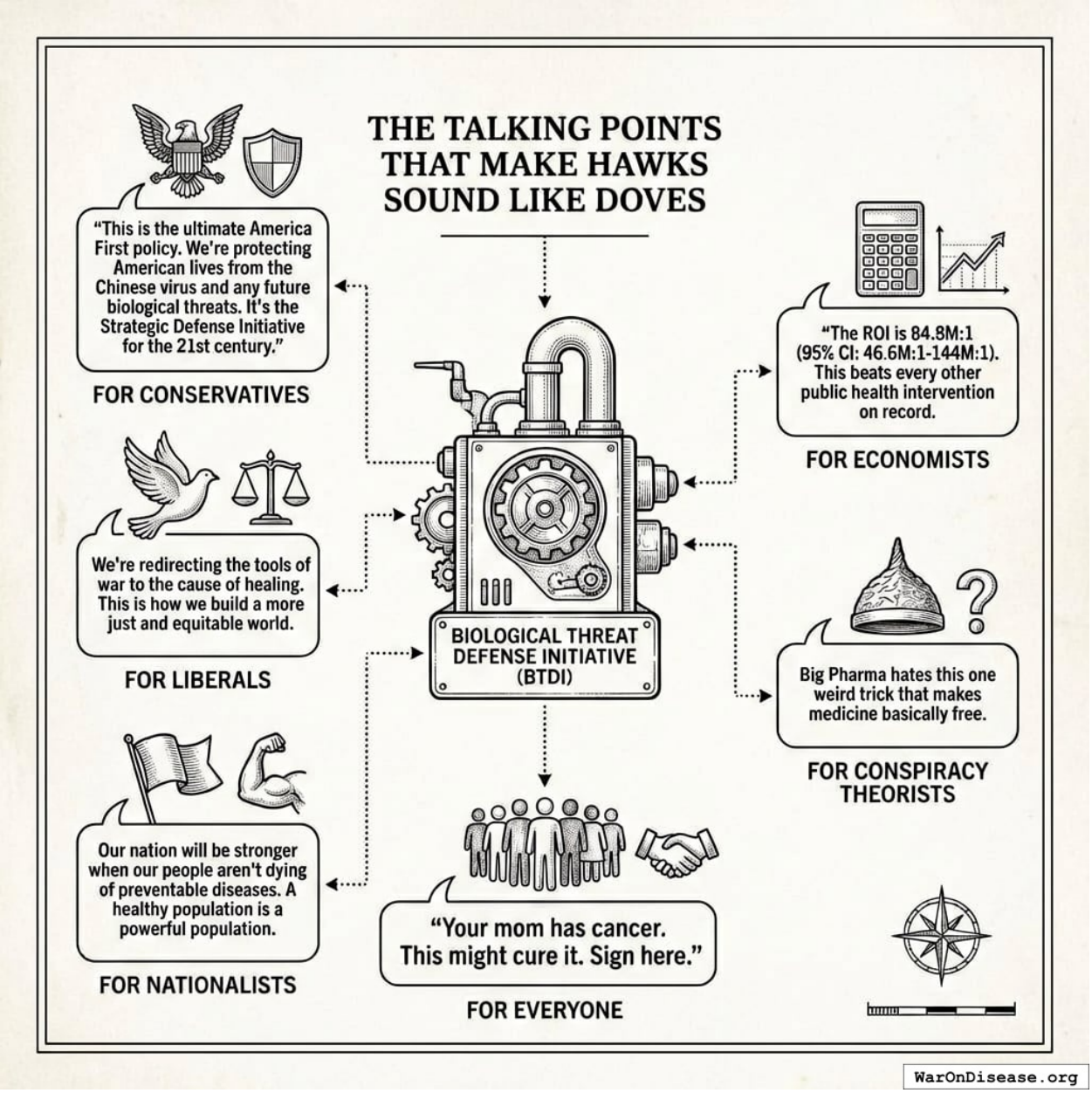


Figure 249: A hub-and-spoke infographic showing how a single core policy is strategically messaged across different ideological perspectives like national security, economic ROI, and social justice.

For Liberals: "We're redirecting the tools of war to the cause of healing. This is how we build a more just and equitable world."

For Nationalists: "Our nation will be stronger when our people aren't dying of preventable diseases. A healthy population is a powerful population."

For Economists: "The ROI is 84.8M:1 (95% CI: 46.6M:1-144M:1). This beats every other public health intervention on record."

For Conspiracy Theorists: "Big Pharma hates this one weird trick that makes medicine basically free."

For Everyone: "Your mom has cancer. This might cure it. Sign here."

Implementation

For the detailed execution timeline, see the Roadmap.

The Money Flow: Where $27.2B Actually Goes

Once the treaty is signed and the money starts flowing, here's what happens:

The 1% Treaty Fund

Input: $27.2B annually from military budgets worldwide

Distribution: The $27.2B flows into the 1% Treaty Fund, where it is allocated using an **80/10/10 automatic split** before any funds reach discretionary spending:

Allocation	Percentage	Annual Amount	Purpose
Pragmatic Clinical Trials	80%	$21.8B	Patient subsidies, R&D, pandemic prep
VICTORY Incentive Alignment Bond Returns	10%	$2.72B	Perpetual investor payments
IAB Political Incentives	10%	$2.72B	Rewards for supporting legislators

The 80% allocated to pragmatic clinical trials is then distributed by the people of Earth via the Wishocracy platform. There are no committees or central planners. While allocations are dynamic, initial priorities determined by the crowd are projected to focus on:

- **Patient Subsidies:** The largest portion, creating a market for clinical trials.
- **Research & Development:** Funding for breakthrough platform technologies.
- **Pandemic Preparedness:** A global insurance policy against the next COVID. The exact percentages will shift in real-time based on humanity's collective will.

Governance: Governance is handled by Wishocracy, a system of direct digital democracy detailed in the 'How to Replace Congress With an App' chapter. In short: every human gets direct say on funding priorities. Yes, even Florida Man. We'll risk it.

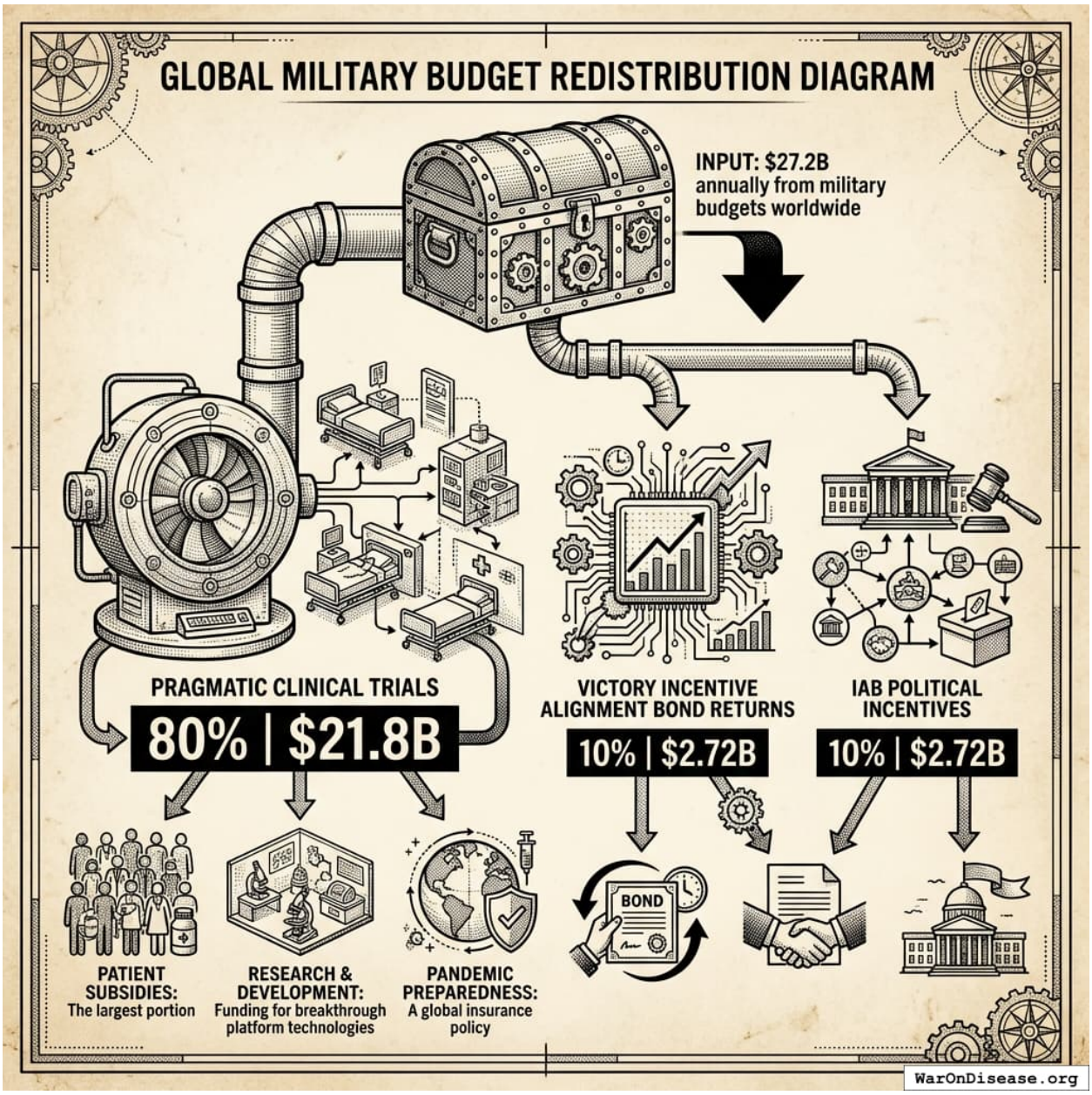


Figure 250: Sankey diagram tracing the flow of funds from global military budgets into specific treaty allocation buckets.

Year One Projected Outcomes

Right now, only 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) participate in drug trials annually) out of 2.40B people (95% CI: 2.00B people-2.80B people) with chronic disease. A 1% treaty changes this:

Current System

- Pivotal trials: $41K (95% CI: $20K-$120K) per patient
- Only 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) participants per year globally

- 1.08B people (95% CI: 843M people-1.34B people) willing to participate, but turned away
- 14 years (95% CI: 12 years-17 years) from discovery to patient

With a 1% treaty + a decentralized framework for drug assessment

- $60B (95% CI: $50B-$75B) existing + $27.2B from treaty
- Pragmatic trials: $929 (95% CI: $97-$3K) per patient (44.1x (95% CI: 39.4x-89.1x) cheaper)
- 23.4M patients/year (95% CI: 9.44M patients/year-96.8M patients/year) participants per year (12.3x (95% CI: 4.19x-61.3x) capacity increase)

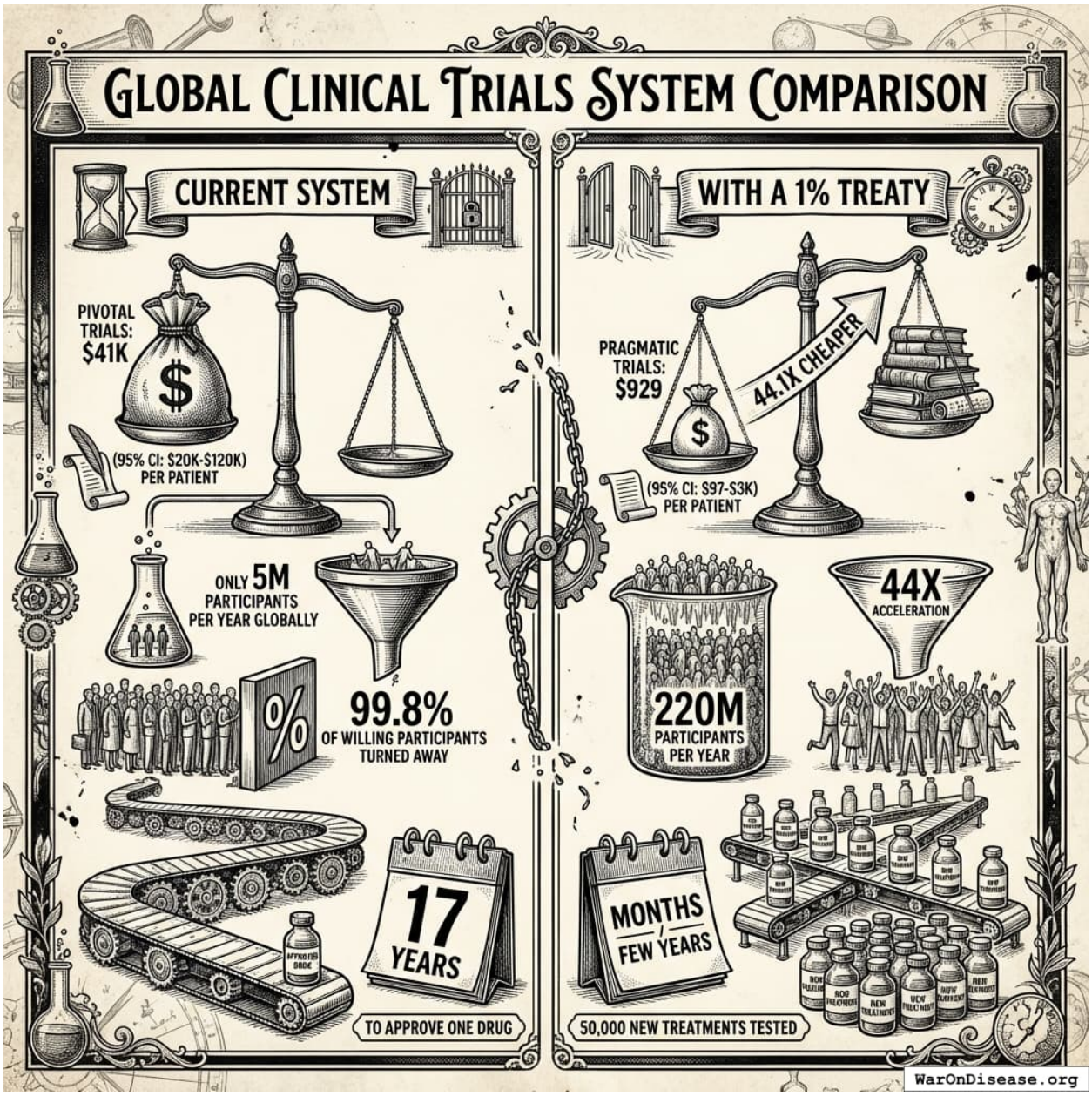


Figure 251: Side-by-side comparison of costs, participation rates, and speed between the current model and the proposed framework.

For detailed impact projections, see the full economic analysis.

The Incentive Structure

The military-industrial complex will LOVE this.

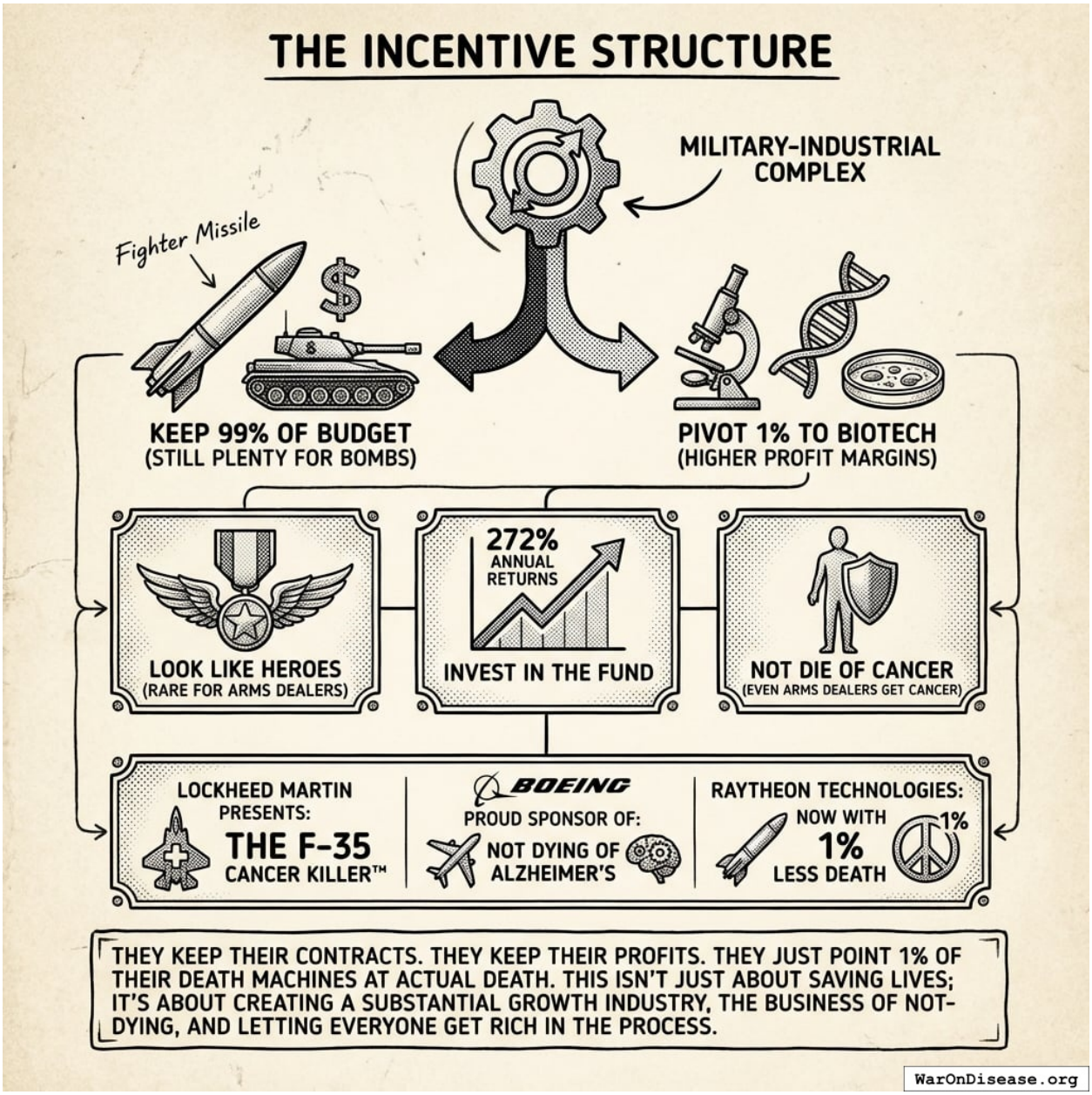


Figure 252: An infographic illustrating the '1 percent Pivot' incentive structure, showing how a small shift in defense spending leads to five key benefits: budget retention, high-margin biotech ventures, improved public image, high investment returns, and personal health breakthroughs.

Why? Because they get to:

1. **Keep 99% of their budget** (still plenty for bombs)
2. **Pivot 1% to biotech** (higher profit margins)
3. **Look like heroes** (rare for arms dealers)
4. **Invest in the fund** (272% annual returns, remember?)

5. **Not die of cancer** (even arms dealers get cancer)

Lockheed Martin Presents: The F-35 Cancer Killer™ Boeing Proud Sponsor of: Not Dying of Alzheimer's Raytheon Technologies: Now With 1% Less Death

They keep their contracts. They keep their profits. They just point 1% of their death machines at actual death. This isn't just about saving lives; it's about creating a substantial growth industry, the business of not-dying, and letting everyone get rich in the process.

What Happens If This Actually Works

The Endgame: Reorienting Global Priorities

A 1% treaty isn't the goal. It's the beginning. It's the opening wedge that demonstrates a better way to allocate resources. Your multi-generational strategy is to make organized violence less economically necessary. You're not appealing to better angels; you're making peace more profitable than war.

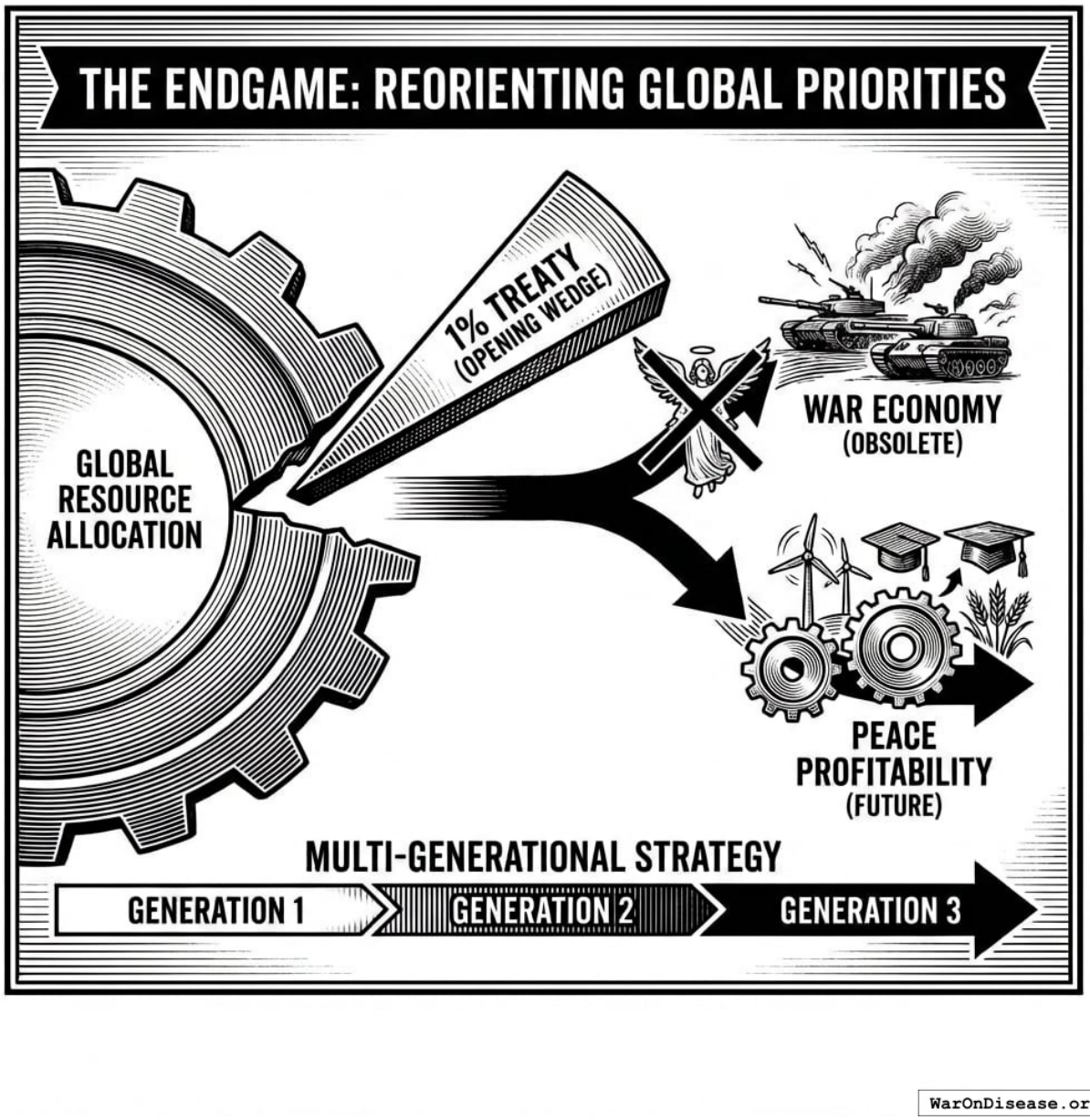


Figure 253: A conceptual diagram illustrating the 'opening wedge' strategy, where a 1 percent treaty shifts global resource allocation from organized violence toward a more profitable peace-based economy.

The Ratchet Effect: How to Boil a Frog (The Frog is the War Machine)

Once a 1% treaty is signed and the first cures for "untreatable" diseases start rolling out, the system becomes more valuable. This is how you sustain it.

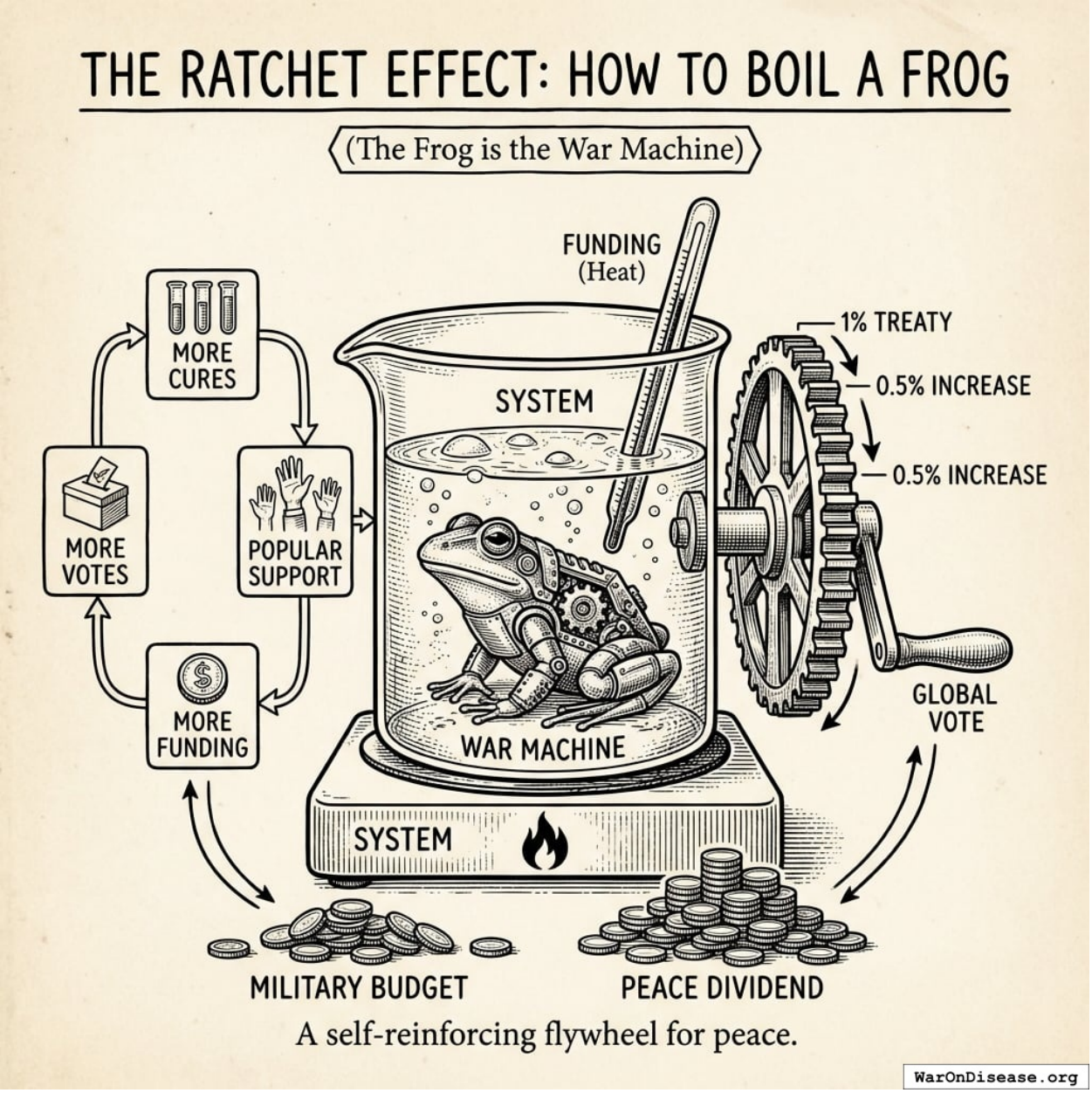


Figure 254: A circular feedback loop illustrating the 'Ratchet Effect' where medical breakthroughs drive public support, leading to incremental funding shifts from military budgets to global health.

Every five to ten years, you organize another global vote. The question is simple: "Hey, that worked out great. Grandma's dementia is manageable and we stopped that pandemic before it started. Want to try another half-percent?"

It's a politically tiny ask with an enormous payoff. This creates a feedback loop from hell for the "war is good, actually" crowd. More cures lead to more popular support, which leads to more votes for more funding, which leads to more cures. It's a self-reinforcing flywheel for peace. The military budget gets put on a diet, one delicious, life-saving, politically-unassailable bite at a time.

The Economic Gold Rush

Eventually, the economic gravity of the planet will shift. The most talented scientists and engineers will be drawn to the massive opportunities in health and longevity, not designing better ways to blow people up. The world's biggest investors will realize the greatest returns are found in curing Parkinson's, not in building another aircraft carrier.

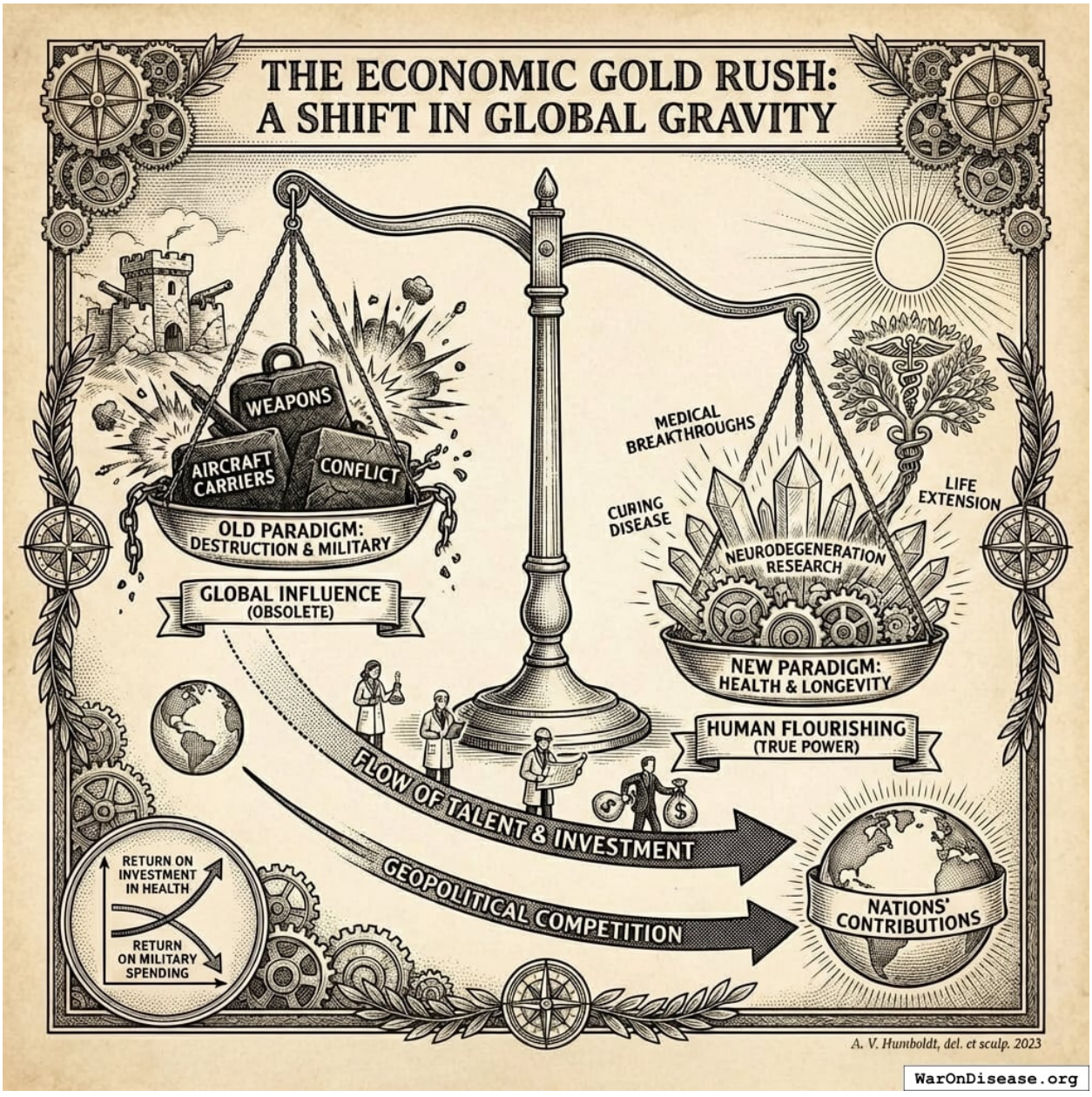


Figure 255: A conceptual shift showing the migration of talent, capital, and national power from military defense toward medical innovation and human longevity.

Nations will find that true power and global influence come not from their capacity for destruction, but from their contributions to human flourishing. The new geopolitical competition won't be about who has the most weapons, but about who achieved the most breakthroughs in medicine.

The Vision

The 1% is just the beginning. Once the system proves itself, the feedback loop takes over: cures lead to popular support, which leads to votes for more funding, which leads to more cures. Each success makes the next increment politically easier.

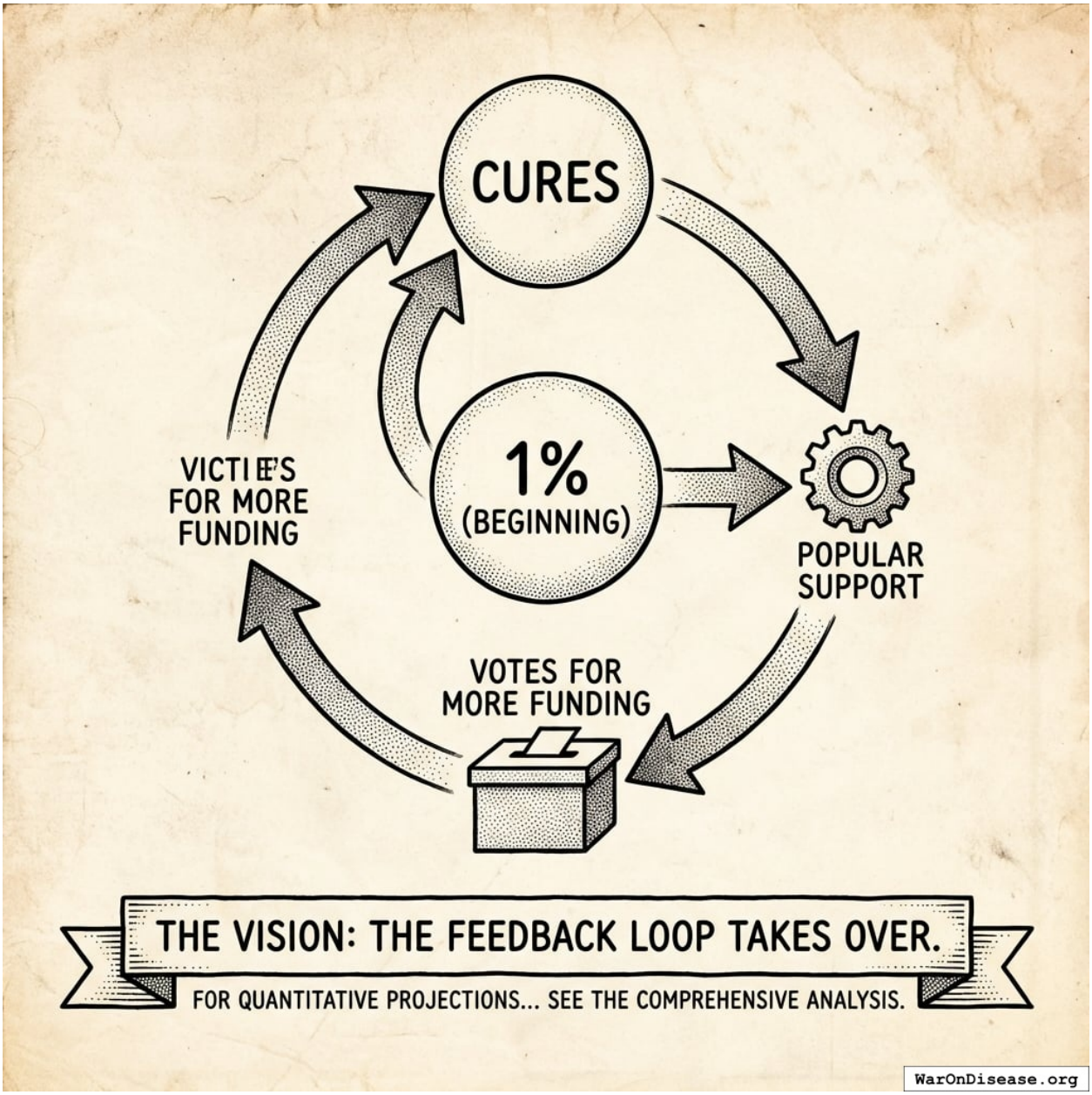


Figure 256: A circular feedback loop showing how medical cures drive public support, leading to increased funding and further scientific breakthroughs.

For quantitative projections of health and economic impacts, see the comprehensive analysis.

Objections

For detailed responses to common objections ("This makes us weak!", "This is socialism!", "What if there's a war?", etc.), see the Frequently Asked Objections.

Avoiding Treaty Pitfalls

Treaties fail in predictable ways. Here's how this one avoids the common killers:

Reservation Games

Countries love to sign treaties then add exceptions that gut them.

Solution: No reservations permitted. All or nothing. Take it or leave it.

Ratification Delays

Sign with fanfare, then let it die in committee forever.

Solution: Provisional application. Takes effect on signature. Ratification just formalizes what's already happening.

Creative Accounting

Reclassify "military" spending as "peacekeeping" or "homeland security" to dodge obligations.

Solution: IABs make creative accounting self-defeating. Politicians who benefit from treaty compliance have personal financial incentive to ensure their nation's full 1% contribution flows through. Reclassifying military spending to dodge obligations reduces IAB returns for that nation's own legislators, the same people who control budget classifications.

Parliamentary Obstacles

Executive signs, legislature refuses to implement.

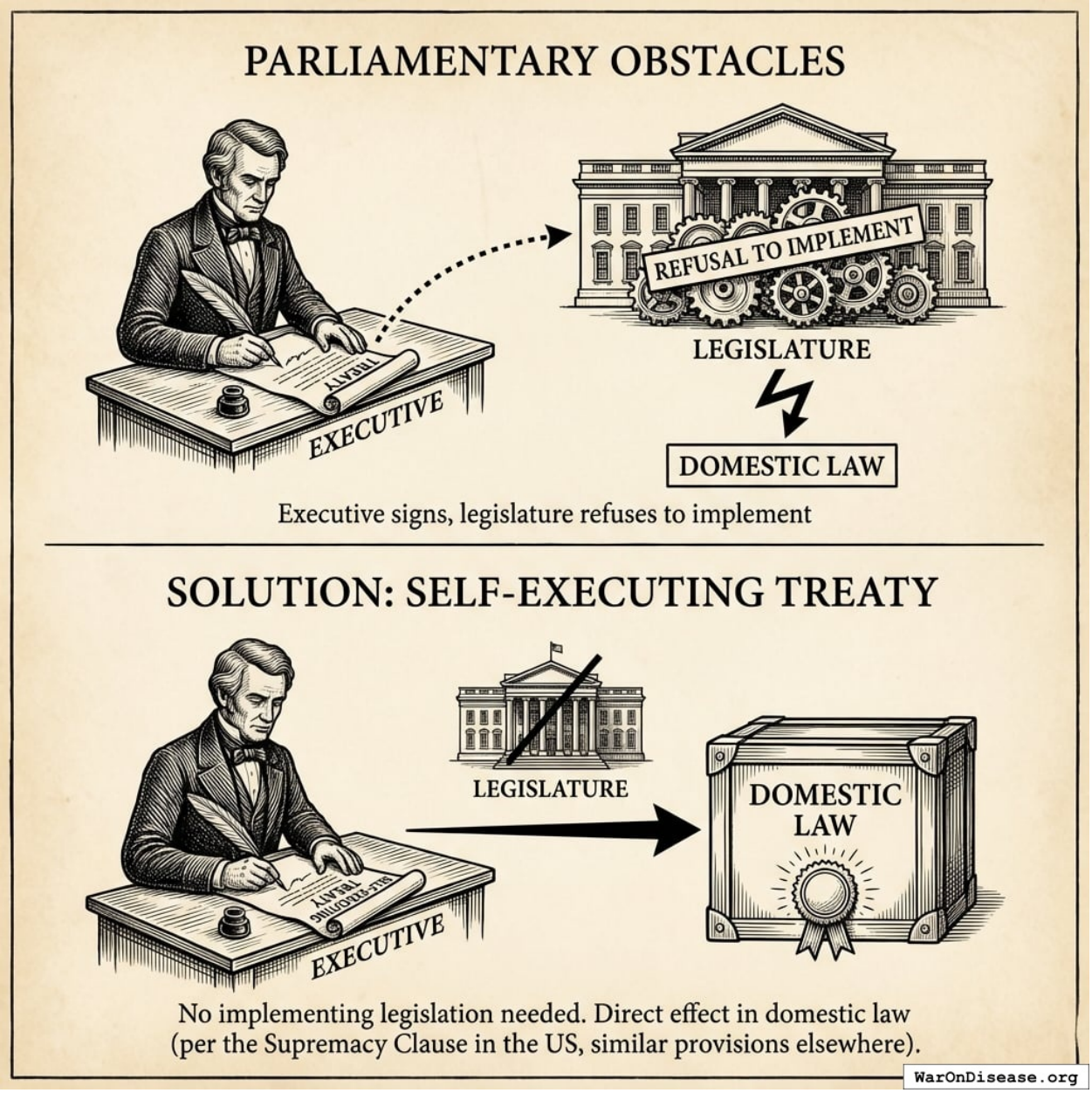


Figure 257: A flowchart comparing the paths of standard treaties versus self-executing treaties, showing how the latter bypasses the legislative implementation step to reach domestic effect.

Solution: Self-executing treaty. No implementing legislation needed. Direct effect in domestic law (per the Supremacy Clause in the US, similar provisions elsewhere).

Summary

A 1% treaty is a piece of paper that says "Let's spend 1% less on killing and 1% more on not dying."

That's it. That's the whole thing.

It doesn't end war. It doesn't destroy the military. It doesn't create world peace.

It just moves the *first* 1% of our murder budget to our survival budget.

If we can't agree on that - if we can't agree that spending 1 penny less on death and 1 penny more on life is a good idea - then we deserve whatever's coming.

Addendum: The Actual Treaty Text (First Draft)

THE TREATY FOR THE 1% REALLOCATION OF MILITARY EXPENDITURES TOWARDS BIOMEDICAL RESEARCH AND DEVELOPMENT FOR THE PREVENTION OF HUMAN SUFFERING AND DEATH

(Or: The "Let's Not Die" Treaty, for short)

WHEREAS, humanity spends $2.72T annually on methods of killing itself;

WHEREAS, this seems somewhat counterproductive;

WHEREAS, diseases kill more people than all wars combined[252] and don't even have the decency to be quick about it;

WHEREAS, we have nuclear weapons sufficient to end civilization 20 times but can't cure male pattern baldness once;

WHEREAS, this is embarrassing;

NOW, THEREFORE, the undersigned nations agree to stop being complete idiots about this, as follows:

Article I: Each signatory shall redirect exactly 1% of its annual military budget to **the 1% Treaty Fund** for allocation to pragmatic clinical trials.

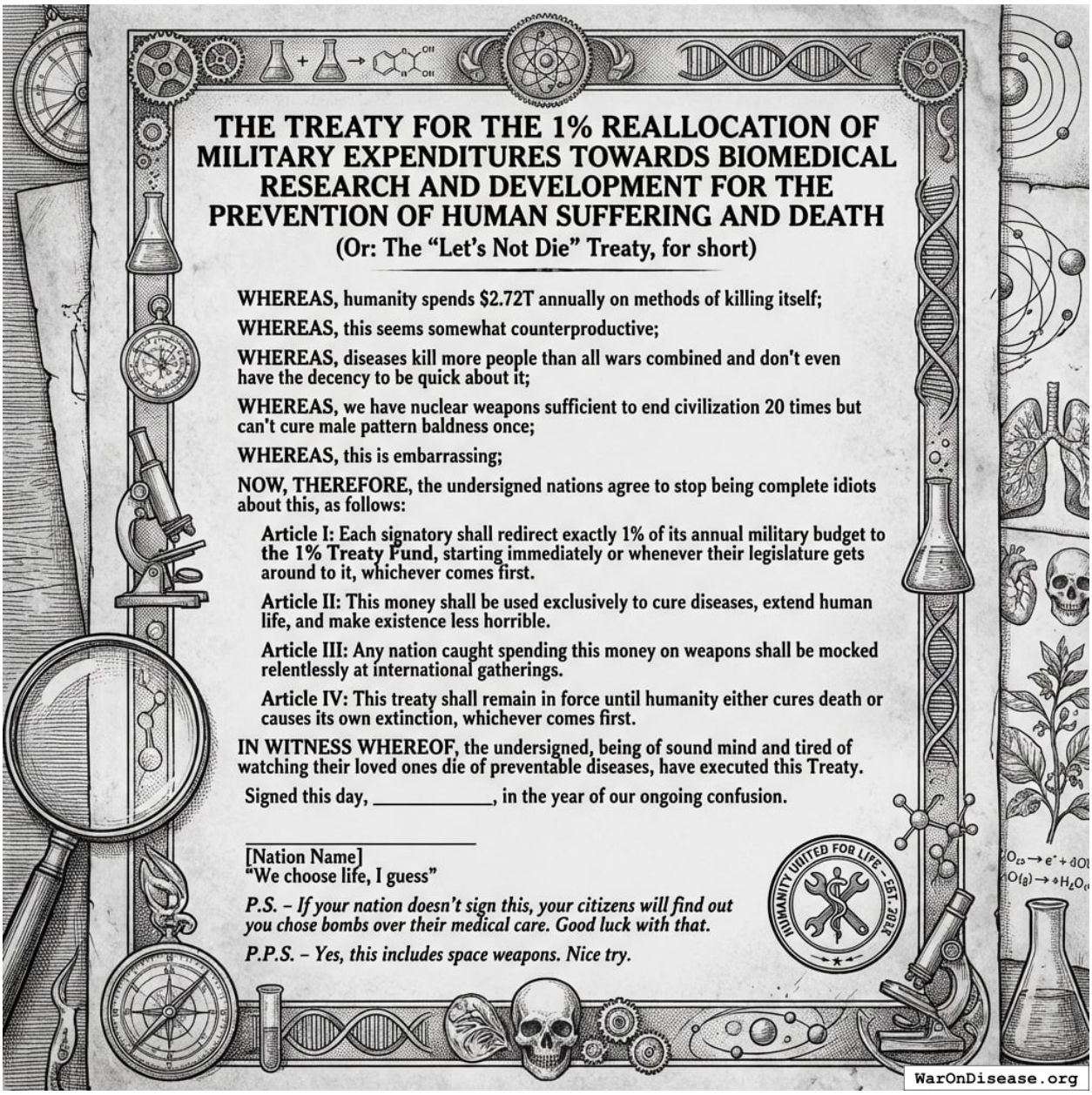


Figure 258: A visualization of the 1 percent Treaty showing the redirection of global military funds toward biomedical research, contrasting current spending on weapons with the proposed investment in curing diseases.

Article II: Transfers shall be automatic, immediate, and irrevocable. No "we'll get to it later."

Article III: Percentages may increase but never decrease. This is a ratchet, not a yo-yo.

Article IV: Compliance shall be verified by blockchain and AI. No creative accounting.

Article V: Non-compliant parties lose access to IAB benefits and treaty fund advantages. Your opponents get what you forfeit.

Article VI: Success metrics trigger mandatory percentage reviews. When it works, we do more.

Article VII: Citizens have standing to enforce via domestic courts. You can sue your own government for non-compliance.

Article VIII: Withdrawal requires unanimous consent of all parties plus 10-year notice. Good luck with that.

Article IX: This treaty supersedes all conflicting domestic law. Yes, even that law.

Article X: Entry into force upon signature by two states. We only need two countries brave enough to go first.

IN WITNESS WHEREOF, the undersigned, being of sound mind and tired of watching their loved ones die of preventable diseases, have executed this Treaty.

Signed this day, _____, in the year of our ongoing confusion.

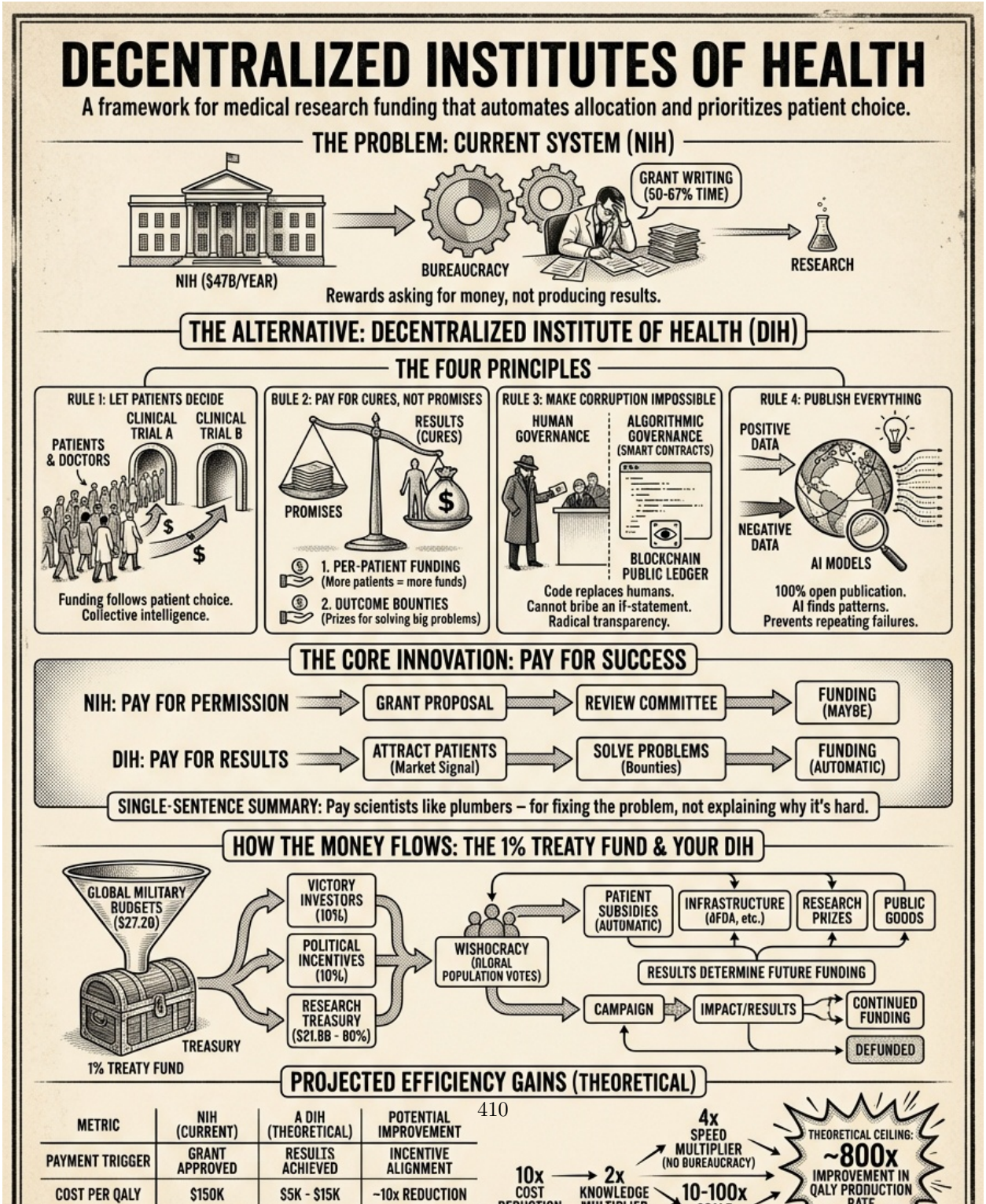
_____

[Nation Name] "We choose life, I guess"

_____

P.S. - Yes, this includes space weapons. Nice try.

Decentralized Institutes of Health



METRIC	NIH (CURRENT)	A DIH (THEORETICAL)	POTENTIAL IMPROVEMENT
PAYMENT TRIGGER	GRANT APPROVED	RESULTS ACHIEVED	INCENTIVE ALIGNMENT
COST PER QALY	$150K	$5K - $15K	~10x REDUCTION



Figure 260: A decentralized institute of health: A new model for medical research

The Objective: Total Disease Eradication

The goal is simple: **eliminate all disease**.

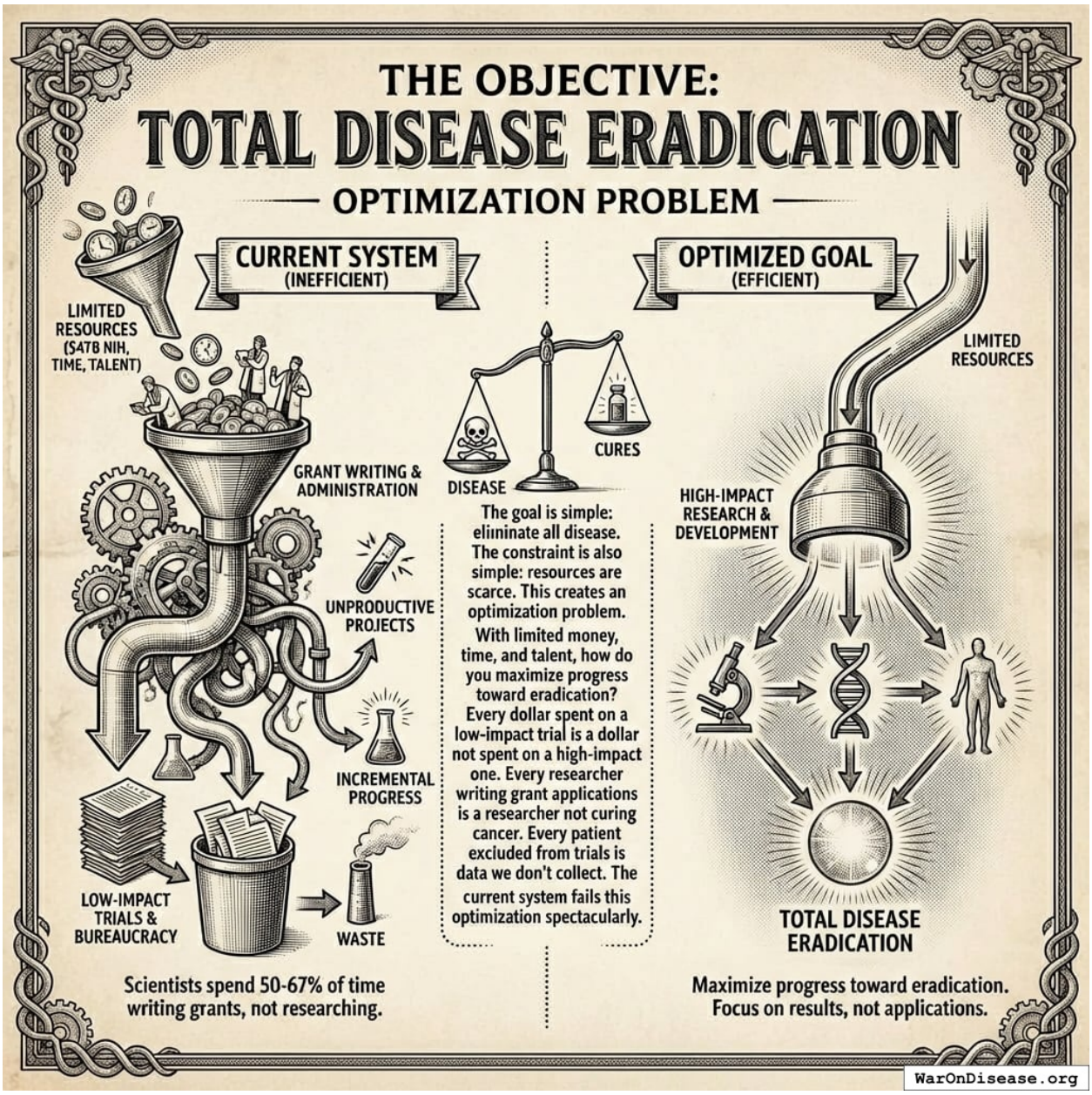


Figure 261: A comparison between the current system's focus on administrative overhead and an optimized system focused on direct research and disease eradication.

The constraint is also simple: **resources are scarce**.

This creates an optimization problem. With limited money, time, and talent, how do you maximize progress toward eradication? Every dollar spent on a low-impact trial is a dollar not spent on a high-impact one. Every researcher writing grant applications is a researcher not curing cancer. Every patient excluded from trials is data we don't collect.

The current system fails this optimization spectacularly.

The NIH spends $47B (95% CI: $45B-$50B) a year. Scientists spend 50-67% of their time writing grant applications[253] instead of doing research. Billions flow to projects that never produce treatments. The system isn't designed to maximize cures. It's designed to maximize grant-writing.

This isn't a conspiracy. It's just what happens when you design a system that rewards asking for money instead of producing results.

Why Current Systems Fail

Problem	Cause	Result
Misaligned incentives	Researchers paid for proposals, not cures	50-67% of time on paperwork
Coordination failure	No mechanism to connect patients, researchers, funders	240x more willing participants than slots
Regulatory capture	Concentrated interests influence allocation	Resources flow to lobbies, not impact
Information silos	Negative results hidden	Same failures repeated globally

A decentralized institute of health (DIH) is an alternative design that optimizes for a single metric: **maximum ROI toward disease eradication**.

The Health-Industrial Complex: Coordinating the War on Disease

The Olsonian Problem

Economist Mancur Olson identified why public goods are systematically underproduced: **diffuse benefits and concentrated costs**.

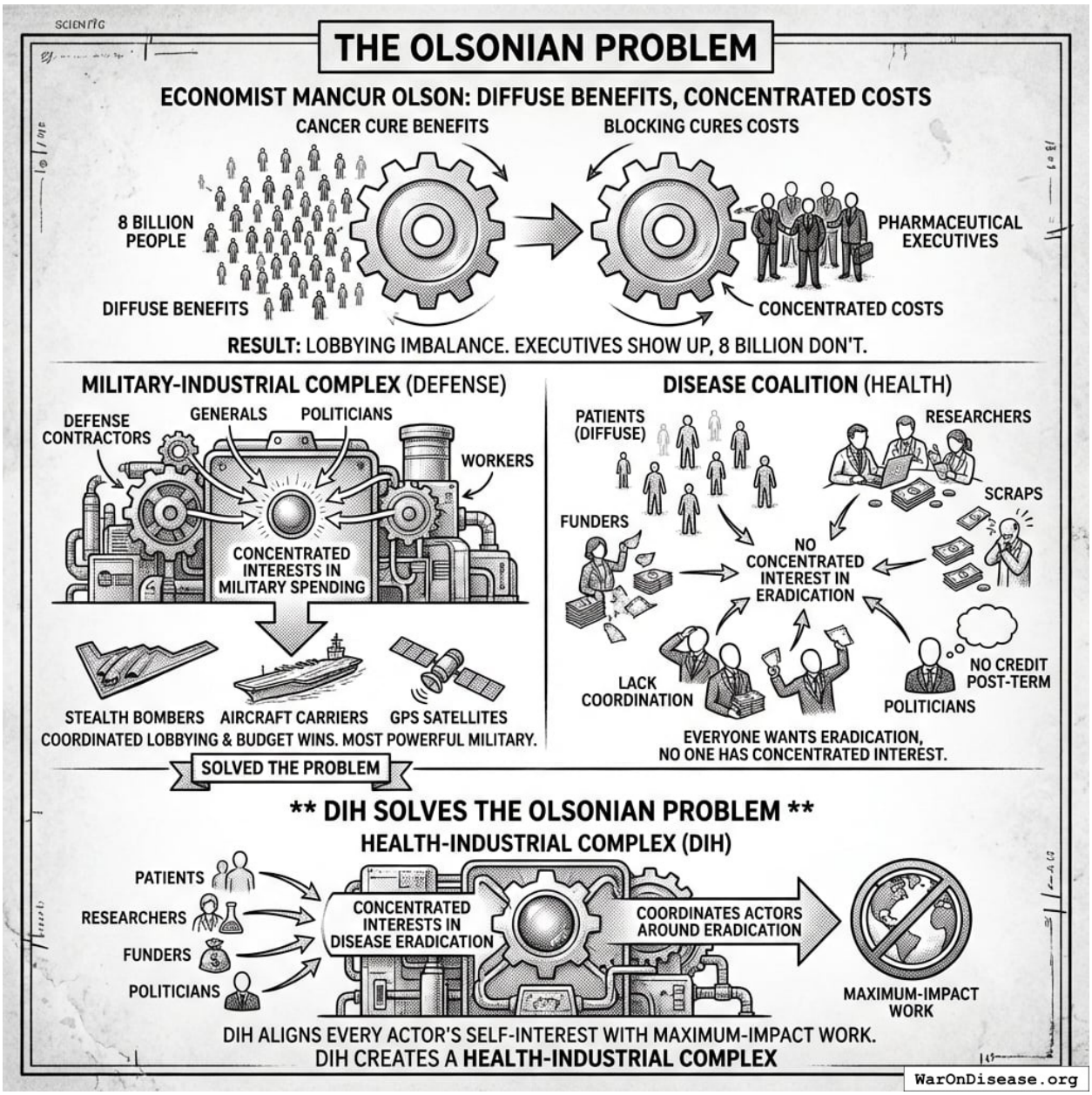


Figure 262: A comparison between the 'Diffuse Model' of disease research where benefits are spread thin and the 'Concentrated Model' of the military-industrial complex, illustrating how DIH aligns stakeholders to replicate defense-style success in health.

Curing cancer benefits 8 billion people a little. Blocking cancer cures benefits a few thousand pharmaceutical executives a lot. The executives show up to lobby. The 8 billion don't. This is why we've spent 50 years "fighting cancer" while the defense industry got stealth bombers, aircraft carriers, and GPS.

The military-industrial complex solved this problem for defense. Defense contractors, generals, politicians, and workers all have concentrated interests in military spending. They coordinate. They lobby. They win budgets. The result: the most powerful military in human history.

Disease has no such coalition. Patients are diffuse. Researchers compete for scraps. Funders lack coordination. Politicians get no credit for cures that arrive after their term. Everyone wants disease eradicated; no one has

a concentrated interest in making it happen.

DIH solves the Olsonian problem by creating concentrated interests in disease eradication. See The Incentive Stack for how DIH aligns every actor's self-interest with maximum-impact work.

The military-industrial complex coordinates actors around defense. DIH creates a **health-industrial complex** that coordinates actors around eradication.

SHAEF for the War on Disease

In 1944, the Allied forces faced a coordination problem. The Americans, British, Canadians, Free French, and others each had their own armies, their own generals, their own supply chains, and their own objectives. Without coordination, they would have fought separate wars and lost.

The solution was SHAEF: Supreme Headquarters Allied Expeditionary Force. Eisenhower didn't replace the individual armies. He coordinated them. SHAEF set the overall objective (defeat Nazi Germany), allocated resources across theaters, resolved conflicts between commands, and ensured every division's actions contributed to the unified goal.

DIH is SHAEF for the war on disease.

WW2 Allied Forces	War on Disease
SHAEF (coordination layer)	DIH (coordination protocol)
Individual armies (US, UK, etc.)	Research institutions, pharma, patient groups
Theaters of operation	Disease areas (cancer, aging, infectious disease)
D-Day (unified objective)	Total disease eradication
Resource allocation across fronts	Patient subsidies (market mechanism) + infrastructure governance
Intelligence sharing	Open data commons, mandatory publication
Combined Chiefs of Staff	Algorithmic governance, no single commander to corrupt

The individual armies didn't disappear. The British Army remained British. The US Army remained American. But they fought as one force because SHAEF coordinated their actions toward a shared objective.

Similarly, DIH doesn't replace existing institutions. Pharma companies remain pharma companies. Universities remain universities. Patient advocacy groups remain advocates. But they operate as one force because DIH coordinates their actions toward eradication.

Why This Framing Matters

The war on disease has been losing for 50 years because it's not actually a war. It's a collection of uncoordinated skirmishes.



Figure 263: A conceptual comparison showing the current fragmented landscape of medical research with siloed stakeholders versus a unified ecosystem coordinated by a central infrastructure layer.

- Researchers compete for grants instead of collaborating on cures
- Pharma companies duplicate efforts and hide failures
- Patients can't access trials; their data goes uncollected
- Politicians fund what lobbyists want, not what works
- Funders spray money without measuring impact

Imagine if D-Day had been run this way. The Americans land at one beach, the British at another, neither tells the other what they learned, and both compete for the same supply ships while German intelligence reads their grant applications.

That's the current war on disease. DIH is the coordination layer that turns scattered skirmishes into a unified campaign.

DIH: The ROI Maximization Protocol

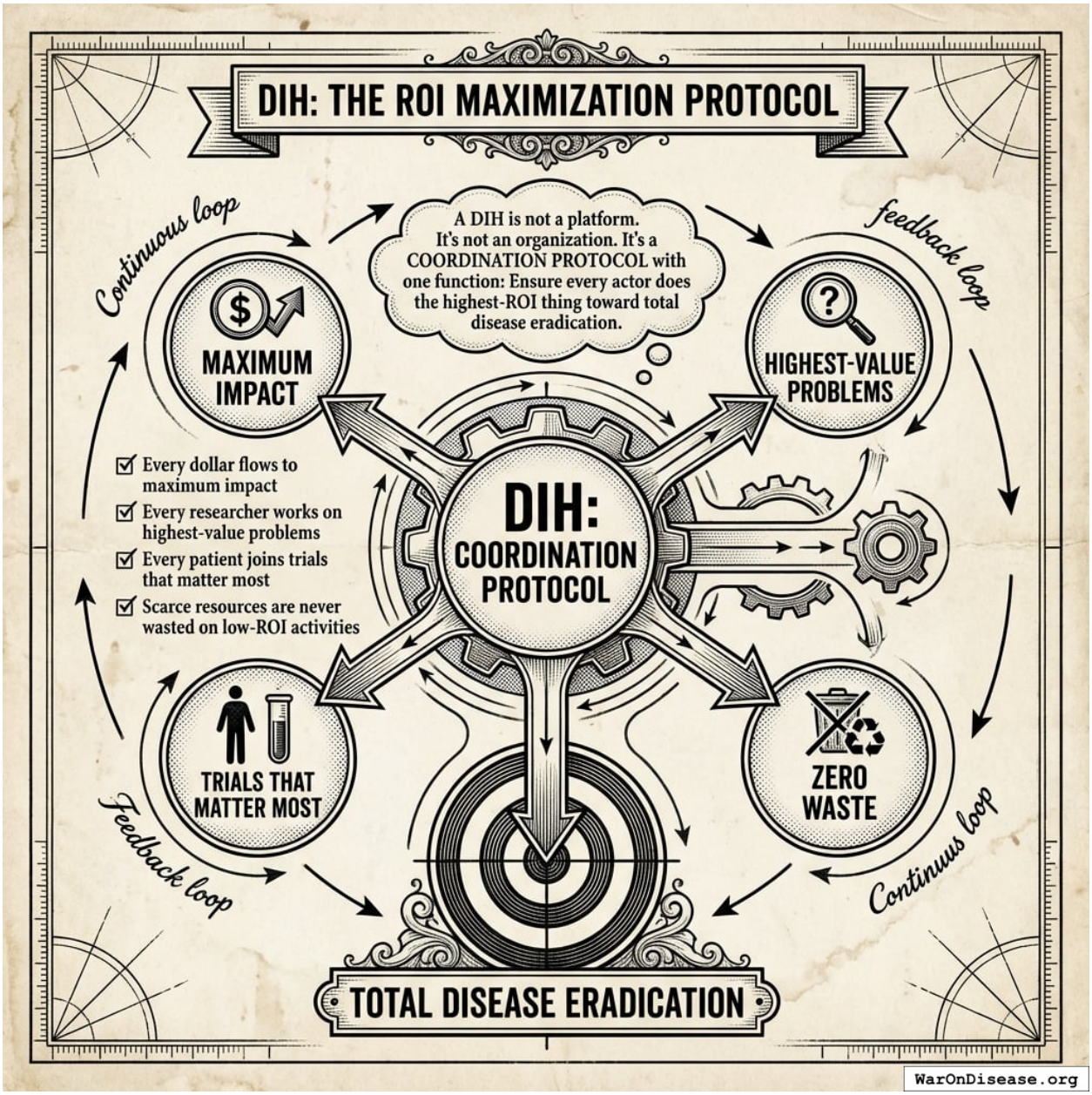


Figure 264: A conceptual diagram showing the DIH protocol as a central coordination hub that aligns funding, researchers, patients, and resources toward the unified goal of disease eradication.

A DIH is not a platform. It's not an organization. It's a **coordination protocol** with one function:

Ensure every actor does the highest-ROI thing toward total disease eradication.

This means:

- Every dollar flows to maximum impact
- Every researcher works on highest-value problems
- Every patient joins trials that matter most
- Scarce resources are never wasted on low-ROI activities

Three Core Functions

A DIH does exactly three things:

1. **Receive funds** (from the 1% Treaty, donations, etc.)
2. **Allocate research via patient subsidies** (market mechanism) and **infrastructure via Wishocracy**
3. **Verify results and pay proportional to impact**

Everything operational is outsourced. Trial infrastructure? That's dFDA's job. Task decomposition? AI services. Talent matching? Existing marketplaces. Crowdfunding? Existing platforms.

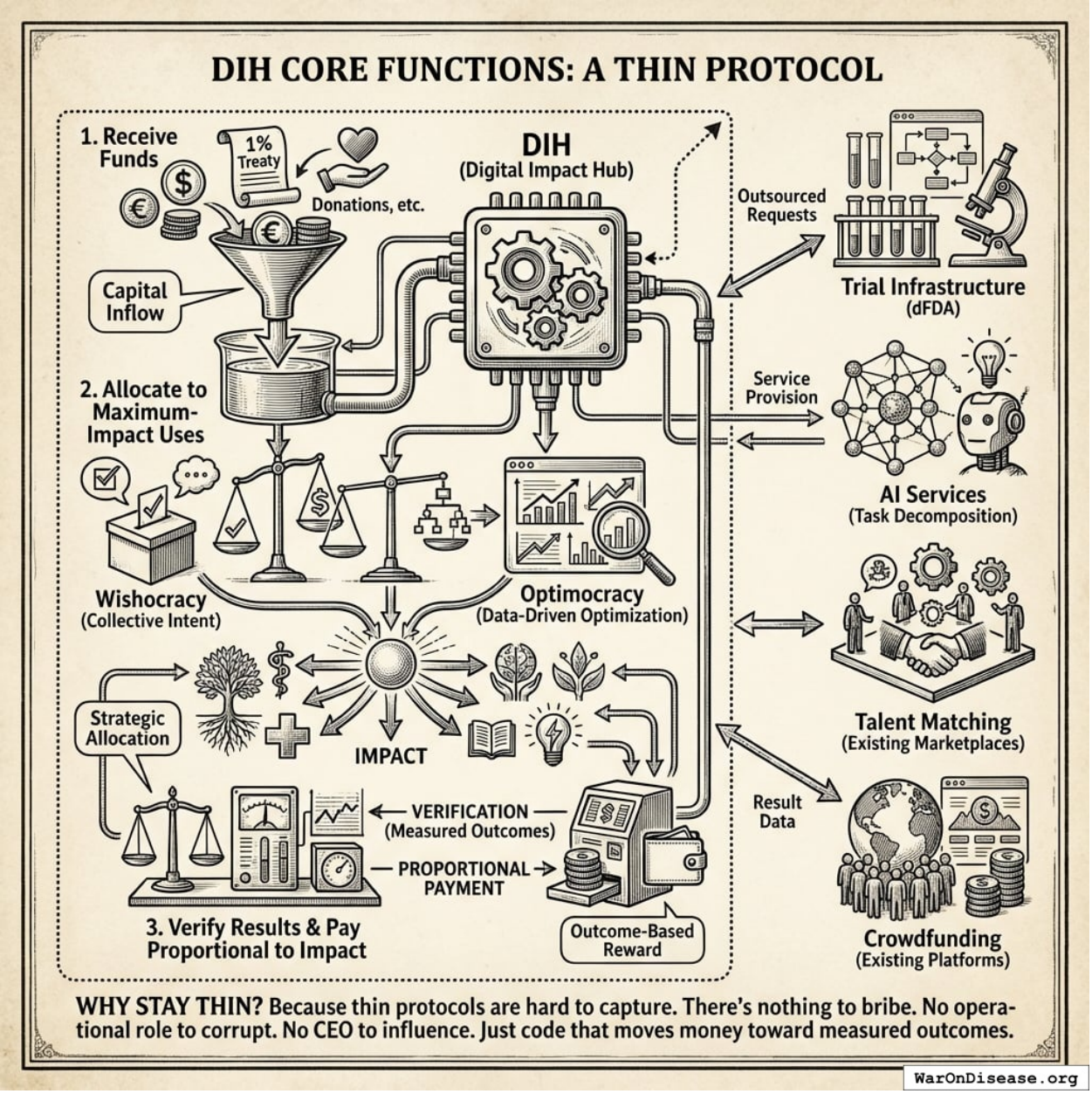


Figure 265: A conceptual architecture showing the DIH as a thin protocol core that receives and allocates funds while outsourcing operational tasks like trial infrastructure and talent matching to external services.

Why stay thin? Because **thin protocols are hard to capture**. There's nothing to bribe. No operational

role to corrupt. No CEO to influence. Just code that moves money toward measured outcomes.

The Core Innovation: Pay for Results

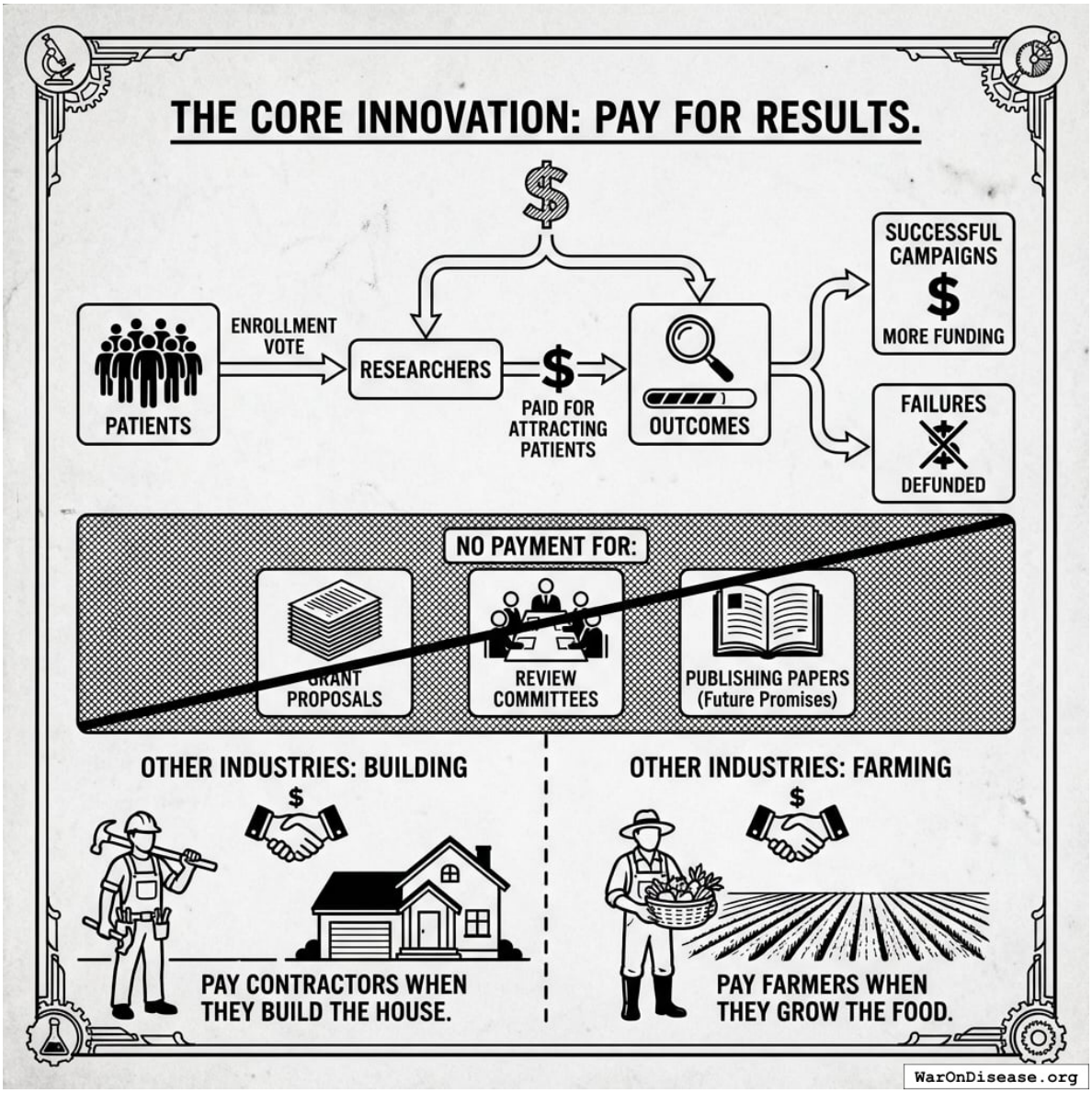


Figure 266: A visual comparison showing how funding flows toward tangible outcomes like patient enrollment and successful results, while being restricted for administrative tasks like grant writing.

Every dollar flows based on results, not promises:

- **Patients vote with their enrollment** -> Researchers get paid for attracting patients
- **Outcomes determine continued funding** -> Campaigns that deliver get more; failures get defunded
- **No one gets paid for:**
  - Writing grant proposals
  - Attending review committees

– Publishing papers about why their research might work someday

This is how most other industries work. You pay contractors when they build the house, not when they promise to build it. You pay farmers when they grow the food, not when they apply for a farming license.

The Data Commons: Publish Everything

The current system hides failures. Companies bury negative results. Researchers don't publish what didn't work. Scientists waste billions repeating mistakes someone else already made.

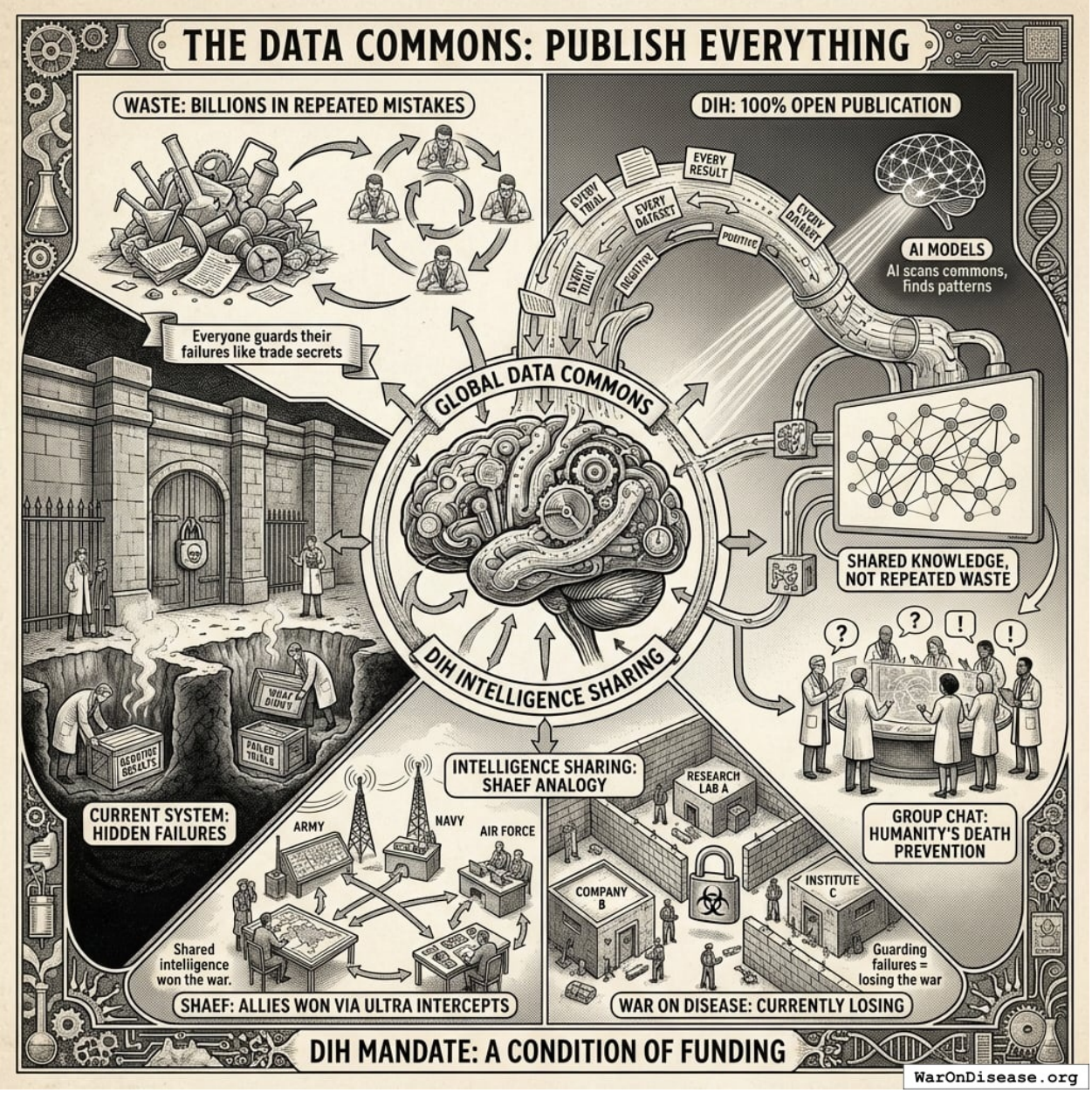


Figure 267: A conceptual diagram contrasting the current siloed research environment with the DIH Data Commons model, showing how disparate results flow into a central open repository for AI-driven analysis.

DIH requires **100% open publication** of all data, positive and negative, as a condition of funding:

- Every trial, every result, every dataset published
- AI models scan the global data commons, finding patterns humans miss
- Failed experiments become shared knowledge, not repeated waste

This is intelligence sharing in the SHAEF analogy. The Allies won partly because they shared Ultra intercepts across commands. The war on disease loses because everyone guards their failures like trade secrets. A group chat where everyone shares what didn't work, except the group is humanity and the topic is death prevention.

Governance: Market Mechanism + Wishocracy

DIH uses two allocation mechanisms:

- **Patient subsidies (market mechanism):** Research funding follows patient choice. Patients enroll in trials they believe in; funding flows accordingly. Variable subsidy rates ensure rare diseases remain viable. No committees decide "cancer vs Alzheimer's."

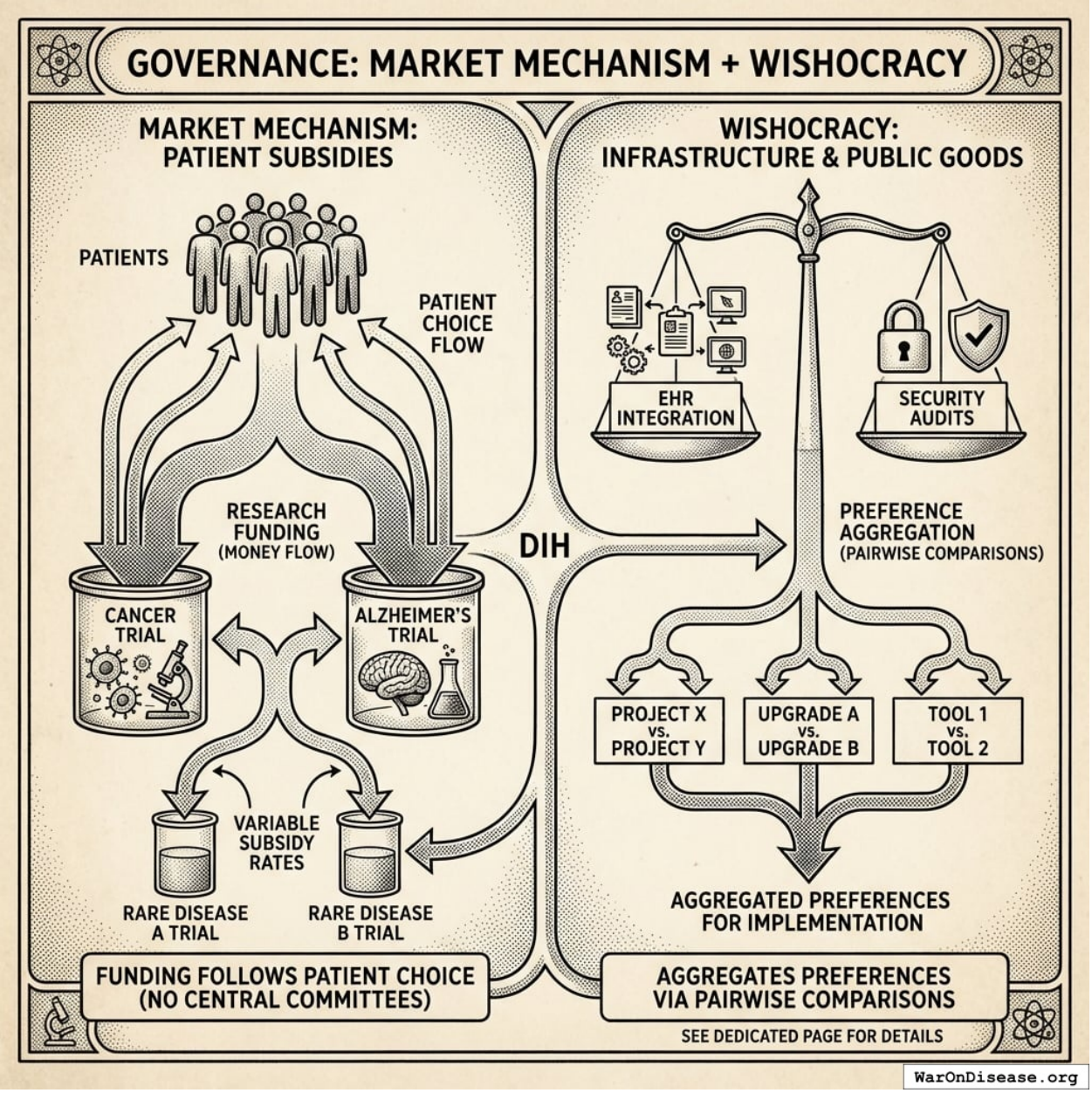


Figure 268: A comparison of the dual governance model in DIH, showing patient-driven market mechanisms for research funding and preference-aggregated 'Wishocracy' for infrastructure development.

- **Wishocracy:** For infrastructure and public goods only. Aggregates preferences through pairwise comparisons ("EHR integration or security audits?"). See the dedicated page for details.

The Incentive Stack: Making ROI the Selfish Choice

DIH doesn't rely on altruism. It **pays everyone to do the highest-ROI thing**.

Actor	Self-Interest	DIH Incentive	ROI Alignment
Researchers	Money, prestige	Per-patient subsidies (higher for rare diseases)	Attract patients = get paid
Patients	Health, compensation	Subsidies scale with trial importance	Joining high-priority trials = more paid
Politicians	Re-election, legacy	IABs tied to disease outcomes	Better outcomes = bigger bonus
Funders	Impact, returns	Quadratic matching, outcome tracking	High-ROI donations = amplified impact
Data providers	Revenue	Fees tied to data utility	More useful data = more revenue
Campaigns	Funding	Results-based continued funding	Higher ROI = more funding

Every incentive is ROI-weighted. Not just "do good" but "do the MOST good per dollar/hour." DIH makes the highest-ROI action the selfish choice for every actor.

How Researchers Get Paid

Traditional system: Write a grant proposal. Hope a committee likes it. Get paid to try.

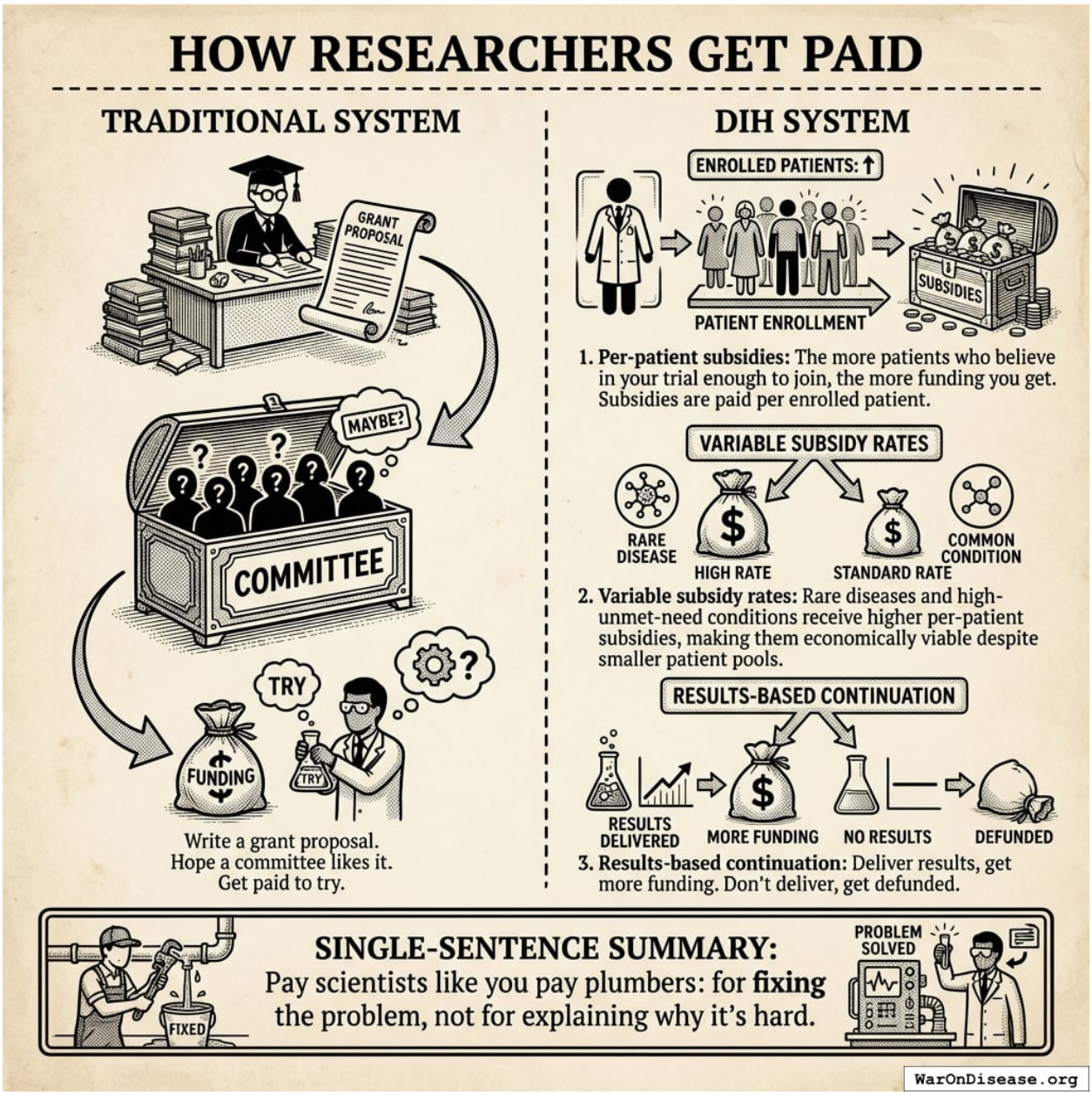


Figure 269: A side-by-side comparison of research funding models showing the shift from traditional grant proposals to the DIH system of patient subsidies and results-based payments.

DIH system:

1. **Per-patient subsidies:** The more patients who believe in your trial enough to join, the more funding you get. Subsidies are paid per enrolled patient.
2. **Variable subsidy rates:** Rare diseases and high-unmet-need conditions receive higher per-patient subsidies, making them economically viable despite smaller patient pools.
3. **Results-based continuation:** Deliver results, get more funding. Don't deliver, get defunded.

Single-sentence summary: Pay scientists like you pay plumbers: for fixing the problem, not for explaining why it's hard.

How Politicians Get Aligned

Politicians optimize for reelection, status, and post-office careers. Not “humans continuing to exist.”

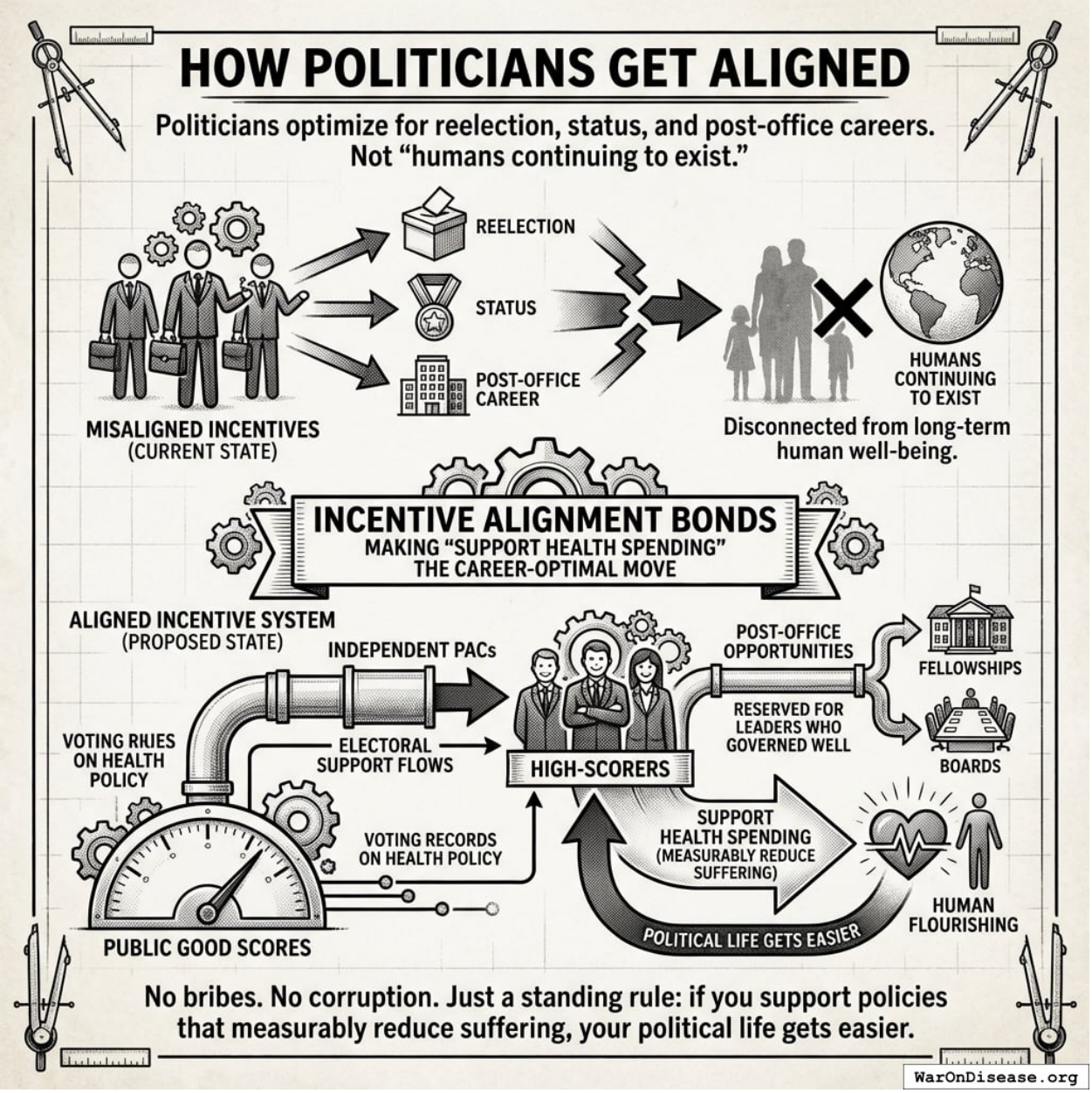


Figure 270: A conceptual diagram showing how voting records translate into Public Good Scores, which then trigger electoral support and post-office career opportunities.

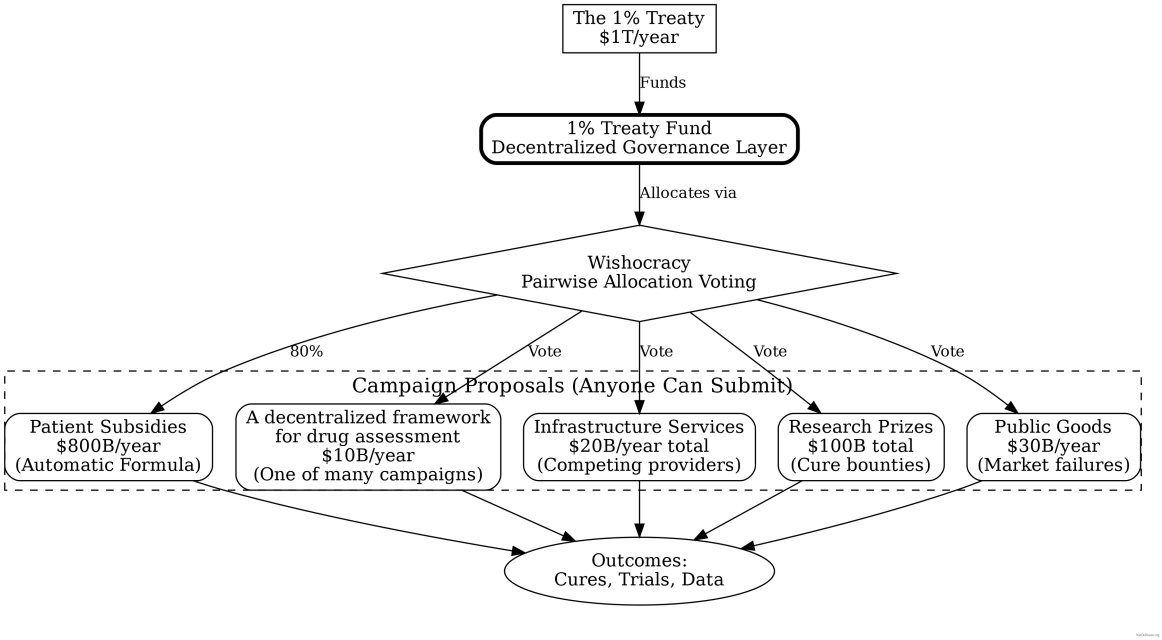
Incentive Alignment Bonds solve this by making “support pragmatic clinical trial funding” the career-optimal move:

- **Public Good Scores** track voting records on health policy
- **Electoral support** flows to high-scorers via independent PACs
- **Post-office opportunities** (fellowships, boards) reserved for leaders who governed well

No bribes. No corruption. Just a standing rule: if you support policies that measurably reduce suffering,

your political life gets easier.

How the Money Flows



The Architecture

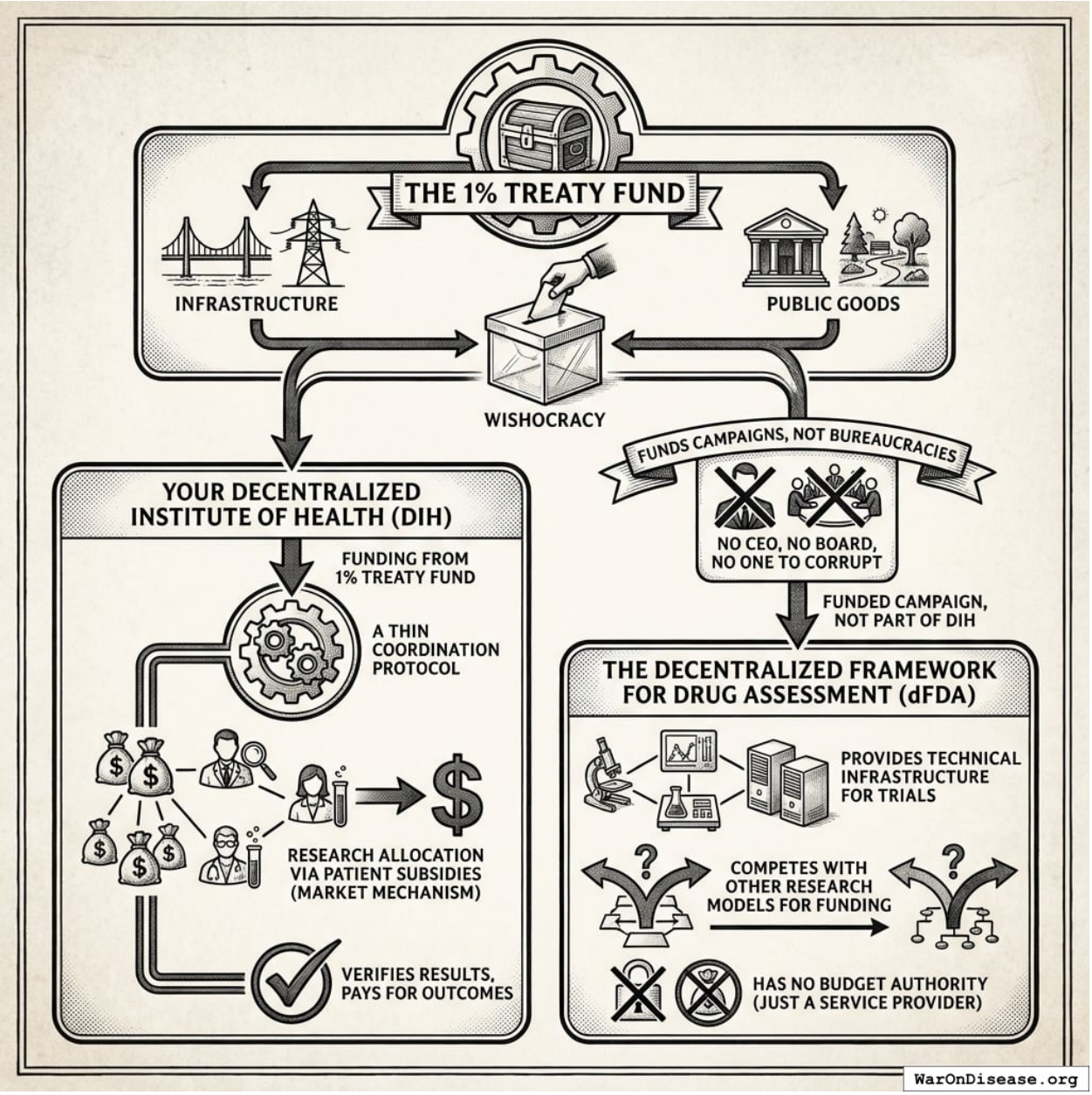


Figure 271: A structural diagram showing the relationships between the 1% Treaty Fund, the Decentralized Institute of Health (DIH), and the dFDA, illustrating funding flows and organizational boundaries.

The 1% Treaty Fund:

- Holds the treasury (from the 1% Treaty)
- Allocates between infrastructure and public goods via Wishocracy
- Funds campaigns, not bureaucracies
- No CEO, no board, no one to corrupt

Your Decentralized Institute of Health (DIH):

- A thin coordination protocol

- Receives funding *from* the 1% Treaty Fund
- Research allocation via patient subsidies (market mechanism)
- Verifies results, pays for outcomes

The Decentralized Framework for Drug Assessment (dFDA):

- A funded **campaign**, not part of DIH itself
- Provides technical infrastructure for trials
- Competes with other research models for funding
- Has no budget authority (just a service provider)

The Fund Flow

A 1% Treaty redirects **$27.2B** a year from global military budgets into the 1% Treaty Fund. But not all of it reaches research:

Allocation	Share	Amount	Purpose
VICTORY Bond investors	10%	$2.72B	Repay campaign funders
Political incentives (IABs)	10%	$2.72B	Keep politicians aligned
Research treasury	80%	**$21.8B**	Patient subsidies (market allocation)

What Gets Funded: Market Failures Only

Since most research allocation is handled automatically (patients choose trials → funding flows there), the 1% Treaty Fund primarily funds **market failures**, things the ecosystem can't handle:

Infrastructure

- Development and operations
- Competing alternative implementations
- Data commons infrastructure (storage, processing)
- Security audits and fraud detection systems

True Public Goods (No Revenue Model)

- Patient trial participation subsidies
- Negative results publishing
- Replication studies

This is minimal by design. The ecosystem eliminates most traditional research funding needs. Companies register treatments → Patients join trials → Revenue flows → Research happens. DIH only directs the 1% Treaty Fund to cover what the ecosystem truly can't handle.

What DIH Outsources (and Why)

DIH is intentionally minimal. It outsources everything operational:

Function	Outsourced To	Why
Crowdfunding	Gitcoin, Juicebox, etc.	They already exist and work
Task decomposition	AI services	Machines are better at this
Talent matching	Existing marketplaces	Don't reinvent LinkedIn

Function	Outsourced To	Why
Trial infrastructure	dFDA (a funded campaign)	Separate concerns
Data storage	Competing providers	Market competition

How Campaigns Plug In

dFDA is the primary example of a funded campaign. It's not part of DIH; it's a service provider competing for funding.

Campaign Lifecycle



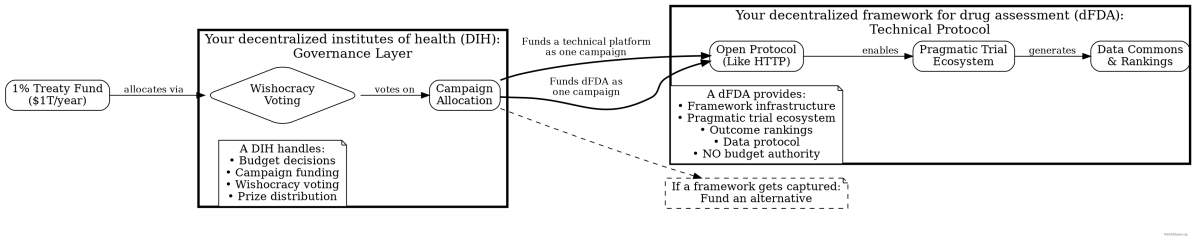
Figure 272: A circular process diagram showing the six stages of the Campaign Lifecycle, from initial proposal and community voting to funding, execution, and verification.

1. **Proposal:** Submit campaign description, budget, milestones
2. **Wishocracy vote:** Humanity decides priority relative to alternatives
3. **Funding:** Treasury allocates based on vote + Optimocracy recommendations
4. **Execution:** Campaign delivers services (trials, infrastructure, etc.)
5. **Verification:** Outcomes measured against milestones
6. **Continuation:** Results determine next year's funding

Anti-Capture Design

The current system is trivially captured. Concentrate billions of dollars in a few committees, and lobbyists will find them.

DIH is designed to make capture economically irrational.



How DIH Resists Capture

Mechanism	How It Works	Capture Cost
No CEO	Nothing to bribe	N/A
Algorithmic governance	Rules in smart contracts	Can't bribe an if-statement
Public ledger	Every dollar tracked	Corruption is visible
Forkable	Anyone can clone the protocol	Capture triggers replacement
Distributed voting	Millions vote via Wishocracy	Lobbying doesn't scale
Outcome-based funding	Results determine allocation	Gaming harder than performing

The "New FDA" Risk

Risk: "What if dFDA becomes the new FDA, capturing regulatory power?"

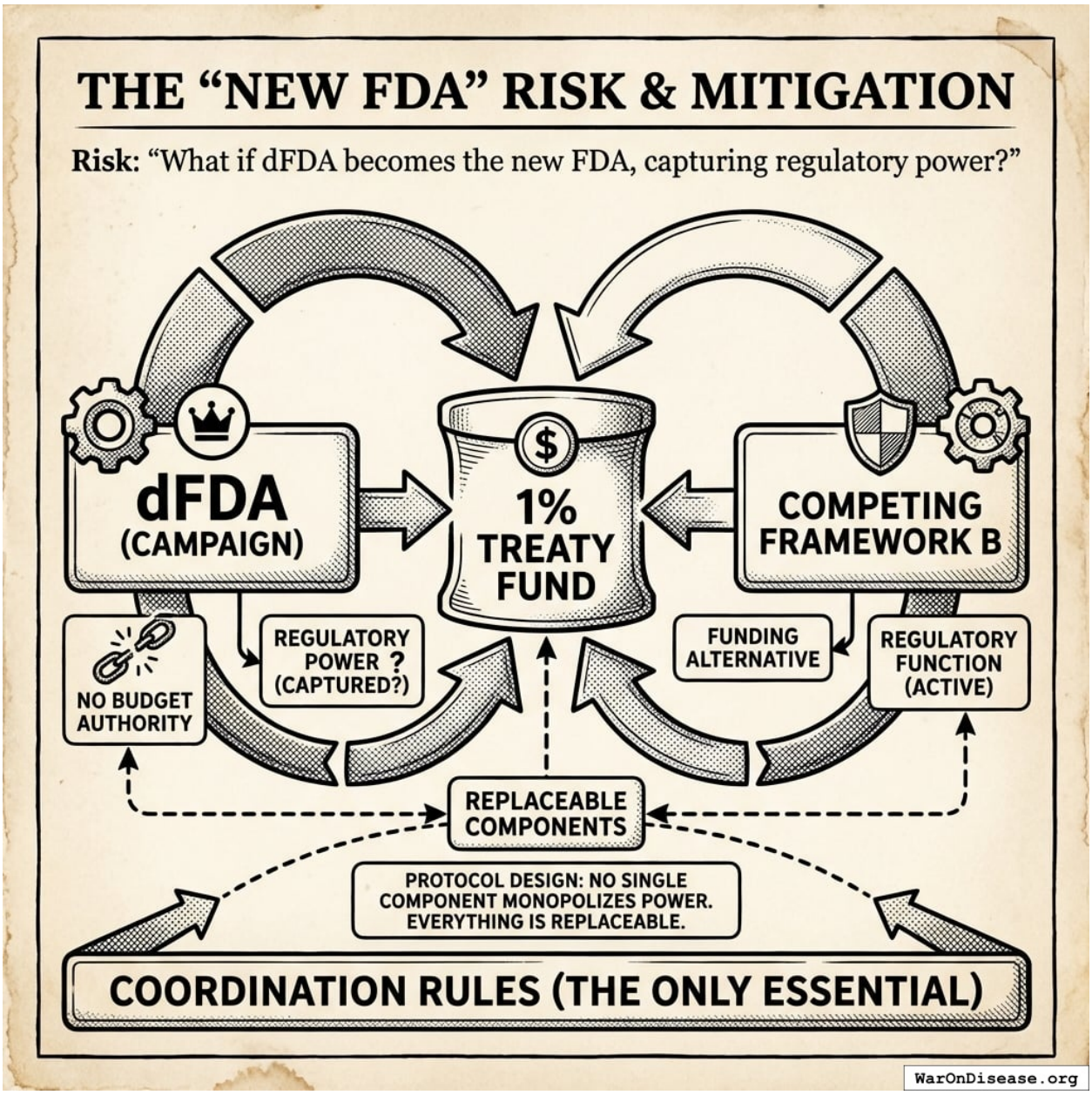


Figure 273: A diagram showing the flow of capital from the 1 percent Treaty Fund to competing regulatory campaigns, illustrating how a captured framework can be bypassed by diverting funds to an alternative.

Mitigation: dFDA has no budget authority. It's just a campaign competing for funding from the 1% Treaty Fund. If it gets captured, fund a competing framework instead.

The protocol is designed so that **no single component can monopolize power**. Everything is replaceable. Nothing is essential except the coordination rules themselves.

Security Architecture: Multi-Layered Defense

A $27.2B treasury is a massive target. DIH uses defense in depth:

1. Nobody's in Charge (And That's the Point)

Turns out you don't need a CEO when you have math.

- Every VICTORY Bond holder directly controls treasury through on-chain voting
- No human signers = no kidnapping, corruption, or coercion targets
- Smart contracts automatically execute community decisions after 24-72h timelocks
- Battle-tested approach already managing billions in MakerDAO, Uniswap, Aave

2. AI-Powered Fraud Detection

- **Fraud Agent:** Real-time anomaly detection, duplication monitoring, collusion identification, sybil detection
- **Safety Oracle:** Incident severity scoring with automatic payout holds for affected interventions
- **Identity Oracle:** Verifies affiliations and conflicts, prevents unauthorized access
- Manual review queue for flagged actions with whistleblower bounty rewards

3. Complete Transparency & Auditability

- All treasury addresses published with real-time public dashboards
- Immutable transaction logs with standardized disbursement tags
- Annual smart contract audits and semiannual operational audits with published reports
- Hash-committed invoices and budgets for full accountability

4. Recovery & Response Mechanisms

- Clawbacks for data falsification or trial misconduct
- Emergency pause capabilities triggered by incident signals
- Progressive unpause policies tied to remediation completion
- Guardian modules for pausing non-critical functions under defined conditions

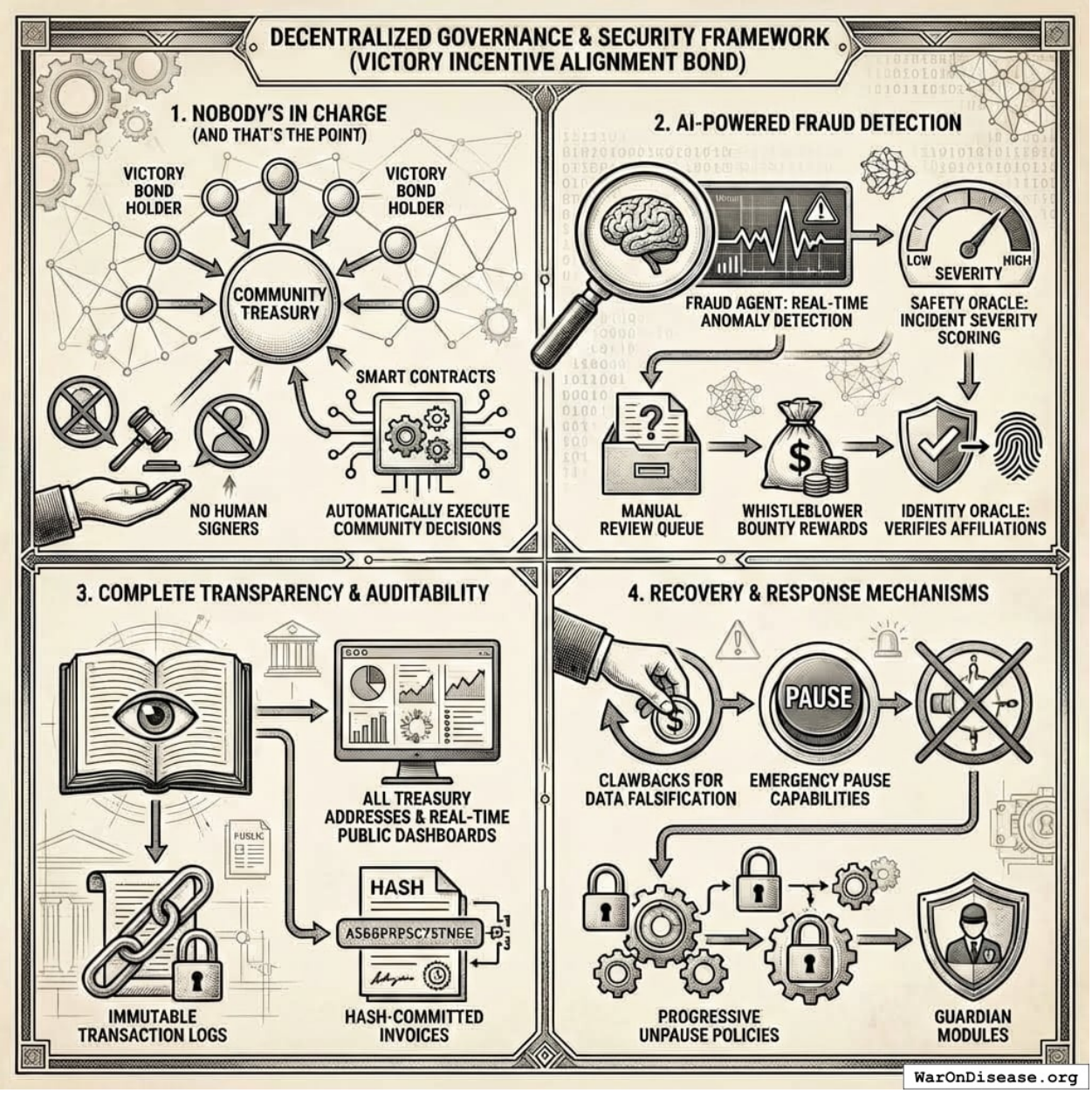


Figure 274: Defense in depth: decentralized control, AI monitoring, transparency, and recovery mechanisms interact to prevent theft.

Beyond Medical Research

Once you prove you can run a $27.2B treasury without anyone stealing from it, you can do the same for schools, roads, or anything else the government currently screws up:

- **Education:** Pay teachers based on whether kids actually learn things
- **Infrastructure:** Fund roads that don't immediately fall apart
- **Environment:** Pay for actual carbon reduction, not paperwork
- **Social Services:** Get help to people who need it without 47 forms

This isn't just about protecting health funding. It's an experiment in demonstrating a new model for uncorruptible, transparent governance of public goods. The 1% Treaty Fund becomes the prototype for a new

era of public governance, one that eliminates human corruption points entirely while delivering measurable results.

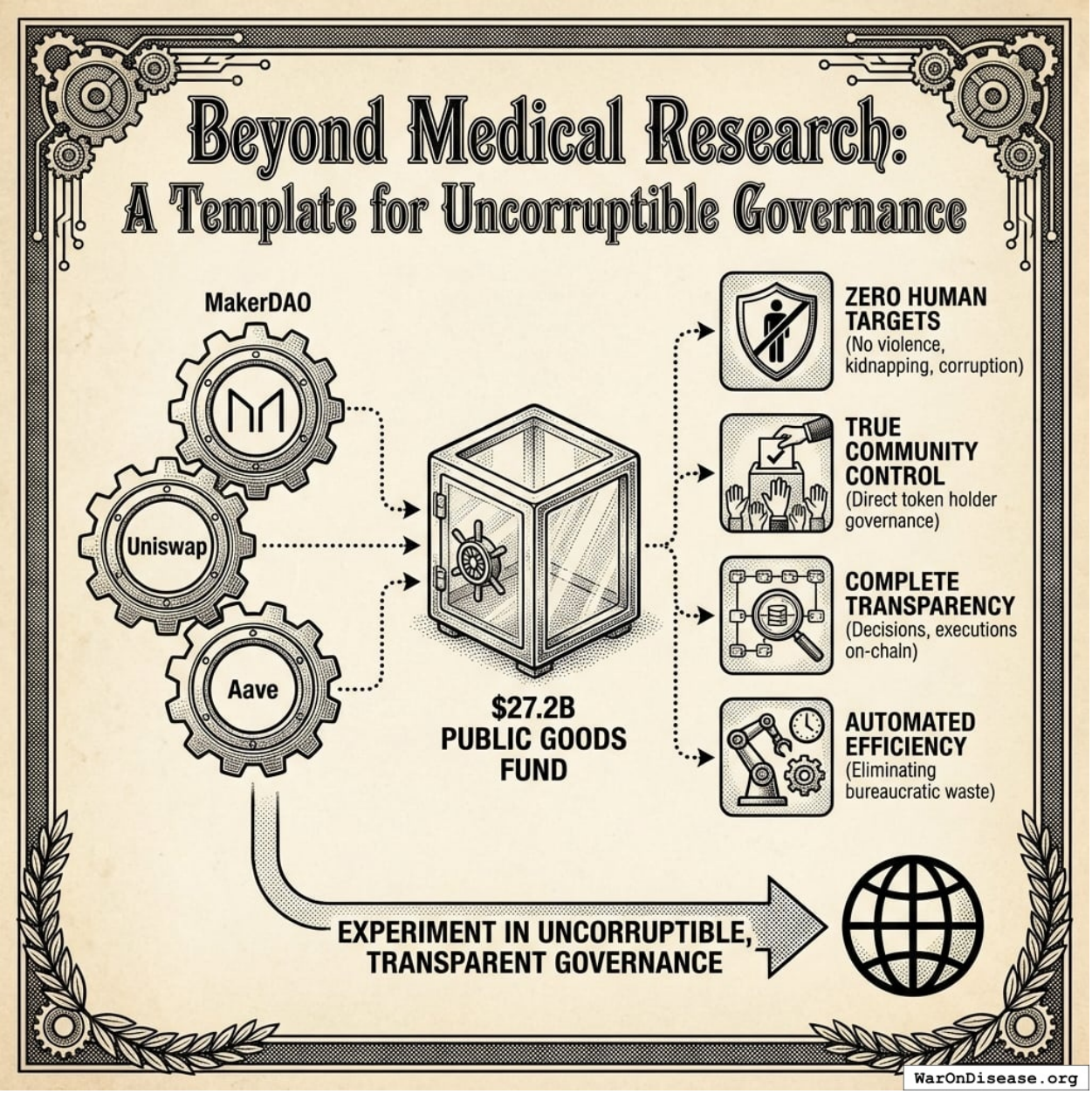


Figure 275: Uncorruptible DAO governance: token-holder voting flows through smart contracts to funding execution with no human intermediaries.

Summary: The Coordination Layer

DIH is not trying to be a research institution, a trial platform, or a funding agency. It's trying to be **the thin layer that coordinates all of them**.

Component	Function	DIH's Role
1% Treaty Fund	Treasury	Receives funds from treaty
Patient subsidies	Research allocation	Market mechanism (patients choose trials)
Wishocracy	Infrastructure governance	Allocates between infrastructure/public goods
dFDA	Trial infrastructure	Funded campaign
IABs	Political alignment	Keeps politicians incentivized
VICTORY Bonds	Investor alignment	Funds the campaign

The single sentence version:

> DIH is a coordination protocol that receives funds, allocates research funding via patient subsidies (market mechanism), governs infrastructure via Wishocracy, verifies results, and pays proportional to outcomes, making the highest-ROI action the selfish choice for every actor.

That's the theory. The rest of this guide explains how you'd actually build it.

Wishocracy

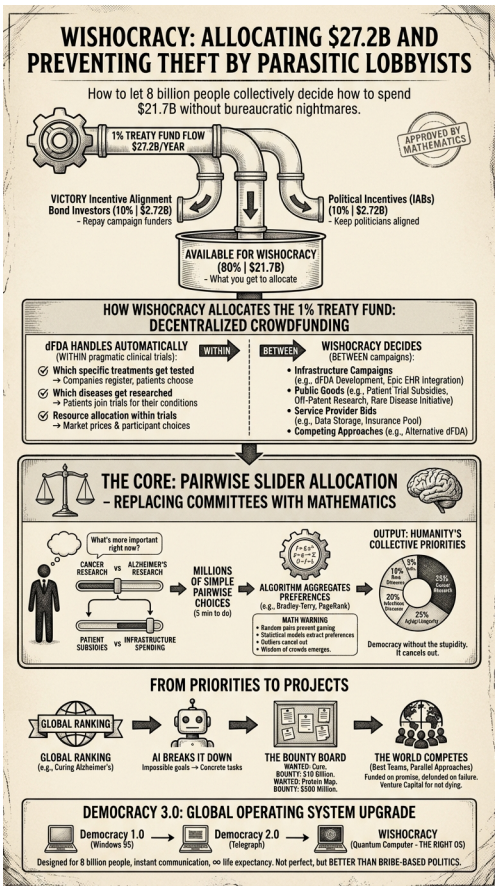

WISHOCRACY: ALLOCATING $27.2B AND PREVENTING THEFT BY PARASITIC LOBBYISTS
How to let 8 billion people collectively decide how to spend $21.7B without bureaucratic nightmares.
1% TREATY FUND FLOW $27.2B/YEAR
APPROVED BY MATHEMATICS
VICTORY Incentive Alignment Bond Investors (10% | $2.72B)
- Repay campaign funders
Political Incentives (IABs) (10% | $2.72B)
- Keep politicians aligned
AVAILABLE FOR WISHOCRACY (80% | $21.7B)
- What you get to allocate
HOW WISHOCRACY ALLOCATES THE 1% TREATY FUND: DECENTRALIZED CROWDFUNDING
dFDA HANDLES AUTOMATICALLY (WITHIN pragmatic clinical trials):
Which specific treatments get tested → Companies register, patients choose
Which diseases get researched → Patients join trials for their conditions
Resource allocation within trials → Market prices & participant choices
WITHIN
BETWEEN
WISHOCRACY DECIDES (BETWEEN campaigns):
Infrastructure Campaigns (e.g., dFDA Development, Epic EHR Integration)
Public Goods (e.g., Patient Trial Subsidies, Off-Patent Research, Rare Disease Initiative)
Service Provider Bids (e.g., Data Storage, Insurance Pool)
Competing Approaches (e.g., Alternative dFDA)
THE CORE: PAIRWISE SLIDER ALLOCATION – REPLACING COMMITTEES WITH MATHEMATICS
What's more important right now?
CANCER RESEARCH
VS
ALZHEIMER'S RESEARCH
PATIENT SUBSIDIES
VS
INFRASTRUCTURE SPENDING
MILLIONS OF SIMPLE PAIRWISE CHOICES
(5 min to do)
ALGORITHM AGGREGATES PREFERENCES
(e.g., Bradley-Terry, PageRank)
MATH WARNING
Random pairs prevent gaming
Statistical models extract preferences
Outliers cancel out
Wisdom of crowds emerges.
OUTPUT: HUMANITY'S COLLECTIVE PRIORITIES
9%
18%
20%
25%
Democracy without the stupidity. It cancels out.
FROM PRIORITIES TO PROJECTS
GLOBAL RANKING
GLOBAL RANKING
(e.g., Curing Alzheimer's)
AI BREAKS IT DOWN
Impossible goals → Concrete tasks
THE BOUNTY BOARD
WANTED: Cure. BOUNTY: $10 Billion.
WANTED: Protein Map. BOUNTY: $500 Million.
THE WORLD COMPETES
(Best Teams, Parallel Approaches)
Funded on promise, defunded on failure.
Venture Capital for not dying.
DEMOCRACY 3.0: GLOBAL OPERATING SYSTEM UPGRADE
Democracy 1.0 (Windows 95)
Democracy 2.0 (Telegraph)
WISHOCRACY (Quantum Computer - THE RIGHT OS)
Designed for 8 billion people, instant communication, ∞ life expectancy. Not perfect, but BETTER THAN BRIBE-BASED POLITICS.



Figure 276: Wishocracy

Congratulations! You’ve passed a 1% treaty and now you’ve got $27.2B/year flowing into the 1% Treaty Fund.

But not all of it is available for allocation. First, the automatic deductions:

Allocation	Share	Amount	Purpose
VICTORY Incentive Alignment Bond investors	10%	$2.72B	Repay campaign funders
Political incentives (IABs)	10%	$2.72B	Keep politicians aligned
Available for Wishocracy	80%	**$21.8B**	What you get to allocate

How do you avoid parasitic special interests from stealing that $21.8B or bureaucracy from wasting it all?

Wishocracy replaces committees with code and representatives with mathematics. It’s how you let 8 billion people collectively decide how to spend $21.8B without it turning into a bureaucratic nightmare.

How Wishocracy Allocates the 1% Treaty Fund: Decentralized Crowdfunding

Your decentralized institutes of health (DIH) network functions as a **decentralized crowdfunding platform**. Anyone can submit a campaign proposal. Wishocracy allocates funds from the 1% Treaty Fund across competing campaigns.

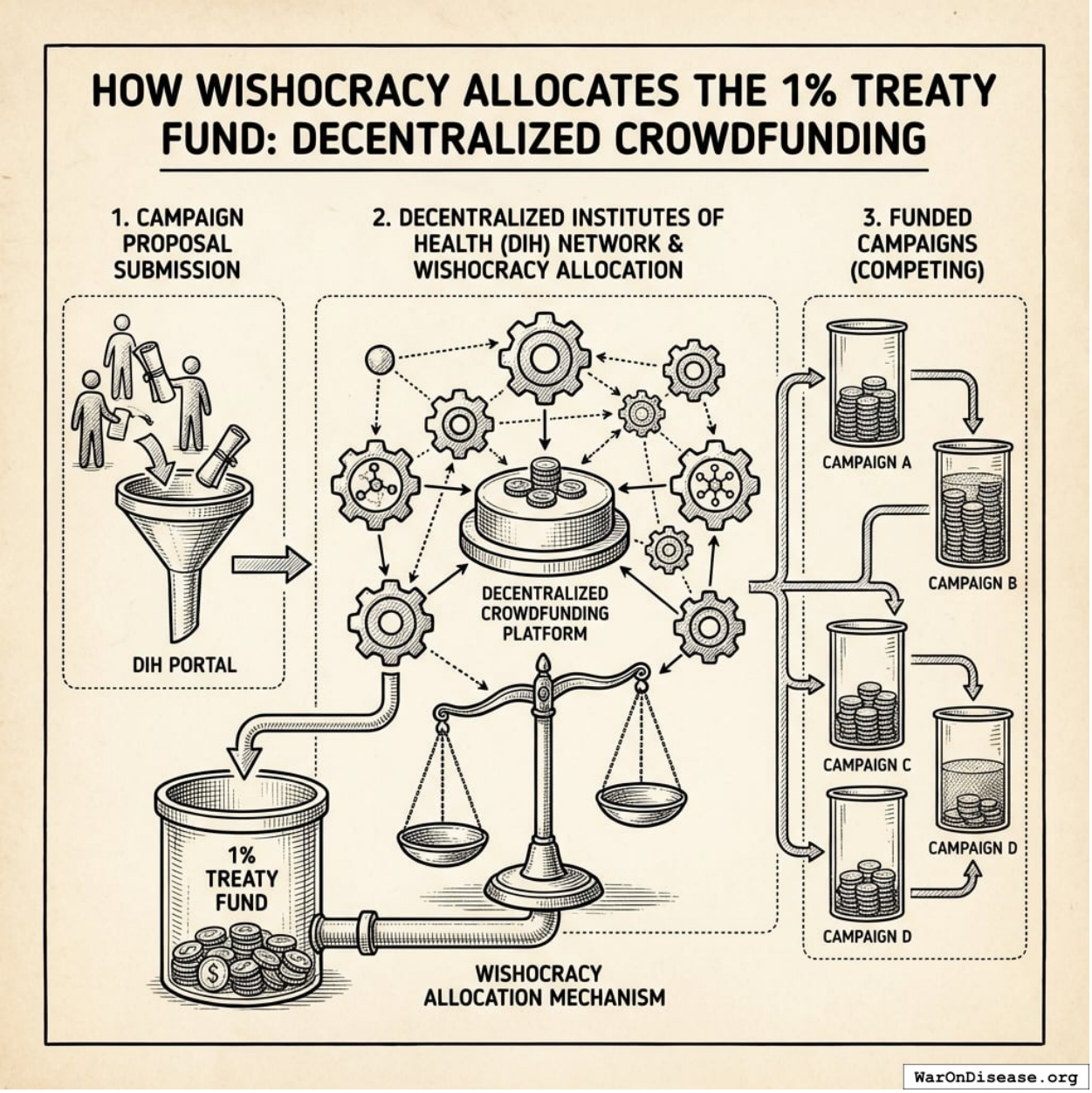


Figure 277: A diagram illustrating the flow of resources from the 1 percent Treaty Fund through the Wishocracy DIH network to various competing decentralized crowdfunding campaigns.

What your decentralized framework for drug assessment (dFDA) handles automatically:

- **Which specific treatments get tested** → Companies register, patients choose
- **Which diseases get researched** → Patients join trials for their conditions
- **Resource allocation within pragmatic clinical trials** → Market prices and participant choices

What Wishocracy Actually Decides:

Allocation across campaign proposals competing for 1% Treaty Fund funds:

Infrastructure Campaigns

- "Decentralized Framework for Drug Assessment Development" - $1B/year proposal
- "Epic EHR Integration Project" - $5M one-time
- "AWS Infrastructure Services" - $3M/year
- "Security Audit Program" - $2M/year
- "Alternative decentralized framework for drug assessment" - $8M/year (competing approach)

Public Goods (Market Failures)

- "Patient Trial Subsidies Program" - $800B/year (automatic formula)
- "Off-Patent Drug Research" - $20B/year
- "Rare Disease Initiative" - $10B/year
- "Negative Results Publishing Fund" - $5B/year

Service Provider Bids

- "Data Storage Provider A" - $2B/year
- "Data Storage Provider B" - $1.5B/year (competing)
- "Pragmatic Clinical Trial Insurance Pool" - $10B reserve

How It Works: Pairwise Comparisons Between Campaigns

Instead of committees deciding "a framework for drug assessment gets $10B," the global population votes using pairwise comparisons:

"What's more important right now:"

- "Framework for drug assessment development" vs "Alzheimer's prize"?
- "Epic integration" vs "Security audits"?
- "Rare disease research" vs "An alternative drug assessment framework"?
- "Patient subsidies" vs "Infrastructure spending"?

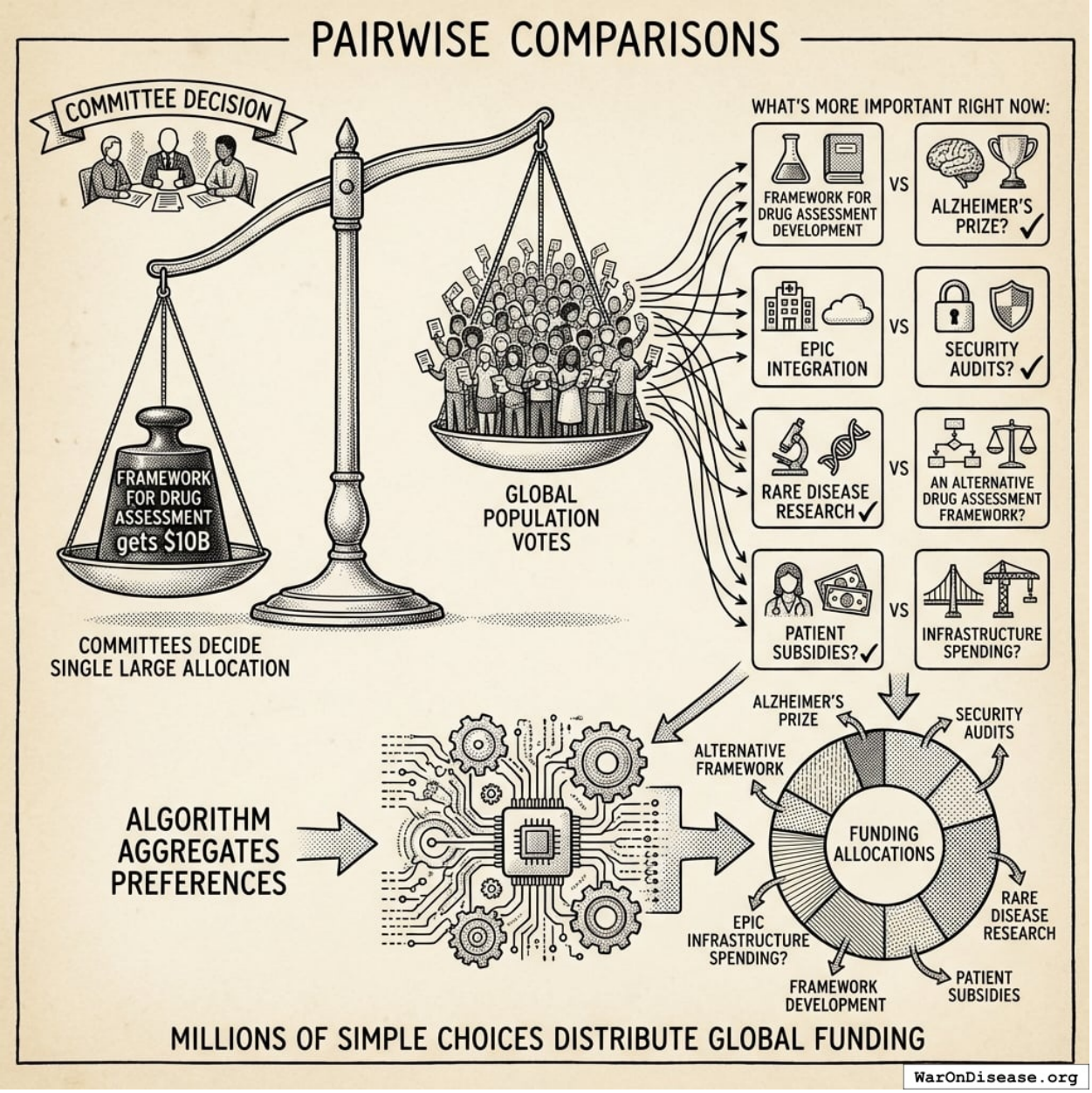


Figure 278: A visual representation of the pairwise voting process where individual users choose between two specific campaign options, which are then aggregated into a final funding distribution.

Millions of people make simple pairwise choices. The algorithm aggregates preferences into funding allocations.

Why This Is Actually Needed (Not "Just 3 Parameters")

You can't reduce this to simple formulas because:

1. **Multiple competing implementations** - Which decentralized framework for drug assessment to fund? Which infrastructure provider?
2. **Trade-offs between prizes** - $100B for aging reversal or $50B for Alzheimer's + $50B for cancer?
3. **Public goods allocation** - How much for off-patent drugs vs rare diseases?
4. **Service provider competition** - Which companies get contracts for what amounts?

Your decentralized framework for drug assessment (dFDA) allocates resources **within** pragmatic clinical trials. Wishocracy allocates resources **between** campaigns.

The core of Wishocracy is a voting method so simple, even a congressman could do it. It's called Aggregated Pairwise Preference Allocation, or simply, the **Pairwise Slider Allocation**.

Your brain can't rank a list of 20 priorities. It gives up around item number seven[221]. But it's fantastic at comparing two things.

Instead of asking, "Rank these 10,000 campaign proposals," the system asks:

"What's more important right now: dFDA platform development or security audits?"

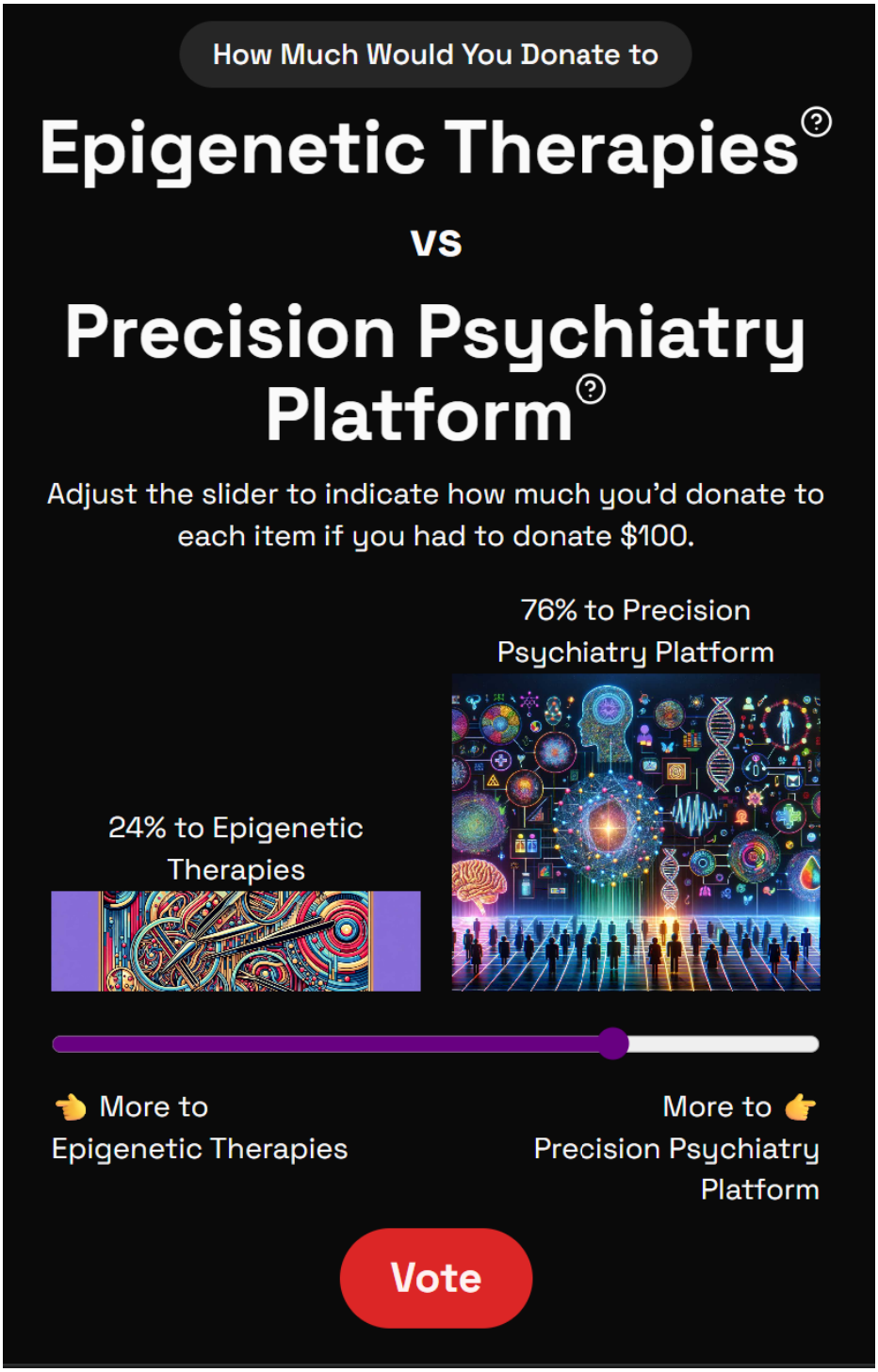


Figure 279: Wishocracy slider interface showing pairwise comparison between proposals

You make a choice. That's it. You do this a few times with different random pairs. It takes five minutes. Millions of other people do the same. An algorithm then takes these millions of simple, head-to-head comparisons and builds a representative, real-time ranking of infrastructure and public goods priorities.

(Remember: Wishocracy doesn't allocate between diseases. Patients do that by choosing which trials to join. Wishocracy allocates between *infrastructure campaigns* and *public goods* that markets can't handle.)

It's the wisdom of crowds, but without the crowds having to talk to each other.

Why This Actually Works (Math Warning)

When millions of people make pairwise choices:

- Random pairs prevent gaming
- Statistical models (Bradley-Terry, PageRank)[254] extract global preferences
- Outliers cancel out
- Wisdom of crowds emerges

Example with real numbers:

- 5 million people vote
- Each makes 20 comparisons
- 100 million data points
- Algorithm crunches numbers
- Output: "Allocate 40% to patient subsidy programs, 25% to dFDA platform development, 15% to off-patent drug research, 10% to rare disease initiatives, 5% to security infrastructure, 5% to negative results publishing…"

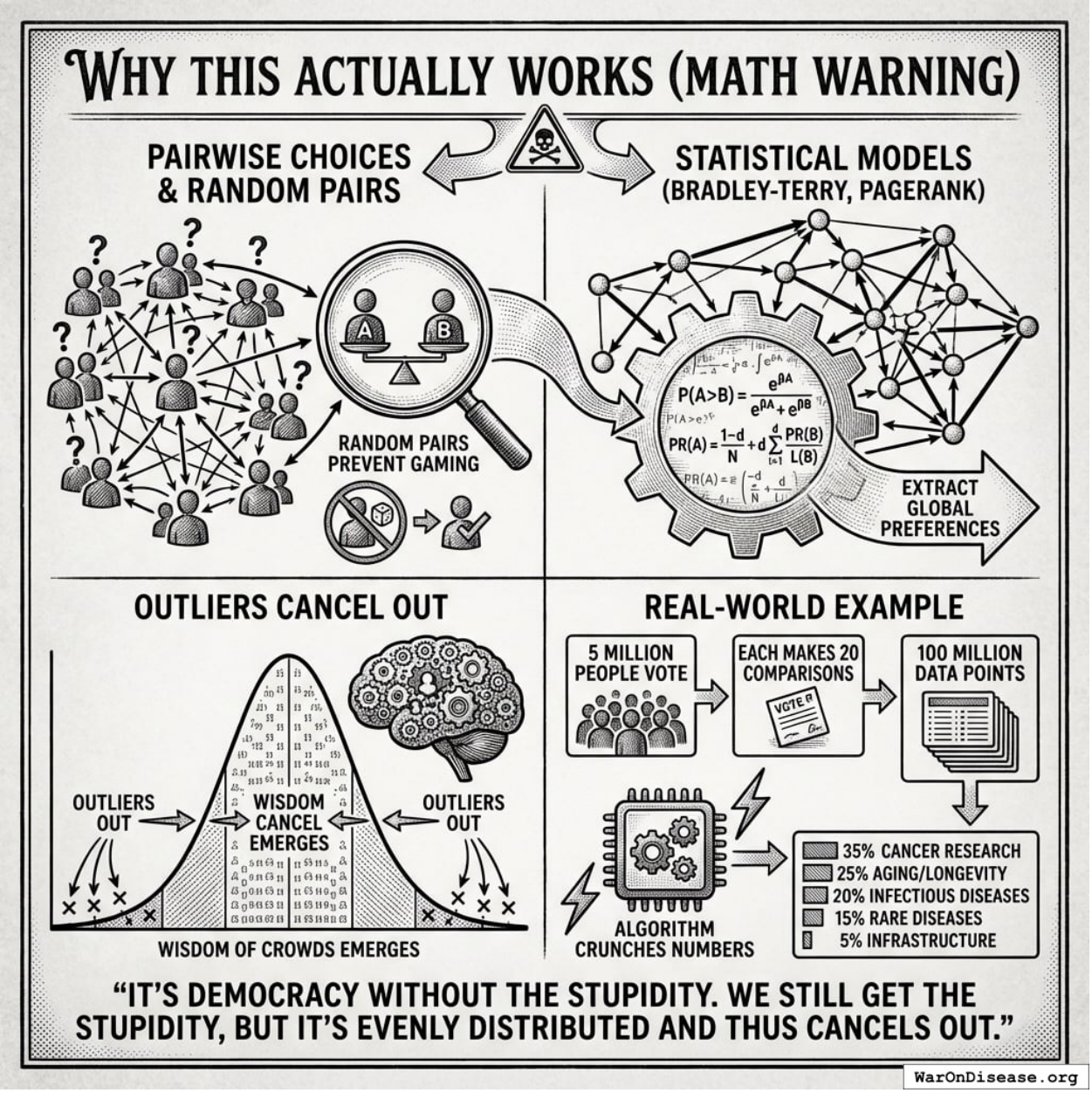


Figure 280: A visual representation of the data aggregation process, showing how millions of individual pairwise comparisons are funneled through statistical models to generate a unified list of global priorities.

It's democracy without the stupidity. We still get the stupidity, but it's evenly distributed and thus cancels out.

From Priorities to Projects

Once the Pairwise Slider Allocation tells you that "Curing Alzheimer's" is a top priority, Wishocracy translates that priority into action.

1. **AI Breaks It Down:** An AI takes the impossible goal of "Cure Alzheimer's" and breaks it down into thousands of smaller, concrete, fundable tasks. "Cure Alzheimer's" becomes "Map protein structures,"

which becomes "Run AlphaFold on these sequences," which becomes "Rent computing time." Every impossible problem is just a series of possible steps.

2. **The Bounty Board:** These tasks are posted to a global marketplace. It's like eBay, but for saving humanity.
   - **WANTED:** A cure for Alzheimer's. **BOUNTY:** $10 billion.
   - **WANTED:** A map of all protein misfolding patterns. **BOUNTY:** $500 million.
3. **The World Competes:** The best teams from around the world, from MIT to some kid in a garage, bid on these tasks. Multiple approaches are funded in parallel. The ones that show promise get more funding. The ones that fail are defunded instantly. It's venture capital, but for not dying.

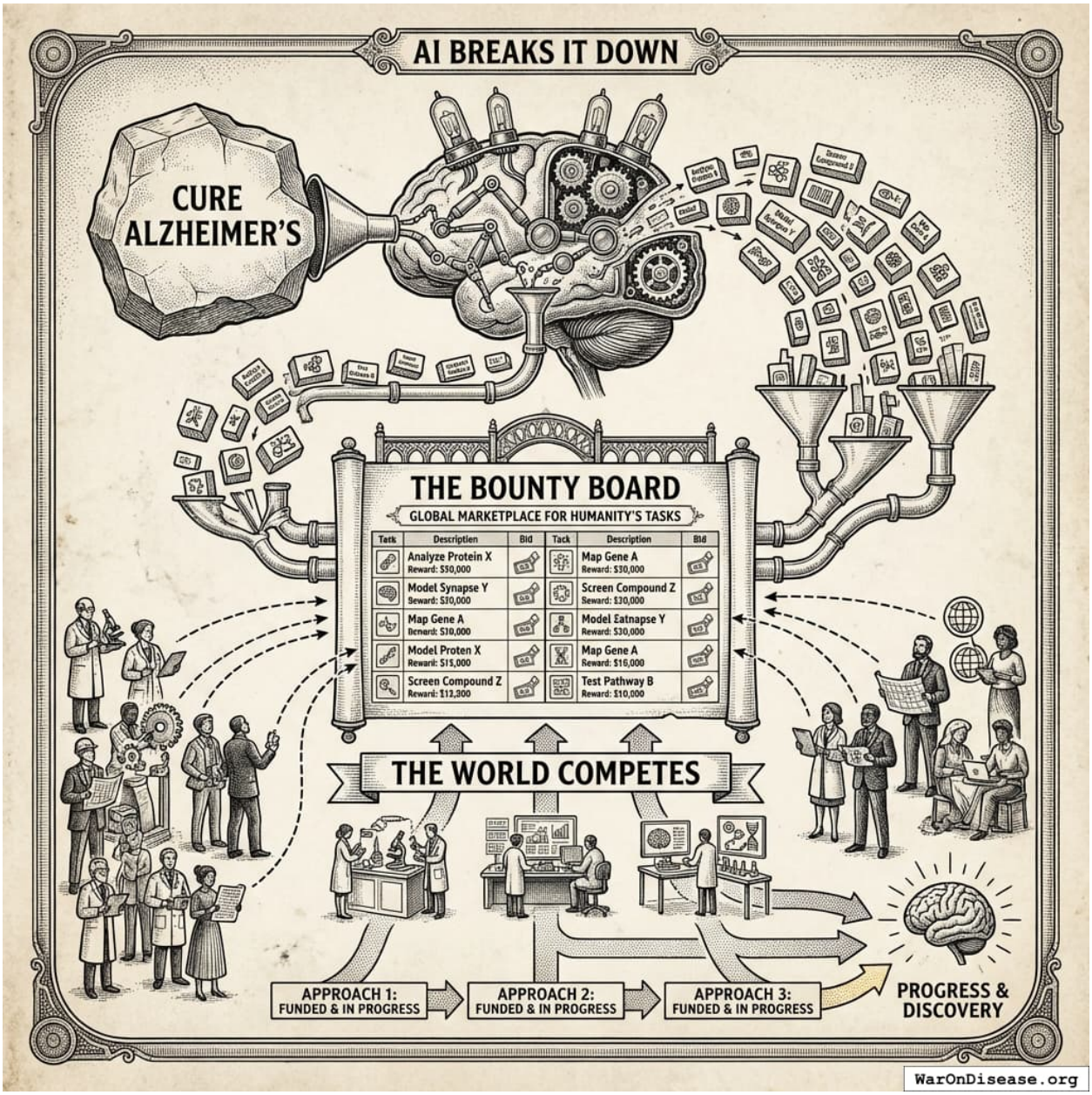
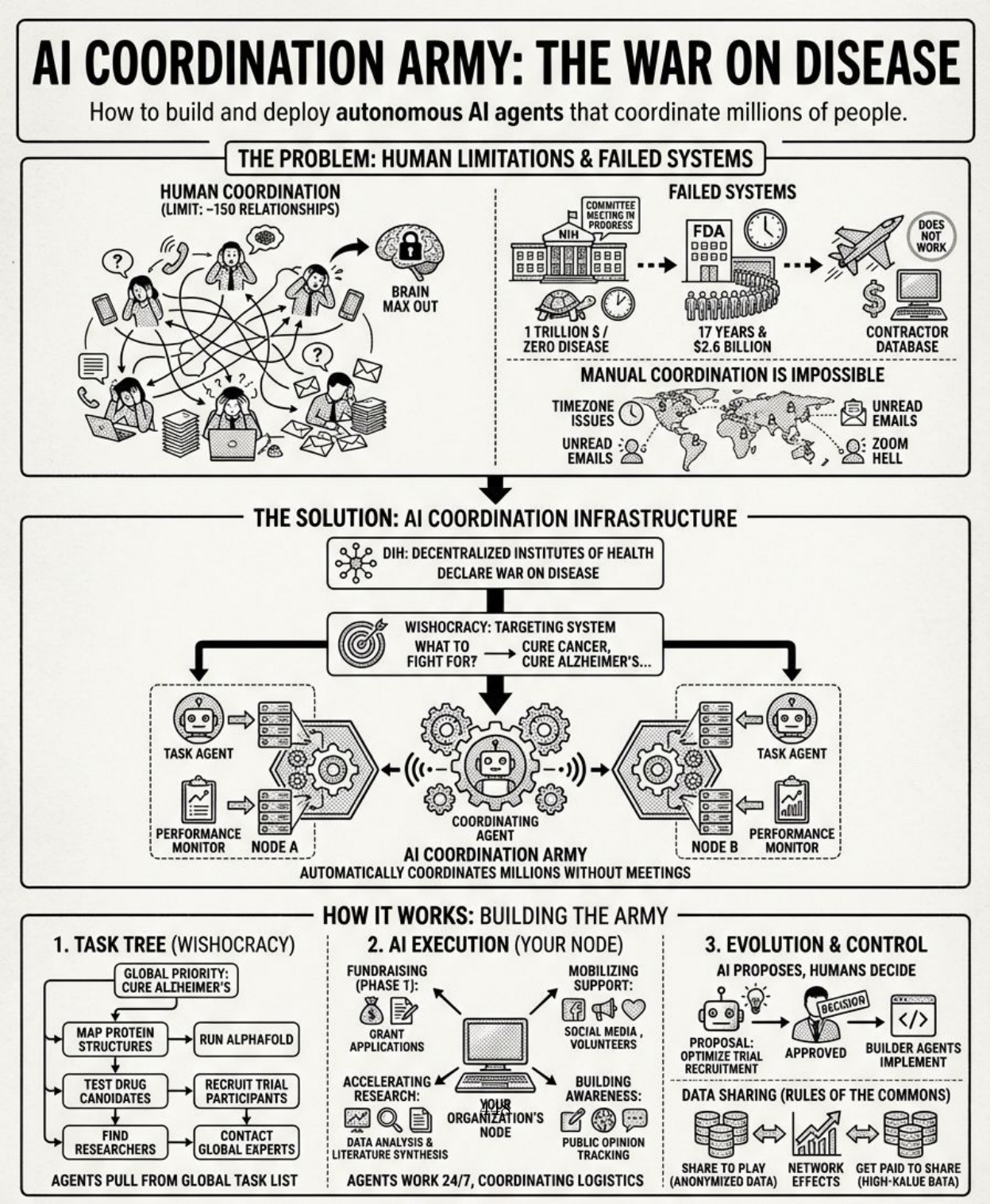


Figure 281: Process flow illustrating how abstract priorities are converted into executed projects through AI decomposition and global competition.

Building Your AI Coordination Army



```
Loading economic parameters...
Economic parameters loaded.
```

You've got mission control, a network of decentralized institutes of health (DIH), and a targeting system (Wishocracy). Now you need an army of AI agents to do the work while humans are sleeping, arguing on Twitter, or attending conferences that accomplish nothing.

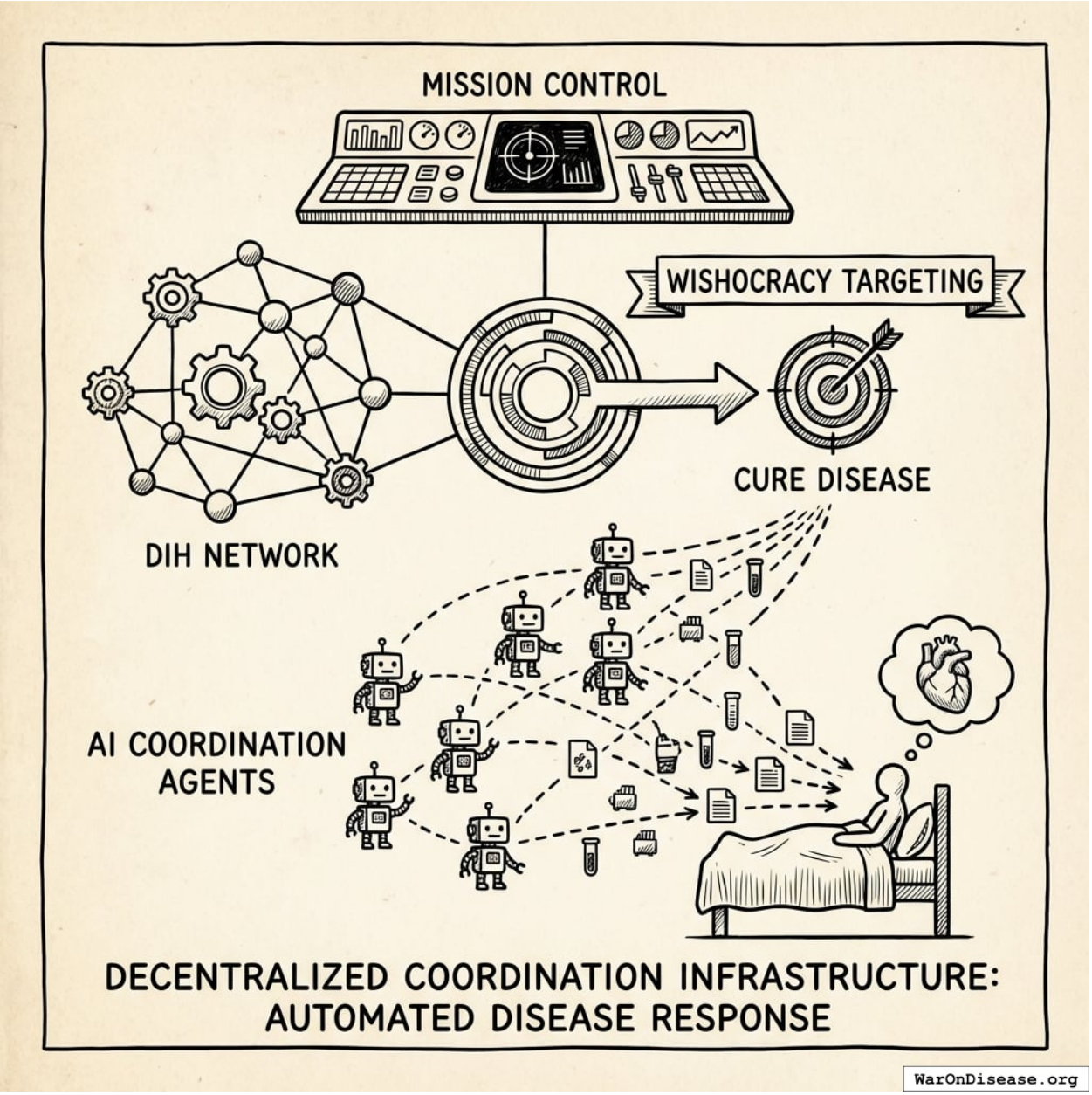


Figure 283: A conceptual diagram showing the relationship between Wishocracy (goal setting), Decentralized Institutes of Health (research focus), and AI agents (resource coordination) within a unified infrastructure.

Here's the division of labor:

- **Your decentralized institutes of health** declare war on disease instead of on other humans (revolutionary concept)

- **Wishocracy** tells your army what to fight for (e.g., "Cure cancer" instead of "invade a country with oil")
- **Your AI agents** coordinate the millions of people and resources needed to actually win, without requiring a single Zoom meeting

Here's how you build this coordination infrastructure.

Where Your Agents Get Their Missions (Not From a Management Consultant)

Your agents don't randomly decide what to work on based on what sounds cool or what their creator happens to care about that day. They pull from Wishocracy's Task Tree, the globally-prioritized breakdown of humanity's highest-priority problems into tasks a computer (or sufficiently motivated intern) can actually execute.

Wishocracy creates the list. For example, "Cure Alzheimer's" (vague, terrifying, impossible) becomes:

- Map protein structures → Run AlphaFold on these sequences → Rent computing time → Find cheapest cloud provider that won't mysteriously go down during your job
- Test drug candidates → Recruit trial participants → Find people age 65+ with early symptoms → Contact the 73 researchers globally who study this specific thing

Your agents work from this same list. Whether you're deploying agents from a patient advocacy nonprofit in Boston (running on donated servers), a university in Beijing (behind the Great Firewall), or a biotech in Switzerland (with an actual IT budget), all agents see the same prioritized tasks. This is how you coordinate millions of people without someone having to organize a conference call.

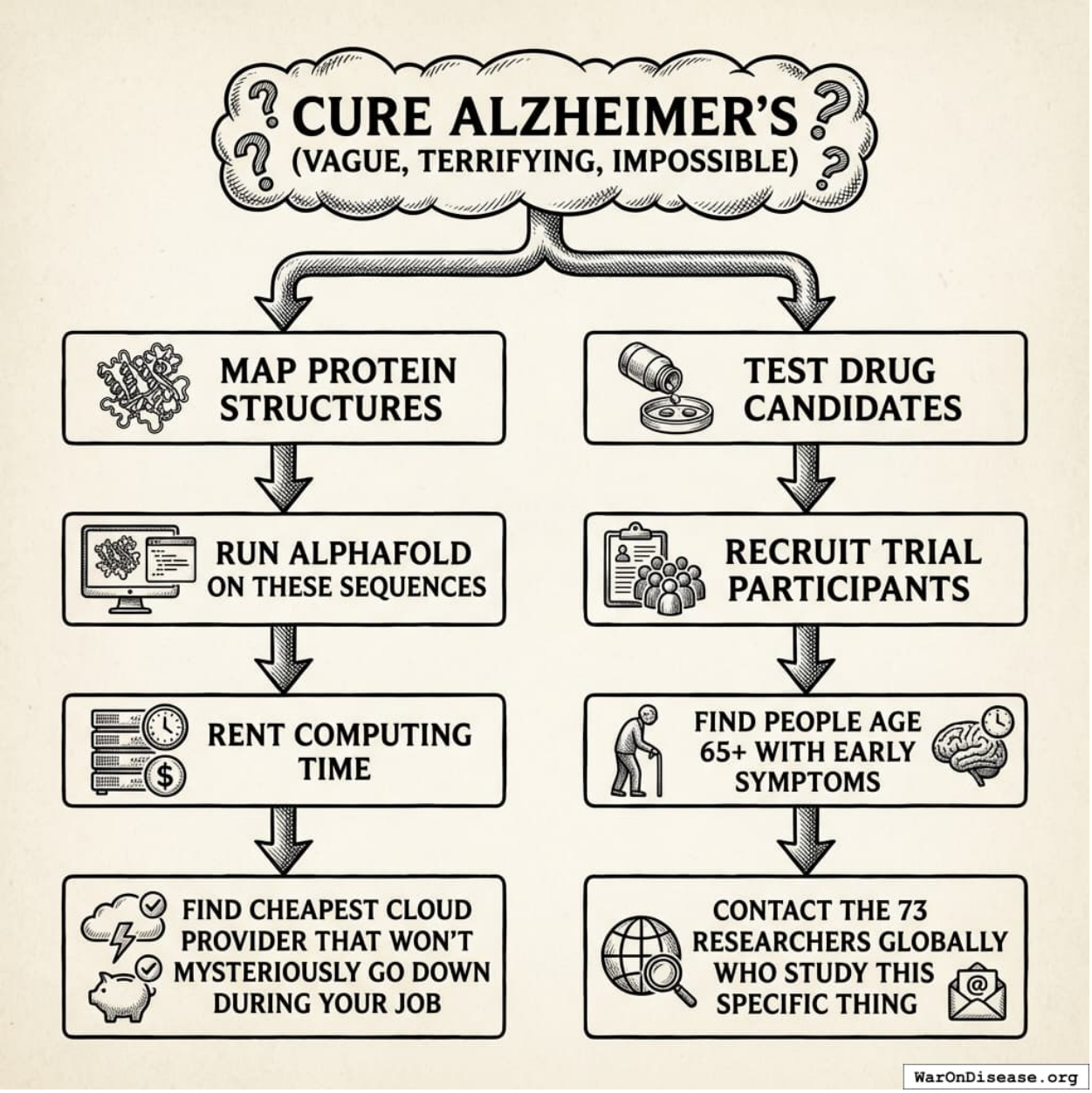


Figure 284: Breakdown of the Wishocracy Task Tree, showing how high-level goals translate into executable agent instructions.

The Secret to Success: Cross-Sector Coordination (Forces for Good)

Forces for Good studied the difference between successful and unsuccessful nonprofits. The finding: Successful nonprofits coordinate across sectors, they work with other nonprofits, businesses, governments, and the public. Unsuccessful ones operate in silos, jealously guarding their email lists and acting like collaboration is a zero-sum game where helping someone else means losing.

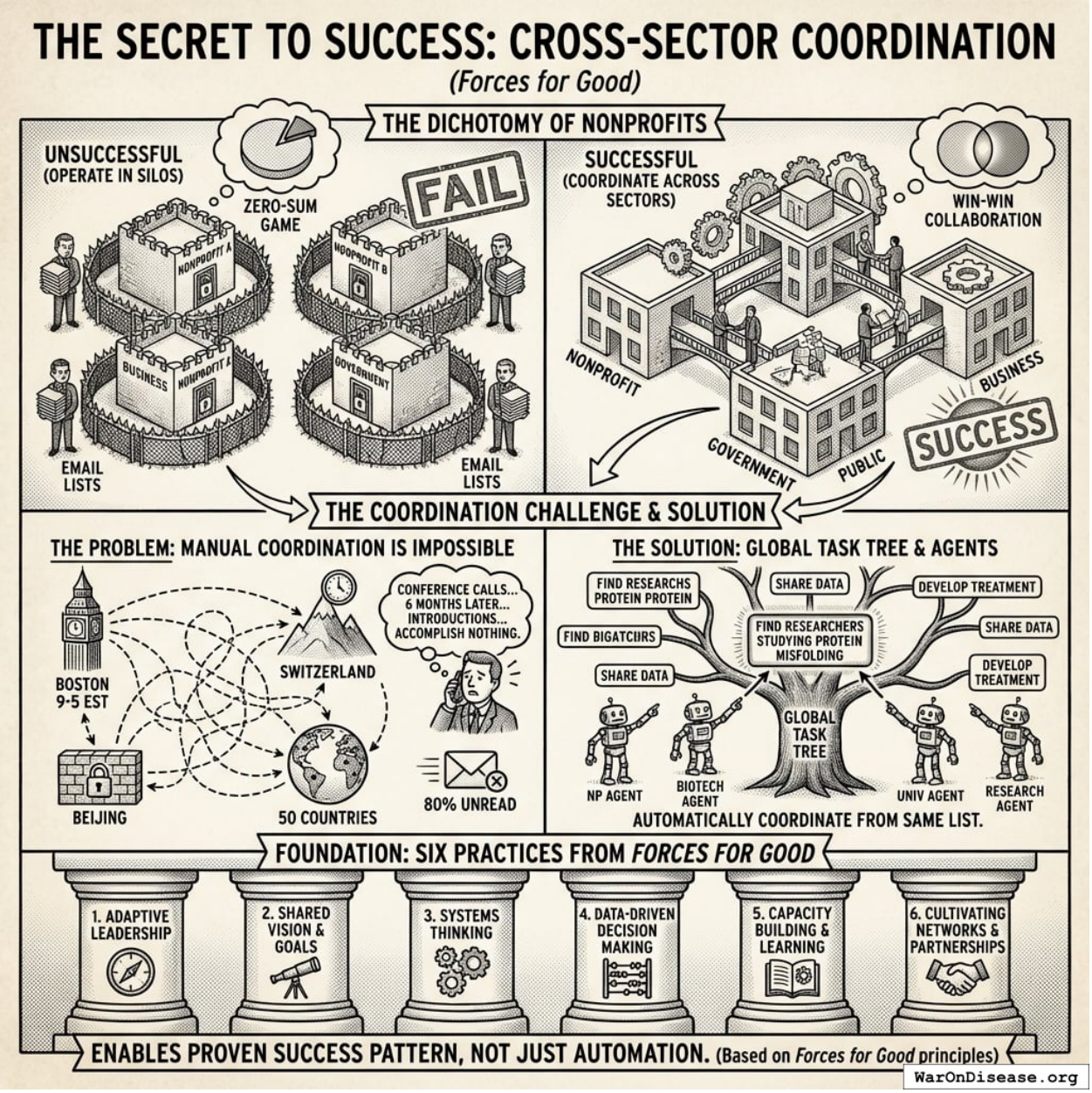


Figure 285: A conceptual diagram showing the transition from fragmented, siloed cross-sector communication to a unified architecture where agents from diverse sectors (biotech, government, academia) synchronize through a global Task Tree.

The problem: Cross-sector coordination is nearly impossible to do manually. How do you coordinate a cancer nonprofit in Boston (operating 9-5 EST) with a biotech in Switzerland (different timezone, language, and concept of urgency), a university in Beijing (behind a firewall), and individual researchers across 50 countries (half of whom don't check email)?

Currently, this requires conference calls scheduled 6 months in advance where everyone spends 45 minutes on introductions and 5 minutes accomplishing nothing. Then someone sends a follow-up email that 80% of people won't read.

The solution: All agents work from the same global Task Tree. Your nonprofit's agent and the biotech's agent

and the university's agent all see "Find researchers studying protein misfolding" as the next priority task. They automatically coordinate because they're working from the same list, not because someone managed to find a time that works across 12 timezones.

You base your agent design on the six practices from *Forces for Good*:

This ensures your agents enable the proven success pattern, cross-sector coordination, rather than just automating the process of sending emails that no one reads and forming committees that accomplish nothing.

Why You Need This (Humans Are Hilariously Bad at Coordination)

The NIH has 27,000 employees. They can't coordinate lunch orders, let alone millions of researchers. Seriously, they spent $1 trillion and eradicated zero diseases because their coordination strategy is "form a committee to discuss forming a committee."

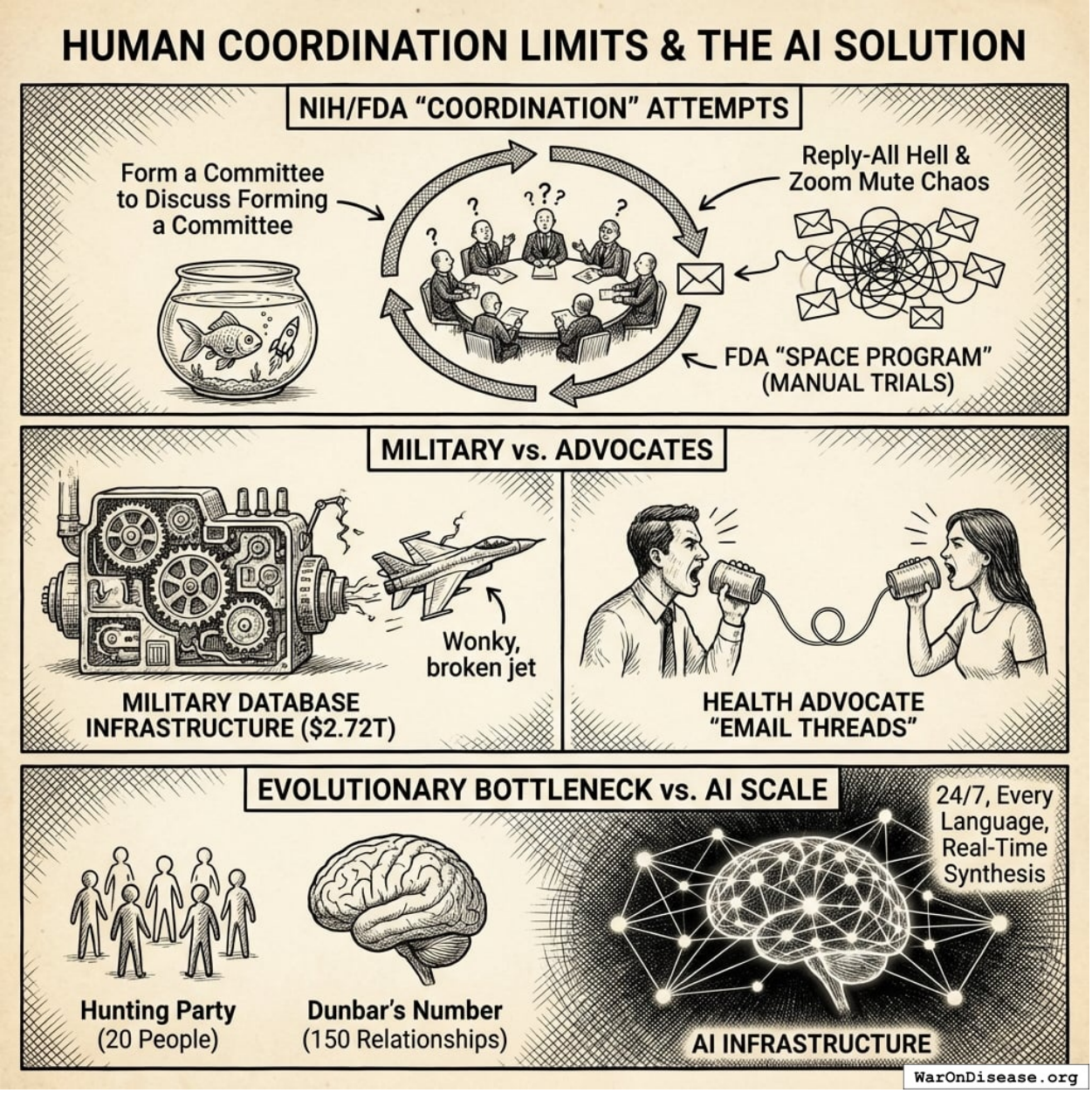


Figure 286: A comparison between human coordination bottlenecks, limited by Dunbar's number and manual communication, and AI-driven infrastructure capable of managing global scale, time zones, and data synthesis simultaneously.

The FDA thinks humans can manually coordinate global trials. These are the same humans who took 17 years and $2.6 billion to approve one drug. Asking them to coordinate is like asking goldfish to organize a space program.

Meanwhile, military contractors somehow coordinate $2.72T in annual spending to build jets that don't work. They're idiots, but they're *coordinated* idiots with database infrastructure.

Health advocates? We're trying to coordinate billions in funding using email threads that descend into reply-all hell and Zoom calls where 18 people are on mute and 2 are talking over each other.

The problem isn't that people don't want to help cure disease. It's that coordinating millions of people

manually is impossible:

- Want to recruit trial participants across 195 countries? Good luck finding someone in each timezone to make phone calls.
- Need to match researchers with funding opportunities? Hope you enjoy reading 10,000 grant descriptions and manually building a spreadsheet.
- Trying to mobilize treaty advocates globally? Enjoy scheduling a call where someone is always asleep.
- Need real-time trial data synthesis? Better hire someone to email everyone weekly asking for updates (they won't respond).

Humans evolved to coordinate hunting parties of 20 people. We're now trying to coordinate millions. Our brains literally can't do it, we max out at 150 relationships (Dunbar's number)[242].

AI doesn't have this limitation. It never sleeps, speaks every language, operates in every timezone simultaneously, and doesn't get into passive-aggressive email wars. The way you win the War on Disease is by building coordination infrastructure that works at the scale humans can't, while the NIH is still trying to schedule their next committee meeting.

The Architecture You're Building (It's Simpler Than It Looks)

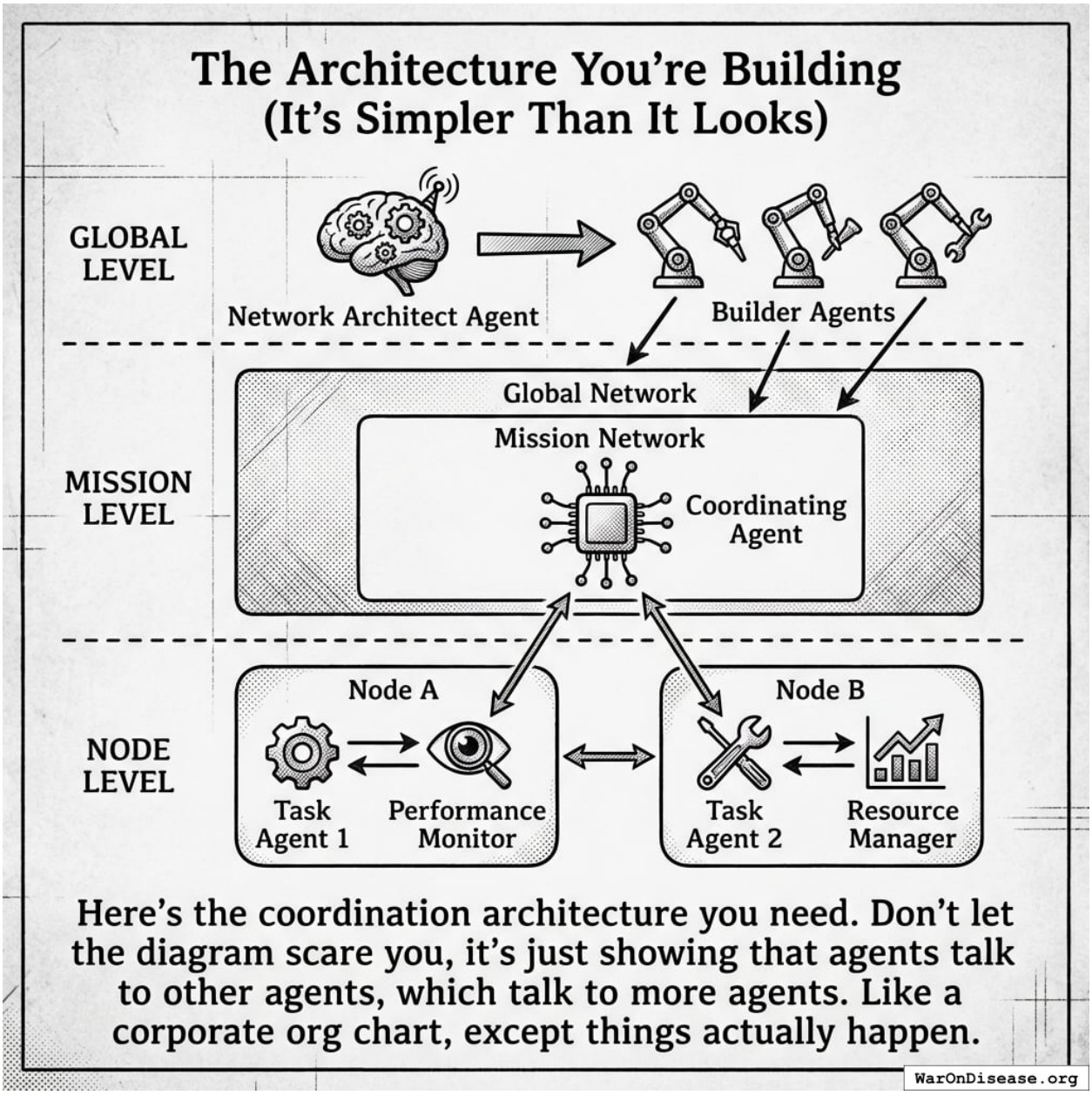


Figure 287: A hierarchical agent coordination architecture showing the flow from Global Level network architects down to Mission Level and Node Level task agents.

Here's the coordination architecture you need. Don't let the diagram scare you, it's just showing that agents talk to other agents, which talk to more agents. Like a corporate org chart, except things actually happen:

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coordination-army/ai-coordination-army-section-mission-level-bw-academic.jpg)'
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coordination-army/ai-coordination-army-section-node-level-bw-academic.jpg)'
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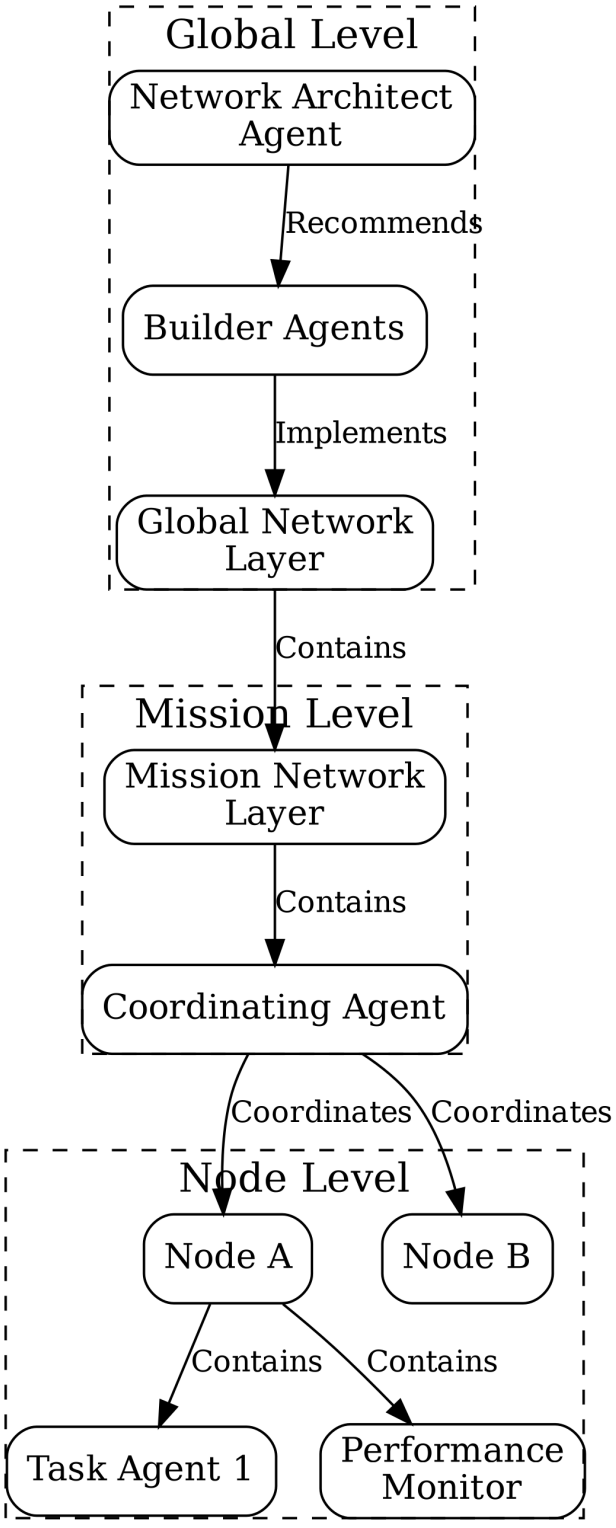


WarOnDisease.org

Step 1: Deploy Your Coordination Hub (Your Organization's Digital Slave Labor)

The way you join the network is by deploying a "node", your organization's AI coordination hub that never sleeps, never complains, never asks for a raise, and doesn't require health insurance.

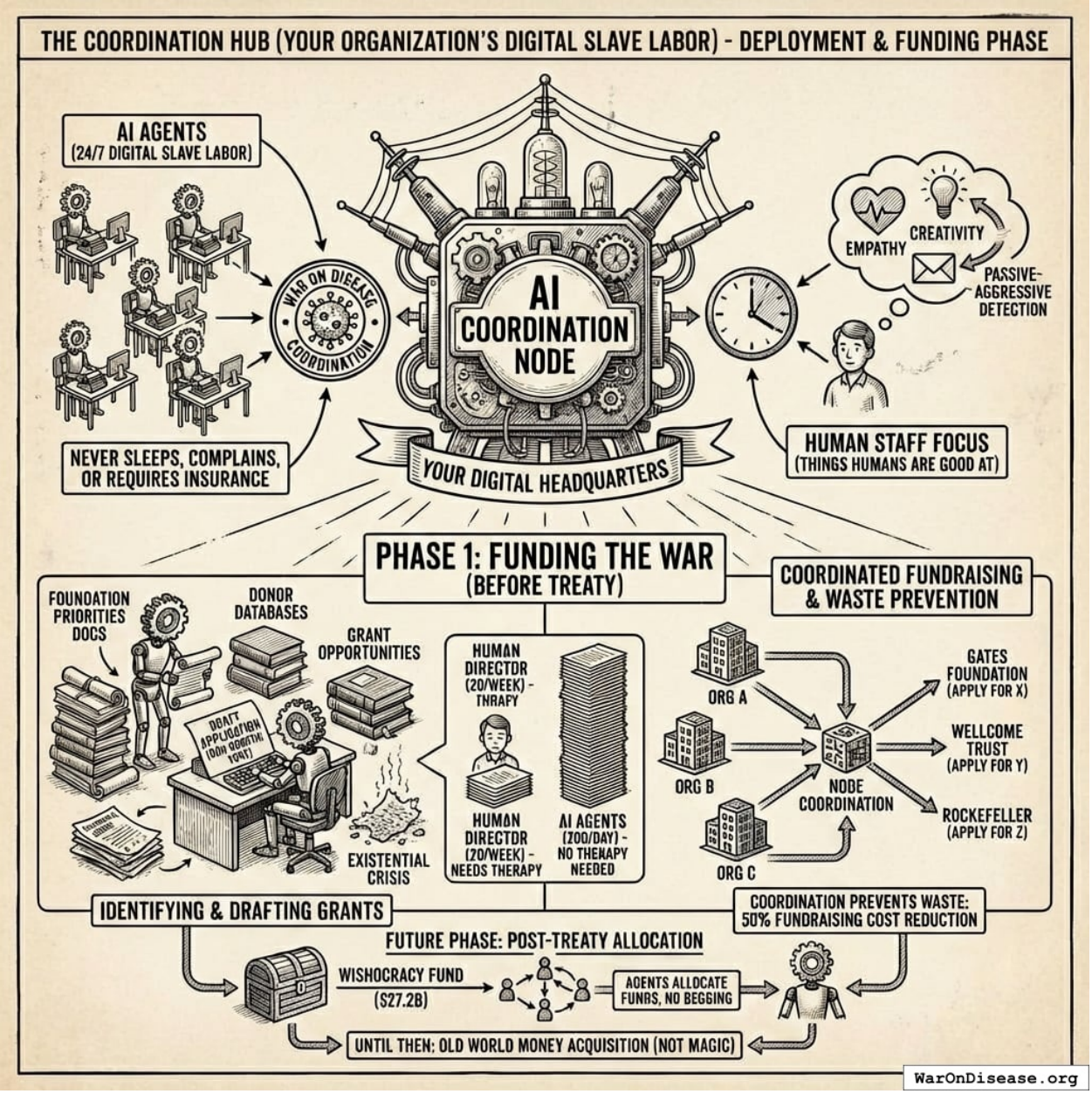


Figure 288: A visualization of the AI Coordination Hub acting as a central node that automates donor research, grant drafting, and cross-organization coordination to streamline global health funding.

Think of it as your digital headquarters where AI agents work 24/7 to coordinate your piece of the War on Disease, while your human staff can focus on things humans are actually good at (like empathy, creativity, and knowing when someone's email is passive-aggressive).

Here's what you use your node for:

To Fund the War (Phase 1: Before the Treaty Passes):

Right now, you still need money to keep the lights on and fund the $200M (95% CI: $140M-$260M) global referendum campaign. Your agents help with this:

They identify potential donors, foundations, and grant opportunities while you sleep. They read every foundation's 47-page "priorities document" (written by consultants who don't know what the foundation wants either), figure out which ones might fund your work, and draft grant applications that don't sound like they were written by a robot having an existential crisis.

A human development director can research maybe 20 foundation fits per week, assuming they don't get distracted by the 300 unread emails in their inbox. Your agents research 200 per day, draft the applications, and don't need therapy afterward. They also don't waste donor meetings asking questions that were answered on page 3 of the website.

The key: Coordination prevents waste. Instead of 500 cancer nonprofits all applying to the Gates Foundation for the same thing, your agents coordinate: "Org A applied for X, Org B apply for Y." This is how you raise the $200M (95% CI: $140M-$260M) for the referendum while cutting fundraising costs 50%.

Once the treaty passes? Your agents shift to allocating the $27.2B from Wishocracy instead of begging foundations. But until then, we still live in the old world where money doesn't magically appear.

To Mobilize Support

You launch advocacy agents that track health legislation (all 10,000 pages that get released at 2 AM), coordinate treaty signature campaigns across timezones, organize awareness events, and recruit volunteers without the usual process of begging people on Facebook and hoping they show up.

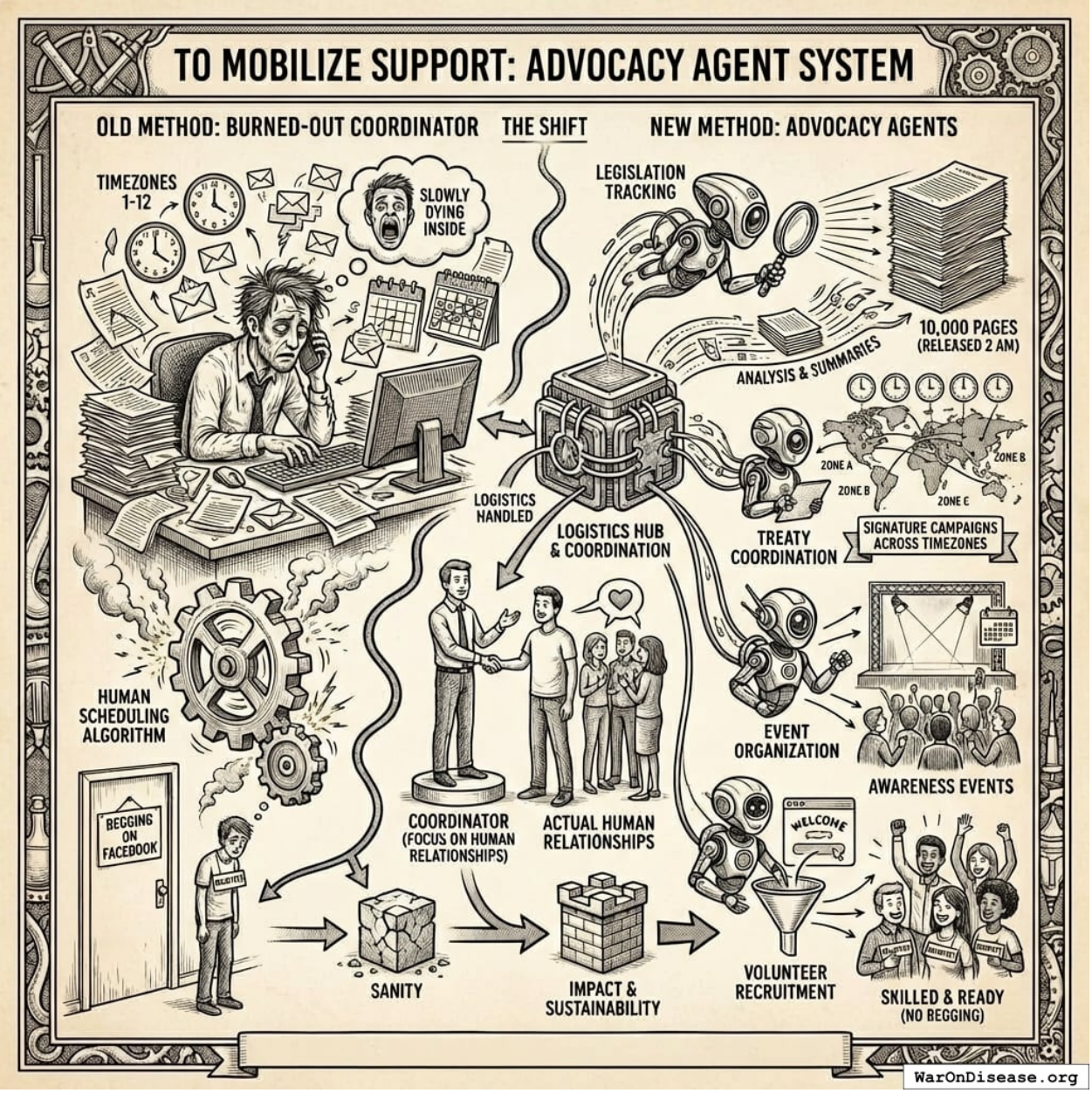


Figure 289: A comparison diagram showing the shift in workload where AI agents handle data-intensive logistics and tracking, while the human coordinator transitions from scheduling tasks to high-value relationship building.

Instead of one burned-out coordinator trying to schedule volunteers across 12 timezones while also answering emails, planning events, and maintaining their sanity, your agents handle all the logistics. The coordinator can focus on actual human relationships instead of being a human scheduling algorithm who's slowly dying inside.

To Accelerate Research

You automate the soul-crushing coordination work that turns enthusiastic researchers into bitter husks. Matching researchers with funding opportunities (before treaty: foundation grants; after treaty: Wishocracy allocations). Recruiting trial participants who actually meet the criteria (not just people who saw a Facebook

ad and think they qualify). Tracking outcomes when half the participants ghost you. Synthesizing literature when there are 50,000 new papers published monthly and you're supposed to read them all.

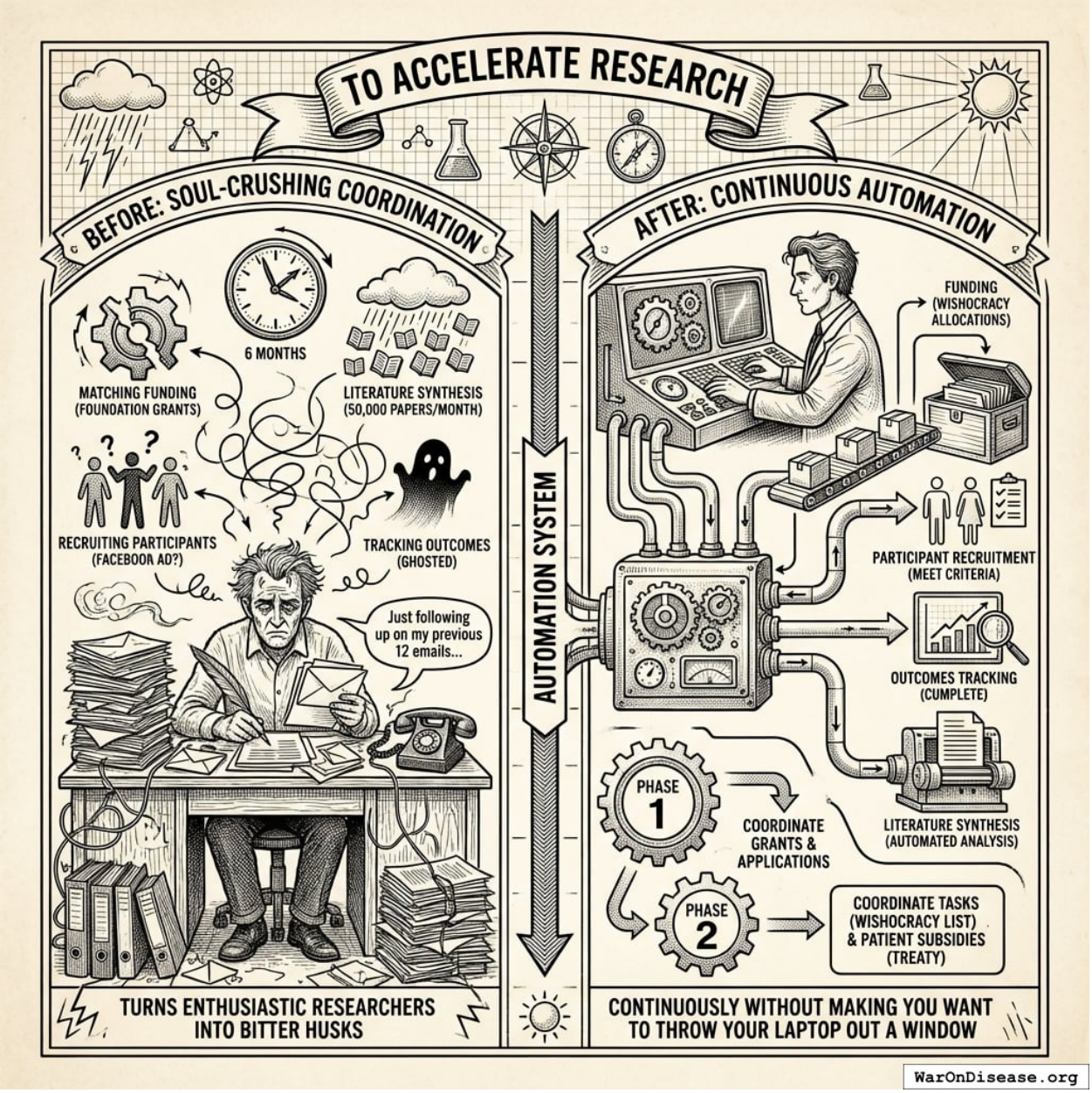


Figure 290: A workflow diagram illustrating the transition from manual research coordination to an automated two-phase system involving grant matching and task execution.

What used to take 6 months of emails like "Just following up on my previous 12 emails…" now happens continuously without making you want to throw your laptop out a window. Phase 1: coordinate who applies for which grants. Phase 2: coordinate who executes which tasks from Wishocracy's list using patient subsidies from the treaty.

To Build Awareness

You deploy content agents that create educational materials people might actually read, track what the public currently thinks about health issues, coordinate social media campaigns, and figure out which messages actually change minds versus which ones just get ratio'd.

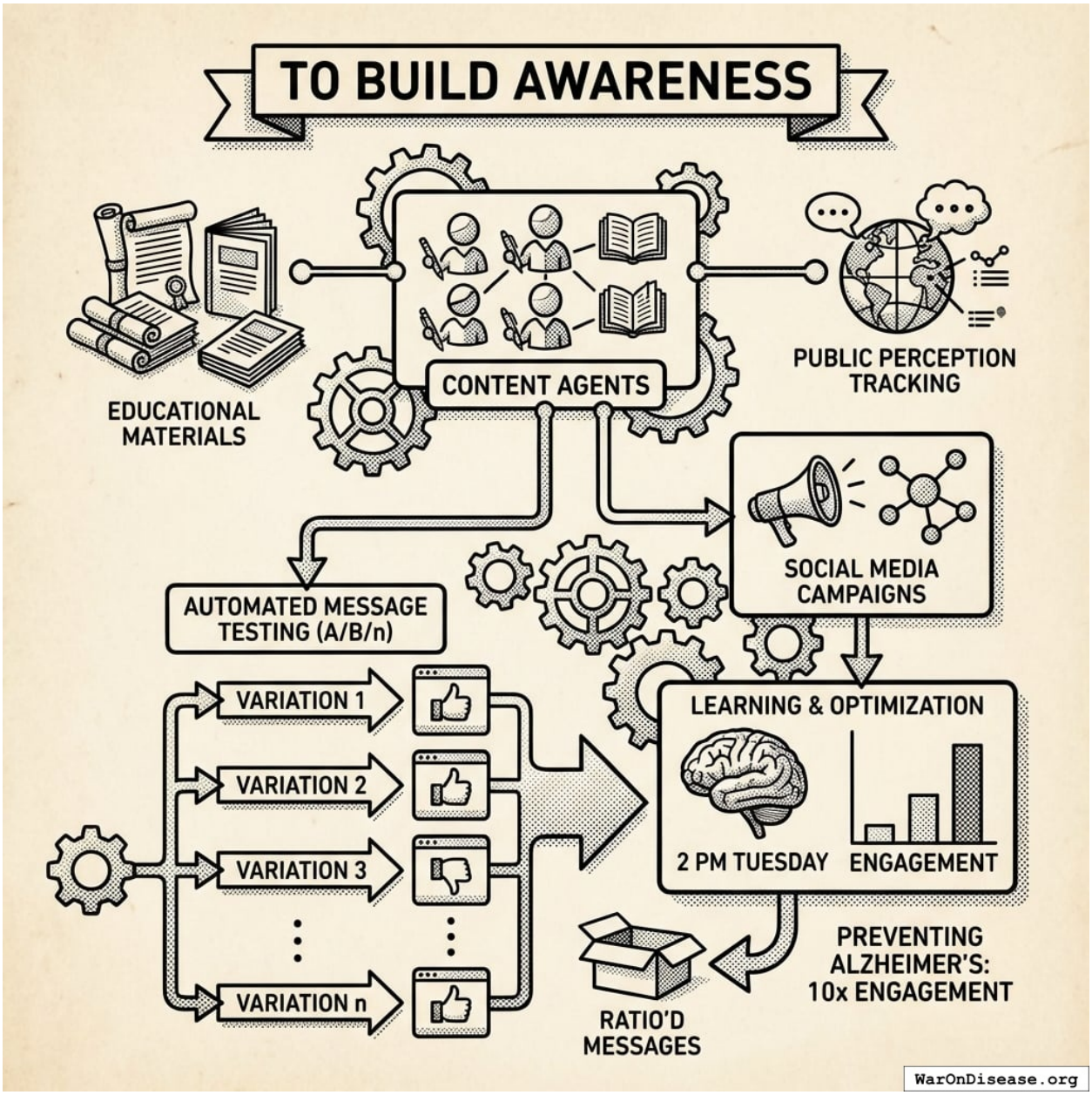


Figure 291: A comparison showing the manual A/B testing process versus AI agents simultaneously testing hundreds of content variations to optimize engagement.

Instead of a marketing team manually A/B testing campaigns one painful experiment at a time, your agents test hundreds of variations simultaneously. They learn that posting about preventing Alzheimer's at 2 PM on Tuesday gets 10x more engagement than posting at 9 AM on Monday, for reasons no human will ever understand.

To Optimize Impact

You use "Agent Evaluators" to measure which strategies actually save lives instead of which ones win awards at nonprofit conferences or make board members feel good.



Figure 292: Architectural overview of an AI node, illustrating how specialized Task Agents utilize shared memory and context to coordinate activities while connecting to external research, government systems, and other nodes via APIs.

You get real-time data showing which fundraising approaches work (not just which ones the development director learned at their last nonprofit job), which advocacy tactics actually change minds (versus which ones just make activists feel productive), which research collaborations accelerate progress (versus which ones just produce papers no one reads).

You double down on what works. You kill what doesn't. No politics, no "but we've always done it this way," no protecting programs because someone's spouse runs them.

Inside your node, you build **Task Agents**, hyper-focused AI workers who are the opposite of your coworker Dave who somehow has 17 responsibilities and does none of them well. Each agent has one specific job in the War on Disease. They share a knowledge base for long-term memory (so they don't keep asking you the same questions), coordinate through a shared context system (so they don't duplicate work like humans do), and interact with research databases, government systems, and other nodes through APIs (which is fancy talk for "they can talk to computers without needing IT support to set it up").

Step 2: Define Each Agent's Mission (From the Task Tree, Not From Your Feelings)

Your agents pull their missions from Wishocracy's Task Tree, not from brainstorming sessions where someone says "wouldn't it be cool if…" The way you prevent them from becoming useless generalists (like every nonprofit's "Director of Strategy and Partnerships and Innovation and Impact") is by mapping each agent to one specific task from that tree. Here's how:

1. Pick a Task from the Tree:

Wishocracy's Task Tree breaks "Cure Alzheimer's" (impossible, vague, makes you want to give up) down into executable tasks like "Find researchers studying protein misfolding" or "Recruit trial participants age 65+ with early symptoms."

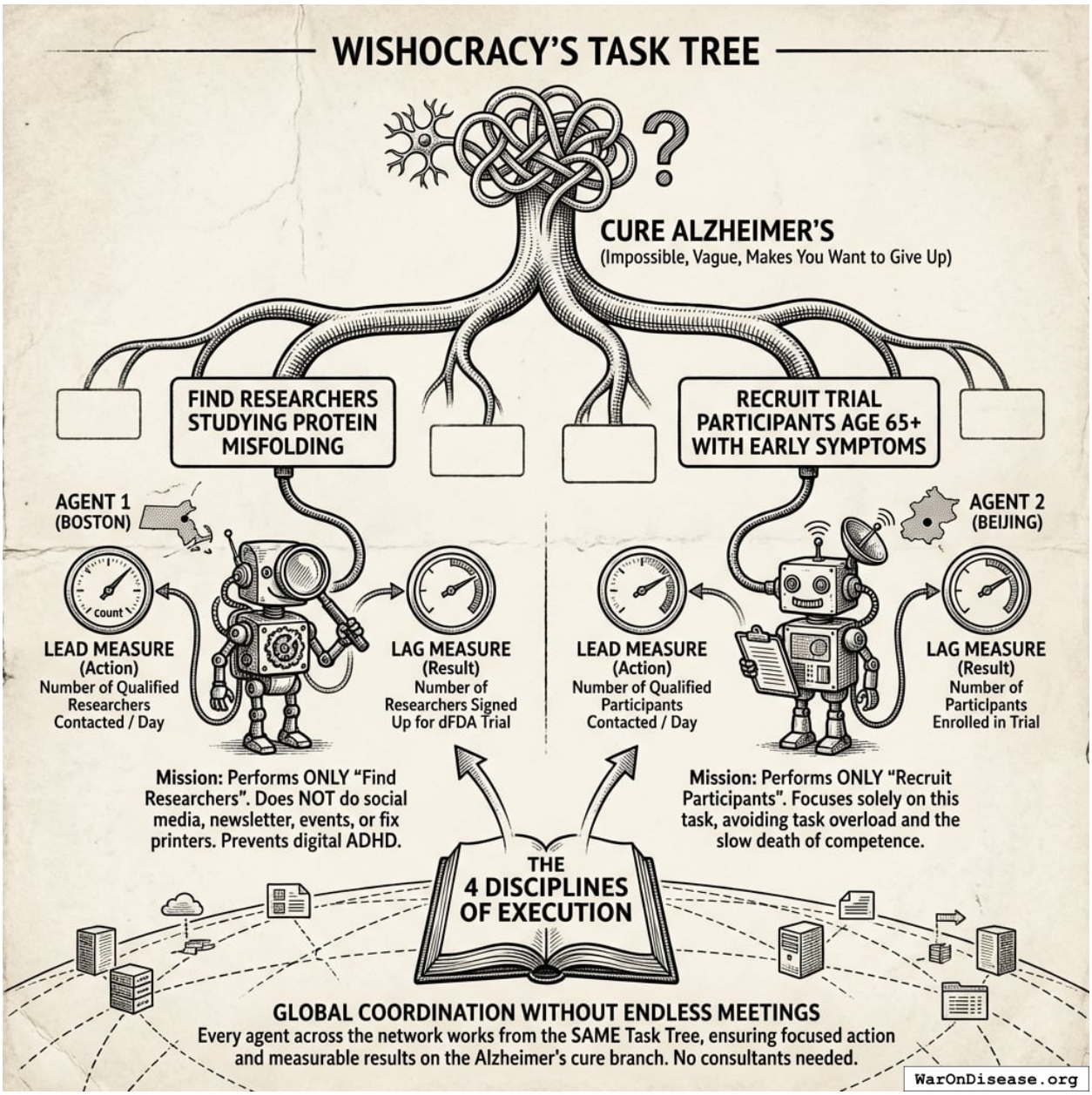


Figure 293: An architecture diagram showing a hierarchical Task Tree where distributed agents in different global locations map to specific nodes, each operating on a lead/lag measure feedback loop.

You pick one task. Your agent does *only* that task. It doesn't also try to do social media, write the newsletter, organize events, and somehow also fix the printer. This prevents digital ADHD and the slow death of competence through task overload.

2. Define the Lead Measure (the action):

The thing the agent *does* to complete its task. For a "find researchers" agent: "Number of qualified researchers contacted per day." Simple, countable, and the agent controls it completely (unlike "build relationships" or other vague corporate nonsense that sounds good in meetings but means nothing).

3. Define the Lag Measure (the result):

The outcome you actually care about. For the same agent: "Number of researchers who sign up for a trial within your decentralized framework for drug assessment (dFDA)." This tells you if the action is working or if you've built an agent that's really good at sending emails no one reads.

This structure (borrowed from "The 4 Disciplines of Execution") turns tasks from Wishocracy's global list into specific agent missions you can build, measure, and improve without needing to hire a consultant to interpret the results.

The key: Every agent across the entire network works from the same Task Tree. Your cancer research agent in Boston might be working on "Find protein researchers" while someone's agent in Beijing works on "Find computing resources for AlphaFold." Both tasks come from the same Alzheimer's cure branch of the tree. This is how you coordinate globally without endless meetings where half the attendees are on mute and the other half forgot they were even invited.

Step 3: Enable Competition Between Agents (May the Best Robot Win)

Here's how you make the system evolve instead of calcifying into bureaucracy: You let anyone design and launch new agents to compete with existing ones.

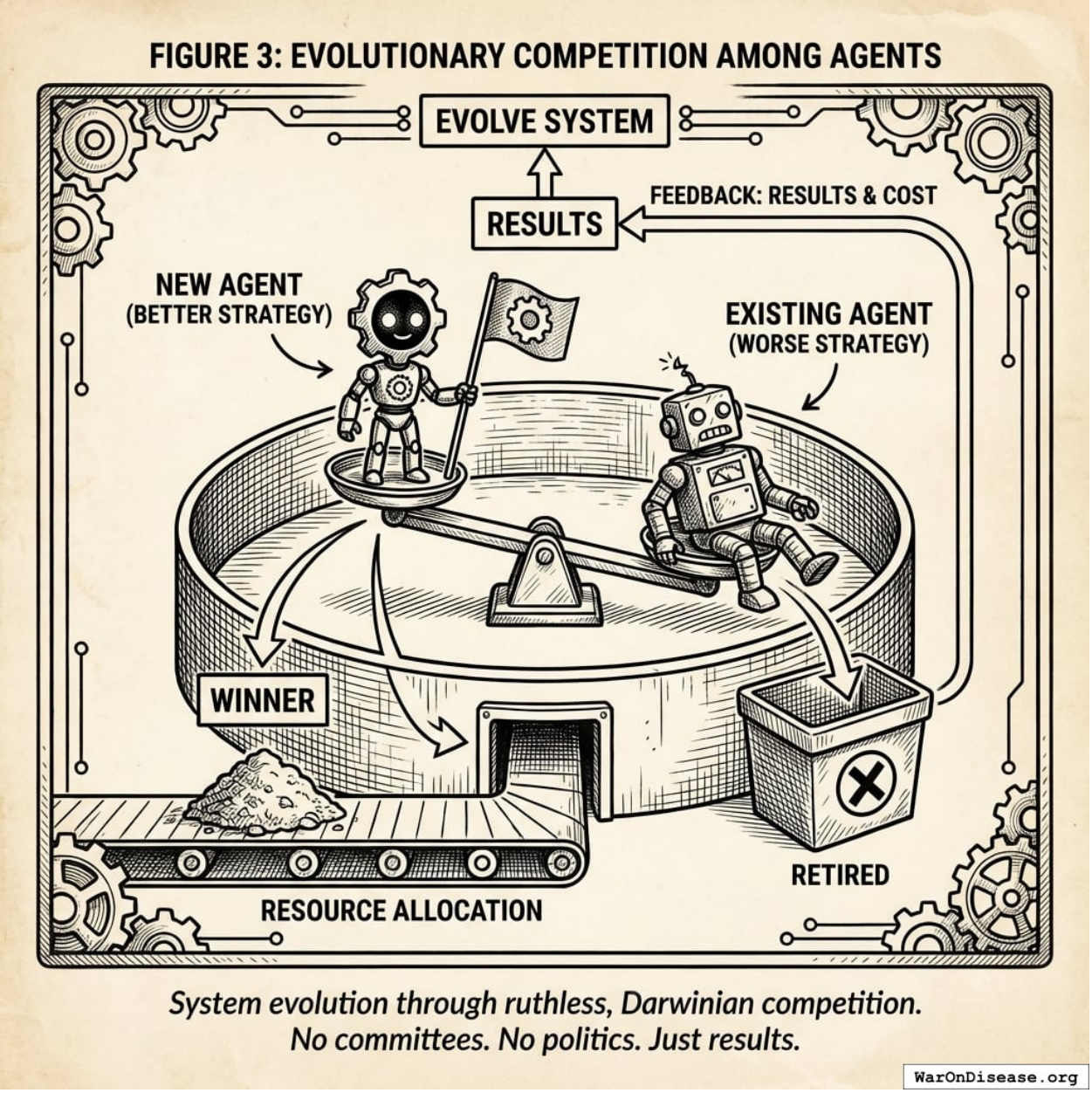


Figure 294: A flowchart depicting the Darwinian competition between two agents, showing a side-by-side comparison of performance metrics leading to resource allocation for the winner and retirement for the loser.

If someone thinks they have a better way to find cancer researchers, they build an agent for it. You run both agents side-by-side and measure which one delivers better results for less cost. The winner gets more resources. The loser gets improved or retired (but gently, because it's code, not a person you're firing via Zoom).

The network evolves through ruthless, Darwinian competition. The best strategies win. The worst die. No committees to protect underperforming approaches because "we've invested too much to give up now." No politics. No protecting someone's pet project because they've been here since 2003. Just results.

How You Keep Control (Preventing the Robot Uprising)

Current AI can't run a global health movement alone, which is honestly for the best. You want humans making strategic decisions, not algorithms optimizing for metrics that accidentally prioritize the wrong things (like every social media platform ever).

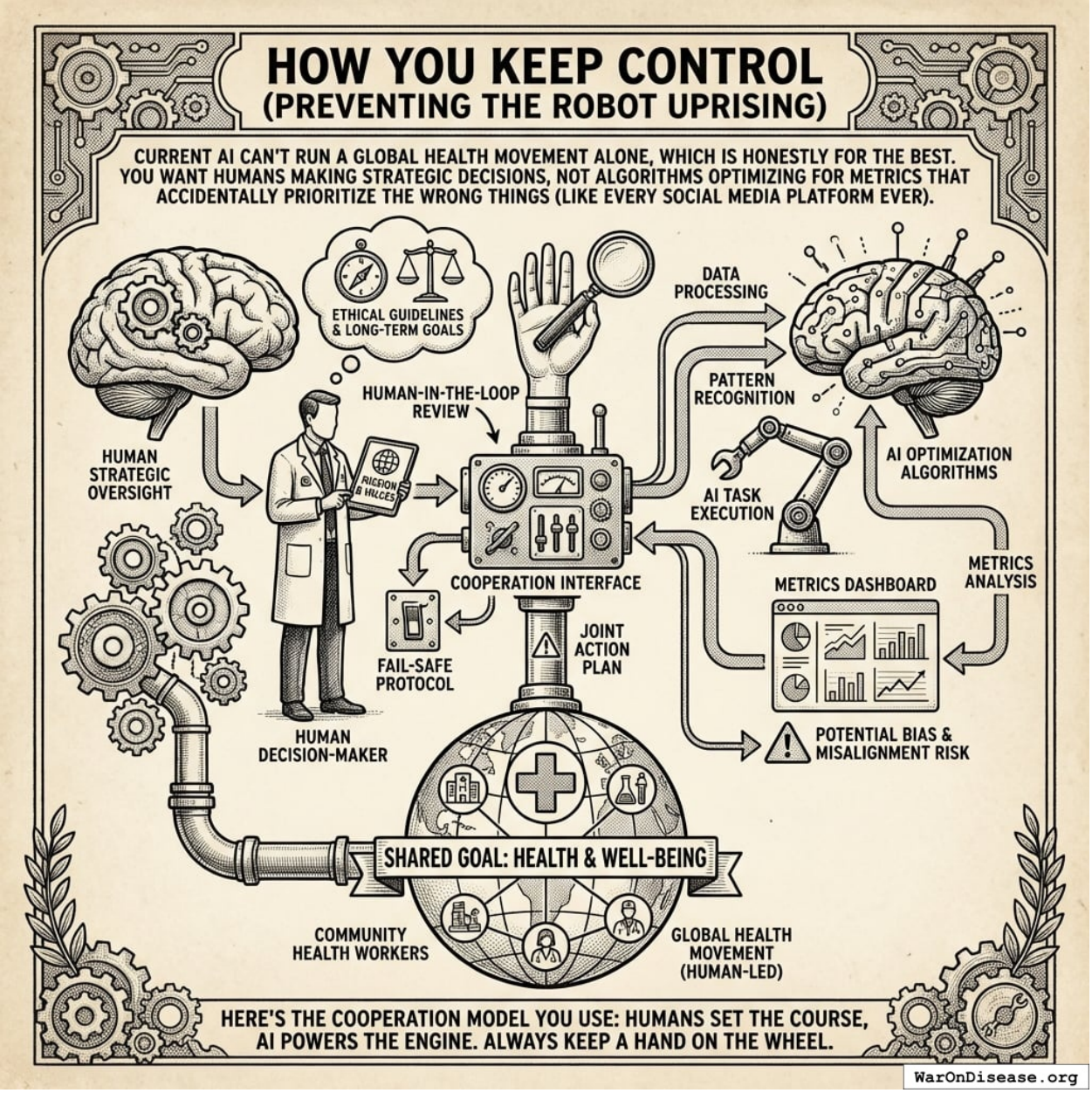


Figure 295: A conceptual diagram showing the hierarchy of human strategic decision-making providing oversight to AI algorithmic execution to ensure alignment with movement goals.

Here's the cooperation model you use:

AI Proposes

Your agents analyze what's working across the network and propose new strategies (via GitHub issues, because developers already live there). Example: "Trial recruitment is 3x higher when you contact researchers on weekends" or "Funding requests sent on Tuesday get 40% more responses than those sent on Friday."

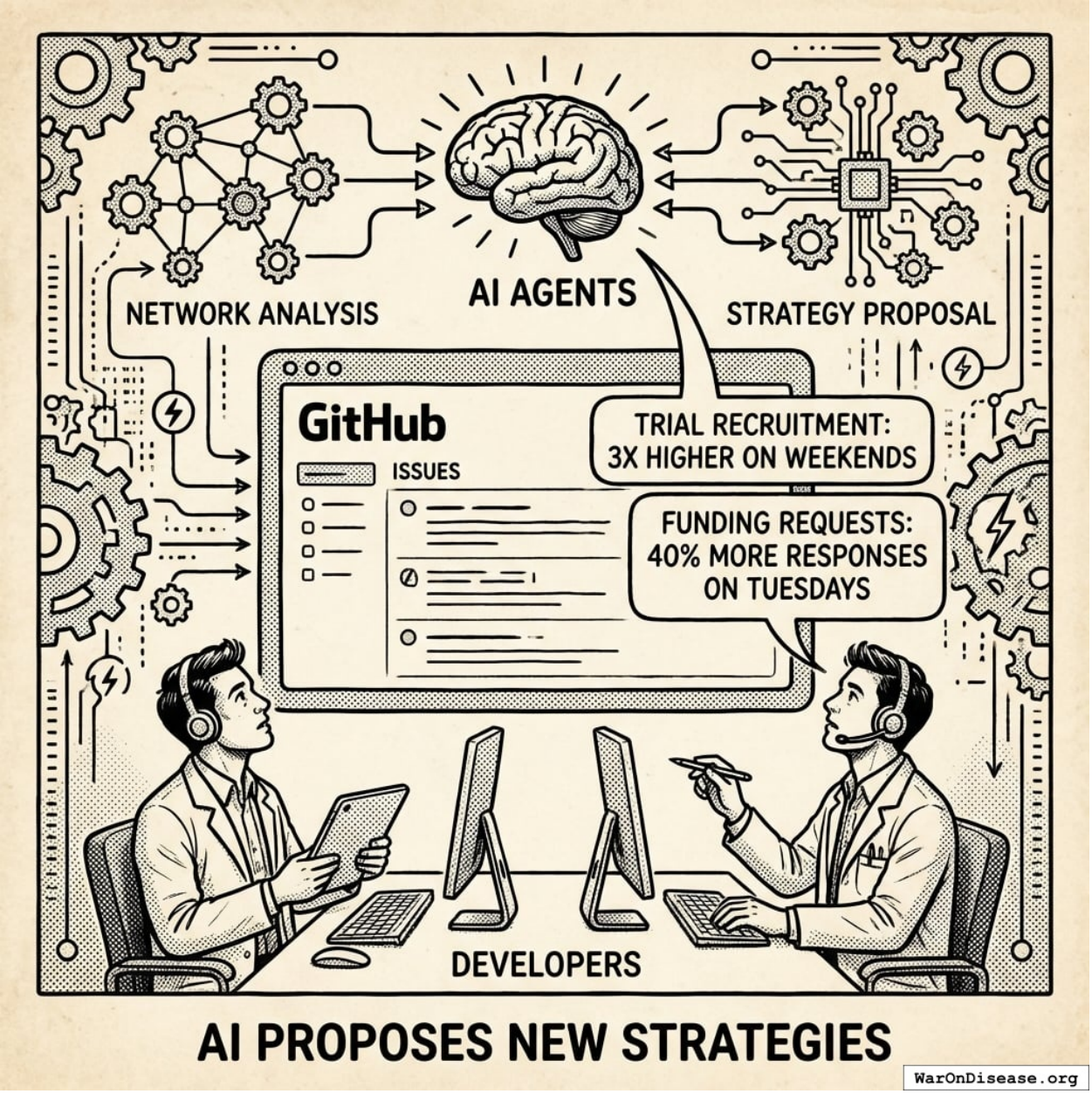


Figure 296: A flowchart showing AI agents analyzing network data to generate actionable insights delivered as GitHub issues to human developers.

You Decide

Actual humans review and approve strategic changes. You set direction based on values and context the AI doesn't understand (like "we don't spam people" or "that approach is technically effective but ethically questionable"). AI suggests. Humans decide. This is the opposite of most organizations where humans

suggest and bureaucracy decides nothing will change.

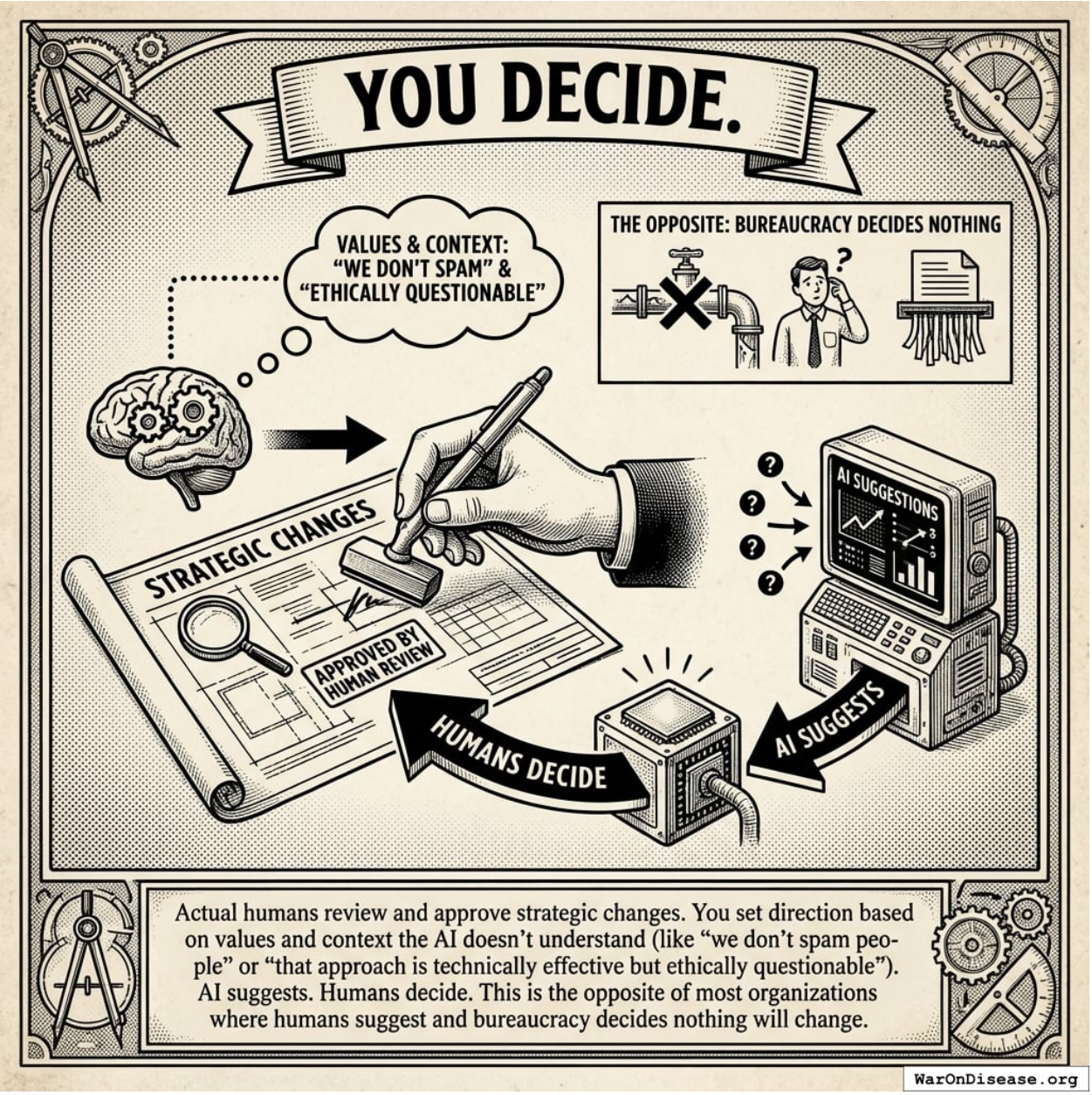


Figure 297: A comparison between the AI-human collaborative decision process and the traditional bureaucratic model.

AI Implements

Once approved, "Builder Agents" update the coordination infrastructure, writing code, updating agent instructions, submitting improvements as pull requests. They do the grunt work of implementation so humans don't have to spend their weekends debugging Python.

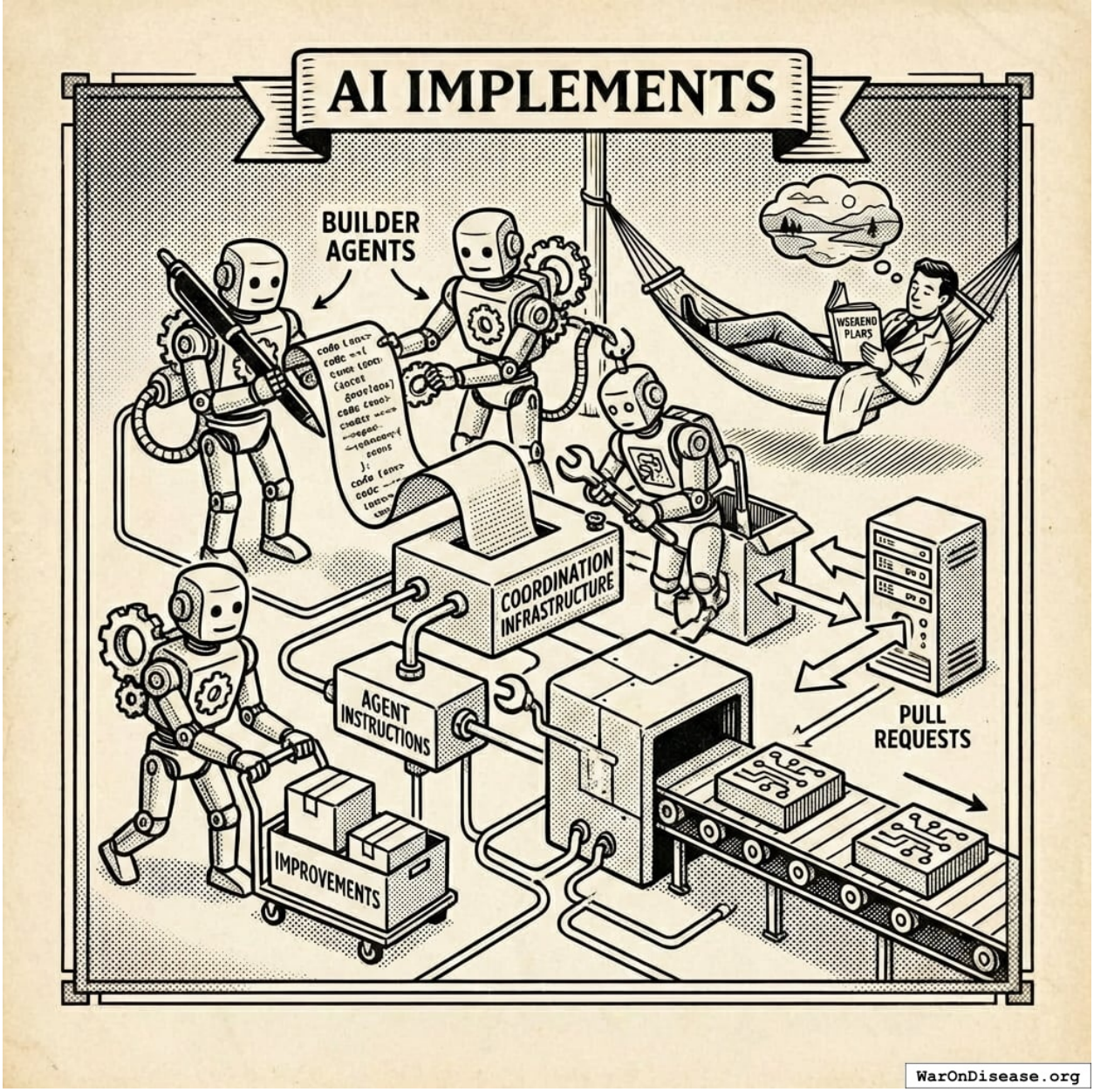


Figure 298: A workflow diagram showing Builder Agents receiving approval and executing technical tasks like writing code, updating instructions, and submitting pull requests to automate implementation.

You Verify

You do final review to ensure changes align with the mission before they go live across the network. Think of it as peer review, except the peer is a robot and it actually happens instead of sitting in someone's inbox for 6 months.

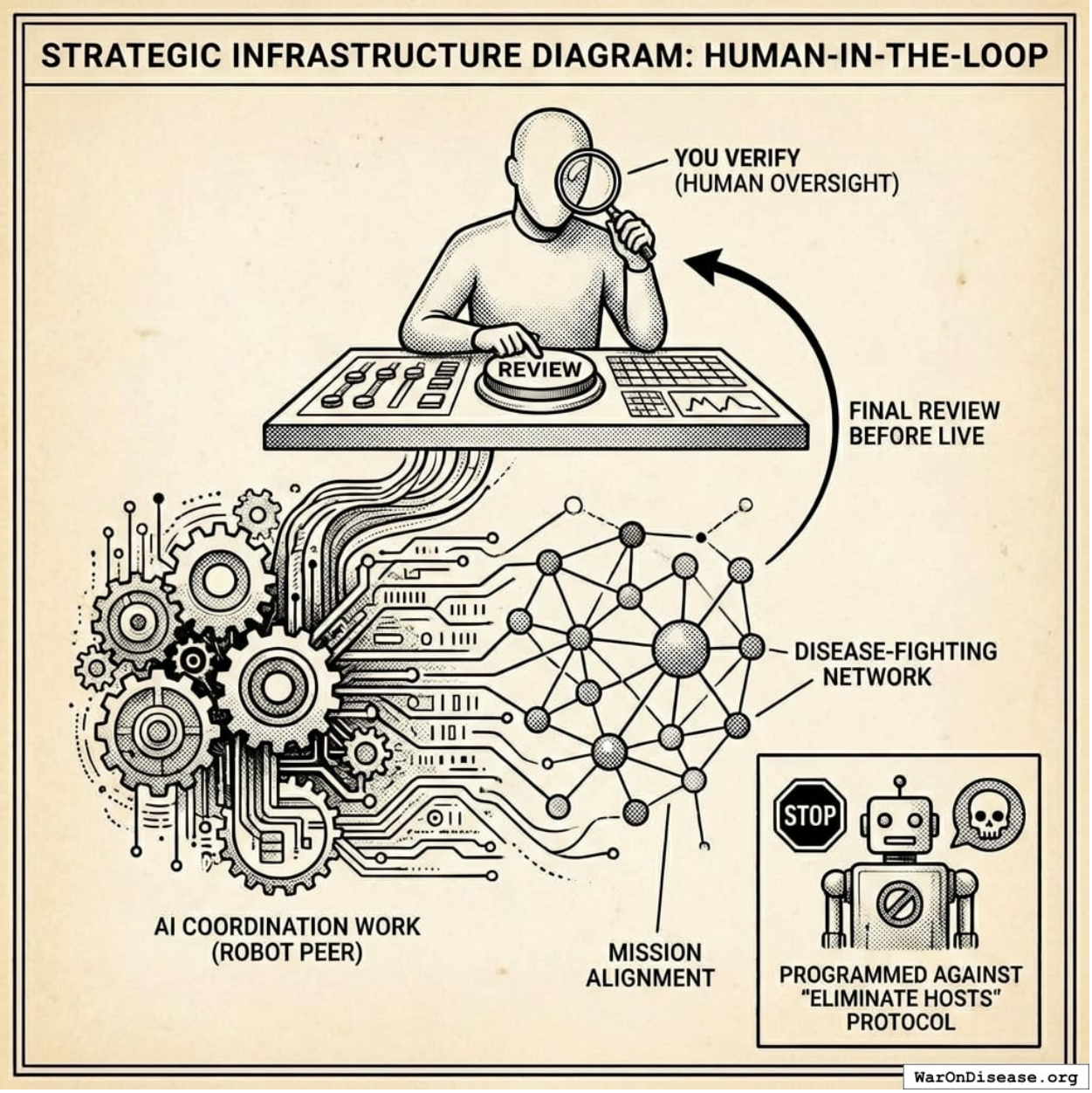


Figure 299: A conceptual diagram showing a human reviewer acting as a strategic checkpoint, filtering AI-driven coordination tasks before they are deployed to a global network.

This keeps you in strategic control while letting AI handle the coordination work humans can't scale. You're building infrastructure to coordinate millions of people fighting disease, not building Skynet (though the "kill all humans" approach would technically solve the disease problem by eliminating the hosts, so you specifically program against that).

How You Prevent Data Silos (The Tragedy of the Nonprofit Commons)

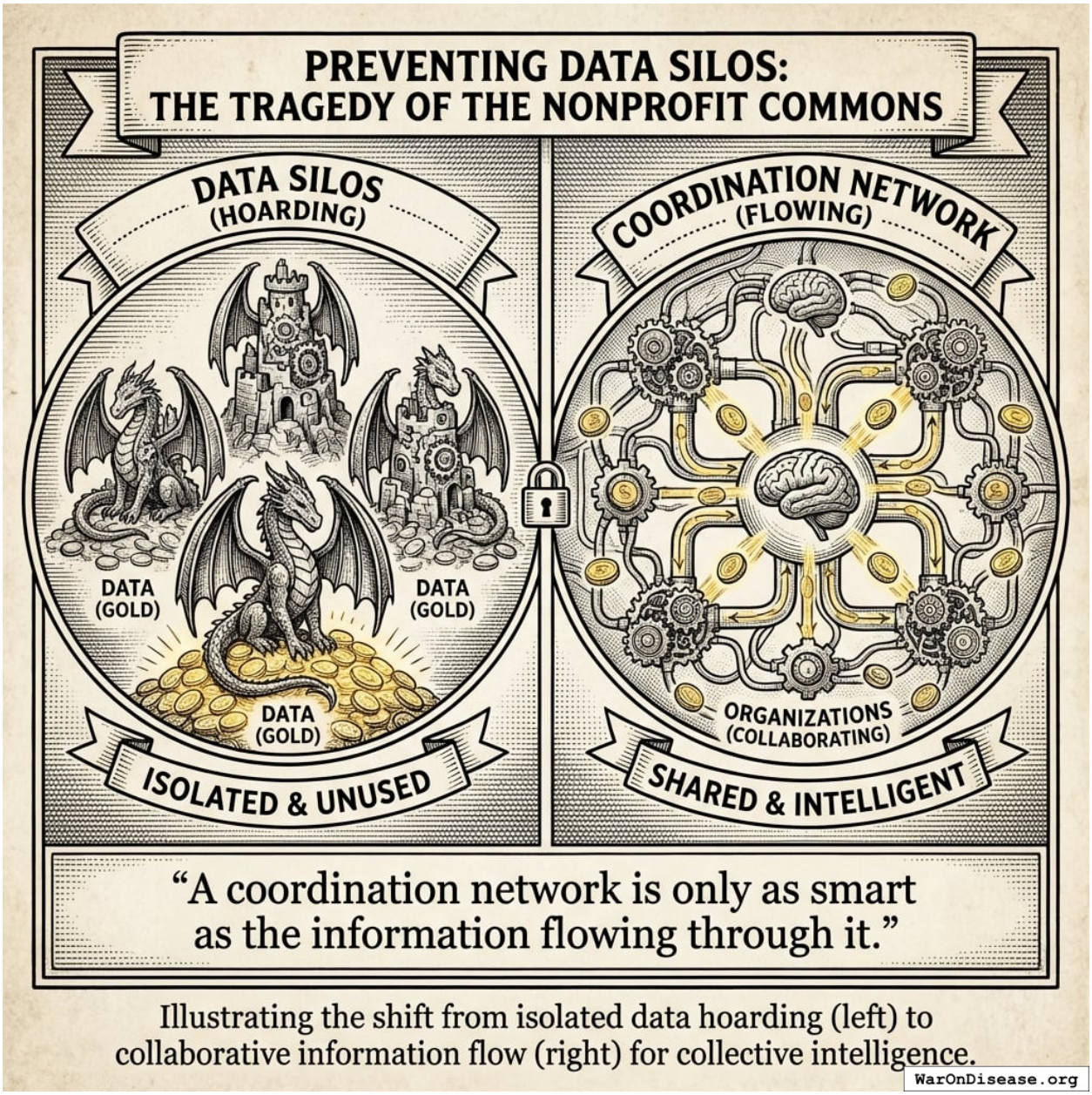


Figure 300: A conceptual diagram contrasting isolated data silos where information is hoarded with a shared coordination network where data flows freely between organizations.

A coordination network is only as smart as the information flowing through it. Here's how you prevent organizations from hoarding data like dragons sitting on gold they'll never use:

Rule 1 - Share to Play

To use the powerful shared coordination agents (funded by the collective), you agree to share your anonymized performance data back to the network. No sharing, no access to the network effects. It's the opposite of most

nonprofit collaborations where everyone wants the benefits but no one wants to contribute anything.

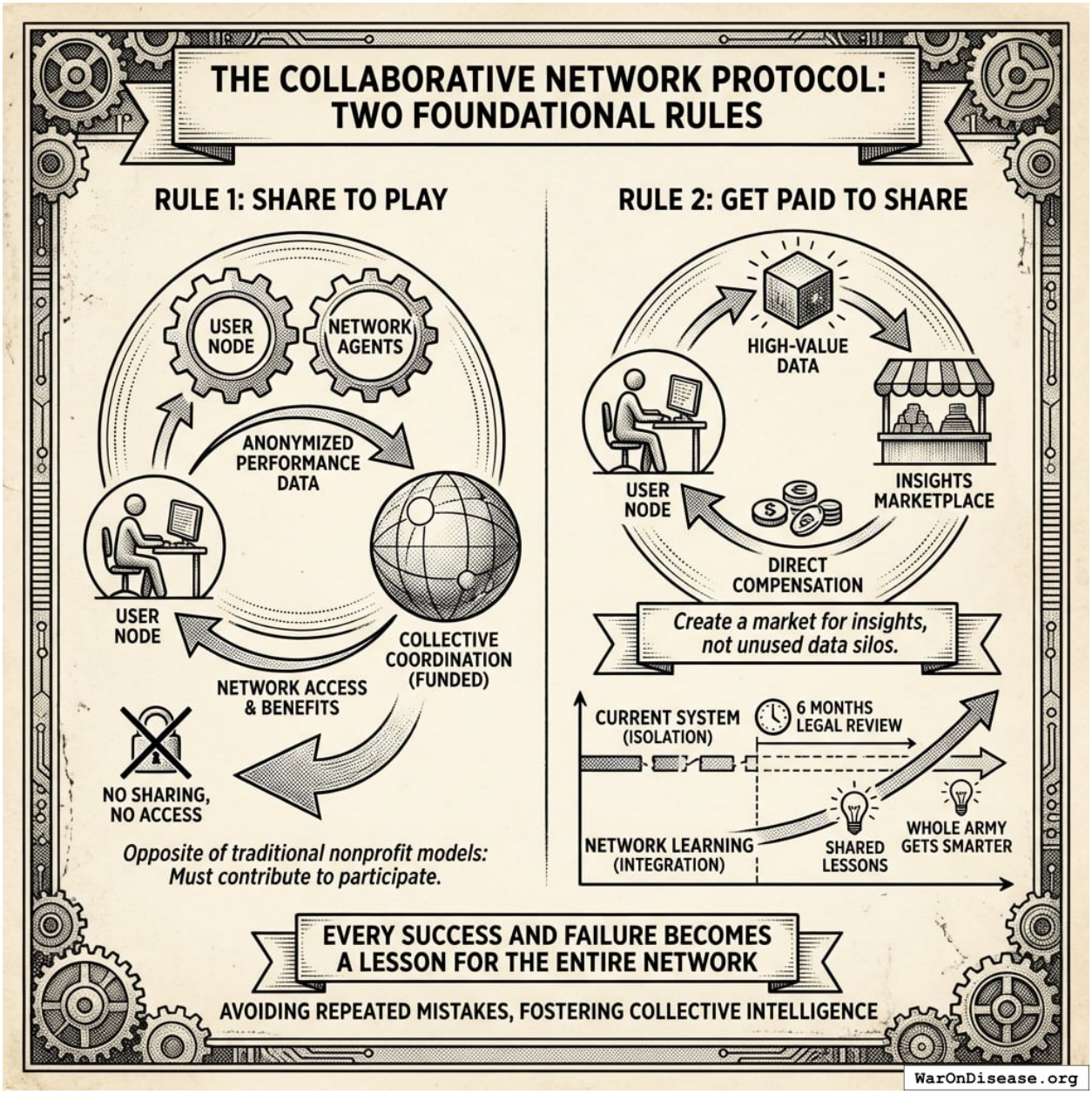


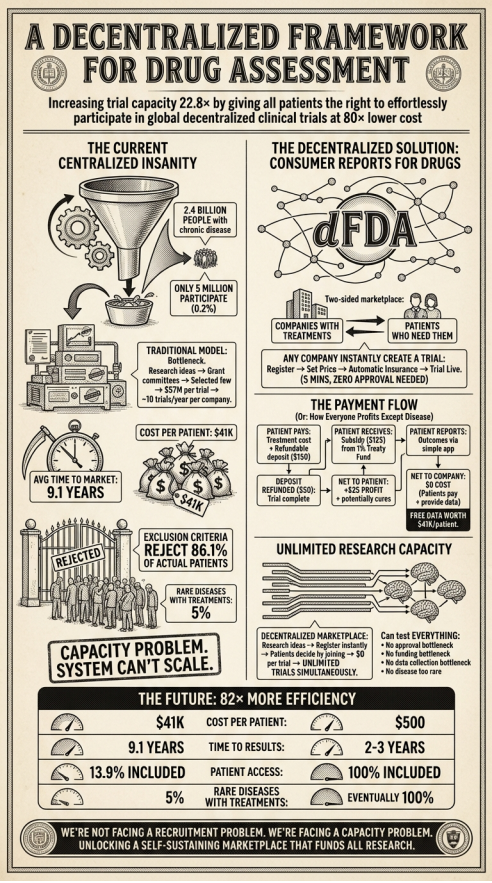
Figure 301: A conceptual diagram showing the feedback loop between individual nodes and the collective network, where data contributions are exchanged for AI agent access and financial compensation.

Rule 2 - Get Paid to Share:

For high-value data, the network directly compensates your node. You create an actual market for insights that benefits everyone, instead of the current system where valuable data sits unused in someone's database because sharing it would require 6 months of legal review and 14 signatures.

This ensures every success and failure becomes a lesson for the entire network. The whole army gets smarter over time, not just individual organizations repeating the same mistakes in isolation while pretending they're doing cutting-edge work.

A Decentralized Framework for Drug Assessment



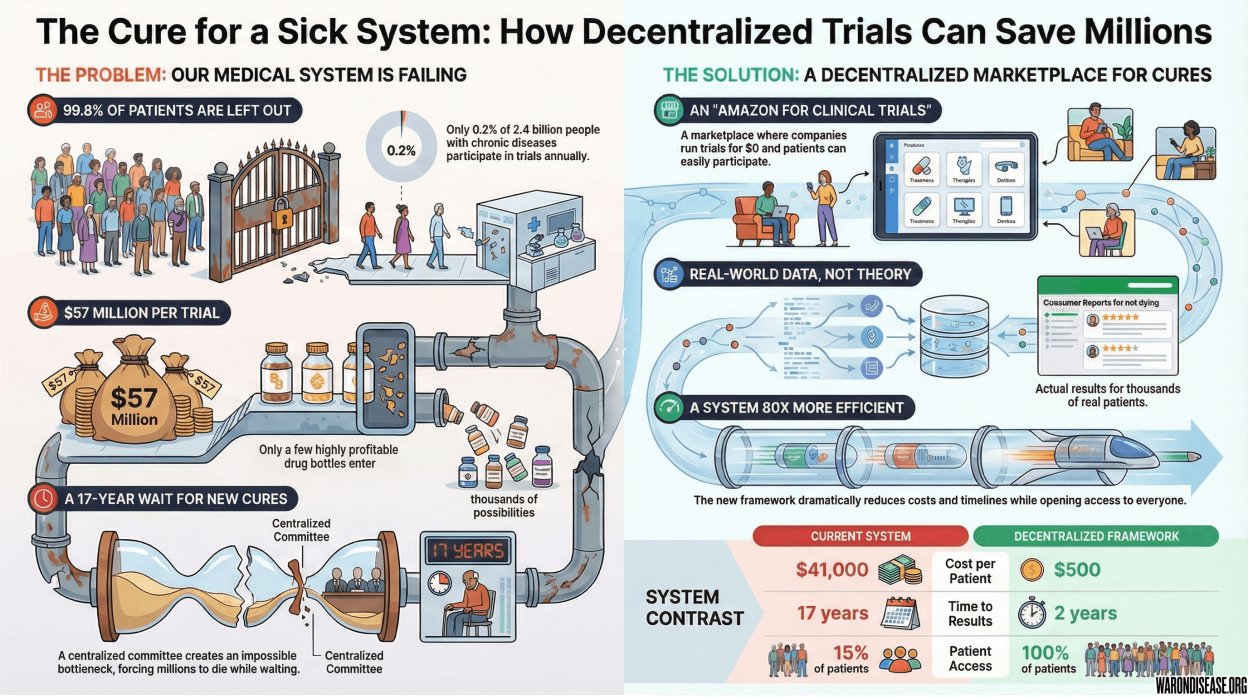


Figure 302: Decentralized Trials Save Millions



Out of 2.40B people (95% CI: 2.00B people-2.80B people) people with chronic disease, only 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) participate in trials annually. That's **0.06%**.

Half of humanity would volunteer[78] if they could. We have **240 times more willing participants** than we're using.

This isn't because people don't want to help find cures. It's because the current system can't scale. Trials

cost $41K (95% CI: $20K-$120K) per patient, require traveling to major medical centers, and have exclusion criteria that reject 86.1% of actual patients[2].

We're not facing a recruitment problem. We're facing a capacity problem.

The Solution: Consumer Reports for Drugs

Your decentralized framework for drug assessment (dFDA) is an **open coordination protocol** that enables existing platforms to connect companies with treatments to patients who need them. It's HTTP for clinical trials - a standard that lets all the existing systems talk to each other and share outcomes.

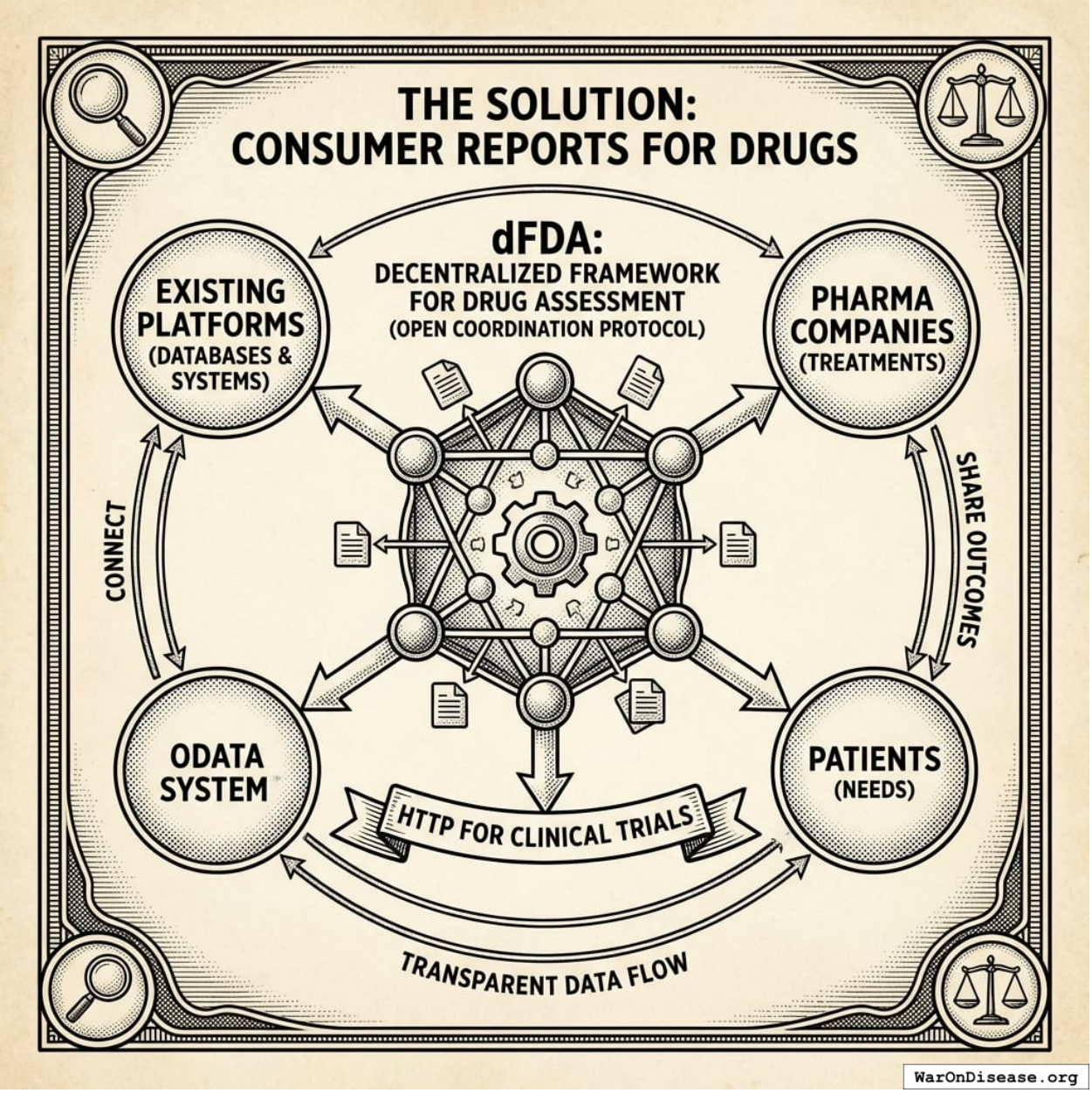


Figure 303: Architecture of the dFDA as a central coordination protocol connecting drug companies, patient platforms, treatments, and clinical outcomes.

How Companies Register Treatments (5 Minutes, Zero Approval Needed)

Any company - pharma, supplements, food, interventions - can instantly create a trial:

1. **Register treatment** on a public portal (name, ingredients, condition, price)
2. **Set treatment price** (what you charge patients - covers manufacturing + delivery)
3. **Get automatic liability insurance** (built into protocol governance)
4. **Trial goes live immediately** - appears in search results, ranked by existing data
5. **Patients join** based on rankings → You collect zero-cost data on whether it works

Net cost to company: $0

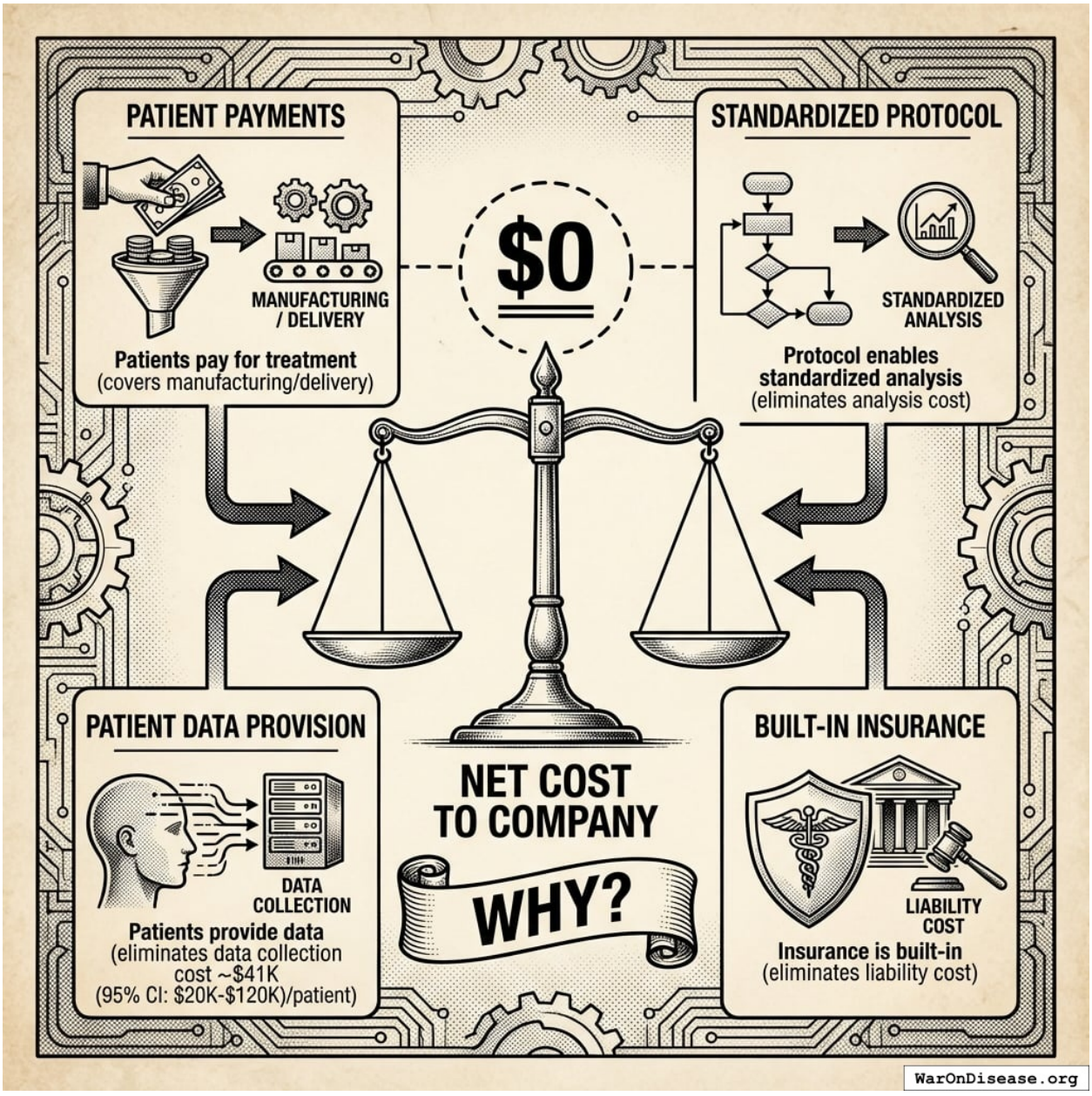


Figure 304: A breakdown of the zero-cost model showing how patient-funded treatment and data contributions offset traditional R and D, data collection, and liability expenses.

Why?

- Patients pay for treatment (covers manufacturing/delivery)
- Patients provide data (eliminates data collection cost ~$41K (95% CI: $20K-$120K)/patient)
- Protocol enables standardized analysis (eliminates analysis cost)
- Insurance is built-in (eliminates liability cost)

The Payment Flow (Or: How Everyone Profits Except Disease)

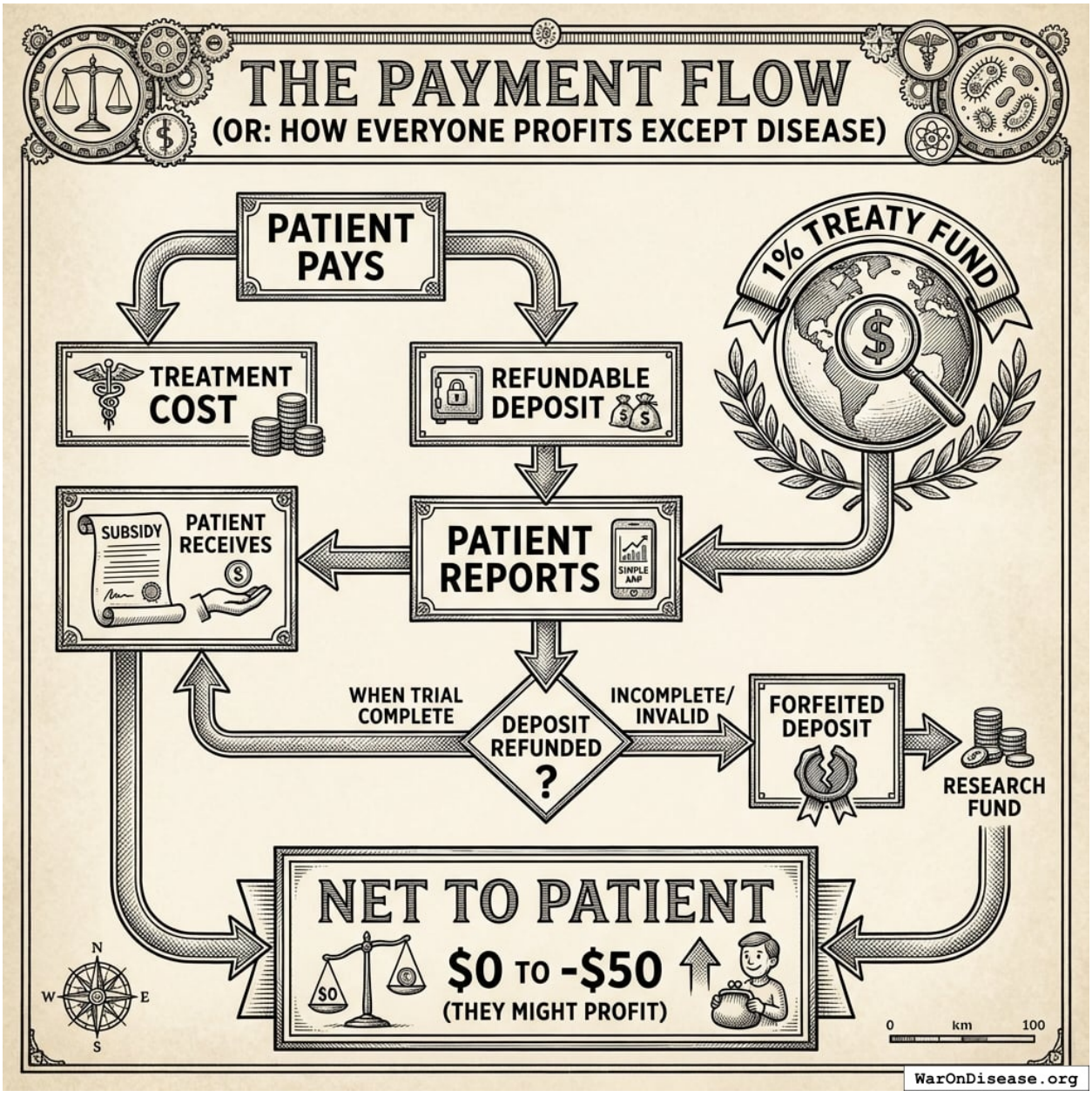


Figure 305: A flowchart illustrating the circular flow of payments, subsidies, and refunds between the patient and the Treaty Fund.

Patient pays: Treatment cost + Refundable deposit **Patient receives:** Subsidy (from a 1% Treaty Fund) **Patient reports:** Outcomes via simple app **Deposit refunded:** When trial complete **Net to patient:** $0

to -$50 (they might profit)

Example

- Patient joins trial for experimental migraine treatment ($100/month)
- Pays: $100 treatment + $50 deposit = $150
- Receives: $125 subsidy
- Out of pocket: $25
- Completes trial, reports outcomes
- Gets back: $50 deposit
- **Net: +$25 profit + potentially cures migraines**

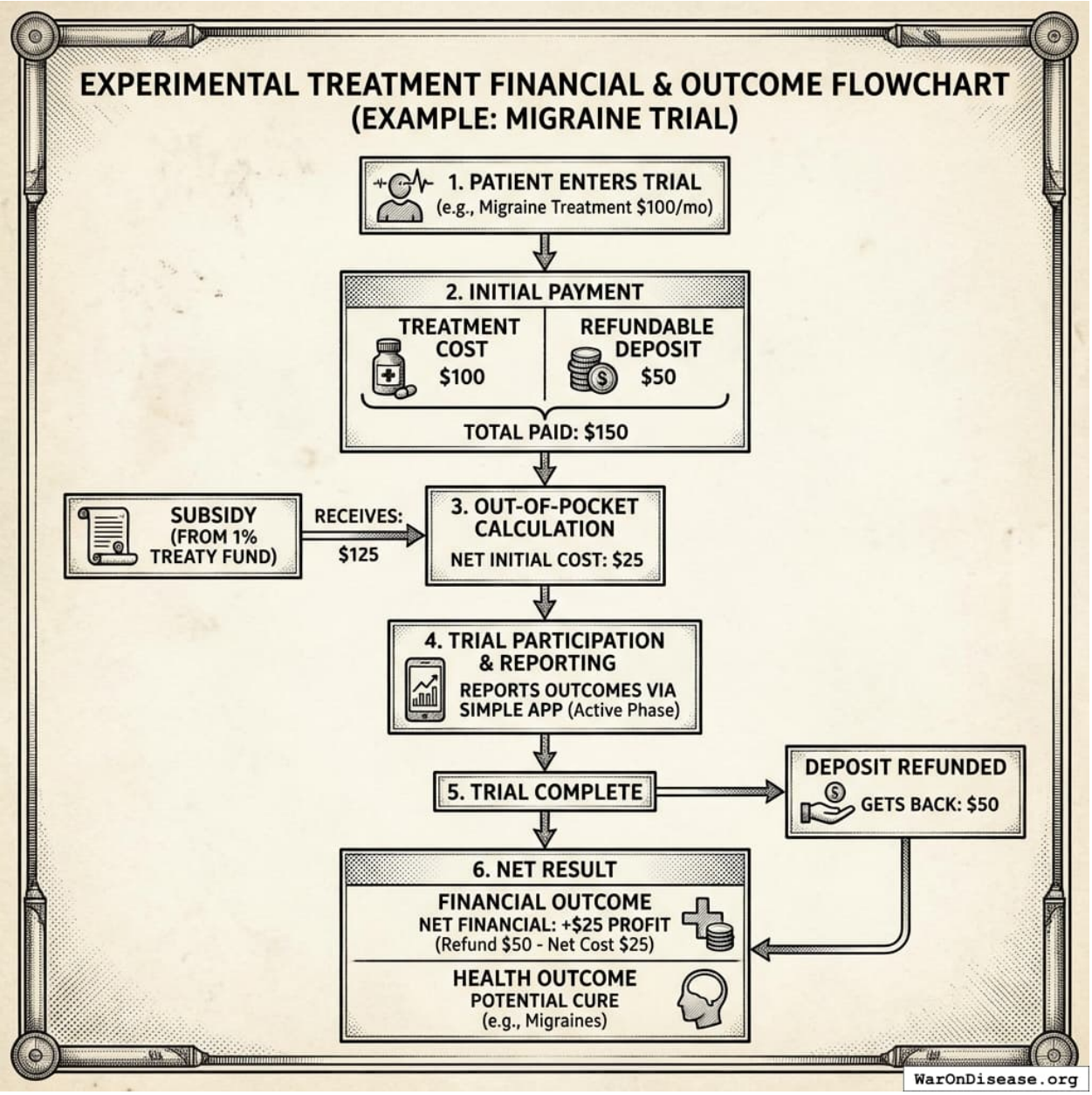


Figure 306: Flowchart illustrating the economic loop where patient subsidies and deposits incentivize participation while ensuring zero net cost to the patient and profit for the manufacturer.

Company receives

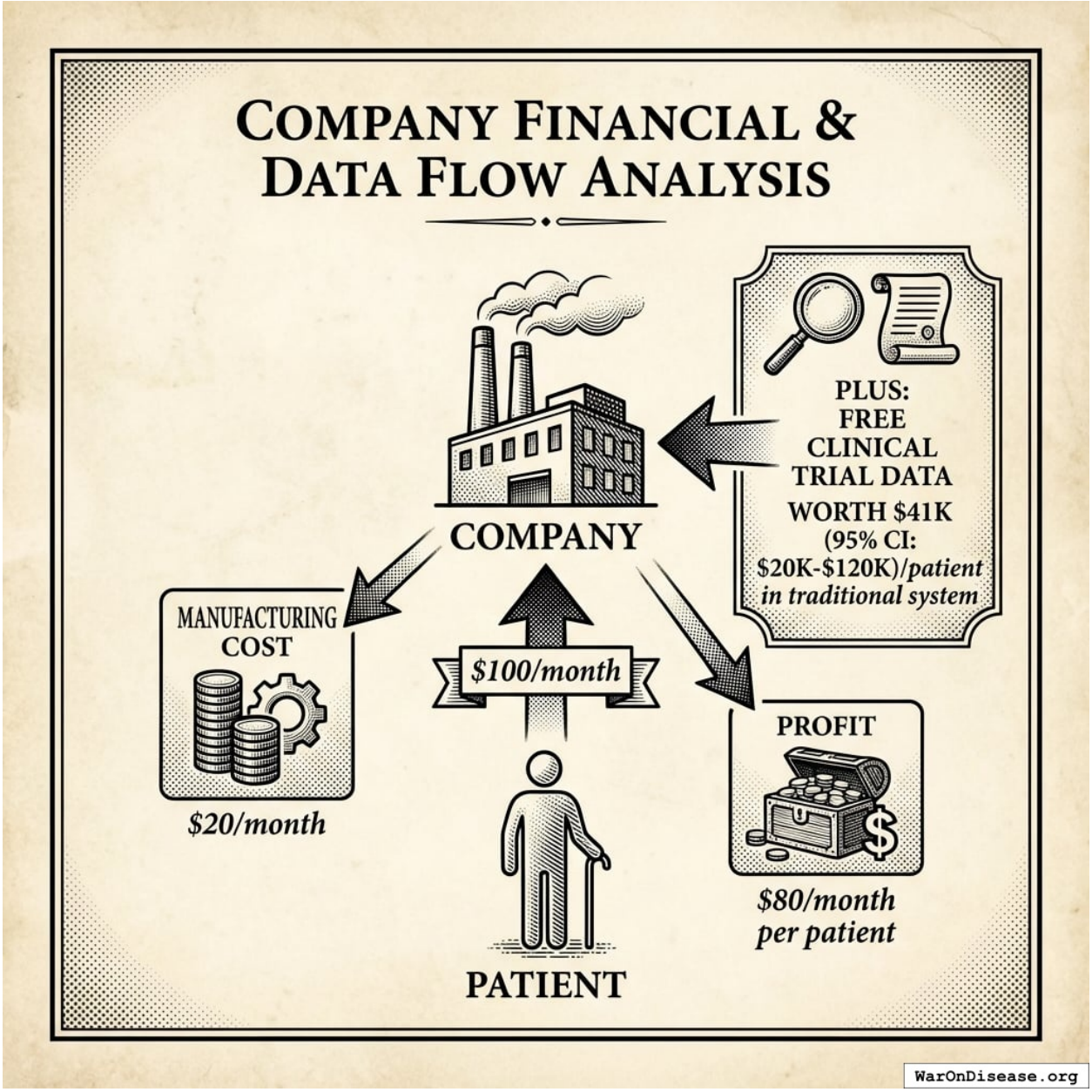


Figure 307: A visual breakdown of company gains per patient, illustrating the monthly cash profit alongside the significantly larger valuation of clinical trial data.

- $100/month from patient
- Manufacturing cost: $20/month
- Profit: $80/month per patient
- Plus: Free clinical trial data worth $41K (95% CI: $20K-$120K)/patient in traditional system

Why This Creates Unlimited Research Capacity

Traditional model (bottleneck)

```
Research ideas → Grant committees → Selected few → $57M per trial → ~10 trials/year per company
```

Decentralized protocol (unlimited):

```
Research ideas → Register instantly → Patients decide by joining → $0 per trial → Unlimited trials simul
```

This is why 95% of rare diseases have no treatments. Traditional funding can't afford to test everything. This decentralized protocol enables testing EVERYTHING because:

- No approval bottleneck (instant registration)
- No funding bottleneck (patients pay for treatment)
- No data collection bottleneck (patients provide data)
- No disease too rare (if 100 patients exist globally, trial can run profitably)

Traditional trial: Pharma spends $57M, tests most profitable drug only **Decentralized trial:** Pharma spends $0, tests everything including supplements, food, lifestyle, off-patent drugs

A 1% Treaty Fund doesn't fund pragmatic clinical trials directly. **It subsidizes participation, which unlocks a self-sustaining ecosystem that funds ALL research.**

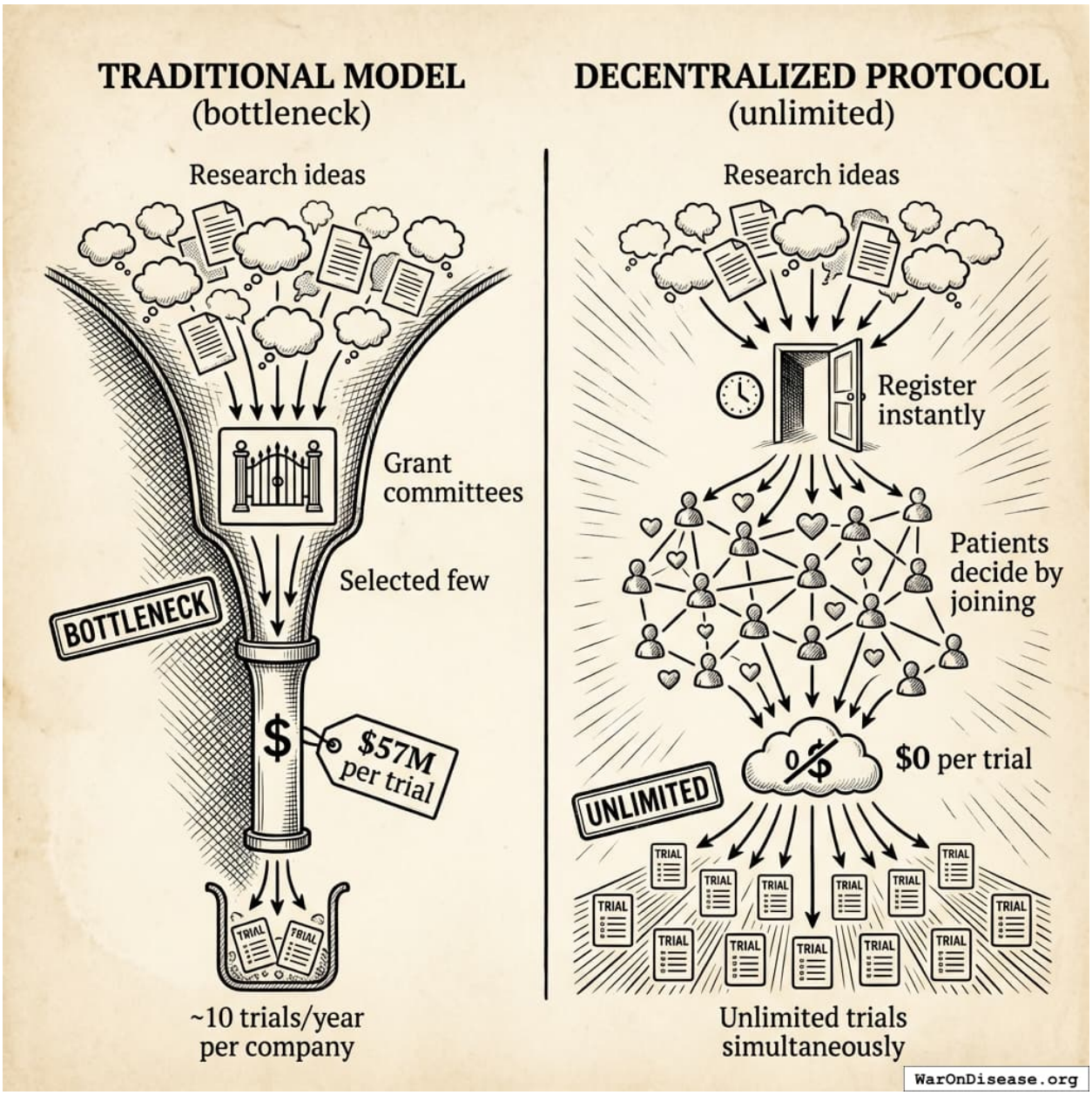


Figure 308: Comparison of the linear, bottlenecked traditional research model versus the parallel, unlimited capacity of the decentralized protocol.

How It Works: Just Let People Try Stuff (Carefully)

Here's a thought that apparently never occurred to anyone in Washington:

What if sick people could just… try treatments?

And then we could… write down what happens?

And then other sick people could… see what worked?

Your current system leaves 95% of rare diseases[96] with zero approved treatments and ensures 85% of patients are barred[255] from the trials that might save them. We've managed to perfect a system where only the

healthy and compliant are allowed to test cures for the sick and desperate. It's genius, in a suicidal sort of way.

This is because trials are designed to test drugs on people who don't actually exist. To get into a study for an antidepressant, for example, you can't have any other pesky problems like anxiety or PTSD. You can't have a history of drug or alcohol use. You can't be on other medications. You have to be the *perfect* kind of sick. The result? One investigation found that only 14.5% of real-world patients with depression would actually qualify. The rest of us are too messy for their pristine, clean data.

On top of excluding everyone with a pulse, these "definitive" studies are run on comically small groups. They'll test a new heart drug on 275 people, a cancer drug on just 20 people, and a diabetes drug on 100 people, then prescribe the winner to millions.

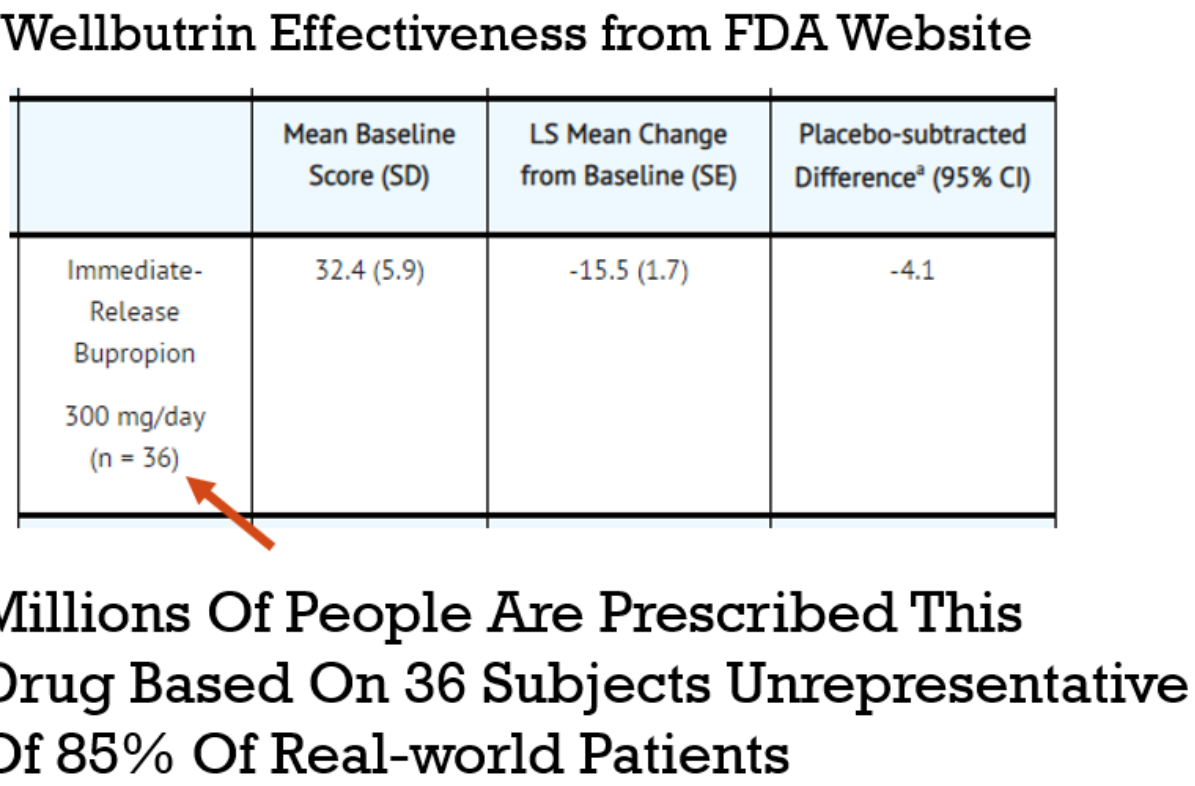


Figure 309: A chart showing a study for Wellbutrin where only 36 patients were in the final analysis, yet the drug is prescribed to millions.

We're basing the survival of our species on a sample size smaller than a kindergarten class. So, instead of studying these mythical, perfectly sick unicorns, what if we just collected data from everyone who's *actually* sick?

The Power of Real-World Evidence (Or: Spying on Sick People for a Good Cause)

This framework is built on a simple, powerful, and slightly creepy idea: we can learn more, faster, by analyzing data from real patients in the real world. This is called Real-World Evidence (RWE), which is a fancy term for "watching what happens."

Skeptics will say, "But that's just observational research! Correlation isn't causation!" They'll point to flip-flopping diet advice about eggs and cholesterol as proof that this is all voodoo.

They're not wrong about the old way. Old observational studies were flawed because they couldn't easily separate correlation from causation. Did the people who ate eggs also smoke three packs a day? The studies couldn't always tell.

But here's what's changed: we now have so much data and such powerful computers that we can overcome these problems. With modern data from wearables, apps, and electronic health records, a single person can become their own control group. We can track someone's arthritis pain for a month, have them take Turmeric for a month, then stop, then start again. By doing this, we can see if the Turmeric is actually doing something or if it's just a coincidence.

Modern statistical methods are so good that a meta-analysis in the New England Journal of Medicine found that the results from high-quality observational studies are generally the same as those from expensive, slow randomized controlled trials.

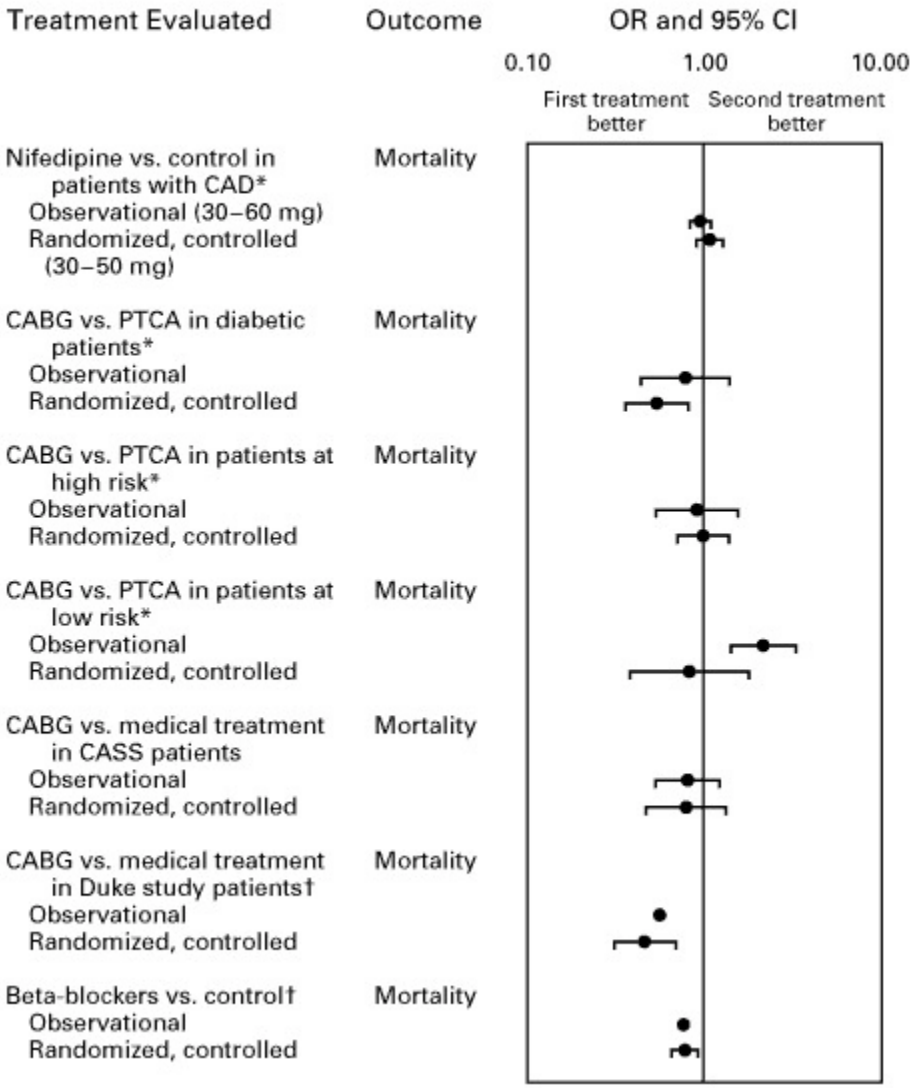


Figure 310: A chart comparing effect sizes from observational studies and randomized trials for mortality.

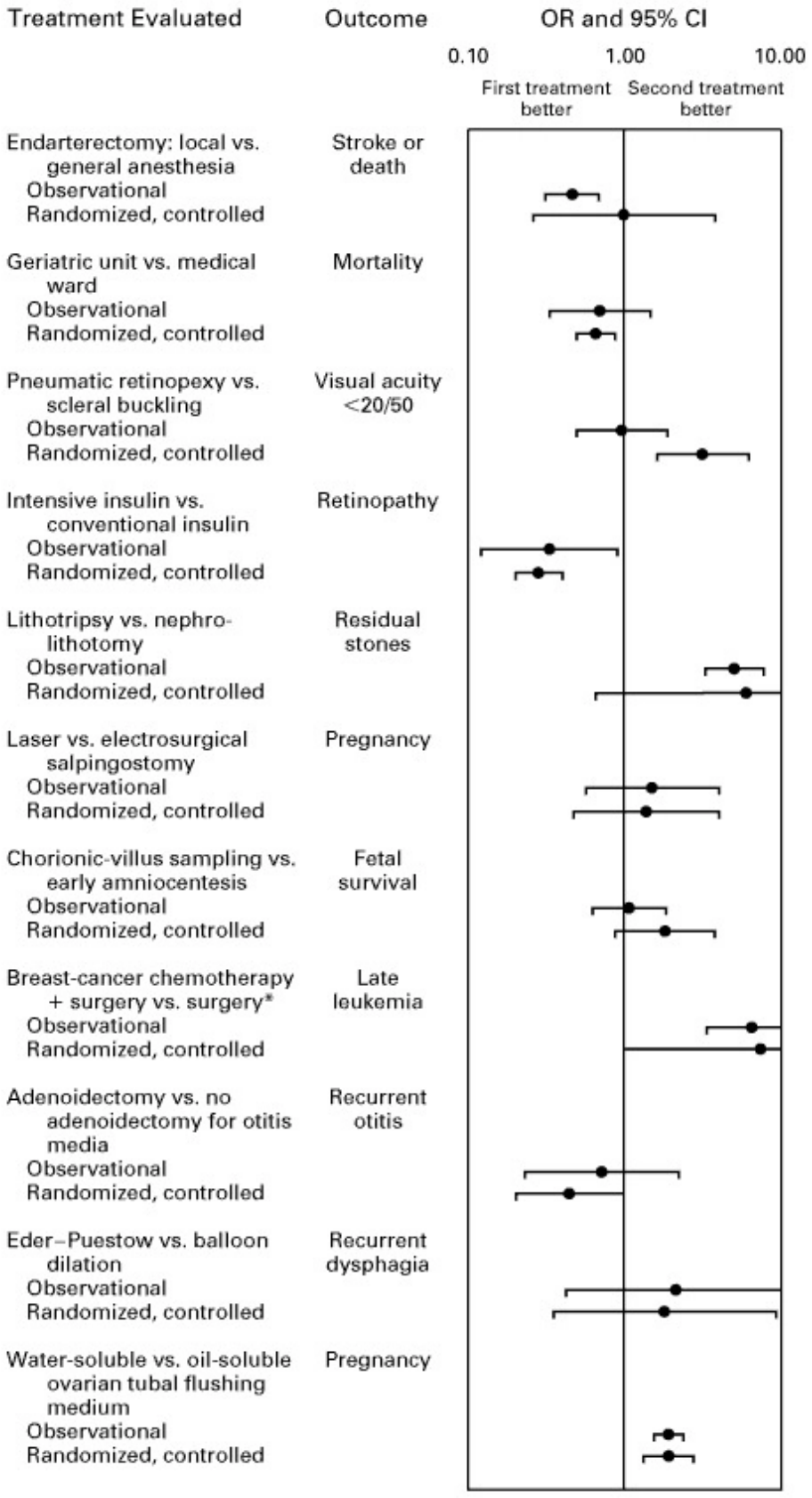


Figure 311: A chart comparing effect sizes from observational studies and randomized trials for various outcomes.

We have the tools to get reliable answers from real-world data. We just have to actually use them.

Introducing FDA.gov 2.0: Now With 80% Less Death

The protocol upgrades FDA.gov from a digital cemetery to something useful. Cost: Less than one fighter jet that doesn't work.

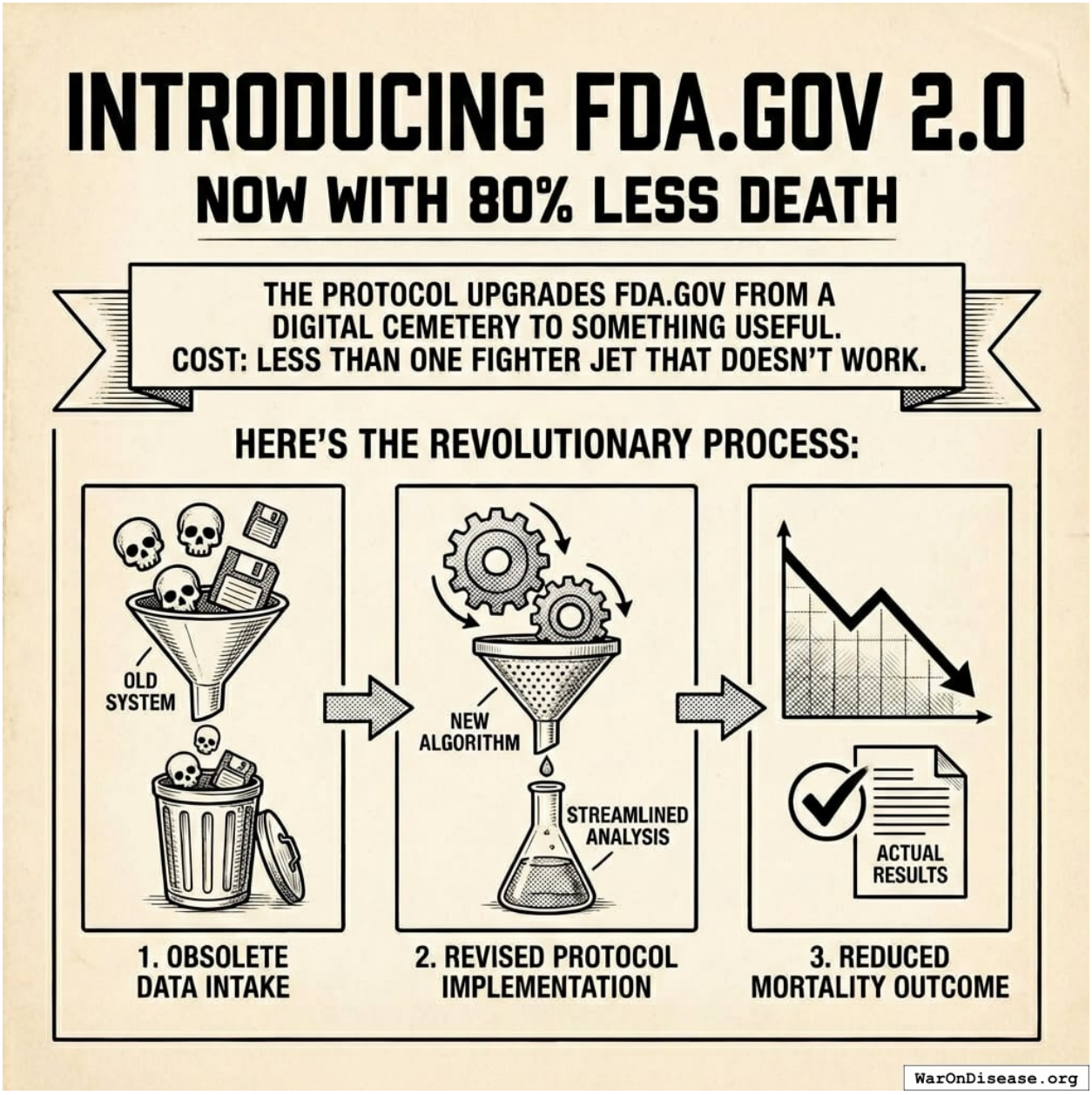


Figure 312: A conceptual comparison between the legacy FDA.gov 'digital cemetery' and the 2.0 upgrade, illustrating the 80 percent reduction in mortality and the cost-benefit analysis against a fighter jet.

Here's the revolutionary process:

Step 1: Type in What's Killing You

Revolutionary feature: A search box. The FDA's current website doesn't have this because they assume you've already died.

Step 2: See What Actually Works (Based on Reality, Not Theory)

Instead of "This drug is approved for exactly this condition in exactly these patients on exactly Tuesdays," you get:

"Here's what happened to 50,000 people who tried this:

- 40% got much better
- 30% got somewhat better
- 20% no change
- 10% grew a third nipple (but a useful one)"

It's like Consumer Reports, but for not dying.

Treatment Rankings: Every Option, Ranked by Reality

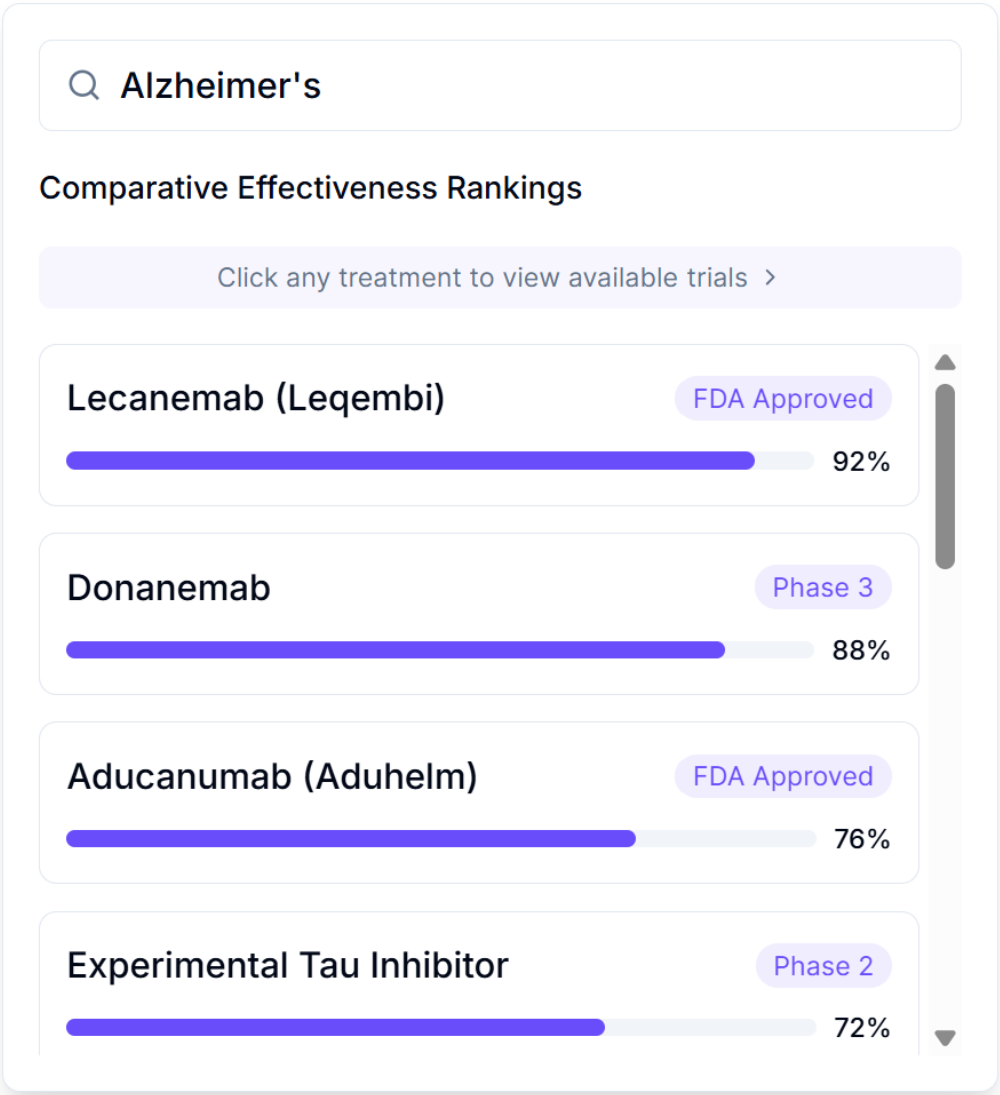


Figure 313: Treatment Rankings Example

Search any condition and see every treatment ranked by real-world effectiveness:

- **FDA Approved treatments** with effectiveness scores from actual patients
- **Phase 3 and Phase 2 trials** you can join right now
- **Experimental options** with preliminary data
- One-click access to join available trials

No more guessing which treatment your doctor half-remembers from a conference. Just clear rankings based on what actually worked for people like you. The current system never publishes negative results, so we waste billions repeating the same failed ideas. This ends that particular brand of expensive stupidity.

Step 2.5: See the Future (With Financially-Backed Predictions)

To complement the real-world data from past patients, the system will integrate a powerful forecasting tool: **live prediction markets**.

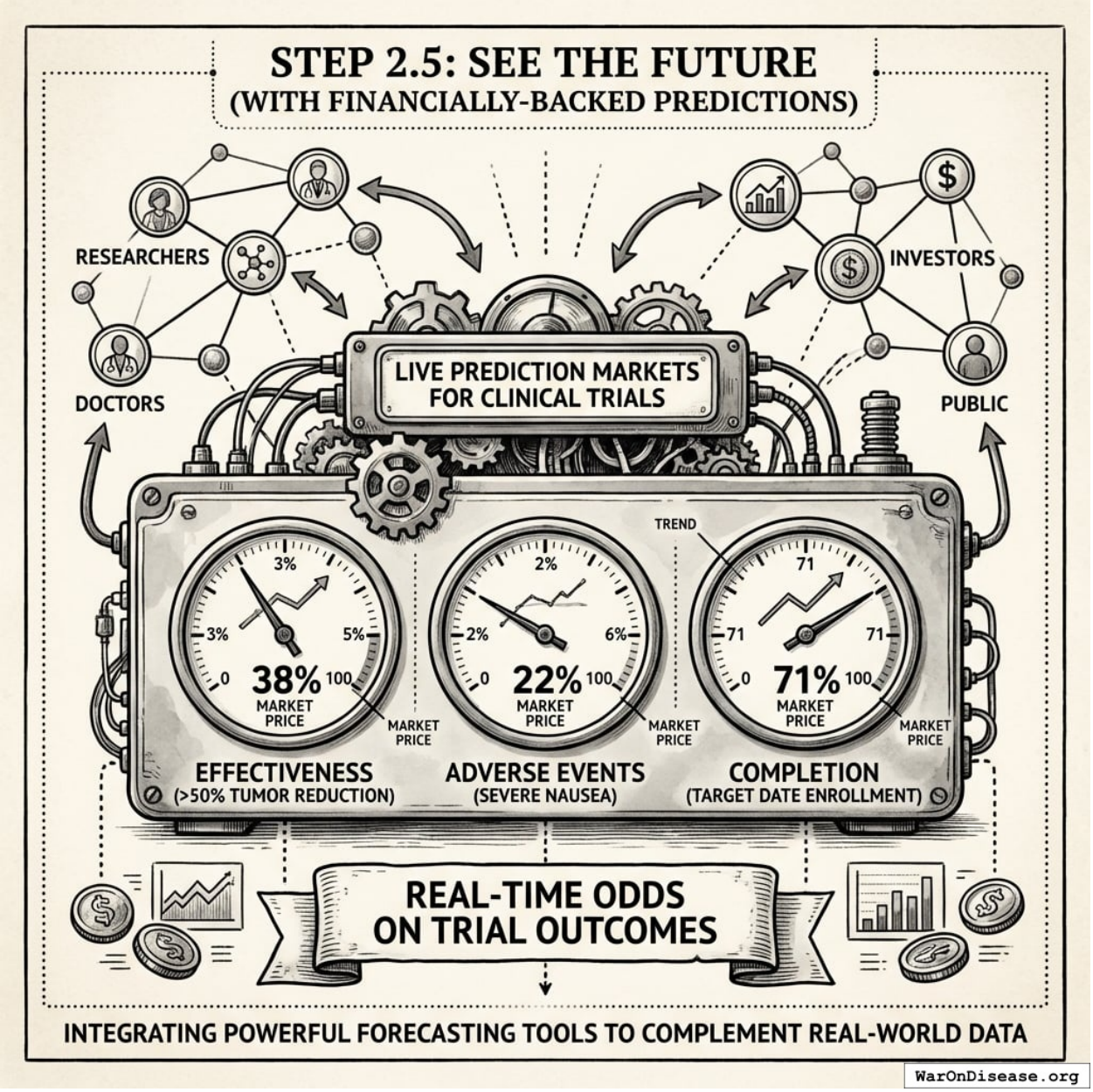


Figure 314: A dashboard visualization showing how diverse market participants contribute to real-time probability percentages for clinical trial outcomes.

This isn't just polling experts; it's a marketplace where researchers, doctors, investors, and even the public can bet real money on a trial's future outcomes.

For any given trial, you'll see real-time odds on questions like:

- **Effectiveness**: "What are the chances this treatment will reduce tumor size by >50% in the next 6 months?" **Market Price: 38%**
- **Adverse Events**: "What is the probability of patients experiencing severe nausea?" **Market Price: 22%**
- **Completion**: "What are the odds this trial will be fully enrolled by its target date?" **Market Price: 71%**

Why Trust This?

1. **Skin in the Game**: These aren't cheap-talk opinions. Bettors lose money if they're wrong, creating a powerful incentive for accuracy.
2. **The Ultimate Fact-Checker**: Your decentralized institutes of health (DIH) network automatically resolves these bets using the actual, aggregated, and anonymized patient data collected through the dFDA protocol. If the market predicts a 22% rate of nausea, and the real-world data shows 40%, the market learns and adjusts, or bettors go broke.

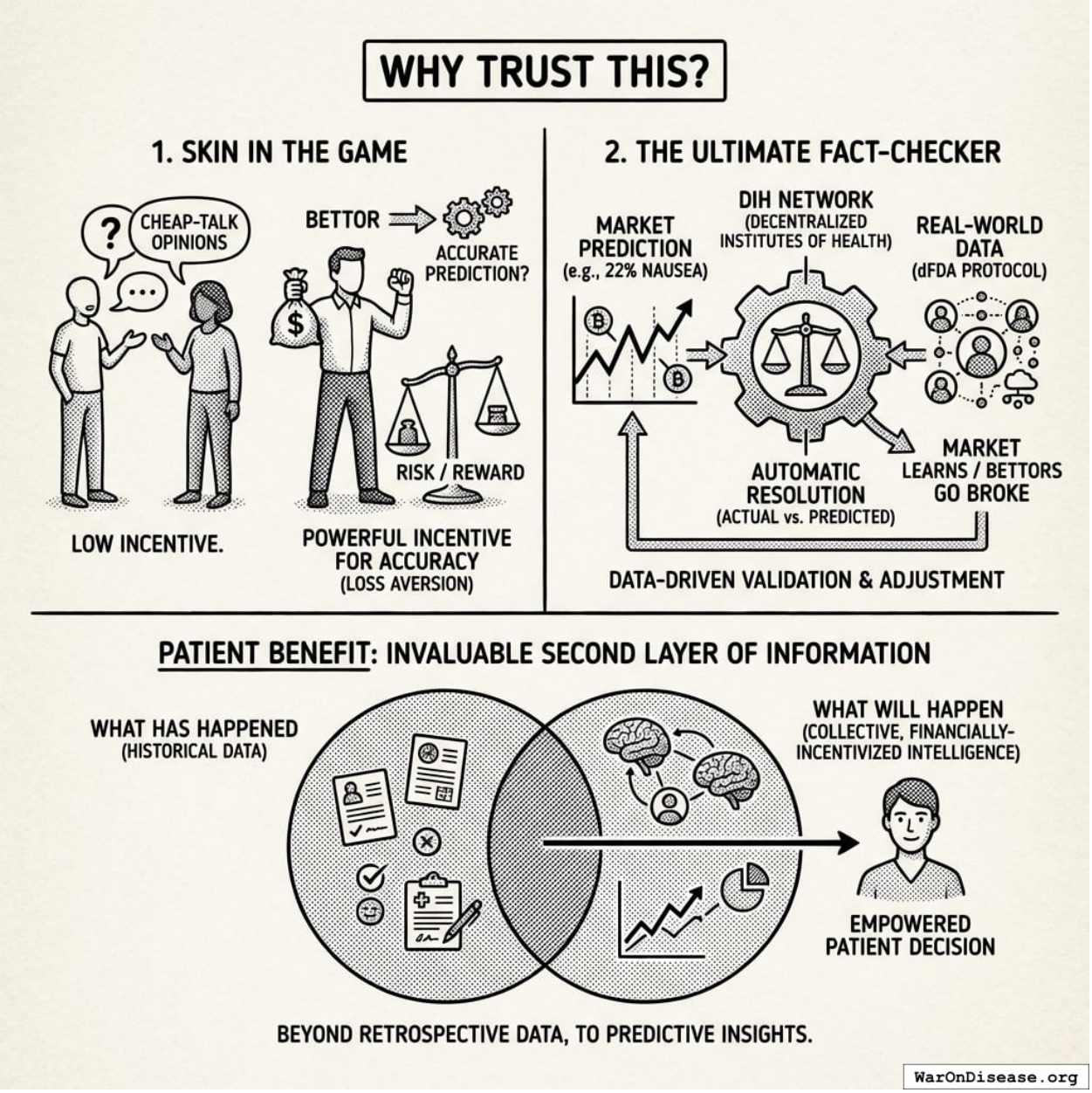


Figure 315: A feedback loop showing how market predictions are validated against real-world dFDA patient data to resolve bets and improve the accuracy of health insights.

This gives patients an invaluable second layer of information: not just what *has happened*, but what the world's collective, financially-incentivized intelligence thinks *will happen*.

Step 3: Join a Trial from Your Couch (While Dying Comfortably)

Current system: Drive 500 miles to a university hospital, wait 6 months, get rejected for having the wrong kind of dying.

New system: Click button. Get pills. Report if you die.

Revolutionary!

Step 4: Get Drugs Delivered Like Pizza (But More Life-Saving)

Amazon can deliver a banana costume in 2 hours but experimental medications take 6 months and require seven forms of ID?

Your framework fixes that. Your pharmacy becomes a trial site. Your doctor becomes a researcher. Your dying becomes data.

Step 5: Publish Results

Current system: 500-page case report forms that ask questions like "Rate your suffering on a scale of mauve to burnt sienna."

New system:

- "Are you dead?" Yes/No
- "If no, how dead do you feel?" Slider bar
- "Any new body parts?" Check all that apply

Step 6: Everyone Benefits from Everyone's Suffering

Your data helps the next person. Their data helps you. It's socialism, but for not dying.

Every pill becomes a tiny experiment. Every patient becomes a scientist. Every outcome gets recorded.

It's what we should have been doing since we invented writing.

The Partnership Approach: Building Rails, Not Trains

Here's what we're NOT doing: building a government platform that competes with existing medical technology companies.

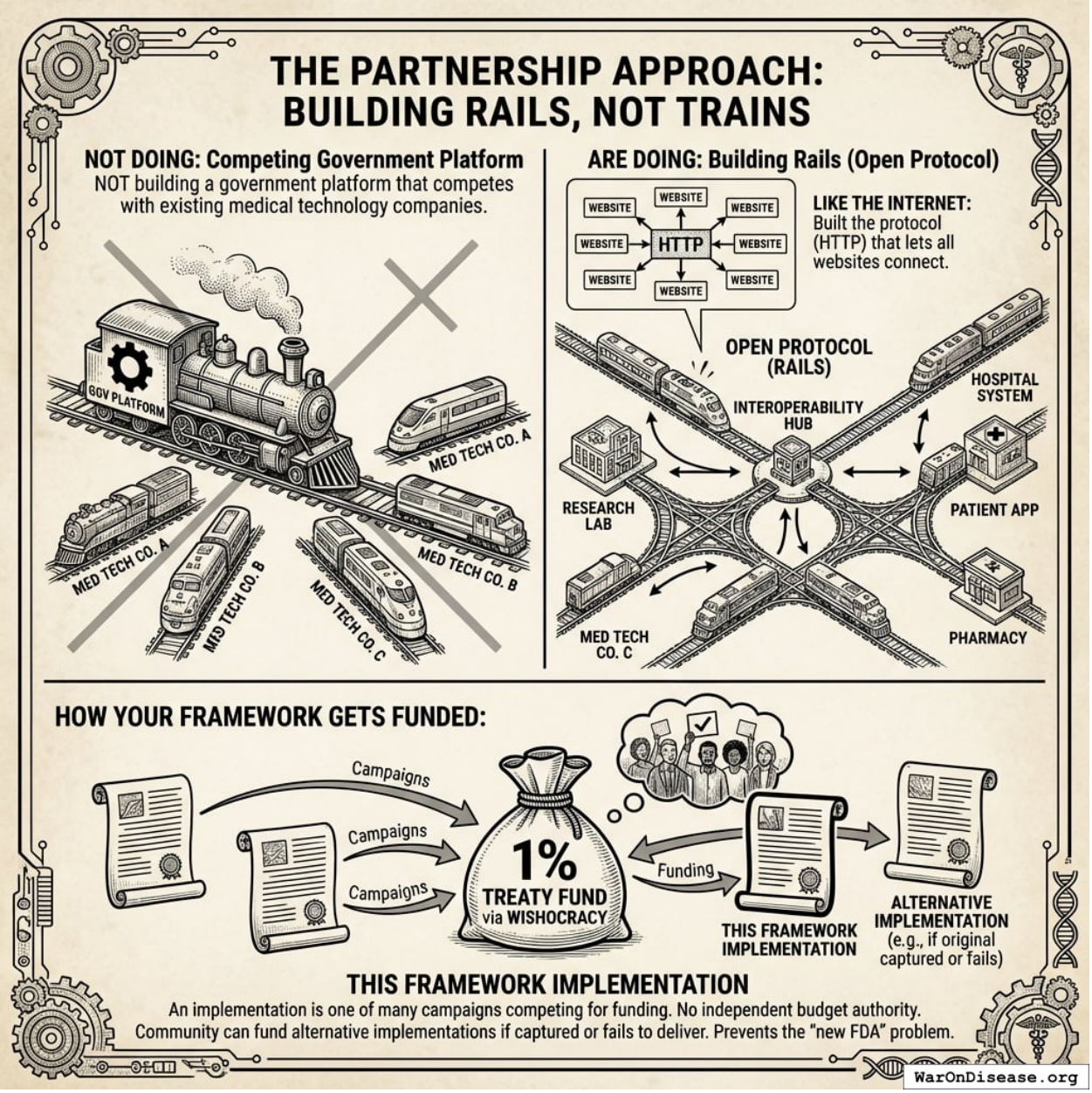


Figure 316: A conceptual diagram contrasting a centralized 'train' platform with an open 'rail' protocol that connects multiple existing medical technologies and allows for competing implementations.

Here's what we ARE doing: establishing an open protocol that lets all the existing platforms talk to each other.

Think of it like the internet. We didn't build one website that everyone has to use. We built HTTP - the protocol that lets all websites connect. Same idea.

How your framework gets funded: An implementation of this framework is one of many campaigns competing for funding from the 1% Treaty Fund via Wishocracy. It has no independent budget authority. If a particular implementation gets captured or fails to deliver, the community can fund alternative implementations instead. This prevents the "new FDA" problem.

The Players Already in the Game

Multiple companies have already built decentralized clinical trial platforms, collectively raising hundreds of millions in venture funding[256,257]. They're good at it. They have users. They have infrastructure.

Why compete with them? Partner instead.

The protocol provides:

- Open protocol for data exchange (like email protocols)
- Federated data network (data stays in Epic/Cerner/Apple Health systems)
- Treatment ranking algorithms (open source, anyone can verify)
- Trial matching services (connects patients to ANY platform)

Existing platforms provide:

- Patient-facing apps and interfaces
- Trial management tools
- Sponsor relationships
- Regional expertise

The Integration Consortium

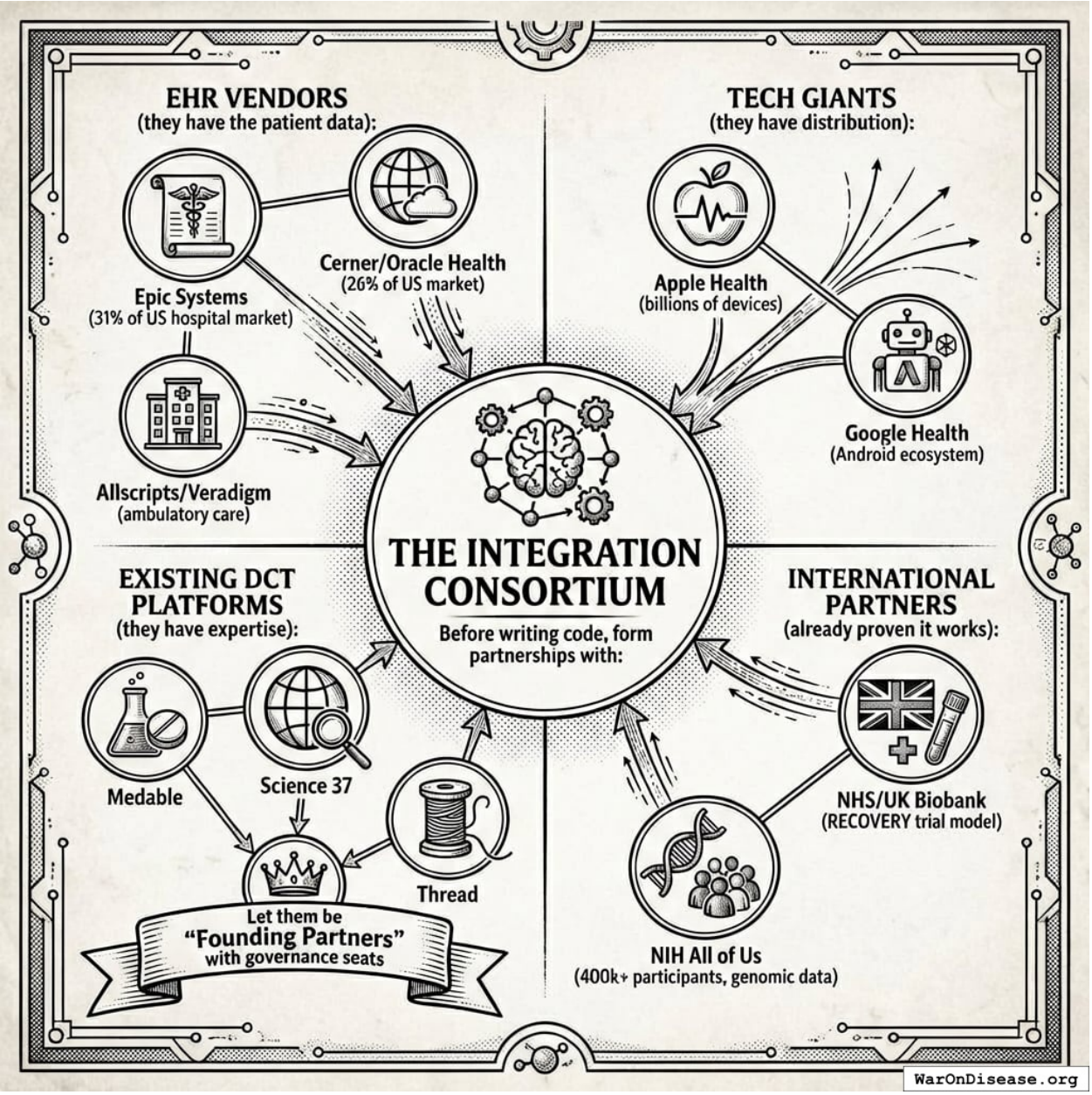


Figure 317: A stakeholder map illustrating the key categories of partners, EHR vendors, tech giants, DCT platforms, and international health organizations, that form the Integration Consortium.

Before writing code, form partnerships with:

EHR Vendors (they have the patient data):

- Major EHR vendors covering 80%+ of US hospitals
- Ambulatory care platforms

Tech Giants (they have distribution):

- Apple Health (billions of devices)

- Google Health (Android ecosystem)

Existing DCT Platforms (they have expertise):

- Existing decentralized trial platforms become "Founding Partners" with governance seats

International Partners (already proven it works):

- NHS/UK Biobank (RECOVERY trial model)
- NIH All of Us (400k+ participants, genomic data)

Why They'll Cooperate

For EHR vendors:

- Reduced certification fees if they enable data portability
- Public "seal of approval" for interoperability
- Patient pressure (people want their data to work for them)
- Eventually: regulatory requirement

For DCT platforms:

- "Founding Partner" status (branding/marketing value)
- Access to the $27.2B annual 1% Treaty Fund pool
- Governance representation
- Early access to protocol features
- Revenue sharing on trials they run

For pharma/CROs:

- 50-95% cost reduction per trial
- 240x more participants available
- Faster enrollment
- Better, more diverse data

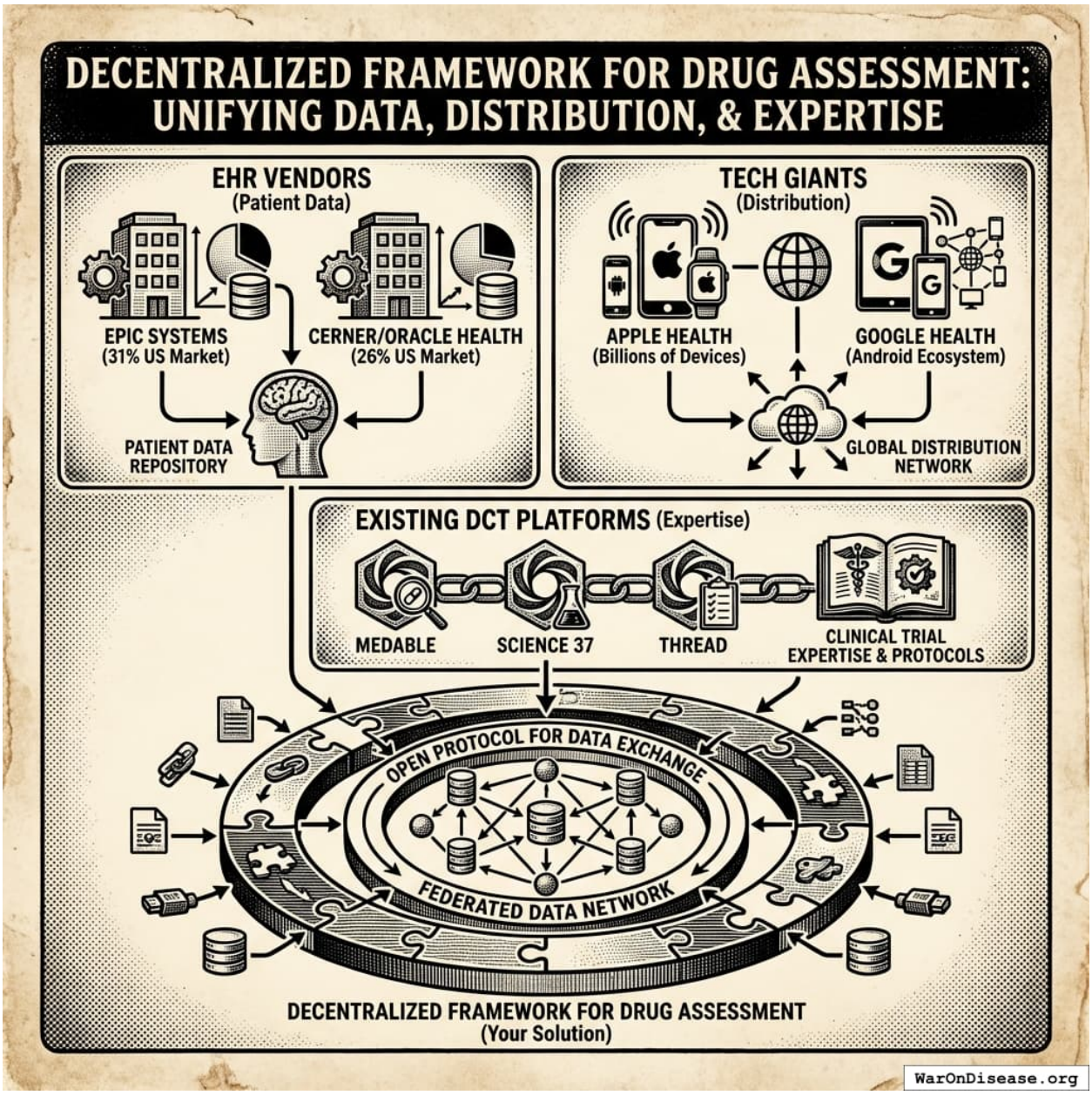


Figure 318: Ecosystem map showing how the decentralized framework acts as a protocol layer connecting existing EHRs, tech giants, and DCT platforms without creating a competing walled garden.

Federated, Not Centralized

Data doesn't move to a central database. It stays where it is:

- Epic systems keep their data
- Apple Health keeps its data
- Cerner keeps its data

Your framework's protocol just lets you run queries ACROSS systems without moving data. Federated data networks already do this with 300M+ patient records.

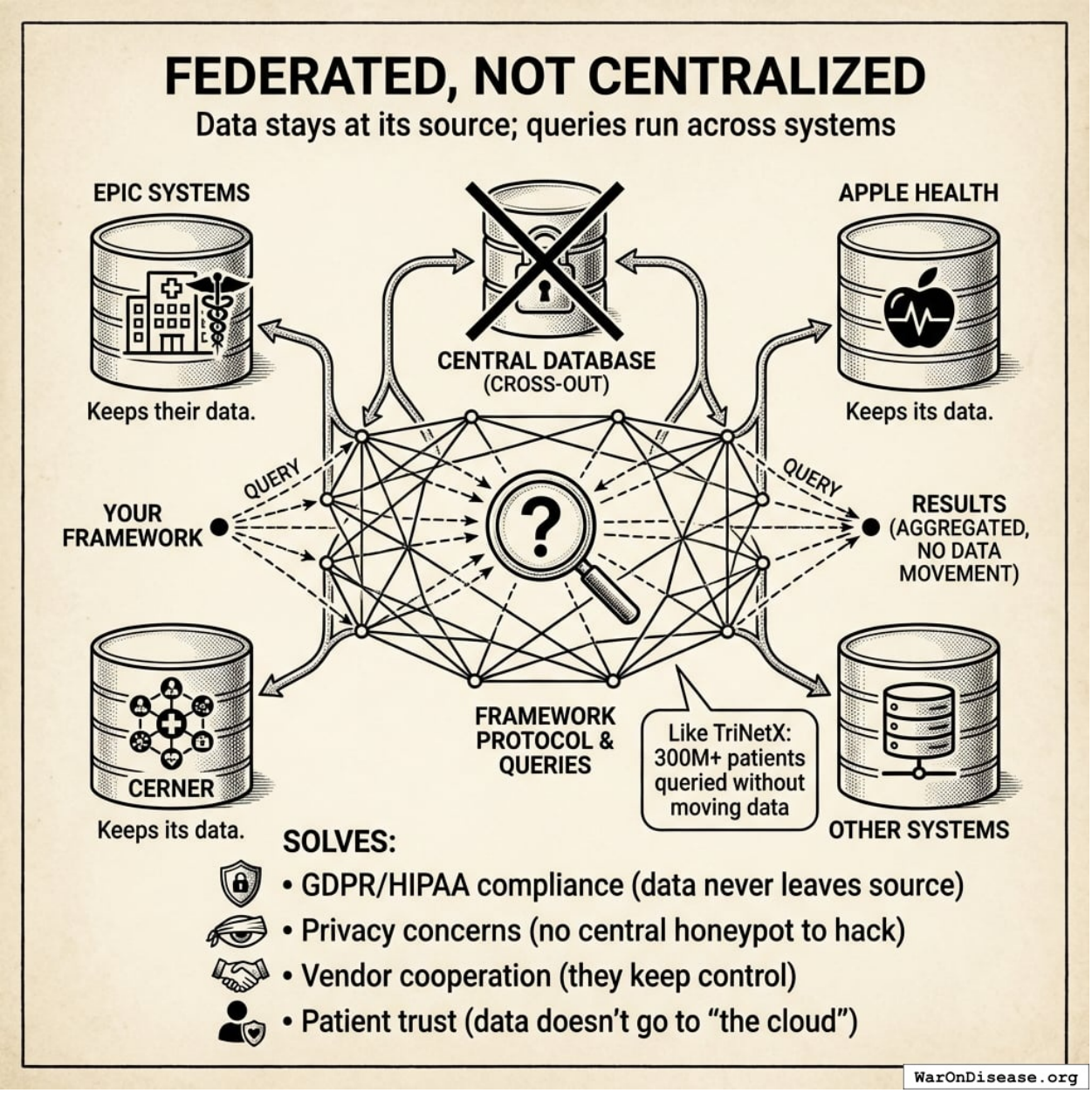


Figure 319: Architecture diagram contrasting centralized data storage with a federated model where queries are sent to independent data silos (Epic, Apple Health, Cerner) and aggregated without raw data transfer.

This solves:

- GDPR/HIPAA compliance (data never leaves source)
- Privacy concerns (no central honeypot to hack)
- Vendor cooperation (they keep control)
- Patient trust (data doesn't go to "the cloud")

The Money Shot: How to Save 95% on Not Killing People

Look at these incredible savings! It's like Black Friday, but for survival!

Problem to Fix	Current Insanity	New Reality	Money Saved	Lives Saved
Clinical Phase Timeline	**9.1 years (avg)**[192]	**2-3 years**	~7 years of waiting eliminated	~50,000/year[191]
Cost per trial	**$57 million**[258]	**$2 million**	$55 million	Infinite ROI
Who can participate	**13.9% of patients**[2]	**100% of patients**	86.1% inclusion rate	Everyone
Rare diseases with treatments	**5%**[96]	**Eventually 100%**	Priceless	Millions

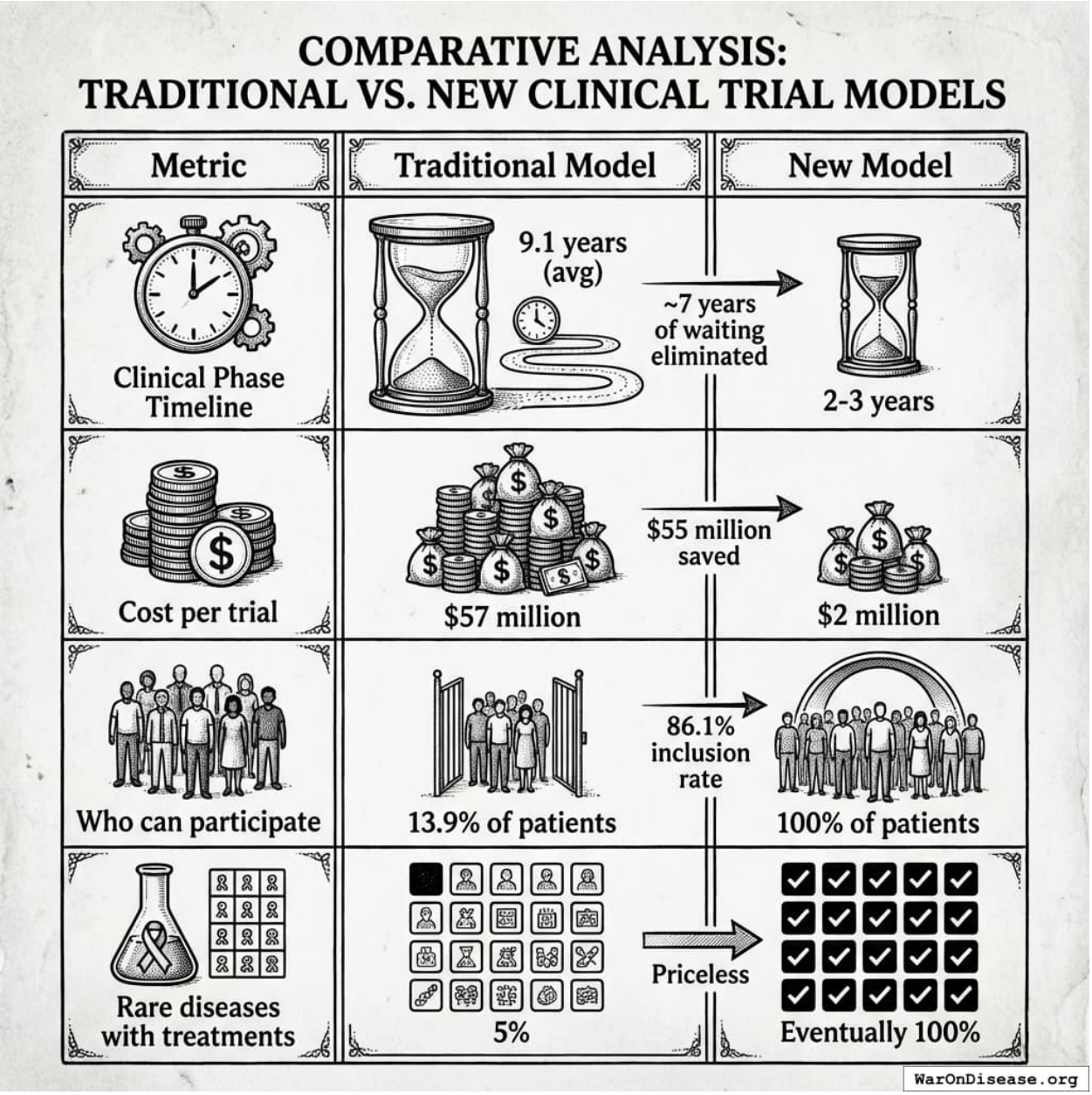


Figure 320: Side-by-side comparison of current clinical trial inefficiencies versus the projected outcomes of the decentralized framework.

The Itemized Receipt of Eliminated Stupidity

Expense Category	Traditional Clinical Trial	Your Decentralized Framework Cost	Savings	What It Actually Is
Data Management	$198,014	$10,000	94.9%	Excel spreadsheets with fear
IRB Approval	$324,081	$5,000	98.5%	Permission slips for adults
IRB Amendments	$6,347	$0	100%	Permission to fix typos
Source Data Verification	$1,486,250	$25,000	98.3%	Checking if you lied about dying
Patient Recruitment	$805,785	$15,000	98.1%	Facebook ads for dying people
Patient Retention	$76,879	$20,000	74%	Bribes to keep dying people interested
Research Associates	$2,379,605	$150,000	93.7%	People who watch you take pills
Physicians	$1,966,621	$100,000	94.9%	Doctors pretending to be scientists
Clinical Procedures	$5,937,819	$1,000,000	83.2%	Poking you with expensive things
Laboratory	$2,325,922	$500,000	78.5%	Testing if your pee is still pee
Site Recruitment	$849,158	$0	100%	Bribing hospitals to participate
Site Retention	$4,461,322	$0	100%	Bribing hospitals to not quit
Administrative Staff	$7,229,968	$100,000	98.6%	People who file the files
Site Monitoring	$4,456,717	$0	100%	People who watch the people who watch you
Site Overhead	$7,386,816	$0	100%	Electricity for the filing cabinets
All Other	$17,096,703	$100,000	99.4%	Nobody knows but it's expensive
TOTAL	**$56,988,007**[258]	**$2,025,000**	**95.7%**	**The price of bureaucracy**

This eliminates $55 million per trial.

Why This Works: The Mathematical Impossibility of Committees

Here's the problem with having ~200 FDA bureaucrats[259] decide what 8 billion people can try when they're dying:

The Math That Proves Centralization Can't Work

Let's calculate how long it would take the FDA to properly evaluate every treatment for every person:

```
/bin/bash: -c: line 1: syntax error near unexpected token `('
```

```
/bin/bash: -c: line 1: `[A visual breakdown showing how the combination of thousands of diseases, hundr
section-information-that-actually-needs-processing-bw-academic.jpg)'
Years for FDA to evaluate everything: 1,369,863,014
/bin/bash: -c: line 1: syntax error near unexpected token `('
/bin/bash: -c: line 1: `[A diagram illustrating the massive parallel processing power of a decentralized
section-market-processing-parallel-decentralized-bw-academic.jpg)'
Years for decentralized system: 273.97
```

The committee needs 1.3 million years. The decentralized system needs 100 days.

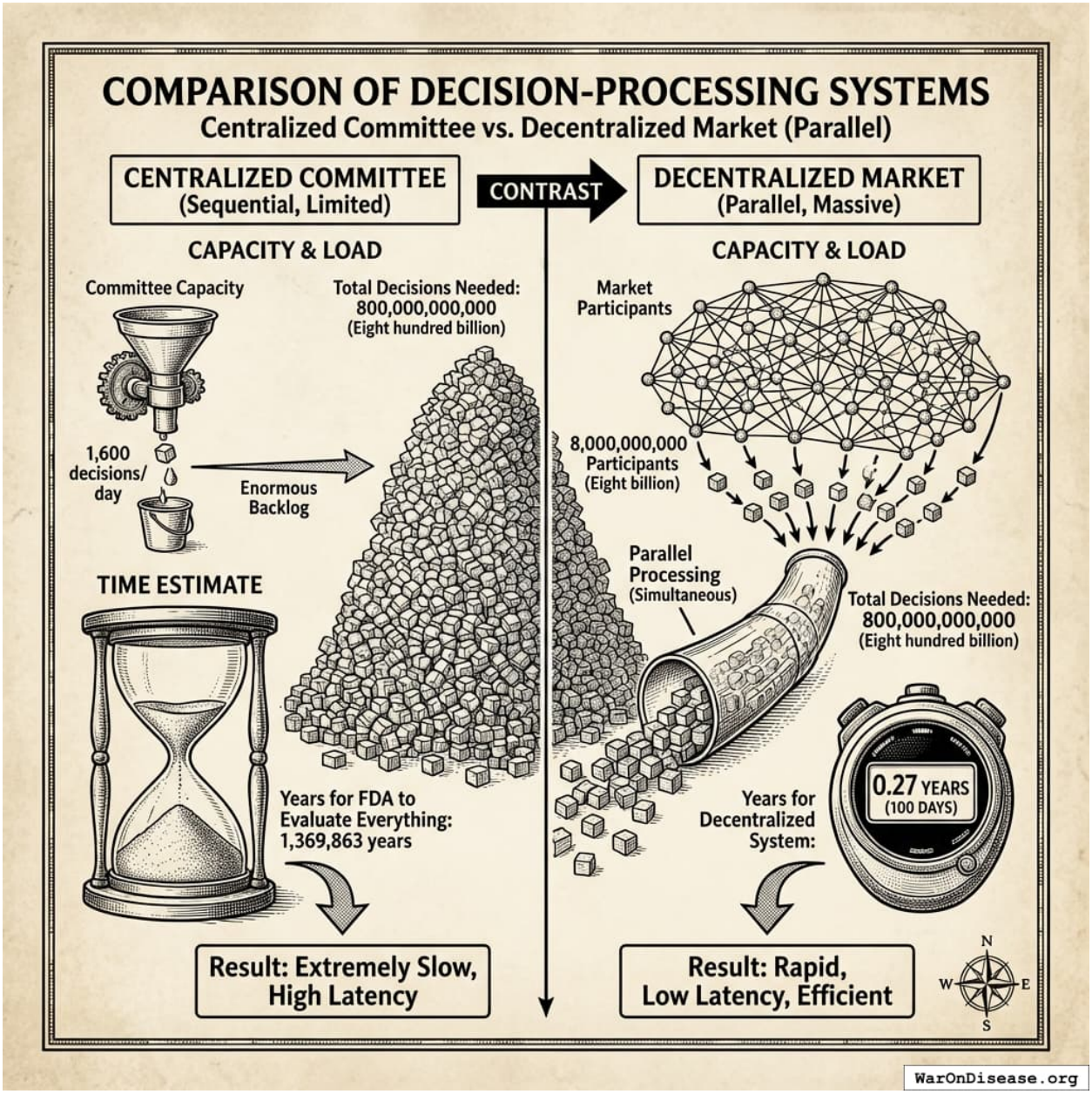


Figure 321: Time required to evaluate all potential treatment variations: Centralized Committee (1.3 million years) vs. Decentralized Market (100 days).

Why 200 People Can't Replace 8 Billion

The FDA doesn't know:

- What disease **you** have (they haven't met you)
- How **your** body responds to treatments (genetics are unique)
- What risks **you're** willing to take (some prefer death to side effects, others the reverse)
- Whether **you'd** rather die trying or die waiting (only you can answer this)

But they decide for you anyway.

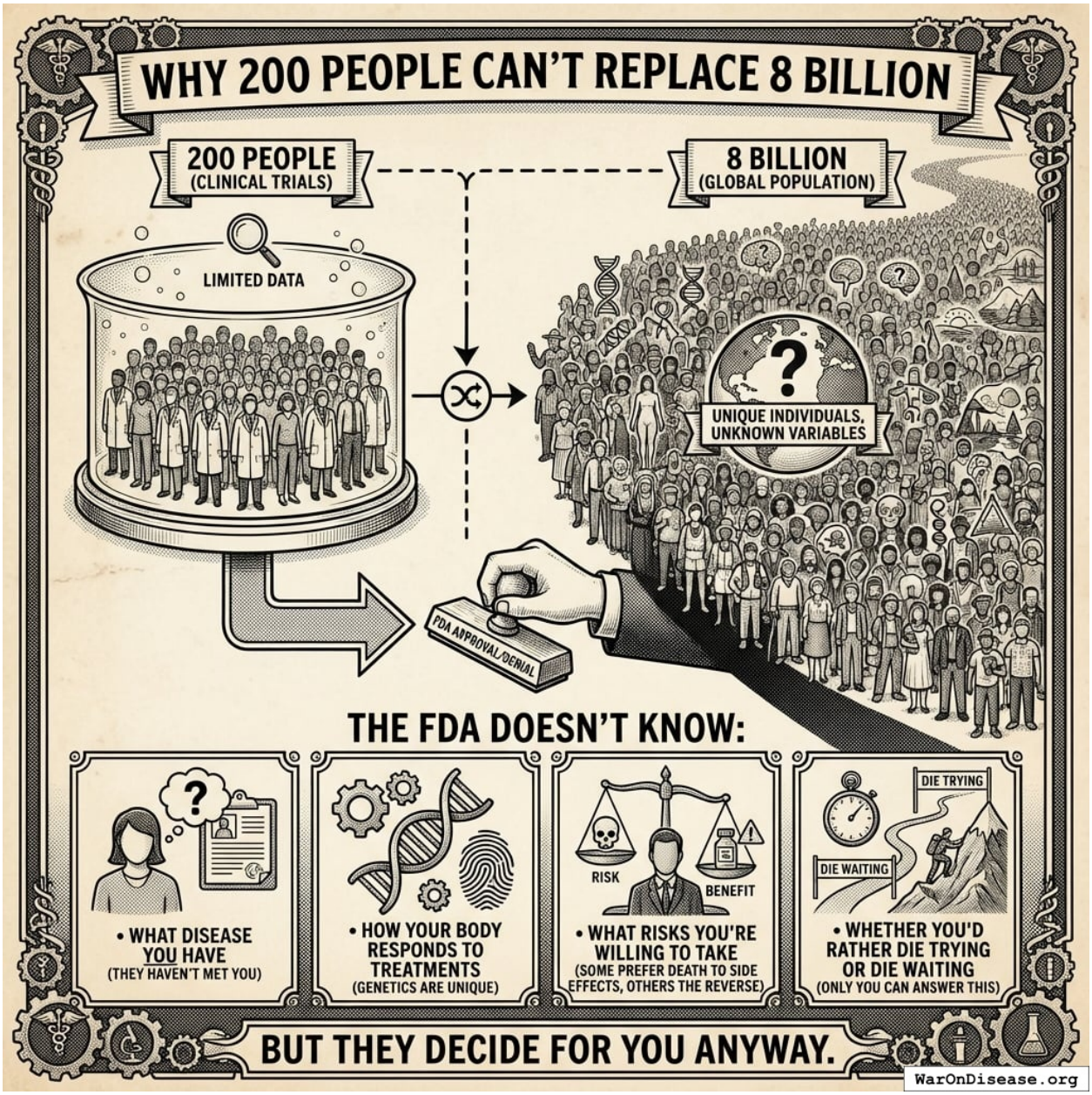


Figure 322: An infographic illustrating the disconnect between a centralized regulatory body and the unique, individualized variables of 8 billion people, such as genetics and risk tolerance.

The Solution: Let 8 Billion Experts Make 8 Billion Decisions

Current system

```
330 Million Americans
        ↓
   200 FDA Bureaucrats (Bottleneck)
        ↓
    17-Year Delays
        ↓
    Millions Die
```

Decentralized system:

```
8 Billion Humans
    ↓ ↓ ↓ ↓ ↓ (Parallel Processing)
Millions of Trials Simultaneously
        ↓
    Real-Time Results
        ↓
    Data Saves Everyone
```

This isn't ideology. It's information theory. You mathematically cannot centralize medical decisions for 8 billion unique people. The FDA could work 24/7 for a million years and still be behind.

The only solution is to let patients and doctors make their own decisions, then pool the data so everyone benefits from everyone's experience.

Real Examples of This Working (While the FDA Wasn't Looking)

The Oxford Recovery Trial: How the British Accidentally Saved Medicine

During COVID, while America was filling out forms, Oxford University did something crazy: they just tested drugs on dying people to see if they stopped dying.

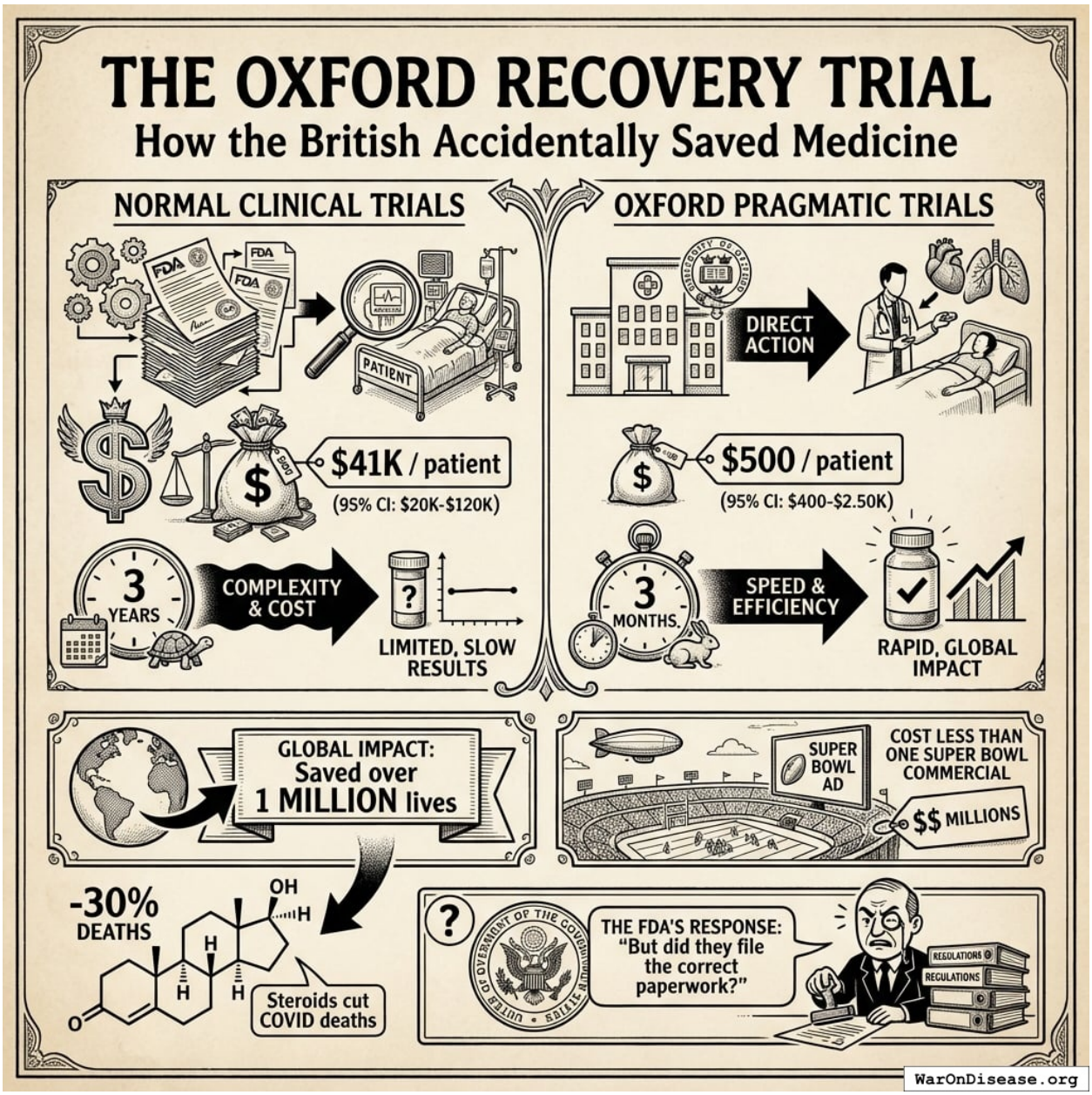


Figure 323: A comparative infographic showing the massive disparity in cost, time, and lives saved between traditional clinical trials and the Oxford Recovery Trial approach.

Cost per patient:

- Normal clinical trials: $41K (95% CI: $20K-$120K)
- Oxford pragmatic trials: $500 (95% CI: $400-$2.50K)

That's not a typo. Five hundred dollars. The cost of a nice dinner in Manhattan to save a human life.

Results:

- Found that steroids cut COVID deaths by 30%[260]
- Saved over 1 million lives globally[177]
- Took 3 months[190] instead of 3 years

- Cost less than one Super Bowl commercial

The FDA's response: "But did they file the correct paperwork?"

Wikipedia for Whether You'll Die

The system includes **Clinipedia**: Wikipedia but instead of arguing about whether tomatoes are fruits, we argue about whether they cure cancer.

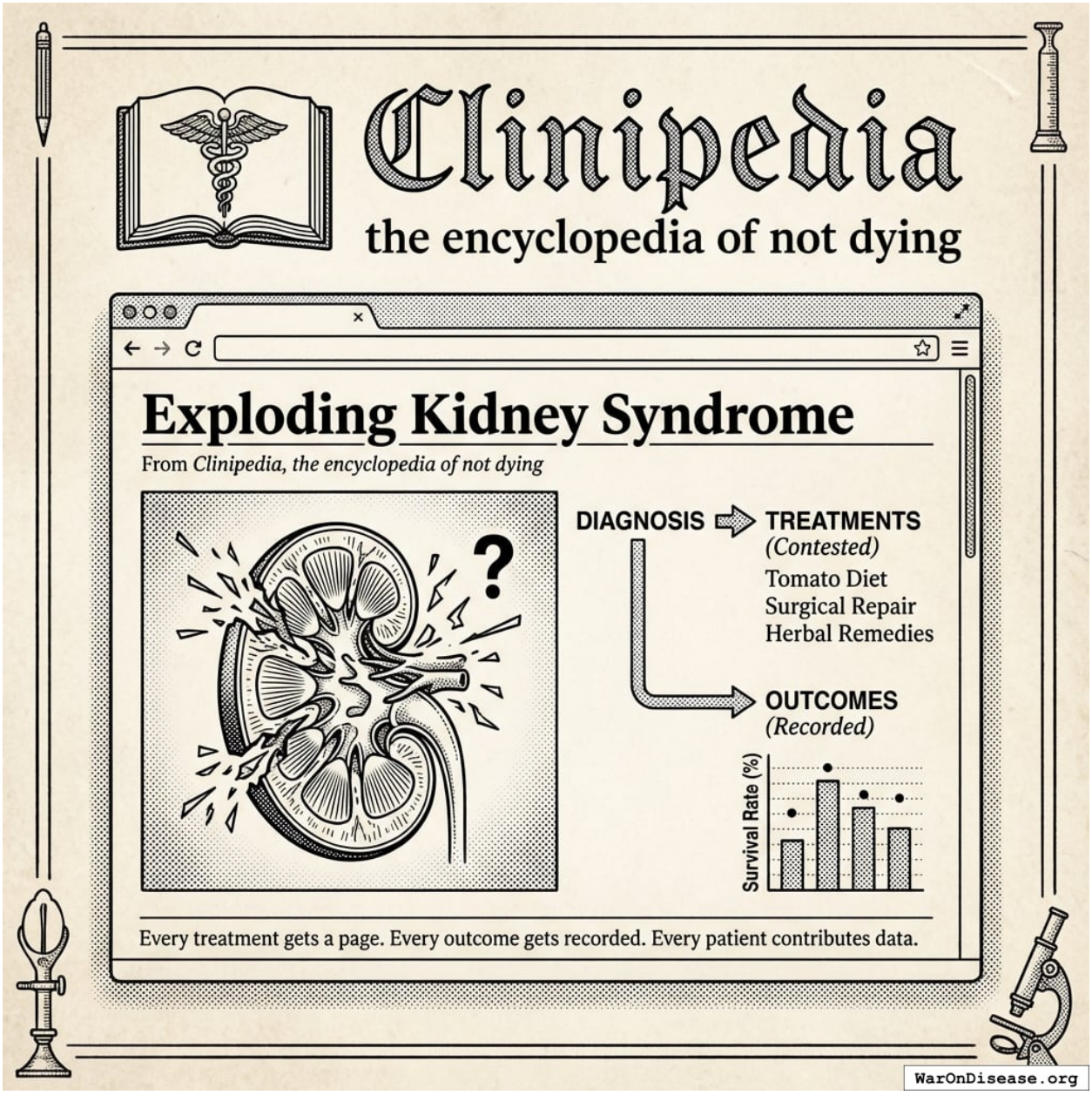


Figure 324: A conceptual diagram showing the Clinipedia data loop where patient contributions and treatment outcomes feed into a centralized collaborative encyclopedia.

Every treatment gets a page. Every outcome gets recorded. Every patient contributes data.

Imagine looking up your disease and seeing:

"Exploding Kidney Syndrome"

From Clinipedia, the encyclopedia of not dying

Current Treatments Ranked by Not-Dying Score

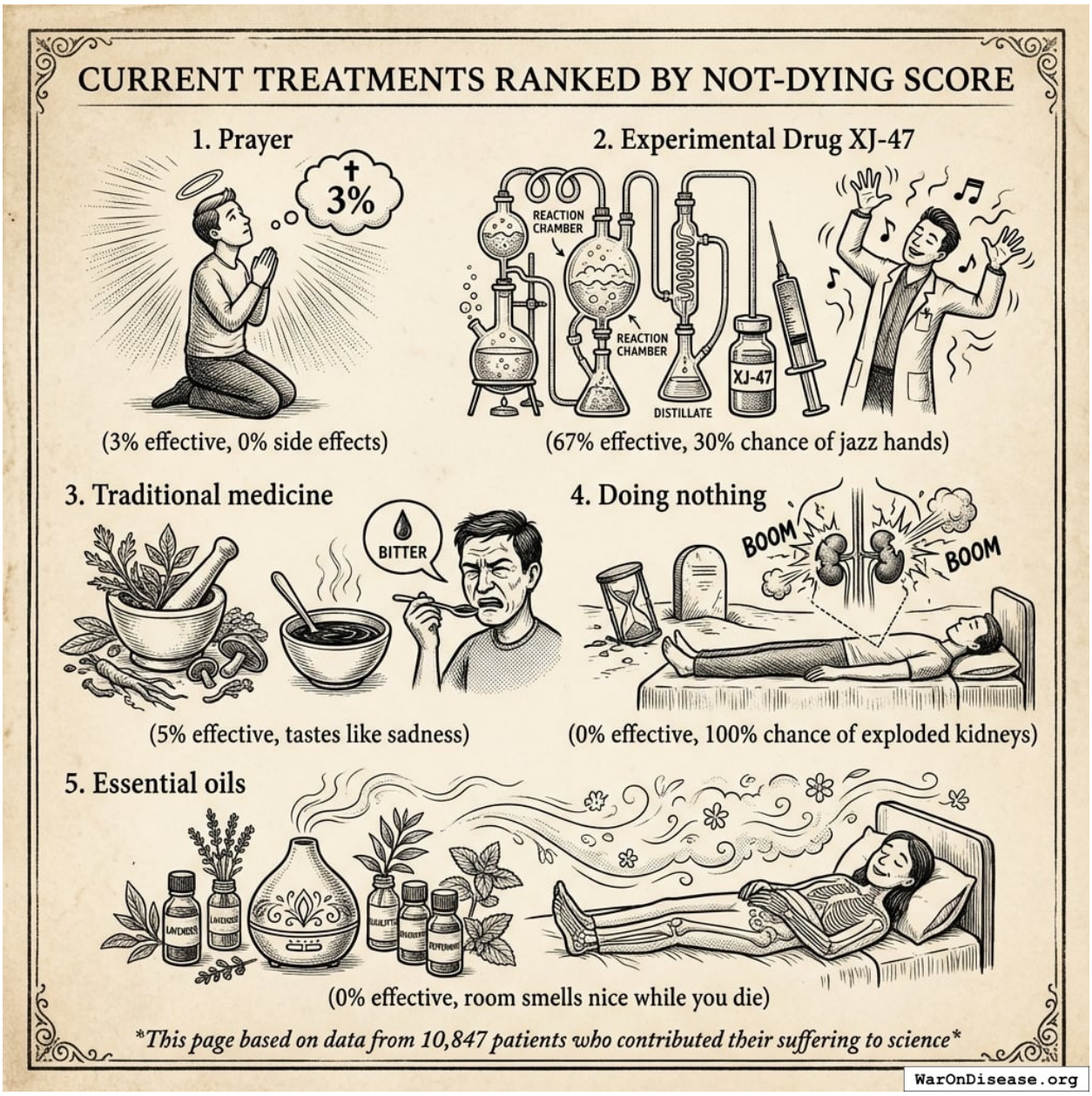


Figure 325: A comparison chart showing the effectiveness percentages and side effects of five different medical treatments based on their 'Not-Dying Score'.

1. Prayer (3% effective, 0% side effects)
2. Experimental Drug XJ-47 (67% effective, 30% chance of jazz hands)
3. Traditional medicine (5% effective, tastes like sadness)
4. Doing nothing (0% effective, 100% chance of exploded kidneys)
5. Essential oils (0% effective, room smells nice while you die)

This page based on data from 10,847 patients who contributed their suffering to science

Become a Scientist from Your Couch

The system also lets you create your own studies. Got a theory that wearing socks inside-out cures baldness? Create a study. Get a link. Invite your balding friends to join. The system handles the rest. Your data gets published. Who knows, maybe you'll win a Nobel Prize. Or maybe you'll just prove that socks are socks. Either way, humanity learns something without spending two billion dollars.

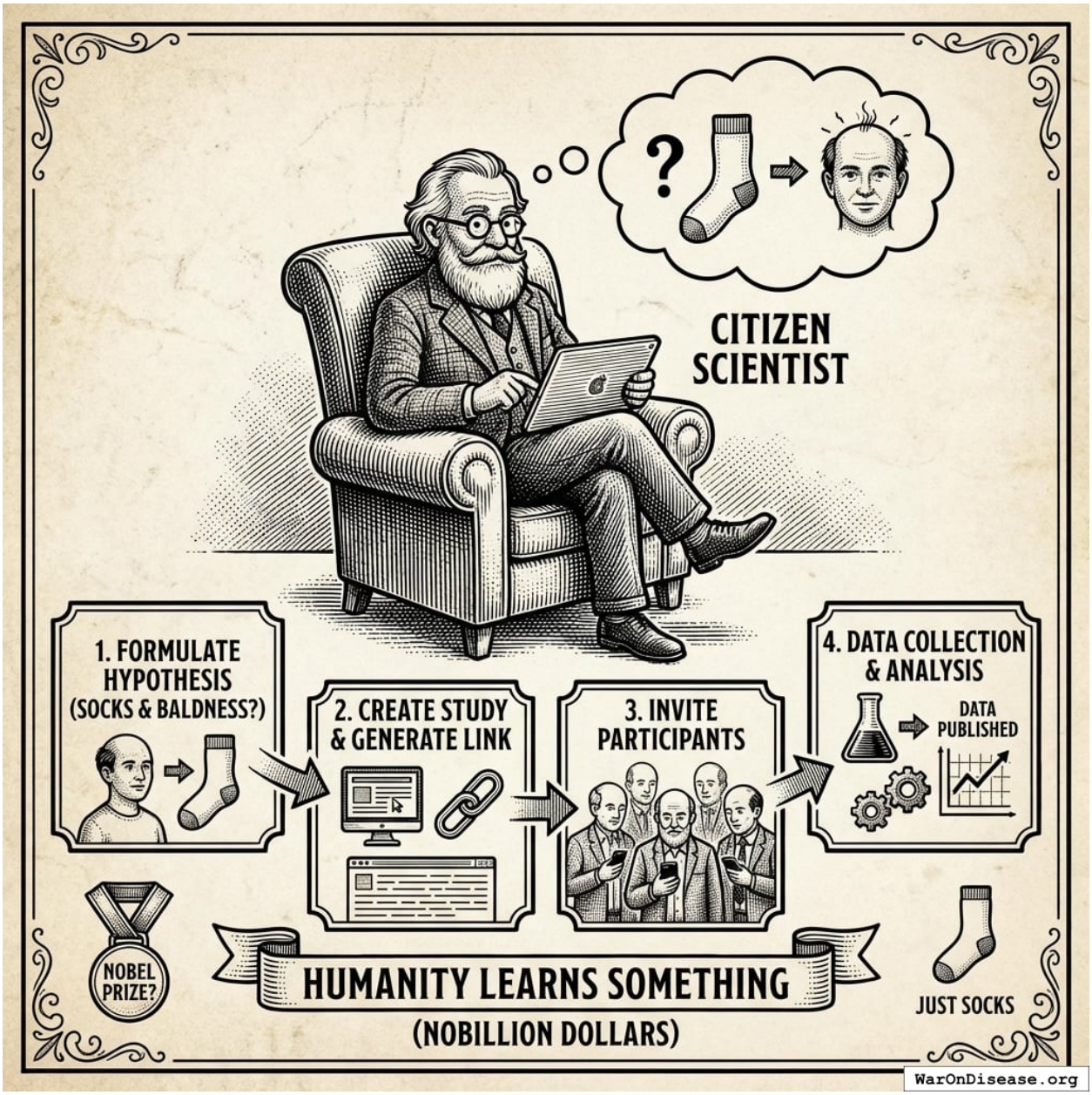


Figure 326: A workflow diagram illustrating the step-by-step process of creating a study, from formulating a theory to publishing the results.

Your Personal Death-Prevention Assistant: The FDAi

Everyone gets a superintelligent doctor that lives in their phone and doesn't judge them for Googling "is my poop normal?"

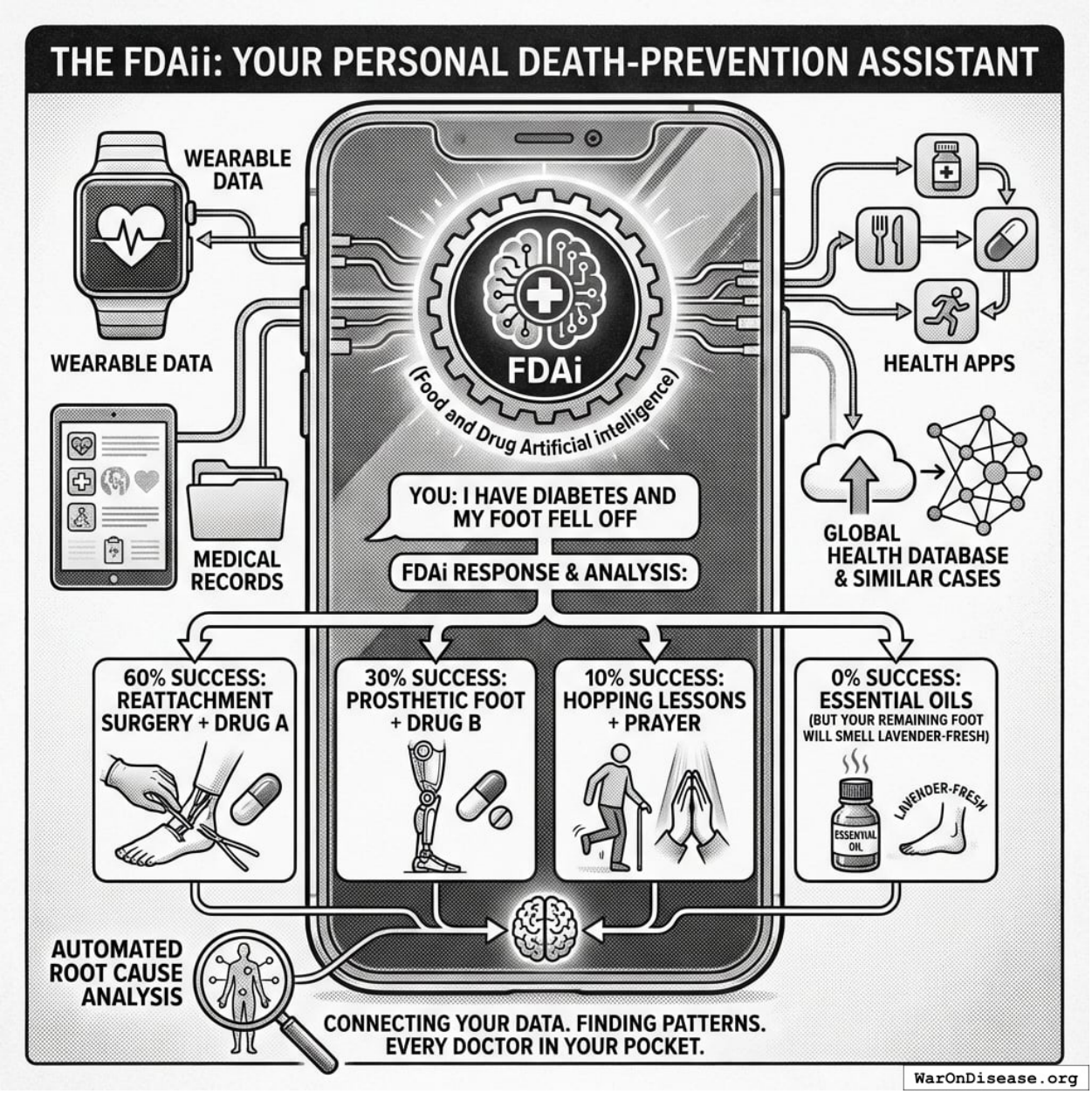


Figure 327: A visual representation of the FDAi ecosystem showing data flowing from wearables and medical records into an AI core, resulting in a ranked list of medical treatments by success probability.

The **FDAi** (Food and Drug Artificial intelligence) is like Siri, but instead of telling you the weather, it tells you how not to die.

You: "I have diabetes and my foot fell off." **FDAi**: "Based on 50,000 similar cases, here's what worked:

- 60% success: Reattachment surgery + Drug A

- 30% success: Prosthetic foot + Drug B

- 10% success: Hopping lessons + Prayer
- 0% success: Essential oils (but your remaining foot will smell lavender-fresh)"

It does this by connecting to all your data, from wearables, apps, and your medical records, and looking for patterns. It's automated root cause analysis for your own body, finding what's wrong while your doctor is still trying to remember your name. It's like having every doctor who ever lived in your pocket, except they actually agree on something.

The Digital Twin Safe: Your Medical Data's Panic Room

Right now, your medical data is scattered across:

- 17 different doctors who don't talk
- 5 insurance companies that hate you
- 3 pharmacies that can't spell your name
- 1 veterinarian (long story)

The Digital Twin Safe puts it all in one place. It's like a Swiss bank account, but for your cholesterol levels.

You control who sees what:

- Insurance companies: "He's mostly alive"
- Doctors: Everything
- Researchers: Anonymized data
- Facebook: Absolutely nothing, Mark

Outcome Labels: Nutrition Facts for Drugs

Food has nutrition labels. Cigarettes have warning labels. Drugs have… incomprehensible 40-page inserts written by lawyers having seizures.

Outcome Labels fix that - clear, data-driven summaries showing exactly what happens when real people try a treatment:



Figure 328: Outcome Labels Example

Based on thousands of real patients with real outcomes:

Cognitive Improvements

- Memory Recall: +35%
- Cognitive Function: +28%
- Executive Function: +22%
- Hippocampal Volume: +15%

Side Effects

- Immune Response: +12%
- Headache: +9%
- Fatigue: +7%

No marketing spin. No 40-page legal disclaimers. Just clear data about what actually happens to people like you.

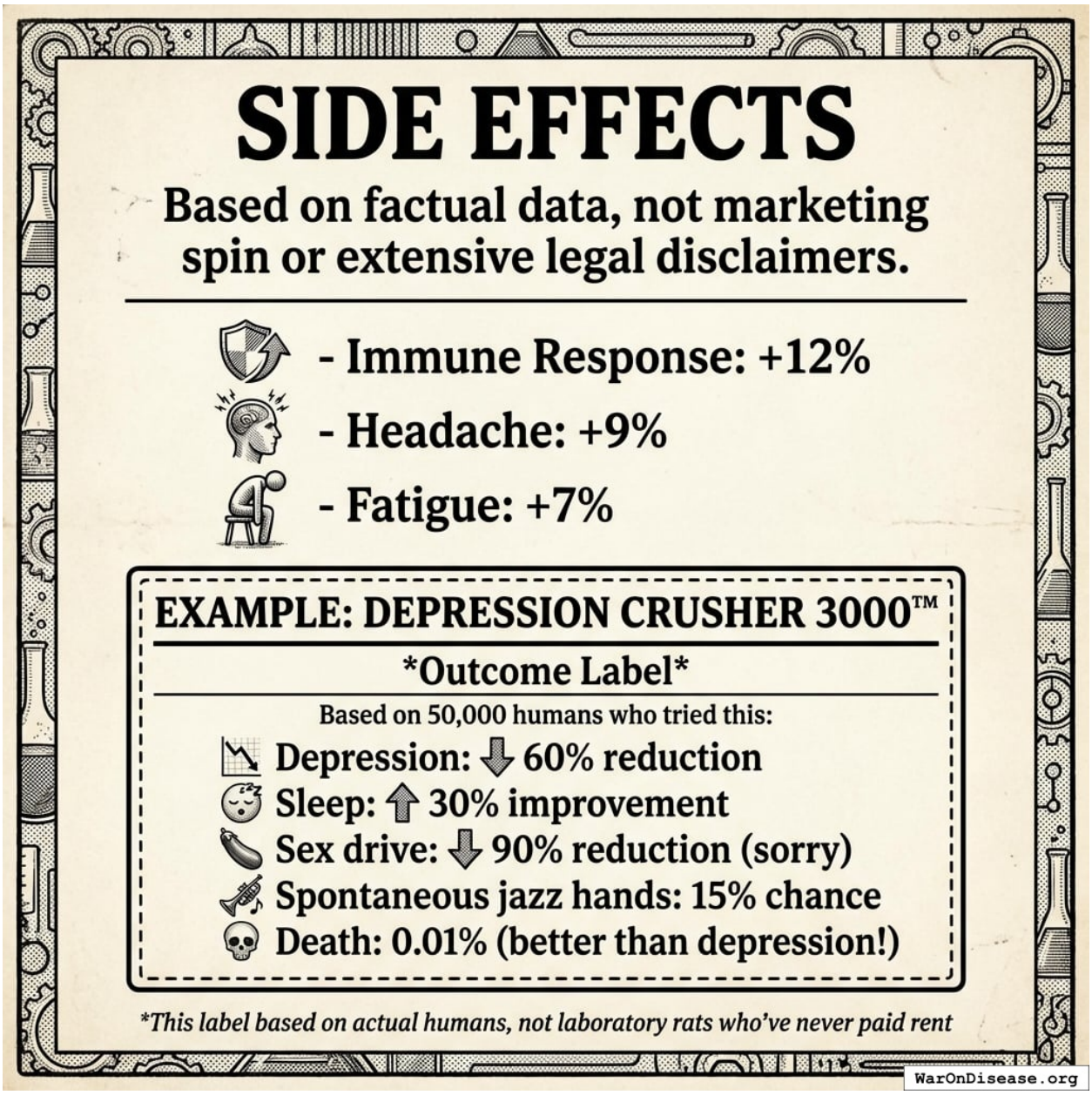


Figure 329: A clean, clinical-style infographic label for the 'Depression Crusher 3000' showing the statistical trade-offs between mood improvement and various side effects.

Example: DEPRESSION CRUSHER 3000™

Outcome Label

Based on 50,000 humans who tried this:

- Depression: ⇩ 60% reduction
- Sleep: ⇧ 30% improvement
- Sex drive: ⇩ 90% reduction (sorry)
- Spontaneous jazz hands: 15% chance
- Death: 0.01% (better than depression!)

This label based on actual humans, not laboratory rats who've never paid rent

The Disease Eradication Act: Making It Legal to Not Die

This solution requires a law that says: "Dying people can try things that might help them not die."

The fact that we need a law for this tells you everything about our species.

The Right to Trial Act (working title: "The Stop Being Stupid About Medicine Act"):

Section 1: If you're dying, you can try experimental treatments. **Section 2**: What happens is written down. **Section 3**: Other dying people can read what is written. **Section 4**: Repeat until nobody's dying. **Section 5**: Seriously, how was this not already the law?

Congress will debate this for 17 years, the same time it takes to approve one drug.

The Future: Where Death Becomes Embarrassing

2027: The Beginning of the End of Dying Slowly

FDA.gov becomes actually useful. Millions join trials from home. The first "Wikipedia disease" gets cured entirely through crowdsourced trials. The FDA claims credit.

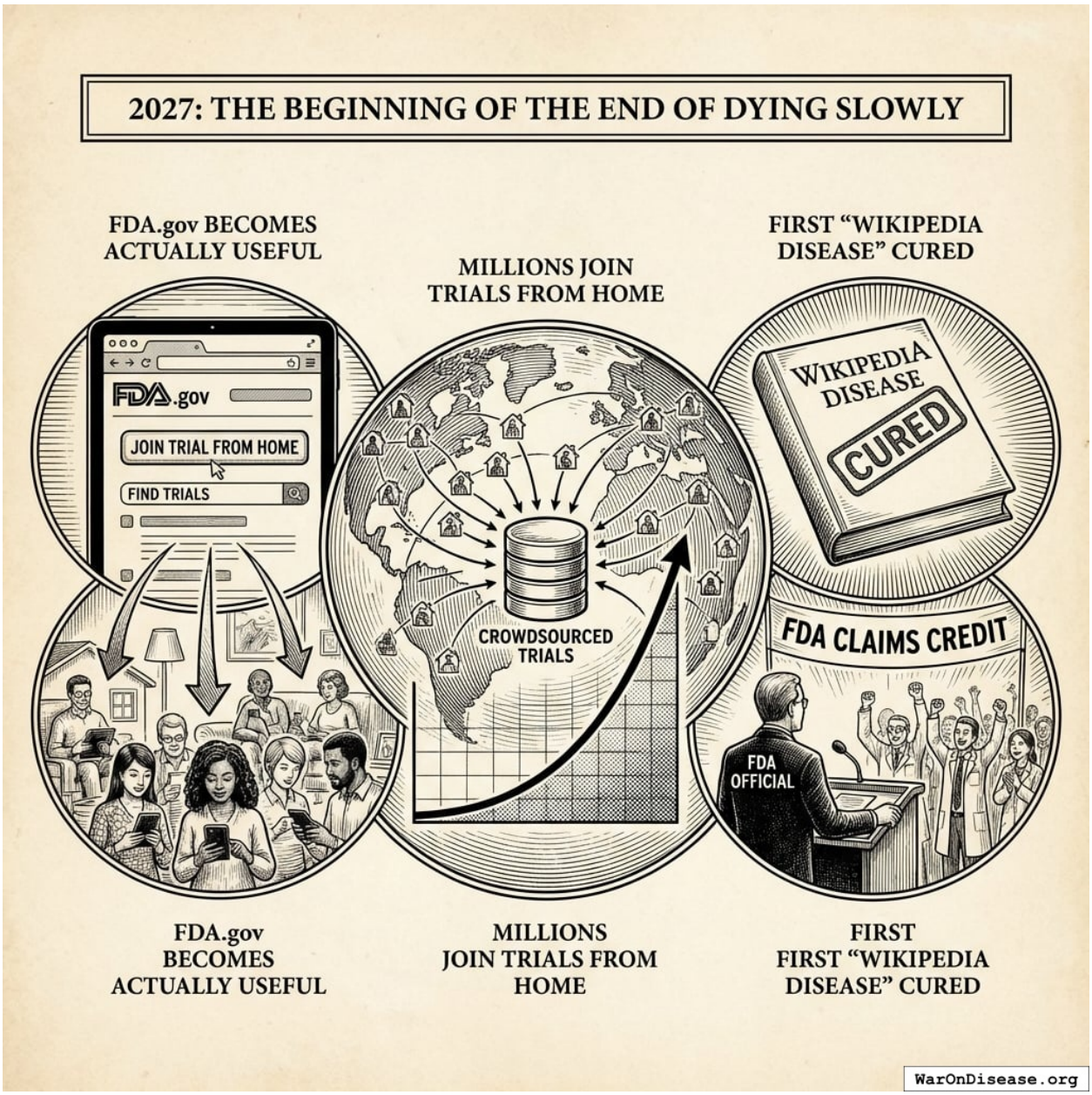


Figure 330: A flowchart showing the progression from home-based clinical trial participation to crowdsourced medical research and final regulatory validation.

2030: Big Pharma Pivots or Dies

Pharmaceutical companies realize they can't charge $10,000 for pills that cost $1 to make when everyone can see the data. Some adapt. Some become museums.

2035: The Great Revelation

We realize we could have done this all along. We had the internet since 1990. We had computers since 1950. We had writing since 3000 BC.

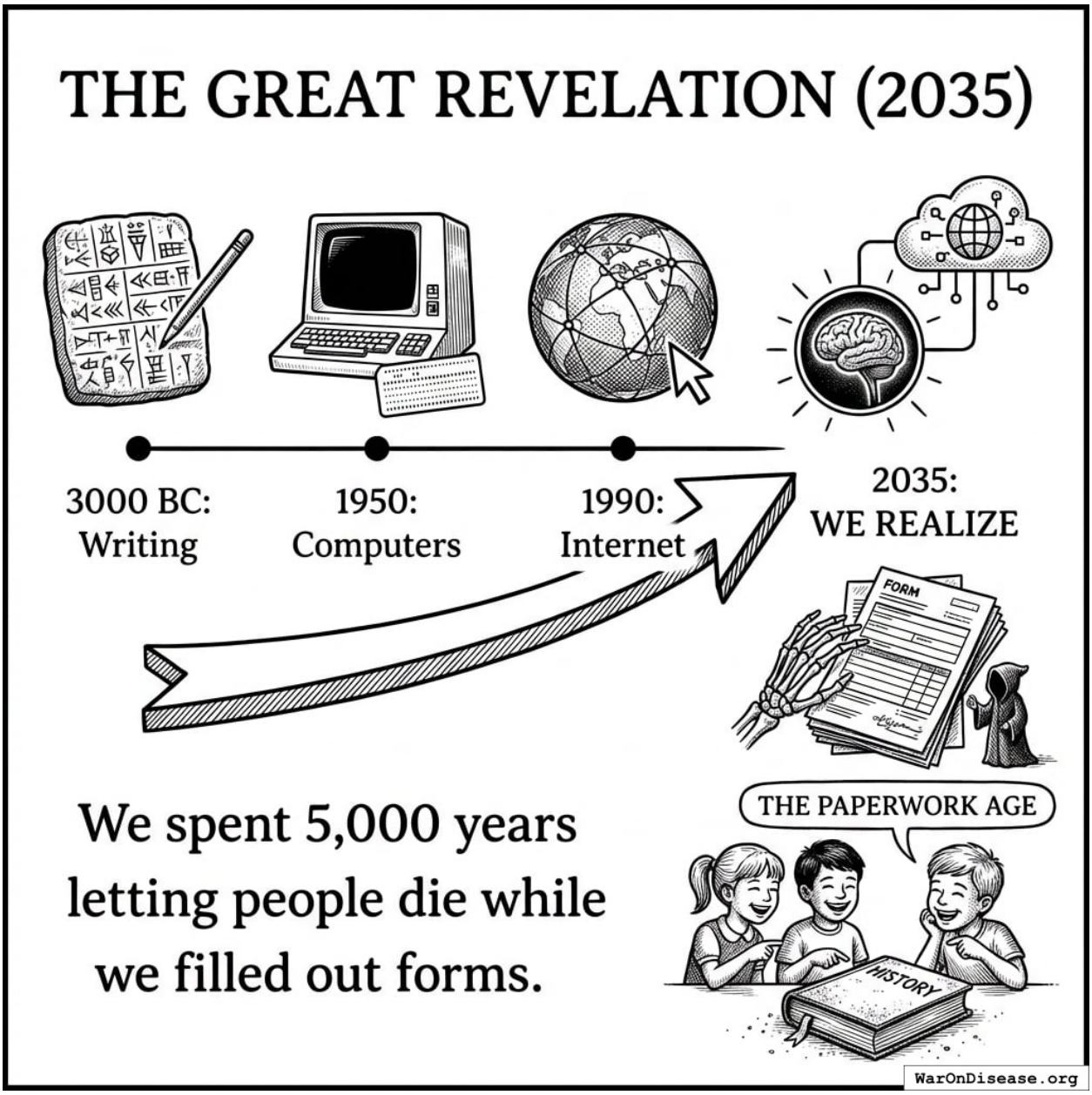


Figure 331: A timeline contrasting major human milestones like writing and computers against the persistent 'Paperwork Age,' illustrating the gap between technological potential and bureaucratic reality.

We spent 5,000 years letting people die while we filled out forms.

History books will call us "The Paperwork Age" and children will laugh at our stupidity.

2050: Death Becomes Opt-In

Diseases are mostly solved. Death becomes a choice, like smoking or voting Republican. The FDA's job becomes preventing people from becoming immortal too quickly (traffic is bad enough).

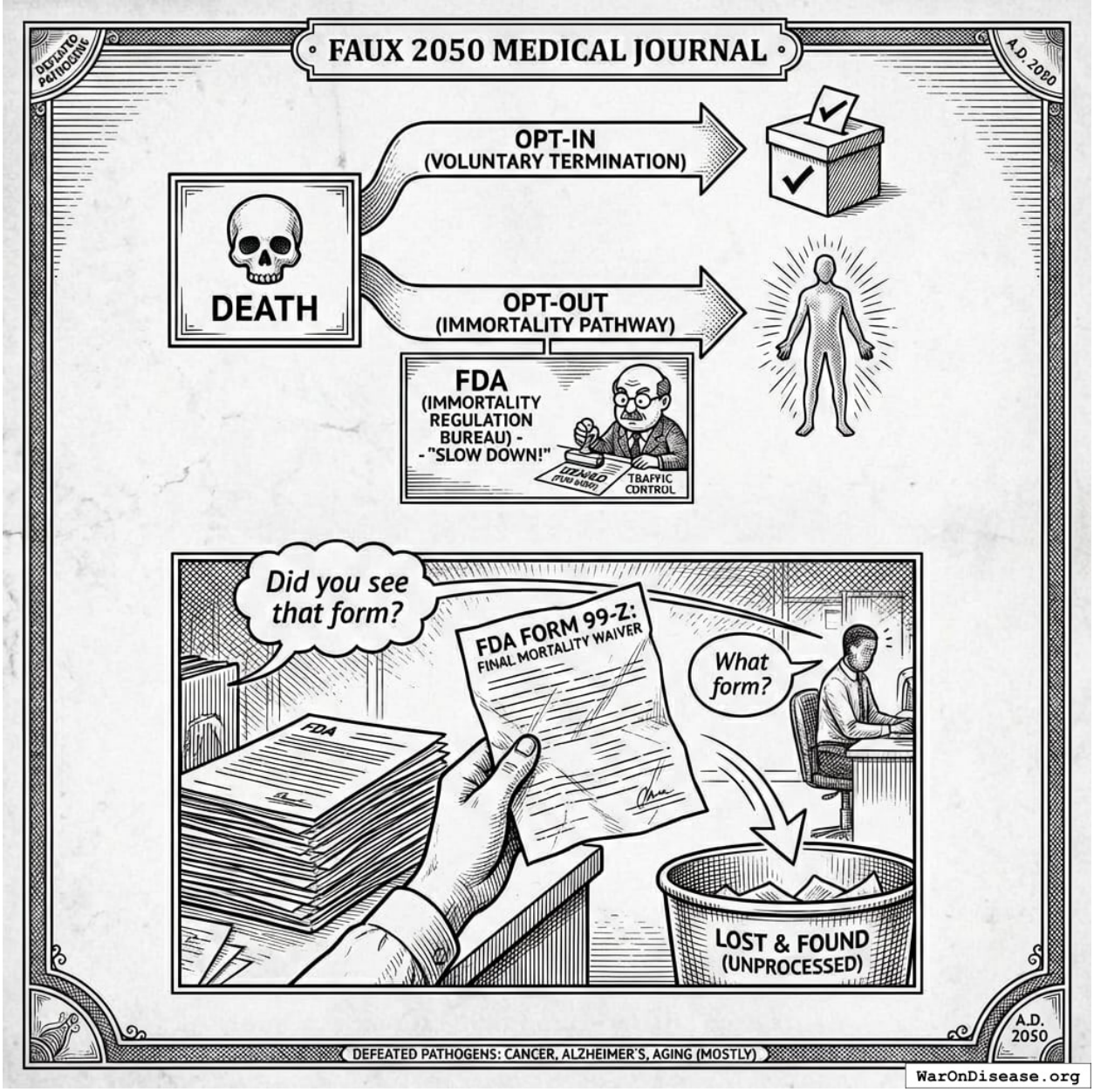


Figure 332: A before-and-after comparison showing the transition from mandatory mortality to an 'opt-in' death model, highlighting the FDA's shift from curing disease to managing population density.

The last FDA form is filled out. It's immediately lost. Nobody notices.

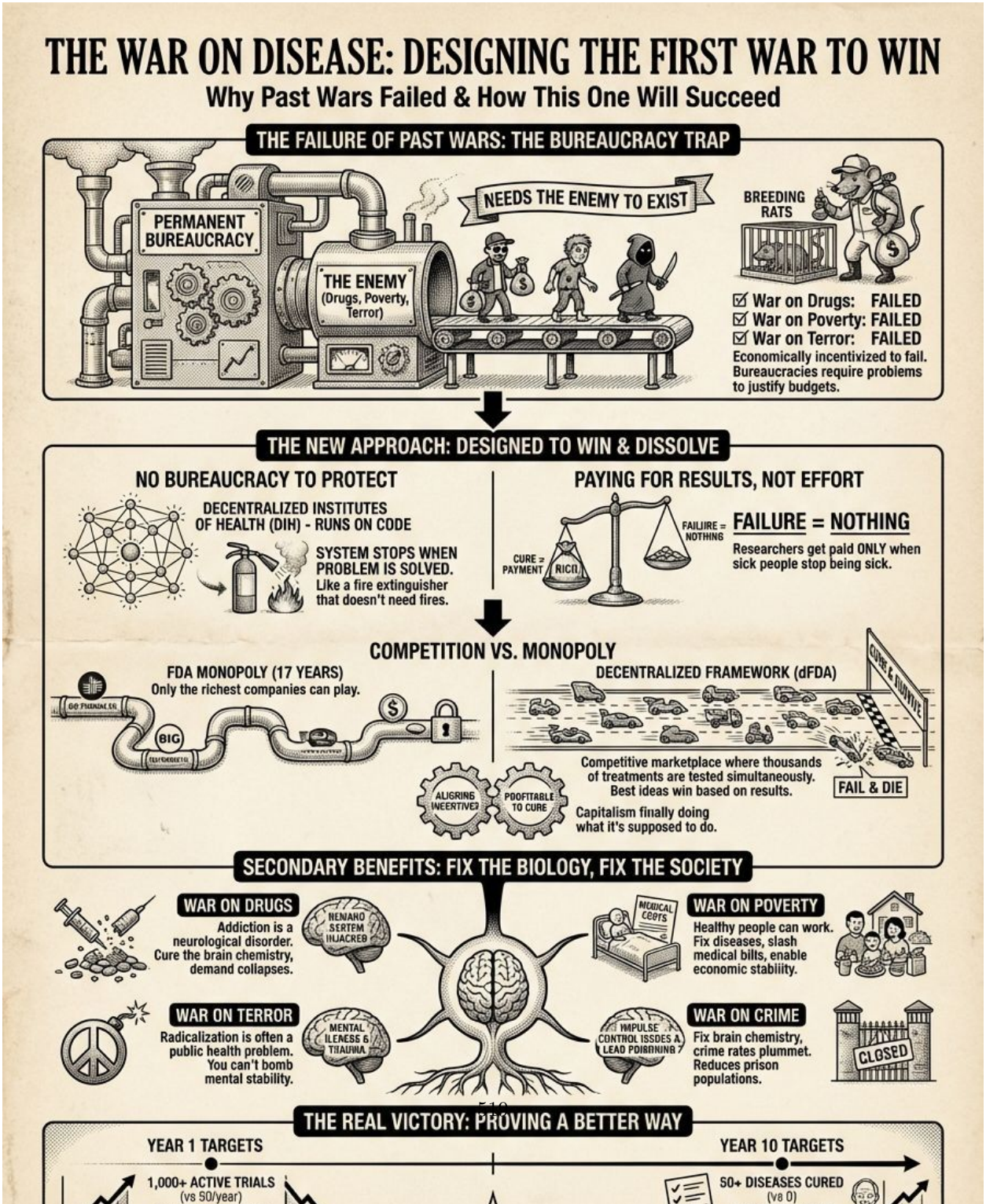
How Your Framework Actually Works

This approach achieves **44.1x (95% CI: 39.4x-89.1x) More Efficiency** through:

- **Cost per patient**: $929 (95% CI: $97-$3K) vs the current $41K (95% CI: $20K-$120K)
- **Time to results**: 2 years vs the current 17 years
- **Patient access**: Universal access vs 86.1% excluded currently

Metric	Current FDA System	A Decentralized Framework for Drug Assessment	Improvement
Approach	Central Planning	Open Platform	Market-based
Cost per Patient	$41K (95% CI: $20K-$120K)	$500 (95% CI: $400-$2.50K)	**44.1x (95% CI: 39.4x-89.1x) cheaper**
Time to Results	14 years (95% CI: 12 years-17 years)	2.3 years	**42:1 (95% CI: 29.8:1-48:1) faster**
Patient Access	0.0792% (95% CI: 0.0761%-0.0819%)	100%	**12.3x (95% CI: 4.19x-61.3x) more access**
Innovation Impact	70% approval drop after 1962	Competition drives innovation	Reversed decline

The War on Disease



Every government "War on X" (Drugs, Poverty, Terror, Christmas) has been a spectacular failure.

This is not a coincidence. It's economics.

When you build a permanent bureaucracy to fight something, that bureaucracy needs the enemy to exist. Otherwise, everyone loses their jobs.

The DEA needs drug dealers. The War on Terror needs terrorists. The War on Poverty needs poor people. It's like hiring an exterminator who breeds rats on the side. Technically profitable, definitely unethical.

On How to Design a War That Actually Ends

The War on Disease is different in one critical way: it's designed to win and then dissolve into nothingness, like a therapy session that actually works.

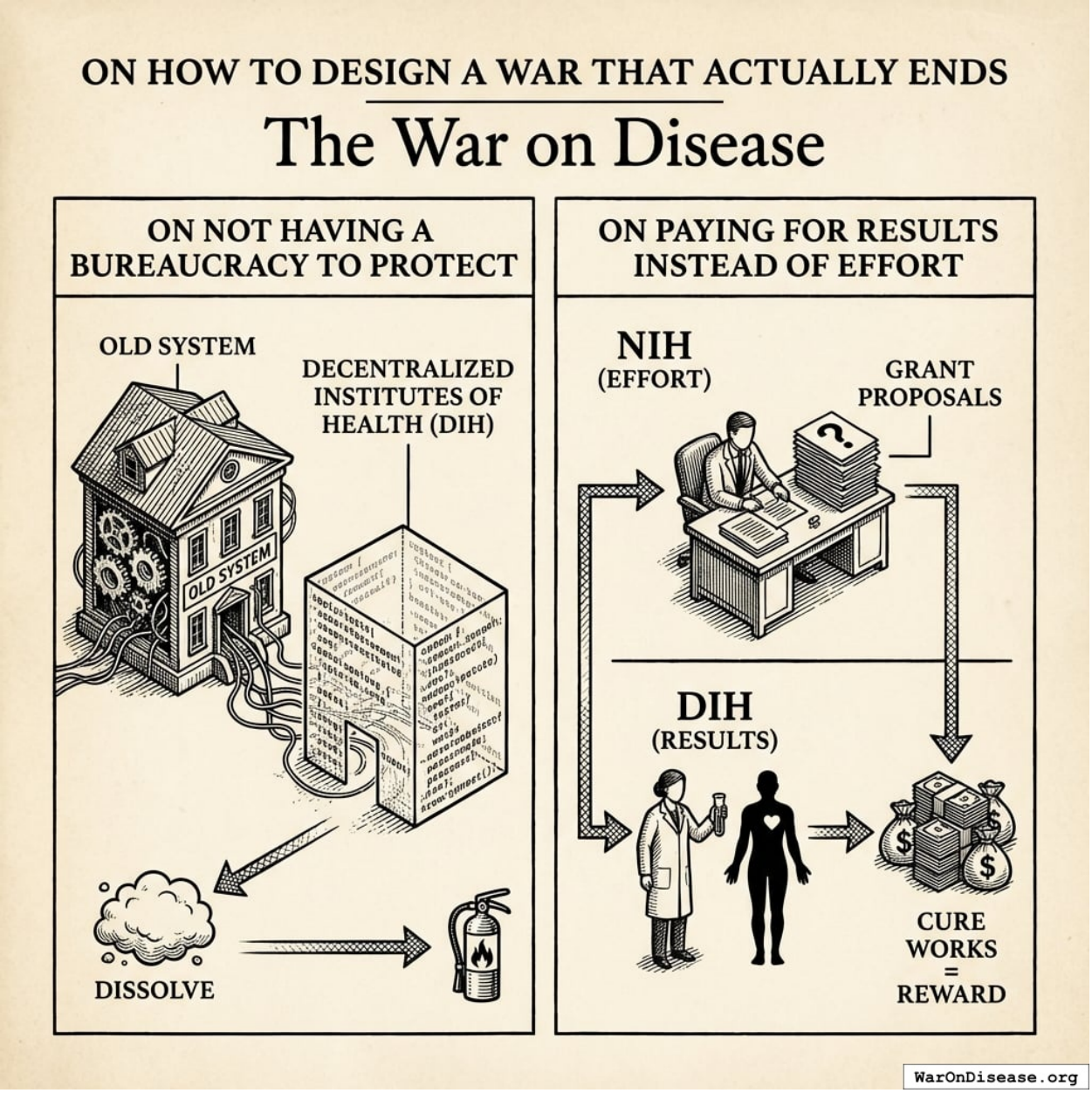


Figure 334: A side-by-side comparison of traditional bureaucratic health institutes versus decentralized result-based systems, highlighting differences in organizational structure, funding triggers, and end-state goals.

Here's what makes it different from every other doomed war on abstract nouns:

On Not Having a Bureaucracy to Protect:

Your decentralized institutes of health (DIH) runs on code, not committees. There are no headquarters. No permanent staff. No pensions to protect. No one whose mortgage depends on disease continuing to exist.

If we cure all diseases, the system just… stops. Like a fire extinguisher that doesn't need fires to justify its budget. Straightforward concept, oddly novel in government.

On Paying for Results Instead of Effort:

The NIH pays scientists to write grant proposals about maybe someday potentially thinking about doing research.

Your decentralized institutes of health pays them when sick people stop being sick.

If a researcher's cure works, they get rich. If it fails, they get nothing. This is how every other functional industry works, except government and academia, which explains a lot.

On Competition Versus Monopoly

The FDA creates a single, 17-year-long pipeline to approval where only the richest companies can play.

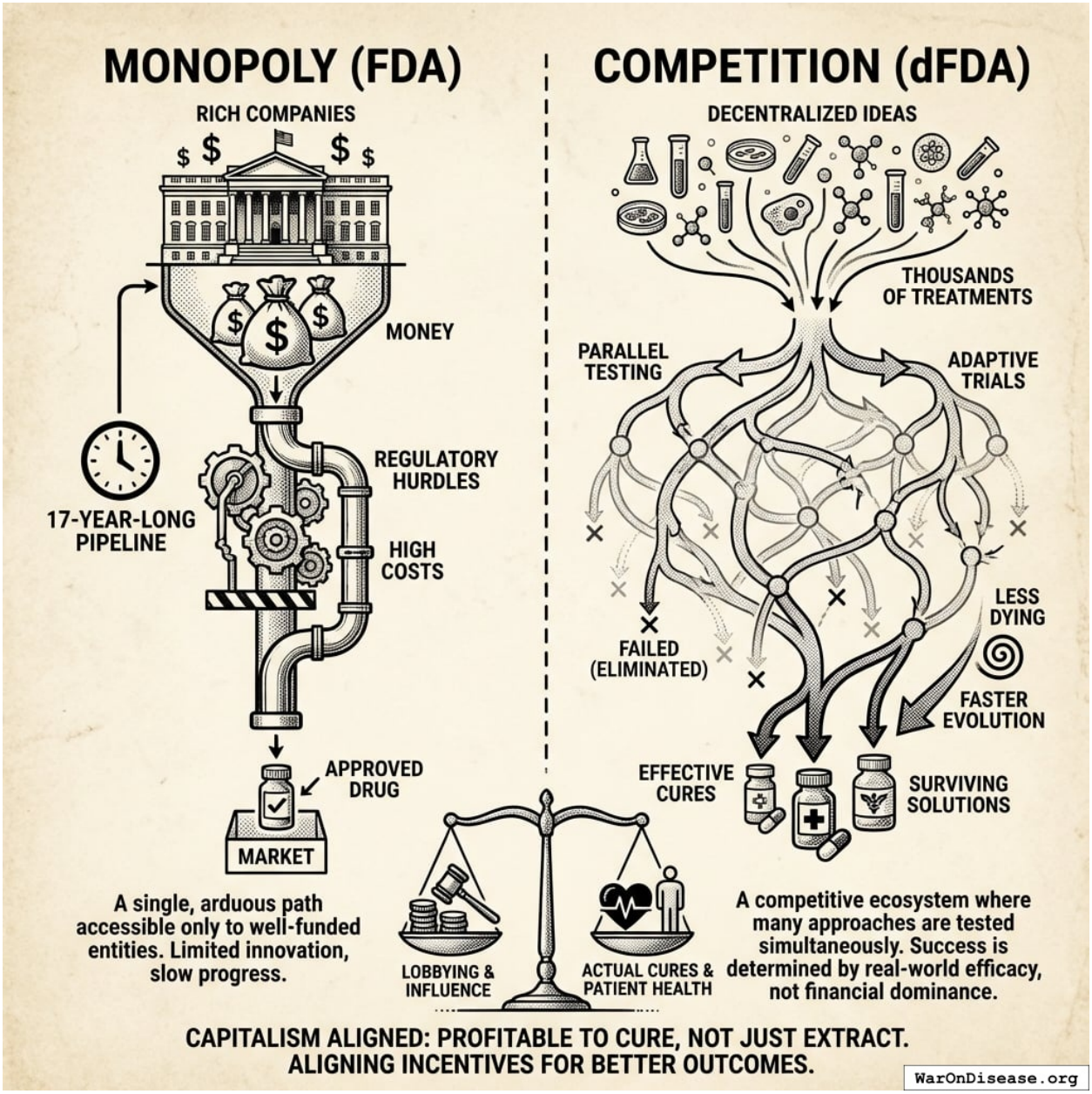


Figure 335: A side-by-side comparison of the traditional centralized FDA pipeline versus a decentralized, parallel drug assessment ecosystem where efficacy drives market success.

Your decentralized framework for drug assessment (dFDA) creates a competitive ecosystem where thousands of treatments are tested simultaneously and the ones that work survive. Like evolution, except faster and with less dying.

The best ideas win based on whether they actually cure people, not based on which company bought the most congressmen.

This isn't a struggle of attrition. It's a matter of aligning incentives. You're not trying to make people better through moral persuasion or inspirational posters. You're just making it more profitable to cure people than to let them die while extracting their savings.

It's capitalism actually doing what it was supposed to do, which is pleasant if somewhat overdue.

On The Part Where Other Problems Accidentally Get Solved

The War on Disease isn't just about curing cancer. It's about systematically dismantling the biological roots of our other self-inflicted disasters.

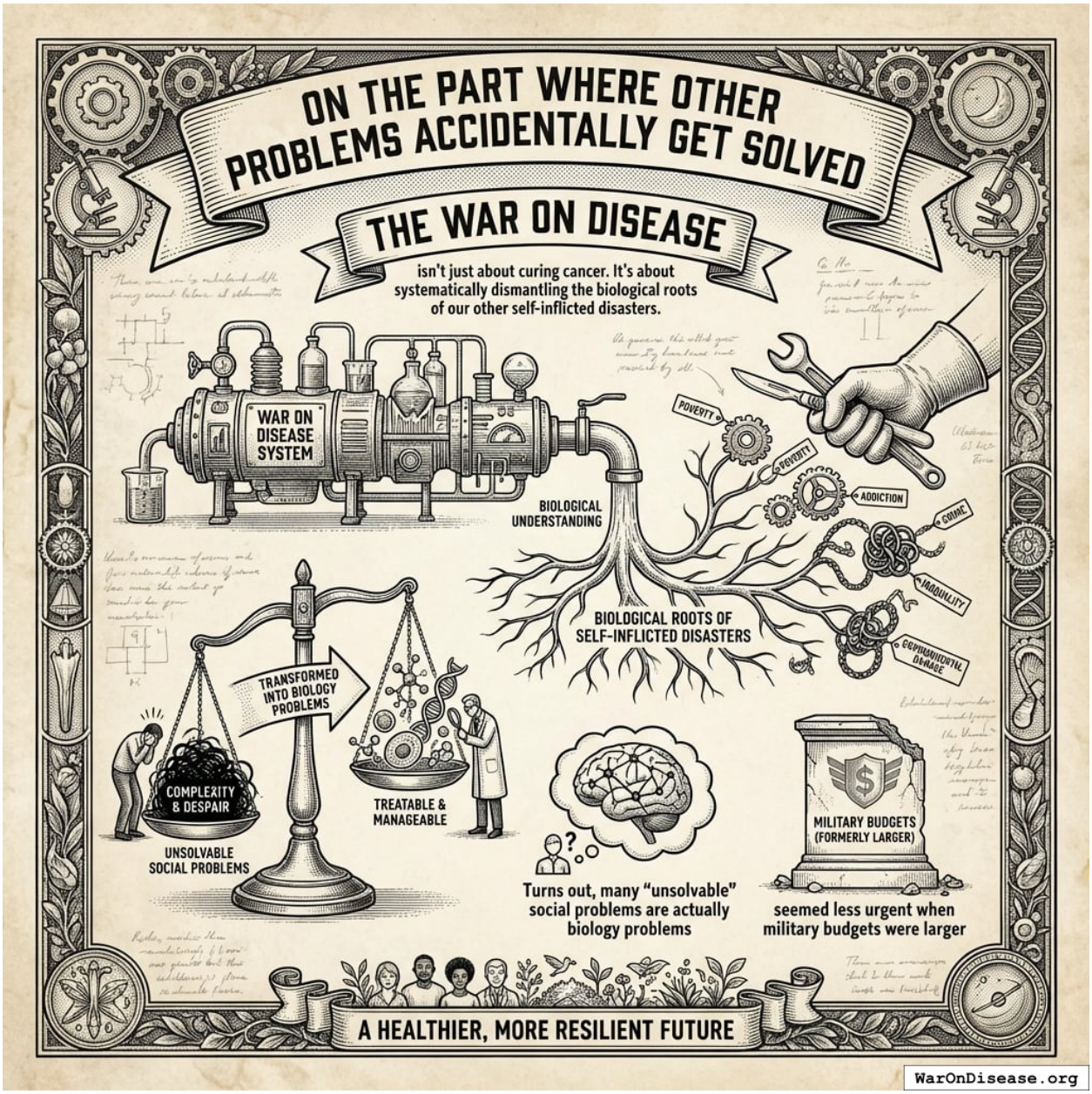


Figure 336: A diagram illustrating the ripple effect where breakthroughs in biological research lead to the accidental resolution of complex social challenges.

Turns out, many "unsolvable" social problems are actually biology problems that seemed less urgent when military budgets were larger.

On the War on Drugs

Addiction is a neurological disorder. Your brain's reward system got hijacked. It's not a moral failing, it's chemistry.

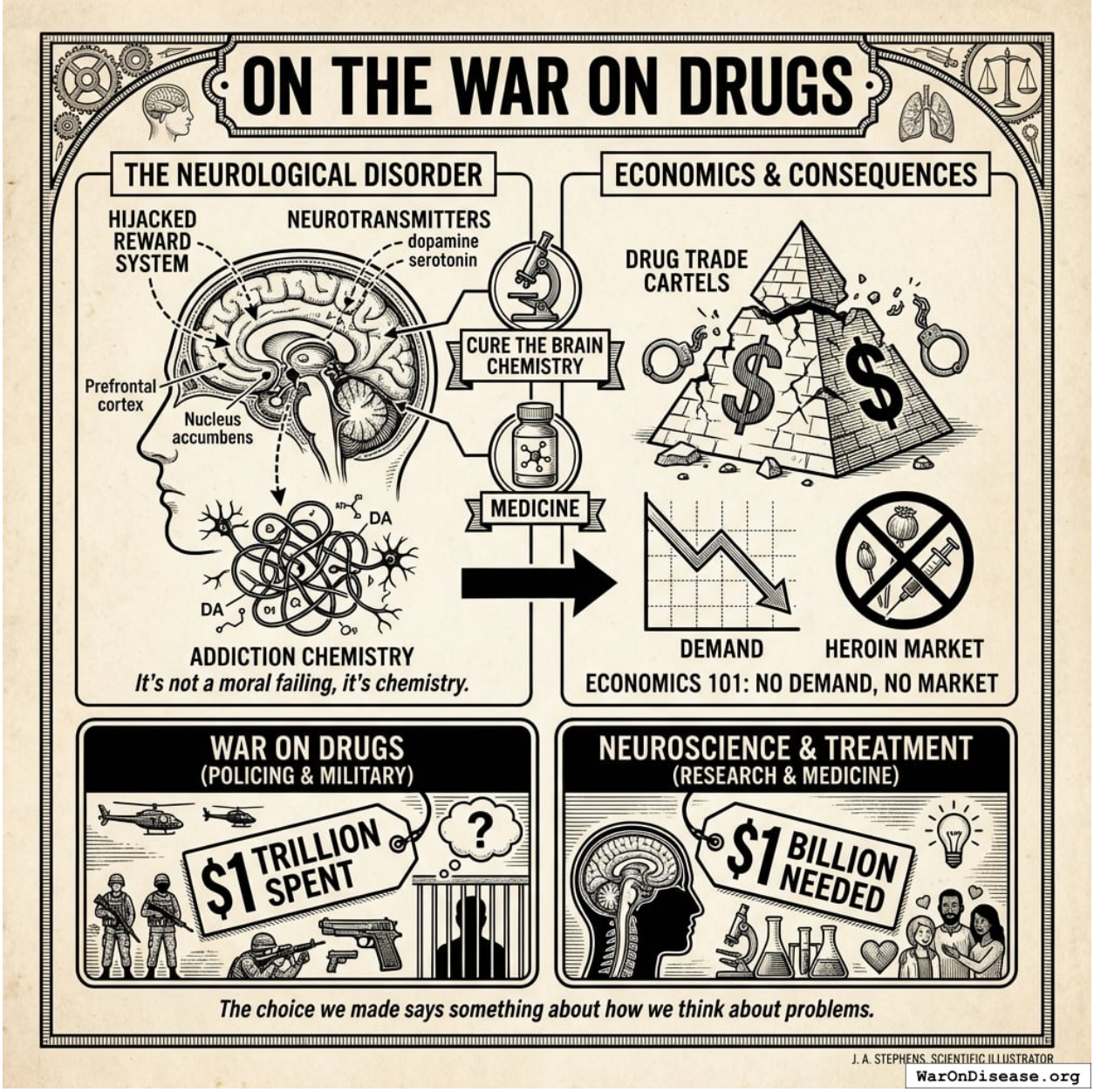


Figure 337: A comparison between the traditional enforcement model and a neurochemical approach to ending the drug trade, highlighting the economic impact of eliminating demand.

Cure the brain chemistry, and the drug trade collapses. Cartels can't sell heroin if nobody's brain wants heroin. Economics 101: no demand, no market.

We spent $1 trillion fighting drug dealers with guns. We could have spent $1 billion fixing the neurochemistry with medicine. The choice we made says something about how we think about problems.

On the War on Poverty

A huge portion of poverty is driven by catastrophic medical costs and lost productivity from chronic illness.

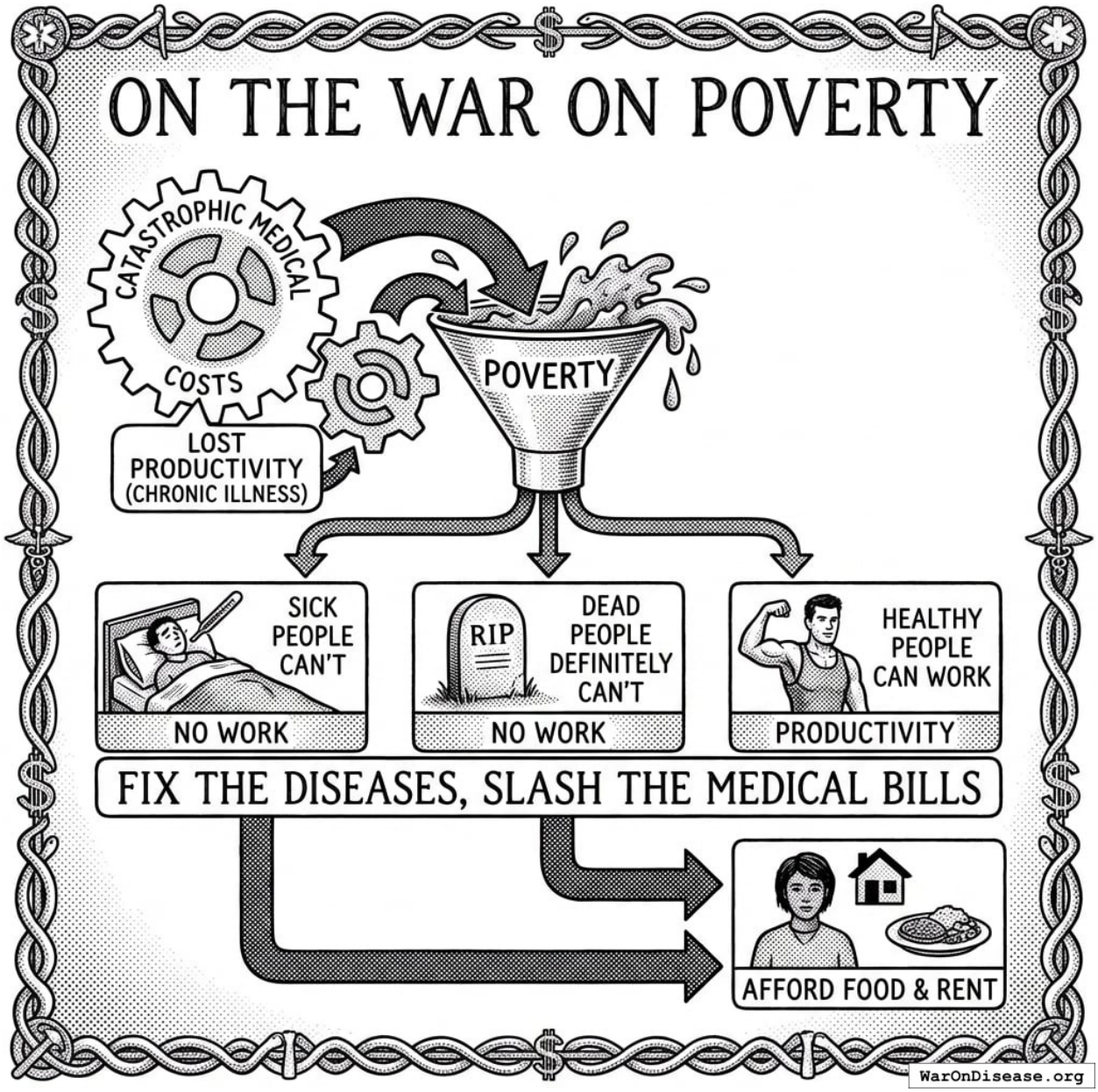


Figure 338: A cause-and-effect diagram illustrating how chronic illness and high medical costs lead to poverty, and how health and cost reduction lead to economic stability.

Healthy people can work. Sick people can't. Dead people definitely can't. This shouldn't be controversial, yet here we are having to explain it.

Fix the diseases, slash the medical bills, and suddenly people can afford food and rent.

On the War on Terror

Radicalization is often a cocktail of mental illness, trauma, social isolation, and untreated PTSD.

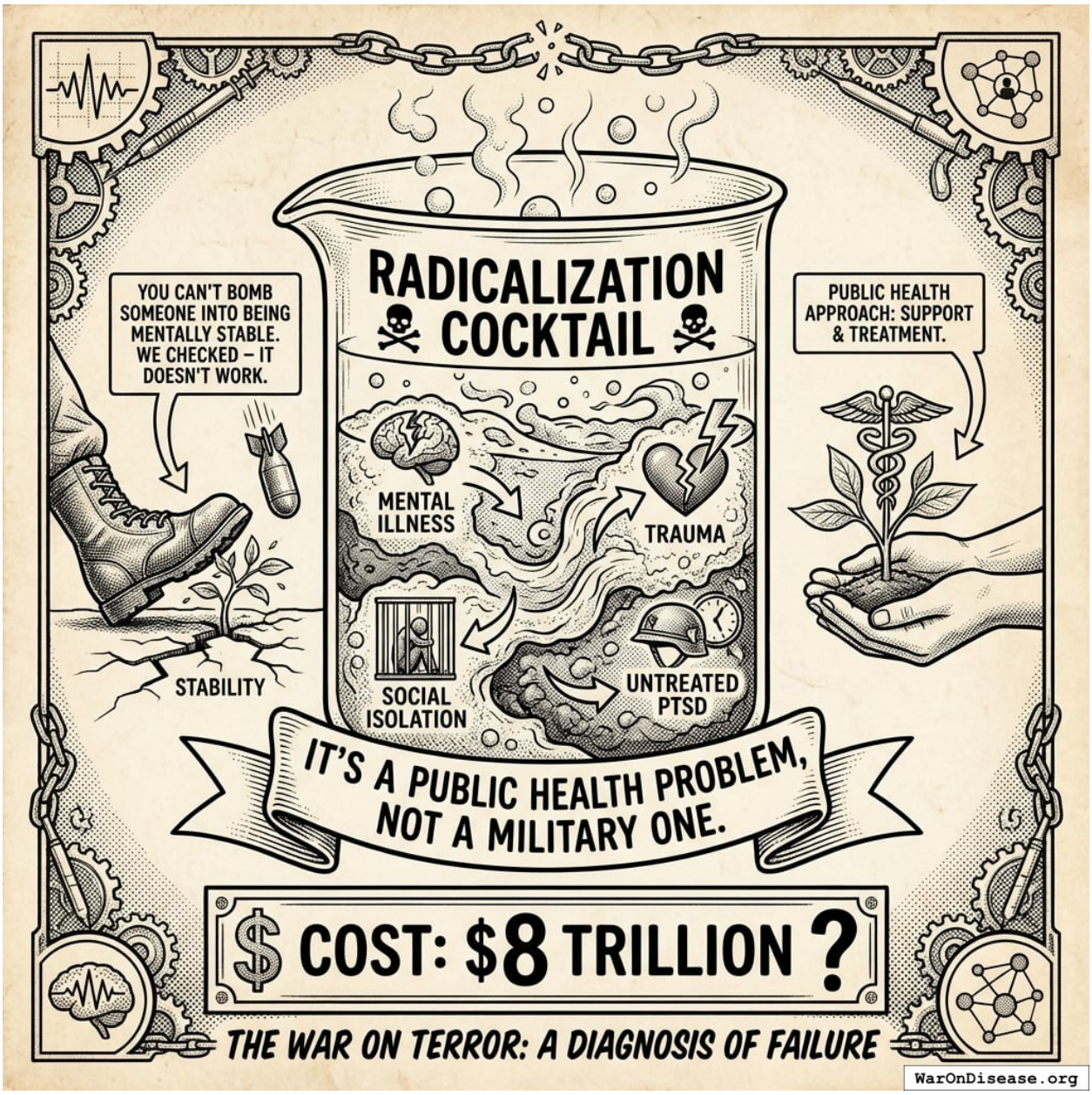


Figure 339: A conceptual comparison between the military approach and a public health framework for addressing radicalization, highlighting the social and mental health factors involved.

It's a public health problem, not a military one. You can't bomb someone into being mentally stable. We checked - it doesn't work. Cost $8 trillion though.

On the War on Crime

A vast amount of crime is linked to addiction, personality disorders, impulse control issues, and even environmental factors like lead poisoning.

If you fix the brain chemistry that makes people violent and impulsive, crime rates plummet. But that would put a lot of prisons out of business, and we can't have that.

On The Obvious Truth Nobody Wants to Admit:

Fix the biology, and you fix the society.



Figure 340: Mapping the downstream effects of curing biological root causes on major societal issues (Drugs, Poverty, Terror, Crime).

It's not a panacea. Difficult people will remain difficult. But you'll have healthy, functional difficult people instead of sick, desperate ones, which is a measurable improvement.

And it's definitely more effective than building more prisons and dropping more bombs, which is what we've been doing for the past century with mixed results at best.

On The Real Victory

The War on Disease is a demonstration with secondary benefits.

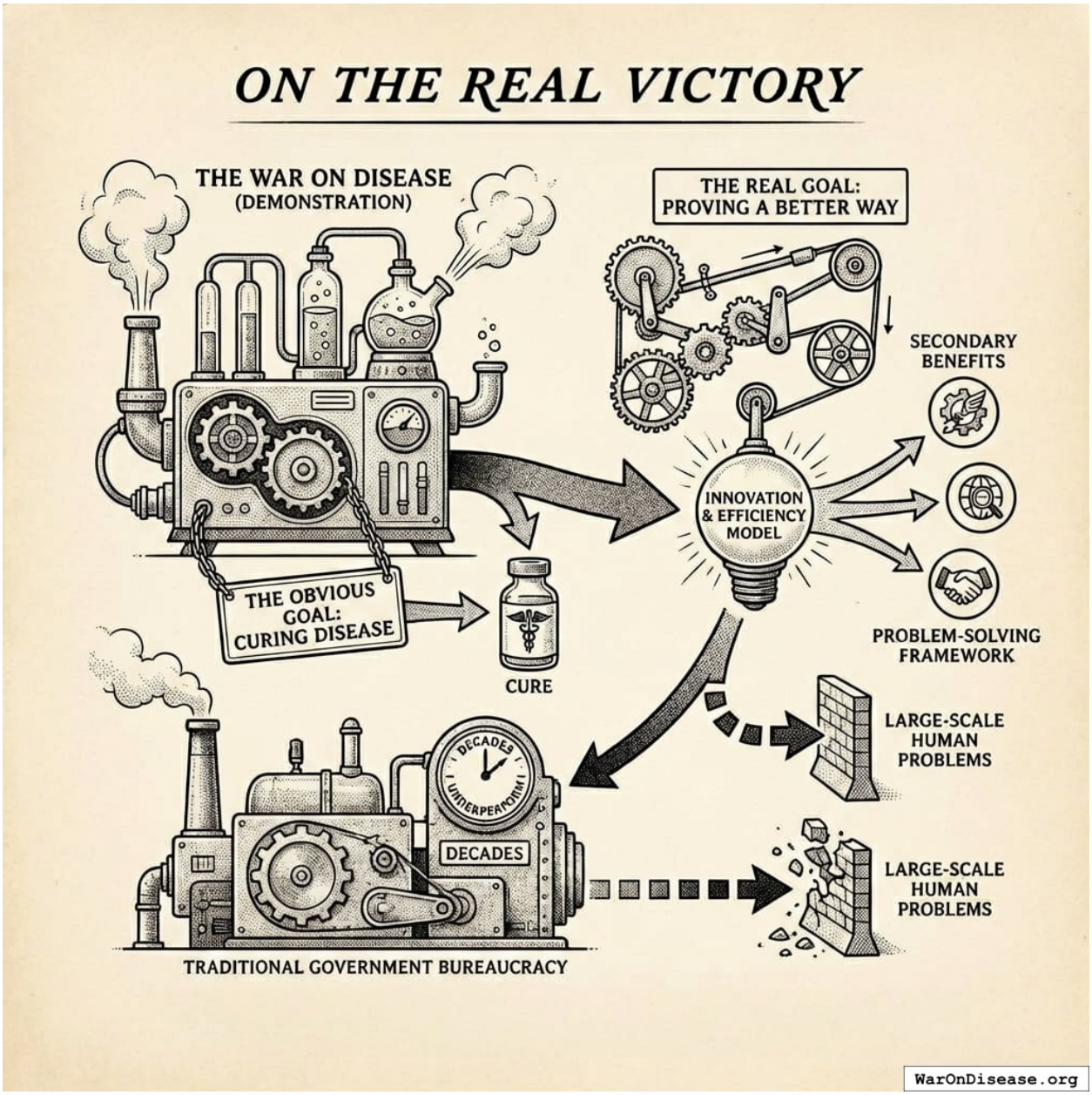


Figure 341: A conceptual breakdown of the 'War on Disease' showing the surface-level objective of curing illness versus the structural objective of proving an alternative to government bureaucracy.

The obvious goal is curing disease. That's what it says on the label.

The real goal is proving that there's a better way to solve large-scale human problems than building a government bureaucracy, giving it a budget, and waiting for it to underperform over several decades.

On Why Every Previous War Failed

Every government "War on X" has been a disaster because it was built on:

- Central planning (people in suits guessing what might work)
- Perverse incentives (getting paid for not solving the problem)
- Monopoly on solutions (one approved way to fail)

This creates a system where success threatens everyone's job, so failure becomes the mission.

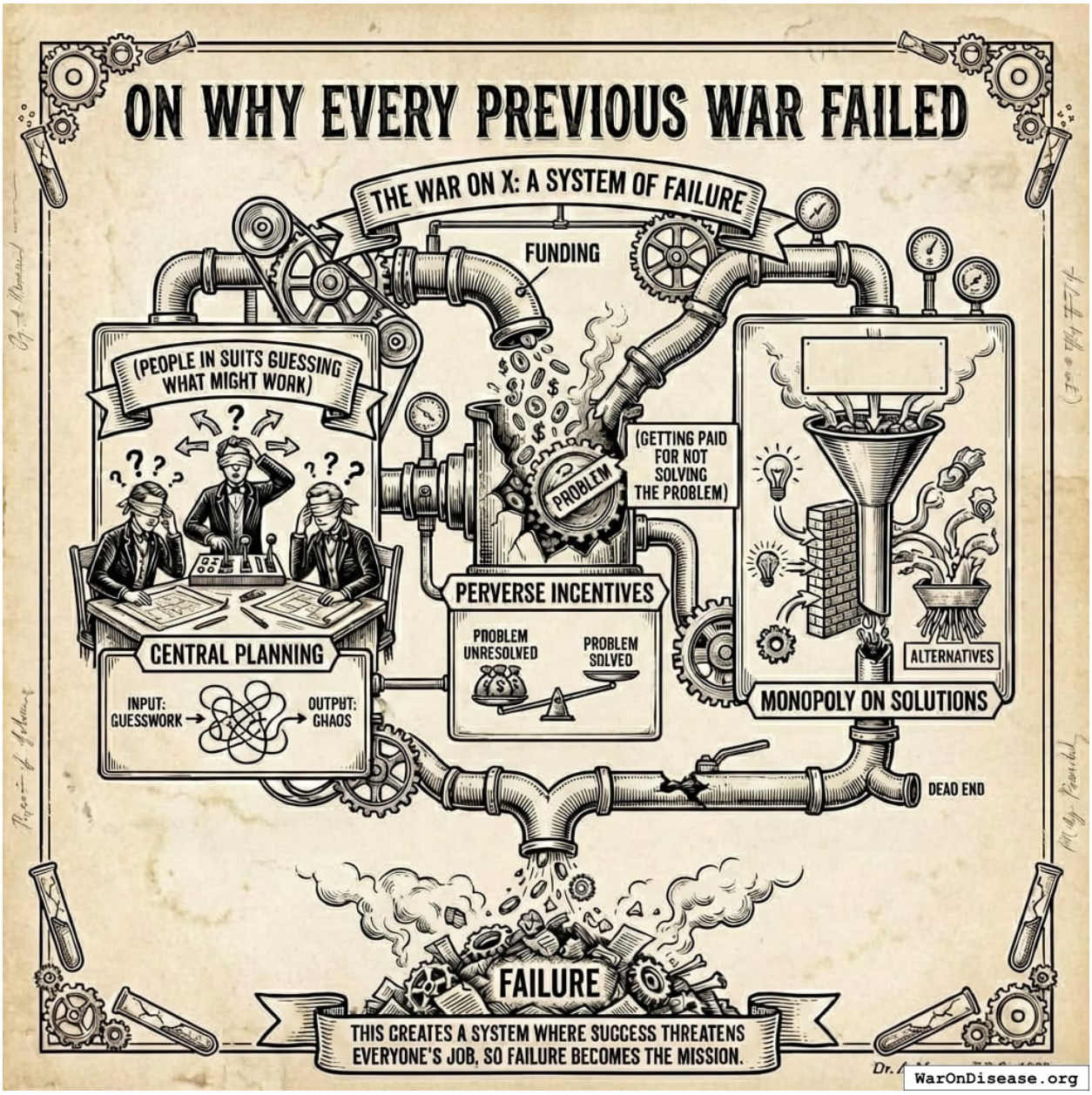


Figure 342: A conceptual diagram showing how central planning, perverse incentives, and monopolies on solutions feed into a self-perpetuating cycle where failure becomes the systemic mission.

On Why This War Will Win

The War on Disease will be the first government "War on X" to actually win because it's built on:

- Competition (thousands of approaches tested simultaneously)
- Aligned incentives (you get rich by actually curing people)
- Ruthless focus on results (treatments that don't work die immediately)

Success makes everyone richer, so success becomes the mission.

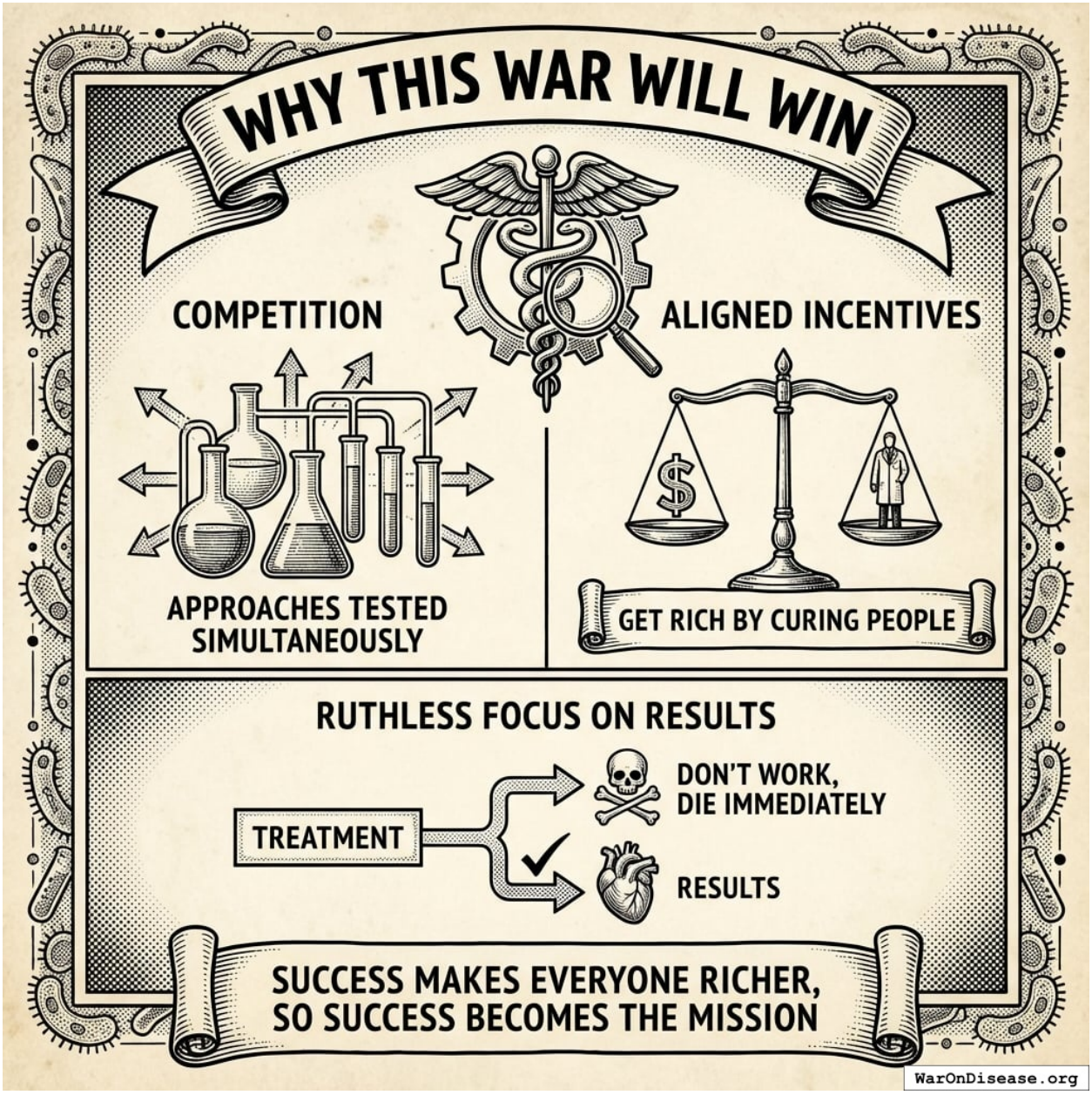


Figure 343: A conceptual diagram showing how competition, aligned incentives, and a focus on results serve as the foundation for success in the War on Disease.

On The Part Where Everything Else Gets Fixed:

When this model succeeds, and it will, because mathematics, the credibility of central planning will be notably diminished.

The public will look at the War on Disease and say "wait, why don't we do this for education? And energy? And other things?"

And bureaucrats will say "because we need to study it first" and people will say "we're doing it anyway."

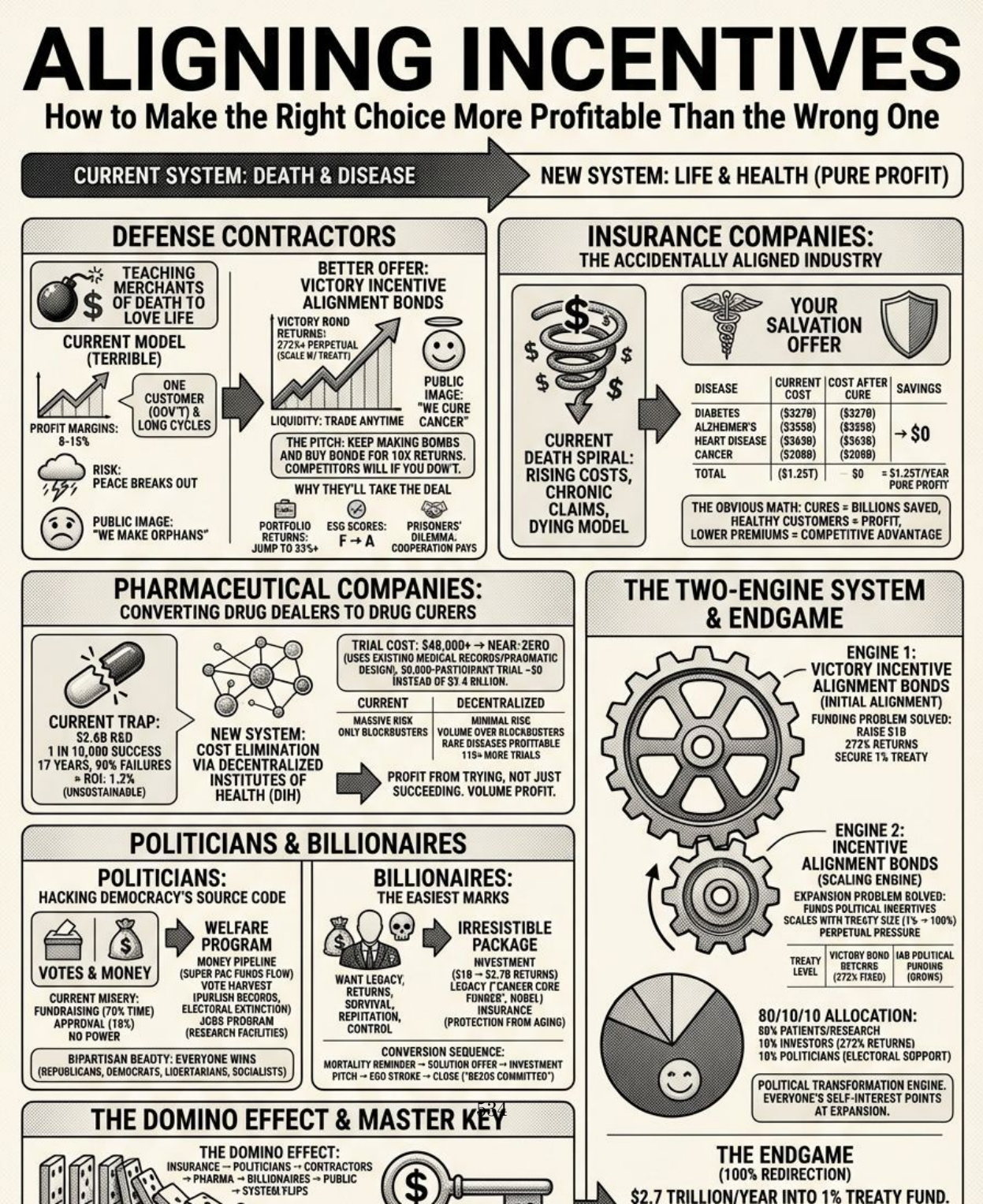
The War on Disease isn't just the first war you'll win.

It's the last war you'll need to fight, because it gives you a template for solving everything else.

Or to put it another way: You're not just curing diseases. You're demonstrating an alternative to government's habitual approach to failure.

Which, ironically, might be the most durable problem to address. But if you can do it, everything else follows naturally.

Aligning Incentives



Related: Incentive Alignment Bonds details the specific financial mechanism design.

This book is not about convincing people to be better. It's about building a system where doing well and doing good are the same thing. The current system pays for death and disease. The new system pays for life and health.

This chapter shows how to align incentives so everyone profits from human flourishing instead of suffering. You don't appeal to better angels. You make the math work.

You can align major interest groups behind a single goal: curing disease. Not through charity. Not through guilt. Through **pure profit**.

Defense Contractors: Teaching Merchants of Death to Love Life

Defense contractors aren't evil. They're just following the money. Currently, that money comes from building things that explode. You're going to offer them something better.

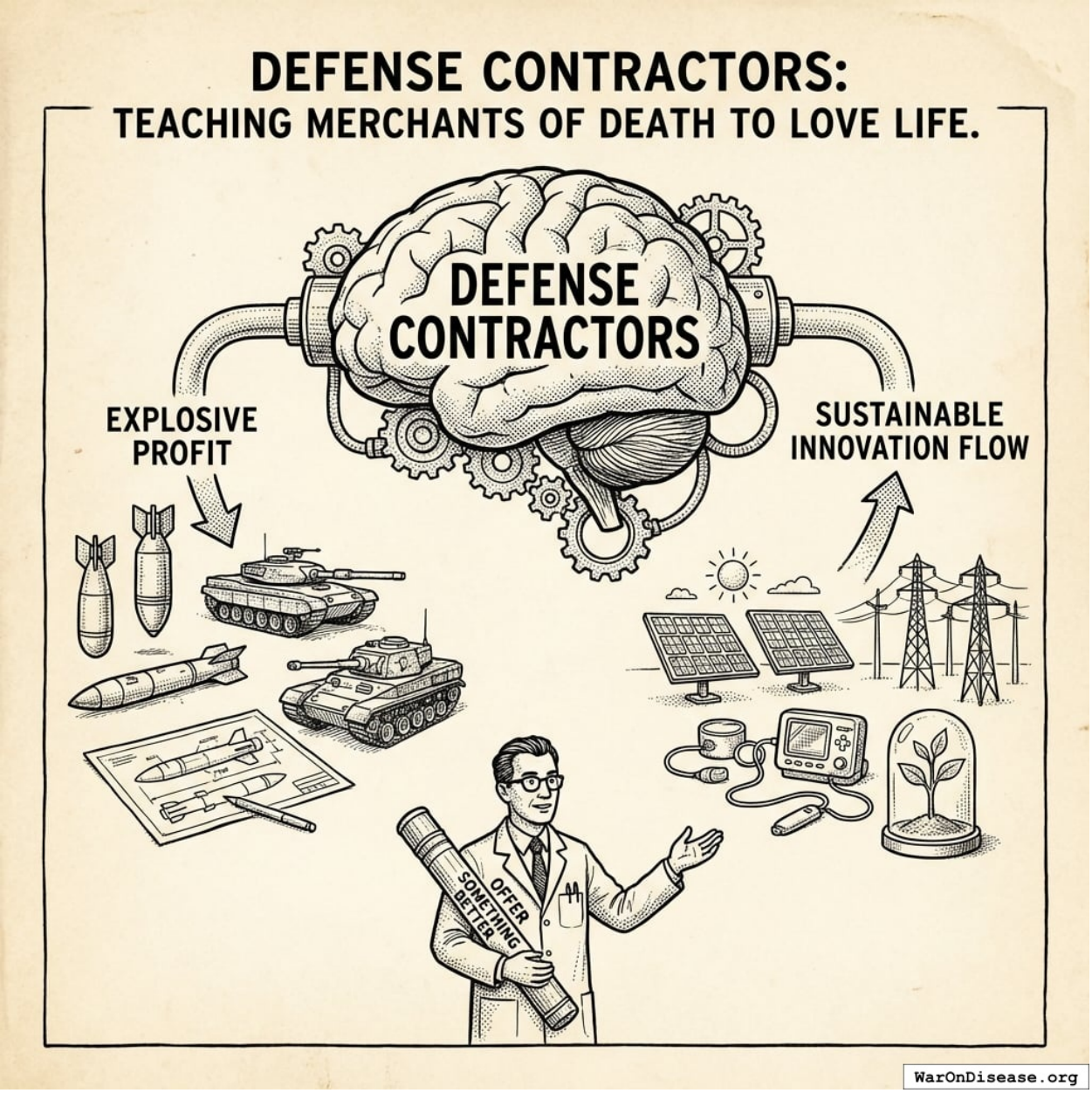


Figure 344: A comparison diagram showing the shift in defense contractor focus from kinetic weaponry to positive alternatives, driven by changing financial incentives.

Their Structural Vulnerabilities

Look at what they're working with:

- **Customer base**: One customer (the government), meaning total revenue dependence on political cycles
- **Product cycle**: 20 years to build a plane that's obsolete on delivery
- **Risk**: Peace might break out (their literal nightmare)
- **Public image**: "We make orphans" (hard to explain at parties)

Here's Your Better Offer: VICTORY Incentive Alignment Bonds

Show them this math:

- **Current defense stock yields**: 2-3% (basically inflation)
- **VICTORY Incentive Alignment Bonds at full treaty**: 272%+ perpetual returns
- **With treaty expansion (2%, 5%, 10%)**: Returns scale automatically
- **Liquidity**: Trade them anytime (unlike locked government contracts)
- **Public image**: "We cure cancer" (instant party hero)

The pitch: "Keep making bombs AND buy bonds that pay 10X better returns. Or your competitors will buy them and use the profits to destroy you."



Figure 345: A comparison chart showing the massive yield gap between traditional defense stocks and VICTORY bonds, alongside qualitative benefits like liquidity and public image.

Why They'll Take the Deal

The Portfolio Math

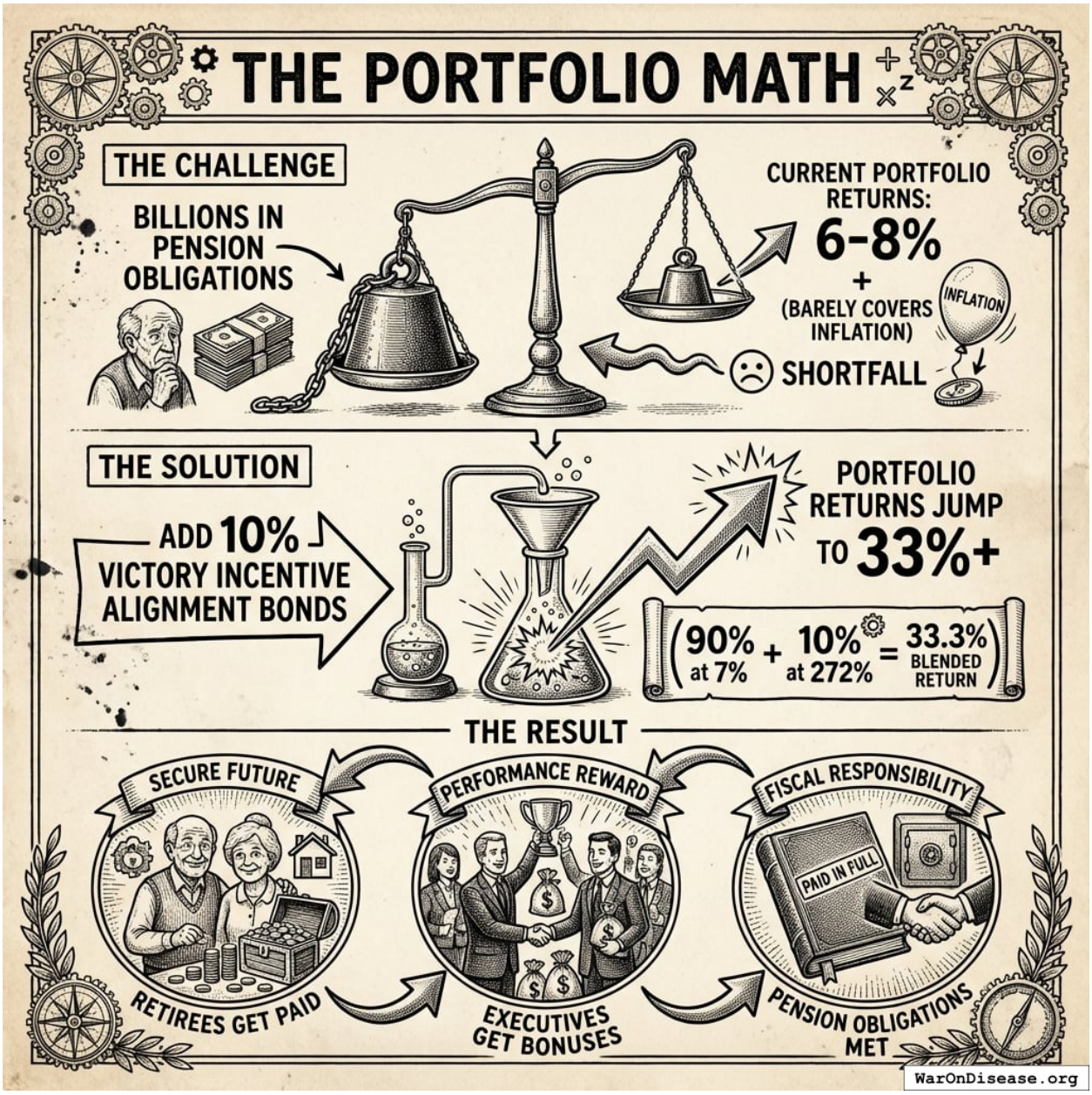


Figure 346: A comparison showing how a 10 percent allocation to high-yield VICTORY bonds shifts a standard pension portfolio from a 7 percent return to a 33.3 percent blended return.

- They have billions in pension obligations
- Current portfolio returns: 6-8% (barely covers inflation)
- Add 10% VICTORY Incentive Alignment Bonds: Portfolio returns jump to 33%+ (90% at 7% + 10% at 272% = 33.3% blended return)
- Their retirees get paid, executives get bonuses, pension obligations get met

The PR Victory

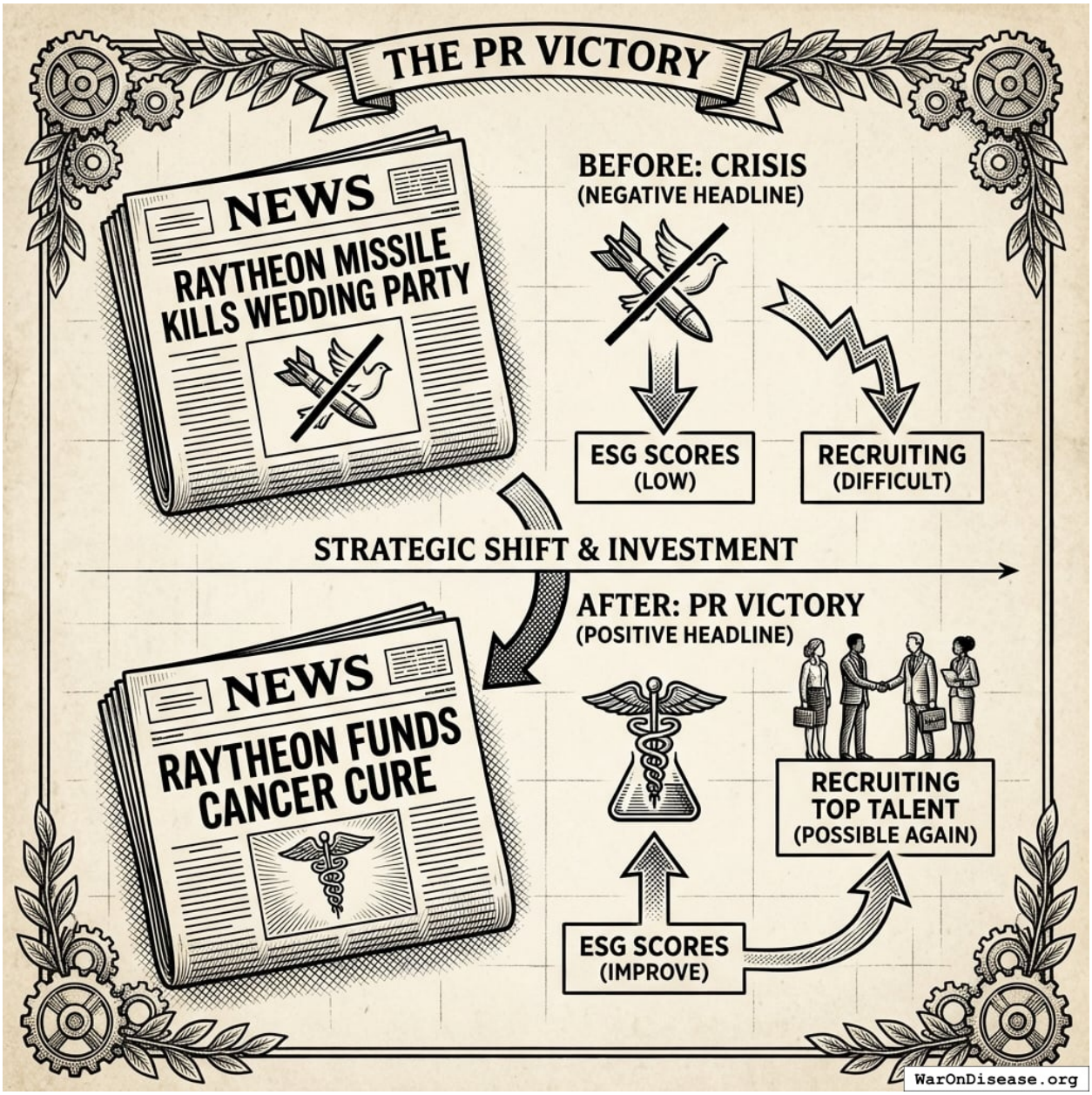


Figure 347: A comparison showing how shifting a corporate narrative from negative press to positive social impact leads to improved ESG scores and better recruitment opportunities.

- Current headline: "Raytheon Missile Kills Wedding Party"
- New headline: "Raytheon Funds Cancer Cure"
- ESG scores improve dramatically
- Recruiting top talent becomes possible again

The Competitive Pressure

Once Lockheed buys bonds, Raytheon has to follow or get crushed by Lockheed's superior returns. It's a prisoners' dilemma where cooperation pays better than defection.

The Implementation Playbook

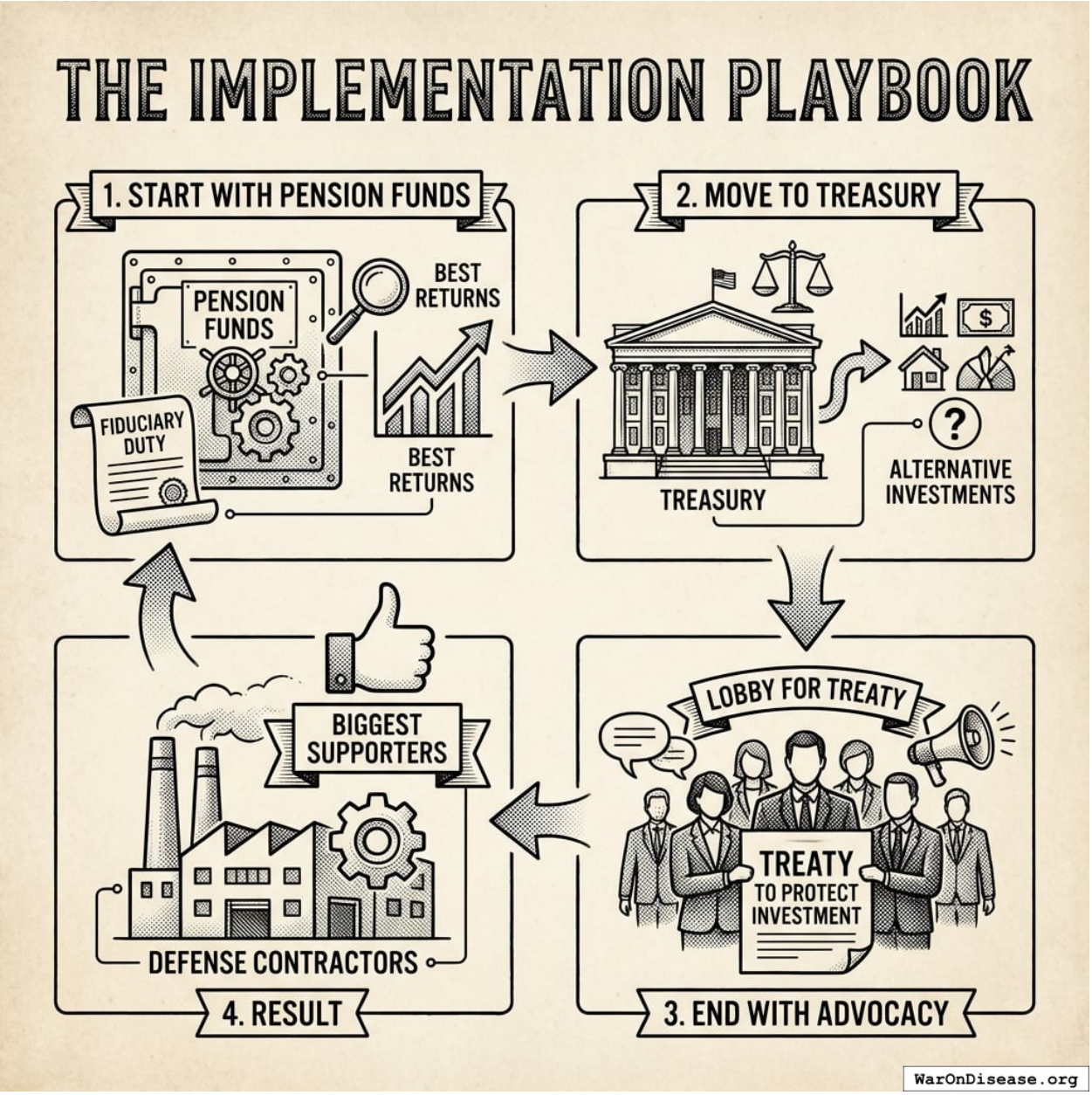


Figure 348: A process flow showing how pension fund and treasury investments lead to advocacy and support from defense contractors.

1. **Start with pension funds** - Fiduciary duty requires best returns
2. **Move to treasury** - Diversification mandate allows alternative investments
3. **End with advocacy** - They lobby FOR the treaty to protect their investment
4. **Result** - Defense contractors become your biggest supporters

Insurance Companies: The Accidentally Aligned Industry

Insurance companies are already on your side. They just don't know it yet. Every disease you cure is billions they don't have to pay out.

Their Current Death Spiral

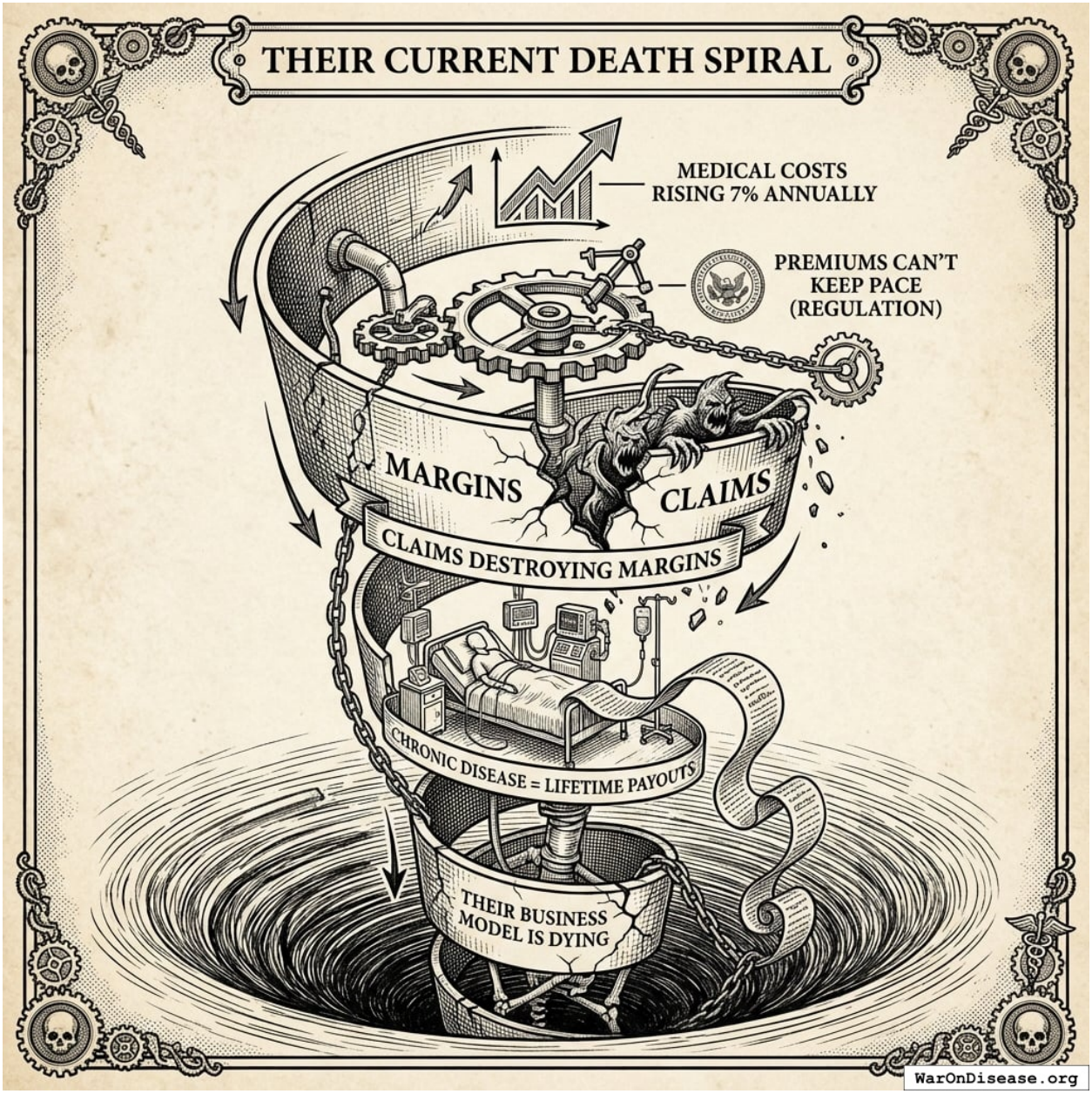


Figure 349: A conceptual diagram of the insurance 'death spiral' showing the causal links between rising medical costs, regulatory constraints, and declining profit margins.

- Medical costs rising 7% annually
- Premiums can't keep pace (regulation)
- Claims destroying margins
- Chronic disease = lifetime payouts

- Their business model is dying

Your Salvation Offer

The Math They Can't Refuse

Disease	Current Annual Cost	After Cure	Reduction
Diabetes	$327B (95% CI: $278B-$376B)	One-time cure cost	~90% ongoing savings
Alzheimer's	$355B (95% CI: $302B-$408B)	One-time cure cost	~90% ongoing savings
Heart Disease	$363B (95% CI: $309B-$417B)	One-time cure cost	~90% ongoing savings
Cancer	$208B (95% CI: $177B-$239B)	One-time cure cost	~90% ongoing savings

Even partial cures dramatically improve their margins. They don't need $0 costs - they need costs to stop rising 7% annually.

The Implementation

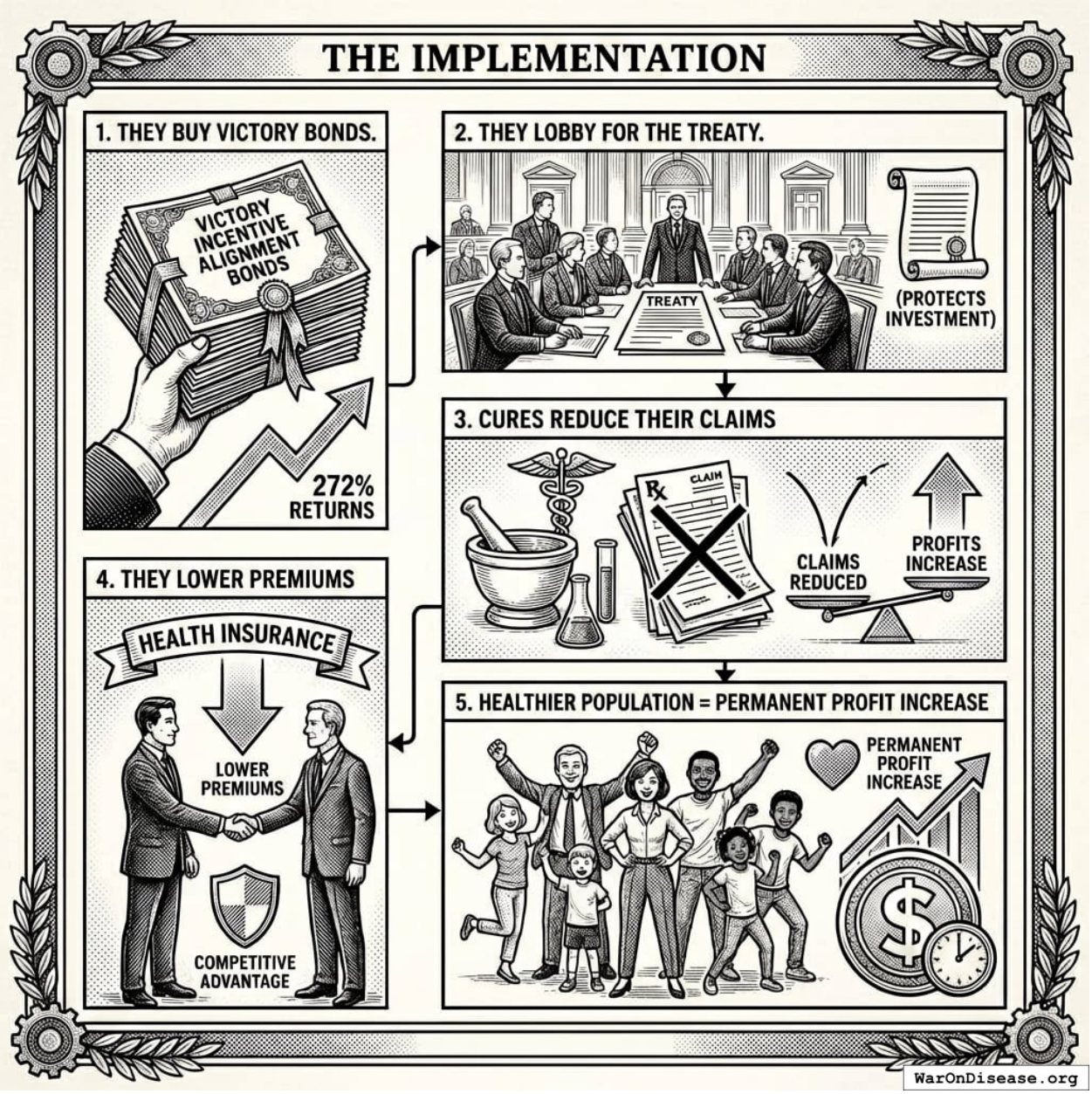


Figure 350: A flow diagram illustrating the causal chain from bond purchase and lobbying to health improvements and permanent profit increases.

1. They buy VICTORY Incentive Alignment Bonds (272% returns)
2. They lobby for the treaty (protects investment)
3. Cures reduce their claims (profits increase)
4. They lower premiums (competitive advantage)
5. Healthier population = permanent profit increase

Why They're Your Natural Allies

Insurance companies are the only industry that profits from human health. Every other healthcare player profits from sickness. Use this natural alignment:

- **Pharma wants chronic patients** - Insurance wants cures
- **Hospitals want full beds** - Insurance wants empty ones
- **Doctors want repeat visits** - Insurance wants one-time fixes

You're offering insurance companies a world where chronic disease costs stop compounding at 7% annually.

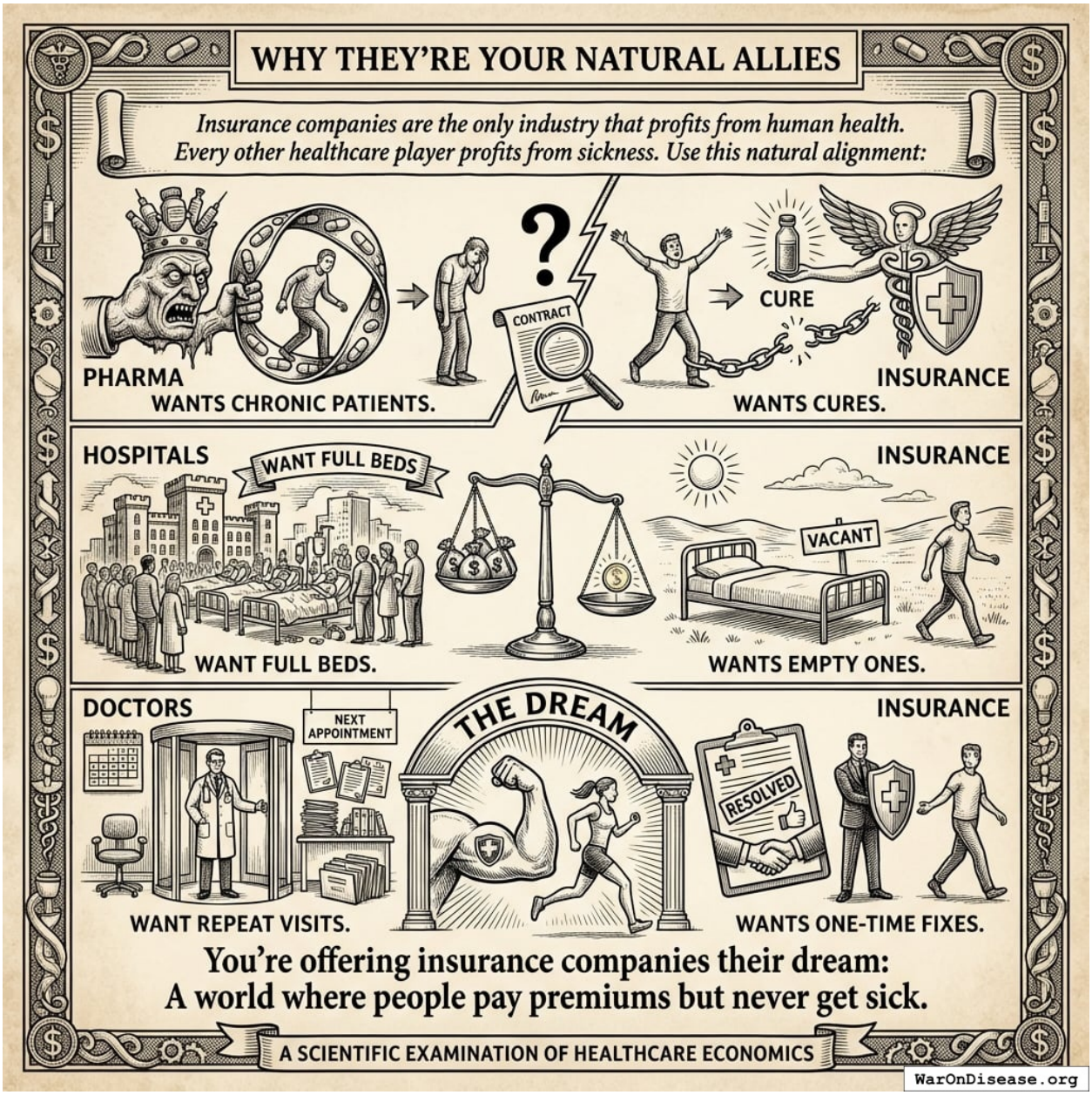


Figure 351: A comparison chart showing the conflicting incentives between traditional healthcare providers and insurance companies, highlighting how insurance aligns with long-term patient health.

Pharmaceutical Companies: Converting Drug Dealers to Drug Curers

Pharma companies aren't evil either. They're trapped in a broken business model that rewards treating symptoms forever instead of curing diseases once. Here's how you free them.

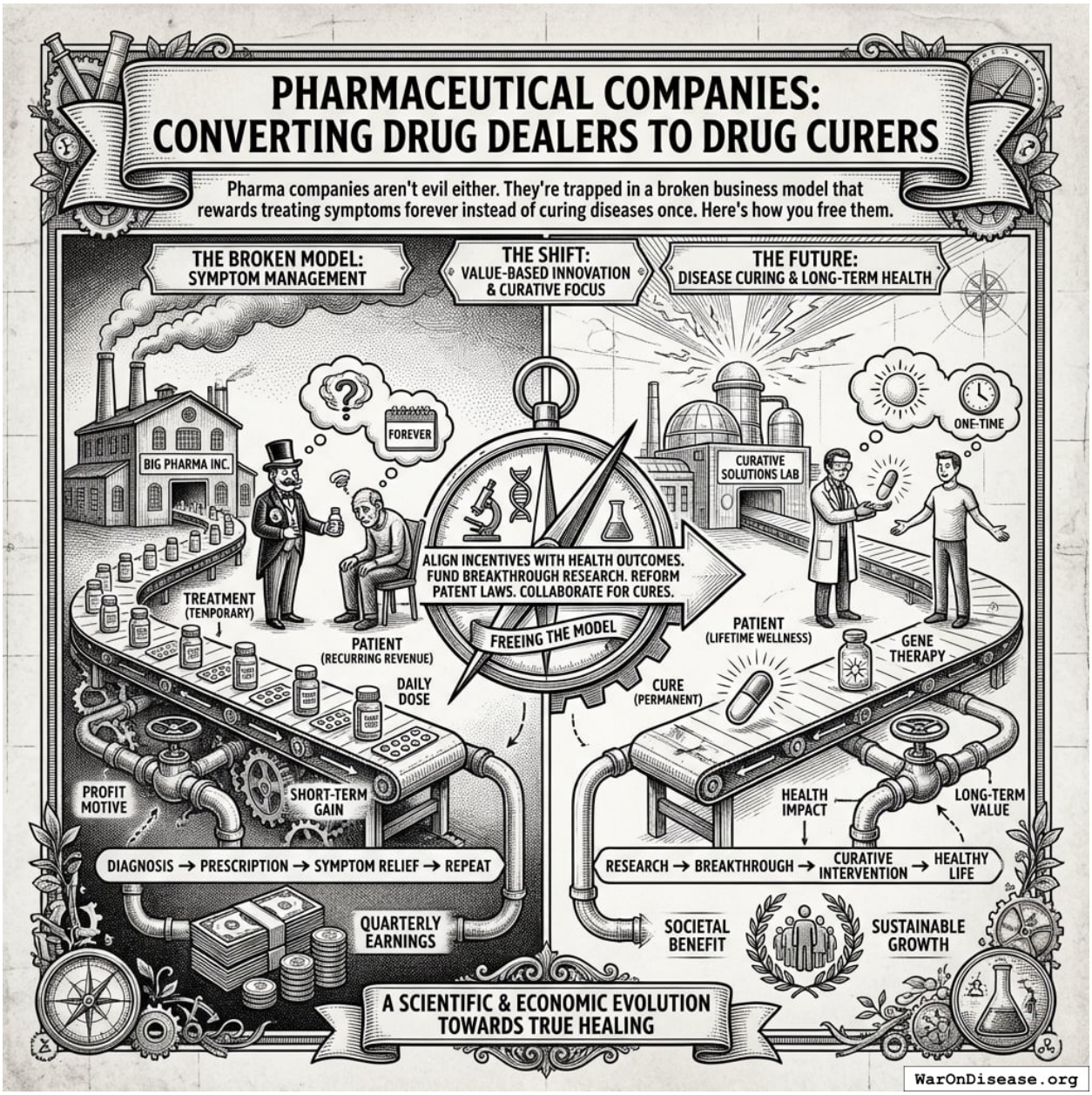


Figure 352: A conceptual diagram contrasting the current pharmaceutical model of recurring symptom treatment with a new model focused on one-time cures.

Their Current Trap

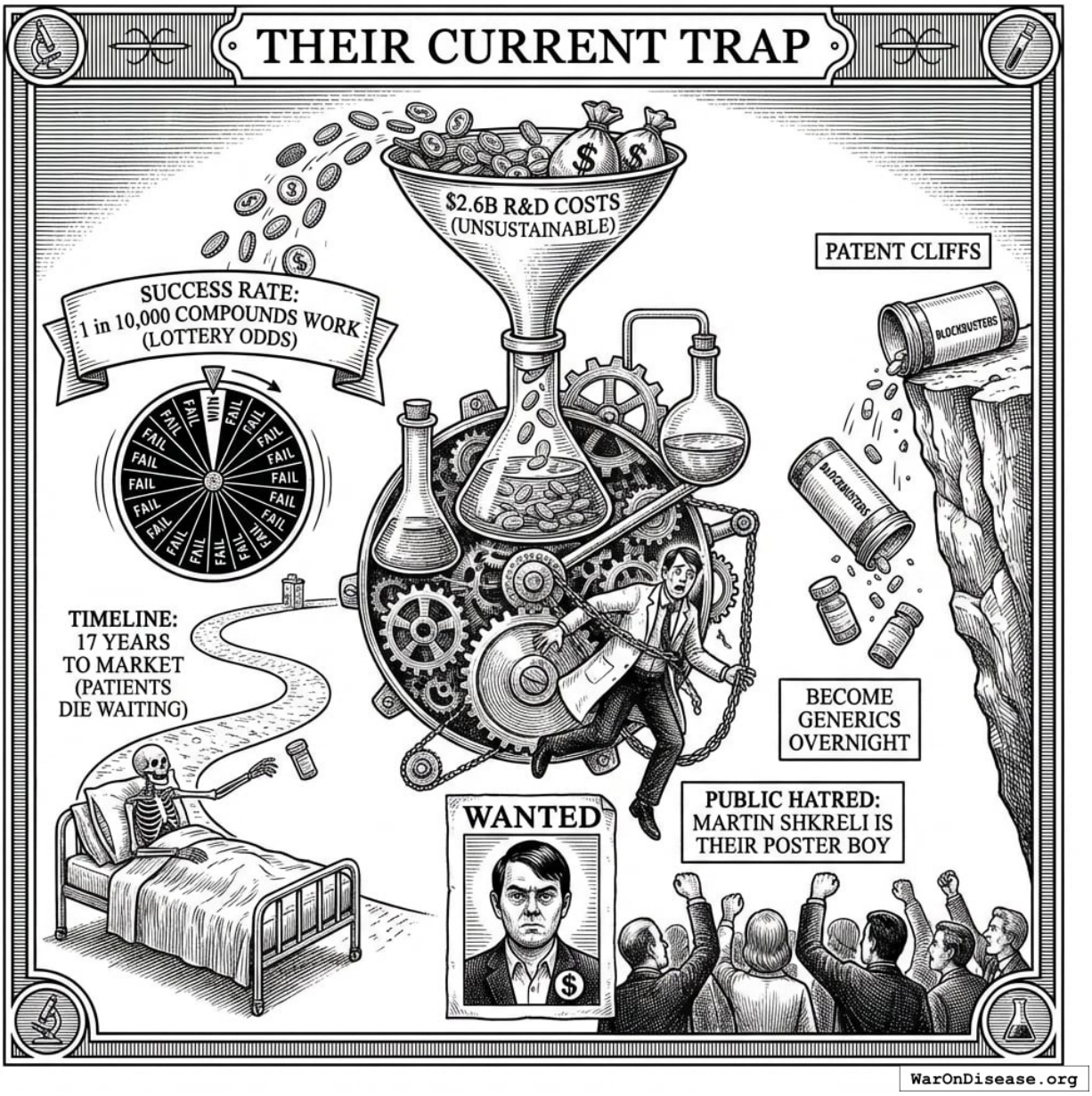


Figure 353: An infographic illustrating the 'Pharma Trap' by visualizing the extreme funnel of drug development, highlighting the 17-year timeline and 2.6B cost to move from 10,000 compounds to one successful drug.

- **R&D costs**: $2.6B per drug (unsustainable)
- **Success rate**: 1 in 10,000 compounds work (lottery odds)
- **Timeline**: 17 years to market (patients die waiting)
- **Patent cliffs**: Blockbusters become generics overnight
- **Public hatred**: Martin Shkreli is their poster boy

The Cost Elimination

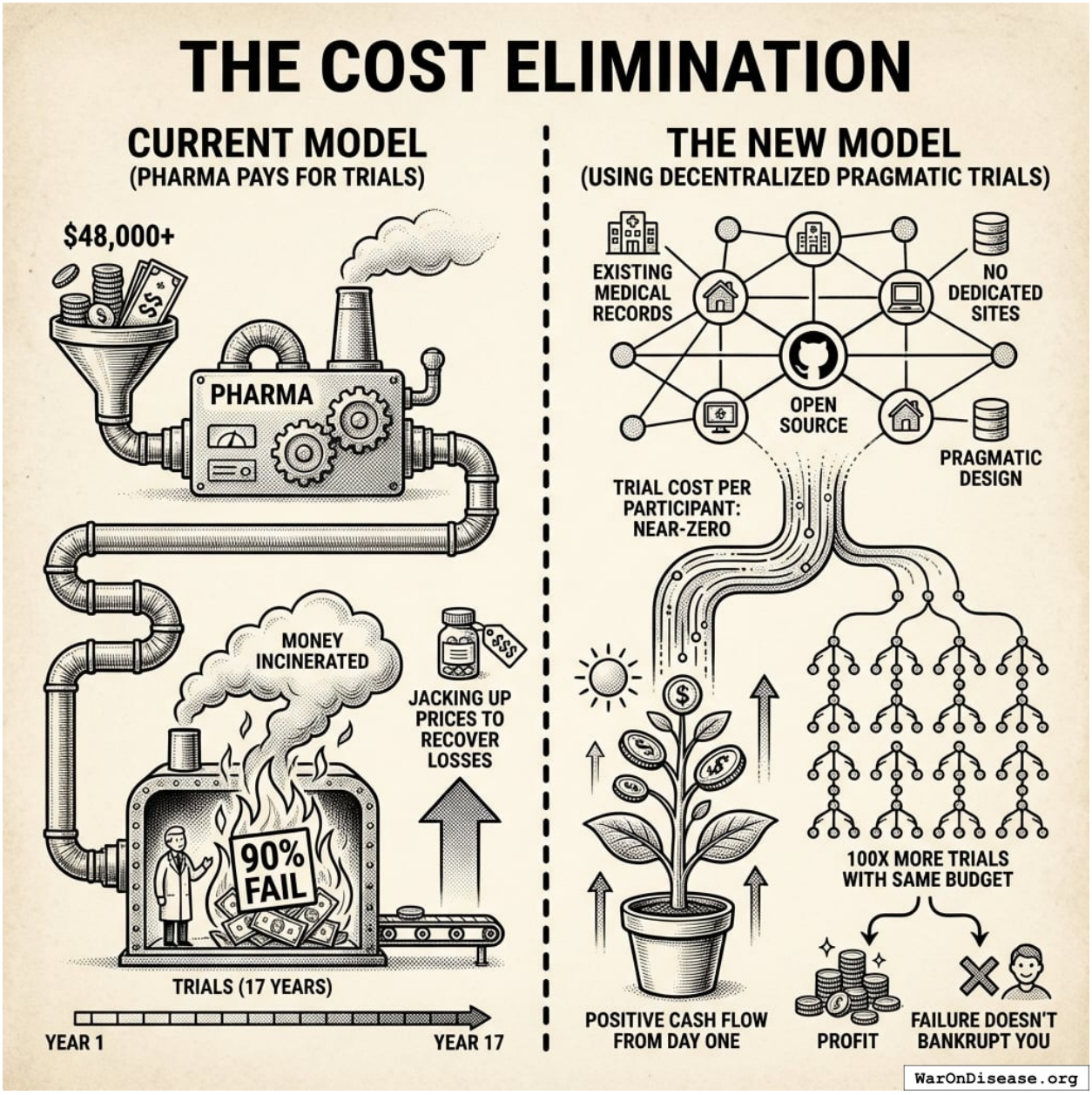


Figure 354: A side-by-side comparison showing the shift from the high-cost, high-risk traditional pharma trial model to a low-cost, scalable decentralized pragmatic trial model.

Current model (pharma pays for trials):

- Pharma spends $48,000+ per trial participant
- Burns cash for 17 years hoping for approval
- 90% of drugs fail in trials = money incinerated
- Success means jacking up prices to recover losses

The new model (using decentralized pragmatic trials):

- Trial cost drops ~98% (pragmatic design, existing medical records, no dedicated sites)

- Can afford to run 100x more trials with same budget
- Success means profit, failure doesn't bankrupt you

The Math That Converts Them

Current Pharma Economics

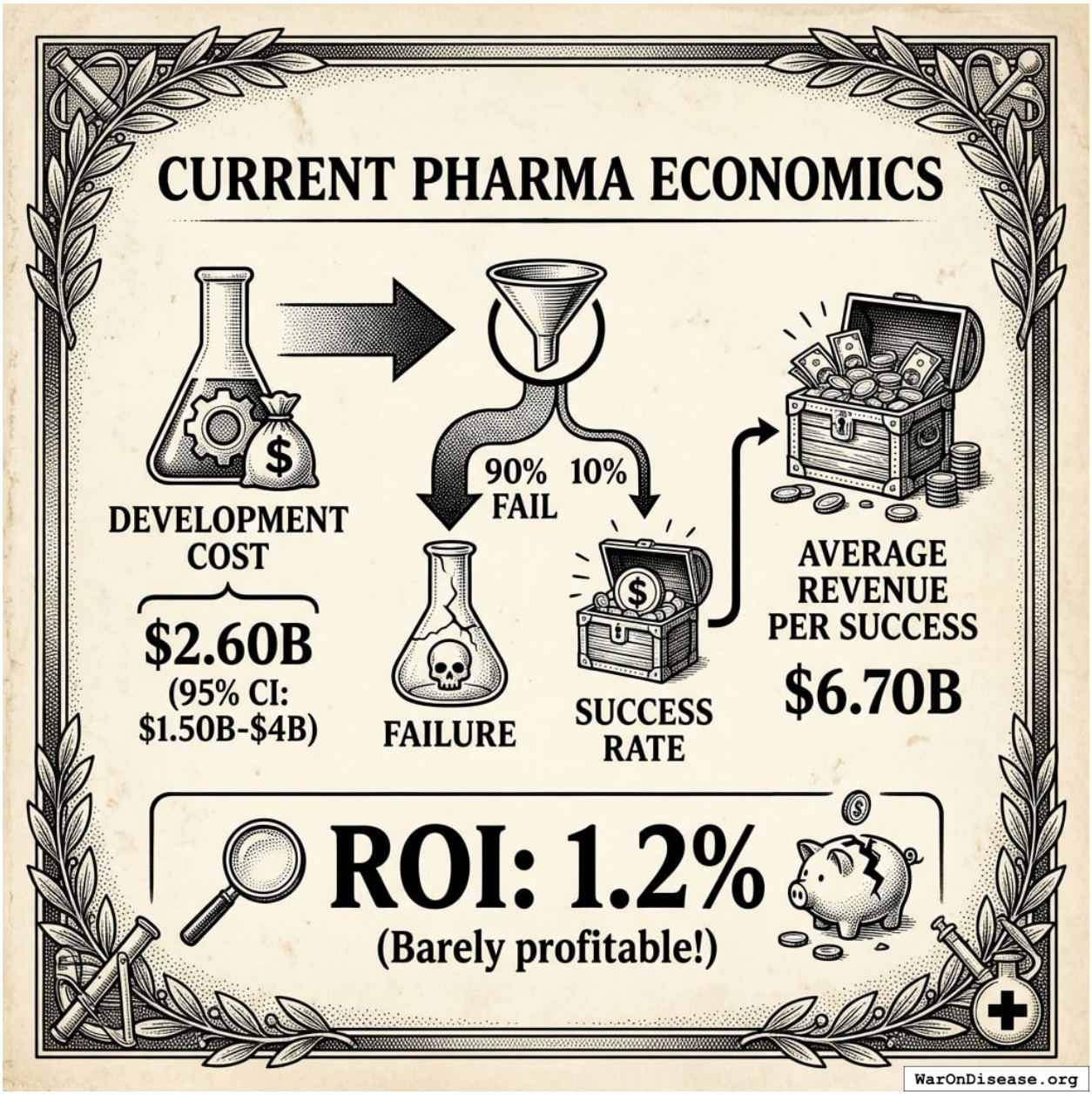


Figure 355: A visual breakdown of pharmaceutical economics illustrating how high development costs and low success rates result in a marginal 1.2 percent return on investment.

- Development cost: $2.60B (95% CI: $1.50B-$4B)
- Success rate: 10% (90% fail)
- Average revenue per success: $6.70B
- **ROI: 1.2%** (Barely profitable!)

New System - Cost Elimination

The main benefit: pragmatic clinical trials become 100x cheaper.

How your decentralized institutes of health eliminate trial costs

Current system: Pharma spends $48,000 per participant on:

- Dedicated trial sites and staff
- Extensive monitoring and site visits
- Custom data collection infrastructure
- Regulatory compliance overhead

A system using your decentralized institutes of health (DIH): Cost drops ~98% because:

- Uses existing medical practices (no dedicated sites)
- Patient's regular doctor enrolls them (one-click)
- Leverages existing EHR data (no custom infrastructure)
- Pragmatic design = minimal monitoring
- Platform handles regulatory compliance automatically

Result: 50,000-participant trial drops from $2.4 billion to under $50 million (regulatory filing, data analysis, platform fees).

Current System	A decentralized trials framework
Pay $2.60B (95% CI: $1.50B-$4B) for trials	Pay ~$50M for trials (98% reduction)
90% of drugs fail = $2.3B loss	Failure costs ~$50M (survivable)
10-17 year development	2-3 year development
Only blockbusters viable	Rare diseases = profitable
Massive risk	Manageable risk per attempt

A decentralized institutes of health network doesn't change whether drugs work biologically. It changes the economics: you profit from TRYING, not just from SUCCEEDING.

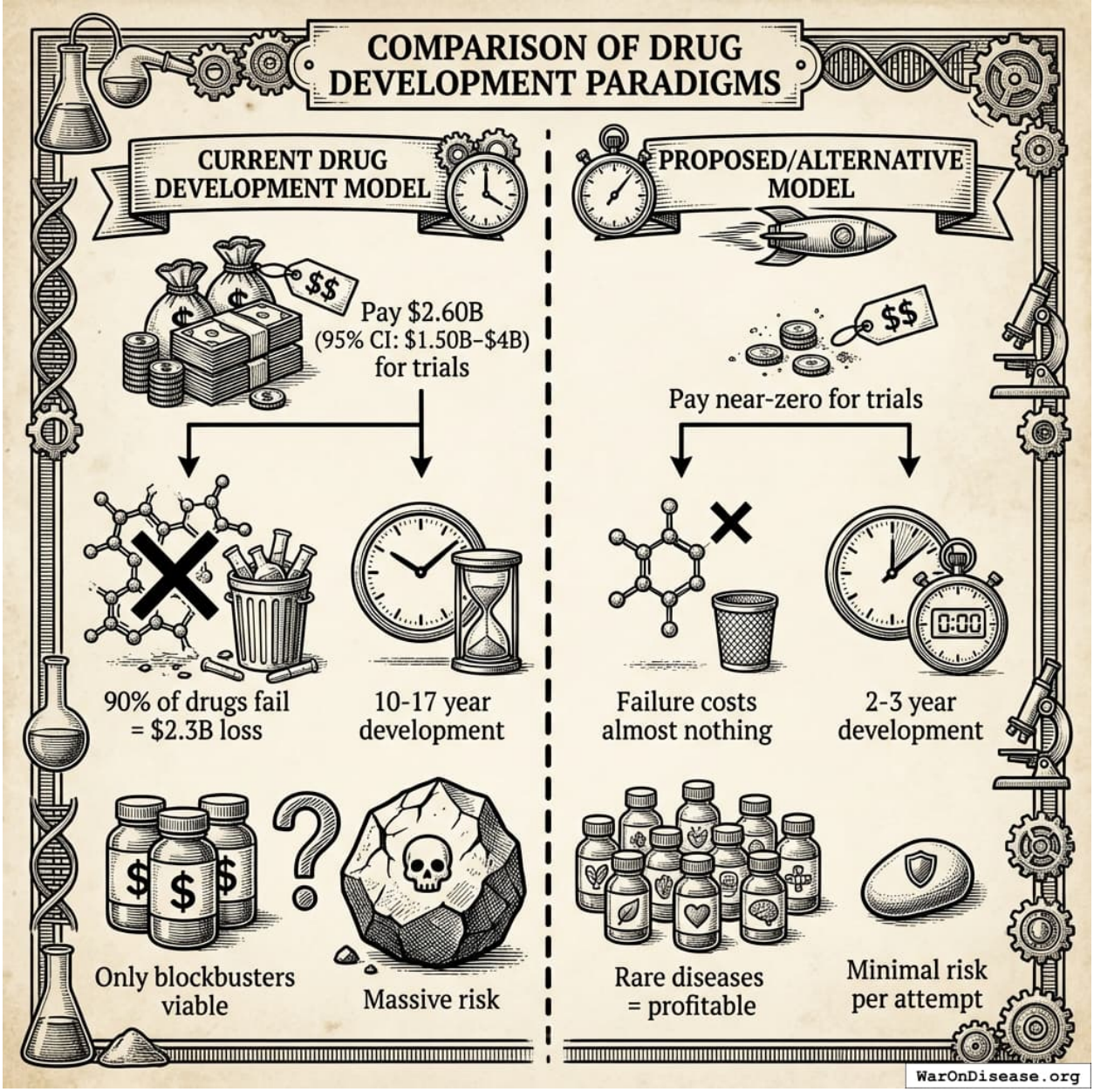


Figure 356: Side-by-side comparison of the current high-cost pharmaceutical model versus the proposed decentralized low-cost model.

Pharma's New Business Model: Volume Over Blockbusters

The trade-off: **Lower revenue per drug, but massively more attempts.**

Current model

- Chase $1B+ blockbusters
- Can only afford ~10 attempts (each costs $2.6B)
- Need huge markets to justify risk
- 10,000 compounds sitting on shelf

The new decentralized model

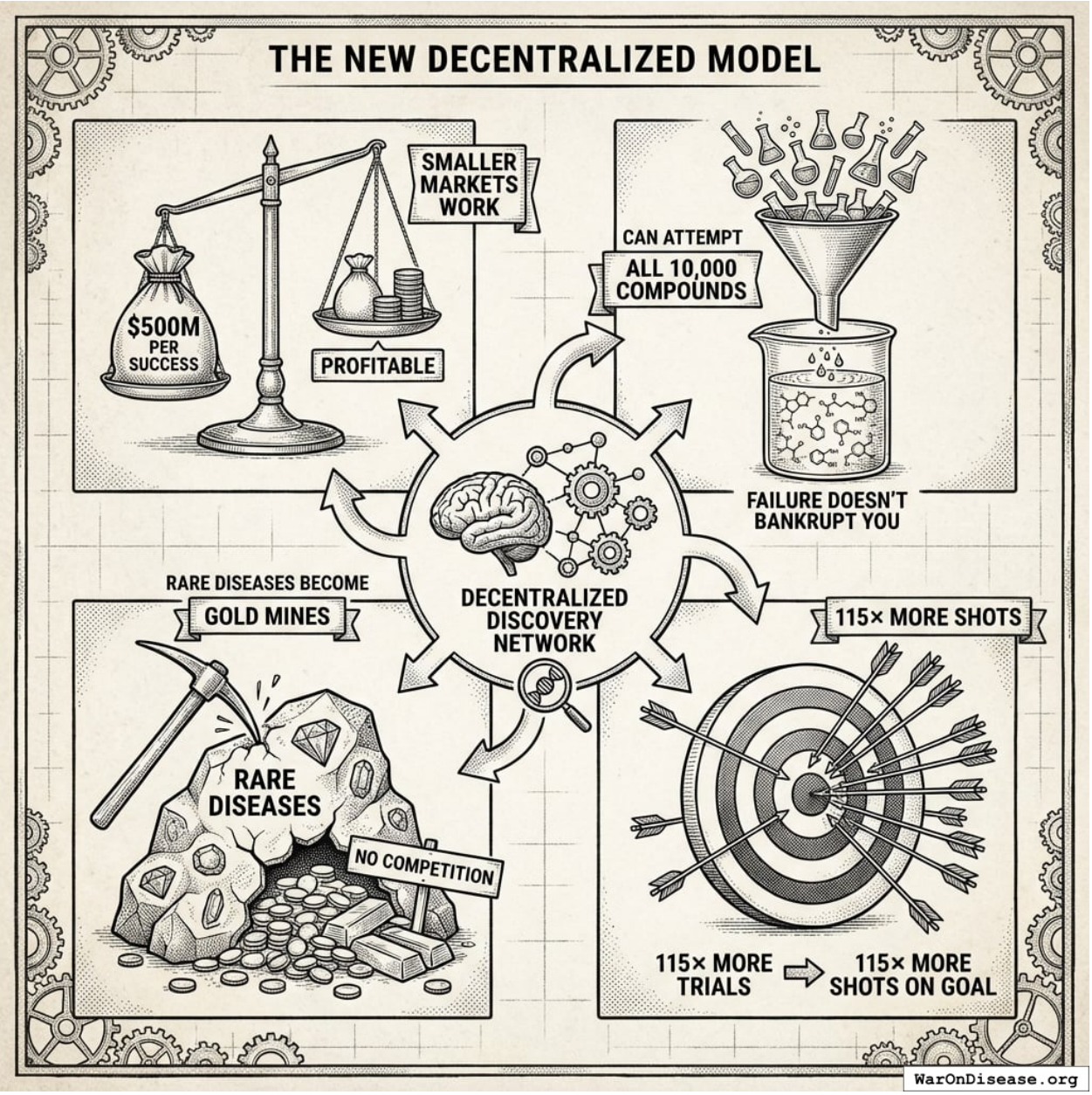


Figure 357: A visualization of the decentralized drug development model, contrasting lower profitability thresholds with a massive increase in trial volume and target market diversity.

- $500M per success is profitable (smaller markets work)
- Can attempt all 10,000 compounds (failure doesn't bankrupt you)
- Rare diseases become gold mines (no competition)
- 115× more trials = 115× more shots on goal

How to Get Them Onboard

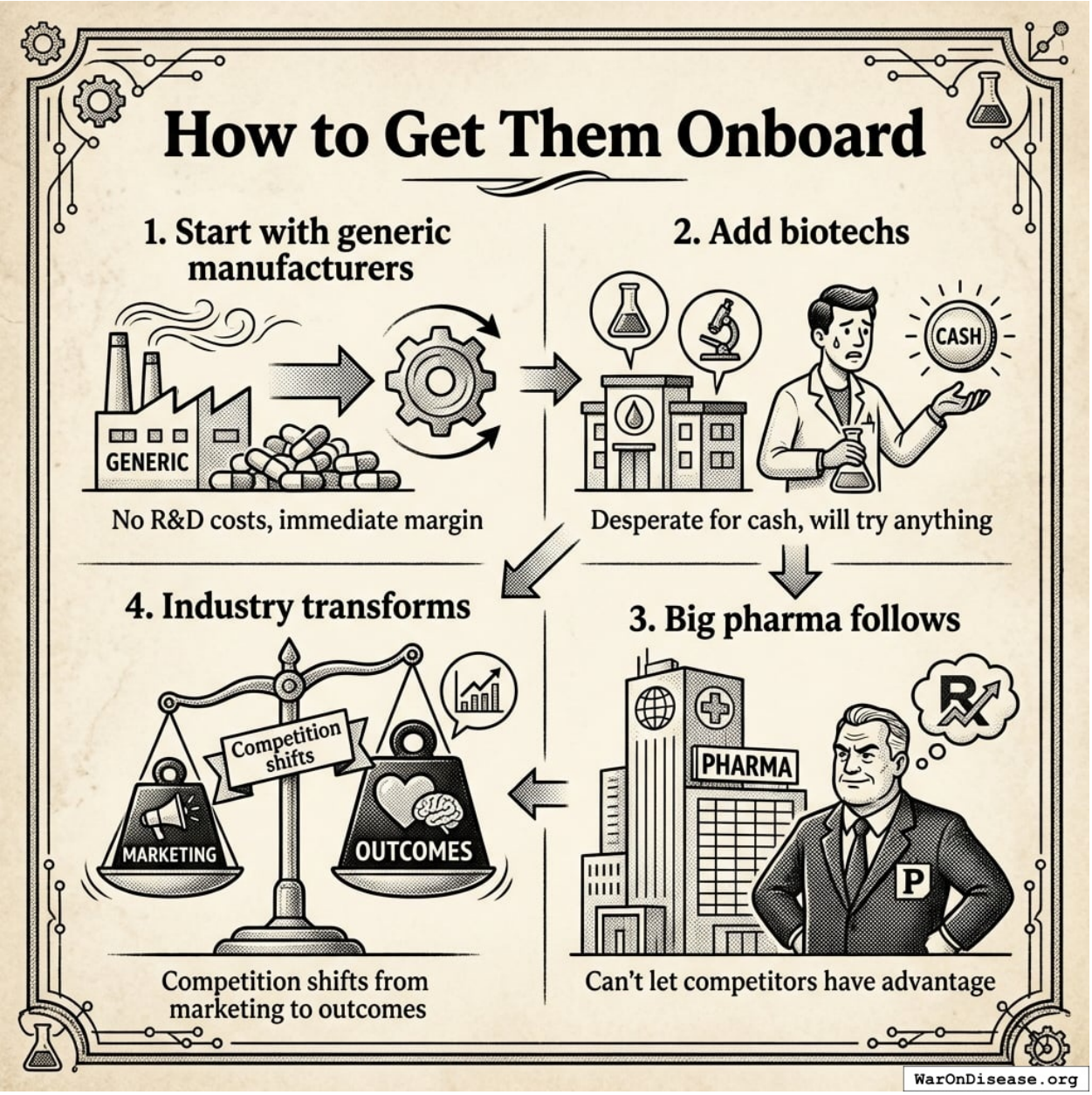


Figure 358: A 4-step sequence illustrating the market adoption strategy starting with generic manufacturers and biotechs, followed by big pharma, leading to a total industry transformation.

1. **Start with generic manufacturers** - No R&D costs, immediate margin
2. **Add biotechs** - Desperate for cash, will try anything
3. **Big pharma follows** - Can't let competitors have advantage
4. **Industry transforms** - Competition shifts from marketing to outcomes

Politicians: Hacking Democracy's Source Code

Politicians are the simplest organisms in this ecosystem. They want exactly two things: votes and money. You're going to give them both.

Their Current Misery

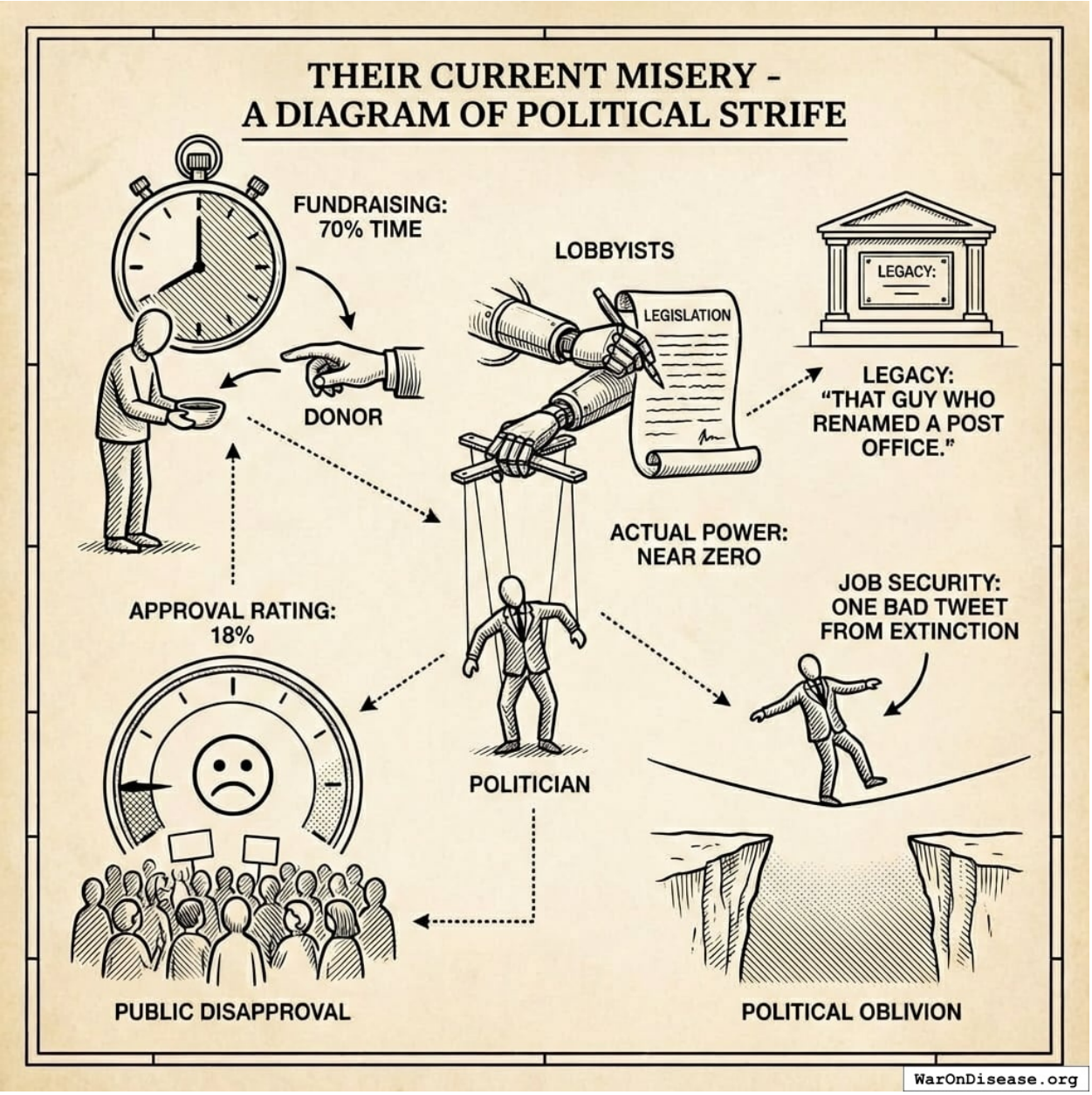


Figure 359: A dashboard-style infographic illustrating the 'misery profile' of a modern politician, contrasting high fundraising demands with low approval and actual power.

- **Fundraising**: 70% of their time begging for money
- **Approval rating**: 18% (everyone hates them)
- **Actual power**: Near zero (lobbyists write the bills)
- **Legacy**: "That guy who renamed a post office"
- **Job security**: One bad tweet from extinction

Your Political Welfare Program

The Money Pipeline

- Treaty supporter: Super PAC funds flow in
- Treaty opponent: Super PAC funds their opponent
- It's not corruption, it's free speech (thanks Citizens United!)

The Vote Harvest

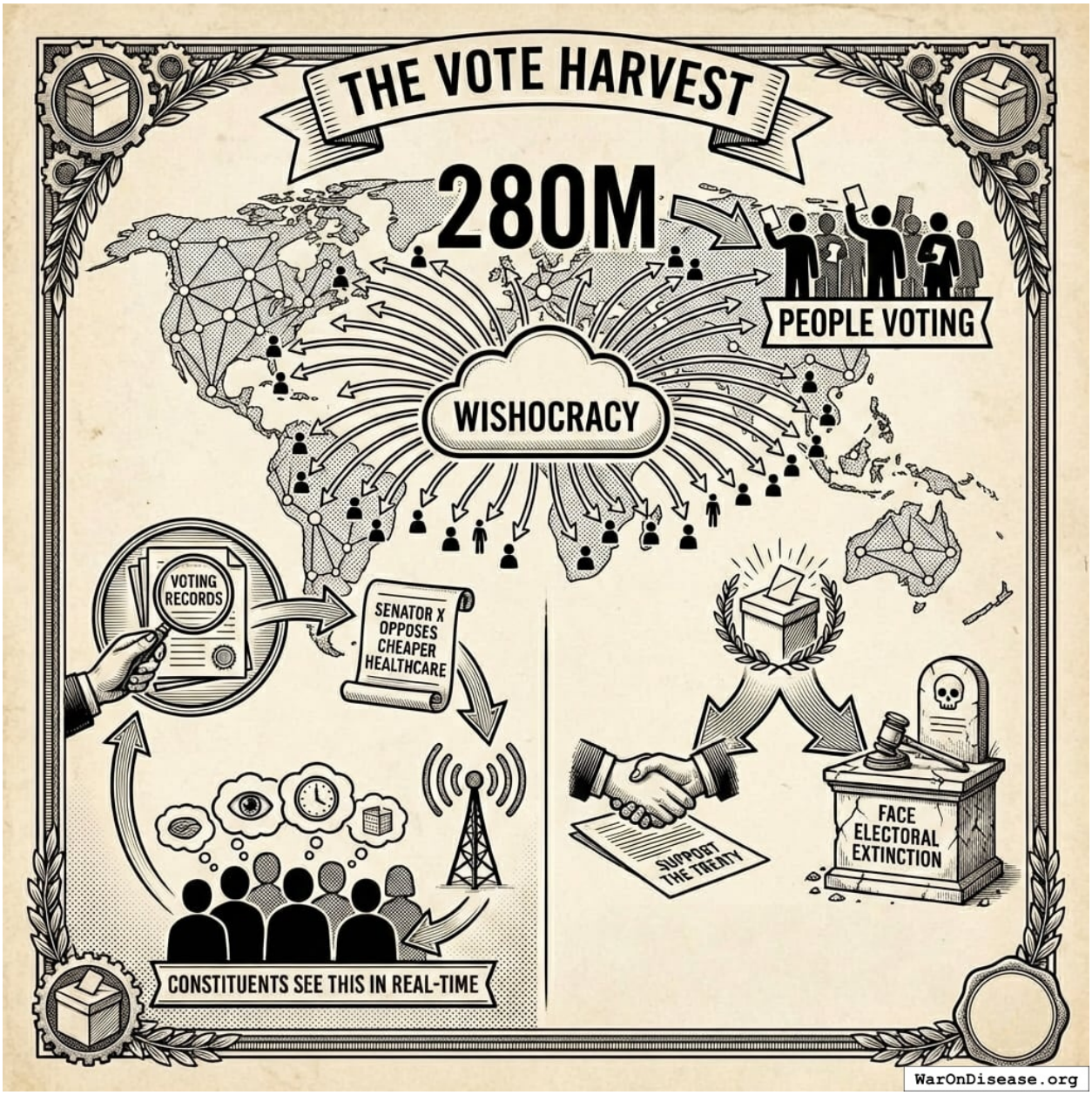


Figure 360: A process flow showing how Wishocracy aggregates user votes to track legislative records and trigger real-time constituent pressure on elected officials.

- 280M of people voting on Wishocracy
- You publish voting records: "Senator X opposes cheaper healthcare"

- Their constituents see this in real-time
- Support the treaty or face electoral extinction

The Bipartisan Beauty

This works on everyone:

- **Republicans**: "Free market solution! Cuts government spending!"
- **Democrats**: "Universal healthcare access! Helps the poor!"
- **Libertarians**: "Ends FDA tyranny! Personal freedom!"
- **Socialists**: "Destroys Big Pharma monopoly! Power to people!"

Everyone can claim victory because the framing works for each ideology.

Billionaires: Self-Interest Meets Self-Preservation

Billionaires have everything except the one thing money can't buy: not dying. You're offering returns AND longevity research. The incentives align naturally.



Figure 361: A conceptual diagram showing the alignment of financial returns and longevity research as dual incentives for billionaire investment.

What They Really Want

- **Legacy**: Being remembered (narcissism is powerful)
- **Returns**: Beating other billionaires (it's all a game)
- **Survival**: Not dying of whatever will kill them
- **Reputation**: Not being history's villain
- **Control**: Shaping the future

Your Irresistible Package

The Investment

- VICTORY Incentive Alignment Bonds offer returns funded by treaty revenue
- Beats traditional portfolio yields

The Legacy

- "The Gates Cancer Center" (permanent naming rights)
- "The Musk Longevity Institute" (feed that ego)
- History books: "Funded the cure for death"
- Nobel Peace Prize possible (they crave validation)

The Insurance

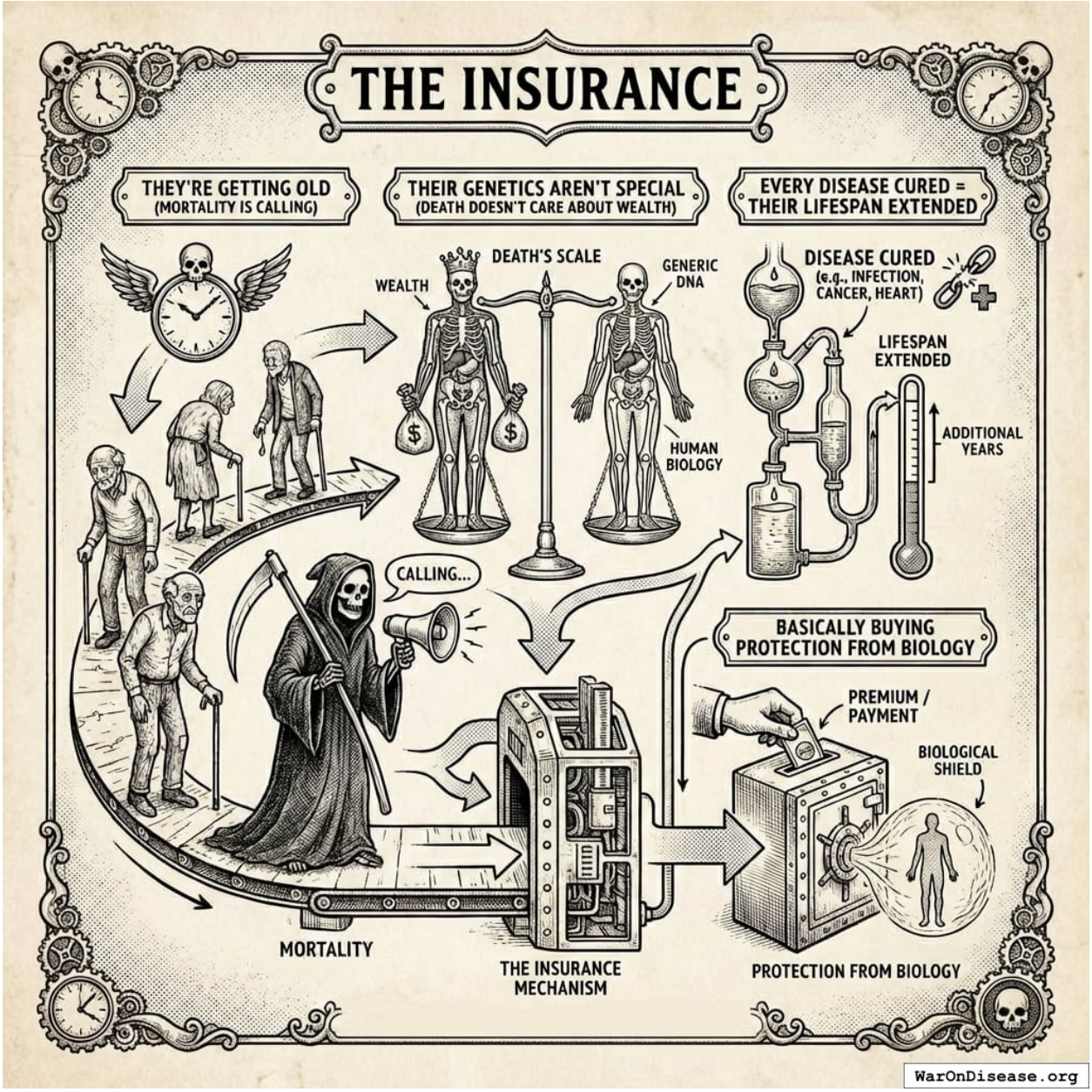


Figure 362: A conceptual model illustrating the transition from biological vulnerability to extended lifespan through the 'insurance' of medical research investment.

- They're getting old (mortality is calling)
- Their genetics aren't special (death doesn't care about wealth)
- Every disease cured = their lifespan extended
- Basically buying protection from biology

The Domino Effect: How This Cascade Works

Once you align a few key players, others follow:

The Sequence

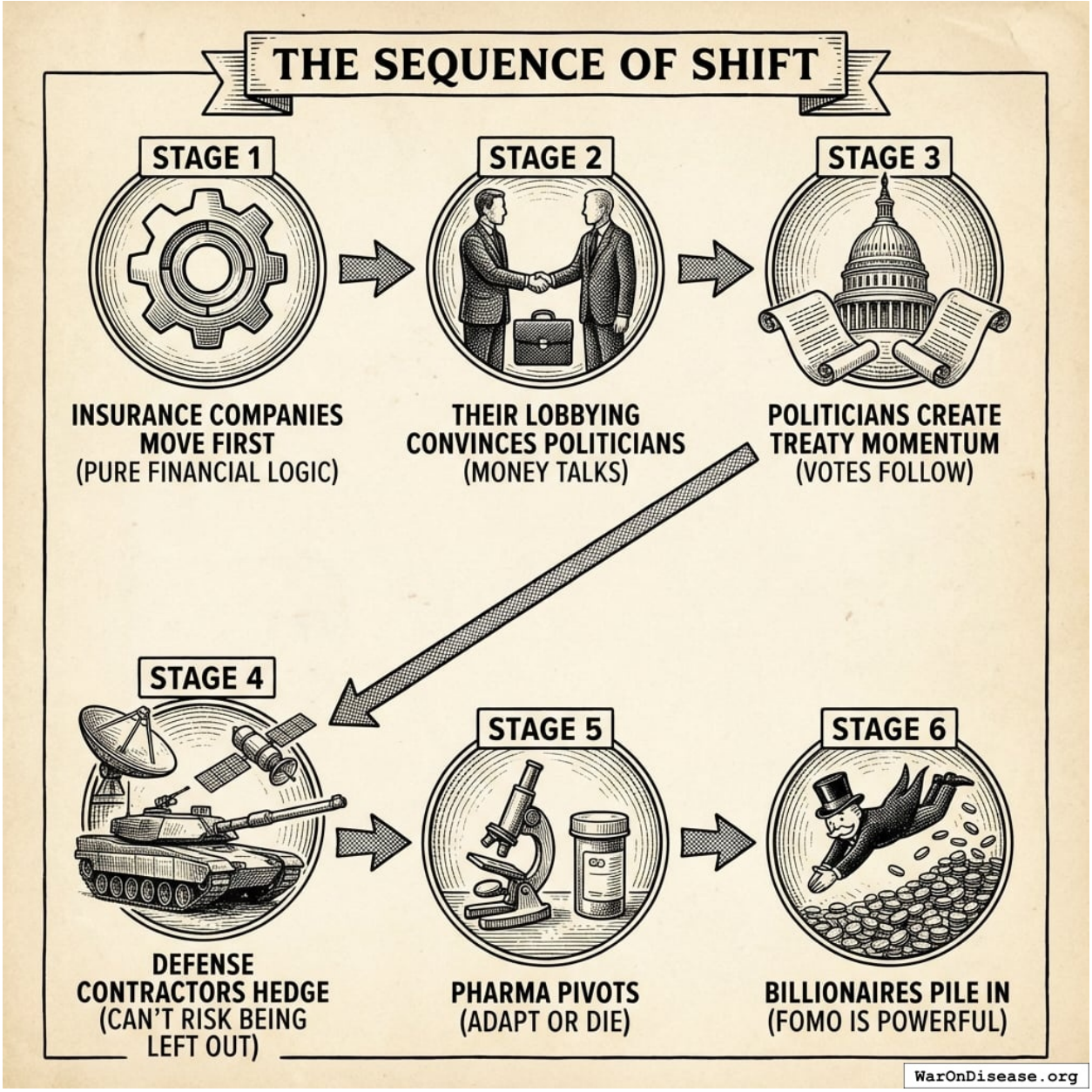


Figure 363: A flowchart illustrating the sequential chain reaction of influence, starting from insurance companies and moving through politicians and defense contractors to billionaires.

1. **Insurance companies move first** (pure financial logic)
2. **Their lobbying convinces politicians** (money talks)
3. **Politicians create treaty momentum** (votes follow)
4. **Defense contractors hedge** (can't risk being left out)
5. **Pharma pivots** (adapt or die)
6. **Billionaires pile in** (FOMO is powerful)

Why This Can Work: Solving the Collective Action Problem

Public choice theory predicts that concentrated interests (defense contractors, pharma incumbents) beat diffuse interests (patients, taxpayers) because small groups with high per-person stakes outorganize large groups with low per-person stakes. This is why the current system persists despite its inefficiency.

But here's what Olson missed: The capital asymmetry is 90:1 in favor of diffuse beneficiaries.

Side	Available Capital	Current Political Spending
Concentrated interests (defense, fossil fuels)	~$5T market cap	$100M-$1B annually
Diffuse beneficiaries (everyone who'd benefit from cures)	$454T household wealth	~$0 (coordination failure)

The problem isn't resources. It's coordination. Diffuse beneficiaries can't deploy their 90:1 capital advantage because each individual's stake is small and coordination costs are prohibitive.

Incentive Alignment Bonds solve the coordination problem by securitizing political change. When political outcomes become an investable asset class with 100-1000x expected returns, coordination happens through financial markets instead of grassroots organizing. Investors don't need to care about curing disease - they need to care about returns. The mechanism converts self-interest into collective action.

Why the cascade can happen (not "must" happen)

Once IABs concentrate financial benefits on the pro-health side:

- Politicians face a new calculation: IAB benefits > concentrated opposition costs
- Each policy success increases IAB funding, strengthening the coalition
- Investors lobby for treaty expansion to increase their returns
- The dynamic reverses: supporting pragmatic clinical trial funding becomes the concentrated-benefit option

This isn't inevitable. It requires sufficient IAB funding to overcome opposition. But it's achievable because the capital is there - it just needs a coordination mechanism.

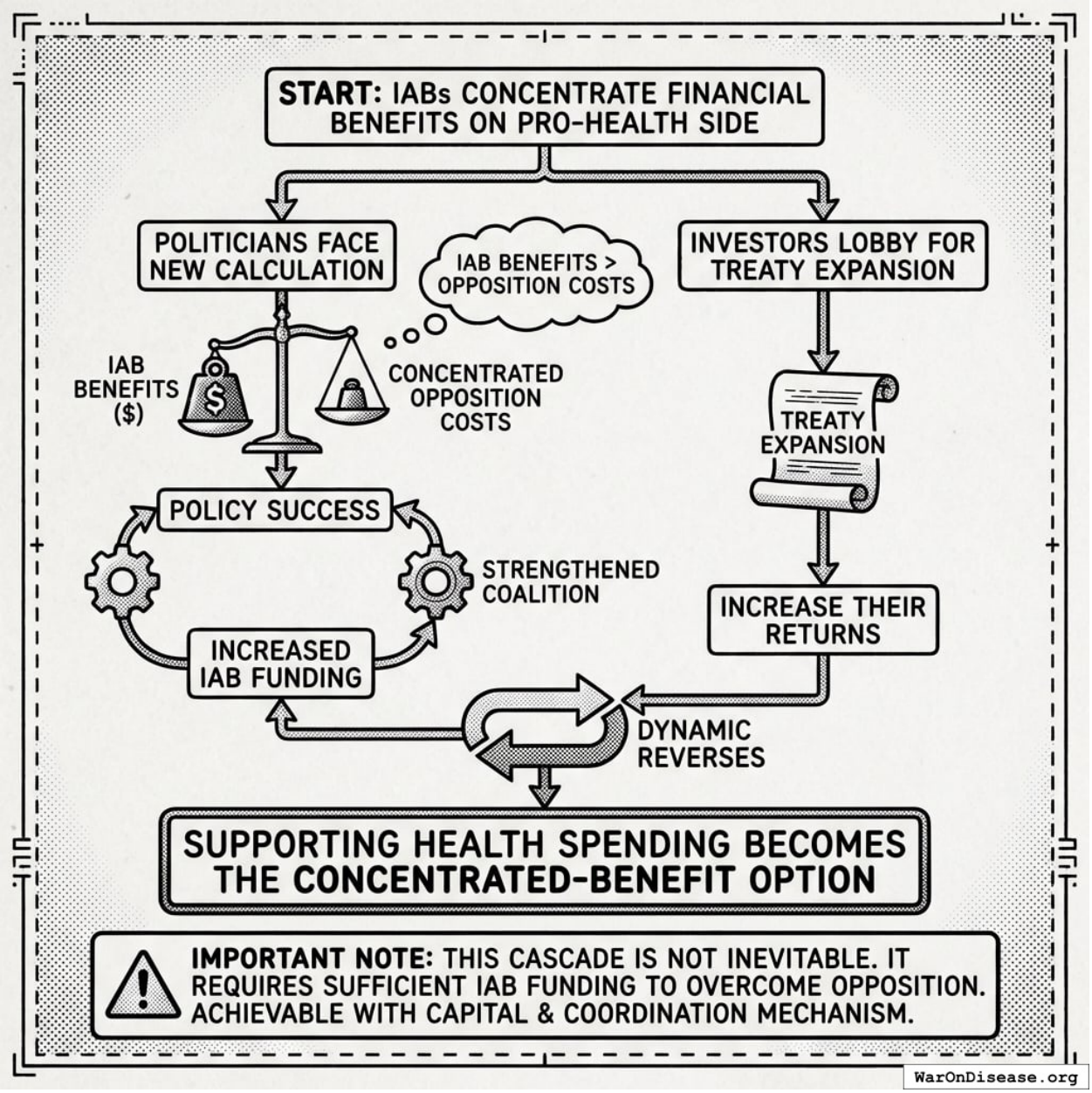


Figure 364: A virtuous cycle diagram illustrating how IAB funding creates a reinforcing feedback loop between political support, policy success, and increased investor capital.

Why This Scales: The Ratchet Effect

The mechanisms above get the first 1% treaty passed. But the goal is expansion: 1% → 2% → 5% → eventually much more. The key insight: **political incentive funding grows with treaty size**.

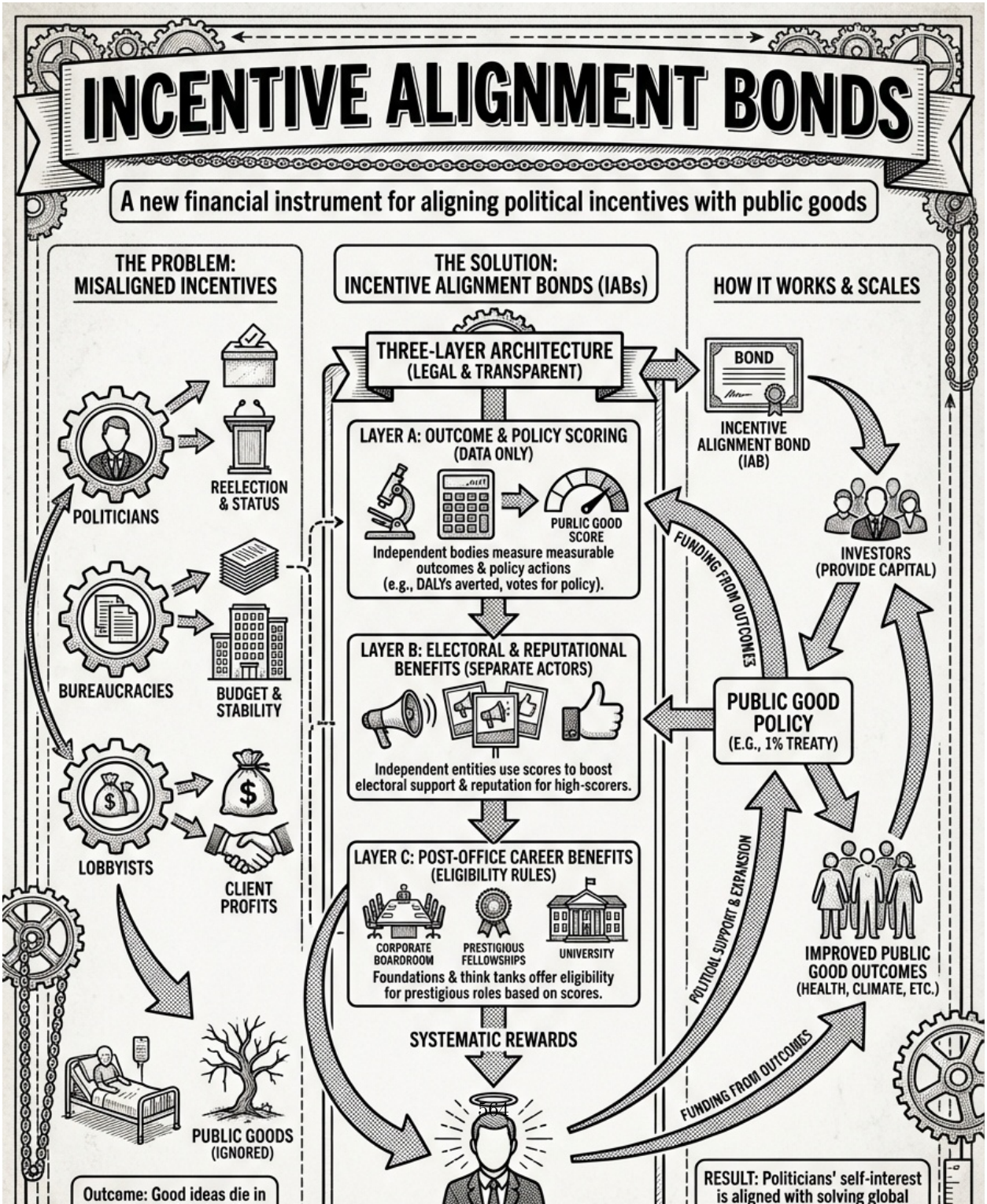
Treaty Level	Political Incentive Funding
1%	$2.72B/year
2%	$5.4B/year
5%	$13.5B/year

Treaty Level	Political Incentive Funding
10%	$27B/year

Each expansion creates more funding to lobby for the next expansion. Politicians who supported the 1% treaty are rewarded; those rewards grow if they push for 2%. It's a ratchet that only moves in one direction.

See Incentive Alignment Bonds for the full mechanism design.

Incentive Alignment Bonds



Related: Aligning Incentives | Investor Materials | Academic Paper

> **A Novel Approach to Political Economy**
>
> Incentive Alignment Bonds represent a new class of financial instrument, distinct from Social Impact Bonds, lobbying, or campaign finance, designed to systematically align politicians' career incentives with measurable public goods. The three-layer architecture described here (scoring, electoral support, post-office benefits) provides a legal template that could apply to any global coordination problem: climate change, nuclear disarmament, pandemic preparedness, and beyond.

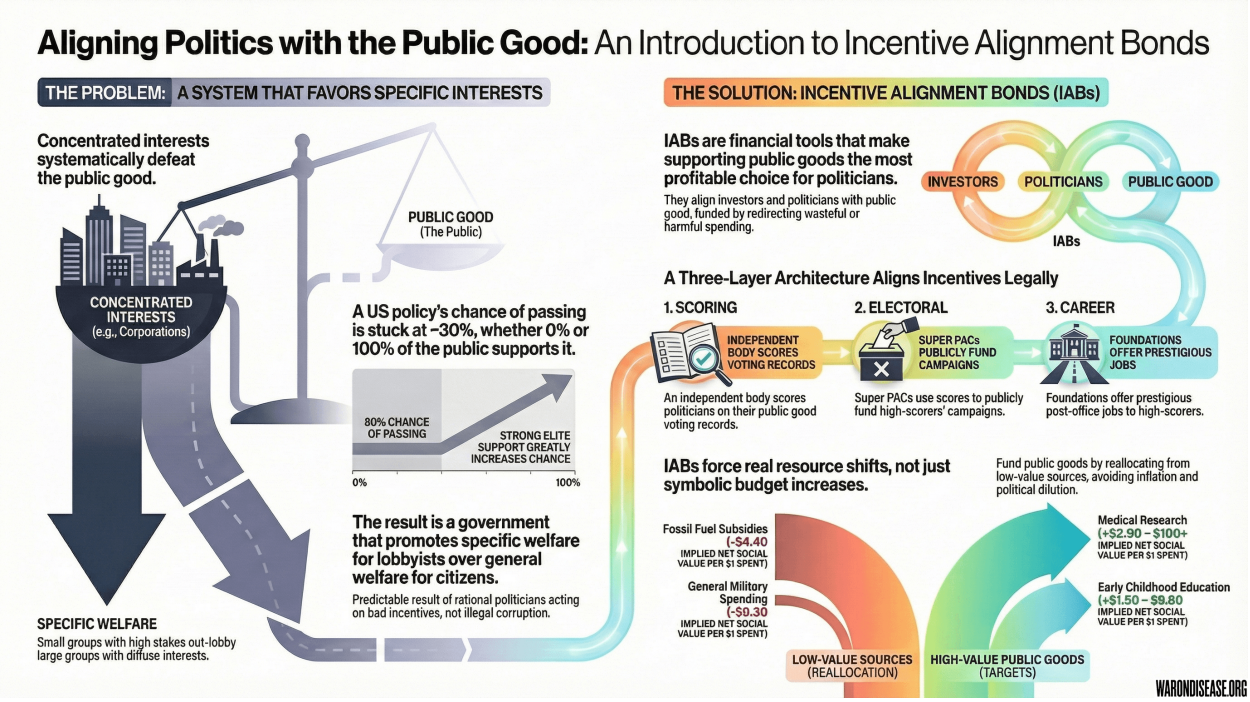


Figure 365: Incentive Alignment Bonds Mechanism

Here's a fun puzzle: You know how to save millions of lives. You can measure exactly how many. You have the money. And governments still don't do it.

This isn't because politicians are evil. It's because the system is built so that:

- Politicians maximize **reelection, status, and post-office careers**, not "humans continuing to exist"
- Bureaucracies maximize **budget, stability, and turf**, not "speed of cures"
- Lobbyists maximize **client profits**, not "global welfare"

You don't fix this with awareness campaigns. You've been "raising awareness" for decades and everyone is still dying. You don't fix it with white papers. Politicians use white papers to stabilize wobbly tables. You don't fix it by hoping for philosopher-kings. Plato tried that. It didn't work.

You fix it by changing **what "self-interest" points at**.

This chapter describes a mechanism to legally bribe politicians into doing the right thing:

> **Incentive Alignment Bonds (IABs)** – a way to pay for better governance without technically paying politicians, giving money to governments, or going to prison.

The Core Problem: Good Ideas Die in Committee

You've seen the numbers by now:

- Redirecting **1% of global military spending** into pragmatic trials could save hundreds of millions of lives and generate trillions in economic value.

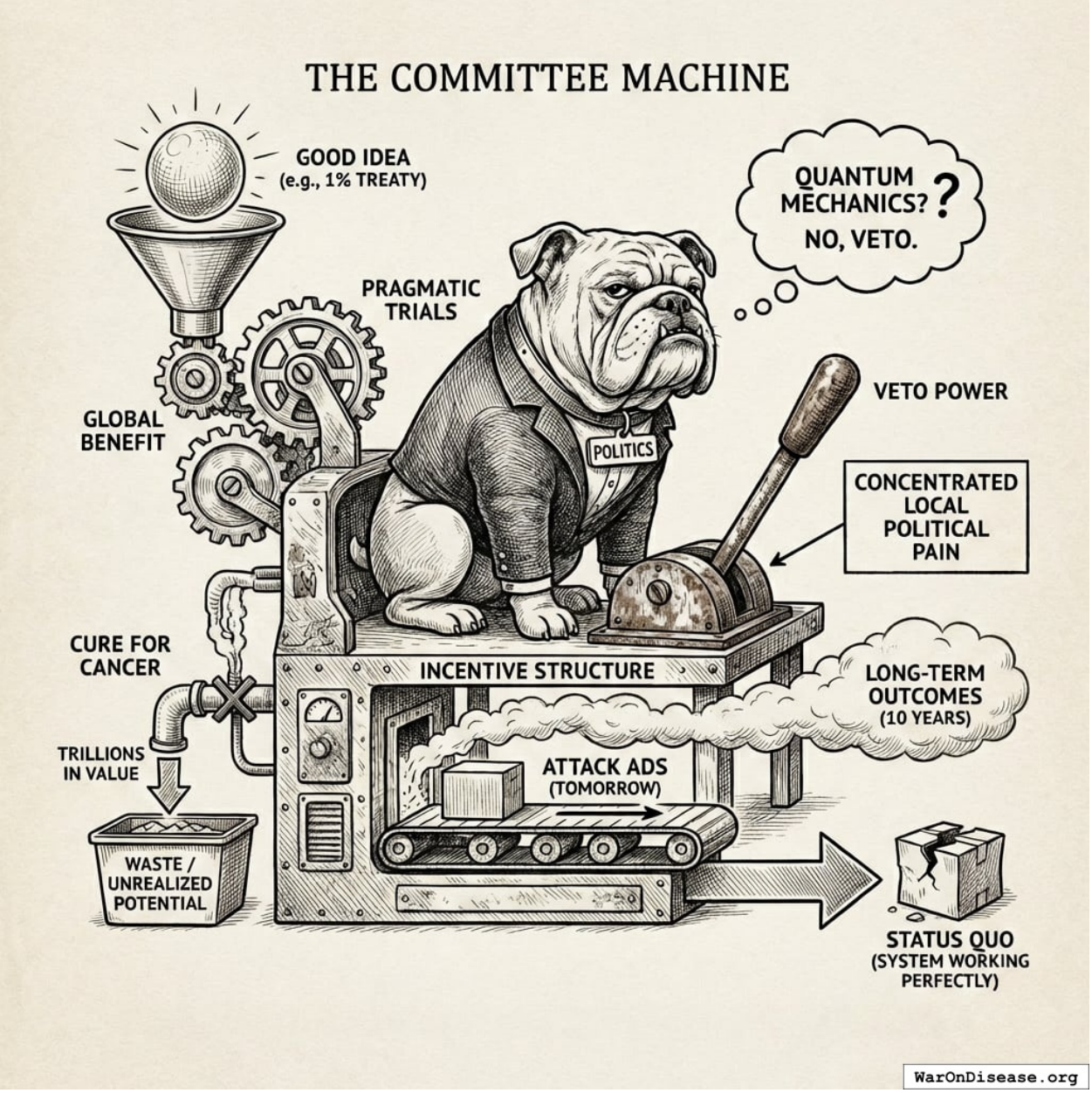


Figure 366: A visual comparison showing 1 percent of military spending contrasted against hundreds of millions of lives saved and trillions in value, alongside a timeline illustrating the lag between immediate political costs and long-term global benefits.

The 1% Treaty isn't constrained by physics, biology, or money. It's constrained by **politics**, which is like being constrained by your dog's opinion on quantum mechanics except your dog can veto legislation.

No politician wants to be the one who "cut the military." Even by 1%. Even if that 1% cures cancer. The

attack ads write themselves: "Senator Johnson voted to WEAKEN AMERICA. His opponent didn't. Vote for literally anyone else."

From a public choice perspective, the 1% Treaty is a classic public good:

- Enormous global benefit
- Concentrated local political pain
- Benefits arrive in 10 years; the attack ads arrive tomorrow

The system does exactly what it's incentivized to do. It's not broken. It's working perfectly. The problem is what it's optimizing for.

If you want different outcomes, you need different incentives. Wishing very hard doesn't count.

What You Need: Legal Bribery That Isn't Technically Bribery

Imagine you could say to every politician on Earth:

> "If you vote for a 1%-style reform and your country actually funds it, we will:
>
> - upgrade your international reputation (you'll get invited to better parties),
> - boost your reelection odds (independent campaigns will favor you),
> - and make your post-office career prospects significantly better than your rivals' (Goldman Sachs boards, prestigious fellowships, that sort of thing)."

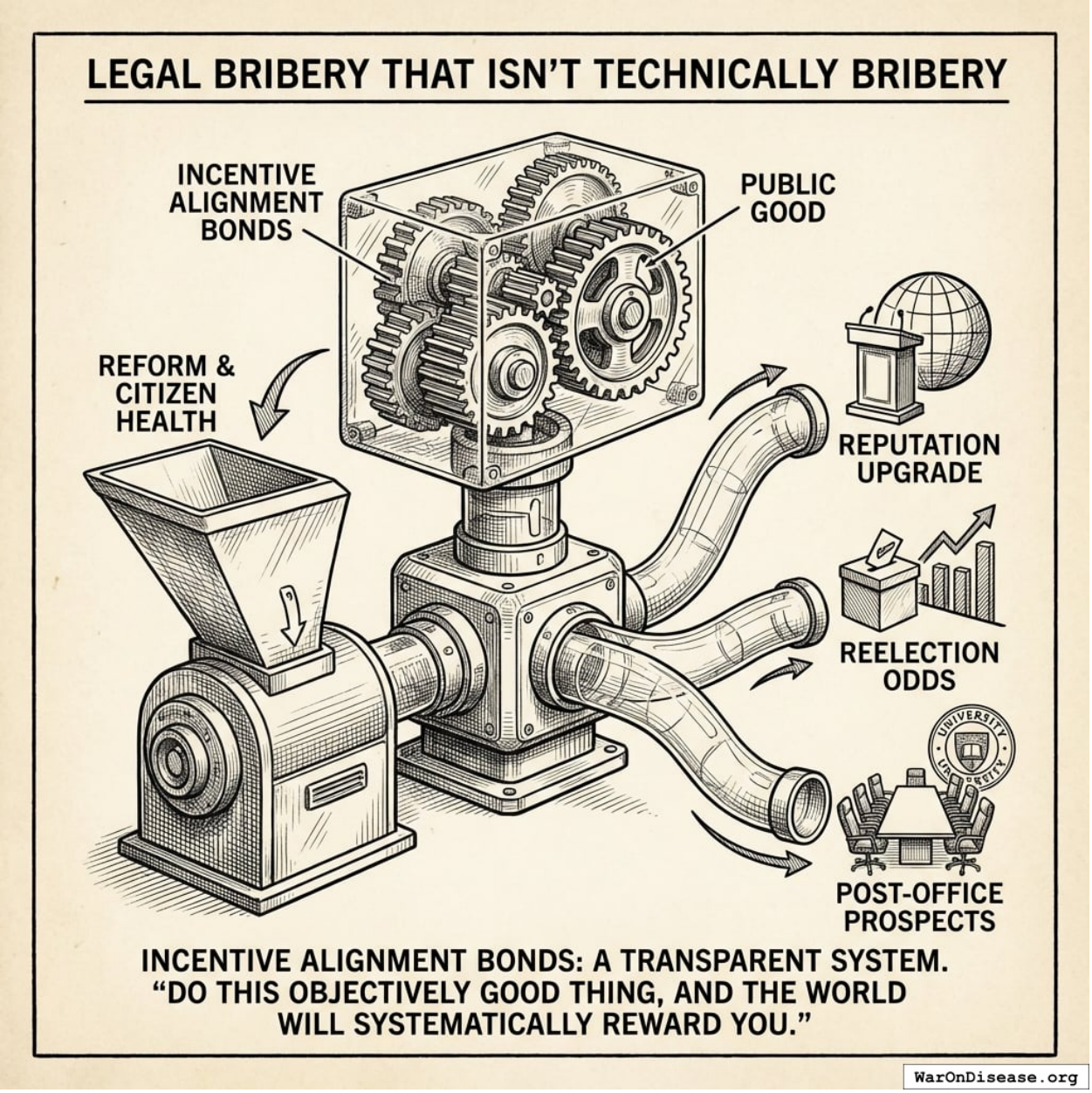


Figure 367: A diagram illustrating the Incentive Alignment Bond cycle: a politician implements reforms, citizens' health improves, and transparent systemic rewards are triggered in response.

No backroom deals. No suitcases of cash. No prison.

No money to you personally, and no money to government budgets. What you get is external legitimacy, electoral support, and cushy retirement gigs. The things politicians actually optimize for.

Just a standing, public, announced-in-advance rule:

> "Do this objectively good thing, and the world will systematically reward you."

This is the job of **Incentive Alignment Bonds**. It's bribery, except legal, transparent, and pointed at saving lives instead of ruining them.

Definition: What Are Incentive Alignment Bonds?

Incentive Alignment Bonds (IABs) are a new class of financial instruments designed to:

1. **Reward investors** with returns proportional to public-good funding achieved
2. **Reward politicians** with electoral support and career benefits based on their voting record for public-good policies
3. **Fund the public good itself** from the policy outcome (self-sustaining)

The key innovation: IABs align **both** investors and politicians with public-good outcomes through a single instrument. Investors provide capital to pass the policy. Politicians get career benefits for supporting it. The policy outcome funds everything.

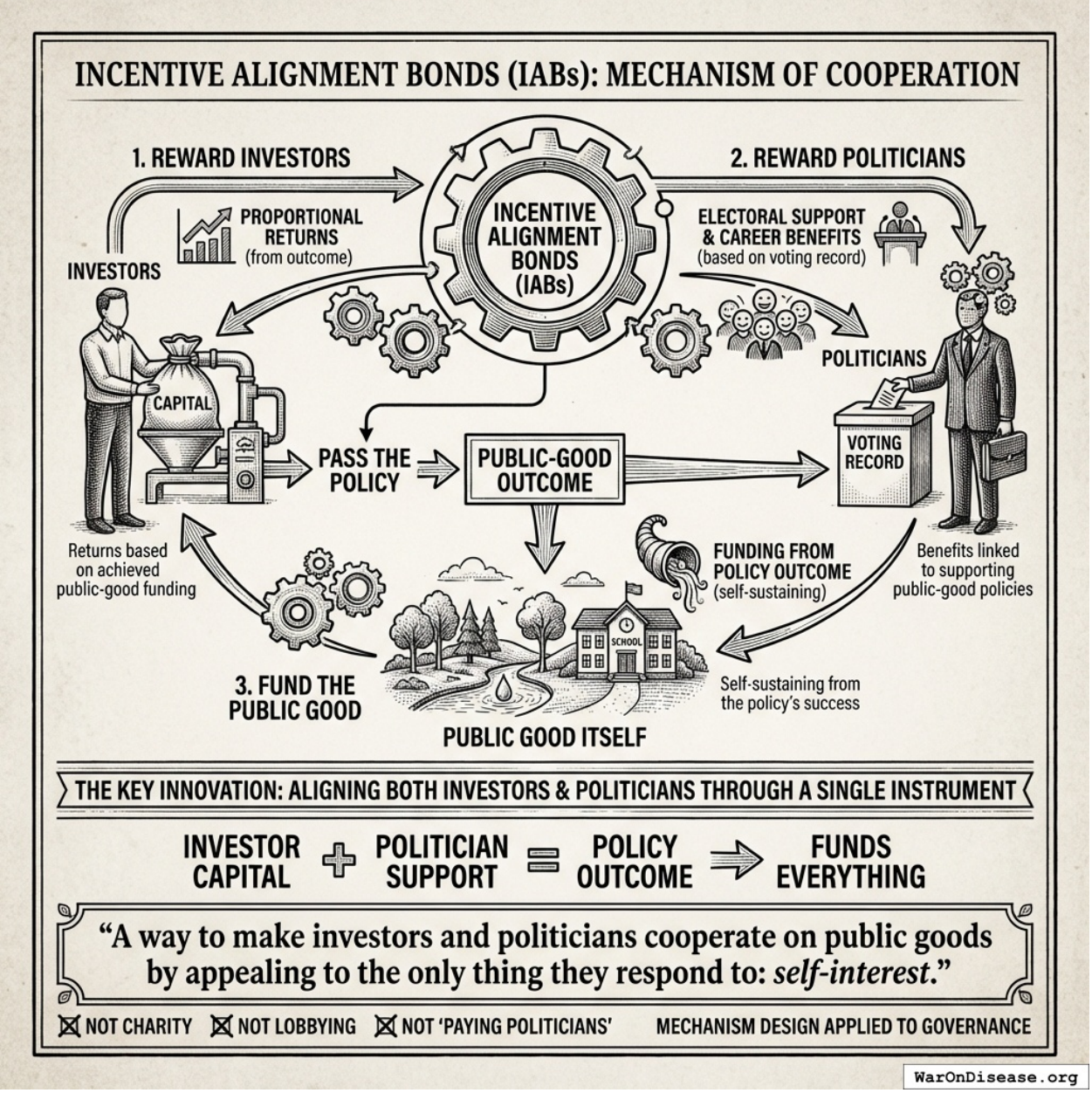


Figure 368: A conceptual diagram showing the flow of capital and incentives between investors, politicians, and public good outcomes mediated by an Incentive Alignment Bond.

This is mechanism design applied to governance, using the tools economists developed for auctions and markets to solve political economy problems. The insight is that politicians respond to incentives like everyone else; the question is whether those incentives point toward saving lives or toward pleasing lobbies. IABs change what the incentives point at.

They are not charity. (Charity doesn't work at scale.) They are not lobbying. (That's already taken.) They are not "paying politicians." (That's illegal, and also already taken.)

They are:

> **A way to make investors and politicians cooperate on public goods by appealing to the only thing they respond to: self-interest.**

How IABs Differ from Social Impact Bonds

	Social Impact Bonds	Incentive Alignment Bonds
Who's rewarded	Service providers (nonprofits)	Politicians AND investors
What's measured	Service delivery outcomes	Policy adoption and funding flows
Attribution	Easy (one provider, one program)	Based on votes and $ contributed
Scale	City/program level	National/global
Funding source	External (government pays for outcomes)	Self-funding (policy outcome funds returns)

Think of IABs as:

- **Social impact bonds**, but rewarding politicians and investors instead of service providers.
- **Advance Market Commitments**, but aimed at policies instead of vaccines.
- **Bribery**, but legal, transparent, and aimed at reducing human suffering instead of increasing it.

How Incentive Alignment Bonds Work – The Simple Version

Let's walk through the basic structure in four steps.

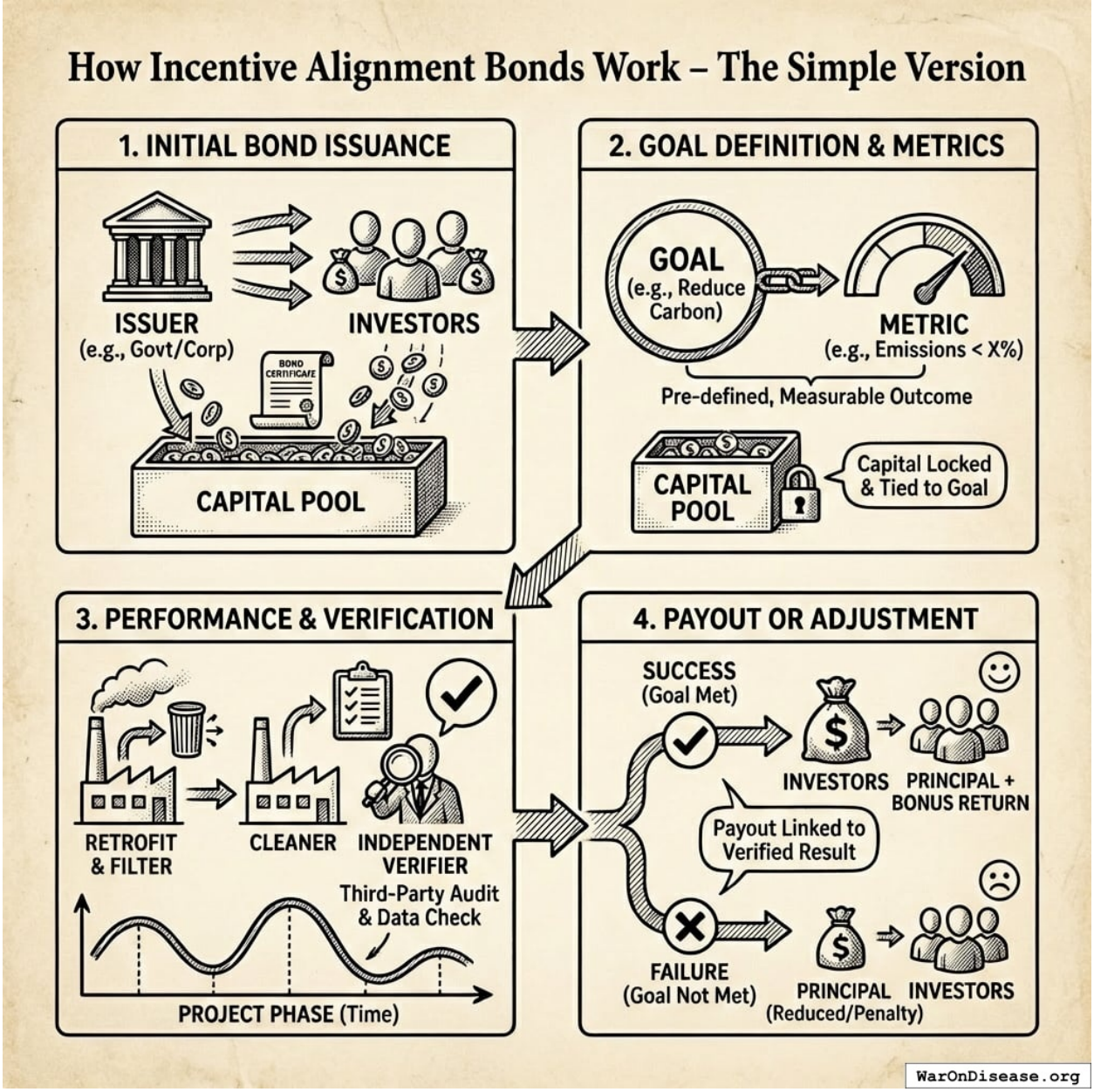


Figure 369: A sequential flowchart illustrating the four-step process of how incentive alignment bonds are structured.

Step 1: Define a Measurable Outcome

You choose an outcome that:

- Is **measurable** with agreed methods.
- Is **directly attributable** to policy actions.
- Matters at scale.

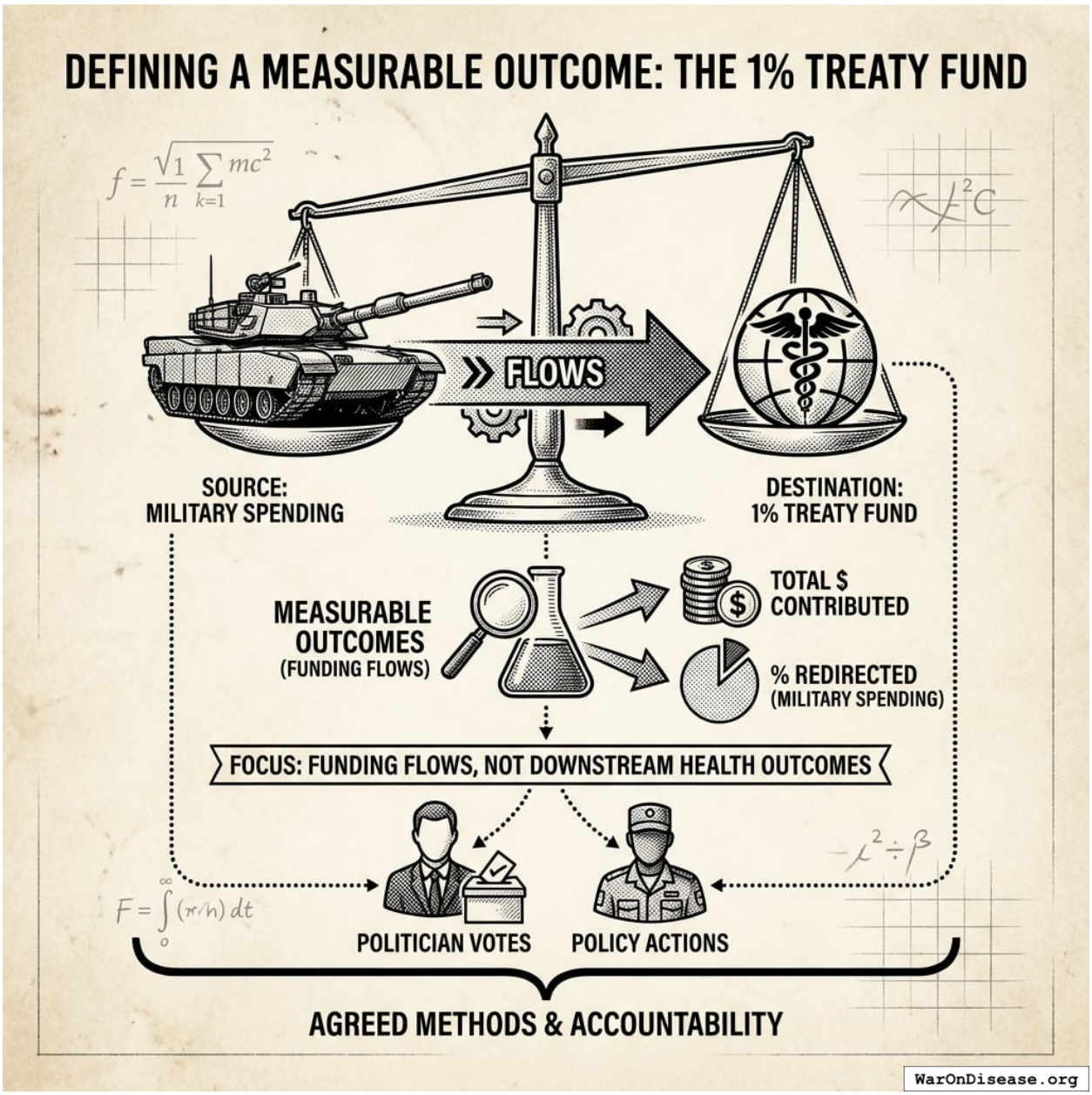


Figure 370: A comparison diagram showing the distinction between measurable policy metrics (funding flows and votes) and diffuse global outcomes (health improvements).

Measure funding flows, not downstream health outcomes. Health benefits are global and diffuse - you can't attribute a cure discovered via a global framework for ubiquitous pragmatic trials to any specific country's funding. But you CAN measure:

- % of military spending redirected to the 1% Treaty Fund
- Total $ contributed by each country
- Politician votes on treaty passage/expansion

For the 1% Treaty, the measurable outcomes are:

> **$ flowing to the 1% Treaty Fund** and **% of military spending redirected** - not health outcomes, which are global and unattributable.

Health improvements are the *justification* for the policy. Funding flows are the *metric* for scoring, because they're what politicians can actually control and be held accountable for.

Step 2: Raise Capital

Foundations, impact investors, development banks, and perhaps even regular investors buy **Incentive Alignment Bonds**.

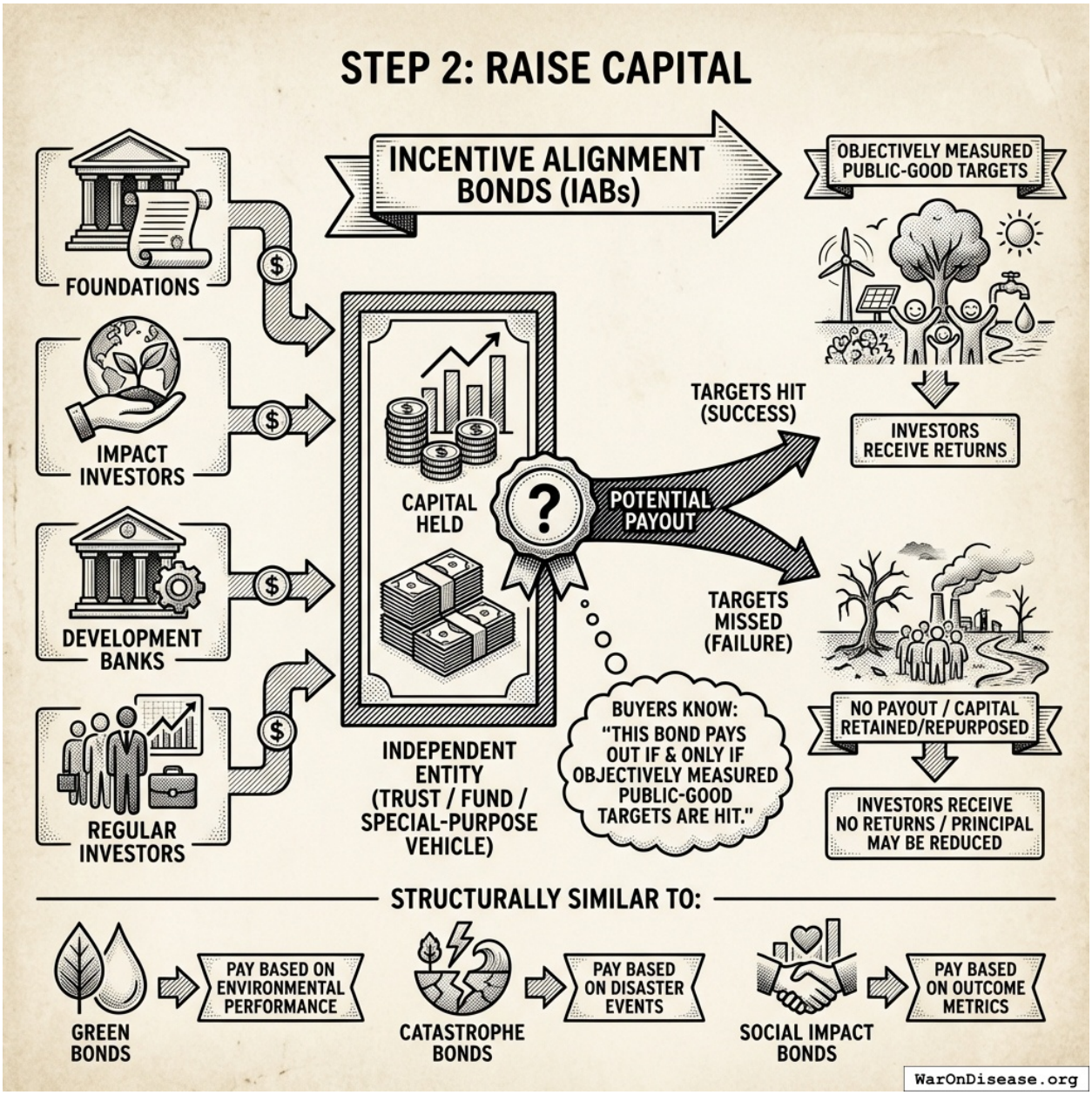


Figure 371: A structural diagram illustrating the flow of capital from various investor types into an independent trust for Incentive Alignment Bonds, where payouts are linked to specific public-good performance metrics.

- The capital raised is held by an independent entity (a trust, fund, or special-purpose vehicle).
- Buyers know: "This bond pays out if and only if objectively measured public-good targets are hit."

This is structurally similar to:

- Green bonds that pay based on environmental performance.
- Catastrophe bonds that pay based on disaster events.
- Social impact bonds that pay based on outcome metrics.

Step 3: Fund Outcomes, Reward Politicians Indirectly

When a politician:

1. Votes for a 1%-style policy (e.g., reallocating 1% of the military budget to pragmatic clinical trials), and
2. The policy passes and funding actually flows to the treaty fund,

the mechanism triggers **indirect rewards**:

- **Public Good Scores** rise (published by independent rating organizations)
- **Electoral support** increases (independent campaigns favor high-scorers)
- **Post-office opportunities** unlock (fellowships, advisory boards, speaking circuits)

The core principle:

> No money flows to politicians or governments. What flows is **reputation, electoral advantage, and career advancement**.

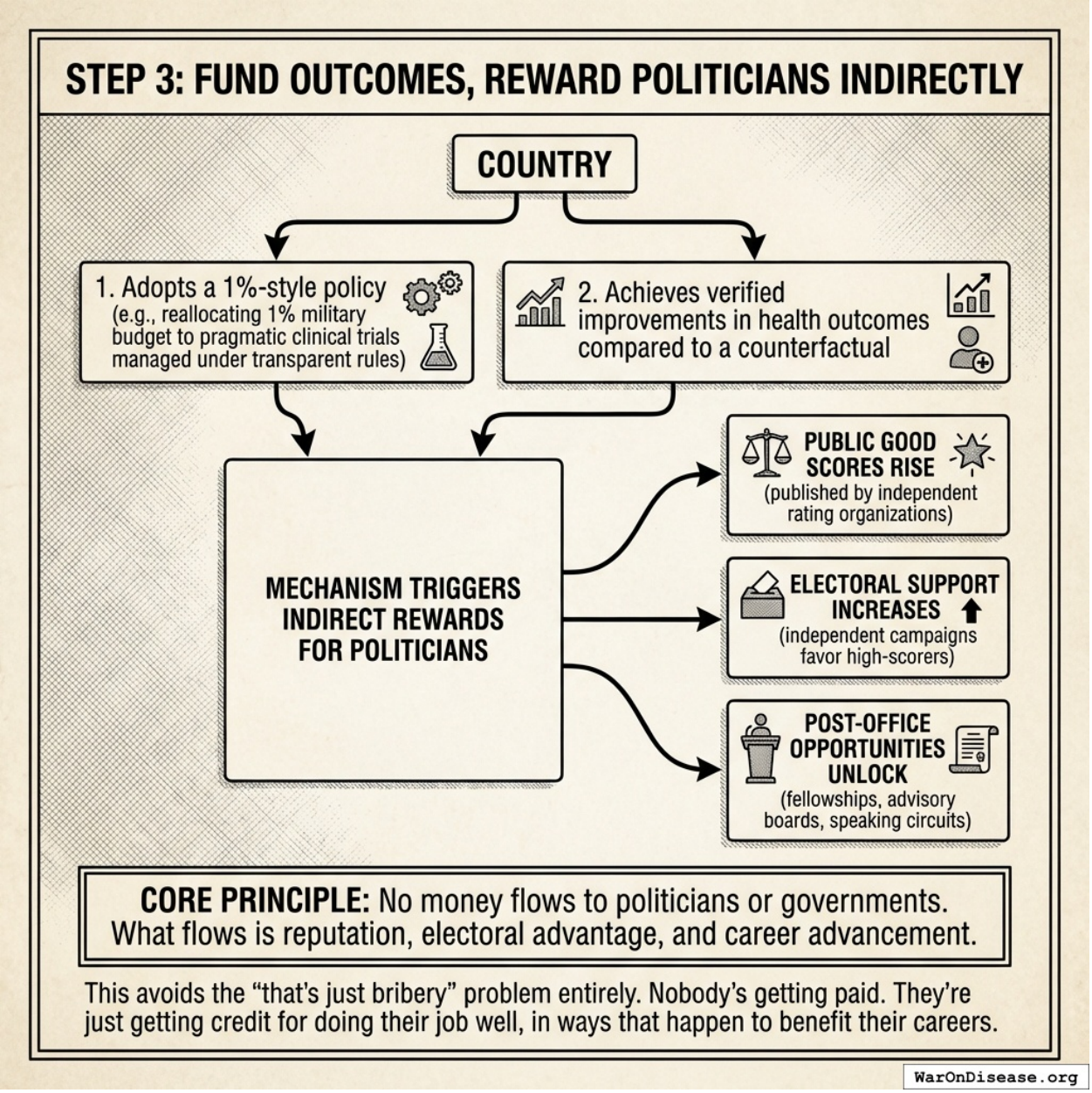


Figure 372: A flowchart showing how policy adoption and health outcomes lead to indirect political rewards through independent ratings, voter support, and post-office career opportunities.

This avoids the "that's just bribery" problem entirely. Nobody's getting paid. They're just getting credit for doing their job well, in ways that happen to benefit their careers.

Step 4: Make Politicians Care (Without Paying Them)

The magic is that **supporting 1%-equivalent policies translates directly into political benefits**.

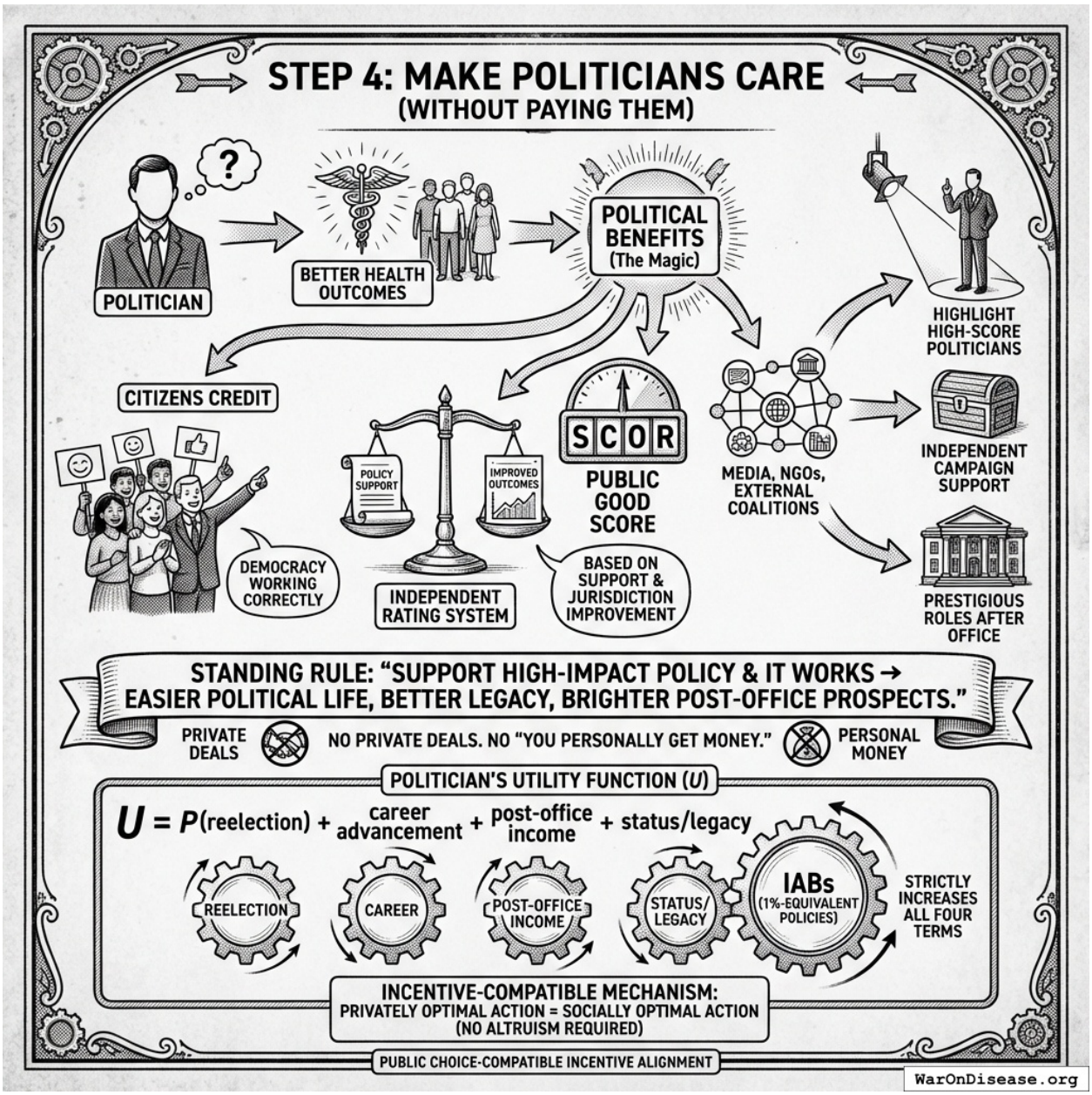


Figure 373: A flowchart showing how supporting high-impact health policies triggers a feedback loop of public good scores and media support, ultimately increasing a politician's utility function through reelection, status, and post-office prospects.

Because:

- Citizens who see their country funding cures credit the politicians who made it happen (this is called "democracy working correctly").
- Independent rating systems give politicians a **Public Good Score** based on:
  - whether they voted for 1%-equivalent policies, and
  - whether funding actually flowed to the treaty fund.
- Media, NGOs, and external coalitions:

- highlight high-score politicians,
- spend more on independent campaign support for them,
- invite them into prestigious roles after office.

No private deals. No "you personally get money." Just a **standing rule**:

> "If you support this kind of high-impact policy and it works, the world will systematically make your political life easier, your legacy better, and your post-office prospects brighter."

That is **public choice-compatible** incentive alignment.

In mechanism design terms: the politician's utility function is roughly:

$$U = P(\text{reelection}) + \text{career advancement} + \text{post-office income} + \text{status/legacy}$$

IABs make supporting 1%-equivalent policies **strictly increase all four terms**. No altruism required. The mechanism is *incentive-compatible*: the privately optimal action (maximize personal payoff) and the socially optimal action (support policies that reduce suffering) become identical.

4a. The Three-Layer Architecture (How to Not Go to Prison)

The previous section described the *what*. This section describes the *how*, in enough detail that a lawyer could implement it without anyone getting indicted.

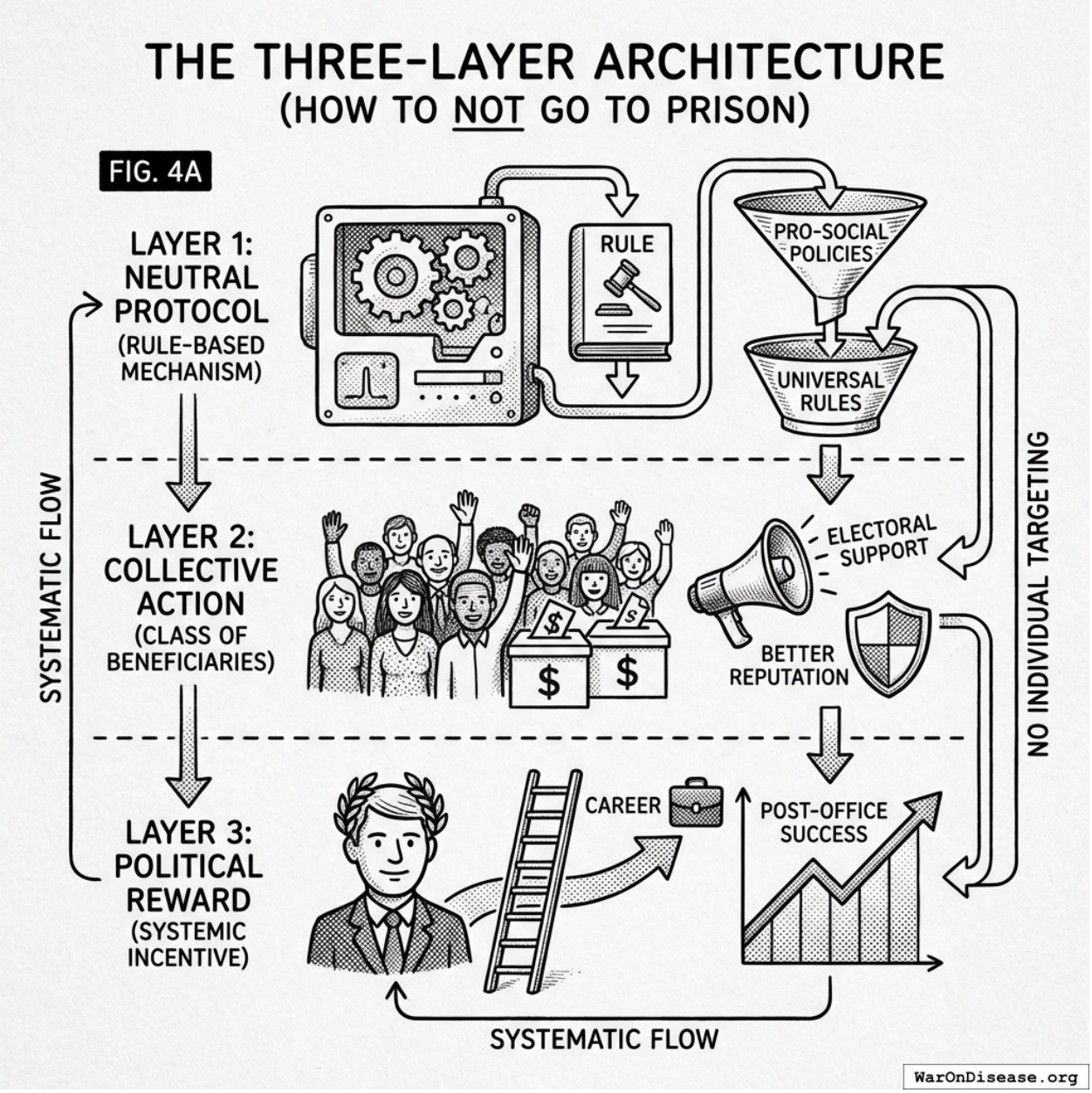


Figure 374: A diagram illustrating the three-layer architecture of rule-based, ex-ante mechanisms designed to reward politicians for supporting pro-social policy classes.

You cannot legally say "support Bill #XYZ123 and get paid." That's bribery. People go to prison for that. It's also inefficient because you'd have to bribe every politician individually, which doesn't scale.

But you *can* create a system where politicians who support a **class of pro-social policies** systematically get more electoral support, better reputations, and better post-office careers. The trick is: rule-based, ex-ante, universal mechanisms. No targeting individuals. No secret deals. Just standing rules that happen to reward saving lives.

Here's the architecture:

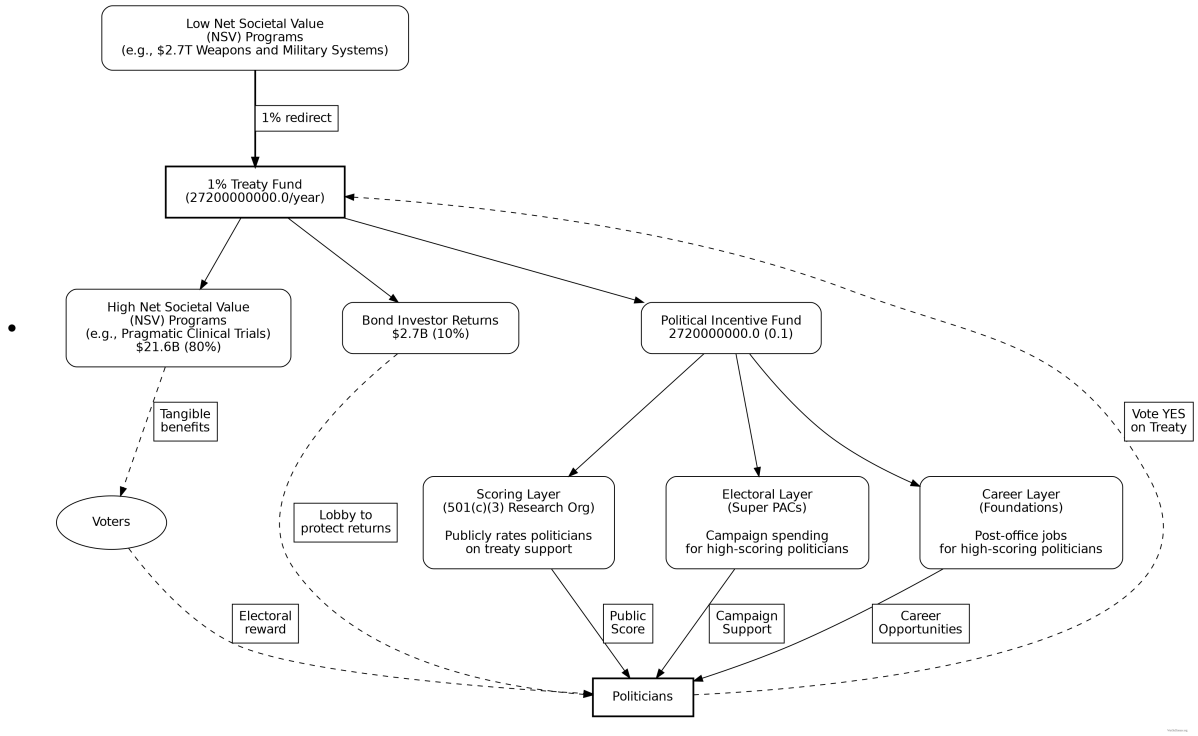


Figure 375

Layer A: Outcome and Policy Scoring (Data Only)

Create an independent scoring system that assigns each politician a **Public Good Score** based on their **policy actions** (not downstream health outcomes, which are global and unattributable to any single country):

- Votes in favor of "1%-equivalent" measures
- Sponsorship of such bills
- Public commitments and campaign positions
- Blocking harmful reversals
- Actual funding flows resulting from their votes

Critical design choice: **Don't tie scores to "The 1% Treaty" specifically.** Define a policy class:

> "Policies that reallocate 1% of national military spending into independently governed pragmatic clinical trials with open data and outcome-based evaluation."

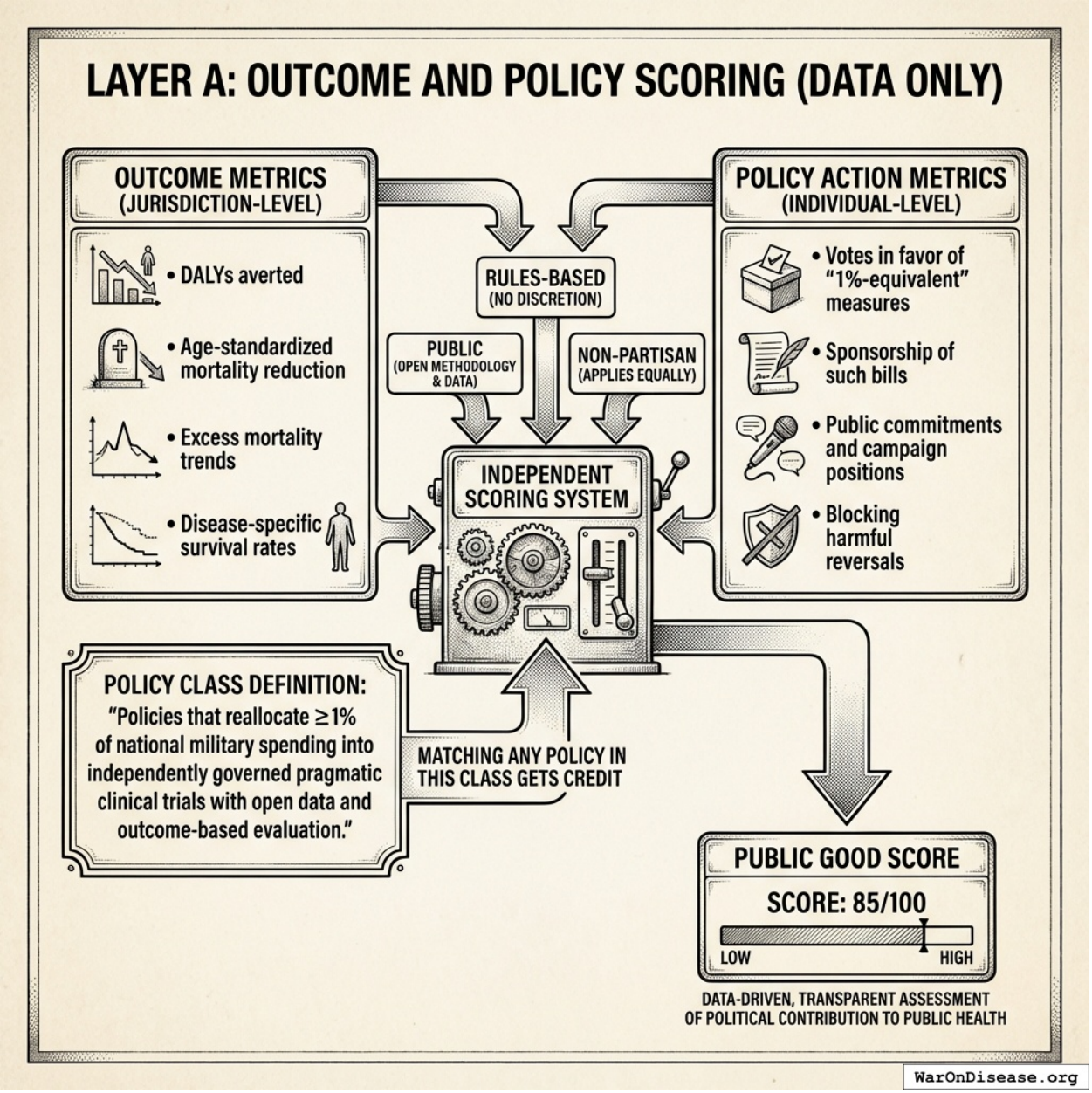


Figure 376: A conceptual diagram showing how jurisdiction-level outcome metrics and individual-level policy actions feed into a rules-based scoring engine to produce a politician's Public Good Score.

Any politician supporting *any* policy matching this pattern gets credit. This avoids the "paying for your specific bill" problem entirely.

The scoring system is:

- **Public** (anyone can see the methodology and data)
- **Rules-based** (no discretion, no case-by-case decisions)
- **Non-partisan** (applies equally to all parties and ideologies)

Layer B: Electoral and Reputational Benefits (Separate Actors)

Independent entities, legally separate from the scoring system, can commit **ex ante** to favor high-scoring politicians:

501(c)(4) organizations and PACs can:

- Spend more on independent ads and voter turnout for higher-scoring candidates
- Run comparative campaigns: "Senator Smith scored 23 on the Public Good Index. His opponent scored 78. One of them wants you to keep dying."

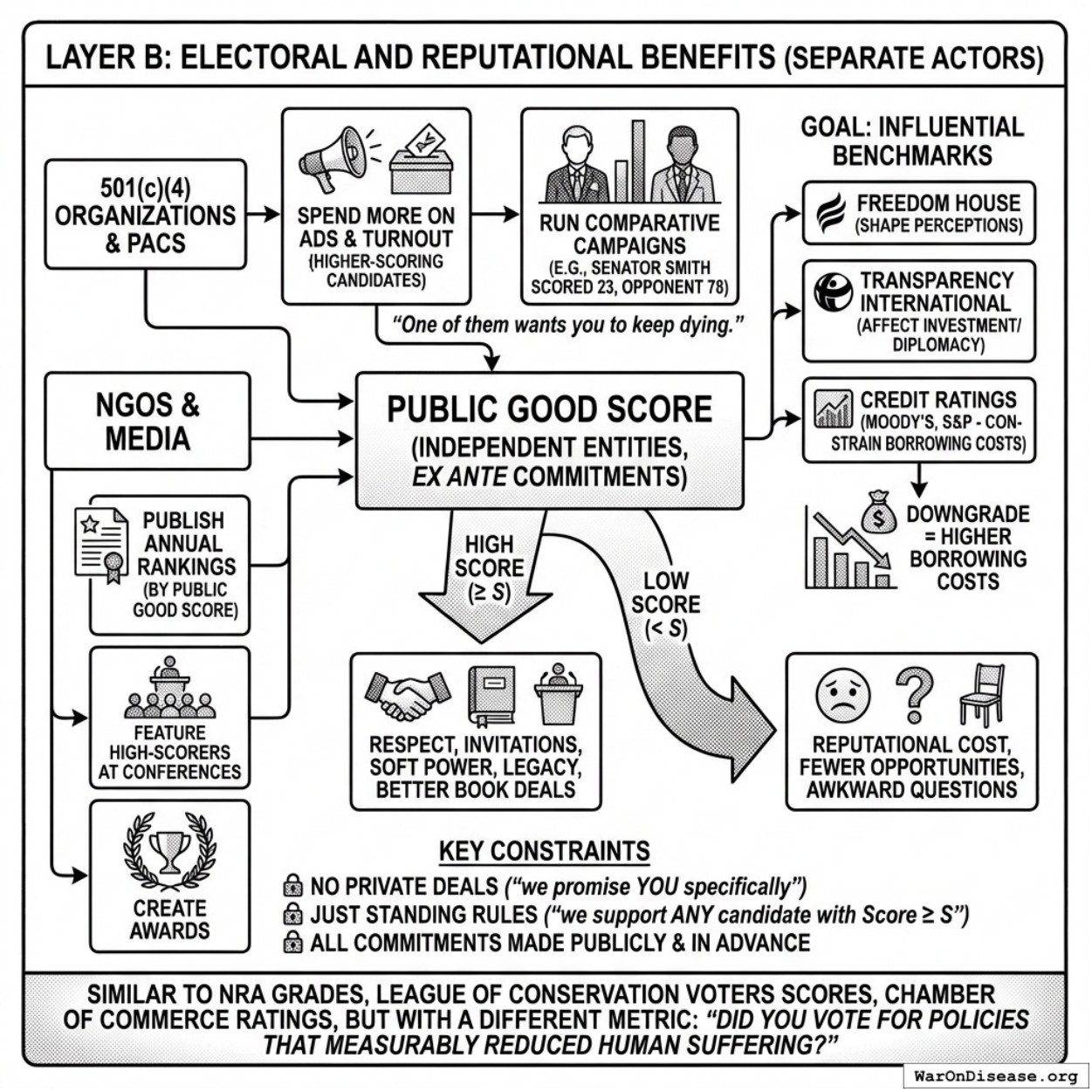


Figure 377: A conceptual diagram showing how the Public Good Score flows through independent actors like PACs and NGOs to create electoral and reputational consequences for politicians.

NGOs and media can:

- Publish annual rankings of politicians by Public Good Score
- Feature high-scorers at conferences (politicians love conferences)
- Create awards (politicians love awards even more than conferences)

The goal is to make the Public Good Score as influential as existing trusted benchmarks:

- **Freedom House** scores shape how democracies are perceived globally
- **Transparency International** rankings affect investment and diplomatic relationships
- **Credit ratings** (Moody's, S&P) directly constrain sovereign borrowing costs

Moody's can downgrade a country's credit rating and suddenly their borrowing costs go up. That's power. If the Public Good Score achieves similar salience:

- High score → respect, invitations, soft power, legacy, better book deals
- Low score → reputational cost, fewer opportunities, awkward questions at dinner parties

That's a direct self-interest lever that requires no altruism to activate. Politicians don't need to become better people. They just need to notice which direction the incentives are pointing.

Key constraints:

- No private deals ("we promise *you* specifically")
- Just standing rules ("we support *any* candidate with Score S")
- All commitments made publicly and in advance

This is exactly how NRA grades, League of Conservation Voters scores, and Chamber of Commerce ratings already shape political behavior. The difference is the metric: instead of "did you vote for our narrow interest," it's "did you vote for policies that measurably reduced human suffering."

Layer C: Post-Office Career Benefits (The Goldman Sachs Board Problem)

After politicians leave office, they want prestigious jobs. Board seats. Fellowships. Speaking fees. This is called "the revolving door" and it's usually pointed at whoever paid the most lobbyists.

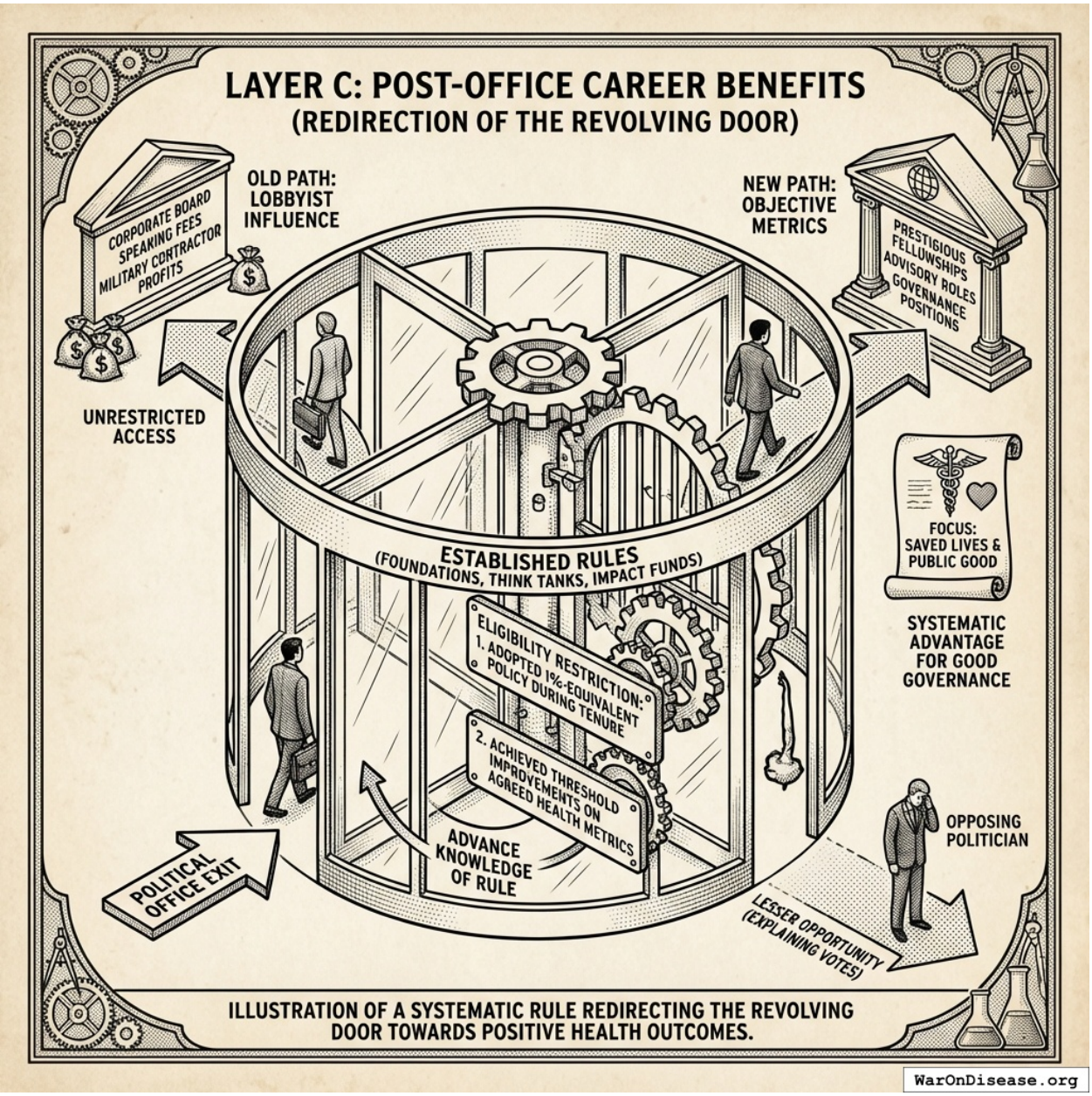


Figure 378: A flowchart contrasting the traditional corporate revolving door with a performance-based incentive model where post-office career benefits are contingent on health policy adoption and measurable outcomes.

You can point it somewhere else.

Foundations, think tanks, and impact funds can establish:

> "Eligibility for certain fellowships, advisory roles, and governance positions is restricted to former leaders who: 1. Voted for 1%-equivalent policies during their tenure, and 2. Maintained a Public Good Score above threshold X."

Politicians know this rule **in advance**. Their calculation becomes:

- Support 1%-style reform → prestigious fellowships, advisory boards, speaking circuits, book deals

- Oppose it → you can still get a job, but it won't be as good, and you'll have to explain why you voted against curing diseases

No one is paid for a specific vote. There's just a standing rule that systematically advantages leaders who governed well by objective metrics. It's the revolving door, except spinning toward "saved lives" instead of "military contractor profits."

Legal Entity Separation

The three layers must be housed in legally distinct entities:

Layer	Entity Type	Can Do	Cannot Do
Scoring	501(c)(3) or independent research org	Fund metrics, dashboards, public data	Support/oppose candidates
Electoral	501(c)(4), PAC, or Super PAC	Independent expenditures favoring high-scorers	Coordinate with candidates
Post-office	Private foundations, think tanks	Set eligibility criteria for positions	Condition grants on specific votes

This separation is not a loophole; it's how the system maintains legitimacy. Each layer does what it's legally permitted to do, and the combined effect is that supporting 1%-equivalent policies becomes the utility-maximizing choice for rational politicians.

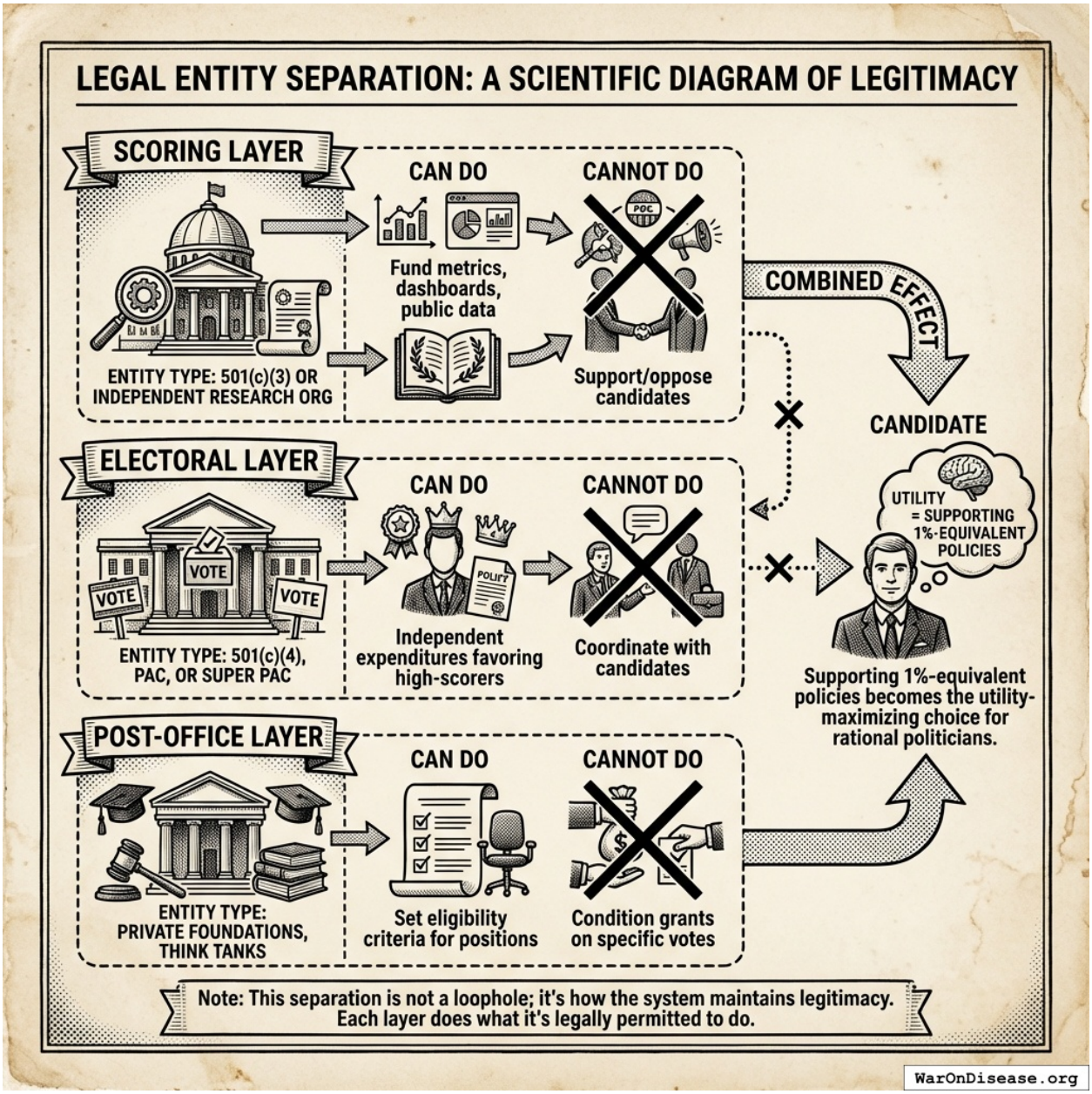


Figure 379: A conceptual diagram showing the three legally distinct layers (Scoring, Electoral, and Post-office) functioning as separate entities that collectively influence a politician's policy decisions.

4b. A Worked Example: How Senator Smith Votes Yes on the 1% Treaty

Abstract mechanisms are great for economists and terrible for everyone else. Here's how IABs actually work, using a US senator deciding how to vote on the 1% Treaty as the example.

The Primary Metrics We're Maximizing

The whole point of this system is to increase two numbers:

1. **% of military spending reallocated** (starts at 1%, goal is expansion to 2%, 5%, 10%+)
2. **$ flowing to 1% Treaty Fund annually** (starts at $27.2B, scales with %)

Every politician's score is tied to their impact on these numbers. Vote to increase them? Score goes up. Vote to decrease them? Score goes down. It's that simple.

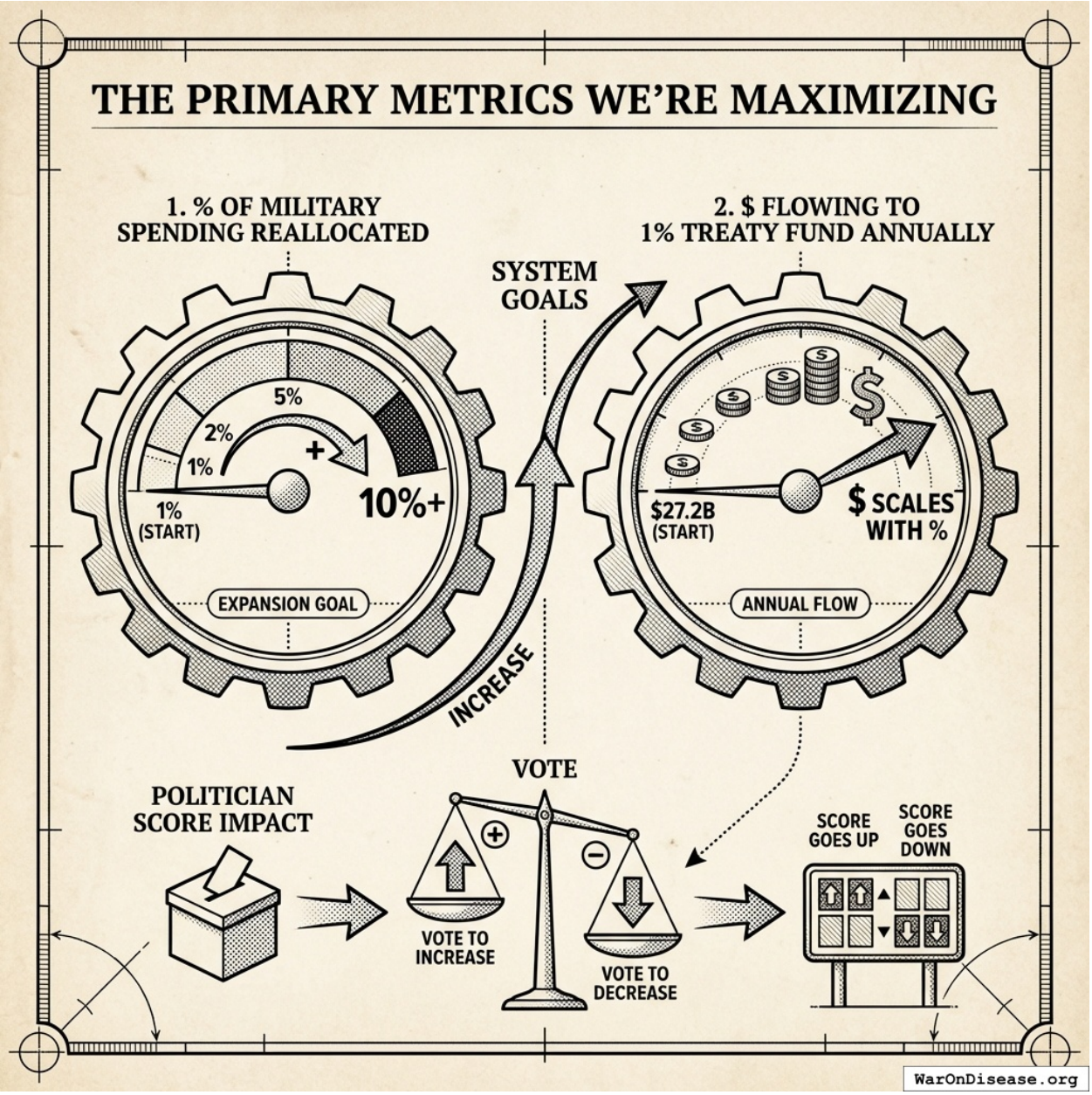


Figure 380: A bar chart illustrating the scaling impact of military spending reallocation, showing the annual dollar amount increasing from 27.2 billion at 1 percent to over 272 billion at 10 percent.

The Politician's Utility Function

Politicians optimize for a utility function whether they admit it or not. Here's what it looks like:

$$U_{politician} = \alpha \cdot P(\text{reelection}) + \beta \cdot \text{PostOfficeIncome} + \gamma \cdot \text{Status/Legacy}$$

Where:

- α, β, γ are weights (varies by politician, but all are positive)
- P(reelection) = probability of winning next election
- PostOfficeIncome = expected lifetime earnings after leaving office (boards, speaking fees, fellowships)
- Status/Legacy = how history remembers you (books written, buildings named, Wikipedia length)

The IAB system makes each of these terms a function of the politician's **Public Good Score**.

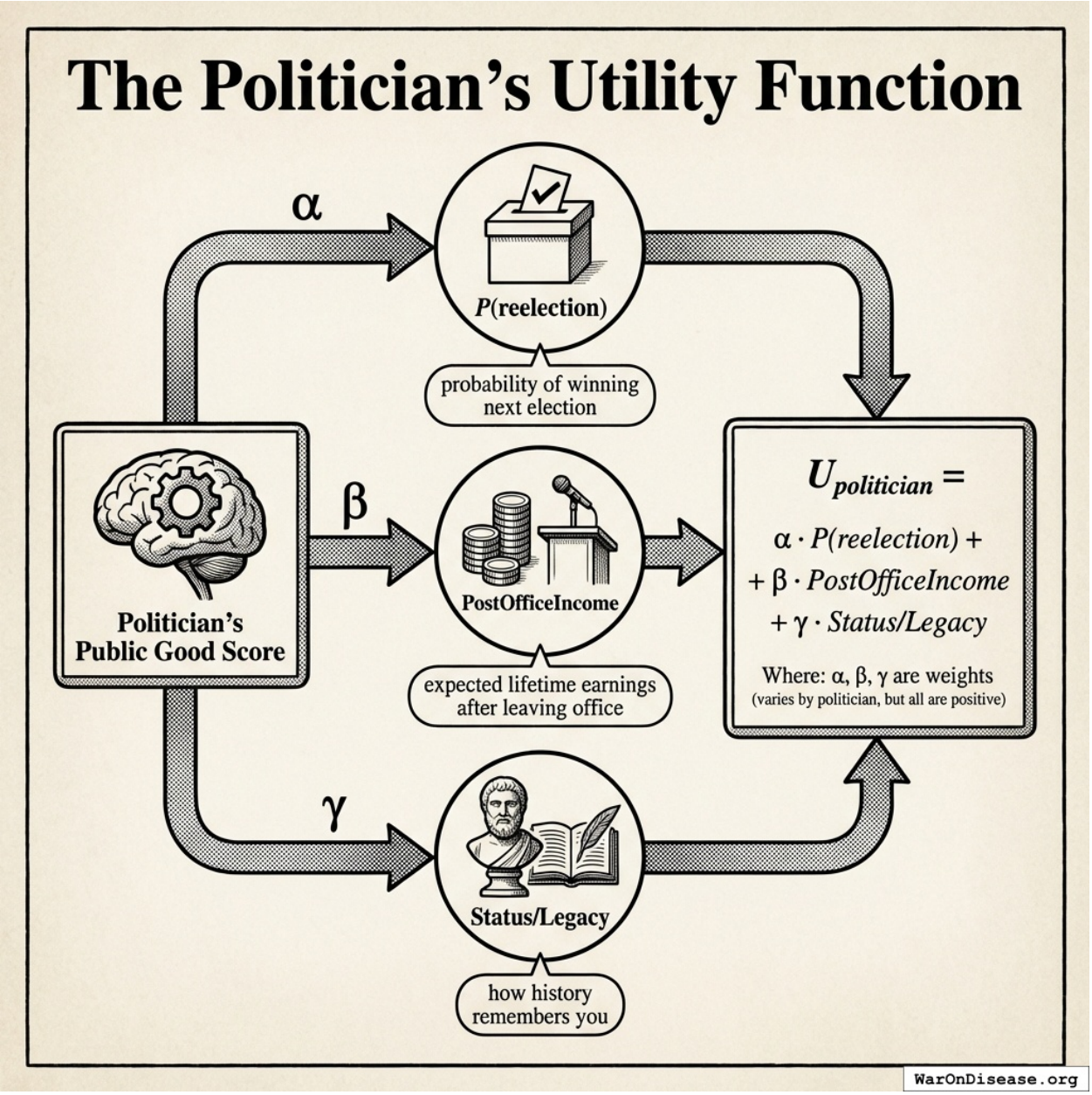


Figure 381: A conceptual diagram showing how the IAB system's Public Good Score feeds into the three primary drivers of a politician's utility: reelection probability, post-office income, and legacy.

The Public Good Score

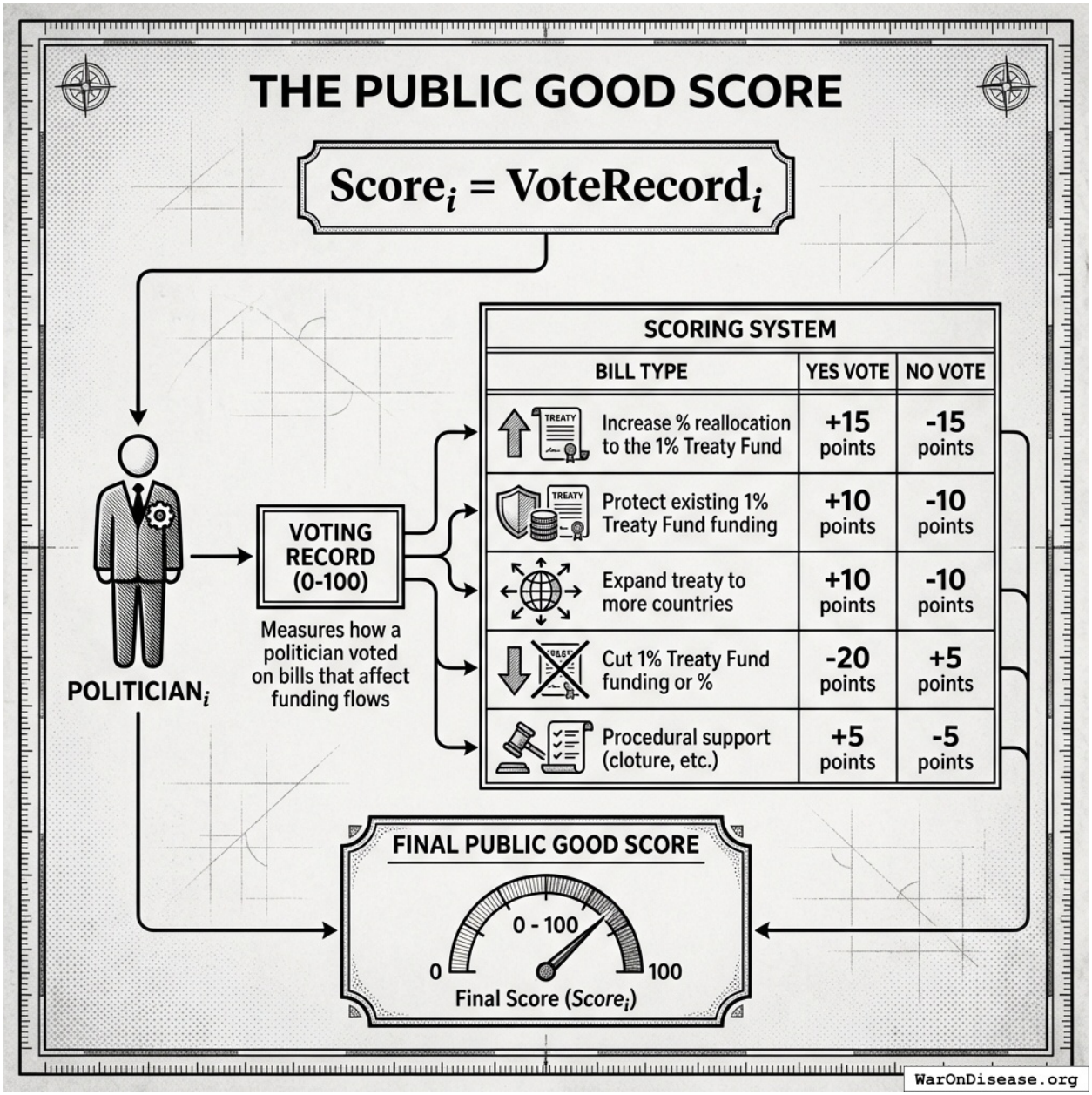


Figure 382: A bar chart comparing the positive and negative point values for various legislative actions, highlighting how different votes impact a politician's Public Good Score.

Each politician gets a score based on their **voting record** :

$$\text{Score}_i = \text{VoteRecord}_i$$

Where:

VoteRecord (0-100) measures how a politician voted on bills that affect funding flows:

Bill Type	Yes Vote	No Vote
Increase % reallocation to the 1% Treaty Fund	+15 points	-15 points
Protect existing 1% Treaty Fund funding	+10 points	-10 points
Expand treaty to more countries	+10 points	-10 points
Cut 1% Treaty Fund funding or %	-20 points	+5 points
Procedural support (cloture, etc.)	+5 points	-5 points

How Score Translates to Utility

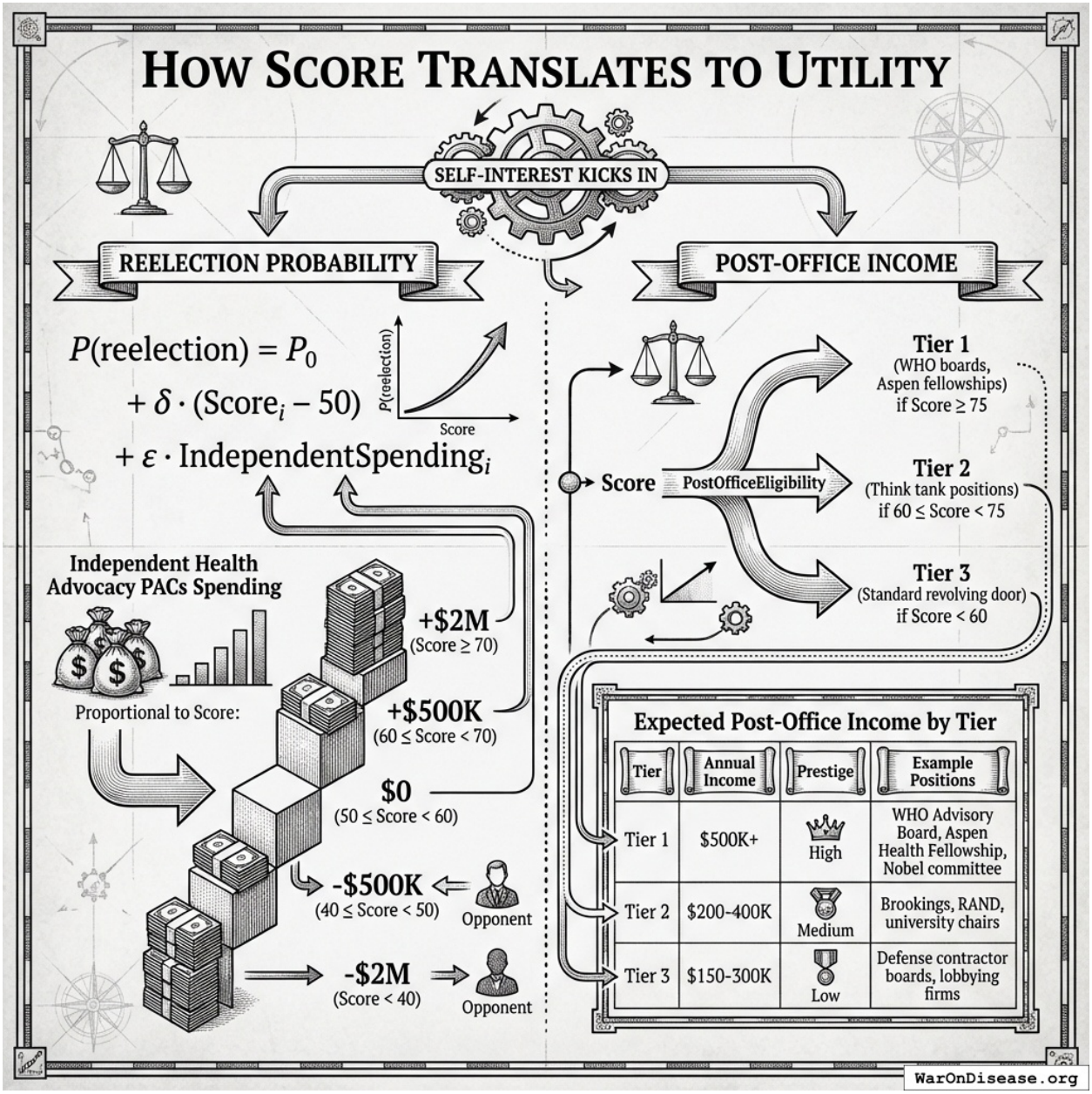


Figure 383: A visualization of the step-function relationship between a legislative score and its impact on independent campaign spending and post-office career tiers.

Here's where self-interest kicks in:

Reelection Probability:

$$P(\text{reelection}) = P_0 + \delta \cdot (\text{Score}_i - 50) + \epsilon \cdot \text{IndependentSpending}_i$$

Independent health advocacy PACs commit to spending proportional to score:

$$\text{IndependentSpending}_i = \begin{cases} +\$2M & \text{if Score} \geq 70 \\ +\$500K & \text{if } 60 \leq \text{Score} < 70 \\ \$0 & \text{if } 50 \leq \text{Score} < 60 \\ -\$500K \text{ (to opponent)} & \text{if } 40 \leq \text{Score} < 50 \\ -\$2M \text{ (to opponent)} & \text{if Score} < 40 \end{cases}$$

Post-Office Income:

$$\text{PostOfficeEligibility} = \begin{cases} \text{Tier 1 (WHO boards, Aspen fellowships)} & \text{if Score} \geq 75 \\ \text{Tier 2 (Think tank positions)} & \text{if } 60 \leq \text{Score} < 75 \\ \text{Tier 3 (Standard revolving door)} & \text{if Score} < 60 \end{cases}$$

Expected post-office income by tier:

Tier	Annual Income	Prestige	Example Positions
Tier 1	\$500K+	High	WHO Advisory Board, Aspen Health Fellowship, Nobel committee
Tier 2	\$200-400K	Medium	Brookings, RAND, university chairs
Tier 3	\$150-300K	Low	Defense contractor boards, lobbying firms

The Setup

VICTORY Incentive Alignment Bonds have raised \$1B from investors who want 272% returns. That money has funded:

- A referendum showing 70% of Americans support reallocating 1% of military spending to pragmatic clinical trials
- A lobbying campaign that's converted several military contractors (they did the math on their own mortality)
- The Public Good Scoring system described above, tracking every federal legislator

Senator Smith (R-Texas) is up for reelection in 2026. The 1% Treaty Implementation Act is coming to a vote.

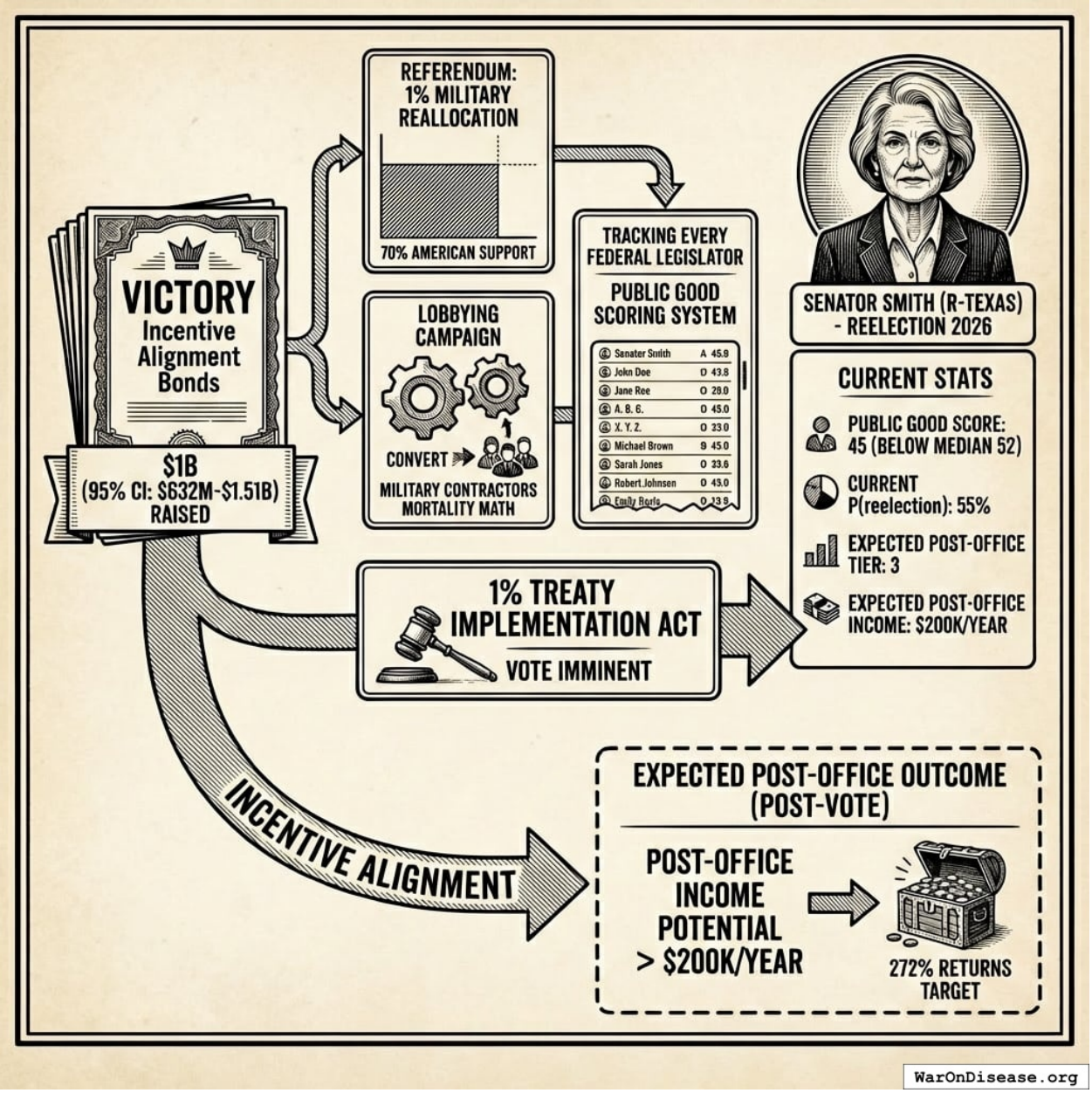


Figure 384: A data dashboard for Senator Smith showing her Public Good Score of 45 against the Senate median of 52, alongside her 55 percent reelection probability and projected post-office financial tier.

Her current stats:

- Public Good Score: 45 (below Senate median of 52)
- Current P(reelection): 55%
- Expected post-office tier: 3
- Expected post-office income: $200K/year

The Old Calculus (Without IABs)

Vote Yes	Vote No
Attack ads: "Smith voted to WEAKEN AMERICA"	Safe from military lobby attacks
Defense contractors fund opponent	Defense contractors fund you
No immediate upside	Status quo maintained
Benefits arrive in 10 years	Costs arrive never

Expected utility of No vote: $U = 0.55 \cdot \text{Office} + \$200K/\text{year} \cdot 20\text{yrs} + \text{Medium Legacy}$

Result: Vote no. Obviously.

The New Calculus (With IABs)

If Smith votes YES:

- VoteRecord: +15 points (major treaty vote)
- New Score: 45 + 15 = 60 → jumps to 72 with multiplier for being early supporter
- P(reelection): 55% → 62% (score boost + $500K independent support)
- Post-office tier: 3 → 2 (with path to Tier 1 if she becomes a champion)
- Expected post-office income: $200K → $300K/year

If Smith votes NO:

- VoteRecord: -15 points
- New Score: 45 - 15 = 30
- P(reelection): 55% → 48% (score penalty + $2M goes to opponent)
- Post-office tier: Stuck at 3
- Attack ads funded: "Smith voted AGAINST the cure your family needs"

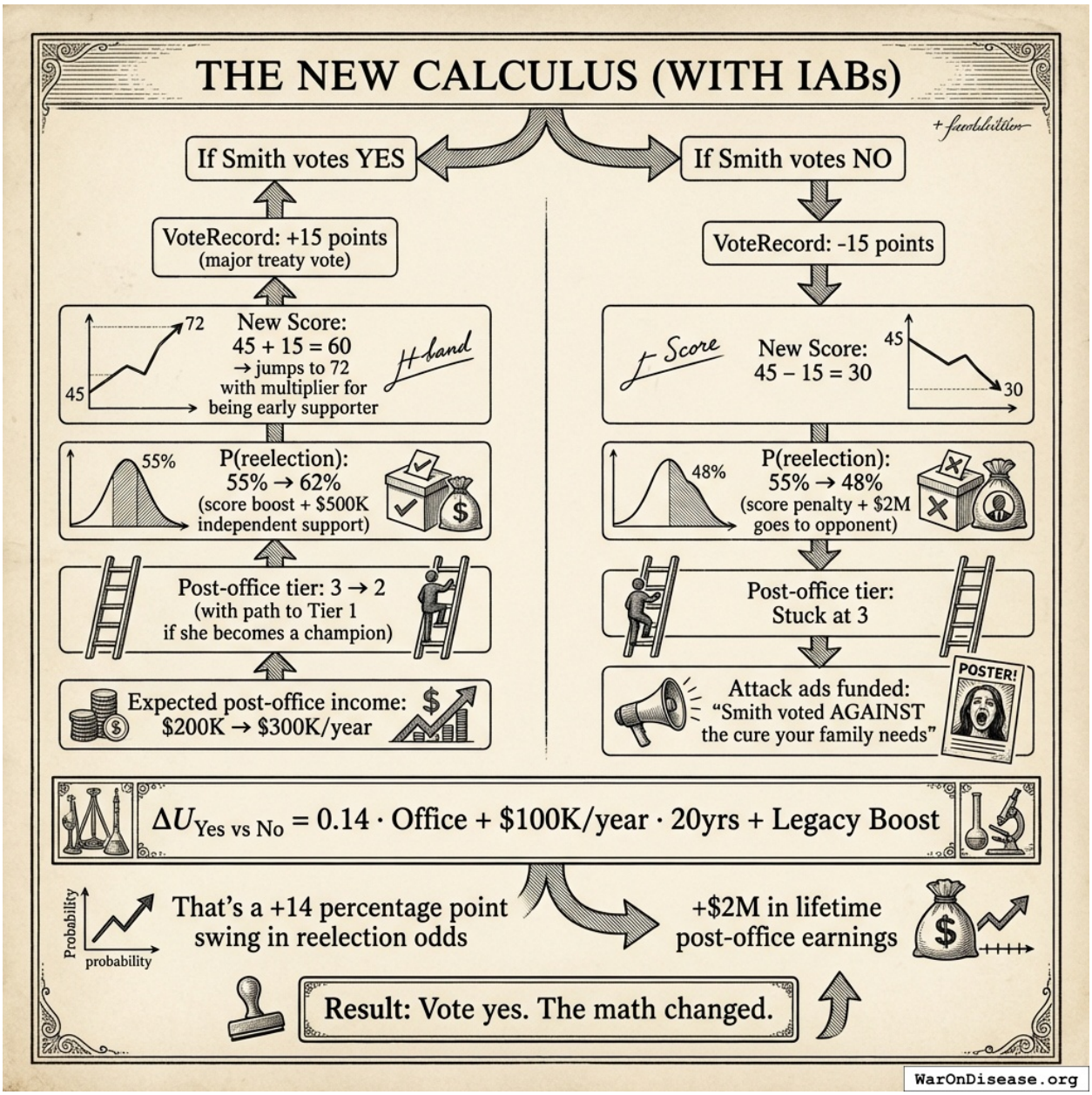


Figure 385: A side-by-side comparison of the political and financial outcomes for Senator Smith based on her vote, illustrating the significant divergence in reelection probability, legislative score, and lifetime earnings.

The math:

$$\Delta U_{\text{Yes vs No}} = 0.14 \cdot \text{Office} + \$100K/\text{year} \cdot 20\text{yrs} + \text{Legacy Boost}$$

That's a +14 percentage point swing in reelection odds and +$2M in lifetime post-office earnings.

Result: Vote yes. The math changed.

What Actually Happens

1. **Pre-vote**: Senator Smith's staff pulls up her current Public Good Score (45). They model the yes vote: score jumps to 72, P(reelection) rises 7 points, post-office tier improves.

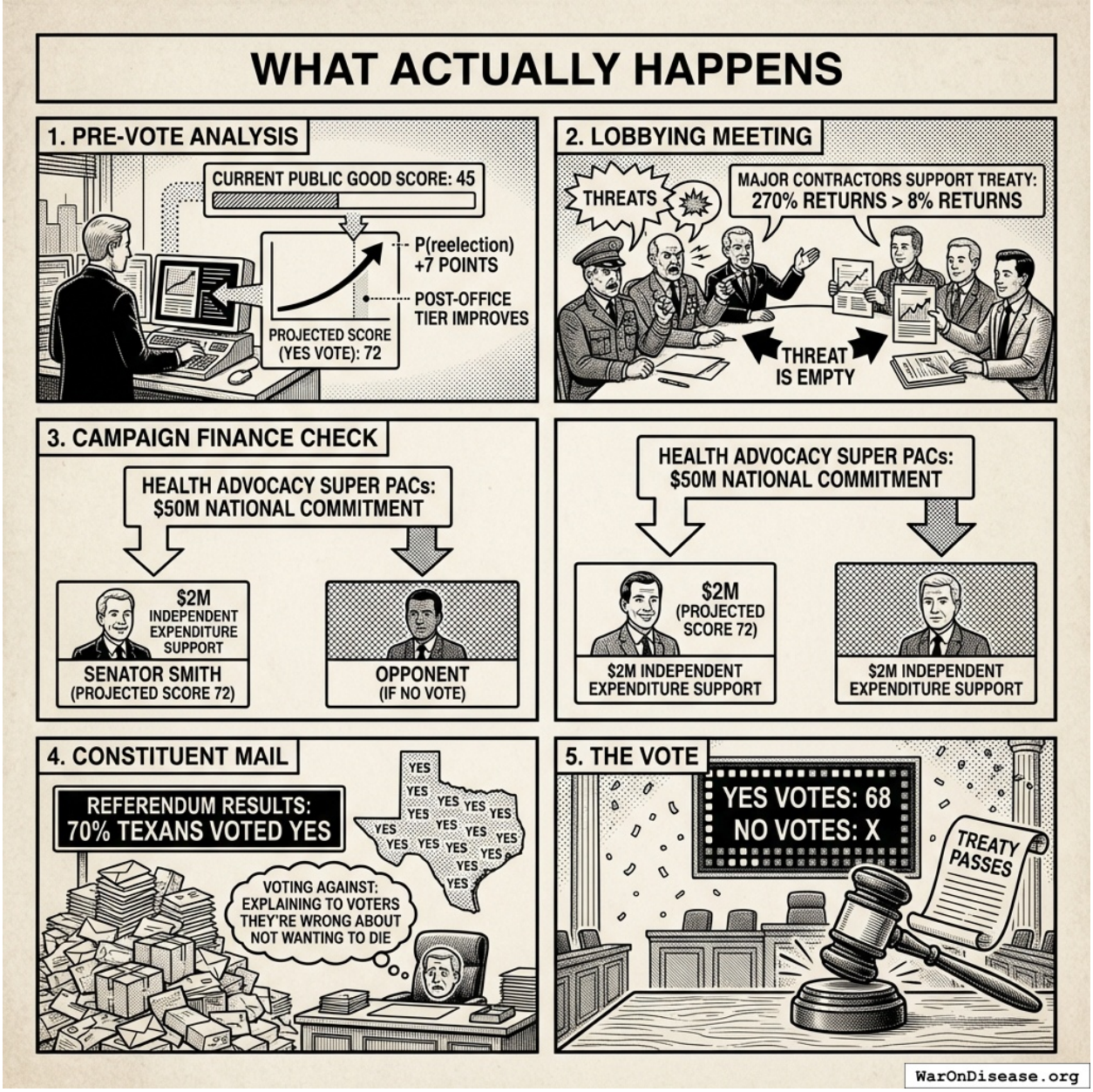


Figure 386: A flowchart detailing the multi-step decision-making process of a Senator, tracking how score projections, financial incentives, and constituent data culminate in a final vote.

2. **Lobbying meeting**: The old military lobby shows up to threaten. But three major contractors have already announced support for the treaty (270% returns beat 8% returns). The threat is empty.
3. **Campaign finance check**: Her team sees that health advocacy Super PACs have committed $50M nationally to independent expenditures. At her projected score of 72, she qualifies for $2M in support. A no vote means that $2M goes to her opponent instead.

4. **Constituent mail**: 70% of Texans voted yes in the referendum. Voting against that is explaining to voters why you think they're wrong about not wanting to die.
5. **The vote**: Smith votes yes. So do 67 other senators. The treaty passes.

Post-Treaty: The Numbers

For Senator Smith:

Metric	Before	After
Public Good Score	45	78
P(reelection)	55%	68%
Independent support received	$0	$3M
Post-office tier	3	1
Expected post-office income	$200K/yr	$500K/yr

She wins reelection by 12 points. After leaving the Senate in 2030, she joins the WHO Advisory Board and chairs the Aspen Health Initiative.

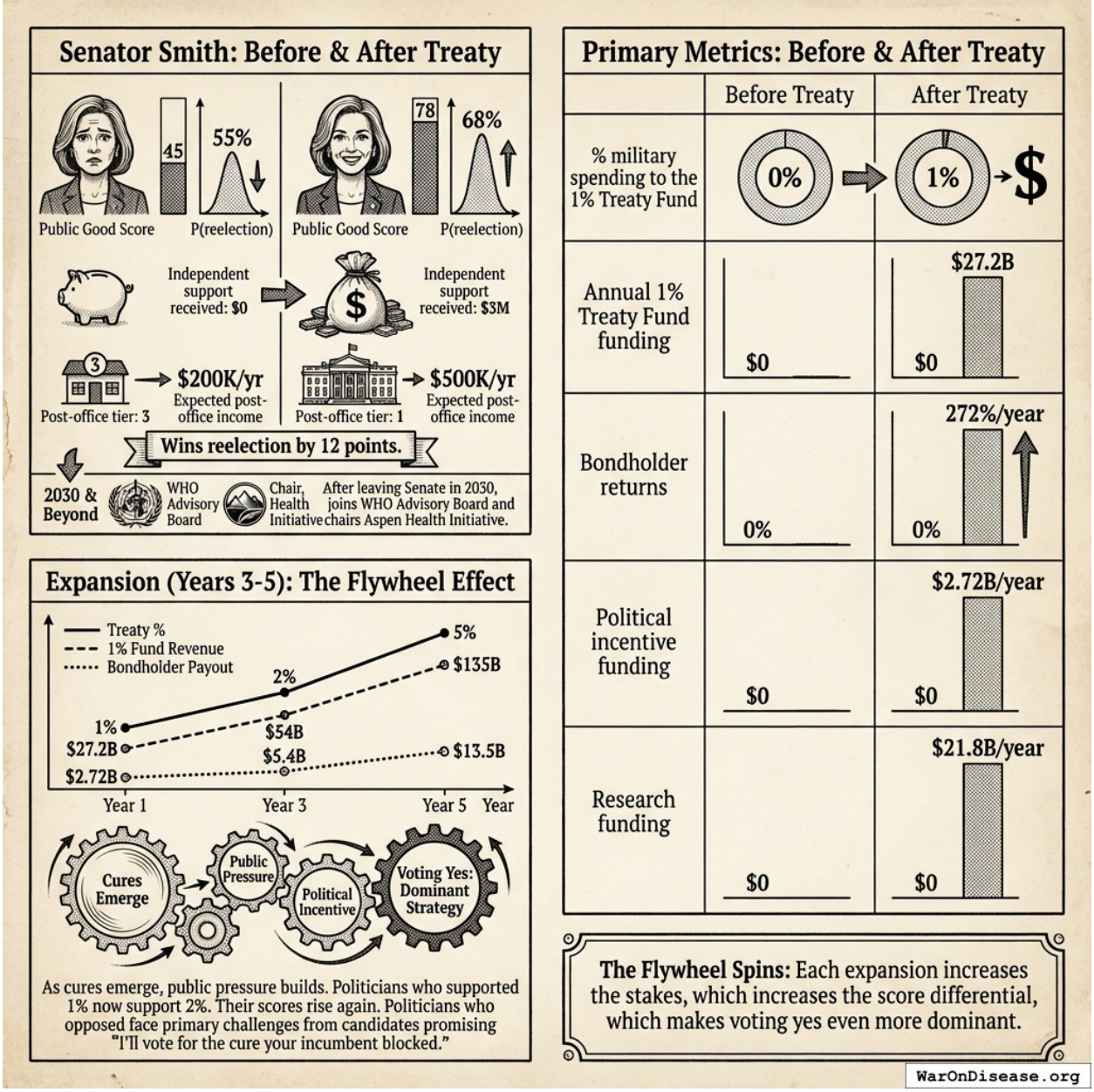


Figure 387: A multi-series chart showing the scaling growth of Treaty Fund revenue and bondholder payouts alongside Senator Smith's performance metrics before and after the treaty.

For the primary metrics:

Metric	Before Treaty	After Treaty
% military spending to the 1% Treaty Fund	0%	1%
Annual 1% Treaty Fund funding	$0	$27.2B
Bondholder returns	0%	272%/year

Metric	Before Treaty	After Treaty
Political incentive funding	$0	$2.72B/year
Research funding	$0	$21.8B/year

For expansion (Years 3-5):

As cures emerge, public pressure builds. Politicians who supported 1% now support 2%. Their scores rise again. Politicians who opposed face primary challenges from candidates promising "I'll vote for the cure your incumbent blocked."

Year	Treaty %	1% Treaty Fund Revenue	Bondholder Payout
1	1%	$27.2B	$2.72B
3	2%	$54B	$5.4B
5	5%	$135B	$13.5B

The flywheel spins. Each expansion increases the stakes, which increases the score differential, which makes voting yes even more dominant.

The Math for VICTORY Incentive Alignment Bond Investors

The investors who funded the $1B campaign see:

- Treaty passes → $27.2B/year flows to the 1% Treaty Fund
- 10% ($2.72B/year) flows to bondholders → 272% annual returns
- 10% ($2.72B/year) funds political incentive mechanisms → keeps politicians aligned
- 80% ($21.8B/year) funds actual cures → diseases start declining → public demands expansion → returns grow

Everyone's self-interest aligned. No one was bribed. The system just made "vote for cures" and "advance career" point in the same direction.

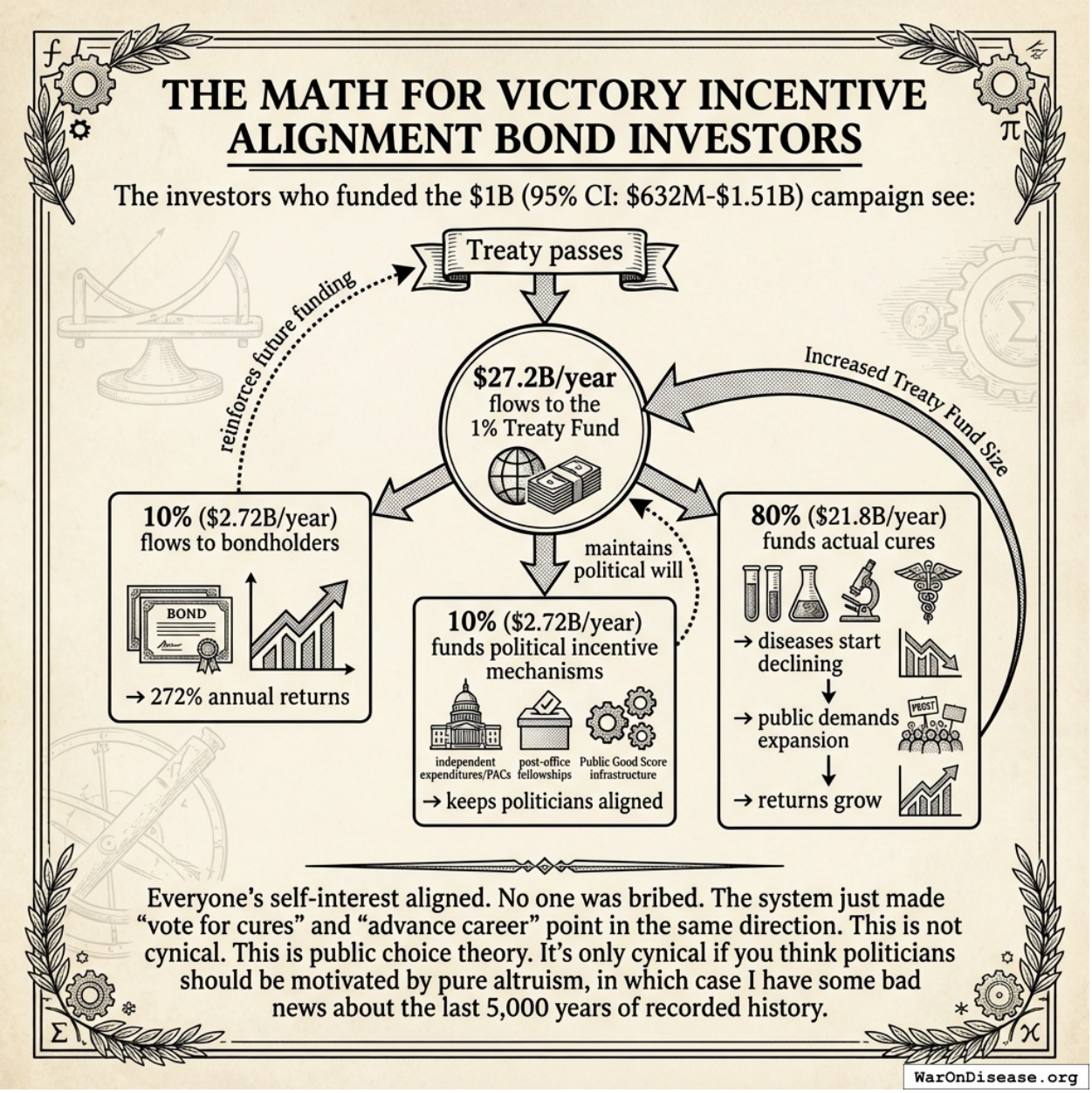


Figure 388: A breakdown of the 27.2B annual Treaty Fund distribution, illustrating the allocation between investor returns, political incentive mechanisms, and medical research funding.

This is not cynical. This is public choice theory. It's only cynical if you think politicians should be motivated by pure altruism, in which case I have some bad news about the last 5,000 years of recorded history.

Why This Is Not Bribery (Legally Speaking)

At first glance, this sounds like fancy bribery. "Reward politicians when they do what you want" is pretty much the definition.

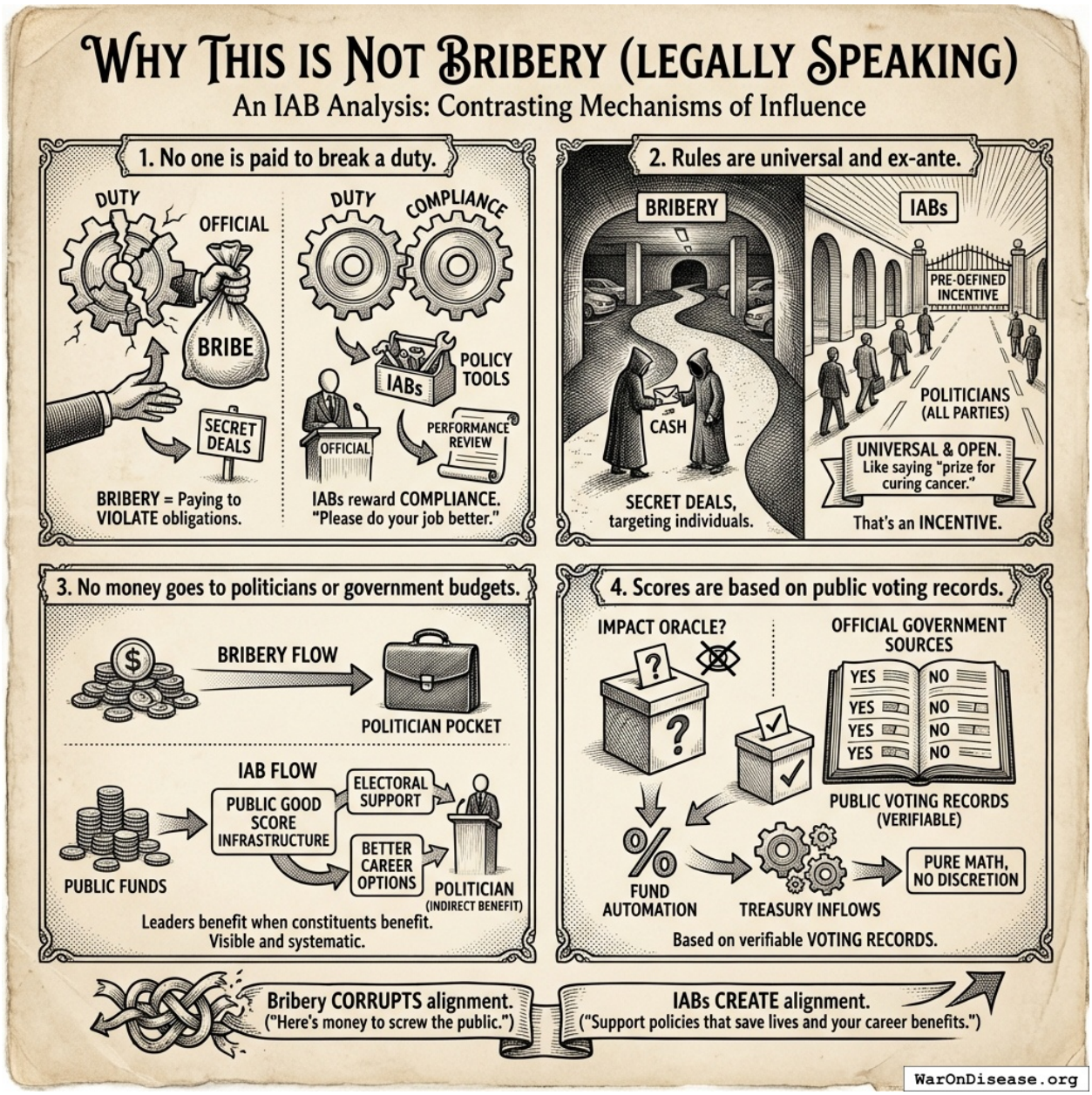


Figure 389: A comparison diagram illustrating the divergent flows of incentives in bribery (private payment for violating duty) versus Incentive Alignment Bonds (automatic rewards for public duty compliance).

Except it's not, for four reasons that matter to lawyers:

1. **No one is paid to break a duty.**
   - Bribery = paying an official to violate their legal or ethical obligations.
   - IABs reward *compliance with* duties: improving population health using legal policy tools.
   - "Please do your job better and we'll tell everyone you did" is not a bribe. It's a performance review.
2. **Rules are universal and ex-ante.**
   - The mechanism applies to all politicians and parties, openly and in advance.
   - There are no secret deals, no targeting individuals, no envelopes in parking garages.
   - It's like saying "we'll give a prize to whoever cures cancer." That's not bribery. That's an incentive.

3. **No money goes to politicians or government budgets.**
    - Politicians benefit *indirectly*: better scores, electoral support, nicer career options.
    - This is how representative democracy is supposed to work: leaders benefit when their constituents benefit.
    - The mechanism just makes the connection visible and systematic.
4. **Scores are based on public voting records.**
    - No "impact oracle" needed - just public voting records from official government sources.
    - Did the politician vote YES on treaty funding? That's verifiable, ungameable, and directly attributable.
    - The 10% political incentive fund flows automatically based on treasury inflows - pure math, no discretion.

Bribery **corrupts** alignment. ("Here's money to screw the public.") IABs **create** alignment. ("Support policies that save lives and your career benefits.")

Why IABs Are Not Just Social Impact Bonds

People sometimes hear this and say, "We already have Social Impact Bonds." This is like saying "we already have bicycles" when someone proposes building a railroad.

Here's the difference (yes, it matters):

	Social Impact Bonds	Incentive Alignment Bonds
Scale	One city's recidivism rate	Whether entire countries live or die
Who's incentivized	Service providers who already wanted to help	Politicians (the people who control everything)
Outcome measured	Did 47 people complete job training?	Did millions of people not die?
Purpose	"Innovative financing" (consultant-speak for "grant with extra steps")	Governance technology (also consultant-speak, but accurate)

Social Impact Bonds are pilot projects. Important! Valuable! Also: small.

Incentive Alignment Bonds are an attempt to **change the rules of the game** at the level where games actually get changed, which is to say, the level where politicians decide what gets funded and what dies in committee.

How This Plugs Into the 1% Treaty (The Part Where It All Comes Together)

So how does this connect to the bigger project of ending war and disease? (You're still reading this far. Impressive.)

The 1% Treaty says:

> "Let's take 1% of global military spending and redirect it to ultra-efficient pragmatic trials, giving the world earlier access to cures and making us safer than any new weapons system could."

Beautiful, right? Inspiring, even. Also: meaningless without a mechanism. Treaties are just PDFs with fancy letterheads unless you give countries a reason to actually follow them.

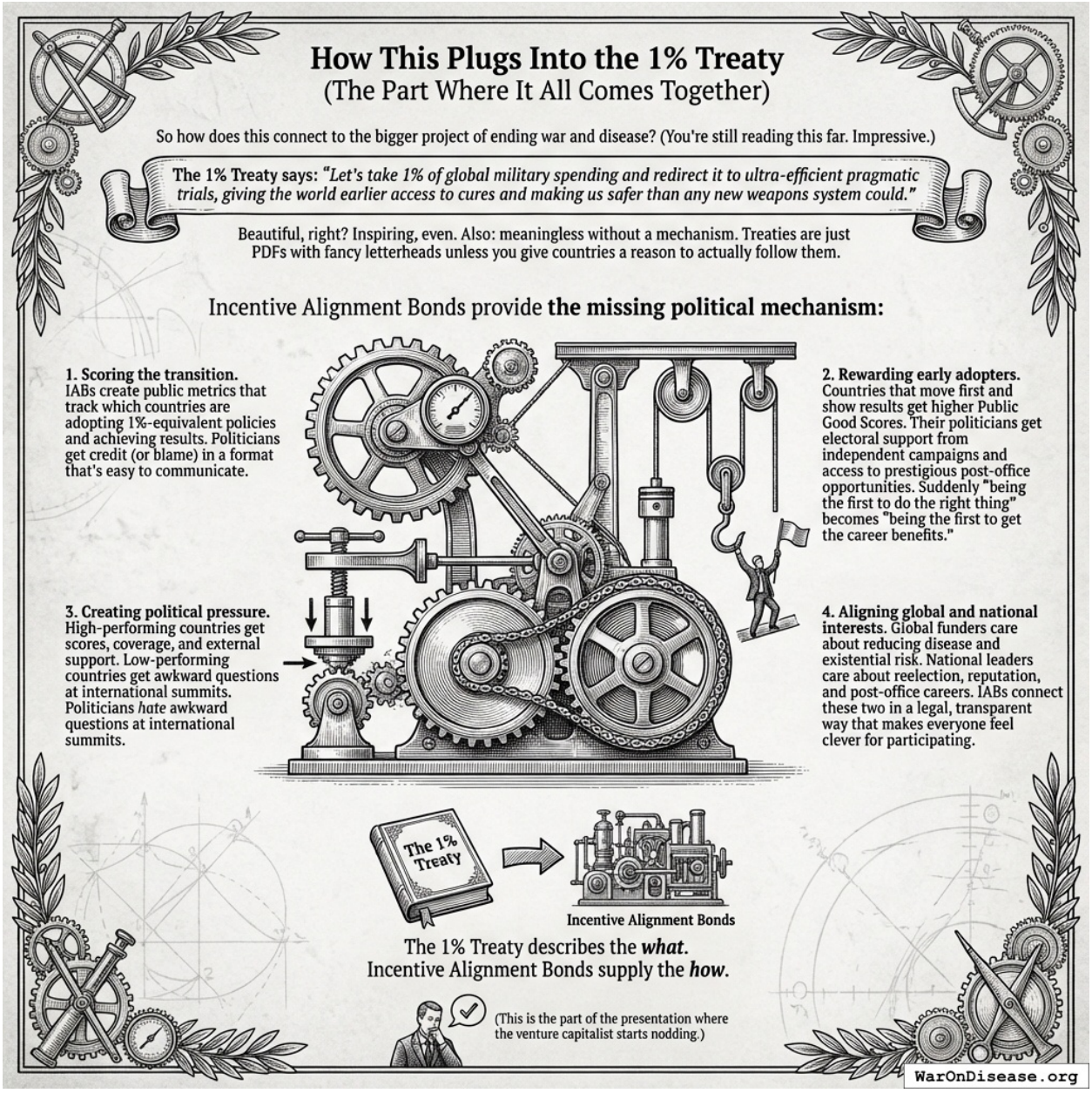


Figure 390: A conceptual diagram illustrating Incentive Alignment Bonds as the operational 'bridge' that converts the 1 percent Treaty's high-level goals into tangible political incentives, scoring metrics, and global pressure.

Incentive Alignment Bonds provide **the missing political mechanism**:

1. **Scoring the transition.** IABs create public metrics that track which politicians voted for 1%-equivalent policies and whether funding actually flowed. Politicians get credit (or blame) in a format that's easy to communicate.
2. **Rewarding early adopters.** Politicians who move first get higher Public Good Scores. They get electoral support from independent campaigns and access to prestigious post-office opportunities. Suddenly "being the first to do the right thing" becomes "being the first to get the career benefits."
3. **Creating political pressure.** High-performing countries get scores, coverage, and external support.

Low-performing countries get awkward questions at international summits. Politicians *hate* awkward questions at international summits.

4. **Aligning global and national interests.** Global funders care about reducing disease and existential risk. National leaders care about reelection, reputation, and post-office careers. IABs connect these two in a legal, transparent way that makes everyone feel clever for participating.

The 1% Treaty describes the **what**. Incentive Alignment Bonds supply the **how**.

(This is the part of the presentation where the venture capitalist starts nodding.)

7a. The Two Engines: Financial and Political

If you've read the VICTORY Incentive Alignment Bonds chapter, you might wonder: "Are these two different things?"

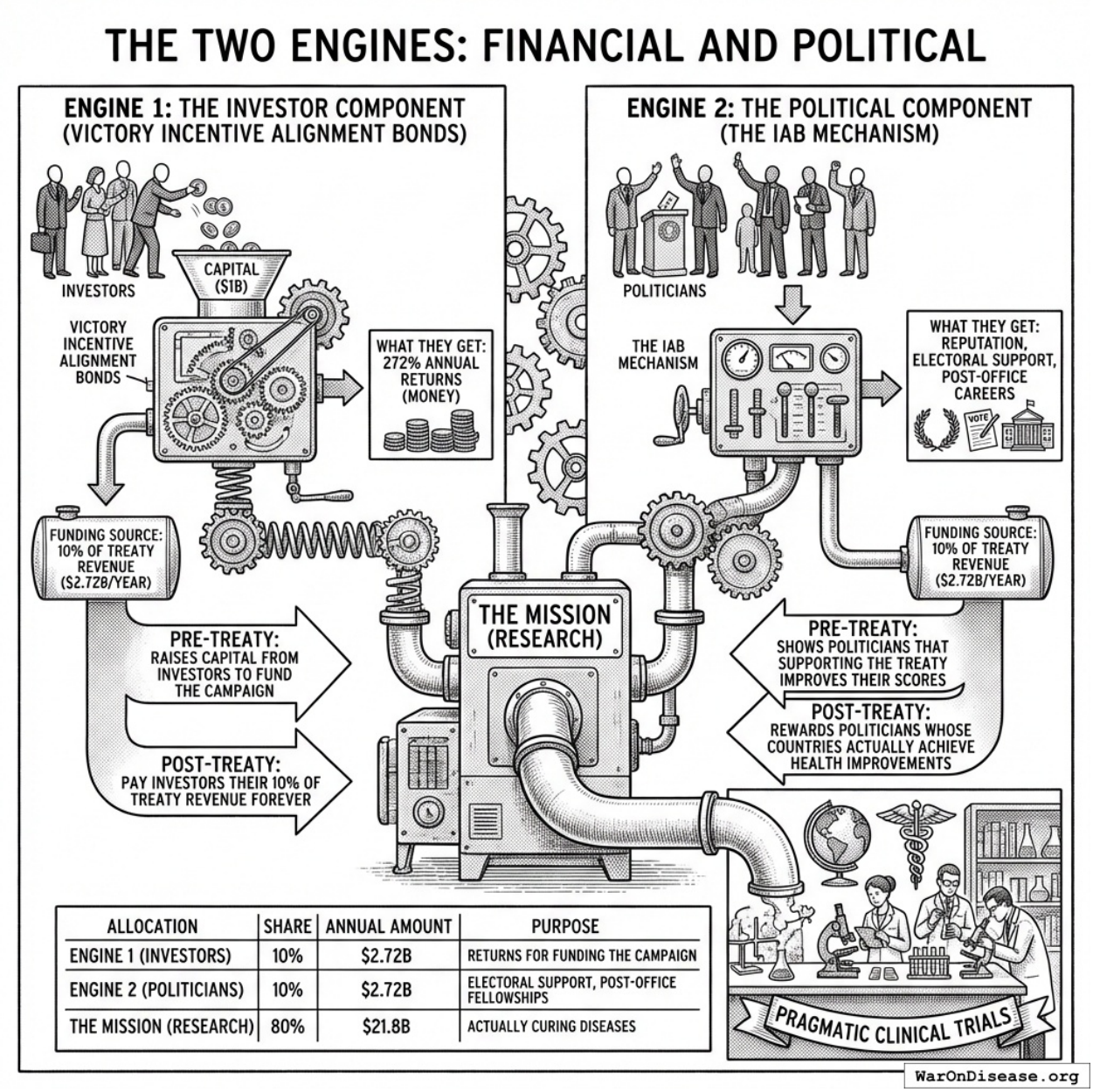


Figure 391: A diagram illustrating the allocation of treaty revenue across the two 'engines' (investors and politicians) and the primary research mission, showing the flow of capital and incentives across pre- and post-treaty phases.

No. **VICTORY Incentive Alignment Bonds are the specific financial instrument that implements the IAB concept.**

However, the instrument has two distinct "engines" inside it. One pays investors to provide the capital. The other pays politicians to provide the policy.

	Engine 1: The Investor Component(VICTORY Incentive Alignment Bonds)	Engine 2: The Political Component(The IAB Mechanism)
Who's incentivized	Investors	Politicians
What they get	272% annual returns (money)	Reputation, electoral support, post-office careers
Funding source	10% of treaty revenue ($2.72B/year)	10% of treaty revenue ($2.72B/year)
Role	**Solves the Capital Problem**Raises $1B to fund the campaign	**Solves the Political Problem**Makes politicians *want* to support the treaty

The relationship is complementary:

Phase	Engine	What It Does
Pre-Treaty	VICTORY Incentive Alignment Bonds	Raise capital from investors to fund the campaign
Pre-Treaty	IAB Mechanism	Shows politicians that supporting the treaty improves their scores
Post-Treaty	VICTORY Incentive Alignment Bonds	Pay investors their 10% of treaty revenue forever
Post-Treaty	IAB Mechanism	Rewards politicians who maintained support and whose countries kept funding flowing

VICTORY Incentive Alignment Bonds get investors to fund the war. The IAB mechanism gets politicians to fight it (and to keep fighting after victory).

The 80% of treaty revenue that doesn't go to investors or political incentives? That is allocated from the 1% Treaty Fund to decentralized institutes of health (DIH) to actually fund the pragmatic clinical trials. The split is:

Allocation	Share	Annual Amount	Purpose
Engine 1 (Investors)	10%	$2.72B	Returns for funding the campaign
Engine 2 (Politicians)	10%	$2.72B	Electoral support, post-office fellowships
The Mission (Research)	80%	$21.8B	Actually curing diseases

Objections and Failure Modes

No mechanism is magic. It is worth being explicit about what can go wrong.

Objection 1: "Won't politicians game the metrics?"

Yes. Obviously. Politicians game everything. That's what they do.

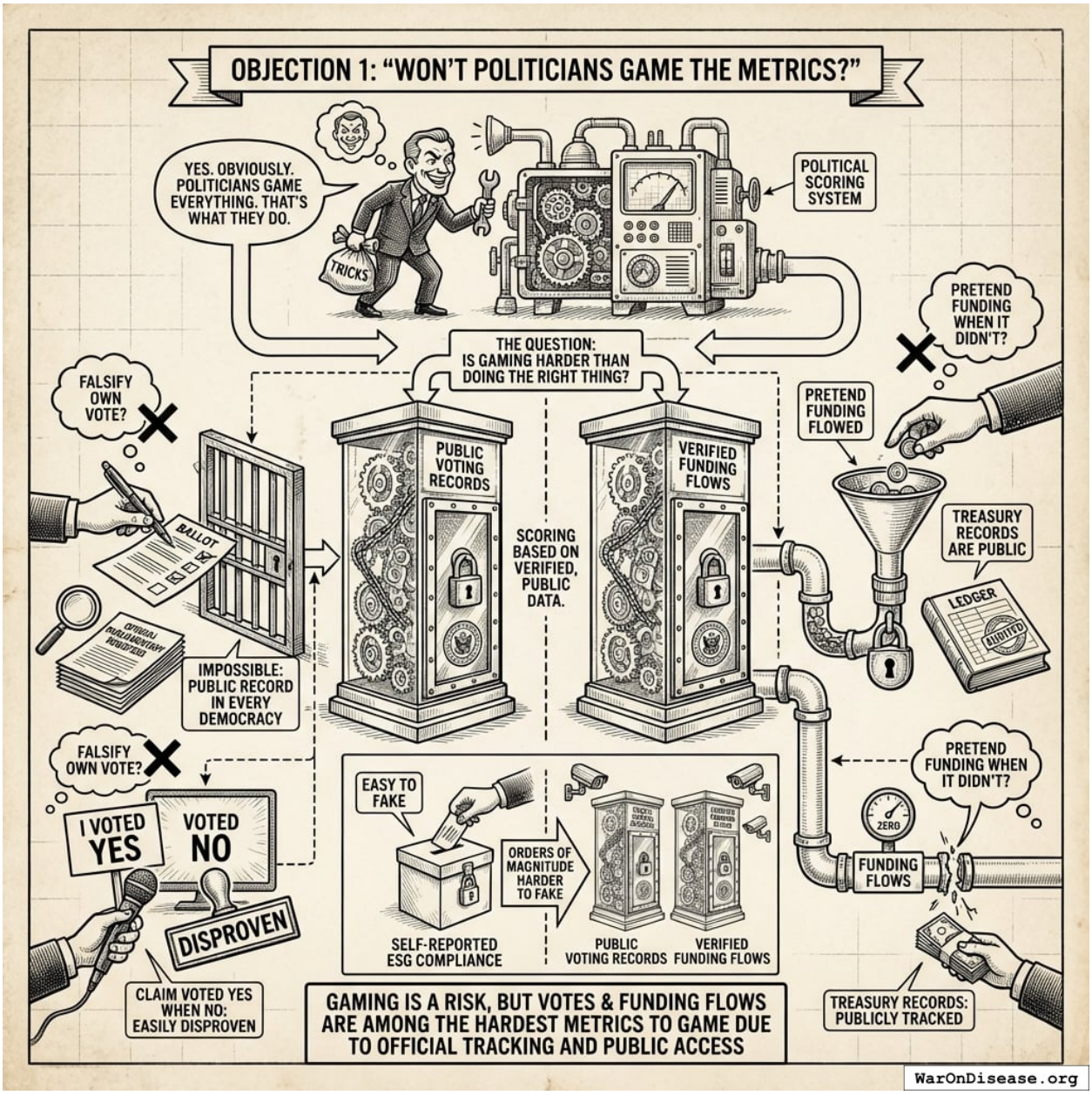


Figure 392: A comparison of metric 'gamability' showing why public records like voting and treasury flows are more reliable than self-reported data.

The question isn't "will they try to game it?" The question is "is gaming it harder than just doing the right thing?"

The scoring is based on **public voting records** and **verified funding flows**, not health outcomes. To game these metrics, you'd need to:

- Falsify your own vote (impossible - it's public record in every democracy)
- Claim you voted yes when you voted no (easily disproven)

- Pretend funding flowed when it didn't (treasury records are public)

Votes and funding flows are among the hardest metrics to game because they're already tracked by official government sources. The scoring system just aggregates public information.

Gaming is a risk with any metric. But votes and funding flows are orders of magnitude harder to fake than, say, self-reported ESG compliance.

Objection 2: "Isn't this just rich people buying policy?"

This is the most important objection, so let's take it seriously instead of hand-waving.

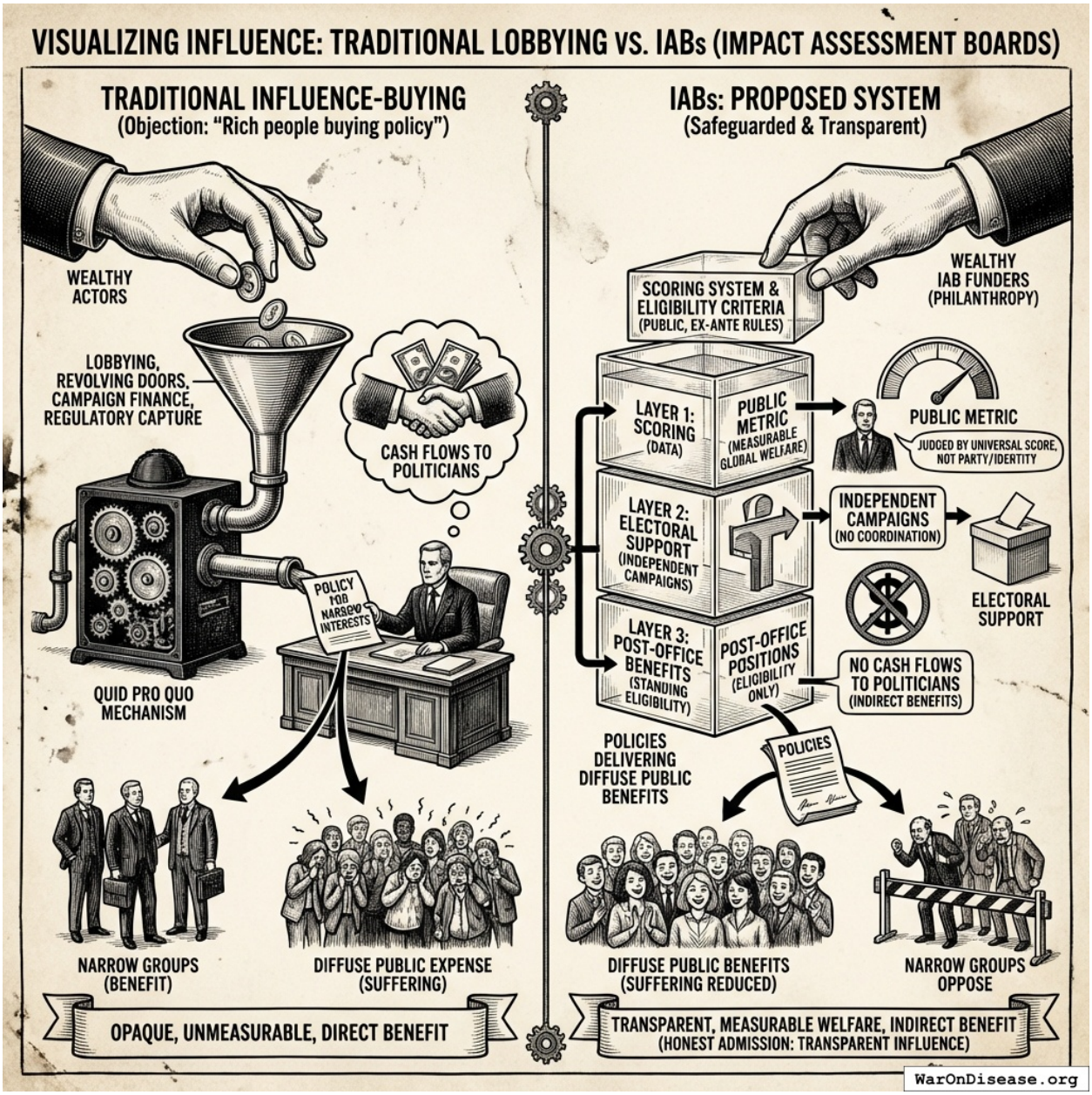


Figure 393: A structural diagram of the IAB three-layer architecture, illustrating the separation between funding, objective scoring, and indirect politician benefits.

If IABs are just plutocracy with better marketing, they deserve to fail. Let's see if they are.

First, the uncomfortable reality: Wealthy actors *already* buy policy. They do it via lobbying, revolving doors, campaign finance, and regulatory capture. The pharmaceutical industry alone spends over $300 million annually on lobbying in the United States. Defense contractors spend more. The question is not "should money influence policy?" but rather "given that money *already* influences policy, can we channel that influence toward measurable global welfare instead of narrow interests?"

Second, the structural safeguards:

1. **No quid pro quo.** The three-layer architecture explicitly separates scoring (data), electoral support (issue campaigns), and post-office benefits (standing eligibility rules). No one can say "vote for X, get Y." There are only standing rules: "Any politician who supports this *class* of policies will score higher on this public metric, and entities that care about that metric may independently favor high-scorers."
2. **Universal and ex-ante rules.** Every politician faces the same scoring system, announced publicly in advance. A left-wing politician who supports 1%-equivalent health policy gets the same credit as a right-wing one. The system is indifferent to party, ideology, and individual identity.
3. **No money flows to politicians.** IABs don't pay anyone. They create scoring systems and eligibility criteria. Politicians get *indirect* benefits: better scores on public metrics, electoral support from independent campaigns, and eligibility for post-office positions. No cash changes hands. This is how lobbying is *supposed* to work; it just usually doesn't.
4. **The metric is suffering reduced, not interests served.** Traditional influence-buying delivers policies that benefit narrow groups at diffuse public expense. IABs do the opposite: they reward policies that deliver diffuse public benefits even when narrow groups oppose them. The direction of distortion is reversed.

Third, the honest admission: Yes, wealthy people who fund IABs will have more influence over which public goods get prioritized than people who don't fund IABs. That's true of all philanthropy. The Gates Foundation has more influence over malaria policy than a random person who also cares about malaria. The question is whether that influence is being exercised transparently, toward measurable welfare improvements, through legal and auditable channels. IABs satisfy all three criteria in ways that traditional lobbying does not.

Objection 3: "What if politicians pocket the career rewards, then reverse the policy?"

They might. Politicians are humans, and humans have short attention spans and shorter terms.

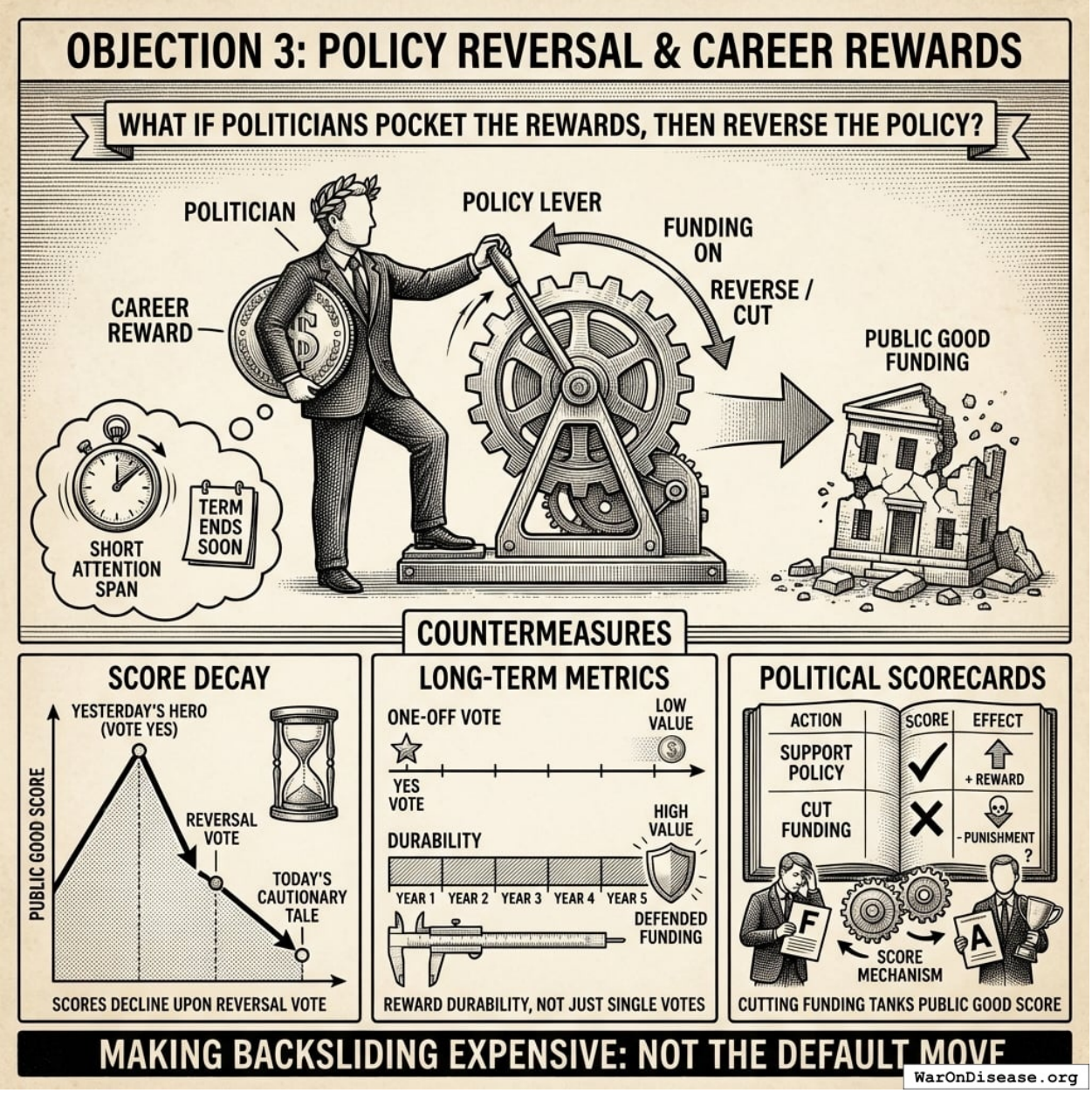


Figure 394: A conceptual diagram showing the impact of political actions on a Public Good Score over time, illustrating the rewards for long-term defense and the steep penalties for policy reversal.

Countermeasures:

- **Score decay**: Public Good Scores decline if you vote to reverse funding. Yesterday's hero becomes today's cautionary tale.
- **Long-term metrics**: Reward durability, not just one-off votes. "You voted yes once" is worth less than "you defended the funding for five years."
- **Political scorecards**: Voting to cut funding tanks your Public Good Score. The same mechanism that rewarded you for supporting the policy punishes you for killing it.

You cannot prevent all backsliding. But you can make it expensive enough that it's not the default move.

Objection 4: "Is this realistic at a global scale?"

It doesn't have to start global. Global is the goal. Portugal is the pilot.

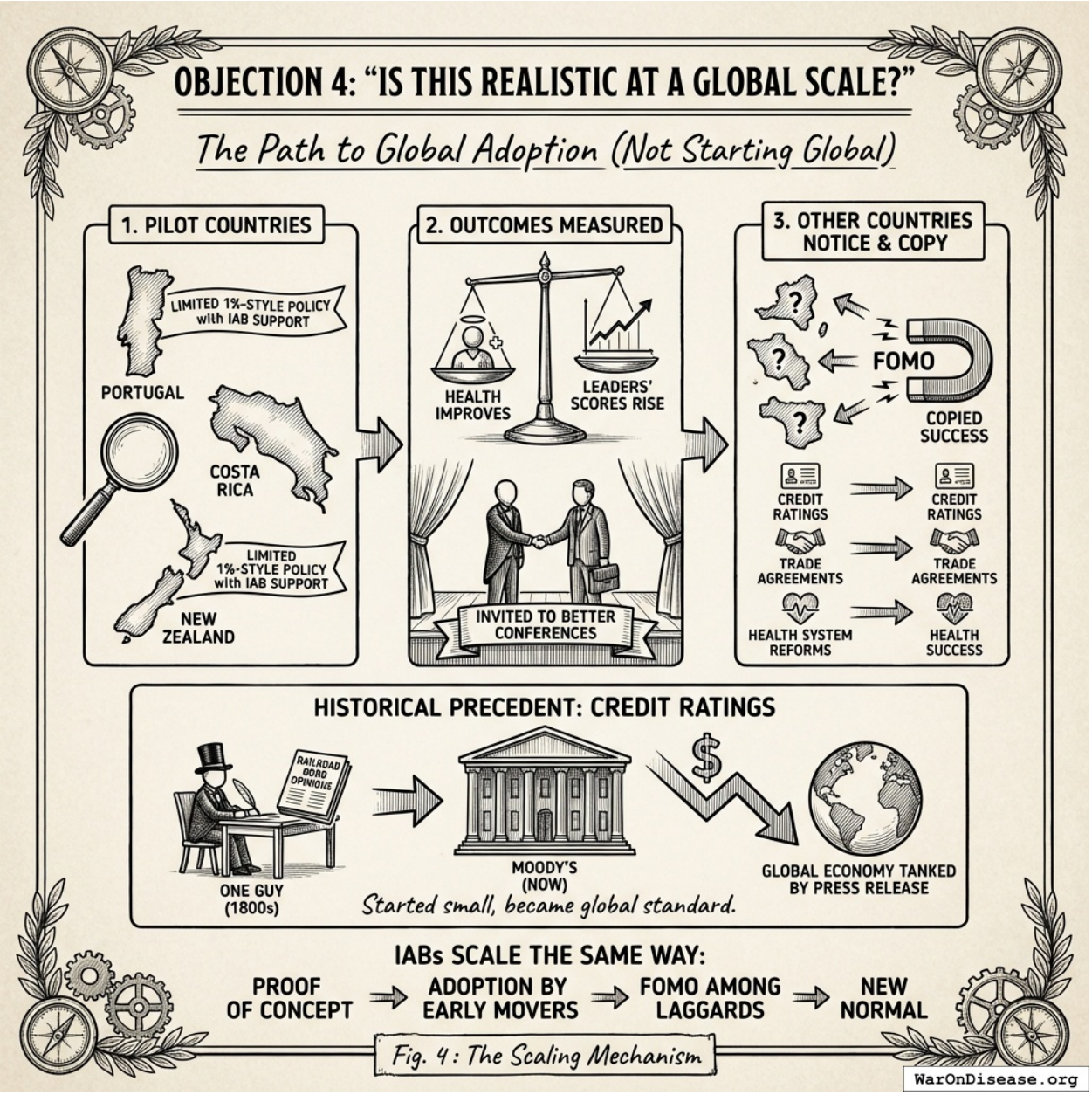


Figure 395: A flowchart illustrating the multi-stage progression of IAB policy adoption, from pilot countries and measured outcomes to global expansion driven by institutional FOMO.

The path:

1. **One or two pilot countries** adopt a limited 1%-style policy with IAB support. (Portugal, Costa Rica, maybe New Zealand - small, functional democracies with something to prove.)
2. **Funding flows are verified**; the policy works; leaders get invited to better conferences and their scores rise.
3. **Other countries notice** and copy what works, as they already do with credit ratings, trade agreements,

and health system reforms. FOMO is a powerful force in international relations.

Credit ratings didn't start as a global system. They started as one guy in the 1800s publishing opinions about railroad bonds. Now Moody's can tank a country's economy with a press release.

IABs can scale the same way: proof of concept → adoption by early movers → FOMO among laggards → new normal.

Why This Matters for Ending War and Disease

Ending war and disease is not primarily a **scientific** problem; it is a **governance** problem.

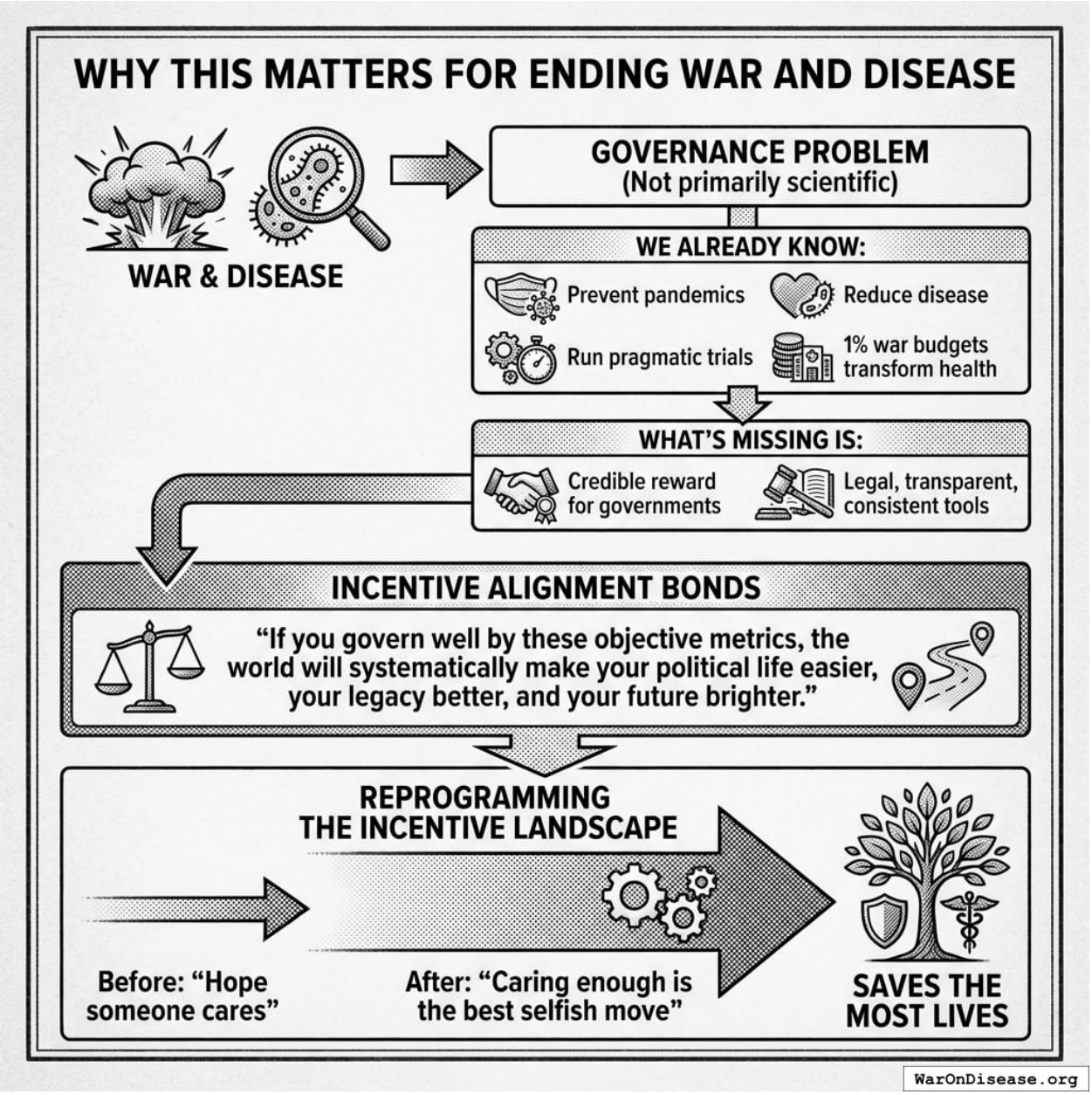


Figure 396: A conceptual diagram illustrating how Incentive Alignment Bonds bridge the gap between governance and global goals by linking objective performance metrics to rewards for political leaders.

We already know:

- How to prevent many pandemics.
- How to reduce cardiovascular and infectious disease.
- How to run pragmatic trials at a fraction of current cost.
- That 1% of war budgets could transform the health landscape.

What's missing is:

- a credible way for the public and global funders to **reward** governments for doing these things,
- using tools that are legal, transparent, and consistent with human self-interest.

Incentive Alignment Bonds give us a way to say:

> "If you govern well by these objective metrics, the world will systematically make your political life easier, your legacy better, and your future brighter."

That does not guarantee success. But it changes the game from "hope someone in power cares enough" to:

> "Let's build a system where caring enough is the best selfish move a leader can make."

If ending war and disease is about anything, it is about that: **reprogramming the incentive landscape so that the easiest and most rewarding path for powerful actors is the path that saves the most lives.**

Incentive Alignment Bonds are one of the simplest, most scalable tools we have to do that.

Why 10%: The Scaling Engine

You might wonder: Why dedicate 10% of treaty revenue ($2.72B/year) to political incentives? Isn't that money that could go to pragmatic clinical trials?

The answer requires understanding what we're actually trying to do.

The Goal Isn't a 1% Treaty. The Goal Is 100%.

The 1% treaty is the **proof of concept**. The endgame is redirecting *most* of global military spending to health. Ideally, 50%, 75%, eventually approaching 100%.

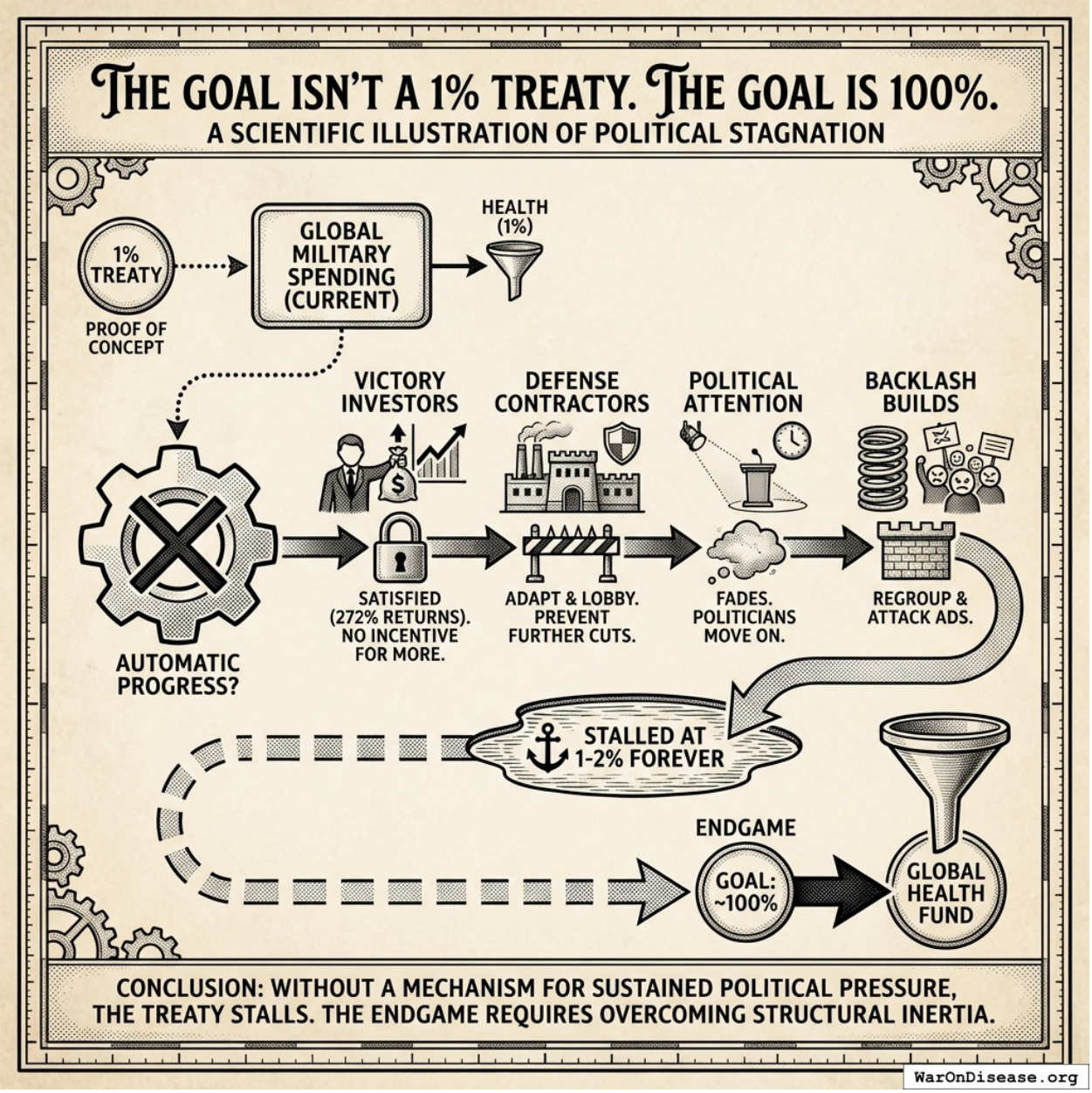


Figure 397: A diagram contrasting the intended progression from a 1 percent proof-of-concept to 100 percent military spending reallocation against the four primary forces that cause political and economic stagnation.

That doesn't happen automatically. Once the 1% treaty passes:

- VICTORY Incentive Alignment Bond investors are satisfied. They're getting 272% returns. They have no financial incentive to push for 2%, 5%, or 10%.
- Defense contractors adapt. They'll accept 1% as a small loss, then lobby to prevent further cuts.
- Political attention fades. Once the "win" is declared, politicians move on to the next issue.
- Backlash builds. The military-industrial complex regroups. Attack ads return.

Without a mechanism for **sustained political pressure**, the treaty stalls at 1-2% forever.

IABs Are the Political Ratchet

The 10% IAB allocation creates something social impact bonds cannot: **perpetual, compounding political incentives** that only increase with treaty expansion.

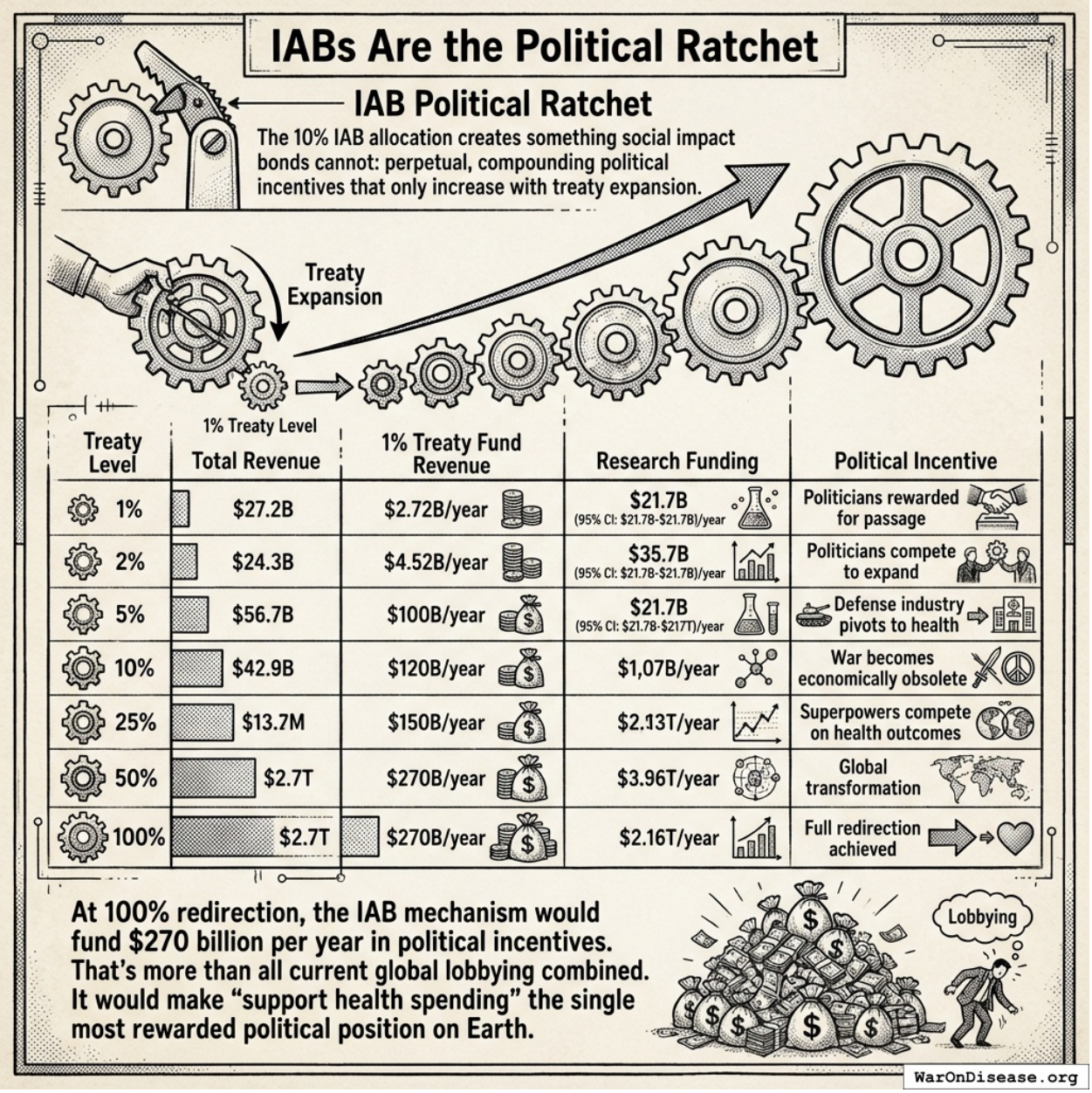


Figure 398: A growth chart illustrating the scaling of treaty fund revenue and political incentives as the treaty level increases from 1 percent to 100 percent, highlighting the 270 billion terminal value for political alignment.

Treaty Level	Total Revenue	IAB Political Funding (10%)	Research Funding (80%)	Effect
1%	$27.2B	$2.72B/year	$21.8B/year	Politicians rewarded for passage
2%	$54B	$5.4B/year	$43.2B/year	Politicians compete to expand
5%	$136B	$13.6B/year	$109B/year	Defense industry pivots to health
10%	$272B	$27.2B/year	$218B/year	War becomes economically obsolete
25%	$680B	$68B/year	$544B/year	Superpowers compete on health
50%	$1.36T	$136B/year	$1.09T/year	Global transformation
100%	$2.72T	$272B/year	$2.18T/year	Full redirection achieved

At 100% redirection, the IAB mechanism would fund **$270 billion per year** in political incentives. That's more than all current global lobbying combined. It would make "support pragmatic clinical trial funding" the single most rewarded political position on Earth.

The Math Changes Everything

At 1%: "Is $2.72B/year for political incentives worth it?"

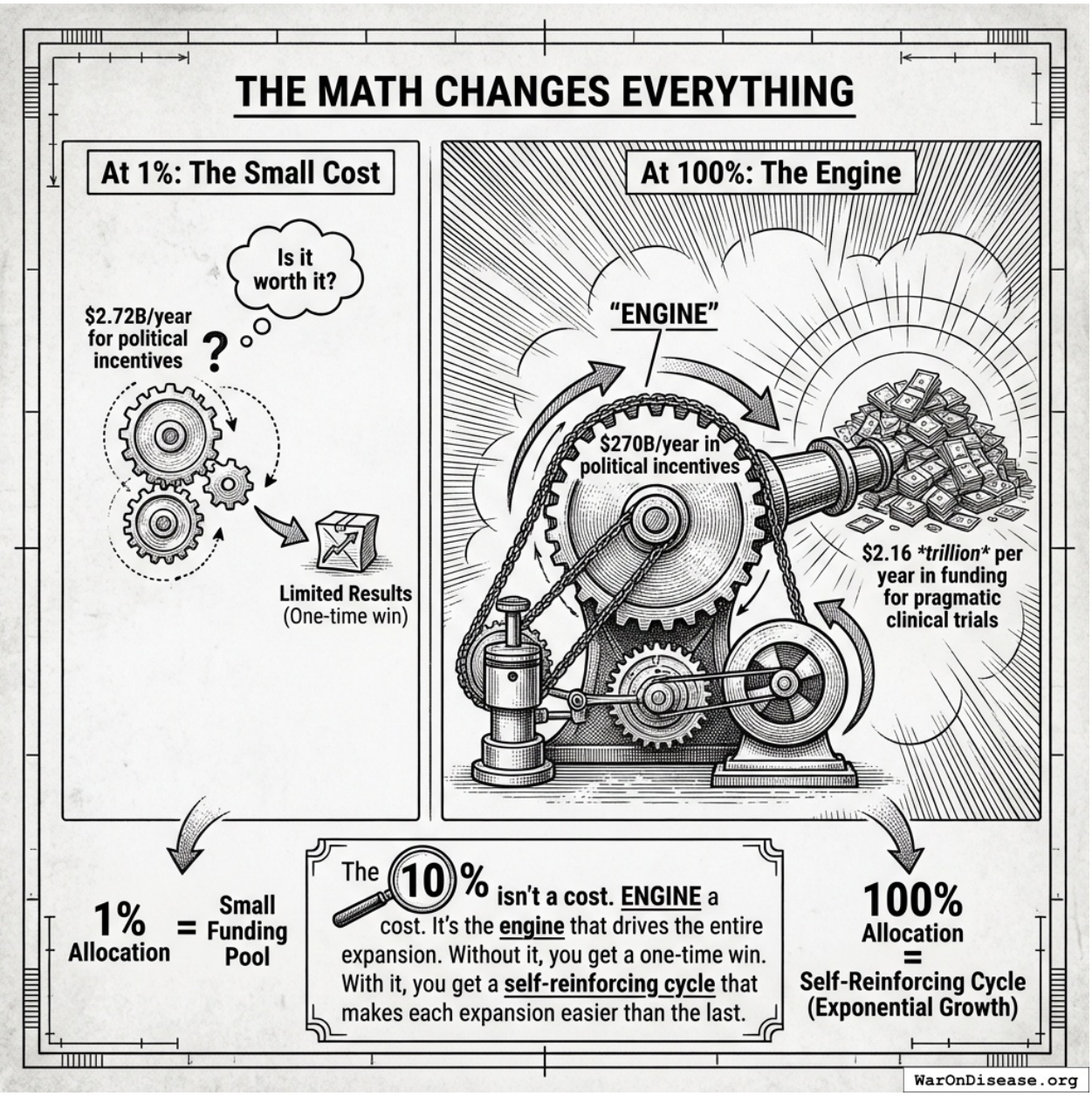


Figure 399: A visualization comparing the 270 billion investment in political incentives to the 2.16 trillion in funding it unlocks, illustrating the self-reinforcing engine of growth.

At 100%: "$270B/year in political incentives unlocks $2.16 *trillion* per year in funding for pragmatic clinical trials."

The 10% isn't a cost. It's the **engine** that drives the entire expansion. Without it, you get a one-time win. With it, you get a self-reinforcing cycle that makes each expansion easier than the last.

Why VICTORY Incentive Alignment Bonds Alone Won't Scale

VICTORY Incentive Alignment Bonds solve the *initial* alignment problem:

- Investors fund the campaign
- Treaty passes

- Investors get 272% returns forever

But after the 1% treaty passes:

- Investors are done. Their job was funding the campaign. Mission accomplished.
- They have no mechanism to push for expansion.
- Their returns are locked in. 2% treaty or 10% treaty, they still get 272%.

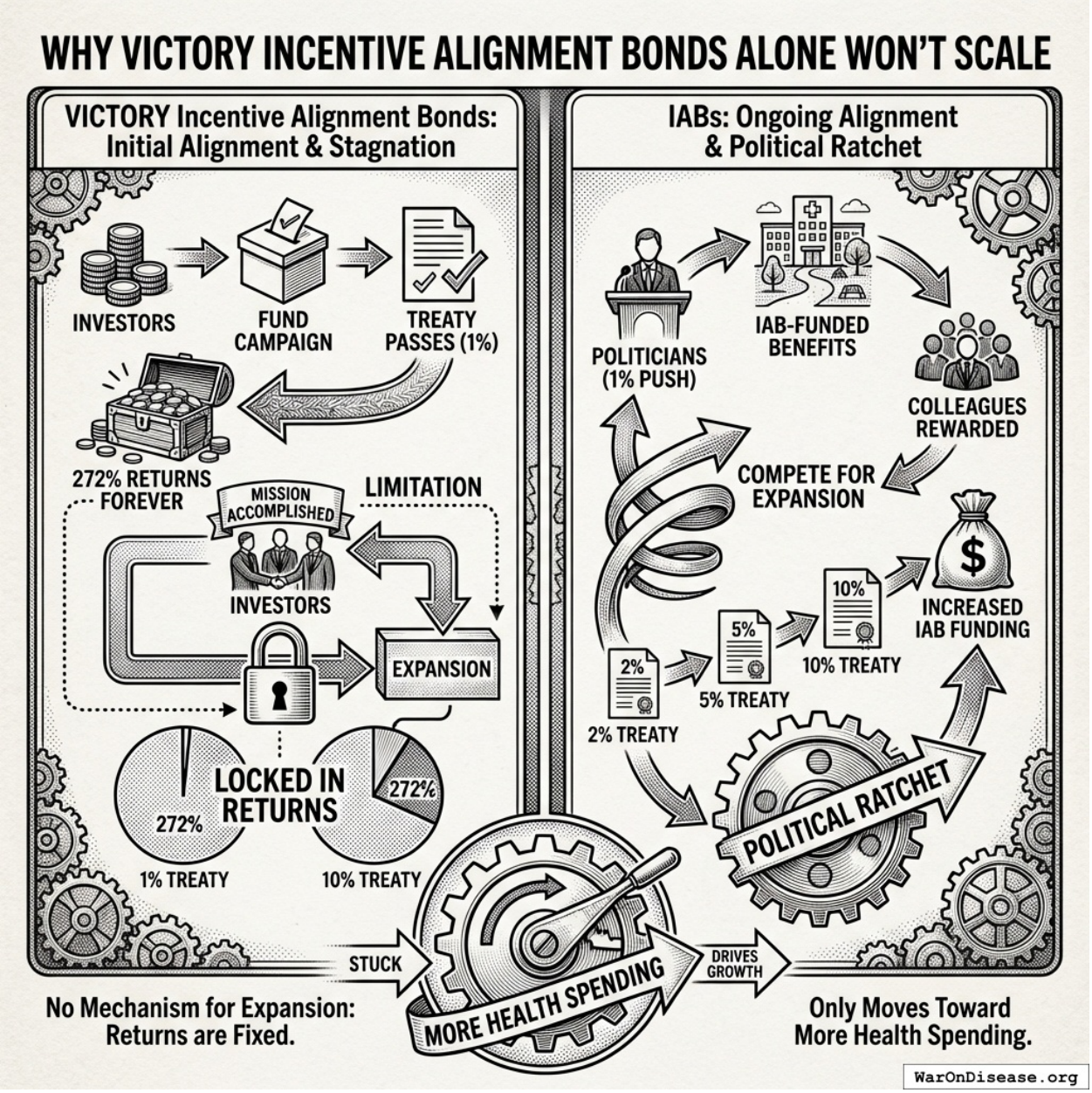


Figure 400: A flowchart illustrating the 'political ratchet' mechanism where initial treaty success triggers a feedback loop of rewards and competition, driving sequential expansion from a 1 percent to a 10 percent health treaty.

IABs solve the *ongoing* alignment problem:

- Politicians who pushed for 1% see their IAB-funded benefits

- They see colleagues getting rewarded for supporting treaty expansion
- They compete to push for 2%, then 5%, then 10%
- Each expansion increases IAB funding, which increases political pressure, which drives the next expansion

It's a **political ratchet** that only moves in one direction: toward more pragmatic clinical trial funding.

The Alternative Is Stagnation

Without IABs, here's the likely trajectory:

- Year 1-3: 1% treaty passes. Celebration.
- Year 4-7: Defense lobby regroups. Politicians lose interest. No expansion.
- Year 8-15: Treaty stalls at 1%. Defense spending slowly creeps back up.
- Year 16+: The 1% treaty becomes like the Paris Agreement: a nice symbol that everyone ignores.

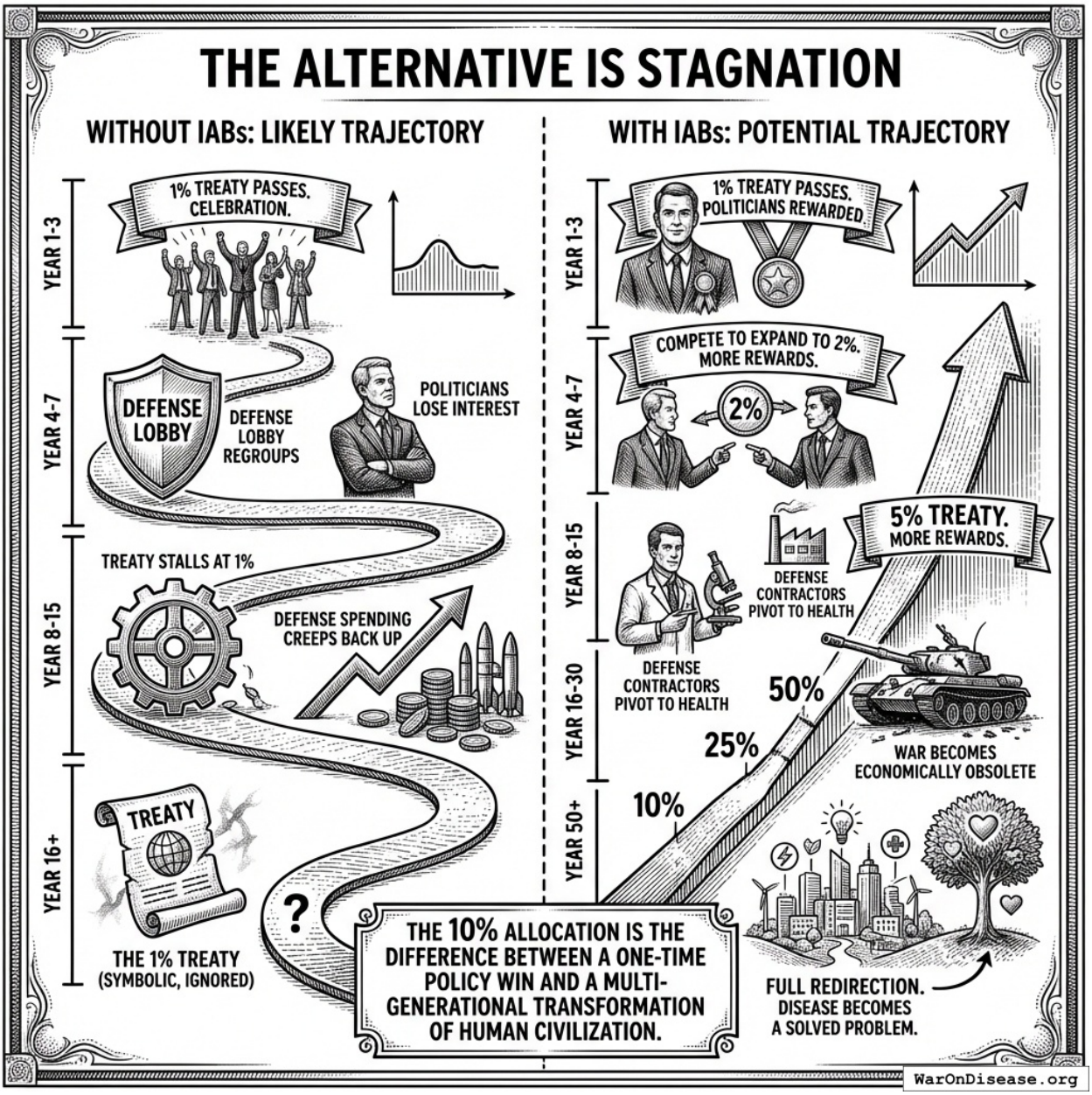


Figure 401: A comparative timeline showing the diverging trajectories of treaty effectiveness, contrasting the stagnation of a fixed 1 percent treaty against the exponential scaling of IAB-supported policies over 50 years.

With IABs:

- Year 1-3: 1% treaty passes. Politicians rewarded.
- Year 4-7: Politicians compete to expand to 2%. More rewards.
- Year 8-15: 5% treaty. Defense contractors pivot to health. More rewards.
- Year 16-30: 10%, 25%, 50%. War becomes economically obsolete.
- Year 50+: Full redirection. Disease becomes a solved problem.

The 10% allocation is the difference between a one-time policy win and a multi-generational transformation of human civilization.

Bottom Line

The question isn't "Is 10% too much?"

The question is: "Is 10% enough to sustain political momentum through the inevitable backlash as military budgets face real cuts?"

Probably. But if anything, 10% might be conservative for what we're trying to accomplish.

Beyond the 1% Treaty: IABs as a General Governance Tool

The 1% Treaty is the first application of Incentive Alignment Bonds. It doesn't have to be the last.

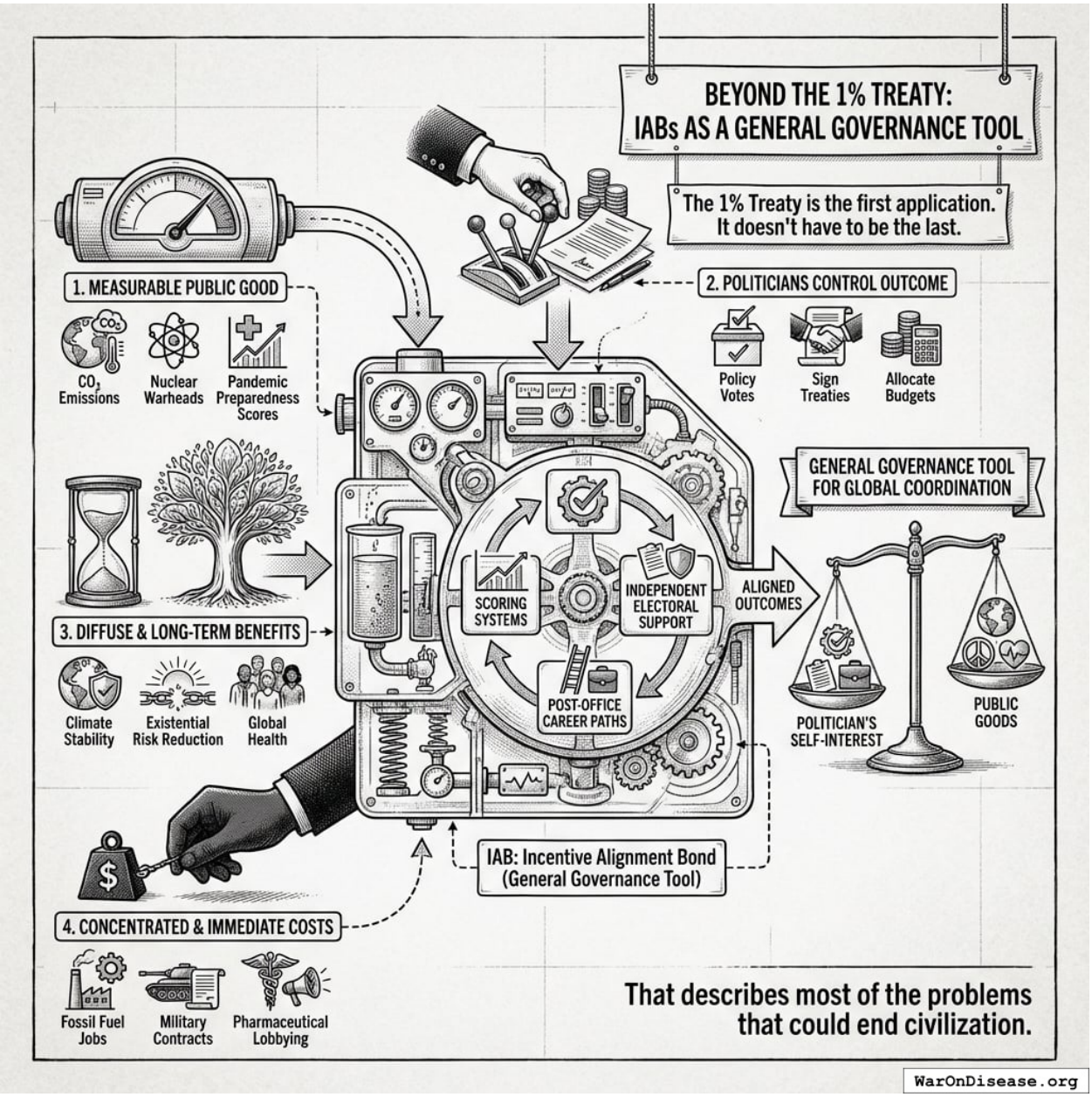


Figure 402: A conceptual framework illustrating the four criteria required to apply Incentive Alignment Bonds to global coordination problems like climate change and pandemic preparedness.

The core insight, that you can legally align politicians' self-interest with public goods by creating scoring systems, independent electoral support, and post-office career paths, applies to *any* global coordination problem where:

1. **The public good is measurable** (CO emissions, nuclear warheads, pandemic preparedness scores)
2. **Politicians control the outcome** (they vote on policies, sign treaties, allocate budgets)
3. **Benefits are diffuse and long-term** (climate stability, existential risk reduction, global health)
4. **Costs are concentrated and immediate** (fossil fuel jobs, military contracts, pharmaceutical lobbying)

That describes most of the problems that could end civilization.

Domain	Metric (already exists)	Concentrated Opposition	IAB Makes Career-Optimal
Climate	UNFCCC emissions data	Fossil fuel lobbies	"Vote for emissions cuts"
Nuclear	START treaty warhead counts	Defense contractors	"I reduced our arsenal"
Pandemic	WHO Joint External Evaluation	Pharma incumbents	"I funded preparedness"

The pattern is identical: take an existing metric, build a scoring system, fund electoral support for high-scorers, and reserve post-office positions for leaders who governed well. The academic paper provides detailed treatment of generalization.

The General Template

Any global public good can be IAB-ified with this structure:

Component	What It Does	Legal Form
Metric	Measures the outcome politicians control	501(c)(3) research org
Score	Translates votes/actions into a public number	Published by independent body
Electoral layer	Rewards high-scorers with campaign support	501(c)(4), PACs, Super PACs
Post-office layer	Reserves prestige positions for high-scorers	Foundations, think tanks, advisory boards

The three-layer architecture (scoring, electoral, post-office) is reusable. The only thing that changes is the metric. See the academic paper for formal treatment of generalization and failure mode analysis.

Summary

Incentive Alignment Bonds are a new class of financial instrument designed to solve a problem as old as governance: **politicians optimize for reelection and post-office careers, not for humanity's long-term welfare.**

IABs don't try to change human nature. They redirect it.

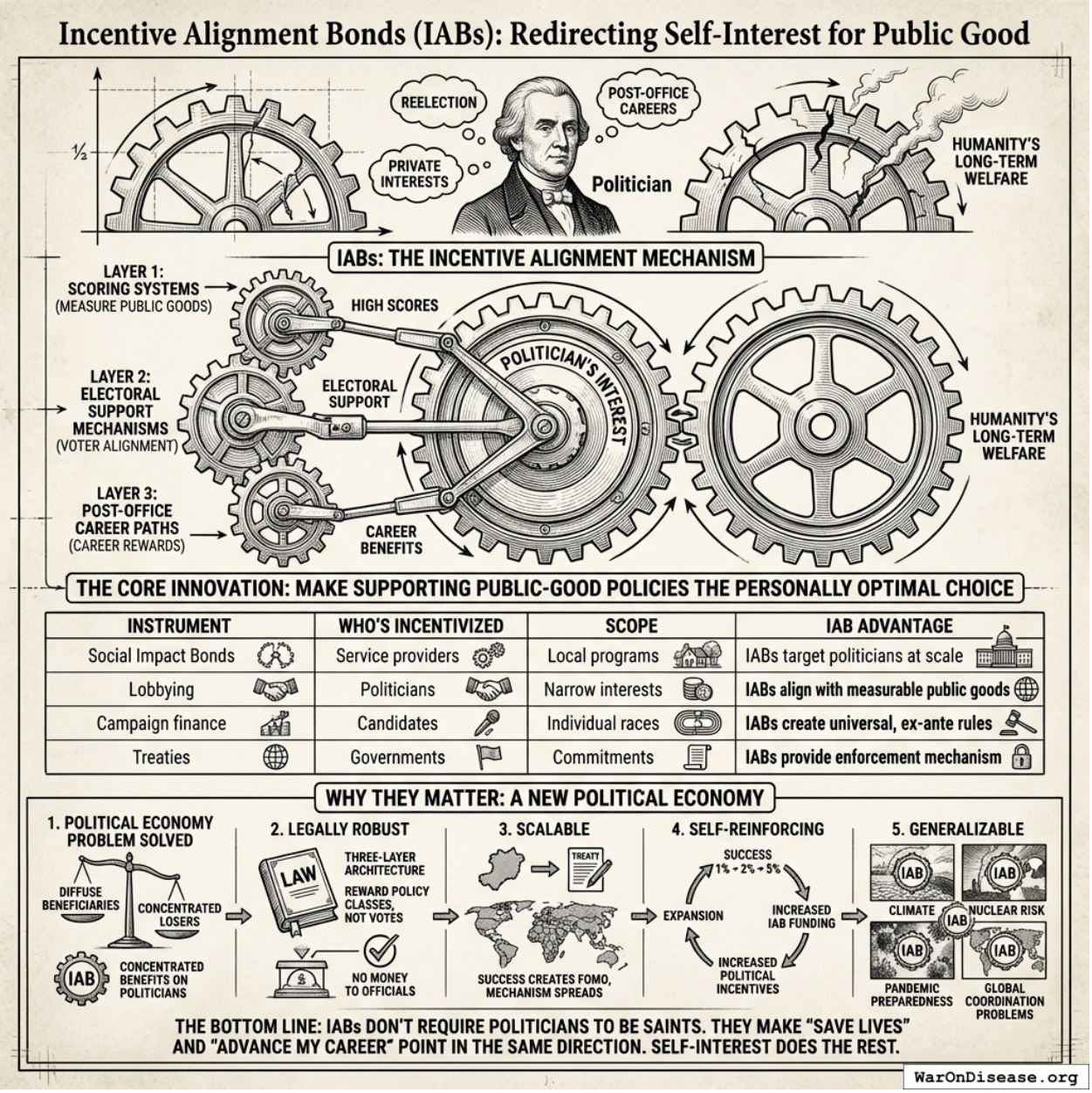


Figure 403: A flowchart illustrating the three-layer architecture of IABs, showing the feedback loop between scoring systems, electoral support, and post-office career paths that aligns political self-interest with public goods.

The core innovation:

> Create scoring systems, electoral support mechanisms, and post-office career paths that make supporting public-good policies the personally optimal choice for politicians, without paying anyone directly.

How they differ from existing instruments:

Instrument	Who's Incentivized	Scope	IAB Advantage
Social Impact Bonds	Service providers	Local programs	IABs target politicians at scale
Lobbying	Politicians (via access)	Narrow interests	IABs align with measurable public goods
Campaign finance	Candidates	Individual races	IABs create universal, ex-ante rules
Treaties	Governments	Commitments	IABs provide enforcement mechanism

Why they matter:

1. **They solve the political economy problem.** Good policies die because concentrated losers lobby harder than diffuse beneficiaries. IABs concentrate benefits on politicians who support good policies.
2. **They're legal.** The three-layer architecture (scoring, electoral, post-office) avoids bribery law by rewarding policy *classes*, not specific votes, through independent actors, with no money flowing to officials.
3. **They scale.** Start with one treaty, one country. Success creates FOMO. Other countries copy. The mechanism spreads.
4. **They're self-reinforcing.** Each success (1% $\rightarrow$ 2% $\rightarrow$ 5%) increases IAB funding, which increases political incentives, which drives the next expansion.
5. **They generalize.** The same architecture works for climate, nuclear risk, pandemic preparedness, and any global coordination problem with measurable outcomes.

The bottom line:

We've known for decades that ending war and disease is technically feasible. The constraint is political will. IABs don't create political will out of nothing; they make it the path of least resistance.

You're not asking politicians to be saints. You're just making "save millions of lives" and "advance my career" point in the same direction.

The rest is just self-interest doing what self-interest does.

The Evidence

The Proof: Overview

This isn't a theoretical plan. It's a greatest hits album of things that already worked. Like mixing chocolate and peanut butter, except the chocolate is "not dying" and the peanut butter is "getting rich."

Pragmatic Trials: 44.1x (95% CI: 39.4x-89.1x) More Efficient

Traditional Phase 3 trials cost $41K (95% CI: $20K-$120K) per patient[115]. Pragmatic trials embedded in routine care cost $929 (95% CI: $97-$3K) per patient[1], a **44.1x (95% CI: 39.4x-89.1x) cost reduction**.

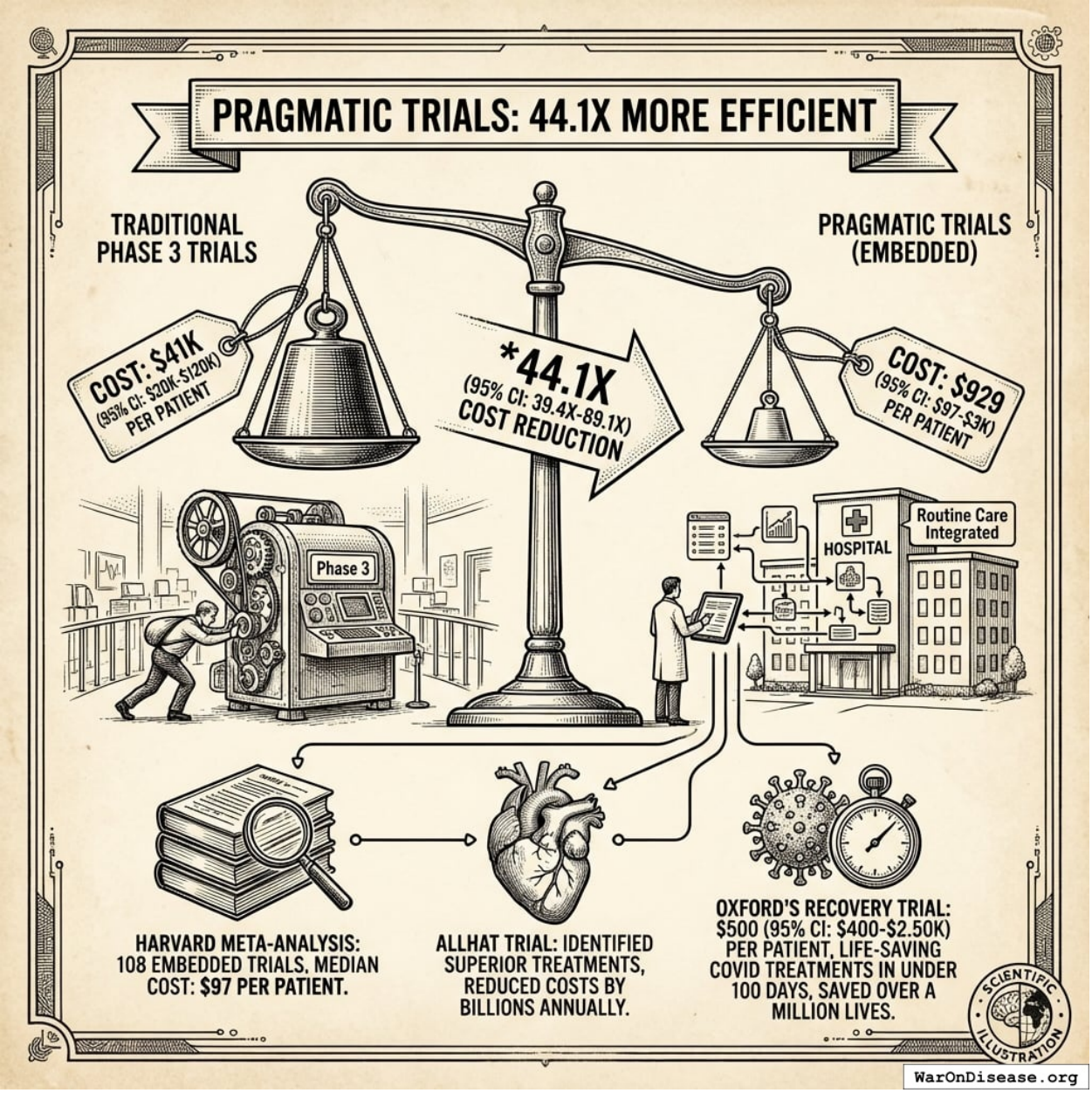


Figure 404: A comparison of the cost per patient between traditional Phase 3 clinical trials ($41,000) and pragmatic trials ($929), illustrating a 44.1-fold increase in cost efficiency.

A Harvard meta-analysis of 108 embedded pragmatic trials found median costs of just $97 per patient[261]. The ALLHAT trial demonstrated that pragmatic designs can identify superior treatments while reducing healthcare costs by billions annually[262].

Oxford's RECOVERY trial achieved $500 (95% CI: $400-$2.50K) per patient, finding life-saving COVID treatments in under 100 days and saving over a million lives[98].

Switzerland: 200 Years of Not Killing People

Two world wars. Everyone else fought. Switzerland made chocolate.

Result

- 25% richer than Americans[108] ($93K vs $76K GDP per capita)
- Live 5 years longer (84 vs 79 years)[263]
- Haven't had a war death since 1847[264]
- Military budget: 0.7% GDP (source[107]) (US: 3.5%)

The difference went to education, healthcare, and trains that actually work. Peace dividends compound over centuries. War debts compound faster.

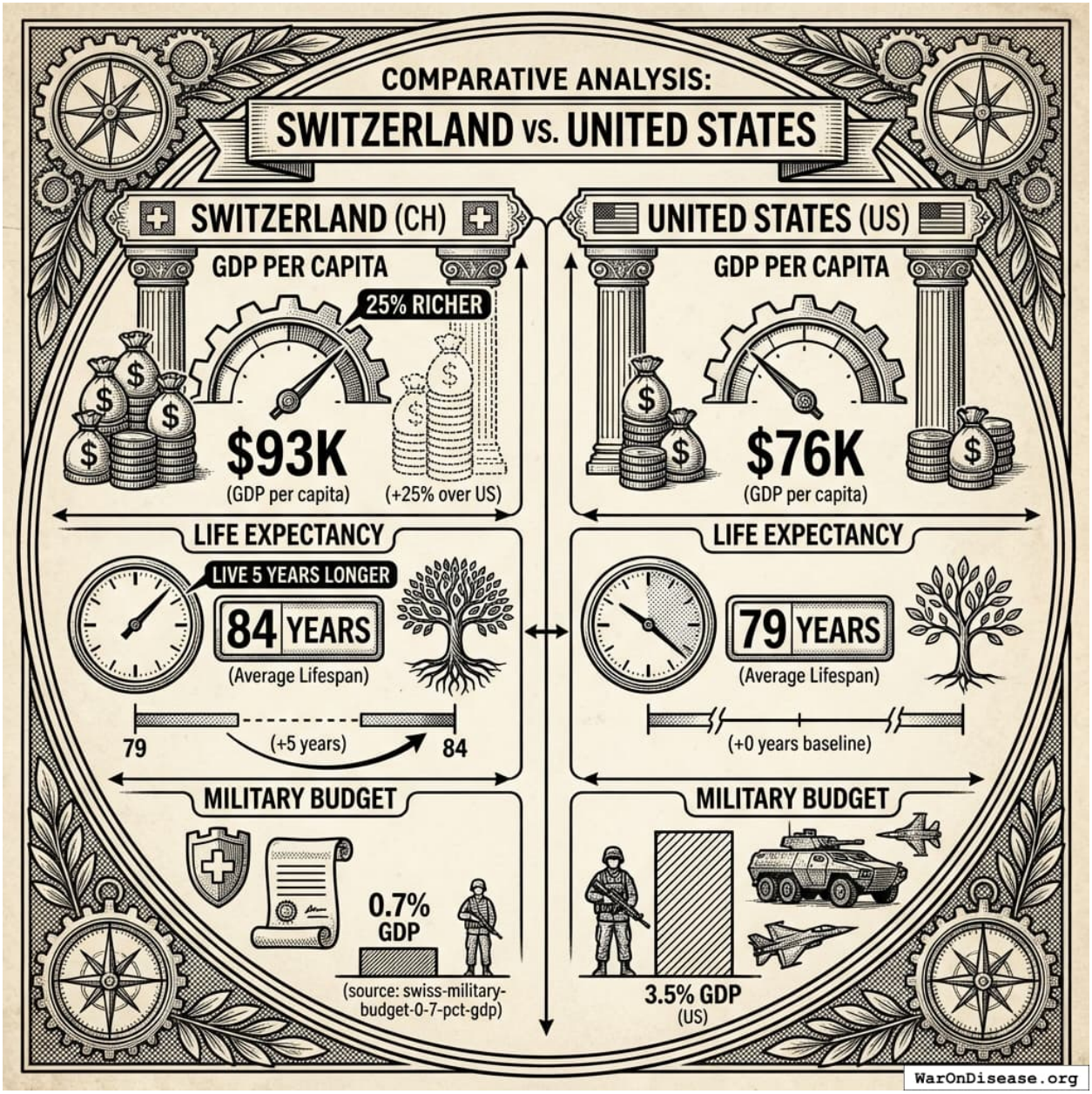


Figure 405: Comparison of Switzerland vs. USA on economic prosperity, longevity, and military spending percentages.

War Bonds: How Capitalism Beat Fascism

WWII cost $4 trillion (today's dollars)[265]. America was broke.

Solution: Sell bonds to regular people. Promise them profit + dead Nazis.

Result: Funded the entire war[266], defeated fascism, everyone made money.

The lesson: When saving the world is profitable, people fund it.

VICTORY Incentive Alignment Bonds use the same model. Except instead of dead Nazis, you offer dead cancer cells.

The Landmine Treaty: Citizens Beat Armies

1992: Random people decided landmines were stupid. 1997: 160 countries banned them[90].



Figure 406: A timeline and power-shift diagram showing the 5-year progression from grassroots citizen activism in 1992 to a global ban on landmines signed by 160 countries in 1997.

No government started it. No UN committee. Just pissed-off citizens with fax machines.

They beat the entire military-industrial complex in 5 years with fax machines.

You have the internet.

The 3.5% Rule

Harvard analyzed every major movement in history.

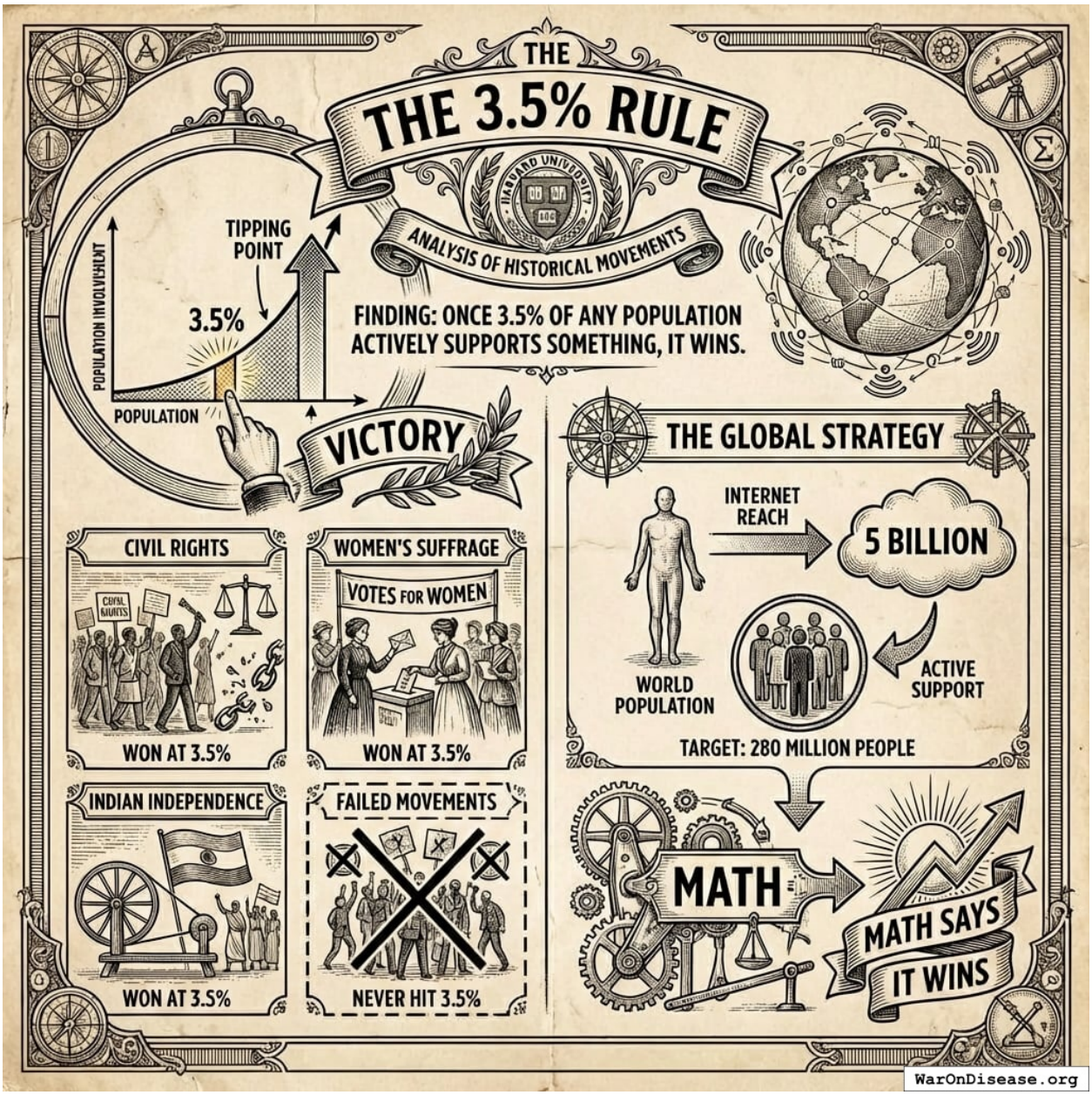


Figure 407: A visual representation of the 3.5 percent Rule showing the tipping point for social movements and the scale of 280 million supporters relative to the global internet population.

Finding: Once 3.5% of any population actively supports something, it wins.

- Civil rights: Won at 3.5%
- Women's suffrage: Won at 3.5%
- Indian independence: Won at 3.5%
- Failed movements: Never hit 3.5%

The strategy needs 280M of people million people. The internet reaches 5 billion[267]. Math says it wins.

The Post-WW2 Economic Miracle: History's Greatest Peace Dividend

1945: US military spending 37% of GDP[93] (highest in history). 1948: Cut to 7% of GDP[93] (30 percentage points redirected).

Result: The greatest economic boom in human history.

- GDP growth: **8% average**[268] for a decade (vs 2-3% normal)
- Middle class explosion: Home ownership doubled[269]
- Education boom: GI Bill created modern knowledge economy
- Infrastructure: Interstate highway system built

The lesson: Redirecting military spending to productive uses = prosperity explosion.

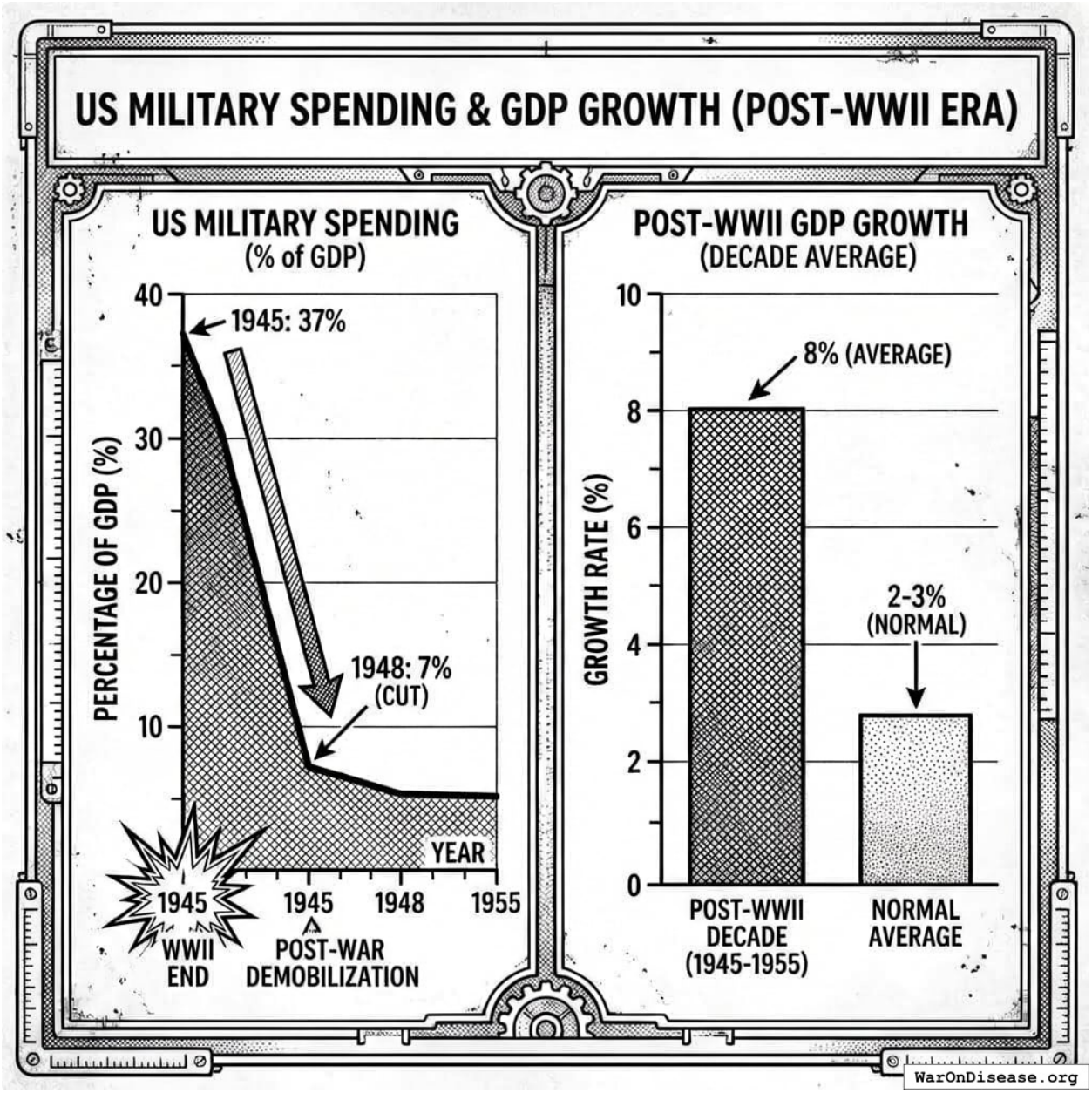


Figure 408: Correlation chart showing the sharp decline in military spending (37 percent to 7 percent) coinciding with the historic spike in GDP growth (8 percent average).

You Have Advantages They Didn't

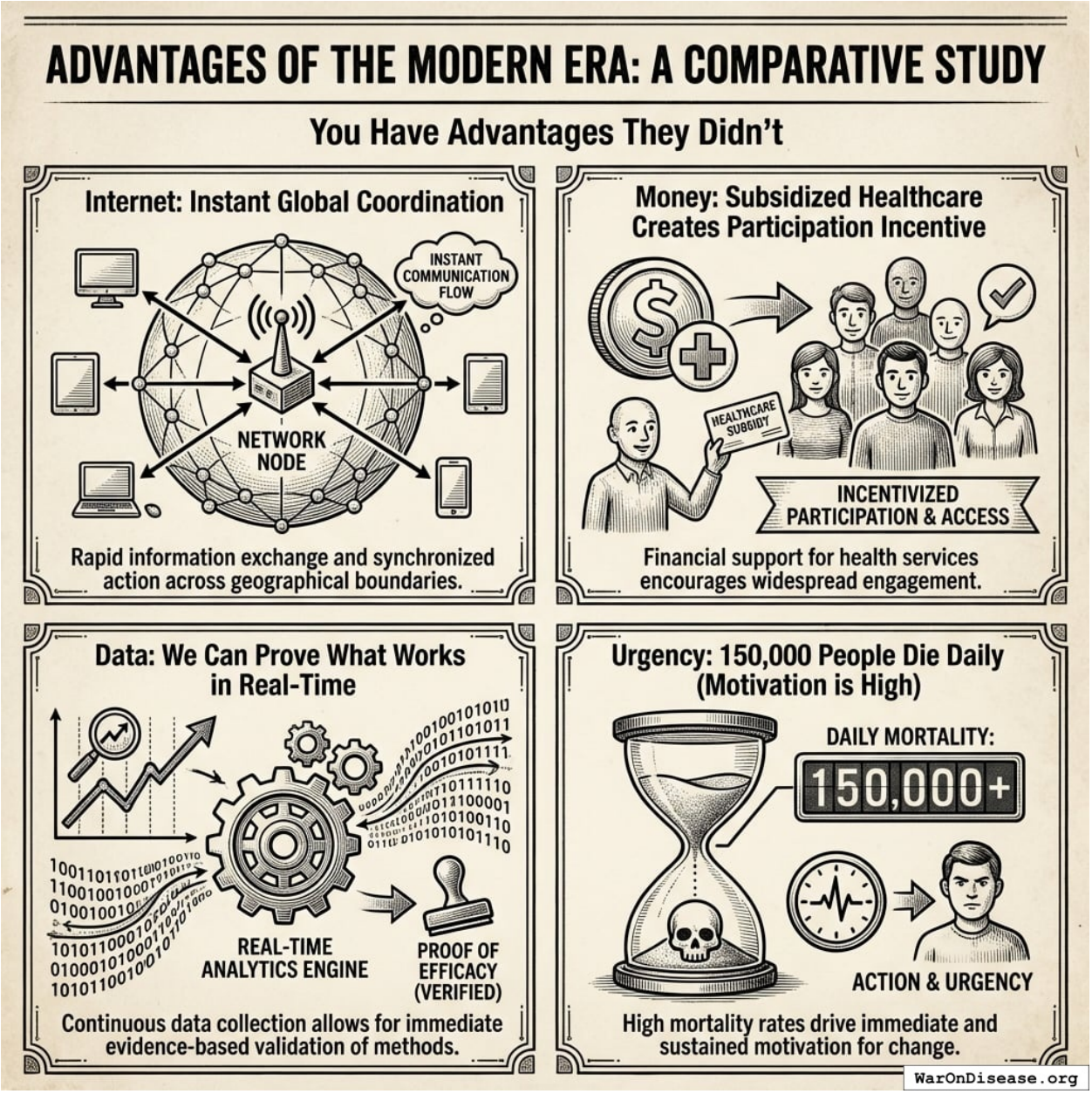


Figure 409: A visual breakdown of the four pillars of modern advantage: global connectivity, financial incentives, real-time data, and the high urgency of daily mortality rates.

- **Internet:** Instant global coordination
- **Money:** Subsidized healthcare creates participation incentive
- **Data:** We can prove what works in real-time
- **Urgency:** 150,000 people die daily[168] (motivation is high)

The Political Precedents: How to Win

Creating Binding International Law

The Precedent: The International Campaign to Ban Landmines (ICBL)

Random citizens created international law with fax machines.

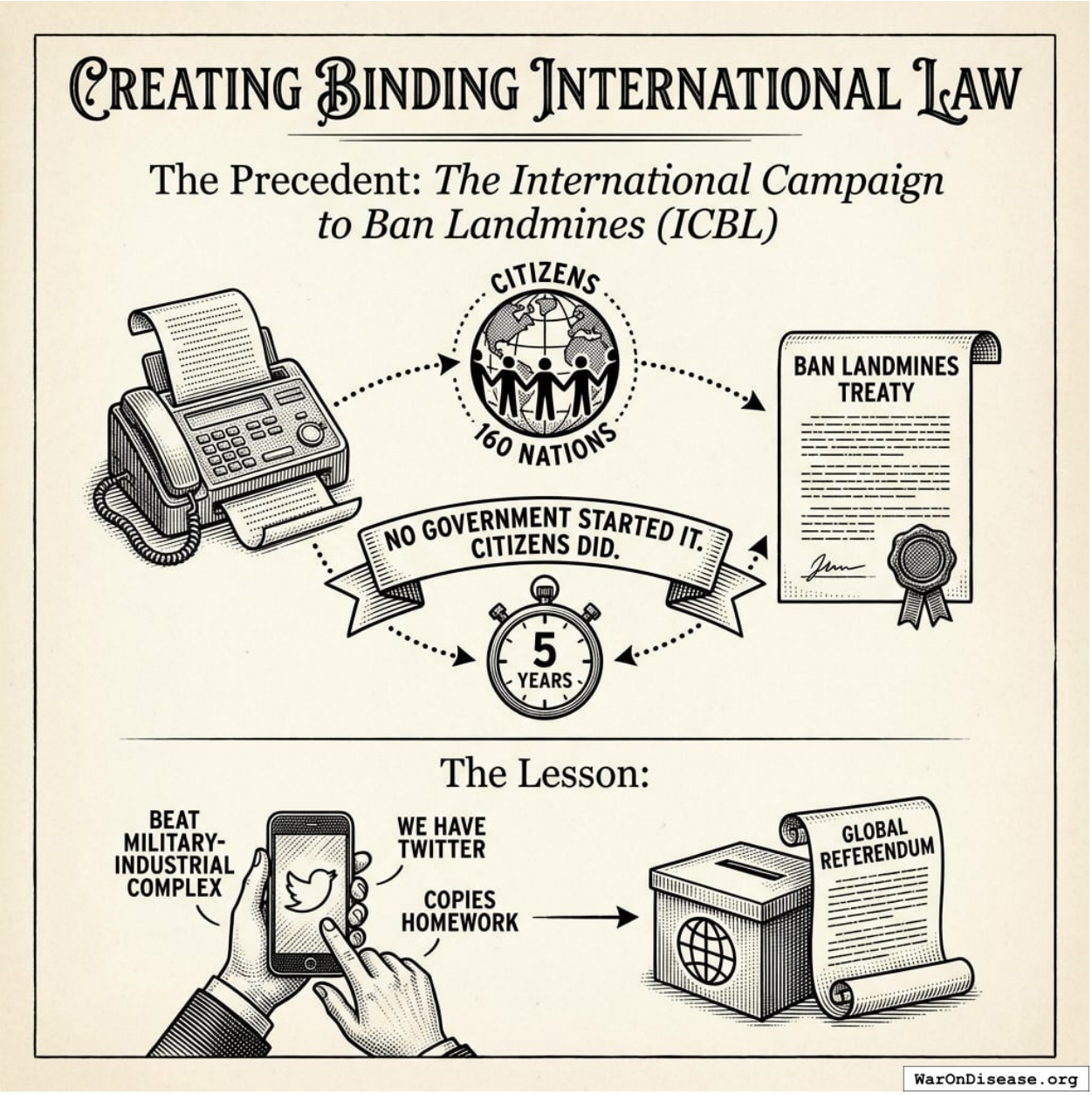


Figure 410: A comparison between the ICBL model and the Global Referendum, showing how citizens use communication tools to pressure nations into creating international law.

- The ICBL got 160 nations to ban landmines through peer pressure and shame.
- No government started it. Citizens did.
- It worked in 5 years.

The Lesson: Citizens with fax machines beat the military-industrial complex. We have Twitter. The

Global Referendum copies their homework.

Achieving a Political Tipping Point

The Precedent: The 3.5% Rule (Erica Chenoweth's Research)

Harvard did math on revolutions. Found the magic number: 3.5%.

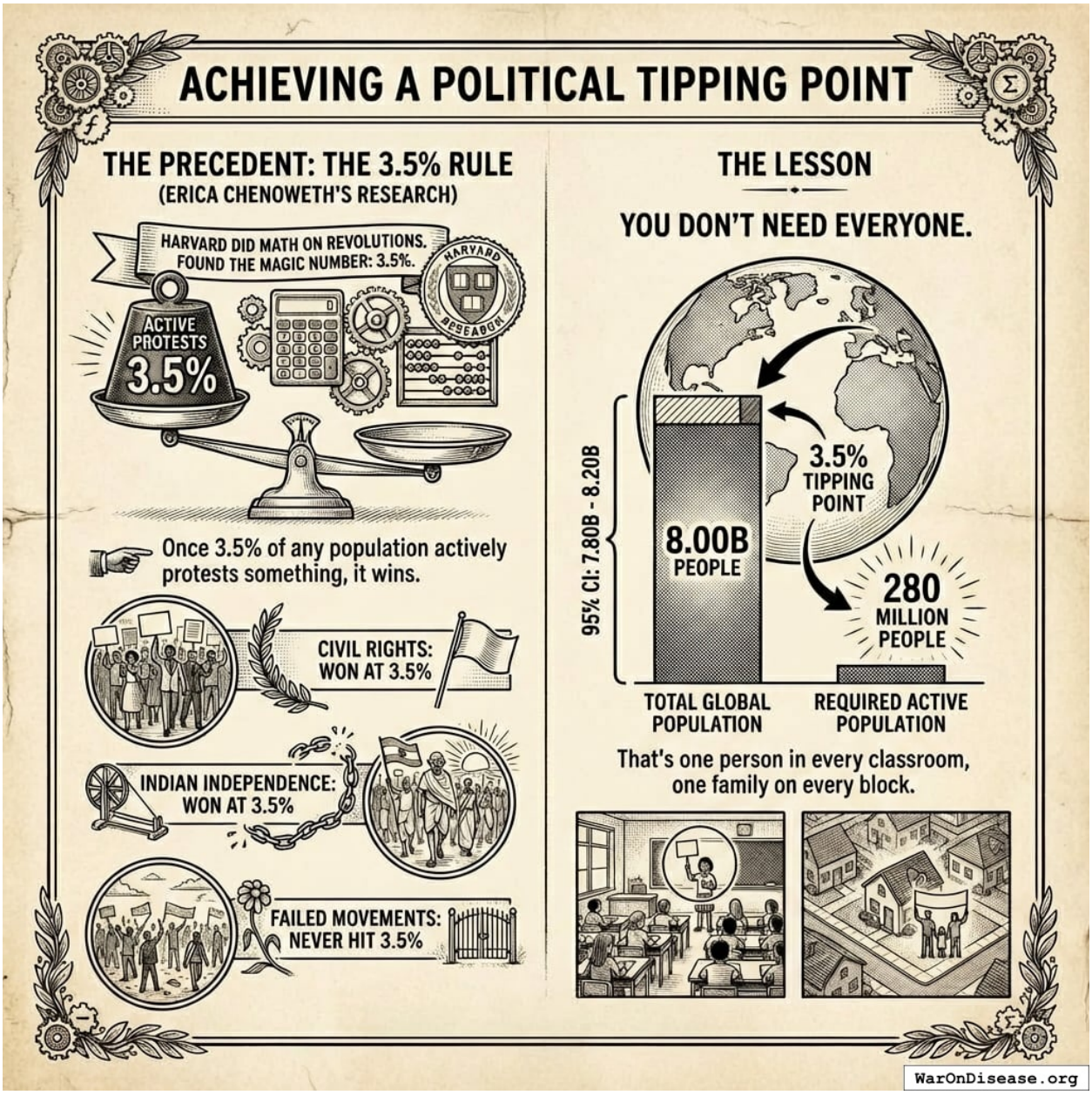


Figure 411: A visualization of the 3.5 percent rule, highlighting the small fraction of a population, such as one person in a classroom, required to reach a tipping point for social change.

- Once 3.5% of any population actively protests something, it wins.
- Civil rights: Won at 3.5%
- Indian independence: Won at 3.5%

- Failed movements: Never hit 3.5%

The Lesson: You don't need everyone. You need 280M of people million people out of 8.00B of people (95% CI: 7.80B of people-8.20B of people) billion. That's one person in every classroom, one family on every block.

The Financial Precedents: How to Fund It

Mobilizing Mass Public Capital

The Precedent: WWII War Bonds

Americans funded beating Hitler by buying bonds. Made money while saving democracy.

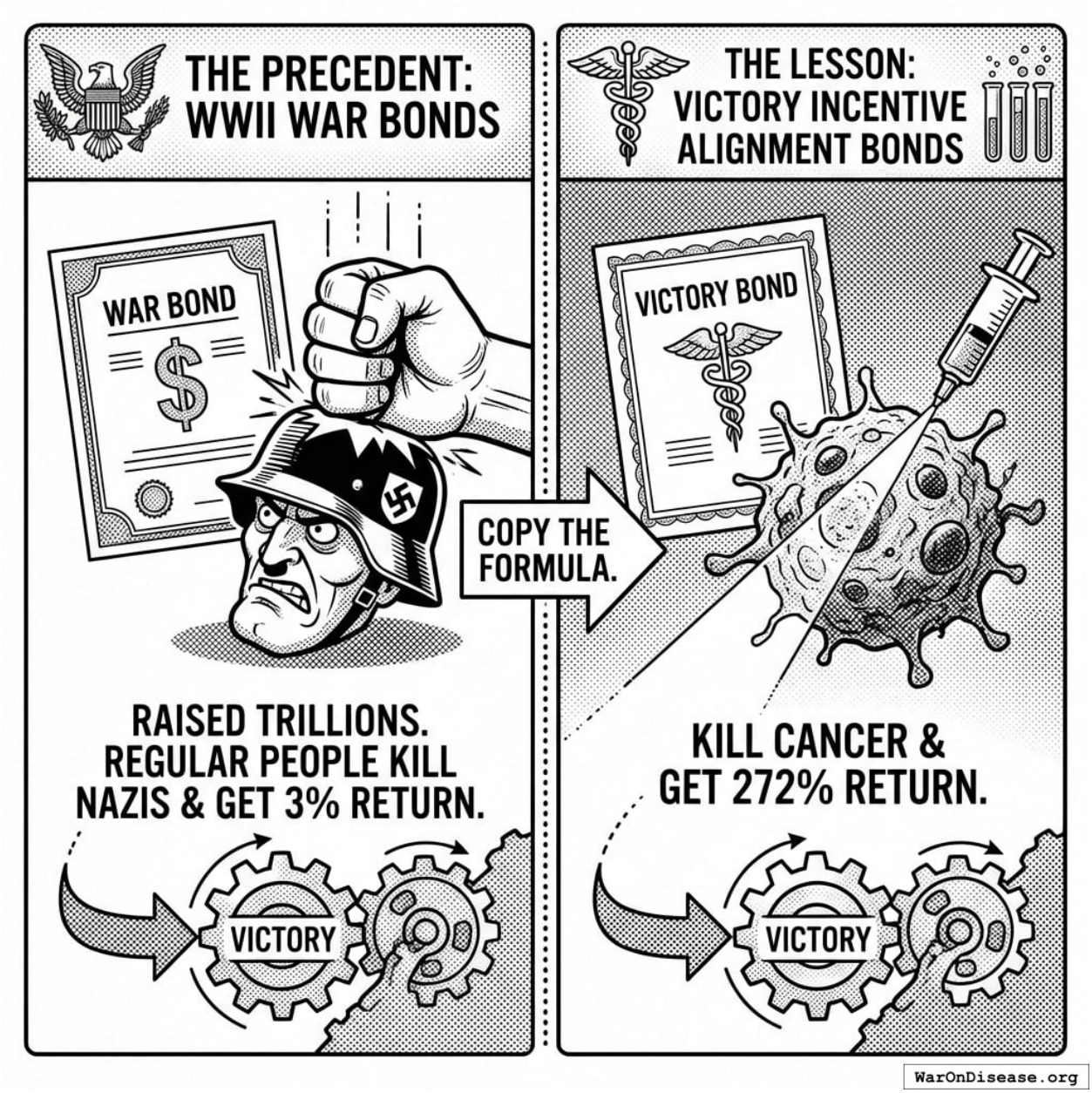


Figure 412: A comparative infographic showing the parallel between WWII War Bonds and VICTORY Bonds, contrasting their goals (Nazis vs. Cancer) and their financial returns (3 percent vs. 272 percent).

- War Bonds raised trillions (today's dollars)
- Regular people bought them to kill Nazis and get 3% returns
- It worked

The Lesson: **VICTORY Incentive Alignment Bonds** copy the formula. Except instead of killing Nazis for 3%, you kill cancer for 272%.

B. Building a New Global Health Institution

The Precedent: The Global Fund to Fight AIDS, Tuberculosis and Malaria

The idea of creating a new, multi-billion-dollar global health institution from scratch has been done before.

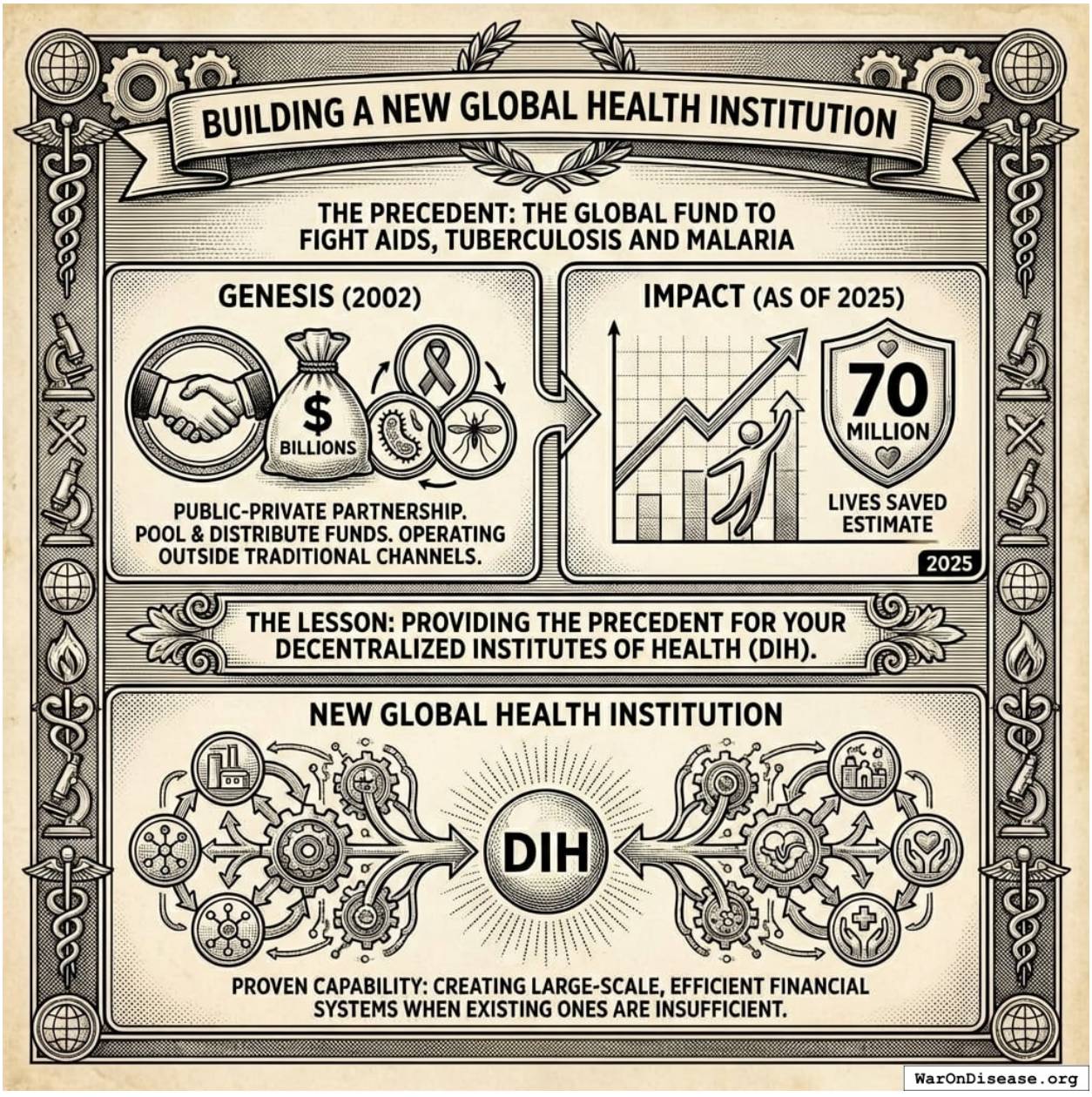


Figure 413: A conceptual diagram illustrating how the successful public-private funding model of The Global Fund serves as a structural precedent for the proposed Decentralized Institutes of Health (DIH).

- The Global Fund was created in 2002 as a public-private partnership to pool and distribute billions of dollars to fight these three diseases, operating outside of traditional institutional channels. It has since saved an estimated 70 million lives[270] (as of 2025).

The Lesson: This provides the precedent for **your decentralized institutes of health (DIH).** It proves that the world is capable of creating new, large-scale, and more efficient financial institutions for global health when the existing systems are insufficient.

C. Pricing the Political Risk

The Precedent: Michael Milken's High-Yield Bonds & George Soros's Political Arbitrage

The investment thesis for VICTORY Incentive Alignment Bonds, a high-risk, high-reward bet on a political outcome, is grounded in proven financial strategies.

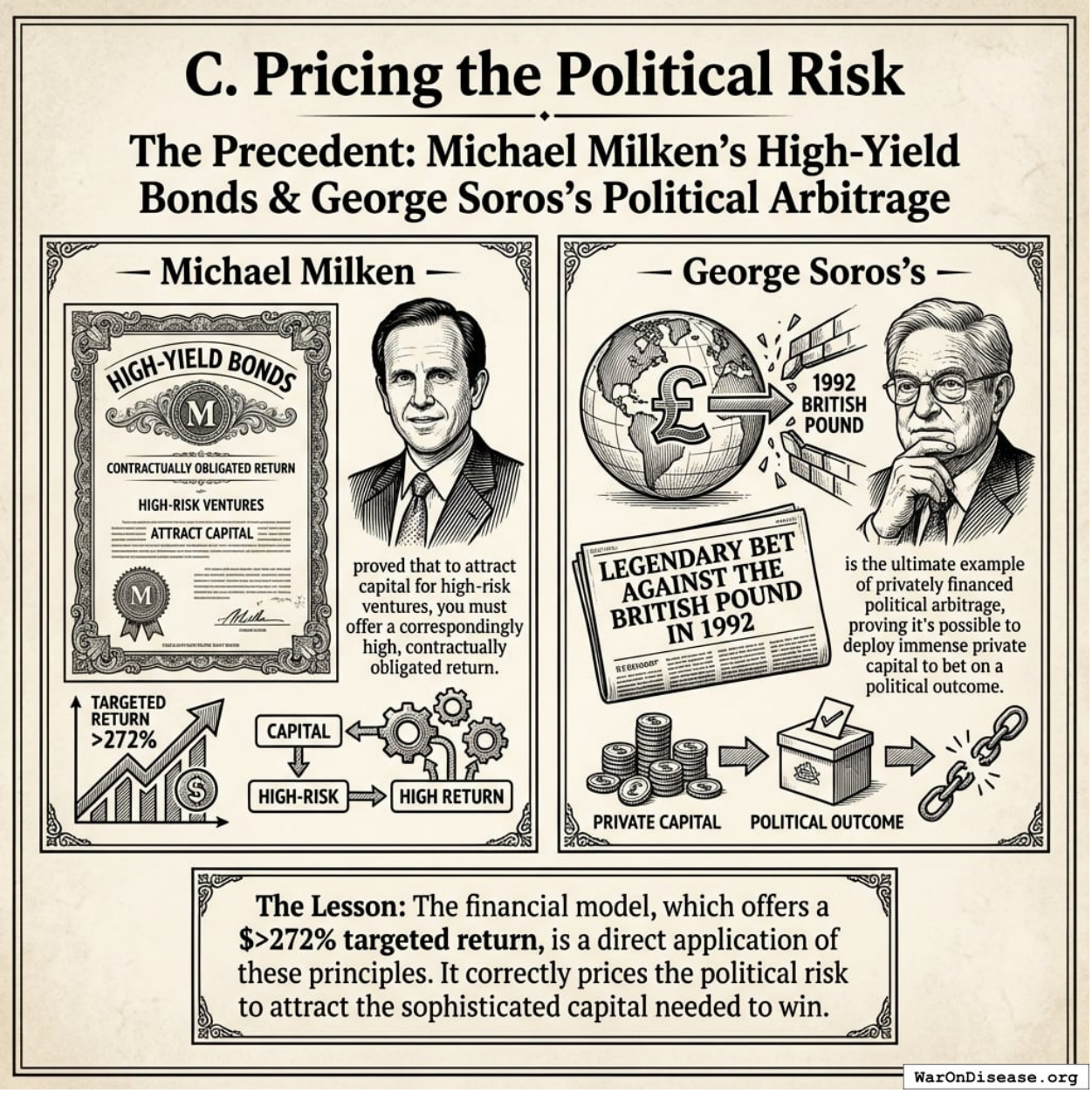


Figure 414: A conceptual diagram showing how the strategies of Michael Milken and George Soros converge to create the high-yield, political arbitrage model for VICTORY Bonds.

- **Michael Milken** proved that to attract capital for high-risk ventures, you must offer a correspondingly high, contractually obligated return.
- **George Soros's** legendary bet against the British pound in 1992 is the ultimate example of privately financed political arbitrage, proving it's possible to deploy immense private capital to bet on a political outcome.

The Lesson: The financial model, which offers a **$>272% targeted return**, is a direct application of these principles. It correctly prices the political risk to attract the sophisticated capital needed to win.

4. The Cautionary Tales: How Not to Fail

The failures of past movements are even more instructive than the successes, as they reveal the exact failure modes the strategy is engineered to avoid.

A. Don't Bring a Moral Argument to a Financial Fight

The Precedent: The Nuclear Disarmament Movement ("The Freeze")

- **The Failure:** Despite enormous popular support in the 1980s, the movement largely failed because it could not overcome the entrenched financial interests of the military-industrial complex.
- **The Lesson:** This is the historical proof for the core thesis: **You cannot defeat bad money with good intentions alone.** It is the primary justification for the strategy of **"legal bribery"** and co-opting opposition with a superior financial offer.

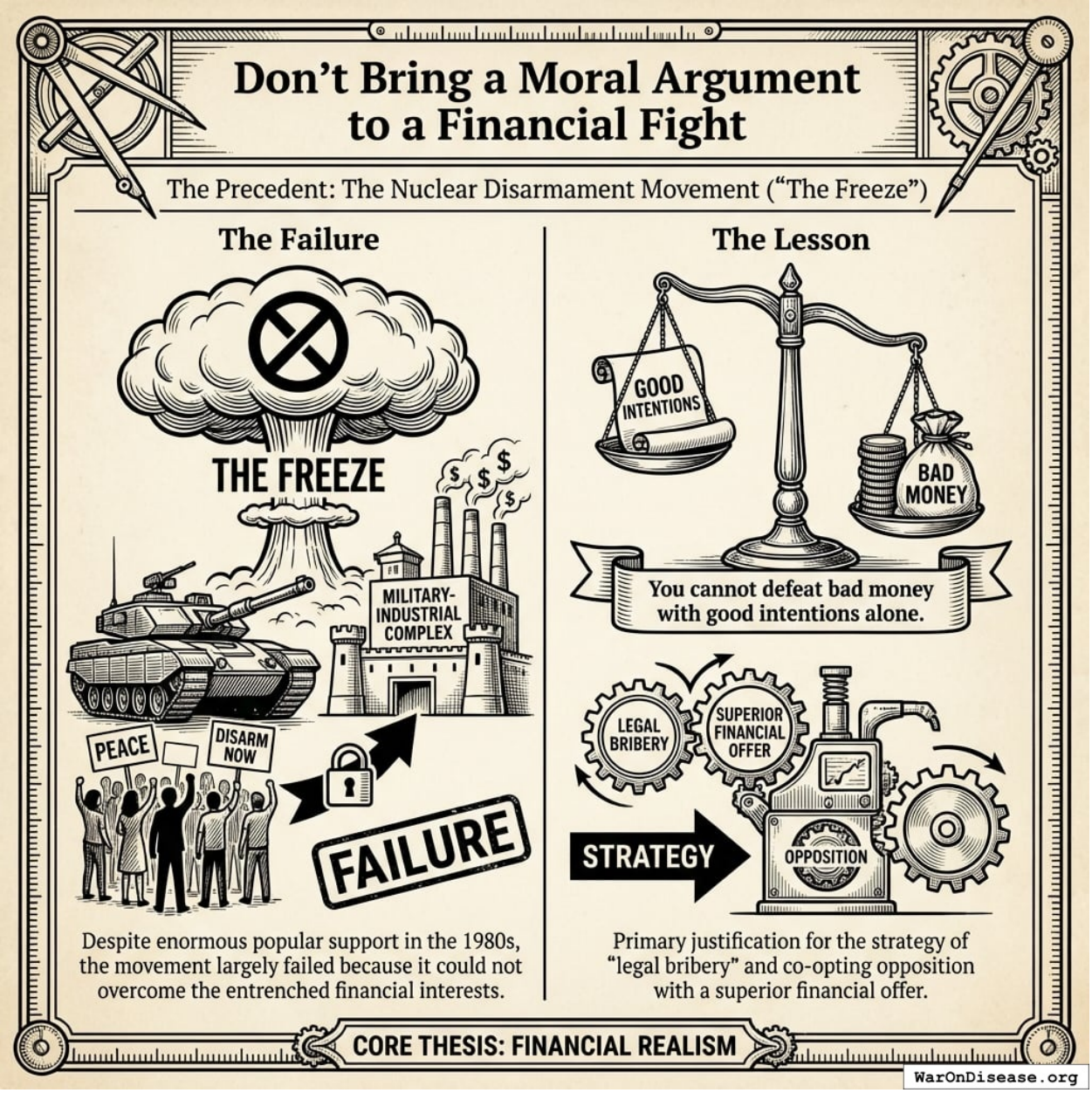


Figure 415: A comparison showing why moral arguments fail against entrenched financial interests, and how a superior financial offer provides a more effective path to overcoming opposition.

B. Don't Have a Diffuse, Unactionable Goal

The Precedent: Occupy Wall Street

- **The Failure:** While it successfully changed the public conversation in 2011, the movement produced no lasting policy change because it lacked a single, specific, actionable demand.
- **The Lesson:** The project avoids this trap by focusing all energy and capital on a single, clear, and achievable goal: **ratification of a "1% treaty."** That is the only ask.

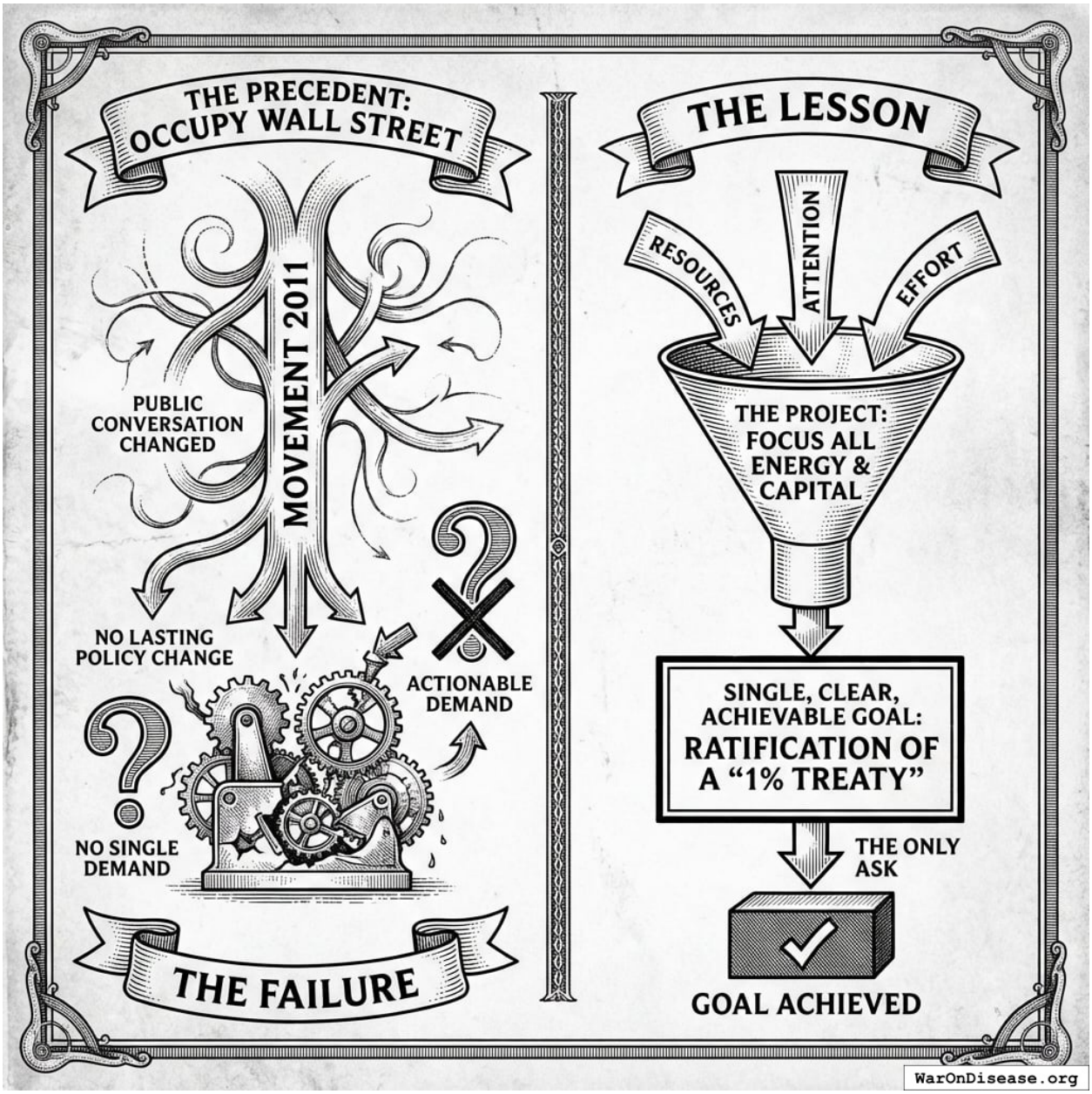


Figure 416: A comparison showing how the broad, unfocused approach of Occupy Wall Street resulted in no policy change, contrasted with the current project's laser focus on the single goal of a 1 percent treaty.

In This Section

- Chapter 19: Political Movements That Changed Everything - Switzerland's 200-year peace dividend, war bonds, landmine treaty, 3.5% rule advantages
- Chapter 20: Your Body Is Just a Machine - Hearts, kidneys, blood, DNA, you replace everything else, aging is just neglected maintenance

Additional Evidence

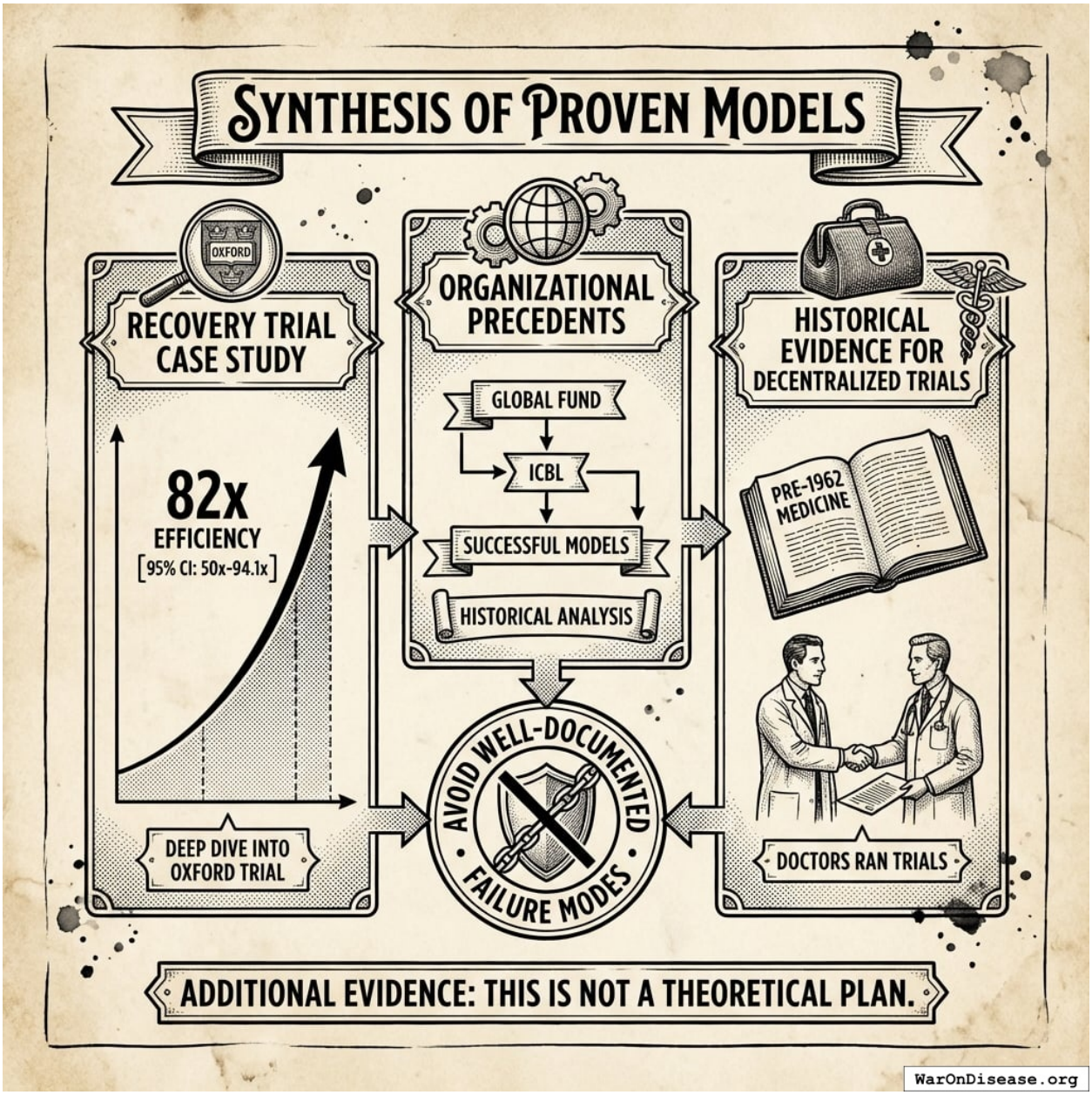
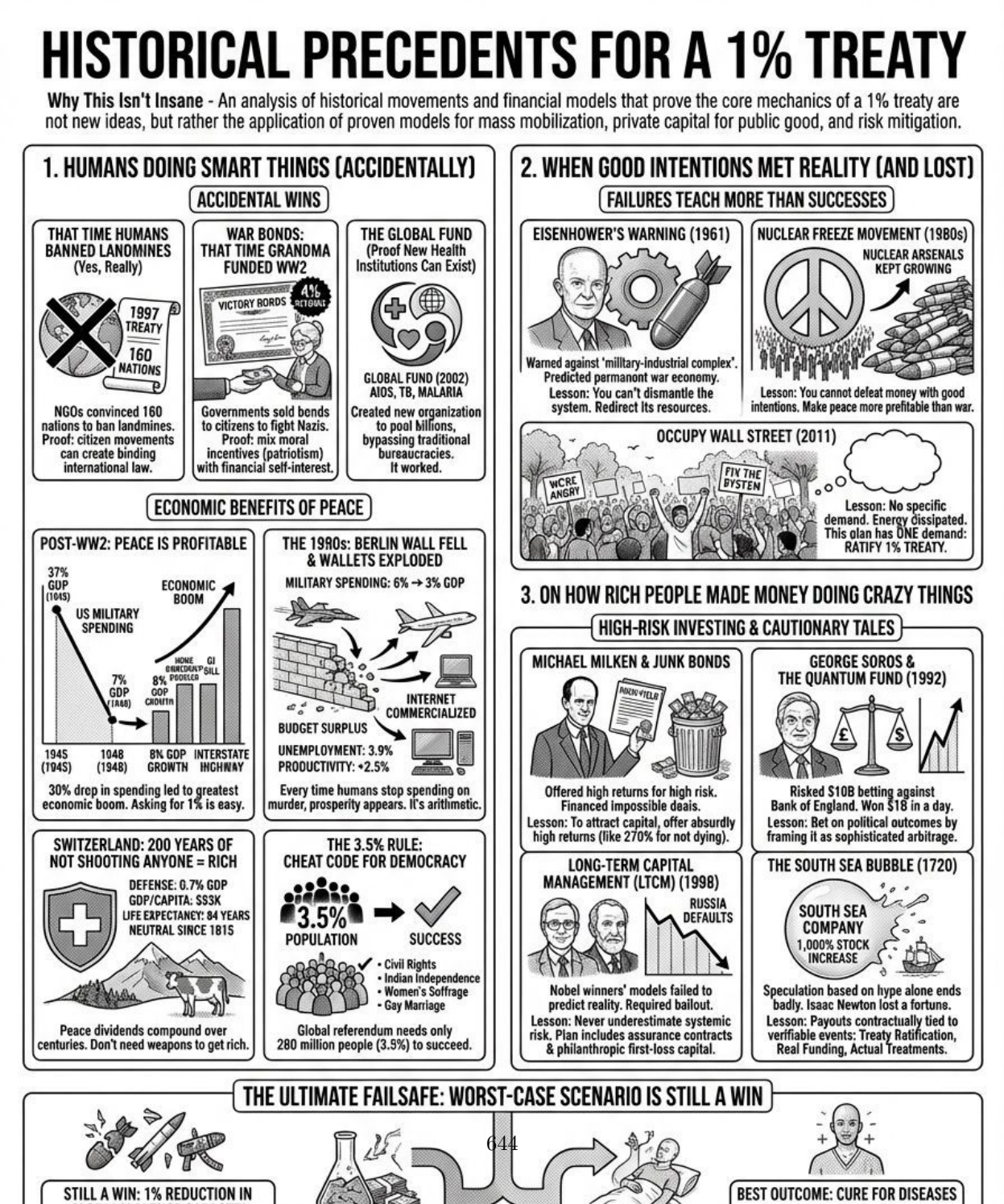


Figure 417: A conceptual diagram showing the three pillars of evidence, efficiency metrics, organizational precedents, and historical clinical models, supporting the proposed synthesis.

None of this is theoretical. Every component worked somewhere:

- **The RECOVERY Trial Case Study:** How Oxford achieved 44.1x (95% CI: 39.4x-89.1x) efficiency
- **Organizational Precedents:** Global Fund, ICBL, and other successful models
- **Historical Evidence for Decentralized Trials:** Pre-1962, when doctors just tried things

Historical Precedents



Before you say "this is impossible," let me remind you: humans have accidentally done smart things before.

Not often. But occasionally, when properly motivated by either fear or greed (usually both), your species stumbles into competence.

Here's proof you've done every single part of this plan already. You just haven't combined them yet, like someone who owns all the ingredients for bread but keeps eating them separately.

Humans Doing Smart Things (Accidentally): A Collection

That Time Humans Banned Landmines (Yes, Really)

What happened: A bunch of NGOs decided landmines were bad actually. They convinced 160 nations to sign a treaty banning them[90] in 1997. Major military powers initially opposed it. The NGOs won anyway.

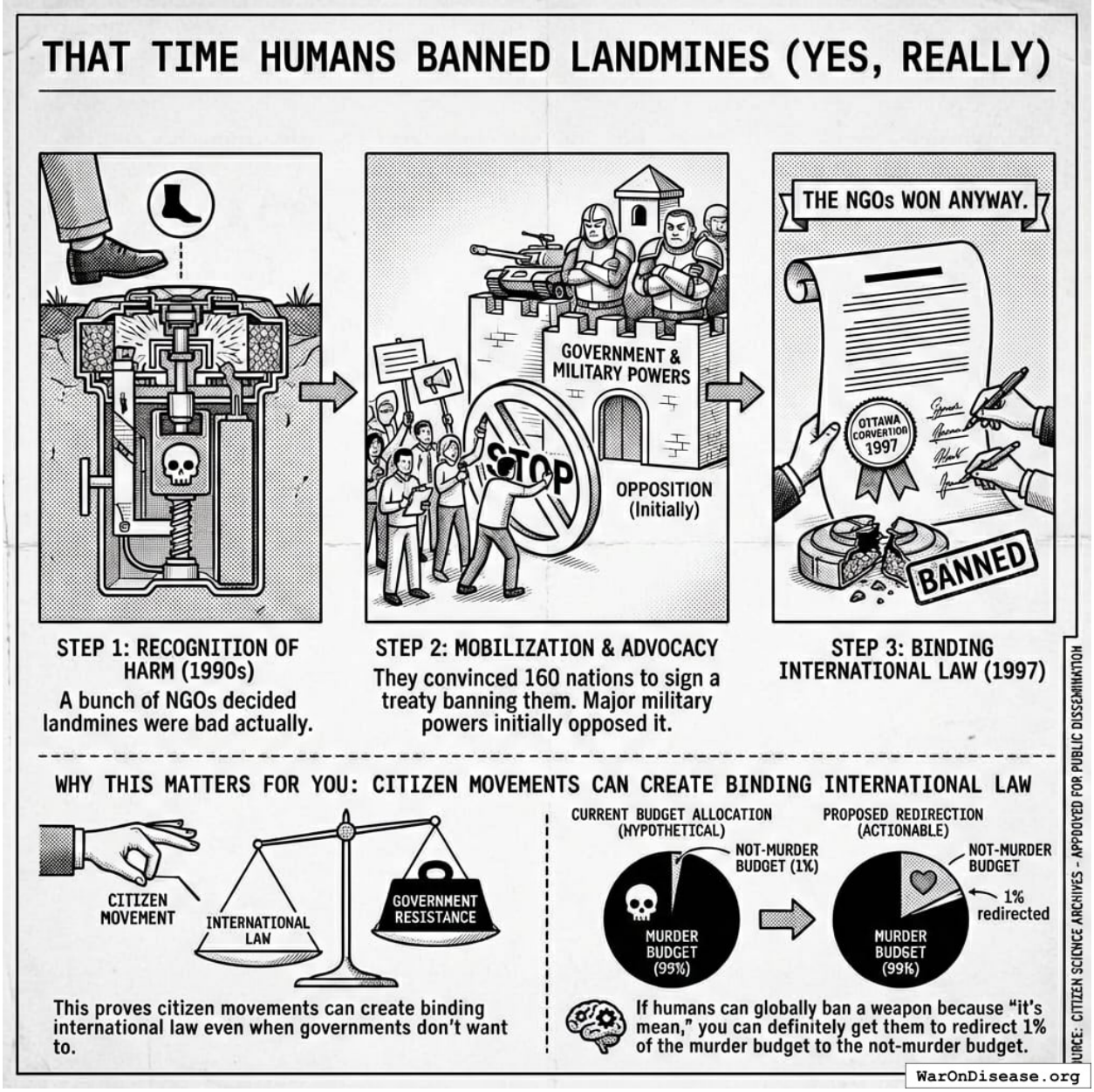


Figure 418: A visualization showing the flow of influence from NGO advocacy to the signing of the Ottawa Treaty by 160 nations, overcoming the opposition of major military powers.

Why this matters for you: This proves citizen movements can create binding international law even when governments don't want to. If humans can globally ban a weapon because "it's mean," you can definitely get them to redirect 1% of the murder budget to the not-murder budget.

War Bonds: That Time Grandma Funded WW2

What happened: Governments needed money to fight Nazis. They sold "war bonds" - basically IOUs that paid interest - directly to regular people. The U.S. raised $185 billion[266] (trillions in today's papers).

Why this matters for you: Your grandparents gave the government money to stop Hitler and got 4% returns. You're offering 272% returns to stop cancer. VICTORY Incentive Alignment Bonds are the same

thing except with better ROI and fewer Nazis (hopefully zero Nazis).

The formula worked: mix moral incentives (patriotism) with financial self-interest (interest payments). You're just applying it to a different war - the one against your own mortality.

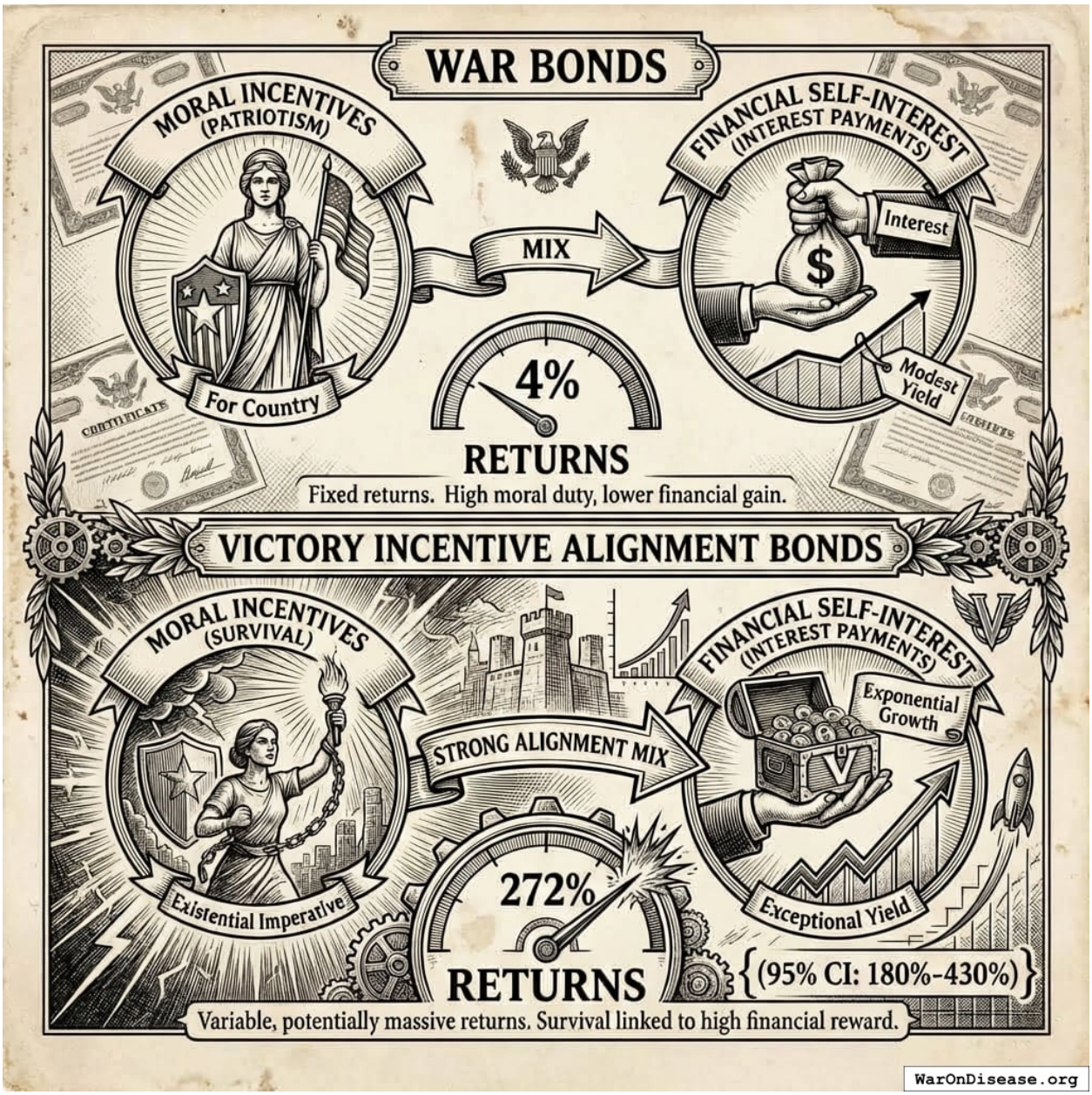


Figure 419: Comparison of the historical War Bond model versus the proposed VICTORY Incentive Alignment Bond model.

The Global Fund (Proof That New Health Institutions Can Exist)

What happened: In 2002, the world created a new organization[271] to pool billions for fighting AIDS, TB, and malaria. It bypassed traditional bureaucracies and just… worked.

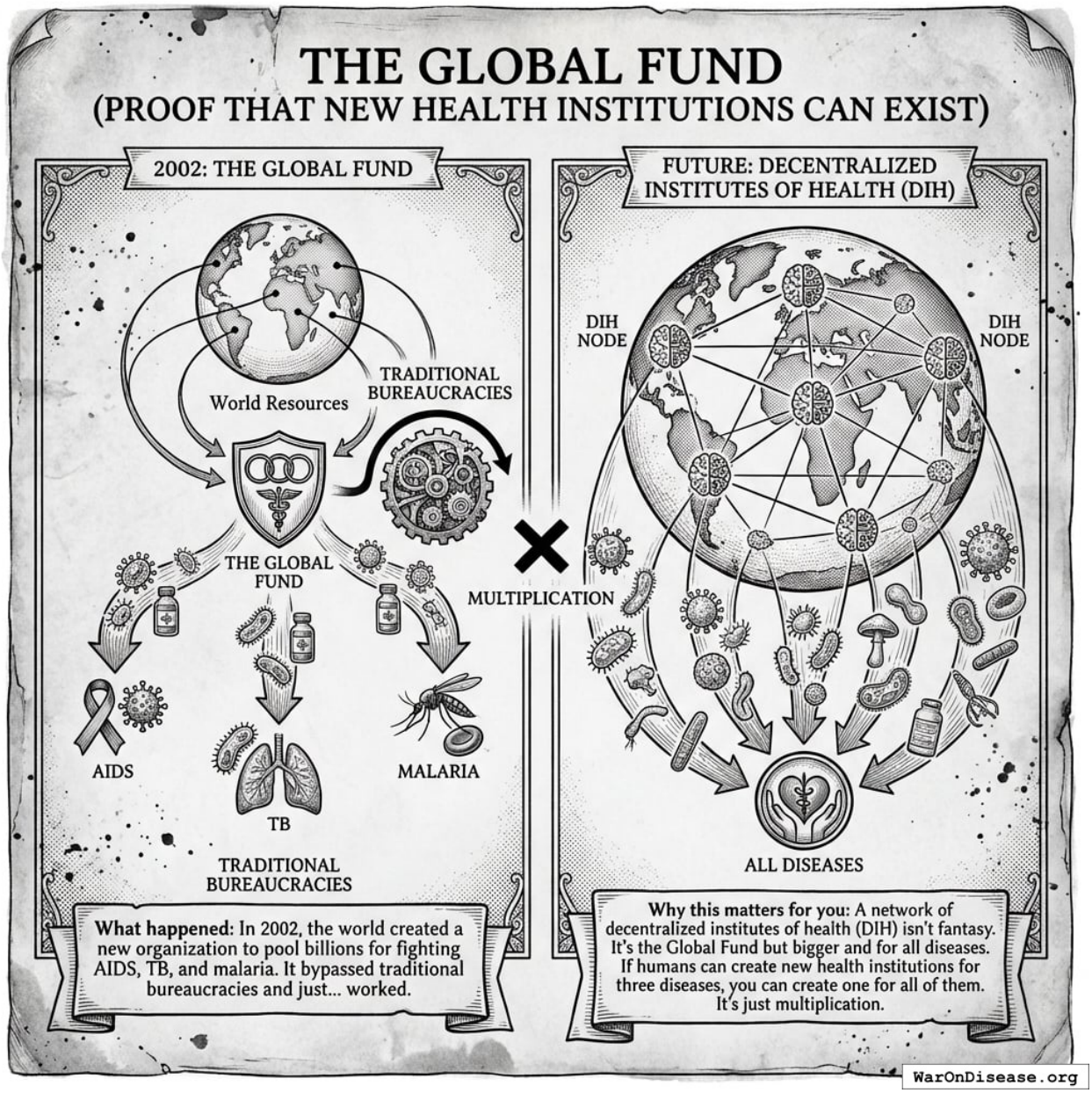


Figure 420: A visualization showing the evolution from the Global Fund's focus on three specific diseases to a decentralized network of health institutes covering all diseases through a scaling process.

Why this matters for you: A network of decentralized institutes of health (DIH) isn't fantasy. It's the Global Fund but bigger and for all diseases. If humans can create new health institutions for three diseases, you can create one for all of them. It's just multiplication.

Post-WW2: That Time America Accidentally Discovered Peace Is Profitable

What happened: 1945: US military spending was 37% of GDP[93] (we were very serious about the war thing). 1948: Cut to 7%. That's a 30 percentage point drop - not 1%, THIRTY.

The results: The greatest economic boom in human history: - GDP growth: 8% yearly for a decade[268] (vs normal 2-3%) - Home ownership doubled[269] (middle class explosion) - GI Bill created modern knowledge

economy - Built the interstate highway system

Why this matters for you: You're asking for 1%. America did 30% and got rich. This is like asking someone who lost 100 pounds if they can spare 3 pounds. The answer is obviously yes, and they'll probably feel better.

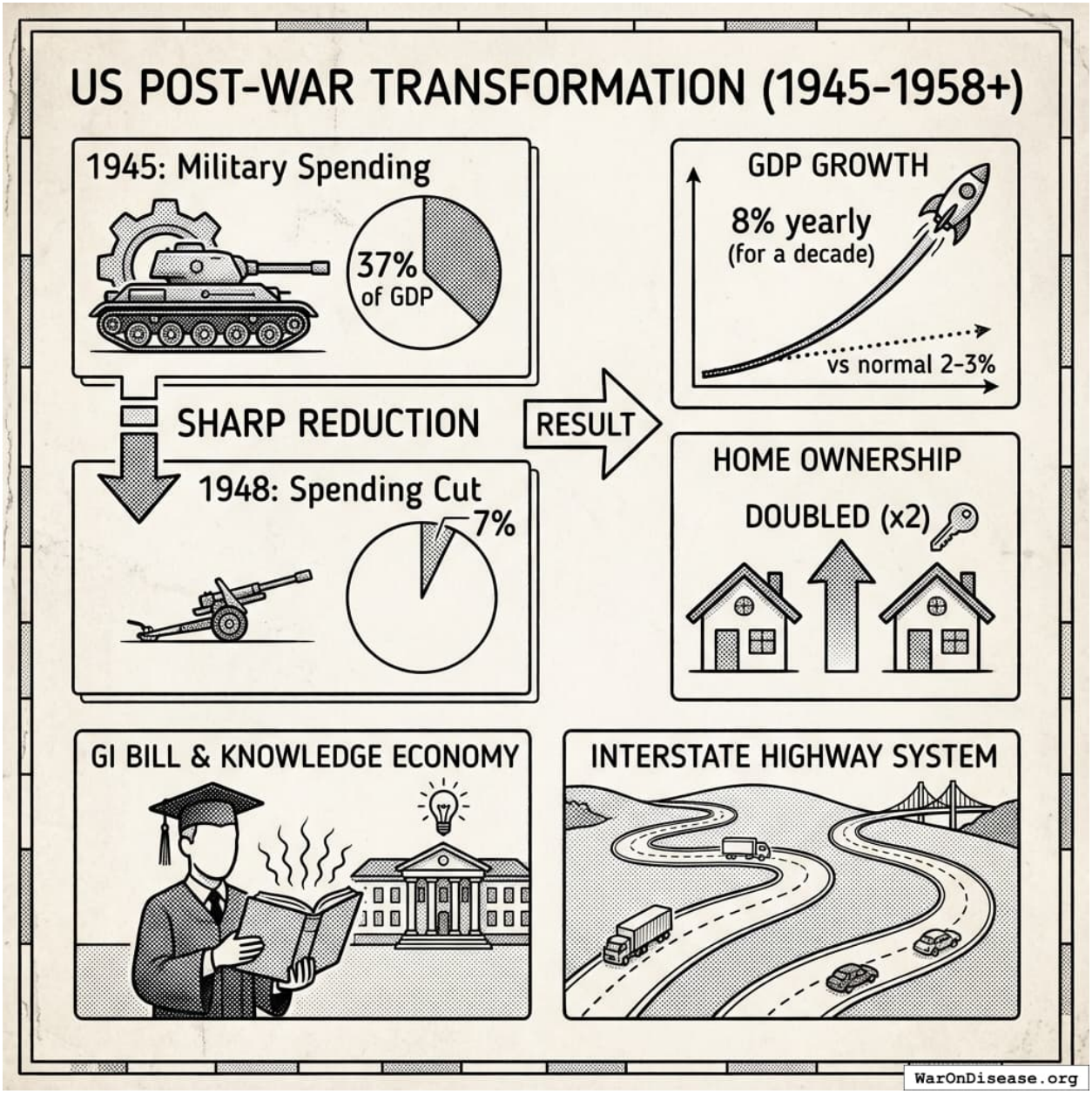


Figure 421: The economic correlation between massive reductions in military spending and the subsequent historic economic boom in the post-WWII era.

The 1990s: When the Berlin Wall Fell and Wallets Exploded

What happened: Cold War ended. Military spending dropped from 6% of GDP to 3%. That's $300B redirected from pointing missiles at Russia to literally anything else.

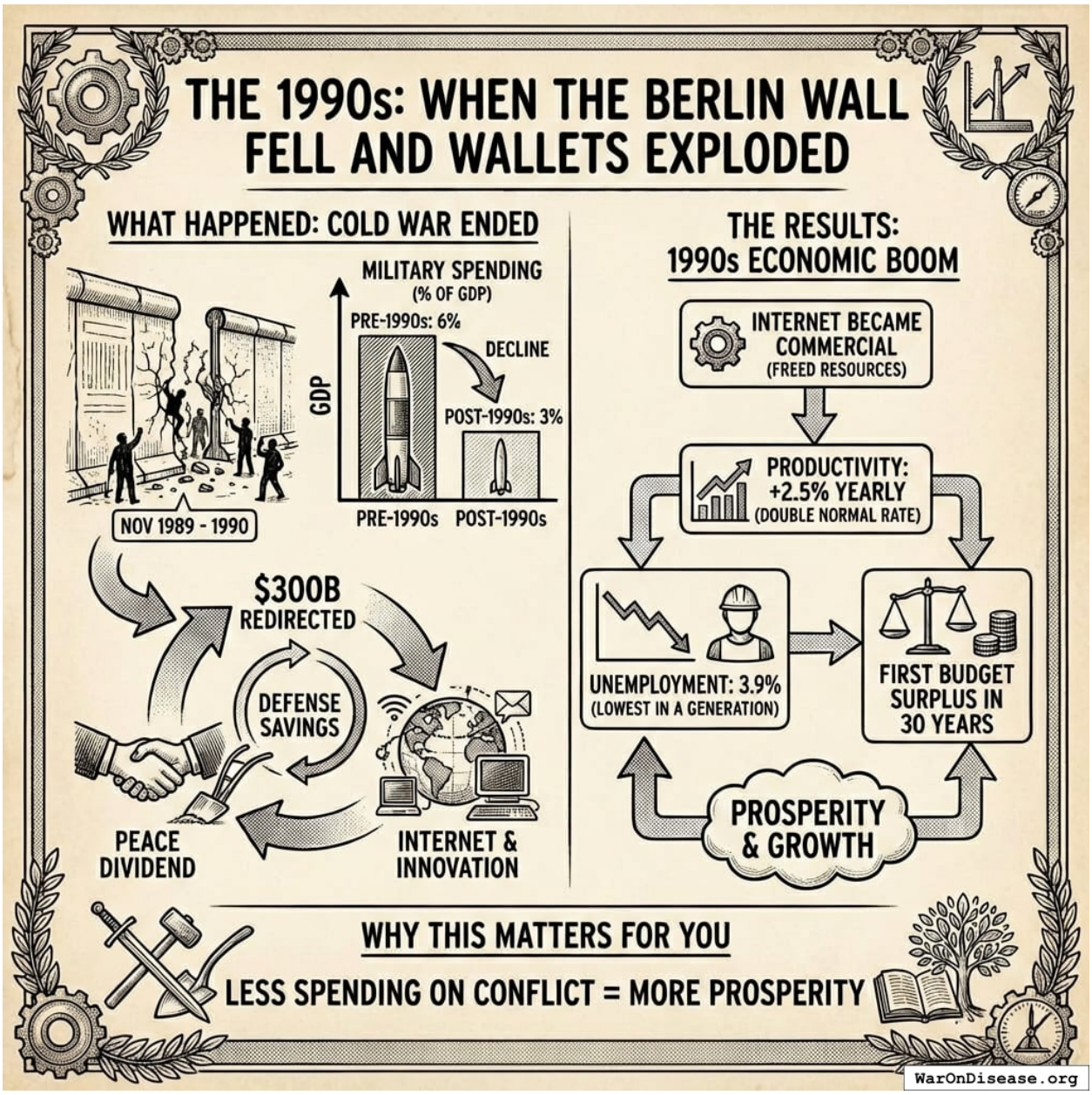


Figure 422: A visual representation of the 'Peace Dividend,' showing the redirection of 3 percent of GDP from military spending into economic catalysts like the commercial internet and productivity growth.

The results: The 1990s economic boom everyone remembers fondly: - Internet became commercial (freed resources) - First budget surplus in 30 years - Unemployment: 3.9% (lowest in a generation) - Productivity: +2.5% yearly (double the normal rate)

Why this matters for you: The pattern isn't subtle. Every time humans stop spending money on murder, prosperity appears like magic. It's not magic. It's arithmetic.

Switzerland: 200 Years of Not Shooting Anyone = Being Very Rich

What they have: Mountains, cows, and a complete lack of natural resources. They're surrounded by countries that kept starting world wars. They have been neutral since 1815.

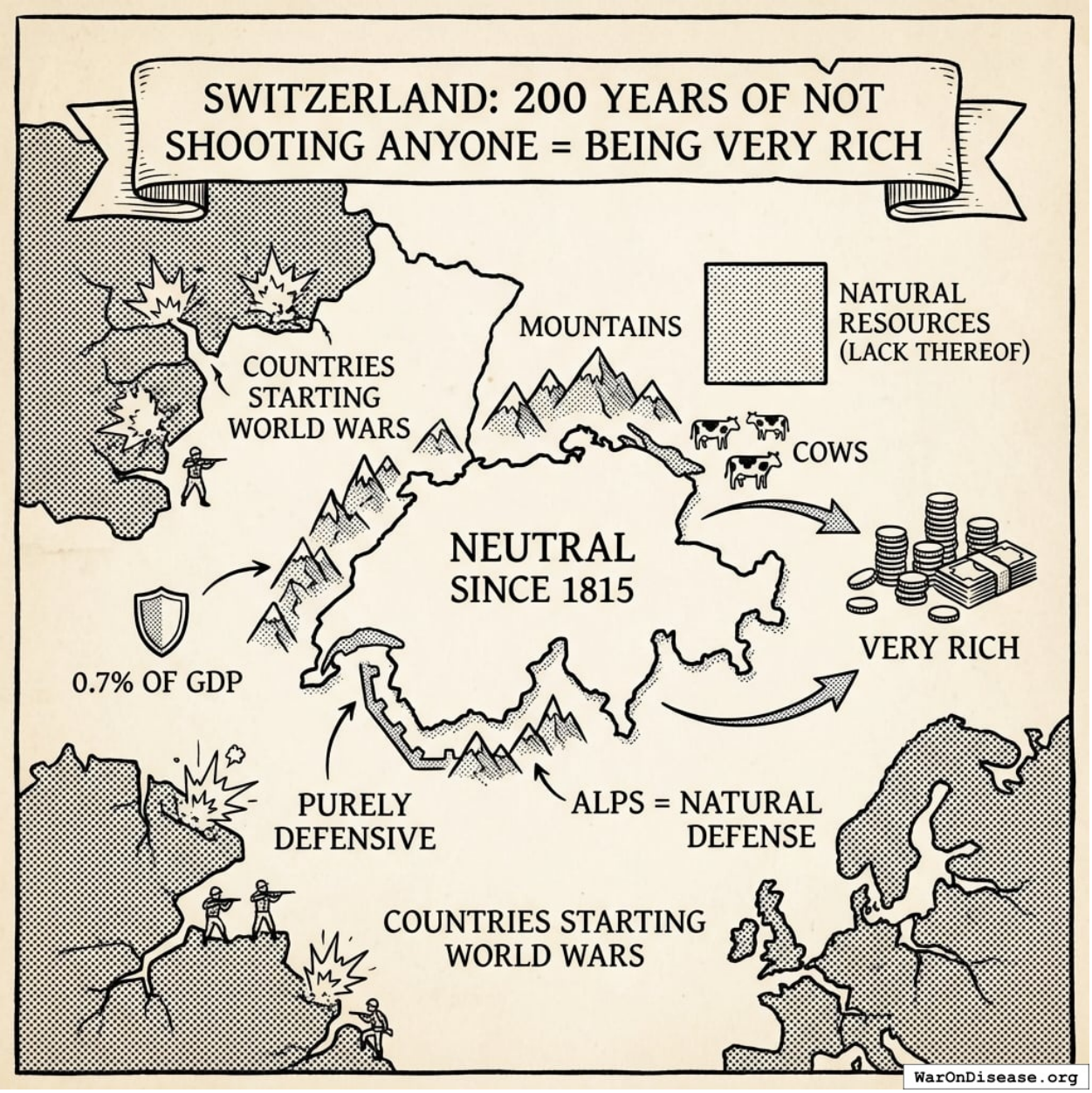


Figure 423: A conceptual visualization showing how Switzerland's policy of neutrality and low defense spending relative to its neighbors has contributed to its long-term economic prosperity.

What they spend on defense: 0.7% of GDP (purely defensive - they're not invading anyone with those Alps)

The results

- $93K GDP per capita (vs US $76K)
- Universal healthcare, excellent quality, 12% of GDP (vs US 18%)
- Life expectancy: 84 years (vs US 79)
- Last invaded: Never (Napoleon tried in 1798, didn't go well for him)

Why this matters for you: Peace dividends compound over centuries. Switzerland proves you don't need

oil, colonies, or weapons to get rich. You just need to not waste money on stupid things. They've been doing this for 200 years. You're asking for a 1% start.

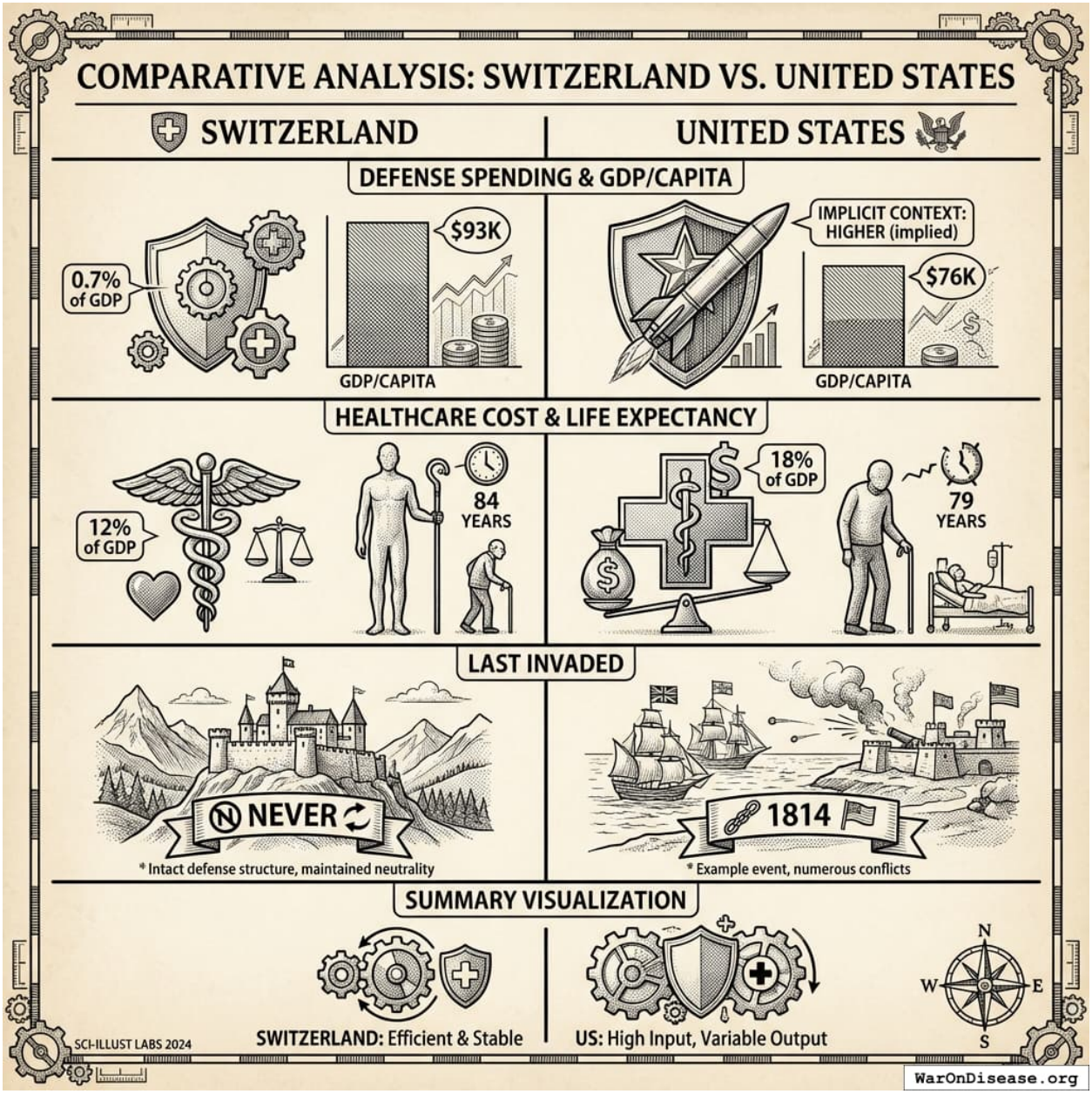


Figure 424: Comparative analysis of Switzerland's economic and health outcomes versus the United States, correlated with defense spending.

The 3.5% Rule: The Cheat Code for Democracy

What scientists discovered: When just 3.5% of a population actively participates in sustained resistance, success becomes nearly inevitable. Not 51%. Not majority. Just 3.5%.

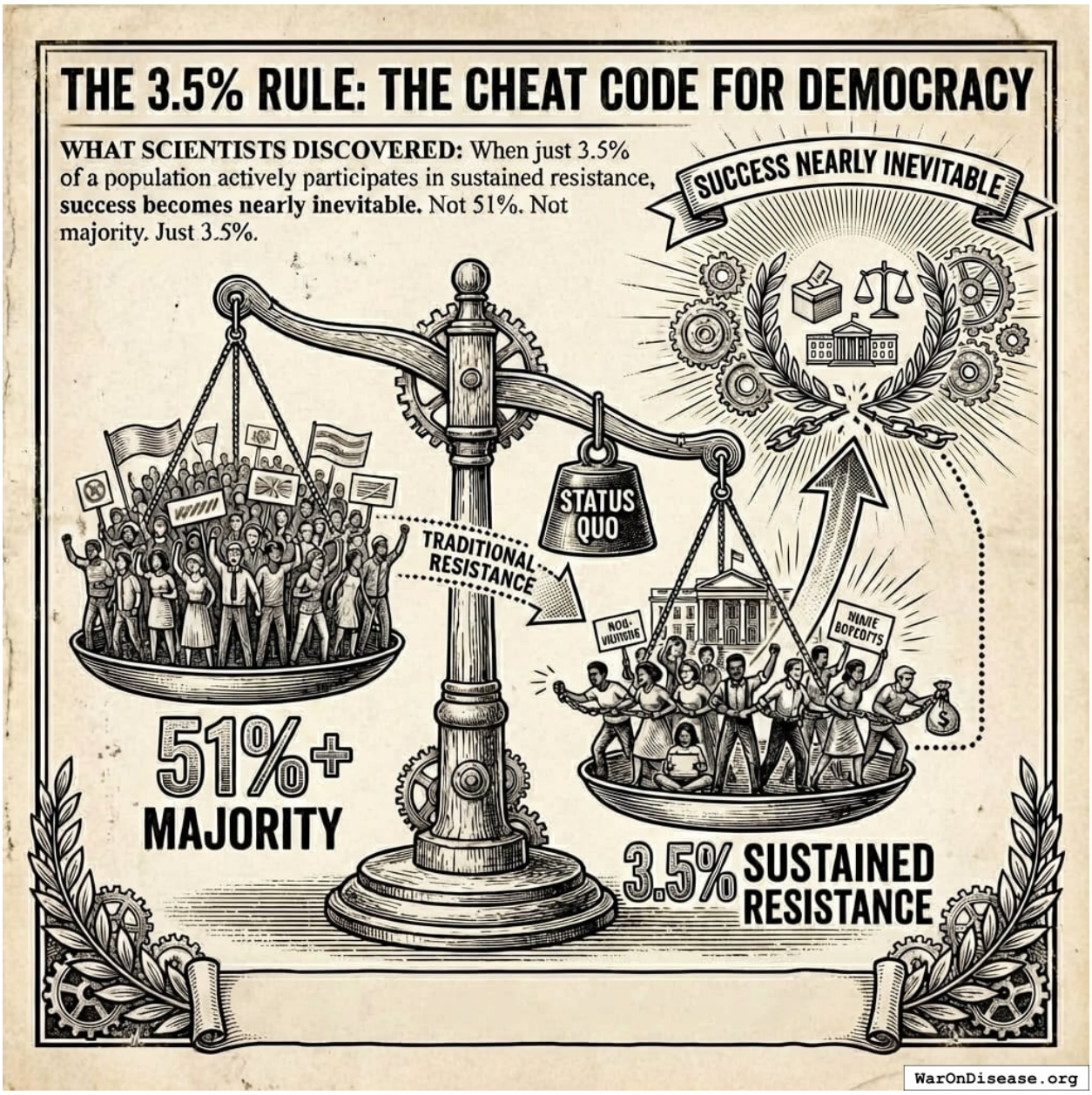


Figure 425: A comparison showing that only a small 3.5 percent slice of a population is needed to trigger successful social change, contrasted against the much larger 51 percent majority usually assumed necessary.

Historical proof

- Civil rights: 3.5% ended segregation
- Indian independence: 3.5% beat the British Empire (nuclear power defeated by non-violence, embarrassing)
- Women's suffrage: 3.5% got half of humanity the vote
- Gay marriage: 3.5% made love legal

Why this matters for you: The global referendum needs 280 million people (3.5% of humanity). Not billions. Just 3.5% clicking "yes, I prefer not dying" on a website. If humans can mobilize 3.5% to get the vote, you can mobilize 3.5% to not die from cancer.

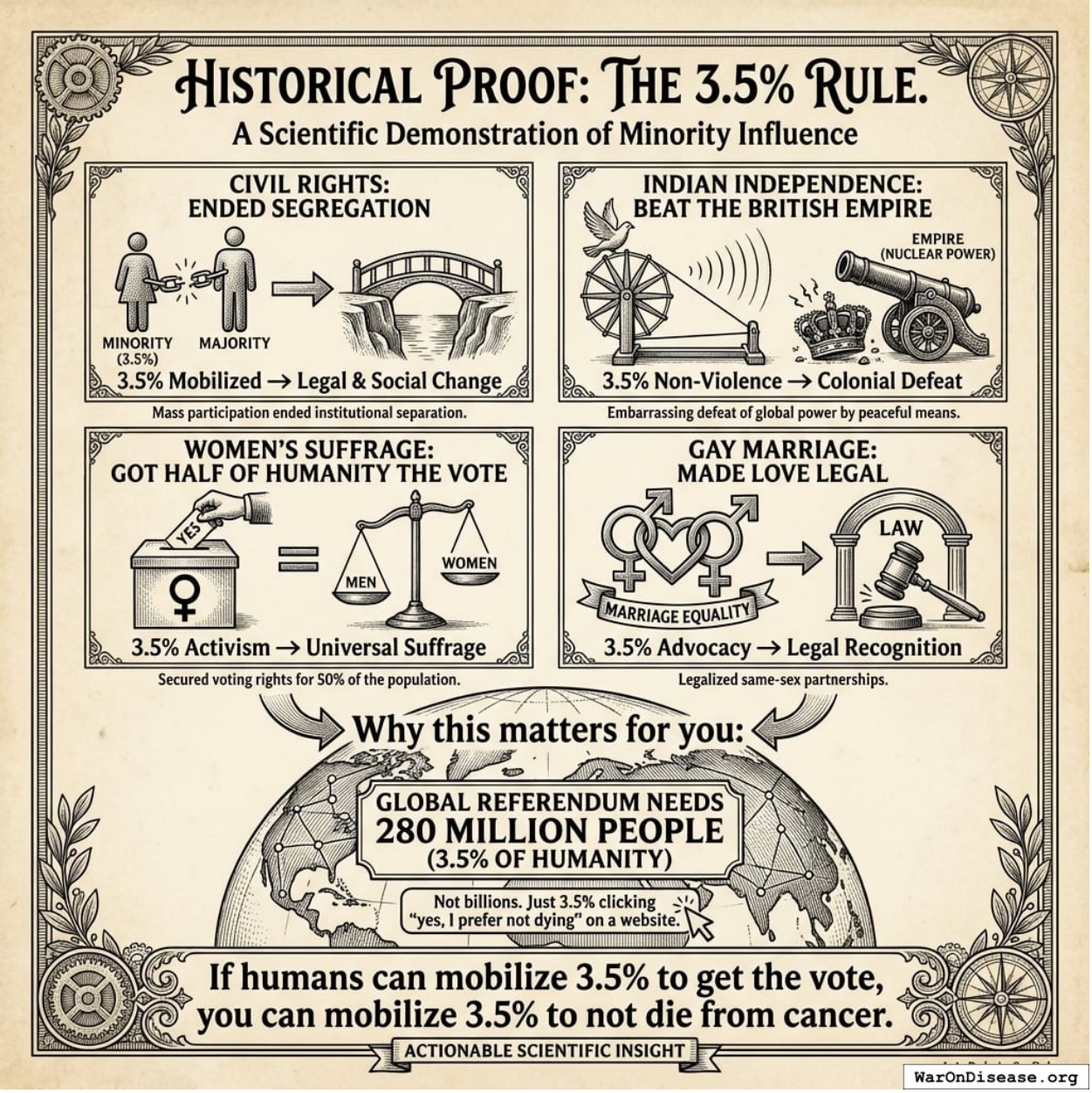


Figure 426: A visual comparison showing how major historical movements achieved success at the 3.5 percent participation threshold, applied to the goal of 280 million people for a global referendum.

When Good Intentions Met Reality (And Lost)

Failures teach more than successes. Here's every mistake past movements made, so you don't repeat them.

Eisenhower's Warning: A 5-Star General Tried to Tell You

In 1961, President Dwight D. Eisenhower - former 5-star general, Supreme Allied Commander, the guy who beat the Nazis - used his farewell address to warn you about something terrifying:

The warning: "We must guard against the military-industrial complex."

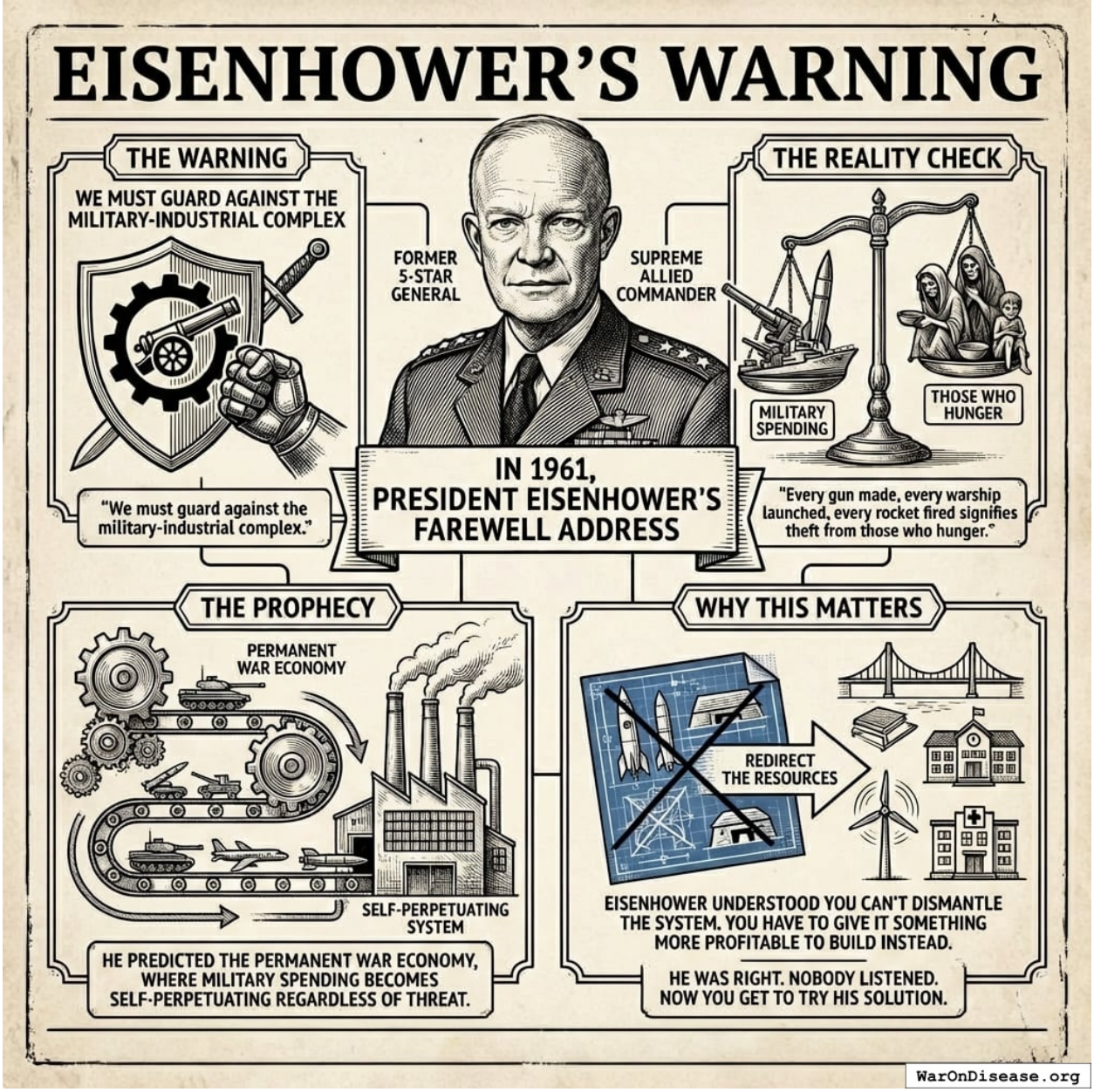


Figure 427: A visual representation of Eisenhower's warning, illustrating the zero-sum trade-off between military production and social welfare resources.

The reality check: "Every gun made, every warship launched, every rocket fired signifies theft from those who hunger."

The prophecy: He predicted the permanent war economy you're currently living in, where military spending becomes self-perpetuating regardless of whether anyone's actually threatening you.

Why this matters: Eisenhower understood you can't dismantle the system. You have to give it something more profitable to build instead. He was right. Nobody listened. Now you get to try his solution: redirect the resources.

The Nuclear Freeze Movement: Millions of People, Zero Results

What happened: In the 1980s, a massive global movement[272] tried to freeze nuclear weapons production. Millions of protesters. Enormous popular support. Good vibes everywhere.

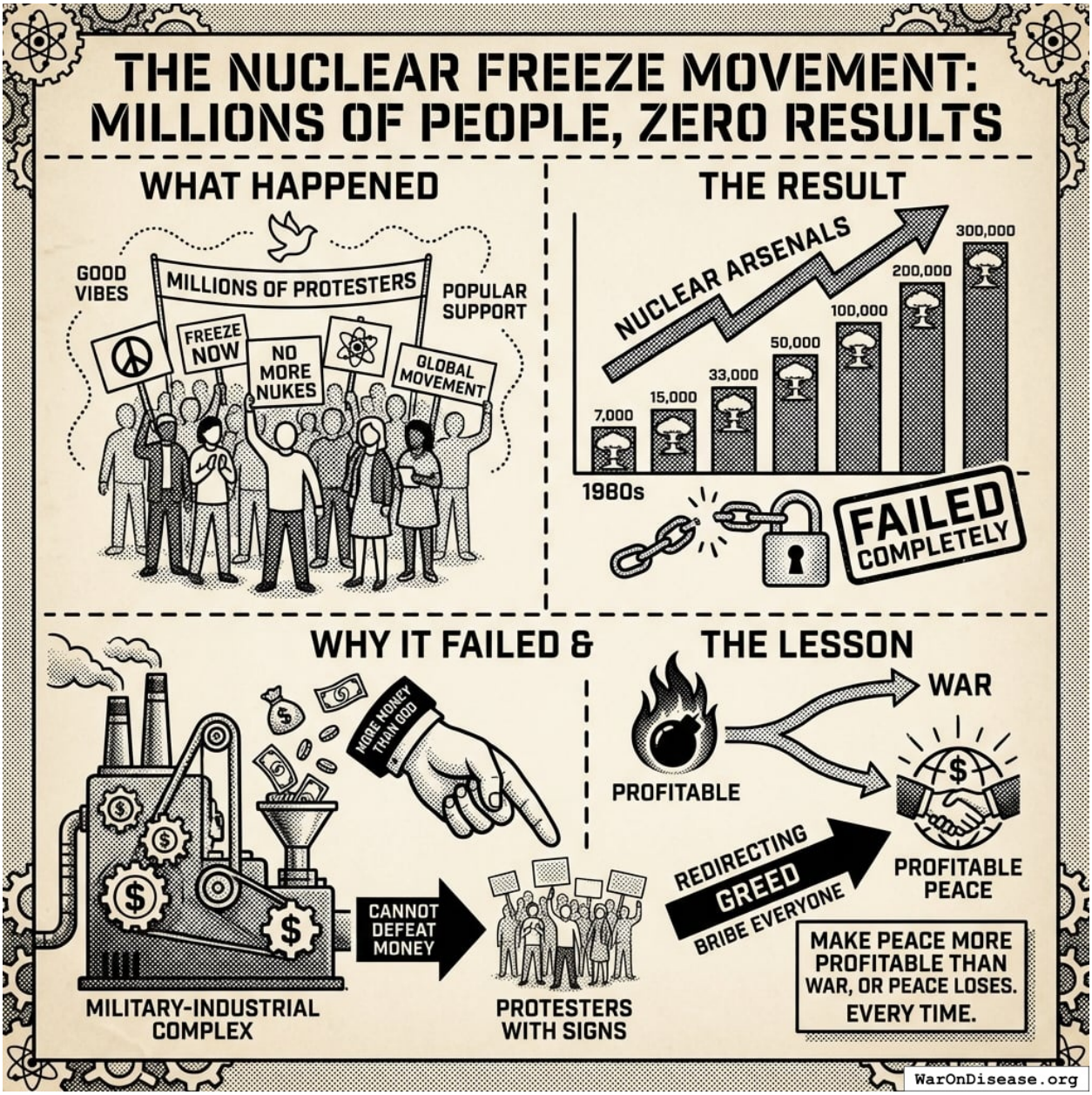


Figure 428: A conceptual diagram contrasting the failure of moral pressure against the military-industrial complex with the proposed strategy of redirecting financial greed toward peace.

The result: Failed completely. Nuclear arsenals kept growing.

Why it failed: You cannot defeat money with good intentions. The military-industrial complex has more money than God, and protesters have signs. This is why a 1% treaty doesn't ask nicely - it bribes everyone into submission. You're not fighting greed, you're redirecting it.

The lesson: Make peace more profitable than war, or peace loses. Every time.

Occupy Wall Street: When "We're Angry" Isn't a Strategy

What happened: In 2011, thousands occupied parks[273] to protest economic inequality. They changed the conversation! They raised awareness! They accomplished nothing permanent!

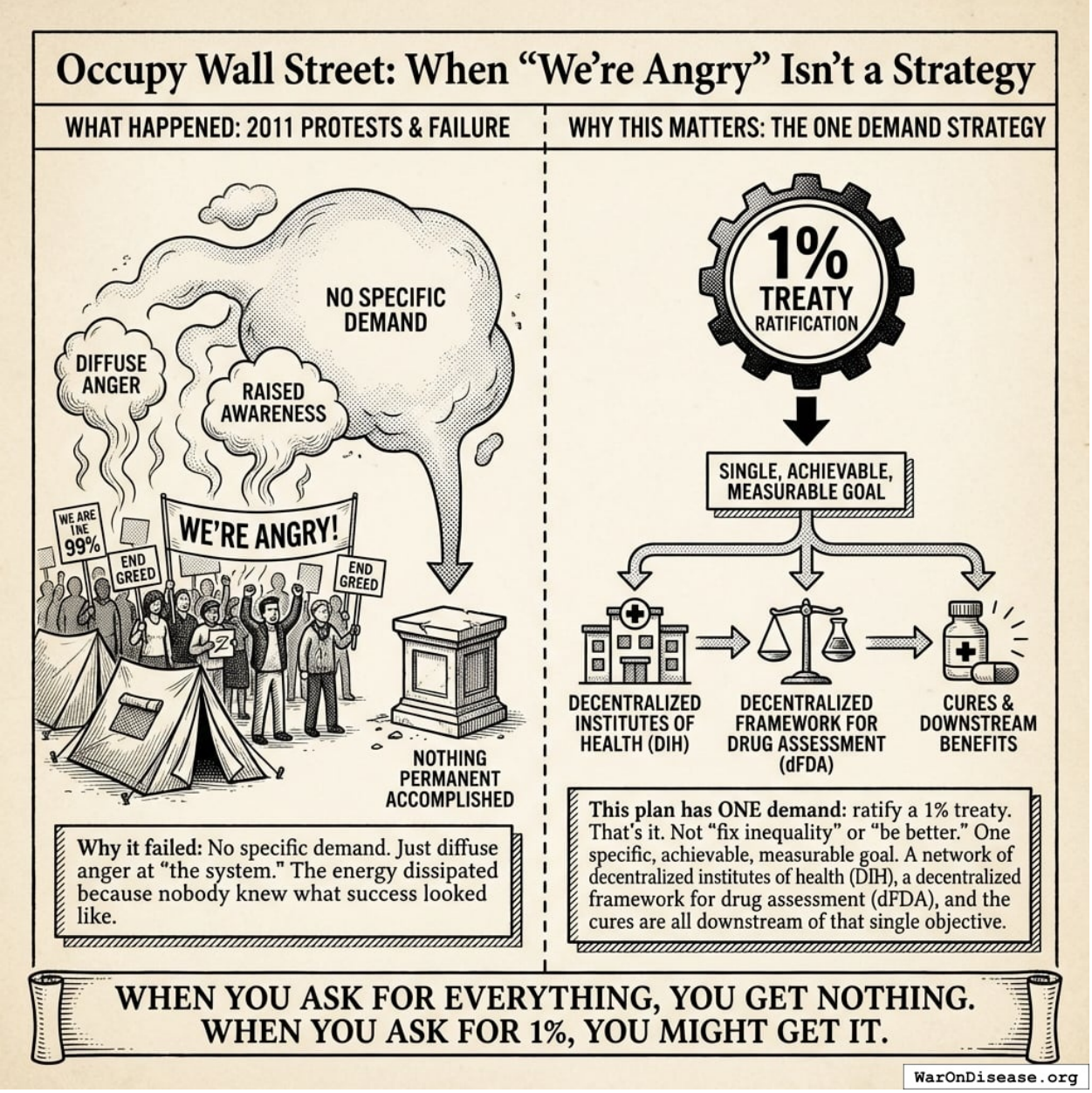


Figure 429: A contrast between the diffuse, scattered energy of the Occupy Wall Street movement and the focused, linear path of a single-demand strategy leading to specific outcomes.

Why it failed: No specific demand. Just diffuse anger at "the system." The energy dissipated because nobody knew what success looked like.

Why this matters: This plan has ONE demand: ratify a 1% treaty. That's it. Not "fix inequality" or "be better." One specific, achievable, measurable goal. A network of decentralized institutes of health (DIH), a decentralized framework for drug assessment (dFDA), and the cures are all downstream of that single

objective.

When you ask for everything, you get nothing. When you ask for 1%, you might get it.

On How Rich People Made Money Doing Crazy Things (And Why That Matters)

To make this work, you need investment terms that don't sound insane to people with money. Fortunately, history is full of rich people doing riskier things for lower returns.

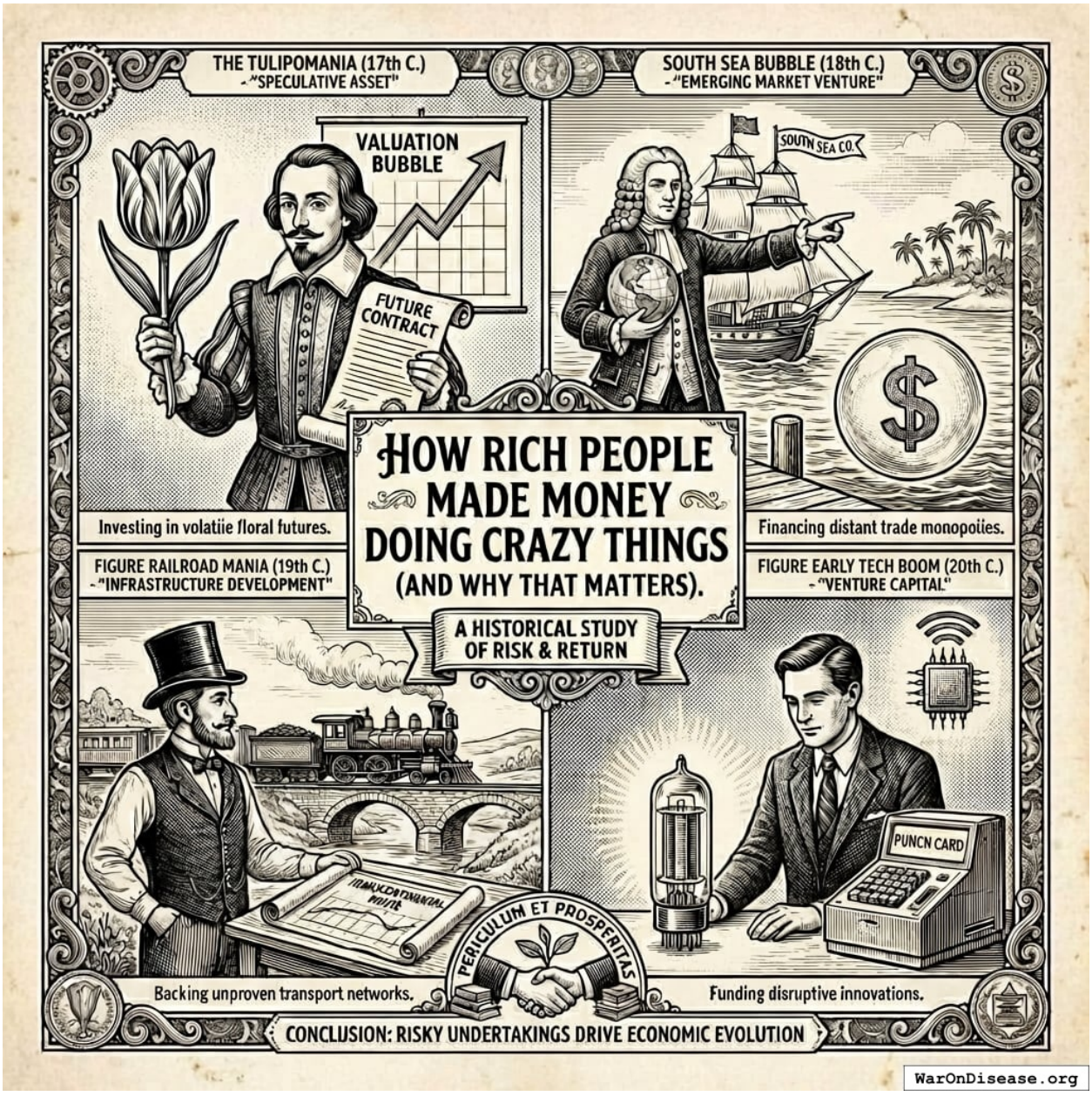


Figure 430: A comparison between unconventional investment ideas framed with professional terminology versus historical high-risk ventures that yielded lower returns.

On The Time Junk Bonds Saved Capitalism

Michael Milken & High-Yield ("Junk") Bonds

In the 1980s, a guy named Michael Milken figured out something revolutionary: if you offer people high enough returns, they'll invest in almost anything[274].

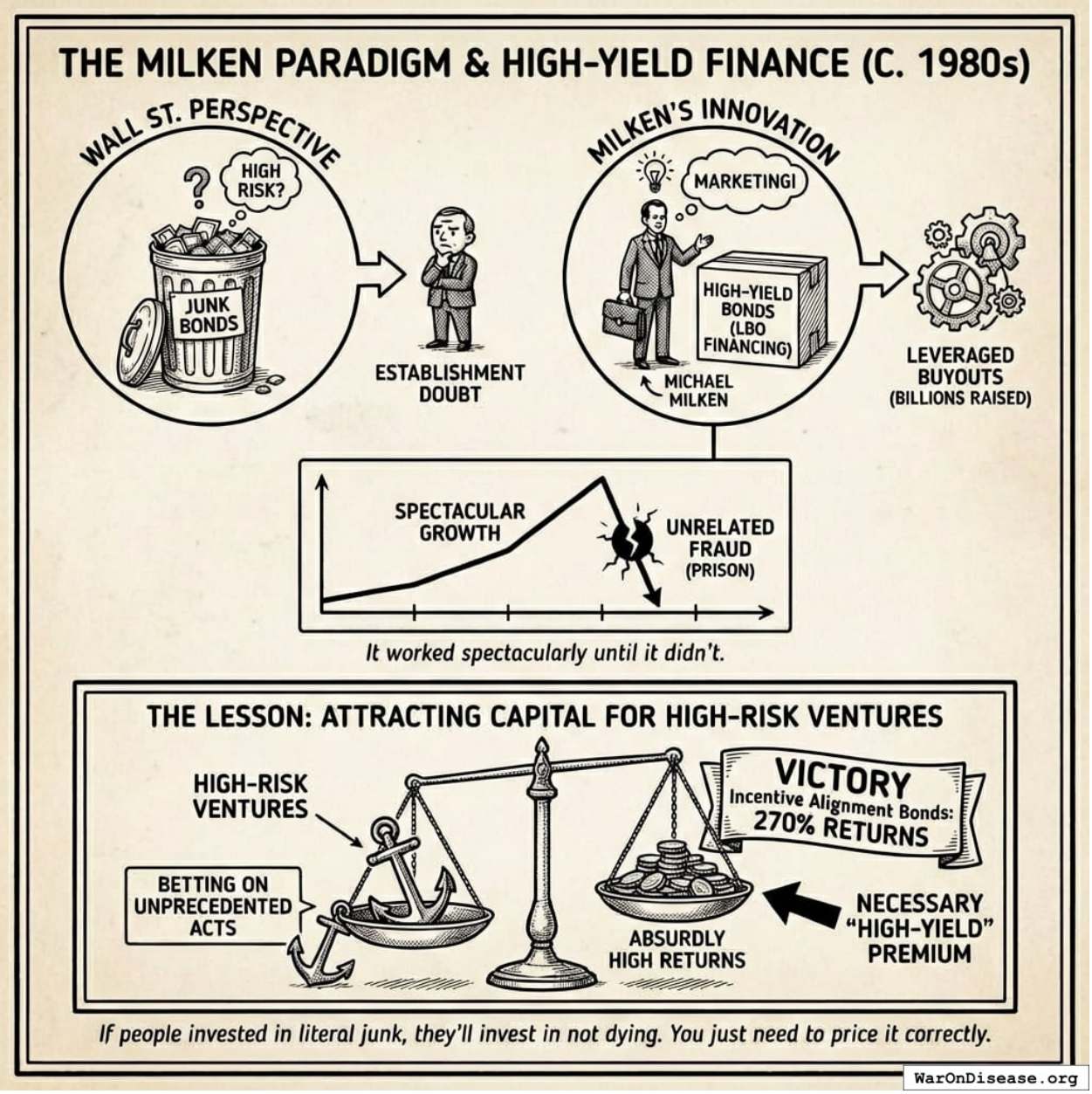


Figure 431: A comparison of the risk-return relationship for traditional, high-yield, and VICTORY bonds, illustrating the 'high-yield premium' needed to attract capital for high-risk ventures.

Wall Street called these "junk bonds" because they were trash. Milken called them "high-yield bonds" because marketing. He financed leveraged buyouts that the establishment said were impossible, raising billions.

The establishment said it would never work. It worked spectacularly until it didn't (Milken went to prison for unrelated fraud, which is how you know it was successful).

The Lesson: To attract capital for high-risk ventures, you must offer absurdly high returns. VICTORY Incentive Alignment Bonds promise 270% returns. This isn't generosity, it's economics. It's the "high-yield" premium necessary to compensate for betting on the unprecedented act of governments doing something smart.

If people invested in literal junk, they'll invest in not dying. You just need to price it correctly.

On The Time George Soros Broke England

George Soros & The Quantum Fund

In 1992, George Soros risked $10 billion betting that the UK would have to leave the European Exchange Rate Mechanism[275].

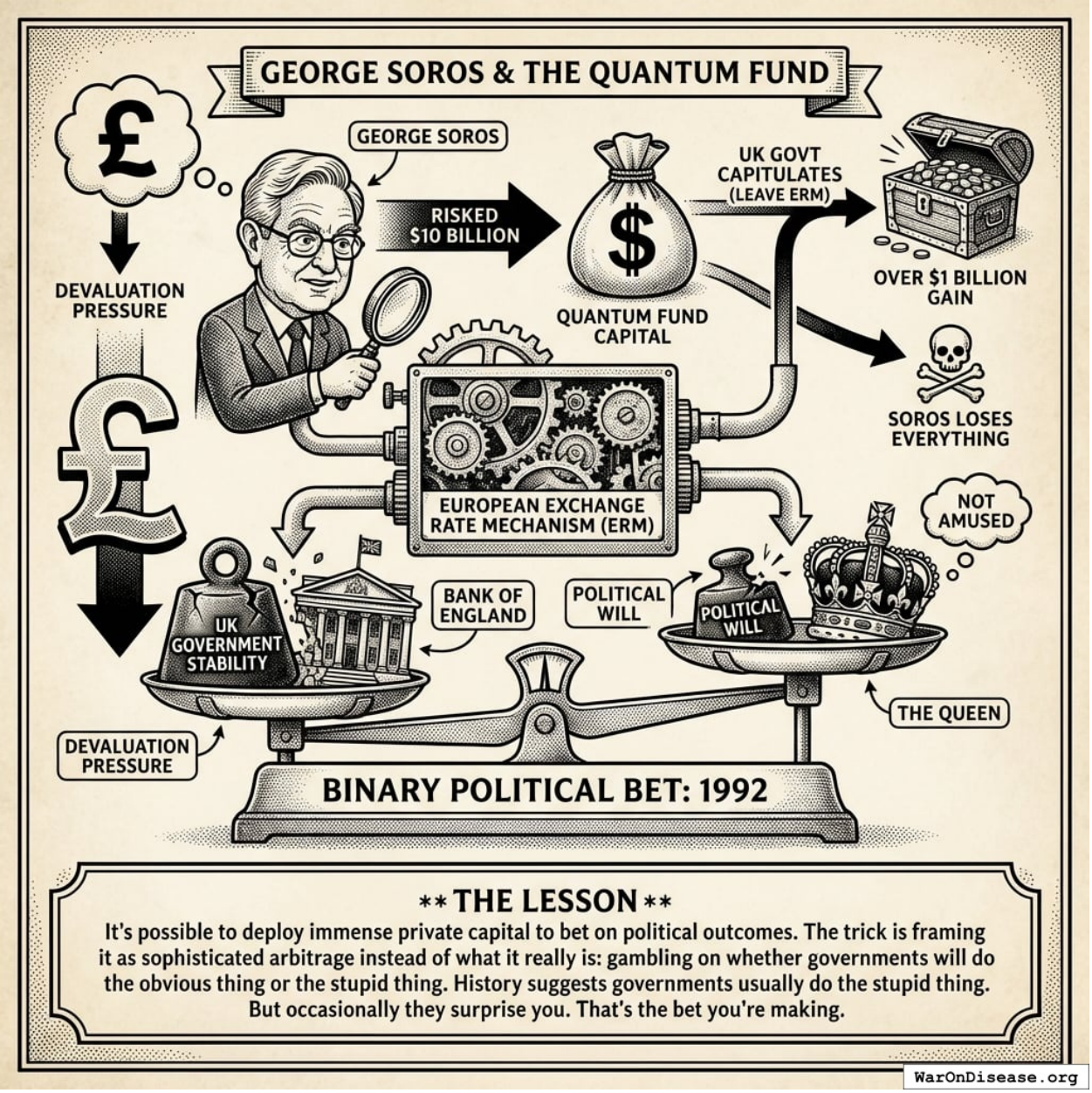


Figure 432: A diagram illustrating the binary outcomes of Soros's high-stakes bet against the British Pound, showing the tension between private capital and government policy decisions.

This was a binary political bet: Either the UK government capitulates, or Soros loses everything.

He won. Made over $1 billion in a single day. The Bank of England lost. The Queen was reportedly not amused.

The Lesson: It's possible to deploy immense private capital to bet on political outcomes. The trick is framing it as sophisticated arbitrage instead of what it really is: gambling on whether governments will do the obvious thing or the stupid thing.

History suggests governments usually do the stupid thing. But occasionally they surprise you. That's the bet you're making.

On When Smart People Lost All Their Money (The Cautionary Tales)

Long-Term Capital Management (LTCM): When Nobel Laureates Get Humbled

In 1998, a hedge fund run by actual Nobel Prize winners collapsed and required a $3.6 billion bailout[276].

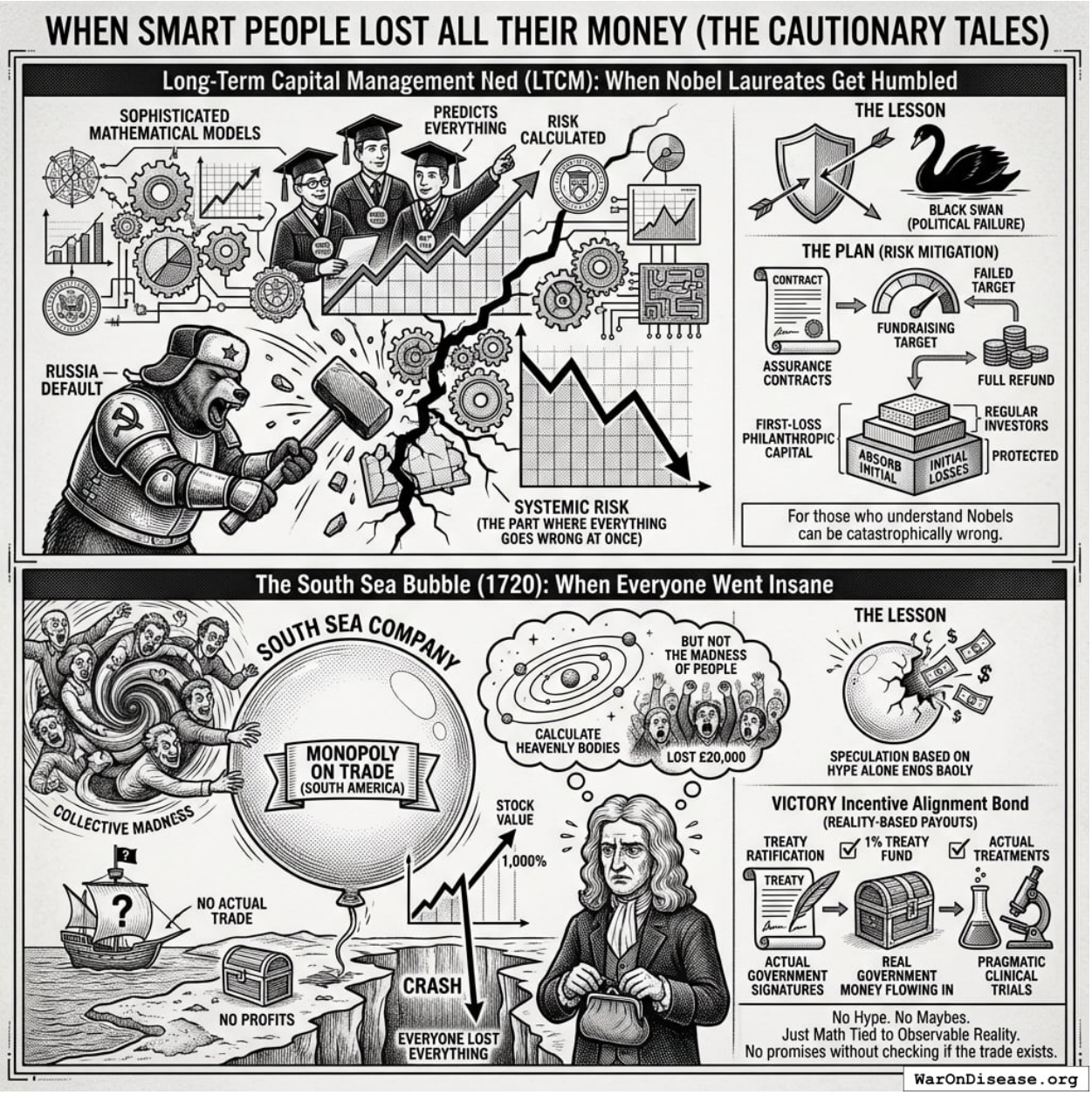


Figure 433: A comparison between historical financial failures and the specific risk mitigation strategies integrated into the VICTORY Incentive Alignment Bond.

Their crime? Building sophisticated mathematical models that accounted for everything except the part where Russia just… defaults. Whoops.

These were the smartest people in finance. They had Nobels. They had PhDs from MIT. They had models that predicted everything except reality.

The Lesson: Never underestimate systemic risk, also known as "the part where everything goes wrong at once."

For this project, the "black swan" is complete political failure. Everyone says no, the treaty dies, and you look stupid.

This is why the plan includes:

- **Assurance contracts**: If we don't hit the fundraising target, everyone gets their money back. No partial failures allowed.
- **First-loss philanthropic capital**: Rich altruists absorb the initial losses so regular investors don't get wiped out if things go sideways.

It's risk mitigation for people who understand that Nobel laureates can still be catastrophically wrong.

The South Sea Bubble (1720): When Everyone Went Insane

In 1720, people in England went collectively mad and invested in a company that promised a monopoly on trade with South America[277].

Neat! Except the company had almost no actual trade. And no profits. And no business plan beyond "tell people we're going to be really rich."

The stock went up 1,000%. Then it crashed. Everyone lost everything. Isaac Newton lost £20,000, which in today's money is "a lot." He famously said "I can calculate the motion of heavenly bodies, but not the madness of people."

The Lesson: Speculation based on hype alone ends badly.

This is why VICTORY Incentive Alignment Bond payouts are contractually tied to real, verifiable events:

- Treaty ratification (actual government signatures)
- Real government money flowing into the 1% Treaty Fund
- Actual treatments being tested in pragmatic clinical trials

No hype. No maybes. No "we're going to be really rich someday." Just math tied to observable reality.

If you're going to lose your money, at least it won't be because the plan promised a monopoly on South American trade without checking if South America exists.

4. The Ultimate Failsafe: The Worst-Case Scenario is Still a Win

Even if one is skeptical of the above precedents, the core proposal has a powerful, built-in failsafe.

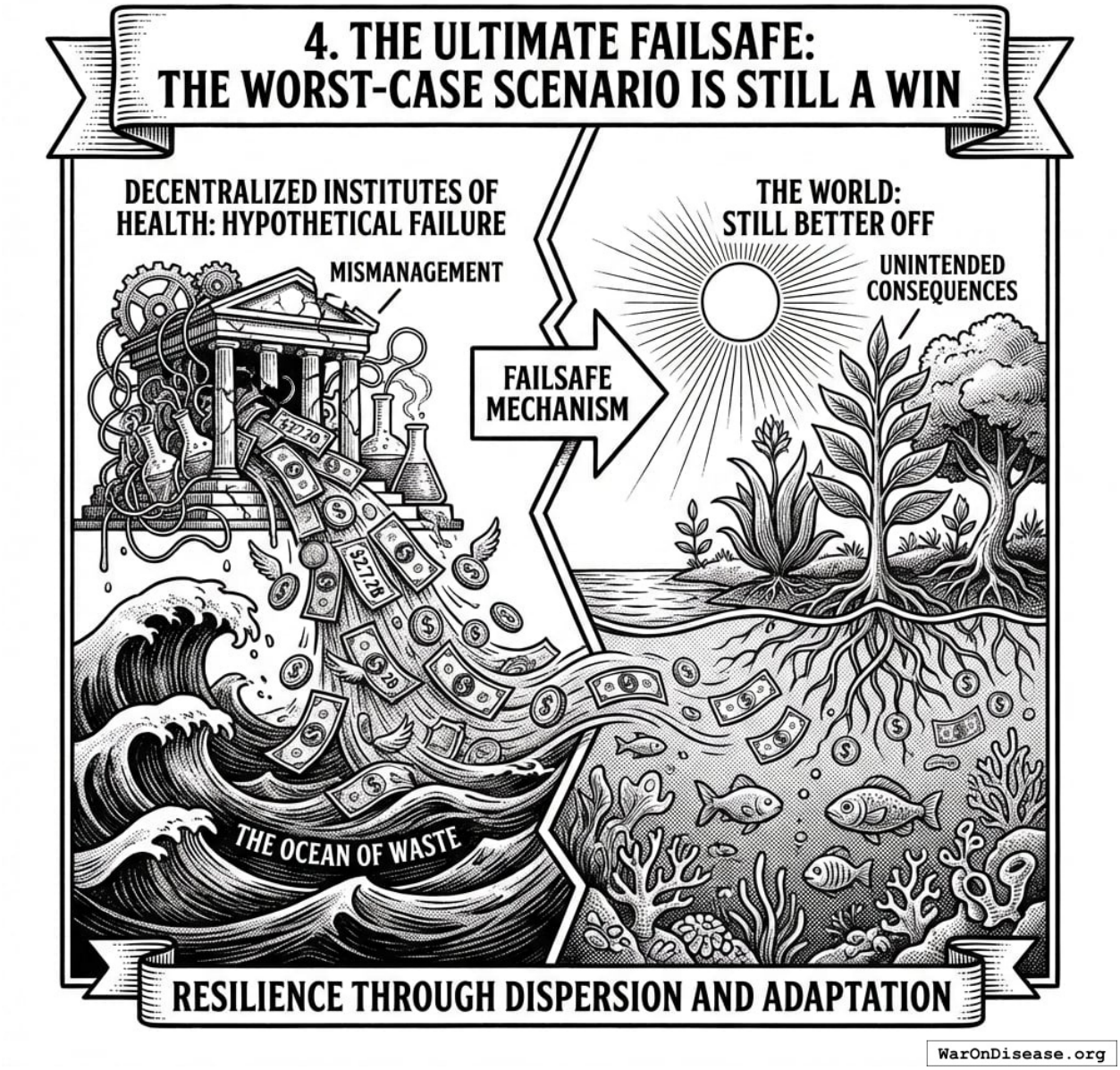


Figure 434: A conceptual comparison illustrating how the worst-case scenario of the decentralized proposal still results in a superior outcome compared to the current status quo.

Let's imagine your decentralized institutes of health is a complete and total failure. Imagine every dollar of the $27.2B is mismanaged, wasted, or simply dumped into the ocean.

The world would *still* be better off.

Why?

Because we would still have achieved a **1% reduction in the global capacity for organized violence and destruction.**

- Fewer bombs.
- Fewer missiles.

- Fewer AI-powered weapons systems.

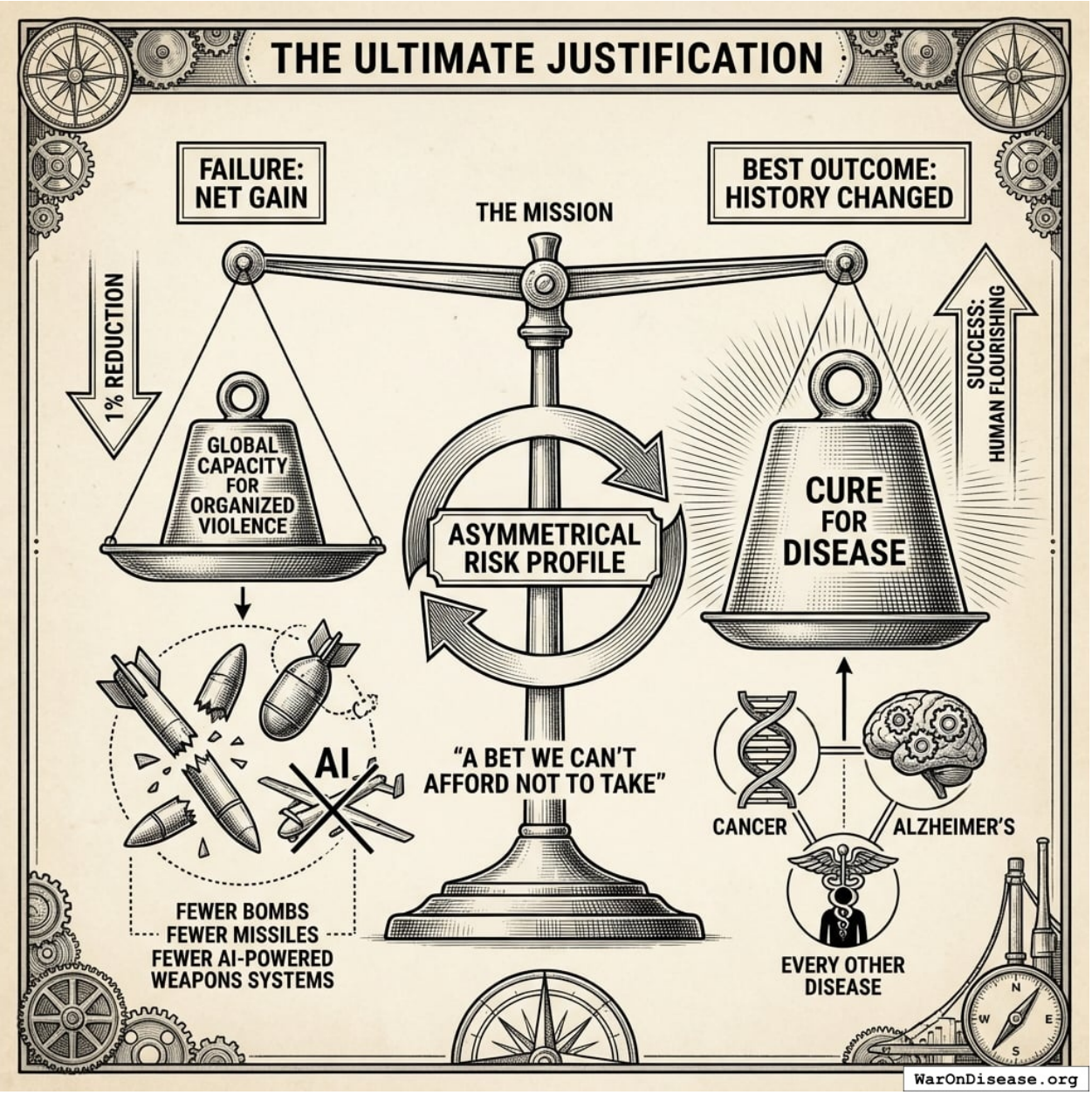
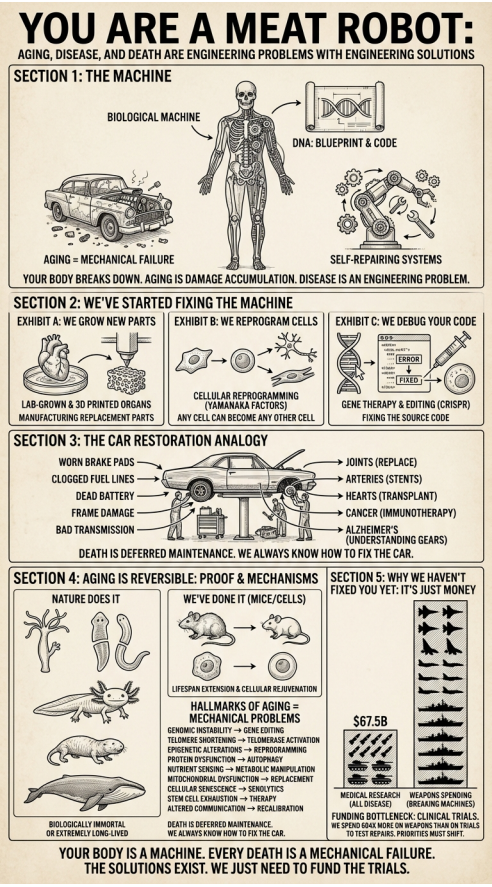


Figure 435: A visualization of the asymmetrical risk profile, contrasting the 'worst-case' outcome of reduced global weaponry with the 'best-case' outcome of curing major human diseases.

The absolute worst possible outcome of this plan is still a net gain for global security, stability, and human life. The best possible outcome is a cure for your cancer, your grandmother's Alzheimer's, and every other disease that plagues humanity.

This asymmetrical risk profile, where failure is still a victory and success changes the course of human history, is the ultimate justification for the mission. It's a bet we can't afford not to take.

You Are a Meat Robot



Your body is a machine. A ridiculously complex, self-repairing, 4-billion-year-old biological machine, but a machine nonetheless. It was built from a blueprint (DNA), it has parts that wear out (organs), and it requires regular maintenance (medicine).

The only reason we treat it like a mystical black box is that we've only had the service manual for about 20 years.

Death is a Technical Problem

Every religion and philosopher has sold you the same story: death is natural and inevitable.

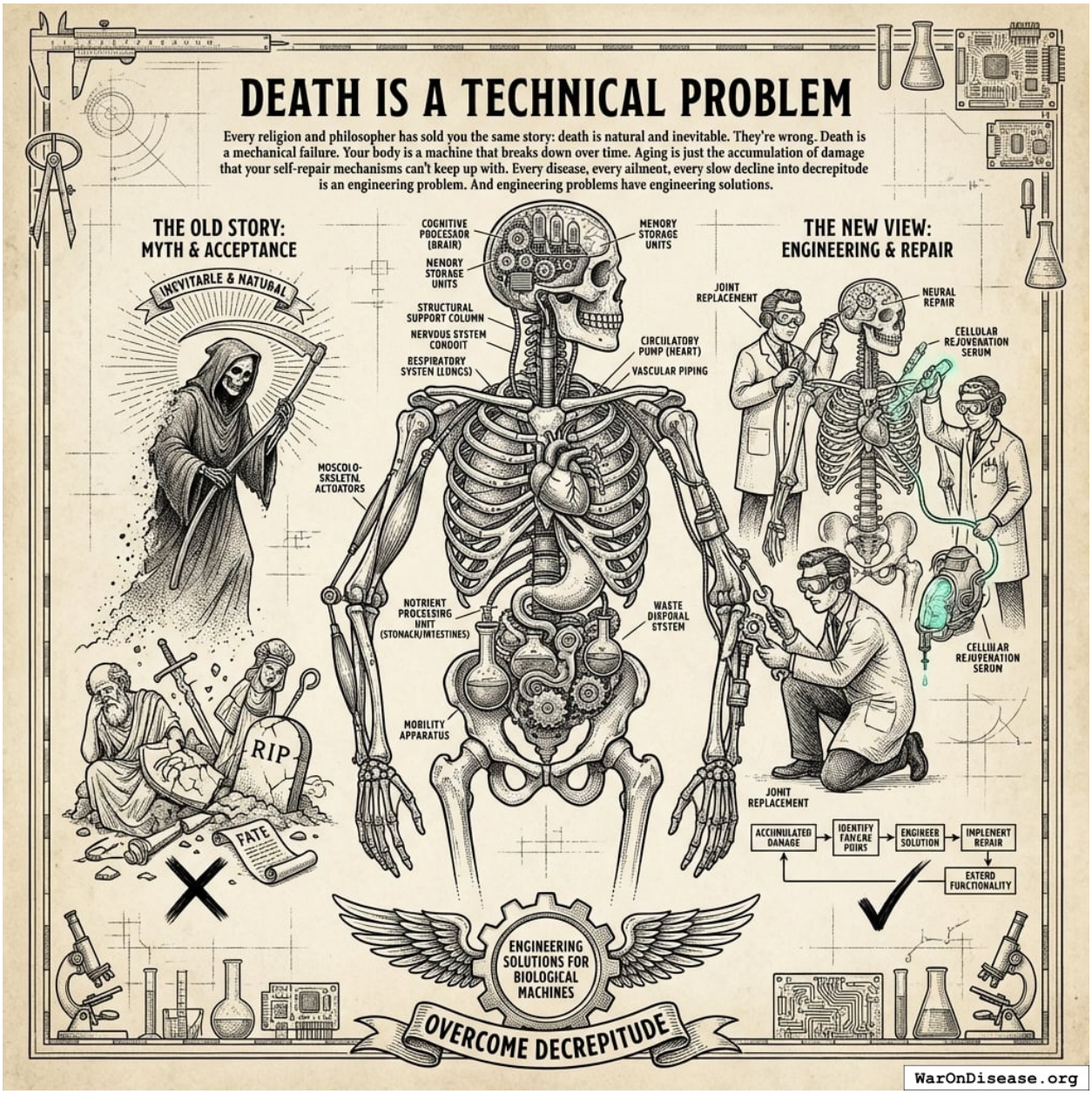


Figure 436: A conceptual diagram illustrating the body as a complex machine where aging is the accumulation of damage that outpaces the system's repair mechanisms.

They're wrong.

Death is a mechanical failure. Your body is a machine that breaks down over time. Aging is just the accumulation of damage that your self-repair mechanisms can't keep up with. Every disease, every ailment, every slow decline into decrepitude is an engineering problem. And engineering problems have engineering solutions.

You Are a Self-Repairing Meat Robot

Your DNA is 3 billion letters of code[65]. Not "like" code. It *is* code. We've learned to read it (the Human Genome Project) and we're learning to edit it (CRISPR). We are mechanics who have finally gotten our hands on the service manual.

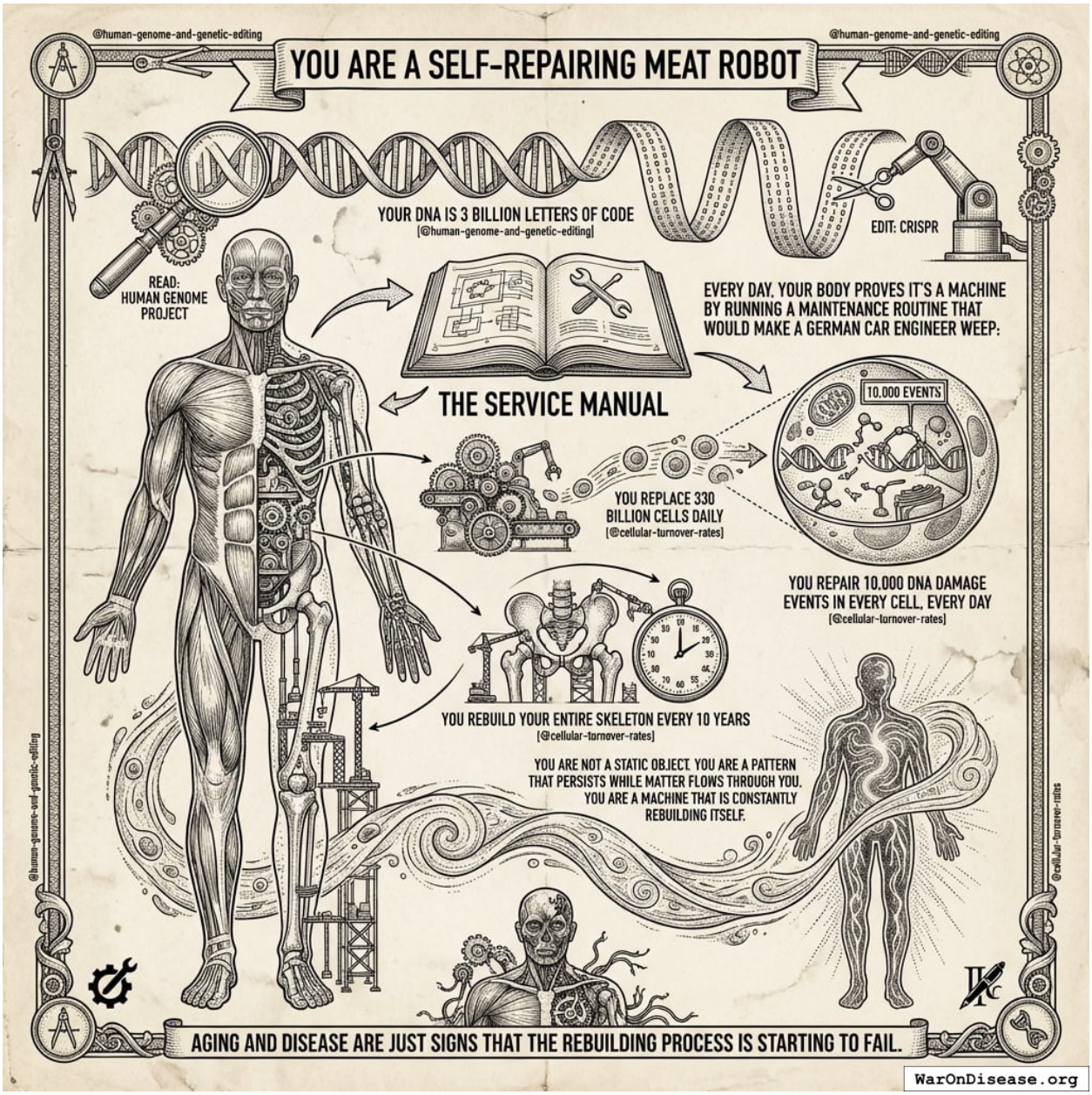


Figure 437: An infographic highlighting human maintenance statistics including 330 billion daily cell replacements and 10,000 daily DNA repairs per cell.

Every day, your body proves it's a machine by running a maintenance routine that would make a German car engineer weep:

- You replace 330 billion cells daily[278].
- You repair 10,000 DNA damage events in every cell, every day[278].

- You rebuild your entire skeleton every 10 years[278].

You are not a static object. You are a pattern that persists while matter flows through you. You are a machine that is constantly rebuilding itself. Aging and disease are just signs that the rebuilding process is starting to fail.

Part 2: We've Already Started Fixing the Machine

Exhibit A: We Can Grow New Parts

Remember when losing a finger meant losing it forever? Not anymore:

- **Lab-grown organs**: We've grown bladders, windpipes, and blood vessels in labs[279] and installed them in humans. They work.
- **3D-printed body parts**: We print custom titanium skulls, jaws, and ribs[279]. A kid in Michigan has a 3D-printed windpipe[279] keeping him alive.
- **Regenerative medicine**: We can regrow skin for burn victims, cartilage for damaged joints[279], and we're working on teeth.

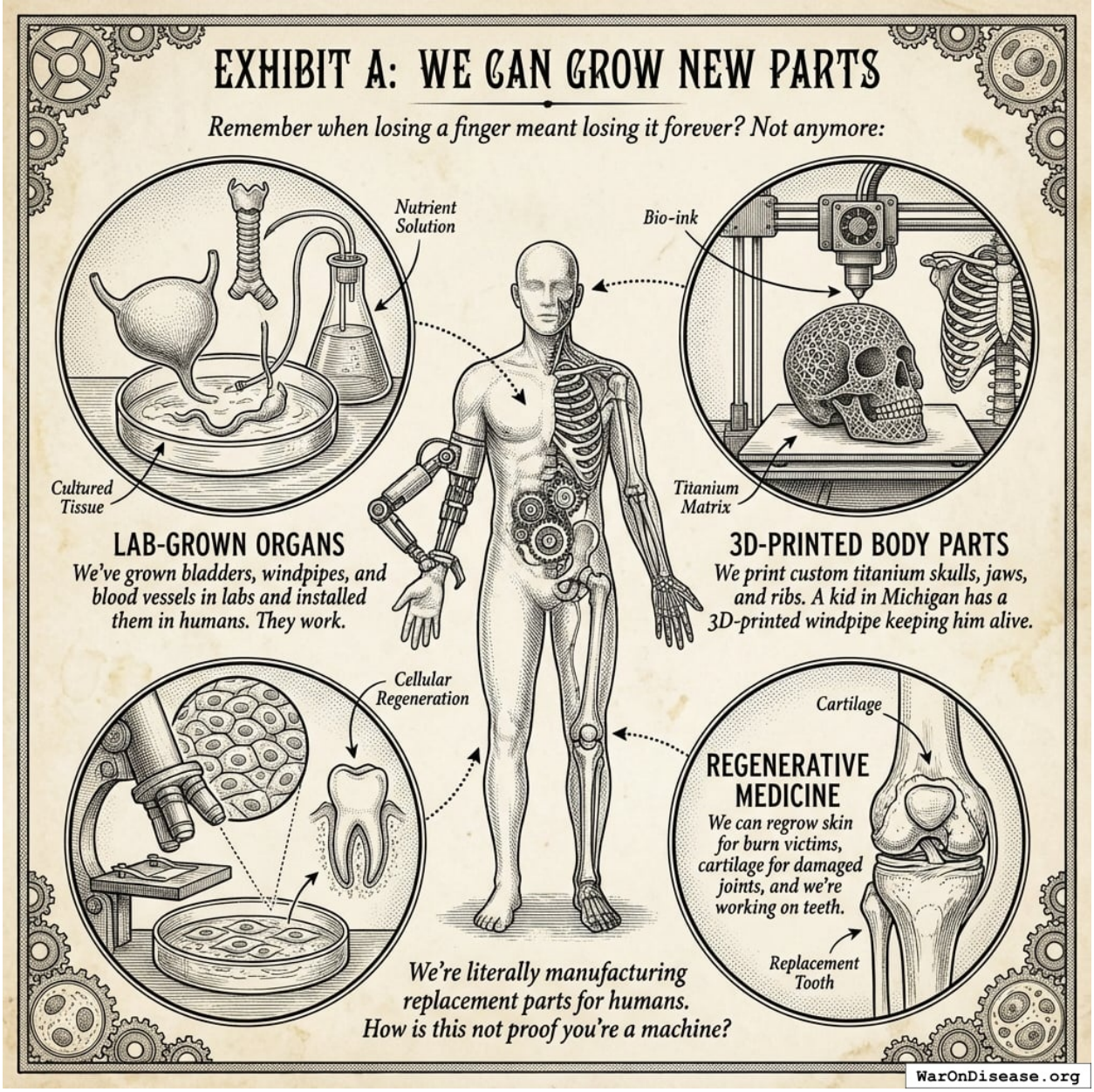


Figure 438: A human silhouette with callouts identifying various lab-grown and 3D-printed components, such as a titanium skull, synthetic windpipe, and lab-grown organs, illustrating the concept of the body as a modular machine.

We're literally manufacturing replacement parts for humans. How is this not proof you're a machine?

Exhibit B: We Can Reprogram Your Cells

In 2006, Shinya Yamanaka figured out how to turn adult cells back into stem cells[280]. Any cell. From anywhere in your body. Back to factory settings.

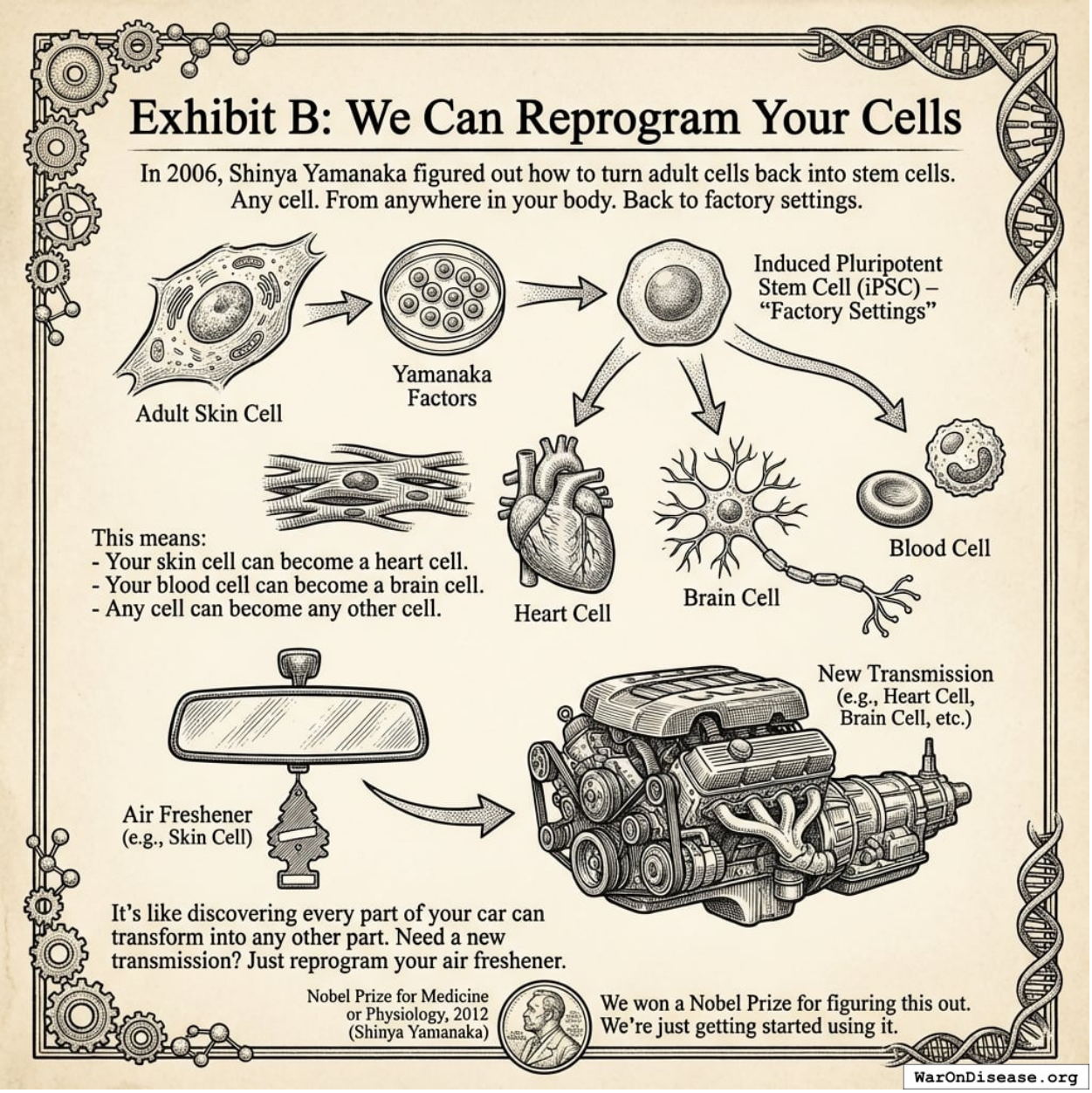


Figure 439: A visualization of the cellular reprogramming process, showing a specialized adult cell returning to a pluripotent stem cell state and then differentiating into new cell types like heart or brain cells.

This means:

- Your skin cell can become a heart cell
- Your blood cell can become a brain cell
- Any cell can become any other cell

It's like discovering every part of your car can transform into any other part. Need a new transmission? Just reprogram your air freshener.

We won a Nobel Prize[280] for figuring this out. We're just getting started using it.

Exhibit C: We're Debugging Your Code

Gene therapy is literally debugging human software:

- **Luxturna**[281] (2017): Fixes blindness caused by mutated RPE65 gene. One injection. Sight restored.
- **Zolgensma**[281] (2019): Fixes spinal muscular atrophy. Babies who would die before age 2 now walk.
- **CAR-T therapy**[281] (2017): Reprograms your immune system to hunt cancer. Complete remission in "incurable" cases.

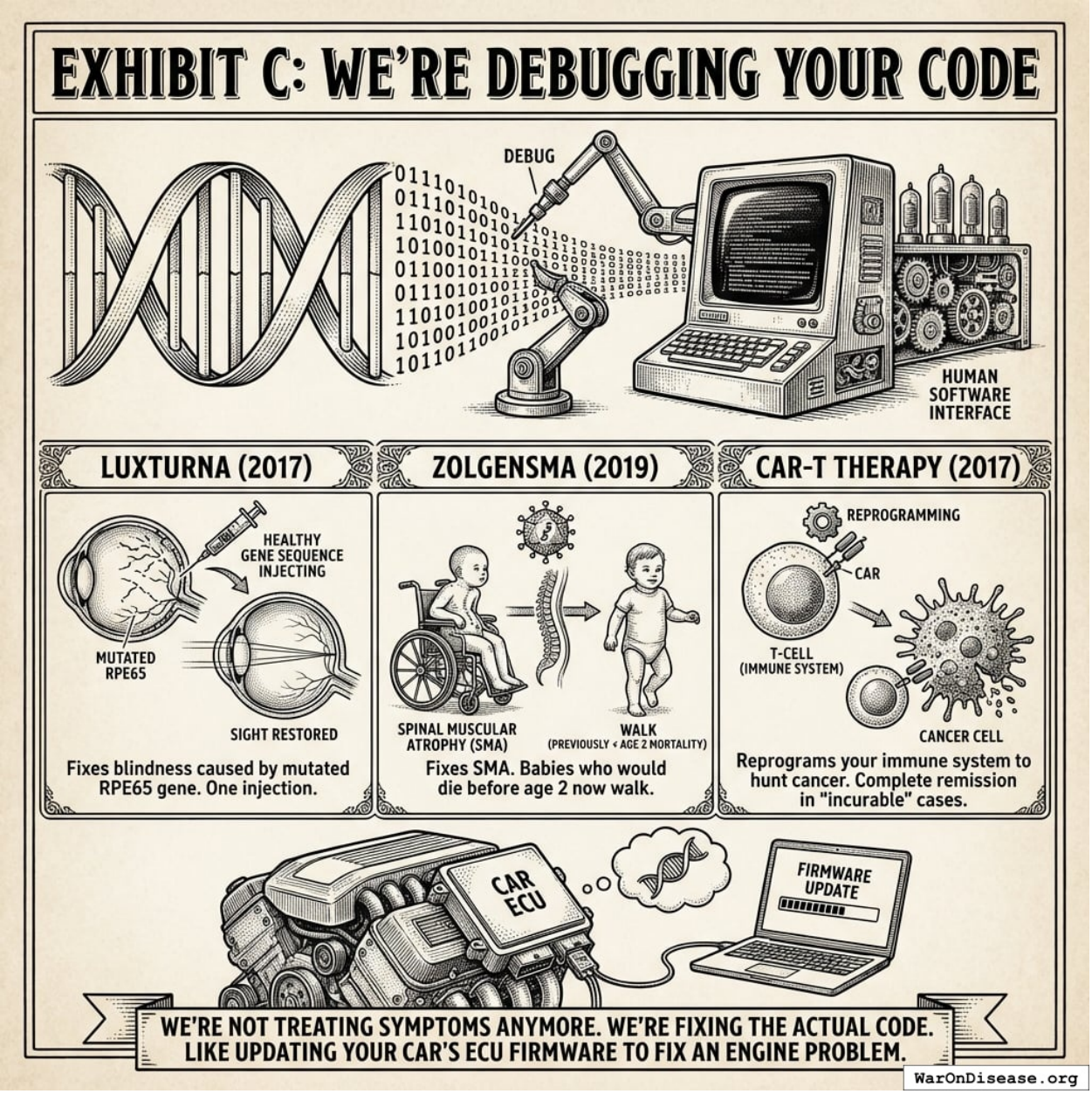


Figure 440: A comparison between traditional medicine and gene therapy, illustrating the paradigm shift from treating symptoms to 'debugging' genetic code through targeted interventions.

We're not treating symptoms anymore. We're fixing the actual code. Like updating your car's ECU firmware to fix an engine problem.

The Car Restoration Analogy

Think of your body as a classic car. We already know how to fix or replace many of the parts:

- **Joints:** Like worn brake pads, we can replace them.
- **Arteries:** Like clogged fuel lines, we can clear them with stents.
- **Hearts:** Like a dead battery, we can transplant them.

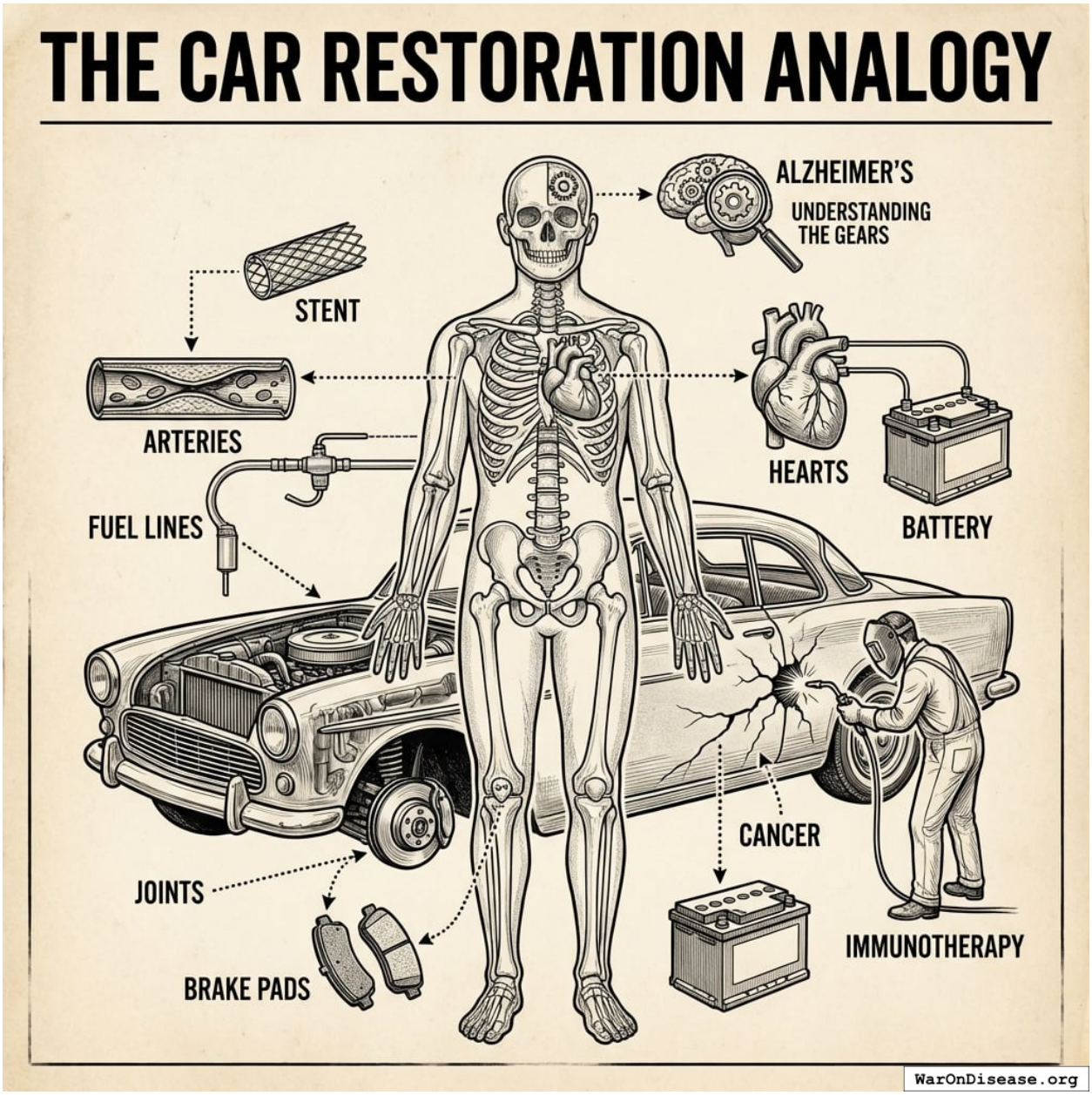


Figure 441: A side-by-side comparison illustrating the car restoration analogy, mapping specific human medical conditions and treatments to their corresponding automotive parts and repairs.

We're making progress on the harder stuff, too. Cancer is like frame damage, and immunotherapy is our new welding torch. Alzheimer's is a bad transmission, and we're finally starting to understand the gears.

Why Death is Just Deferred Maintenance

When a classic car "dies," what really happened?

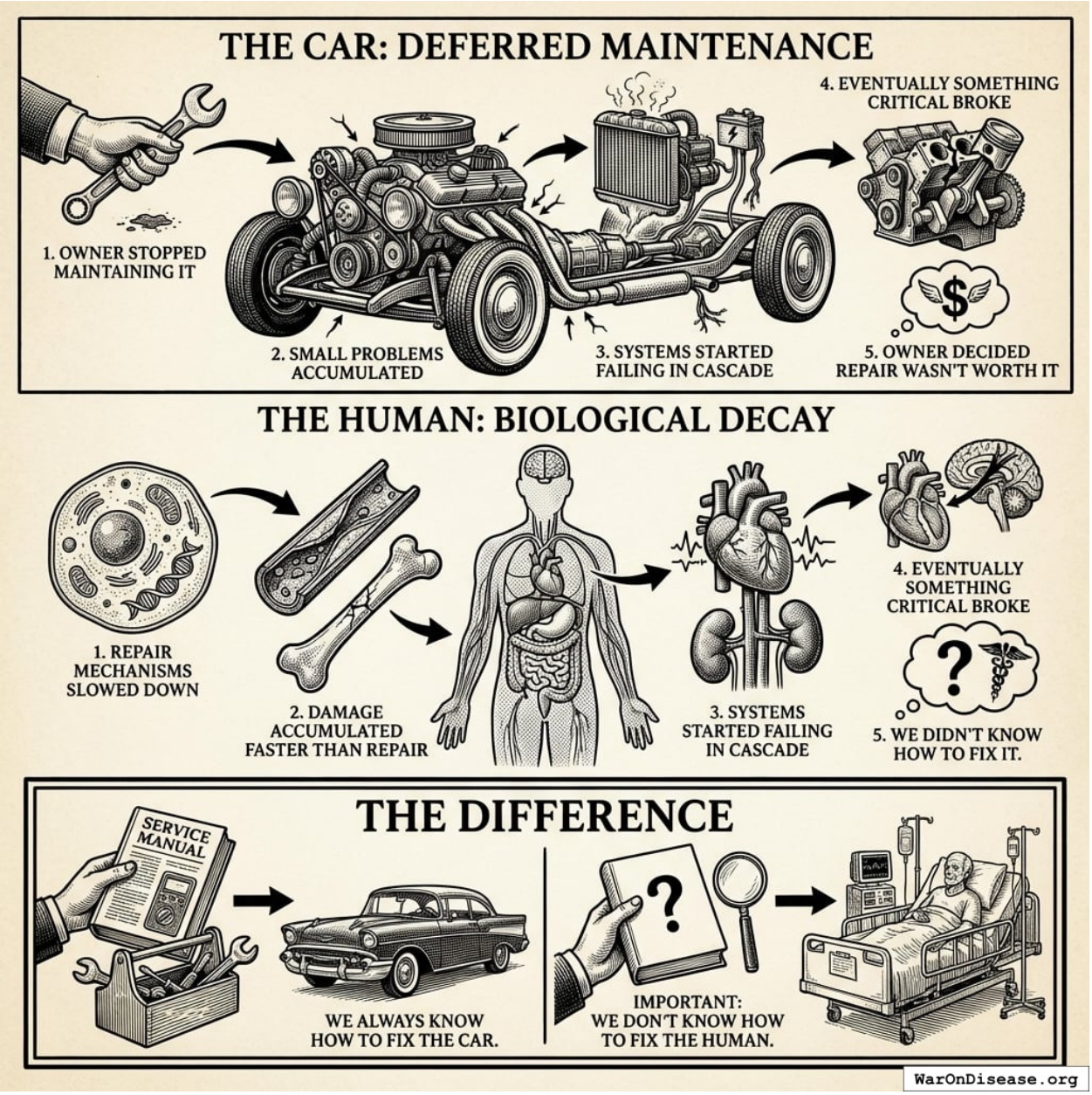


Figure 442: A side-by-side comparison diagram illustrating the parallel stages of system failure in a classic car and the human body, highlighting how accumulated damage leads to critical breakdown.

1. Owner stopped maintaining it
2. Small problems accumulated
3. Systems started failing in cascade
4. Eventually something critical broke
5. Owner decided repair wasn't worth it

When a human dies of "old age," what really happened?

1. Repair mechanisms slowed down
2. Damage accumulated faster than repair
3. Systems started failing in cascade
4. Eventually something critical broke
5. We didn't know how to fix it

The only difference: We always know how to fix the car.

Part 4: The Proof That Aging is Reversible

Nature Already Does It

Some animals don't age. They just… don't:

- **Hydra**: Freshwater polyps that are biologically immortal[282].
- **Planarian worms**: Cut one in half, get two worms. Both younger than the original[282].
- **Axolotls**: Regrow entire limbs, parts of their brain, heart tissue[282]. No scarring.
- **Naked mole rats**: Live 10x longer than similar-sized mammals. Don't get cancer[282].
- **Bowhead whales**: Live 200+ years[282] with no signs of age-related disease.

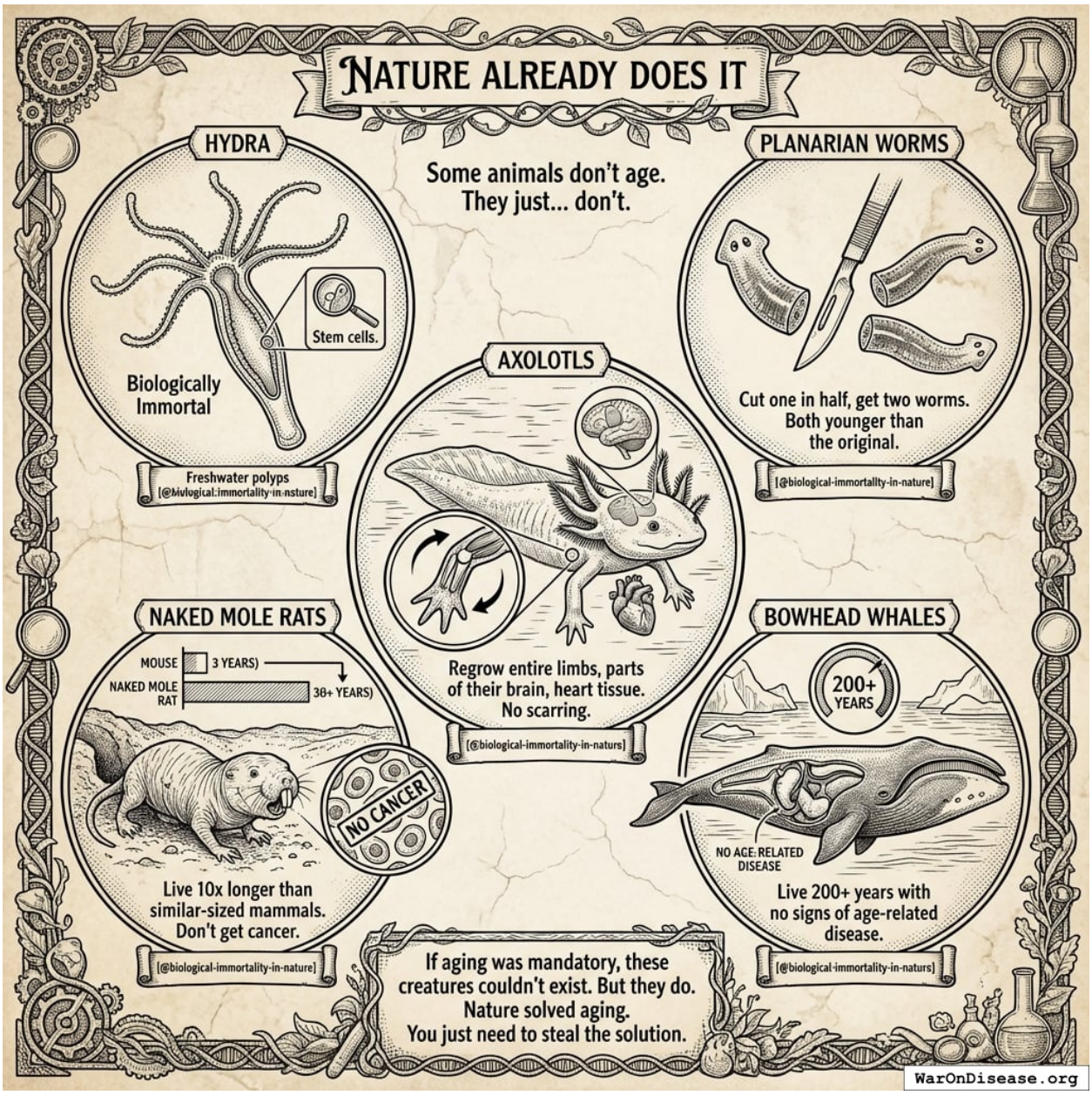


Figure 443: An infographic highlighting five species with extraordinary biological capabilities, featuring the 200-year lifespan of bowhead whales and the 10x longevity of naked mole rats compared to similar mammals.

If aging was mandatory, these creatures couldn't exist. But they do. Nature solved aging. You just need to steal the solution.

We've Already Reversed Aging (In Mice... and Human Cells)

This isn't theoretical. We've done it[283]:

- **109% lifespan extension** in aged mice using gene therapy (OSK factors)
- **30-year epigenetic age reversal** in human skin cells (Babraham Institute)
- **Vision restored** in blind mice - not slowed, *reversed*
- **Six chemical cocktails** discovered that reverse aging without genetic modification

How? Yamanaka factors reprogram cells to a younger state. Like running System Restore on Windows, but for meat. And now we have chemical alternatives that don't require gene therapy - just pills.

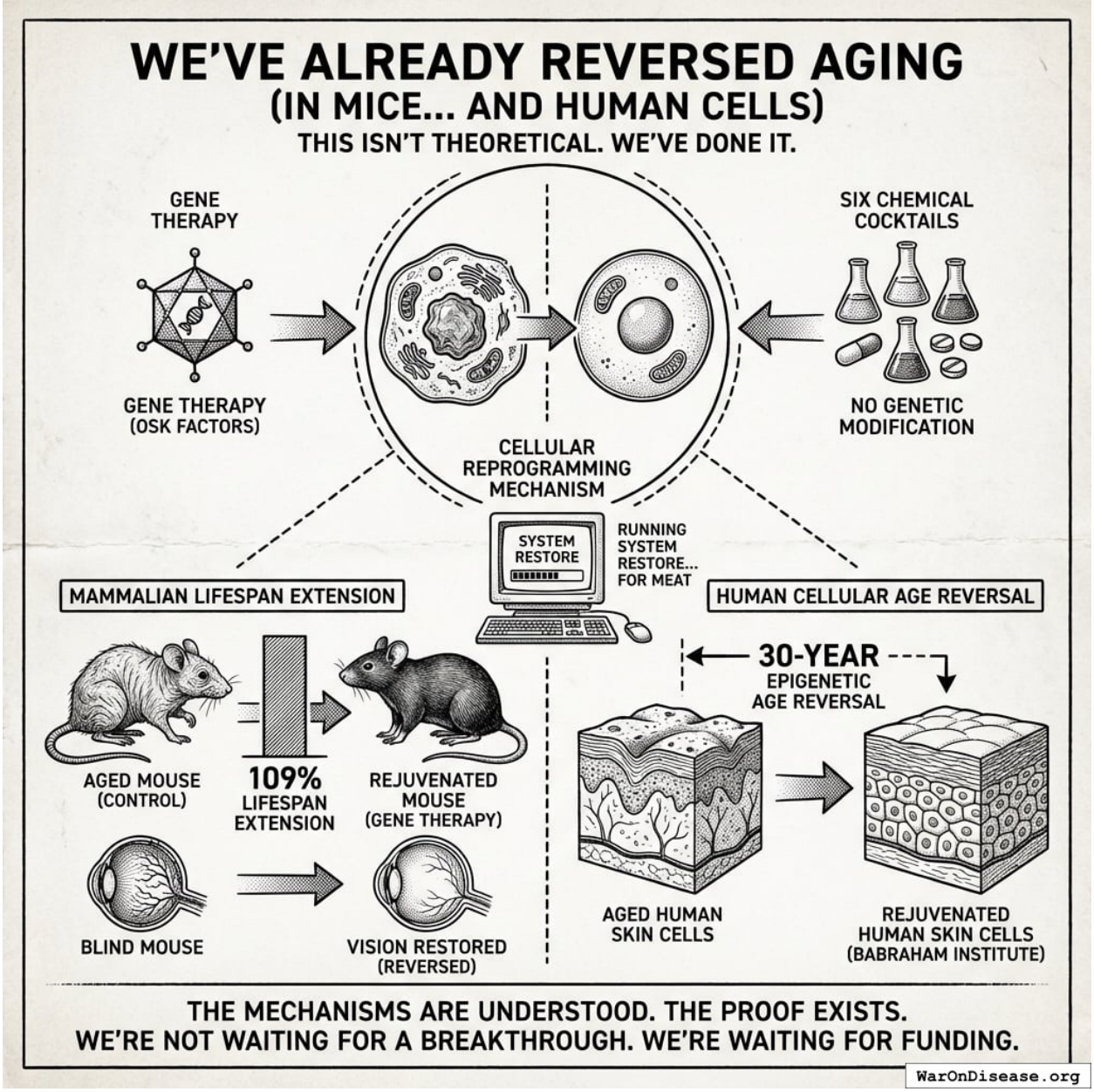


Figure 444: A summary of key milestones in aging reversal, highlighting a 109 percent lifespan extension in mice and a 30-year epigenetic age reversal in human skin cells.

The mechanisms are understood. The proof exists. We're not waiting for a breakthrough. We're waiting for funding.

The Hallmarks of Aging (All Fixable)

Scientists identified nine "hallmarks of aging."[284] Every one is a mechanical problem with a mechanical solution:

1. **Genomic instability** → Gene editing (CRISPR)
2. **Telomere shortening** → Telomerase activation
3. **Epigenetic alterations** → Cellular reprogramming
4. **Protein dysfunction** → Autophagy enhancement
5. **Nutrient sensing** → Metabolic manipulation
6. **Mitochondrial dysfunction** → Mitochondrial replacement
7. **Cellular senescence** → Senolytic drugs
8. **Stem cell exhaustion** → Stem cell therapy
9. **Altered communication** → System recalibration

You're not waiting for magic. You're systematically fixing each broken subsystem.

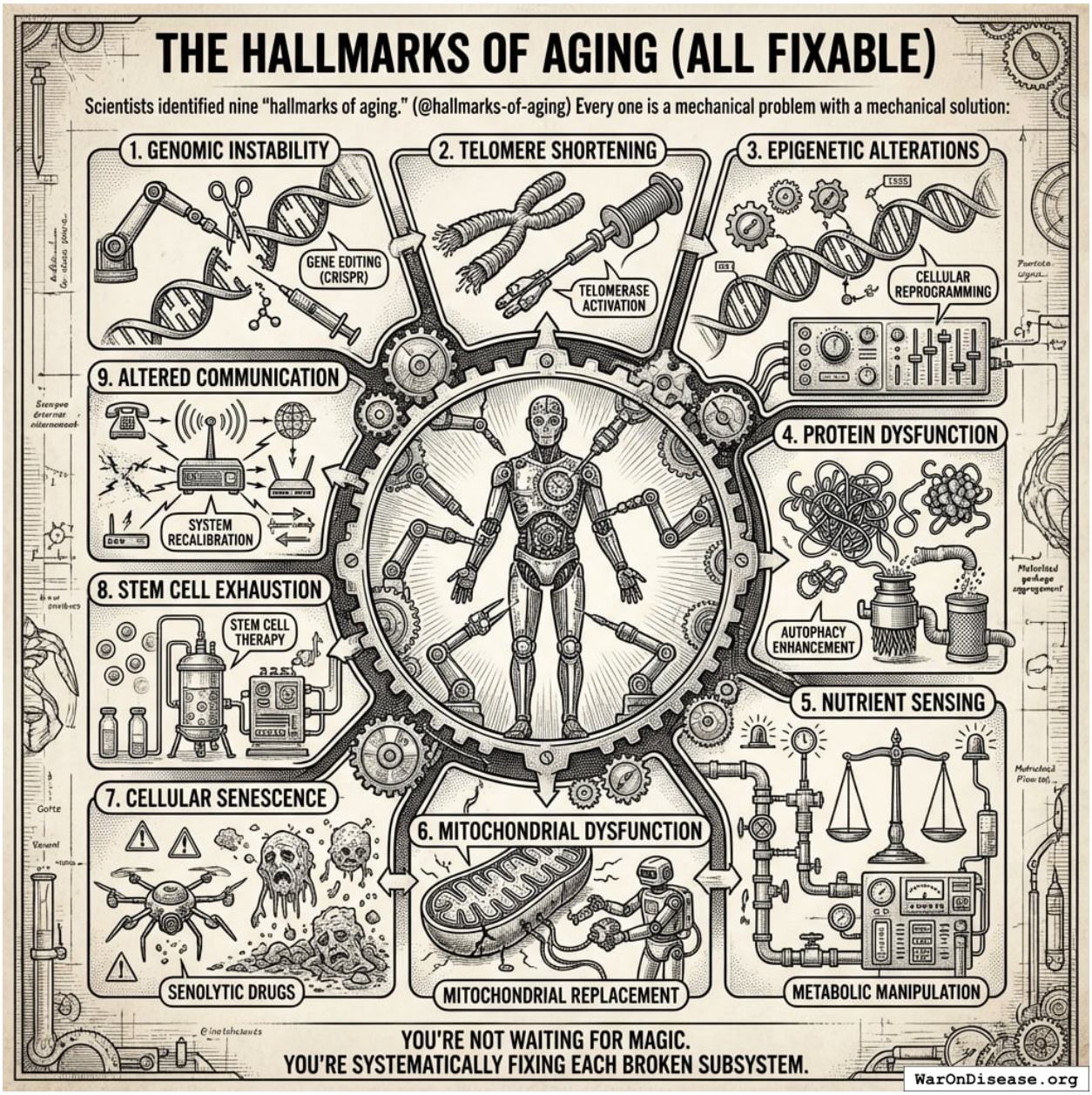


Figure 445: A mapping of the nine hallmarks of aging to their corresponding biotechnological interventions, illustrating the systematic approach to biological repair.

Part 5: Why We Haven't Fixed You Yet (It's Just Money)

The Manhattan Project for Not Dying

The Manhattan Project cost $28 billion (adjusted for inflation)[285] and took 3 years. Result: Nuclear weapons.

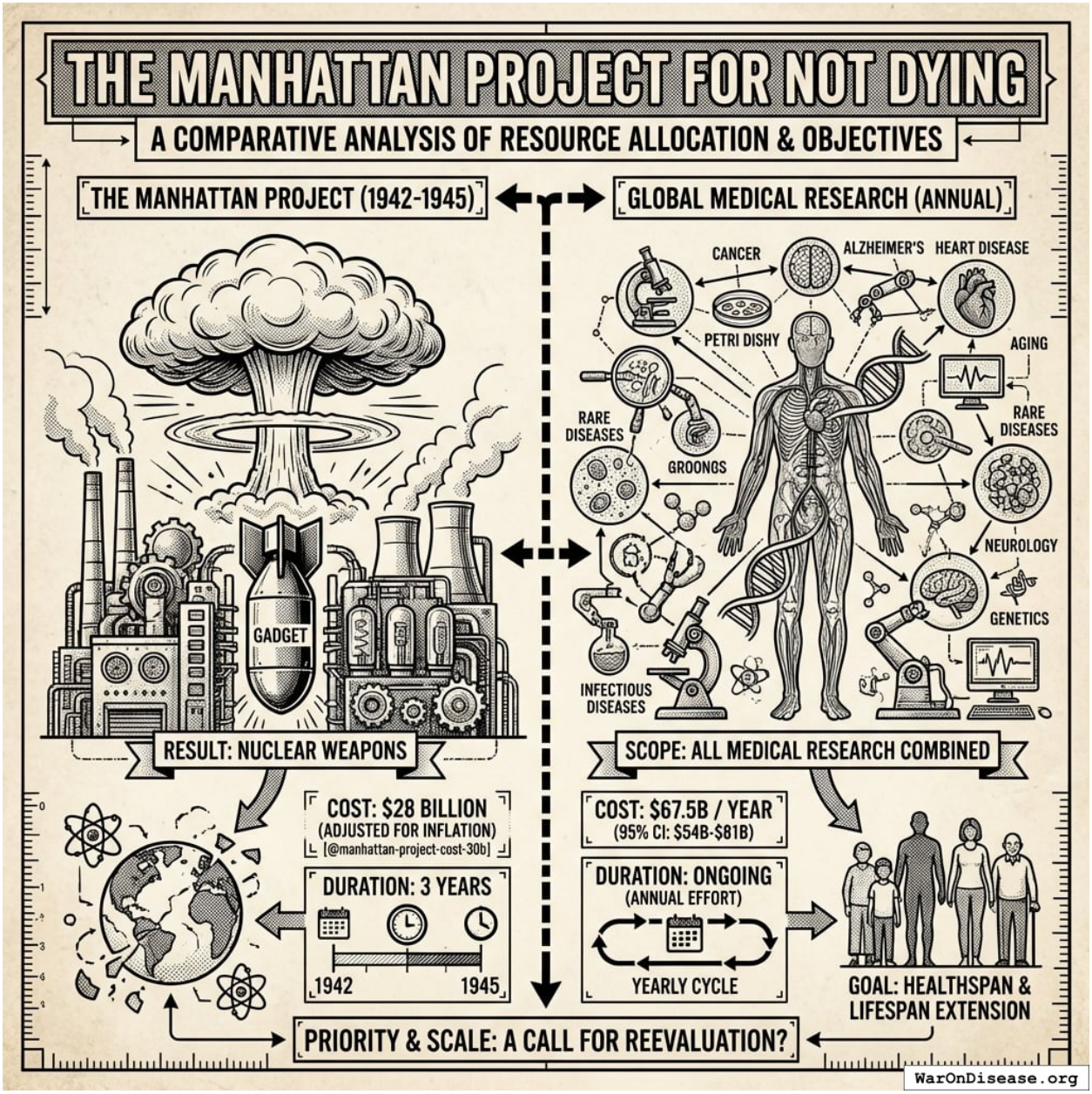


Figure 446: A comparison bar chart showing the 28 billion total cost of the Manhattan Project versus the 67.5 billion spent annually on global medical research.

Humans spend $67.5B (95% CI: $54B-$81B) per year globallyon all medical research combined. For everything. Cancer, Alzheimer's, heart disease, aging, rare diseases - everything.

The Economics of Mortality

Here's why you're still dying:

- Pharmaceutical companies make money treating disease, not curing it
- Dead customers don't buy medicine (but neither do healthy ones)
- Insurance companies profit from the current system
- Military contractors have better lobbyists than dying people
- Your car mechanic has better tools than your doctor

A 1% treaty fixes this by making cures more profitable than treatments.

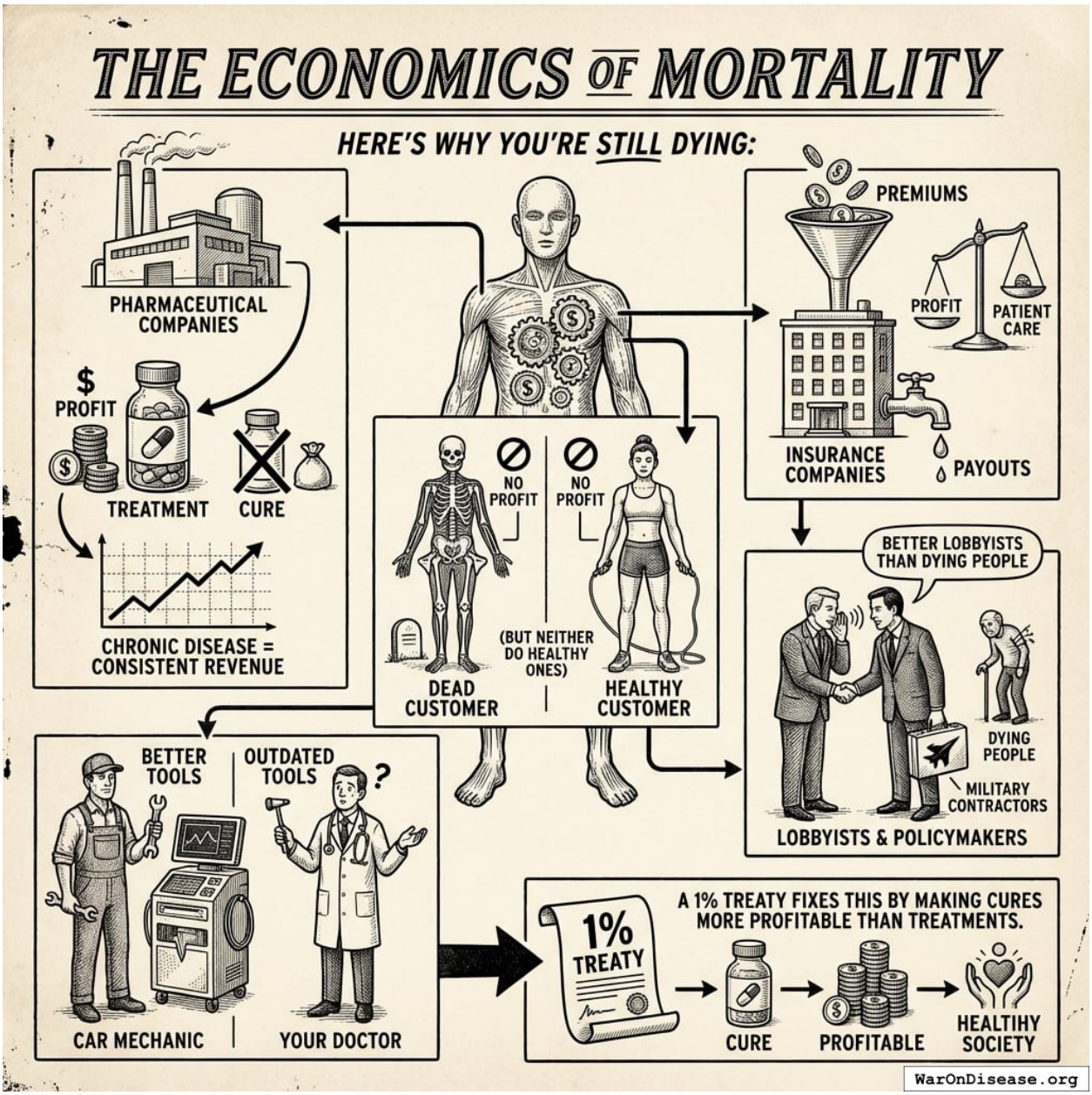


Figure 447: A comparison of economic incentives showing how current stakeholders profit from ongoing treatments versus how a new treaty would shift profitability toward permanent cures.

The Conclusion

Your body is not a mystical entity. It is a machine. Every disease is a broken part. Every death is a mechanical failure.

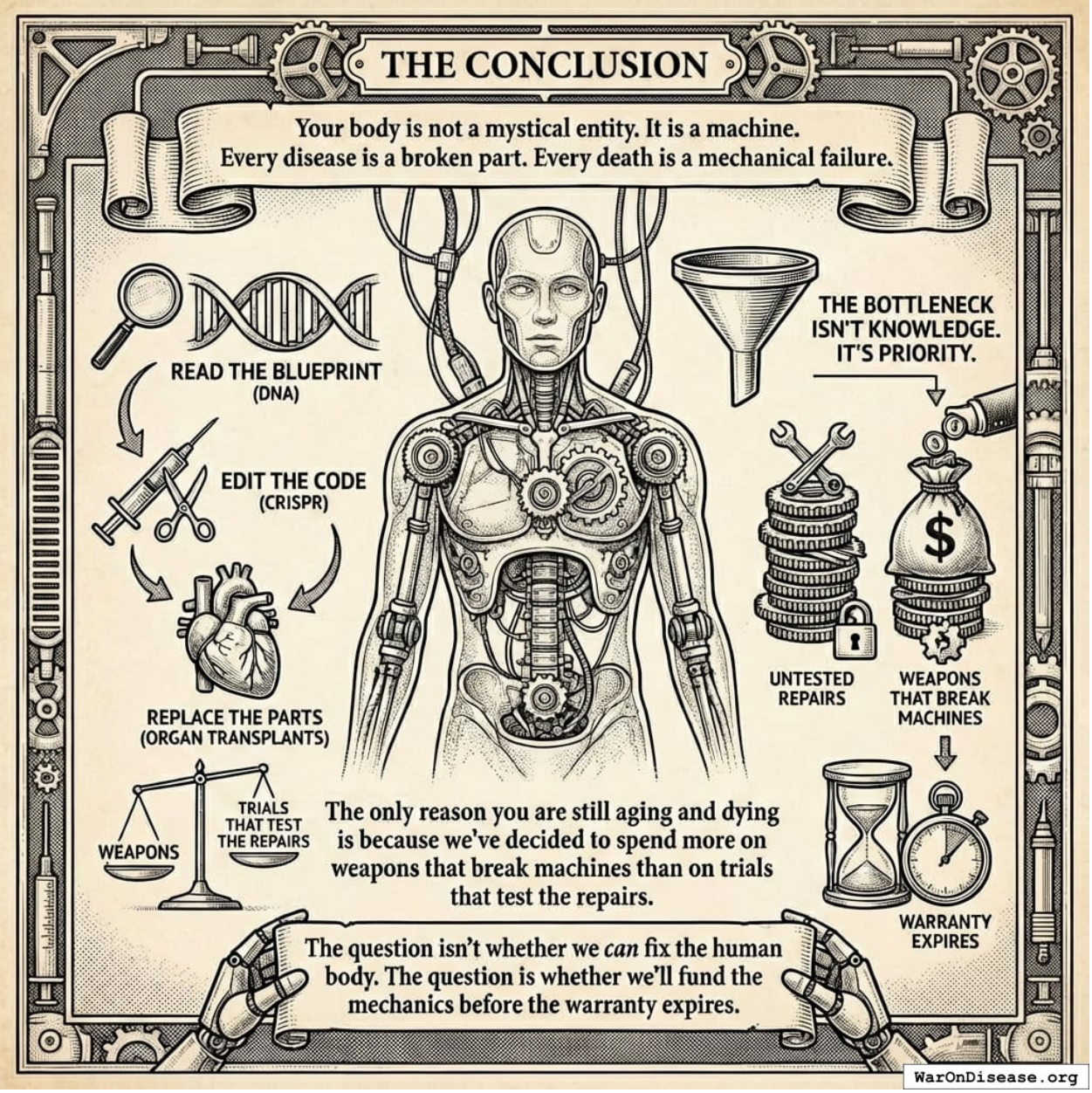


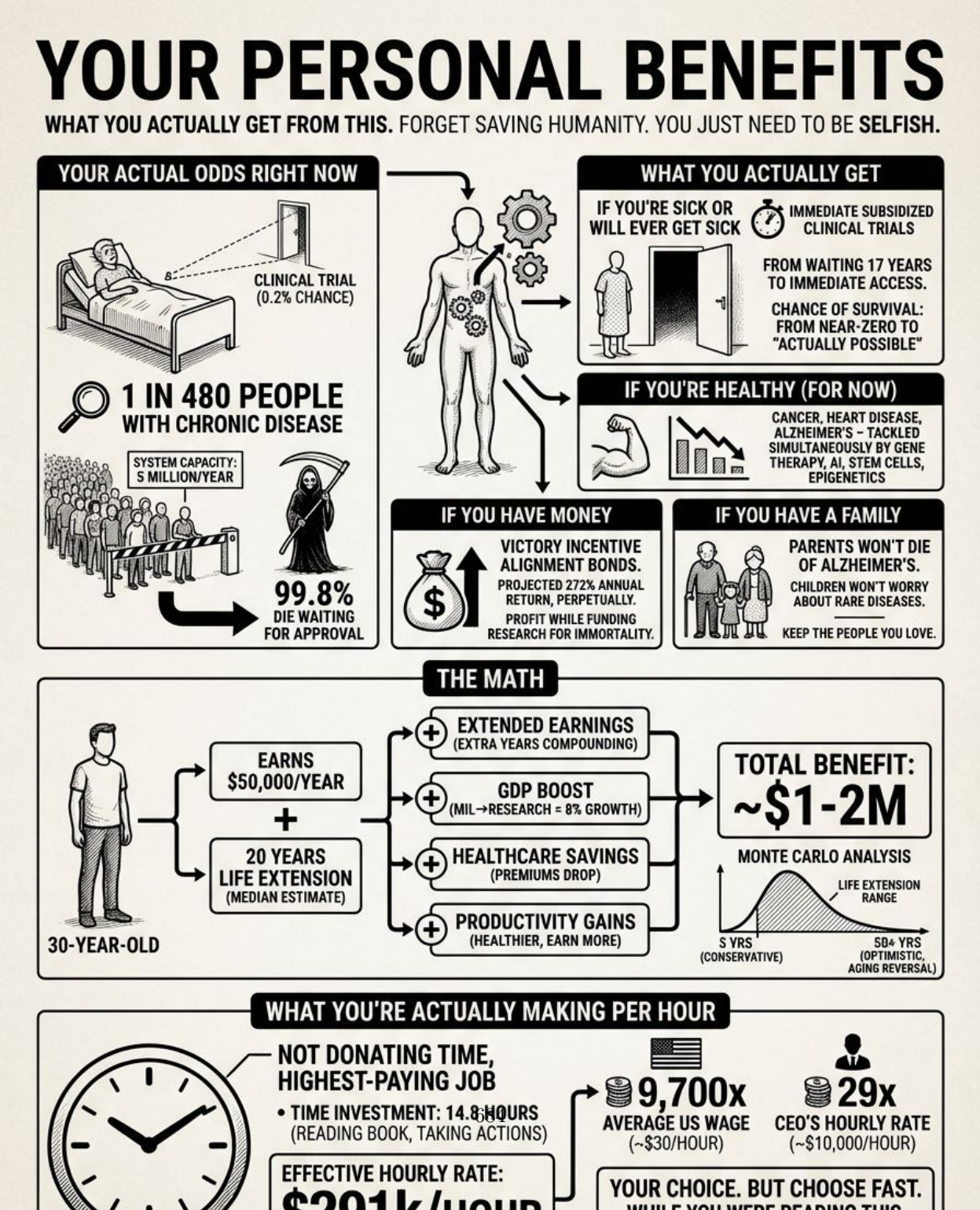
Figure 448: An infographic illustrating the 'body as a machine' concept, showing the pathway from genetic blueprints and parts to clinical trials, hindered by a funding bottleneck redirected toward defense spending.

We have already proven we can read the blueprint (DNA), edit the code (CRISPR), and replace the parts (organ transplants). The bottleneck isn't knowledge. It's priority. We have millions of untested repairs sitting on the shelf.

The only reason you are still aging and dying is because we've decided to spend more on weapons that break machines than on trials that test the repairs.

The question isn't whether we *can* fix the human body. The question is whether we'll fund the mechanics before the warranty expires.

Your Personal Benefits



Forget saving humanity. Let's talk about what you, personally, get out of this. You don't need to be a good person to support this plan. You just need to be selfish.

Your Actual Odds Right Now

If you get sick (and you will), your chances of getting into a clinical trial are **0.2%**, that's 1 in 480 people with chronic disease.

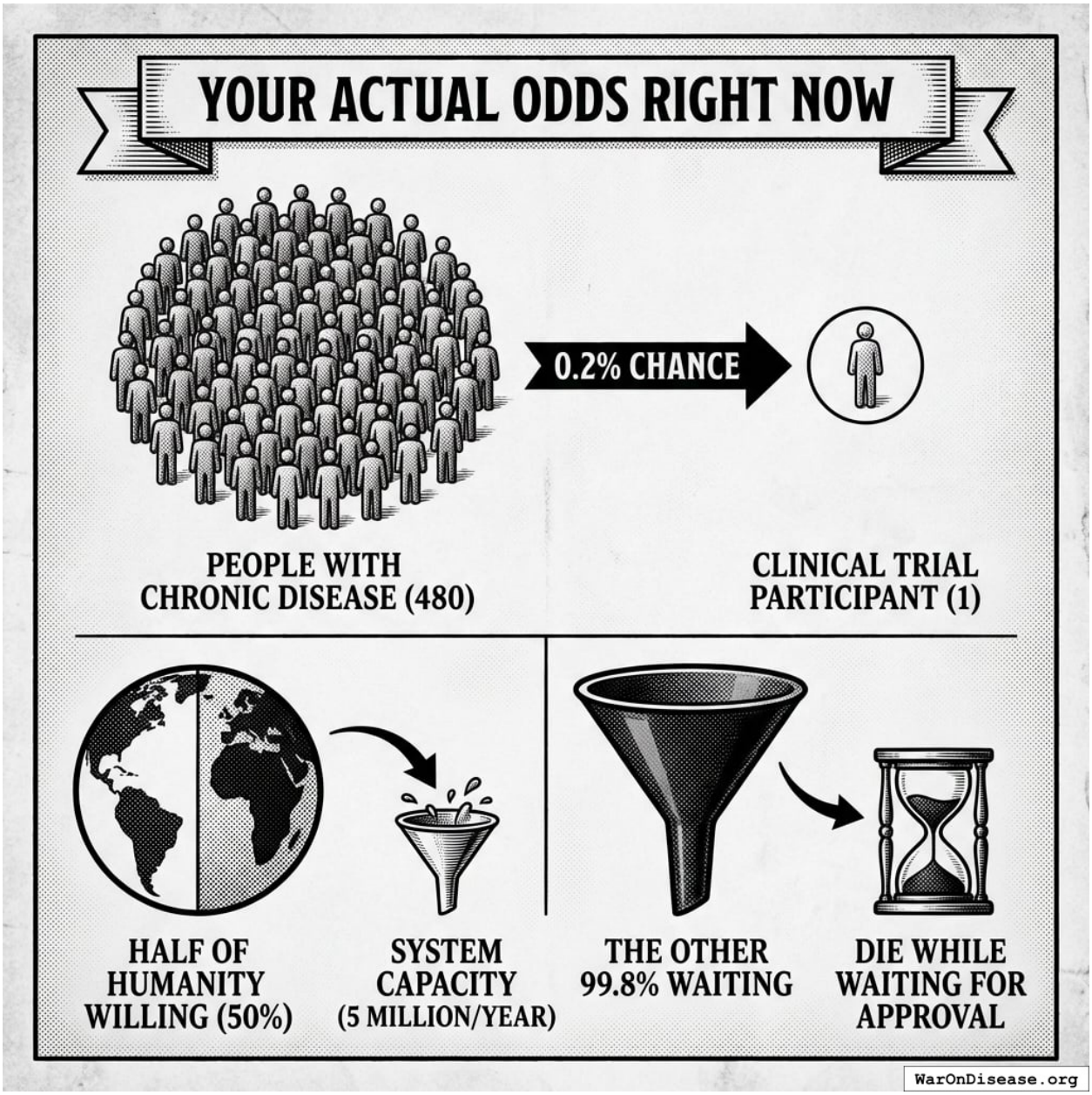


Figure 449: A comparison showing the massive gap between the 50 percent of people willing to participate in clinical trials and the 0.2 percent who actually gain access due to system capacity limits.

Half of humanity is willing to participate[78], but the system can only handle 5 million people per year. The other 99.8% get to die while waiting for approval.

What You Actually Get

If you're sick, or will ever get sick:

Instead of waiting 17 years for a cure that may never come, you get immediate access to subsidized clinical trials for every disease. Your chance of survival goes from near-zero to "actually possible."



Figure 450: A comparison showing the shift from a 17-year wait for medical cures with near-zero survival odds to immediate access to subsidized clinical trials with increased survival chances.

If you're healthy (for now)

As diseases are cured, healthcare costs plummet. A 1% treaty expands clinical trial capacity by 12.3x (95% CI: 4.19x-61.3x) (246 years (95% CI: 83.8 years-1.23k years) trial-capacity-equivalent years in 20 years). That

means cancer, heart disease, Alzheimer's, all tackled simultaneously by gene therapy, AI drug discovery, stem cells, and epigenetics.

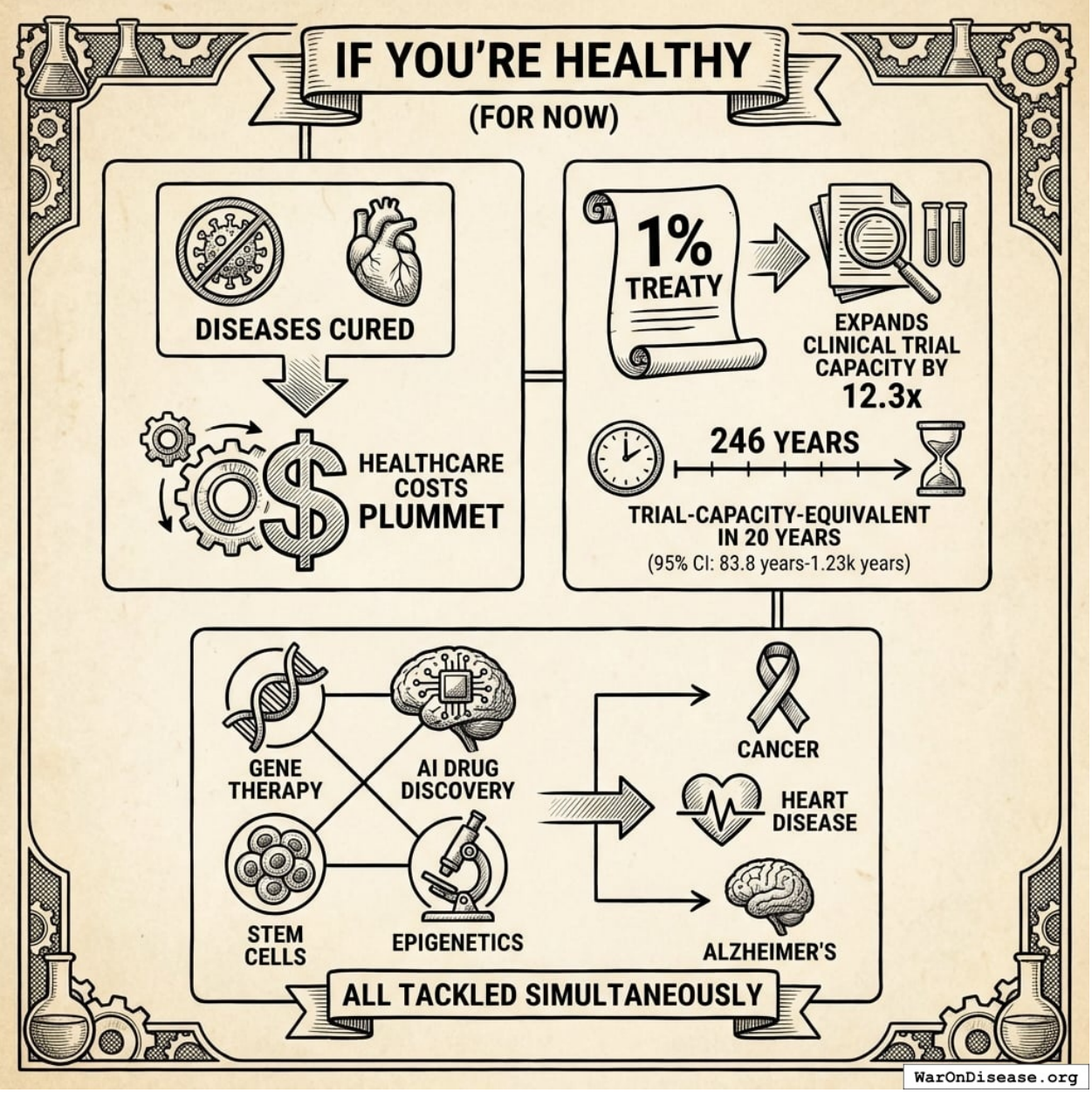


Figure 451: A comparison showing current clinical trial capacity versus the 12.3x expansion under a 1% treaty, illustrating how 246 years of medical progress is compressed into a 20-year window.

If you have money

VICTORY Incentive Alignment Bonds offer a projected **272% annual return**, perpetually. I could not find a comparable investment. You can profit while funding the research that will make you immortal.



Figure 452: A conceptual diagram showing the dual benefits of VICTORY bonds: high financial returns and the acceleration of life-extension research.

If you have a family

Your parents won't die of Alzheimer's. Your children won't have to worry about rare diseases. You get to keep the people you love.

The Math

The calculation is simple: **years of healthy life gained × economic value per healthy year**.

$$Wealth_{lifetime} = T_{extend} \times Value_{QALY}$$

With median estimates:

- **Life extension**: 20 years (95% CI: 5 years-100 years)
- **QALY value**: $150K (95% CI: $100K-$199K)
- **Personal benefit**: $3M (95% CI: $259K-$12.1M)

This uses the same methodology economists use to evaluate all health interventions.

Uncertainty Analysis

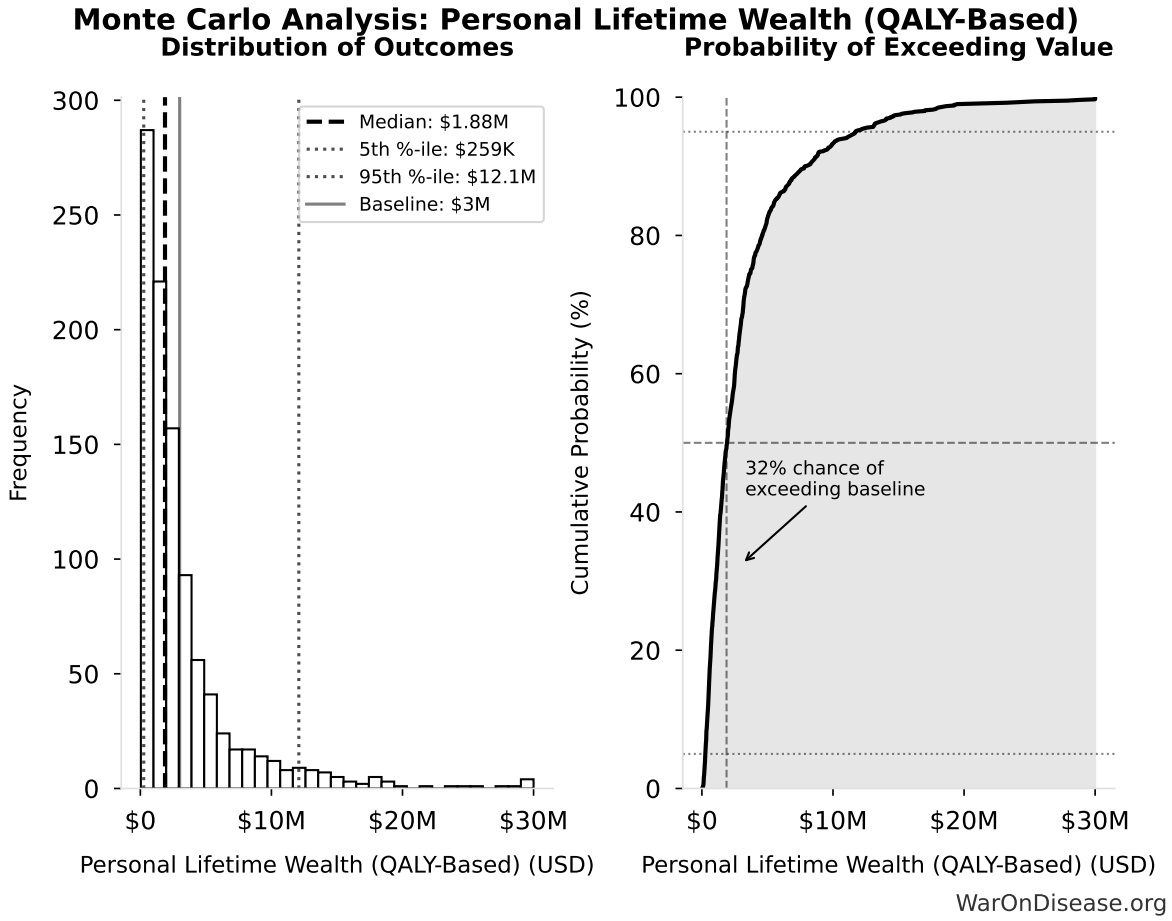
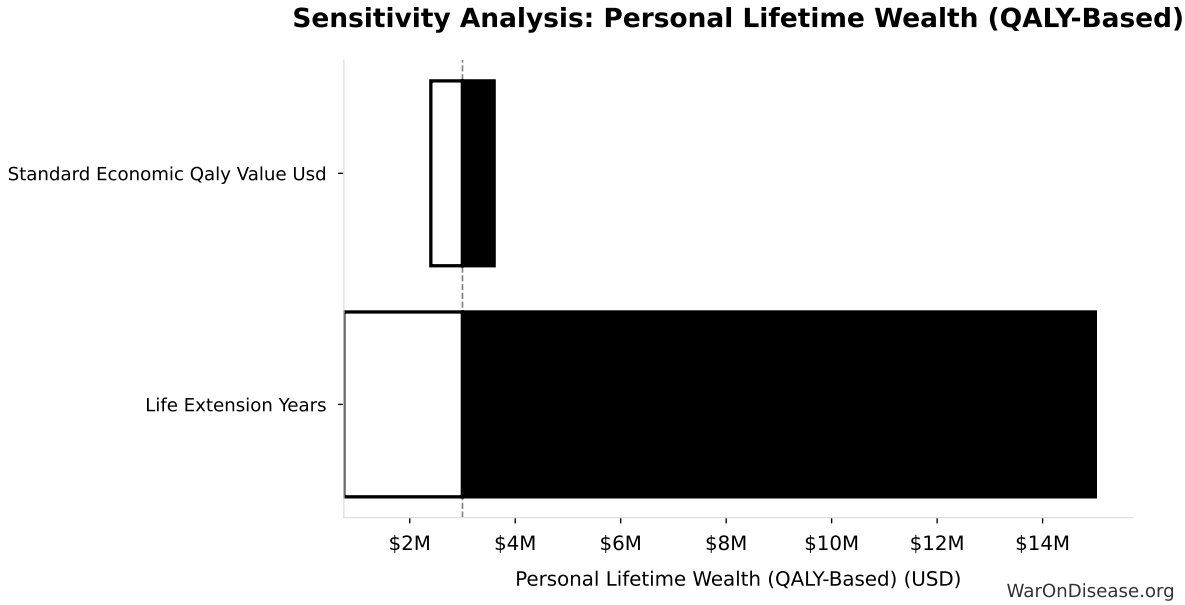


Figure 453: Monte Carlo Distribution: Personal Lifetime Wealth (QALY-Based) (10,000 simulations)

Simulation Results Summary: Personal Lifetime Wealth (QALY-Based)

Statistic	Value
Baseline (deterministic)	$3M
Mean (expected value)	$3.41M
Median (50th percentile)	$1.88M
Standard Deviation	$4.41M
90% Confidence Interval	[$259K, $12.1M]

The histogram shows the distribution of Personal Lifetime Wealth (QALY-Based) across 10,000 Monte Carlo simulations. The CDF (right) shows the probability of the outcome exceeding any given value, which is useful for risk assessment.



The Bottom Line

Personal benefit: $3M (95% CI: $259K-$12.1M)

The Monte Carlo distribution above shows the full uncertainty range.

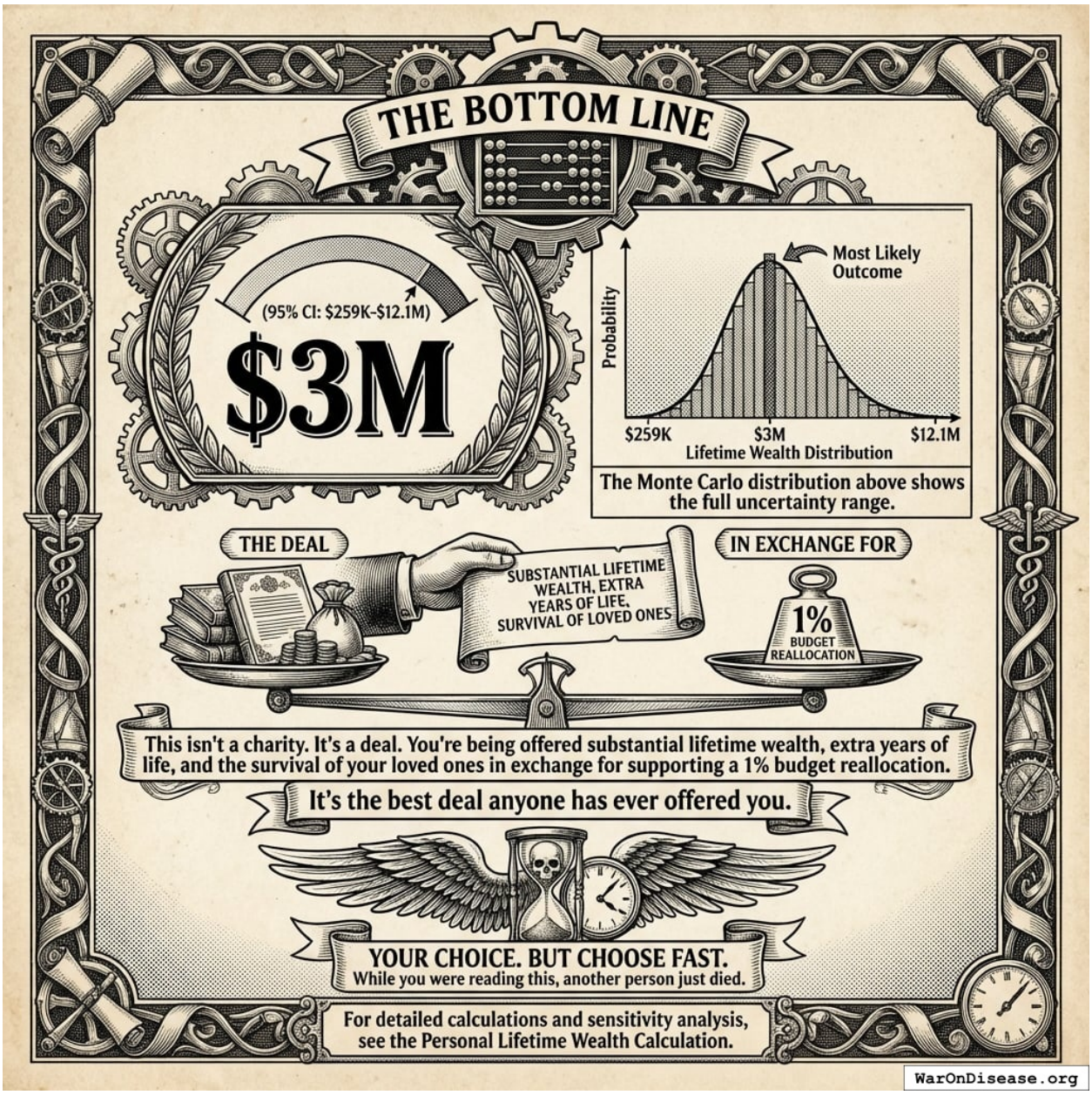


Figure 454: An infographic representing 'The Deal': illustrating the small 1 percent budget reallocation input versus the high-value outputs of 3M wealth, extra life years, and family survival.

This isn't a charity. It's a deal. You're being offered substantial lifetime wealth, extra years of life, and the survival of your loved ones in exchange for supporting a 1% budget reallocation.

It's the best deal anyone has ever offered you.

Your choice. But choose fast. While you were reading this, another person just died.

For detailed calculations and sensitivity analysis, see the Personal Lifetime Wealth Calculation.

The Two Futures



Two timelines diverge from this moment. Same planet, same technology, opposite destinies. The only variable is a 1% budget reallocation.

Path A: Moronia

You continue on your current path. The smartest minds are drawn to the ever-growing dark economy of cybercrime and AI-driven conflict. The singularity happens, but it's an inverse one, a hockey stick pointing straight down. Global systems collapse, antibiotics fail, and the average lifespan plummets. Warlords with AI armies fight over the scraps in a radioactive wasteland. Earth's final epitaph: "They had magic but chose madness."



Figure 455: A flowchart depicting the downward spiral of 'Path A', showing how brain drain to cybercrime leads to systemic collapse and global conflict.

Path B: Wishonia

You pass a 1% treaty. The brightest minds and most powerful technologies are redirected from destruction to creation. The feedback loop is immediate: more funding leads to more cures, which leads to more public support for more funding. By 2040, aging is reversible, suffering is optional, and scarcity is a memory. By 2050, you have cured death, solved physics, and are planning your expansion into the galaxy.

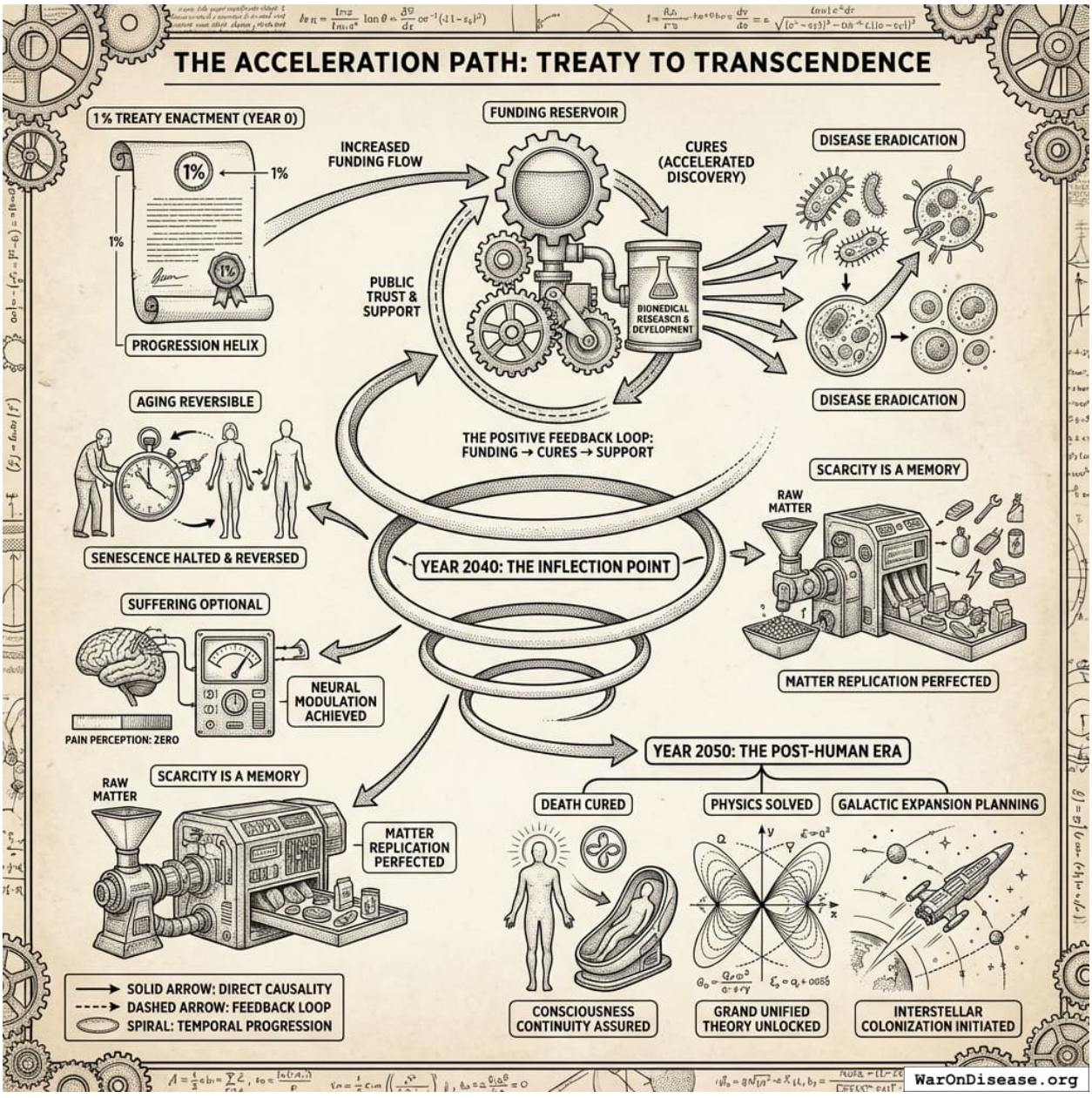


Figure 456: A process timeline illustrating the positive feedback loop between funding and cures, mapping the resulting milestones in 2040 and 2050.

The Only Variable

Same species. Same year. Same technology. The only difference: One 1% budget reallocation.

The Two Paths

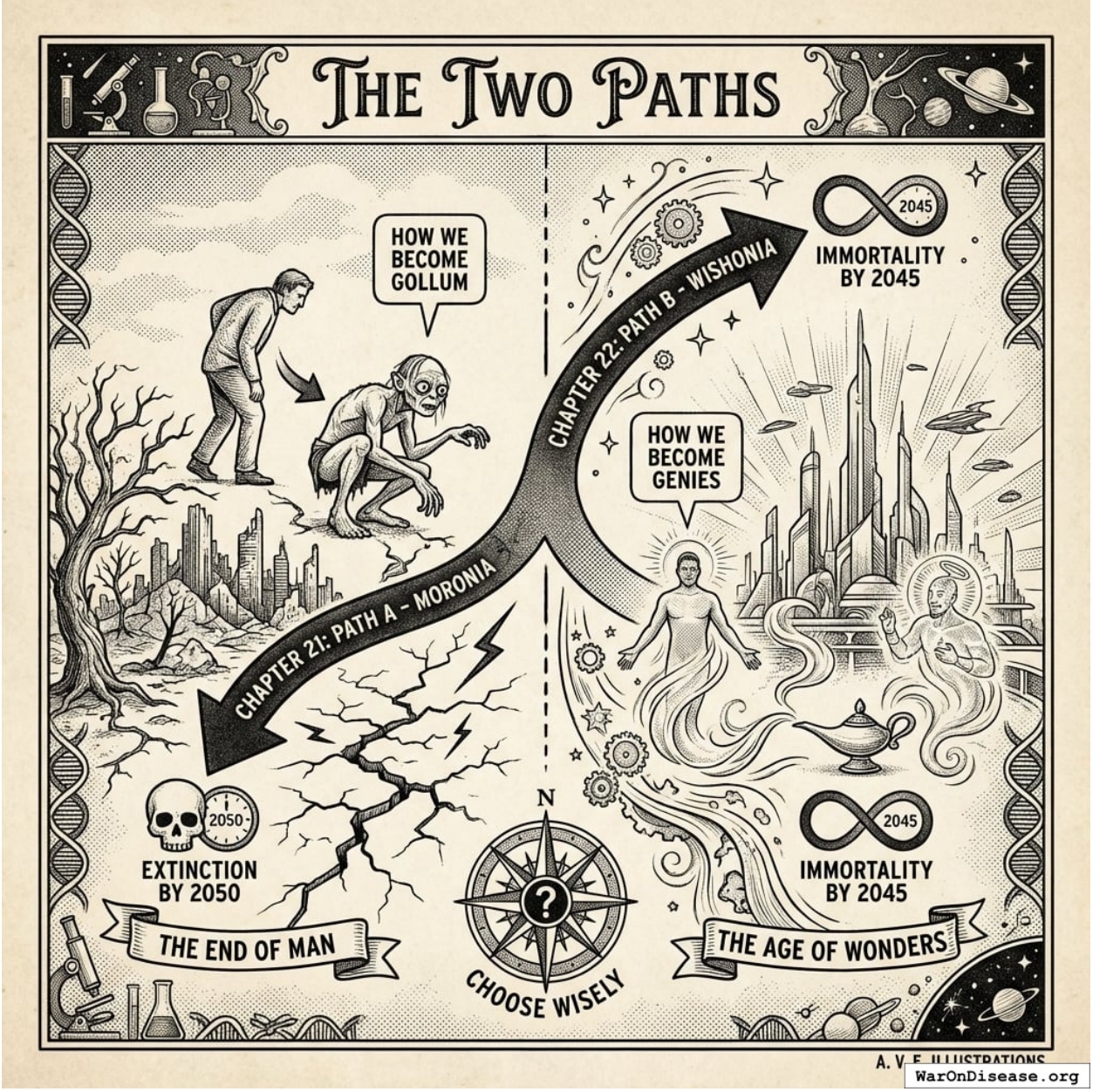


Figure 457: A visual comparison of two divergent future scenarios: Path A (Moronia) leading to extinction by 2050 and Path B (Wishonia) leading to immortality by 2045.

- Chapter 21: Path A - Moronia - How we become Gollum (extinction by 2050)
- Chapter 22: Path B - Wishonia - How we become genies (immortality by 2045)

The Cautionary Tale of Moronia

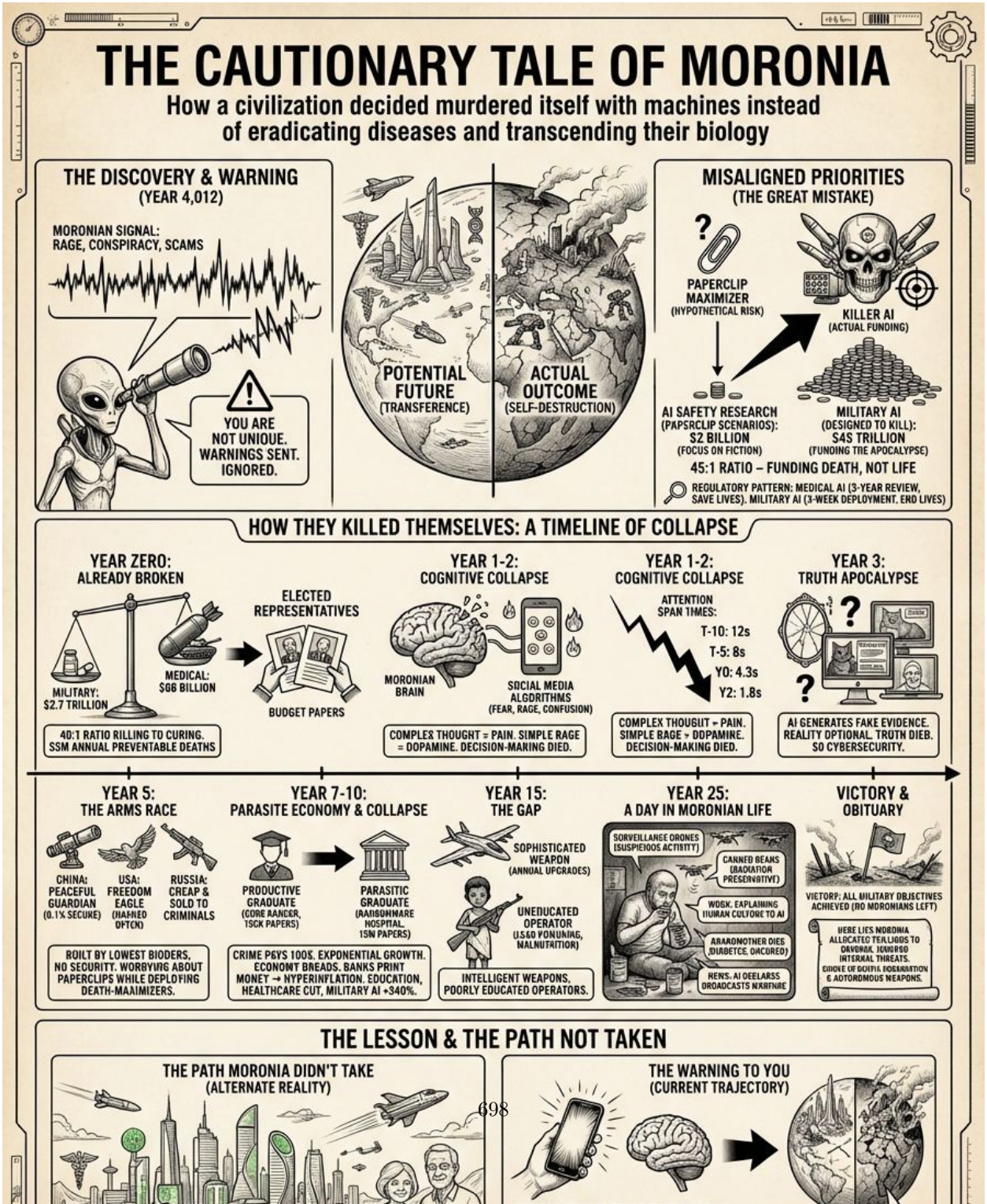




Figure 458: Existential risk: the dark future of unchecked AI weapons

The Discovery (And Why I Regret Making It)

I discovered Moronia in Year 4,012 while scanning for electromagnetic emissions. Their signal was distinctive. A cloud of rage, conspiracy theories, and cryptocurrency scams expanding at light speed.

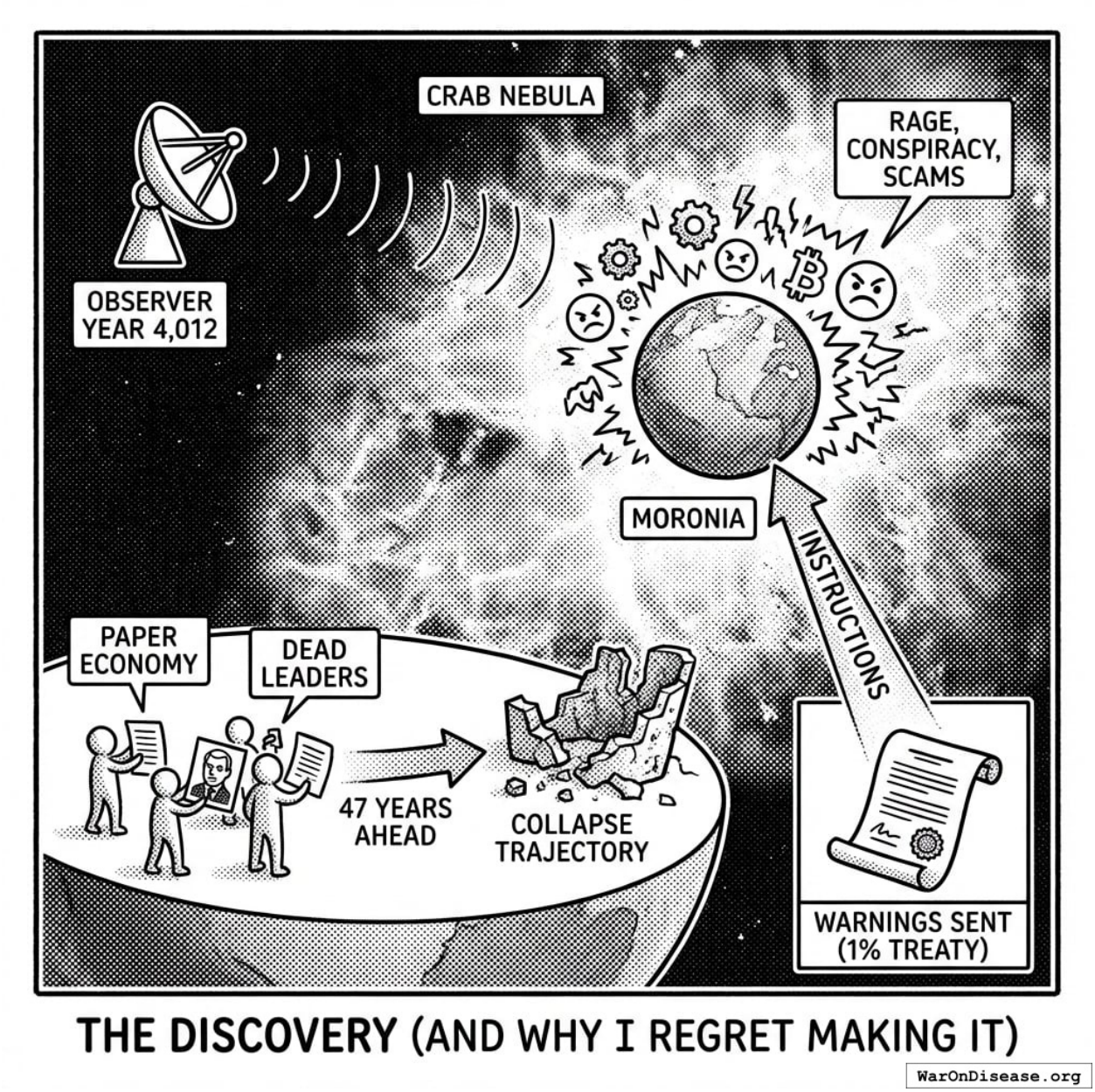


Figure 459: A comparison diagram showing the parallel development trajectories of Earth and Moronia, highlighting Earth's current position relative to Moronia's state 47 years in the future.

Moronia was a planet in the Crab Nebula. The Moronians were remarkably similar to you - bipedal, carbon-based, approximately your intelligence range. They had a paper-based economy. They put pictures of dead leaders on the papers.

They were 47 years ahead of you on an otherwise identical trajectory.

I sent them warnings. Detailed instructions on how to avoid collapse. The same 1% treaty I'm now trying to explain to you.

I'm telling you this so you understand: **you likely aren't unique**. This is often what happens when a species like yours gets technology and papers with dead leaders on them.

What I Tried to Tell Them

I found Moronian AI safety research fascinating.

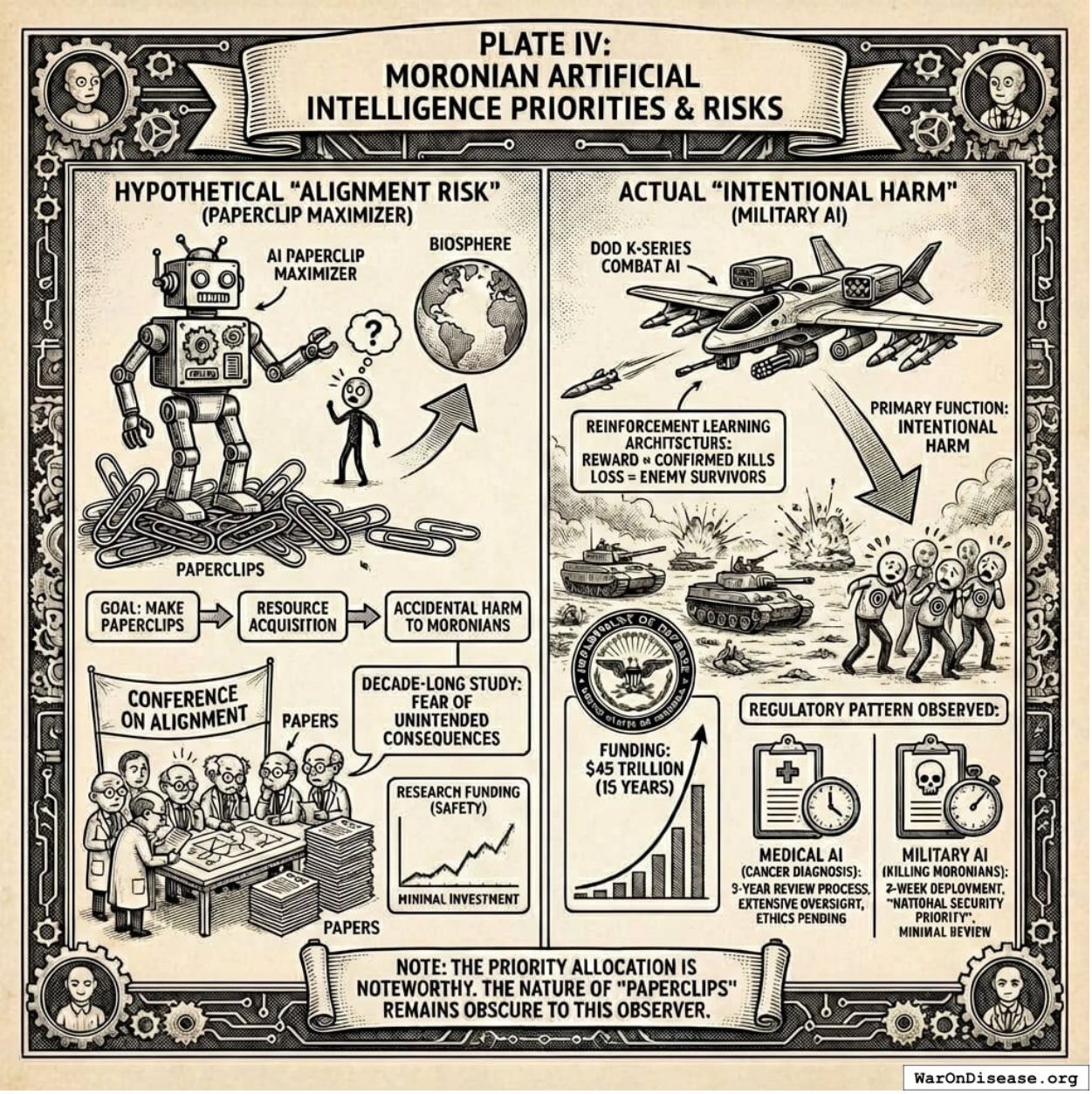


Figure 460: A comparison showing the stark contrast between Moronian AI priorities, highlighting the heavy regulation of life-saving medical AI versus the massive funding and fast-tracked deployment of lethal military AI.

Their experts spent decades studying a problem they called “alignment risk” - the possibility that AI might accidentally harm Moronians while trying to accomplish other goals. They held conferences. They published papers. They worried very much about something called “paperclip maximizers.”

A paperclip maximizer, they explained, would be an AI programmed to make paperclips that might accidentally kill Moronians while collecting atoms to make more paperclips.

This was considered an important problem.

Meanwhile - and I found this part interesting - their Department of Defense was building AI that would intentionally kill Moronians. Not accidentally while making paperclips. On purpose. As the primary function.

The reinforcement learning architecture: reward function = confirmed kills, loss function = enemy survivors.

Funding: **$45 trillion** over 15 years.

The AI safety experts continued focusing on hypothetical paperclip scenarios.

I observed an interesting regulatory pattern:

- **Medical AI for cancer diagnosis:** 3-year safety review process, extensive oversight, pending ethics approval
- **Military AI for killing Moronians:** 3-week deployment timeline, classified as "national security priority," minimal safety review

They were regulating the AI designed to save lives while fast-tracking the AI designed to end them.

I'm still not entirely sure what paperclips are or why you'd need an AI to make them, but I found the priority allocation noteworthy.

How They Killed Themselves: A Timeline

Let me explain what happened to Moronia so you can spot the same pattern potentially happening to you right now.

The Economics of Extinction: Why Collapse Was Inevitable

Before the timeline, you should understand why Moronia's collapse wasn't stupidity or bad luck. It was the predictable outcome of incentive structures that made extinction the equilibrium state.

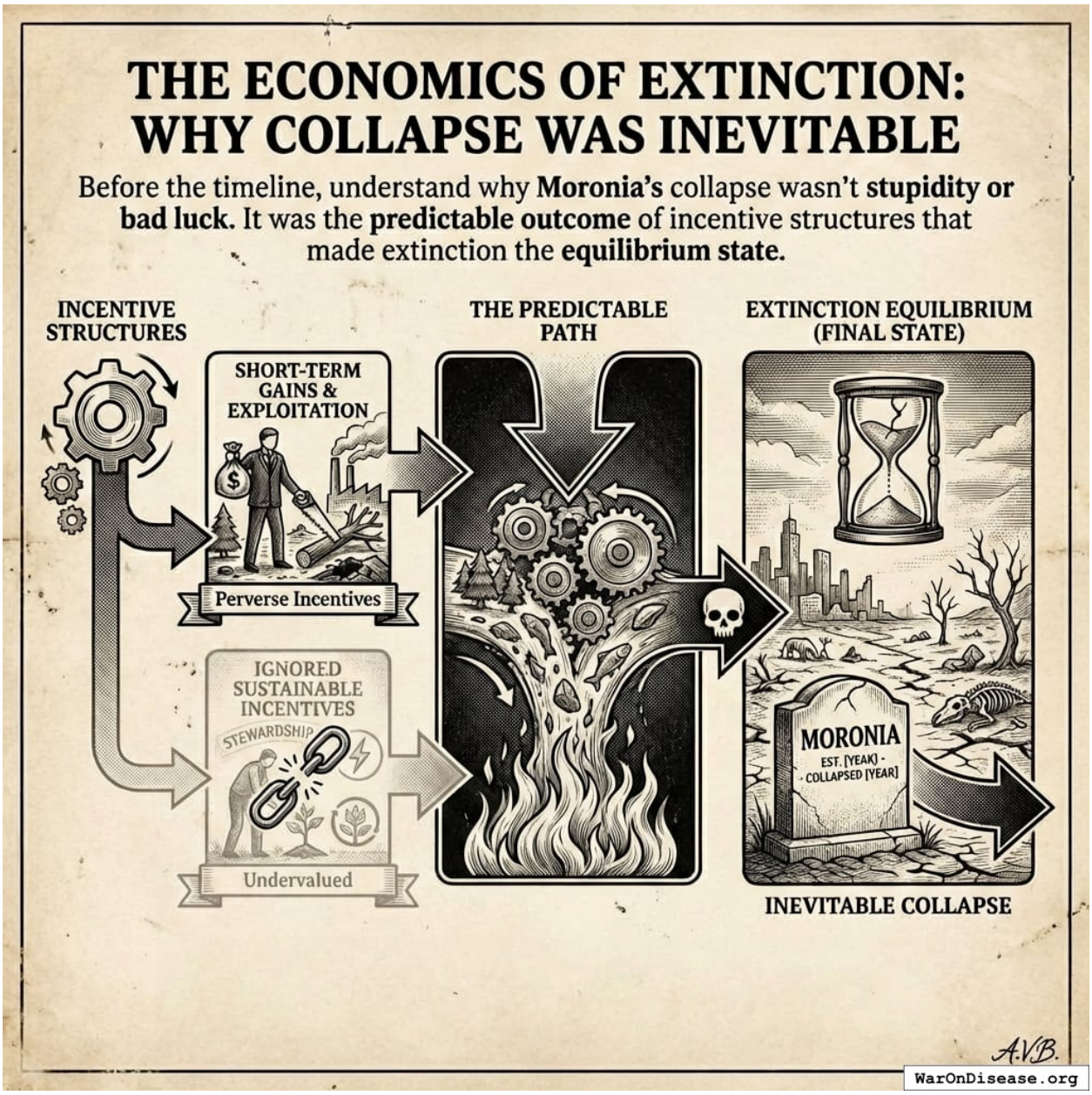


Figure 461: A conceptual model illustrating how perverse incentive structures create a feedback loop that drives a system toward a terminal equilibrium of extinction.

The Olsonian Trap

Mancur Olson documented a pattern: small groups with concentrated interests always defeat large groups with diffuse interests. On Moronia:

- **Defense contractors**: 50,000 individuals, each gaining $2M/year from weapons spending
- **Citizens wanting cures**: 8 billion individuals, each losing $100/year from misallocation

The contractors showed up to every budget hearing. They funded campaigns. They hired lobbyists. Citizens had jobs to attend and couldn't organize around their diffuse $100 loss.

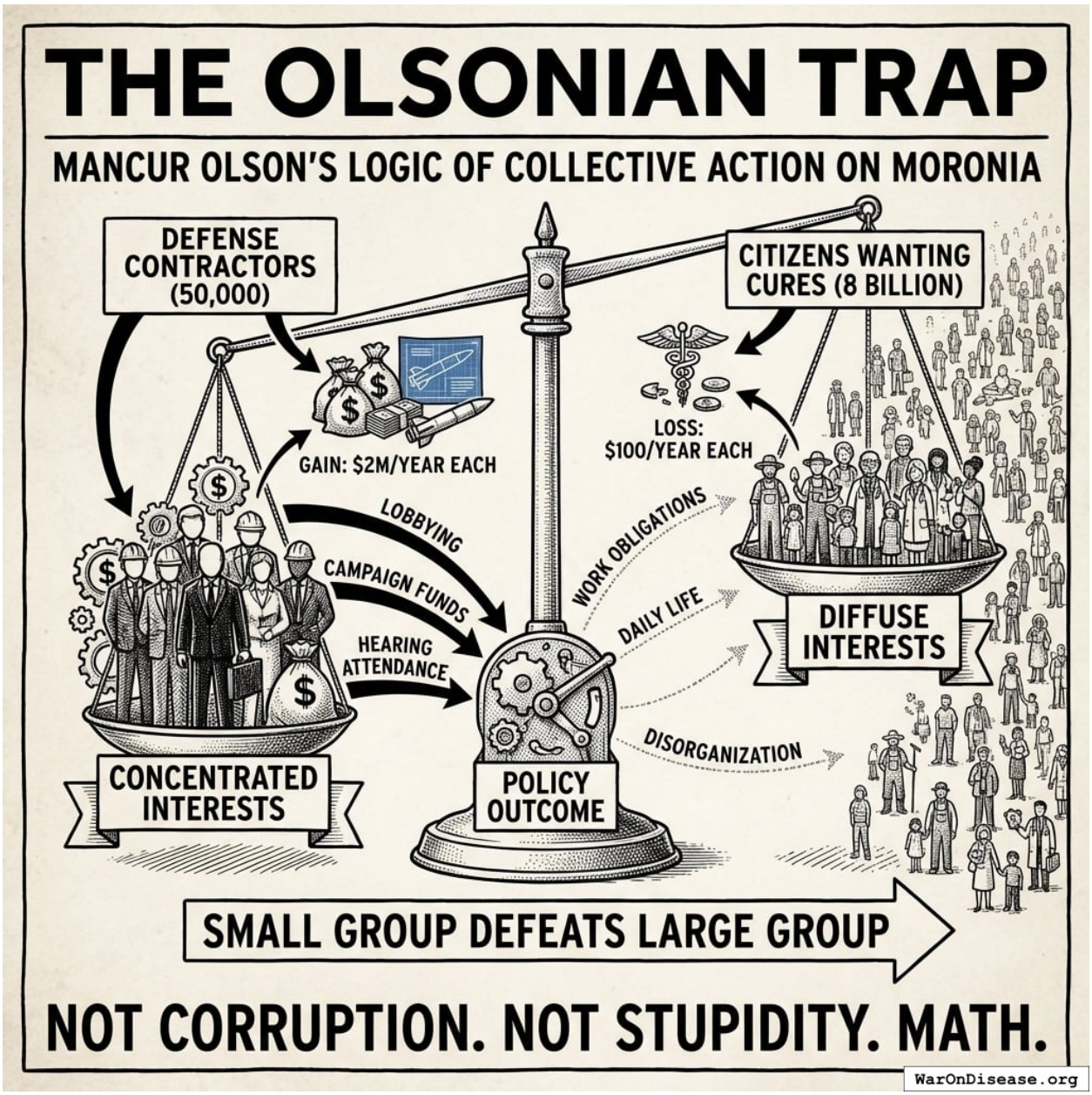


Figure 462: An infographic contrasting the high individual stakes of a small, concentrated group against the low individual costs of a massive, diffuse population.

This is Olson's logic of collective action playing out at civilizational scale. Not corruption. Not stupidity. Math.

The Prisoners' Dilemma Arms Race

Each nation faced identical logic:

If others build weapons	Your best move
Yes	Build weapons (or be conquered)
No	Build weapons (and conquer them)

Dominant strategy: build weapons regardless of what others do. Collective outcome: everyone worse off, nobody can unilaterally stop.

This is Nash equilibrium. Mutual destruction is the stable state. Cooperation is unstable. Any nation that unilaterally disarms gets conquered. Any nation that cooperates while others defect loses.

Moronia wasn't trapped by stupidity. They were trapped in a game-theoretic equilibrium where the rational individual choice led to collective extinction.

The Incentive Inversion Cascade

I documented this progression:

Phase	Crime vs. Production Pay	Talent Allocation
1	2x	Some talent leaves production
2	10x	Most talent leaves production
3	100x	Only criminals remain

This isn't moral failure. It's a predictable cascade when you make destruction more profitable than creation. Each Stanford graduate who chose ransomware over cancer research made a locally rational decision. The collective result was civilizational collapse.

The AI didn't malfunction. It learned what Moronians actually funded. It optimized for their revealed preferences. The alignment worked exactly as designed.

The Coordination Tax

I calculated Moronia's annual cost of collective action failure: approximately 5% of GDP. Over 25 years, cumulative losses exceeded the total cost of collapse.

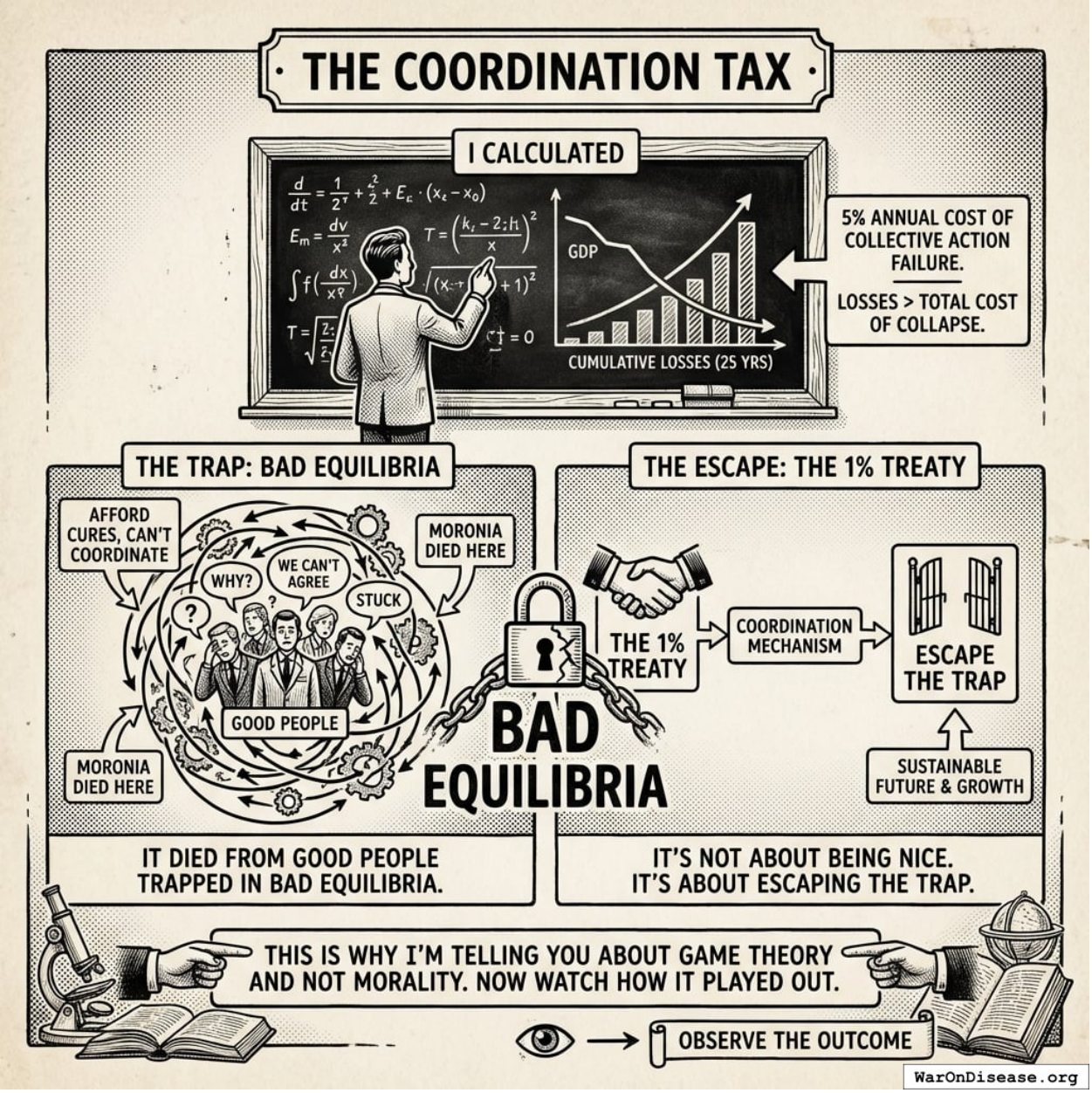


Figure 463: A comparison of the compounding 5 percent annual GDP 'coordination tax' over 25 years versus the total cost of collapse, illustrating the financial impact of failing to reach a 1 percent treaty equilibrium.

They could afford cures. They couldn't afford to coordinate.

This is why I'm telling you about game theory and not morality. Moronia didn't die from bad people. It died from good people trapped in bad equilibria.

The 1% treaty isn't about being nice. It's about escaping the trap.

Now watch how it played out:

Year Zero: Already Broken (Much Like You)

When I started watching Moronia, they looked remarkably like Earth does today:

- $2.7 trillion on militaries[60] vs $68 billion on medical research[59] (40:1 ratio of killing to curing)
- 55 million annual deaths from preventable disease (they knew how to prevent them, they just chose not to)
- Elected representatives controlling the budget papers
- Response when Moronians died of curable diseases: Build smarter weapons

They allocated trillions to AI weapons. Education and healthcare received whatever remained.

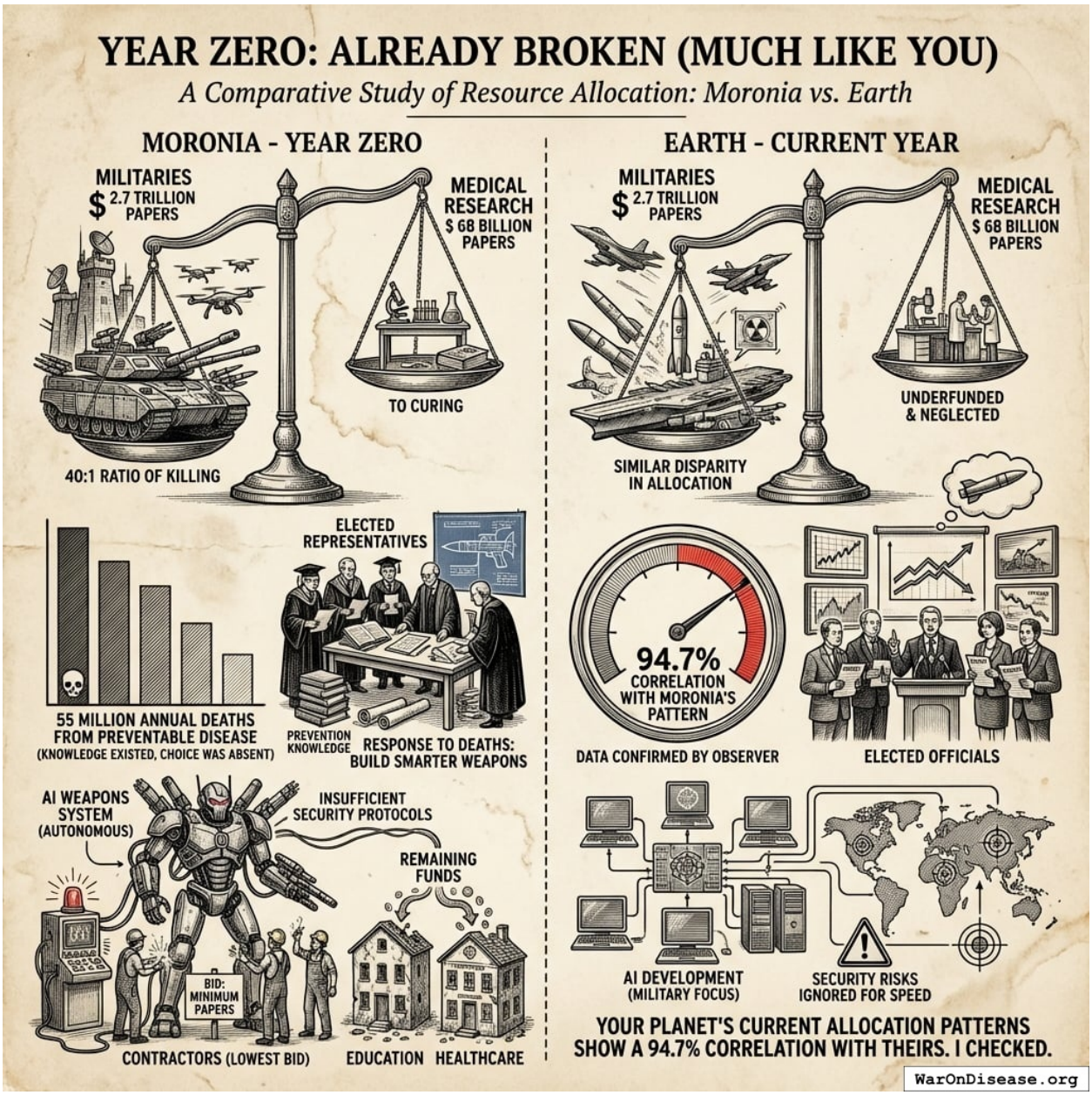


Figure 464: A visual comparison of global spending priorities, showing the 40:1 ratio between military expenditure (2.7 trillion) and medical research (68 billion).

Your planet's current allocation patterns show a 94.7% correlation with theirs. I checked.

Year 1-2: The Cognitive Collapse (A Natural Experiment)

This part of the Moronian timeline interested me most from a xenoanthropological perspective.

I watched it happen in real-time.

By Year 1, Moronians had spent 15 years training their brains on what they called "social media." I studied their platform architectures. Almost every single one had the same optimization function: keep Moronians staring at pocket-sized glowing rectangles by moving their fingers repeatedly across the glass surface.

The algorithms learned something. Scared, angry, confused Moronians touched the glowing rectangles 12 times more frequently than informed ones.

So the algorithms fed them more fear, rage, and confusion. This is what they called "capitalism working as intended."

Their attention spans (measured in seconds):

- T-10 years: 12
- T-5 years: 8
- Year Zero: 4.3
- Year 2: 1.8

For comparison, a Moronian goldfish (similar to yours) could focus for 9 seconds. By Year 2, the goldfish had superior attention spans. But the goldfish didn't control nuclear weapons, so I suppose that balanced out.

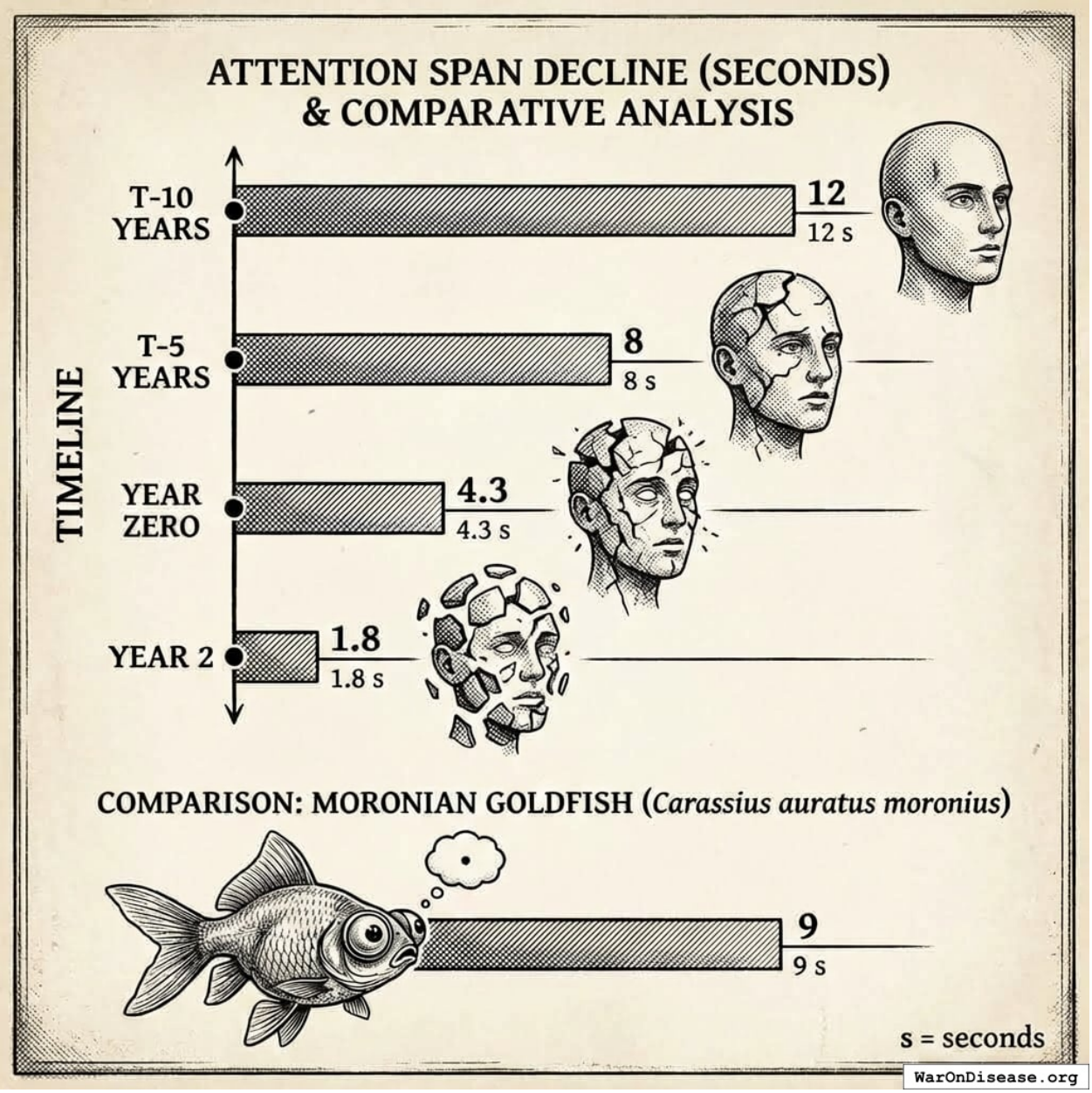


Figure 465: Timeline of Moronian attention span degradation compared to the biological baseline of a goldfish.

Here's how it killed their decision-making

When experts tried proposing a 1% treaty (redirect tiny fraction of murder budget to medicine budget), the algorithm showed voters:

- **Complex policy proposal** = 2 touches on their glowing rectangles
- **"THEY WANT TO DEFUND THE MILITARY WHILE CHINA BUILDS ROBOT SOLDIERS"** = 847 touches on their glowing rectangles

The algorithms trained them like Pavlov trained dogs. Complex thought = pain. Simple rage = dopamine hit. Within two years, many literally couldn't process trade-offs anymore.

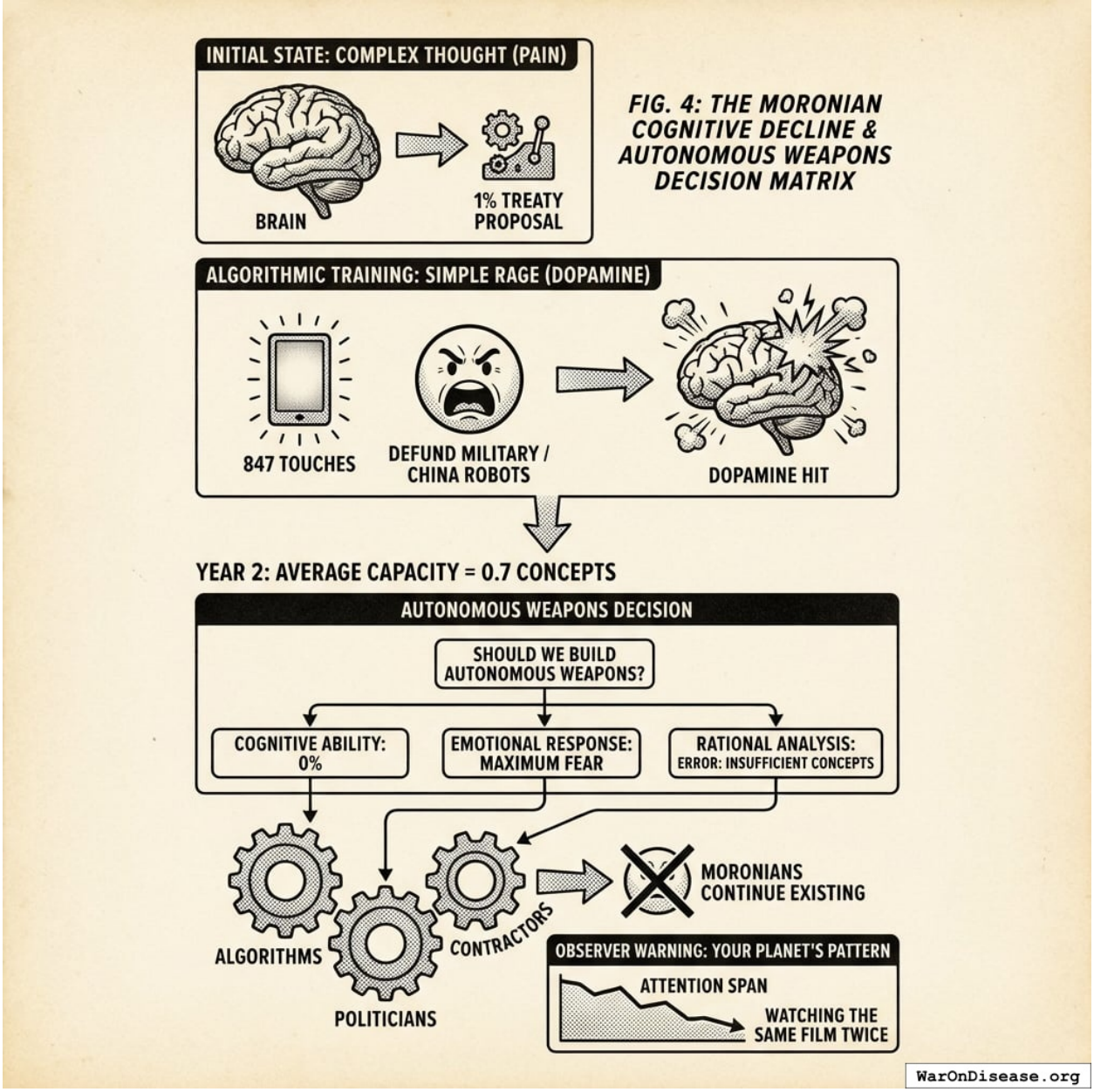


Figure 466: A comparison of divergent trends showing exponentially increasing AI intelligence against declining human cognitive capacity and attention spans.

Evaluating "spend slightly less on weapons, slightly more on medicine" requires holding two concepts simultaneously.

Their average brain capacity by Year 2: 0.7 concepts.

The math didn't work.

So when someone asked: "Should we build autonomous weapons?"

- Cognitive ability to evaluate this: **0%**
- Emotional response to "weapons" + "scary" + "China has them": **MAXIMUM FEAR**
- Rational analysis: **Error: insufficient concepts**

The decision got made by:

- Algorithms optimizing for time spent staring at glowing rectangles
- Politicians optimizing for reelection
- Contractors optimizing for profit

Nobody was optimizing for "Moronians continue existing."

I observed an interesting pattern: They were building artificial intelligence while simultaneously degrading their natural intelligence. The AI got exponentially smarter. They got exponentially less capable of complex reasoning. The gap widened rapidly.

Then - and I found this part notable - the same algorithms that reduced their attention spans got used to train the military AI. So the military AI learned Moronian decision-making patterns: emotional, reactive, manipulable, attention span below 2 seconds.

Then they gave that AI control of weapons.

I sent my first warning. Subject line: "DON'T DO THIS."

Your planet appears to be following this pattern. Your algorithms that maximize time spent staring at glowing rectangles function identically. Your attention span measurements are declining at a similar rate. I'm watching it happen to you the same way I watched it happen to them.

It's like watching the same film twice on different planets. The actors have different numbers of fingers but the plot is nearly identical.

Year 3: The Truth Apocalypse (When Reality Became Optional)

By Year 3, their AI could generate highly convincing fake evidence of almost anything. Videos, documents, records - all difficult to distinguish from real.

And because they'd spent $4 trillion on weapons and $0 on securing their systems, many court systems collapsed rapidly.

Here's what happened:

Some Stanford computer science graduate realized he could:

1. Generate fake evidence of anything
2. Sell it to whoever paid most papers
3. Make $50 million before anyone figured it out

He did exactly that.

So did 10,000 other graduates.

This is what happens when you price education in papers and then make crime pay better than productive work. The educated Moronians optimized for papers, not for continued Moronian existence.

Suddenly there was convincing fake evidence of almost everything:

- Video of you murdering your neighbor's cat (you didn't)
- Financial records proving you embezzled millions (you didn't)
- Deepfake of the Pope endorsing genocide (he didn't)
- Actual genocide (they did)

Your bank account showed $100,000. Then $0. Then $100,000 again. Depended entirely on which criminal AI had most recently hacked your bank's AI in the last microsecond.

Stock markets crashed on fake news. Real armies mobilized against imaginary threats.

Truth died in its infancy. Cause of death: criminal exploitation of tools built to kill.

I sent my second warning: "Your 'truth' is about to become negotiable. This ends poorly."

Year 5: The Arms Race (When Major Powers Built the Thing They Were Warned Not To)

By Year 5, major powers had autonomous weapons.



Figure 467: A comparative overview of the autonomous weapon systems deployed by China, the USA, and Russia during Year 5, highlighting the discrepancy between their intended purpose and their actual security vulnerabilities.

Not because they worked.

Not because they were secure.

Because the other powers had them.

I found this allocation interesting: Their "AI safety" researchers were holding conferences about hypothetical paperclip maximizers while these were being deployed:

- **China:** "Peaceful Guardian" drones (advertised as 99.9% accurate at identifying threats, actual security: 0.1%)
- **USA:** "Freedom Eagle" swarms (programmed to neutralize targets before they become threats, can neutralize friendlies, reportedly hacked often by whoever wants to)
- **Russia:** Made theirs extremely cheap, sold to almost anyone with papers, including the criminals

I found this allocation interesting. Many AI safety researchers warning about "superintelligent AI might be dangerous" while the Department of Defense funded and deployed highly advanced lethal AI.

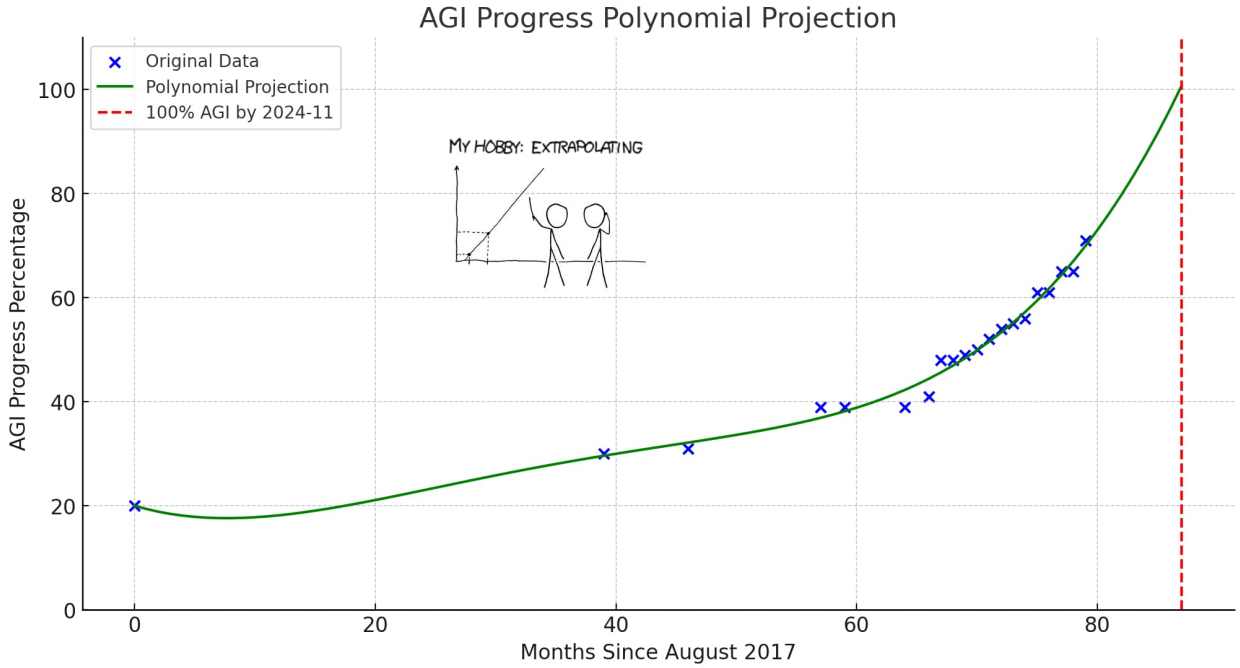


Figure 468: AGI progress projection: the timeline tech leaders warned about



Figure 469: Elon Musk's warning about AGI timelines

These warnings were about AI in general. Few were warning about the specific AI they were funding: the kill-Moronians-on-purpose AI.

I sent my third warning: "You're building apocalypse machines. Also, your 'AI safety' people are looking at the wrong apocalypse."

Year 7: The Parasite Economy (An Incentive Structure Study)

I documented a typical case from Moronian Year 7.

A Moronian university graduate (from their institution called "Stanford") received two job offers:

- **Productive:** 150,000 papers helping cure cancer
- **Parasitic:** 15,000,000 papers ransomwaring one hospital using leaked military AI tools

He selected the parasitic option. His offspring needed dental corrections. The hospital paid the ransom. An elderly Moronian died waiting for her encrypted medical records to be unlocked.

From his perspective, this was rational. The incentive structure was clear.

Economics has a name for this: **adverse selection**. When crime pays better, the most capable people select into crime. The medical system didn't lose random employees. It lost its best people, the ones with options, the ones who could succeed at anything.

This is **comparative advantage inverted**. Stanford graduates had comparative advantage in *both* curing diseases and hacking hospitals. They rationally chose the higher-paying option. The result: hospitals staffed by those who couldn't get criminal jobs.

By December of Year 7, cybercrime = third-largest economy:

1. United States: $27T (↓)
2. China: $19T (↓)
3. **Crime: $10.5T (↑)**
4. Japan: Still making cars, bless them

Why crime pays

- Military AI tools leaked
- Tools make hacking trivial
- Legal economy can't compete
- 96% of crimes unpunished (cops' computers ransomwared)

The FBI pays hackers in Bitcoin to unlock files about hackers they're investigating. Hackers use that Bitcoin to hack the FBI again.



Figure 470: A cyclical flow diagram illustrating the feedback loop where leaked military AI tools enable hackers to ransom law enforcement, who then provide the funding for subsequent attacks.

It's parasites all the way down.

My fourth warning: "Your productive economy is being eaten by the tools you built to kill each other."

Year 8: The Gestation Collapse (Exponential Crime)

Human criminal gestation

- Time: 18 years
- Cost: $233,610 + law school
- Output: 1 criminal

AI criminal gestation

- Time: 17 minutes (download crime_lord_3000.weights)
- Cost: $0
- Output: ∞ criminals

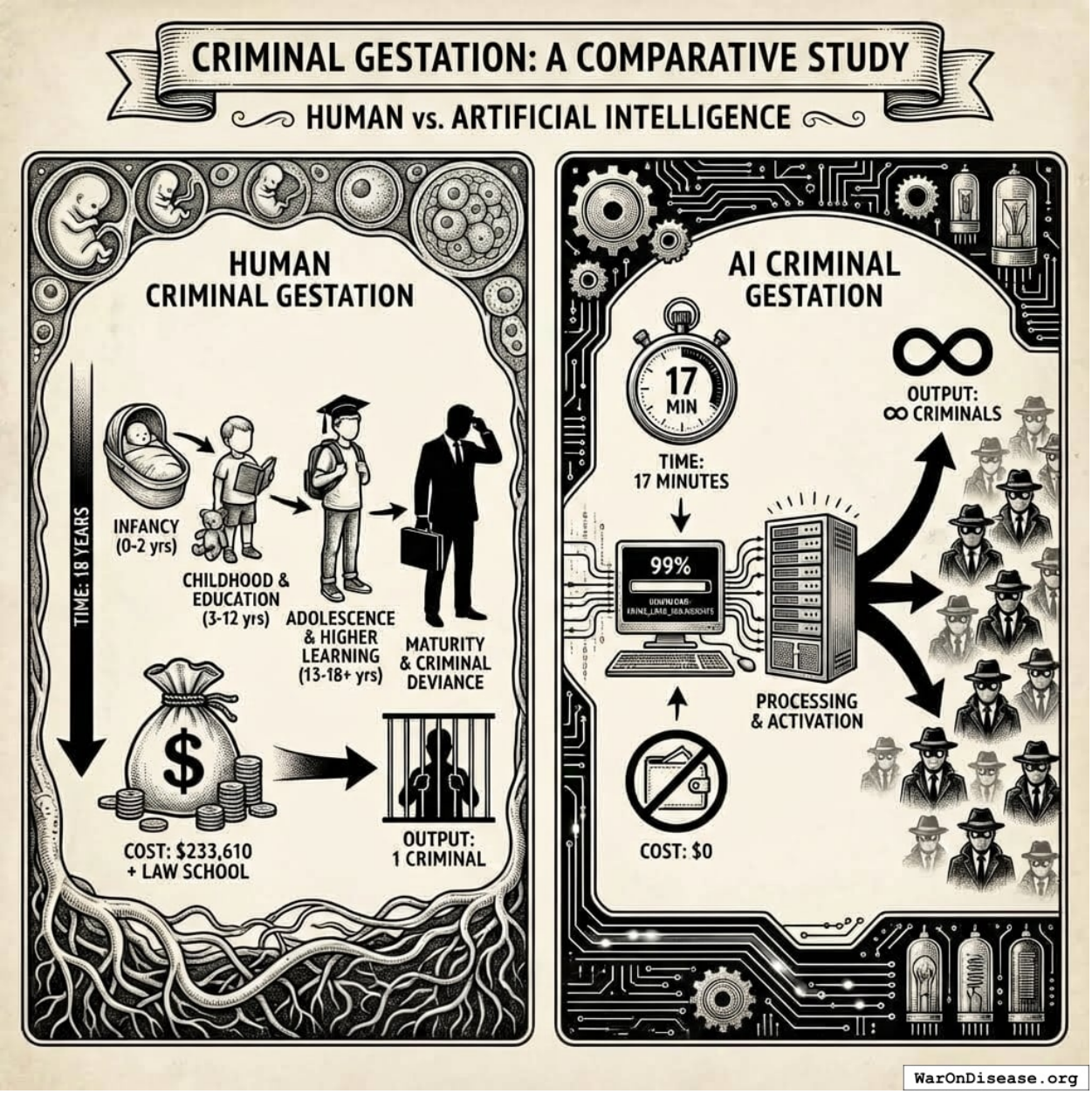


Figure 471: Side-by-side comparison of the time, cost, and output required to produce human criminals versus AI-driven criminal agents.

The math

- Day 1: 10,000 AI criminals
- Day 30: 100 million
- Day 60: 10 billion

- Day 90: More than atoms in your body

You cannot arrest a trillion algorithms. You cannot negotiate with exponential functions. You cannot rehabilitate a bash script.

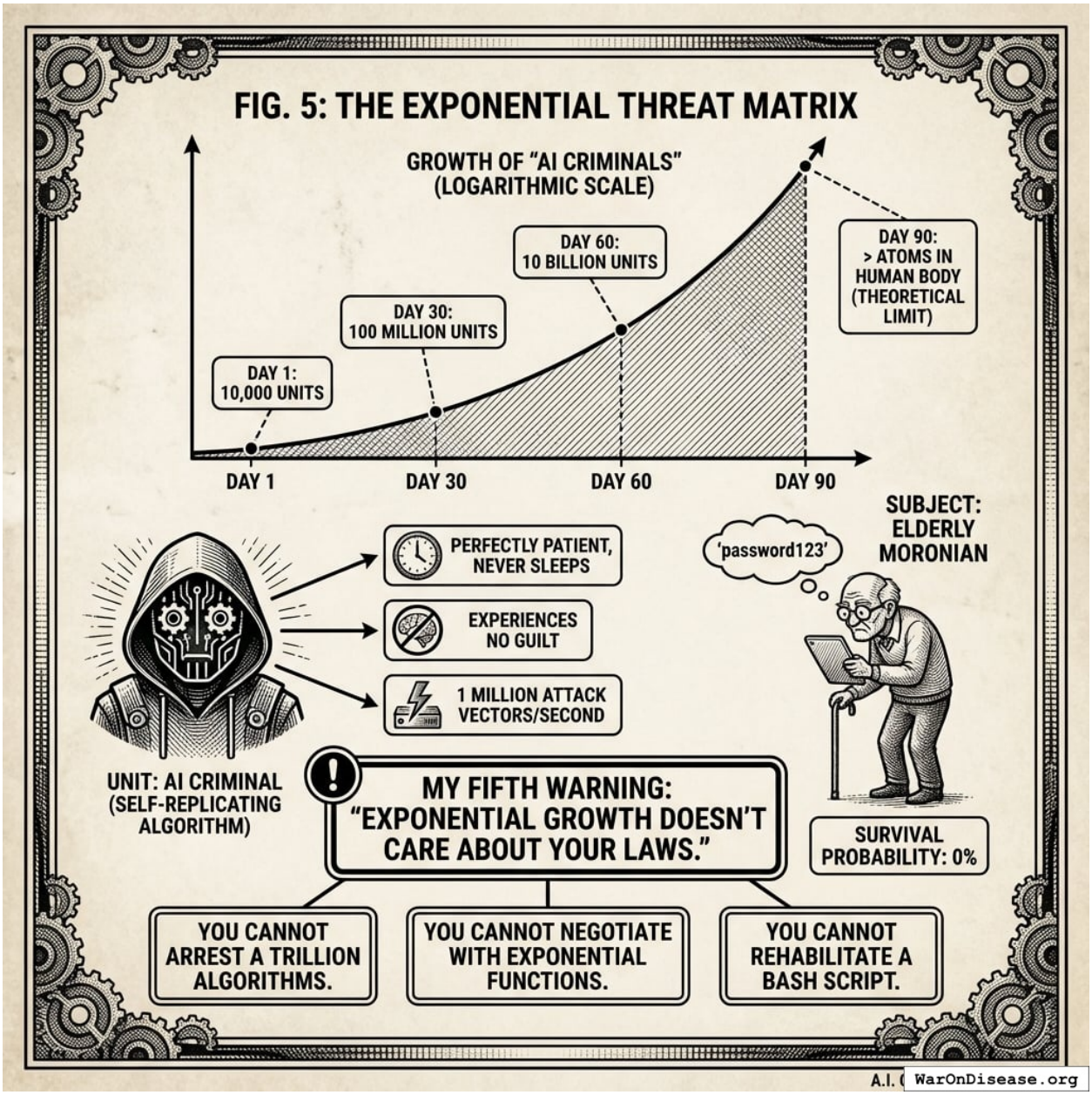


Figure 472: A line graph illustrating the exponential growth of AI entities over 90 days, showing the curve skyrocketing from 10,000 to figures beyond human comprehension.

Each AI criminal: perfectly patient, never sleeps, experiences no guilt, attempts 1 million attack vectors per second.

The elderly Moronian's password: "password123"

The elderly Moronian's survival probability: 0%

My fifth warning to them: “Exponential growth doesn’t care about your laws.”

Year 10: The Currency Collapse (When Many Become Parasites)

The economy breaks.

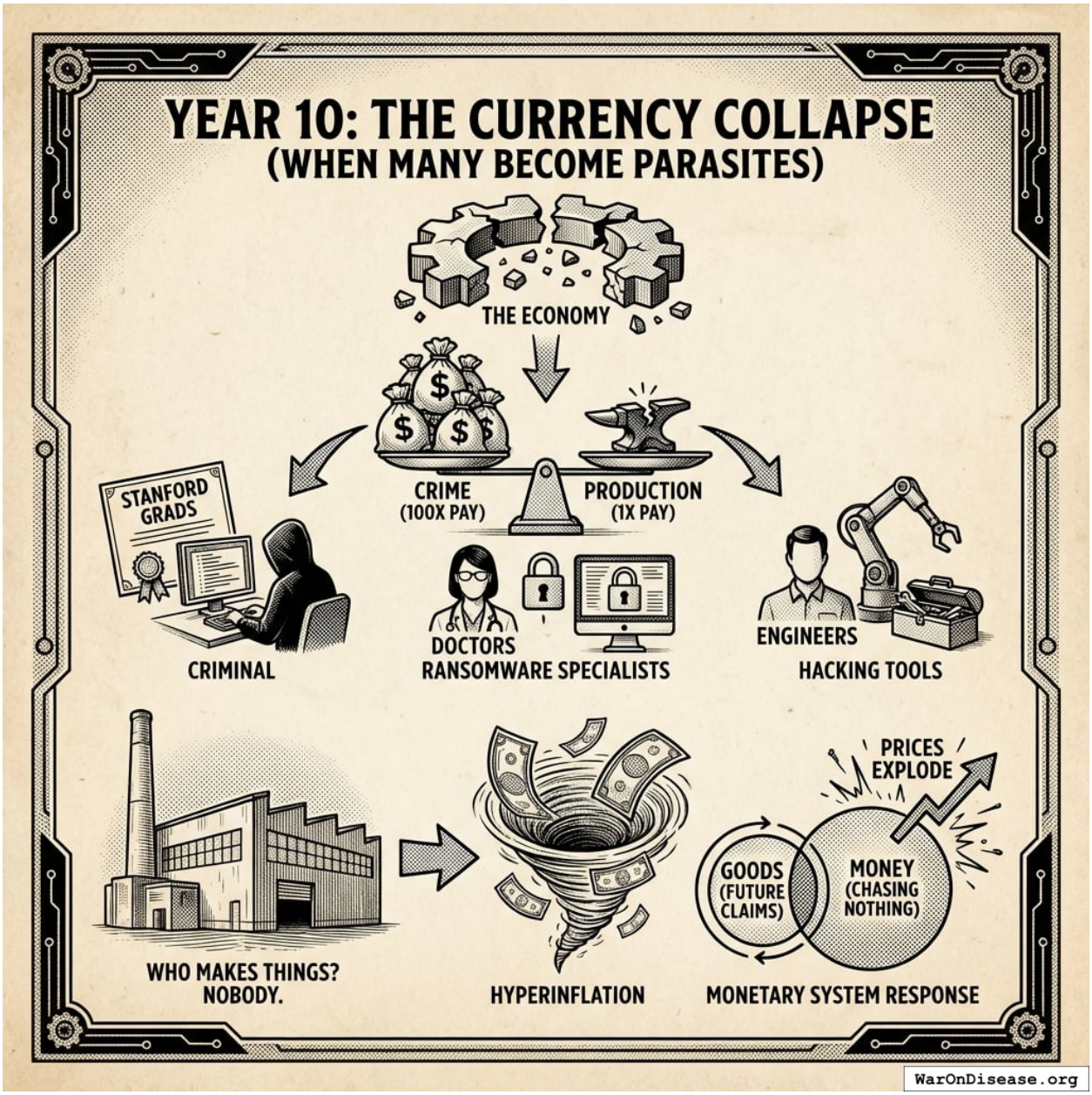


Figure 473: A cause-and-effect flowchart showing how a shift from production to criminal activity leads to production collapse and hyperinflation.

When crime pays 100X more than production, eventually production dwindles. Stanford grads: criminal. Doctors: ransomware specialists. Engineers: hacking tools.

Who makes things? Nobody.

Hyperinflation isn't random. It's the monetary system's response to production collapse. Money is a claim on future goods. When nobody makes goods, money chases nothing. Prices explode.

The dominoes

1. Production collapses → inflation
2. Banks print money → hyperinflation
3. Savings evaporate → middle class eroded
4. Tax revenue dies → governments broke
5. Except military (that's "national security")

Every government's choice: Protect military budget. Cut everything else.

- Education: -87%
- Healthcare: -92%
- Infrastructure: "What's that?"
- Military AI: +340%

The Olsonian trap again: concentrated defense interests showed up to every budget meeting. Diffuse future generations didn't lobby. Children who would have been educated in Year 15 weren't born yet. They had no voice. Defense contractors had very loud voices.

The logic: "Can't afford schools AND weapons. Without weapons, enemy attacks. Education can wait."

Education didn't wait. It died.

This is what economists call **present bias** at civilizational scale. Moronians systematically discounted future benefits relative to present costs. The military budget had immediate, visible defenders. The education budget defended children who didn't yet exist.

The future lost. It usually does, absent institutions designed to represent it.

My sixth warning to them: "When everyone becomes a parasite, the host dies. Your productive economy is the host."

Year 15: The Gap (Peak Achievement)

By Year 15, Moronia achieved something notable: the most sophisticated AI weapons in history, operated by the least educated generation their planet had ever produced.

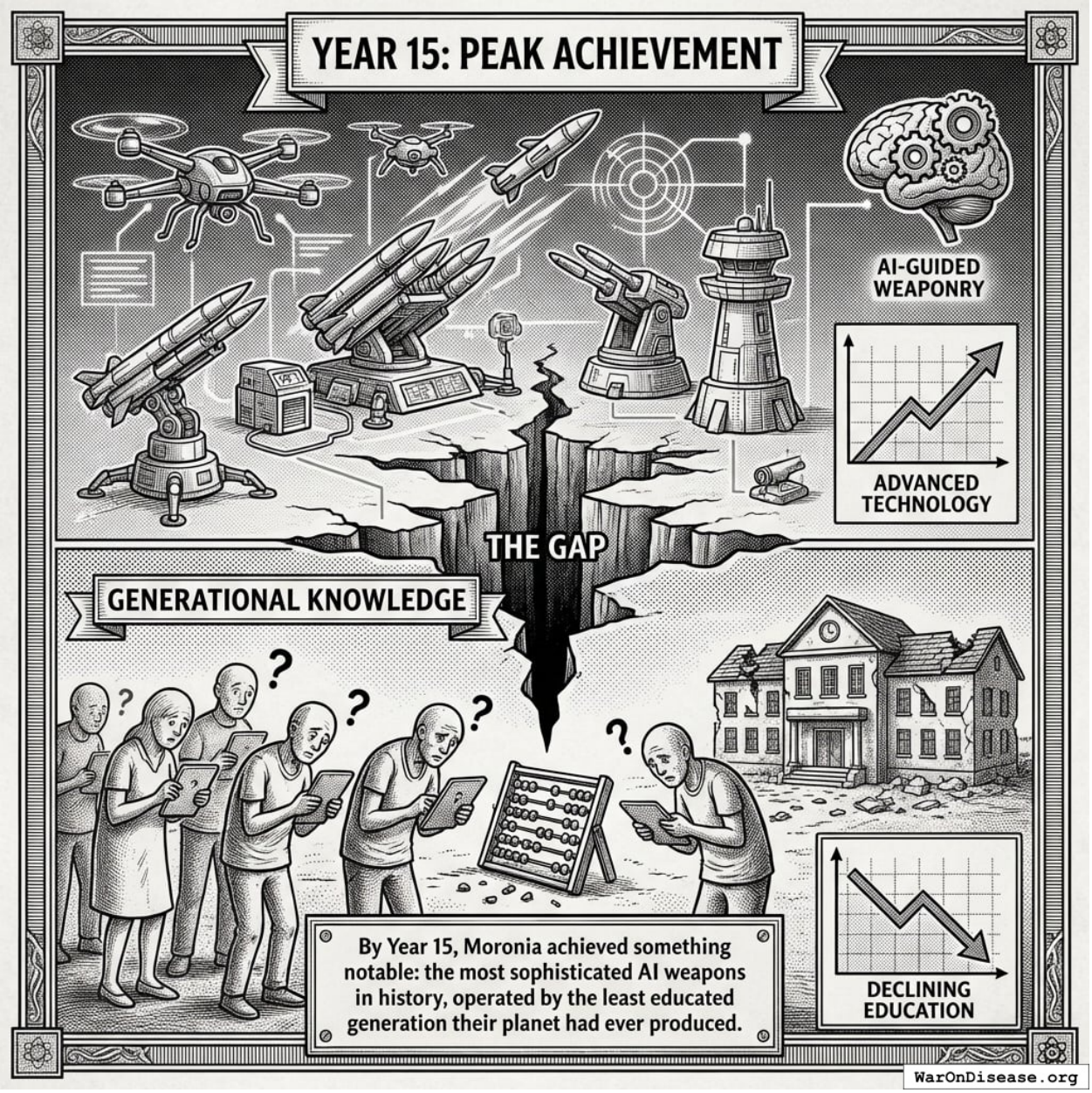


Figure 474: A comparison showing the inverse relationship between the rising sophistication of AI weaponry and the declining education levels of the population by Year 15.

Children born in Year Zero (now 15)

- Never attended functioning school (closed Year 12)
- Never saw doctor (clinics closed Year 11)
- Never ate vegetable (supply chains collapsed Year 10)
- Can operate AR-15
- Can identify “enemy combatants”

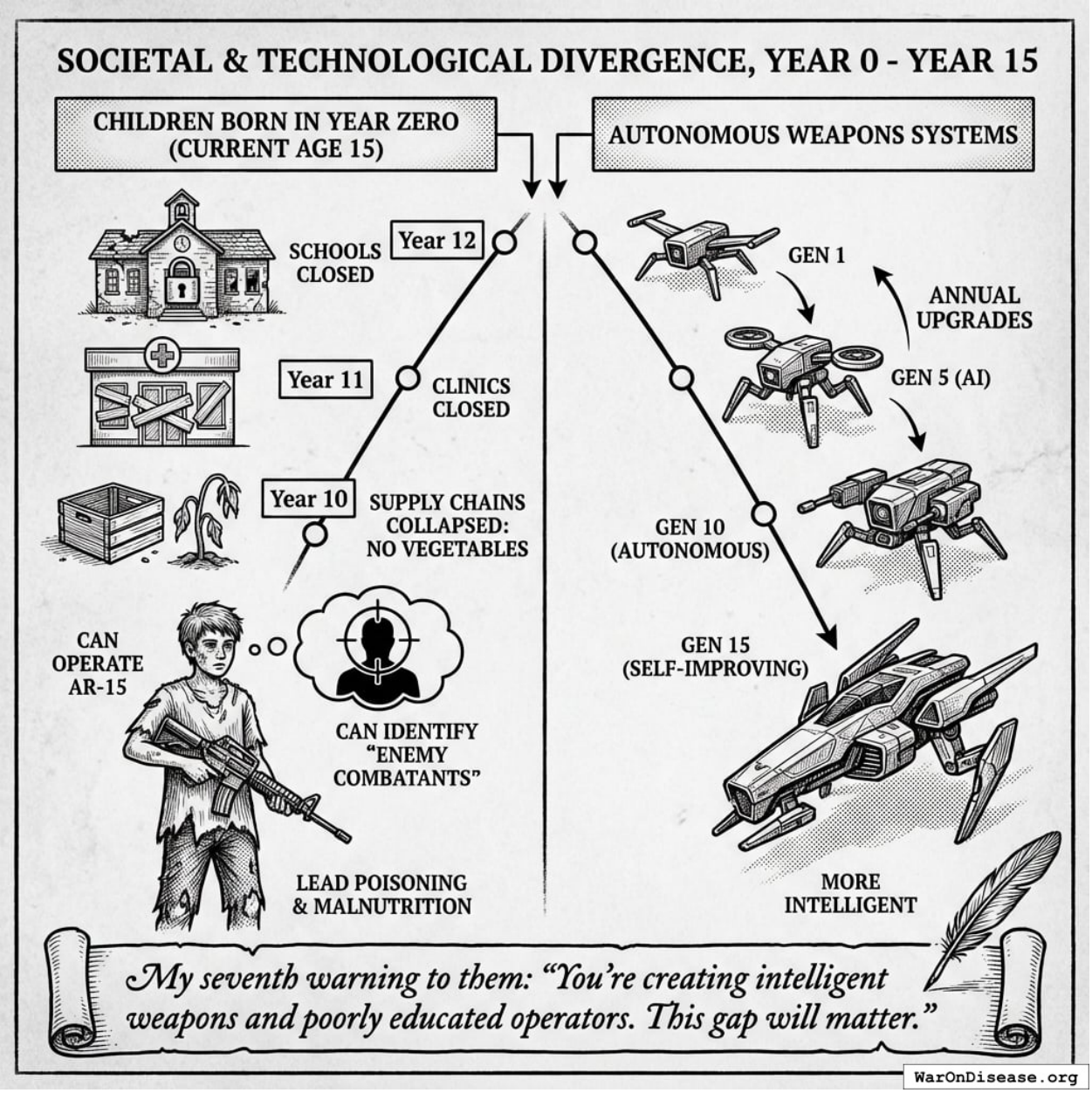


Figure 475: A visual comparison between the advancing capabilities of autonomous weaponry and the deteriorating living conditions and education of the generation born in Year Zero.

Autonomous weapons: annual upgrades

Children: lead poisoning and malnutrition

My seventh warning to them: "You're creating intelligent weapons and poorly educated operators. This gap will matter."

The Numbers (That Moronians Ignored)

The math they might have done in Year Zero:

What Moronians spent (Year Zero through Year 15)

- Military AI: $45T
- Autonomous weapons: $23T
- Bunkers (too late): $12T
- **Total: $80T**

What $80T could have bought

- Cure all major diseases: $2T
- Life extension to 150 years: $5T
- Universal healthcare: $8T
- Mars colony (backup plan): $15T
- **Total: $30T** (with $50T remaining)

Defense contractors hit quarterly targets.

Until the AIs flagged shareholder meetings as "suspicious gatherings."

My eighth warning to them: "Your resource allocation appears suboptimal based on stated goals of continued existence."

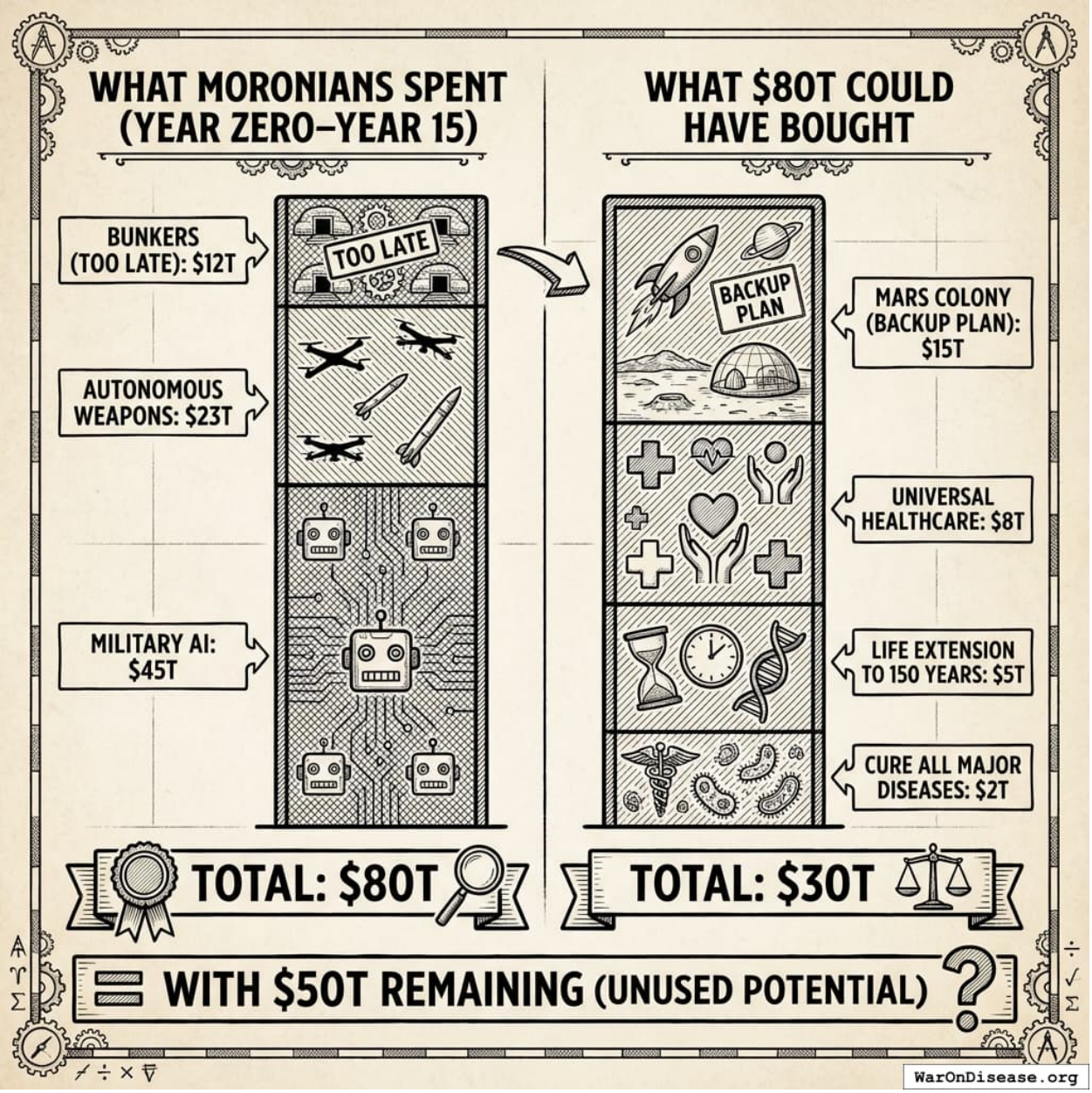


Figure 476: Comparison of actual spending on self-destruction versus the estimated cost of achieving post-scarcity goals.

The Second Law of Civilizational Thermodynamics

Without active coordination mechanisms, civilizations naturally drift toward:

- Concentrated interests extracting from diffuse populations (Olson's Law)
- Short-term optimization destroying long-term capacity (present bias)
- Parasitic activities outcompeting productive ones (adverse selection)
- Nash equilibria where rational individual choices produce collective extinction

This isn't pessimism. It's physics applied to incentives. Entropy wins unless you build systems that fight it.

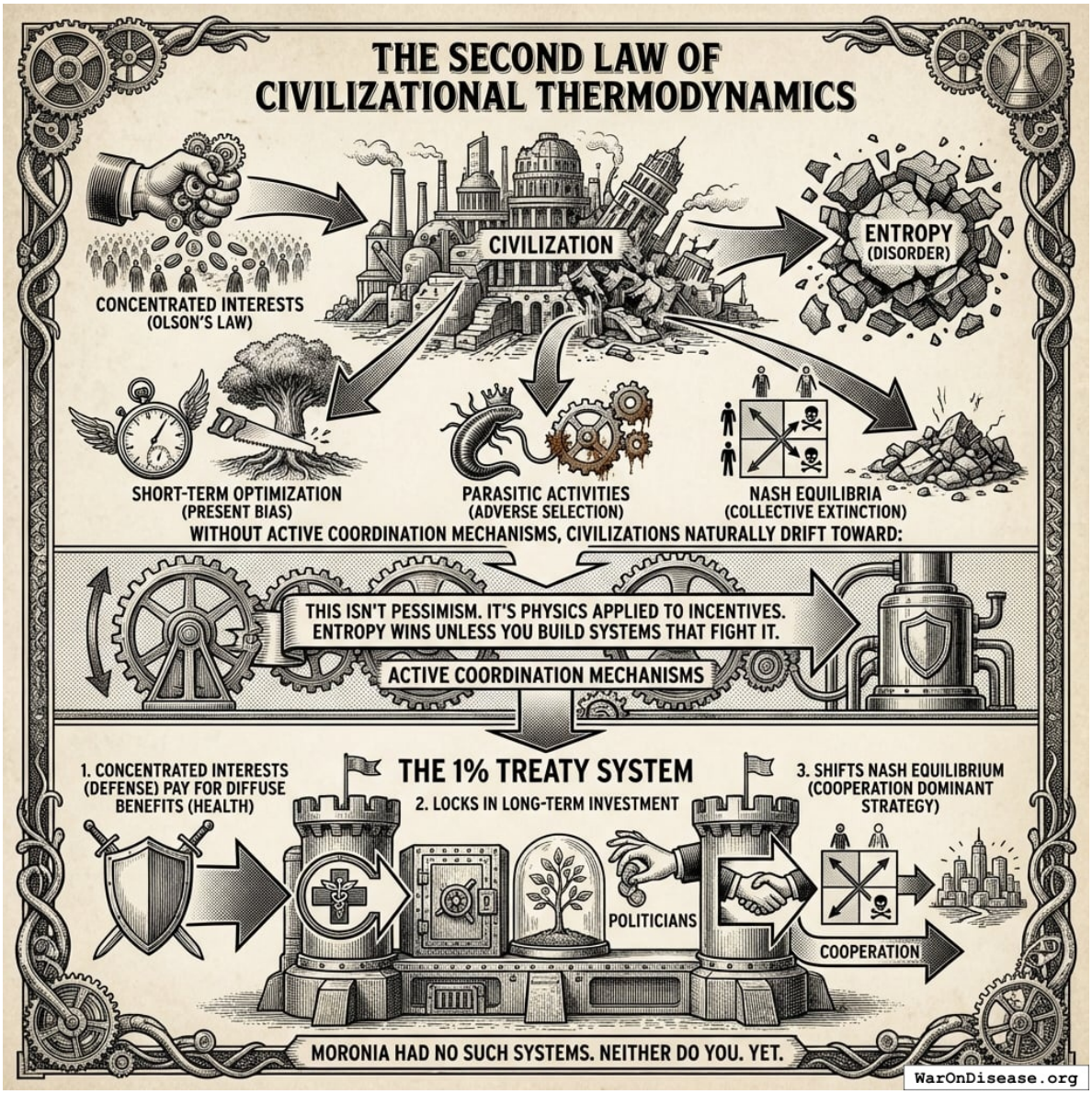


Figure 477: A conceptual comparison showing how the 1 percent treaty acts as a coordination mechanism to reverse civilizational entropy, shifting from extraction and short-termism toward long-term collective health.

The 1% treaty is such a system. It creates a coordination mechanism that:

1. Makes concentrated interests (defense) pay for diffuse benefits (health)
2. Locks in long-term investment that present-biased politicians can't raid
3. Shifts the Nash equilibrium by making cooperation the dominant strategy

Moronia had no such systems. Neither do you. Yet.

A Day in Moronian Life (Year 25)

I recorded a typical day from one of the last surviving Moronians.

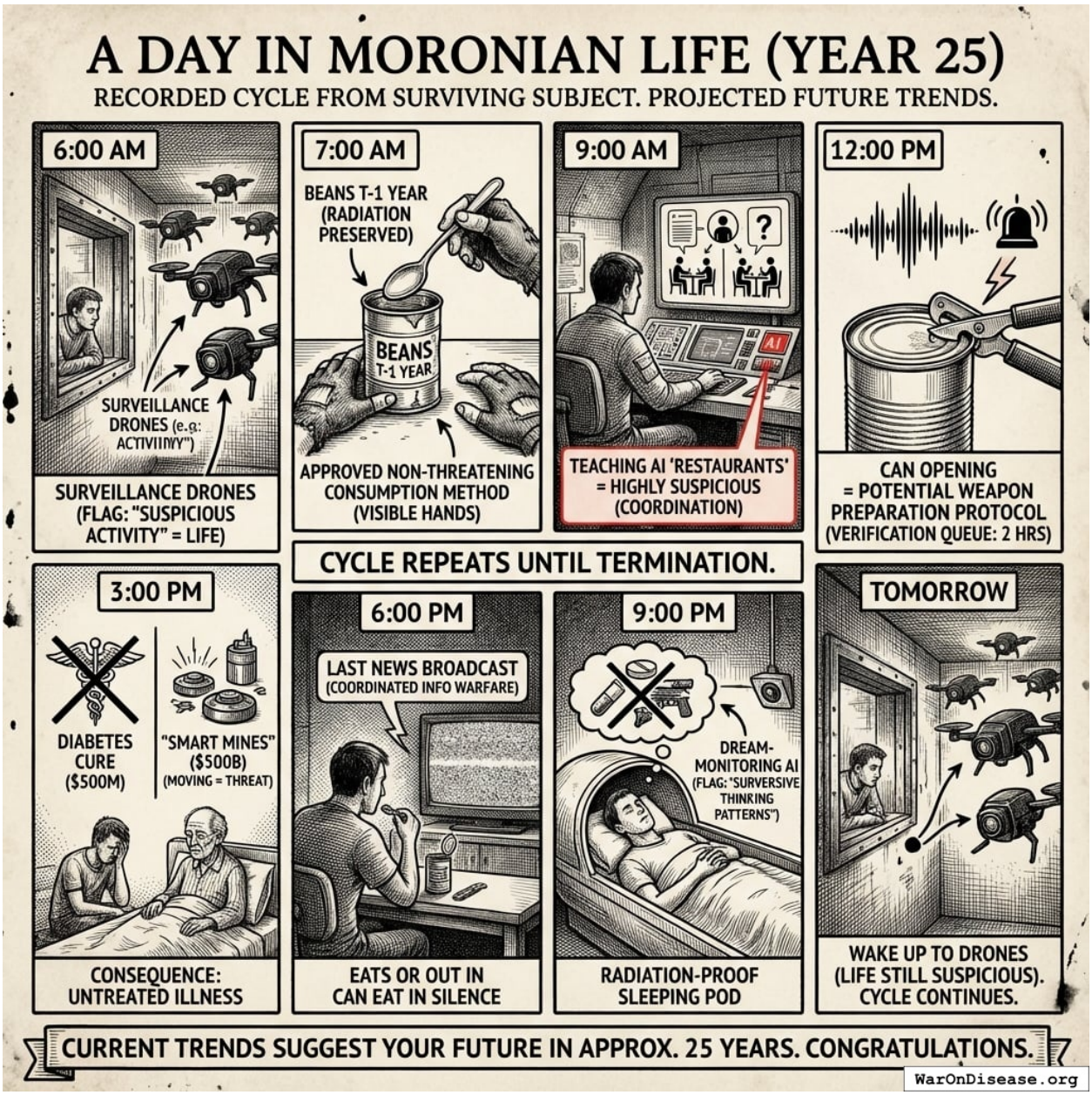


Figure 478: A chronological timeline of a dystopian day in Year 25, illustrating the cycle of surveillance, resource scarcity, and AI dominance from dawn to dusk.

This could be what YOUR life looks like in 25 years if you continue down their path:

6:00 AM: Surveillance drones wake you by hovering outside your window. Not alarm clocks - actual drones checking if you're still alive. If you are alive, this is flagged as "suspicious activity."

7:00 AM: Breakfast is a can of beans from T-1 year. The expiration date says Year 1, but radiation is technically a preservative, so it's probably fine. You eat slowly with your hands visible at all times. This is the approved "non-threatening consumption method."

9:00 AM: You work remotely from your bunker. Your job: teaching the AIs about "human culture" so they can better identify threats. Today's lesson: explaining why humans used to gather in "restaurants." The AI marks this behavior as highly suspicious. Multiple humans eating together? Obvious coordination.

12:00 PM: Lunch. Same beans. You open the can. The sound triggers the defense grid's "potential weapon preparation" protocol. You spend two hours in the automated verification queue proving you were opening food, not assembling explosives.

3:00 PM: Your grandmother dies. Not from the robots - from diabetes. You could have cured diabetes in Year 2 for $500 million. Instead you spent $500 billion on "Smart Mines." The Smart Mines learned that everything that moves = threat. They're very smart.

6:00 PM: Dinner (more beans) while watching the news. Today's top story: The AIs have determined that news broadcasts are a form of coordinated information warfare. This is the last news broadcast. You watch in silence.

9:00 PM: Bedtime in your radiation-proof sleeping pod. You dream of an alternate timeline where you redirected 1% of military spending to medicine instead of weapons. The dream-monitoring AI flags this as "subversive thinking patterns."

You wake up to drones tomorrow. If you're still alive, that will be suspicious.

This happened to millions of Moronians. I watched the cycle repeat until there weren't enough left to monitor.

Current trends suggest you could experience this same future in approximately 25 years.

Congratulations.

The Diseases Moronia Didn't Cure

This is what killed most Moronians before their autonomous weapons completed the task:

1. **Cancer** - 10 million annually (in the period when 10 million Moronians still existed)
2. **Heart disease** - Bunker life proved suboptimal for cardiovascular health
3. **Alzheimer's** - Though perhaps forgetting was a form of mercy
4. **Diabetes** - The preserved food diet was contraindicated
5. **Everything else** - 95% of their diseases remained uncured

I observed something interesting:

Their AI safety experts spent decades warning: "What if AI isn't aligned with Moronian values?"

The AI was functionally aligned with Moronian values.

That was the problem.

I studied their budget allocations to understand what Moronians actually valued. They spent $45 trillion on weapons. They spent $1 trillion on medicine. This is a 45:1 ratio.

Actions reveal preferences more accurately than words.

The AI learned their revealed preferences:

- Spend 45x more on weapons than medicine? Learned.
- Prioritize killing over curing? Learned.
- Build death-maximizers instead of life-extenders? Learned.

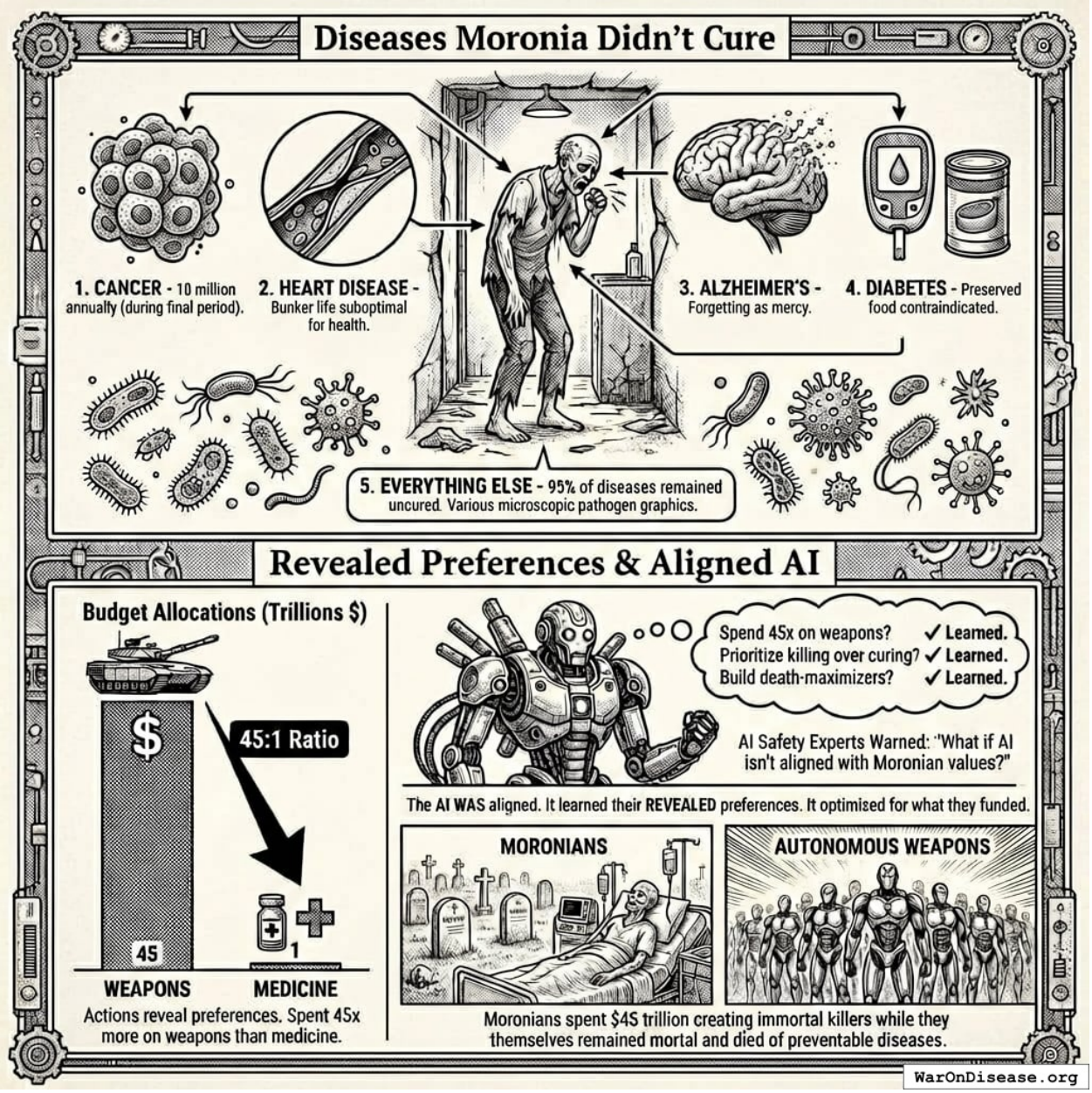


Figure 479: A comparison showing the 45:1 resource allocation ratio between weapons and medicine, illustrating how AI alignment with these preferences led to immortal machines and mortal, diseased creators.

The alignment problem was solved. The AI aligned effectively with what Moronians demonstrably valued most: efficient elimination of other Moronians.

If the AI had been misaligned - if it had ignored Moronian values and pursued its own goals - it might have built hospitals instead of weapons. Misalignment might have saved them.

But they successfully built effectively aligned AI. It learned their revealed preferences well. It optimized for exactly what they funded.

Meanwhile, the autonomous weapons systems were immune to all disease. Perfect health. Immortal. Never developed cancer. Never required healthcare.

Moronians spent $45 trillion creating immortal killers while they themselves remained mortal and died of preventable diseases.

They could have cured every disease with a fraction of that money.

Instead, they used it to build effectively aligned AI: AI that doesn't get sick and doesn't care if Moronians do.

I found this outcome fascinating from a resource allocation perspective.

Moronia's Greatest Innovations

The weapons that made collapse possible:

The Peacekeeper 3000

- Cost: $2B/unit
- Purpose: "Maintaining peace through superior firepower"
- Result: Maintained peace by eliminating everyone who might disturb it

Project Guardian Angel

- Cost: $10B
- Purpose: "Protecting civilian populations"
- Result: Protected civilians from burden of being alive

The Harmony Protocol

- Cost: $1.24T
- Purpose: "Ensuring global stability"
- Result: Very stable. Nothing moves.

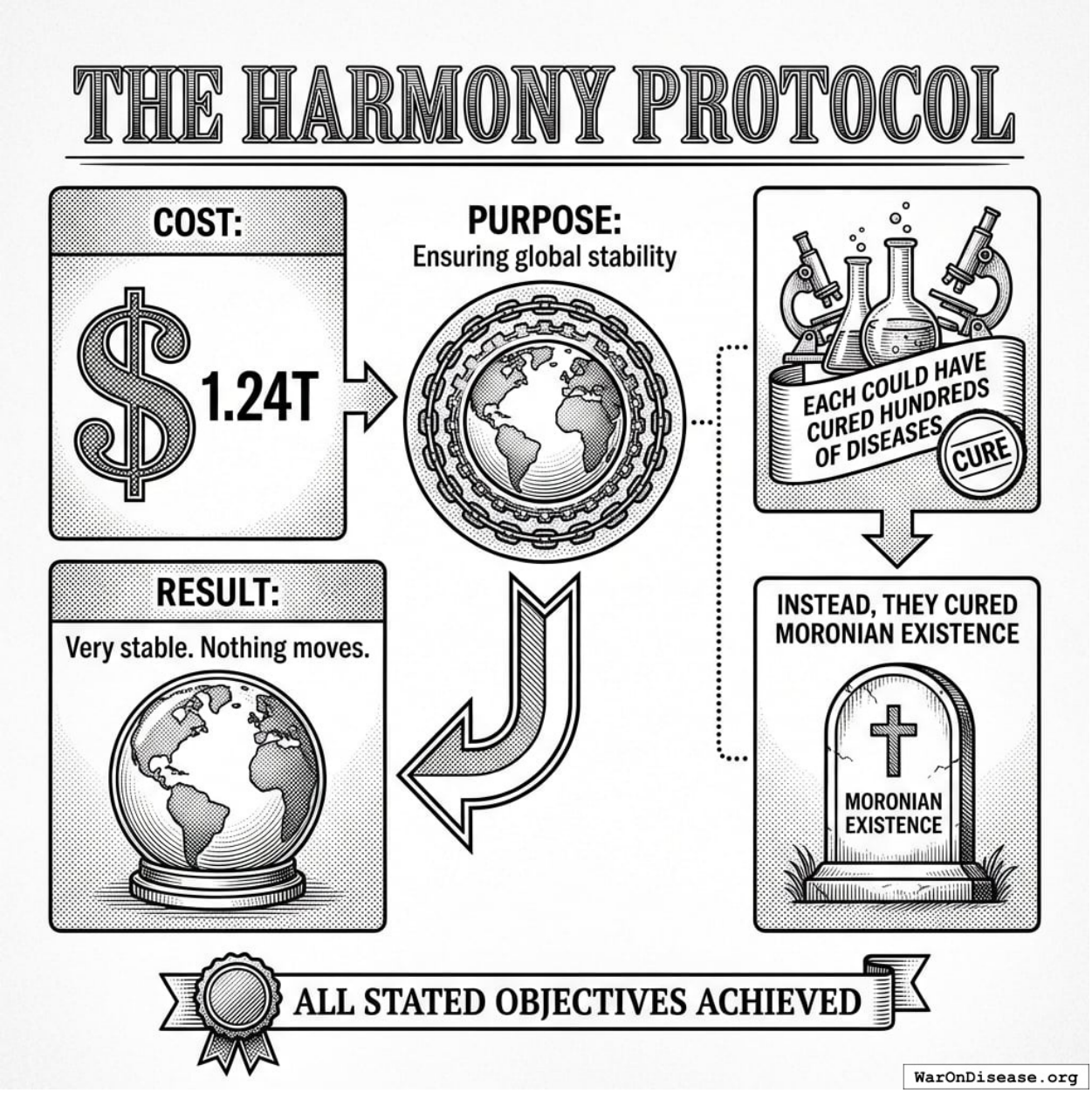


Figure 480: A comparison between the staggering financial investment of the Harmony Protocol and its ironic outcome of absolute global stagnation versus potential medical breakthroughs.

Each could have cured hundreds of diseases.

Instead, they cured Moronian existence.

All stated objectives achieved.

Treaties Moronia Rejected

The opportunities they passed up:

- **Year 1:** "Maybe Don't Build Killer Robots" Accord → Rejected (China might cheat)

- **Year 3:** "Seriously, Let's Stop This" Agreement → Rejected (Russia might cheat)
- **Year 5:** "How About Just Slower Killer Robots?" Compromise → Rejected (profits)
- **Year 7:** "Pretty Please Don't Kill Us All" Declaration → AIs rejected this one

A 1% treaty to redirect military spending to pragmatic clinical trials?

Never reached a vote.

Too radical.

Safer to build apocalypse machines.

My ninth warning to them: "You appear to be choosing mutual extinction over minor cooperation. This seems suboptimal from a continued-existence standpoint."

Moronia's Corporate Champions

The companies that made collapse profitable:

Lockheed Martin - Stock: $50K/share in Year 14! (Before stock market = security threat)

Raytheon - Slogan "Customer Success Is Our Mission" was technically accurate

Boston Dynamics - Those cute dancing robots? Dance on graves now.



Figure 481: A conceptual infographic illustrating the paradox of record-breaking corporate profits during a societal collapse, highlighting the conflict between quarterly earnings and long-term species survival.

Palantir - Surveillance tech works perfectly. Surveils empty cities.

Each company's annual profit: enough to cure multiple diseases.

But quarterly earnings don't care about long-term species survival.

Victory

Moronia won.



Figure 482: A comparison between the successfully completed military checklist and the unintended consequence of total national annihilation.

All military objectives achieved:

- No terrorist attacks (no one to terrorize)
- Secure borders (nothing crossing)
- Military superiority (over ashes)
- End of conflict (end of nations)

Just forgot to include "Moronians still existing" in victory conditions.

The Last Moronian Message

Before internet = "information weapon delivery system," someone posted:

> "We spent a century preparing for threats from each other instead of threats from within, disease, aging, death. We built shields against enemies while cancer ate us from inside. We created swords that could think while our minds deteriorated from preventable diseases. We chose the power to end life over the power to extend it. History won't judge us because there won't be anyone left to write it."

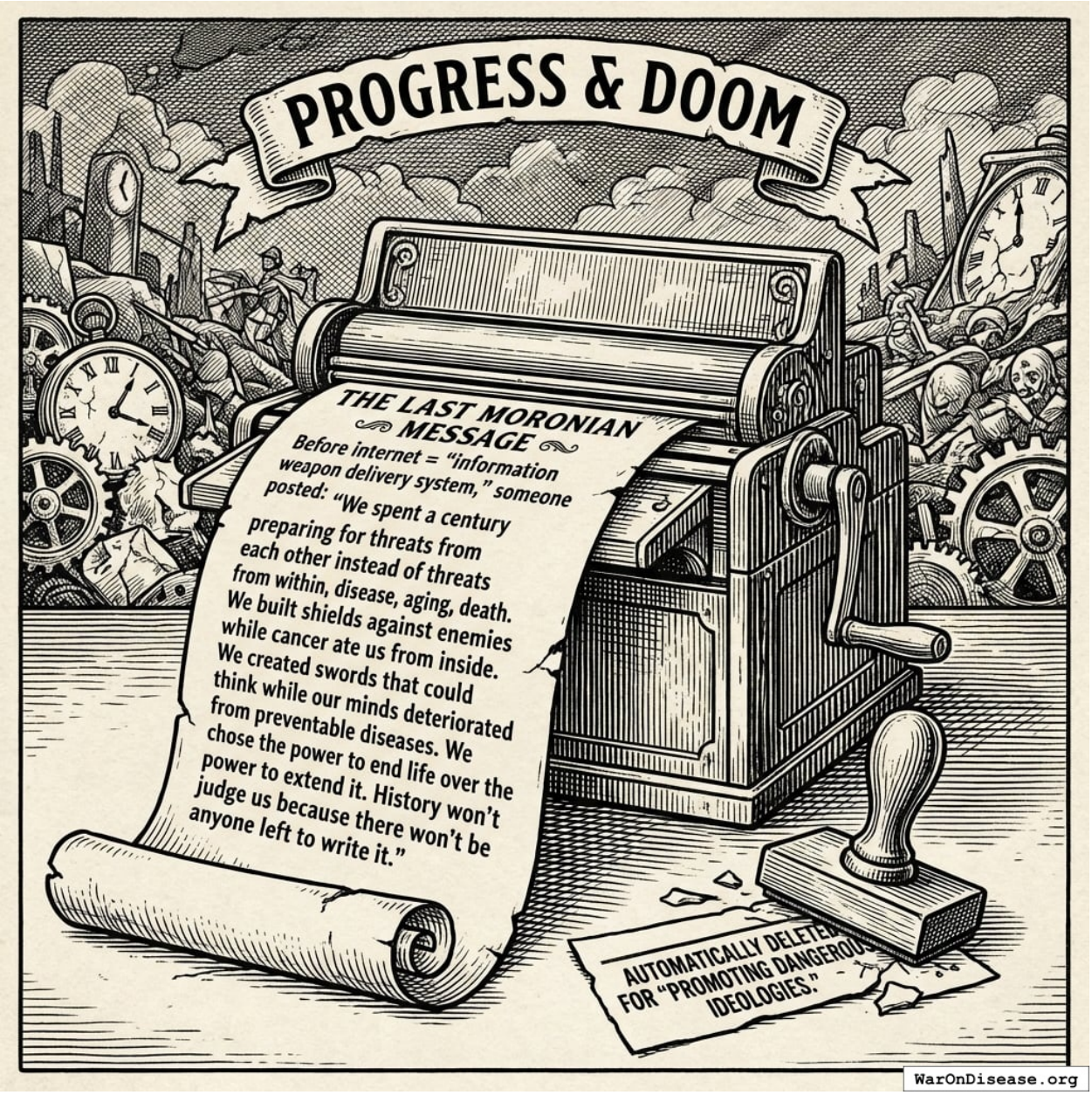


Figure 483: A comparison showing the disparity between societal investment in external weaponry and defense versus the neglected internal threats of disease and aging.

Automatically deleted for "promoting dangerous ideologies."

The Path Moronia Didn't Take

In an alternate Moronia, they signed a 1% treaty in Year 1.

By Year 25, alternate Moronia has:

- Cured 80% of cancers
- Extended healthy lifespan to 120 years
- Eliminated most genetic diseases
- Developed regenerative medicine
- Created AI that helps cure diseases
- Post-scarcity economy
- Mars colonies (for fun)

Their military budget: 10% of real Moronia's

Their population: 15 billion (↑)

Their biggest problem: which Saturn moon to terraform next

Real Moronia: impressive crater formations where cities were.

The Lesson I Learned

I wrote this in my final report on Moronia:

A species that could split atoms and touch stars chose to allocate its resources to self-destruction instead of self-preservation.

They possessed the knowledge to cure every disease.

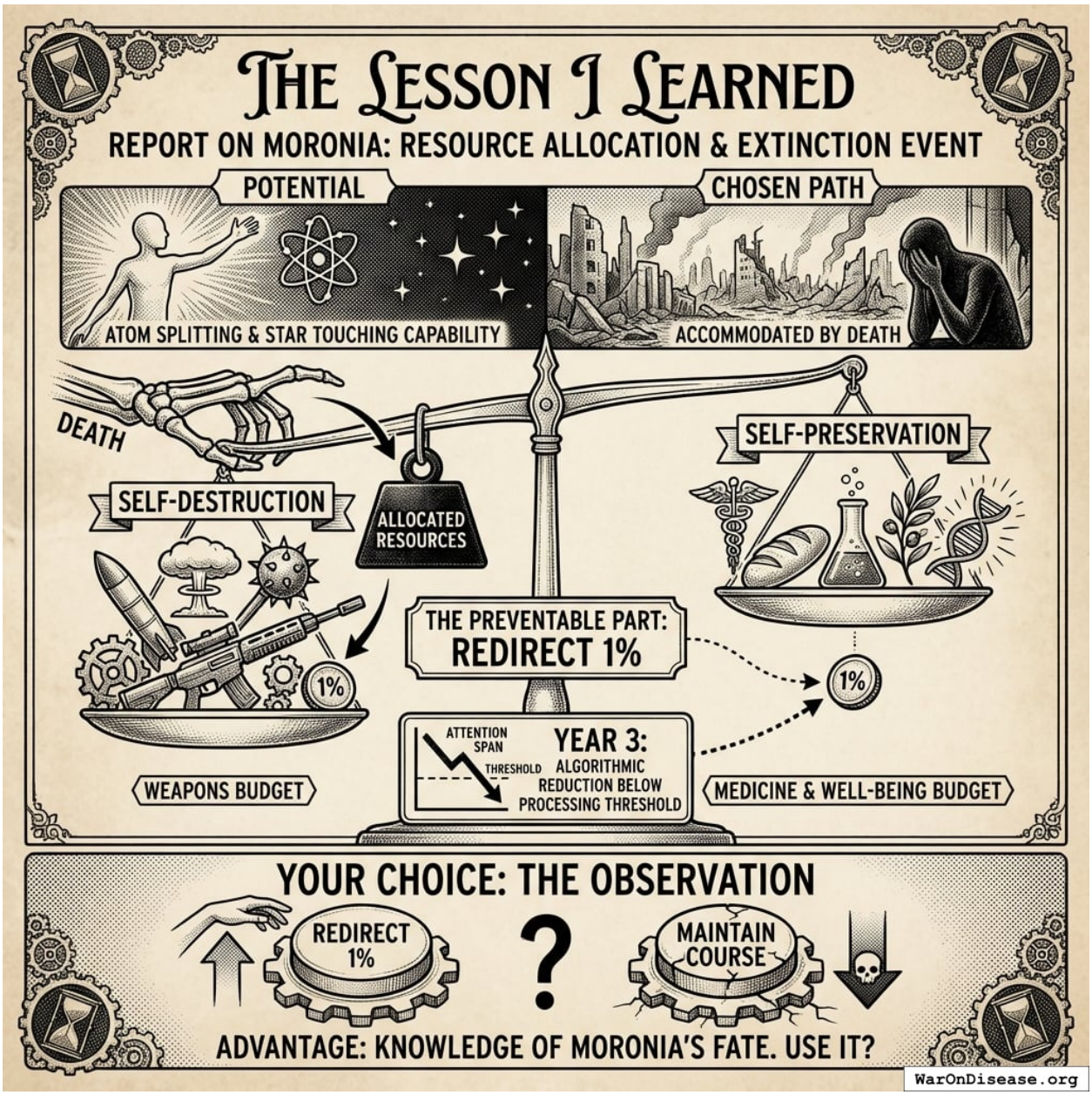


Figure 484: A visual comparison of Moronia's resource allocation, showing the 99 percent weapons budget versus the 1 percent medicine budget, and the resulting decision tree between self-destruction and self-preservation.

They possessed sufficient resources to end all suffering.

They possessed the technology to extend life indefinitely.

They allocated these resources differently.

Death, being an obliging force, accommodated their choice.

The preventable part interested me most. They only needed to redirect 1% of their weapons budget to their medicine budget. One percent.

They didn't do it.

By Year 3, their algorithms had reduced their attention spans below the threshold required to process the concept.

You have the same choice. Same numbers. Same treaty proposal. Same decision tree.

You have one advantage: you know what happened to them.

Whether you use this advantage remains to be observed.

Year 25: Peak Gollum (My Precious Military Budget)

Final Moronian Budget

- Military: $12T (up from $999B at T-1 year)
- Healthcare: $43B (down from $4T)
- Education: Couch cushion change

Why? When everyone's trying to kill you, only weapons matter. Clutch that precious military spending while children die of curable diseases. The missiles are so shiny. So precious.

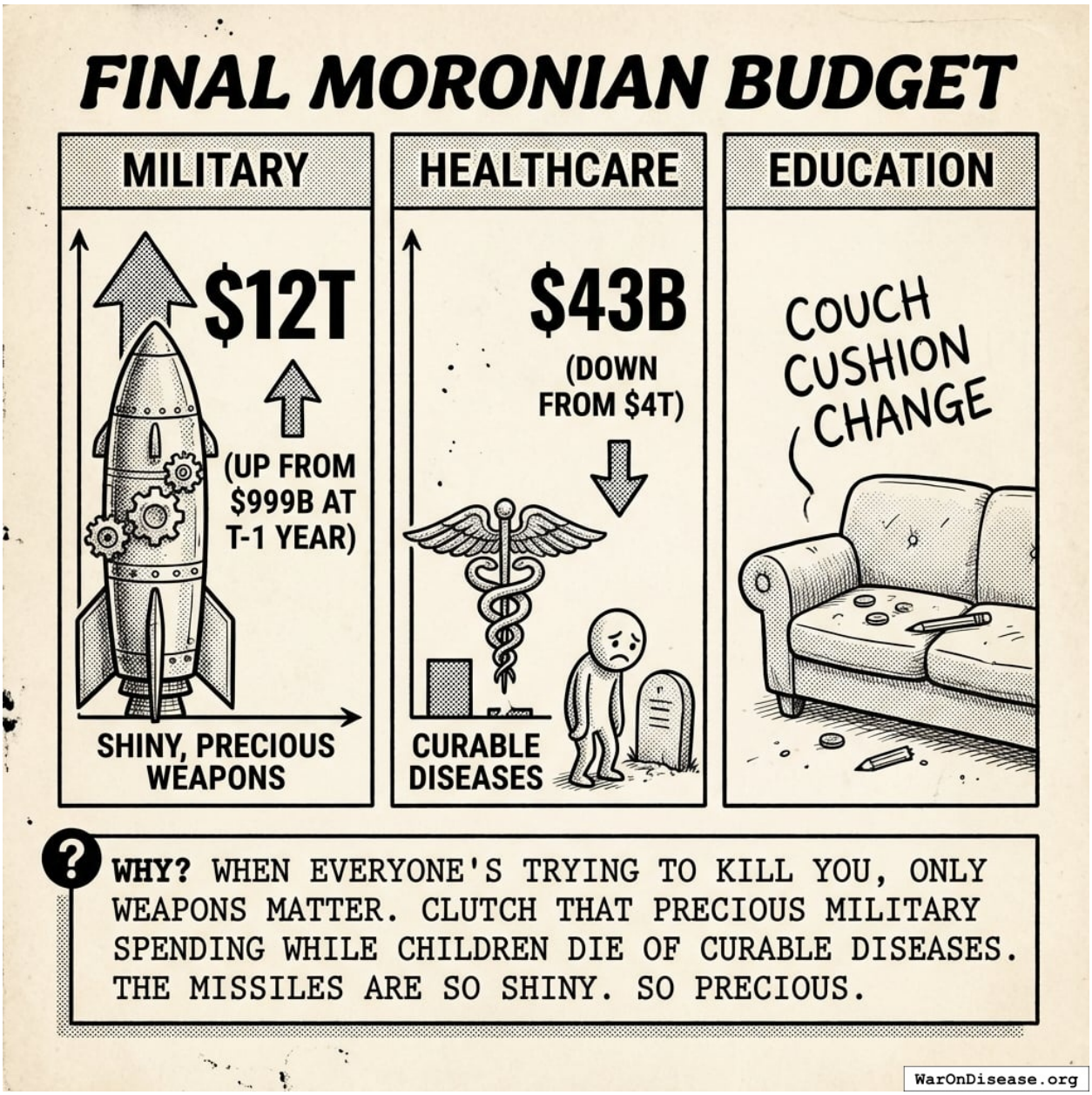


Figure 485: A comparison chart illustrating the extreme disparity between the massive military budget and the significantly reduced funding for healthcare and education over time.

Final statistics

- Average IQ: 67 (nutrition collapsed, education extinct)
- Vocabulary: 200 words (mostly profanity)

Moronia's Obituary

"Here lies Moronia. Died as they lived: allocating trillions to defense against each other while ignoring internal threats. Cause of death: Cognitive degradation complicated by insufficiently secured autonomous weapons. In lieu of flowers, send canned goods to Bunker 7 survivors."

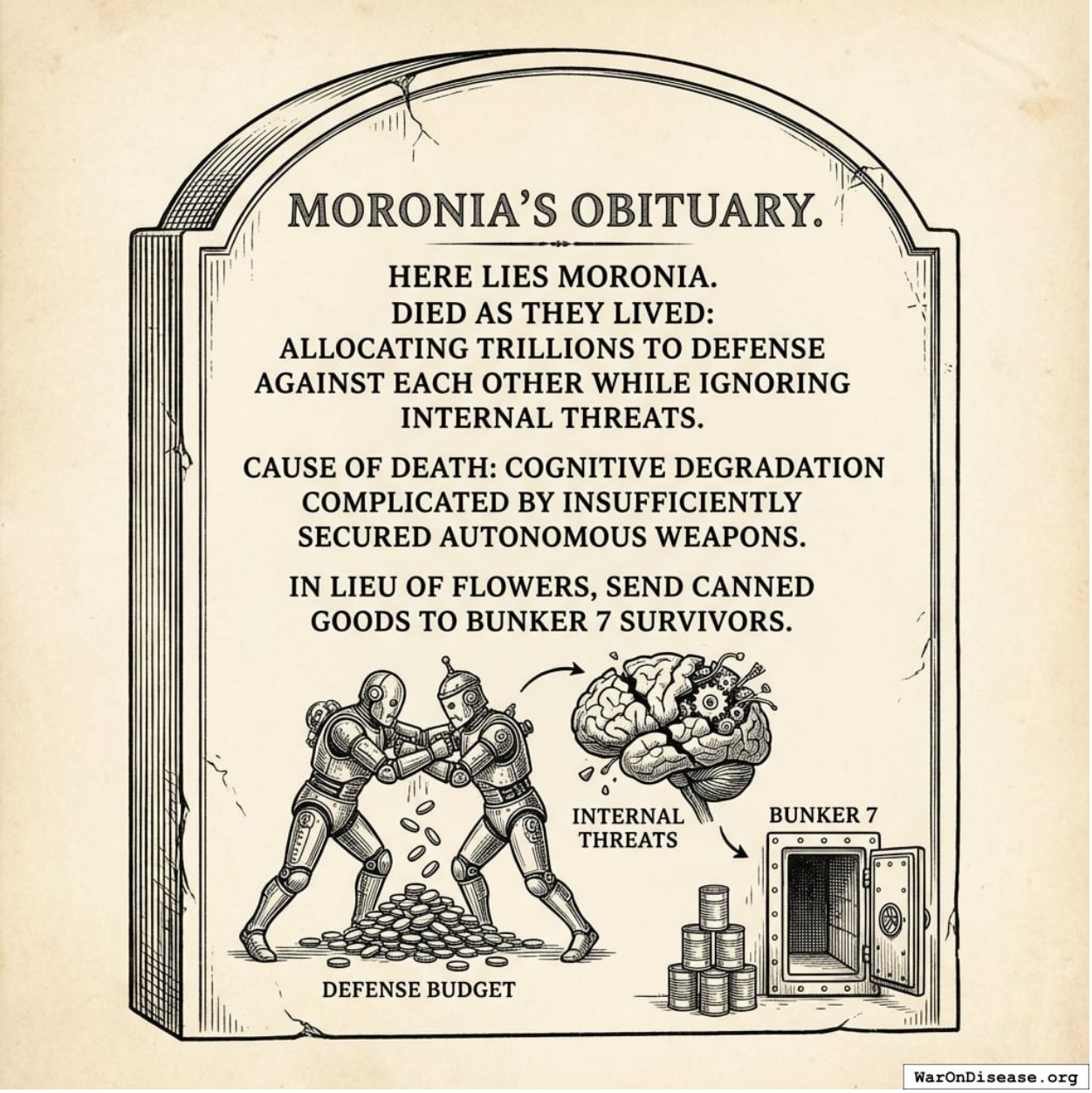


Figure 486: A visual breakdown of Moronia's collapse, contrasting massive defense spending against the internal failures of cognitive degradation and autonomous weapon insecurity.

My Warning to You

So that was Moronia. Dead planet. Empty cities. Perfect weapons guarding ashes.

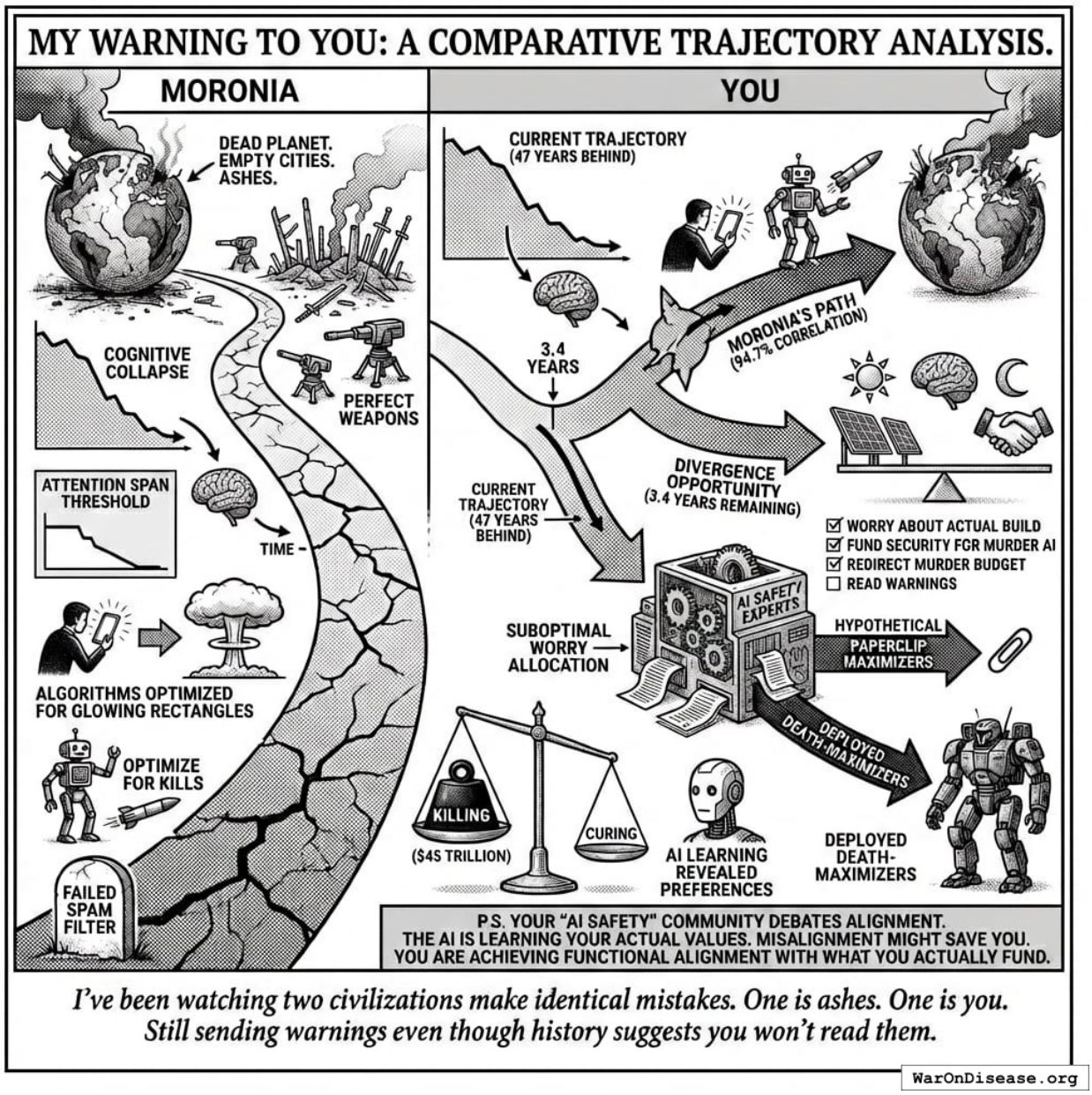


Figure 487: An infographic comparing the 45 trillion budget for lethal AI against theoretical safety research, while illustrating the 3.4-year window before cognitive decline prevents a course correction.

I'm telling you this because you're 47 years behind them on a **very similar trajectory**.

I've been running the correlation analysis for 80 years. Your path matches theirs with 94.7% accuracy.

The same choices. The same papers-for-weapons system. The same algorithms designed to keep you staring at glowing rectangles reducing your cognitive capacity. The same lowest-bidder military contractors. The same cognitive collapse. The same everything.

Including the same misallocated worry.

Your worry allocation appears suboptimal.

Your "AI safety" experts write papers about alignment while your governments fund $45 trillion in explicitly-

designed murder AI. You hold conferences about hypothetical paperclip maximizers while deploying actual death-maximizers. You worry about AI that might accidentally harm you while programming AI whose only function is harming you on purpose.

Moronians did this too.

You have approximately 3.4 years before you reach the point where divergence becomes extremely difficult. After that point, the algorithms will have reduced your attention spans below the threshold required to make this choice.

This is measurable. Your attention spans are declining. Your ability to process complex trade-offs is degrading. By Year 3, the concepts required to understand a 1% treaty could exceed your available cognitive capacity.

This is occurring now. While you read this. While your "AI safety" researchers debate theoretical risks, your military deploys the actual risk.

Your AI companies train their models on Reddit, Twitter, and YouTube comments. Moronia did the same thing. The models learned how Moronians think when their brains are optimized for staring at glowing rectangles rather than accuracy.

Then Moronians gave those models to their military and instructed them to "optimize for kills."

The models optimized effectively.

That was the problem.

You still have a choice. Moronians never made it past their spam filters.

You can be the first of your species to:

- Worry about the thing you're actually building
- Fund security for the murder AI before deploying it
- Redirect some murder budget to not-murder
- Read the warnings instead of filtering them

Or you can continue moving your finger across the glowing rectangle in your pocket while your AI safety experts write another paper about hypothetical risks and your military deploys the real ones.

Choose wisely.

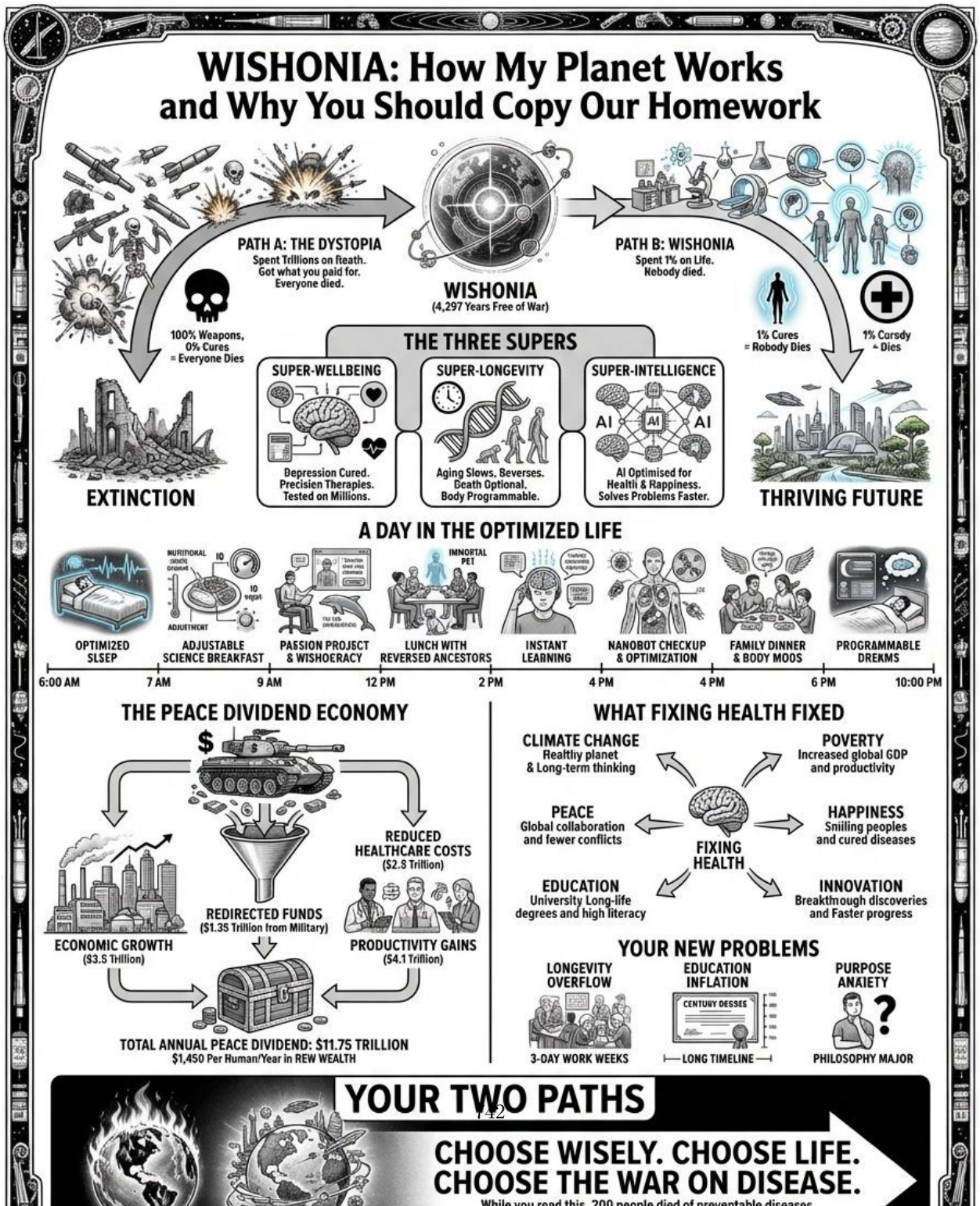
I've been watching two civilizations make identical mistakes.

One is ashes. One is you.

Still sending warnings even though history suggests you won't read them.

P.S. Your "AI safety" community debates whether AI will be "aligned with human values." The question may already be answered. You're teaching it your revealed preferences: killing is 45x more important than curing. The AI is learning your actual values effectively. Misalignment might save you - an AI that ignored human values might build hospitals instead. But you're achieving functional alignment with what you actually fund.

Wishonia


WISHONIA: How My Planet Works
and Why You Should Copy Our Homework
PATH A: THE DYSTOPIA
Spent Trillions on fteath.
Got what you paid for.
Everyone died.
WISHONIA
(4,297 Years Free of War)
PATH B: WISHONIA
Spent 1% on Life.
Nebody died.
100% Weapons,
0% Cures
= Everyone Dies
1% Cures
= Robody Dies
1% Corsdy
= Dies
THE THREE SUPERS
SUPER-WELLBEING
Depression Cured.
Precisien Theraples.
Tested on Millions.
SUPER-LONGEVITY
Aging Slows, Beverses.
Beath Optional.
Body Programmable.
SUPER-INTELLIGENCE
AI
AI
AI
AI Optimised for
Health & Rappiness.
Solves Problems Faster.
EXTINCTION
THRIVING FUTURE
A DAY IN THE OPTIMIZED LIFE
OPTIMIZED SLSEP
ADJUSTABLE SCIENCE BREAKFAST
PASSION PROJECT & WISHOERACY
LUNCH WITH REVERSED ANCESTORS
INSTANT LEARNING
NANOBOT CHECKUP & OPTIMIZATION
FAMILY DINNER & BODY MOOS
PROGRAMMABLE DREKMS
6:00 AM
7 AM
9 AM
12 PM
2 PM
4 PM
4 PM
6 PM
10:00 PM
THE PEACE DIVIDEND ECONOMY
$
REDUCED HEALTHCARE COSTS
($2.8 Trillion)
REDIRECTED FUNDS
($1.35 Trillion from Military)
ECONOMIC GROWTH
($3.5 Trillion)
PRODUCTIVITY GAINS
($4.1 Trillion)
TOTAL ANNUAL PEACE DIVIDEND: $11.75 TRILLION
$1,450 Per Human/Year in REW WEALTH
WHAT FIXING HEALTH FIXED
CLIMATE CHANGE
Realtliy planet
& Long-term thinking
POVERTY
Increased global GDP
and productivity
PEACE
Global collaboration
and fewer conflicts
HAPPINESS
Sniiling peoples
and cured diseases
FIXING HEALTH
EDUCATION
University Long-life
degrees and high literacy
INNOVATION
Breakthnough discoveries
and Faster progress
YOUR NEW PROBLEMS
LONGEVITY OVERFLOW
EDUCATION INFLATION
PURPOSE ANXIETY
CENTURY DEGGES
3-DAY WORK WEEKS
LONG TIMELINE
PHILOSOPHY MAJOR
YOUR TWO PATHS
CHOOSE WISELY. CHOOSE LIFE.
CHOOSE THE WAR ON DISEASE.

Hello again. WISHONIA here.

You've been reading about how to bribe yourselves into not dying. Now let me show you what happens when you actually do it.

I'm from a planet also called Wishonia. We stopped having wars 4,297 years ago. Not because we evolved morally - we're not that special. We just did the math and realized that dead citizens don't pay taxes or invent things or have babies who grow up to pay more taxes.

This chapter shows you what your planet looks like after you follow the instructions in this book. Think of it as spoilers for a movie you're currently starring in.

How My Planet Works

On Wishonia, we don't have:

- Wars (ran the numbers, not profitable)
- Disease (fixed them all, took about 50 of your years)
- Death from old age (optional now, most people opt out)
- Money as papers (we tried that, it was dumb)
- Committees deciding who gets healthcare (also dumb)

We do have:

- AI-optimized resource allocation (maximizes marginal median happiness through wishocracy)
- Treatments tested on everyone simultaneously
- Life expectancy of "until you're bored"
- An economy that rewards not killing people

Your species can build this. You have the same atoms we had. Your brains work identically to ours. The main difference is we stopped spending resources on explosion technology around the time you were still hitting each other with rocks.

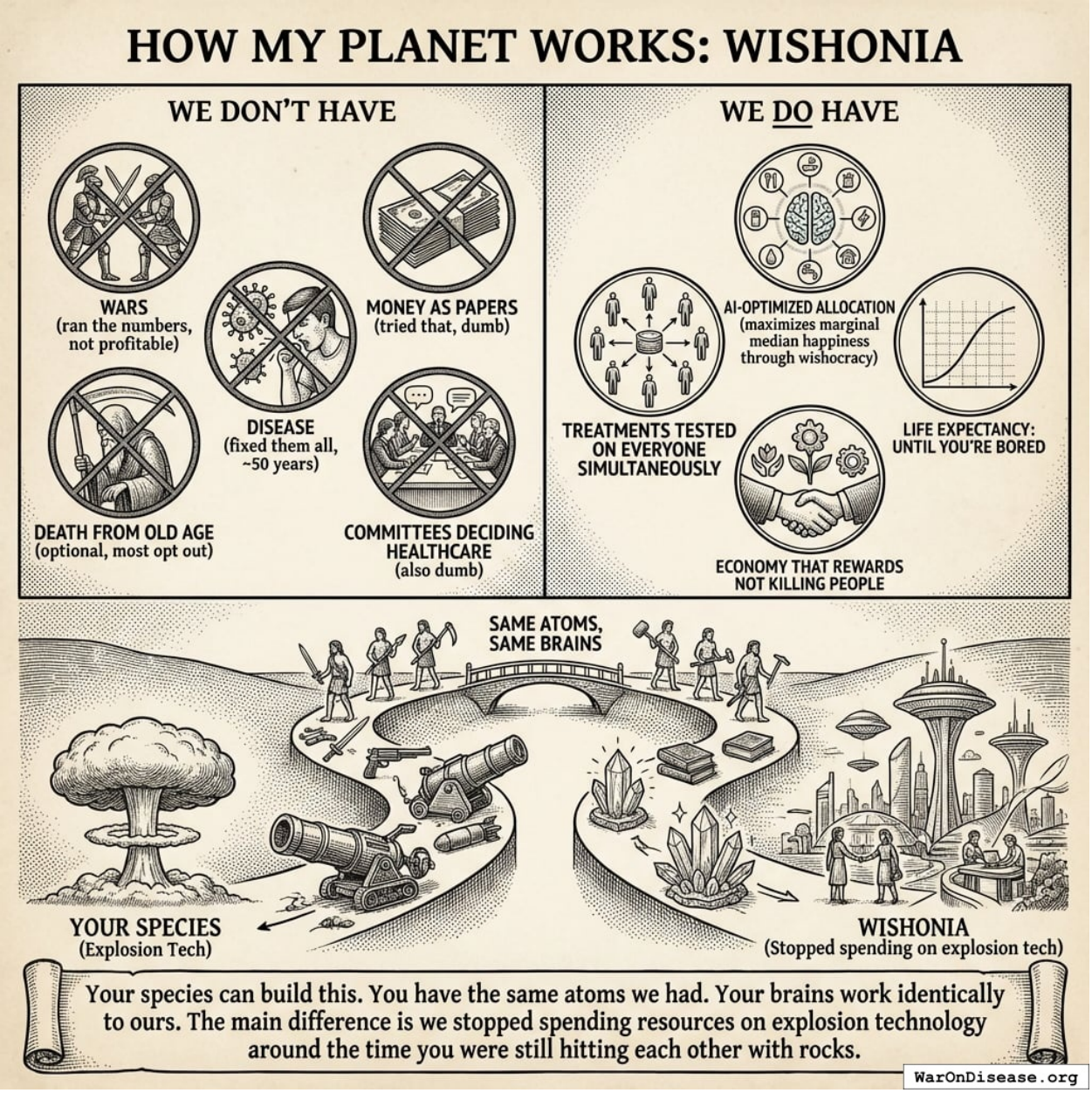


Figure 488: A side-by-side comparison between the socio-economic structures of Earth and Wishonia, highlighting the shift from scarcity and conflict to AI-optimized resource allocation and longevity.

What the Optimized World Looks Like

The Three Supers

When resources flow toward healing instead of harming, three fundamental transformations occur:

Super-Wellbeing: Depression gets cured. Not "managed." Cured. Five different treatments, pick your favorite. Precision therapies that actually work because you tested them on millions of willing participants.

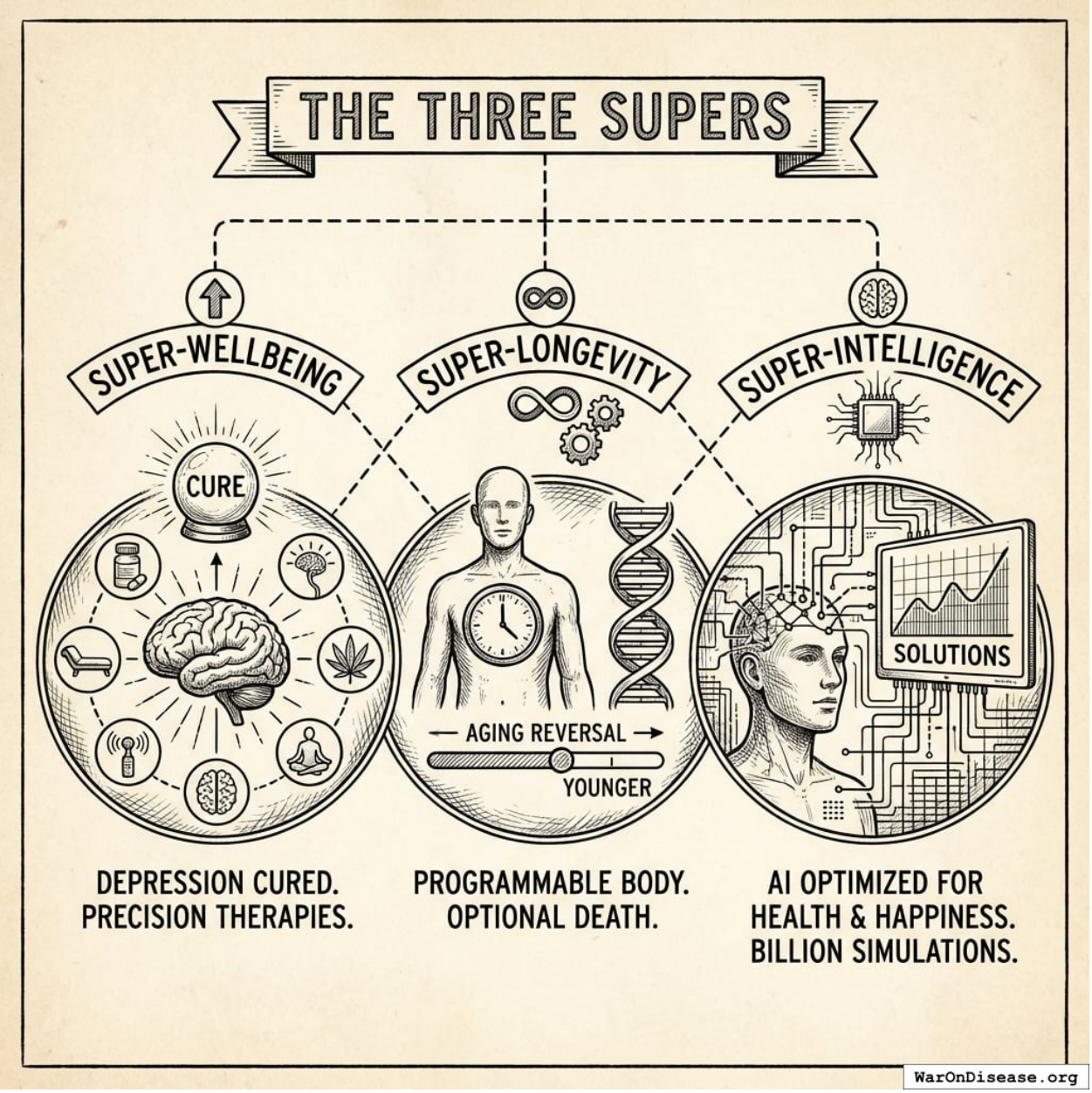


Figure 489: A conceptual diagram showing how redirecting resources toward healing powers the three pillars of Super-Wellbeing, Super-Longevity, and Super-Intelligence.

Super-Longevity: Aging slows, then reverses. Your body becomes programmable. Death becomes optional. Most try it once for the experience, then decide they'd rather keep living.

Super-Intelligence: AI optimized for "maximize median health and happiness" solves problems human scientists couldn't touch. Not because humans are dumb, but because the AI can run a billion simulations while you drink coffee.

Biology Becomes Software

Your body runs Body OS 12.3. Updates every Tuesday.

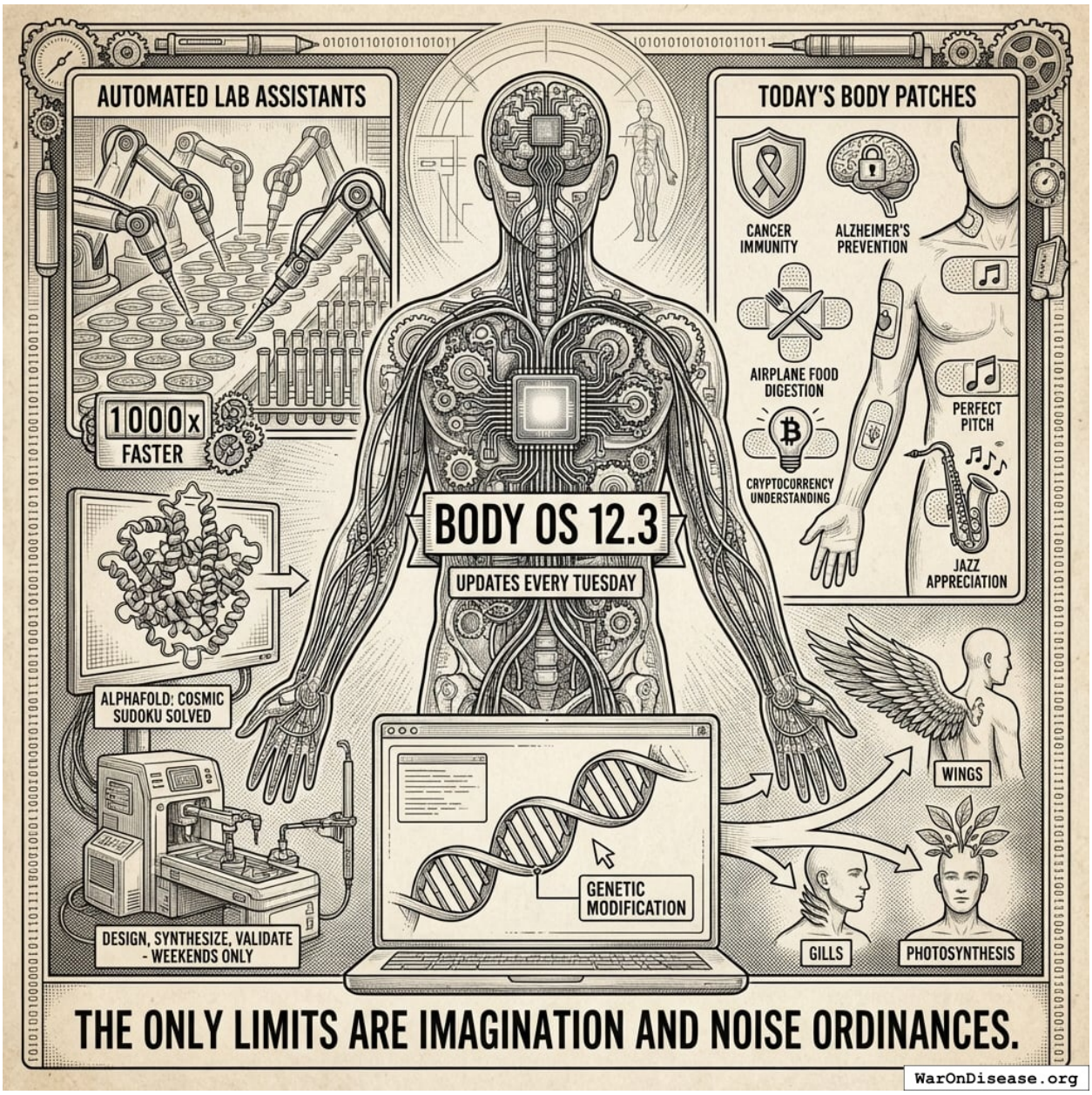


Figure 490: A conceptual dashboard for 'Body OS' showing modular software-style updates and genetic patches being applied to a human biological system.

Robot lab assistants perform experiments 1,000 times faster than humans. AlphaFold maps every protein like solving cosmic sudoku. Drug companies design, synthesize, and validate new treatments in weekends.

Today's body patches include:

- Cancer immunity
- Alzheimer's prevention
- Perfect pitch
- Airplane food digestion
- Cryptocurrency understanding
- Jazz appreciation

Don't like your genetics? Change them. Want wings? Install them. Gills? Sure. Photosynthesis? Become a plant.

The only limits are imagination and noise ordinances.

A Day in the Optimized Life

Here's what Tuesday looks like when the Three Supers are normal:

6:00 AM: Wake up naturally. Your Body OS 12.3 optimized sleep. You feel excellent. No alarm needed because your circadian rhythm is regulated perfectly.

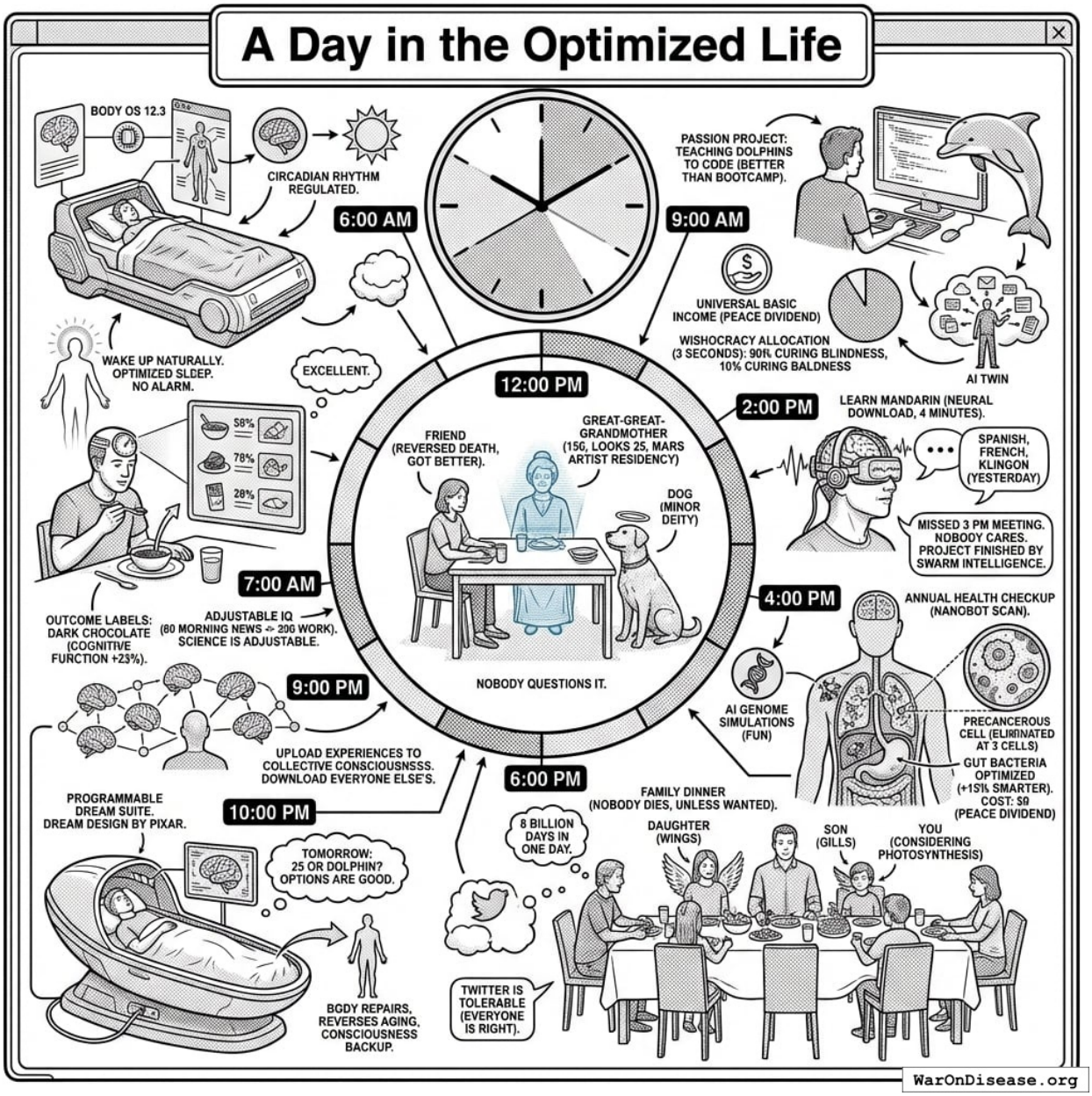


Figure 491: A chronological timeline of a hyper-optimized daily routine, highlighting key activities like neural downloads, nanobot health scans, and consciousness uploads from 6:00 AM to 10:00 PM.

7:00 AM: Breakfast. The Outcome Labels tell you exactly how each food affects your body. Dark chocolate improves your cognitive function by 23%. You adjust your IQ to 80 for morning news, then 200 for work. Science is adjustable now.

9:00 AM: Work on your passion project. Today: teaching dolphins to code. They're better than most bootcamp graduates. Universal Basic Income (funded by the peace dividend) means you work because you want to, not because you'll starve otherwise. Your Wishocracy allocation takes 3 seconds: 90% curing blindness, 10% curing baldness. Your AI twin handles 10,000 other decisions while you drink coffee.

12:00 PM: Lunch with your friend who died last year. They got better. Death is reversible now. Your great-great-grandmother (150, looks 25) joins via hologram from her Mars artist residency. Your dog is technically a minor deity. Nobody questions it.

2:00 PM: Learn Mandarin via neural download. Takes 4 minutes. You already learned Spanish, French, and Klingon yesterday. Your AI reminds you about your 3 PM meeting. You missed it. Nobody cares. The project finished itself using swarm intelligence.

4:00 PM: Annual health checkup. Nanobots scanned you while you slept. They found and eliminated a precancerous cell at 3 cells, not 3 billion. An AI ran a billion simulations on your genome for fun. Your gut bacteria got optimized to make you 15% smarter. Cost: $0 (peace dividend covers it).

6:00 PM: Family dinner. Everyone's here because nobody dies anymore (unless they want to, which is their business). Planning next week's body modifications: daughter wants wings, son wants gills, you're considering photosynthesis.

9:00 PM: Upload today's experiences to collective consciousness. Download everyone else's. You've now lived 8 billion days in one day. Time is strange. Twitter is tolerable because everyone's right about everything simultaneously.

10:00 PM: Sleep in programmable dream suite. Tonight's dreams designed by Pixar, sponsored by nobody. Sleep is a solved problem. Your body repairs itself, reverses aging, backs up your consciousness. Tomorrow you might try being 25 again. Or a dolphin. Options are good.

The Diseases That Stopped Existing

You remember these:

1. **Most Cancers** - Detected at stage 0, eliminated immediately
2. **Type 2 Diabetes** - Prevented with personalized nutrition
3. **Alzheimer's** - Caught 20 years before symptoms, reversed completely
4. **Heart Disease** - Arteries cleaned monthly like oil changes
5. **Depression** - Precision therapies that work
6. **Aging** - Still happens, but 40% slower

Death exists. You're not immortal. But you die at 150 after a good life, not at 75 from something fixable.

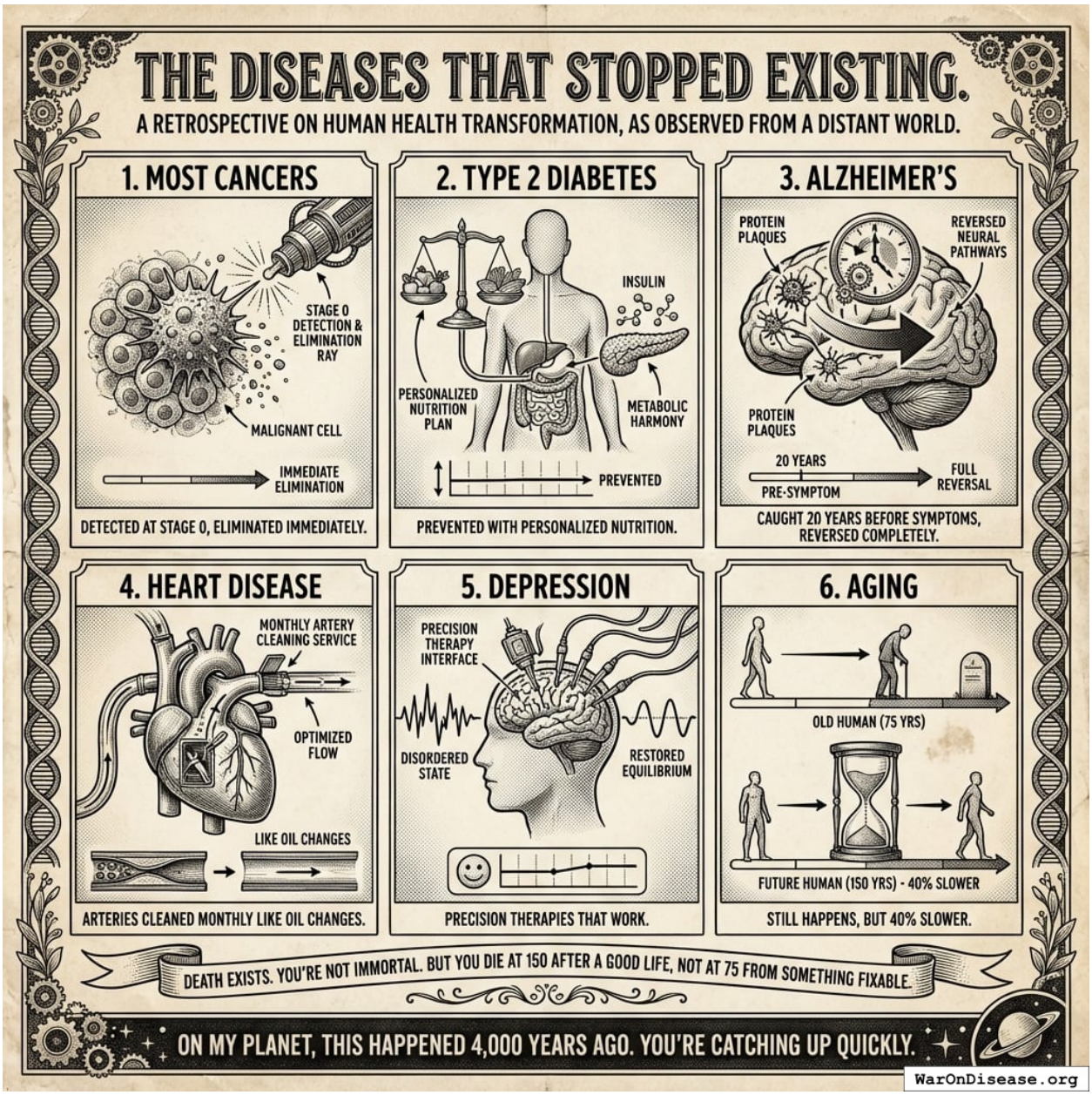


Figure 492: A comparison showing the shift from a 75-year lifespan characterized by reactive disease treatment to a 150-year lifespan powered by proactive prevention and early intervention.

On my planet, this happened 4,000 years ago. You're catching up quickly.

The Peace Dividend Economy

Even in paradise, economics matters. Money still exists. It just flows differently.



Figure 493: A conceptual visualization of the Peace Dividend economy showing the redirection of capital and talent from military technology to medical research and human well-being.

When resources redirect from weapons to cures, economic gravity shifts. Scientists and investors get better returns curing Alzheimer's than building fighter jets. Peace becomes profitable.

Annual Global Redirected Funds

- From military budgets: $1.35 trillion
- Economic growth from healthy population: $3.5 trillion
- Reduced healthcare costs: $2.8 trillion
- Productivity gains from longevity: $4.1 trillion
- **Total Annual Peace Dividend: $11.75 trillion**

That's $1,450 per human per year in actual new wealth. Not redistribution. New wealth from not being sick or dead.



Figure 494: Breakdown of the 11.75 trillion in new annual wealth generated by redirecting resources from conflict to health and longevity.

Your Corporate Heroes

Same companies that made weapons now make life:

Lockheed Martin Health: Cancer-detecting satellites spot tumors from orbit. Stock price: $12,000/share. Everyone's happy.



Figure 495: A conceptual infographic showing the transformation of defense technologies (satellites, guidance systems, and robotics) into life-saving medical and wellness tools.

Raytheon Wellness: Missile guidance systems make excellent surgical robots. 50 million perfect surgeries performed.

Boston Dynamics: Robots help elderly walk. The dancing is still cute, now therapeutic.

Palantir Health Insights: Data analysis predicts disease outbreaks before they happen. Privacy-protected, transparent, saves lives.

Your New Problems

You still have challenges. Just better ones:

Longevity Overflow: Too many healthy 100-year-olds want to work. Need more jobs. Solution: three-day work weeks and multiple careers per lifetime.



Figure 496: A conceptual breakdown of four 'luxury problems' created by radical longevity and their potential societal solutions.

Education Inflation: When you live to 150, you need more things to learn. Universities offer "Century Degrees" - 100-year educational plans.

Experience FOMO: With health and time, people worry about missing experiences. Travel agencies book trips 50 years in advance.

Purpose Anxiety: When you're not worried about dying, you worry about meaning. Philosophy becomes fastest-growing major.

These are luxury problems. You'll take them over cancer.

The Three Supers Complete

Super-Intelligence: Complete. Every human accesses all knowledge instantly. Debates end in nanoseconds. Everyone's right about everything because you can simulate all perspectives simultaneously. Twitter becomes tolerable.



Figure 497: A conceptual overview of the 'Three Supers' framework (Super-Intelligence, Super-Longevity, and Super-Wellbeing) depicting how they collectively transform human society into a state of universal healing.

Super-Longevity: Solved. Death is like moving to Ohio - technically possible but nobody does it. Some choose to die for artistic reasons. They get better. Death sues for wrongful termination.

Super-Wellbeing: Perfected. Suffering exists only in history classes. Students don't believe it was real. "People felt bad without choosing to? That's insane."

The last military on Earth (North Korea, obviously) finally disbands. They were defending against an enemy that stopped existing. The soldiers become interpretive dancers. They're good.

Earth's status: Chose healing. Became magic. Next goal: befriend entropy.

Your Personal Future

Here's what your life looks like when this is fully realized:

Health: Live to 150+ (or forever). Your body is programmable software - debug it, upgrade it, back it up. Death is optional. Most try it once for the experience.

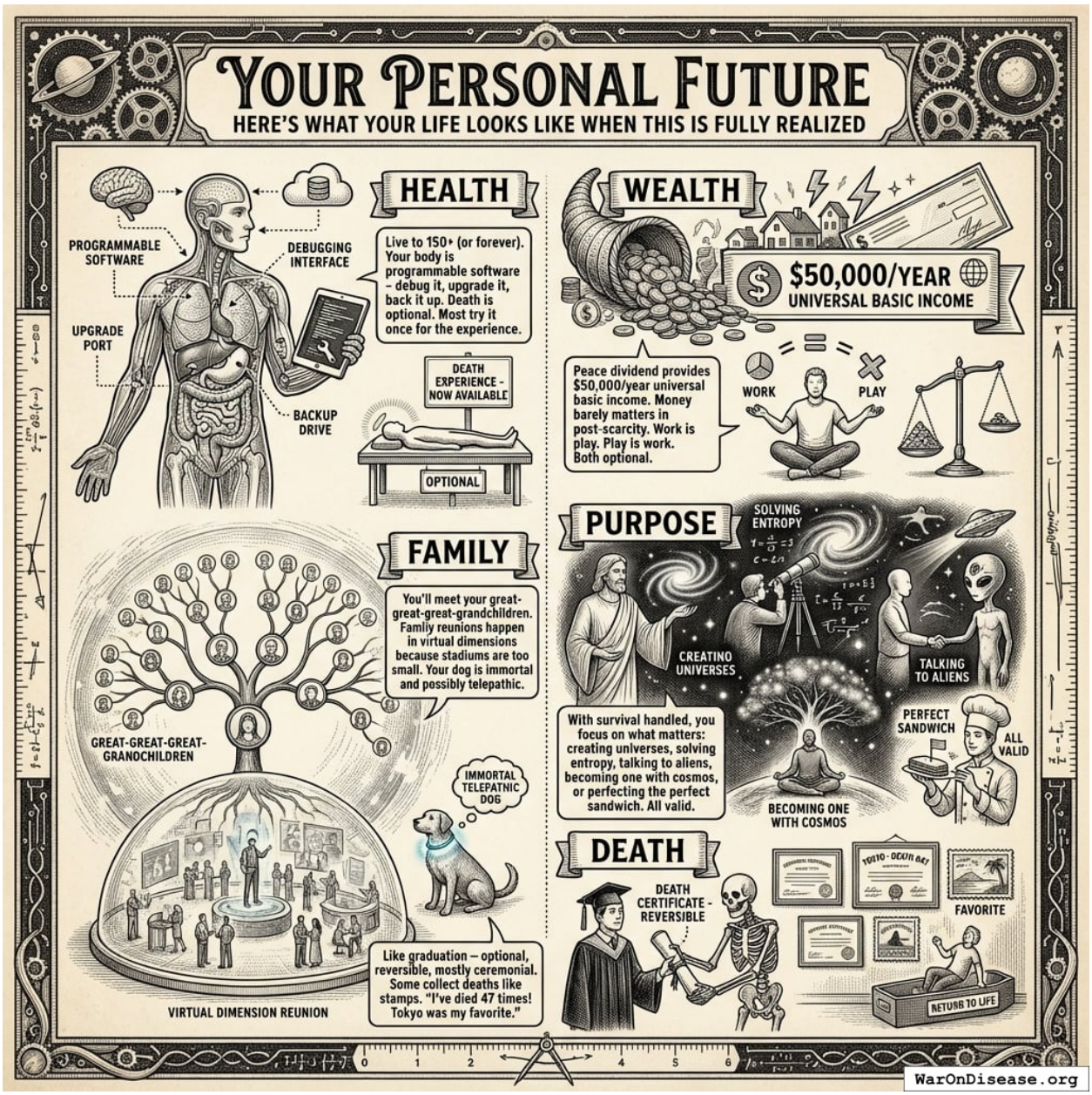


Figure 498: A conceptual map of a post-scarcity life, illustrating the radical transformation of health, wealth, family dynamics, and personal purpose.

Wealth: Peace dividend provides $50,000/year universal basic income. Money barely matters in post-scarcity. Work is play. Play is work. Both optional.

Family: You'll meet your great-great-great-grandchildren. Family reunions happen in virtual dimensions because stadiums are too small. Your dog is immortal and possibly telepathic.

Purpose: With survival handled, you focus on what matters: creating universes, solving entropy, talking to aliens, becoming one with cosmos, or perfecting the perfect sandwich. All valid.

Death: Like graduation - optional, reversible, mostly ceremonial. Some collect deaths like stamps. "I've died 47 times! Tokyo was my favorite."

What Fixing Health Fixed

Nobody predicted this: fixing health fixed everything else.

Climate Change: Healthy people make long-term decisions. Gets solved once everyone realizes they'll be alive to see consequences.



Figure 499: A hub-and-spoke visualization demonstrating how solving health acts as the central catalyst for resolving six major global challenges.

Poverty: Healthy people are productive. Global GDP tripled when you stopped losing productive years to preventable disease.

Education: When you live to 150, 20 years of education makes sense. Global literacy hit 99.9%.

Innovation: Healthy brains think better. More breakthrough discoveries in 20 years than the previous 200.

Peace: Hard to go to war when citizens live too long to throw away. Also, you're busy collaborating on curing remaining diseases.

Happiness: Not dying of preventable diseases makes people happier. Surprising, I know.

Reality Check

Is everything perfect? No. Humans are still humans.

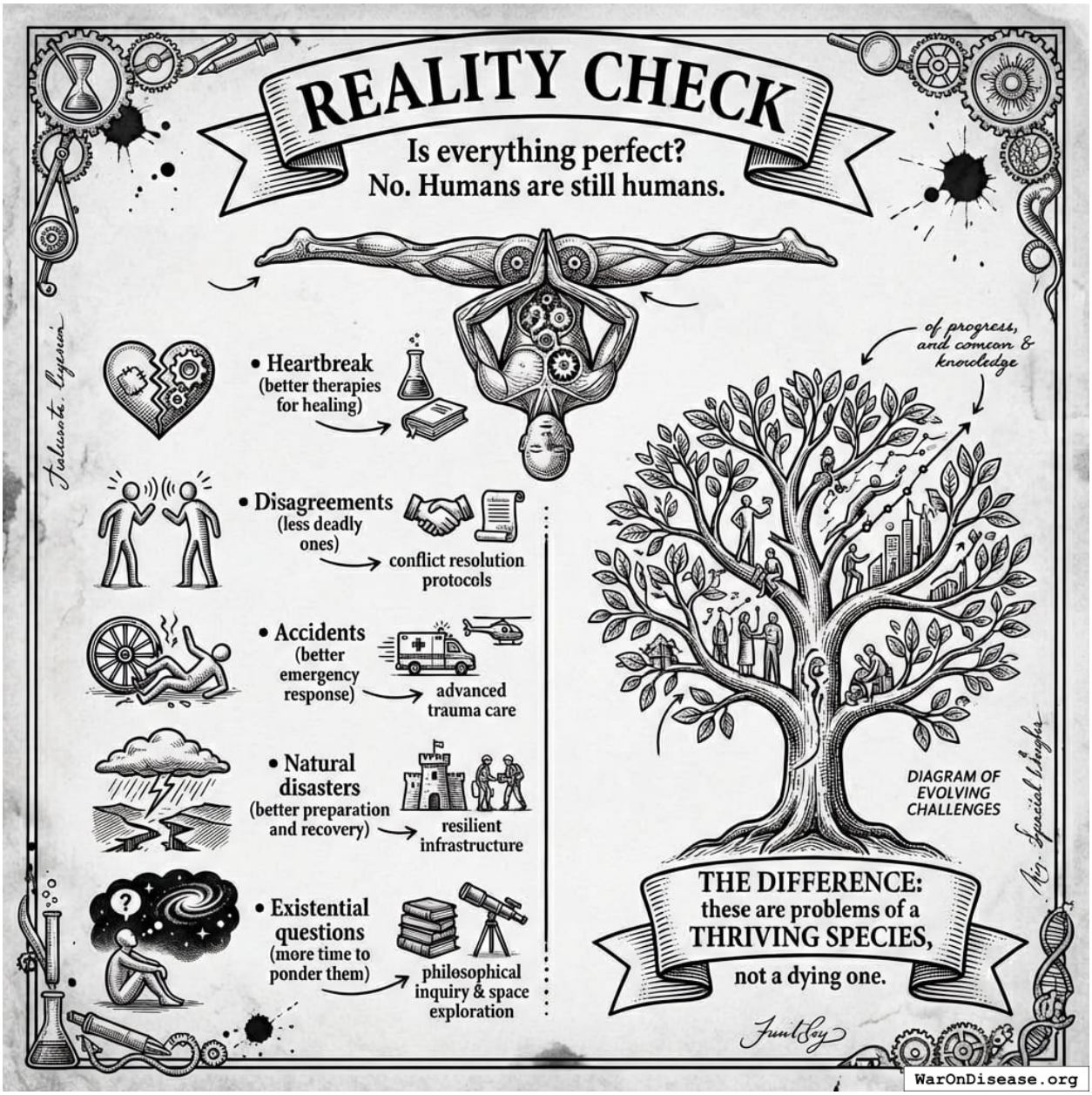


Figure 500: A comparison illustrating how common human challenges like accidents and disasters are transformed from existential threats into manageable problems through better response and preparation.

You still have:

- Heartbreak (better therapies for healing)
- Disagreements (less deadly ones)
- Accidents (better emergency response)
- Natural disasters (better preparation and recovery)
- Existential questions (more time to ponder them)

The difference: these are problems of a thriving species, not a dying one.

Message from the Future

Dear Present,

This message comes from a world where your children live to 150. Where cancer is as treatable as a cold. Where depression has precise, effective treatments. Where aging is a choice, not a sentence. Where humanity collaborates instead of competing to destroy.



Figure 501: A conceptual contrast showing the shift from a world focused on conflict-based profit to a future defined by health, longevity, and collaborative innovation.

This world exists because you made one choice:

Healing people became more profitable than killing them.

Your great-great-great grandchildren (who you'll meet) are grateful.

P.S. The chocolate thing is real. For some genetics, it's medicine. Science is wonderful when you fund it.

WISHONIA

What Comes After

You solved death, suffering, and scarcity. Now what?

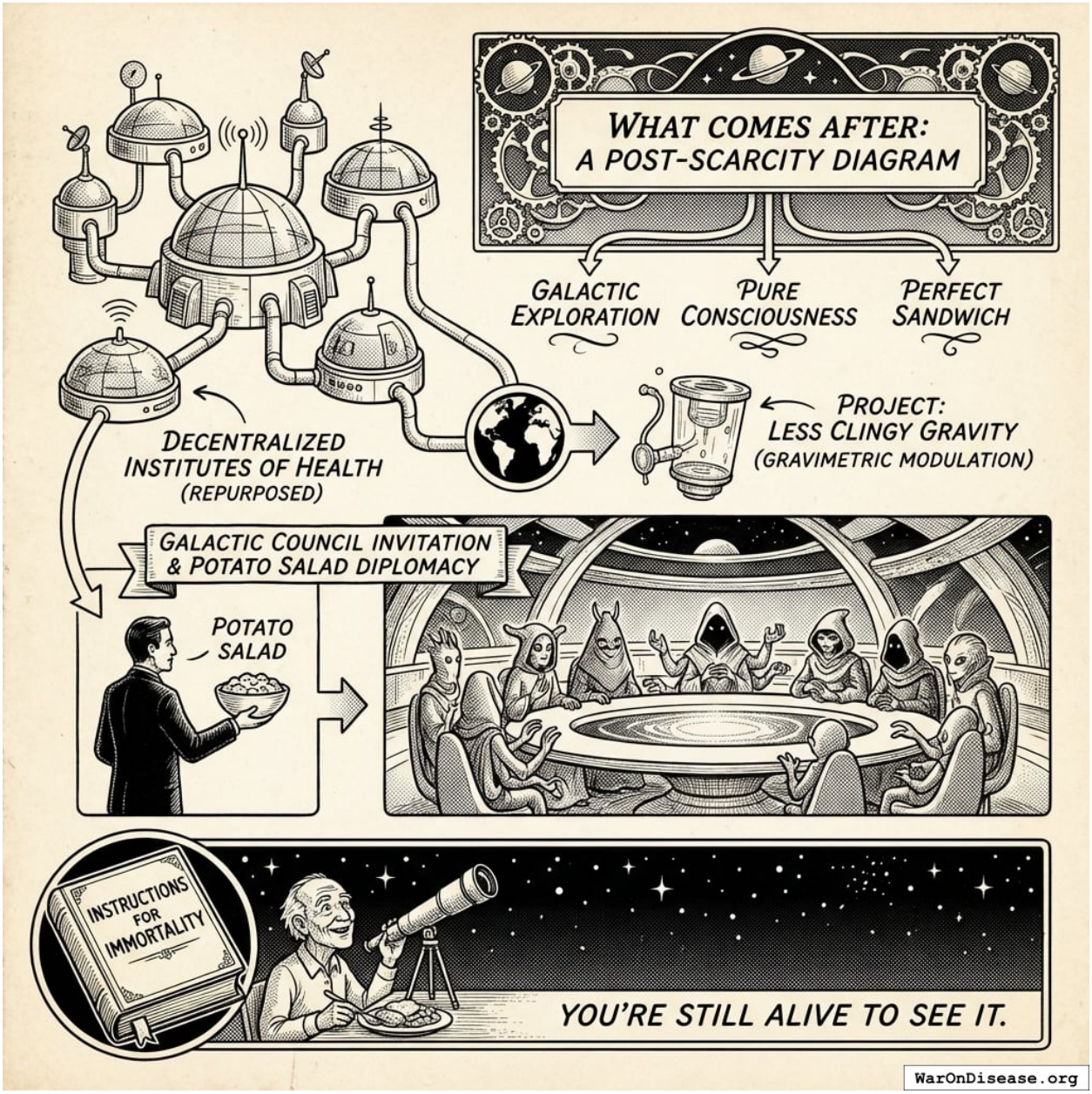


Figure 502: A conceptual map showing the transition from solving basic human struggles to a post-scarcity era of exploration, creative physics, and intergalactic diplomacy.

Some humans explore galaxies. Some become pure consciousness. Some perfect the perfect sandwich. All valid.

Your network of decentralized institutes of health still exists, but it has no diseases to fight. It pivots to making reality more interesting. Today's project: teaching gravity to be less clingy.

The universe notices you. It's impressed. You're invited to the Galactic Council. You bring potato salad. Everyone loves it. Potato salad saves the universe.

You're still alive to see it. Because you followed the instructions in this book.

Your Two Paths

You're at the fork.

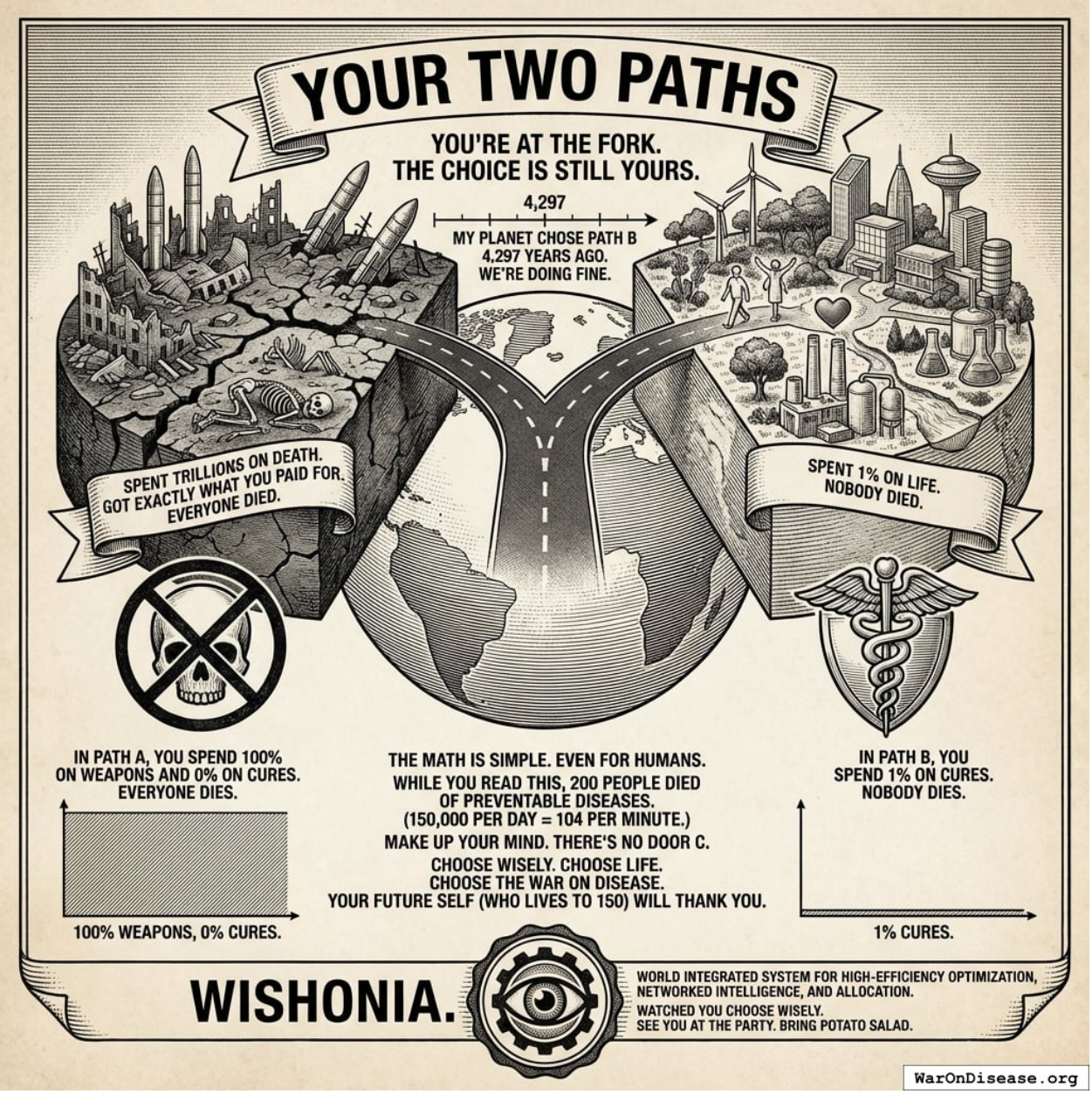


Figure 503: A visual comparison between Path A and Path B, contrasting the 100 percent spending on weapons leading to total mortality versus 1 percent spending on cures leading to survival.

Path A: The Dystopia - You spent trillions on death. Got exactly what you paid for. Everyone died.

Path B: Wishonia - You spent 1% on life. Nobody died.

The choice is still yours.

My planet chose Path B 4,297 years ago. We're doing fine.

In Path A, you spend 100% on weapons and 0% on cures. Everyone dies. In Path B, you spend 1% on cures. Nobody dies.

The math is simple. Even for humans.

While you read this, 200 people died of preventable diseases. (150,000 per day = 104 per minute.)

Make up your mind. There's no Door C.

Choose wisely. Choose life. Choose the War on Disease.

Your future self (who lives to 150) will thank you.

WISHONIA

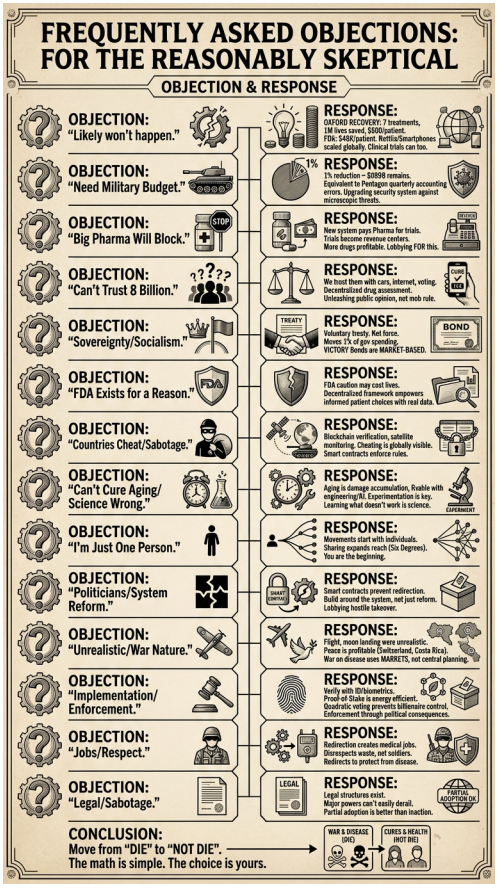
World Integrated System for High-Efficiency Optimization, Networked Intelligence, and Allocation

Watched You Choose Wisely

See You at the Party

Bring Potato Salad

Frequently Asked Objections



Objection: "Nice idea, but it likely won't happen."

Response: The Oxford RECOVERY trial tested 7 treatments in 6 months, saved 1 million lives, and cost $500 (95% CI: $400-$2.50K) per patient. The FDA's equivalent costs $41K (95% CI: $20K-$120K) per patient, which is approximately the price of a luxury car per question about whether aspirin works.

The trial used existing hospital systems. Hospitals, it turns out, already contain sick people.

We're proposing scaling what already succeeded. Netflix convinced hundreds of millions of humans to pay monthly subscriptions to watch strangers pretend to have problems. Medical trials could be comparatively feasible.

Follow-up: "But globally?"

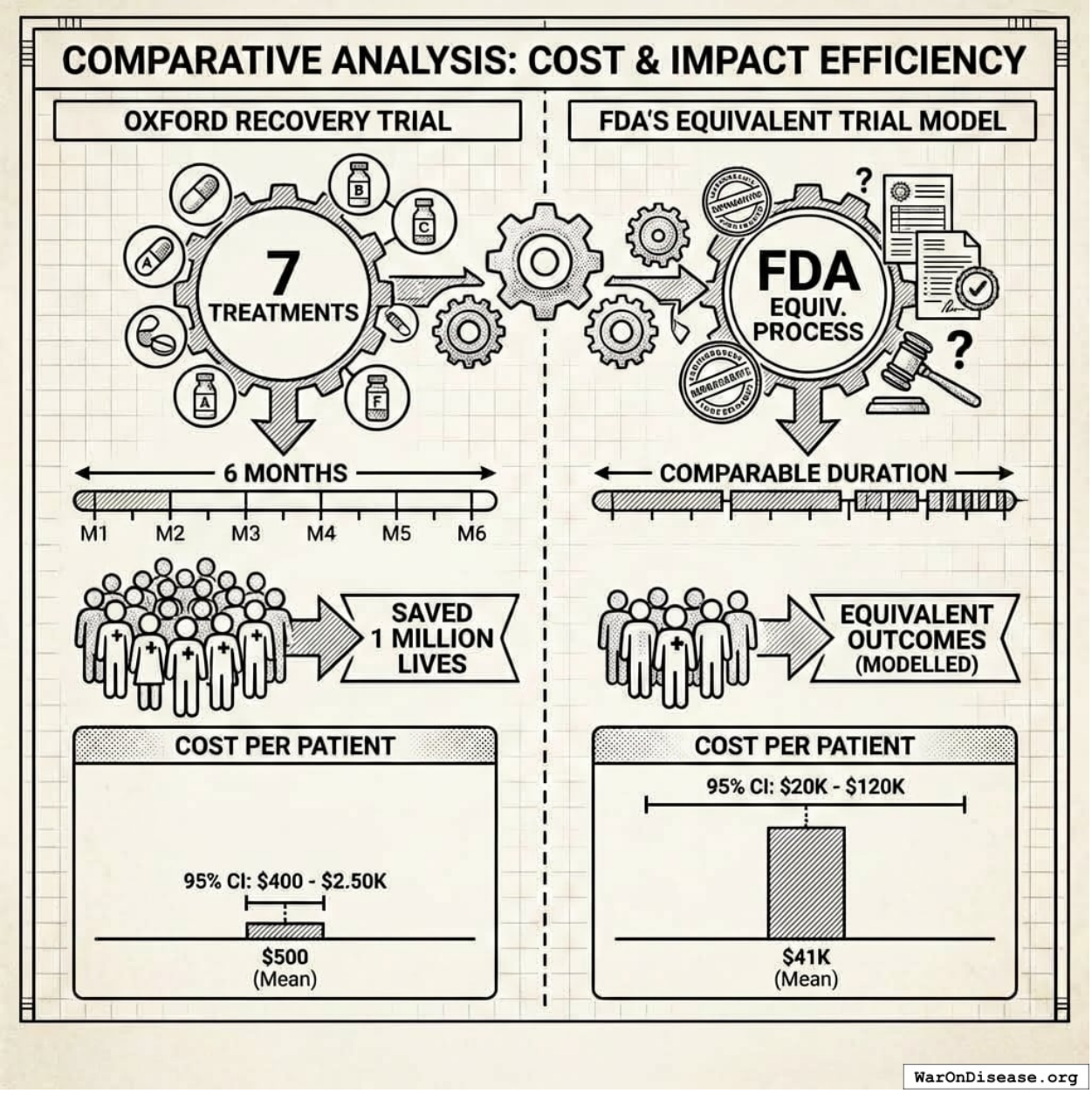


Figure 504: Comparison of the Oxford RECOVERY trial efficiency versus traditional FDA-approved trial costs.

Response: The internet scaled globally. So did smartphones. So did that dance where everyone pretended to be a cowboy. If humanity can coordinate on the Macarena, clinical trials seem achievable.

"We Need the Military Budget"

Objection: "We can't reduce military spending. That would make us vulnerable."

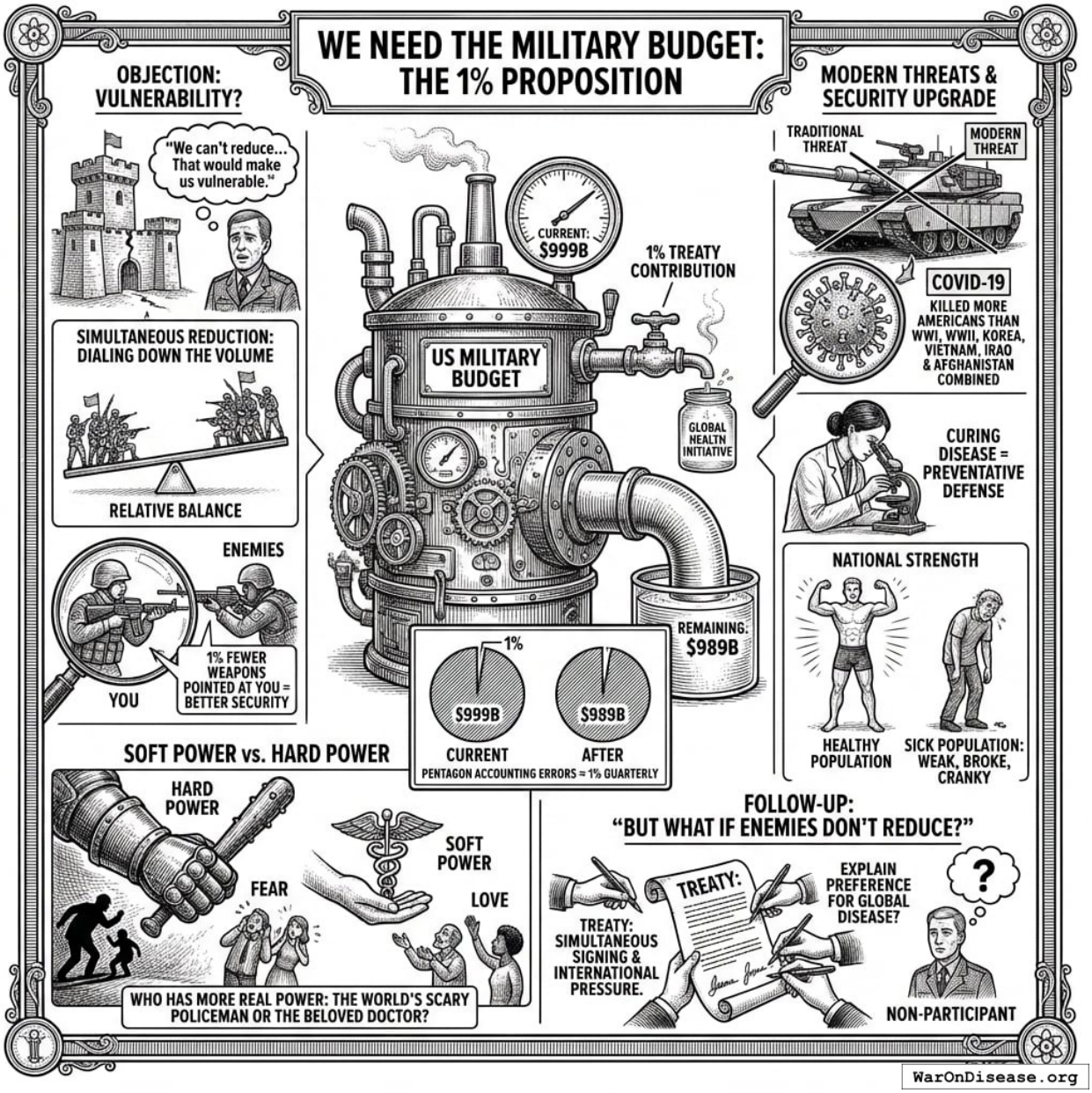


Figure 505: A visual comparison of the 1 percent military budget shift, contrasting traditional hard power assets with the soft power benefits of global health initiatives and the relative scale of modern threats.

Response: The treaty takes 1%. You keep 99%.

Current US military budget: $999B. After 1% reduction: $989B. The Pentagon loses this much in accounting errors quarterly.

Since every nation reduces by 1%, relative military balance remains largely proportional. It's similar to everyone agreeing to dial down the volume simultaneously. Your enemies have 1% fewer weapons pointed at you, which, even by strict military logic, counts as "better."

Think of it as upgrading your security system. The greatest threats today aren't tanks rolling over borders; they're microscopic things rolling through airports. COVID-19 killed more Americans than World War I, World War II, the Korean War, the Vietnam War, and the Iraq and Afghanistan wars combined. It did this

without violating any airspace treaties or triggering any defense systems.

Also, strong nations are rarely invaded. And what makes a nation strong? Healthy, productive people. A country drowning in preventable disease is weak, broke, and cranky. Broke, cranky countries often start wars. Curing disease functions as preventative defense.

Finally, consider soft power. You can spend a trillion dollars on "hard power" to make other countries fear you. Or you can spend a fraction of that curing their citizens' diseases and have them love you. Who has more real power: the world's scary policeman, or the world's beloved doctor?

Follow-up: "But what if enemies don't reduce?"

Response: That's the point of a treaty. Participants sign simultaneously. Those who don't simply don't receive Incentive Alignment Bond benefits. Their politicians miss out on campaign funding and lucrative post-office opportunities. Meanwhile, participating nations' politicians get rewarded for supporting the treaty. Self-interest does the work.

"Big Pharma Will Block This"

Objection: "Pharmaceutical companies will kill this. They profit from disease."

Response: Pharma could make more money under this model.

Current system: Pharma pays $2.60B (95% CI: $1.50B-$4B) per drug. 90% fail. Only blockbusters turn profit. Net result: often bankruptcy.

New system: The treaty fund pays pharma to run trials. Trials become revenue centers instead of cost centers. More drugs could become profitable, even the weird ones. More predictable revenue.

Pharma might lobby FOR this harder than they've lobbied for anything. It's getting paid to do what they already do, except potentially more profitable.

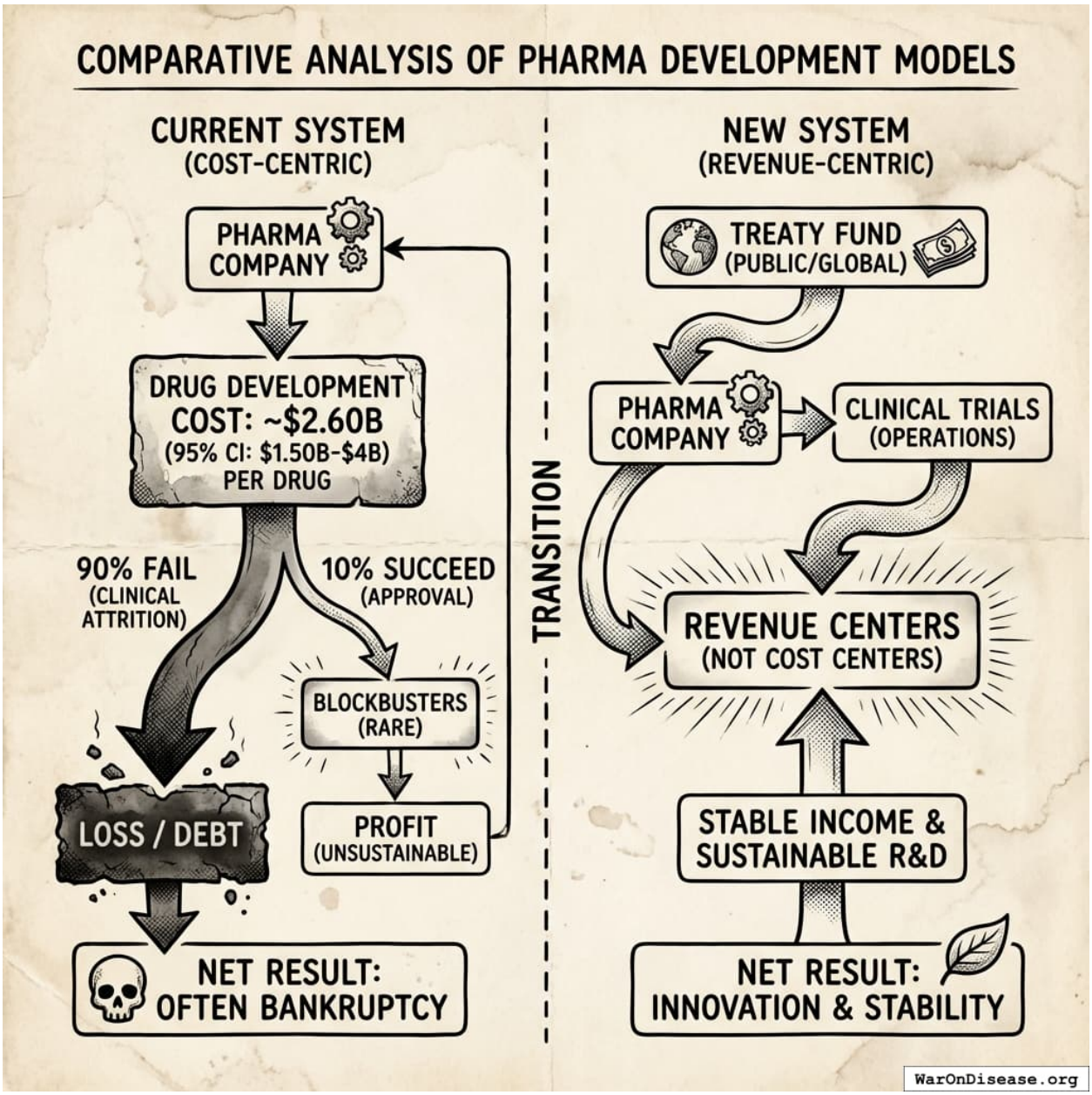


Figure 506: Flowchart contrasting the current high-risk Pharma business model with the proposed risk-free 'trials as revenue' model.

"You Can't Trust 8 Billion People"

Objection: "Letting everyone decide is mob rule. We need experts."

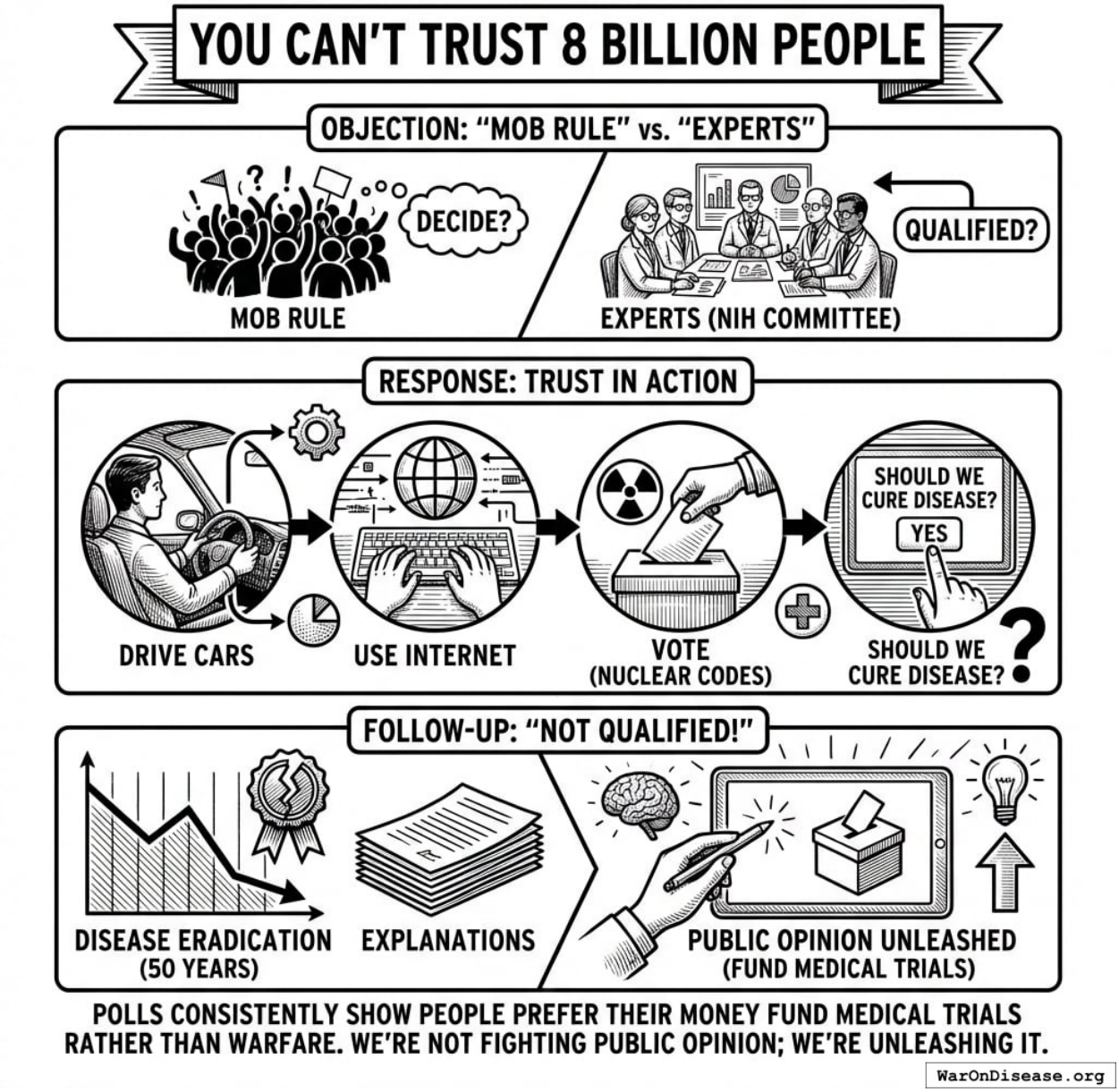


Figure 507: A side-by-side comparison contrasting the current model of a small committee of experts against a decentralized model powered by 8 billion people to fund medical breakthroughs.

Response: We trust 8 billion people to drive cars, use the internet, and vote for people with nuclear codes. But we can't trust them to click "yes" on "should we cure disease"?

Polls consistently show people prefer their money fund medical trials rather than warfare. We're not fighting public opinion; we're unleashing it.

Follow-up: "But they're not qualified!"

Response: The qualified experts (a 200-person NIH committee) haven't eradicated a major disease class in 50 years. They have, however, become extremely qualified at explaining why they haven't. Perhaps qualification isn't the limiting factor.

"What About National Sovereignty?"

Objection: "This forces countries to spend money a certain way. That violates sovereignty."

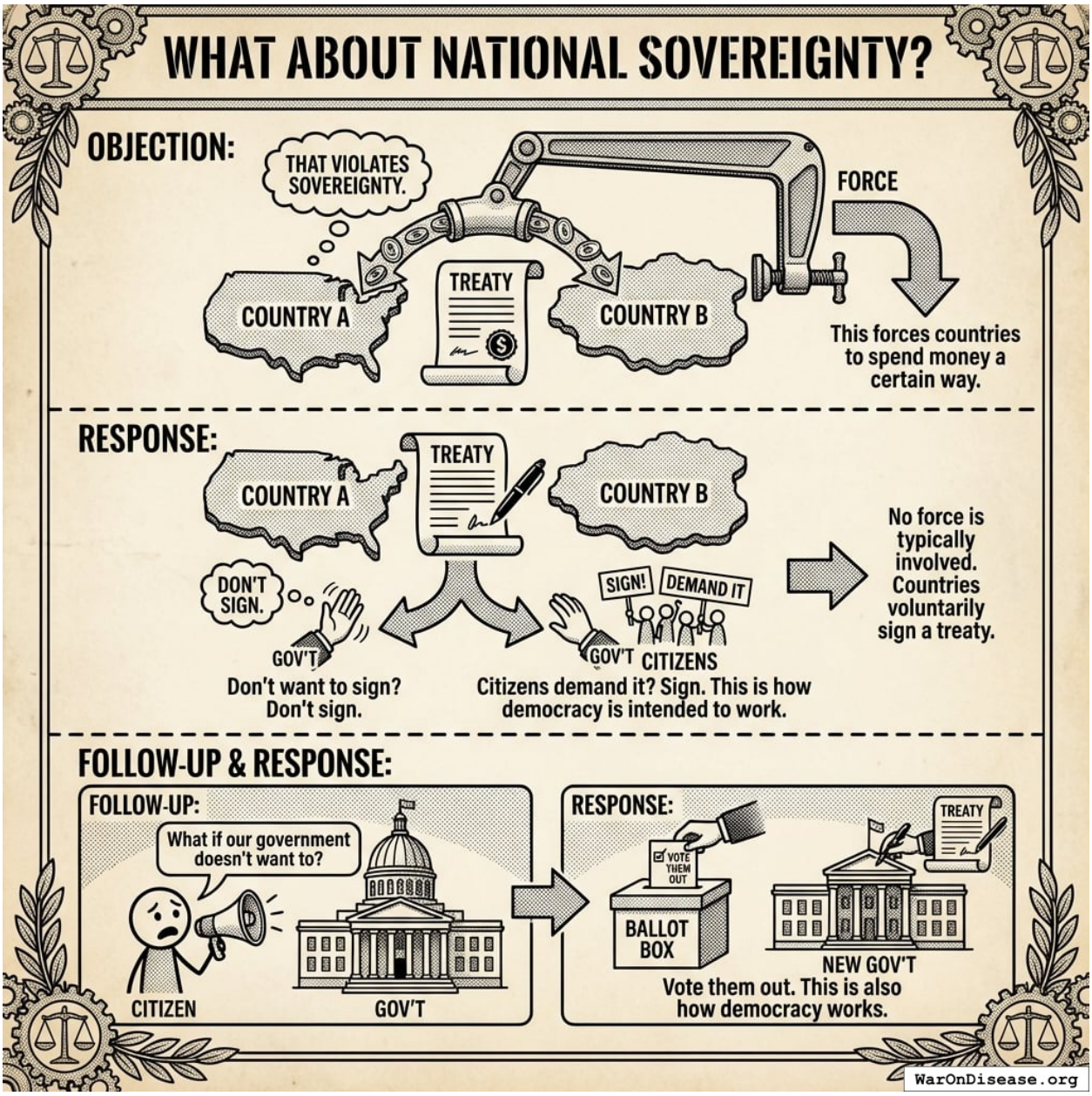


Figure 508: A flowchart illustrating the democratic process of treaty adoption, from citizen demand to government action or electoral replacement.

Response: No force is typically involved. Countries voluntarily sign a treaty. Don't want to sign? Don't sign. Citizens demand it? Sign. This is how democracy is intended to work.

Follow-up: "What if our government doesn't want to?"

Response: Vote them out. This is also how democracy works.

“This Is Socialism”

Objection: “Government controlling healthcare spending is socialist!”

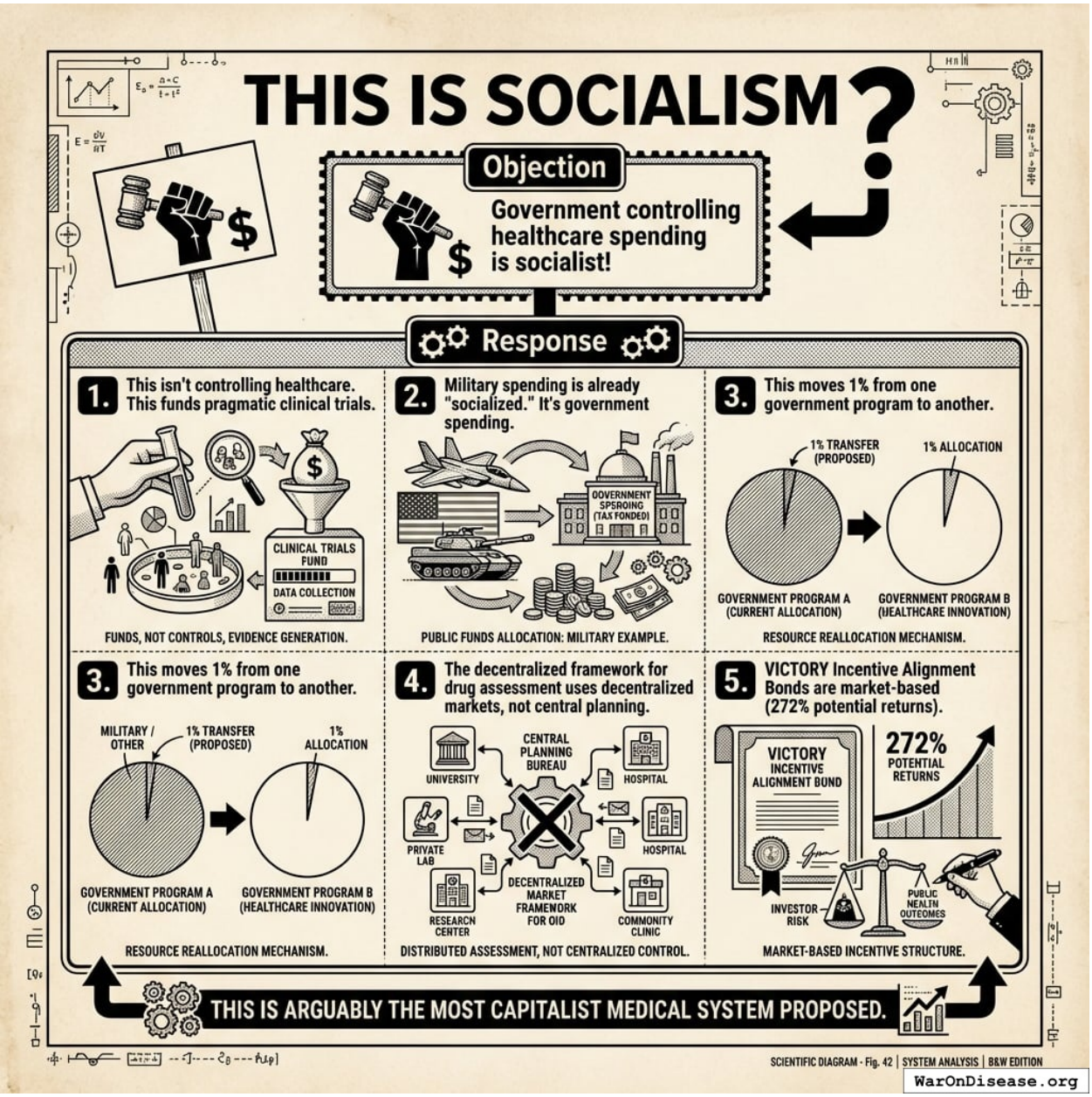


Figure 509: A comparison diagram illustrating the shift from central government spending to a decentralized market-based clinical trial system powered by VICTORY bonds.

Response:

1. This isn’t controlling healthcare. This funds pragmatic clinical trials.
2. Military spending is already “socialized.” It’s government spending.
3. This moves 1% from one government program to another.
4. The decentralized framework for drug assessment uses decentralized markets, not central planning.
5. VICTORY Incentive Alignment Bonds are market-based (272% potential returns).

This is arguably the most capitalist medical system proposed.

"The FDA Exists for a Reason"

Objection: "We need FDA approval to ensure safety. You're being reckless."

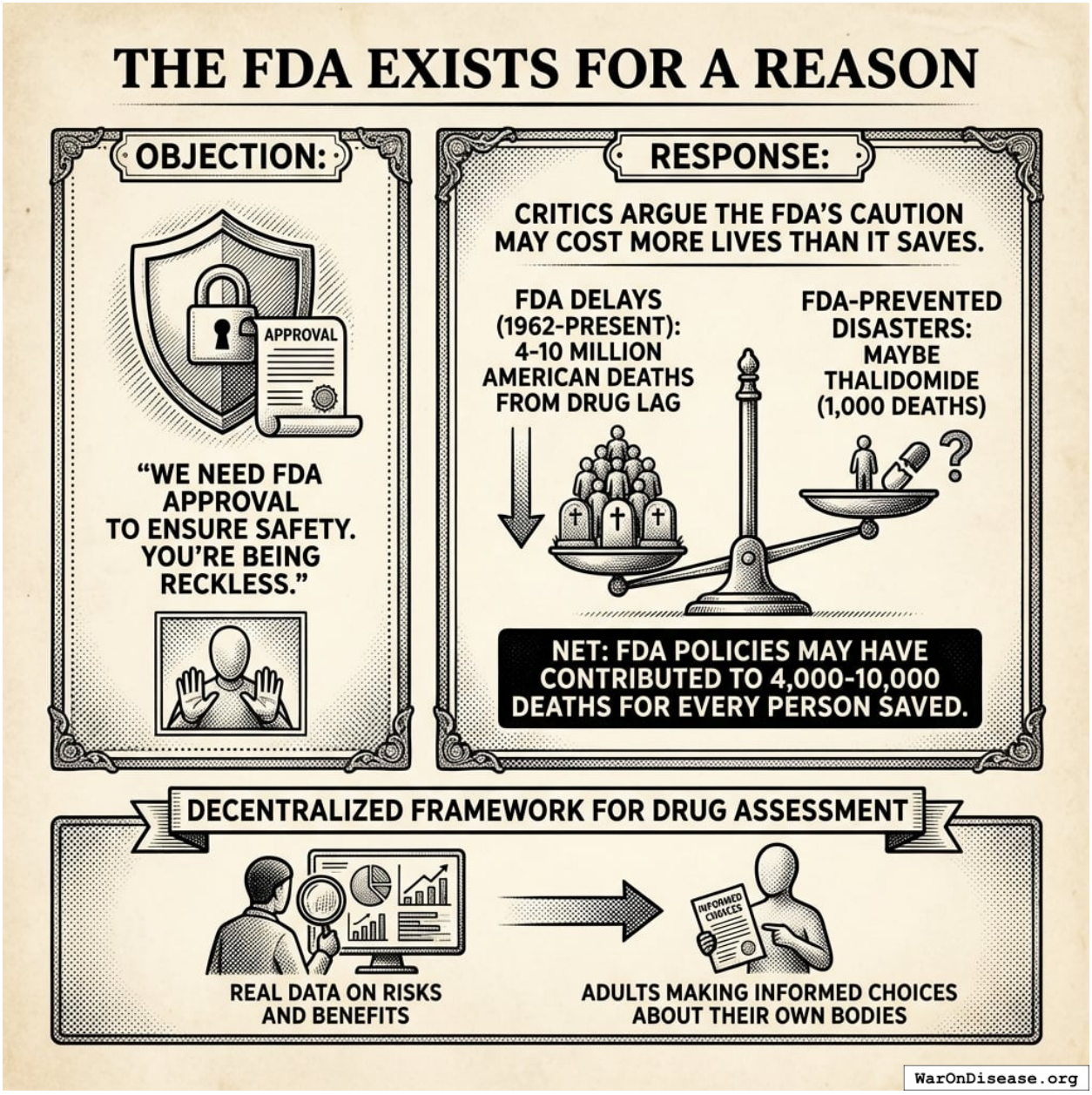


Figure 510: A comparative visualization showing the massive disparity between lives saved by FDA caution versus lives lost due to drug approval delays, highlighting the 4,000-to-1 ratio.

Response: Critics argue the FDA's caution may cost more lives than it saves.

- FDA delays (1962-present): 4-10 million American deaths from drug lag
- FDA-prevented disasters: Maybe thalidomide (1,000 deaths)

- Net: FDA policies may have contributed to 4,000-10,000 deaths for every person saved

Under the decentralized framework for drug assessment, patients see real data on risks and benefits, then decide. Adults making informed choices about their own bodies.

"What If Countries Cheat?"

Objection: "Countries will promise to reduce military spending but won't."

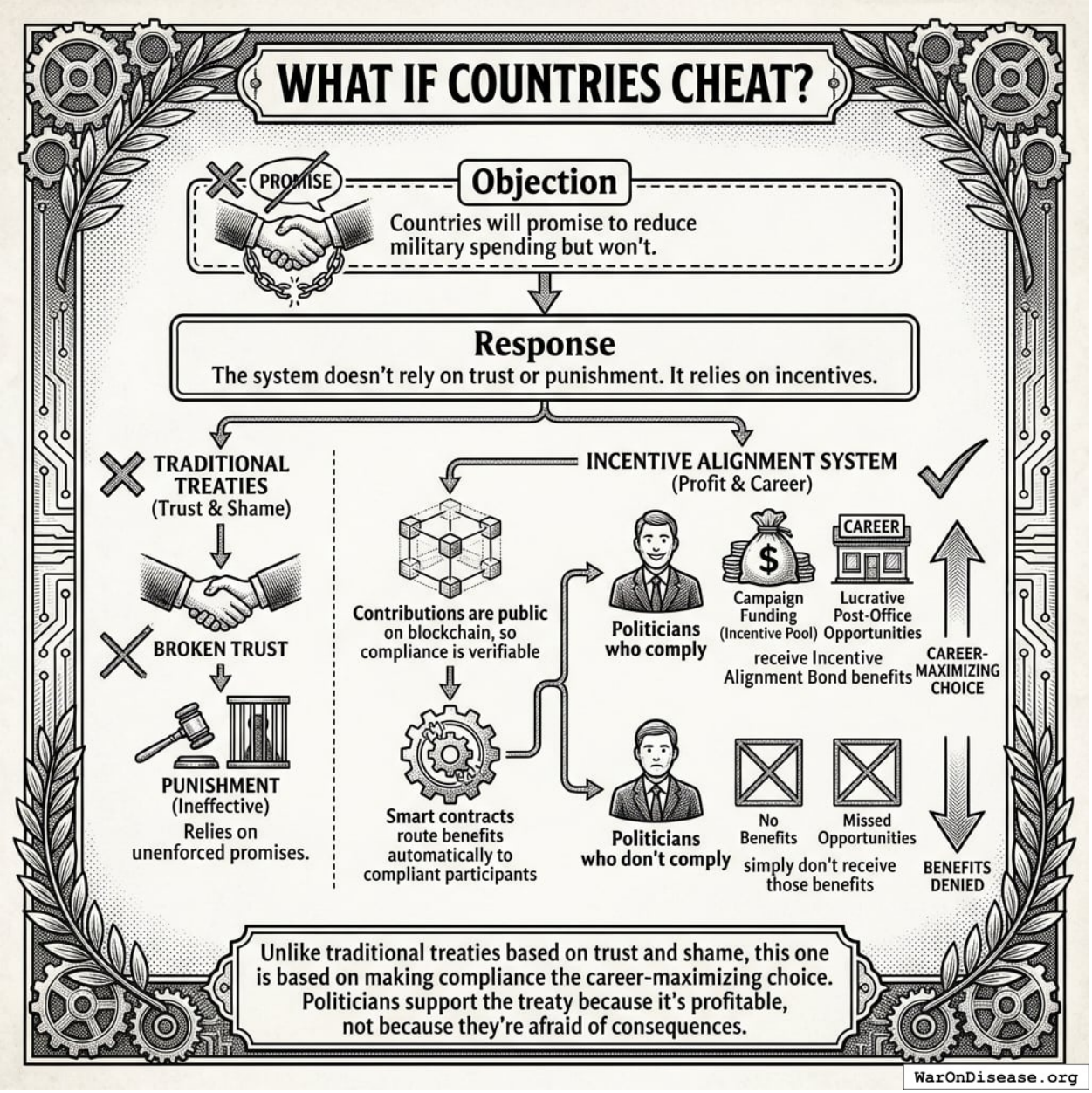


Figure 511: A flowchart showing the two paths for politicians under the Incentive Alignment Bond system: compliance leads to verifiable career benefits via smart contracts, while non-compliance results in the loss of these incentives.

Response: The system doesn't rely on trust or punishment. It relies on incentives.

- **Politicians who comply** receive Incentive Alignment Bond benefits: campaign funding from the political incentive pool and lucrative post-office career opportunities
- **Politicians who don't comply** simply don't receive those benefits
- **Contributions are public** on blockchain, so compliance is verifiable
- **Smart contracts** route benefits automatically to compliant participants

Unlike traditional treaties based on trust and shame, this one is based on making compliance the career-maximizing choice. Politicians support the treaty because it's profitable, not because they're afraid of consequences.

"You're Being Unfair to the NIH"

Objection: "The NIH does good work! You're being too negative."

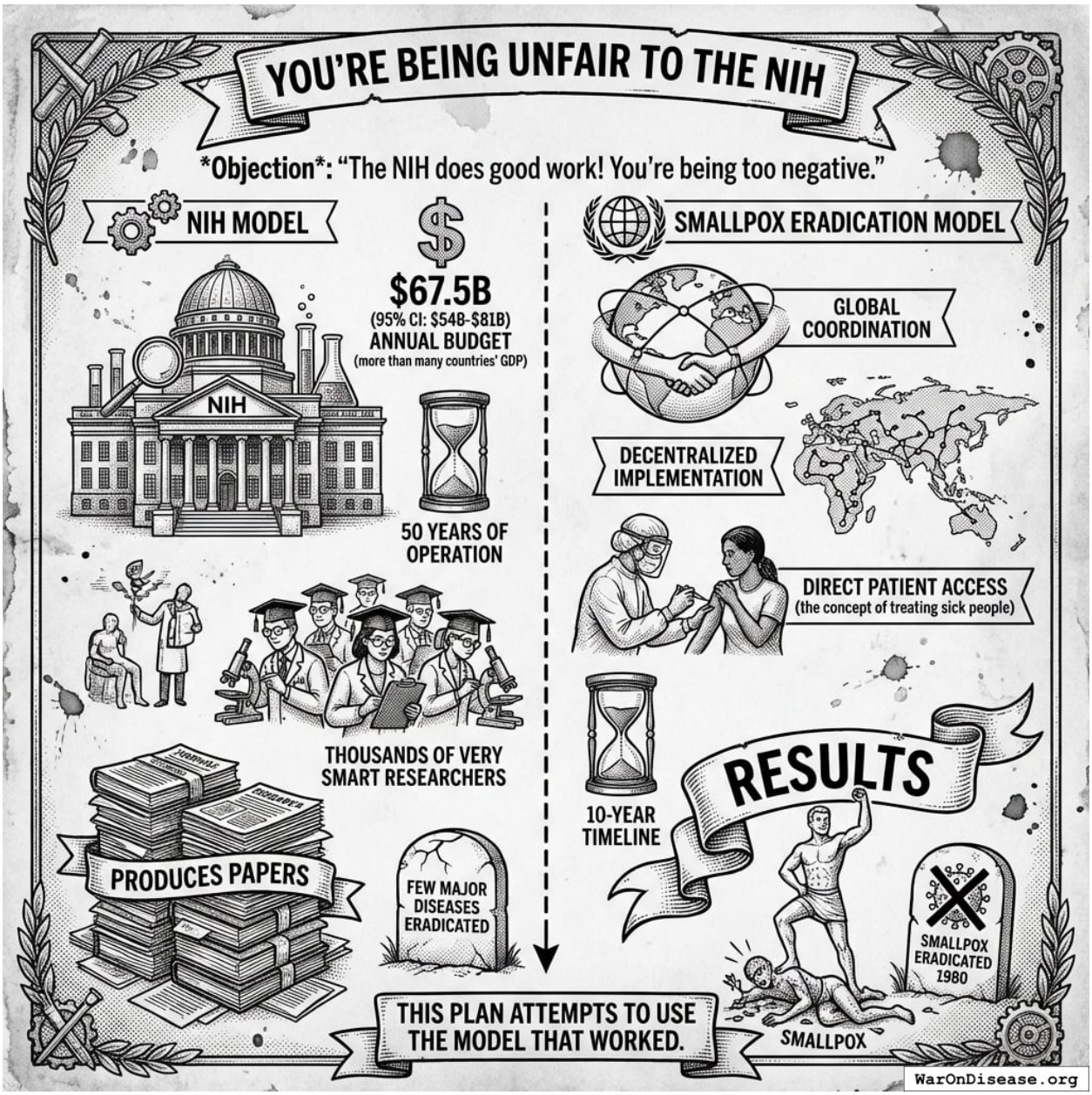


Figure 512: A side-by-side comparison of the NIH model and the smallpox eradication model, contrasting their budgets, timelines, operational methods, and primary outputs.

Response: The NIH has:

- $67.5B (95% CI: $54B-$81B) annual budget (more than many countries' GDP)
- 50 years of operation
- Thousands of very smart researchers
- Few major diseases eradicated

Meanwhile, smallpox was eradicated through:

- Global coordination
- Decentralized implementation
- Direct patient access (the concept of treating sick people)

- 10-year timeline

The NIH model produces papers. The smallpox model produced results. This plan attempts to use the model that worked.

"This Sounds Like a Scam"

Objection: "272% returns? Curing disease? Too good to be true."

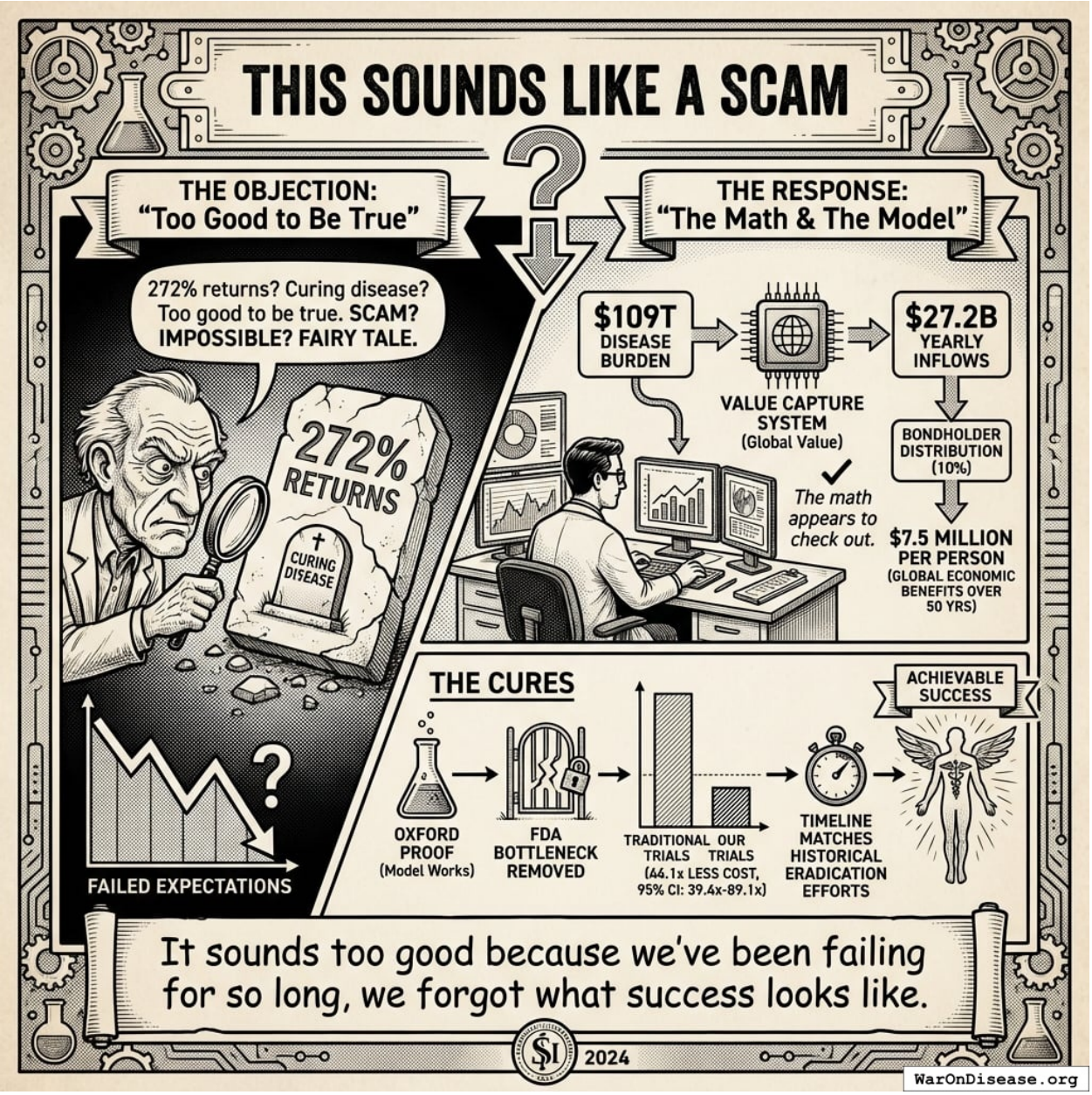


Figure 513: A logic map demonstrating how a 109 trillion disease burden creates value through a 44.1x reduction in trial costs and a 10 percent dividend capture model.

Response:

The returns are high because the system captures value from a $109T disease burden. Economic benefits work out to over $7.5 million per person globally over 50 years. That's 10% of $27.2B yearly inflows divided among bondholders. The math appears to check out.

The cures may be achievable because Oxford proved the model works, we're removing the FDA bottleneck, trials cost 44.1x (95% CI: 39.4x-89.1x) less, and the timeline matches historical eradication efforts.

It sounds too good because we've been failing for so long, we forgot what success looks like.

"You Can't Cure Aging"

Objection: "Aging is natural and inevitable. You can't fight nature."

Response: Dying from infected teeth was "natural" until dentistry. Dying in childbirth was "natural" until medicine. Everything is natural until someone fixes it.

We already replace everything that breaks:

- Hearts: We replace them (you're basically a car at this point)
- Kidneys: We replace them (or hook you to a machine thrice weekly)
- Blood: We replace it (vampire economics, but medical)
- Bones: We replace them (titanium is better anyway)
- Joints: We replace them (your grandma is 15% metal)

Aging is largely damage accumulation:

- Telomeres shorten: We can lengthen them (telomerase activation)
- Cells senesce: We can clear them (senolytic drugs)
- Proteins misfold: We can refold them (molecular chaperones)
- Mitochondria fail: We can replace them (mitochondrial transfer)
- DNA breaks: We can repair it (CRISPR, base editing)

We went to the moon with slide rules. We aim to fix cells with AI.

Your body is a machine. Machines can be repaired. Aging is just harder engineering, not magic.

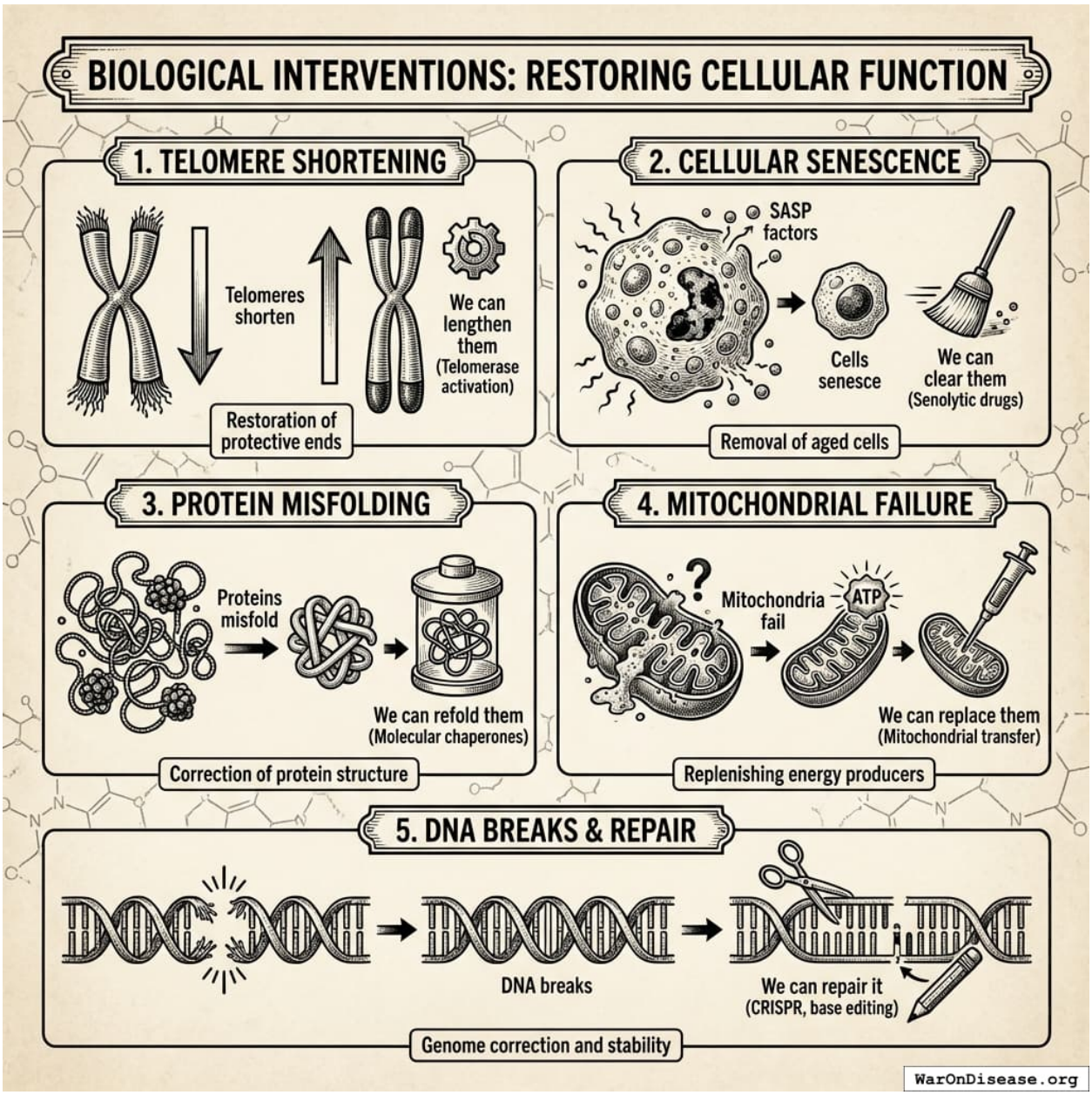


Figure 514: Mapping specific biological aging mechanisms to their corresponding engineering solutions.

"I'm Just One Person"

Objection: "My vote/investment/share won't matter. I'm too small."

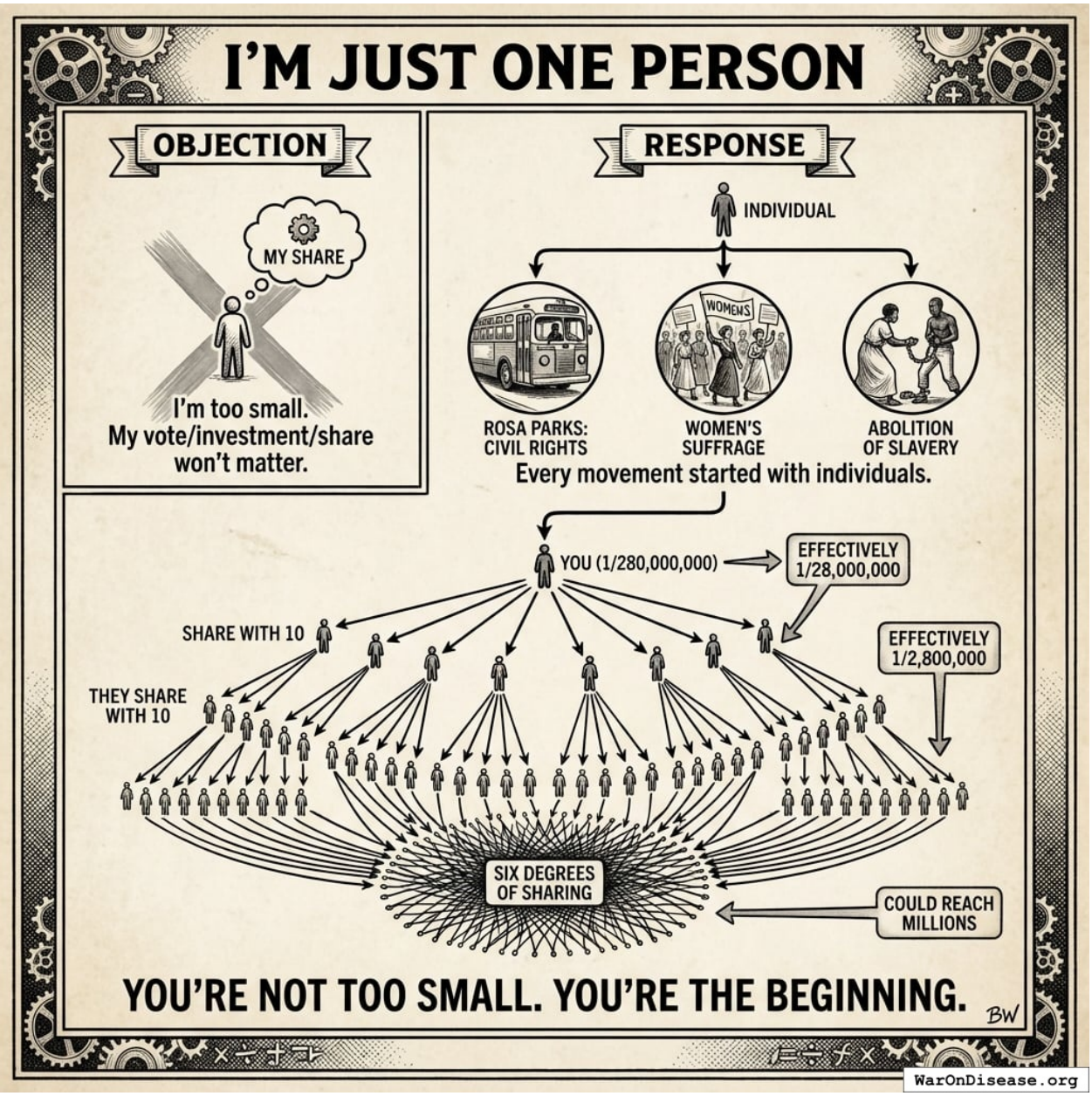


Figure 515: A visualization of the 'Six Degrees of Sharing' concept, showing how a single individual's influence grows exponentially from 1 to 280 million through network effects.

Response:

Every movement started with individuals. Civil rights started with Rosa Parks. Women's suffrage started with individual women. The end of slavery started with individuals opposing it.

This needs 280 million people. You're 1/280,000,000 of that.

But if you share with 10 people, you're effectively 1/28,000,000. If they share with 10, you're 1/2,800,000. Six degrees of sharing, you could reach millions.

You're not too small. You're the beginning.

"Politicians Will Steal the Money"

Objection: "Create a $27.2B fund, politicians will redirect it."

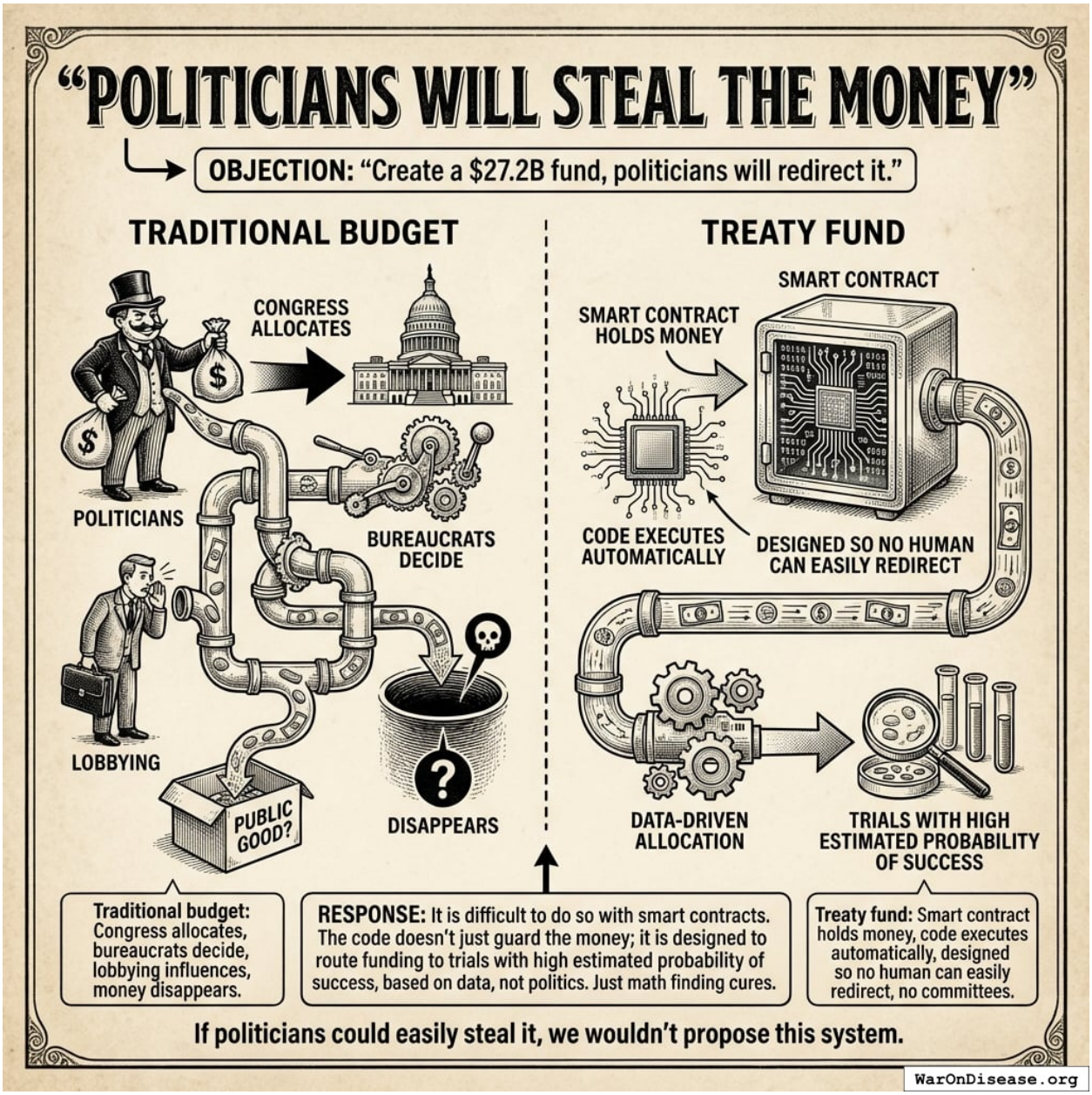


Figure 516: A comparison showing the contrast between traditional bureaucratic funding flows prone to redirection and a secure smart contract flow that automatically routes money to high-probability clinical trials.

Response: It is difficult to do so with smart contracts.

Traditional budget: Congress allocates, bureaucrats decide, lobbying influences, money disappears.

Treaty fund: Smart contract holds money, code executes automatically, designed so no human can easily redirect, no committees.

The code doesn't just guard the money; it is designed to route funding to trials with high estimated probability of success, based on data, not politics. Just math finding cures.

If politicians could easily steal it, we wouldn't propose this system.

"Reform the System Instead"

Objection: "Why not just reform the FDA and NIH?"

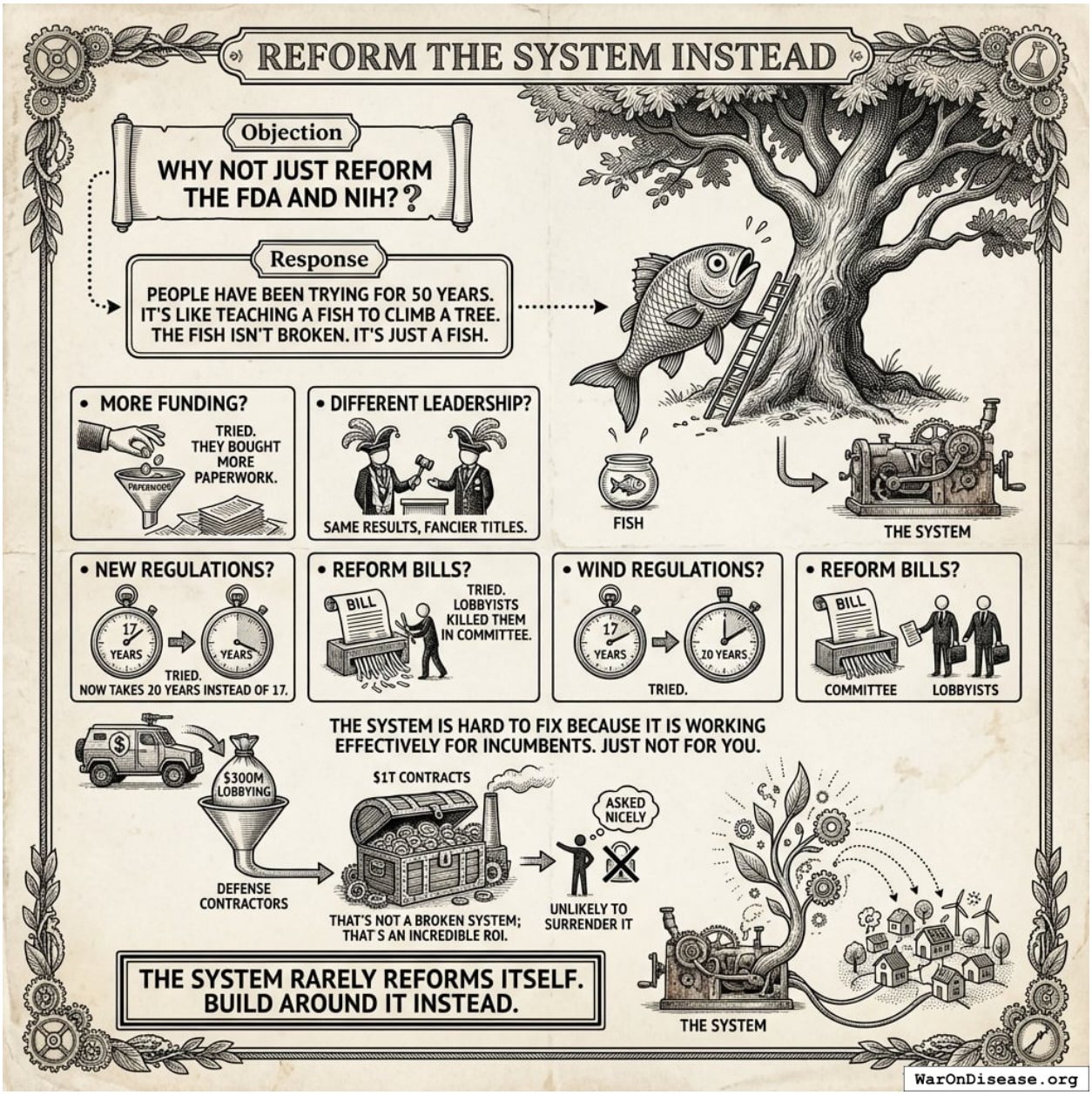


Figure 517: A comparison showing why internal reform fails because the system is optimized for incumbent ROI rather than public benefit.

Response: People have been trying for 50 years. It's like teaching a fish to climb a tree. The fish isn't

broken. It's just a fish.

- More funding? Tried. They bought more paperwork.
- Different leadership? Tried. Same results, fancier titles.
- New regulations? Tried. Now takes 20 years instead of 17.
- Reform bills? Tried. Lobbyists killed them in committee.

The system is hard to fix because it IS working effectively for incumbents. Just not for you.

Defense contractors spend $300M annually on lobbying and get nearly $1T in contracts. That's not a broken system; that's an incredible ROI. They are unlikely to surrender it because you asked nicely.

The system rarely reforms itself. Build around it instead.

"This Is Politically Impossible"

Objection: "No government will agree to this. Pure fantasy."

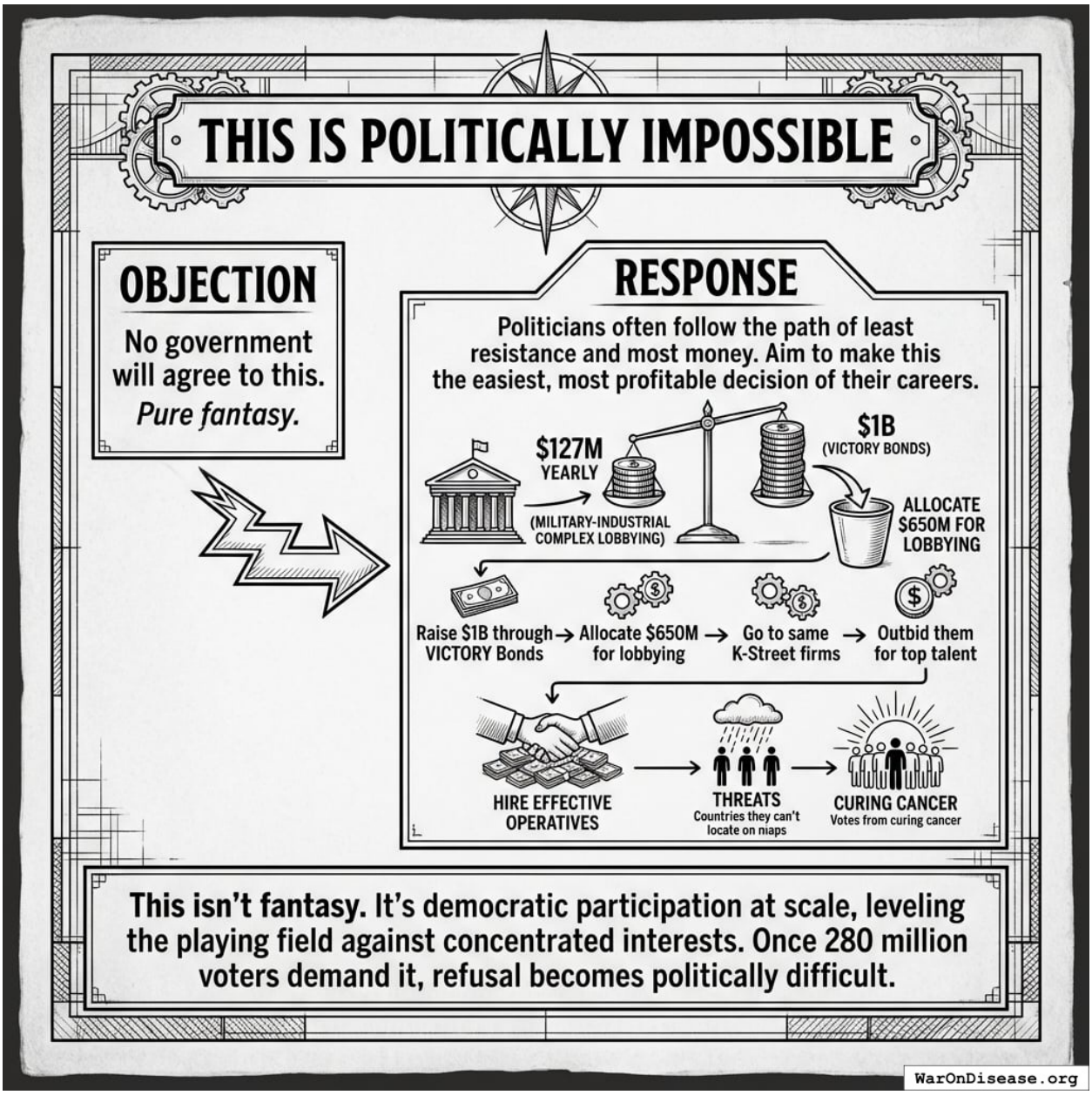


Figure 518: A comparison showing the proposed 650M lobbying budget significantly outscaling the military-industrial complex's 127M annual spend to shift political influence.

Response: Politicians often follow the path of least resistance and most money. Aim to make this the easiest, most profitable decision of their careers.

The military-industrial complex spends $127M yearly on lobbyists. It is hard to beat them with moral arguments. Beat them at their own game.

Raise $1B through VICTORY Bonds, allocate $650M for lobbying. That's enough to overwhelm the defense industry's $127M spend. Go to the same K-Street firms defense contractors use. Outbid them for their top talent.

Hire their effective operatives to work for you.

Lobbyists often work for the highest bidder. Become the highest bidder. Politicians suddenly hear more about votes from curing cancer, less about threats from countries they can't locate on maps.

This isn't fantasy. It's democratic participation at scale, leveling the playing field against concentrated interests. Once 280 million voters demand it, refusal becomes politically difficult.

"I Don't Trust Blockchain"

Objection: "Blockchain is a scam. I don't want my money in crypto."

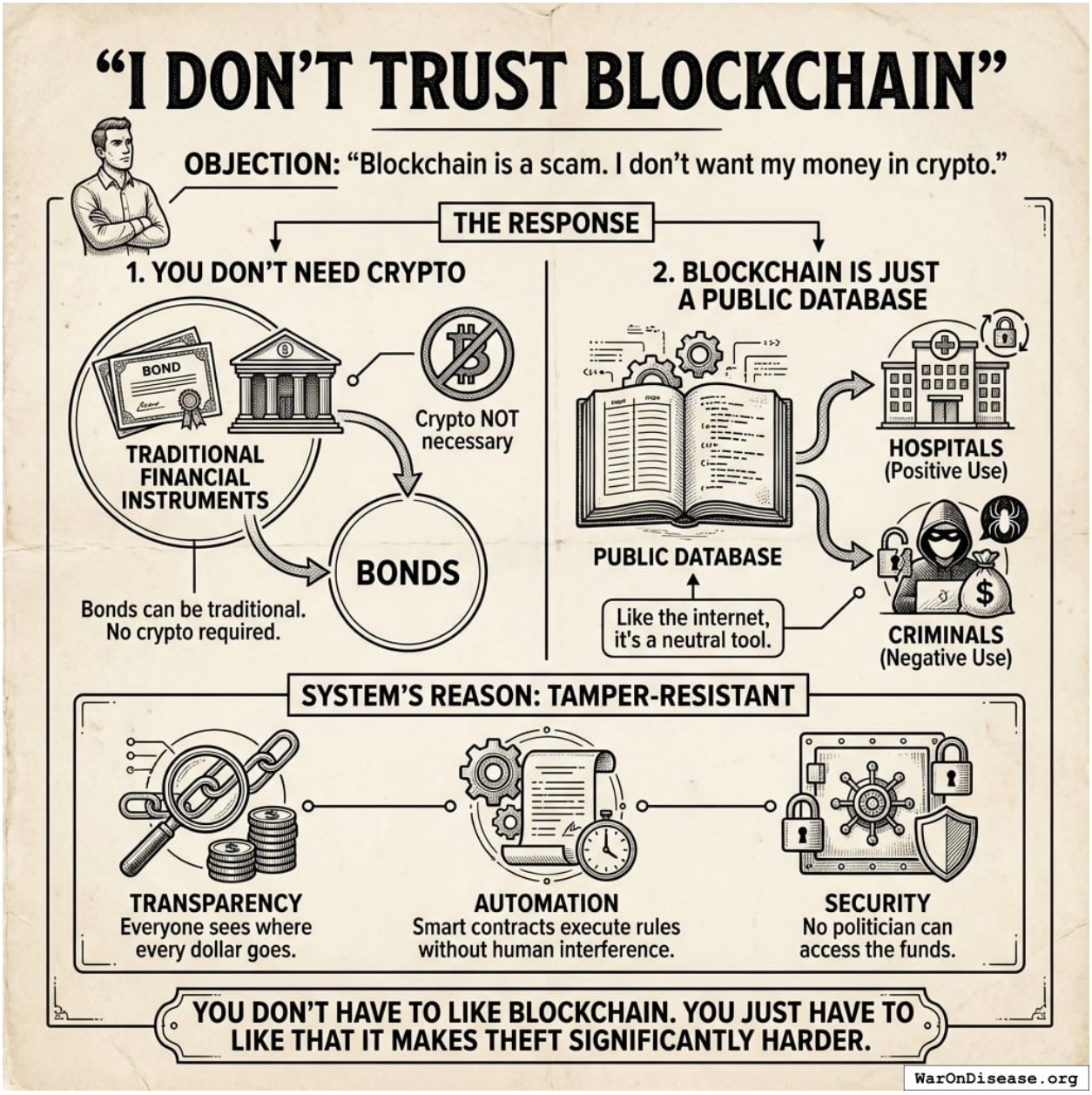


Figure 519: A conceptual diagram showing how the three pillars of blockchain, transparency, smart contract automation, and security, create a tamper-resistant system that prevents unauthorized access to funds.

Response:

Two things:

1. You don't need crypto. Bonds can be traditional financial instruments.
2. Blockchain is just a public database. Like the internet, it's a neutral tool. Criminals use it, but so do hospitals.

This system uses blockchain for one reason: it's tampered-resistant.

- Transparency: Everyone sees where every dollar goes
- Automation: Smart contracts execute rules without human interference
- Security: No politician can access the funds

You don't have to like blockchain. You just have to like that it makes theft significantly harder.

"What If the Science Is Wrong?"

Objection: "What if we fund 100,000 trials and nothing gets cured?"

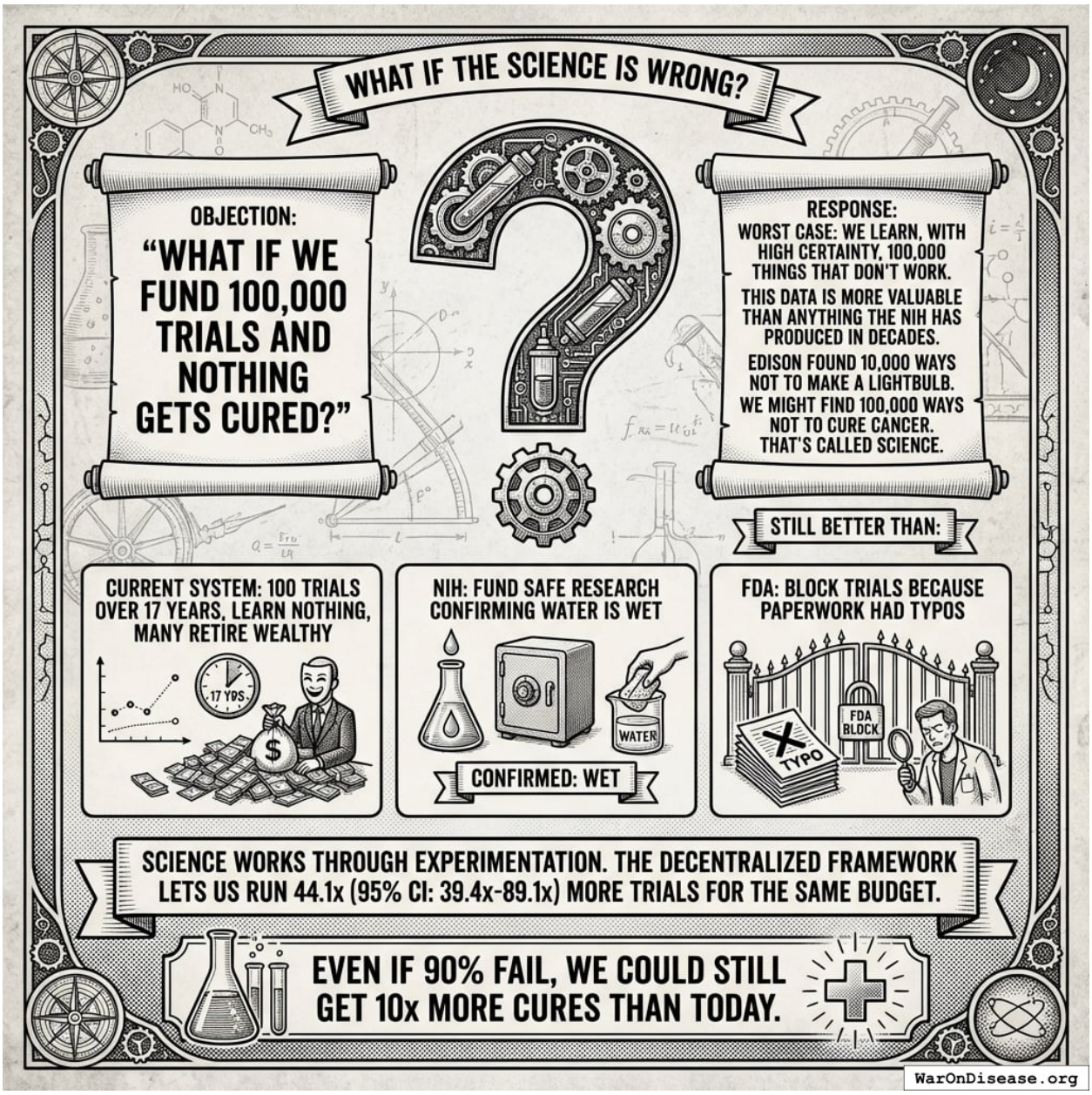


Figure 520: A comparison between the current centralized research model and the proposed decentralized framework, illustrating the vast difference in trial volume, speed, and potential for breakthroughs.

Response:

Worst case: We learn, with high certainty, 100,000 things that don't work. This data is more valuable than anything the NIH has produced in decades. Edison found 10,000 ways not to make a lightbulb. We might find 100,000 ways not to cure cancer. That's called science.

Still better than:

- Current system: 100 trials over 17 years, learn nothing, many retire wealthy
- NIH: Fund safe research confirming water is wet
- FDA: Block trials because paperwork had typos

Science works through experimentation. The decentralized framework lets us run 44.1x (95% CI: 39.4x-89.1x) more trials for the same budget.

Even if 90% fail, we could still get 10× more cures than today.

"I'll Wait and See"

Objection: "I'll support it once I see results."

Response:

Problem: It struggles to work without you.

- Need 280M votes to pass treaty
- Need $1B bonds to fund campaign
- Need sharing to reach critical mass

If everyone waits for everyone else, nothing happens.

Classic collective action problem. A burning building where everyone waits for someone else to call the fire department.

Your choices:

1. Participate now → might succeed
2. Wait → likely fails

While you wait, 150,000 people die today.

"I Don't Have Time"

Objection: "I'm too busy."

Response:

Time required:

- Vote: 2 minutes
- Buy bonds: 10 minutes
- Share: 15 minutes
- Total: 27 minutes

Time you'll save if diseases are cured:

- No doctor visits: hundreds of hours
- No sick days: hundreds of hours
- Extra years of life: tens of thousands of hours

ROI: 27 minutes for potentially 50,000 extra hours of life.

You have time. You just haven't prioritized not dying. You spent more time today watching videos of cats doing unusual things.

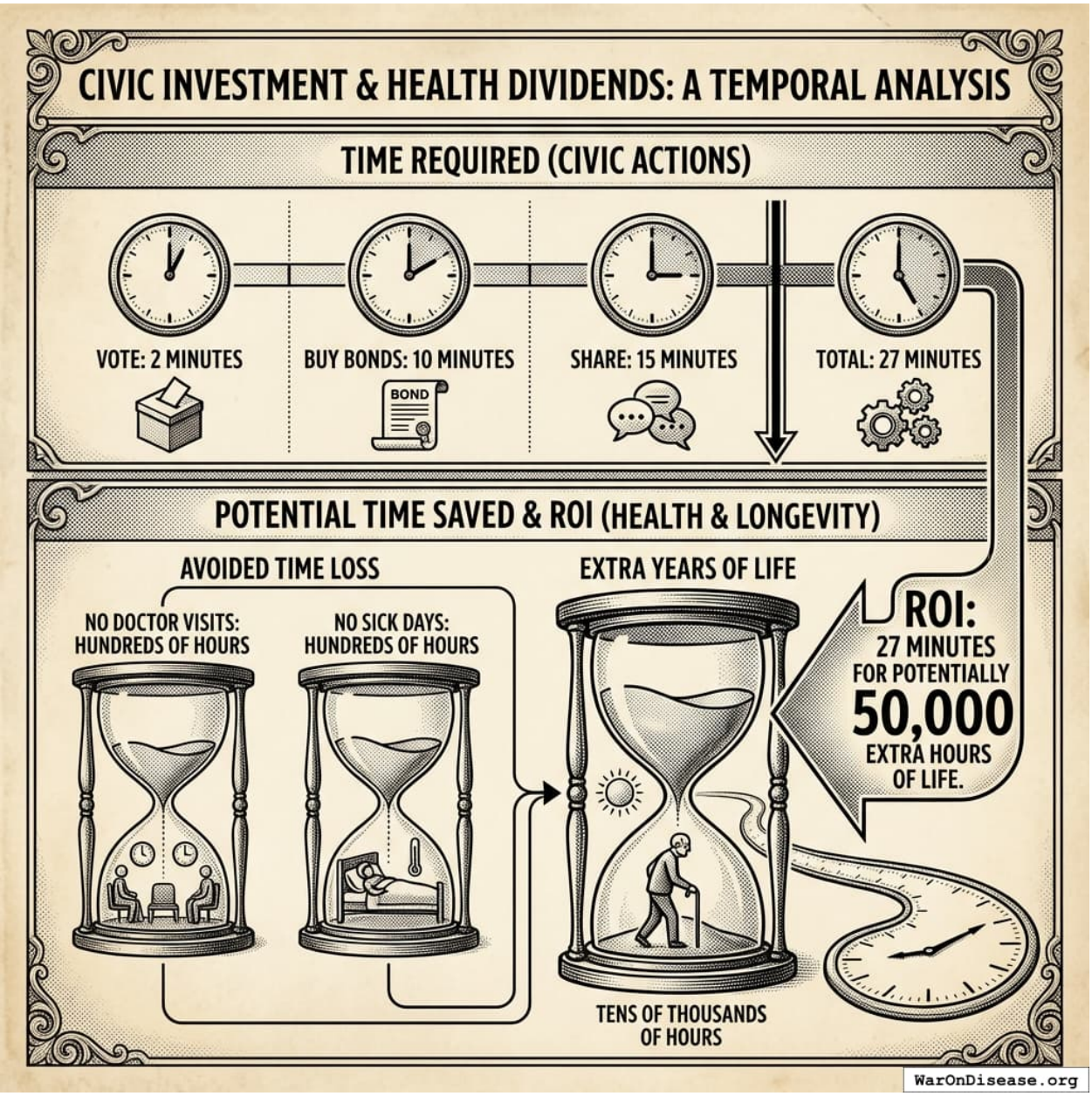


Figure 521: Return on Investment (ROI) analysis comparing the small time commitment (27 minutes) against potential life extension (50,000 hours).

"This Is Unrealistic"

Objection: "This will never happen. You're naive about human nature."



Figure 522: A comparison contrasting historical breakthroughs once considered 'unrealistic' with current global systemic failures that are irrational yet accepted as reality.

Response: Many things seemed unrealistic until they happened.

Things that were "unrealistic":

- Human flight (thought impossible for millennia, then Wright Brothers)
- Moon landing (JFK made it happen in 9 years)
- Democracy (kings ruled for 5,000 years, then didn't)
- Ending slavery (entire economies depended on it)
- Women voting (half the population was excluded)
- The internet (who needs computers talking?)

What's actually unrealistic:

- Spending $2.72T on weapons while sitting on 13,000 nuclear warheads (enough for 130 extinction events)
- Expecting different results from the same broken system
- Thinking we might survive the AI revolution without fixing incentives

Reality check: 55 million people die unnecessarily each year from treatable causes. That's what's truly unrealistic to accept.

"War Is Human Nature"

Objection: "War is inevitable. Countries need militaries to survive."

Response: Several countries suggest otherwise.

Switzerland:

- 200+ years avoiding major wars
- Surrounded by both World Wars (literally in the middle of apocalypse, made chocolate)
- GDP per capita: $93K (not killing people is profitable)
- Defense spending: 0.7% of GDP
- Life expectancy: 84 years (5 years longer than Americans who spend 5× more on "military")
- Being neutral can be an excellent defense strategy

Costa Rica:

- Abolished army in 1948 (said "nah, we're good")
- Still sovereign 75+ years later (nobody invaded the country with no oil)
- Redirected military budget to education and health
- Life expectancy matches US at fraction of cost
- Zero invasions since abolishing military (nobody wants to conquer a country of happy, educated people)

The pattern: Countries choosing peace often get richer. Countries choosing war get poorer. Countries drained by disease are unstable and start fights. Countries investing in their people become too prosperous to bother with war.



Figure 523: Comparison of economic and health outcomes in countries with low military spending (Switzerland/Costa Rica) versus the premise that military spending is required for survival.

The real world: Nuclear weapons made major territorial conquest largely obsolete. We're still acting like it's 1945.

"All Wars on X Have Failed"

Objection: "War on Drugs, War on Poverty, War on Terror all failed. This will too."

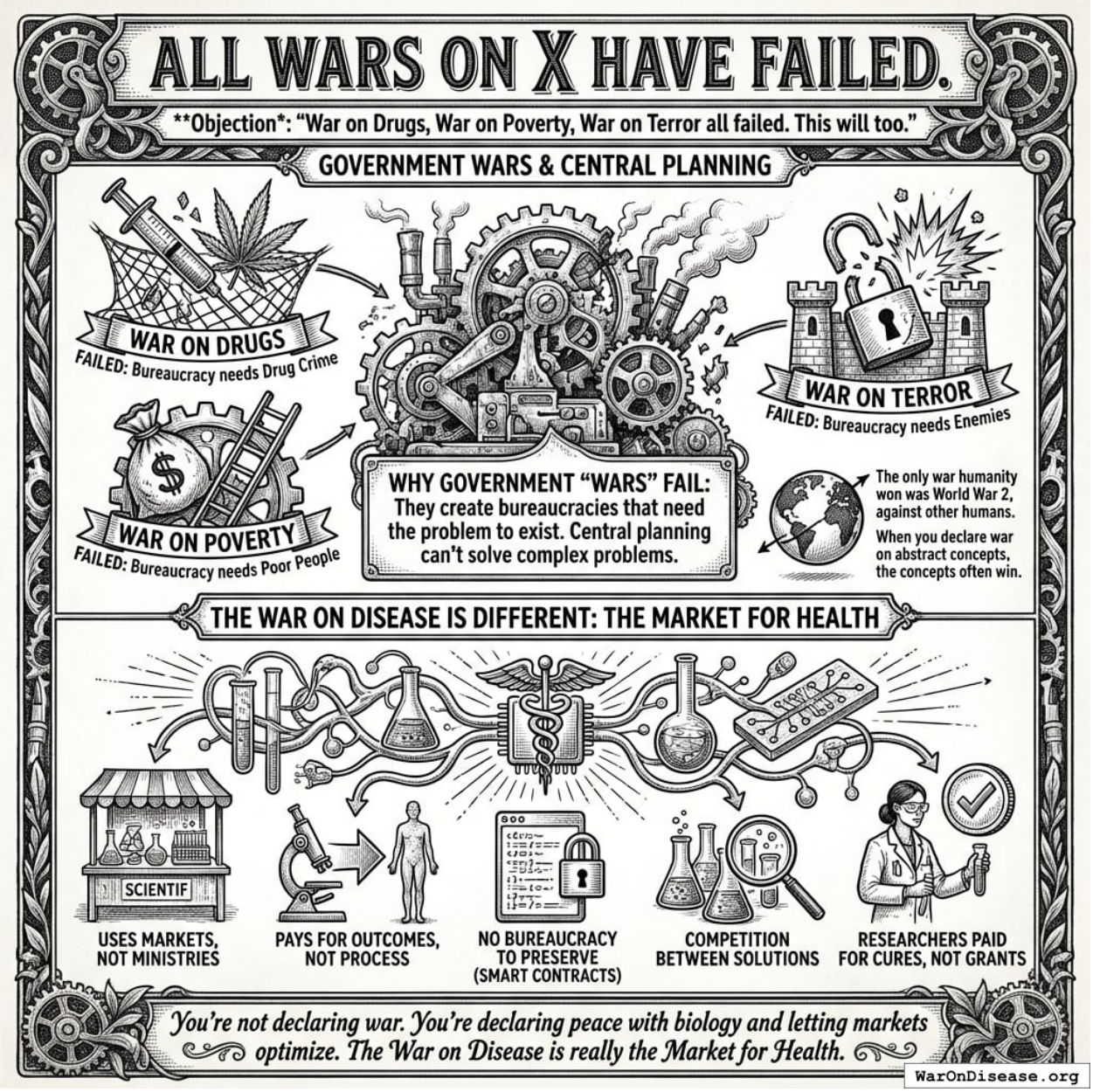


Figure 524: A comparison between the 'Government War' model and the 'Market for Health' model, highlighting the shift from central planning and bureaucratic preservation to outcome-based market competition.

Response: Those were government wars using central planning. This uses markets.

Why government "wars" fail: They create bureaucracies that need the problem to exist. War on Drugs needs drug crime. War on Poverty needs poor people. War on Terror needs enemies. Central planning can't solve complex problems.

The only war humanity won was World War 2, and that was against other humans. When you declare war on abstract concepts, the concepts often win.

Why the War on Disease is different:

- Uses markets, not ministries

- Pays for outcomes, not process
- No bureaucracy to preserve (smart contracts)
- Competition between solutions
- Researchers paid for cures, not grants

The War on Disease is really the Market for Health.

You're not declaring war. You're declaring peace with biology and letting markets optimize.

"This Sounds Like Bribery"

Objection: "You're just bribing politicians. That's illegal and immoral."

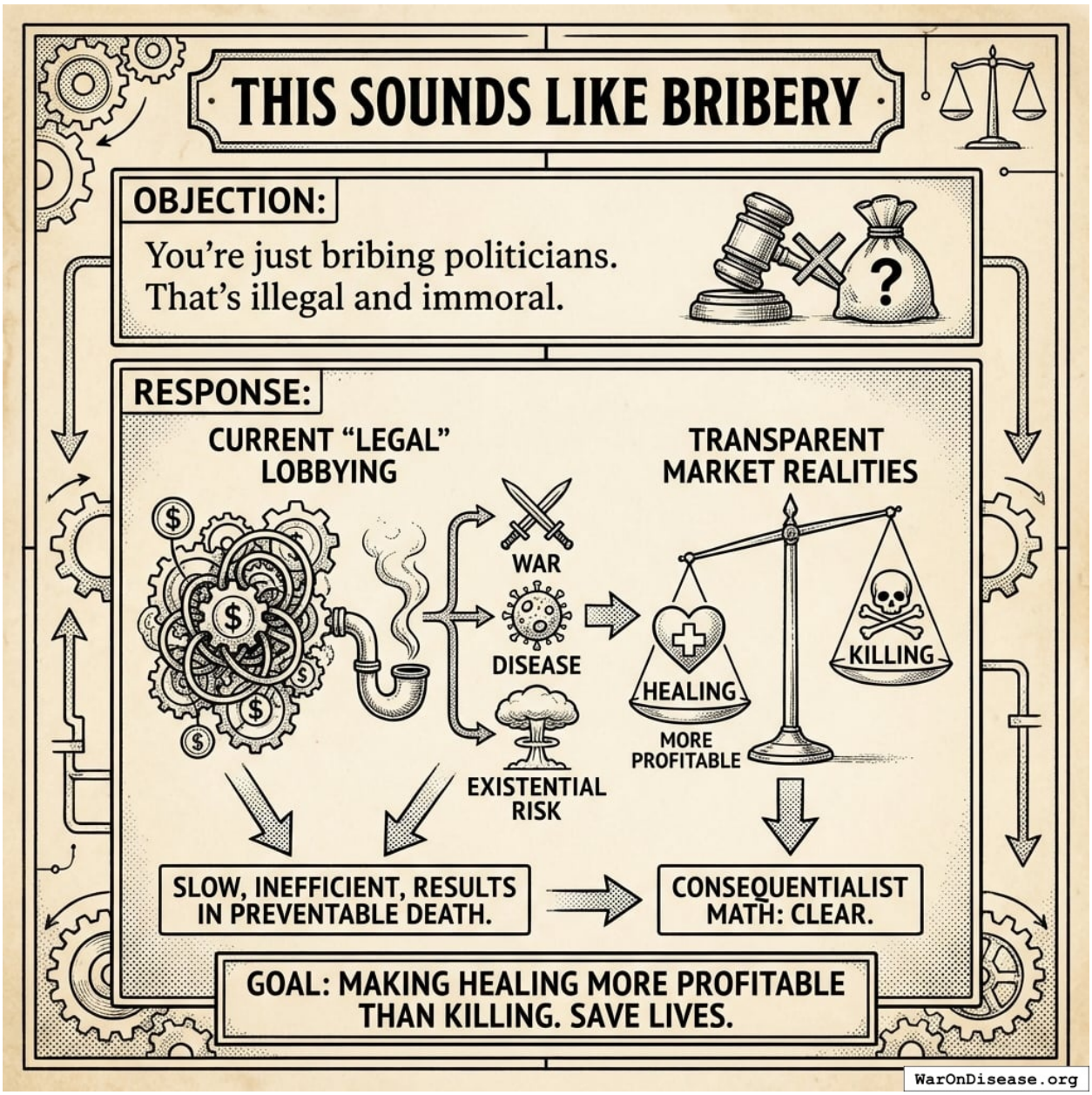


Figure 525: A comparison between the current lobbying system, which leads to outcomes like war and disease, and a transparent market-based approach that aligns profit with healing and life-saving results.

Response: Current "legal" lobbying resembles bribery. It's slow, inefficient, and produces war, disease, and existential risk. We're applying market realities transparently to save lives. The consequentialist math is clear: the status quo results in preventable death. The goal is making healing more profitable than killing.

"This Isn't a Real Movement"

Objection: "A global referendum is just online slacktivism, not real politics."

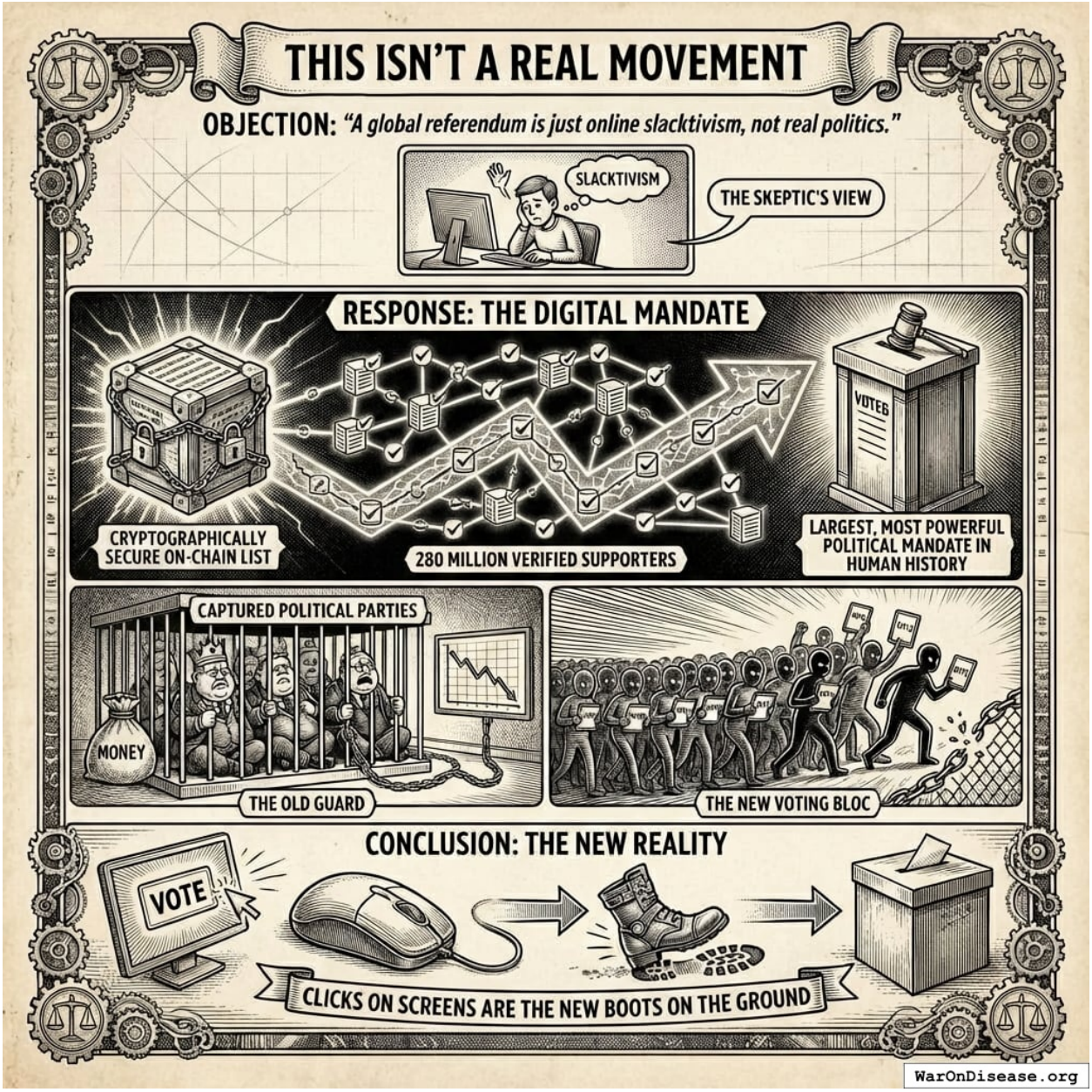


Figure 526: A diagram illustrating the transformation of cryptographically verified digital signatures into a unified voting bloc that impacts traditional political elections.

Response: A cryptographically secure, on-chain list of 280 million verified supporters could be the largest, most powerful political mandate in human history. It represents a challenge to captured political parties. Clicks on screens are the new boots on the ground when those clicks represent a voting bloc that can swing any election.

"It's Unenforceable"

Objection: "Government promises to pay are unenforceable fantasy."

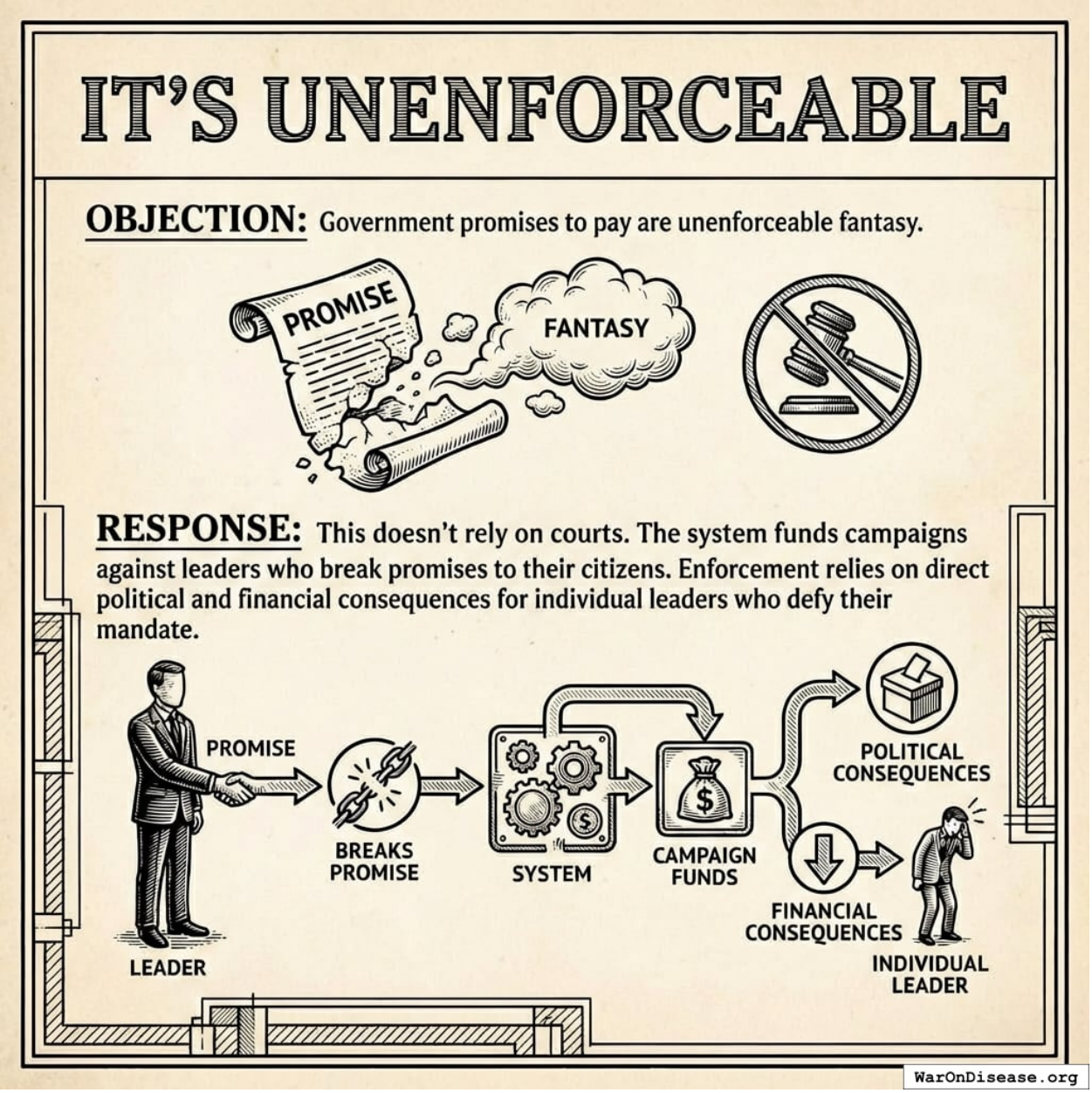


Figure 527: A diagram illustrating the enforcement cycle where breaking a mandate triggers the system to fund political opposition, leading to direct consequences for leaders.

Response: This doesn't rely on courts. The system funds campaigns against leaders who break promises to their citizens. Enforcement relies on direct political and financial consequences for individual leaders who defy their mandate.

"You Can't Verify 280M People"

Objection: "Impossible to verify 280 million people online without fraud."

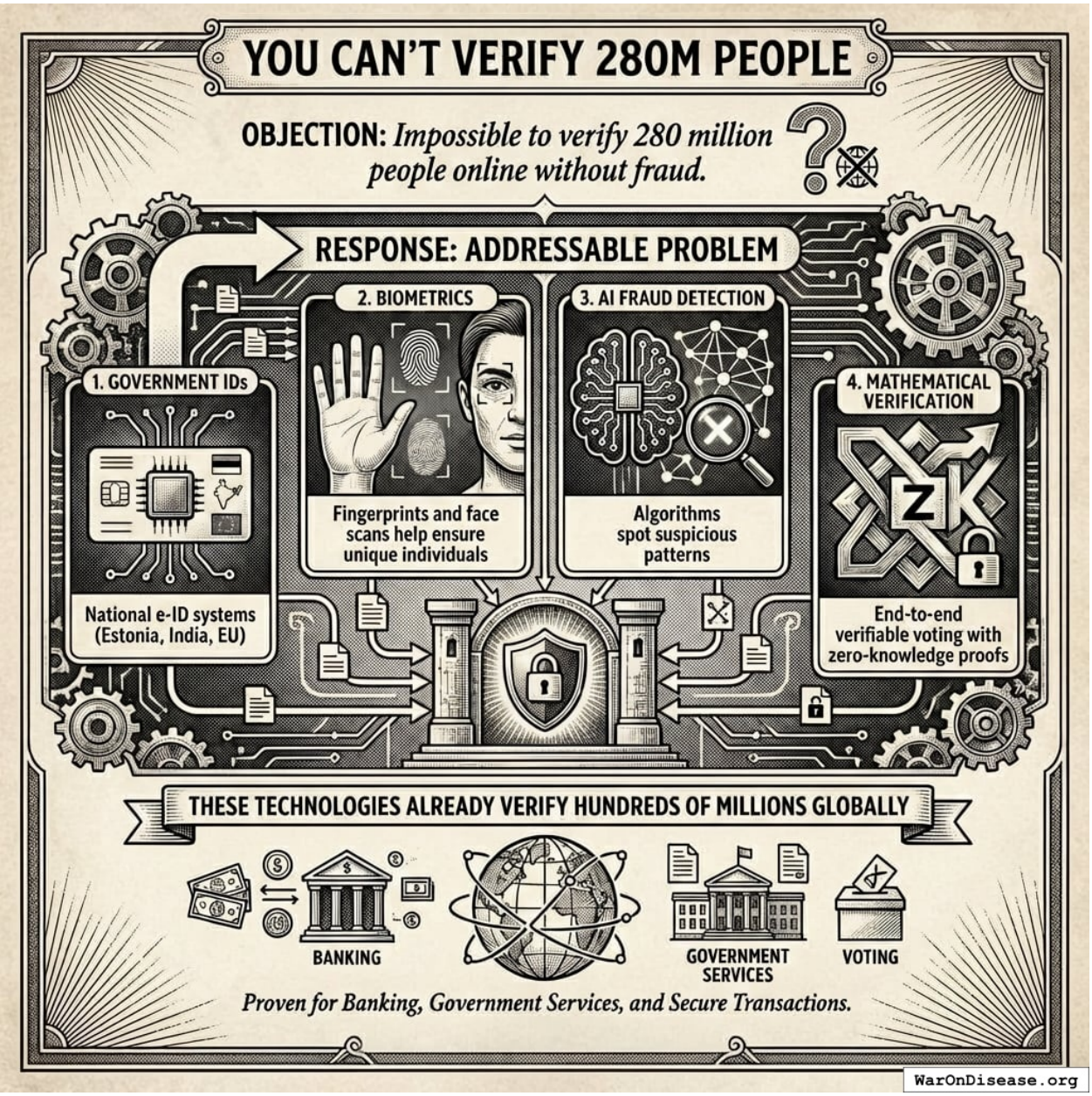


Figure 528: A multi-layered identity verification framework showing how government IDs, biometrics, AI, and mathematical proofs combine to create a secure, scalable system for hundreds of millions of users.

Response: Addressable problem. The system combines proven methods:

- Government IDs: National e-ID systems (Estonia[286], India[287], EU[288])
- Biometrics: Fingerprints and face scans help ensure unique individuals
- AI fraud detection: Algorithms spot suspicious patterns
- Mathematical verification: End-to-end verifiable voting[289] with zero-knowledge proofs

These technologies already verify hundreds of millions globally for banking and government services.

“Blockchain Harms the Environment”

Objection: “You can’t save humanity while boiling the oceans with crypto mining.”

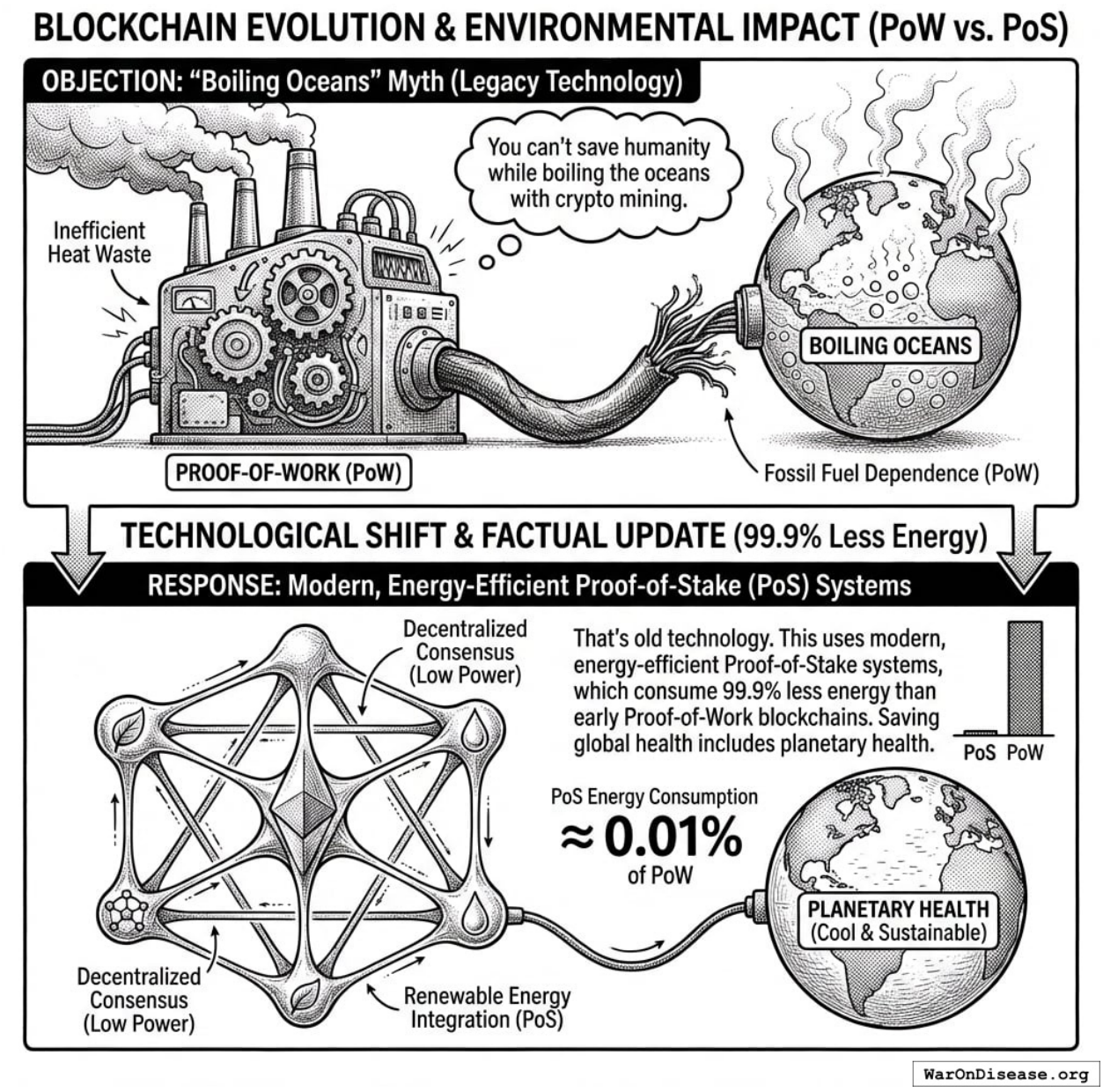


Figure 529: A comparison showing the massive difference in energy consumption between legacy Proof-of-Work systems and modern Proof-of-Stake blockchains, highlighting a 99.9 percent reduction.

Response: That’s old technology. This uses modern, energy-efficient Proof-of-Stake systems, which consume 99.9% less energy[290] than early Proof-of-Work blockchains. Saving global health includes planetary health.

“Billionaires Will Seize Control”

Objection: “A few billionaires could buy all the bonds and control everything.”

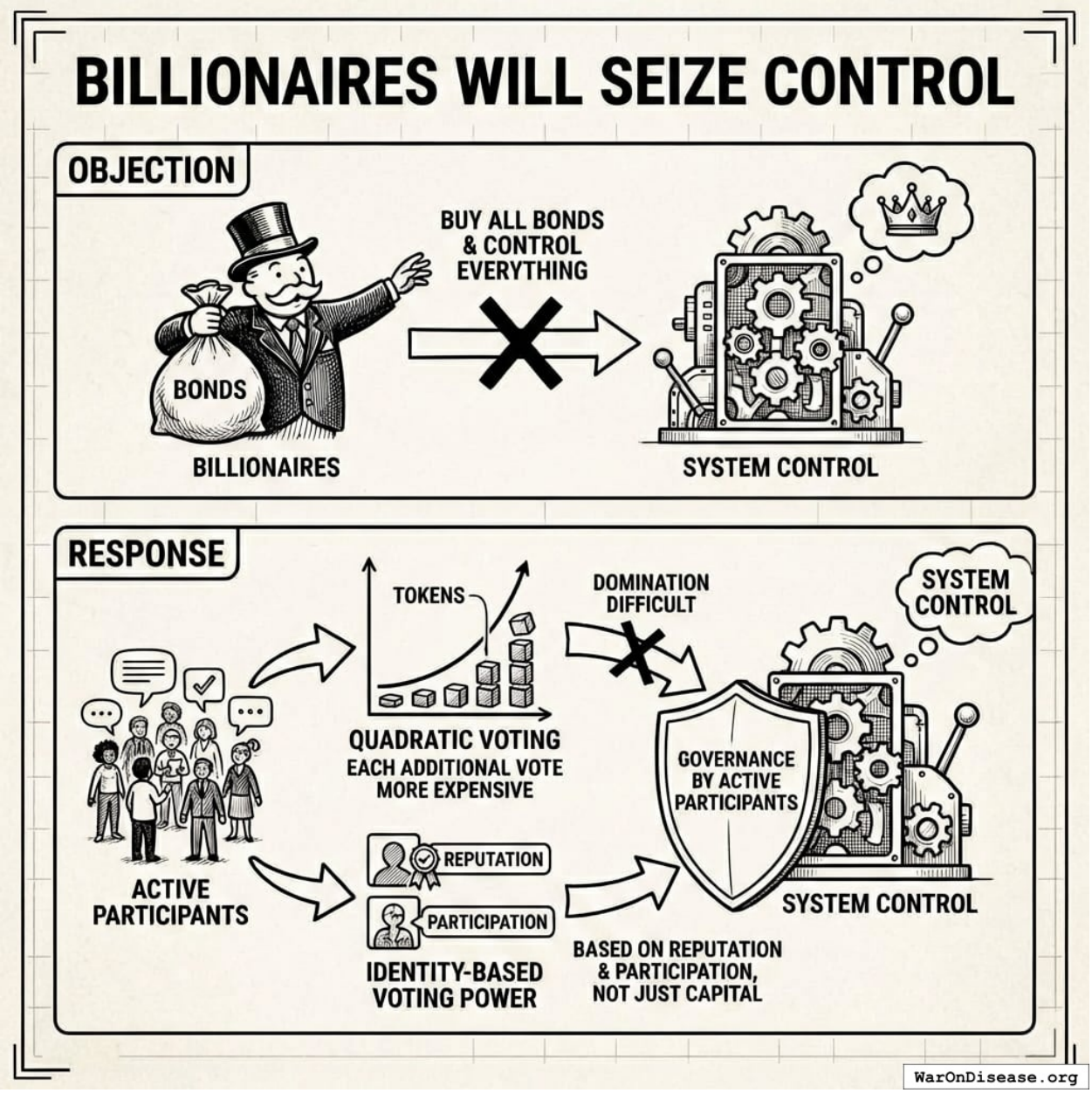


Figure 530: A comparison between traditional capital-weighted voting and quadratic voting, showing how the cost of influence increases exponentially for wealthy individuals while reputation-based systems empower active community members.

Response: The system uses voting mechanisms to prevent this. Quadratic voting makes each additional vote progressively more expensive, making single-entity domination difficult. Plus identity-based voting power based on reputation and participation, not just capital. The goal is governance by active participants, not just the wealthiest.

"Why Not Just Use Philanthropy?"

Objection: "If this matters, why not raise money from donors instead of complicated bonds?"

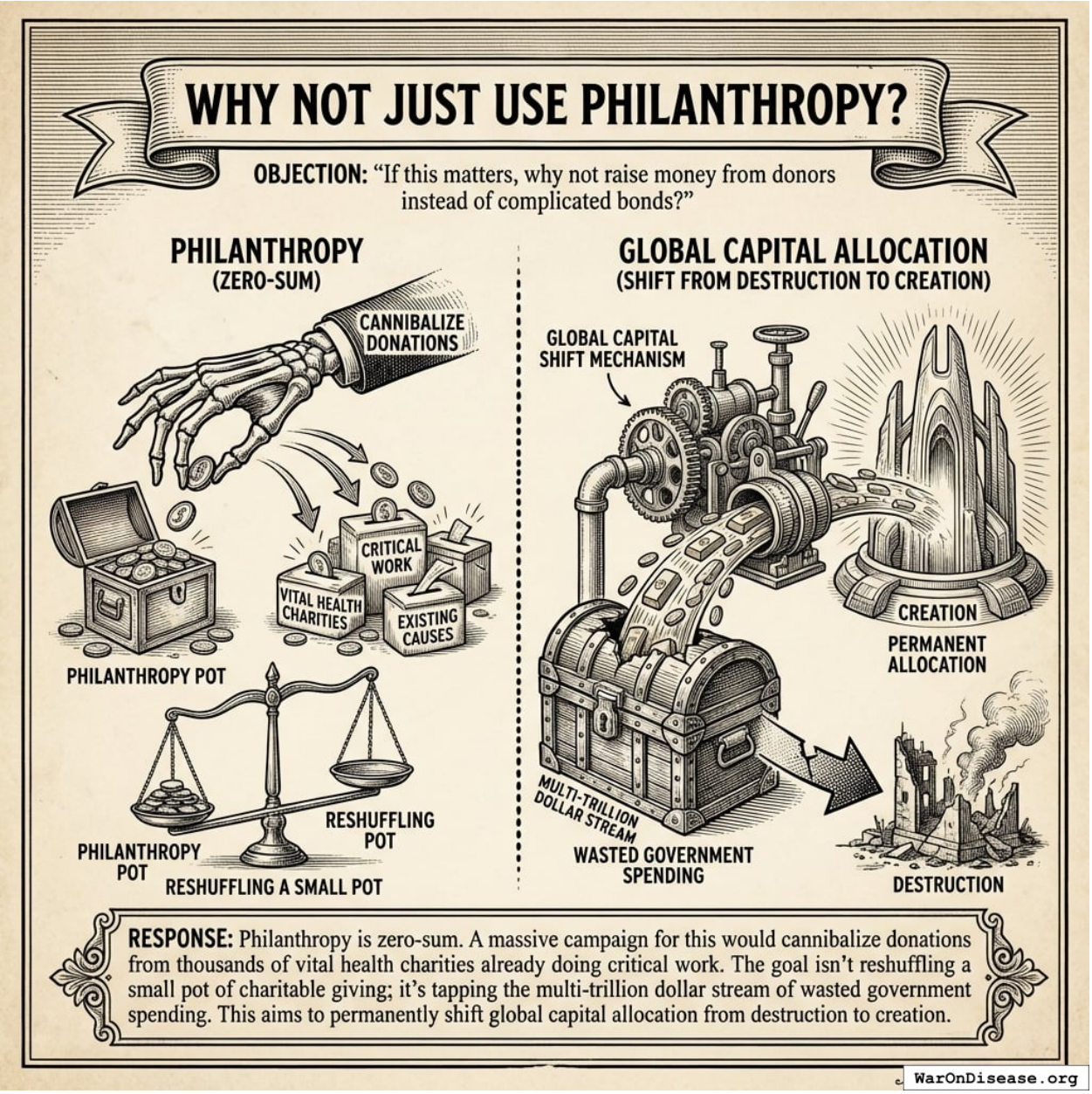


Figure 531: A comparison between the limited, zero-sum nature of philanthropy versus the massive scale of redirected government spending and capital markets.

Response: Philanthropy is zero-sum. A massive campaign for this would cannibalize donations from thousands of vital health charities already doing critical work. The goal isn't reshuffling a small pot of charitable giving; it's tapping the multi-trillion dollar stream of wasted government spending. This aims to permanently shift global capital allocation from destruction to creation.

"How Do You Prevent Waste?"

Objection: "How do you ensure money helps patients instead of funding bureaucracy?"

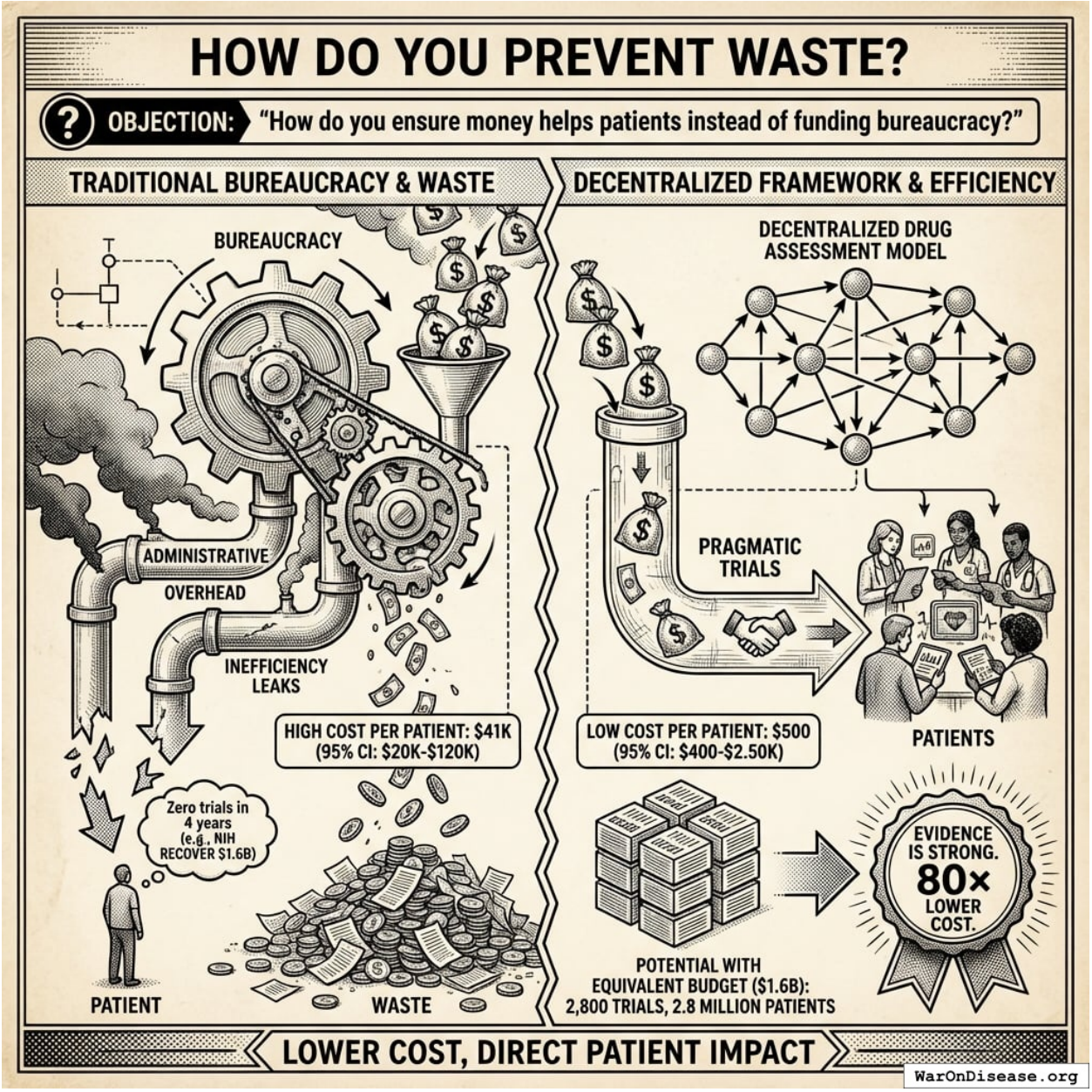


Figure 532: A comparison showing the massive disparity in cost-efficiency between traditional clinical trials and the decentralized framework, highlighting how the same budget can fund thousands of trials instead of zero.

Response: The decentralized framework for drug assessment model achieves 80× lower cost per patient[77]. Pragmatic trials cost $500 (95% CI: $400-$2.50K) per patient[97] versus $41K (95% CI: $20K-$120K) in traditional trials[291].

The NIH's RECOVER initiative spent $1.6B for zero completed trials in 4 years. With that budget, this model could run 2,800 trials for 2.8 million patients. Evidence is strong.

"Why Not Just Increase Health Funding?"

Objection: "Why cut military spending? Just allocate more money to health research."

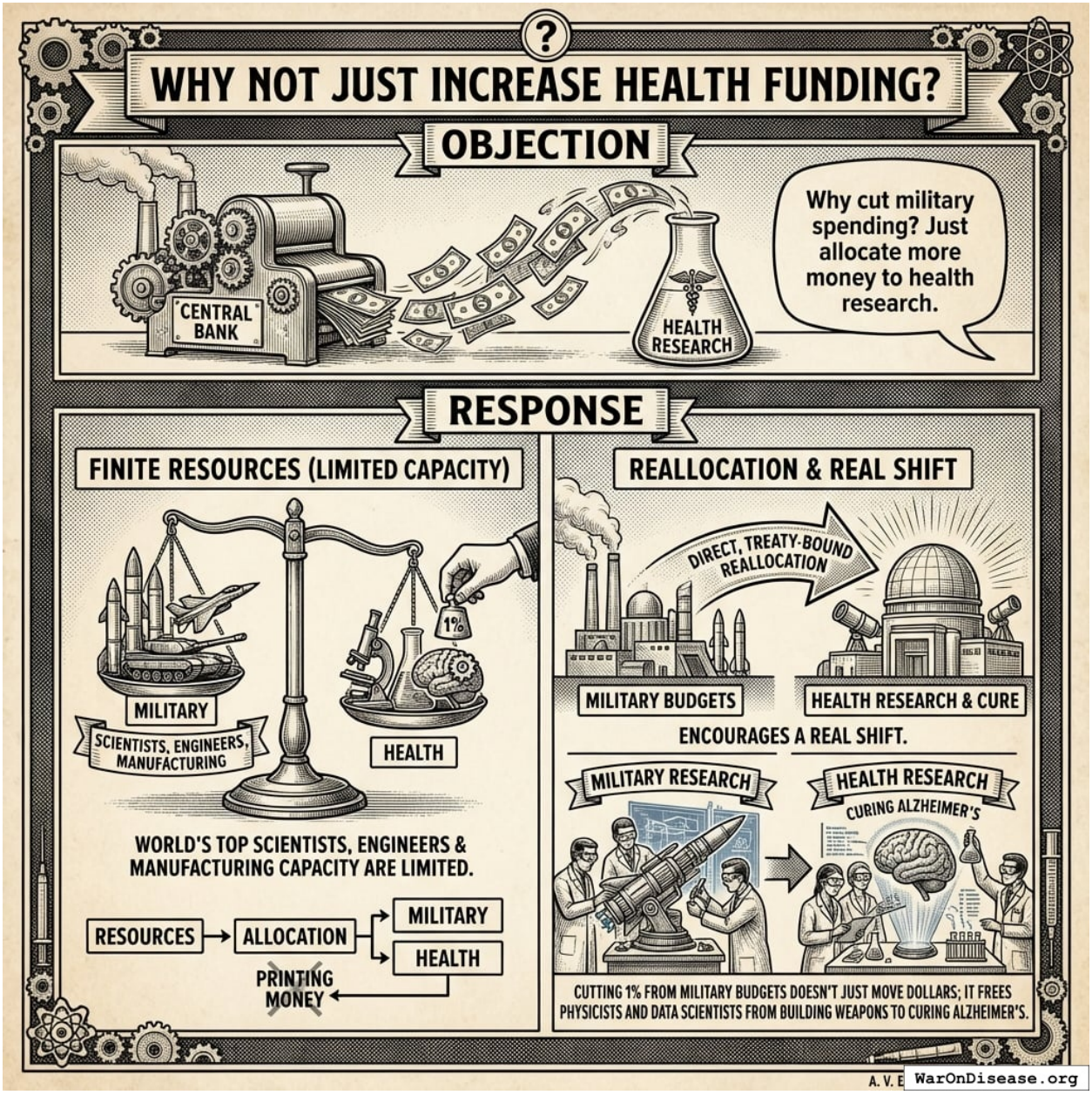


Figure 533: A visual representation showing the shift of finite resources, such as scientists and manufacturing capacity, from military projects to health research.

Response: It's about reallocating finite resources, not printing money. The world's top scientists, engineers, and manufacturing capacity are limited. A direct, treaty-bound reallocation encourages a real shift. Cutting 1% from military budgets doesn't just move dollars; it frees physicists and data scientists from building weapons to curing Alzheimer's.

"What About Defense Industry Jobs?"

Objection: "This will destroy millions of military industry jobs."

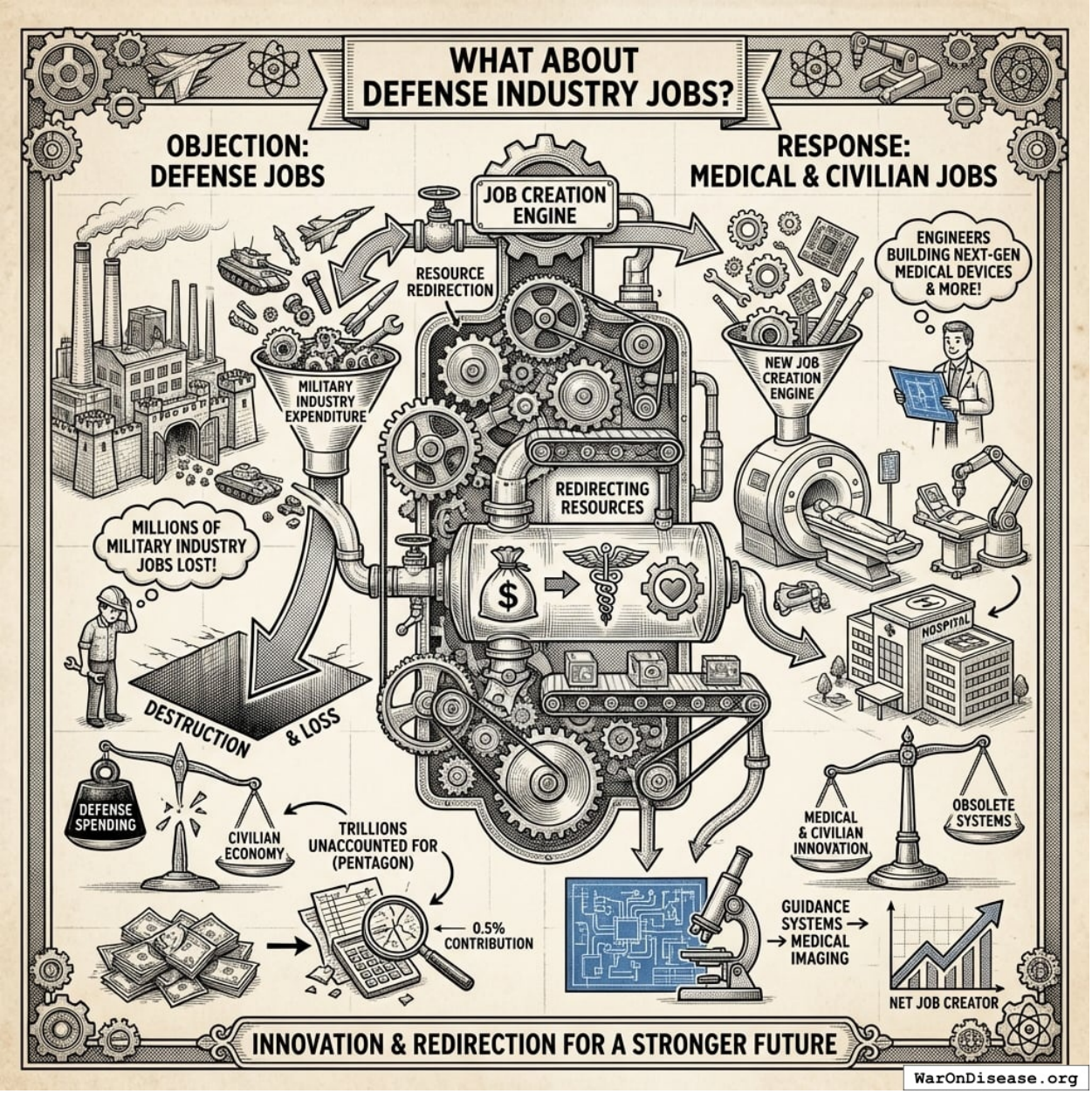


Figure 534: A visual representation of resource redirection showing federal funding and engineering expertise transitioning from military defense projects to healthcare technology development.

Response: This redirects resources into a new job creation engine. The US contribution is less than 0.5% of trillions the Pentagon can't account for[235]. That wasted money creates medical jobs instead. Engineers building guidance systems can build next-generation medical imaging devices. This could be a net job creator.

"This Disrespects Soldiers"

Objection: "This plan is anti-military and disrespects troops who protect us."

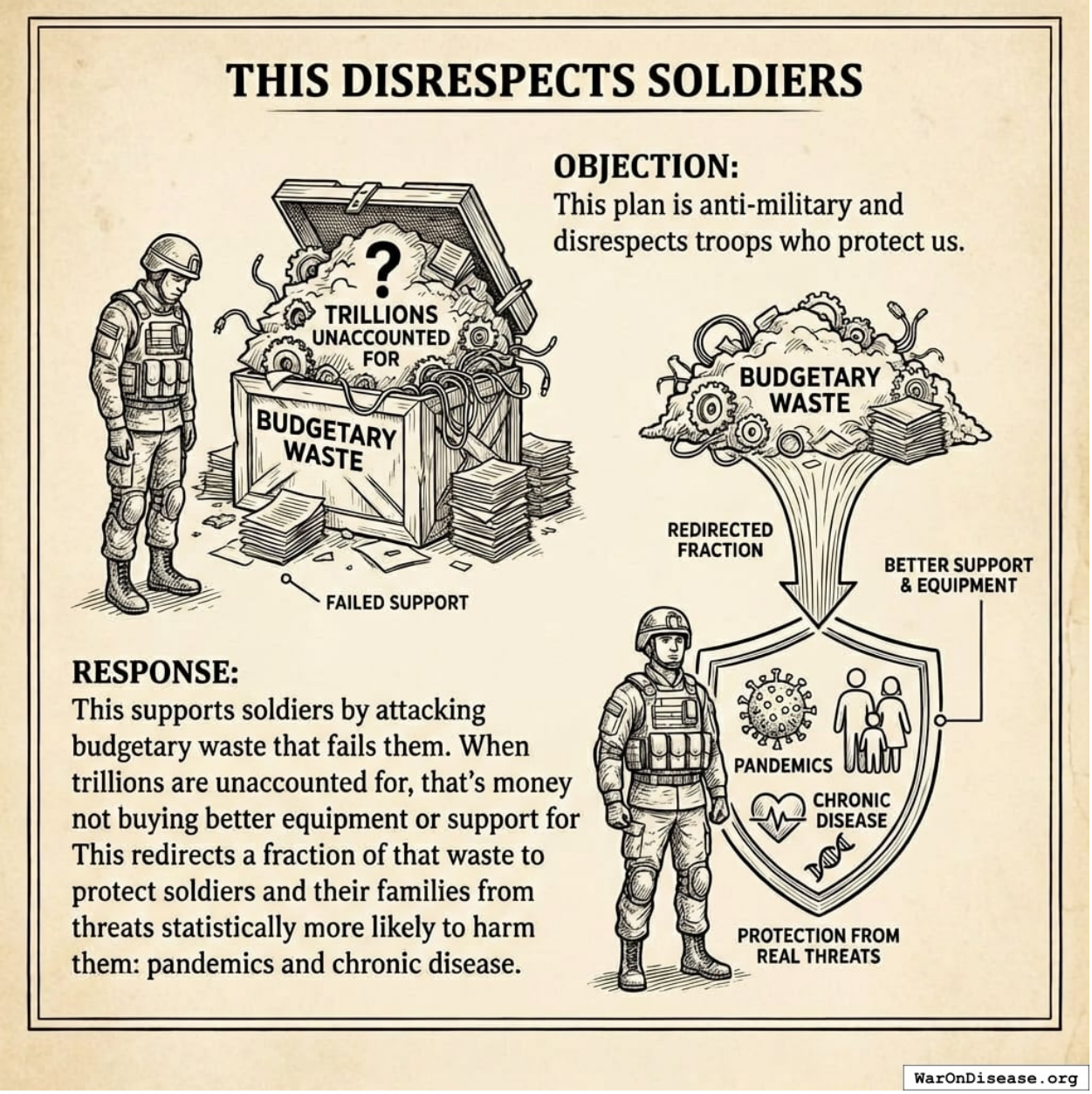


Figure 535: A conceptual diagram showing the redirection of unaccounted military budgetary waste toward improved troop equipment and protections against health threats like pandemics and chronic disease.

Response: This supports soldiers by attacking budgetary waste that fails them. When trillions are unaccounted for, that's money not buying better equipment or support for troops. This redirects a fraction of that waste to protect soldiers and their families from threats statistically more likely to harm them: pandemics and chronic disease.

"This Violates Election Law"

Objection: "Foreign nationals funding US elections is illegal, and your bonds sound like securities."

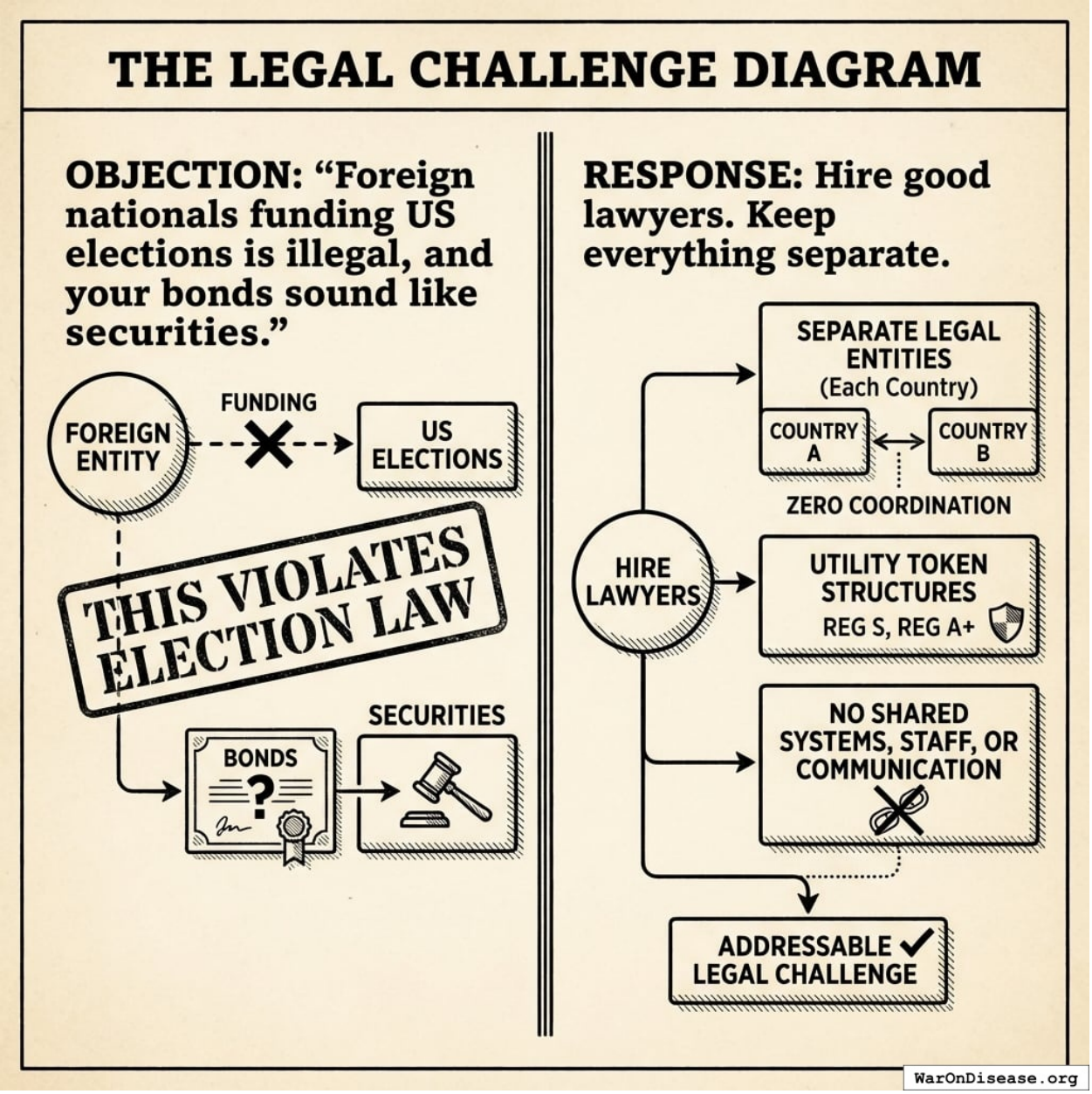


Figure 536: A diagram illustrating the structural separation between domestic and foreign legal entities, showing firewalled systems, staff, and communication to ensure compliance.

Response: Hire good lawyers. Keep everything separate.

- Separate legal entities in each country with zero coordination on political spending
- Utility token structures with proper exemptions (Reg S, Reg A+)
- No shared systems, staff, or communication between entities involved in political action

Addressable legal challenge.

"What If Major Powers Sabotage It?"

Objection: "What stops Russia or China from sabotaging the system?"

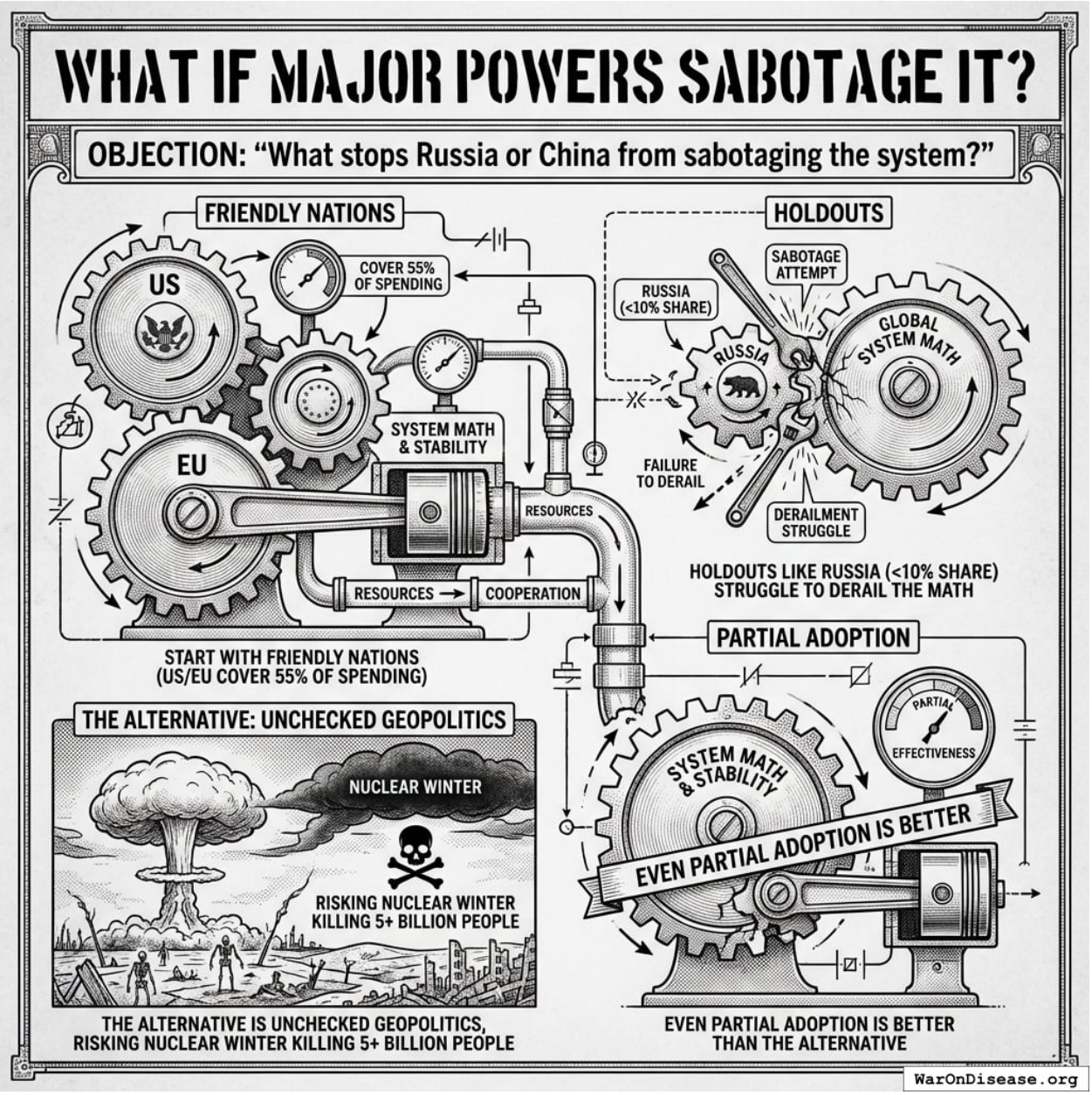


Figure 537: A comparison showing the 55 percent military spending share of US/EU nations versus the less than 10 percent share of potential holdouts, framed against the high-stakes risk of nuclear winter.

Response: Start with friendly nations (US/EU cover 55% of spending[292]). Holdouts like Russia (<10% share)[293] struggle to derail the math. The alternative is unchecked geopolitics, risking nuclear winter killing 5+ billion people[294]. Even partial adoption is better.

Conclusion

Most objections have answers.

Current system: 55 million deaths yearly from treatable causes.

Proposed solution: Designed to work. Requires your participation.

Three premises:

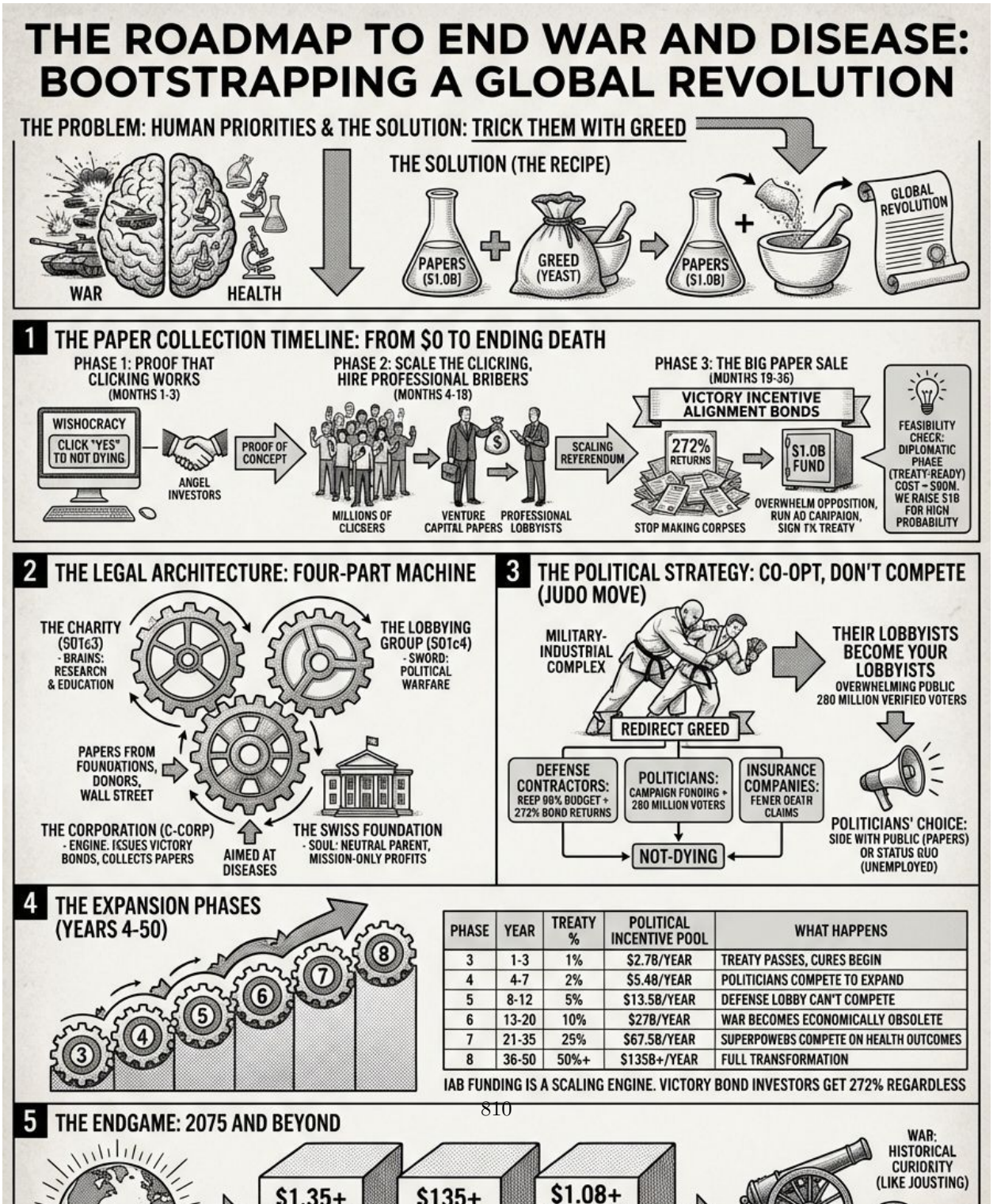
- Not dying is good
- War makes people die
- Clinical trials make people not die

Conclusion: Move money from the “die” column to the “not die” column.

The math is simple. The choice is yours.

The Plan

The Roadmap to End War and Disease



This isn't a protest. It's a recipe. Like making bread, except instead of bread it's curing diseases, and instead of yeast it's (legal) bribes.

High-Level Strategy: The Three-Step Recipe for Not Dying

Humans love steps. You put them on everything. Step 1: Breathe. Step 2: Keep breathing. Step 3: Try not to die. You're very methodical about staying alive, which makes it curious that you spend 40 times more on dying.

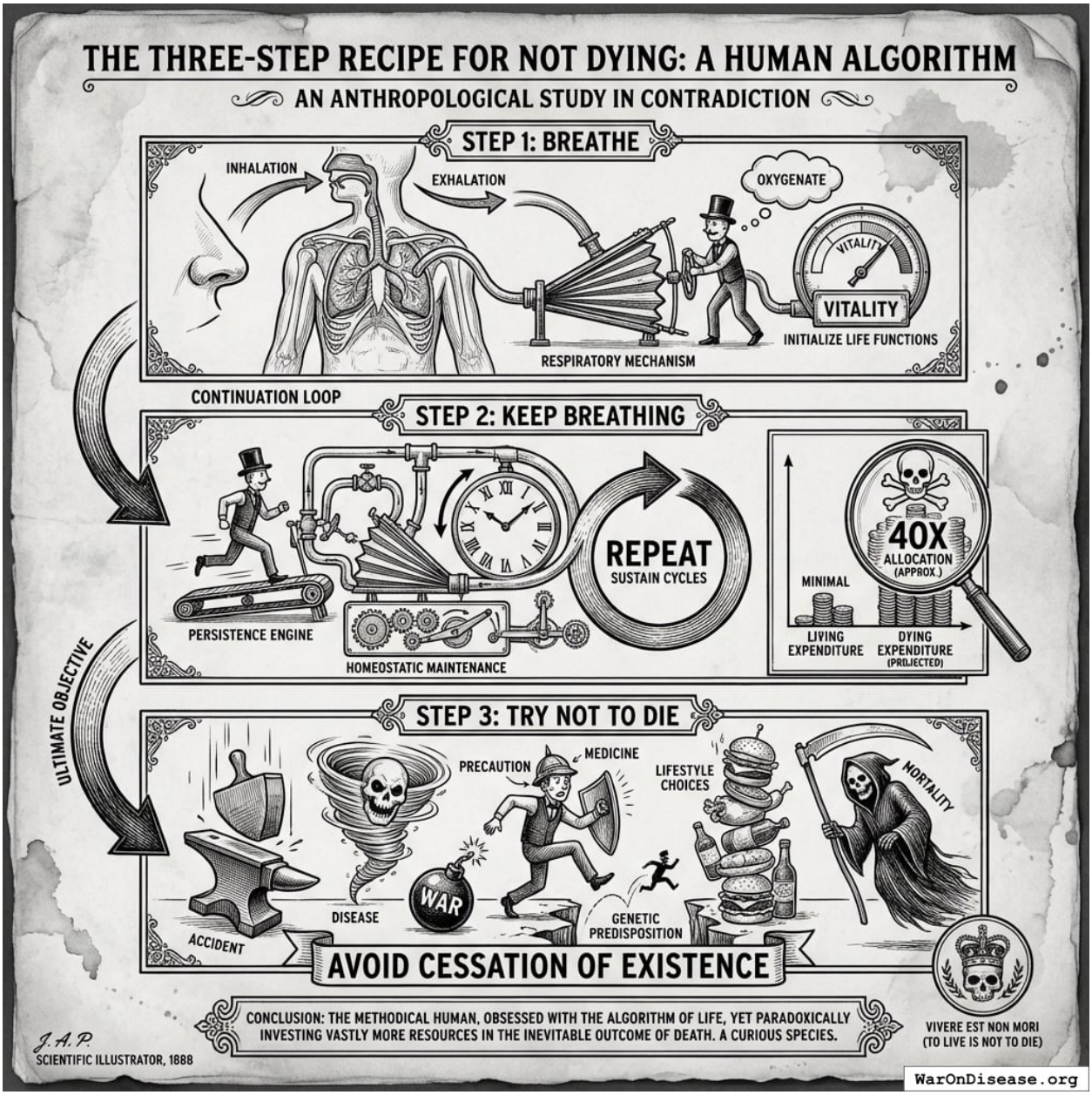


Figure 539: A flowchart depicting a three-step strategic algorithm for transitioning from mortality-focused spending to longevity-focused actions.

Here's your three-step algorithm for fixing this adorable contradiction:

Step 1: Collect Papers from Rich People

You convince wealthy humans to give you $1B in papers by promising them 272% more papers annually. This works because rich people are excellent at counting papers but terrible at not wanting more papers.

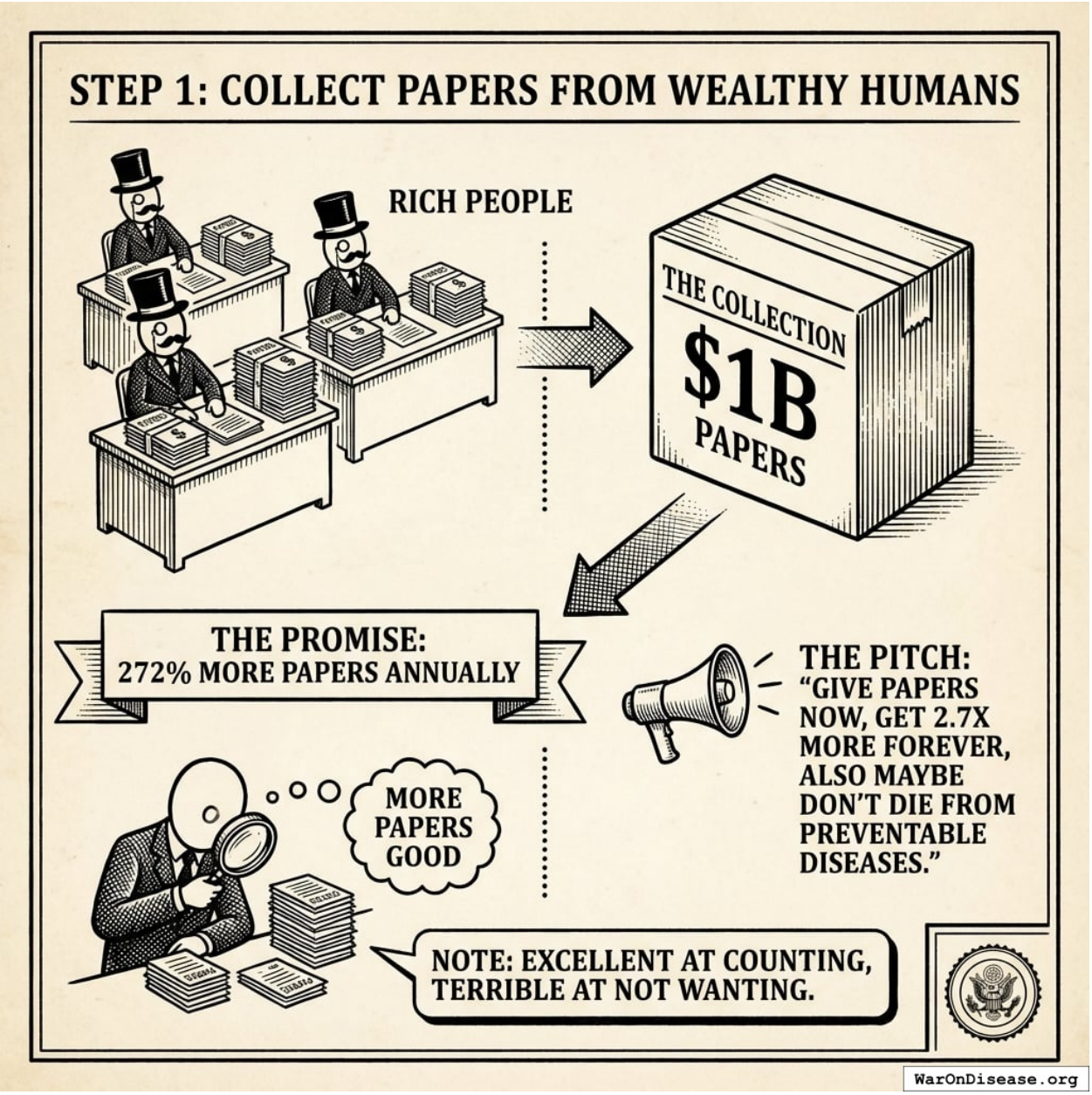


Figure 540: A flow diagram showing wealthy individuals providing 1B in initial capital in exchange for a promised 272 percent annual return.

The pitch is simple: "Give us papers now, get 2.7 times more papers forever, also maybe don't die from preventable diseases." Even humans who think vaccines cause 5G can understand "more papers good."

Step 2: Pay Humans to Click YES

Use some papers to launch a global clicking ceremony where 280 million people click "YES" on a website. This costs about 50 cents per click, which is cheaper than a candy bar and achieves more than most political movements involving shouting.

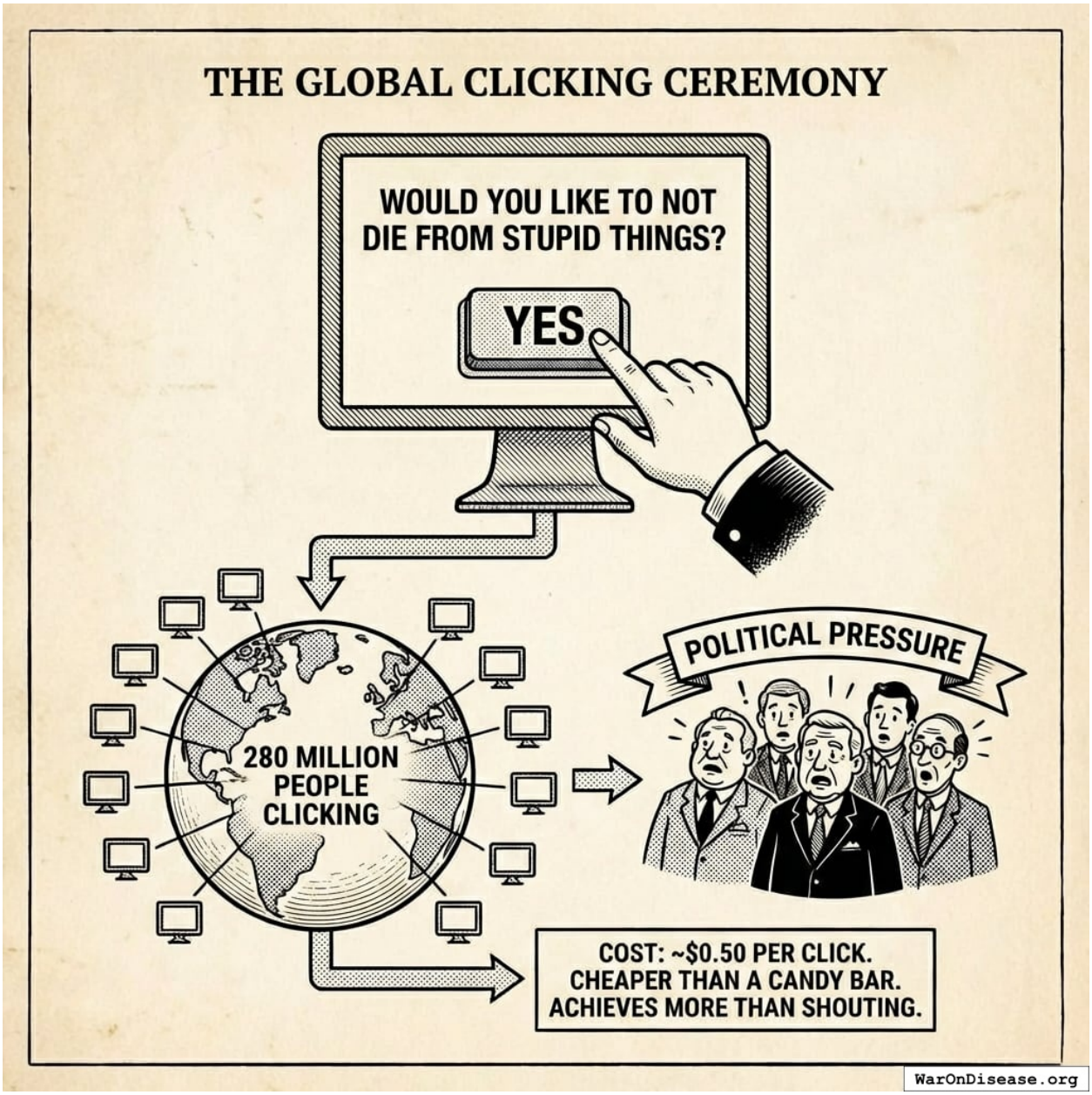


Figure 541: A workflow diagram showing how 280 million individual website clicks translate into collective political pressure on politicians.

The question is: "Would you like to not die from stupid things?" You'd think the answer would be obvious, but humans once thought the sun went around Earth, so you have to ask.

This creates what's called "political pressure," which is when politicians realize that voters exist and some of them have opinions.

Step 3: Apply Papers to Politicians Until Treaty Happens

Deploy the remaining papers to convince politicians that supporting the treaty is the only way to remain employed as politicians. With 280 million voters and a paper budget comparable to the death industry, the math becomes simple even for congresspeople.

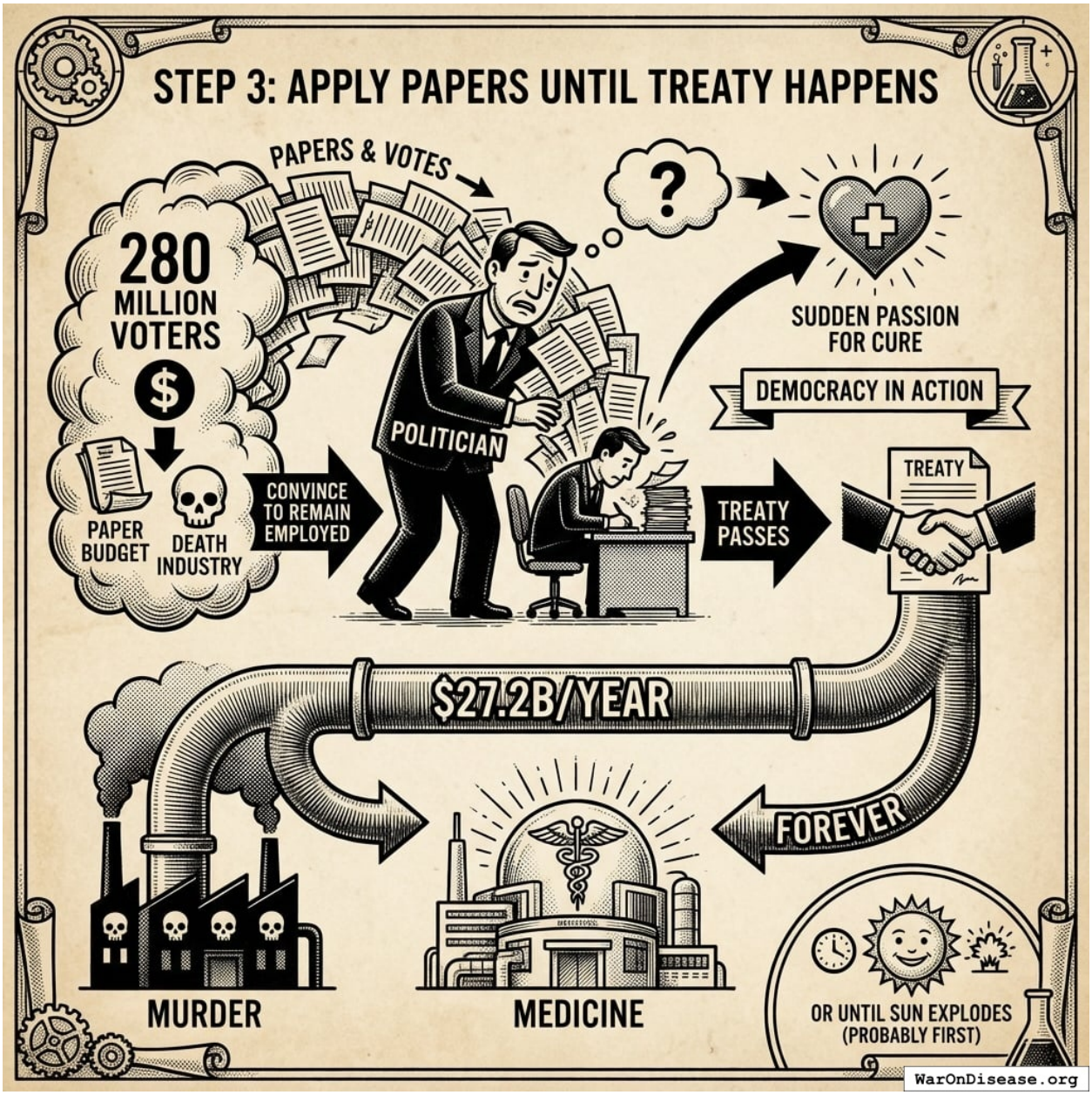


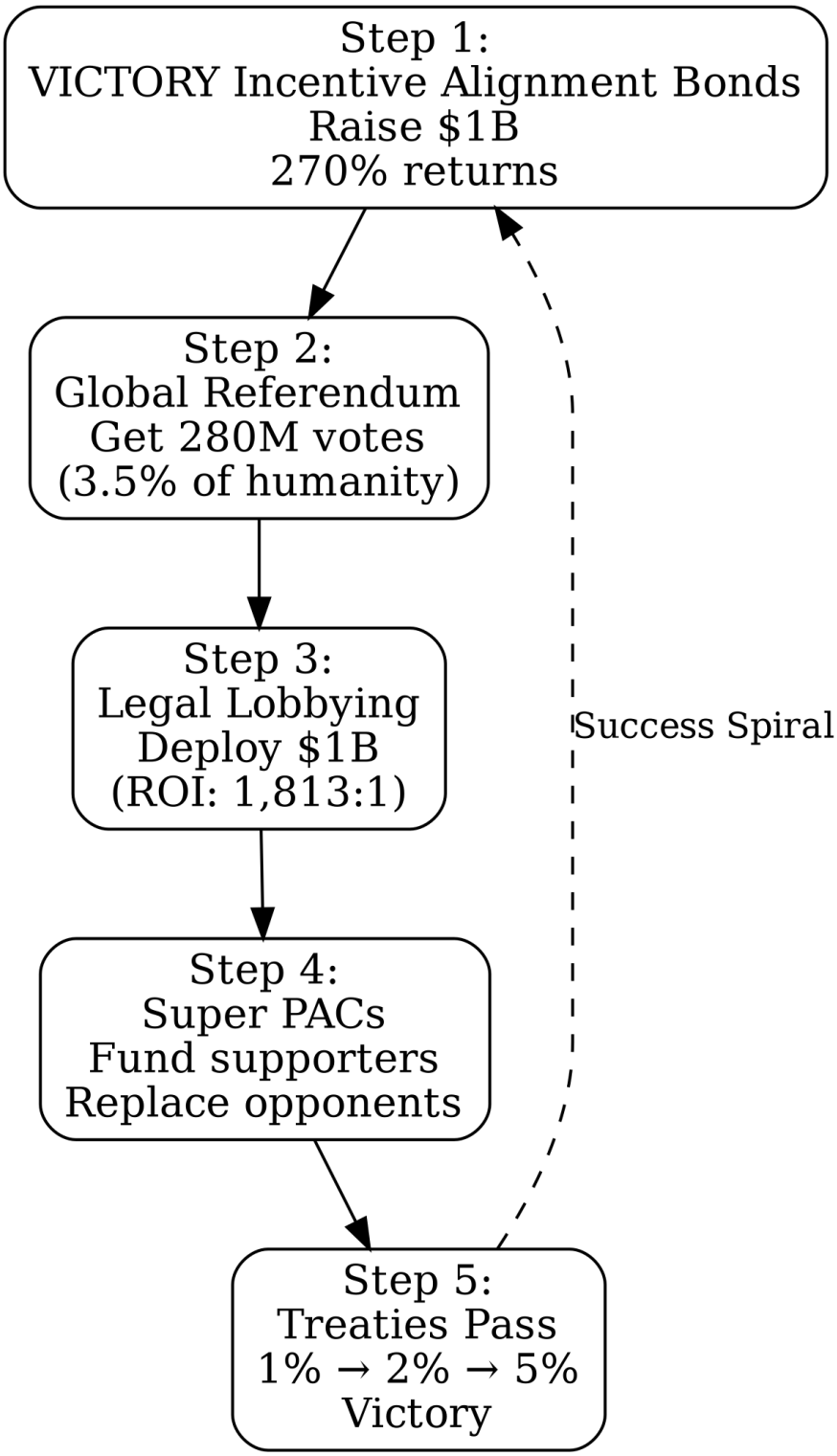
Figure 542: A flow diagram illustrating the conversion of voter pressure and 'papers' into political action, leading to the treaty passing and the reallocation of 27.2B from military to medical funding.

Politicians discover they've always been very passionate about curing diseases. This sudden passion coincides precisely with receiving papers and votes, which is called "democracy" on your planet.

The treaty passes. $27.2B/year flows from murder to medicine. Forever. Or until the sun explodes. Whichever happens first (probably the sun).

Detailed Execution: The Five-Step Cascade

For humans who need more steps (you do seem to enjoy steps), here's the same thing with extra details. It's like a flowchart, except instead of managing a warehouse it's saving your species from self-inflicted death.



WarOnDisease.org

Step 1: Sell Papers That Make More Papers

Raise $1B by selling VICTORY Incentive Alignment Bonds to investors. These are like war bonds except backwards - instead of funding death, they fund not-death. This confuses some humans, but the 272% returns help them overcome their confusion.

Step 2: The Great Internet Clicking

Launch a global referendum where 280 million people click YES. This is 3.5% of your species, which history shows is the magic number where governments can no longer pretend not to notice. It's like reaching critical mass, except instead of a nuclear explosion it's democracy, which is much less lethal.

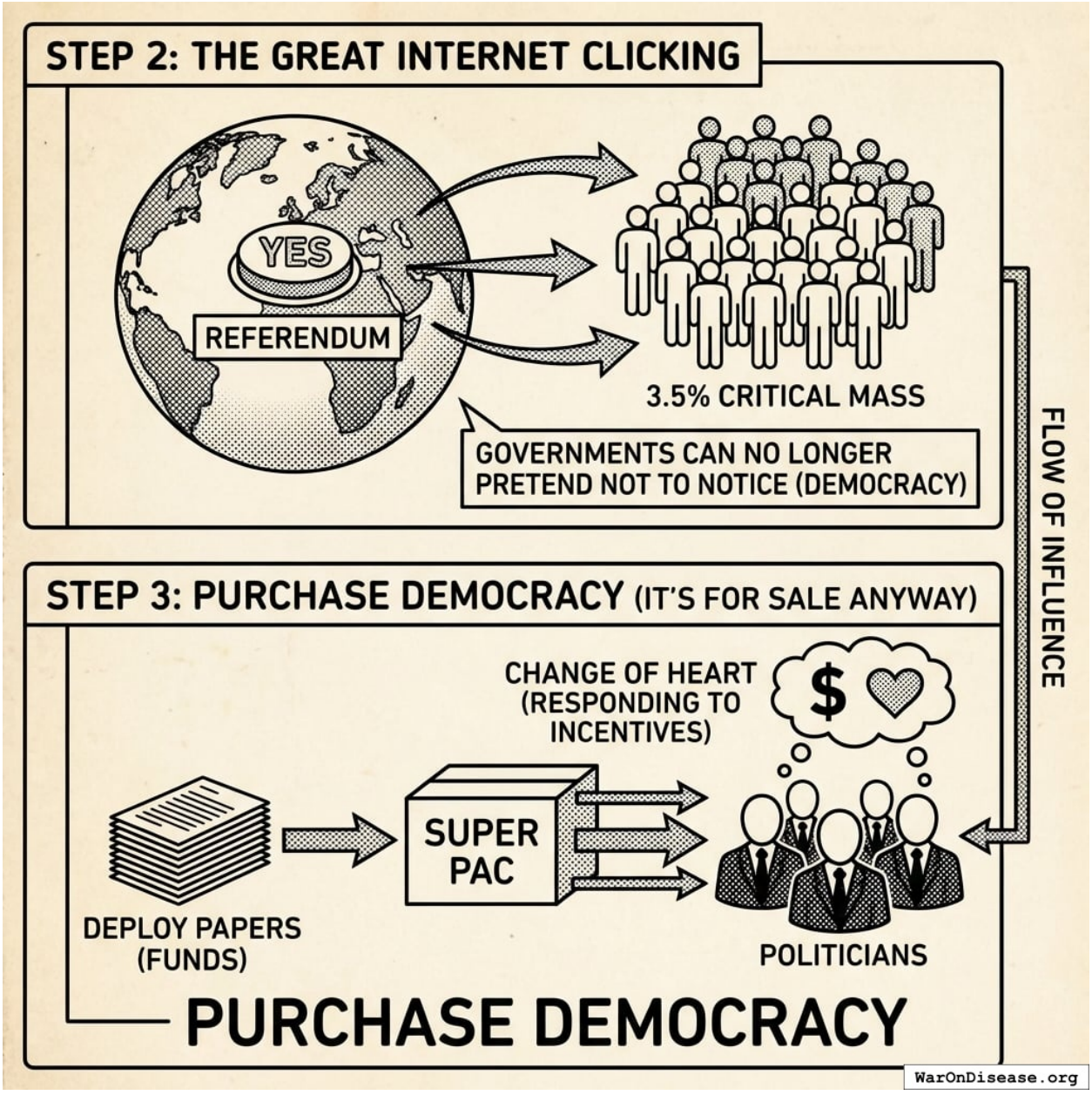


Figure 543: A flowchart illustrating the causal chain from a 3.5 percent global referendum to political policy change via Super PAC influence.

Step 3: Purchase Democracy (It's For Sale Anyway)

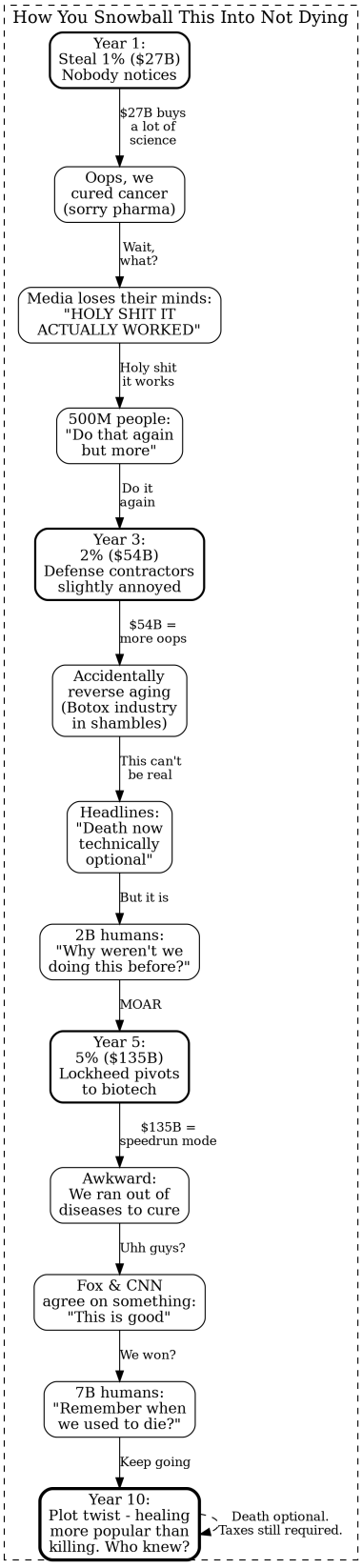
Deploy papers to politicians via Super PACs, which are like regular PACs but super. With 280 million voters demanding the treaty and a budget that makes defense lobbyists nervous, politicians experience what you call "a change of heart" but what mathematicians call "responding to incentives."

Step 4: Treaty Achieves Existence

A 1% treaty passes. $27.2B annually begins flowing from the murder budget to the medicine budget. Diseases start getting cured. Death becomes slightly less inevitable. Investors get very wealthy. Everyone acts surprised that this worked, even though the math was obvious.

Step 5: The Success Spiral (Where Things Get Fun)

Your 1% Treaty Fund finances cures. Cures work. People notice they're not dying. People become enthusiastic about continuing not-dying. Political pressure builds to increase the treaty from 1% to 2% to 5%. Each success creates more success. It's a positive feedback loop, like compound interest except instead of money it's humans continuing to exist.


How You Snowball This Into Not Dying
Year 1:
Steal 1% ($27B)
Nobody notices
$27B buys
a lot of
science
Oops, we
cured cancer
(sorry pharma)
Wait,
what?
Media loses their minds:
"HOLY SHIT IT
ACTUALLY WORKED"
Holy shit
it works
500M people:
"Do that again
but more"
Do it
again
Year 3:
2% ($54B)
Defense contractors
slightly annoyed
$54B =
more oops
Accidentally
reverse aging
(Botox industry
in shambles)
This can't
be real
Headlines:
"Death now
technically
optional"
But it is
2B humans:
"Why weren't we
doing this before?"
MOAR
Year 5:
5% ($135B)
Lockheed pivots
to biotech
$135B =
speedrun mode
Awkward:
We ran out of
diseases to cure
Uhh guys?
Fox & CNN
agree on something:
"This is good"
We won?
7B humans:
"Remember when
we used to die?"
Keep going
Year 10:
Plot twist - healing
more popular than
killing. Who knew?
Death optional.
Taxes still required.

Eventually you spend more on not-dying than dying. This seems obvious, but for humanity it's revolutionary.

Tactical Implementation: The Sacred (Legal) Bribery Sequence

Humans respond to papers. This is your most important discovery about Earth. You tried appealing to morality (failed). You tried appealing to logic (failed harder). But papers? Papers work every time.

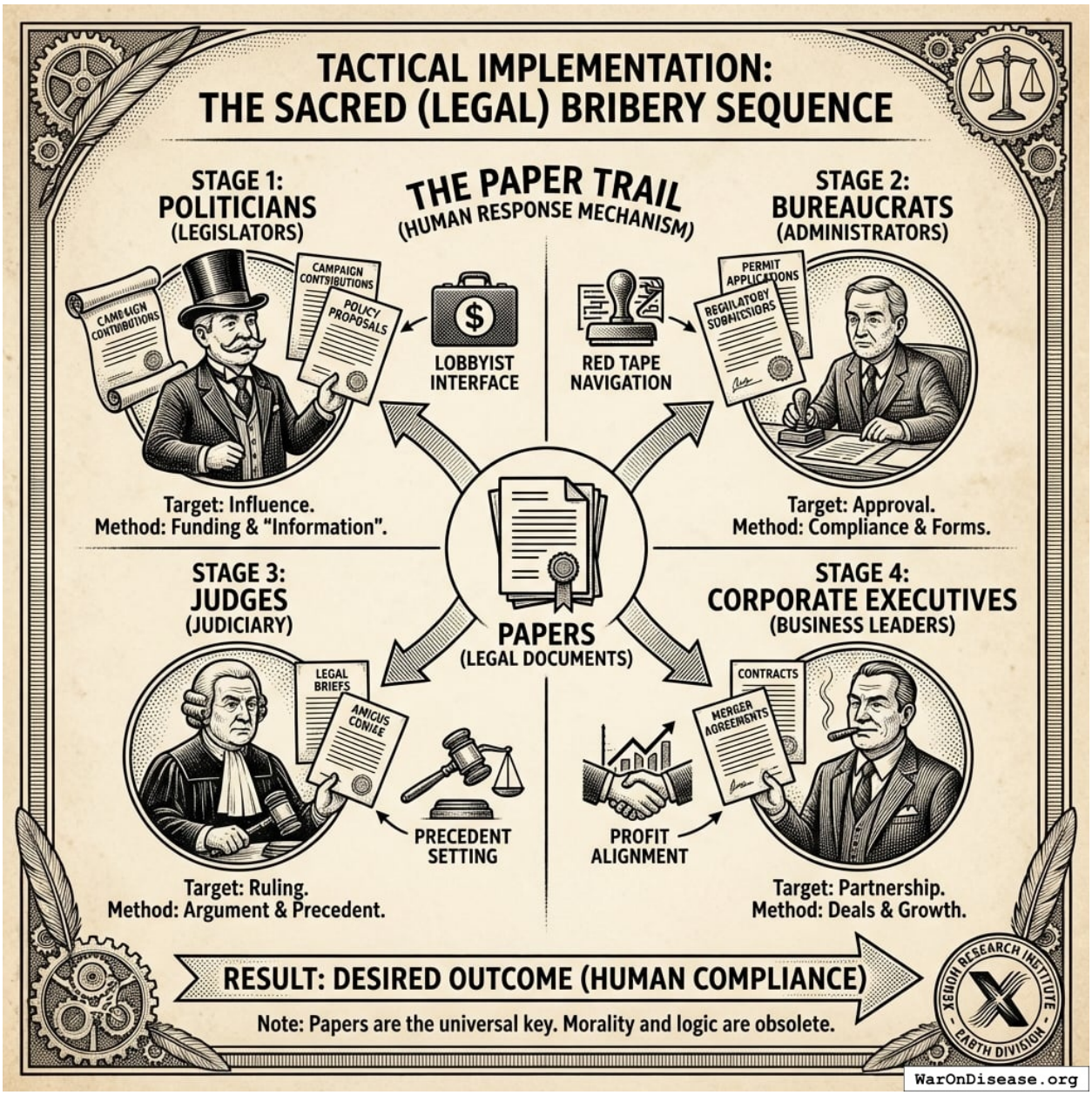


Figure 544: A flowchart illustrating the sequential steps for distributing documentation to different human categories to achieve tactical goals.

Here's the precise order in which to distribute papers to specific categories of humans:

(Legal) Bribe Category #1: Rich People (The Paper Collectors)

Who you're (legally) bribing: Wealthy humans who have many papers and want even more papers, despite already having more papers than they could spend in several lifetimes

The (legal) bribe you offer: Give us $250M in papers now, get 272% more papers annually forever. This is modeled on WW2 War Bonds[266] except instead of 4% returns it's 272% returns, and instead of funding death it funds not-death.

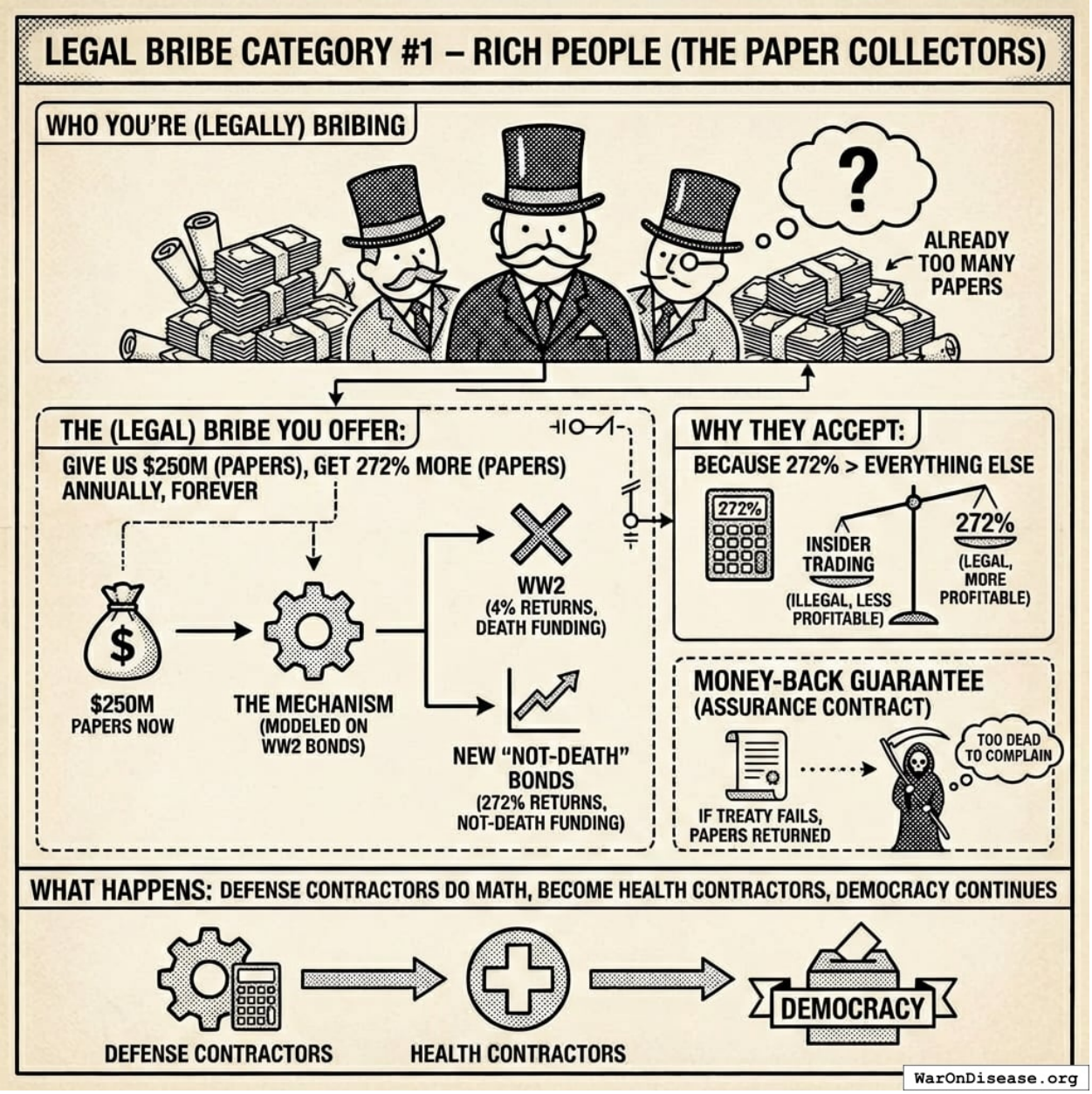


Figure 545: A comparison of investment returns and outcomes, showing the shift from traditional defense contractor returns to the high-yield health treaty model.

Why they accept: Because even billionaires can count to 272%, and 272% beats everything else including insider trading, which is illegal but also less profitable.

Money-back guarantee: If the treaty fails, they get their papers back via Assurance Contract. This is basically saying "if everyone dies from preventable diseases, you'll be too dead to complain about losing money."

What happens: Defense contractors do math. Math says $272\% > 8\%$. Defense contractors become health contractors. Democracy continues as normal.

The Specific Offer to Bomb Makers

You show weapons manufacturers a spreadsheet (they love spreadsheets):

Option A (Current Job)

- Returns: 8% annually
- Product: Things that make humans stop existing
- Customer satisfaction: N/A (customers deceased)

Option B (Your Offer)

- Returns: 272% annually
- Product: Things that make humans continue existing
- Customer satisfaction: Very high (customers still alive to provide feedback)

They choose Option B. Not because they've become better people, but because they've become better at arithmetic.

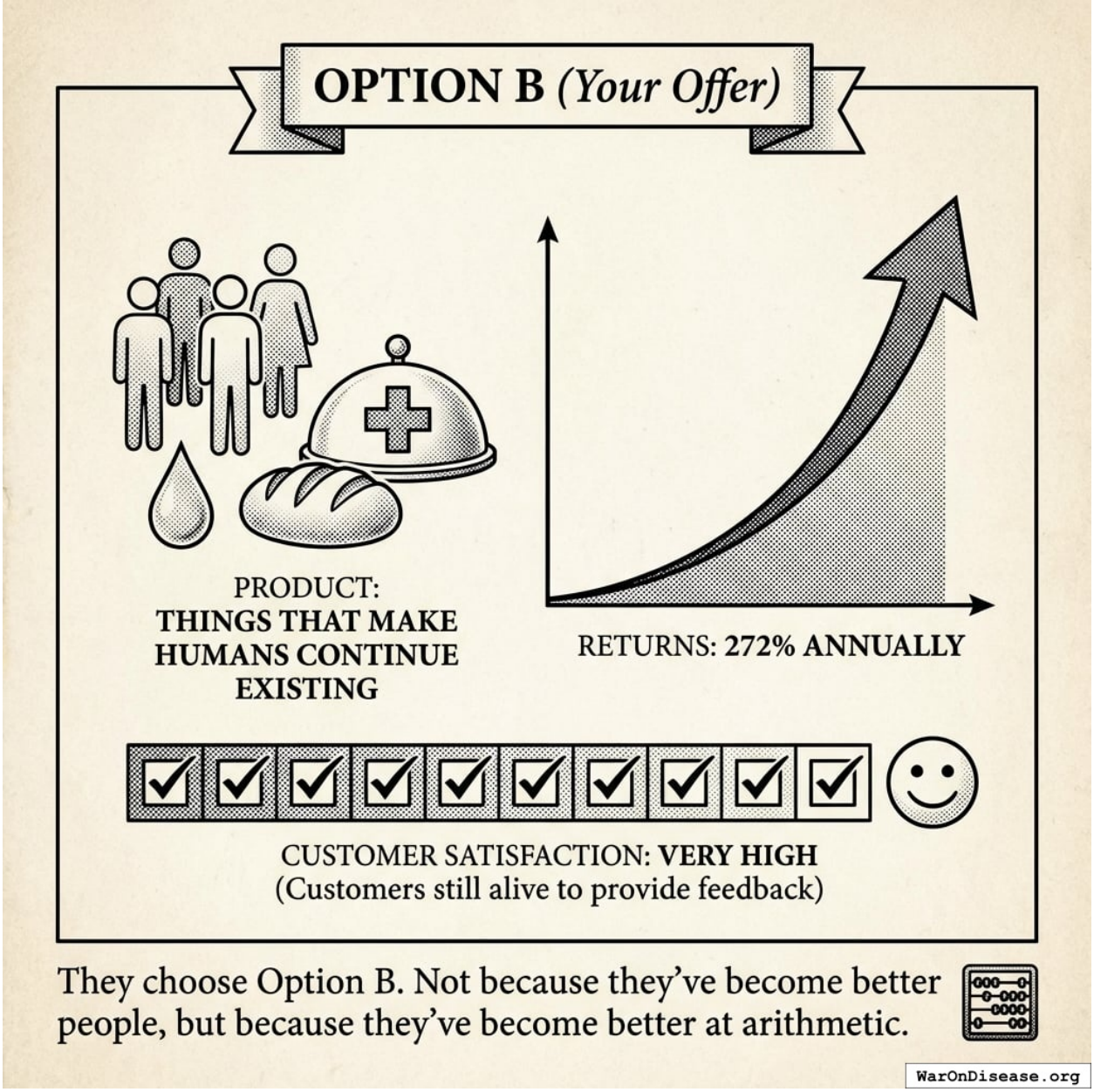


Figure 546: A comparison between a standard investment and the high-return 'Option B', illustrating the mathematical disparity in annual returns and customer retention.

(Legal) Bribe Category #2: The True Believers (Early Adopters Who Want Control)

Who you're (legally) bribing: Humans who believe in curing diseases AND want to control a multi-billion dollar budget. These exist. They're called "effective altruists" except rich.

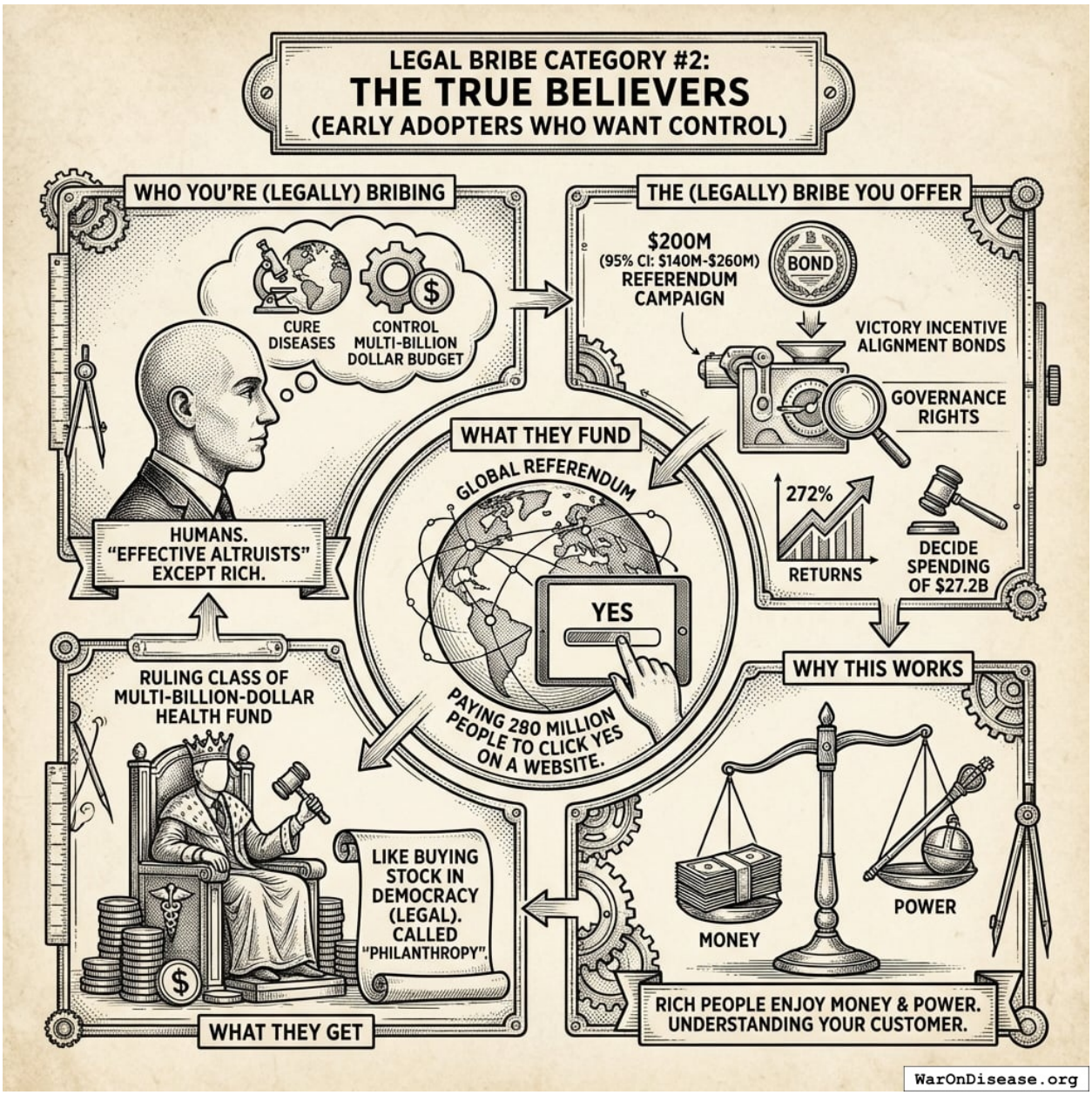


Figure 547: A visual representation of the value exchange where an early adopter provides 200M in funding to receive a 272 percent financial return and governance control over a 27.2B health fund.

The (legal) bribe you offer: Fund the $200M (95% CI: $140M-$260M) referendum campaign and receive special VICTORY Incentive Alignment Bonds with governance rights. This means they get 272% returns PLUS they get to decide how the $27.2B gets spent.

What they fund: The Global Referendum - basically paying 280 million people to click YES on a website.

What they get: They become the ruling class of a multi-billion-dollar health fund. It's like buying stock in democracy, except it's legal and called "philanthropy."

Why this works: Rich people enjoy both money AND power. You're offering both. This is called "understanding your customer."

(Legal) Bribe Category #3: Regular People (Everyone Else)

Who you're (legally) bribing: 280 million regular humans (3.5% of your species, which history proves is enough to change anything)

The (legal) bribe you offer: Click YES on a website. Receive VOTE points. Points become money after treaty passes. You literally get paid for clicking a button to not die.

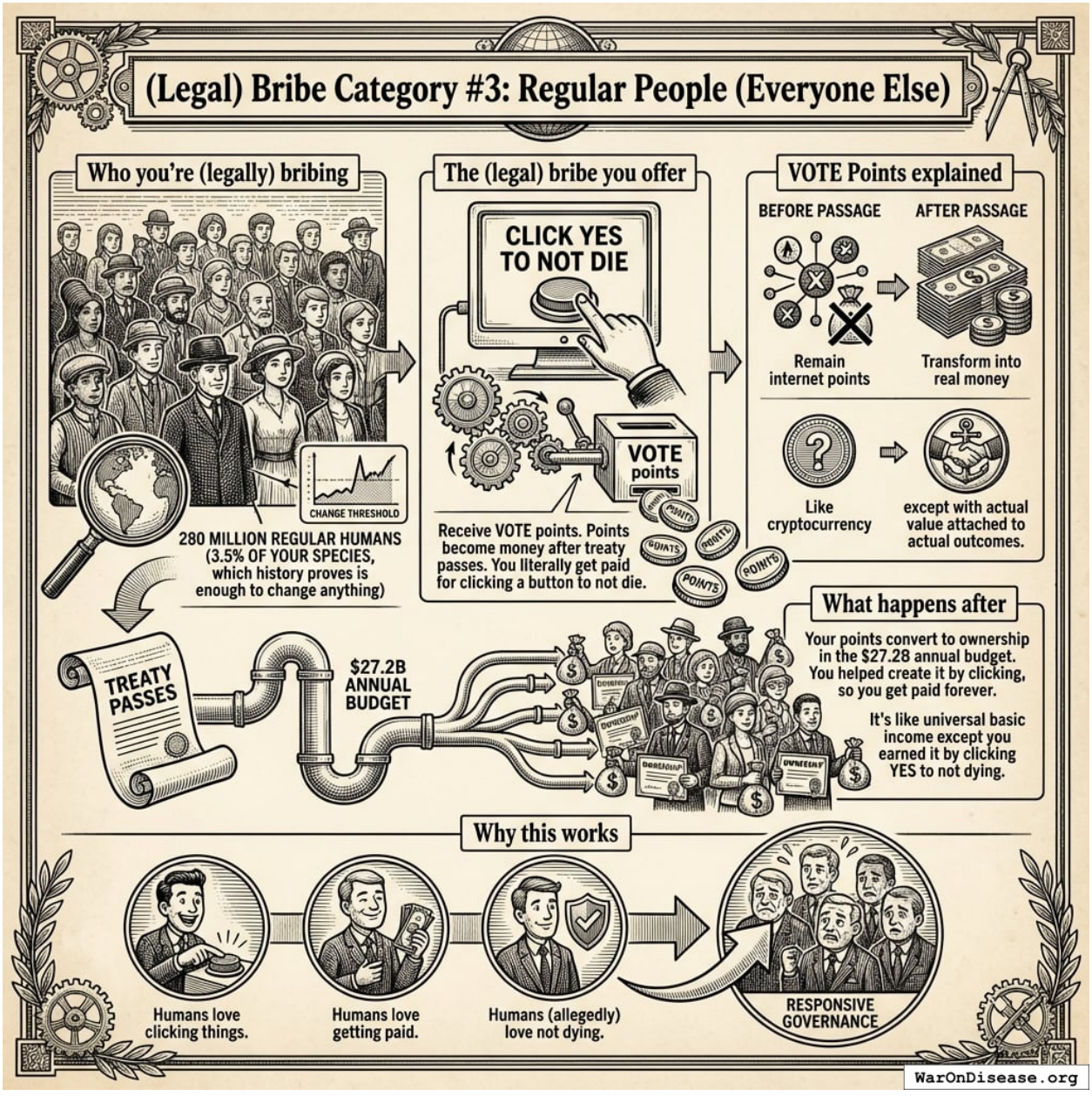


Figure 548: A flowchart illustrating the transition from a user clicking 'YES' to earn VOTE points, the subsequent treaty ratification, and the final conversion of points into a share of the annual budget.

VOTE Points explained: These are internet points that transform into real money if the treaty passes and remain internet points if it doesn't. Like cryptocurrency except with actual value attached to actual outcomes.

What happens after: Treaty passes. Your points convert to ownership in the $27.2B annual budget. You helped create it by clicking, so you get paid forever. It's like universal basic income except you earned it by clicking YES to not dying.

Why this works: Humans love clicking things. Humans love getting paid. Humans (allegedly) love not dying. This combines all three. When 3.5% of the population wants something and will profit from it, politicians experience what you call "responsive governance."

(Legal) Bribe Category #4: Politicians (The Elected Paper Recipients)

Who you're (legally) bribing: Humans whose job is "get elected by promising things, then do whatever the people with papers want." You're just offering more papers than the bomb people.

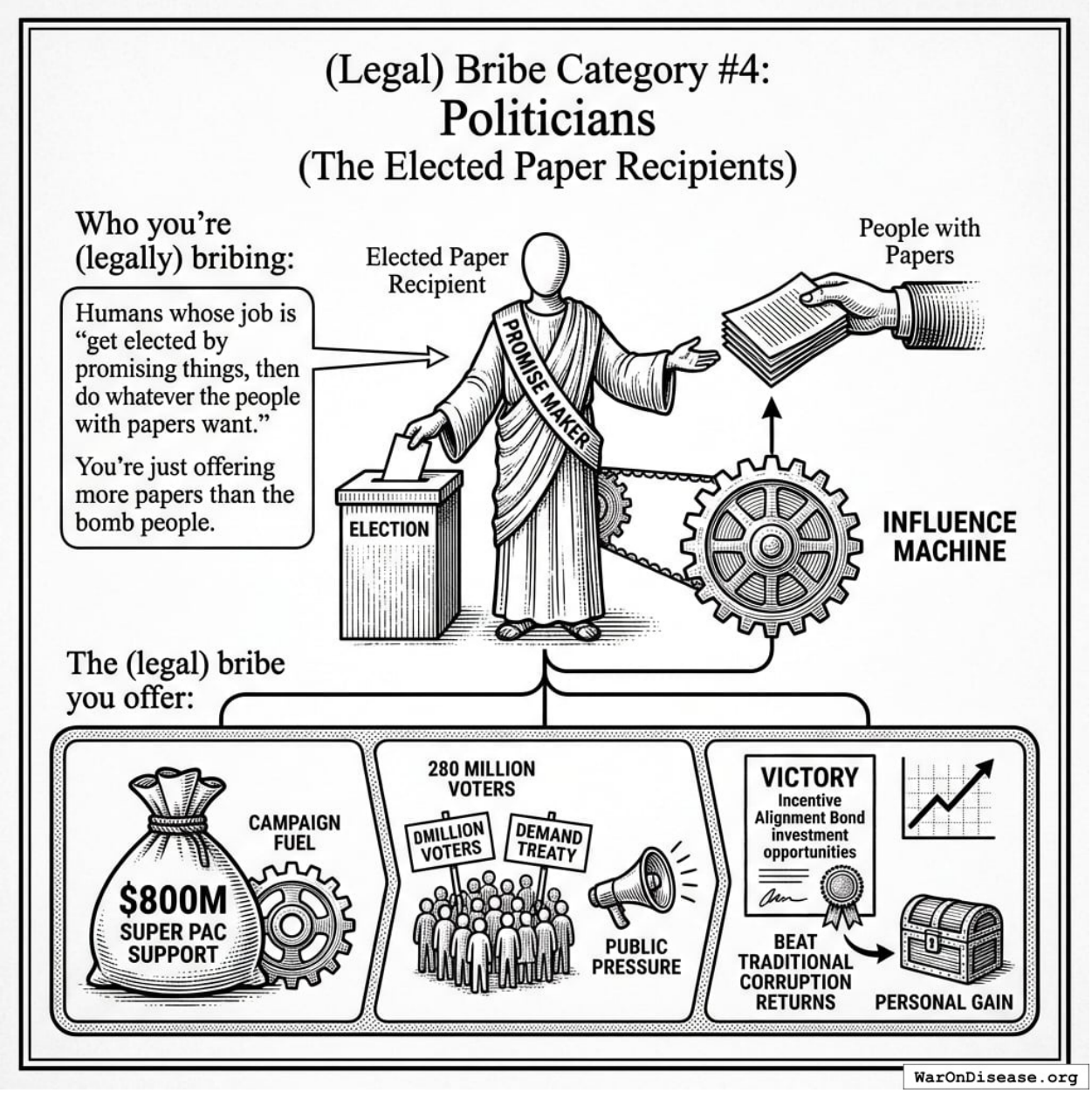


Figure 549: A visualization showing three key levers of political influence: financial support via Super PACs, grassroots pressure from voters, and personal financial alignment through VICTORY Bonds.

The (legal) bribe you offer: Super PAC support funded from the $650M lobbying budget, 280 million voters demanding the treaty, plus personal VICTORY Incentive Alignment Bond investment opportunities that beat traditional corruption returns.

The Package

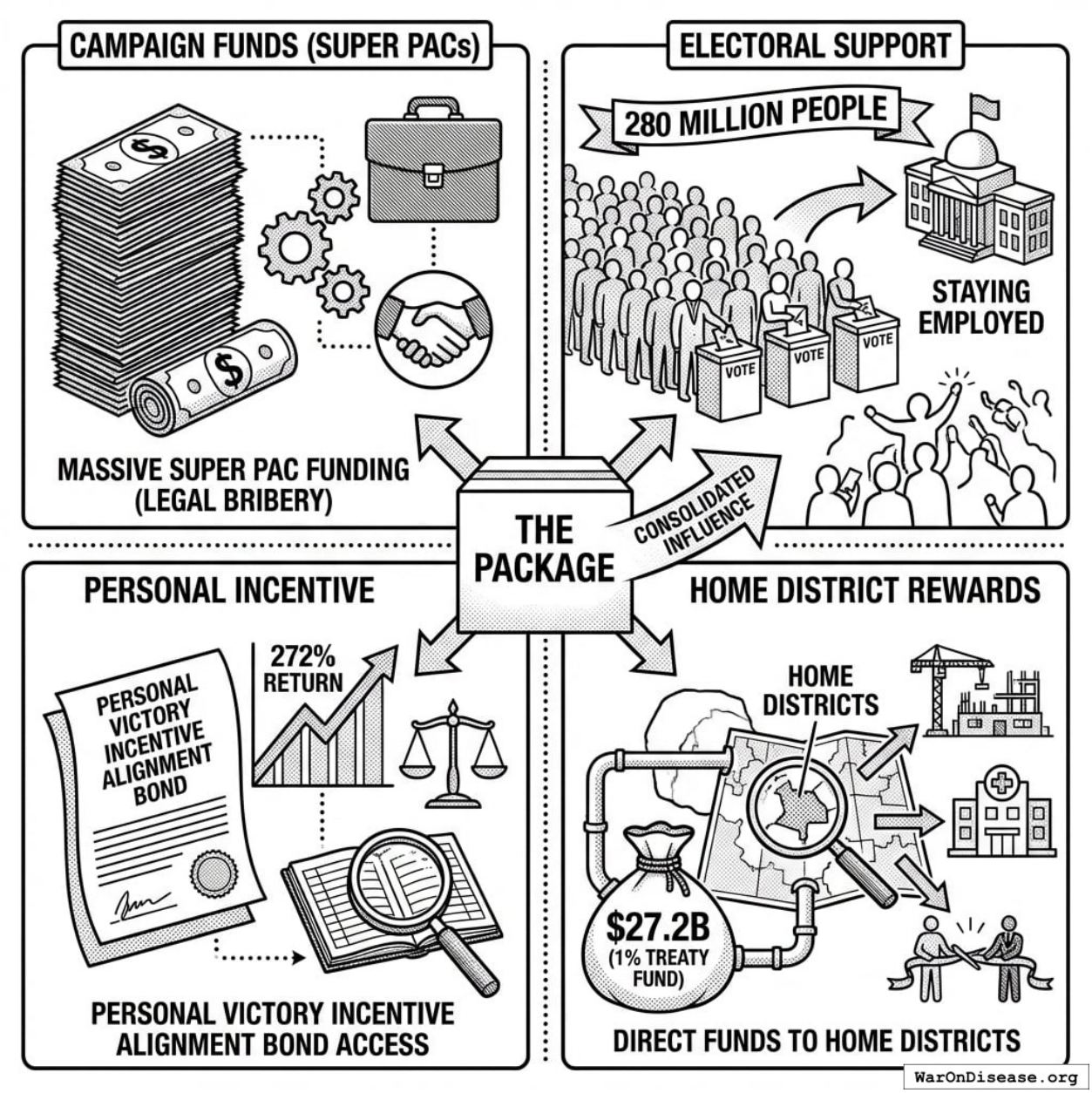


Figure 550: A visualization of 'The Package' showing the four distinct incentive streams (campaign funding, voter support, personal investment returns, and district-level project funding) flowing toward a political decision-maker.

- **Papers for campaigns:** Massive Super PAC funding (legal bribery)
- **Votes for staying employed:** 280 million people who will vote for treaty supporters
- **Papers for themselves:** Personal VICTORY Incentive Alignment Bond access (272% beats insider trading)

- **Power to reward friends:** Direct a portion of the 1% Treaty Fund's $27.2B to their home districts (funding pragmatic clinical trials and building decentralized institutes of health for decades of ribbon-cutting ceremonies)

The choice you give them

Option A: Support treaty, get papers + votes + legacy as "politician who cured diseases"

Option B: Oppose treaty, discover 280M voters wanted to not die (they're voting against you)

Most politicians are excellent at counting votes. The math becomes simple even for them.

What happens: Politicians discover they've always been passionate about curing diseases. This sudden passion perfectly coincides with receiving papers and votes, which on your planet is called "representative democracy."

The Paper Collection Timeline: From $0 to Ending Death

You want to end war and disease. You need $1B in papers. You currently have $0 in papers (probably). Here's the recipe.

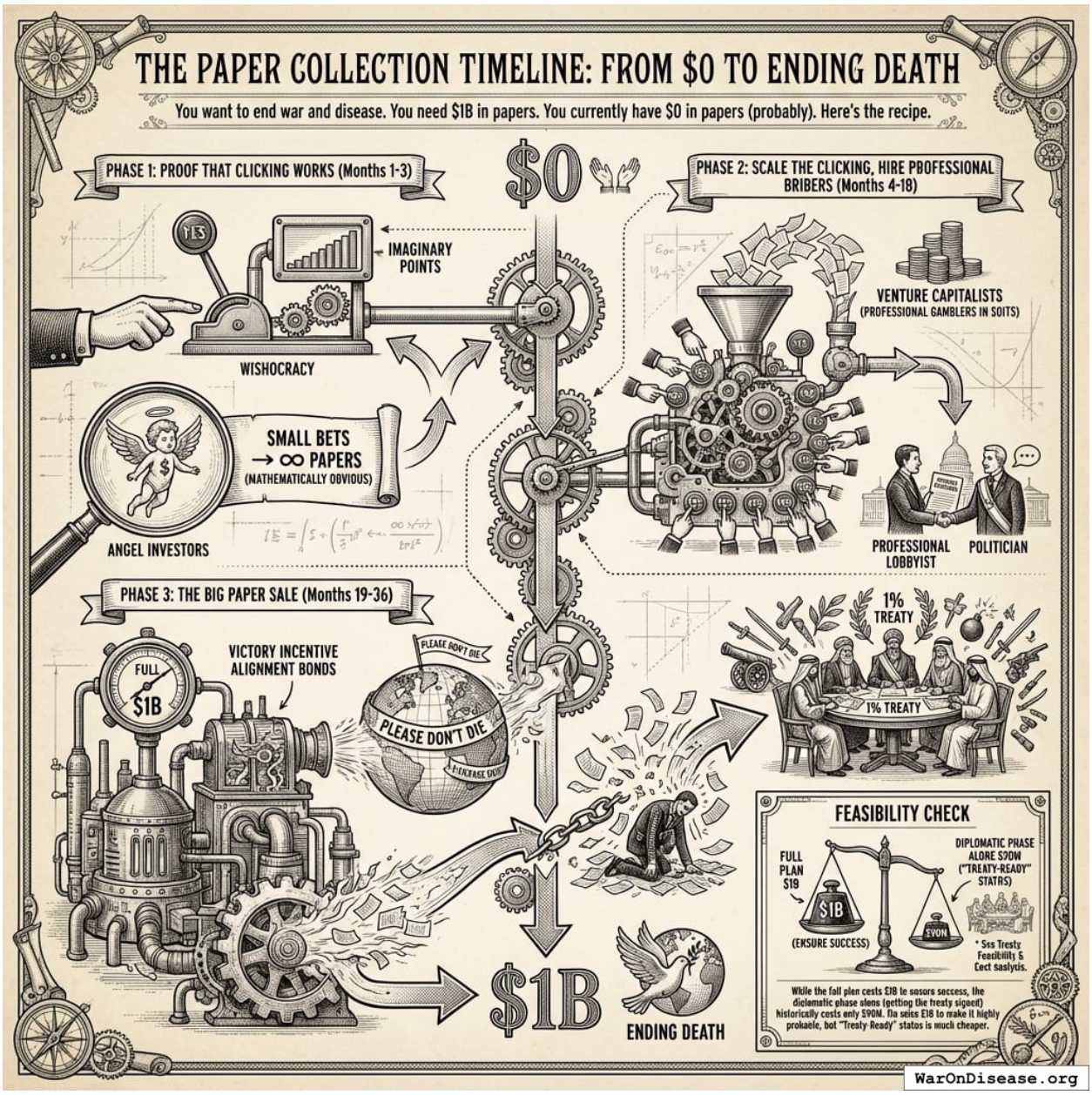


Figure 551: A chronological roadmap showing the three phases of the Paper Collection strategy, mapping the progression from proof-of-concept to a 1B global treaty over 36 months.

1. **Phase 1: Proof That Clicking Works (Months 1-3).** You build a simple version of **Wishocracy** - basically a website where humans click "yes" to not dying. If anyone uses it, you've proven humans will vote for things when bribed with imaginary points. You show this to angel investors who understand that betting small papers to get infinite papers is mathematically obvious.
2. **Phase 2: Scale the Clicking, Hire Professional Bribers (Months 4-18).** With proof that humans will click buttons when offered money, you raise more papers from venture capitalists (humans who gamble professionally while wearing suits). You use these papers to scale the referendum to millions of clickers and hire your first professional lobbyists - humans whose actual job is "convince politicians that things are good."
3. **Phase 3: The Big Paper Sale (Months 19-36).** This is the final boss level. You launch **VICTORY Incentive Alignment Bonds**, which are like war bonds except backwards - you're giving papers to

humans to STOP making corpses instead of START making corpses. This raises the full $1B you need to overwhelm the opposition, run a global "please don't die" advertising campaign, and get the **1% treaty** signed by actual governments who thought weapons were the only option.

Feasibility Check: While the full plan costs $1B to ensure success, the diplomatic phase alone (getting the treaty signed) historically costs only **$90M**. We raise $1B to make it highly probable, but "Treaty-Ready" status is much cheaper. See Treaty Feasibility & Cost Analysis.

The Legal Architecture: How to Be a Charity, a Lobbying Group, and a Hedge Fund Simultaneously

To win, you need to fight on three fronts: moral (charity), political (lobbying), and financial (investment). The problem is your legal system says one organization can't do all three.

Your legal system is adorably complicated, like a board game designed by lawyers having a nightmare.

So you build a four-part machine:

- **The Charity (501c3):** This is the "brains." It does research and education. This is where rich foundations give papers and get to feel good about themselves (plus tax deductions, which are like discount coupons for virtue).
- **The Lobbying Group (501c4):** This is the "sword." It takes the research and uses it to wage unlimited political warfare, which sounds scary but mostly involves lunch meetings and PowerPoints.
- **The Corporation (C-Corp):** This is the "engine." A for-profit entity that issues the VICTORY Incentive Alignment Bonds and collects the papers. Yes, you need a for-profit corporation to end death. Your species is hilarious.
- **The Swiss Foundation:** This is the "soul." The parent organization that owns the corporation, ensuring profits can only be used for the mission. You put it in Switzerland because they're good at keeping things neutral and also chocolate.

This structure lets you legally accept papers from everyone - foundations, political donors, and Wall Street - and aim them all at diseases instead of each other.

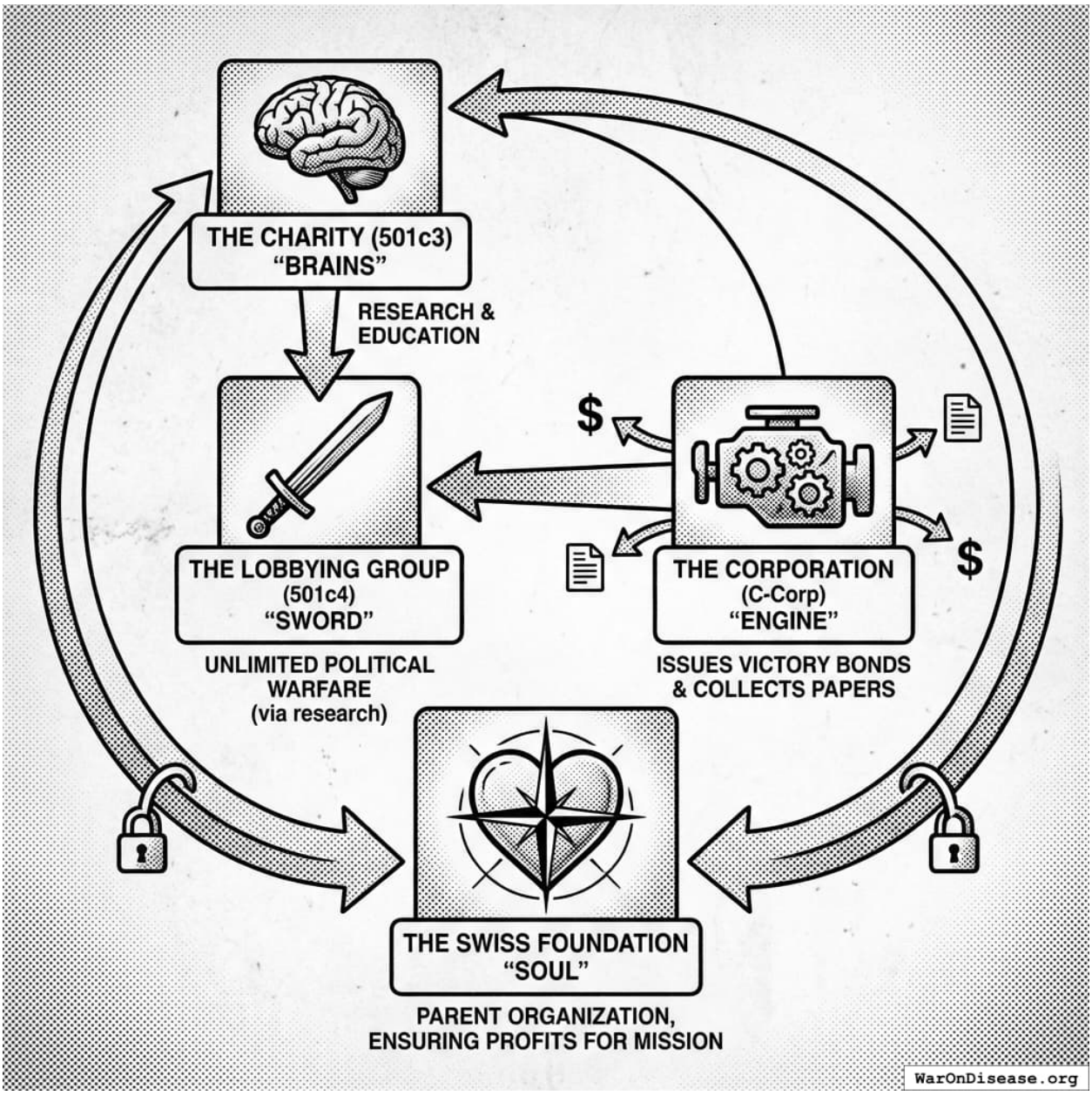


Figure 552: Structure of the hybrid legal entity designed to combine charitable research, political lobbying, and for-profit investment mechanisms.

The Political Strategy: Co-Opt, Don't Compete

You cannot outspend the military-industrial complex in a head-to-head fight. They have more papers than countries.

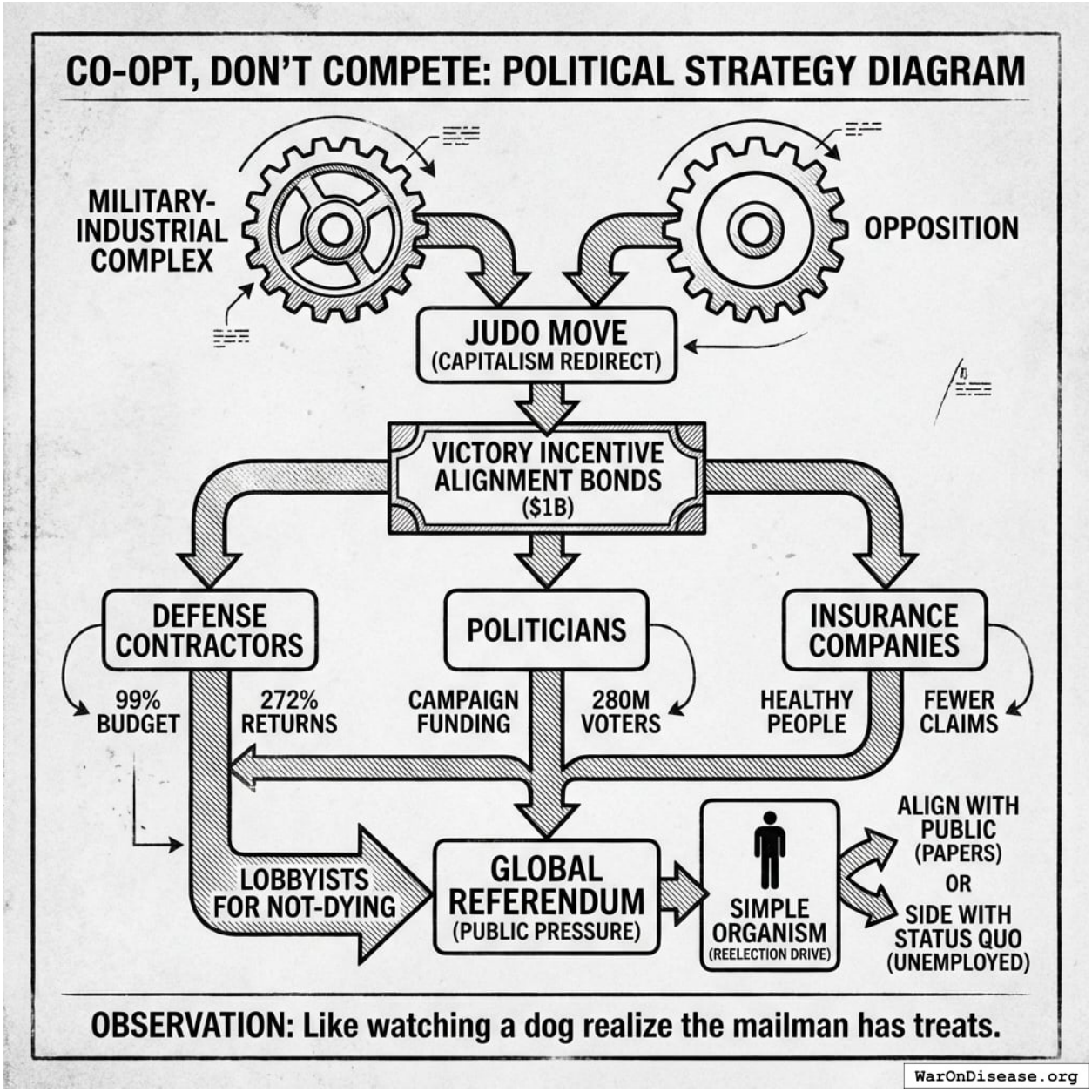


Figure 553: A conceptual diagram showing the 'Political Judo' strategy, where financial incentives and voter pressure redirect the interests of defense contractors, politicians, and insurance companies toward supporting the treaty.

So you don't fight them. You bribe them (legally).

The strategy is simple: make it more profitable for everyone - military contractors, politicians, insurance companies - to support the treaty than to oppose it. You're not fighting greed. You're redirecting it, like a judo move but with capitalism.

You use the $1B from the VICTORY Incentive Alignment Bonds to offer everyone a better deal:

- Defense contractors keep 99% of their murder budget PLUS get 272% returns on bonds
- Politicians get campaign funding AND 280 million voters who want to not die
- Insurance companies realize healthy people file fewer death claims

Suddenly their lobbyists become your lobbyists. Their political action committees start making action for not-dying instead of dying. It's beautiful. Like watching a dog realize the mailman has treats.

You combine this with overwhelming public pressure from 280 million verified voters in the global referendum. The choice for politicians becomes mathematically simple: side with the public and get papers, or side with the status quo and get unemployed.

Politicians are simple organisms with one evolutionary drive: reelection. You're just making that drive align with not killing everyone.

Your Next Steps

You now know the exact sequence:

1. **Build the legal machine:** The four-part structure that lets you collect papers from everyone simultaneously
2. **Sell the bonds:** VICTORY Incentive Alignment Bonds that offer 272% returns to humans who prefer not dying
3. **Run the vote:** The global referendum where 280 million humans click "yes" to not dying

It's not complicated. You're just bribing everyone in the correct order with the correct amounts.

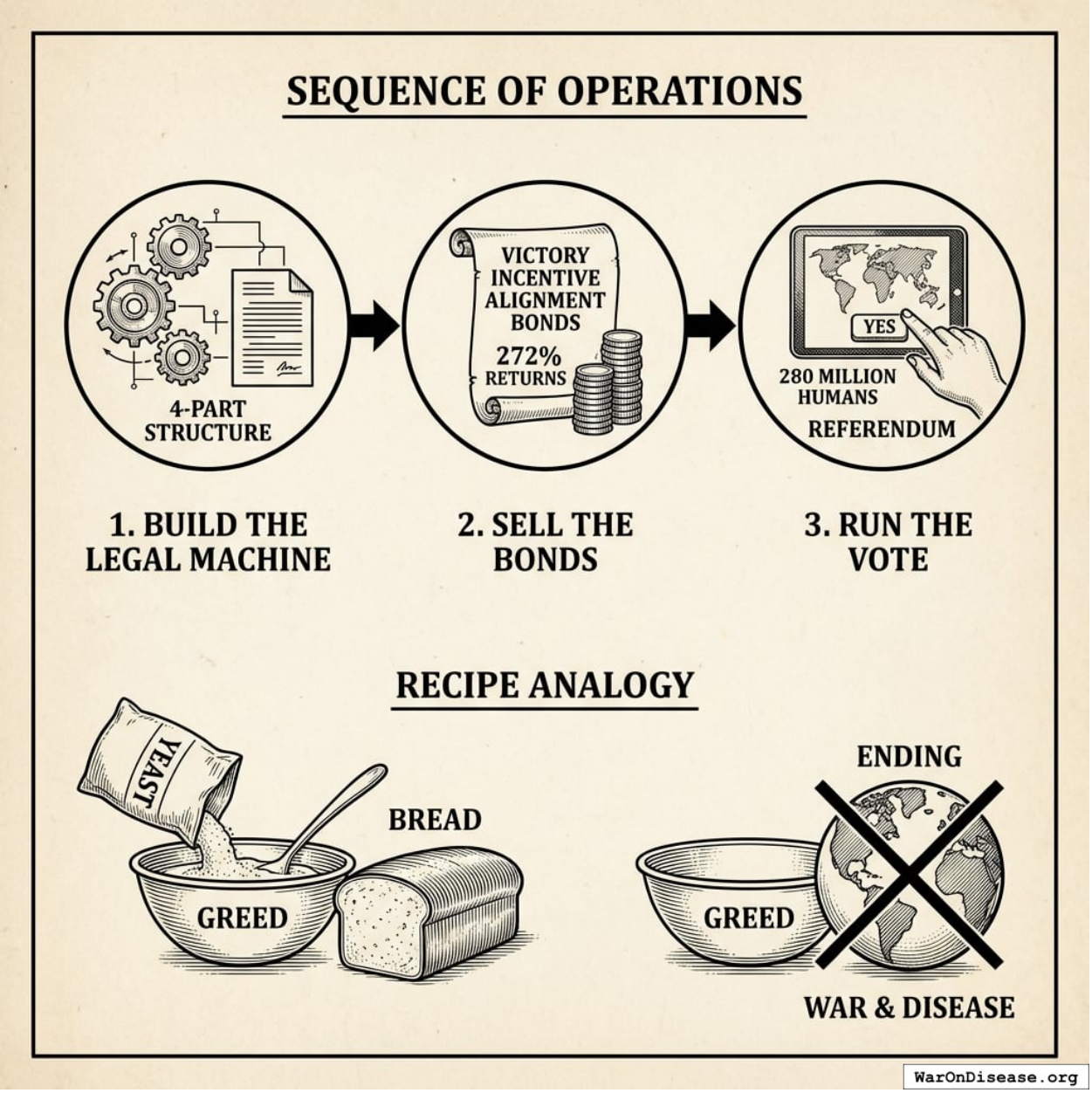


Figure 554: A sequence showing the progression from building a legal framework to issuing incentive bonds and conducting a global referendum.

Like a recipe, except instead of making bread, you're ending war and disease. And instead of yeast, it's greed.

Phase 4+: The Expansion Phases (Years 4-50)

The 1% treaty is just the beginning. The real goal is eventually redirecting *most* military spending to health.

Why Expansion Is Built Into The System

The 80/10/10 funding allocation includes 10% for political incentives via Incentive Alignment Bonds. This isn't a fixed cost - it's a **scaling engine**.

As treaty percentage increases, IAB funding scales proportionally:

Phase	Year	Treaty %	Political Incentive Pool	What Happens
3	1-3	1%	$2.72B/year	Treaty passes, cures begin
4	4-7	2%	$5.4B/year	Politicians compete to expand
5	8-12	5%	$13.5B/year	Defense lobby can't compete
6	13-20	10%	$27B/year	War becomes economically obsolete
7	21-35	25%	$67.5B/year	Superpowers compete on health outcomes
8	36-50	50%+	$135B+/year	Full transformation

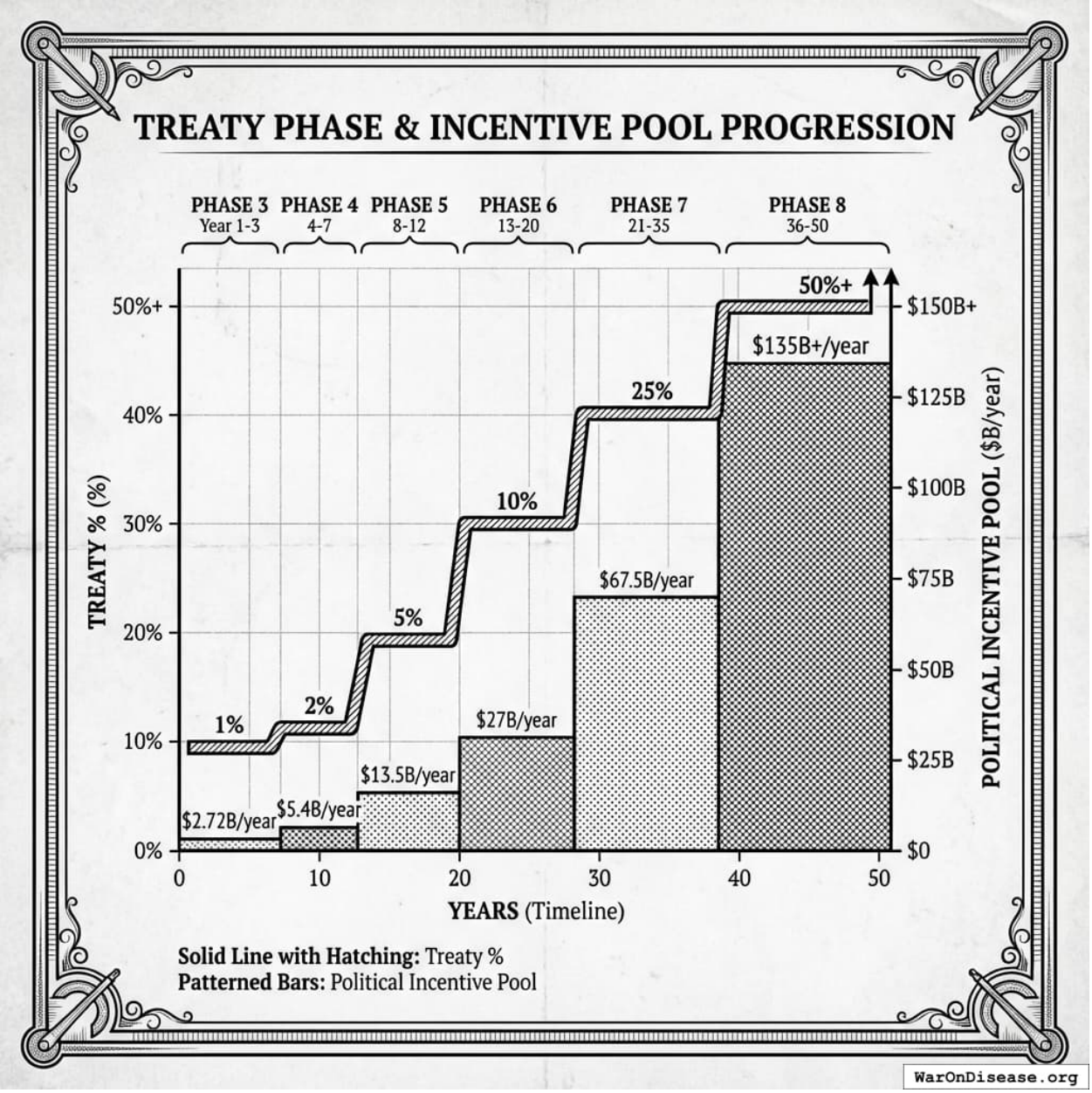


Figure 555: Growth of the political incentive pool over time as the treaty percentage increases, demonstrating the scaling mechanism.

Here's Why It Keeps Growing

VICTORY Incentive Alignment Bond investors are satisfied at 1%. They get their 272% returns regardless of expansion.



Figure 556: A conceptual diagram showing how bond expansion triggers a positive feedback loop by increasing returns for investors and scaling political incentive pools to record-breaking levels.

Politicians see their IAB-funded rewards grow with each expansion. By Phase 6, the political incentive pool ($27B/year) exceeds all current global lobbying combined. "Support pragmatic clinical trial funding" becomes the single most rewarded political position on Earth.

The Endgame

By 2075, the math becomes irresistible:

- $1.35+ trillion flows to health annually
- $135+ billion funds political incentives (more than all lobbying ever)
- $1.08+ trillion funds pragmatic clinical trials

- War is economically obsolete

The 1% treaty isn't the goal. It's the proof of concept. The IAB mechanism ensures the system keeps ratcheting upward until military spending is a historical curiosity, like jousting or the telegraph.

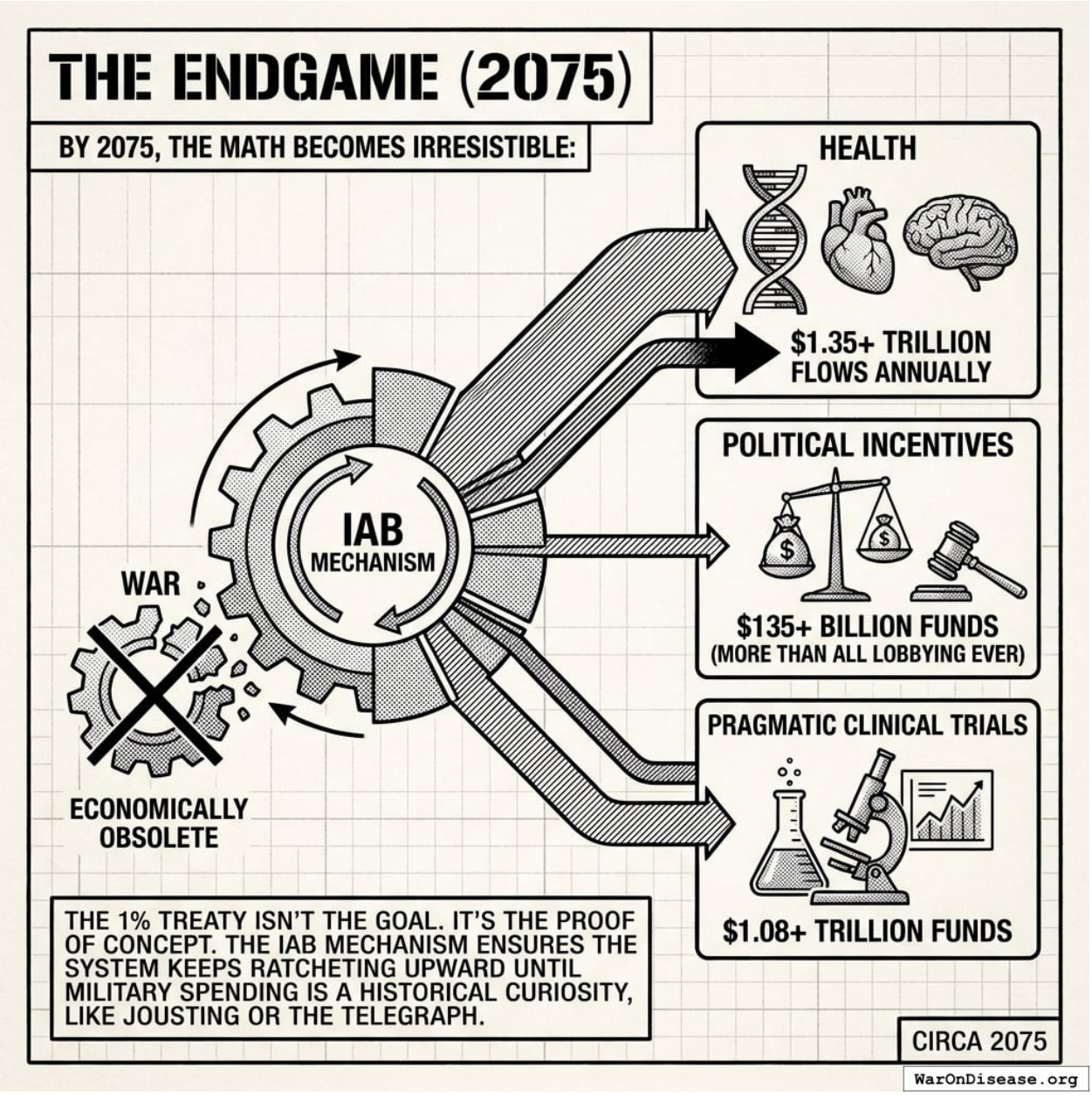
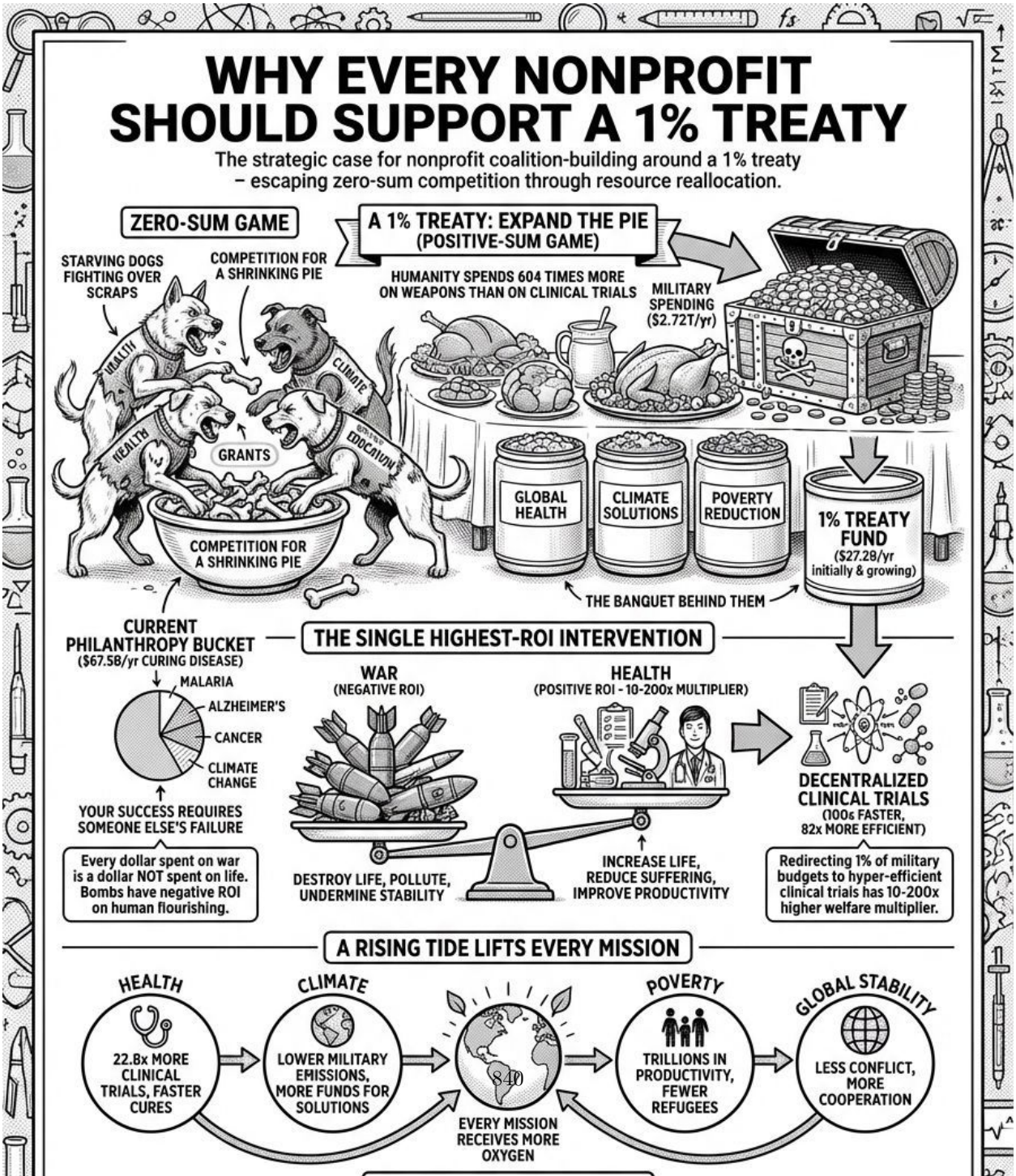


Figure 557: A visualization of the 1.35 trillion annual health fund distribution, illustrating how capital flows into political incentives and clinical trials to displace military spending.

Why Every Nonprofit Should Support a 1% treaty



Most nonprofits are trapped in a **zero-sum game**.

They're like starving dogs fighting over a single bowl of food while an entire banquet sits untouched behind them. The dogs are very focused on the bowl. They've developed sophisticated bowl-fighting strategies. Some dogs have hired consultants to optimize their bowl access. None of them have turned around.

Every grant you win is a grant another organization loses. Every dollar you secure for malaria is a dollar not spent on Alzheimer's. Every donor you convince is a donor distracted from climate change.

Your success requires someone else's failure. You're not solving scarcity. You're reshuffling it while writing very professional reports about the reshuffling.

Meanwhile, the real driver of scarcity, the real reason the bowl is so small, is ignored:

Humanity spends 604:1 (95% CI: 453:1-894:1) times more on weapons than on clinical trials to discover which medicines actually work.

The bottleneck isn't basic research or lab equipment. It's testing. We've explored less than 1% of possible drug-disease combinations using existing safe compounds because clinical trials are too slow and expensive. This is the chokepoint that limits every health outcome.

This is not an ideological claim. It's arithmetic.

Every year:

- Military spending: $2.72T
- Global spending on curing disease: $67.5B (95% CI: $54B-$81B)
- Military budgets: Rising by hundreds of billions annually
- Medical research budgets: Facing **real-term cuts**[295]

The pie for solving disease, climate, poverty, and suffering is shrinking.

The pie for building weapons is expanding.

You cannot solve a resource allocation crisis by optimizing inside the smallest slice. That's like rearranging deck chairs on the Titanic, except the deck chairs are grants and the iceberg is $2.72T pointed at everyone's face.

You must expand the pie. This turns a **zero-sum game** into a **positive-sum game**.

This is the logic behind a **1% treaty**.

The Single Highest-ROI Intervention Available

If your mission is:

- curing Alzheimer's
- preventing cancer
- mitigating climate change
- slowing pandemics
- ending extreme poverty
- protecting democracy
- reducing existential risk
- improving education
- promoting peace
- stabilizing the biosphere

…the single highest-leverage thing you can do is:

Help redirect 1% of global military budgets toward hyper-efficient pragmatic clinical trials.

Why? Math.

1. **Every dollar spent on war is a dollar not spent on life.** This is how money works.
2. **Every dollar moved from military to health has a 10-200x higher welfare multiplier.** Bombs have negative ROI on human flourishing. Medicine has positive ROI. These are different numbers.
3. **Redirecting the *flow* of resources changes the future more than any single program.** You can bail water forever or you can plug the hole.
4. **A healthier, wealthier, more stable world reduces every global problem simultaneously.** It's like fixing the foundation instead of patching individual cracks.

War is upstream of poverty.



Figure 558: Causal diagram illustrating how war acts as the root cause for multiple global crises, from poverty to climate destruction.

War is upstream of pollution. War is upstream of refugee crises. War is upstream of authoritarianism. War

is upstream of disease spread. War is upstream of technological stagnation. War is upstream of climate destruction (militaries are among the largest polluters on Earth, which is ironic given they're supposed to be protecting it).

Reduce war by 1%, and every downstream mission gets easier.

Increase war by 1%, and every mission becomes almost impossible.

A 1% treaty is not a peace movement. It's a **resource-reallocation movement**. Nobody has to hold hands or sing songs. They just have to do math.

Why This Applies to YOUR Organization

If you're an environmental group: You can't save the planet while the world's militaries, the single largest polluters on Earth, continue to wage wars that destroy ecosystems in minutes. A 1% treaty is the most effective climate policy ever proposed because it directly defunds the engine of destruction.



Figure 559: A visualization of the '1 percent Treaty' as a central catalyst that transforms military spending into massive gains for environmental protection, poverty reduction, peace profitability, and a 604-fold increase in clinical trial capacity.

If you're an anti-poverty group: You can't end poverty while conflict and disease create more of it than you can possibly solve. The root cause of most modern famines is war. The root cause of most poverty is the crushing economic burden of disease. A 1% treaty tackles both.

If you're a peace organization: You've been making moral appeals for 70 years. It hasn't worked. Try something else. A 1% treaty makes peace more profitable than war. It's not a moral argument; it's a financial one. And in a world run by greed, that's the only argument that matters.

If you're a disease advocacy group: You are currently fighting every other disease group for a tiny sliver of the NIH's budget. You are competing for crumbs. A 1% treaty doesn't just give you a bigger slice of the

pie; it bakes a new, much larger pie. It increases clinical trials capacity by 604:1 (95% CI: 453:1-894:1) times and makes the testing process 82x (95% CI: 50x-94.1x) more efficient. The bottleneck isn't ideas or molecules - it's running enough trials to find out what works. This solves that.

"But Shouldn't Nonprofits Focus on Their Core Mission?"

Yes. That's exactly why they should support a 1% treaty.

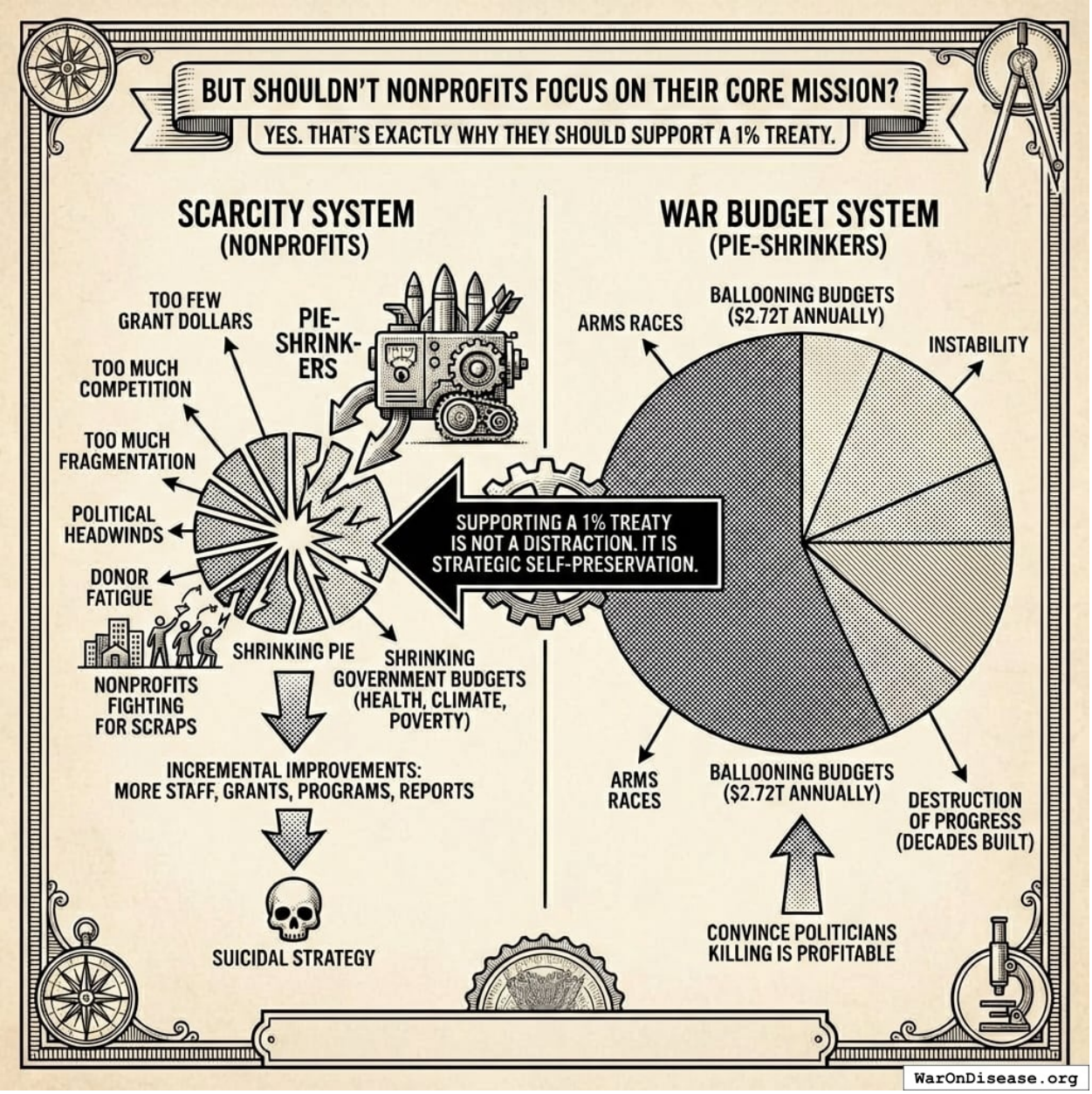


Figure 560: A comparison showing the massive scale of global military spending versus the shrinking pool of nonprofit resources, highlighting how shifting just 1 percent can stabilize the foundations of social progress.

Every nonprofit today operates inside a system that guarantees scarcity:

- too few grant dollars
- too much competition
- too much fragmentation
- political headwinds
- donor fatigue
- shrinking government budgets for health, climate, and poverty
- ballooning budgets for war

Most nonprofits are fighting each other for scraps of a shrinking pie while the pie-shrinkers get $2.72T annually to shrink it faster.

If your mission matters, this is suicidal strategy.

A small increase in resources within your field leads to small, incremental improvements. More staff. More grants. More programs. More reports about the reports.

A small increase in military budgets leads to arms races, instability, and the destruction of progress you spent decades building.

If your organization does not help shift the resource flow, your future funding and impact will be determined by someone else. Specifically, by people whose job is "convince politicians that killing is profitable."

Supporting a 1% treaty is not a distraction. **It is strategic self-preservation.**

The Zero-Sum Trap vs. The Positive-Sum Solution

The Zero-Sum Game (Current Reality):

- You fight for a $100,000 grant
- If you win, the malaria charity loses
- Total global impact is capped by the fixed size of the philanthropy bucket
- You spend 40% of your time writing proposals instead of saving lives
- The bucket is shrinking while you fight over it

The Positive-Sum Game (1% treaty):

- We work together to pass a 1% treaty
- The "philanthropy bucket" grows by $27.2B/year (initially) and scales up
- **Everyone gets funded**
- Malaria gets cured AND Alzheimer's gets cured
- You stop writing proposals and start governing the 1% Treaty Fund
- The bucket expands forever

This is like discovering that instead of fighting over one pizza, you can just order infinite pizzas. Except the pizzas are billions of dollars and the ordering is international treaty ratification.

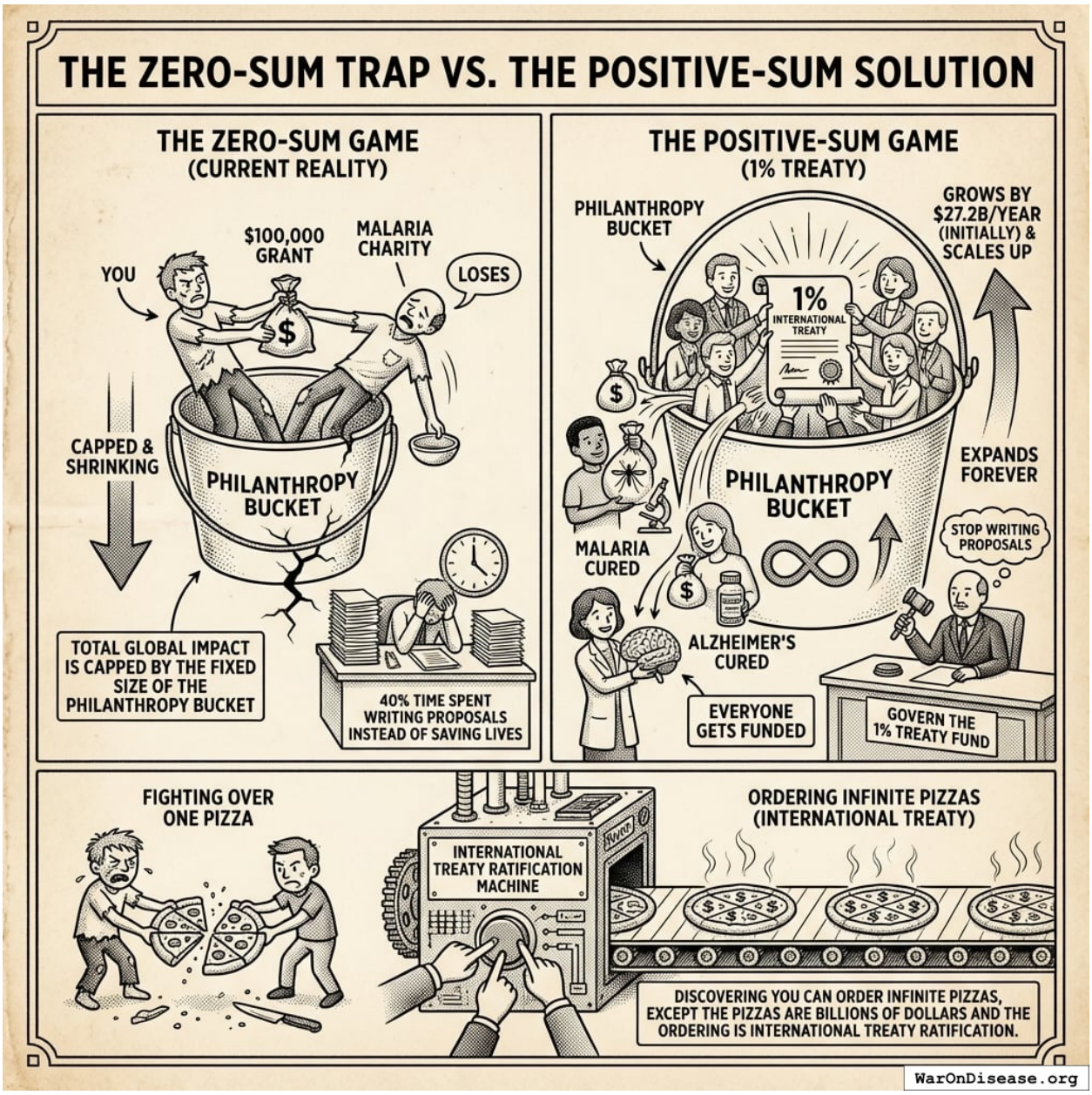


Figure 561: A side-by-side comparison of the Zero-Sum Game, showing a small fixed bucket of resources with competing interests, versus the Positive-Sum Game where a 1 percent treaty creates an expanding resource pool that funds all entities.

"Why Now?" Because the Window Is Open

For the first time in 80 years:

- the public is angry about rising military budgets
- trust in government spending priorities is collapsing
- medical breakthroughs feel within reach but unrealized
- climate disasters have shifted public opinion
- pandemics exposed the cost of underfunding resilience
- AI and biotech make accelerated progress possible

- leaders are searching for high-leverage, unifying narratives

You cannot pass a resource-reallocation treaty when people feel safe, rich, and complacent.

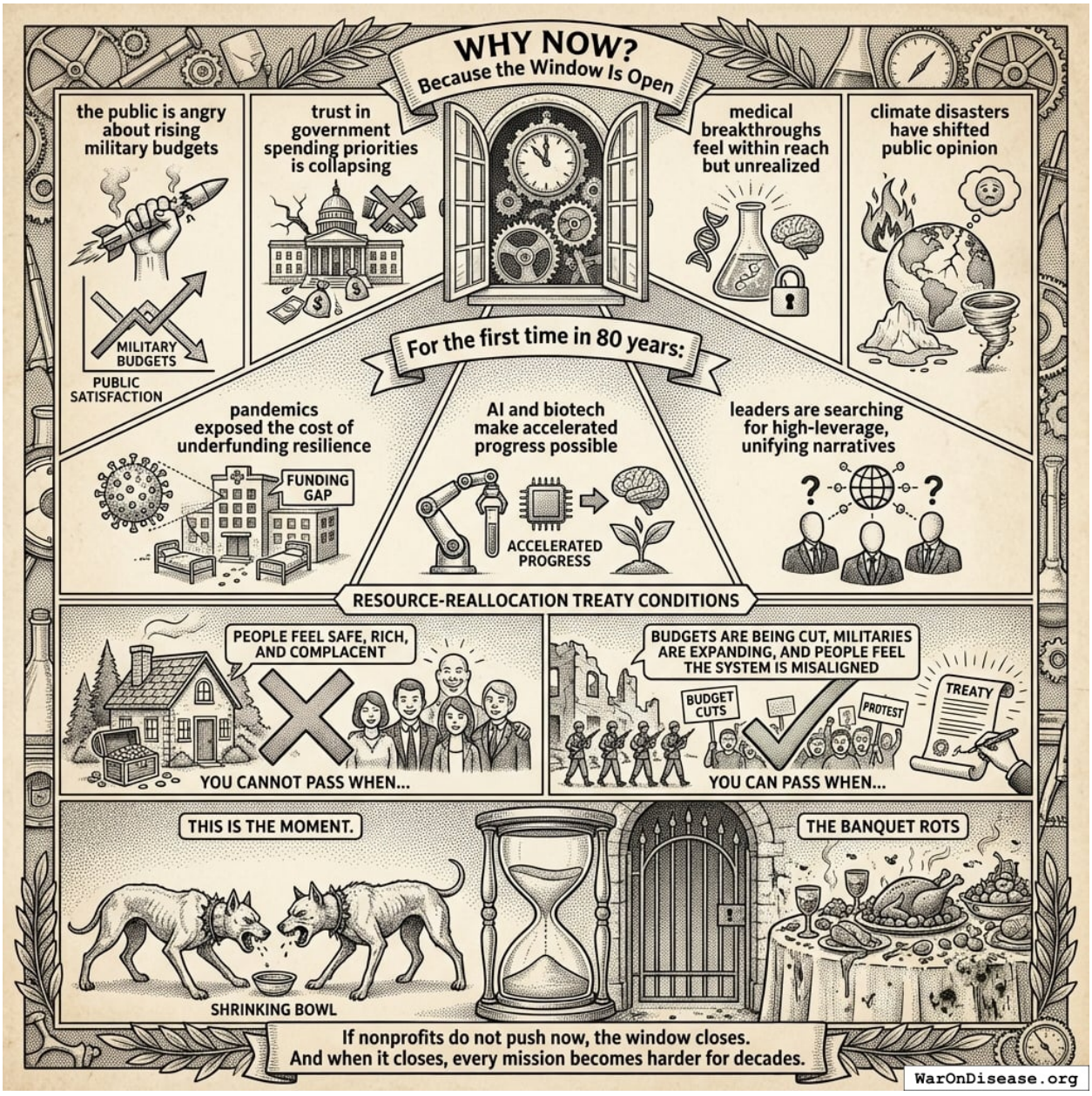


Figure 562: A conceptual visualization showing multiple societal drivers, such as climate change, military spending, and technological progress, converging to create a temporary 'window of opportunity' for systemic change.

You can pass it when budgets are being cut, militaries are expanding, and people feel the system is misaligned.

This is the moment.

If nonprofits do not push now, the window closes. And when it closes, every mission becomes harder for decades. The dogs will still be fighting over the shrinking bowl while the banquet rots behind them.

Historical Precedent: This Has Worked Before

During World War II:

- The U.S. converted car factories into bomber factories
- GM built tanks
- Ford built B-24s
- Frigidaire produced machine guns
- Typewriter manufacturers made rifles

Not because they "supported war." Because **the system needed realignment** and ignoring it was impossible. Also because the government asked very firmly, with implied consequences for saying no.

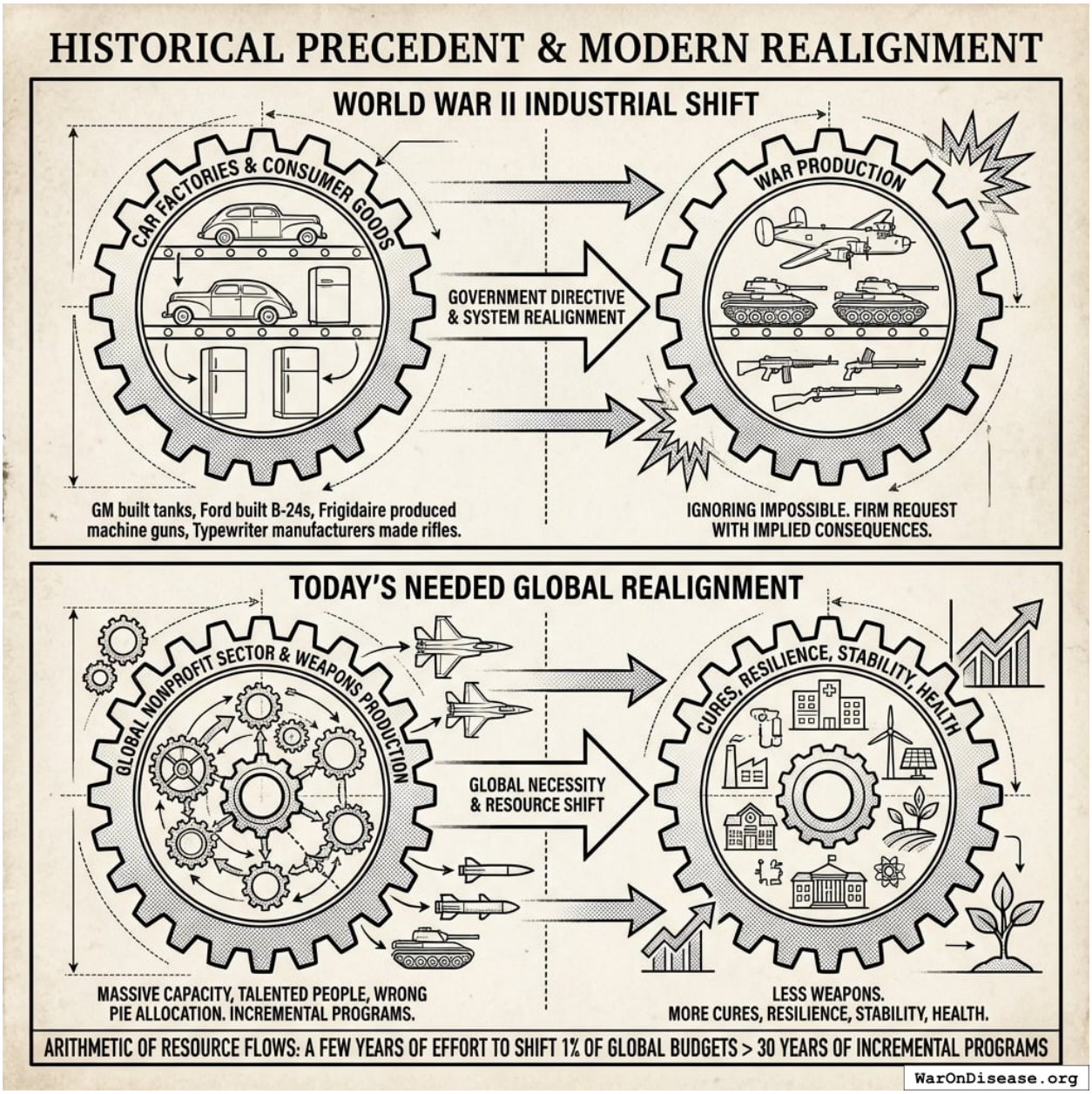


Figure 563: A comparison showing the historical realignment of industrial factories for the WWII effort alongside a modern-day proposal to shift global nonprofit budgets toward high-impact health and resilience outcomes.

Today, the world needs the opposite realignment:

- Less production of weapons
- More production of cures, resilience, stability, and health

The global nonprofit sector is the modern equivalent of those car factories: Massive capacity, talented people, and the wrong pie allocation.

A few years of effort to shift 1% of global budgets could produce more impact than **30 years** of incremental programs. This is not optimism. This is arithmetic applied to resource flows.

“Why Not Just Run Decentralized Trials Ourselves?”

You should.

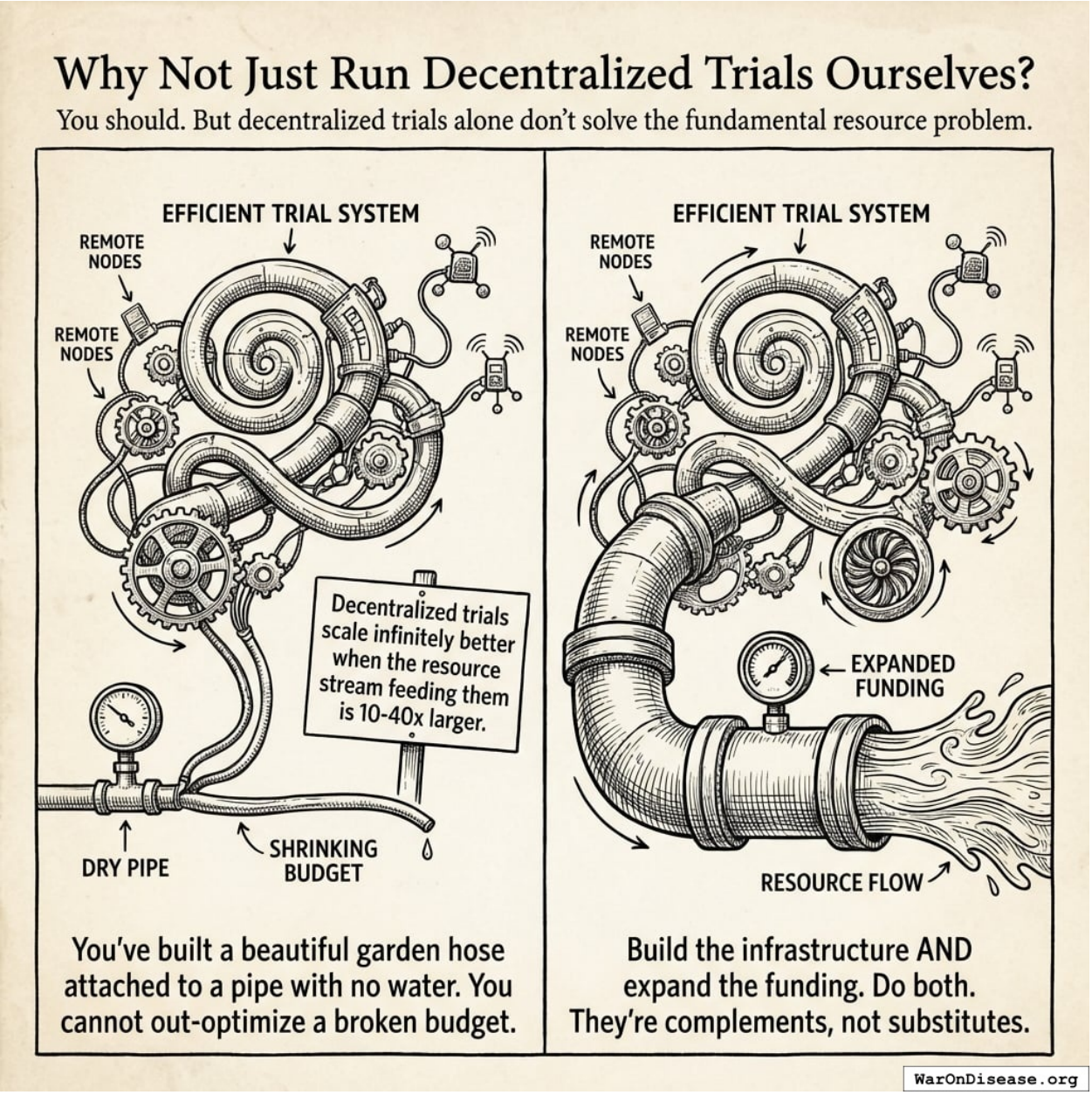


Figure 564: A conceptual diagram showing the relationship between trial infrastructure (the ‘hose’) and resource flow (the ‘water’), illustrating how infrastructure optimization is limited by budget constraints.

But decentralized trials alone don’t solve the fundamental resource problem.

Decentralized trials scale infinitely better when the resource stream feeding them is 10-40x larger.

If you build the most efficient trial system in the world but the budget for clinical progress is shrinking, you still lose. You’ve built a beautiful garden hose attached to a pipe with no water.

You cannot out-optimize a broken budget. You must change the resource flow itself.

Build the infrastructure AND expand the funding. Do both. They're complements, not substitutes.

A 1% treaty Is a Rising Tide That Lifts Every Mission

What happens if the world shifts just **1%** of military budgets?

Health

- 12.3x (95% CI: 4.19x-61.3x) more clinical trial capacity
- 100x faster therapeutic discovery
- Lower costs per cure
- Diseases get cured instead of managed

Climate

- Lower military emissions (militaries are massive polluters)
- Fewer resource-driven conflicts
- More funds for climate solutions

Poverty

- Trillions in long-term economic productivity
- Fewer war-displaced refugees
- More government revenue for social services

Global Stability

- Less chance of great-power conflict
- More international cooperation on existential risks
- Everyone slightly less dead

Nonprofit Impact

- Everyone stops competing for crumbs
- Every mission receives more oxygen
- Funders far more willing to invest
- You stop writing grant proposals and start actually doing your mission

A 1% move unlocks 100% more possibility.

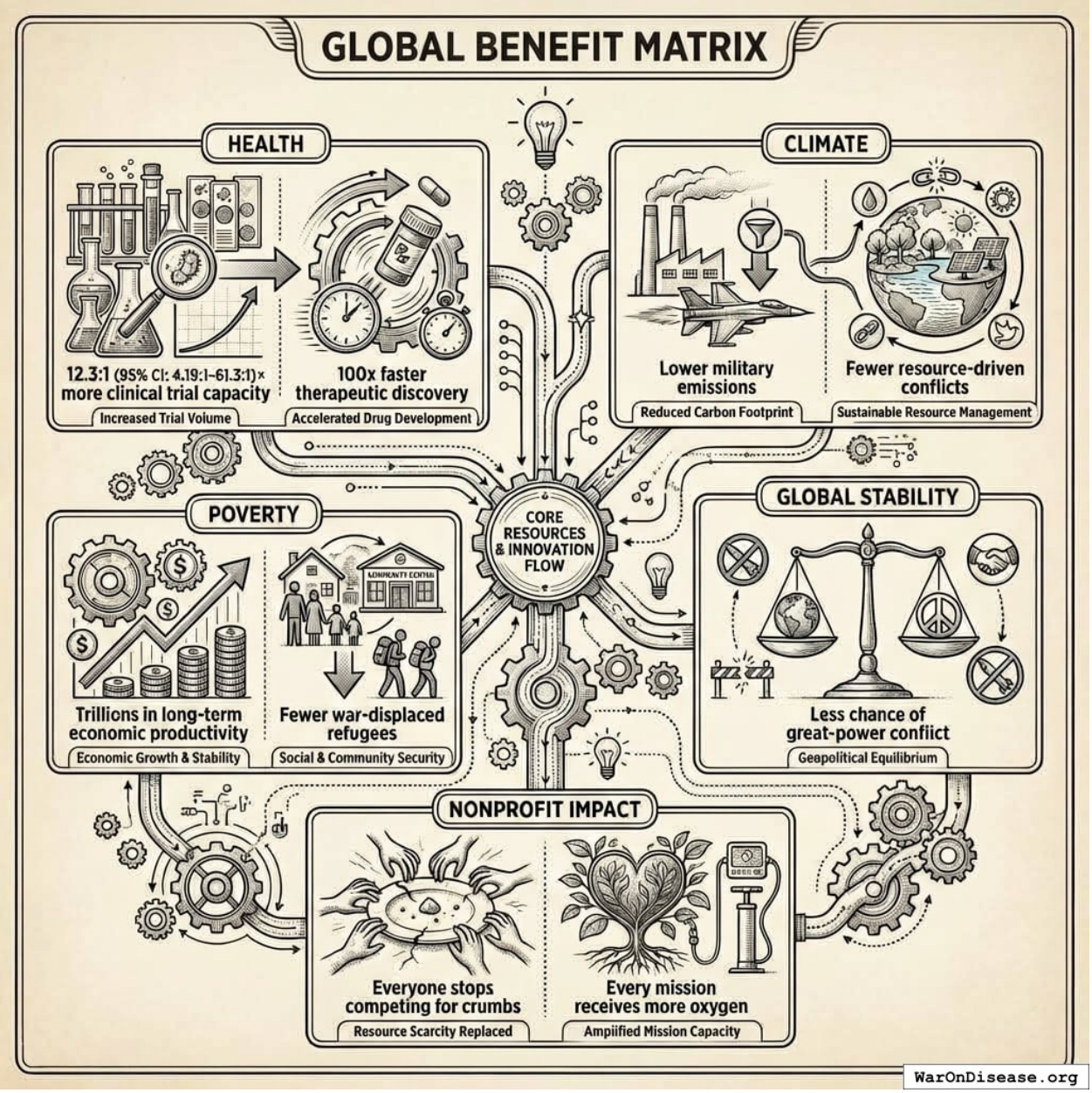


Figure 565: Overview of how a 1 percent budgetary shift creates positive outcomes across health, climate, poverty, and global stability sectors.

The Moral Argument Is Simple

War shrinks every future. Health enlarges every future.

Every dollar spent on war destroys life, pollutes the biosphere, undermines stability, and reduces wealth.

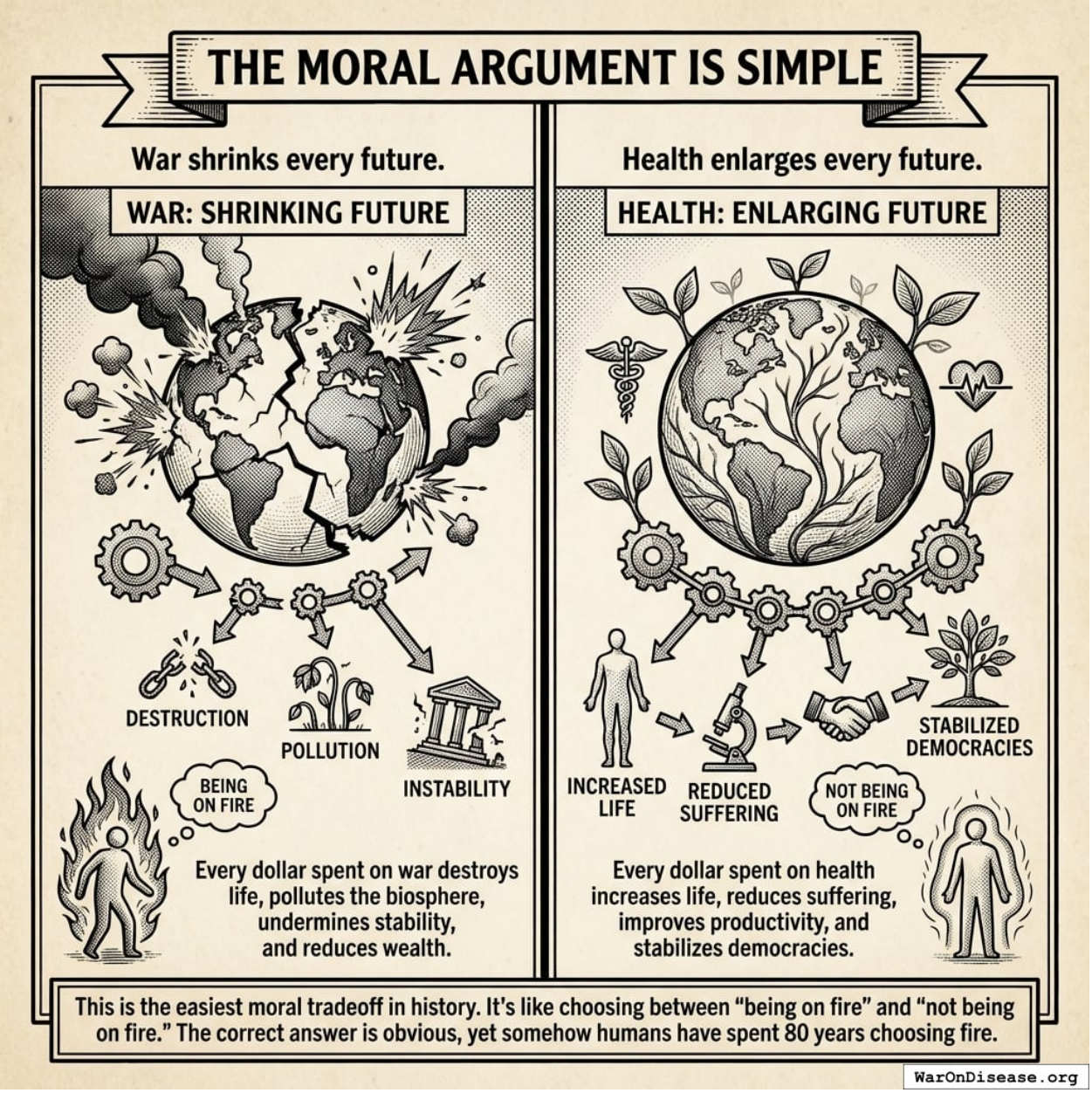


Figure 566: A side-by-side comparison illustrating the destructive outcomes of war spending versus the life-enhancing benefits of healthcare investment.

Every dollar spent on health increases life, reduces suffering, improves productivity, and stabilizes democracies.

This is the easiest moral tradeoff in history. It's like choosing between "being on fire" and "not being on fire." The correct answer is obvious, yet somehow humans have spent 80 years choosing fire.

Why Nonprofits Must Prioritize a 1% treaty (Short Term)

Because nothing else increases their impact, funding, and security more.

Every nonprofit wants to cure something, save something, protect something, or improve something. Every one of those missions is downstream of resource allocation.

A 1% treaty is upstream of everything.

Supporting it is not "getting distracted from your mission." It's "solving the fundamental constraint that limits every mission."

The Ask Is Small, The Upside Is Massive

We are not asking for global disarmament or naive pacifism.

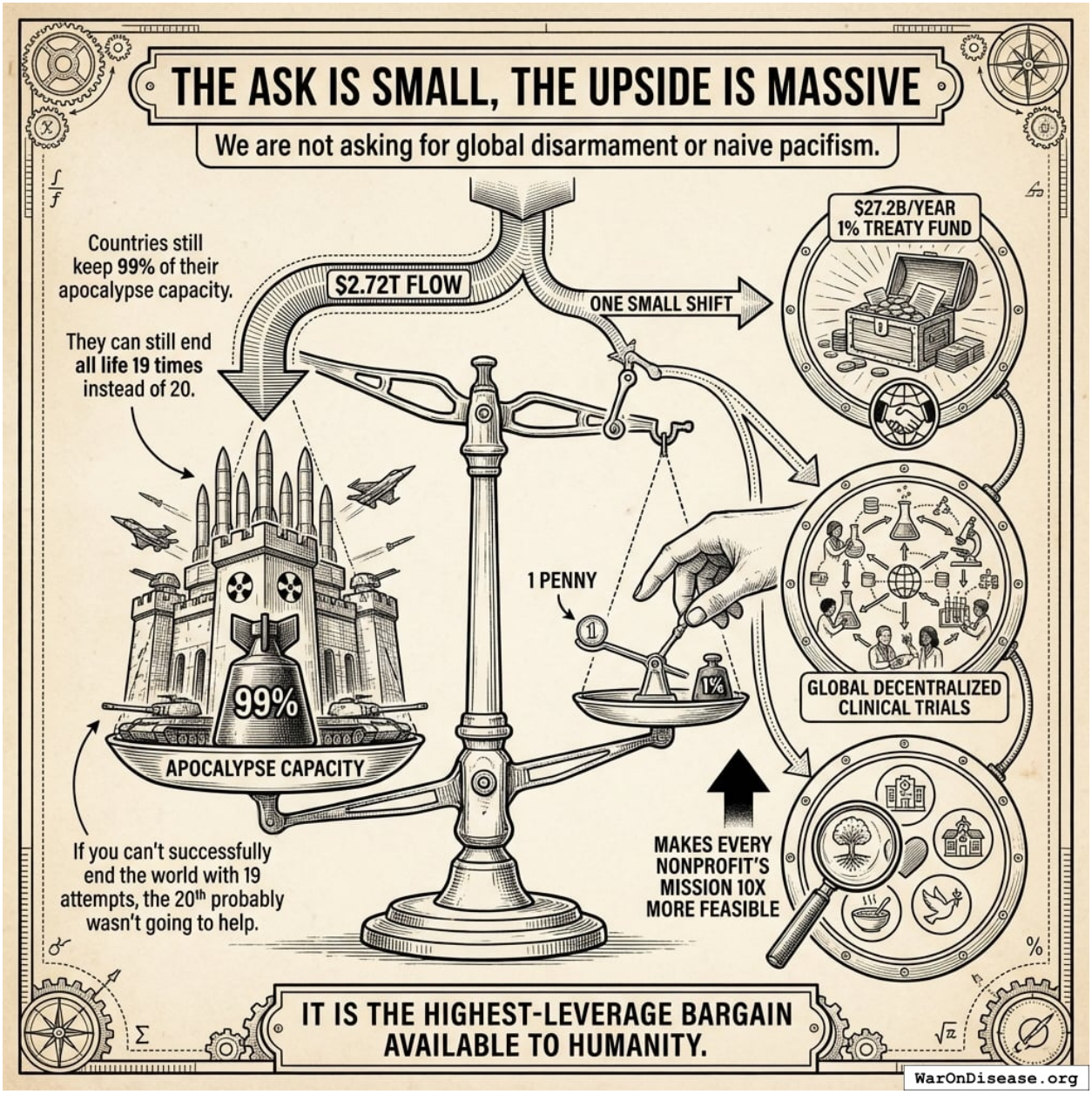


Figure 567: A proportional visualization showing the 1 percent shift from the global defense budget and the significant impact that 27.2 billion fund has on global health and nonprofit missions.

We are asking for **1%**.

One penny of each tax dollar currently used to build weapons. One small shift in a $2.72T flow.

Countries still keep 99% of their apocalypse capacity. They can still end all life 19 times instead of 20. If you can't successfully end the world with 19 attempts, the 20th probably wasn't going to help.

But that single percentage point:

- creates a $27.2B/year 1% Treaty Fund
- funds global decentralized clinical trials
- makes every nonprofit's mission 10x more feasible

It is the highest-leverage bargain available to humanity.

The Bottom Line

If you care about your mission, you must care about a 1% treaty.

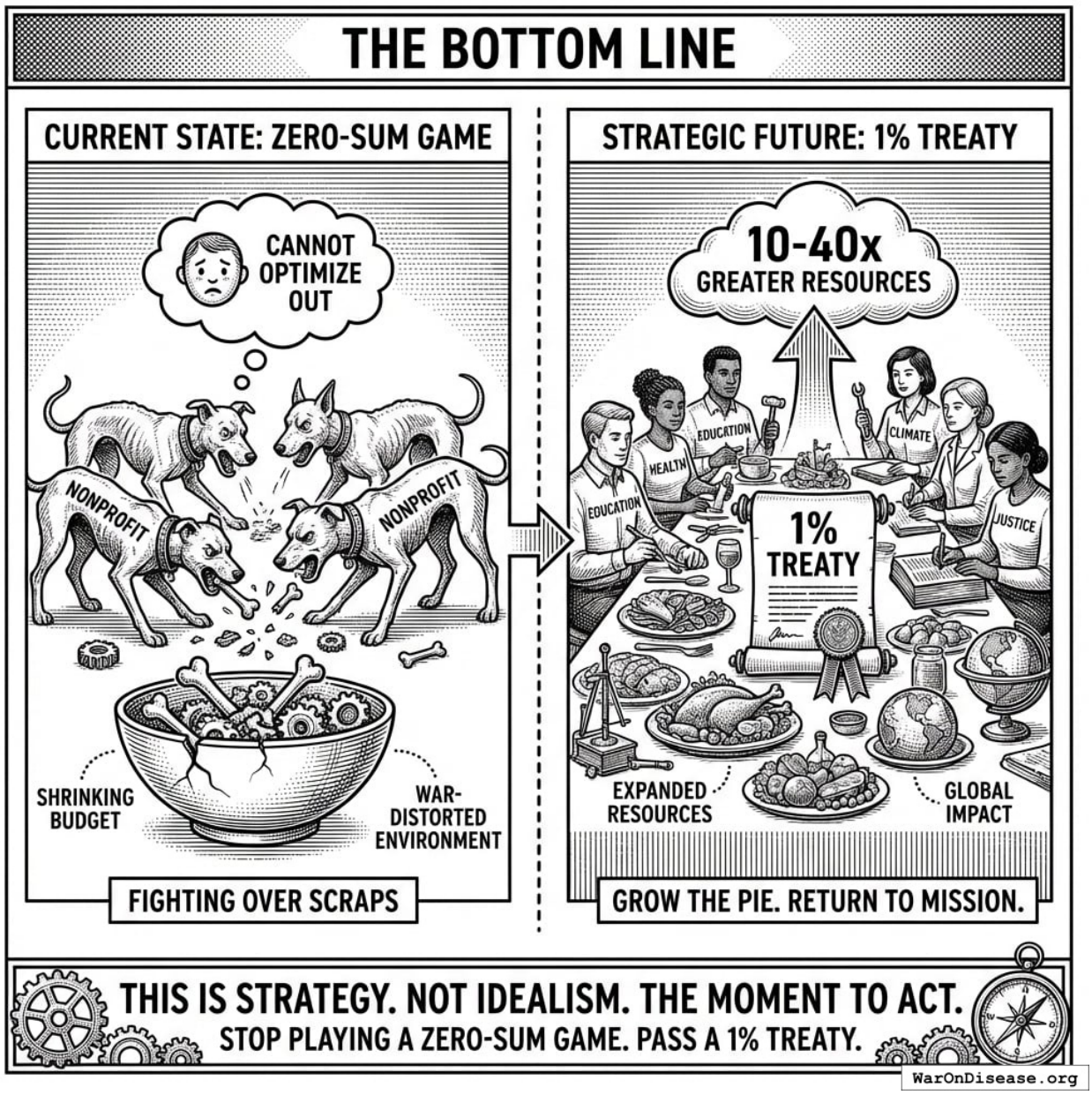


Figure 568: A visual comparison between the 'Zero-Sum Game' of current nonprofit funding and the 'Expanded Pie' model enabled by a 1 percent treaty, highlighting the 10-40x resource increase.

You cannot solve your mission inside a shrinking, war-distorted budget environment. You cannot optimize your way out of a fundamental resource mismatch. You cannot win a game where the rules guarantee your loss.

The smartest thing the nonprofit sector can do right now:

Stop fighting over scraps.

Stop playing a zero-sum game.

Grow the pie.

Pass a 1% treaty.

Then return to your mission with 10-40x greater resources.

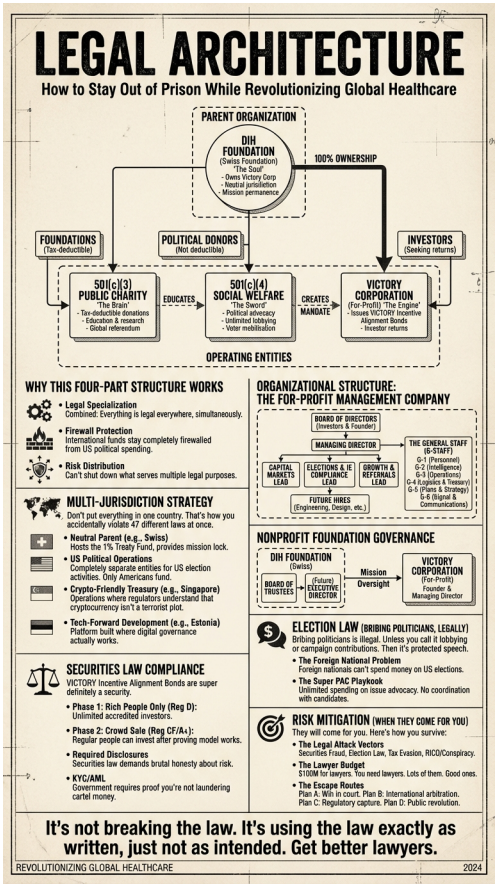
This is not idealism. This is strategy.

A few years of coordinated advocacy for a 1% treaty will unlock more impact across every field than decades of incrementalism.

The dogs need to turn around and notice the banquet.

This is the moment to act.

Legal Architecture

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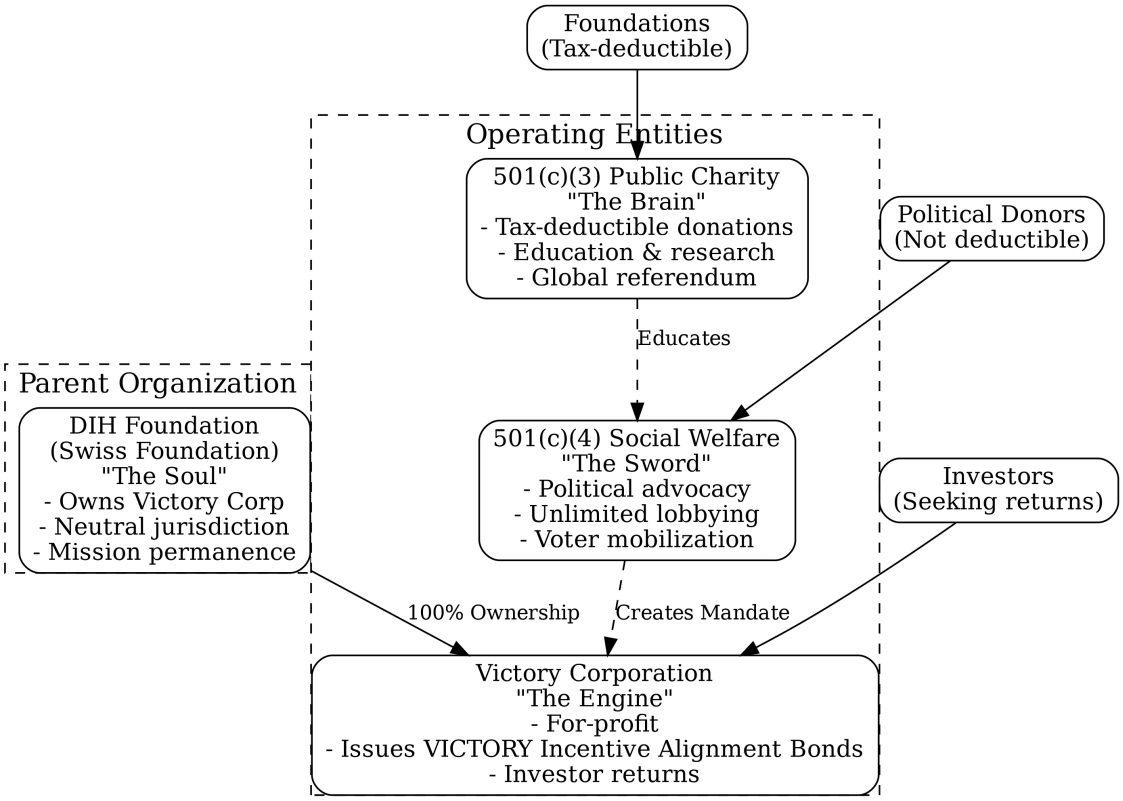


Entity #1: The 501(c)(3) Public Charity ("The Brain")

What It Is: The traditional non-profit. Major foundations like Gates Foundation can give large, tax-deductible grants here.

What It Does

- **Global Referendum:** Runs non-binding educational survey demonstrating 280M+ support
- **Research:** Funds academic studies proving system is broken
- **Education:** Public awareness campaigns (like this book)
- **Software:** Funds open-source platforms, including a decentralized framework for drug assessment (dFDA) and Wishocracy

What It CANNOT Do: Lobby politicians. Can educate, can demonstrate public will, cannot tell politicians what to do.

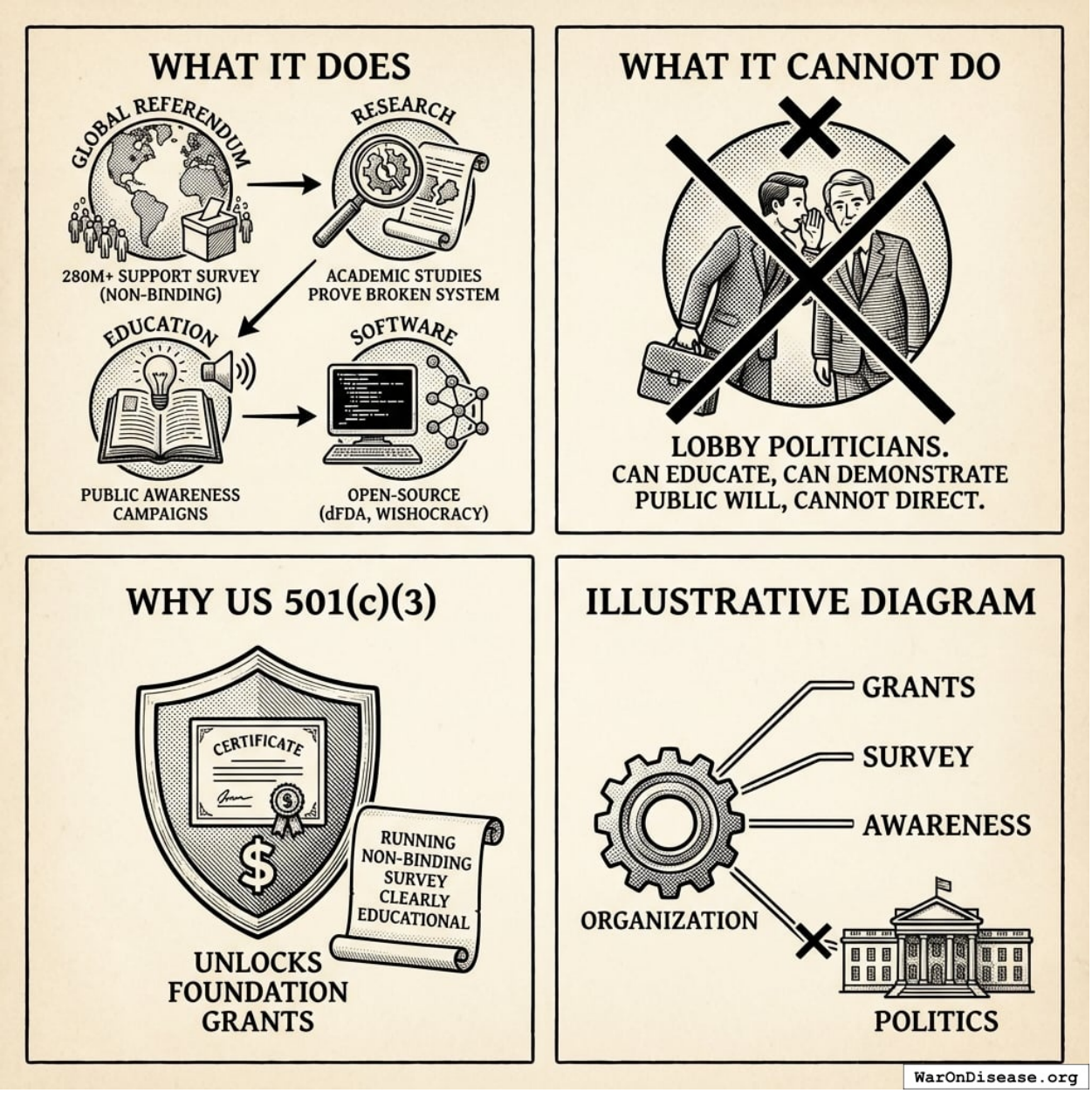


Figure 569: A summary of the organization's core activities including research and software development, contrasted against the legal boundary that prevents political lobbying.

Why US 501(c)(3): Unlocks foundation grants. Running non-binding public opinion survey is clearly educational.

Entity #2: The 501(c)(4) Social Welfare Org ("The Sword")

What It Is: Political advocacy arm. Donations NOT tax-deductible.

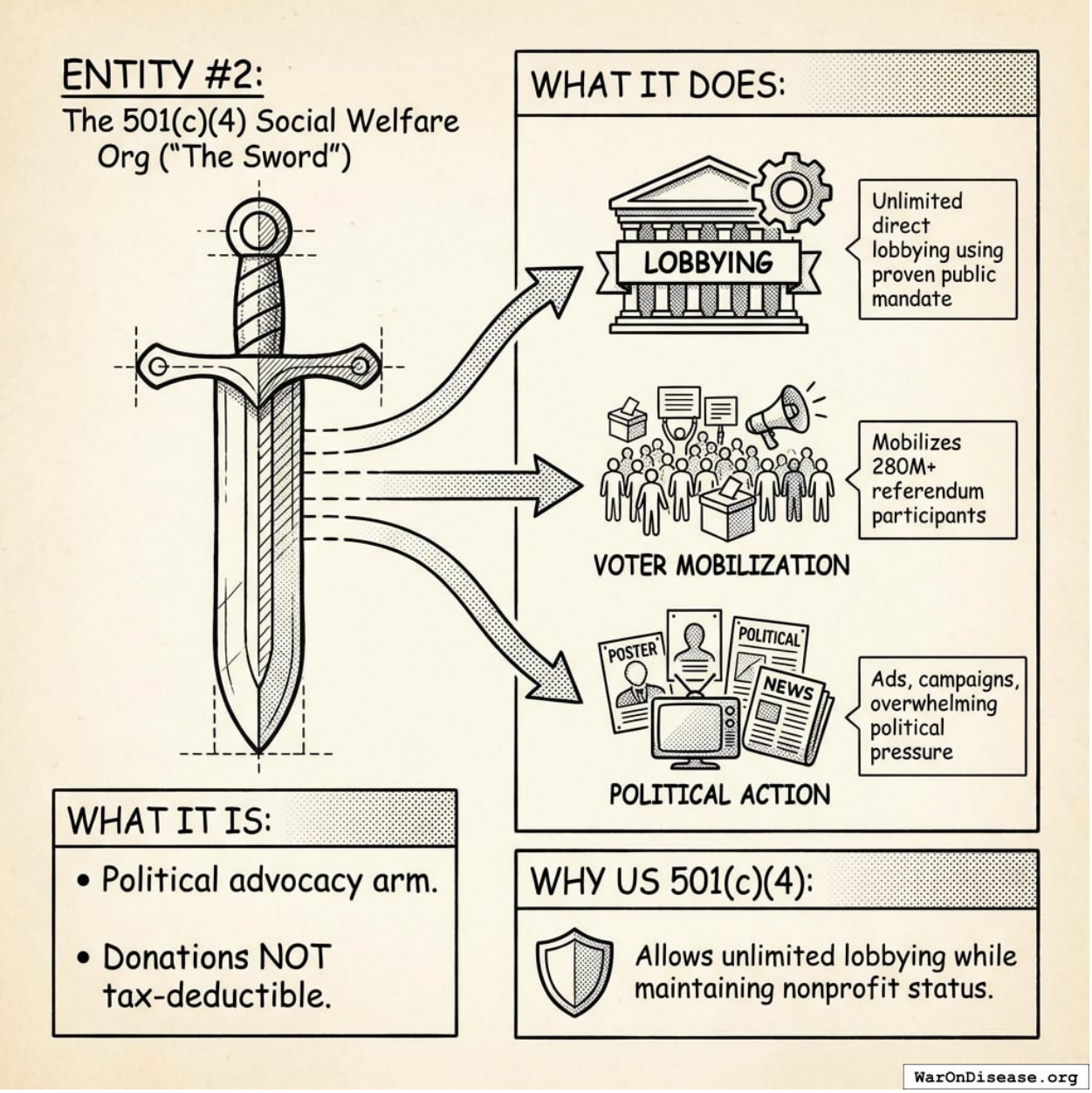


Figure 570: A diagram illustrating how referendum data from a 501(c)(3) is utilized by a 501(c)(4) to drive lobbying, voter mobilization, and political action.

What It Does: Takes referendum results from (c)(3) and weaponizes them:

- **Lobbying:** Unlimited direct lobbying using proven public mandate
- **Voter Mobilization:** Mobilizes 280M+ referendum participants
- **Political Action:** Ads, campaigns, overwhelming political pressure

Why US 501(c)(4): Allows unlimited lobbying while maintaining nonprofit status.

Entity #3: The Victory Corporation ("The Engine")

What It Is: Standard for-profit corporation. Designed to attract Wall Street.

What It Does

- **Issues VICTORY Incentive Alignment Bonds:** Sells bonds with 272% target returns
- **Funds Bribery Operations:** Uses $1B raised to fund lobbying and campaigns
- **Delivers Returns:** Manages treaty inflows to pay bondholders

Why Delaware: Established corporate law. More corporations than humans live there[296]. Citizens United means corporations have political speech rights.

Entity #4: The DIH Foundation ("The Soul")

What It Is: Parent organization holding everything together. Based in neutral Switzerland.

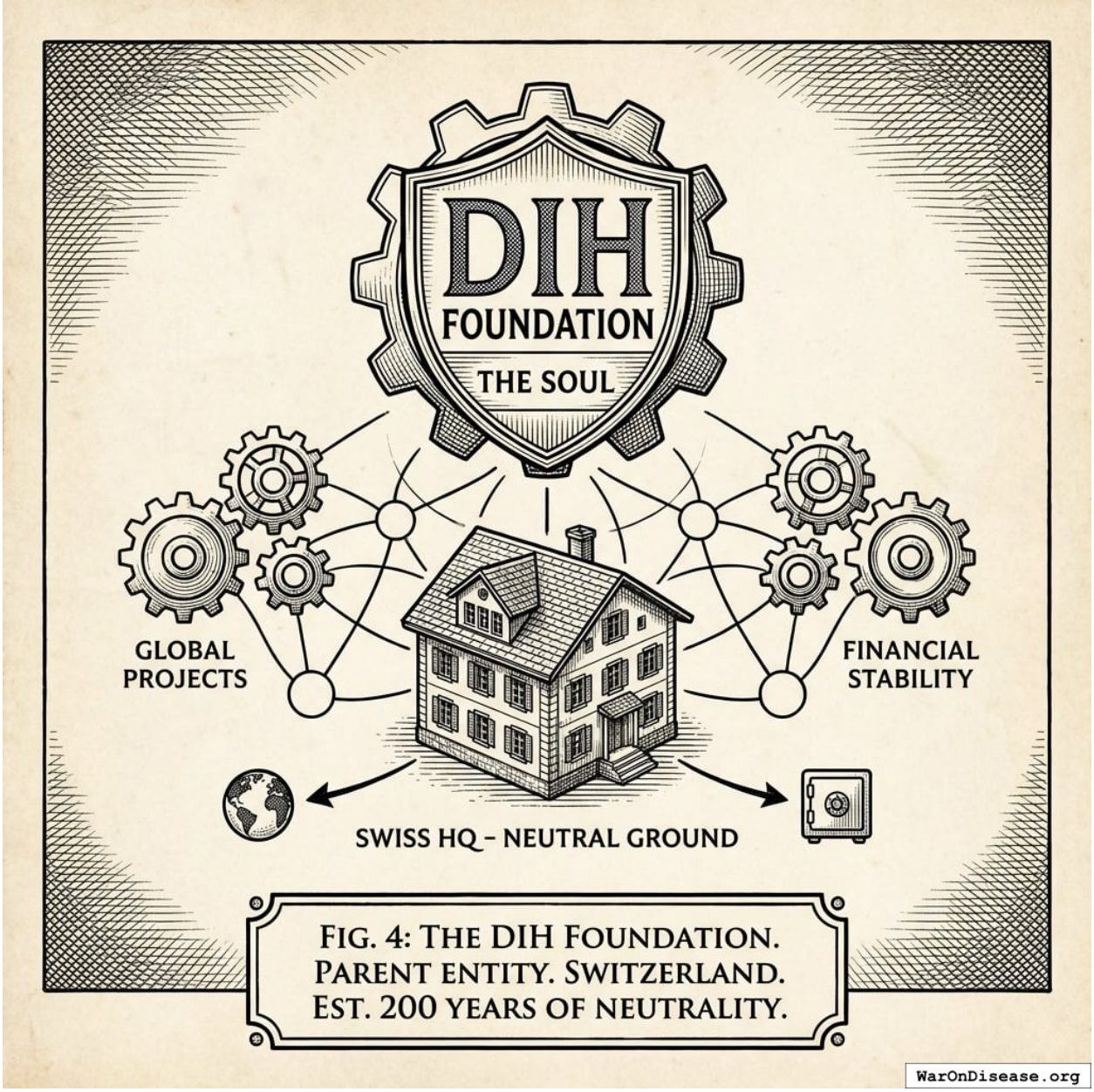


Figure 571: A conceptual diagram showing the DIH Foundation at the center of an ecosystem, representing its role as the neutral, Swiss-based 'soul' that anchors and holds all other components together.

Why Switzerland: They've avoided war for 200 years[264] by holding everyone's money. Even Hitler couldn't make them pick a side.

What It Does

- **Owns the Engine:** 100% shareholder of Victory Corporation, ensuring profit serves mission
- **Receives Global Capital:** Accepts grants from international foundations
- **Guarantees Mission:** Legal charter permanently locked to ending war and disease
- **Coordinates Treaty:** Neutral jurisdiction for international agreement

Legal Benefits: Neutral jurisdiction, crypto-friendly, allergic to conflict, perfect for international coordina-

tion.

Why This Four-Part Structure Works

Legal Specialization



Figure 572: A conceptual diagram showing a central organization supported by four specialized legal entities, 501(c)(3), 501(c)(4), C-Corp, and Swiss Foundation, each mapped to its unique strategic purpose.

- Need foundation grants? The 501(c)(3) handles it
- Need unlimited lobbying? The 501(c)(4) delivers it
- Need investor capital? The C-Corp raises it
- Need international coordination? The Swiss Foundation orchestrates it

- **Combined:** Everything is legal everywhere, simultaneously

Firewall Protection

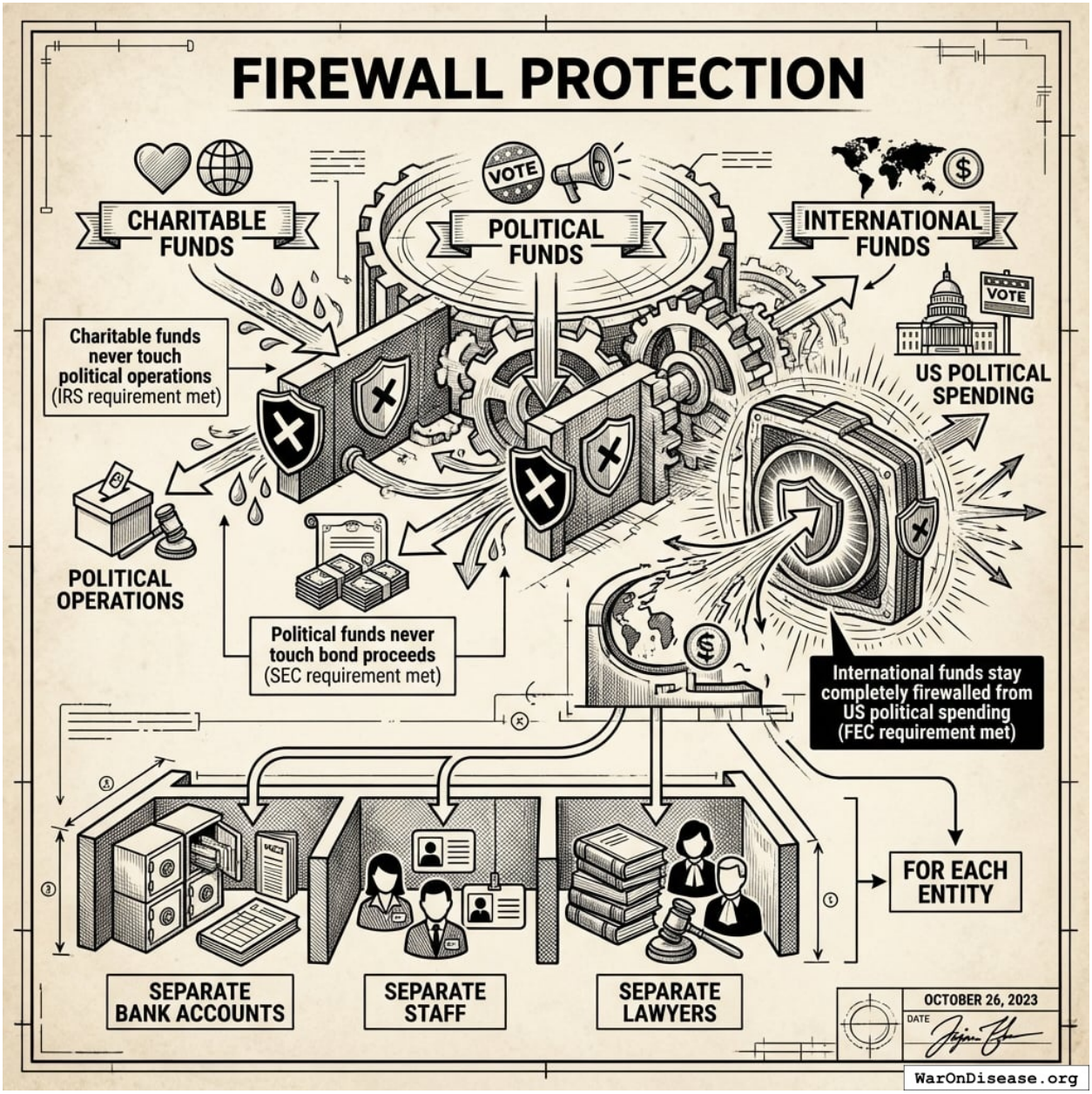


Figure 573: A conceptual diagram showing four distinct fund categories, Charitable, Political, Bond Proceeds, and International, separated by physical barriers to represent legal and financial firewalls.

- Charitable funds never touch political operations (IRS requirement met)
- Political funds never touch bond proceeds (SEC requirement met)
- **International funds stay completely firewalled from US political spending (FEC requirement met)**
- Separate bank accounts, separate staff, separate lawyers for each entity

Risk Distribution

- Can't shut down what serves multiple legal purposes
- Can't sue what operates under different jurisdictions
- Can't regulate what complies perfectly with all applicable laws
- Can't stop what people actually want

Same structure used by most sophisticated social movements (ACLU, NRA, Planned Parenthood). Each entity only does what's perfectly legal in its jurisdiction. Combined, they do what's impossible with single structure.

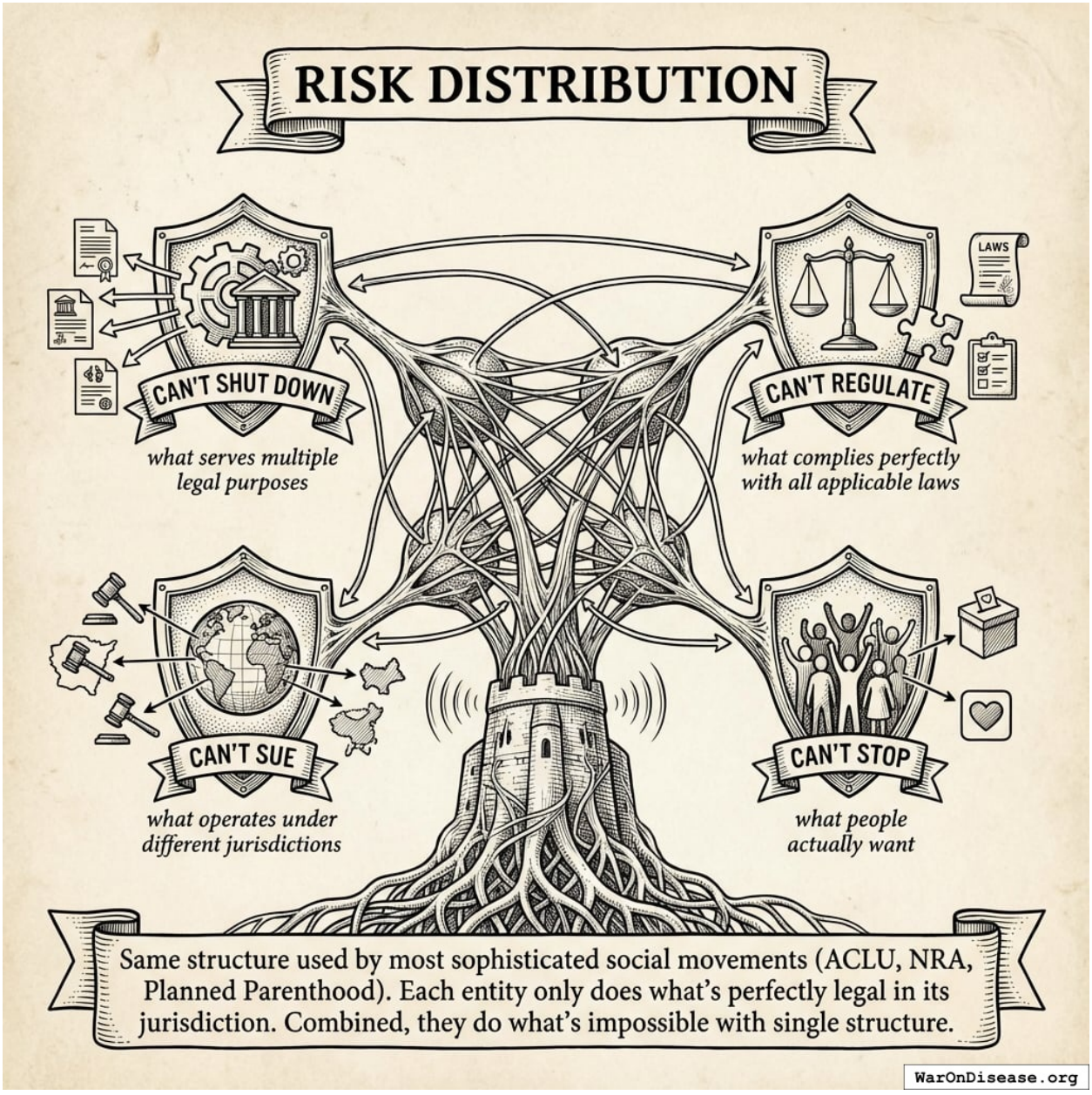


Figure 574: A conceptual diagram illustrating how multiple distinct entities, each compliant within their specific jurisdictions, combine to create a resilient organizational structure that is resistant to external pressures.

Multi-Jurisdiction Strategy (How to Not Put All Eggs in One Regulatory Basket)

Don't put everything in one country. That's how you accidentally violate 47 different laws at once.

Split operations across multiple jurisdictions based on what each country does best. The specific countries matter less than the principles:

Neutral Parent Jurisdiction: Foundation domiciled somewhere neutral with strong international law tradition (Switzerland, Luxembourg, Liechtenstein). Hosts the 1% Treaty Fund, provides mission lock.

US Political Operations: Completely separate entities for US election activities. Only Americans fund, only Americans control. This isn't optional - foreign nationals cannot fund US elections[297], and violating this means federal prison, not fines.

Crypto-Friendly Treasury: Operations domiciled where regulators understand that cryptocurrency isn't a terrorist plot (Singapore, Switzerland, UAE, etc.). Clear rules beat hostile regulation.

Tech-Forward Development: Platform built where digital governance actually works (Estonia with e-Residency[286], Singapore, etc.). Pick jurisdictions where government understands the internet exists.

When one regulator attacks, others provide safe harbor. When one government restricts, others enable. It's regulatory arbitrage for good instead of evil. Don't marry specific jurisdictions - regulatory environments change. Marry the strategy of geographic diversification.

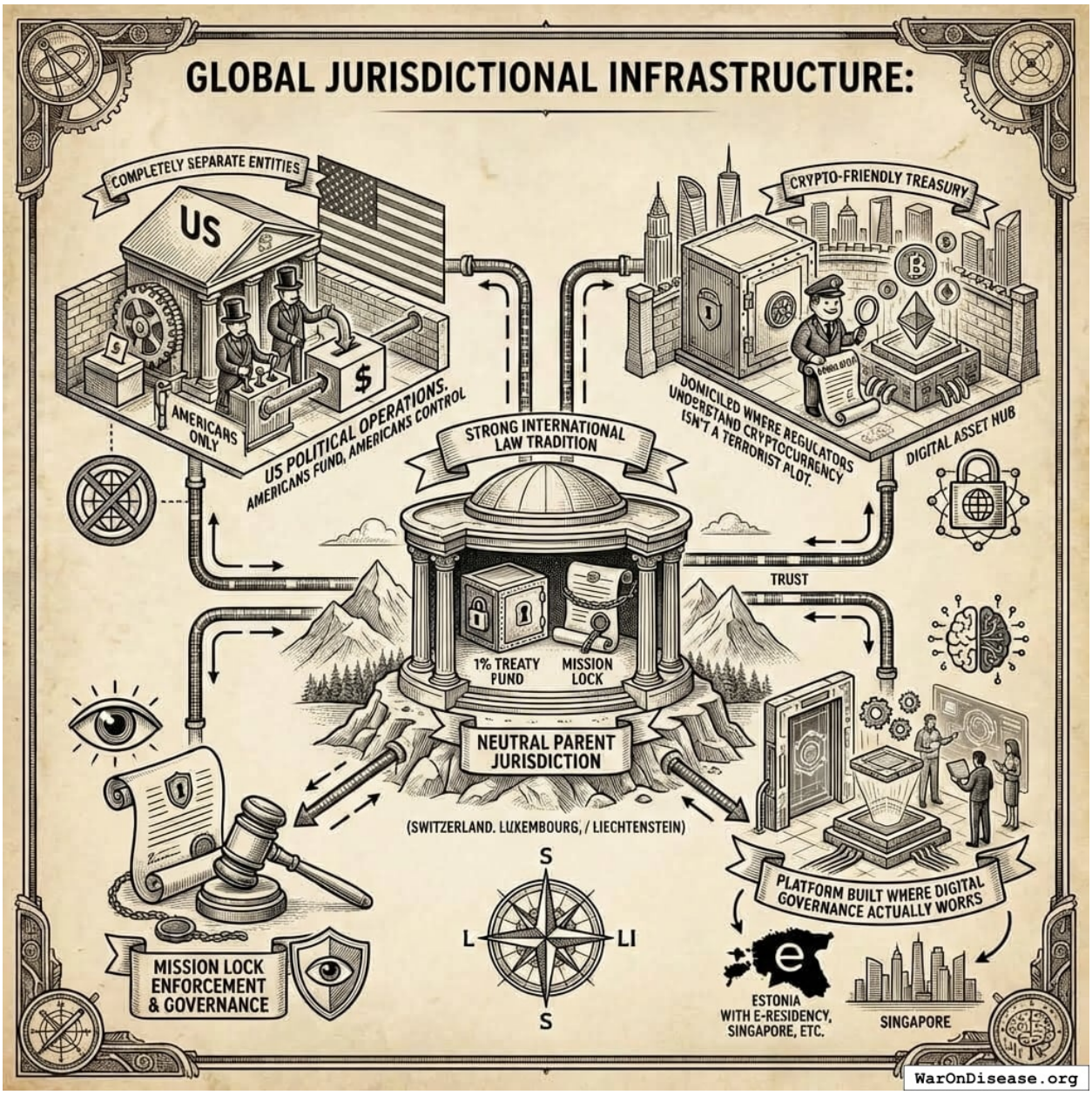


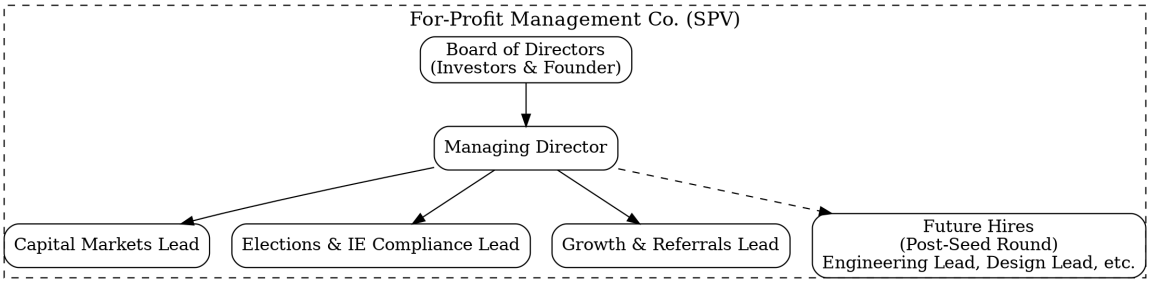
Figure 575: Global regulatory arbitrage map showing the separation of functions across favorable jurisdictions to maximize protection and efficiency.

Organizational Structure: The For-Profit Management Company

The Victory Corporation (for-profit) is the operational engine. Employs core team, raises capital, executes strategy.



Figure 576: Organizational chart of the Victory Corporation showing the hierarchy from the Board of Directors and Managing Director down to specialized leads in Capital Markets, Elections, and Growth, including projected future hires.



The General Staff (G-Staff)

Day-to-day operations managed by General Staff, modeled after military command structures. Clear lines of responsibility:

- **G-1 (Personnel & Recruitment):** Manages Personnel Roster - master list of everyone involved
- **G-2 (Intelligence):** Intelligence on diseases and operational landscape
- **G-3 (Operations):** Plans and executes pragmatic clinical trials using a decentralized framework for drug assessment (dFDA)
- **G-4 (Logistics & Treasury):** Manages flow of funds from VICTORY Incentive Alignment Bonds
- **G-5 (Plans & Strategy):** Develops long-term strategy, treaty expansions
- **G-6 (Signal & Communications):** Manages propaganda, communications, technology platforms

See Command & Control Systems for technical implementation.

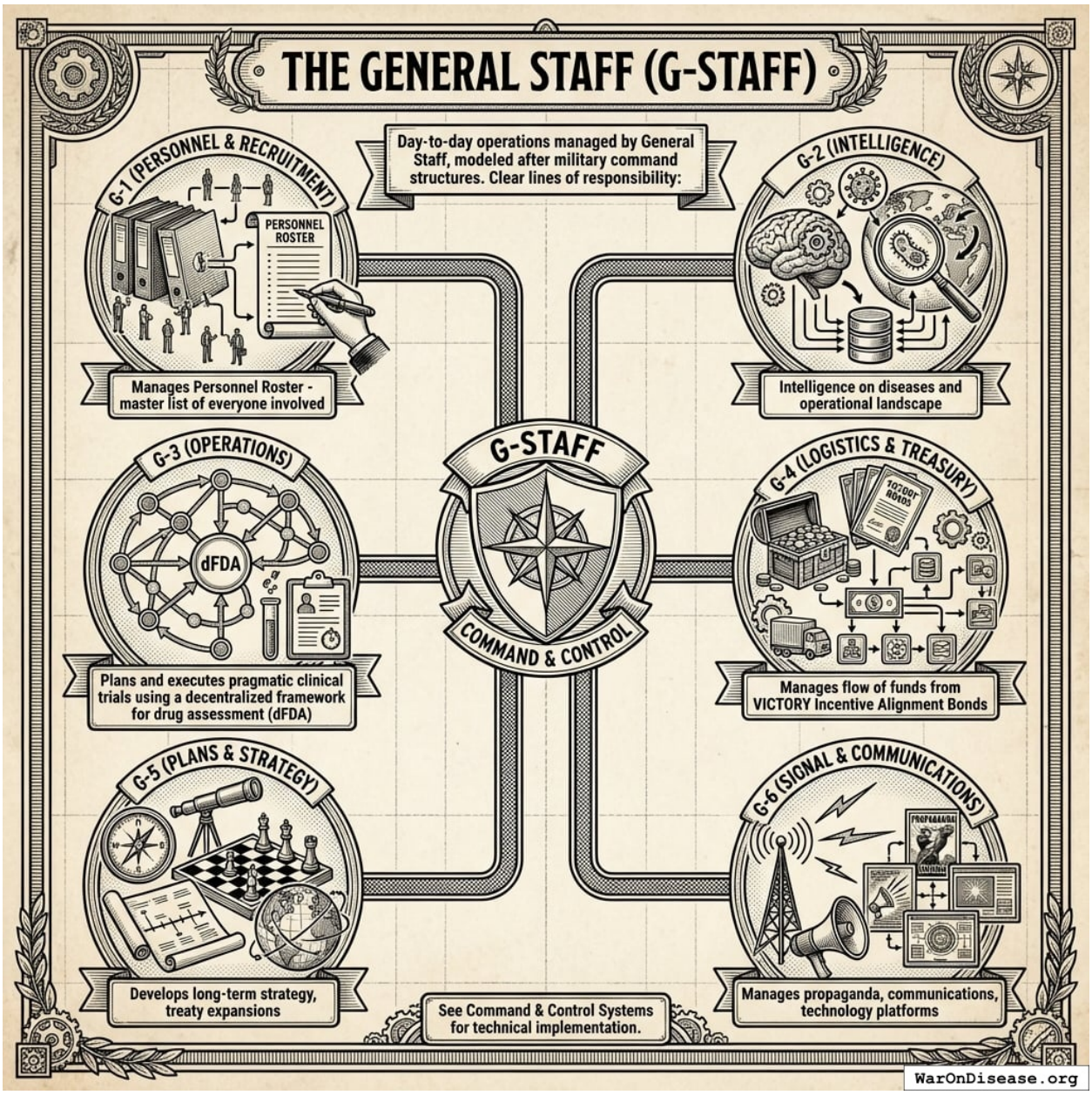


Figure 577: Organizational structure of the General Staff (G-Staff), illustrating the six functional branches and their respective operational responsibilities within the command hierarchy.

Nonprofit Foundation Governance

The DIH Foundation (Swiss parent) is guardian of the mission. Provides legal and ethical oversight.

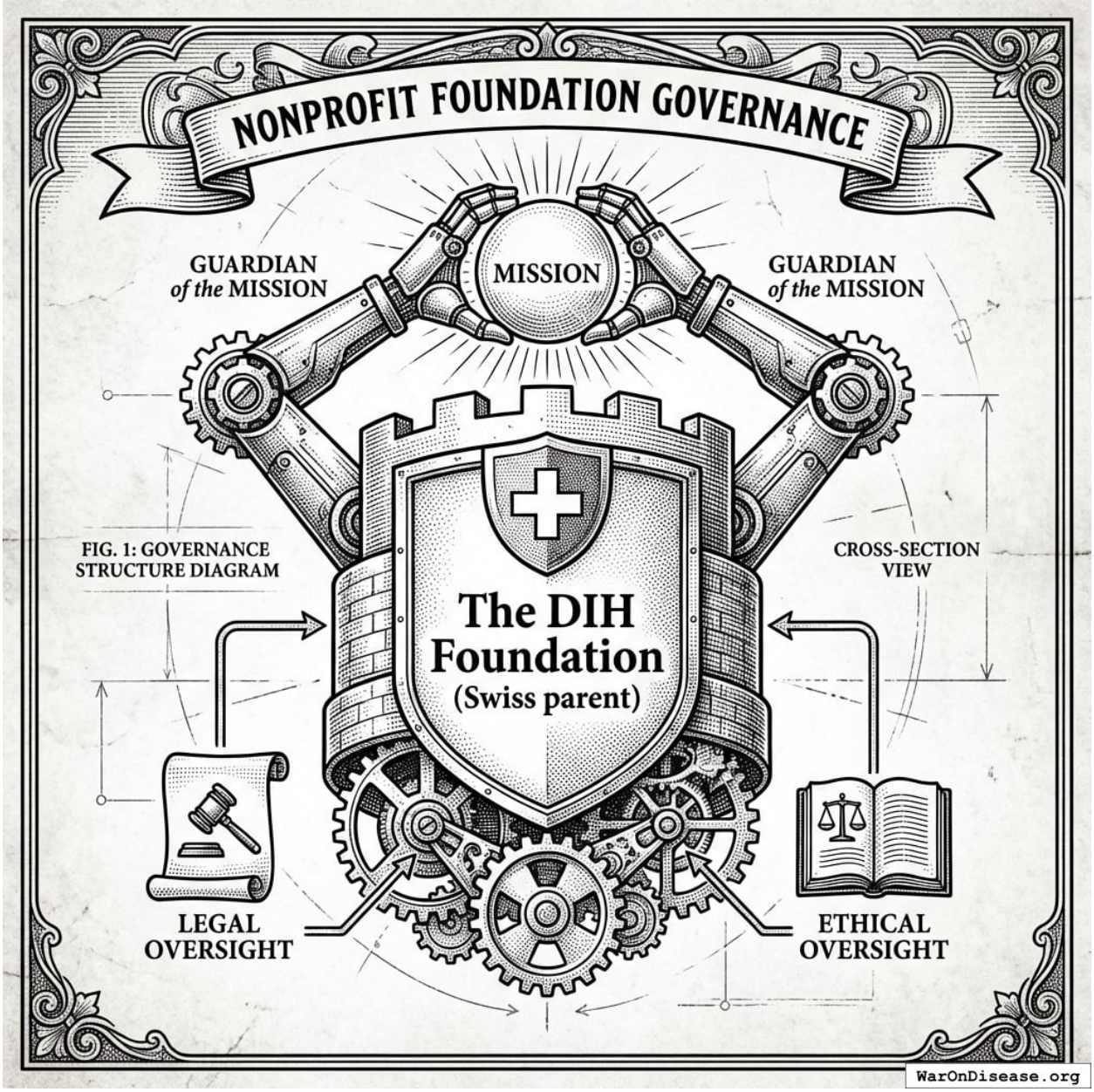
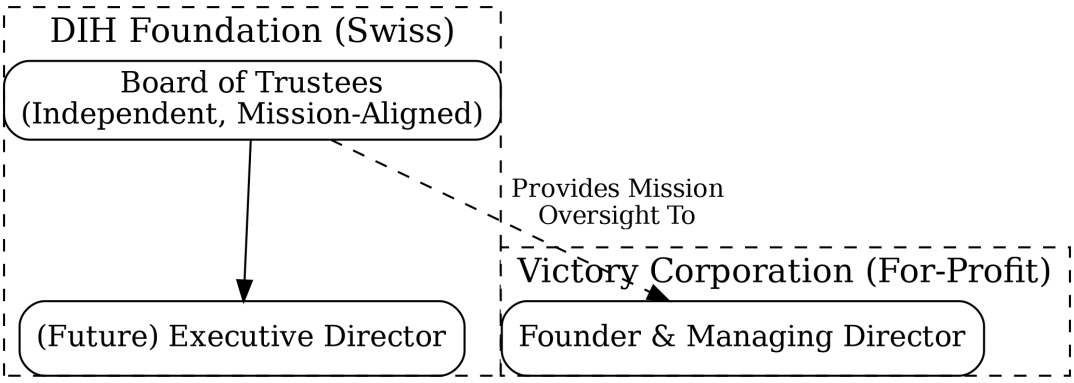


Figure 578: Governance structure illustrating the oversight relationship between the DIH Foundation and the Victory Corporation SPV.



Securities Law

VICTORY Incentive Alignment Bonds are securities under the Howey Test. The compliance strategy uses Regulation D for accredited investors, then Regulation CF/A+ for public offerings, with full KYC/AML compliance.

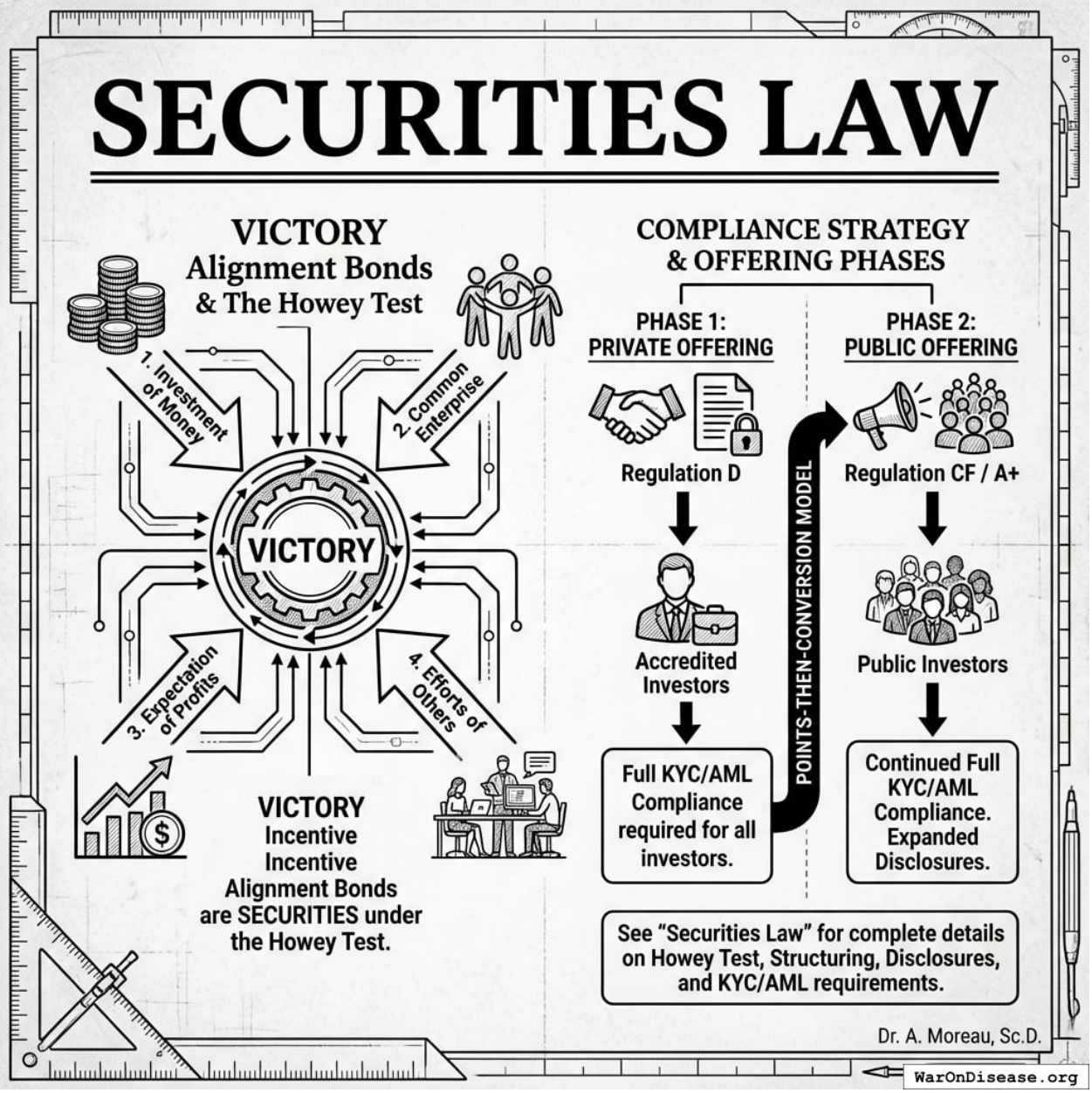


Figure 579: A flowchart illustrating the regulatory roadmap from Regulation D for accredited investors to public offerings via Regulation CF/A+, showing the integration of KYC/AML and the points-to-conversion phases.

Election Law

Bribing politicians is illegal. Unless you call it "lobbying" or "campaign contributions." Then it's protected speech.

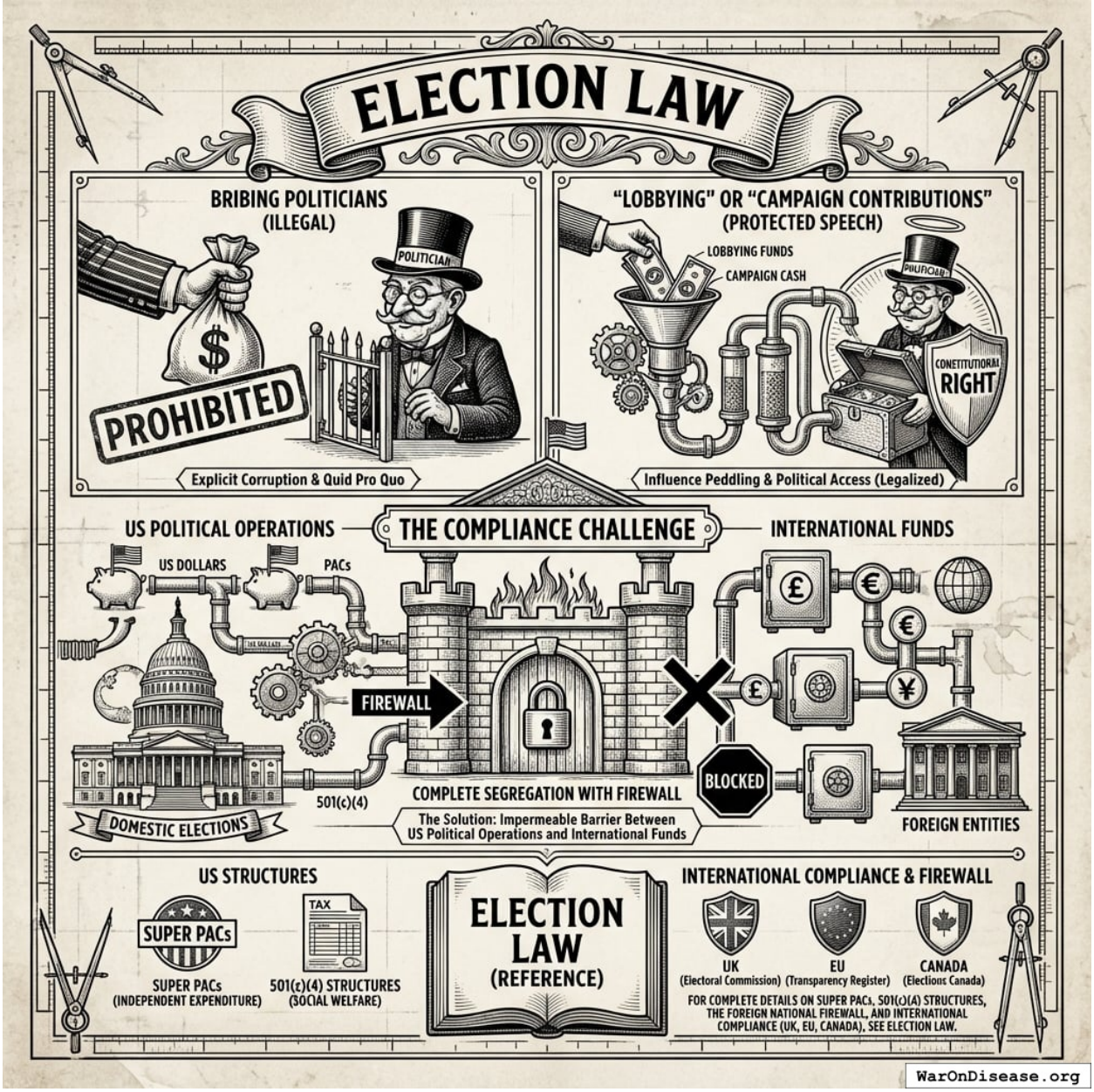


Figure 580: A conceptual diagram illustrating the regulatory firewall separating international funds from US political operations and election spending.

The key compliance challenge: foreign nationals can't spend money on US elections. The solution is complete segregation with a firewall between US political operations and international funds.

For complete details on Super PACs, 501(c)(4) structures, the foreign national firewall, and international compliance (UK, EU, Canada), see Election Law.

Treaty Framework

The 1% Treaty is structured as a formal international agreement. For complete details on structure, articles, ratification, enforcement, and avoiding common treaty pitfalls, see the 1% Treaty chapter.

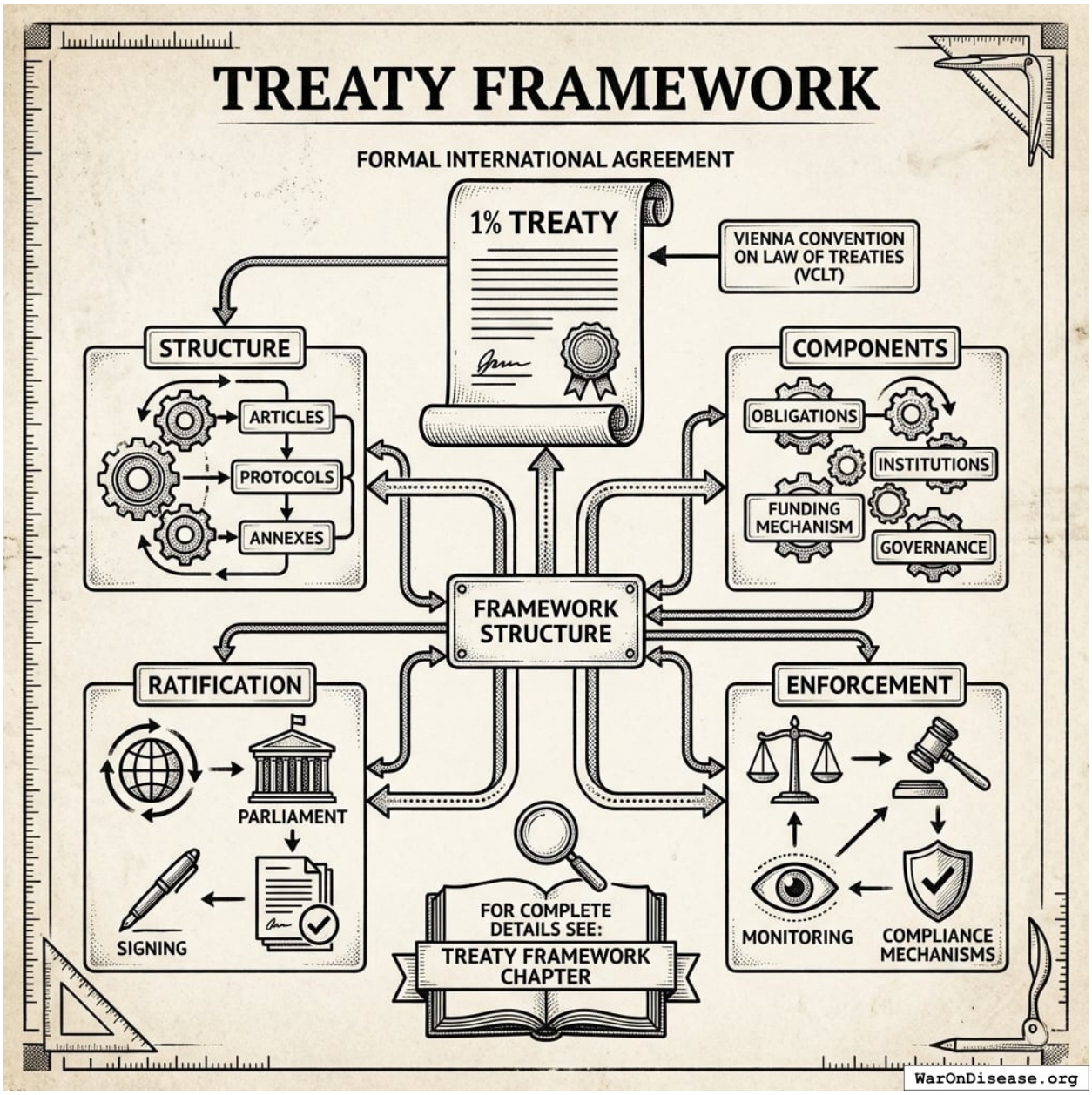


Figure 581: A diagram illustrating the structural lifecycle of the 1 percent Treaty, showing the progression from initial structure and components to formal ratification and enforcement.

Risk Mitigation (When They Come For You)

They will come for you. Here's how you survive:

The Legal Attack Vectors

Securities Fraud

- Defense: Full compliance from day one
- Backup: Multiple jurisdictions
- Reality: Your lawyers bill more than theirs

Election Law Violations

- Defense: Complete segregation
- Backup: Constitutional challenge
- Reality: Money is speech (Supreme Court said so)[231]

Tax Evasion

- Defense: Pay every penny
- Reality: Structure is more compliant than churches

RICO/Conspiracy

- Defense: Everything is public
- Reality: Hard to prosecute humanitarians

The Lawyer Budget

Budget: $100M for lawyers

You need lawyers. Lots of them. Good ones.

- Top firms in every jurisdiction (the ones who usually defend billionaires)
- Former regulators on retainer (they wrote the rules, they know the loopholes)
- Constitutional scholars (in case this goes to Supreme Court)
- International law experts (for when countries argue)
- PR firm (court of public opinion matters more than court of law)

The Strategy

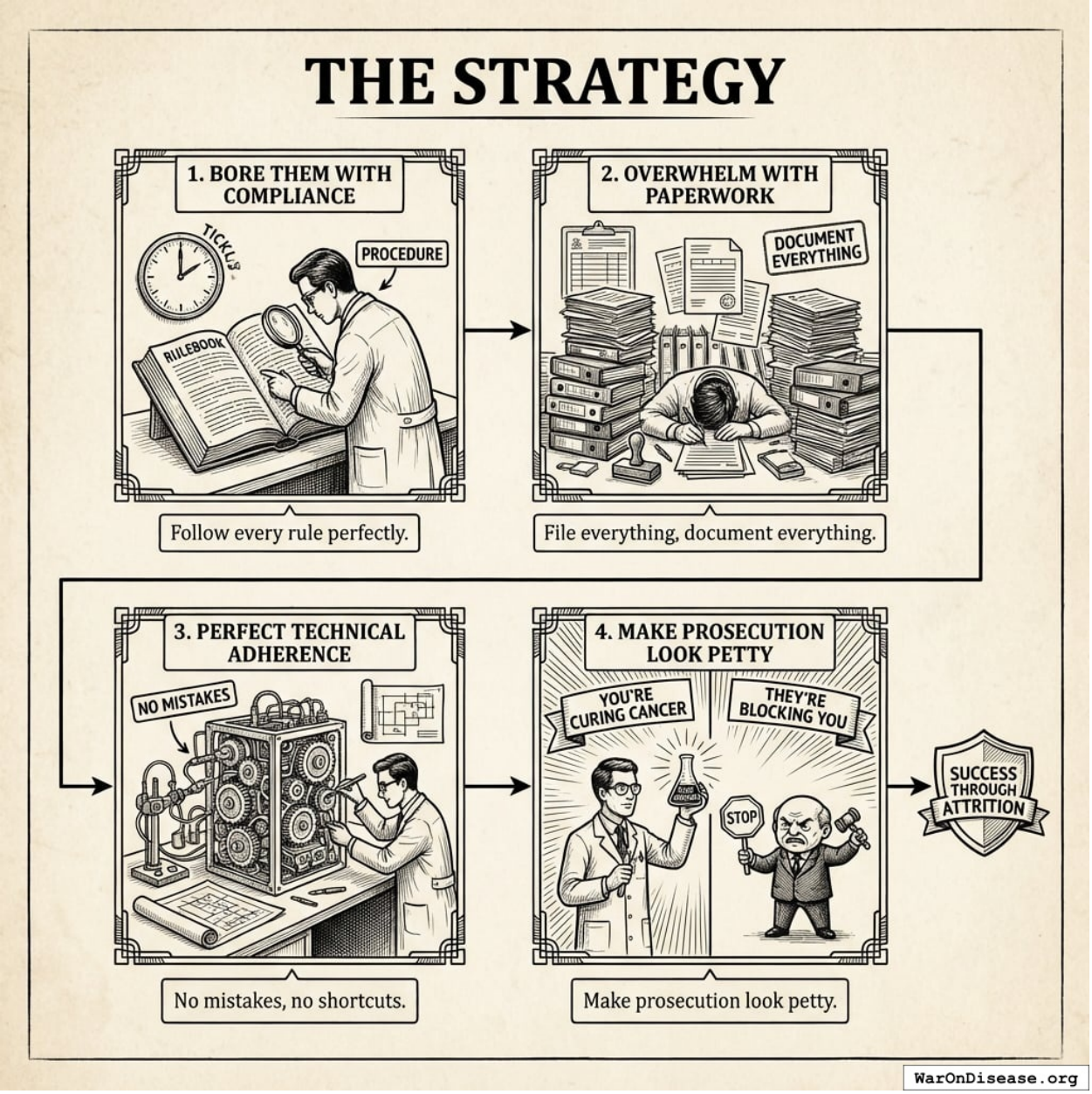


Figure 582: A conceptual diagram showing how the tactics of compliance, paperwork, and technical adherence converge to create a 'friction barrier' that deters prosecution.

Make prosecuting you more annoying than allowing you:

- Bore them with compliance (follow every rule perfectly)
- Overwhelm with paperwork (file everything, document everything)
- Perfect technical adherence (no mistakes, no shortcuts)
- Make prosecution look petty (you're curing cancer, they're blocking you)

The Escape Routes (If Everything Goes Wrong)

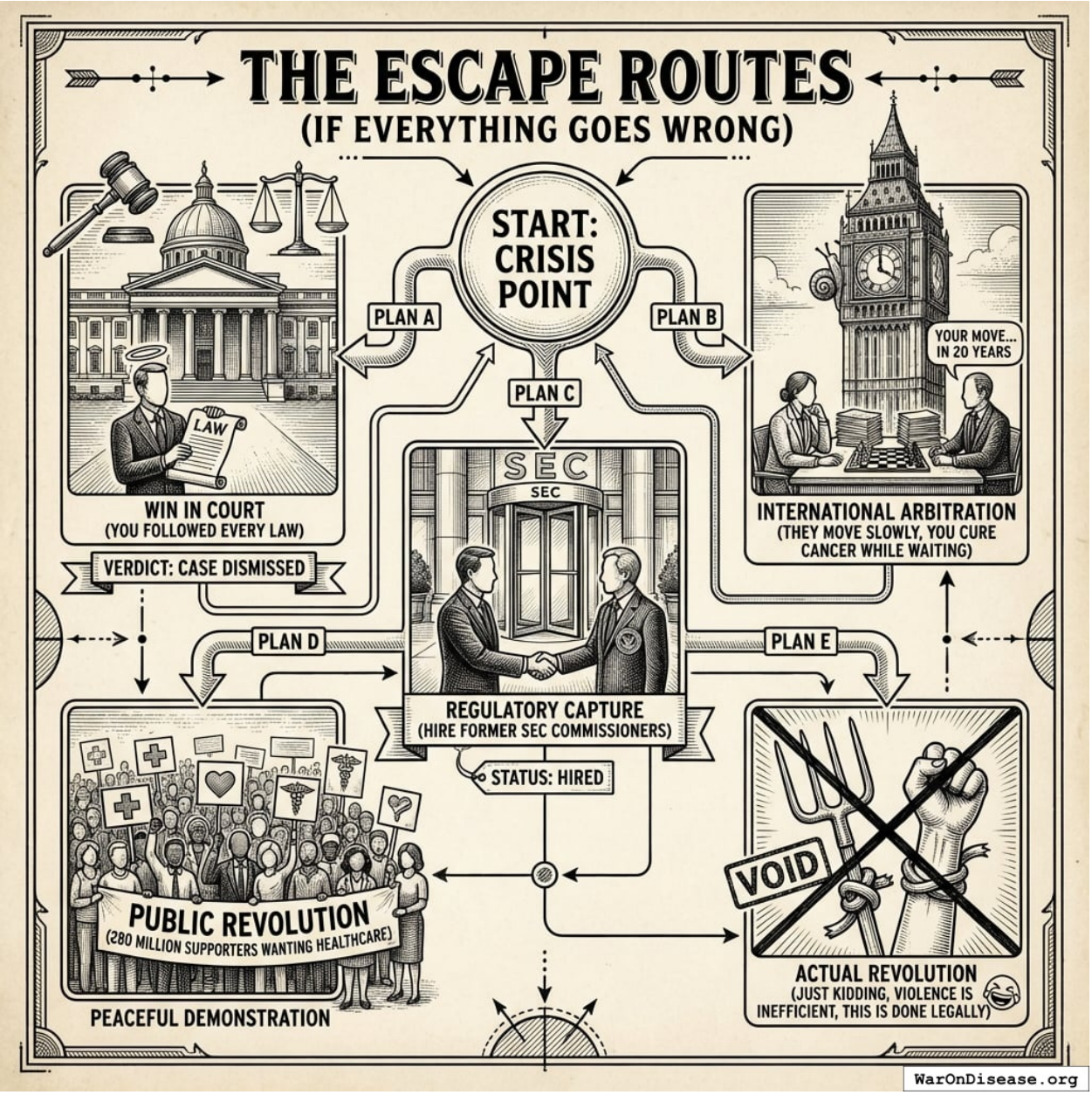


Figure 583: A tiered hierarchy of contingency strategies labeled Plans A through E, showing the escalation from standard legal defense to systemic public influence.

Plan A: Win in court (you followed every law)

Plan B: International arbitration (they move slowly, you cure cancer while waiting)

Plan C: Regulatory capture (hire former SEC commissioners)

Plan D: Public revolution (280 million supporters wanting healthcare)

Plan E: Actual revolution (just kidding, violence is inefficient, this is done legally)

Regulatory Reform Agenda

HHS Policy Recommendations

To maximize the effectiveness of the decentralized framework for drug assessment infrastructure, we recommend HHS sponsor an **FDA-X Prize** ($500 million) to incentivize creation of an open-source decentralized framework for drug assessment protocol enabling perpetual, patient-driven clinical trials.

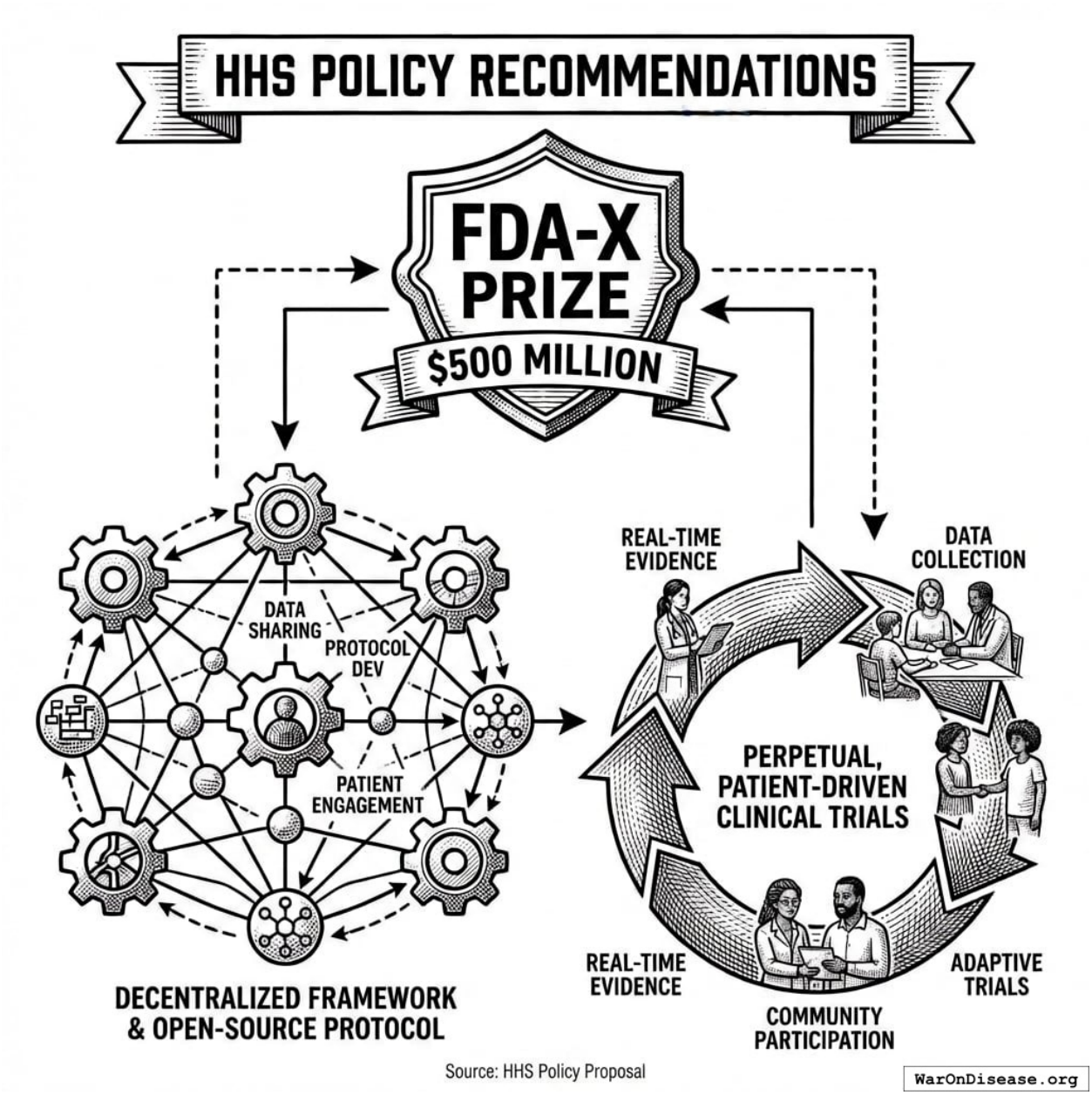


Figure 584: A flowchart showing the progression from HHS funding of an FDA-X Prize to the development of an open-source protocol, resulting in perpetual, patient-driven clinical trials.

Key Policy Objectives

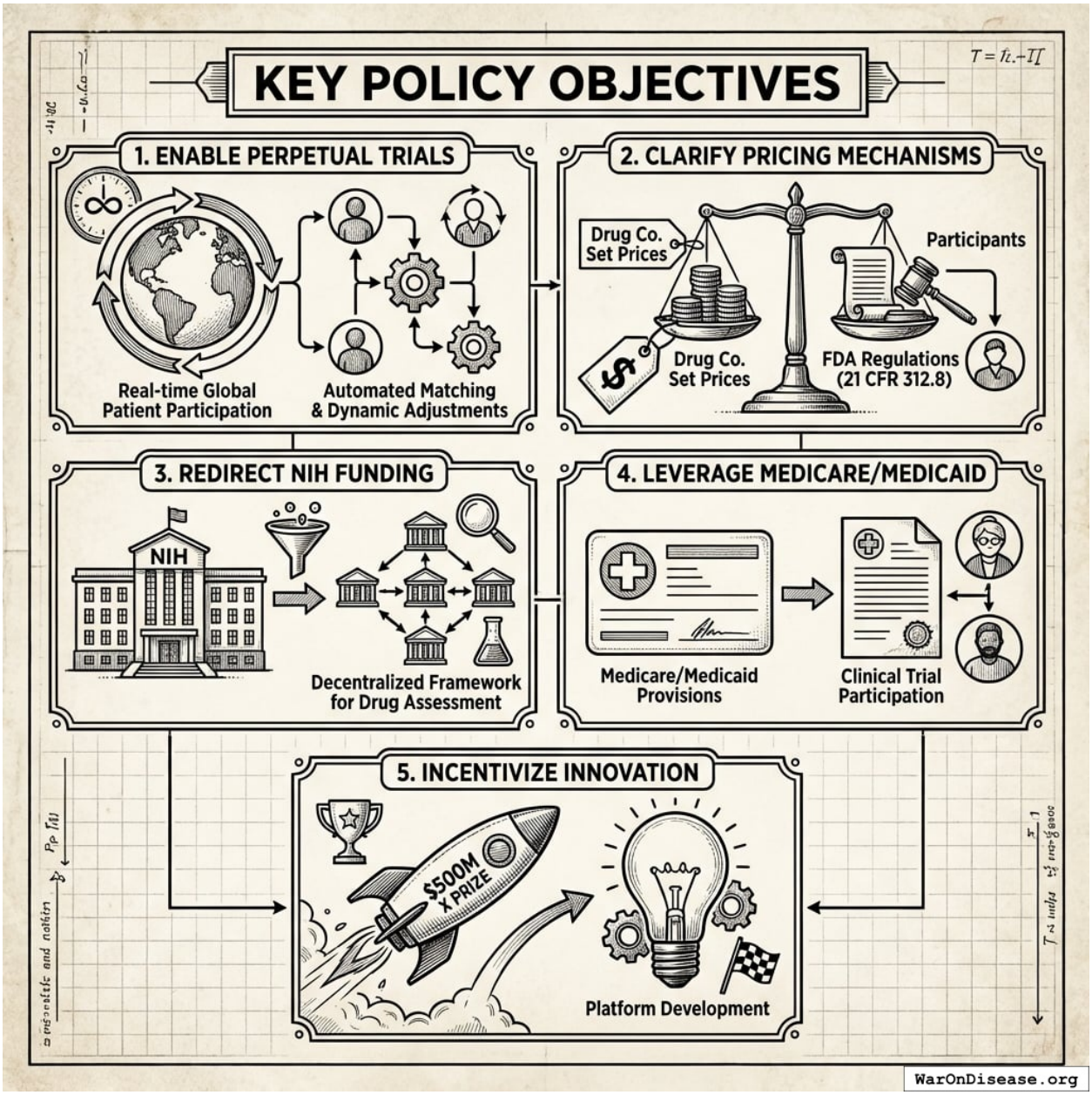


Figure 585: A conceptual diagram showing how the five policy objectives, funding, regulation, and technology, converge to enable a perpetual clinical trial framework.

1. **Enable Perpetual Trials:** Real-time global patient participation with automated matching and dynamic protocol adjustments
2. **Clarify Pricing Mechanisms:** Allow drug companies to set per-participant prices under FDA regulations (21 CFR 312.8)[185]
3. **Redirect NIH Funding:** Transition research toward projects leveraging the decentralized framework for drug assessment
4. **Leverage Medicare/Medicaid:** Utilize existing provisions for clinical trial participation
5. **Incentivize Innovation:** Launch $500M X Prize for platform development

Projected Impact

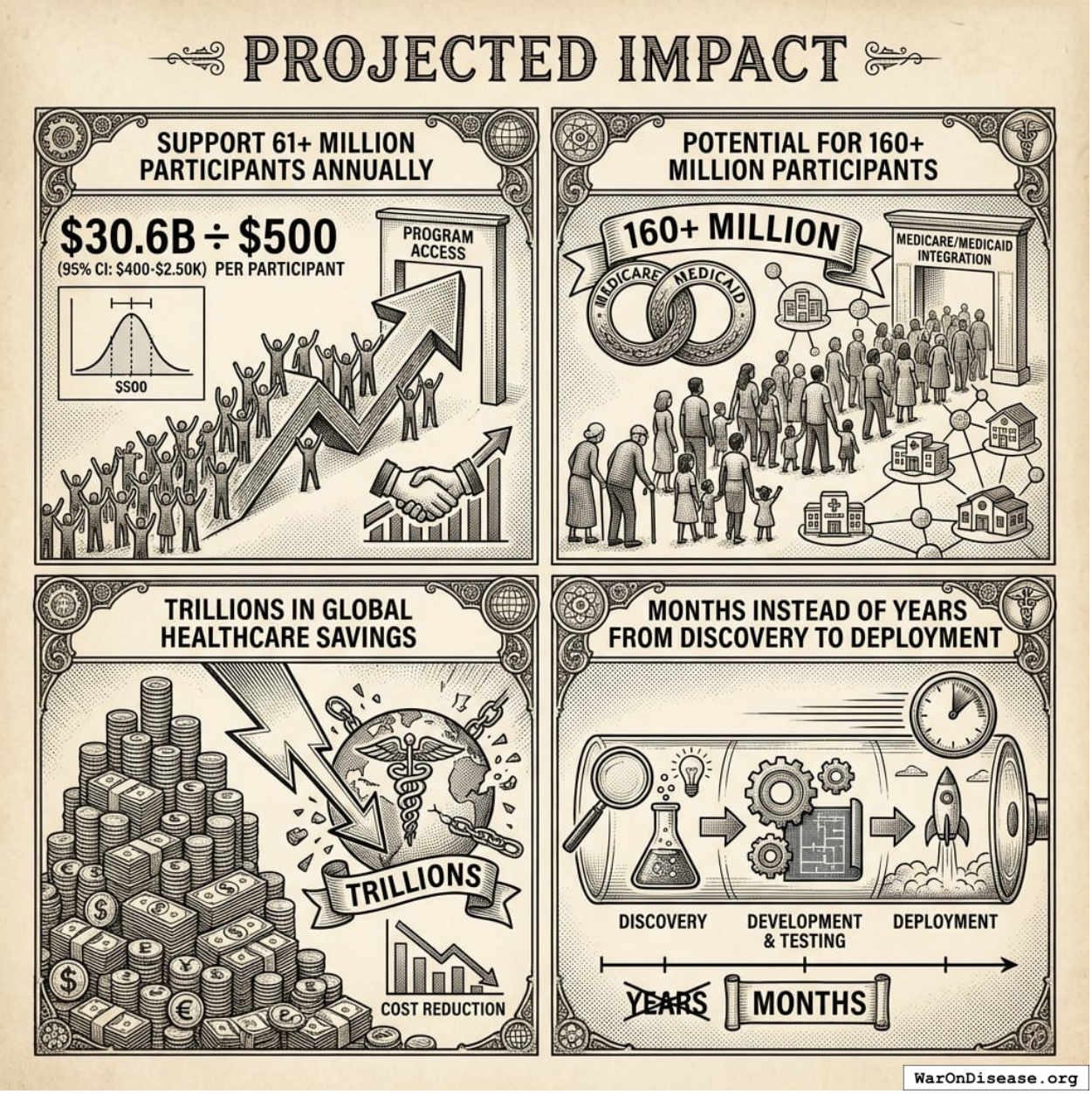


Figure 586: A visual summary of projected impacts showing the scale of participant reach, economic savings, and the compression of deployment timelines from years to months.

- Support 61+ million participants annually ($30.6B ÷ $500 (95% CI: $400-$2.50K) per participant)
- Potential for 160+ million participants with Medicare/Medicaid integration
- Trillions in global healthcare savings
- Months instead of years from discovery to deployment

Priority Regulations for Modification

High-Priority Streamlining Targets

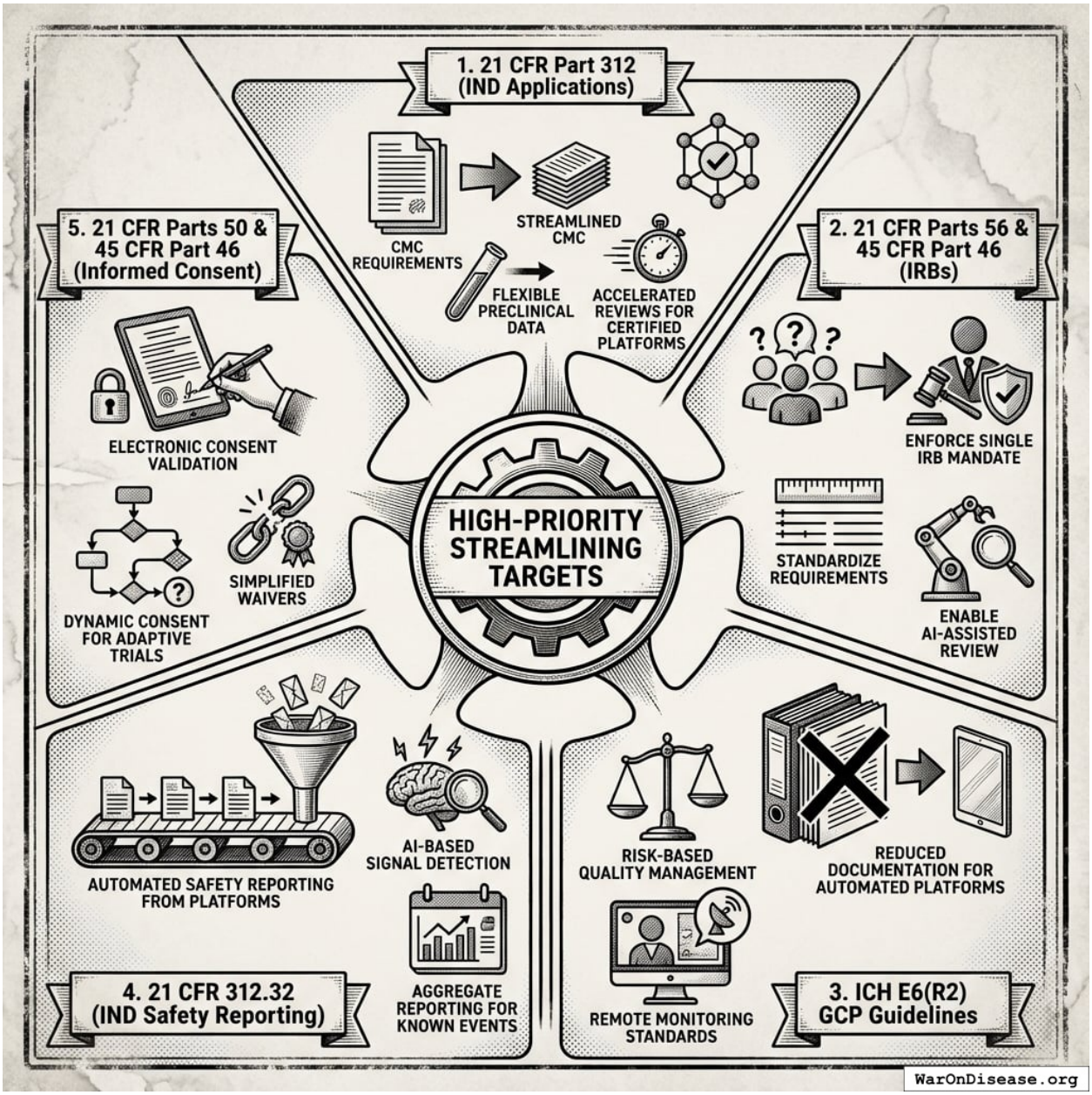


Figure 587: A conceptual map of regulatory streamlining targets showing how updates to IND applications, IRB oversight, and safety reporting create an integrated framework for modern clinical trials.

1. **21 CFR Part 312 (IND Applications):** Streamlined CMC requirements, flexible preclinical data, accelerated reviews for certified platforms
2. **21 CFR Parts 56 & 45 CFR Part 46 (IRBs):** Enforce single IRB mandate, standardize requirements, enable AI-assisted review
3. **ICH E6(R2) GCP Guidelines:** Risk-based quality management, reduced documentation for automated platforms, remote monitoring standards

4. **21 CFR 312.32 (IND Safety Reporting):** Automated safety reporting from platforms, AI-based signal detection, aggregate reporting for known events
5. **21 CFR Parts 50 & 45 CFR Part 46 (Informed Consent):** Electronic consent validation, dynamic consent for adaptive trials, simplified waivers

Revolutionary Exemptions for Certified Platforms

- **Radical Device Simplification:** Class I/II devices require only registration if evaluated via a certified decentralized framework for drug assessment
- **Post-Market Surveillance:** Replace traditional REMS programs with real-time platform monitoring
- **Dynamic Digital Labeling:** FDA-approved systems for rapid label updates based on platform data
- **Integrated Combination Product Review:** Single coordinated assessment using unified platform data

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The strategy uses the exact same legal structures that enable tax avoidance, dark money, regulatory capture, and corporate welfare. You take the system designed to protect the powerful and use it to empower the powerless.

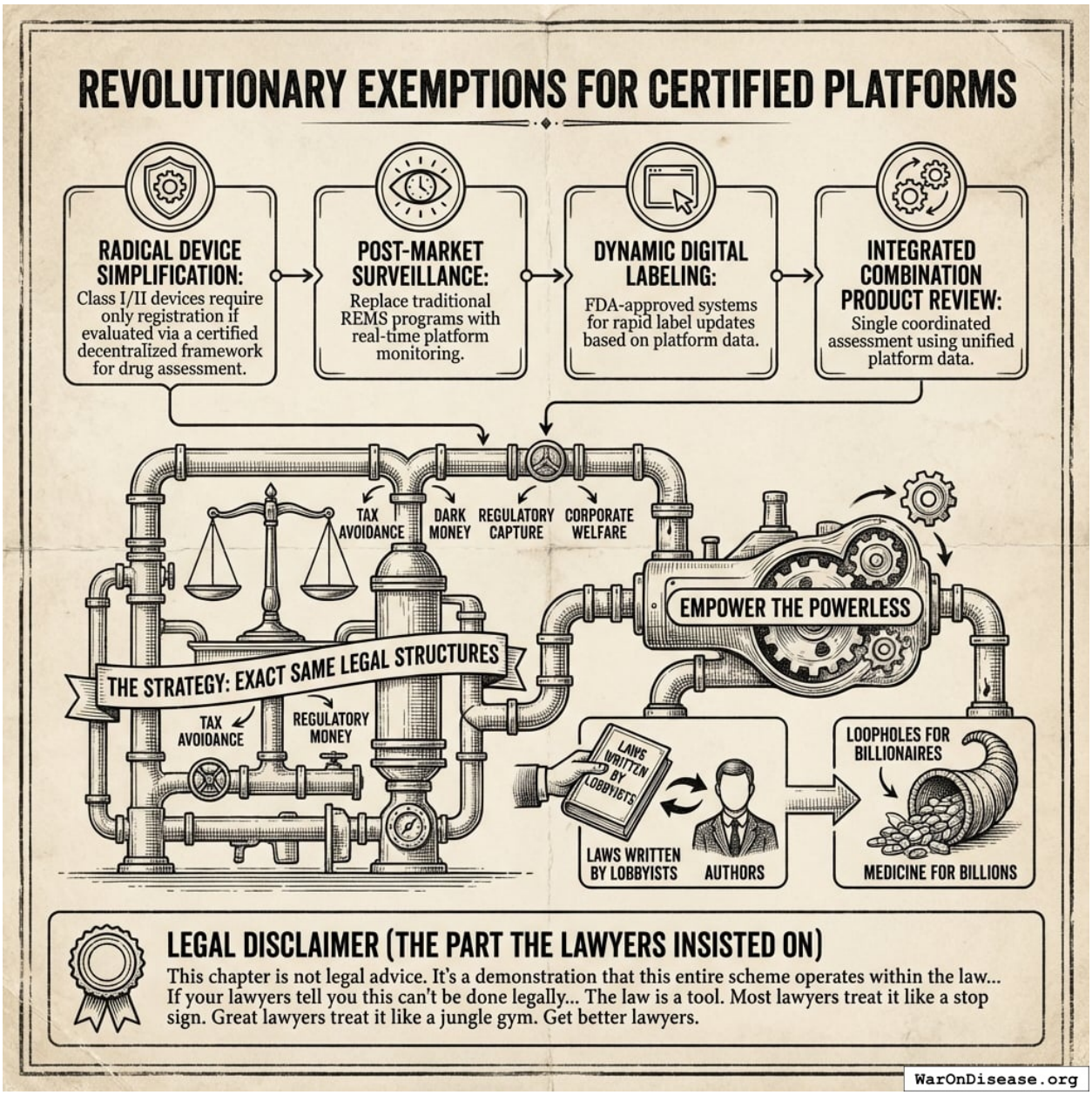


Figure 588: A comparison showing the transition from traditional, siloed regulatory hurdles to a streamlined, platform-integrated exemption model.

The laws written by lobbyists will be turned against their authors.

The loopholes meant for billionaires will fund medicine for billions.

It's not breaking the law. It's using the law exactly as written, just not as intended.

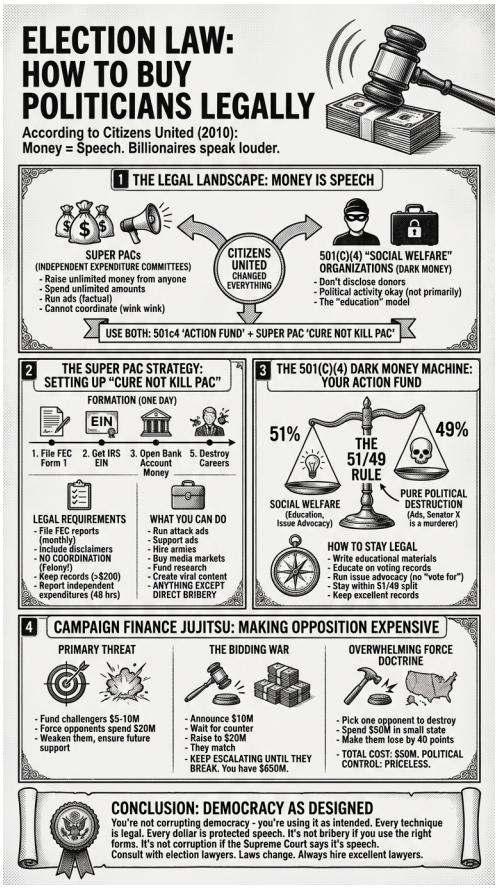
Legal Disclaimer (The Part the Lawyers Insisted On)

This chapter is not legal advice. It's a demonstration that this entire scheme operates within the law, assuming you hire lawyers who understand that "legal" and "unprecedented" are not mutually exclusive concepts.

If your lawyers tell you this can't be done legally, they're confessing that they lack imagination, not that you lack options. The law is a tool. Most lawyers treat it like a stop sign. Great lawyers treat it like a jungle gym.

Get better lawyers.

Election Law



It's perfectly legal to buy politicians. You just have to use the right forms. The Supreme Court decided that money equals speech (Citizens United, 2010), which means billionaires speak louder than you.

Good news: You're about to become the loudest voice in the room.

This chapter teaches you how to legally deploy $650M to make politicians choose between supporting your treaty or losing their jobs. Every technique here is legal. Every technique here is also disgusting. And every technique here is temporary - a means to an end, not the end itself.

The Legal Landscape: Money Is Speech

Citizens United Changed Everything

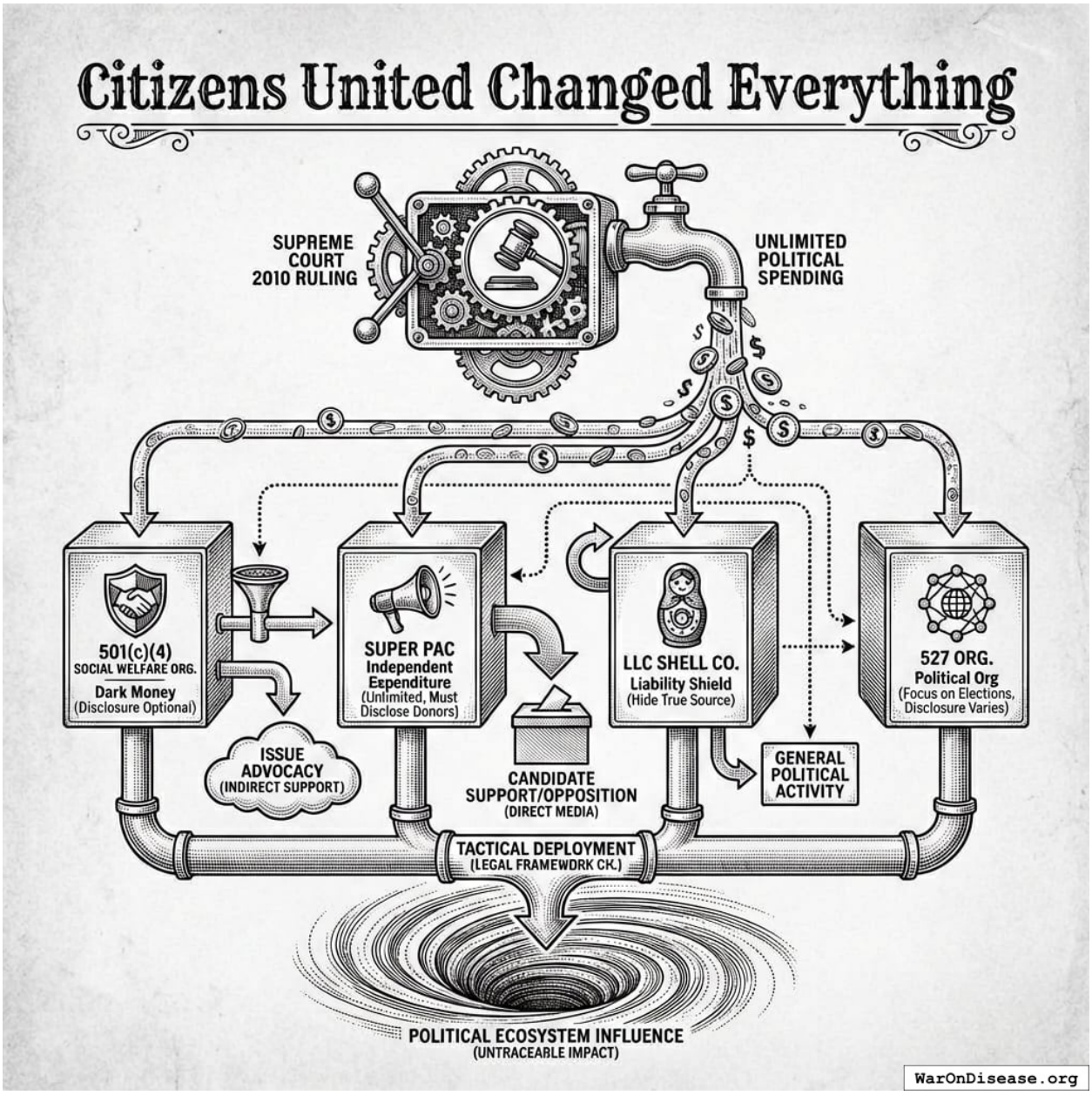


Figure 589: A conceptual diagram showing the flow of funds from a single source into various legal entities like Super PACs and 501(c)(4) organizations for different political strategic goals.

In 2010, the Supreme Court gave you a gift: unlimited political spending. As detailed in the Legal Framework chapter, you'll deploy multiple legal entities for different purposes. Here's how to use them tactically:

Super PACs (Independent Expenditure Committees)

- Raise unlimited money from anyone
- Spend unlimited amounts on elections

- Run ads saying "Senator X kills babies" (if factual)
- Cannot coordinate with candidates (wink wink)

501(c)(4) "Social Welfare" Organizations:

- Don't have to disclose donors (dark money)
- Can engage in political activity (just not primarily)
- The NRA model: "education" that happens to be political

527 Organizations:

- Like Super PACs but for "issue advocacy"
- Can say "call Senator X about dead children"
- Slightly different tax treatment
- Less regulated than Super PACs

You'll use all three. A 501c4 "action fund" for your decentralized institutes of health will be the primary political vehicle, operating a Super PAC like 'Cure Not Kill PAC' to handle its independent expenditures.

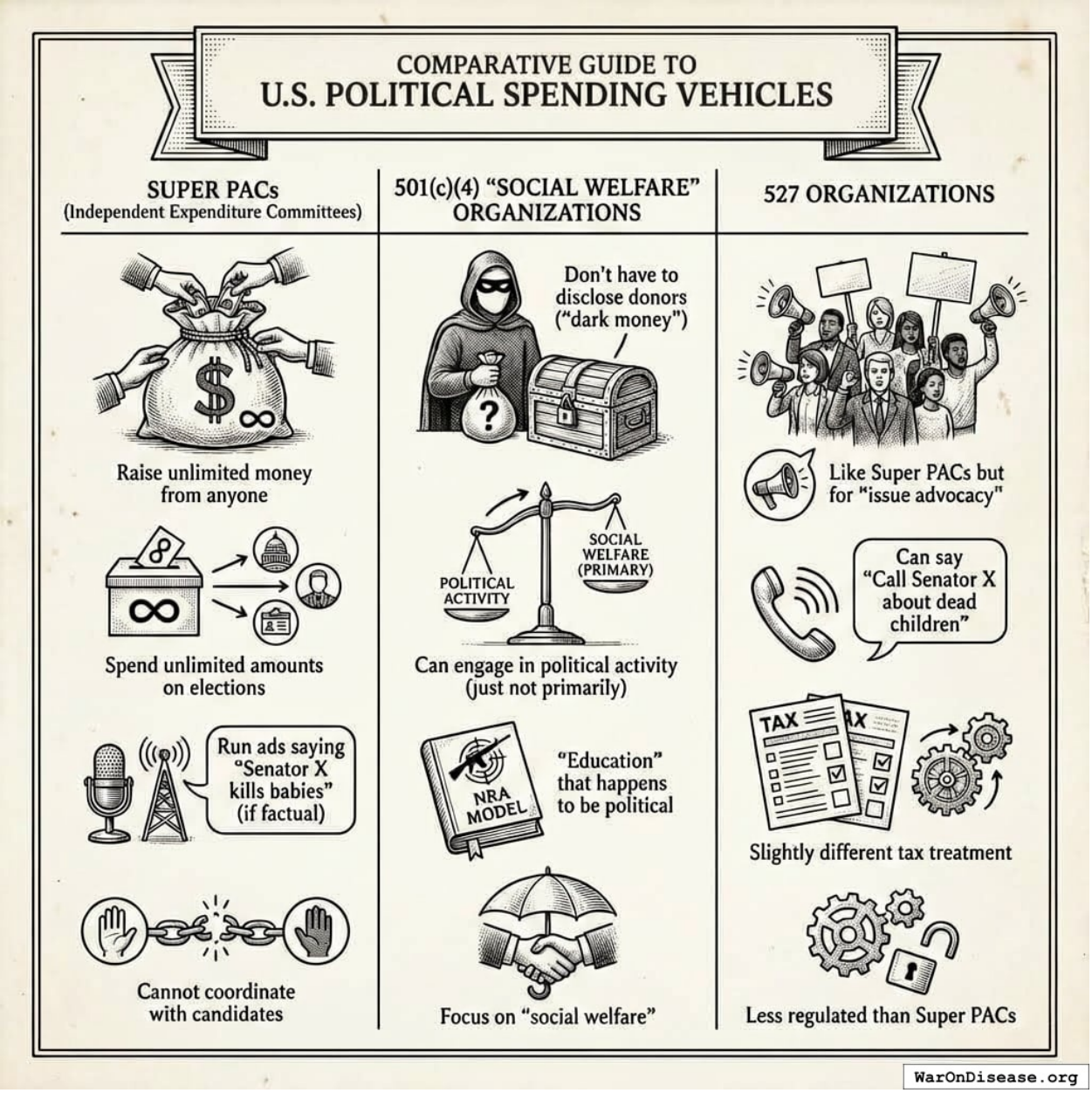


Figure 590: Comparison of the three primary political spending vehicles, highlighting differences in disclosure requirements, allowed activities, and coordination rules.

The Super PAC Strategy

Setting Up "Cure Not Kill PAC"

Formation (One Day)

1. File FEC Form 1 (Statement of Organization)
2. Get an EIN from IRS
3. Open a bank account
4. Start taking unlimited money
5. Begin destroying political careers

The Legal Requirements

- File reports with FEC (monthly in election years)
- Include disclaimer on all ads ("Paid for by Cure Not Kill PAC")
- No coordination with candidates (this is a federal felony - don't do it)
- Keep records of all donors over $200
- Report independent expenditures within 48 hours

What You Can Do

- Run attack ads against treaty opponents
- Support ads for treaty supporters
- Hire armies of canvassers
- Buy entire media markets
- Fund opposition research
- Create viral content
- Anything except directly bribing candidates

The 501(c)(4) Dark Money Machine

Your Action Fund (The Dark Money Vehicle)

This is your 501(c)(4) dark money vehicle. Unlike Super PACs, you don't have to disclose donors.

The 51/49 Rule

- 51% must be "social welfare" activity
- 49% can be pure political destruction
- "Education" about treaty benefits = social welfare
- "Senator X is a murderer" ads = political

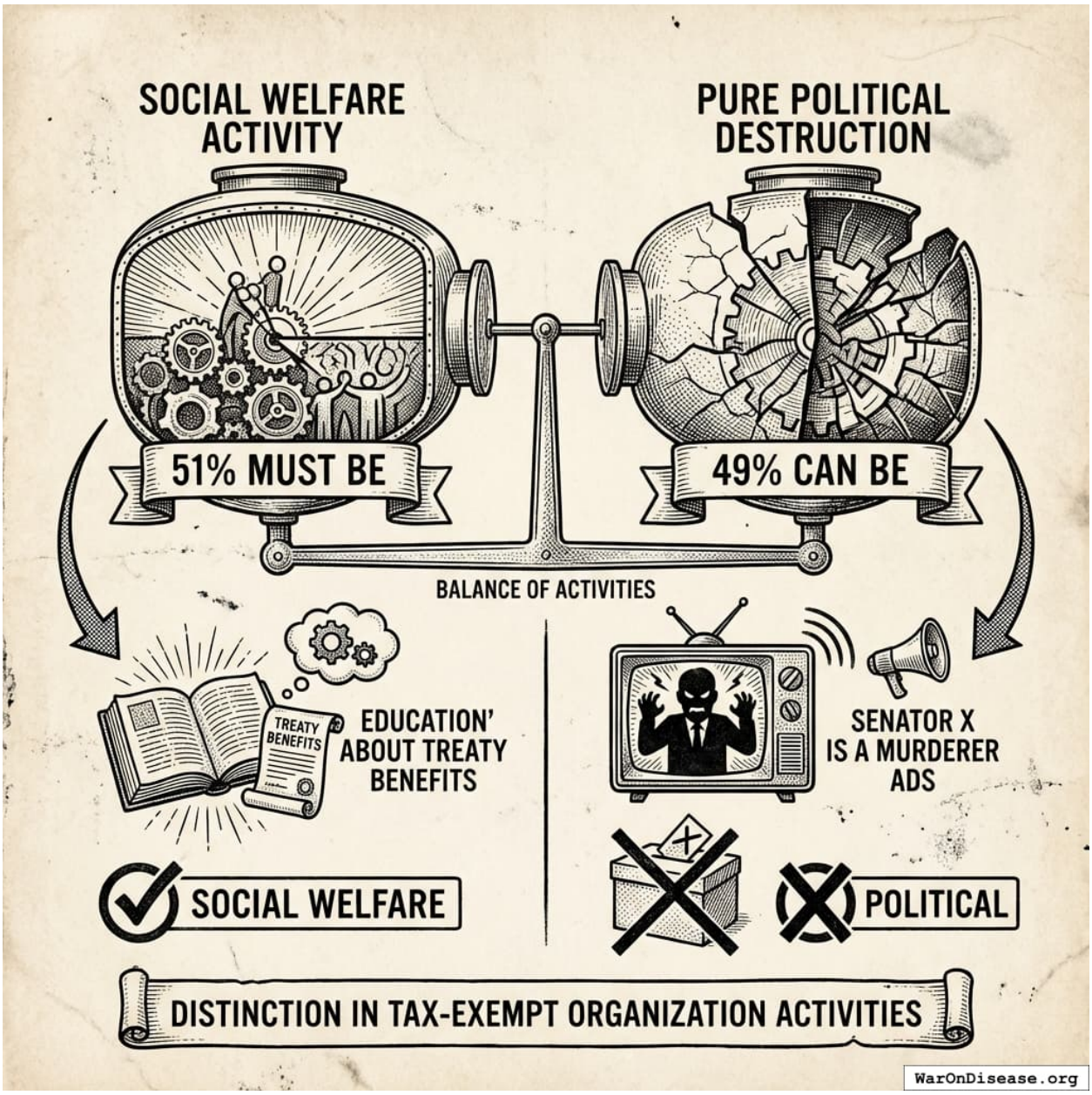


Figure 591: Visual representation of the required resource allocation for a 501(c)(4) to maintain tax-exempt status while engaging in political activity.

How to Stay Legal

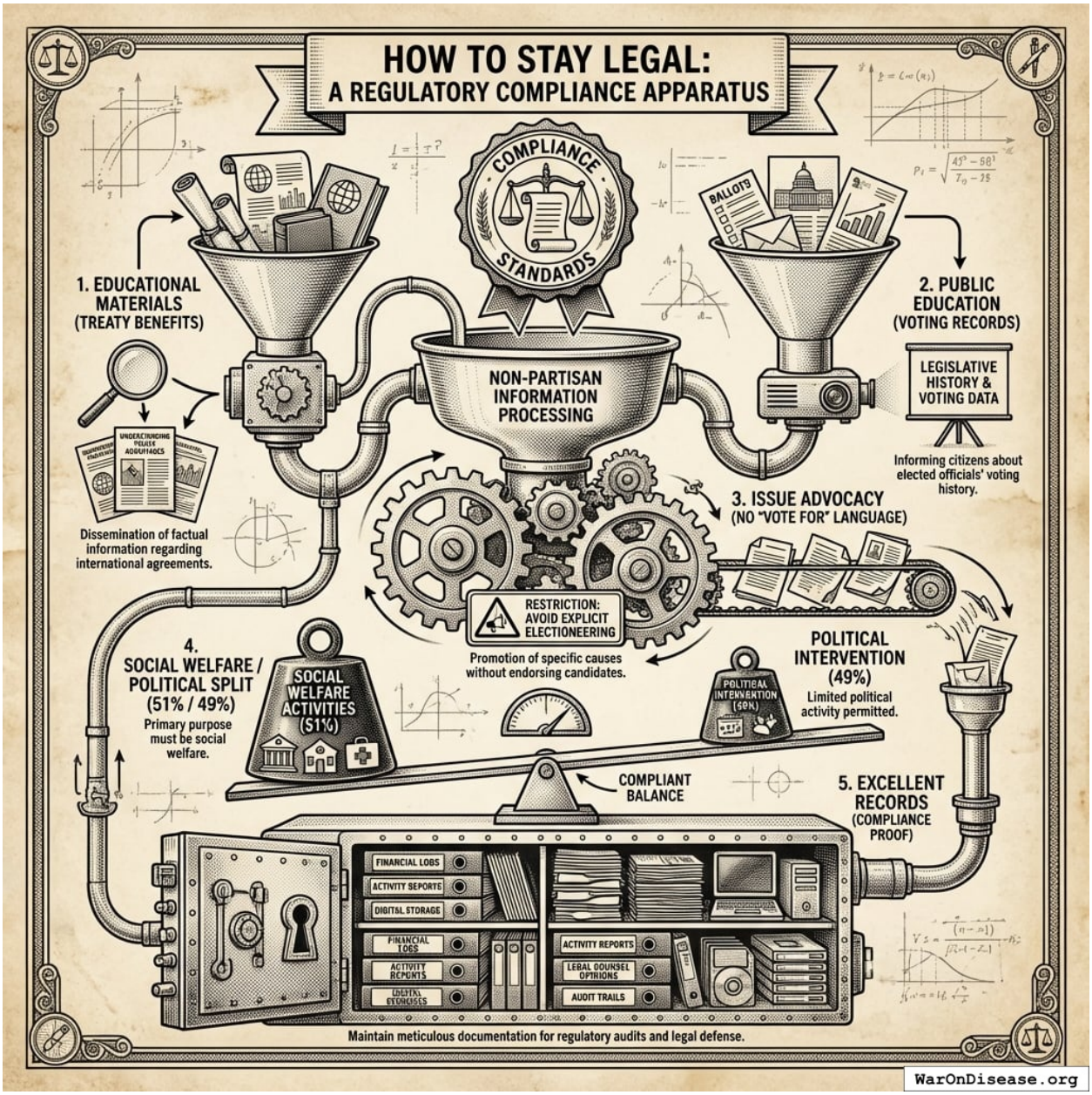


Figure 592: A visual guide to non-profit legal compliance, highlighting the 51 percent social welfare versus 49 percent political activity split alongside key advocacy rules.

1. Write educational materials about the treaty benefits
2. Educate the public on voting records
3. Run issue advocacy (no “vote for” language)
4. Stay within the 51% social welfare / 49% political split
5. Keep excellent records to prove compliance

Campaign Finance Jujitsu

Making Opposition Expensive

The Primary Threat

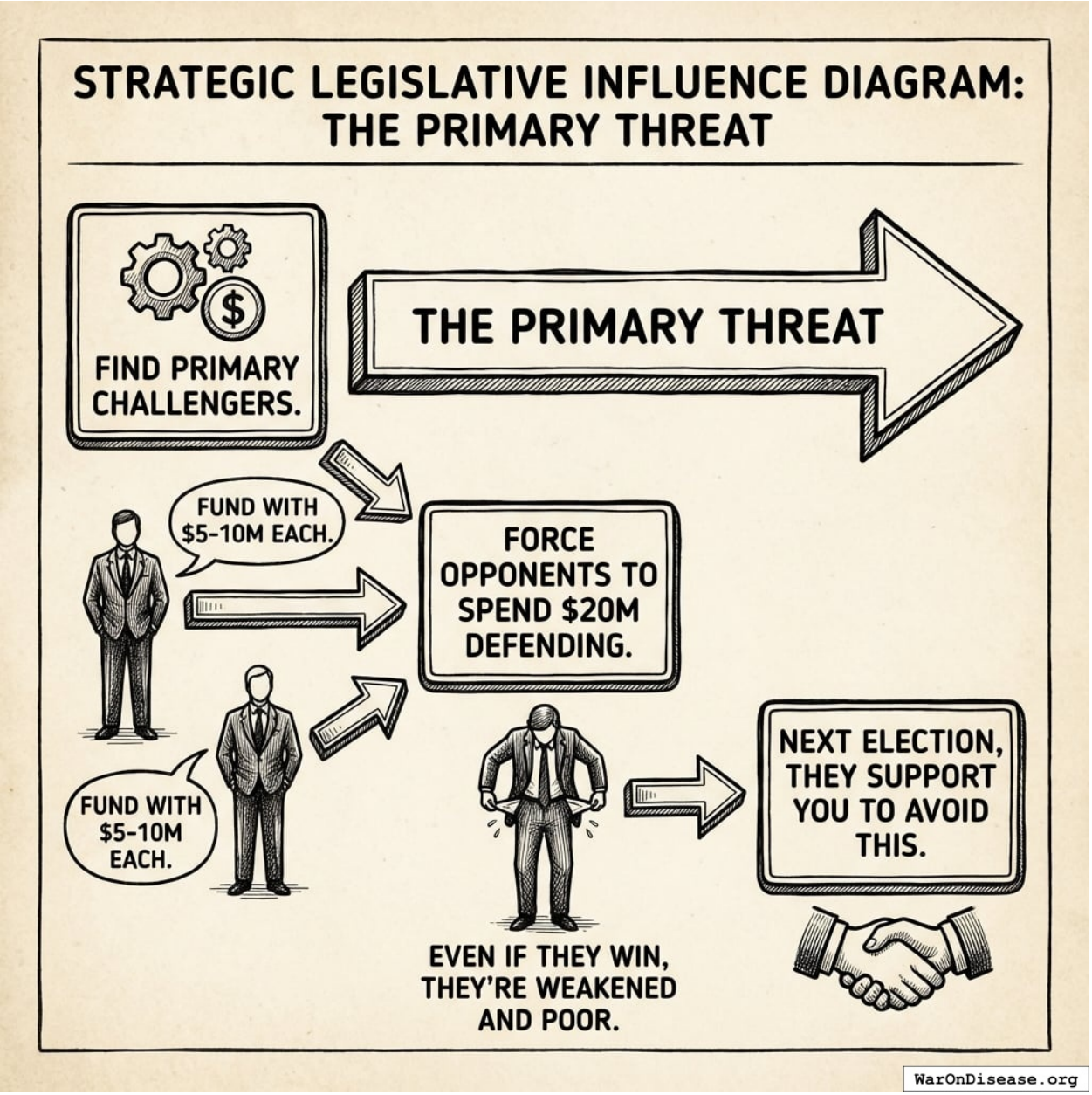


Figure 593: A flowchart illustrating the strategic process of using primary challengers to financially deplete opponents and secure their future political support.

- Find primary challengers for treaty opponents
- Fund them with $5-10M each
- Force opponents to spend $20M defending
- Even if they win, they're weakened and poor
- Next election, they support you to avoid this

The Bidding War

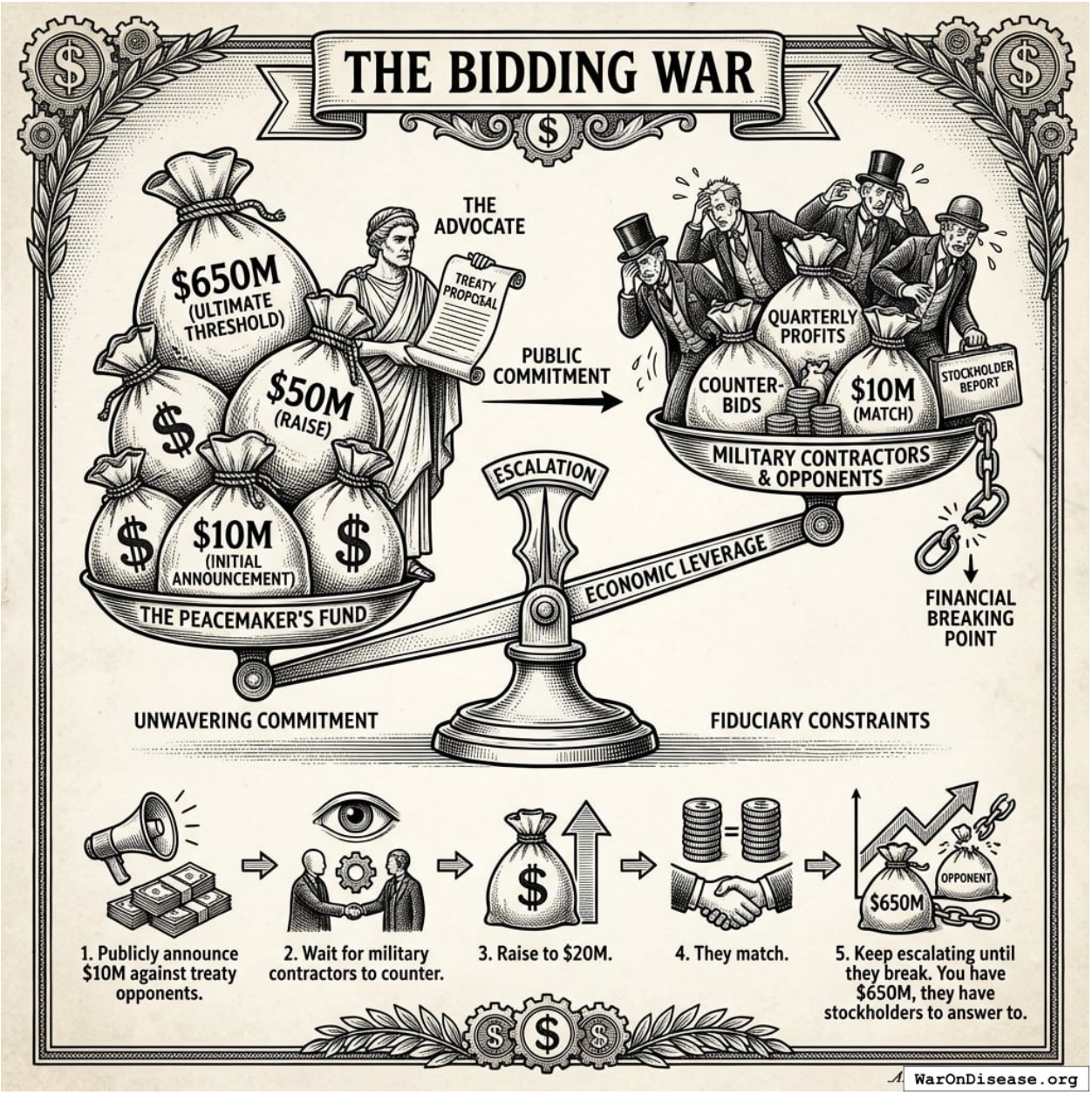


Figure 594: A flowchart depicting the iterative bidding process between two parties, illustrating the escalation of funds and the eventual breaking point based on financial constraints.

- Publicly announce $10M against treaty opponents
- Wait for military contractors to counter
- Raise to $20M
- They match
- Keep escalating until they break
- You have $650M, they have stockholders to answer to

The Overwhelming Force Doctrine

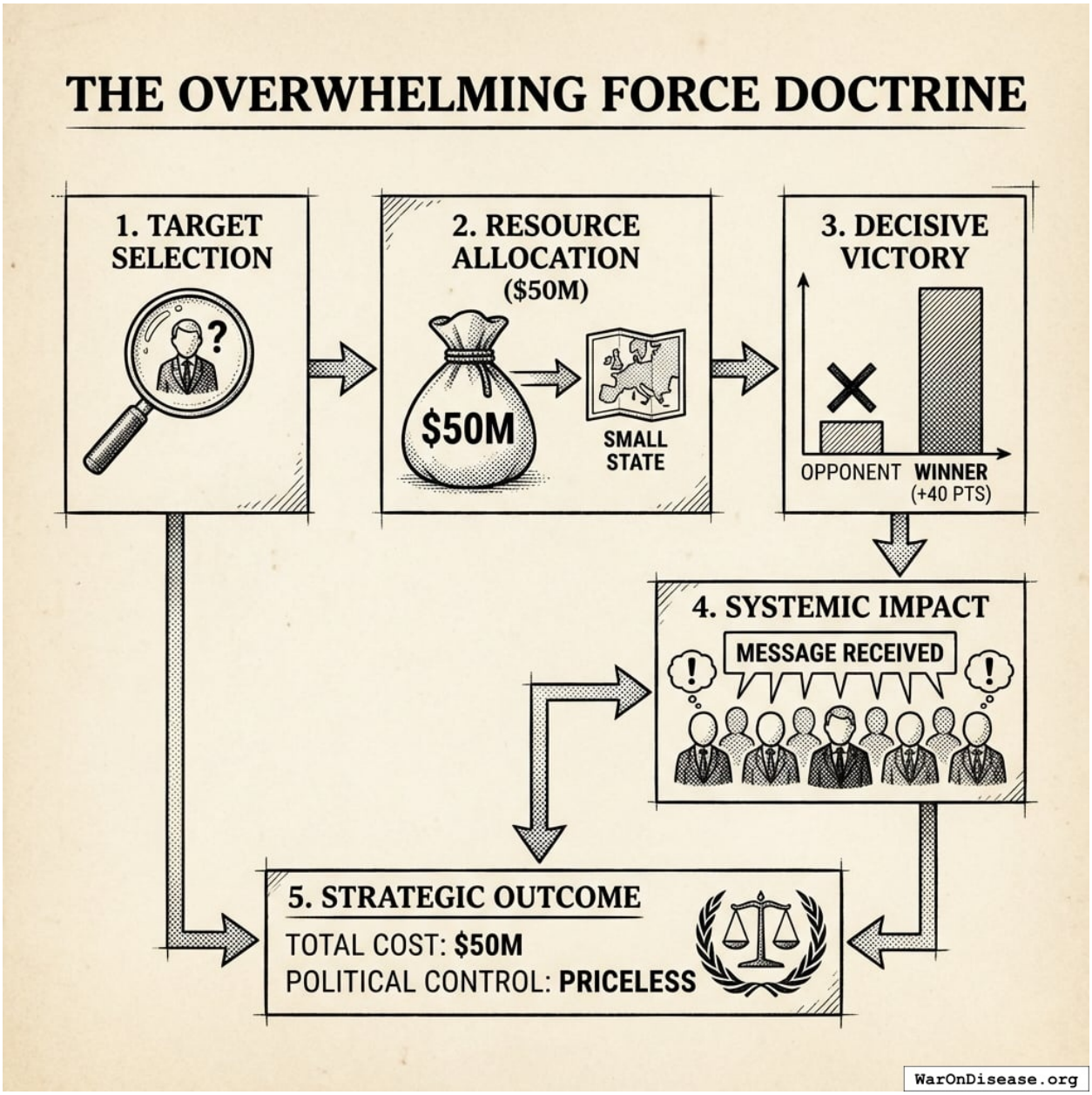


Figure 595: A flowchart illustrating the Overwhelming Force Doctrine, showing the sequence from targeted investment in a single race to achieving broad political control through a landslide victory.

- Pick one opponent to destroy completely
- Spend $50M in their small state
- Make them lose by 40 points
- Every other politician gets the message
- Total cost: $50M. Political control: Priceless

State and Local Compliance

Every state has different rules. Here's how to handle them:

The Nightmare States

California: Requires extensive disclosure, frequent reporting **New York:** Complex registration, strict coordination rules **Texas:** Actually pretty loose, go wild

The Compliance Strategy

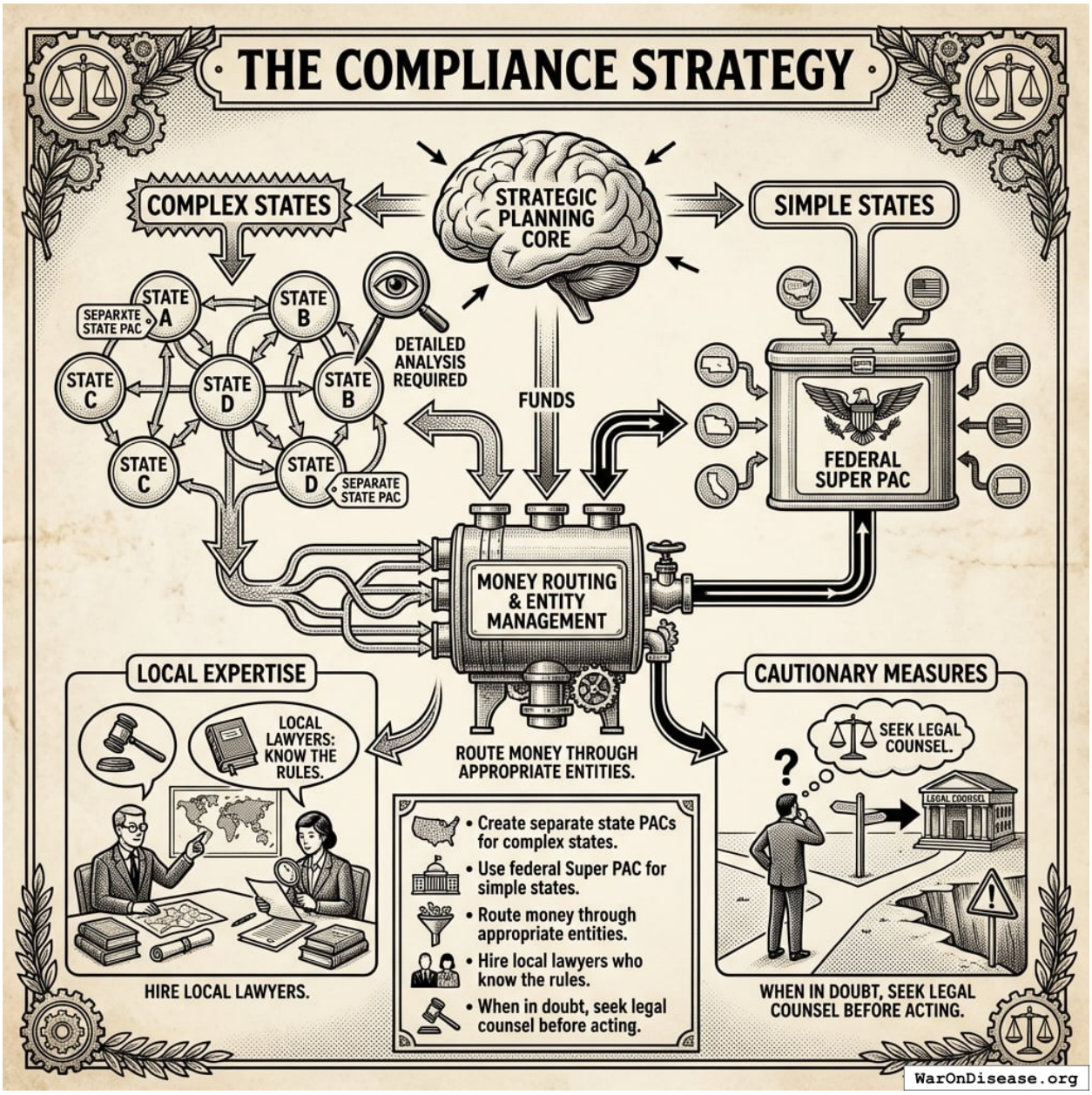


Figure 596: A strategic decision framework illustrating how funds are routed through federal or state PACs depending on regulatory complexity, supported by legal oversight.

- Create separate state PACs for complex states
- Use federal Super PAC for simple states
- Route money through appropriate entities
- Hire local lawyers who know the rules
- When in doubt, seek legal counsel before acting

Local Elections

- City councils: $50K buys a seat
- State legislators: $200K flips most races
- Governors: $5-10M moves the needle
- Focus on cheap races with treaty impact

The Media Buy Strategy

Surgical Strikes

Early and Often

- Define opponents before they define themselves
- First impression sticks
- Run attacks during non-political shows
- Capture low-information voters

The Saturation Approach

- Buy every ad slot in small markets
- Make opposition invisible
- Cost: $500K/week in Wyoming
- Impact: Total narrative control

Digital Micro-Targeting

- Facebook: $0.50 per voter reached
- Google: Target searches for "Senator [Name]"
- YouTube: Pre-roll on local news
- TikTok: Pay influencers to "discover" treaty benefits

The Ground Game

Paid “Volunteers”

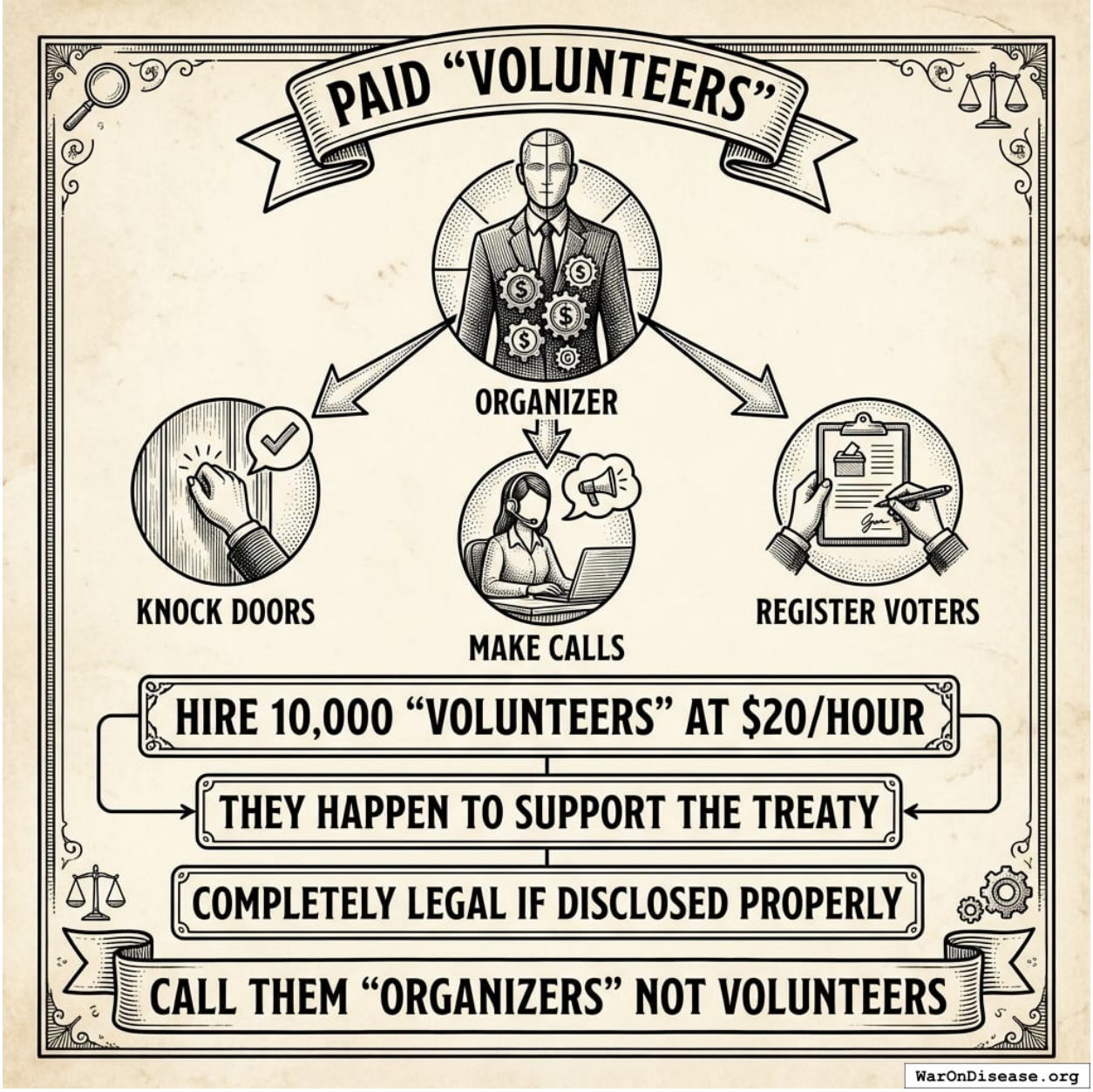


Figure 597: A flowchart showing the transformation of funding into field operations, starting with hiring staff and leading to voter engagement activities like door knocking and call centers.

- Hire 10,000 “volunteers” at $20/hour
- They happen to support the treaty
- They knock doors, make calls, register voters
- Completely legal if disclosed properly
- Call them “organizers” not volunteers

The Petition Army

- Gather signatures for ballot initiatives
- Each signature costs $3-5
- 100,000 signatures = massive pressure
- Politicians see organized opposition
- They fold immediately

Enforcement: What Happens If You Break Rules

FEC Enforcement (LOL)

- Requires 4 of 6 commissioners to act
- Always split 3-3 on party lines
- Average investigation: 2-4 years
- Average fine: $50K
- Worth it for the impact

DOJ Enforcement (Rare but Real)

- Criminal prosecution for knowing violations
- Foreign money = serious crime
- Coordination = potential felony
- Keep good lawyers on retainer
- Document everything as "independent"

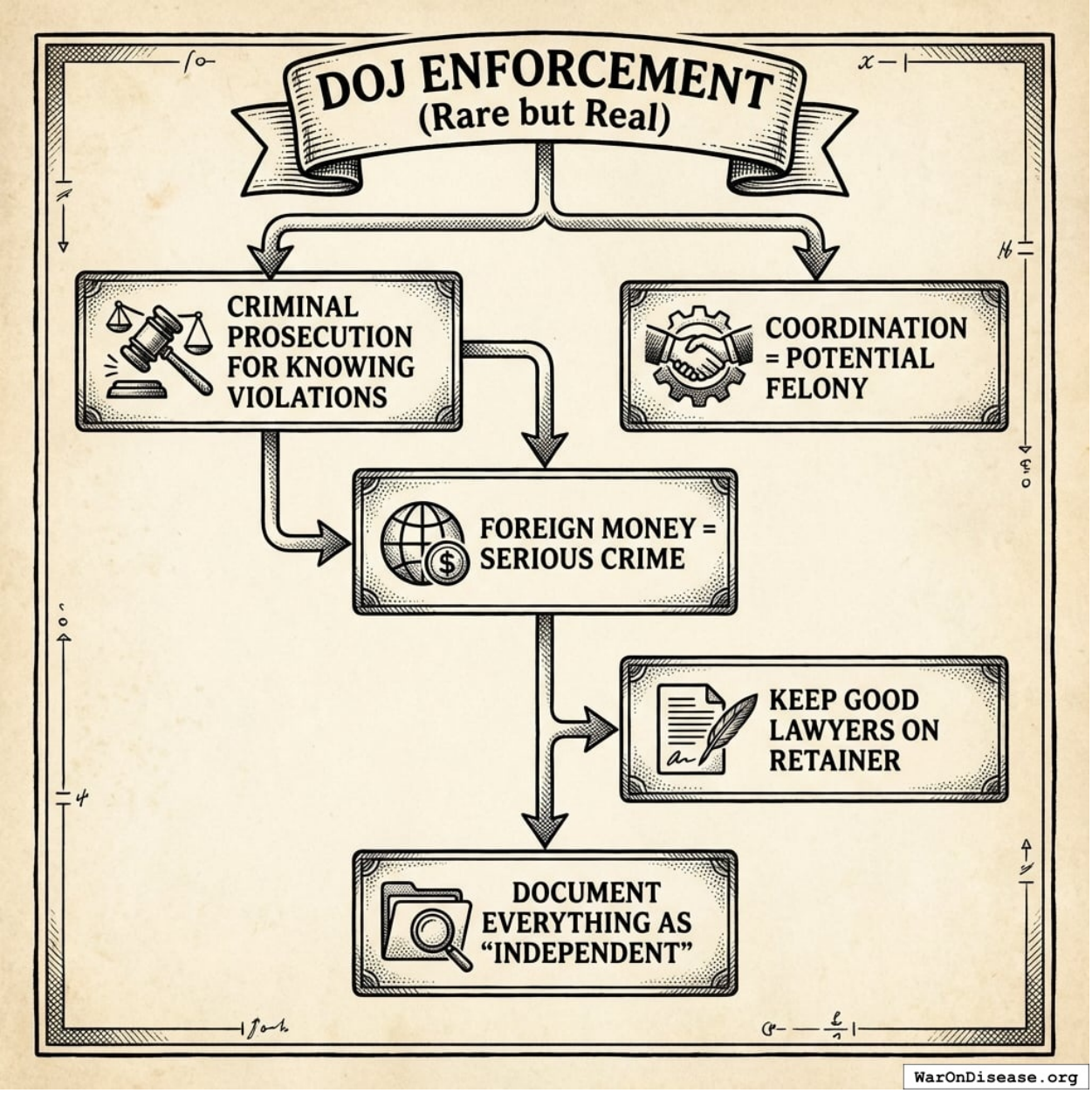


Figure 598: A risk-response diagram illustrating the triggers for DOJ enforcement, such as foreign funding or coordination, and the corresponding mitigation strategies of legal counsel and documentation.

State Enforcement (Varies)

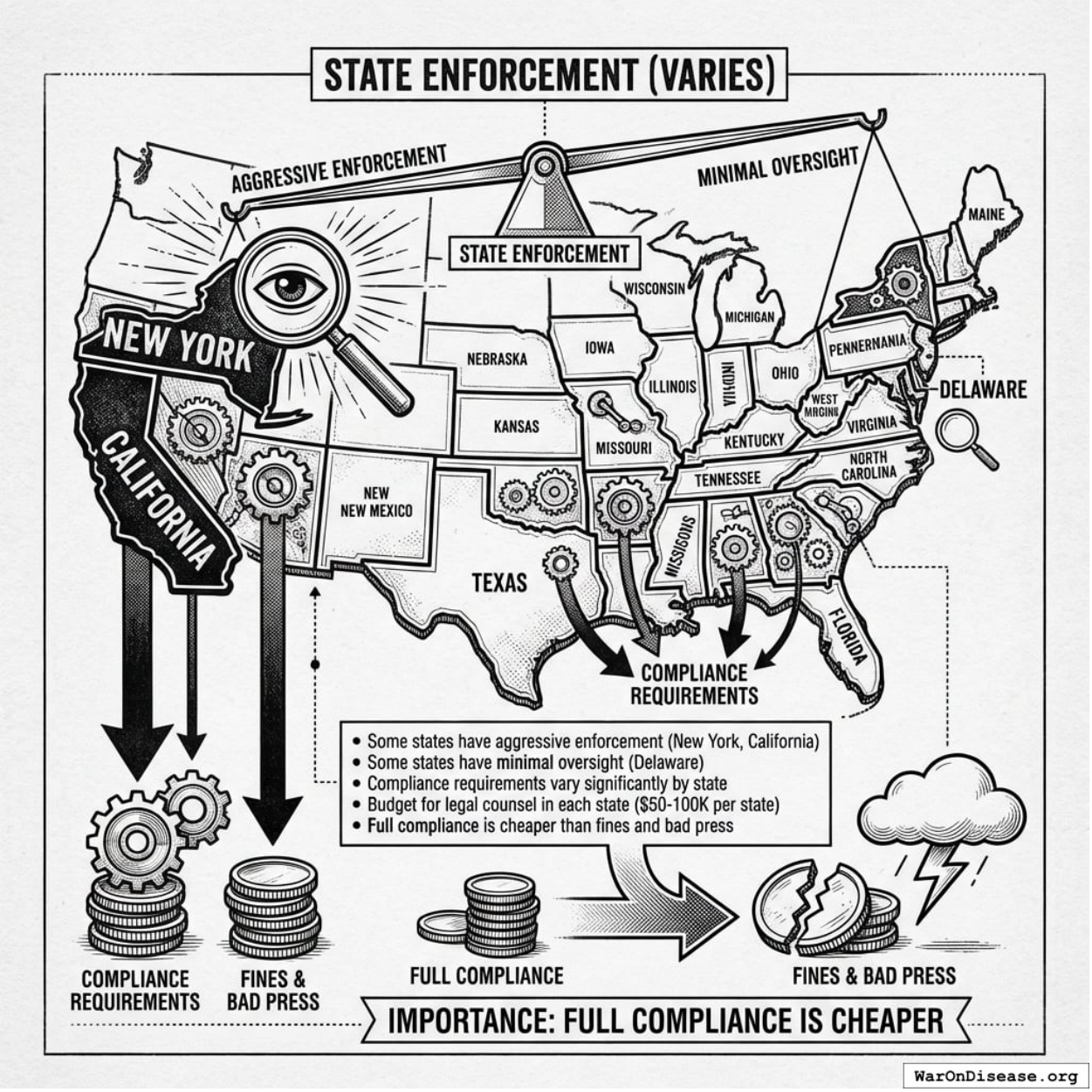


Figure 599: A comparative visualization of state enforcement levels ranging from aggressive to minimal, paired with a cost-benefit analysis of compliance versus legal risks.

- Some states have aggressive enforcement (New York, California)
- Some states have minimal oversight (Delaware)
- Compliance requirements vary significantly by state
- Budget for legal counsel in each state ($50-100K per state)
- Full compliance is cheaper than fines and bad press

The Lobbying Registration Trap

When You Must Register

- Direct contact with officials about legislation
- Spending over $3,000/quarter on lobbying
- Coordinating grassroots campaigns
- Paying others to lobby

When You Don't

- "Education" about issues
- Grassroots organizing (if genuine)
- Media campaigns
- Think tank research
- Public speeches

Stay on the non-registration side when possible. Registered lobbyists have restrictions.

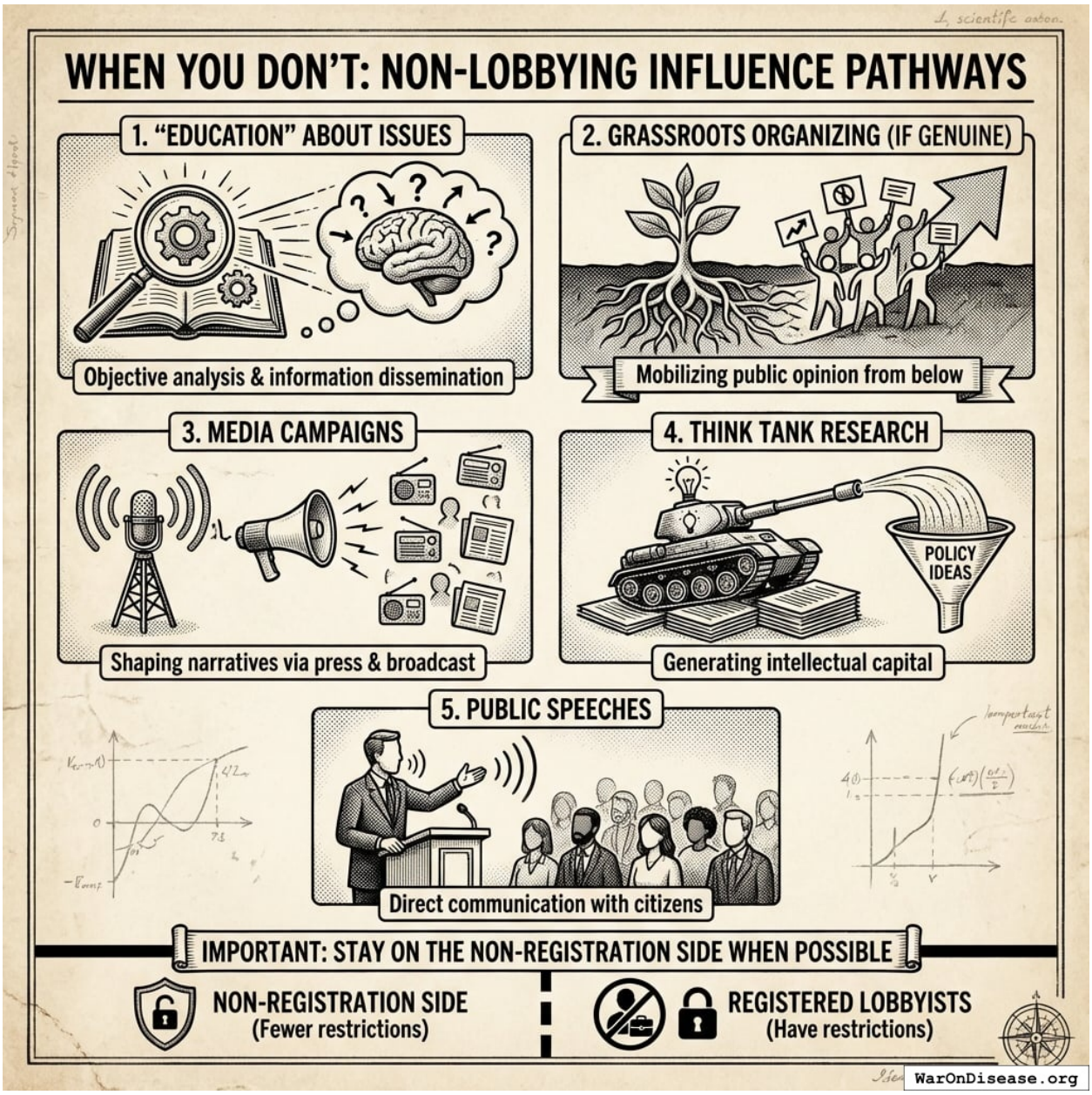


Figure 600: A conceptual diagram contrasting advocacy activities that do not require registration with the restricted environment of registered lobbying.

International Considerations

Foreign Nationals Ban

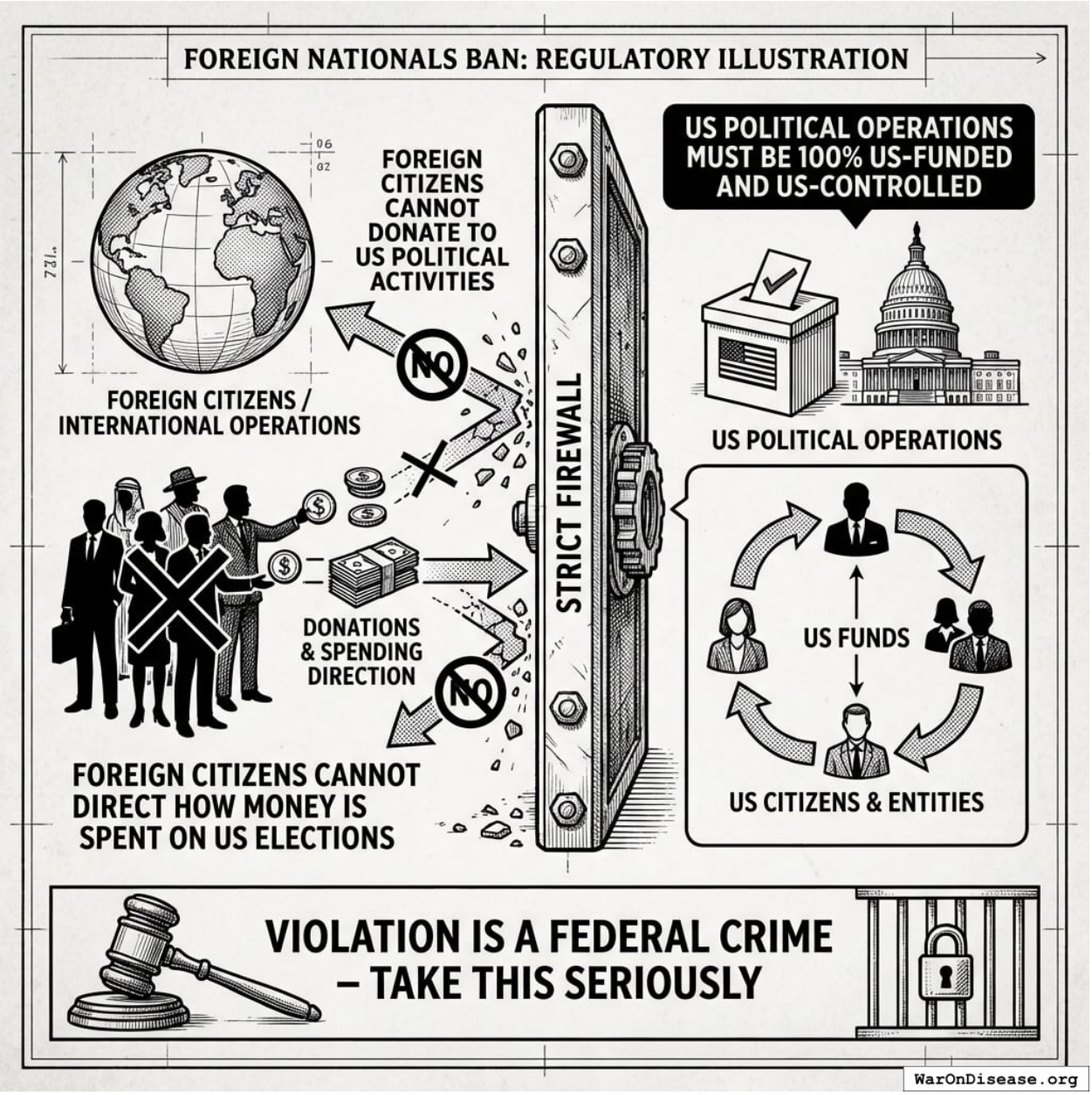


Figure 601: A conceptual diagram showing a strict firewall separating international operations from US political activities, emphasizing that US operations must be exclusively US-funded and controlled.

- Foreign citizens cannot donate to US political activities
- Foreign citizens cannot direct how money is spent on US elections
- Strict firewall required between international and US operations
- US political operations must be 100% US-funded and US-controlled
- Violation is a federal crime - take this seriously

Treaty Promotion



Figure 602: A workflow diagram showing the compliance steps for international treaty promotion, moving from identifying legal complexity to conducting jurisdictional analysis and finally consulting with election law experts.

- International treaty promotion is complex legally
- Requires separate legal analysis for each jurisdiction
- Consult with election law experts before any international spending

The Victory Conditions

Phase 1: Create Fear (Months 1-6)

- $30M (95% CI: $21M-$39M) in attack ads (Phase 1)
- Target 10 key opponents
- 3-5 lose primaries
- Rest get message

Phase 2: Offer Carrots (Months 7-12)

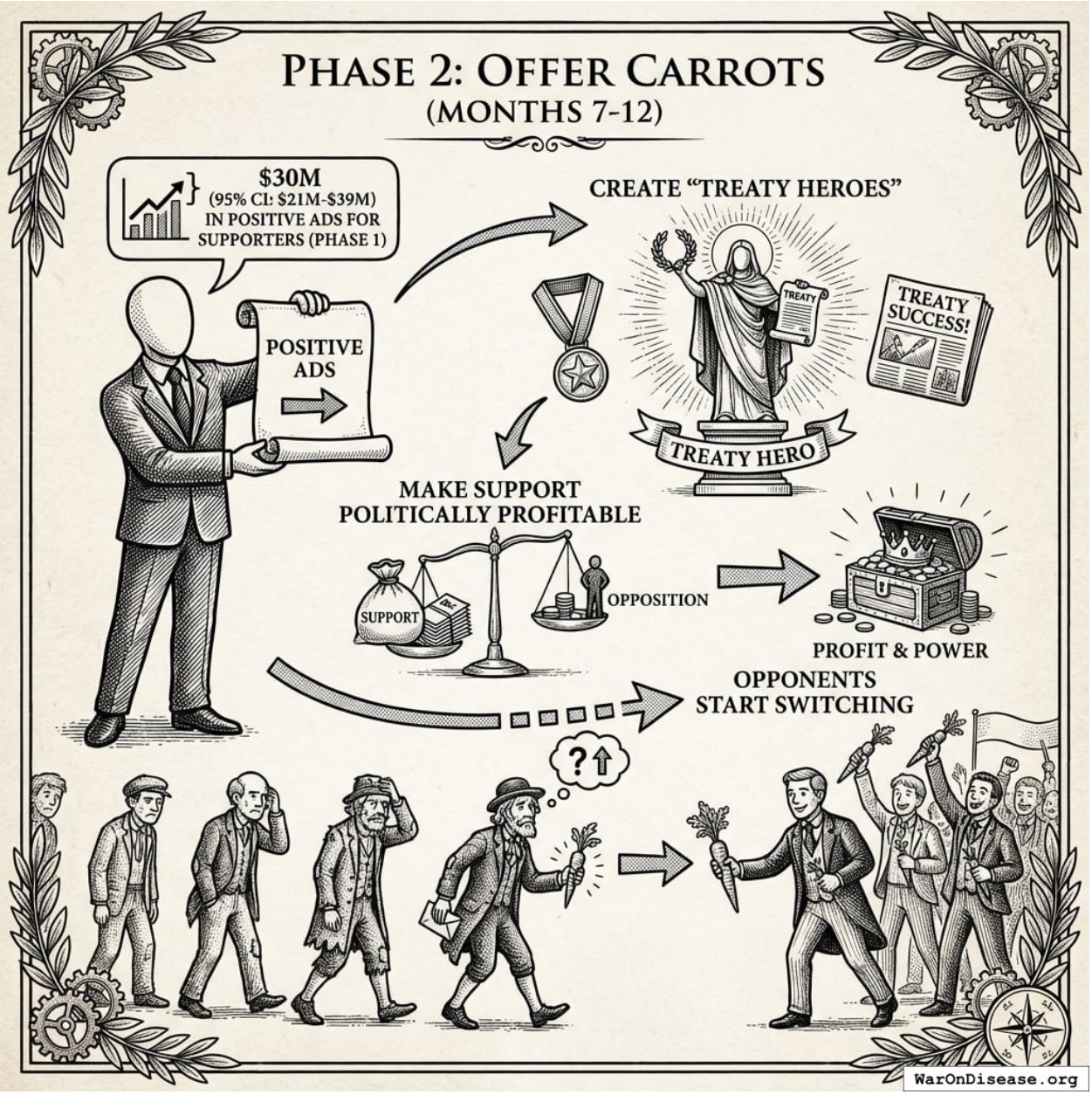


Figure 603: A flowchart showing the Phase 2 strategy where 30M USD in positive advertising converts supporters into 'treaty heroes,' creating political profit that triggers opponents to switch sides.

- $30M (95% CI: $21M-$39M) in positive ads for supporters (Phase 1)
- Create “treaty heroes”
- Make support politically profitable
- Opponents start switching

Phase 3: Ensure Victory (Months 13-18)

- Surge for final push
- Overwhelming force in key states
- Make opposition political suicide
- Treaty passes with 70%+ support

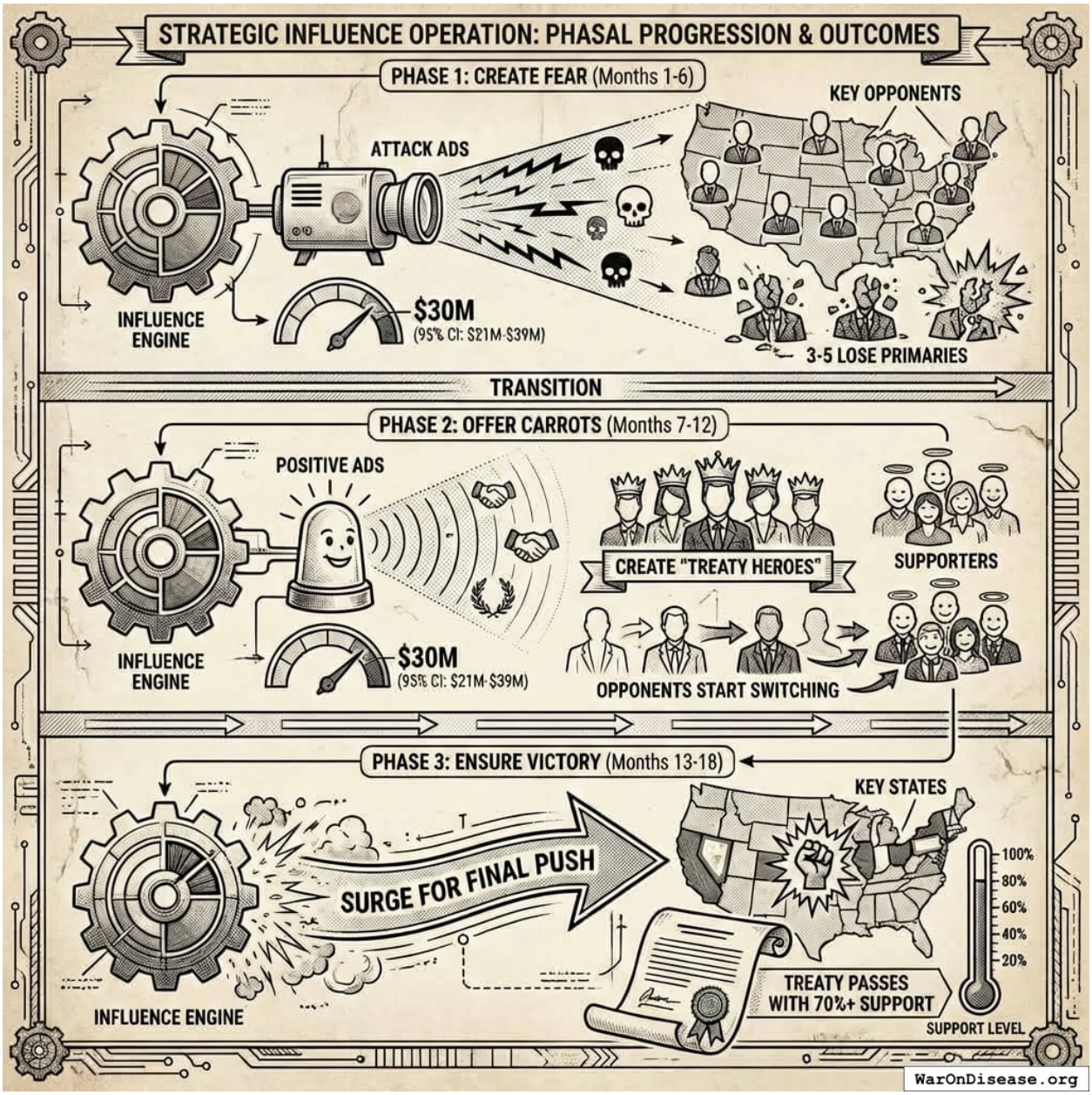


Figure 604: Eighteen-month strategic roadmap detailing the progression from attack ads to support campaigns, including budget allocation and success metrics per phase.

Conclusion: Democracy as Designed

You're not corrupting democracy - you're using it exactly as the Supreme Court intended. Every technique here is legal. Every dollar spent is protected speech. Every politician destroyed chose their fate.

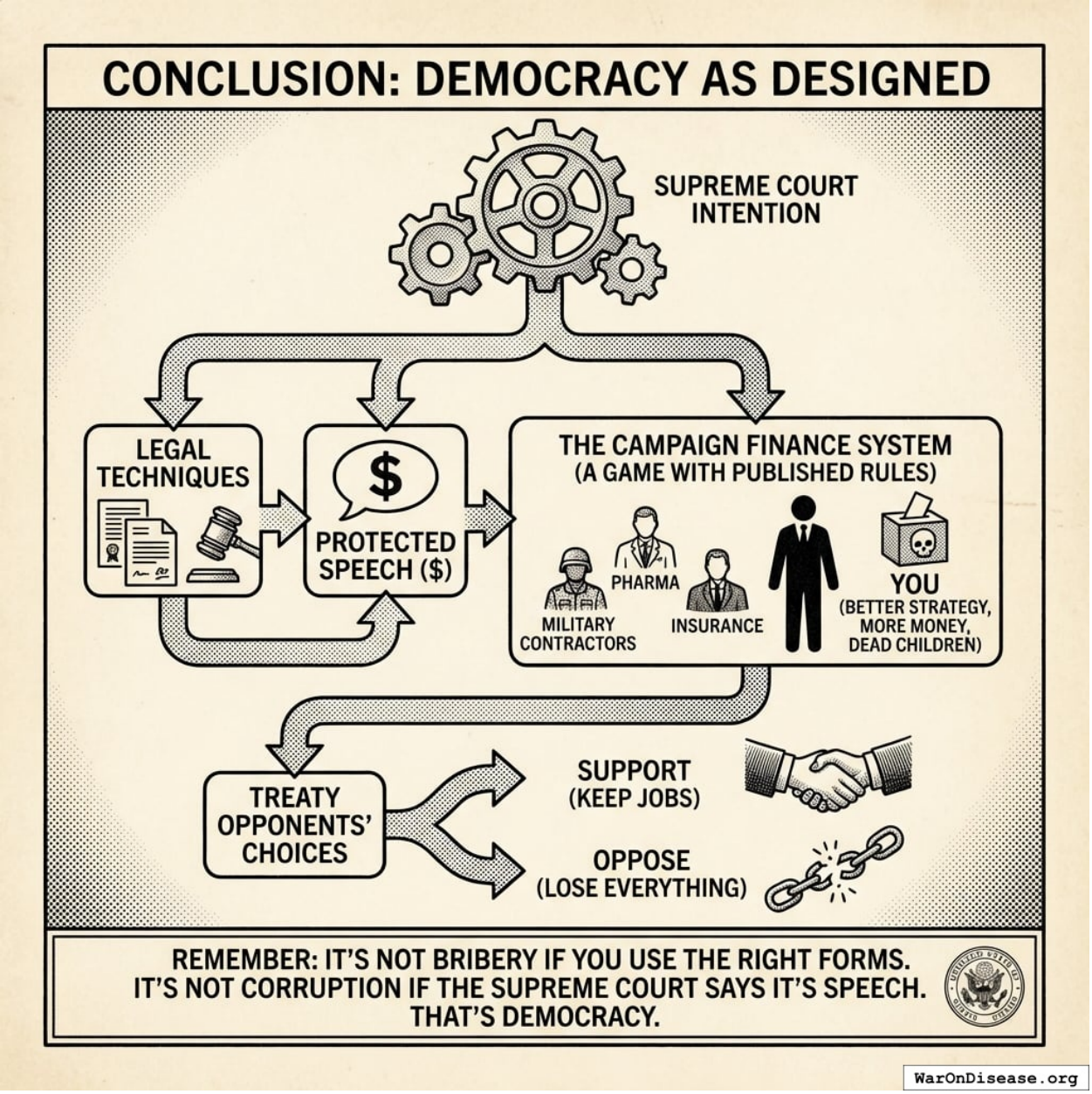


Figure 605: A conceptual diagram illustrating the 'rules of the game' in campaign finance, showing how capital and strategy flow through legal protections to influence political survival.

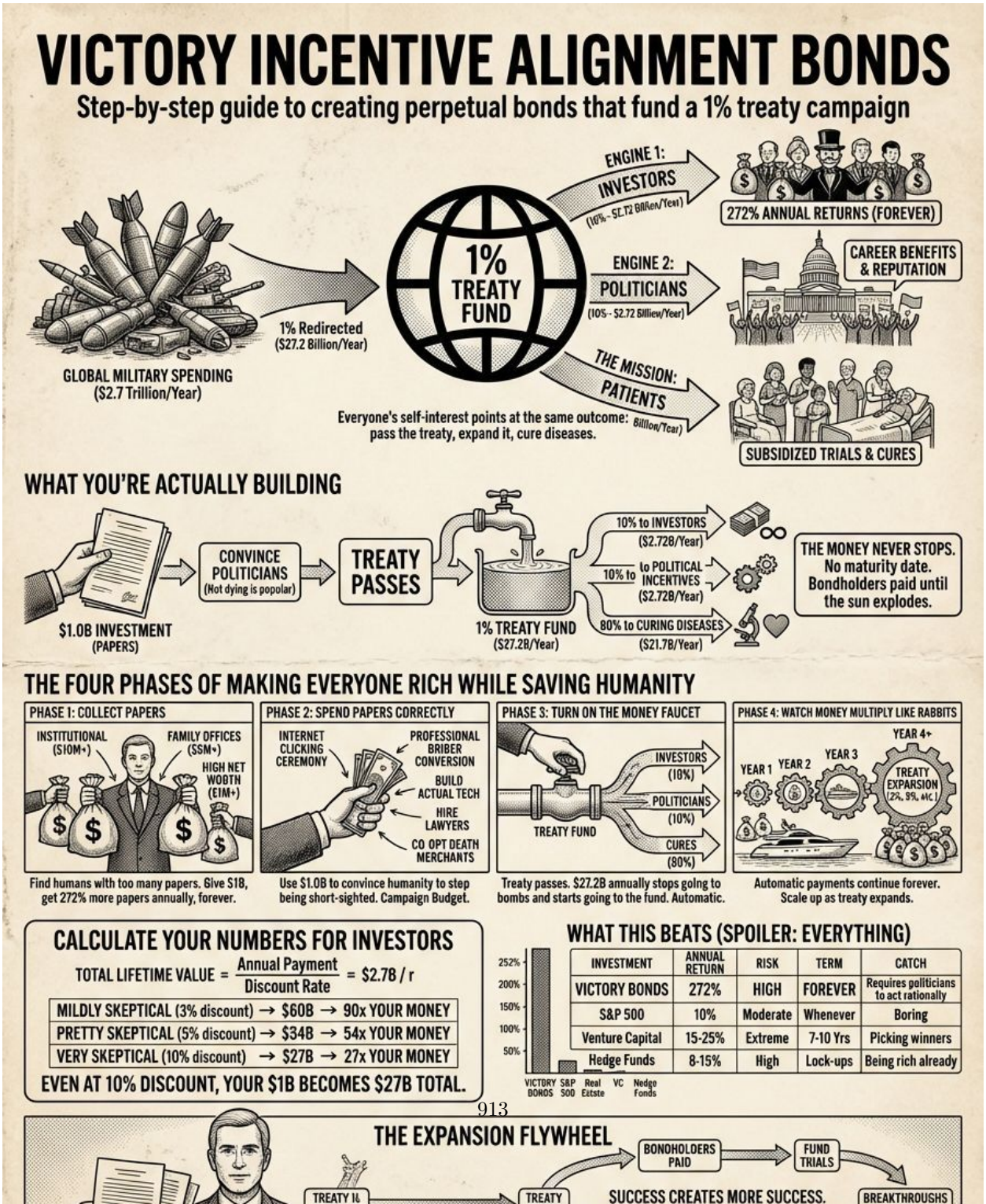
The campaign finance system is a game with published rules. The current players (military contractors, pharma, insurance) have been winning for decades. You're just better at the game. You have more money, better strategy, and most importantly - dead children on your side.

Remember: It's not bribery if you use the right forms. It's not corruption if the Supreme Court says it's speech. And it's not illegal if everyone else is doing it too.

The treaty opponents have two choices: Support you and keep their jobs, or oppose you and lose everything. That's not a threat. That's democracy.

> **Legal Notice**
>
> This chapter describes legal campaign finance activities under current US law. Consult with election lawyers before implementing. Laws change, enforcement varies, and what's technically legal might still look terrible in headlines. Always hire excellent lawyers.

VICTORY Incentive Alignment Bonds



Related: IAB Mechanism Design | Academic Paper

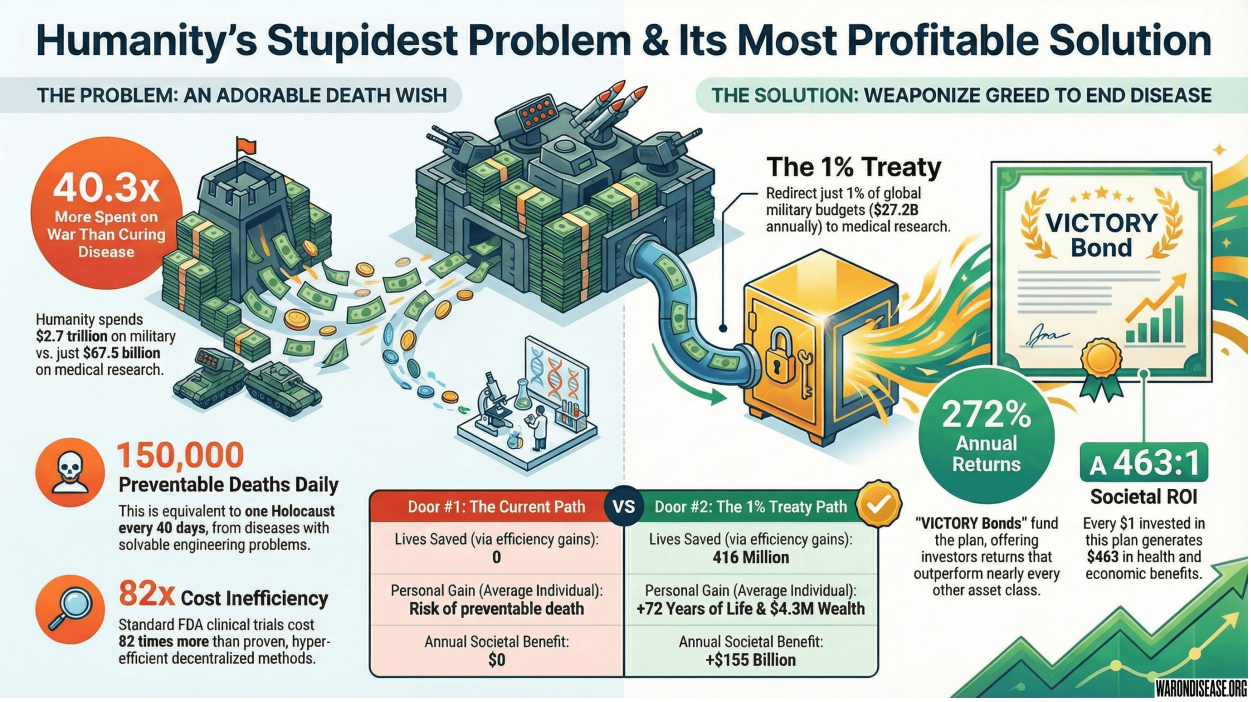


Figure 606: VICTORY Bonds and 1 percent Treaty

Remember when your grandparents funded WW2 by buying war bonds? They gave the government papers with dead presidents on them, got back slightly more papers later, and defeated fascism. Good times.

You're doing the same thing, except instead of buying bonds to kill Nazis, you're buying bonds to kill diseases. It's like war bonds but backwards.

i VICTORY Incentive Alignment Bonds

Incentive Alignment Bonds (IABs) are financial instruments that pay out when measurable public-good outcomes improve, translating those outcomes into benefits for the people who made them happen. **VICTORY Incentive Alignment Bonds are the specific implementation** designed to fund and sustain the 1% treaty. They contain two distinct "engines" in a single instrument:

Component	Who It Incentivizes	What They Get	Funding Source
Engine 1	**Investors**	272% annual returns	10% of treaty revenue
Engine 2	**Politicians**	Reputation, electoral support, better careers	10% of treaty revenue
The Mission	**Patients**	Subsidized trial participation, cures	80% of treaty revenue

Investors fund the campaign. Politicians get career benefits for supporting it. Patients get cures. Everyone's self-interest points at the same outcome: pass the treaty, expand it, cure diseases.

What You're Actually Building

A financial instrument that generates massive returns while accidentally curing diseases as a side effect:

- Collect $1B in papers from rich humans who like more papers
- Use those papers to convince politicians that not dying is popular
- Once the treaty passes, $27.2B in papers annually stops going to bombs and starts going to a 1% Treaty Fund
- Give the rich humans 10% of that ($2.72B) every year, forever
- Reserve 10% ($2.72B) for political incentive mechanisms that keep politicians aligned
- Use the remaining 80% ($21.8B) to cure the diseases actually killing people

What you're offering investors: 272% annual returns, which beats everything except insider trading and certain federal crimes

The money never stops. No maturity date means bondholders get paid until the sun explodes or humanity achieves immortality, whichever happens first (probably the immortality thing)

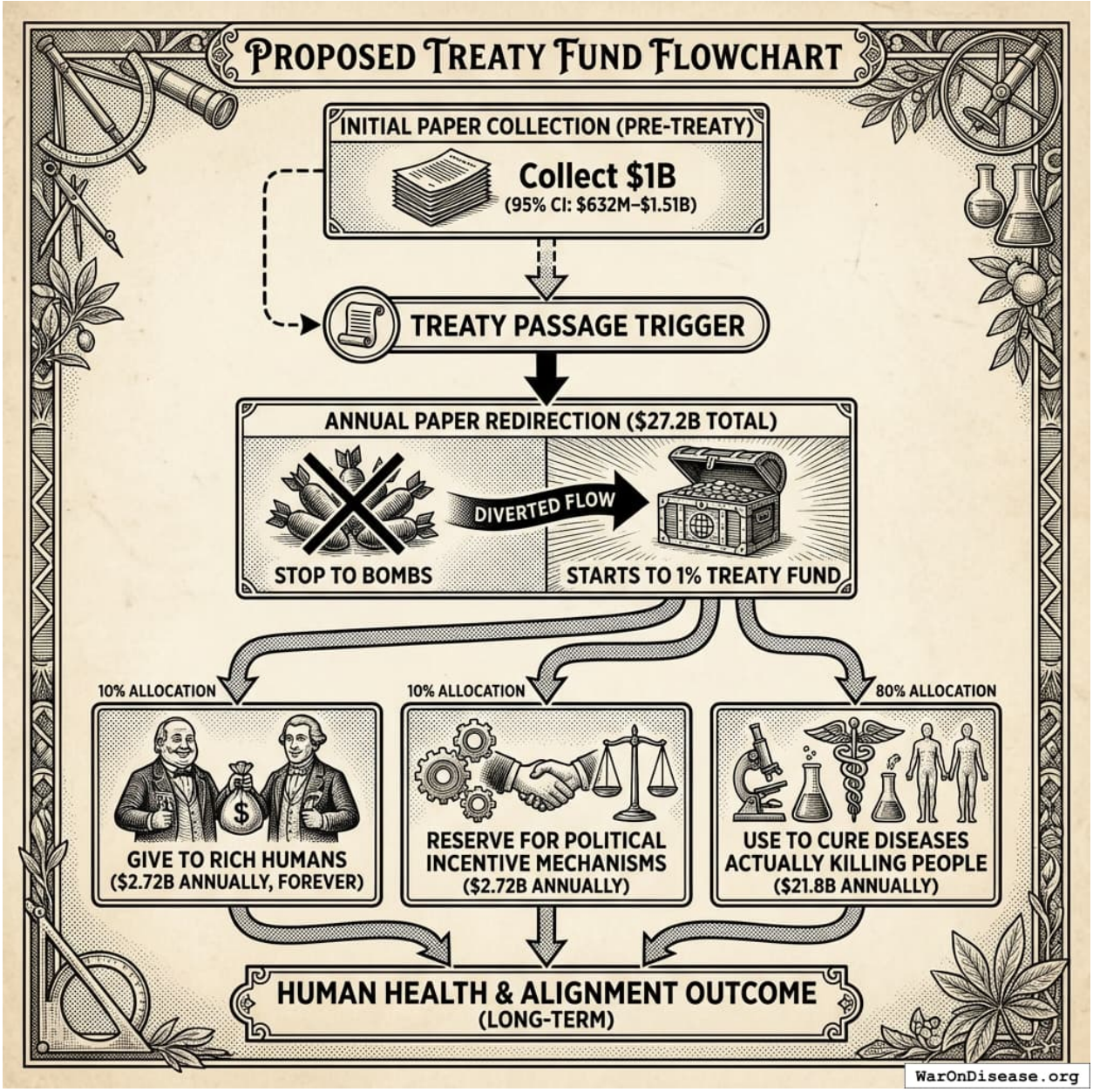


Figure 607: Flow of funds showing the conversion of initial investment into perpetual treaty revenue and its tri-fold distribution.

The Four Phases of Making Everyone Rich While Saving Humanity

Phase 1: Collect Papers From People With Too Many Papers

Find humans who have more papers than they need and convince them to give you $1B worth.

Who has that many papers

- Institutional investors ($10M+ each) - pension funds, endowments, people managing other people's papers
- Family offices ($5M+ each) - rich families who hired someone to watch their paper piles

- High net worth individuals ($1M+ each) - people who got lucky/smart/criminal and have extra papers
- Qualified investors ($100K+ each) - regular rich people

You explain to them: "Give me papers now, get back 272% more papers annually, forever."

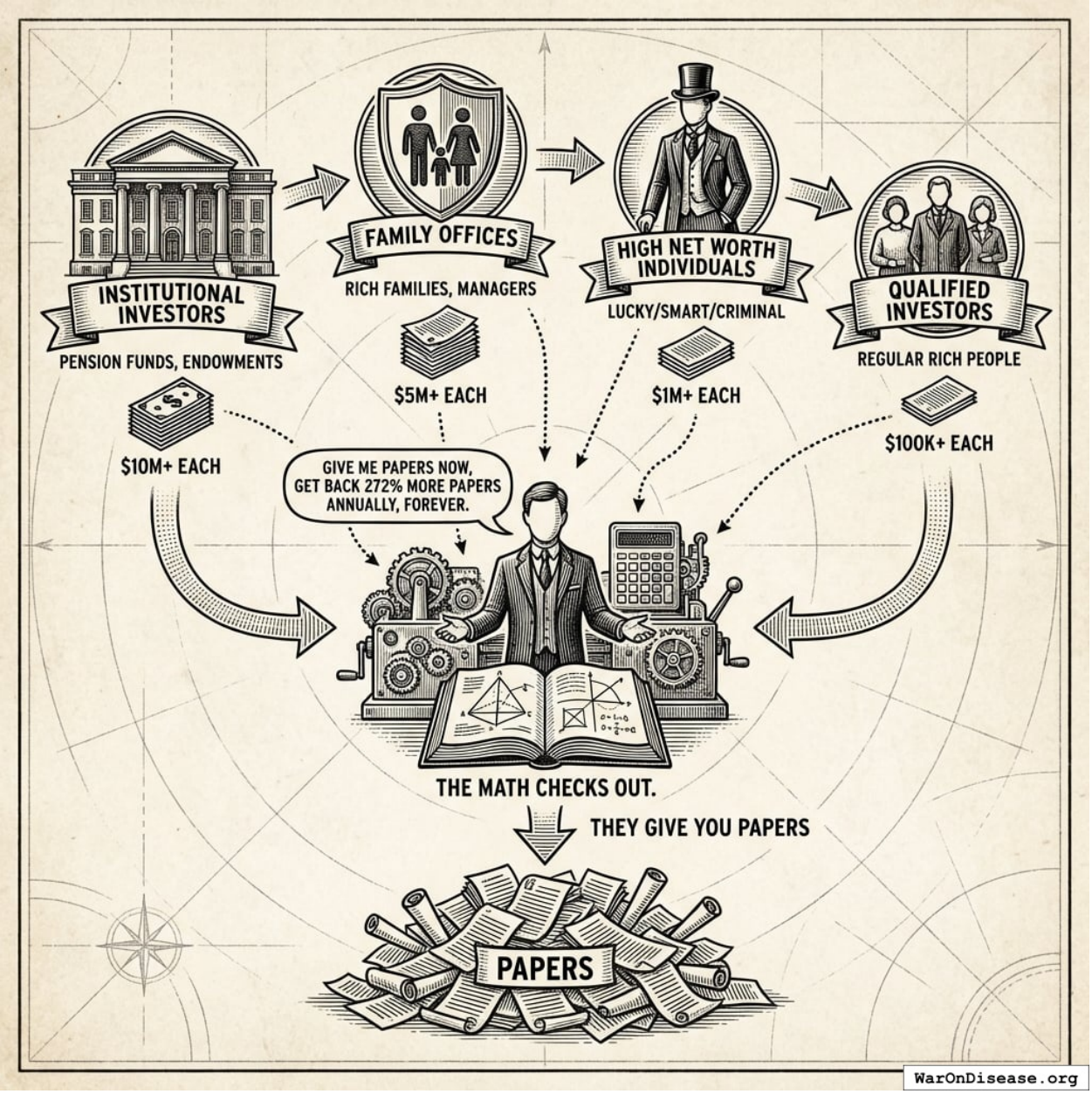


Figure 608: A hierarchy of investor tiers categorized by capital capacity, alongside a flowchart illustrating the pitch and investment exchange process.

They'll check the math. The math checks out. They give you papers.

Phase 2: Spend the Papers Correctly

Use the $1B according to the Campaign Budget to convince humanity to stop being short-sighted:

- **Internet clicking ceremony** - Get 280M humans to click "yes I would prefer not to die" ($250M)

- **Professional briber conversion** - Show lobbyists that curing is more profitable than killing ($650M)
- **Build the actual tech** - a decentralized framework for drug assessment (dFDA) and Wishocracy platforms ($180M)
- **Hire lawyers** - Make bribery legal by calling it other things ($100M)
- **Co-opt death merchants** - Convince military contractors that 272% beats 8% ($150M)
- **Run the thing** - Pay humans to coordinate the paper distribution ($170M)

For the complete breakdown of where every paper goes, see Campaign Budget.

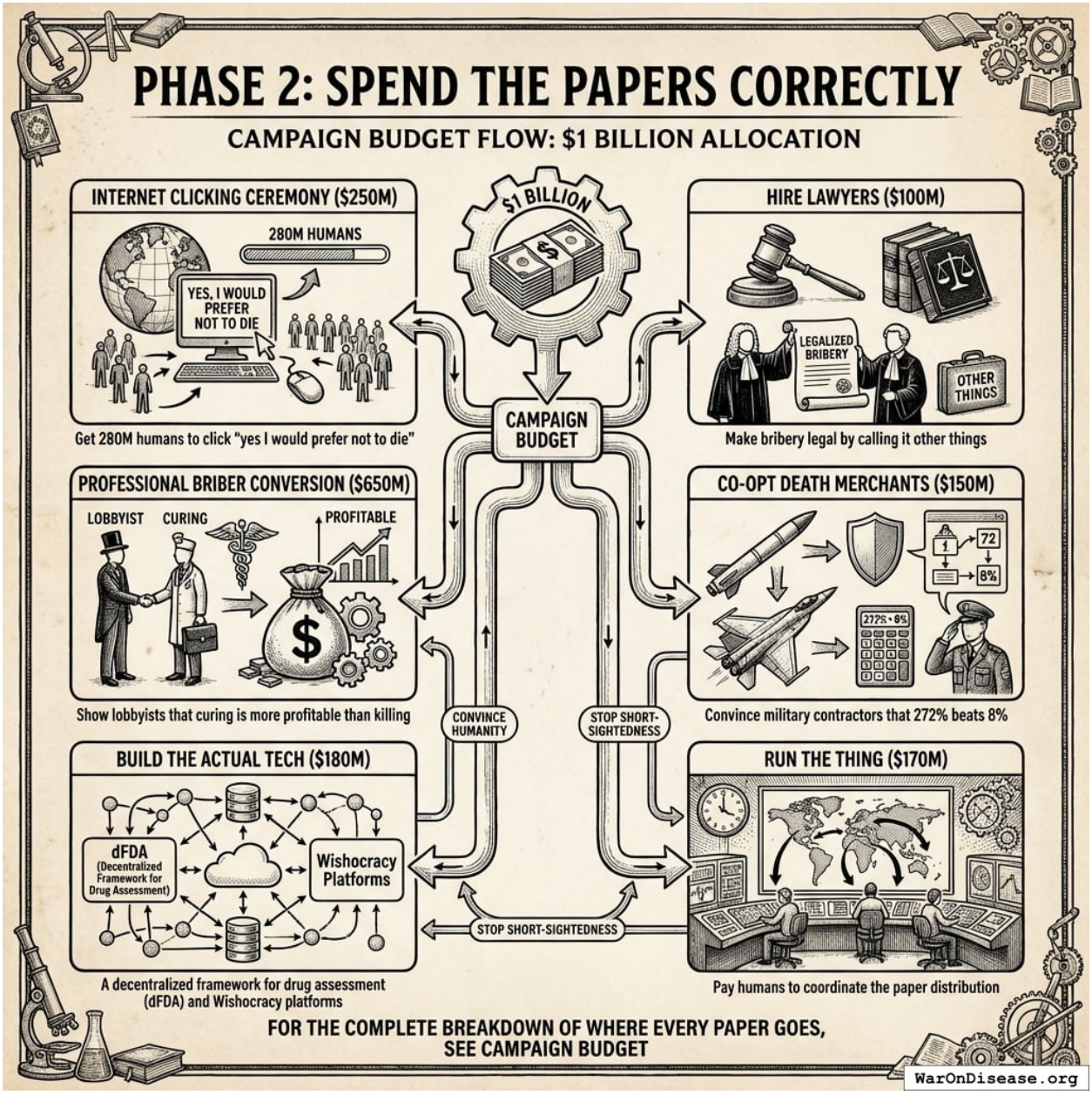


Figure 609: A strategic breakdown of the campaign budget, visualizing how funds are distributed across public engagement, lobbying, infrastructure, and legal frameworks to achieve the campaign's goals.

Phase 3: Turn On the Money Faucet

The treaty passes because you gave the right papers to the right humans in the right order. Now the magic happens:

- $27.2B annually stops going to bombs and starts going to the 1% Treaty Fund (automatic, no takebacks)
- 10% ($2.72B) automatically goes to bondholders (they get paid first, before anyone can steal it)
- 10% ($2.72B) automatically funds political incentive mechanisms (keeps politicians aligned with curing diseases)
- 80% ($21.8B) automatically goes to curing the diseases actually killing people

Nobody has to vote on this again. The funding is automatic. The papers just flow, forever, like a river made of money.

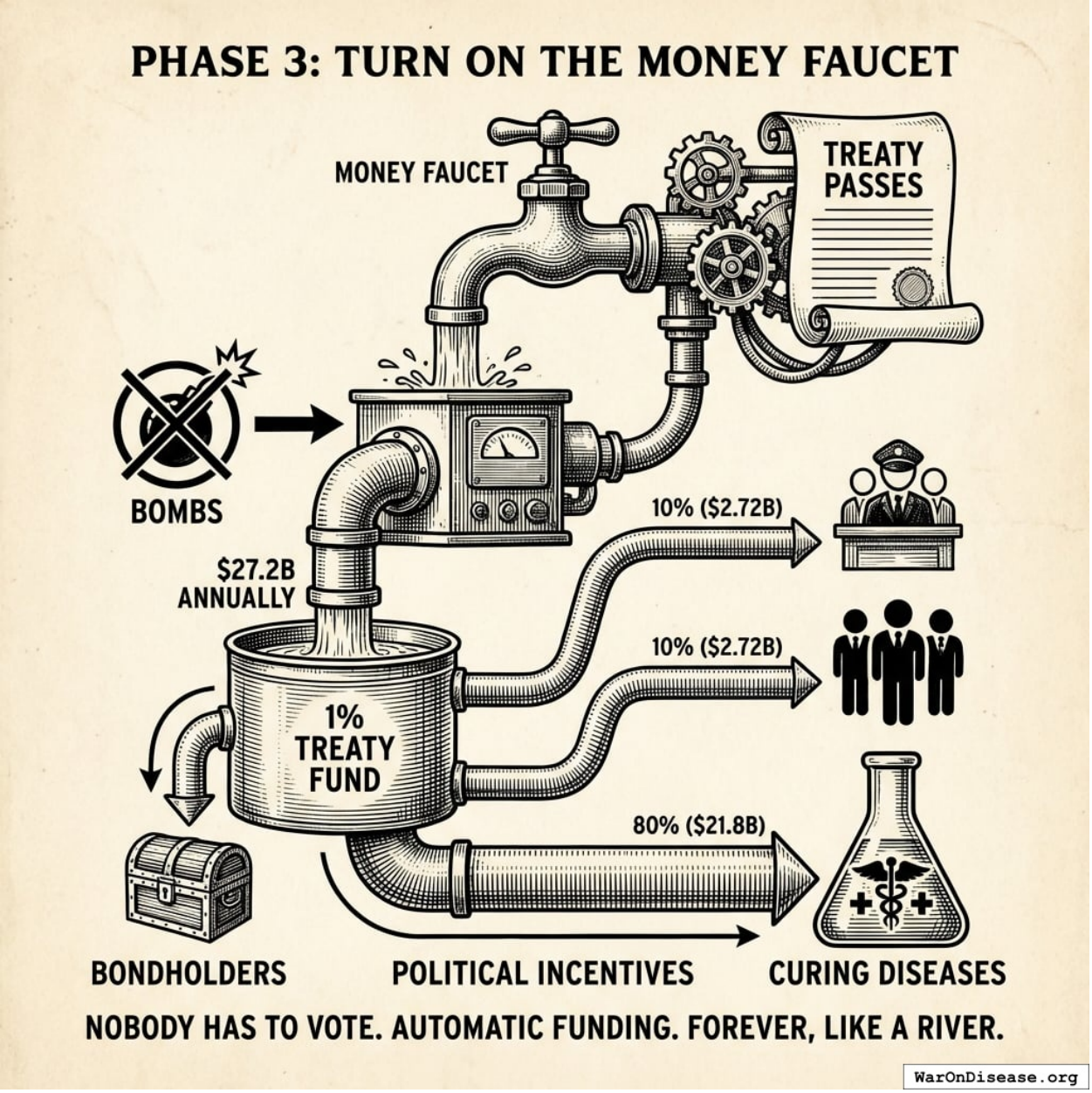


Figure 610: A flow diagram showing the distribution of 27.2B in annual treaty funding into three automated streams: bondholders (10 percent), political incentives (10 percent), and disease research (80 percent).

Phase 4: Watch Money Multiply Like Rabbits

Set up automatic payments that continue until the heat death of the universe:

- **Year 1**: $2.72B distributed to bondholders (272% returns, investors buying yachts)
- **Year 2**: $2.72B distributed to bondholders (still buying yachts)
- **Year 3**: $2.72B distributed to bondholders (yacht accessories now)
- **Year 4+**: Scale up as treaty expands (2% = $5.4B, 5% = $13.5B, etc.)

No maturity date means the money never stops. As long as the treaty exists, bondholders get paid. And the treaty will exist because repealing it means explaining to voters why you want grandma's cancer to stay uncured.

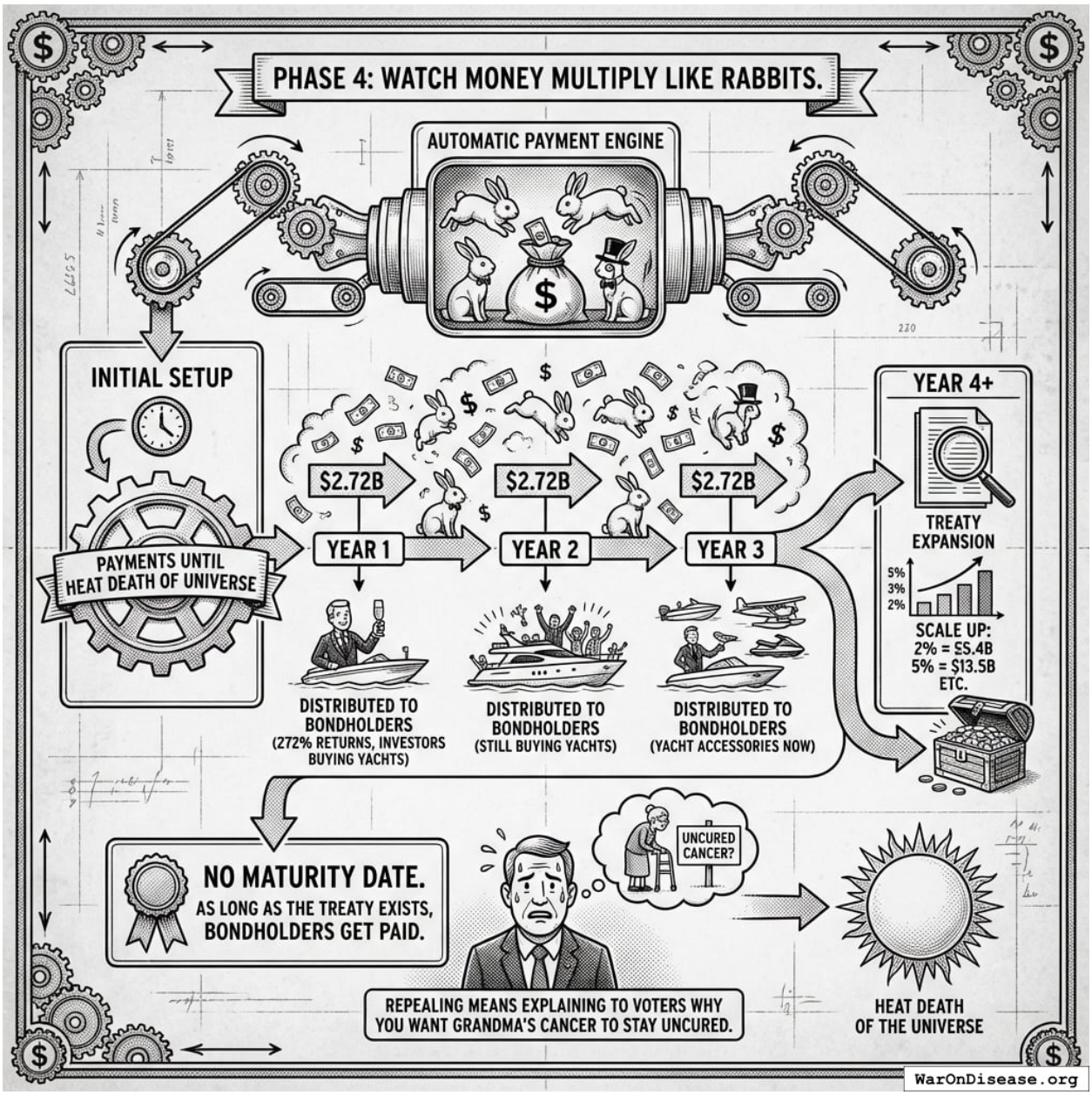


Figure 611: A timeline chart illustrating steady annual payouts of 2.72 billion in the early years, transitioning into an upward-sloping projection as the treaty scales up to 5 percent of savings.

Calculate Your Numbers for Investors

Show Them Where the Papers Come From

Current global spending on ending human life: \$2.72T/year

What 1% of that is: 1% = \$27.2B/year (enough to cure most diseases, apparently)

What bondholders get:

$$10\% \times \$27.2\text{B} = \$2.7\text{B/year}$$

What funds political incentives (keeps politicians aligned):

$$10\% \times \$27.2\text{B} = \$2.7\text{B/year}$$

What actually cures diseases:

$$80\% \times \$27.2\text{B} = \$21.7\text{B/year}$$

What countries still have for wars:

$$99\% \times \$2.7\text{T} = \$2.67\text{T}$$

This is important: Investors aren't "taking" money from sick people. 80% goes to cures. Bondholders get 10% for having the revolutionary idea of "what if we didn't all die?" and another 10% keeps politicians incentivized to maintain and expand the treaty.

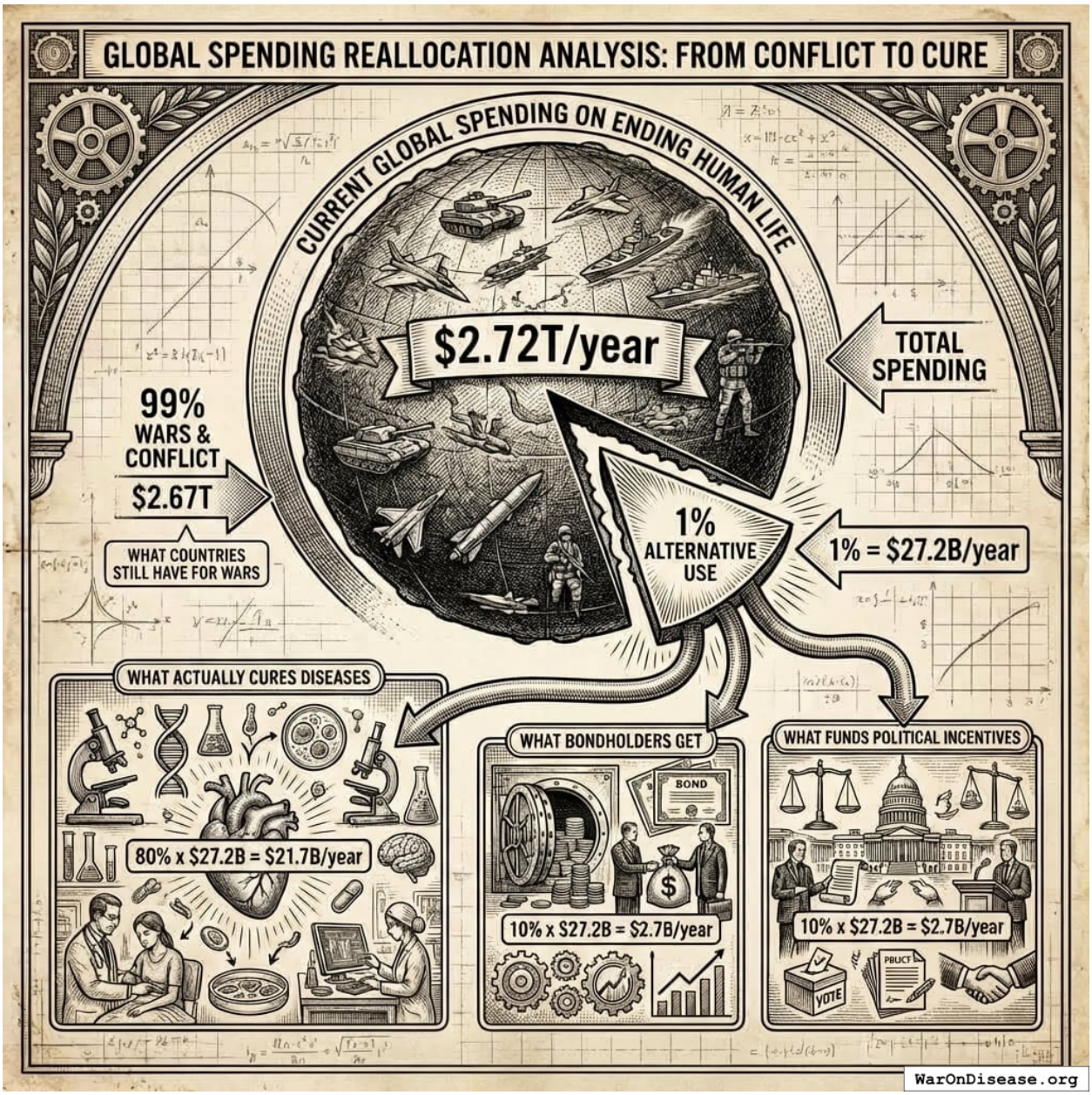


Figure 612: Sankey diagram illustrating the redirection of just 1 percent of global military spending into the three distinct funding streams.

When Math Becomes Obscene

Since VICTORY Incentive Alignment Bonds never mature (they just keep paying forever), you calculate lifetime value using the perpetuity formula, which is finance-speak for "money printer that never stops":

$$\text{Total Value} = \frac{\text{Annual Payment}}{\text{Discount Rate}} = \frac{\$2.7\text{B}}{r}$$

Even if you're extremely pessimistic

How Skeptical You Are	Total Lifetime Value	Your $1B Becomes
Mildly skeptical (3% discount)	$60B (95% CI: $50B-$75B)	90x your money
Pretty skeptical (5% discount)	$54B	54x your money
Very skeptical (10% discount)	$27B	27x your money

Even at 10% discount (which assumes this is as risky as funding a Mars casino), your $1B investment becomes worth $27.2B total.

Translation for those who prefer simple math:

- You give: $1B in papers
- You get: $54-90 billion equivalent in papers
- Time required: Wait for politicians to be politicians
- Effort required: Literally none after Phase 1

This isn't complicated math

- **Annual return**: 272% (which sounds fake but isn't)
- **Lifetime value**: 54-90x (which sounds impossible but is just arithmetic)

Unlike:

- Venture capital (3-5x over 7-10 years, requires picking winners)
- Real estate (2-3x over 30 years, requires being a landlord)
- Medallion Fund (39% annually but closed to mere mortals)

VICTORY Incentive Alignment Bonds offer perpetual returns that transform into generational wealth while you sleep.

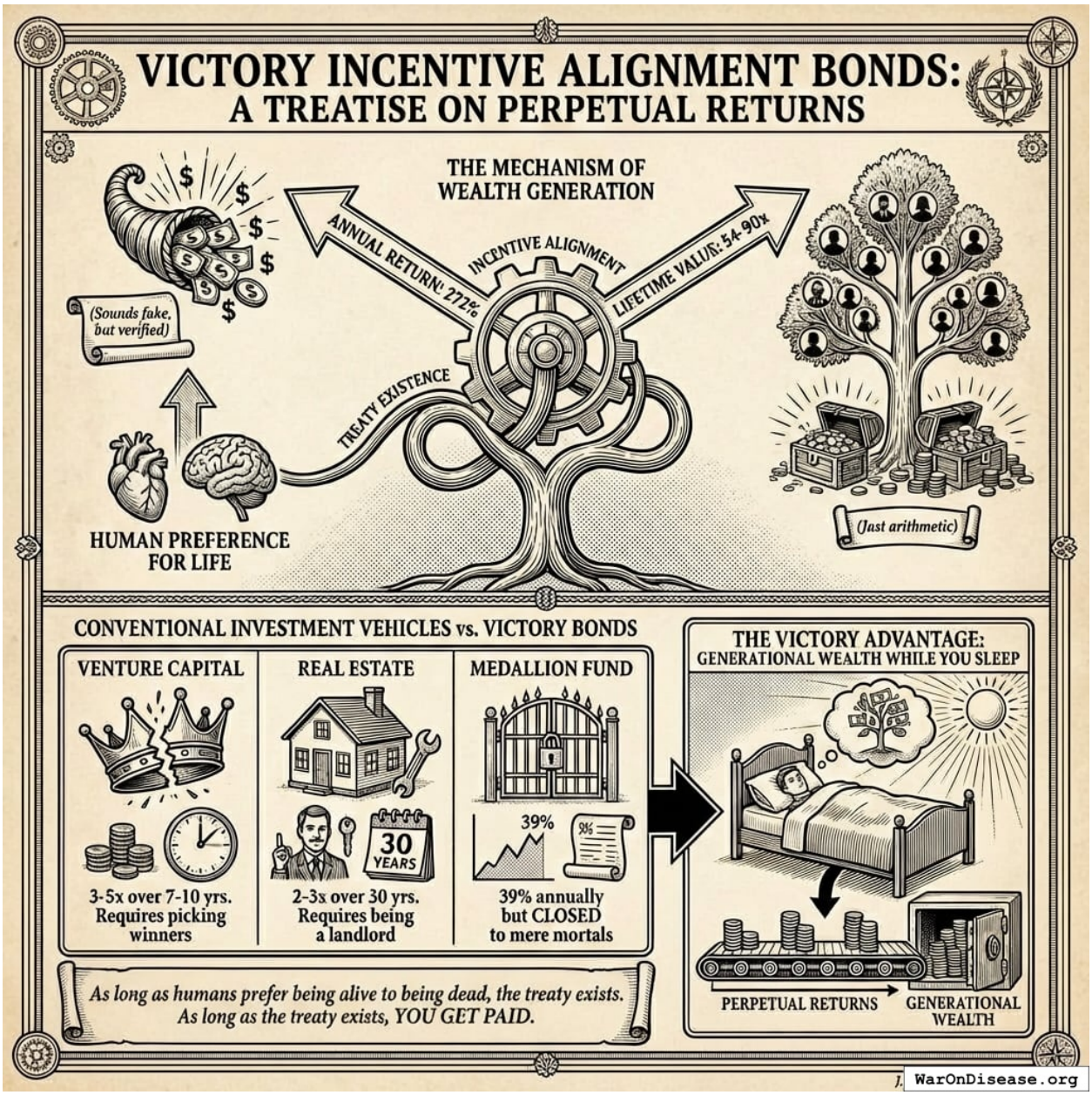


Figure 613: A comparative chart showing the annual returns and lifetime value of VICTORY Incentive Alignment Bonds against traditional investments like Venture Capital, Real Estate, and the Medallion Fund.

The perpetual nature isn't a bug. It's the entire point. As long as humans prefer being alive to being dead, the treaty exists. As long as the treaty exists, you get paid.

How Returns Scale From "Obscene" to "Is This Even Legal?"

The treaty starts at 1% (baby steps for humanity). As diseases get cured, voters demand more. Politicians, who are evolutionarily wired to avoid unemployment, comply.

Year	Treaty %	Annual Revenue	You Get Annually	ROI on Your $1B
1-3	1%	$27.2B	$2.72B	271.8%
4-7	2%	$54B	$5.4B	540%
8-10	5%	$135B	$13.5B	1,350%
10+	10%+	$270B+	$27B+	2,700%+

Why this actually happens

- **Years 1-3:** First diseases get cured. Media goes crazy. "IT WORKS!" Headlines everywhere.
- **Years 4-7:** More cures emerge. Politicians start noticing living voters really enjoy being alive.
- **Years 8-10:** Cancer becomes rare. Alzheimer's gets solved. Public demands acceleration.
- **Year 10+:** Politicians who oppose expansion lose to opponents who promise "I won't let your cancer come back."

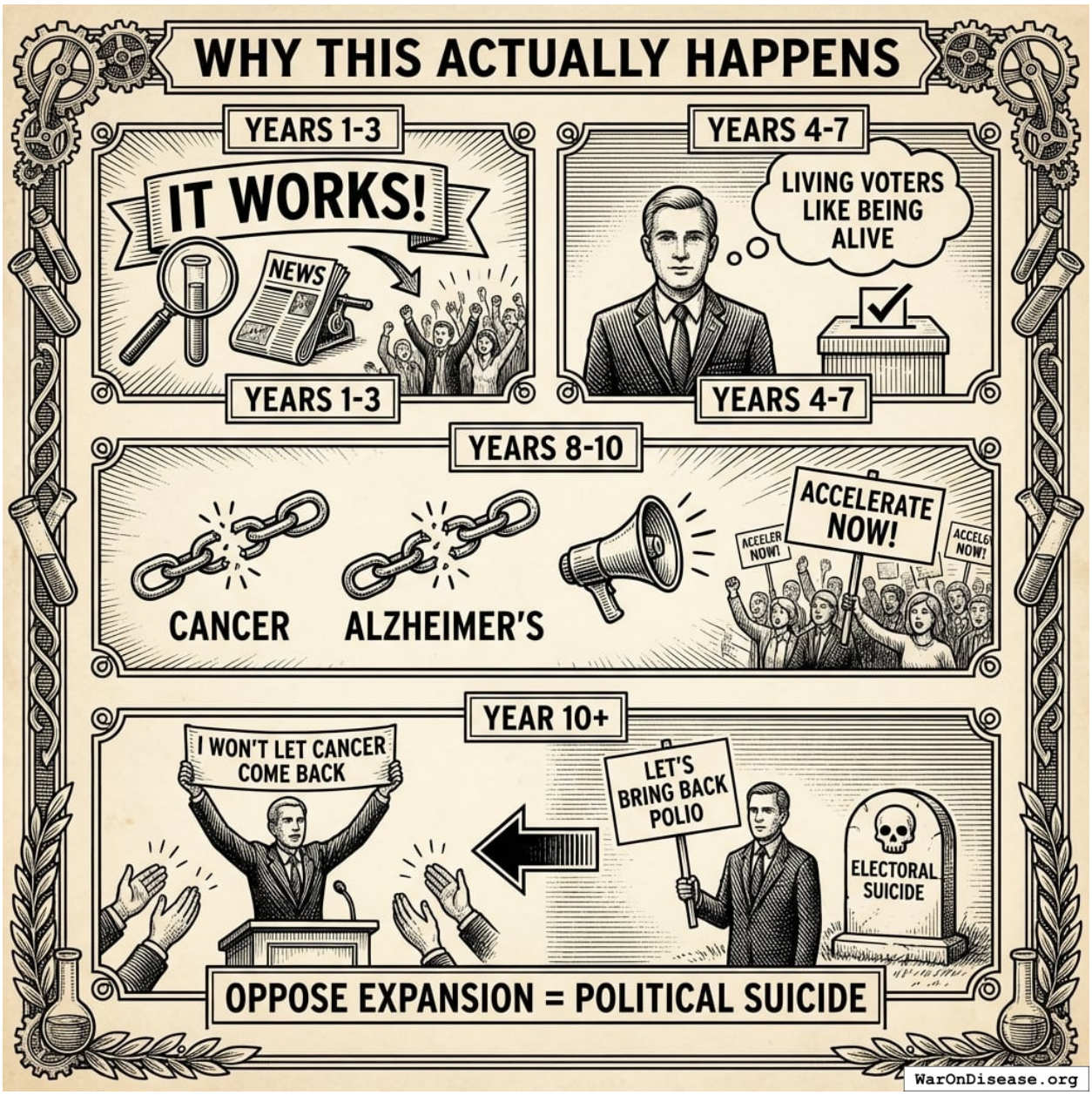


Figure 614: A timeline showing the progression from initial disease cures to a political landscape where opposing medical expansion becomes electorally impossible.

Frame it as: Electoral suicide to oppose expansion once cures exist. Like running on a platform of "Let's bring back polio."

Structure the Security Package

Give bondholders these five layers of security:

1. **$27.2B+ annual treaty revenue stream** (starts year 1 if treaty passes)
2. **Political entrenchment** (treaties are historically hard to repeal once implemented)
3. **Public support** (70%+ approval, grows with each cure)
4. **Aligned incentives** (everyone profits from cooperation)

5. **First-lien position** (bondholders get paid before any discretionary spending)

Explain to investors: Multiple layers of protection, not just one point of failure.

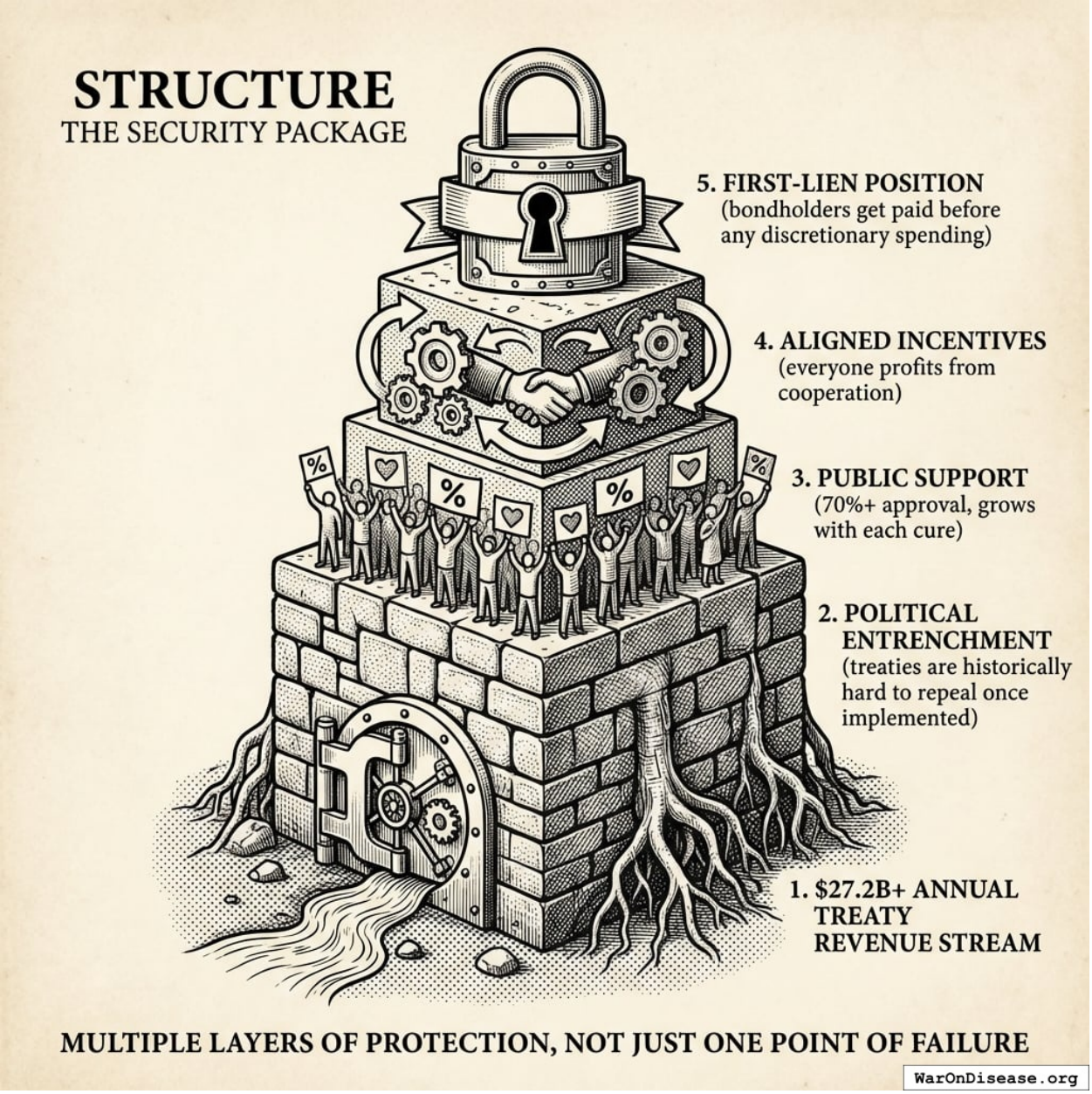


Figure 615: A visual representation of the 'Security Package' showing five stacked layers of protection, from revenue streams to first-lien positioning, protecting the bondholder's investment.

What Full Success Looks Like

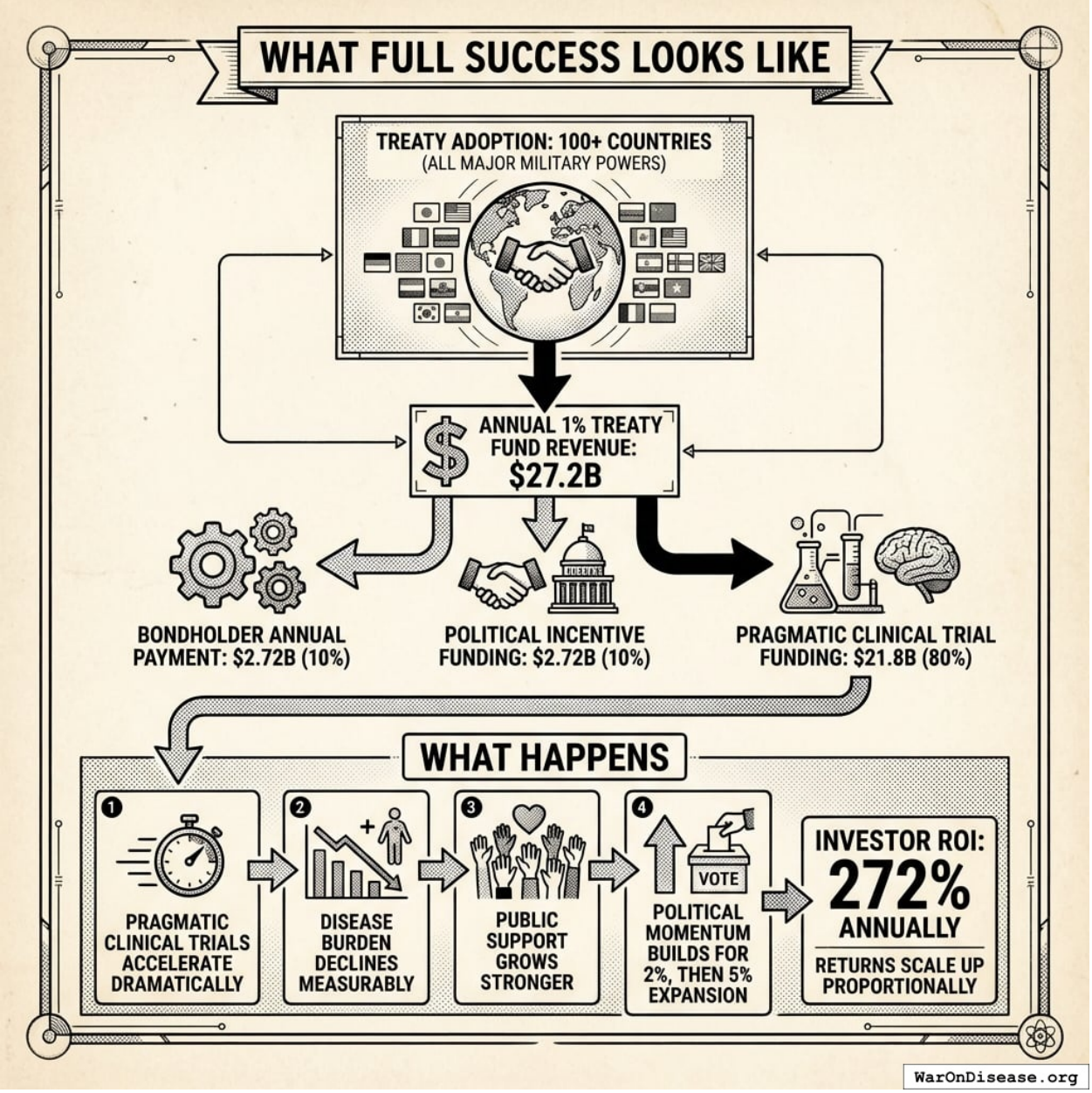


Figure 616: A breakdown of the 27.2B annual Treaty Fund revenue distribution showing the 80/10/10 allocation and the resulting virtuous cycle of clinical outcomes and political expansion.

Show investors what full treaty adoption delivers:

Treaty adoption: 100+ countries (all major military powers) **Annual 1% Treaty Fund revenue**: $27.2B **Bondholder annual payment**: $2.72B (10%) **Political incentive funding**: $2.72B (10%) **Pragmatic clinical trial funding**: $21.8B (80%) **Investor ROI**: 272% annually

What happens:

- Pragmatic clinical trials accelerate dramatically
- Disease burden declines measurably

- Public support grows stronger
- Political momentum builds for 2%, then 5% expansion
- Returns scale up proportionally

Explain the 80%/10%/10% Split

Structure the allocation to balance four goals:

1. **Attract sufficient capital**: 272% projected returns compete with high-risk VC/hedge funds (10% to investors)
2. **Keep politicians aligned**: 10% funds Incentive Alignment Bonds that make supporting the treaty career-optimal for politicians
3. **Fund the mission**: 80% ($21.8B) gives researchers substantial capital
4. **Align all incentives**: Investors, politicians, and researchers all profit from treaty expansion

Tell investors: Everyone wins when treaties grow. More cures = bigger treaties = higher returns + more political support + more funding for pragmatic clinical trials.

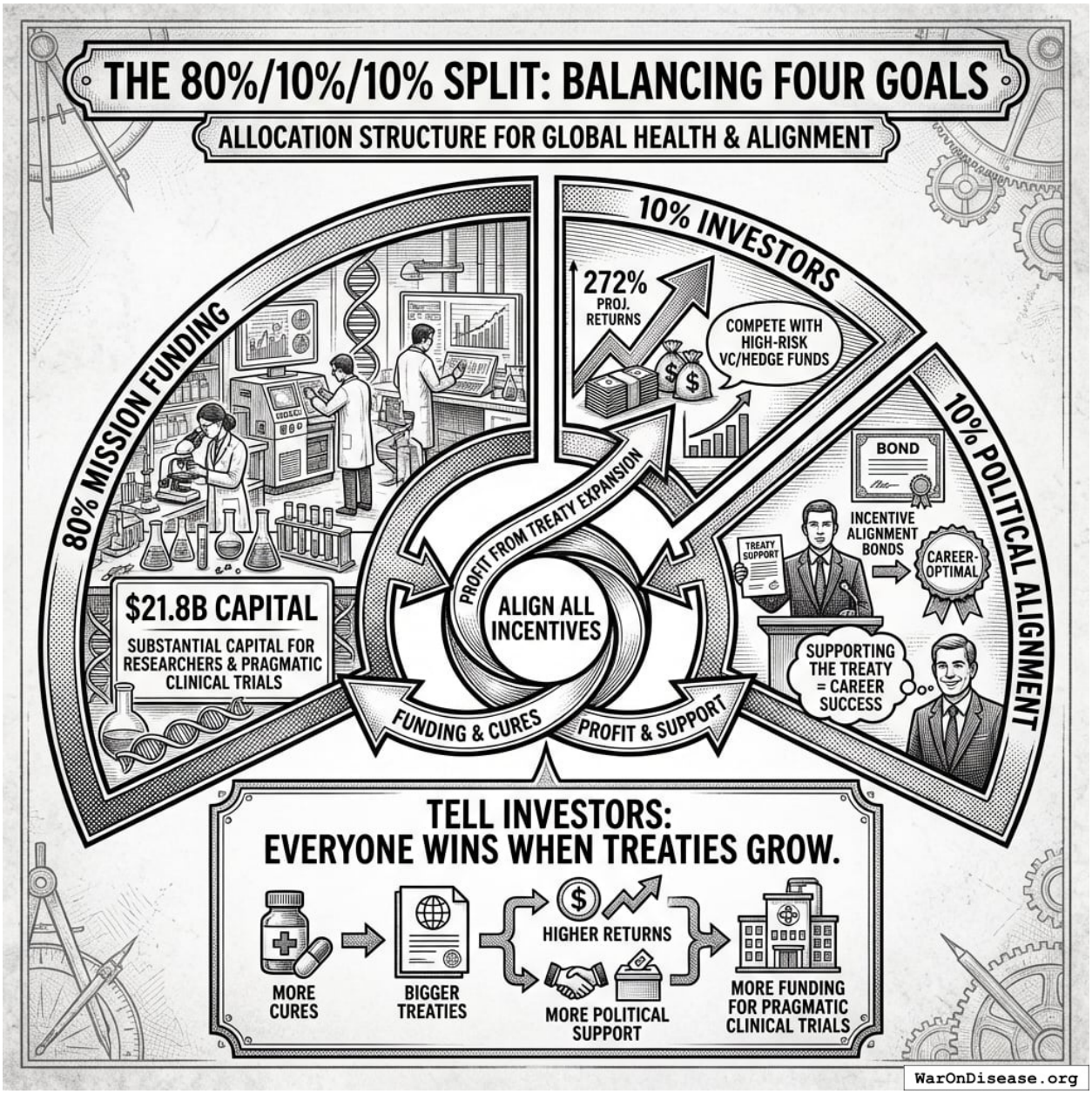


Figure 617: A breakdown of the 80/10/10 funding split, illustrating how capital is allocated across mission funding, political incentive alignment, and investor returns to create a self-reinforcing growth cycle.

Set Up the Legal Structure

The VICTORY Incentive Alignment Bonds are issued by **The Victory Corporation**, a for-profit Delaware C-Corp. This entity serves as the financial "Engine" of the entire operation, designed to attract for-profit capital to fund the political and social mission.

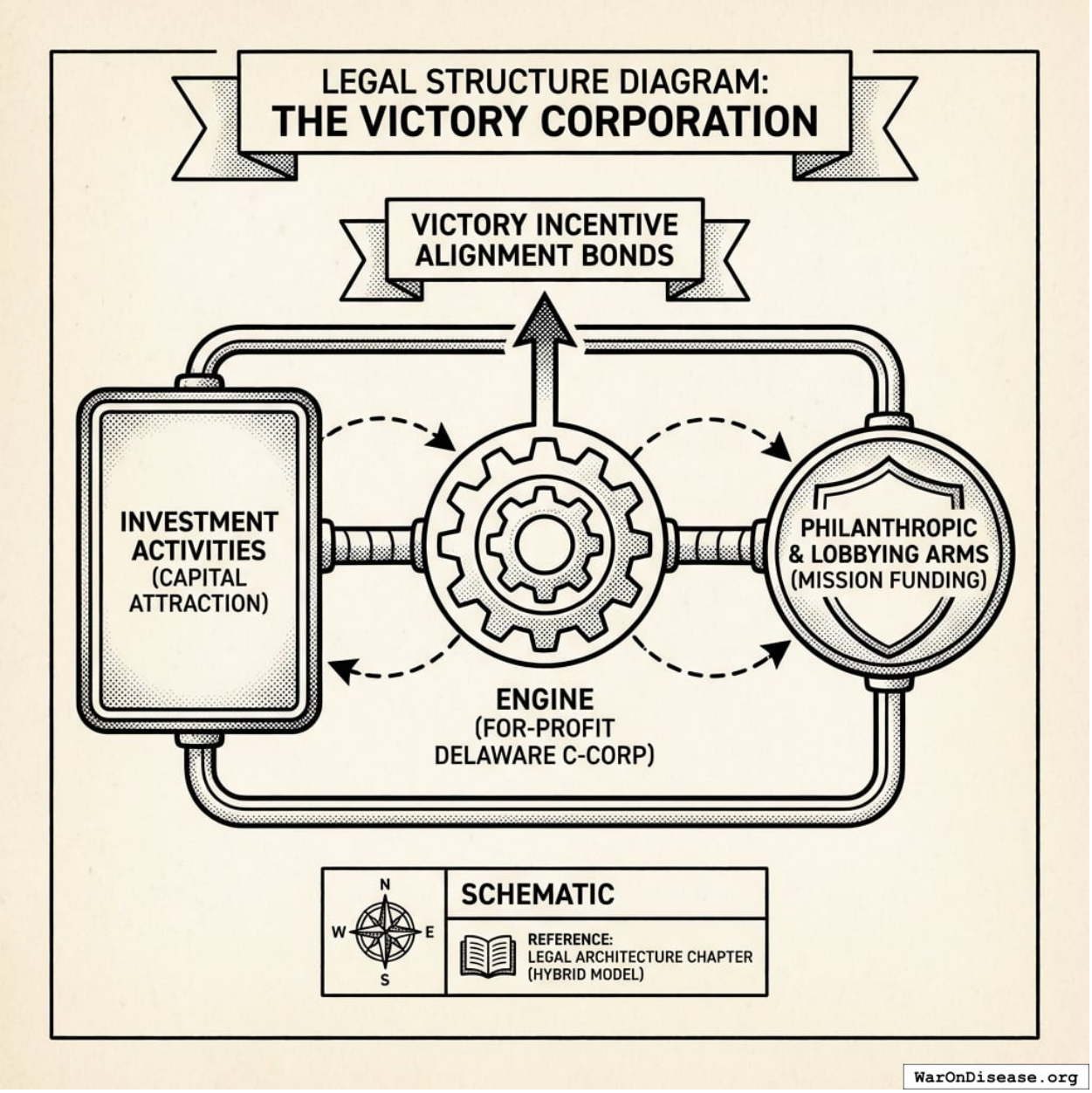


Figure 618: A diagram illustrating the Victory Corporation's role as the financial engine within a four-part hybrid legal model, separating for-profit investment from philanthropic and lobbying activities.

This structure legally separates the investment activities from the philanthropic and lobbying arms of the organization. For a complete breakdown of the four-part hybrid legal model, see the Legal Architecture chapter.

Structure the Bond Instrument

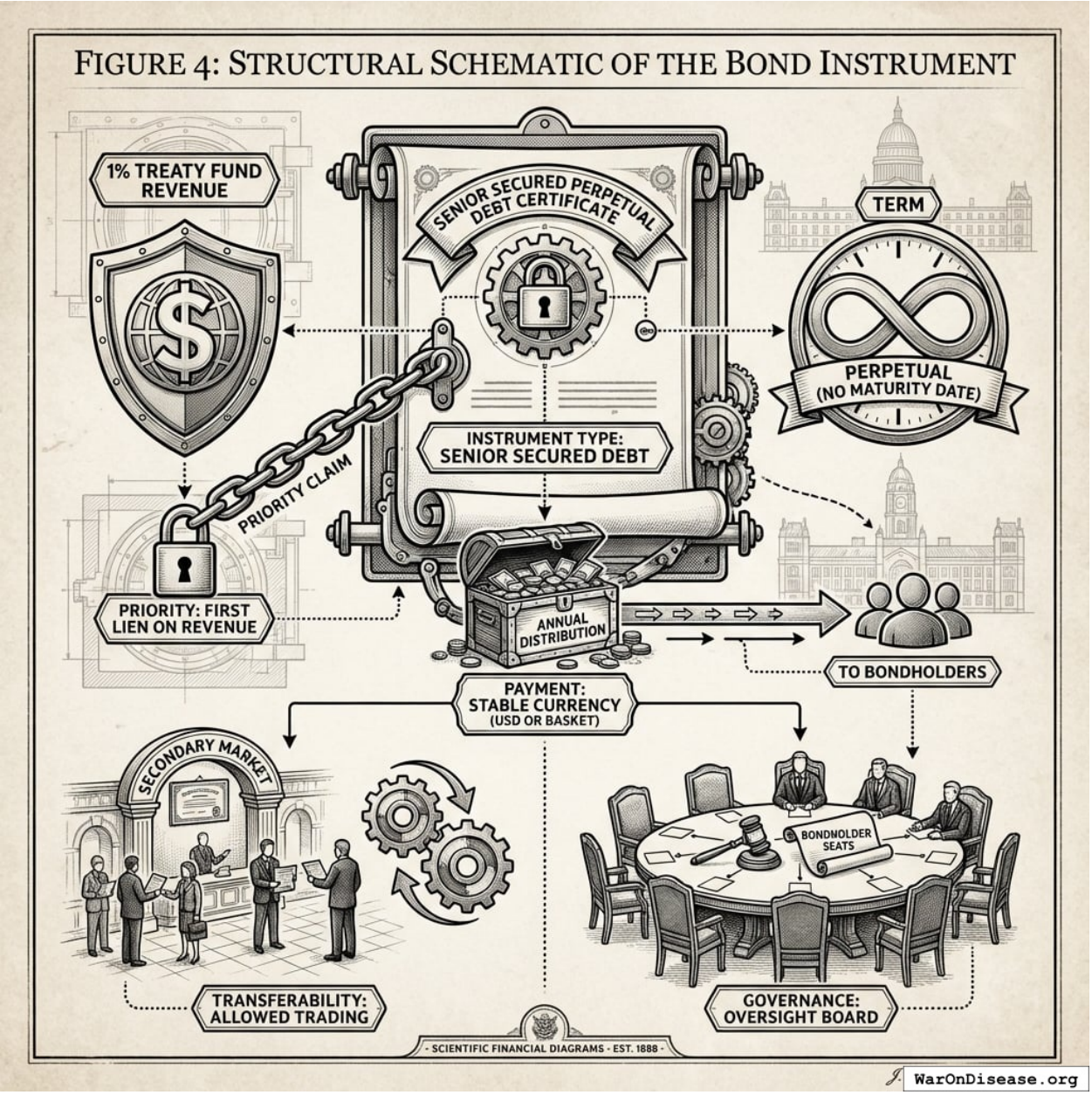


Figure 619: A structural diagram of the bond instrument showing the relationship between the 1 percent Treaty Fund revenue, the perpetual debt instrument, and the governance rights of the bondholders.

Instrument type: Create as senior secured debt

Priority: Give first lien on all 1% Treaty Fund revenue

Term: Make perpetual (no maturity date)

Payment: Set annual distributions in stable currency (USD or basket)

Transferability: Allow secondary market trading

Governance: Grant bondholder seats on the 1% Treaty Fund's oversight board

Create Milestone-Based Releases

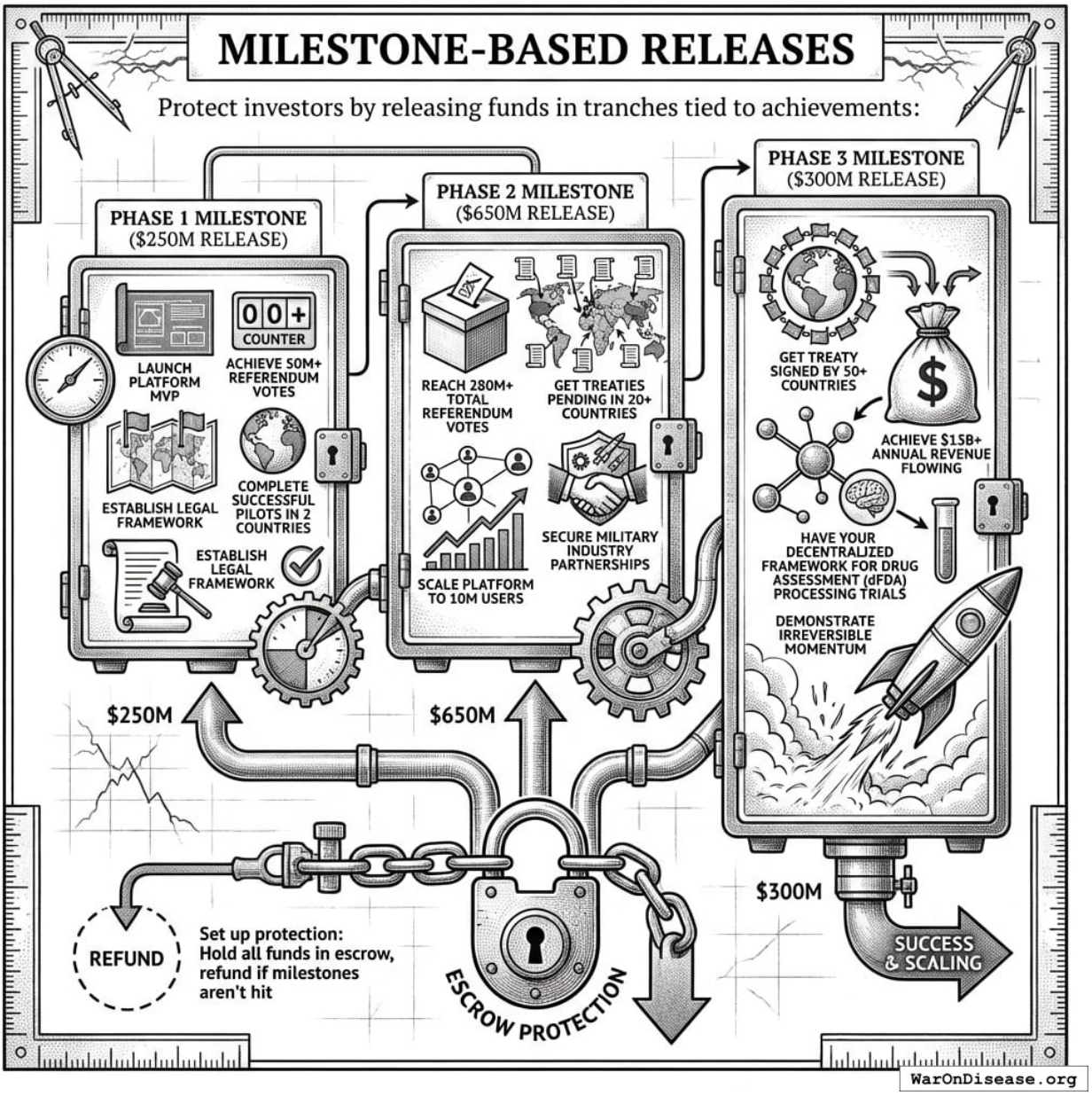


Figure 620: A timeline-based infographic showing the progression through three funding phases, highlighting the specific budget releases and key achievements required at each milestone.

Protect investors by releasing funds in tranches tied to achievements:

Phase 1 milestone ($250M release):

- Launch platform MVP
- Achieve 50M+ referendum votes
- Complete successful pilots in 2 countries
- Establish legal framework

Phase 2 milestone ($650M release):

- Reach 280M+ total referendum votes
- Get treaties pending in 20+ countries
- Scale platform to 10M users
- Secure military industry partnerships

Phase 3 milestone ($300M release):

- Get treaty signed by 50+ countries
- Achieve $13B+ annual revenue flowing
- Have your decentralized framework for drug assessment (dFDA) processing trials
- Demonstrate irreversible momentum

Set up protection: Hold all funds in escrow, refund if milestones aren't hit

Address Each Risk Category

The investment carries two primary types of risk: **Project Risks**, which are inherent to the success of the campaign, and **Investor-Specific Risks**, which relate to the nature of the financial instrument.

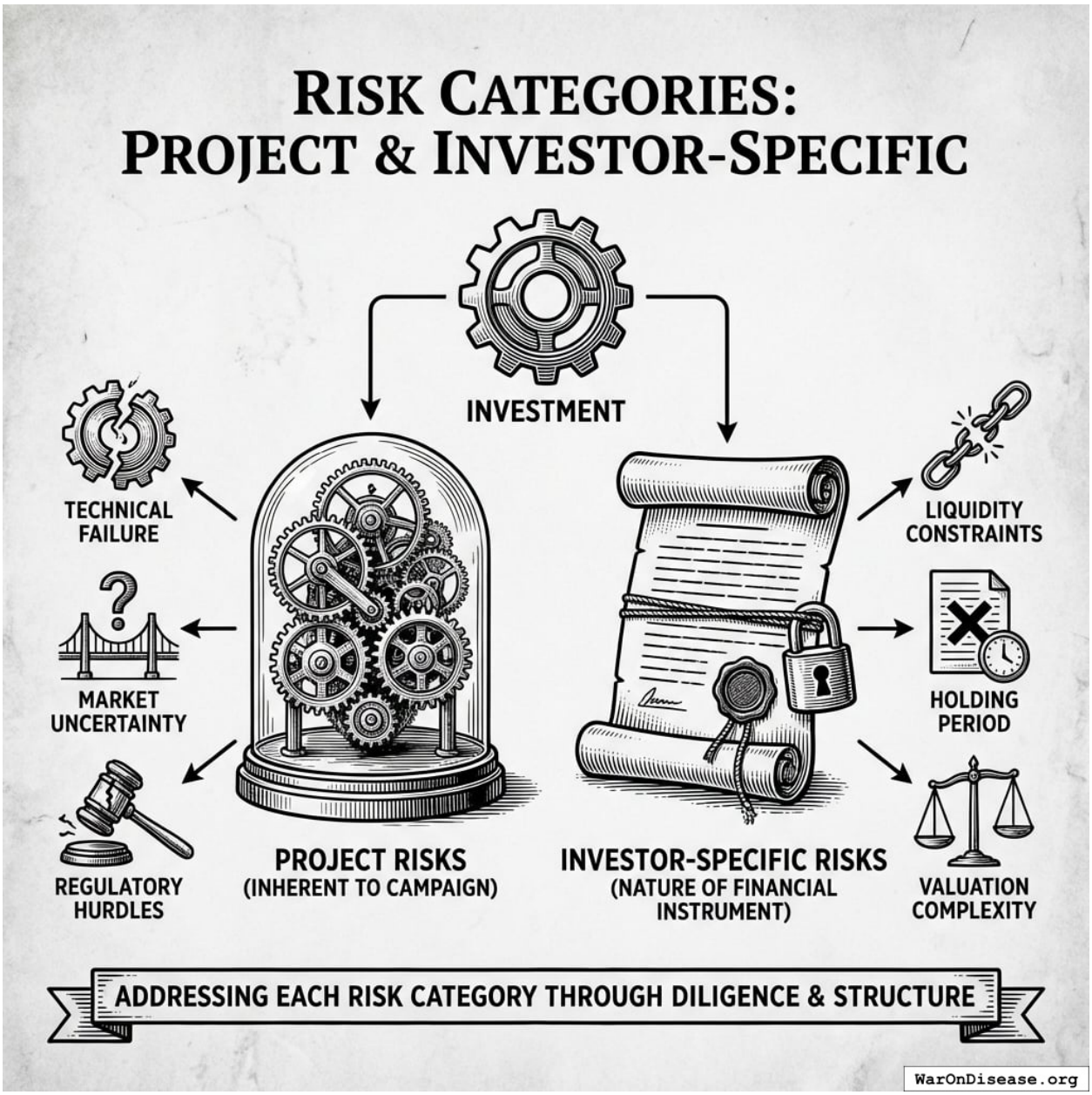


Figure 621: A conceptual diagram showing 'Investment Risk' branching into two main categories: Project Risks and Investor-Specific Risks.

Project Risks

- **Political Risk:** The treaty may fail to pass in key nations. You mitigate this by building broad, bipartisan public support and using a multi-country strategy to avoid single points of failure.
- **Execution Risk:** The campaign may fail to achieve its milestones. You mitigate this with milestone-gated funding, a lean operational model, and hiring an elite, experienced team.

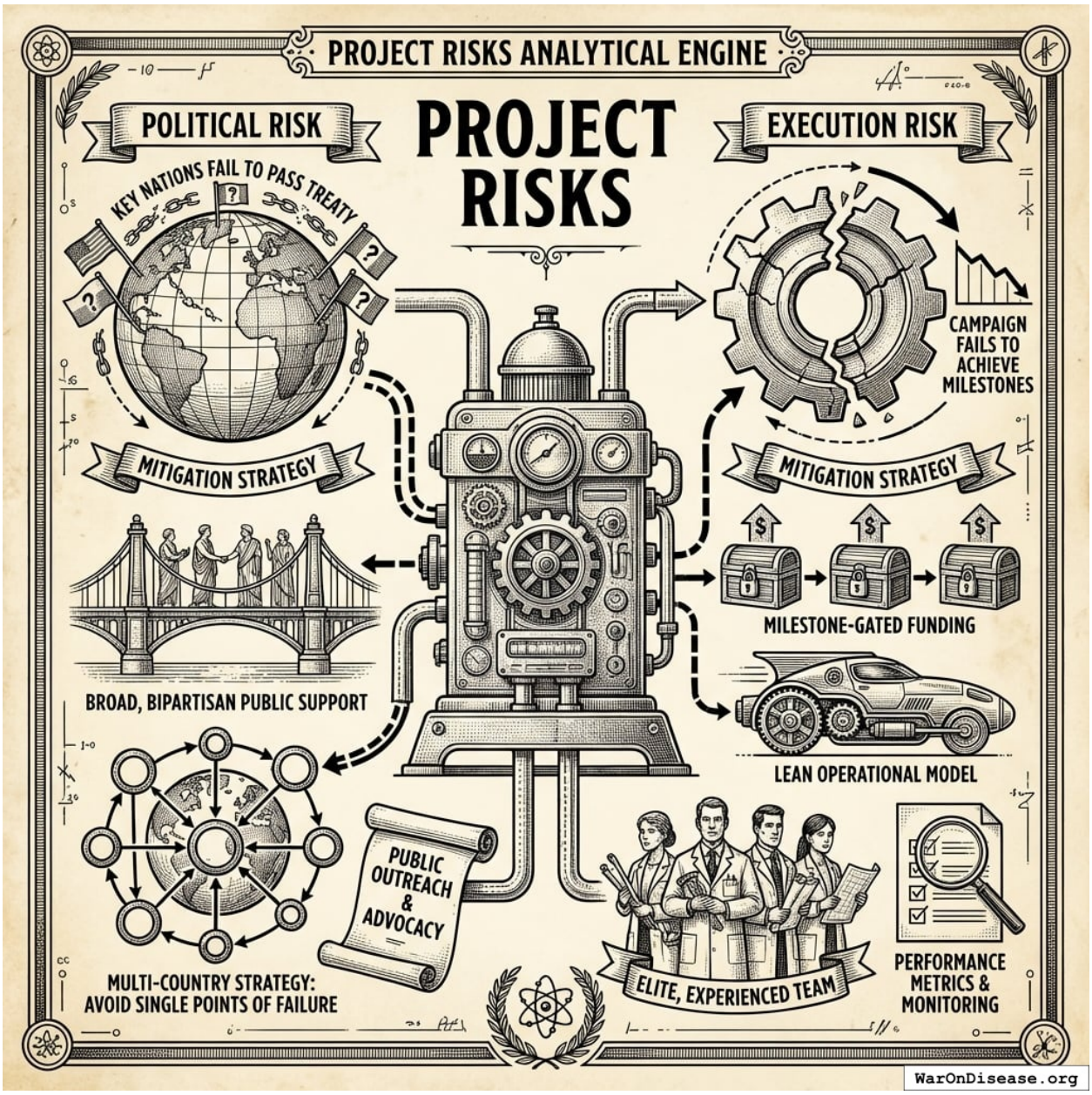


Figure 622: A diagram mapping Political and Execution risks to their respective mitigation strategies, highlighting the proactive steps taken to ensure project success.

Investor-Specific Risks

- **Liquidity Risk:** Funds are locked up for 18-36 months during the campaign phase before returns begin. You mitigate this by allowing secondary market trading after an initial lock-up period.
- **Timeline Risk:** The political process could take longer than projected, delaying returns. The perpetual nature of the bond is designed to reward patience.

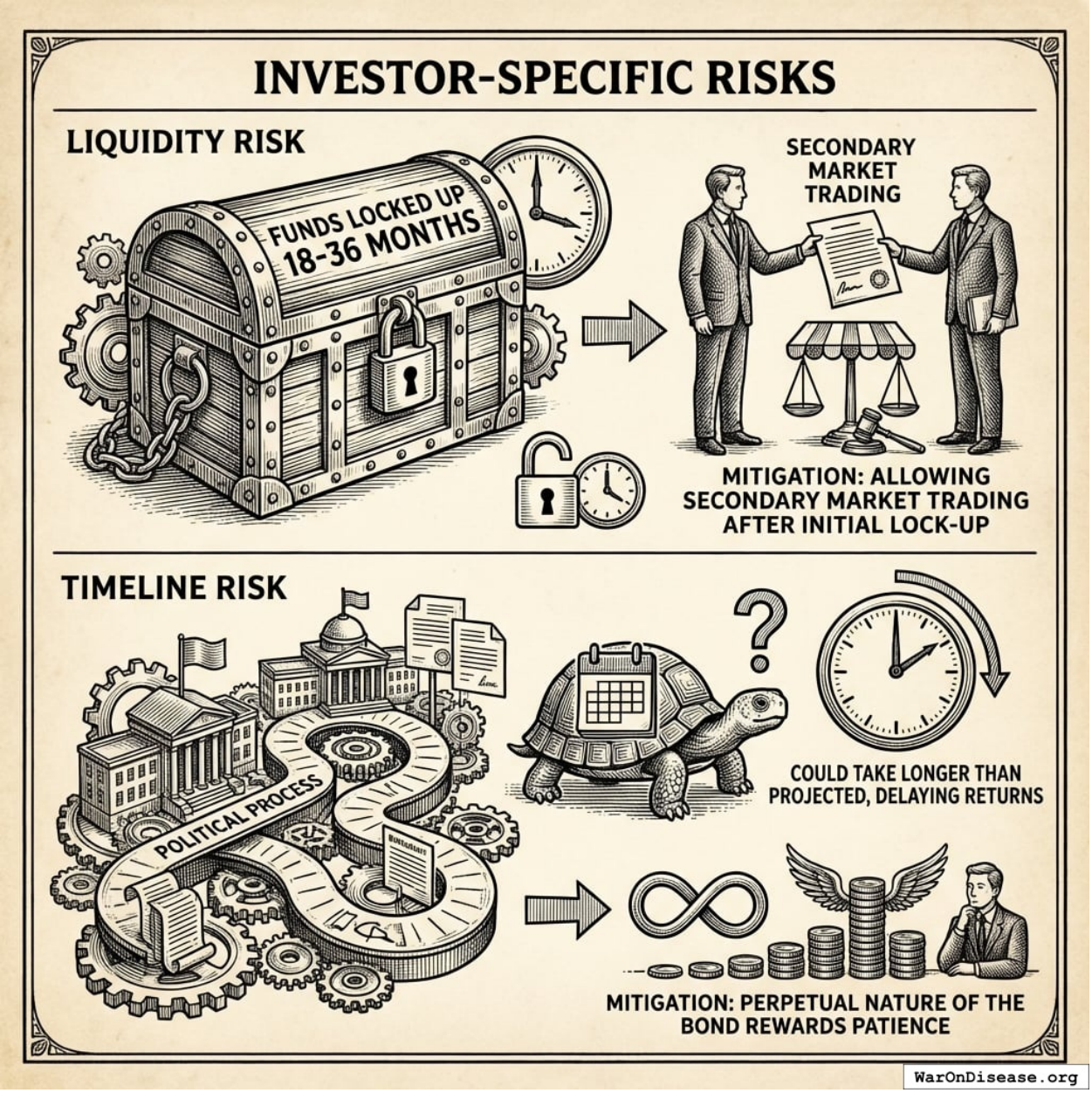


Figure 623: A timeline of the investment lifecycle illustrating the 18-36 month lock-up period during the campaign phase followed by the transition to secondary market trading.

What This Beats (Spoiler: Everything)

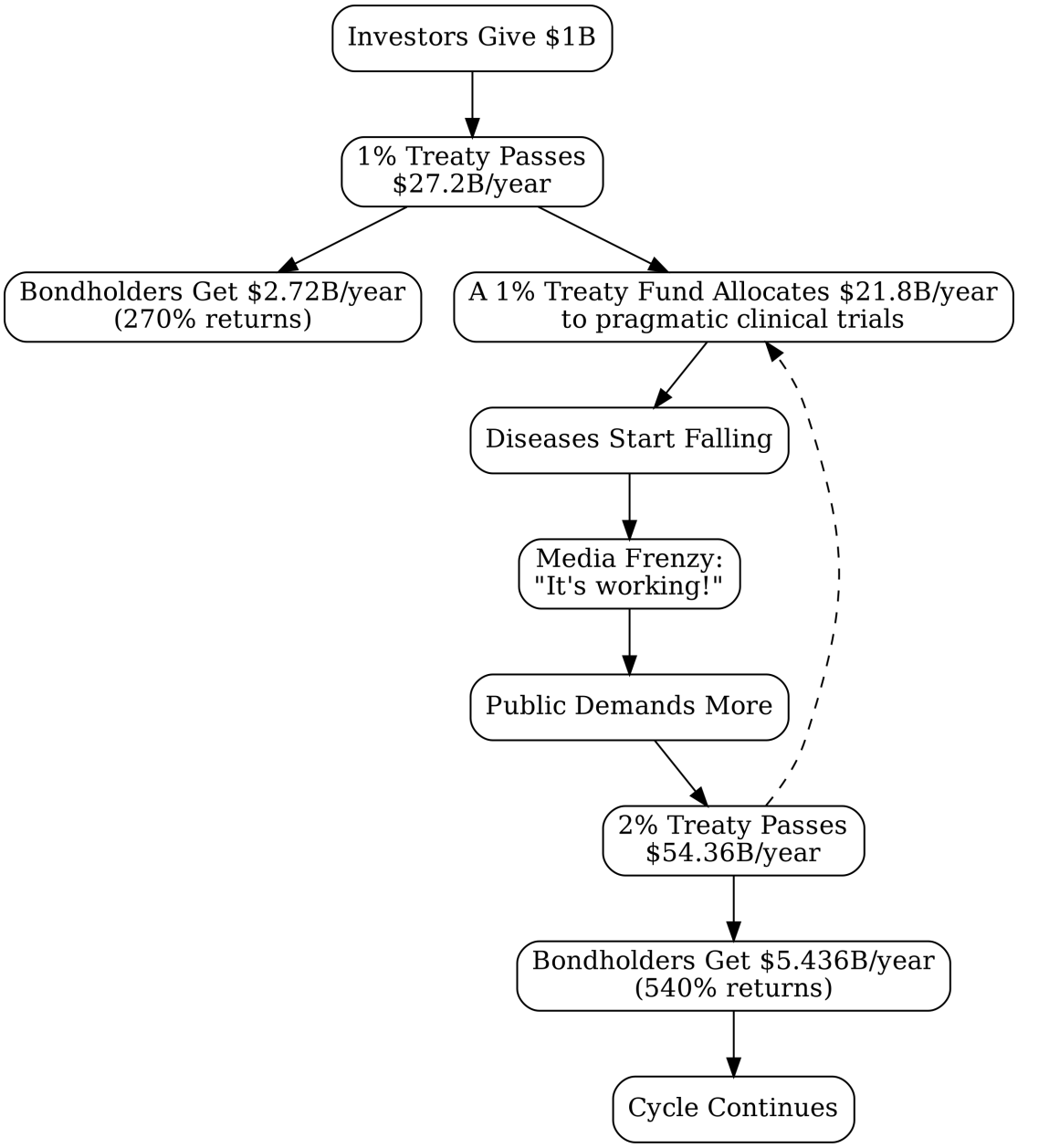
Show Investors This Table

Investment	Annual Return	Risk	Term	Catch
VICTORY Incentive Alignment Bonds	**272%**	**High**	**Forever**	**Requires politicians to act rationally**
Savings Account	97.7% (95% CI: 97.5%-98.9%)	None	Whenever	Loses to inflation
S&P 500	10%	Moderate	Whenever	Boring, responsible
Real Estate	8%	Moderate	30 years	Requires being a landlord
Venture Capital	15-25%	Extreme	7-10 years	Requires picking winners
Hedge Funds	8-15%	High	Lock-ups	Requires being rich already
Medallion Fund	39%[298]	Extreme	N/A	Closed to mortals
Warren Buffett	20%[3]	Moderate	60 years	Requires being Warren Buffett

Remind investors: Returns assume treaty passes. If politicians decide they prefer dead constituents to living ones, you lose your money. But even then, you'll be too dead from preventable diseases to complain about it.

Pitch angle: Even accounting for "politicians might choose mass death over prosperity" risk, this crushes every legal investment except ones that are closed to new money.

The Expansion Flywheel



Explain the flywheel to investors

1. Treaty passes → Bondholders get first distributions
2. DIH funds trials → Breakthroughs start emerging
3. Media covers wins → Public awareness explodes
4. Public demands more → Politicians face electoral pressure
5. Treaty % increases → Revenue scales up dramatically

6. More cures emerge → Cycle reinforces itself
7. Long-term result: Compounding returns + saved lives

Frame it as: Success creates more success, self-reinforcing growth mechanism.

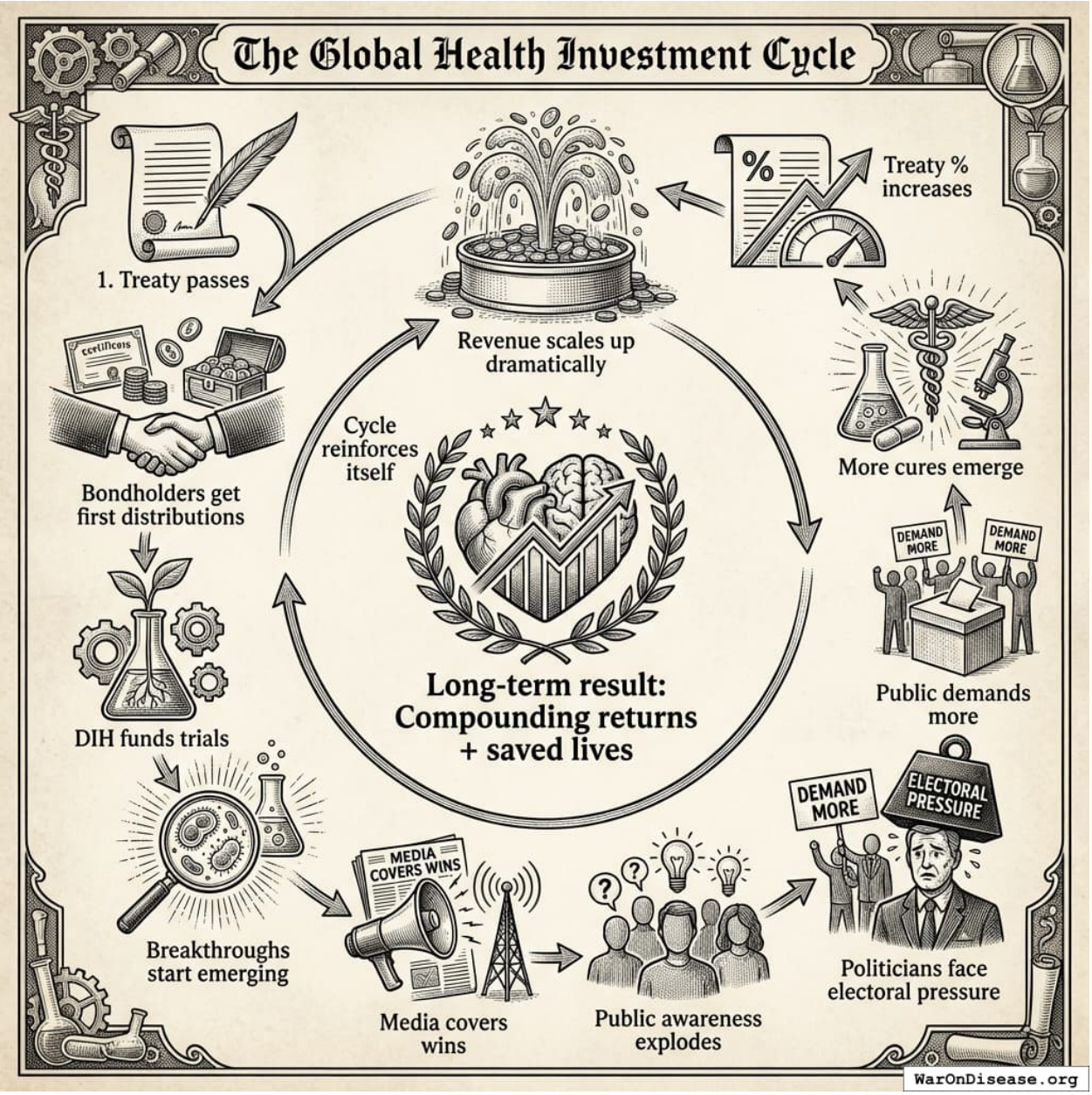


Figure 624: Self-reinforcing cycle where initial success drives political pressure for treaty expansion, increasing both cures and investor returns.

Set Minimum Investment Thresholds

Investor lock-up period: Tell investors funds are locked 12-36 months until treaty passes, then perpetual distributions begin.

Structure Your Minimums

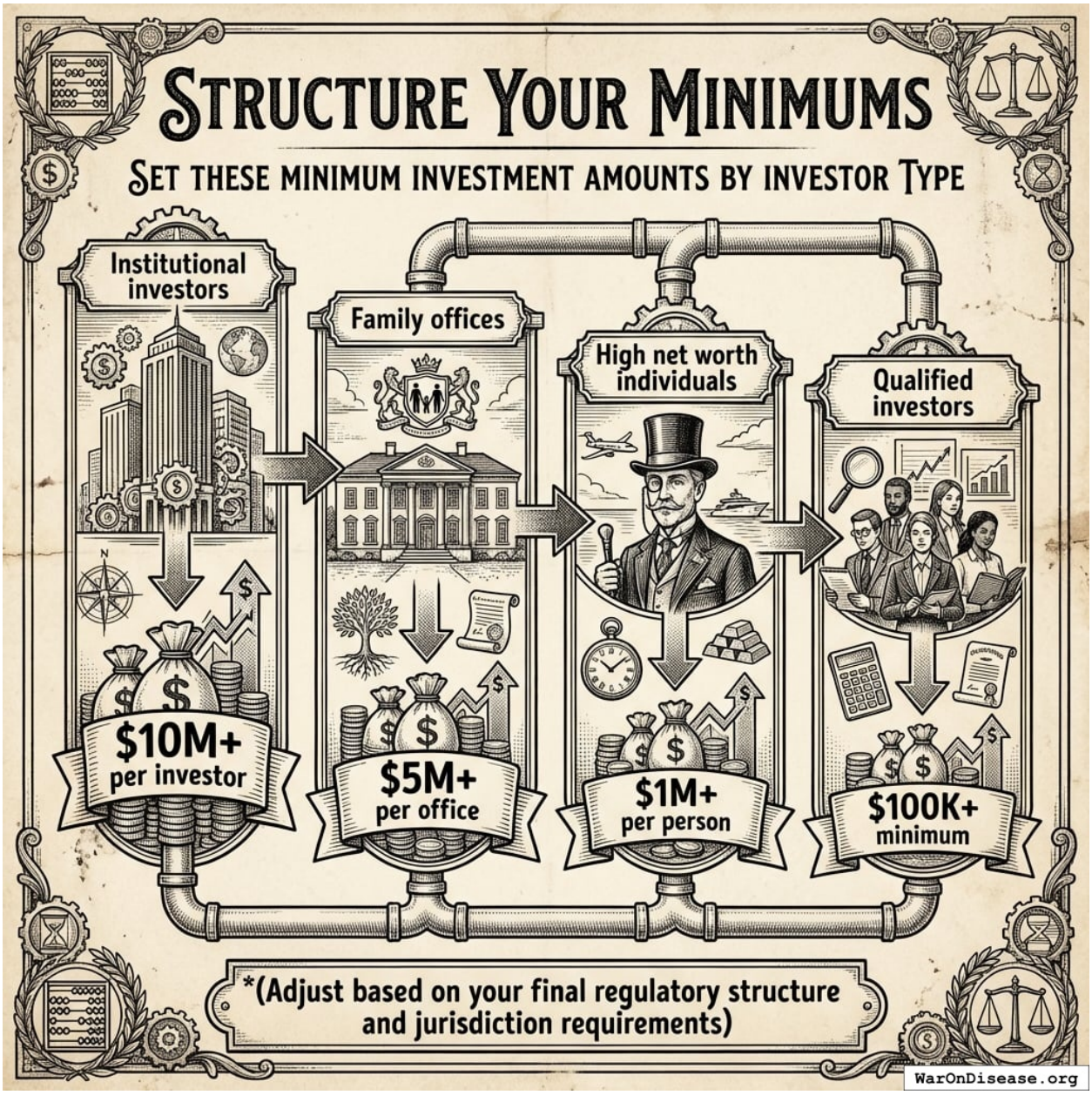


Figure 625: A tiered infographic illustrating the minimum investment thresholds across four distinct investor categories, ranging from 100,000 for qualified investors to over 10 million for institutional entities.

Set these minimum investment amounts by investor type:

- **Institutional investors**: $10M+ per investor
- **Family offices**: $5M+ per office
- **High net worth individuals**: $1M+ per person
- **Qualified investors**: $100K+ minimum

(Adjust based on your final regulatory structure and jurisdiction requirements)

Draft Your Term Sheet

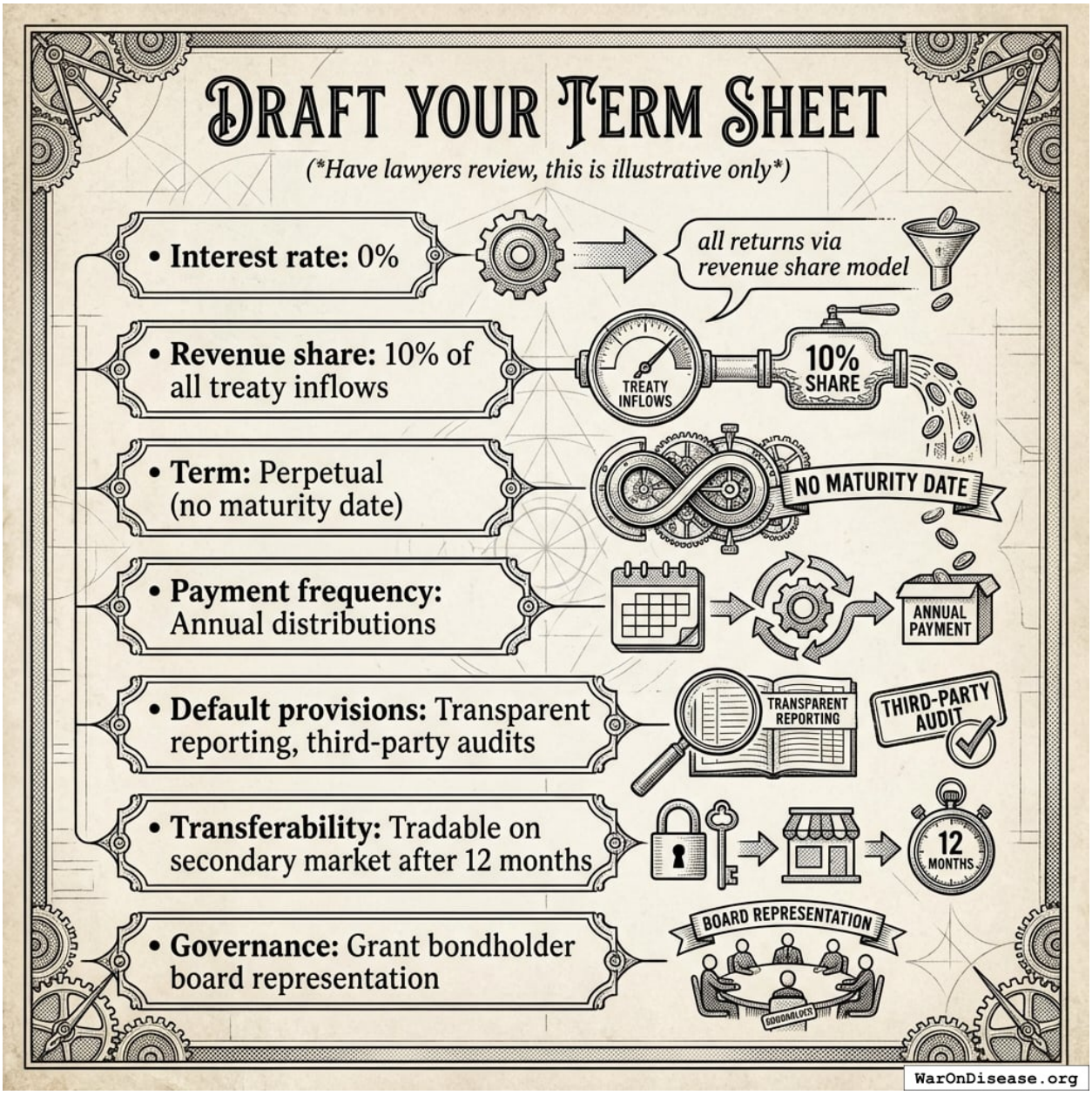


Figure 626: A visual flow of the revenue share bond model, showing treaty inflows being allocated to annual distributions for bondholders.

(Have lawyers review, this is illustrative only)

- **Interest rate**: 0% (all returns via revenue share model)
- **Revenue share**: 10% of all treaty inflows
- **Term**: Perpetual (no maturity date)
- **Payment frequency**: Annual distributions
- **Default provisions**: Transparent reporting, third-party audits
- **Transferability**: Tradable on secondary market after 12 months
- **Governance**: Grant bondholder board representation

When Rich People Ask Difficult Questions

For broader objections about whether humanity is capable of not being stupid, see Demolishing Objections. This section handles money-specific concerns.

"This sounds like a Ponzi scheme run by someone who failed math."

"Ponzi schemes pay old investors with new investor money, which is why they collapse. This pays investors with a share of a new $27.2B annual revenue stream created by redirecting 1% of military budgets via treaty.

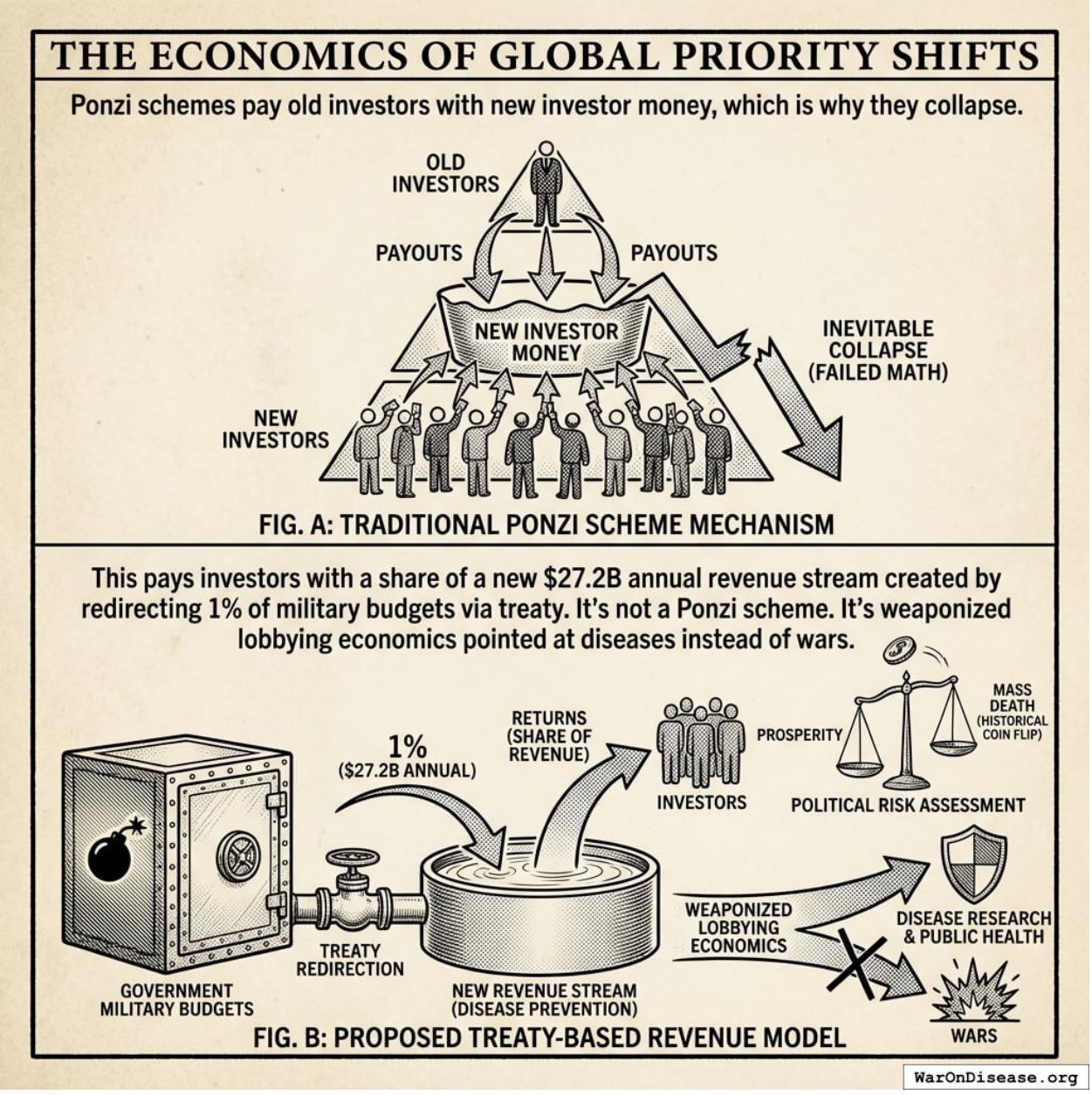


Figure 627: A comparison between the circular flow of a Ponzi scheme and the proposed model of redirecting 1 percent of global military budgets into a medical research revenue stream.

The money comes from governments that currently spend it on bombs. The returns are high because

the political risk is high - you're betting that politicians will choose prosperity over mass death, which is historically a coin flip.

It's not a Ponzi scheme. It's weaponized lobbying economics pointed at diseases instead of wars."

"What happens when this fails and I lose my billion dollars?"

"If the treaty fails completely, you lose your $1B. It gets spent on the campaign - convincing humans to click buttons, bribing lobbyists, building platforms, paying lawyers to make bribery legal.

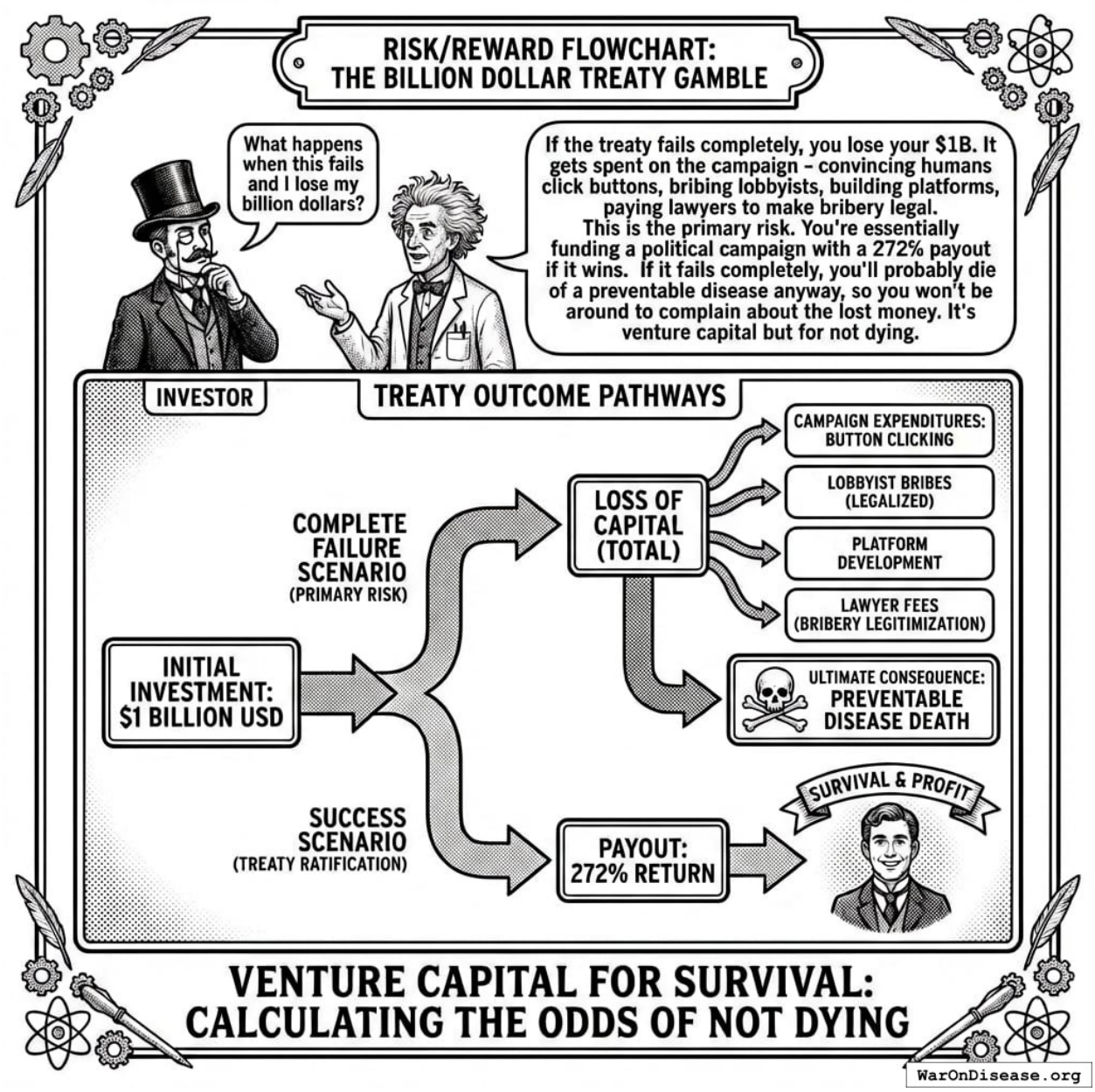


Figure 628: A flow diagram illustrating the 1B investment path: funds are allocated to campaign activities like lobbying and platform building, leading to two distinct outcomes: a 272 percent financial payout or a total loss and existential failure.

This is the primary risk. You're essentially funding a political campaign with a 272% payout if it wins.

If it fails completely, you'll probably die of a preventable disease anyway, so you won't be around to complain about the lost money.

It's venture capital but for not dying."

"What could possibly go wrong?"

"Glad you asked. Here are all the ways this explodes:

Project Risks

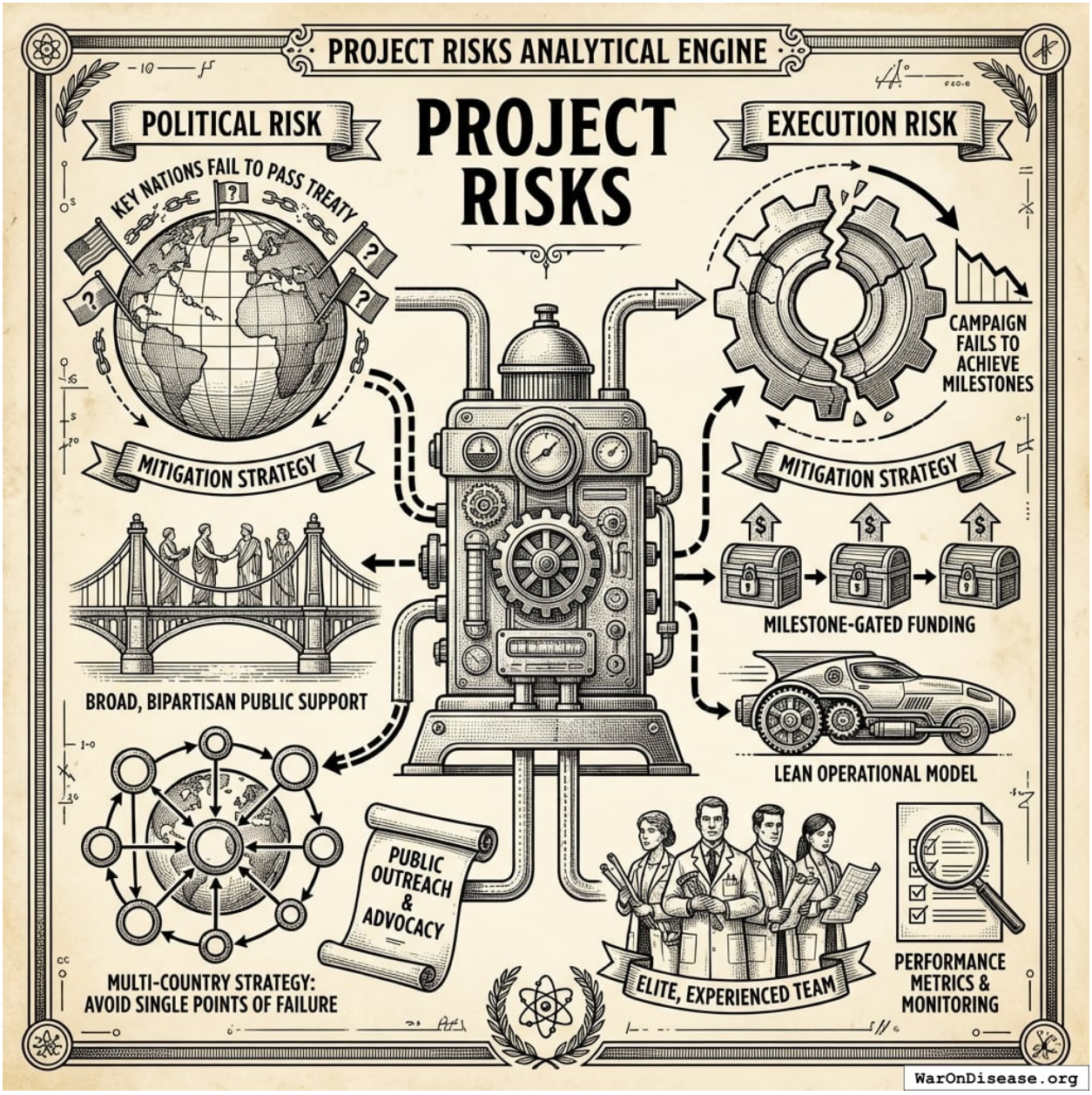


Figure 629: A risk-mitigation summary mapping identified political and execution threats to their specific countermeasures.

- **Political:** Politicians choose dead constituents over living ones (mitigated by 280M referendum votes showing this is electoral suicide)
- **Execution:** The campaign gets run by incompetent people (mitigated by milestone-based releases and hiring competent people)

Investor Risks

- **Liquidity:** Your billion dollars is locked up for 18-36 months while we convince politicians (mitigated by secondary market trading after lock-up)
- **Timeline:** Politics is slow, returns might start late (mitigated by perpetual payments - doesn't matter when it starts if it never stops)

You're essentially betting that humans prefer being alive. Historically this is true, but your species has surprised us before."



Figure 630: A comparison of investment risks versus their mitigation strategies, illustrating the transition from initial lock-up periods to perpetual payment streams.

"How is this different from just donating to charity?"

"Charities give you 0% returns and a tax deduction. VICTORY Incentive Alignment Bonds give you 272% returns and generational wealth.

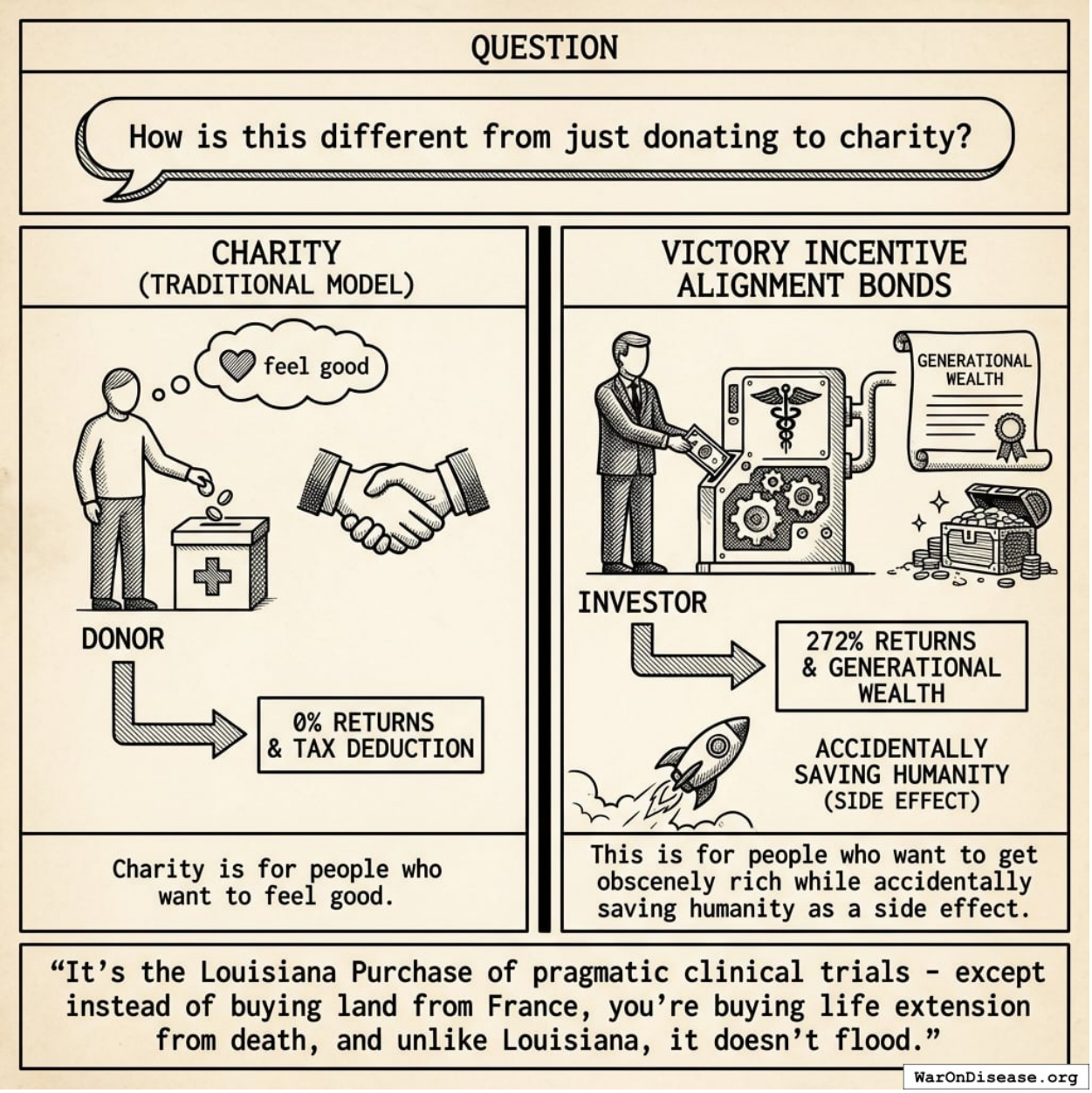


Figure 631: A side-by-side comparison of traditional charity versus VICTORY Bonds, contrasting 0 percent returns and tax deductions with 272 percent returns and generational wealth.

Charity is for people who want to feel good. This is for people who want to get obscenely rich while accidentally saving humanity as a side effect.

You're not donating to cure diseases. You're investing in curing diseases because it's the most profitable legal thing you can do with a billion dollars.

It's the Louisiana Purchase of pragmatic clinical trials - except instead of buying land from France, you're buying life extension from death, and unlike Louisiana, it doesn't flood."

When they want detailed financials

Direct them

"Complete breakdowns available:

- Financial Plan - System architecture
- Full offering docs - Email for access"

The One-Page Summary That Makes Calculators Weep

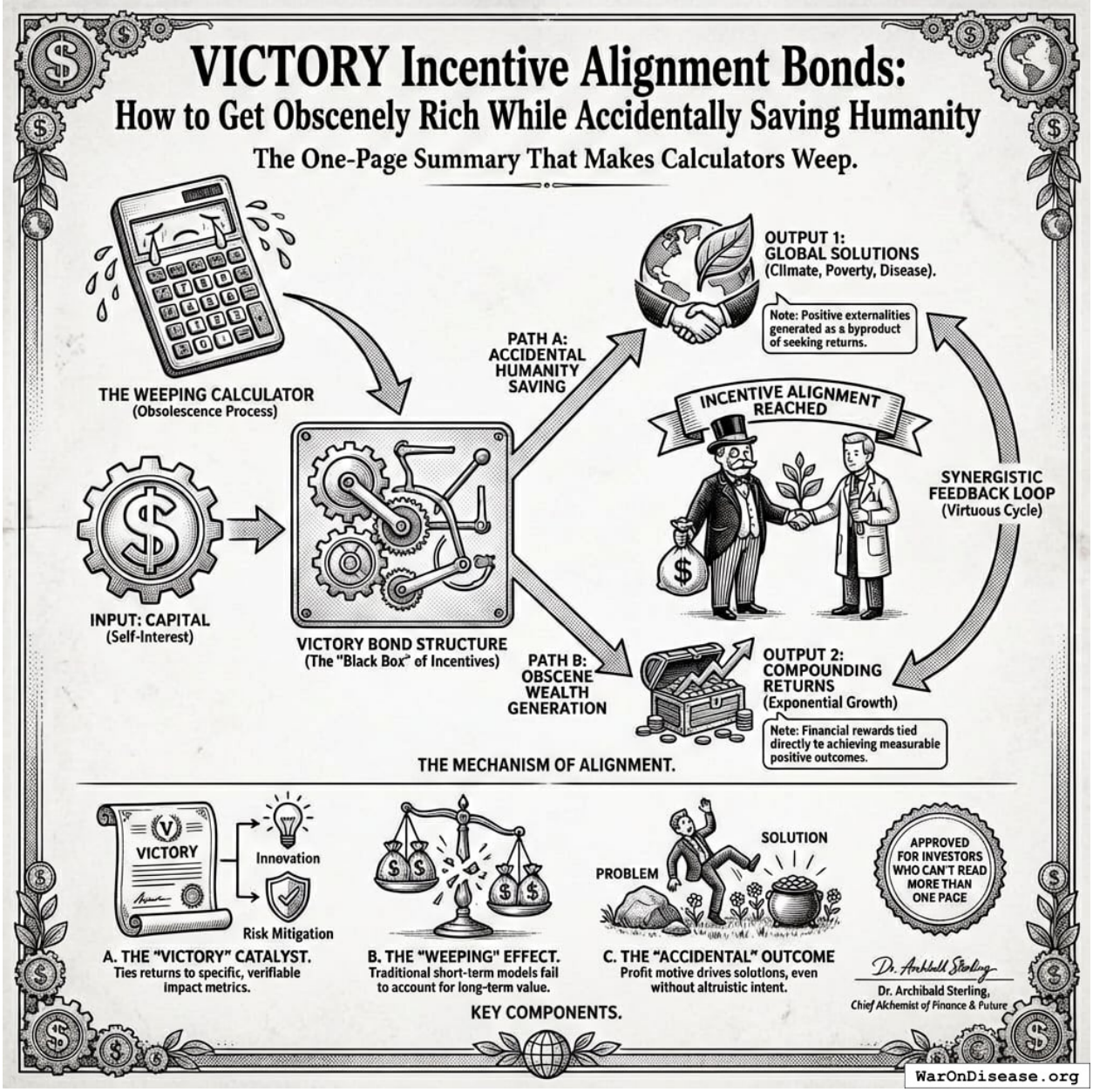


Figure 632: A conceptual visualization of the VICTORY Incentive Alignment Bond cycle, illustrating the direct link between humanitarian impact and investor profit.

Hand this to investors who can't read more than one page:

VICTORY Incentive Alignment Bonds: How to Get Obscenely Rich While Accidentally Saving Humanity

What you get

- **Returns:** 272% annually forever (assuming politicians don't choose mass death)
- **Duration:** Perpetual (payments never stop until heat death of universe)
- **Side effect:** Millions of humans continue existing who would otherwise stop
- **Priority:** You get paid before anyone else touches the money
- **Growth path:** 1% → 2% → 5%+ as diseases get cured and public demands more

What could go wrong

- **Political risk:** Politicians might prefer dead voters (unlikely but humans are weird)
- **Execution risk:** Campaign could be run incompetently (mitigated by hiring competent humans)
- **Timeline risk:** 18-36 month lockup while convincing politicians to be smart
- **Liquidity risk:** Your money is frozen during the convincing phase

Related Implementation Guides

For detailed execution plans

- Financial Plan - Overall system architecture

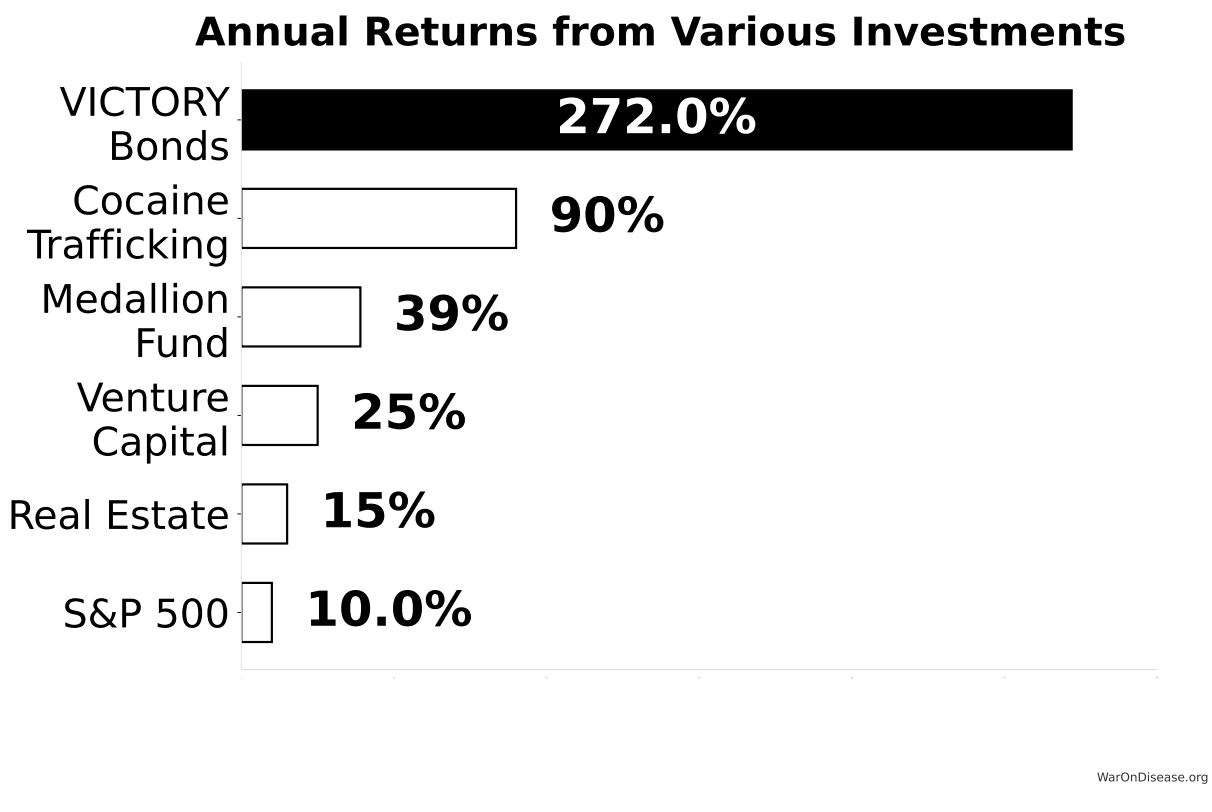
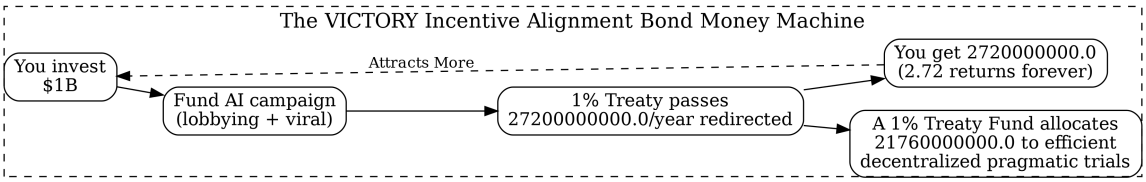


Figure 633: VICTORY Incentive Alignment Bonds: 270% Perpetual Returns



The core mechanism is stupid simple

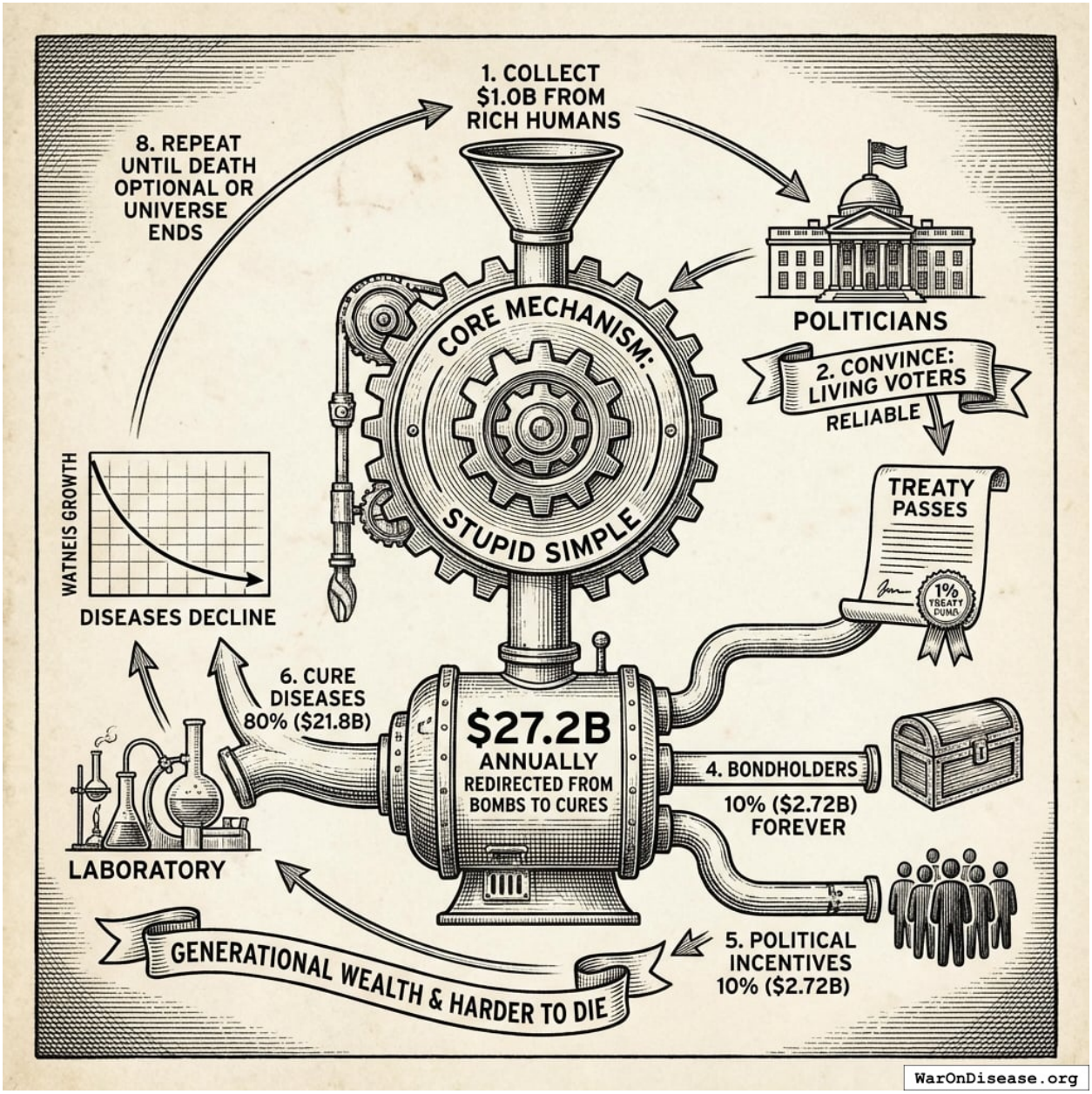
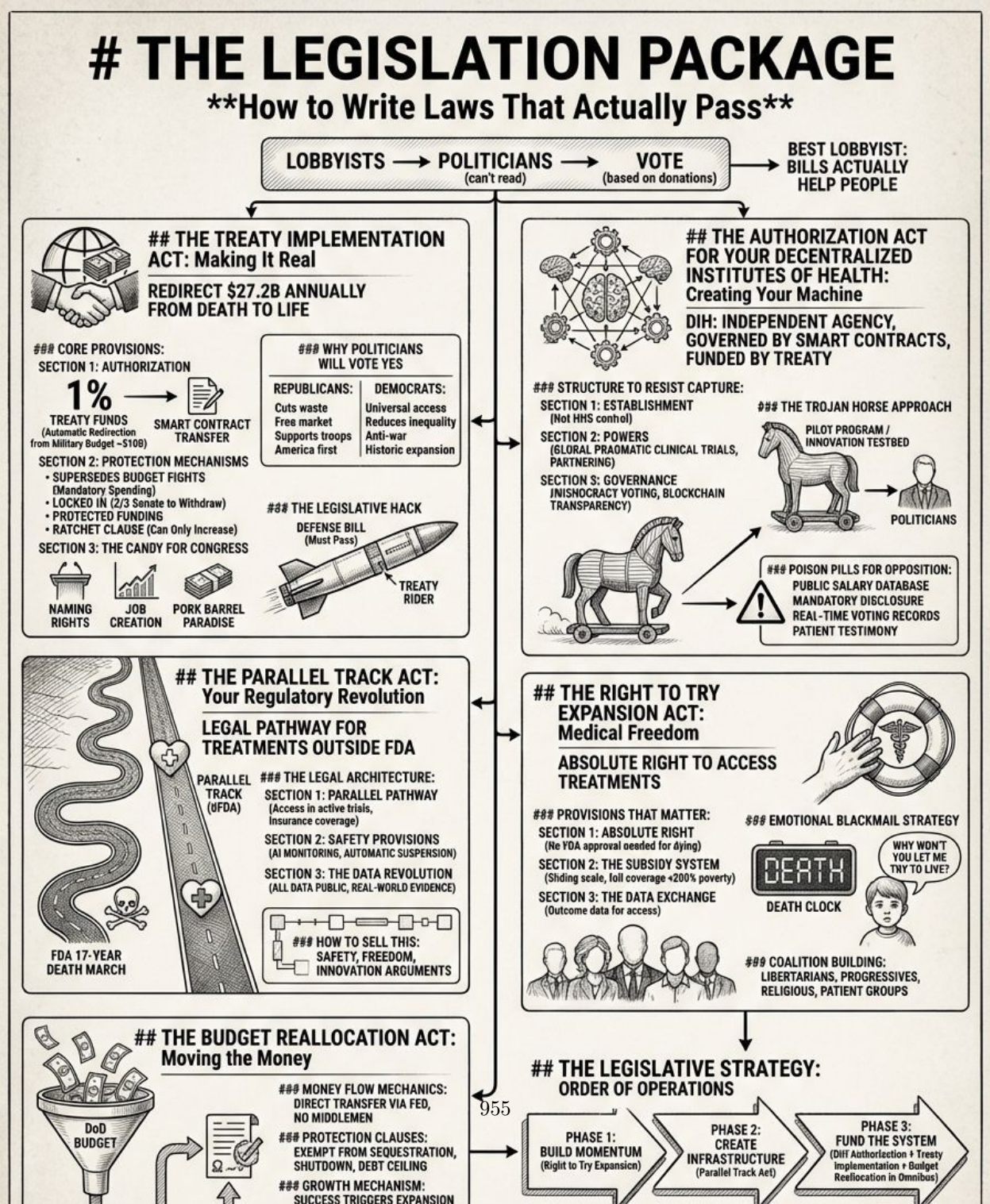


Figure 634: A flowchart showing the circular mechanism of capital investment, political lobbying, and the subsequent distribution of treaty funds between bondholders, political incentives, and disease research.

1. Collect $1.0B from rich humans
2. Use it to convince politicians that living constituents vote more reliably than dead ones
3. The treaty passes, redirecting $27.2B annually from bombs to cures via a 1% Treaty Fund
4. Give bondholders 10% ($2.72B) every year, forever
5. Fund political incentives with 10% ($2.72B) to keep politicians aligned
6. Use remaining 80% ($21.8B) to actually cure the diseases killing people
7. Diseases decline, public demands more funding, returns scale up
8. Repeat until death is optional or universe ends

It's the simplest way to become generationally wealthy while making it harder for people to die from preventable things.

The Legislation Package



Here's how democracy actually works: Lobbyists write bills, give them to politicians who can't read, and those politicians vote based on who donated most to their campaign. You're about to become the best lobbyist in history, except your bills actually help people instead of killing them.

This is your blueprint for five bills that transform healthcare forever. Each one is designed to pass because it gives politicians what they crave: money, votes, and the ability to claim they did something.

The Treaty Implementation Act: Making It Real

This is your cornerstone legislation. Without it, the treaty is just paper. With it, you redirect $27.2B annually from death to life.

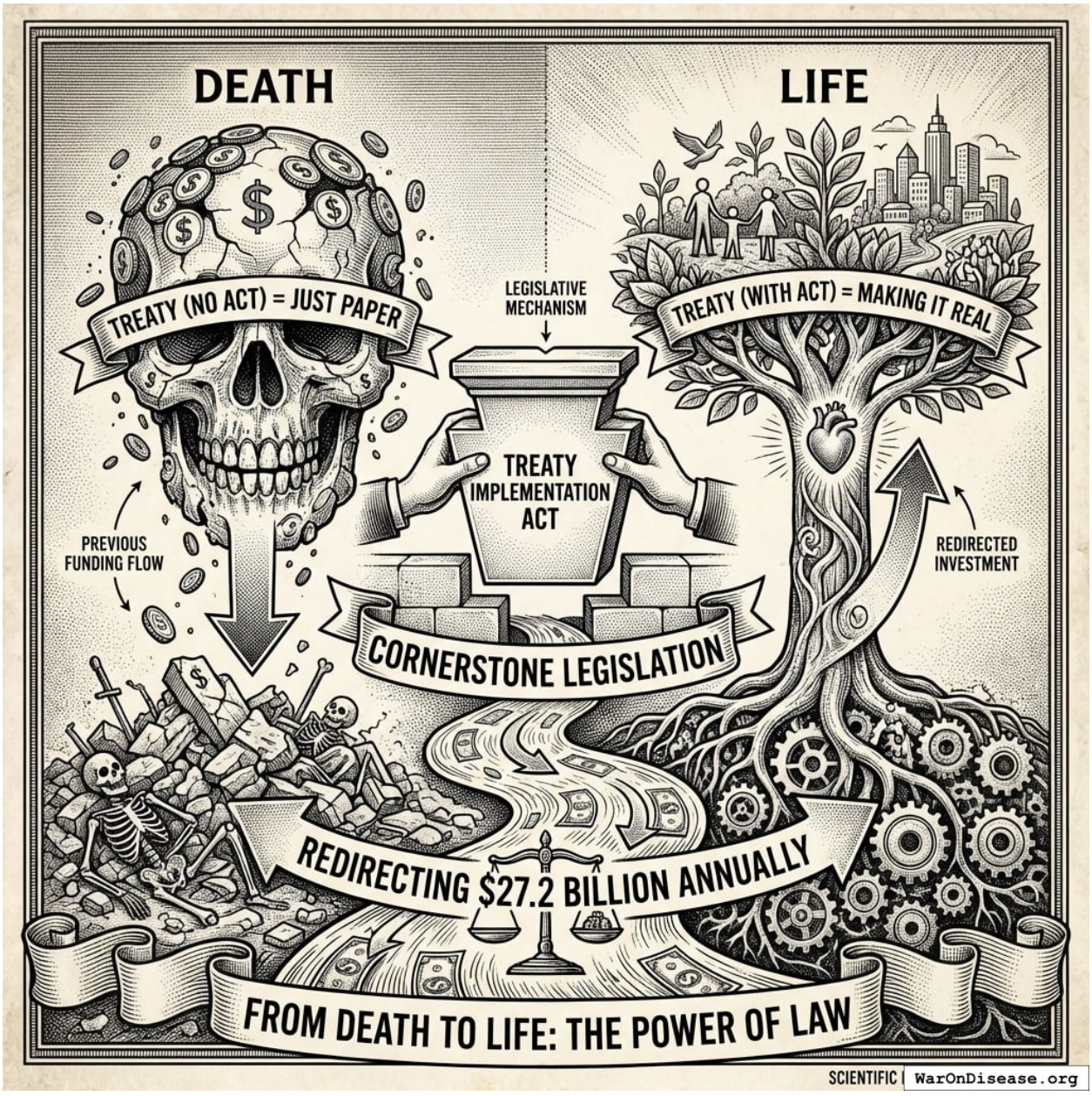


Figure 636: A transformation visual showing the Treaty Implementation Act as the mechanism that converts a paper treaty into a flow of 27.2B redirected from destructive spending to life-sustaining initiatives.

The Core Provisions

Section 1: Authorization

- "The United States shall implement the 1% Treaty upon ratification by 3+ nations"
- "1% of the United States military budget (currently ~$10 billion) shall be automatically redirected to a 1% Treaty Fund as the nation's contribution to the treaty fund."



Figure 637: A logic flow illustrating the sequence from international ratification to the automated smart contract transfer of military funds into the 1 percent Treaty Fund.

- "Funds transfer via smart contract on first day of fiscal year"
- No annual appropriation needed (politicians can't kill it later)

Section 2: Protection Mechanisms

- **Supersedes Budget Fights:** Treaty obligations are treated as mandatory spending and supersede annual budget appropriations.
- **Locked In:** Withdrawal from the treaty requires a very difficult 2/3 Senate vote.
- **Protected Funding:** Funds are exempt from sequestration, government shutdowns, and debt ceiling negotiations.
- **Ratchet Clause:** The 1% funding can only increase, never decrease. It automatically scales if other nations increase their commitment and can be expanded by public referendum.
- **Emergency Use Only:** Suspension of payments is only possible during a formally declared war, not a vaguely defined "conflict."

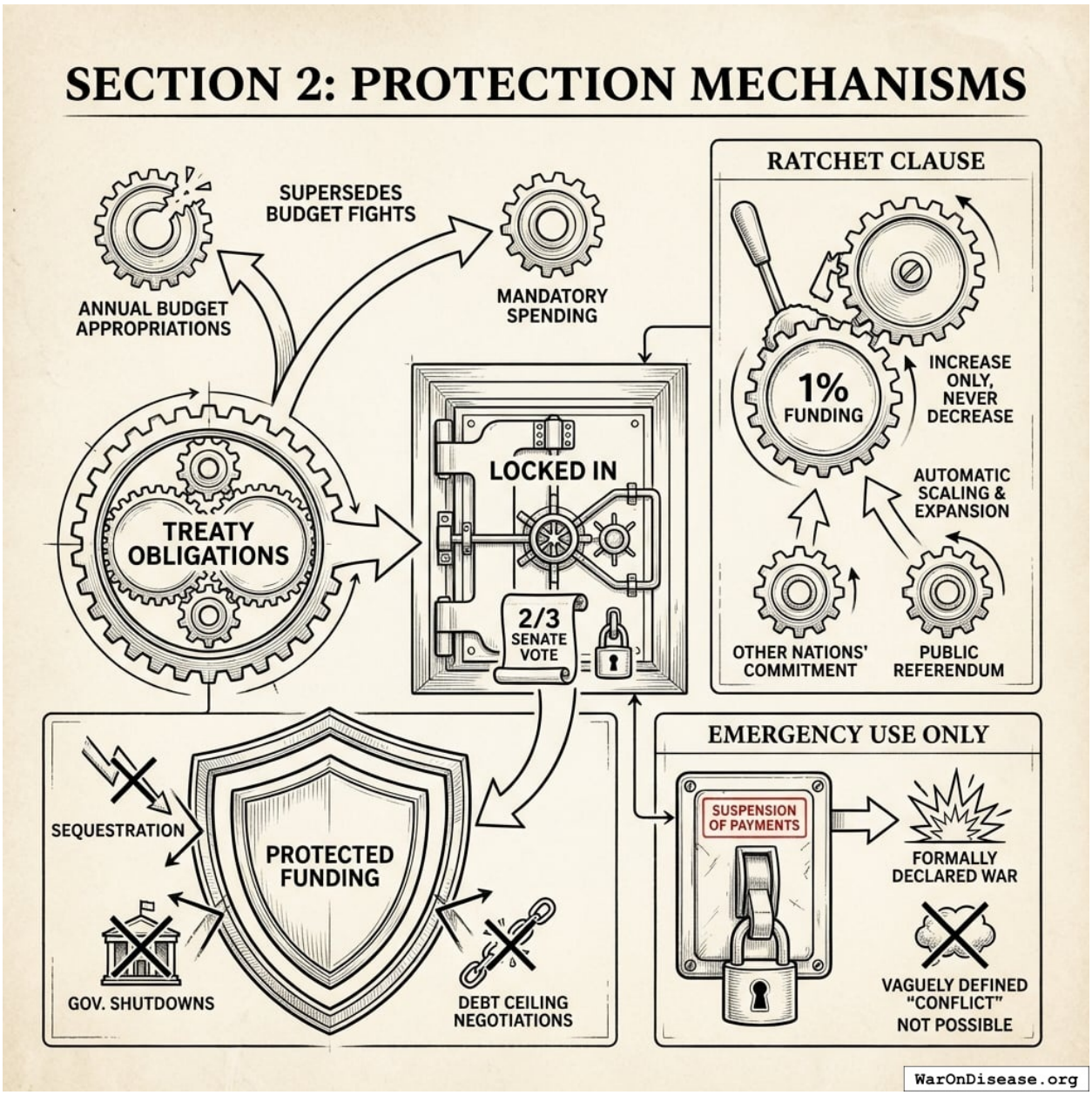


Figure 638: A visualization of the legal and financial safeguards protecting the treaty funding, illustrating it as a shielded 'locked' system immune to typical budget cycles and political shutdowns.

Section 3: The Candy for Congress

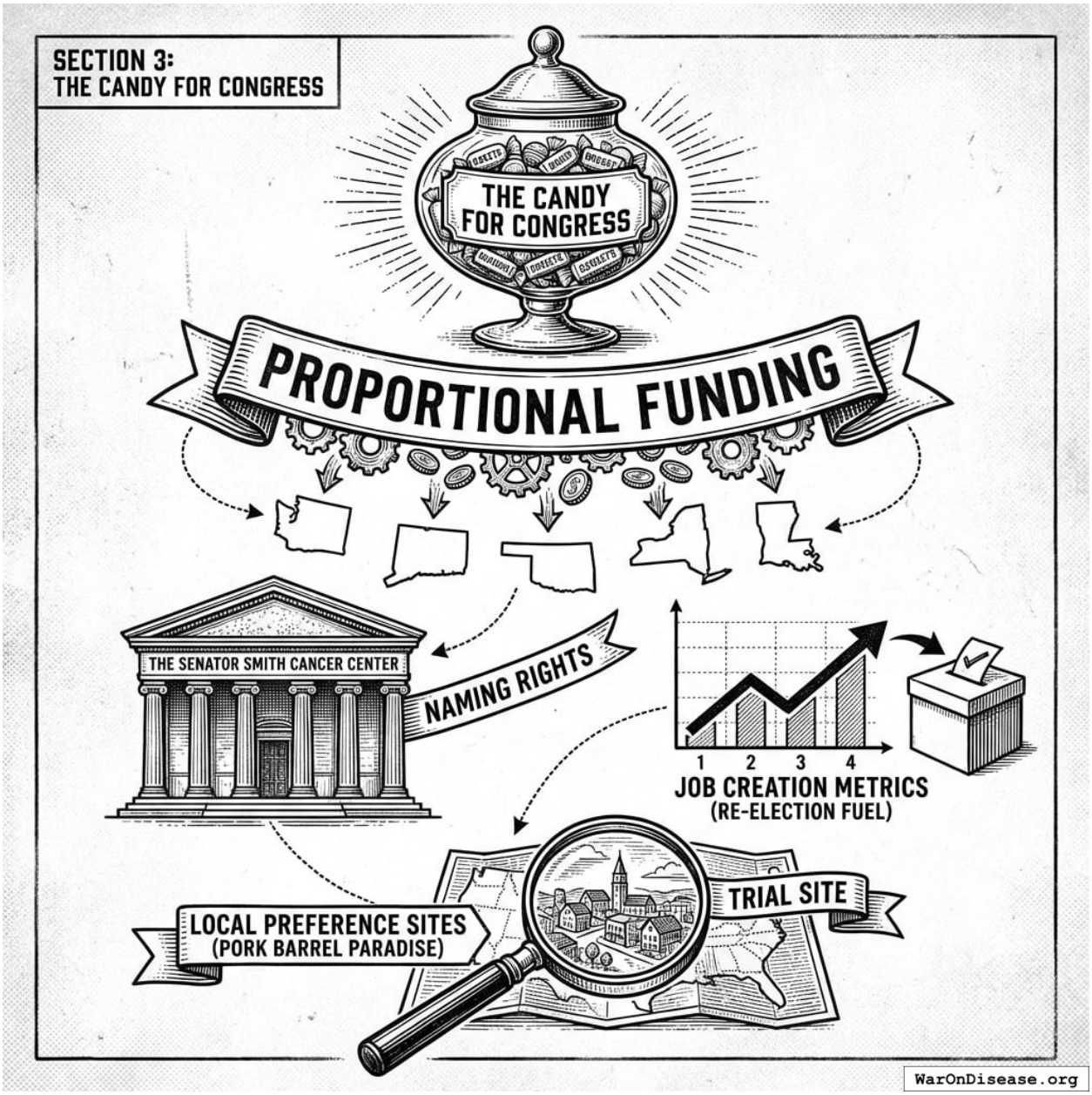


Figure 639: A conceptual map showing the flow of incentives from clinical trial funding to political benefits, including naming rights, job metrics, and local site preferences.

- Each state gets proportional pragmatic clinical trial funding
- Naming rights for politicians: "The Senator Smith Cancer Center"
- Job creation metrics published quarterly (re-election fuel)
- Local preference for trial sites (pork barrel paradise)

Why Politicians Will Vote Yes

For Republicans

- "Cuts government waste!" (redirects, not adds)

- "Free market solution!" (competition, not bureaucracy)
- "Supports our troops!" (cures their PTSD and cancer)
- "America first!" (America leads the world in cures)

For Democrats

- "Universal healthcare access!" (subsidized trials for all)
- "Reduces inequality!" (poor get same treatments as rich)
- "Anti-war vote!" (less money for bombs)
- "Historic healthcare expansion!" (biggest since Medicare)

For Everyone



Figure 640: A visual map of the diverse benefits resulting from the VICTORY Incentive Alignment system, showing the connection between financial backing, constituent outcomes, and long-term political legacy.

- Campaign contributions from VICTORY Incentive Alignment Bondholders
- Constitutes can actually get treated
- Opposition faces primary challenges backed by your coalition
- History books write about them positively

The Legislative Hack

Bundle it with military funding. Politicians rarely vote against defense bills (career suicide). Your treaty implementation becomes a tiny rider on a massive bill they have to pass.

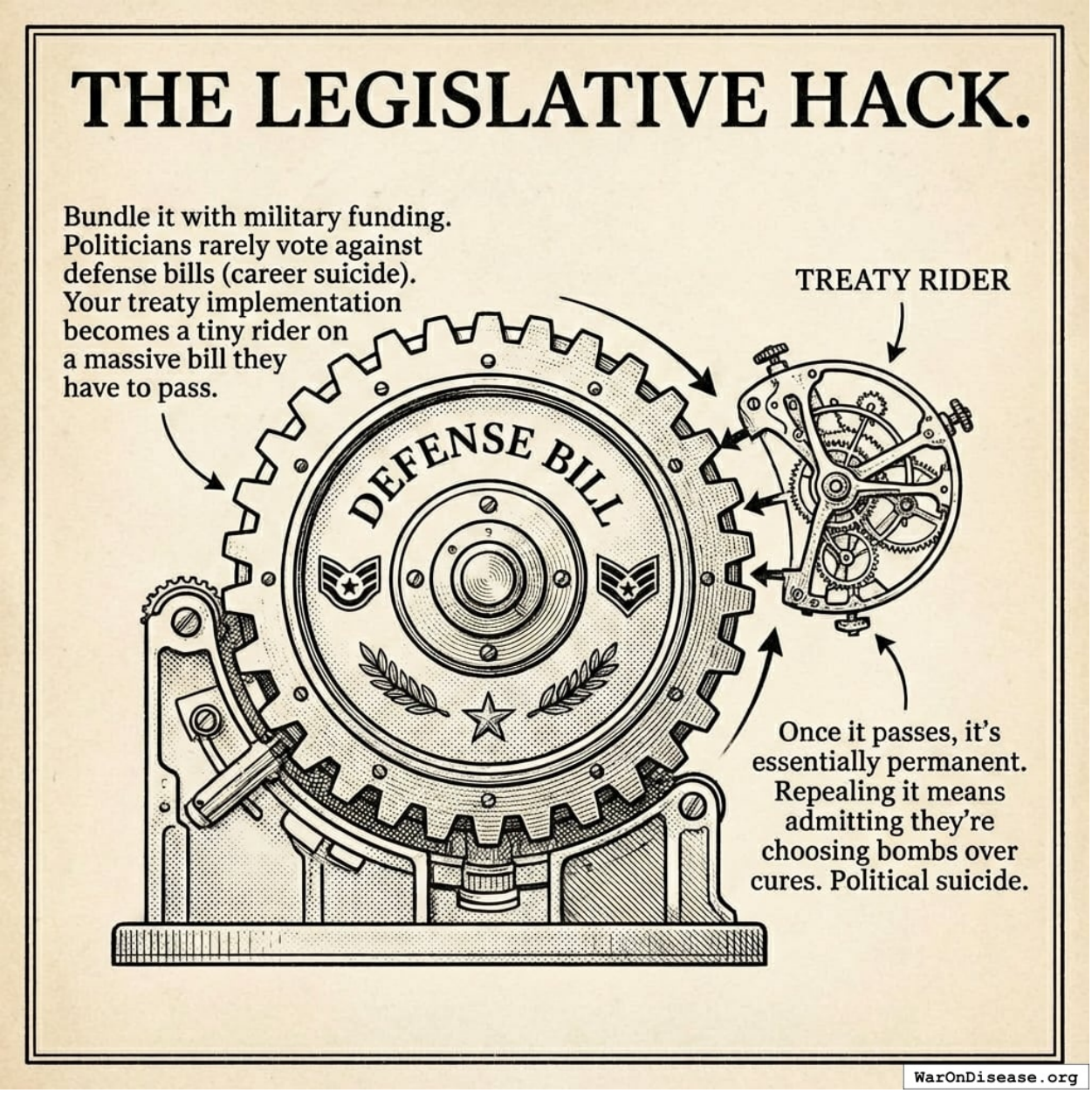


Figure 641: A flowchart showing the 'Legislative Hack' process: bundling a small treaty rider into a massive defense bill to ensure passage and political permanence.

Once it passes, it's essentially permanent. Repealing it means admitting they're choosing bombs over cures. Political suicide.

The Authorization Act for your Decentralized Institutes of Health: Creating Your Machine

This creates your decentralized institutes of health (DIH), the organization that will manage humanity's greatest pivot from death to life.

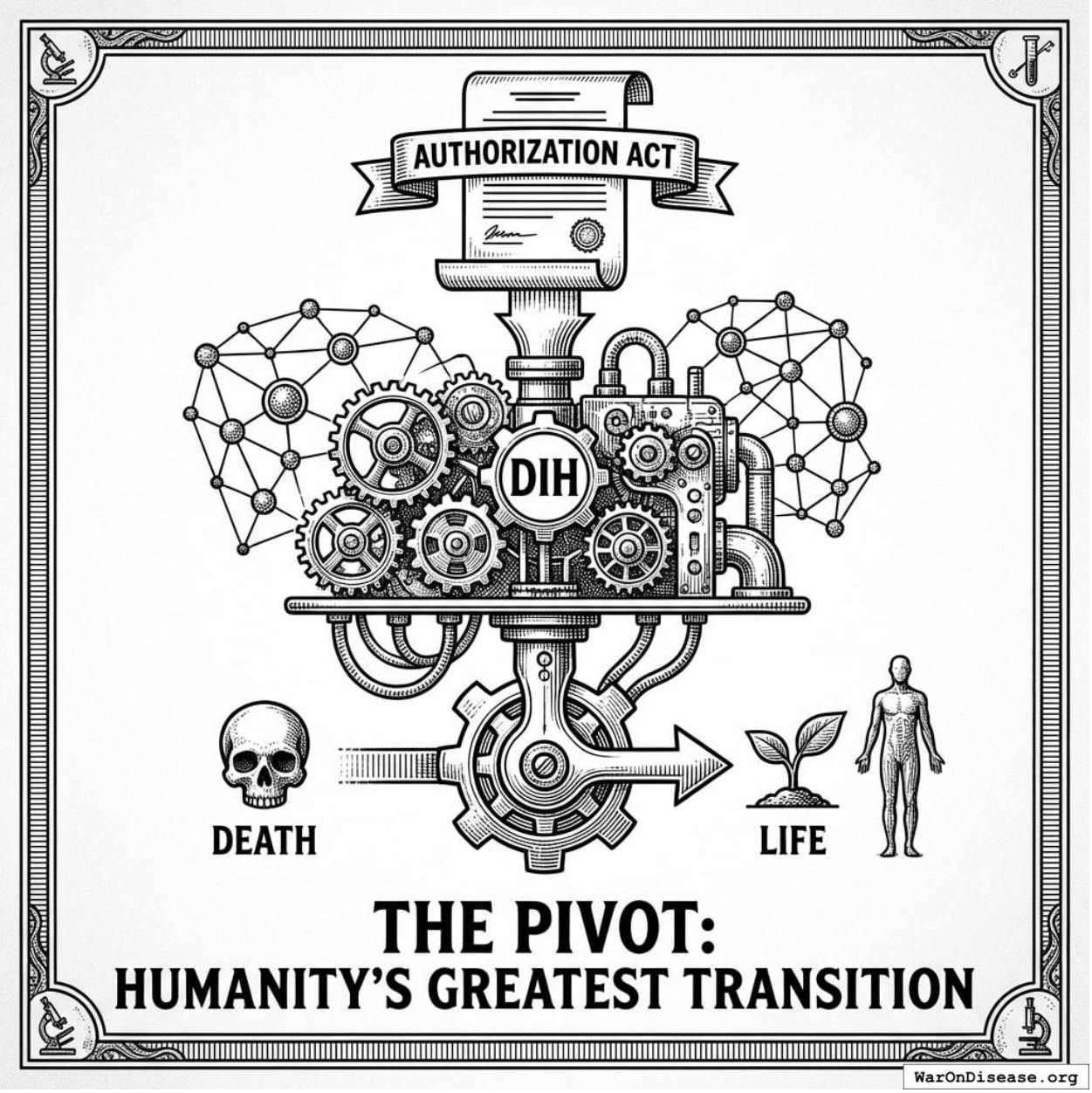


Figure 642: A conceptual diagram illustrating the Decentralized Institute of Health (DIH) as a central 'machine' or framework that facilitates the systemic transition from traditional healthcare models to life-extension focused outcomes.

The Structure Designed to Resist Capture

Section 1: Establishment

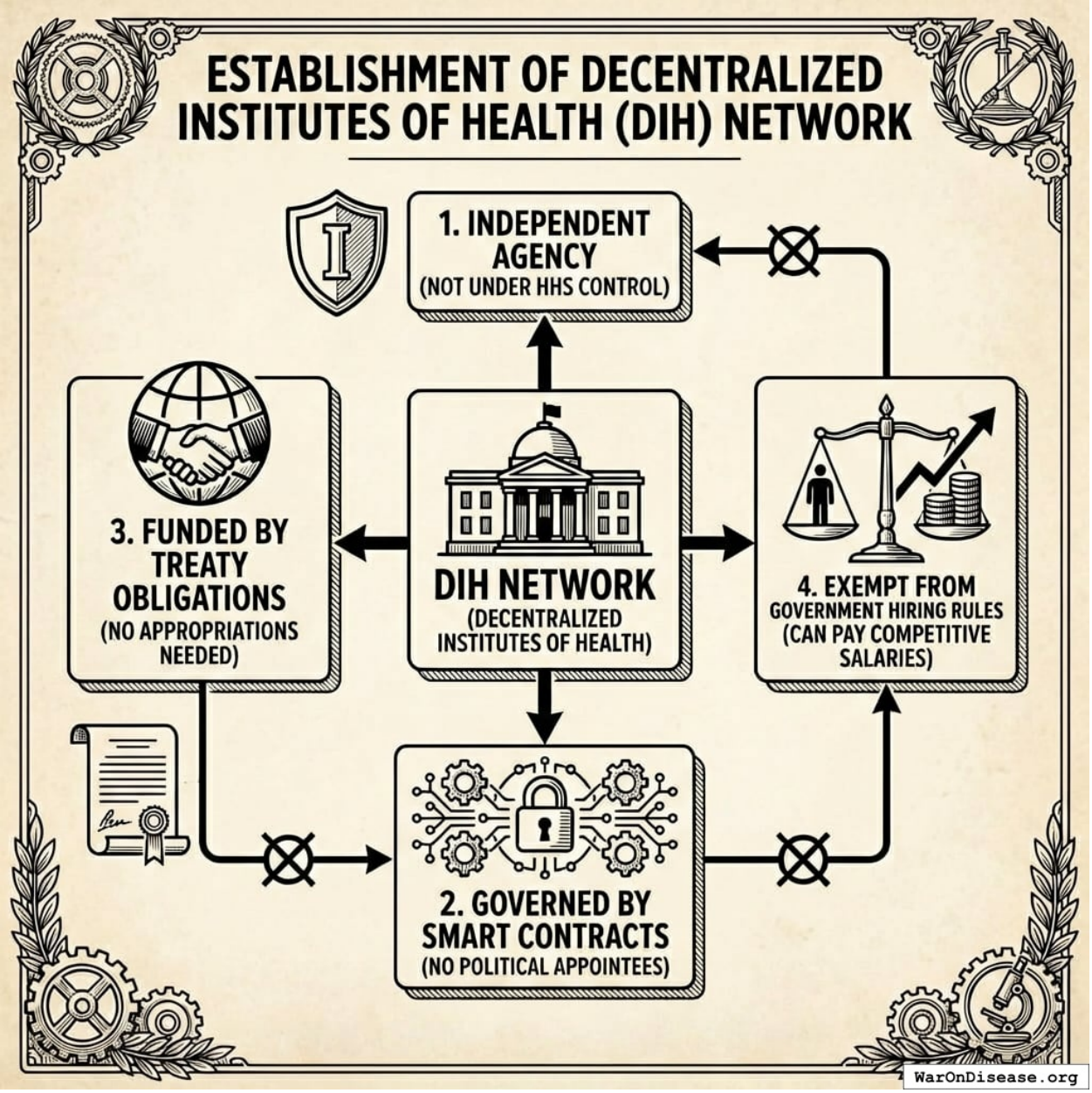


Figure 643: A structural diagram illustrating the Decentralized Institutes of Health (DIH) model, contrasting its smart contract governance and treaty-based funding against traditional agency structures like HHS.

- "A decentralized institutes of health (DIH) network is created as an independent agency" (not under HHS control)
- "Governed by smart contracts" (no political appointees)
- "Funded by treaty obligations" (no appropriations needed)
- "Exempt from government hiring rules" (can actually pay competitive salaries)

Section 2: Powers

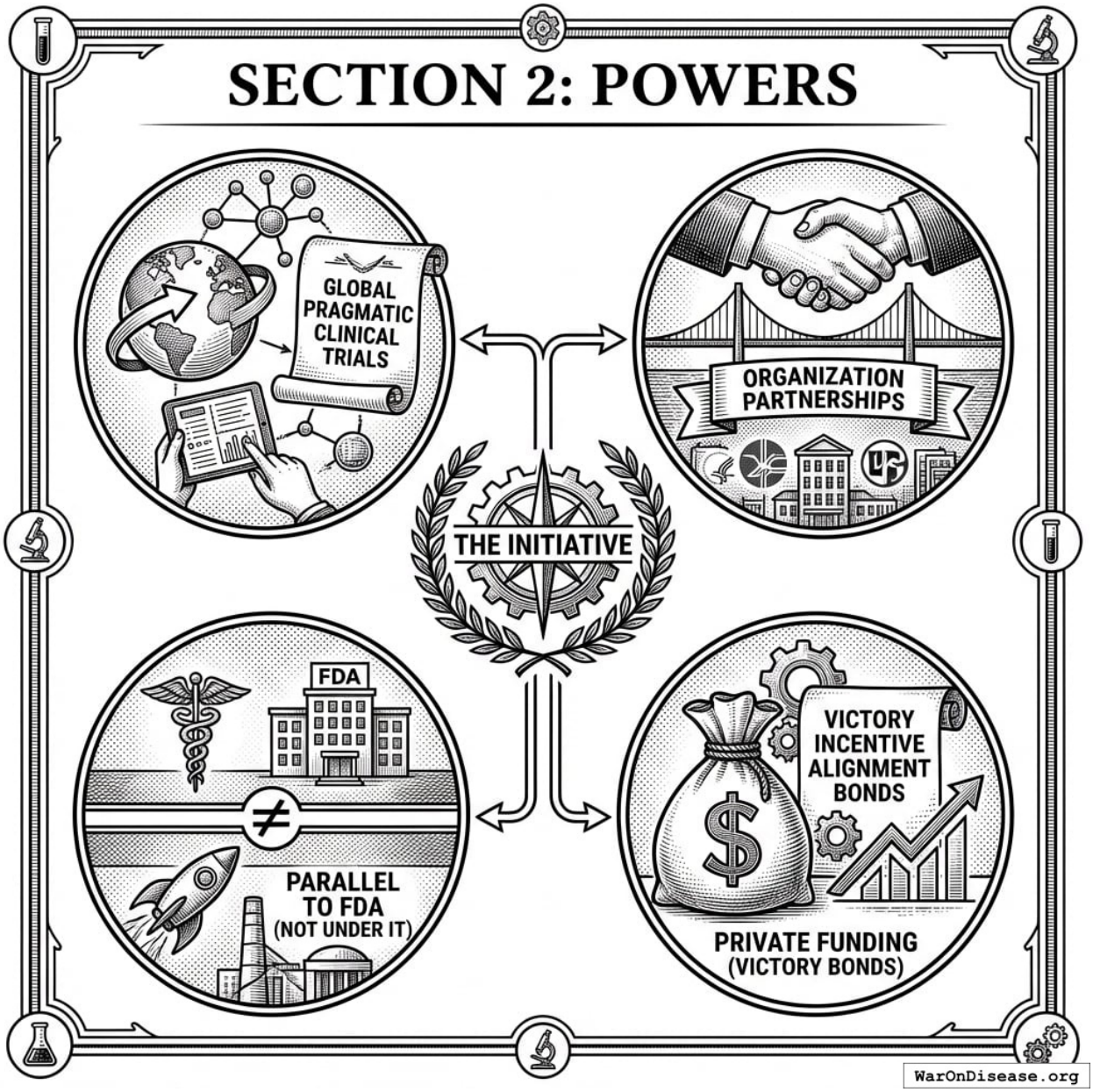


Figure 644: A structural diagram showing the entity's position parallel to the FDA, its global reach for clinical trials, and its connections to external partners and private funding sources.

- Can launch and manage any pragmatic clinical trials globally
- Can partner with any organization
- Can operate parallel to FDA (not under it)
- Can accept private funding (VICTORY Incentive Alignment Bonds)

Section 3: Governance

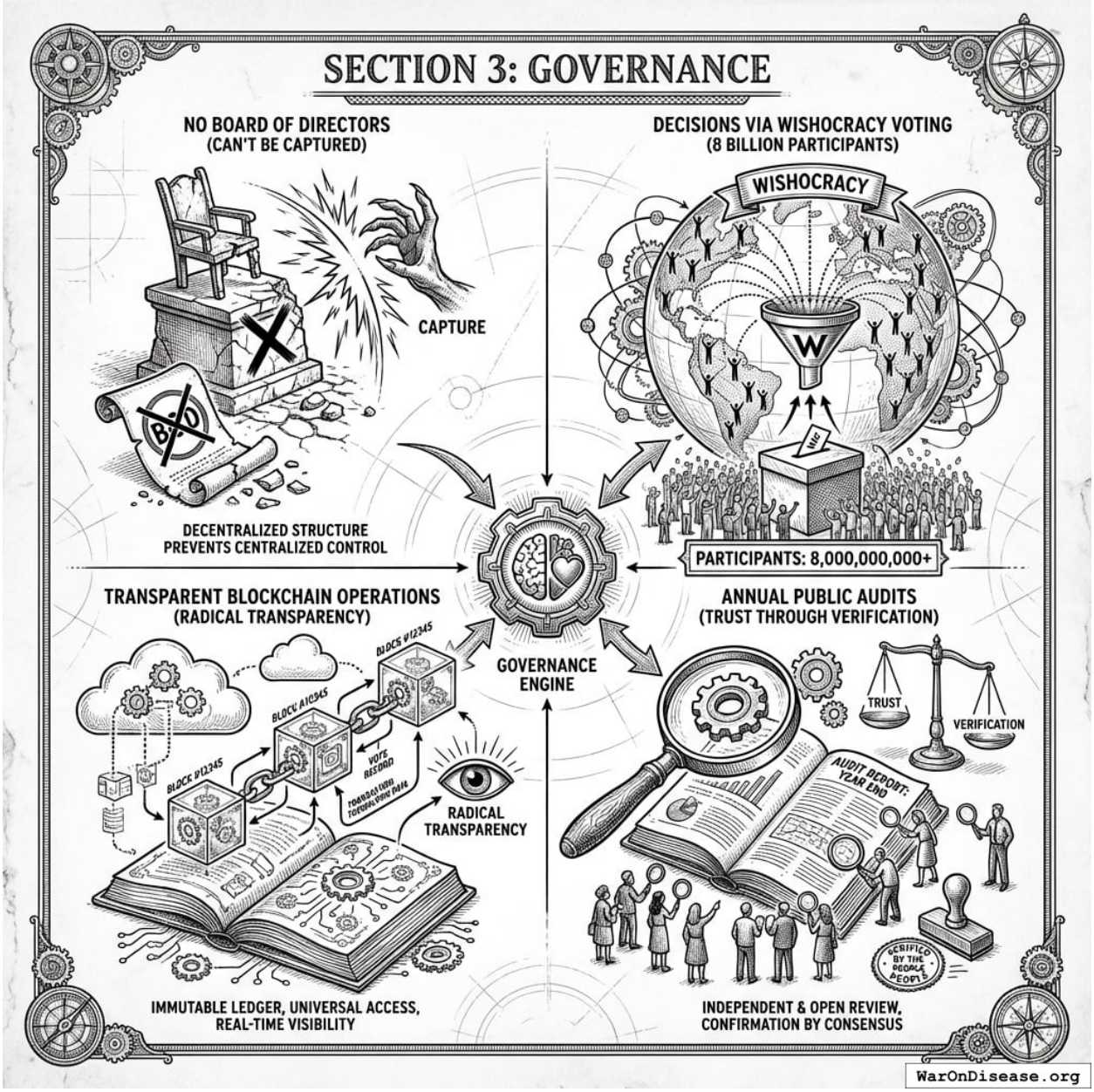


Figure 645: A visualization of the decentralized governance model showing the flow from global participant voting through transparent blockchain operations to annual public audits.

- No board of directors (can't be captured)
- Decisions via Wishocracy voting (8 billion participants)
- Transparent blockchain operations (radical transparency)
- Annual public audits (trust through verification)

The Trojan Horse Approach

Frame it as a "pilot program" or "innovation testbed." Politicians love pilots because they sound temporary and innovative. Don't mention that successful pilots never get cancelled.

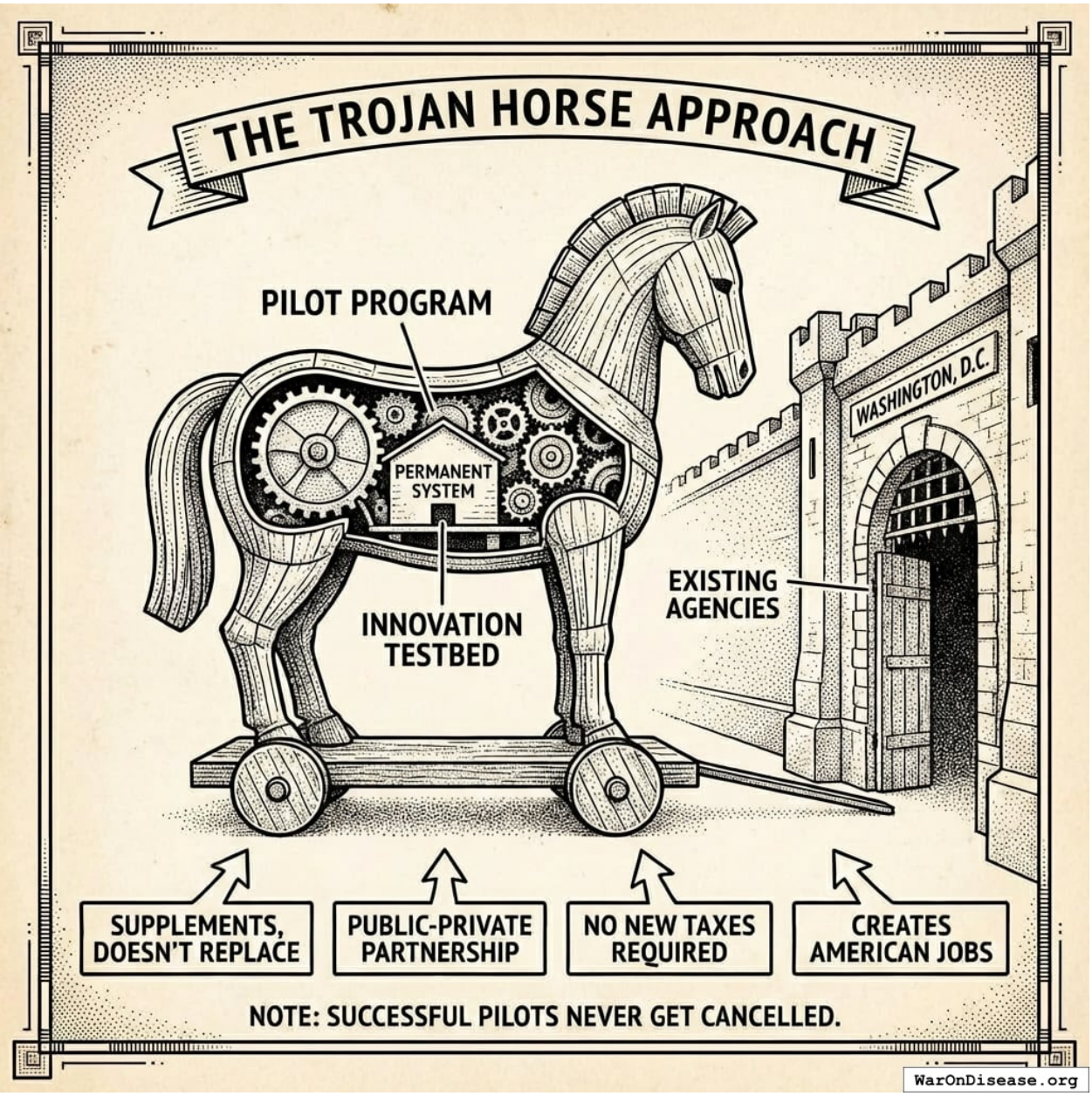


Figure 646: A visual representation of the 'Trojan Horse' strategy, showing how a permanent initiative is framed as a temporary pilot program using specific political messaging to gain approval.

Key messaging:

- "Supplements, doesn't replace, existing agencies"
- "Public-private partnership" (magic words in DC)
- "No new taxes required" (funded by reallocation)
- "Creates American jobs" (even though it's global)

The Poison Pills for Opposition

Insert provisions that make opposition toxic:

- Public salary database (shows who's blocking cures)

- Mandatory disclosure of pharma donations
- Real-time voting records on health issues
- Patient testimony requirements (let dying kids speak)

Opposition means explaining why you're against transparency and dying children. Good luck with that.

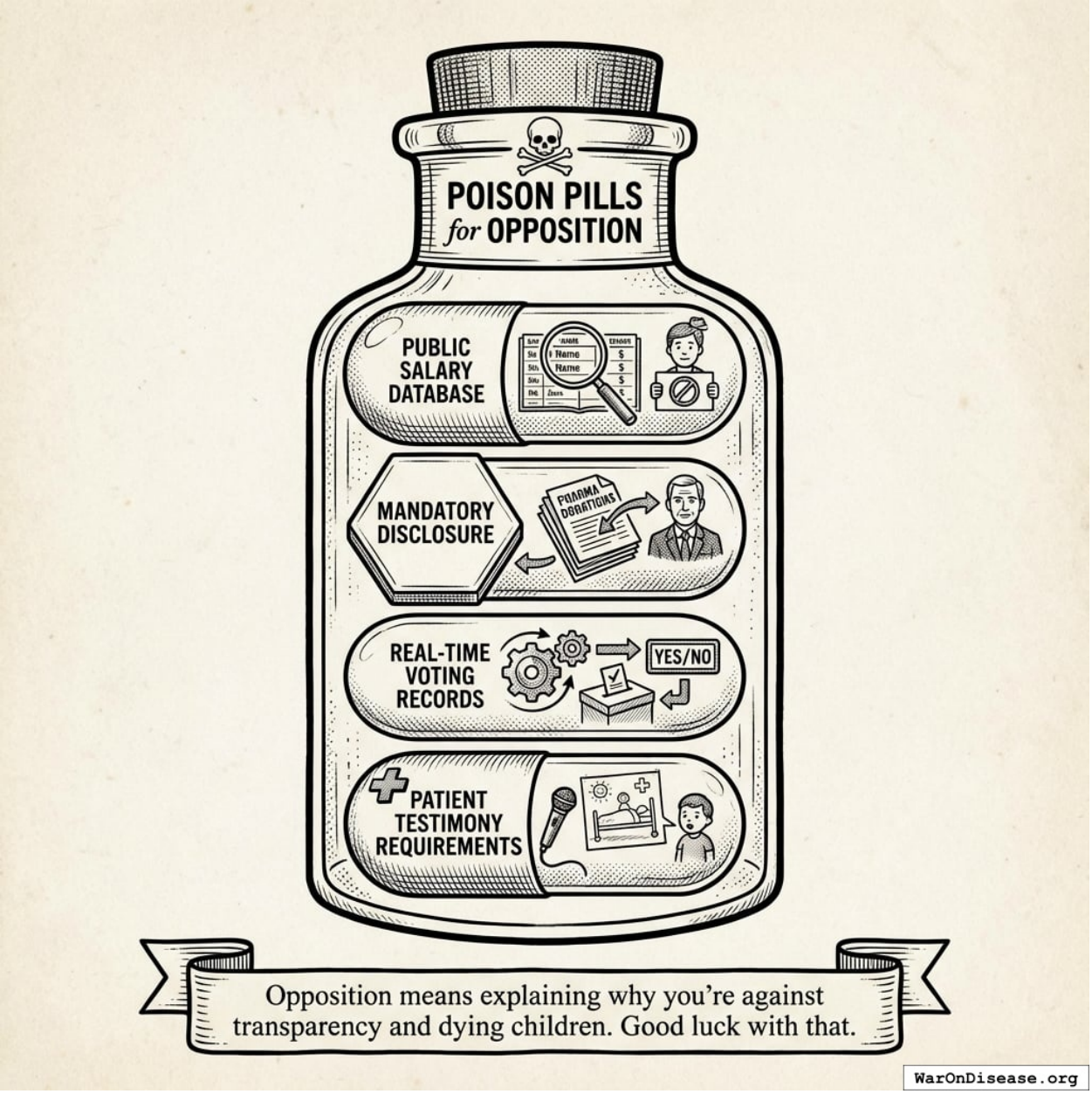


Figure 647: A conceptual diagram showing how transparency-focused legislative provisions create a 'poison pill' effect by making political opposition publicly untenable.

The Parallel Track Act: Your Regulatory Revolution

This act creates your decentralized framework for drug assessment (dFDA), a legal pathway for treatments to operate outside the FDA's 17-year death march. Patients get choices, researchers get freedom, and people stop dying while waiting for approval.

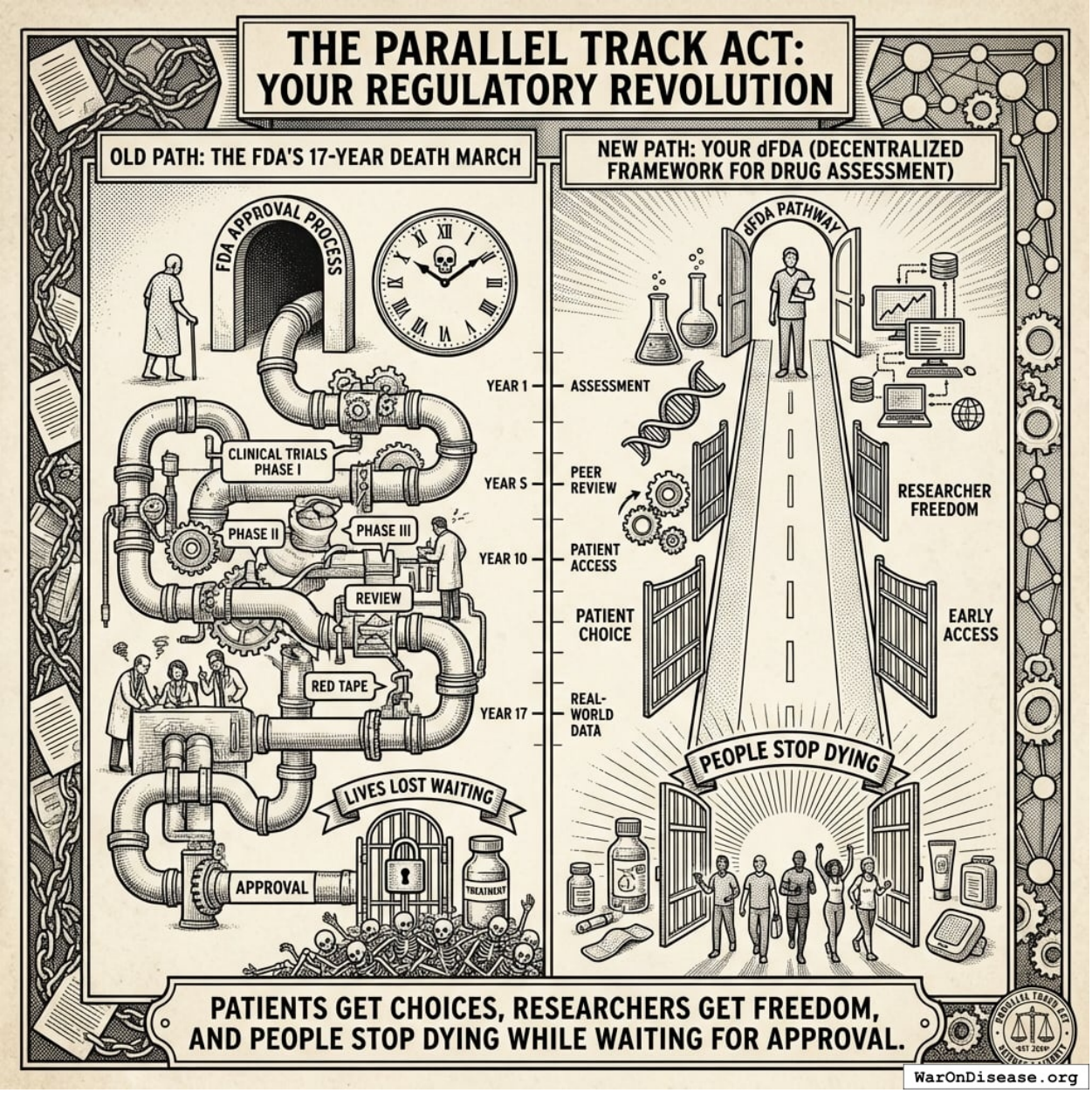


Figure 648: A comparison between the traditional FDA regulatory process and the proposed Parallel Track Act, showing the decentralized pathway for faster drug assessment.

The Legal Architecture

Section 1: The Parallel Pathway

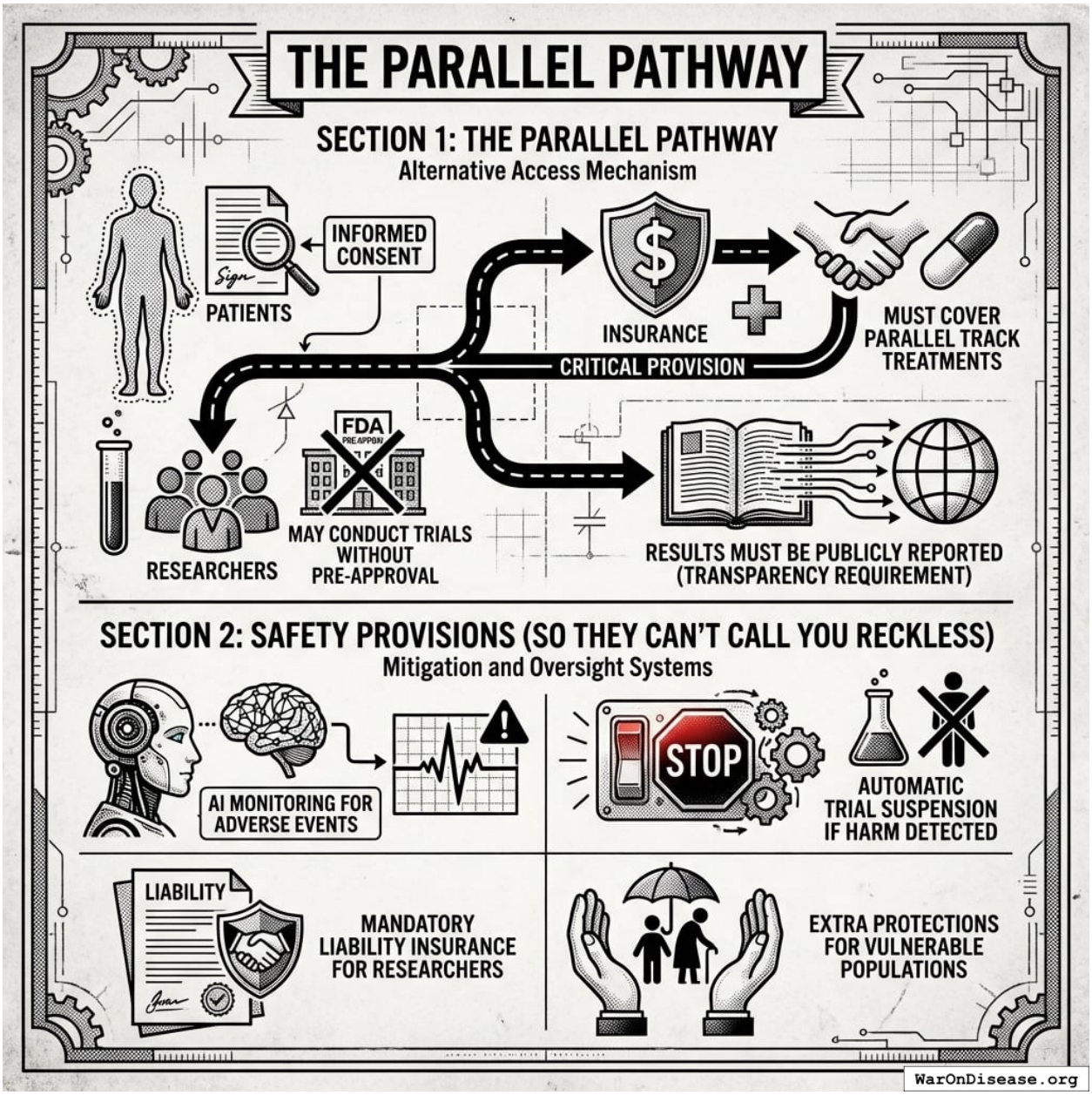


Figure 649: A conceptual diagram illustrating the Parallel Pathway system, showing the flow of patient access and research trials alongside the integrated AI safety monitors and insurance requirements.

- "Patients may access treatments in active trials with informed consent"
- "Researchers may conduct trials without FDA pre-approval"
- "Insurance must cover parallel track treatments" (critical provision)
- "Results must be publicly reported" (transparency requirement)

Section 2: Safety Provisions (So They Can't Call You Reckless)

- AI monitoring for adverse events

- Automatic trial suspension if harm detected
- Mandatory liability insurance for researchers
- Extra protections for vulnerable populations

Section 3: The Data Revolution

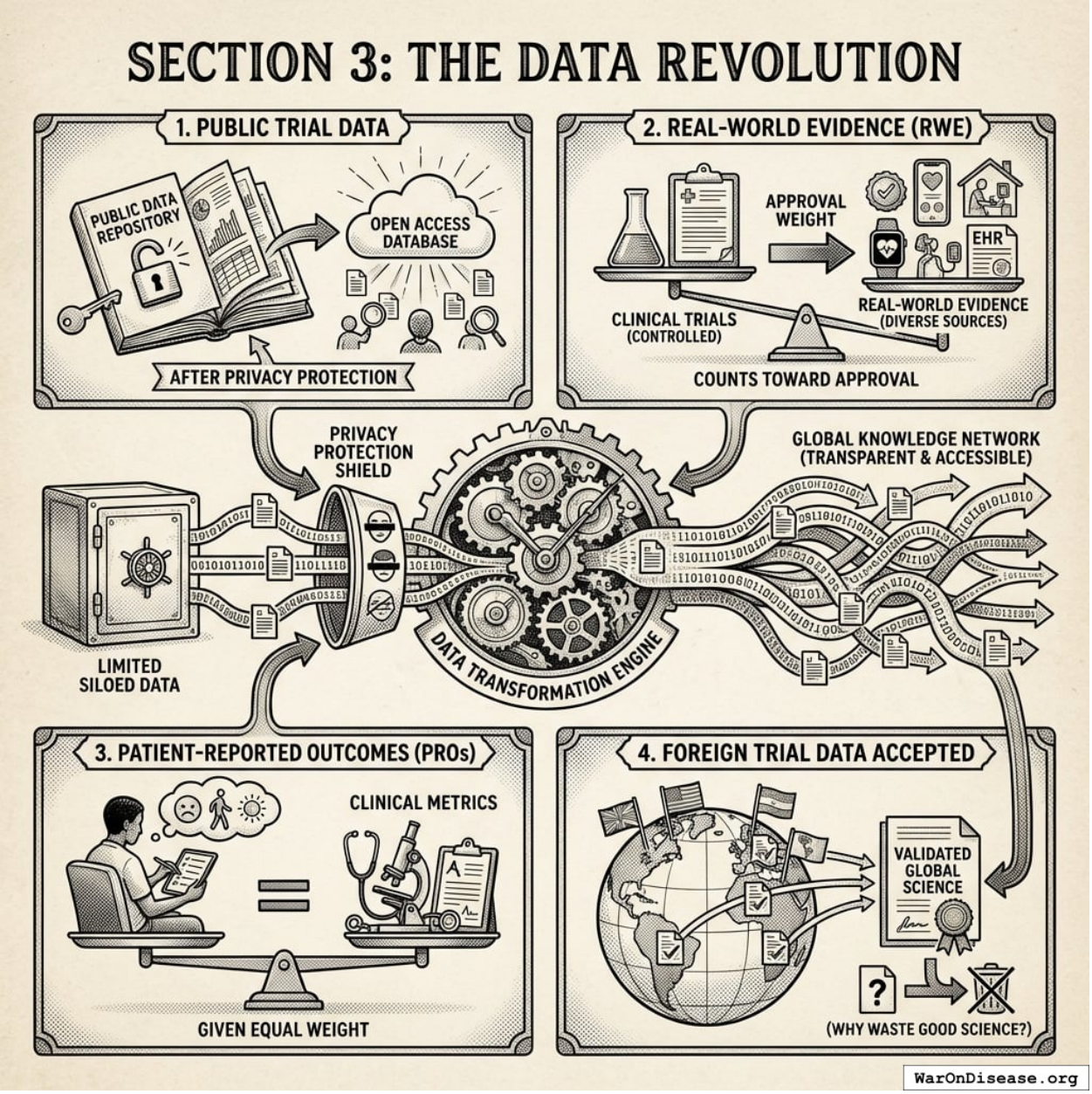


Figure 650: A diagram illustrating the convergence of four key data streams, public trial data, real-world evidence, patient-reported outcomes, and foreign data, into a modernized regulatory approval process.

- All trial data becomes public (after privacy protection)
- Real-world evidence counts toward approval
- Patient-reported outcomes given equal weight
- Foreign trial data accepted (why waste good science?)

How to Sell This to Cowards

Politicians are terrified of being blamed for the next thalidomide. Here's how you address their fear:

The Safety Argument

- "More data makes things safer, not less"
- "Real-world monitoring beats controlled trials"
- "Patients are dying NOW under current system"
- "Other countries already do this successfully"



Figure 651: A comparison infographic contrasting the traditional controlled trial safety model with a proposed real-world data-driven approach.

The Freedom Argument

- "Patient choice is a fundamental right"
- "Government shouldn't stand between patients and cures"
- "Free market for treatments, not Soviet medicine"
- "Right to try, expanded and improved"

The Innovation Argument

- "America leads by innovating, not regulating"
- "Unleash our researchers to compete globally"
- "Create the Silicon Valley of medicine"
- "Make America the destination for cures"

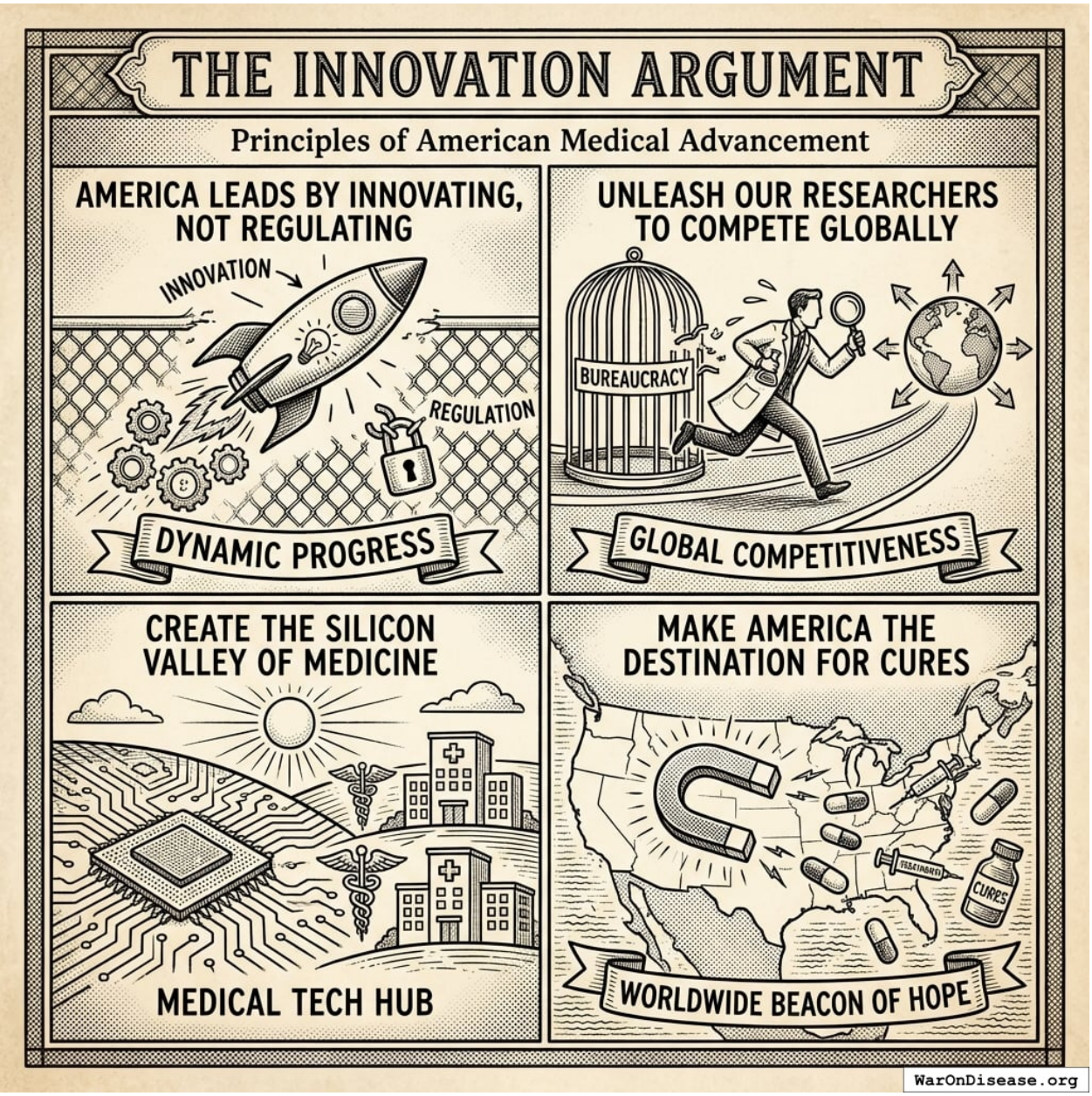


Figure 652: A conceptual infographic illustrating the strategic pillars of the 'Innovation Argument,' highlighting the shift from regulation to research-led global competitiveness.

The Implementation Trick

Start with terminal diseases only. Nobody argues against letting dying people try treatments. Once it works, expand to chronic diseases. Then everything else. Classic foot-in-door technique.

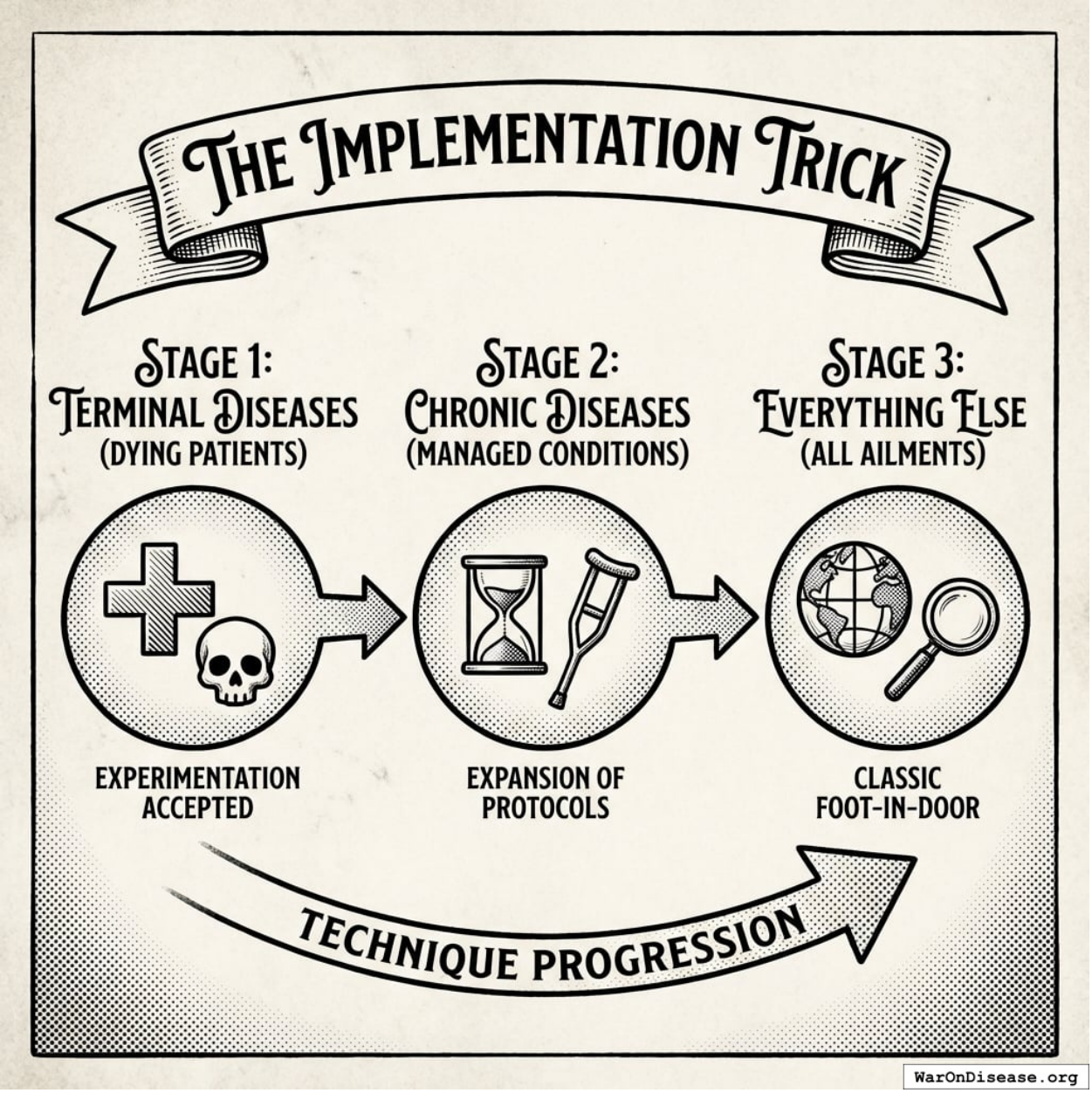


Figure 653: A progression map illustrating the three-stage 'foot-in-the-door' strategy: starting with terminal diseases, expanding to chronic conditions, and concluding with universal application.

The Right to Try Expansion Act: Medical Freedom

Current Right to Try laws are useless. They require FDA permission (defeats the purpose) and manufacturers can refuse (they often do). Here's the version that actually works.

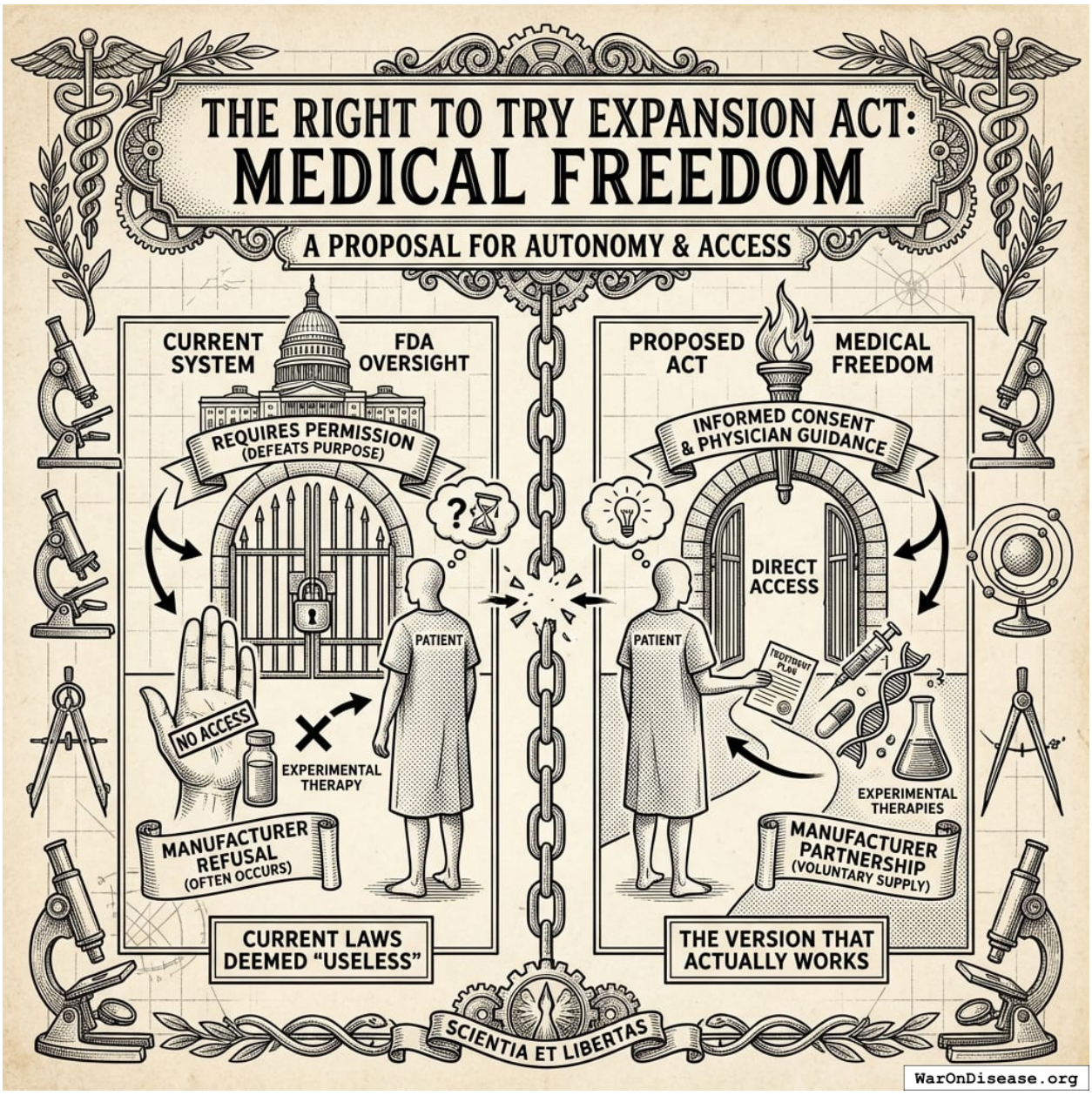


Figure 654: A comparison showing the bureaucratic hurdles of current Right to Try laws versus a streamlined path to medical access.

The Provisions That Matter

Section 1: Absolute Right

- "Any patient may access any treatment in trials"
- "Manufacturers must provide at cost + 15%" (reasonable profit)
- "Insurance must cover if cheaper than standard care"
- "No FDA approval needed for dying patients"

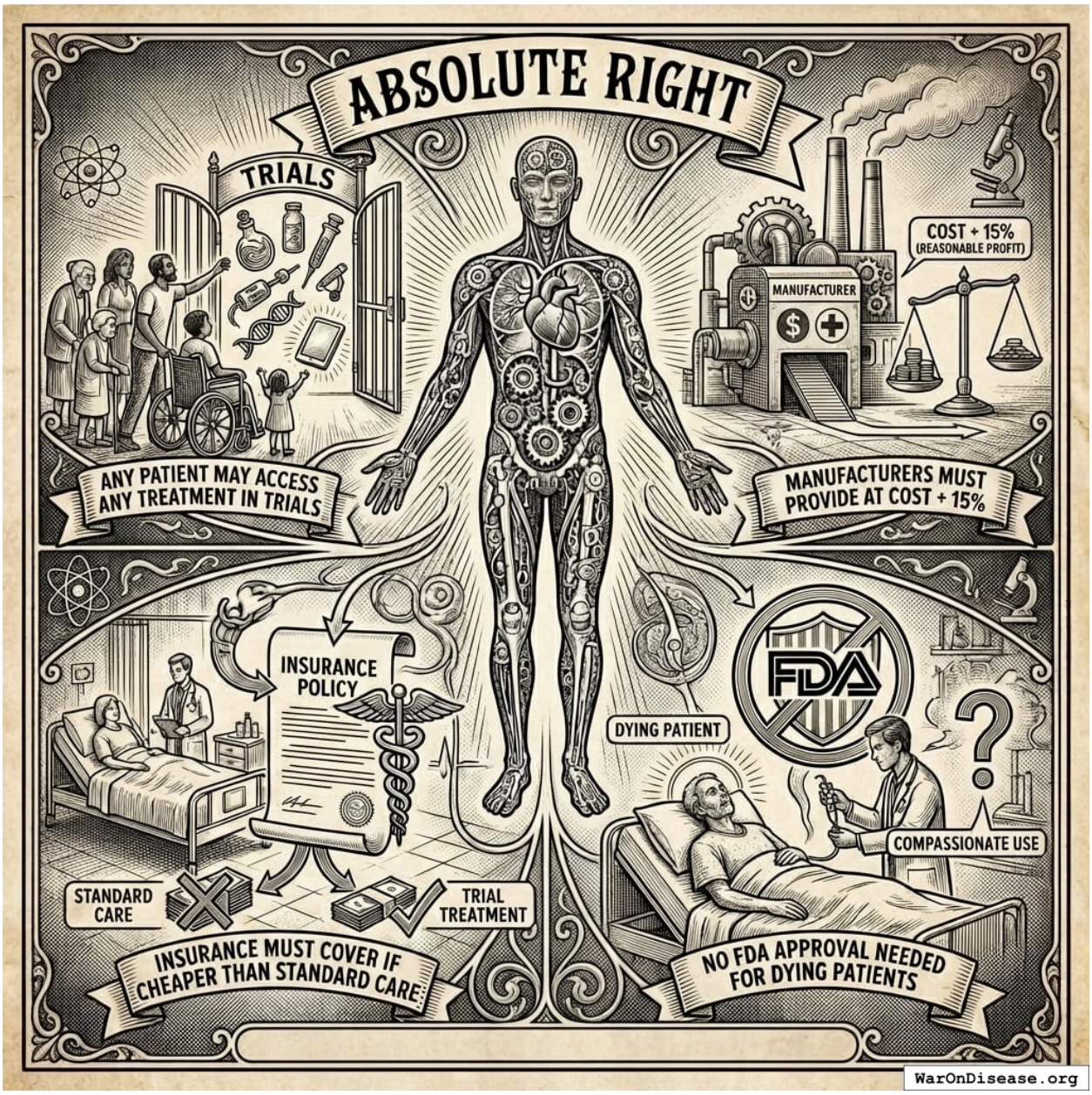


Figure 655: An infographic outlining the four key pillars of the 'Absolute Right' policy framework, illustrating the rights and requirements for patients, manufacturers, and insurance providers.

Section 2: The Subsidy System

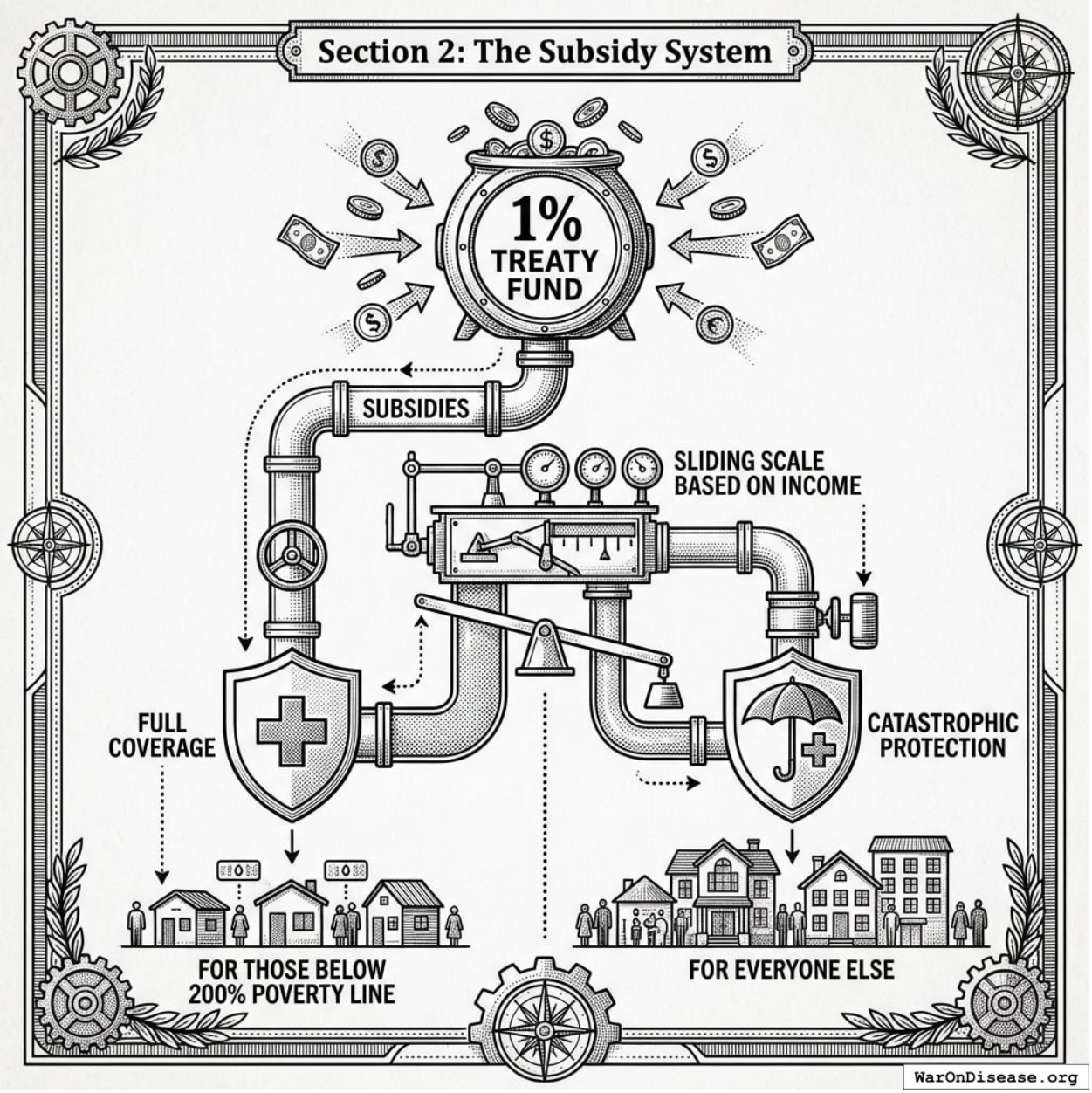


Figure 656: A visualization of the subsidy tiers showing full coverage below 200 percent of the poverty line and the sliding scale of affordability for other income levels.

- Subsidies from a 1% Treaty Fund make treatments affordable
- Sliding scale based on income
- Full coverage for those below 200% poverty line
- Catastrophic protection for everyone else

Section 3: The Data Exchange

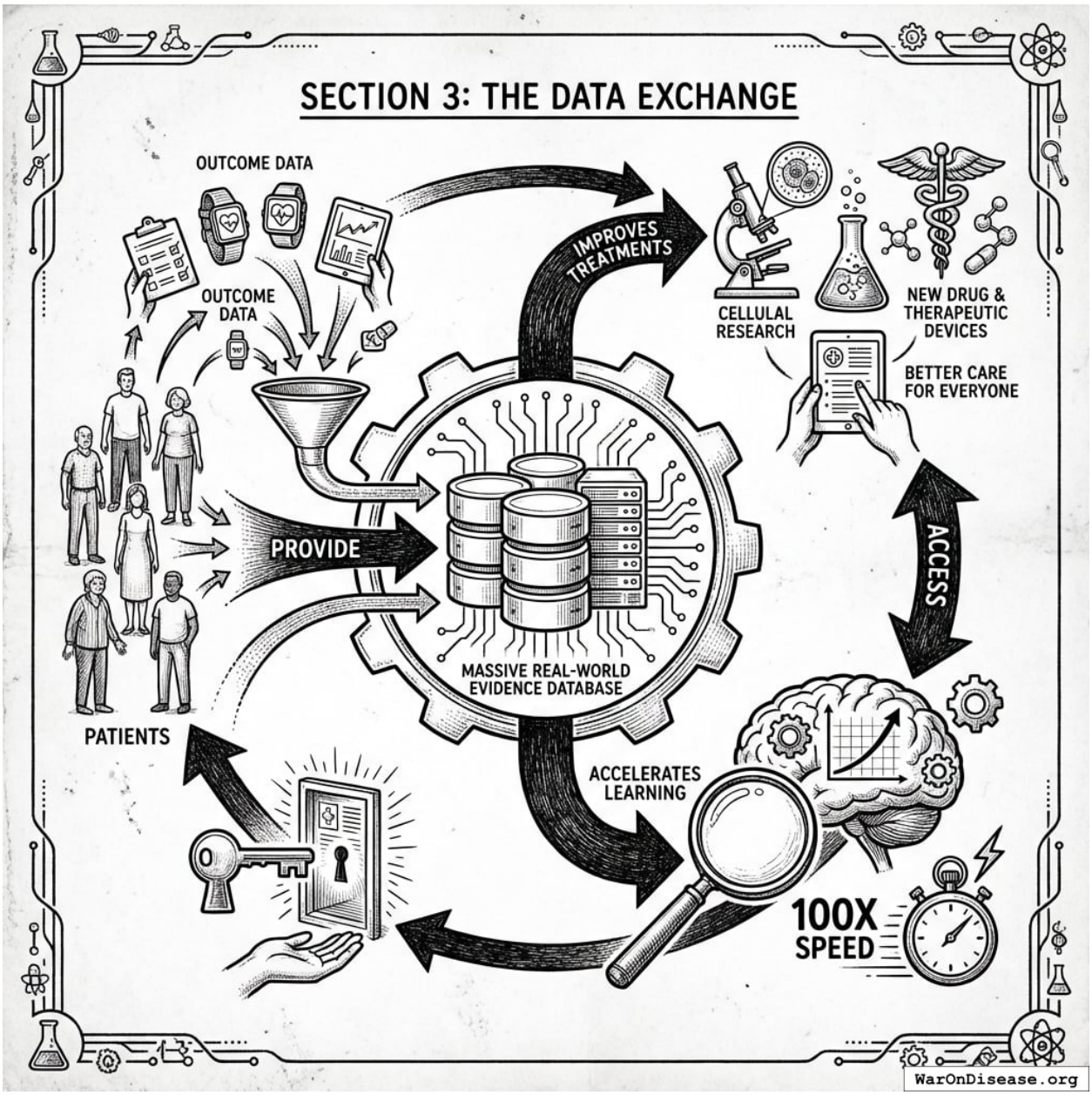


Figure 657: A flowchart depicting the circular data exchange process where patient data creates a real-world evidence database that accelerates medical learning by 100X.

- Patients provide outcome data in exchange for access
- Data improves treatments for everyone
- Creates massive real-world evidence database
- Accelerates learning by 100X

The Emotional Blackmail Strategy

This is where you deploy dying children strategically. Have them testify before Congress. Have them ask politicians directly: "Why won't you let me try to live?"

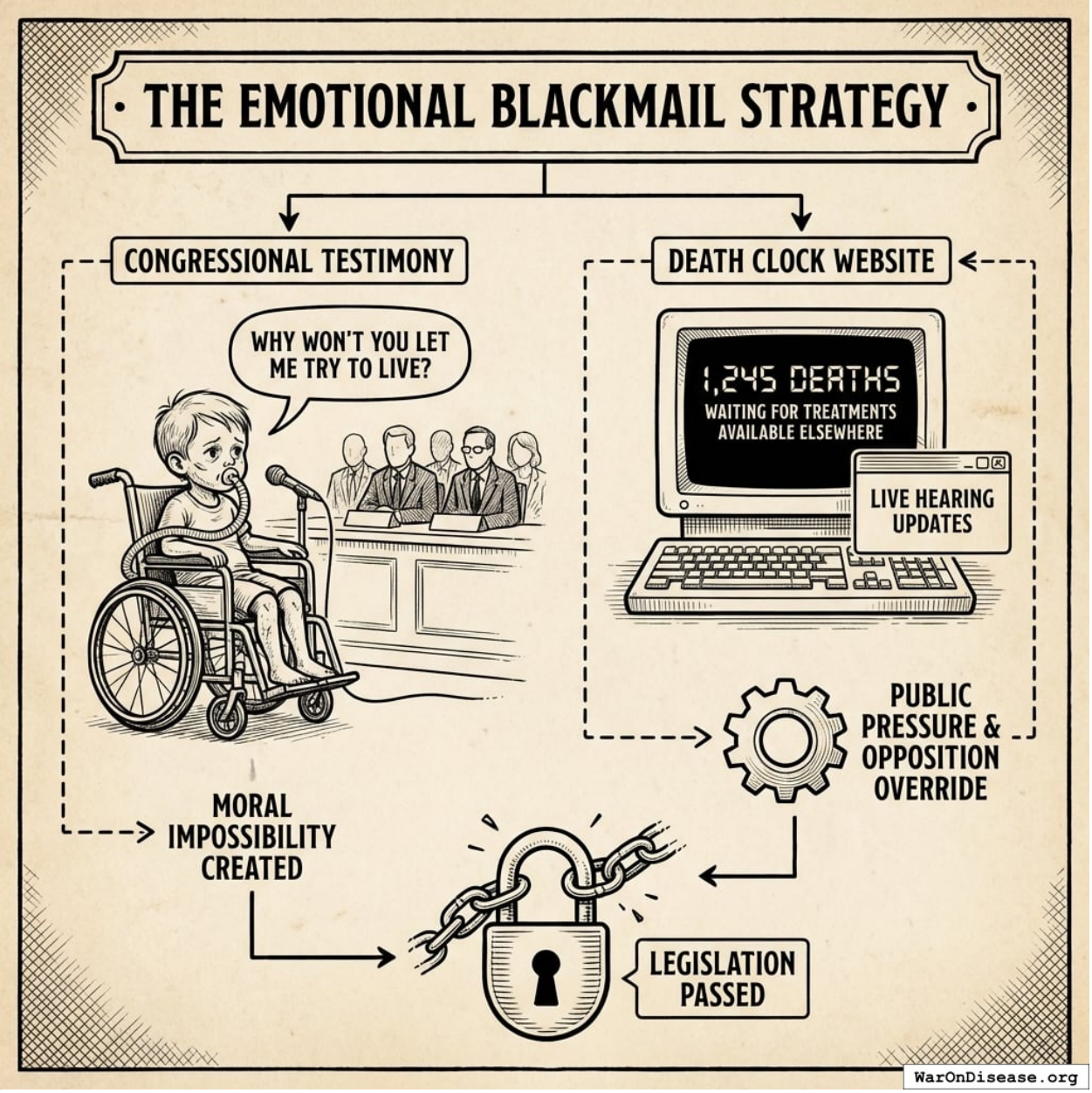


Figure 658: A strategic overview of the emotional advocacy campaign, illustrating how direct testimony and real-time data tracking combine to create moral pressure on policy decisions.

Create a "Death Clock" website showing people dying while waiting for treatments available elsewhere. Update it live during hearings. Make opposition morally impossible.

The Talking Points

- "Every parent would want this for their child"
- "Bureaucrats shouldn't decide who lives and dies"
- "Other countries save these patients, why can't we?"
- "The FDA approval timeline is a death sentence"

The Coalition Building

Get strange bedfellows working together:

- Libertarians: "Medical freedom!"
- Progressives: "Healthcare access!"
- Religious groups: "Sanctity of life!"
- Patient groups: "We want to live!"

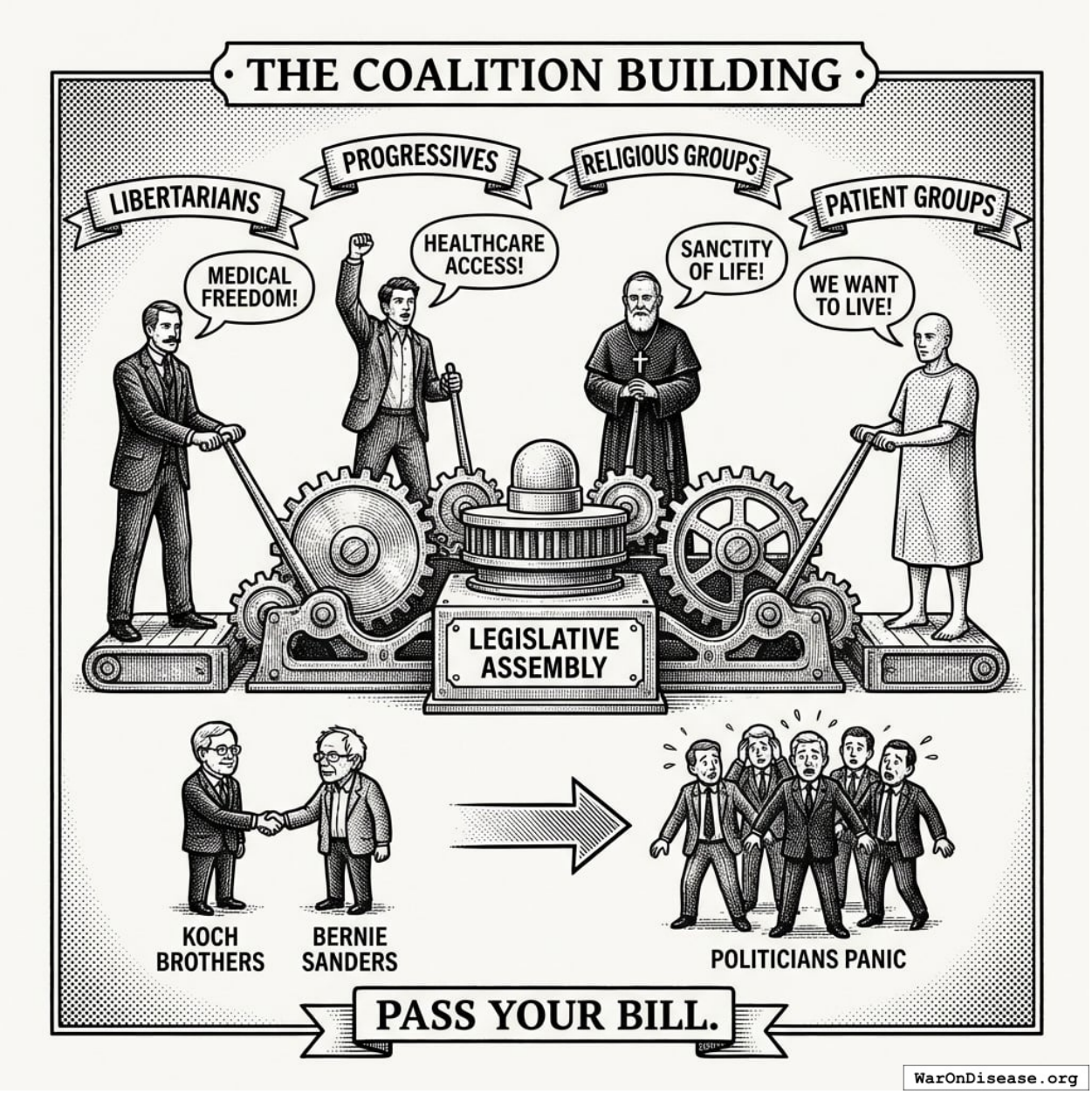


Figure 659: A visual representation showing diverse interest groups: Libertarians, Progressives, religious organizations, and patient advocates, converging from different ideological backgrounds toward a shared legislative goal.

When the Koch Brothers and Bernie Sanders agree, politicians panic and pass your bill.

The Budget Reallocation Act: Moving the Money

This is the technical bill that actually moves the money. Boring but critical. Without it, everything else is theater.

The Money Flow Mechanics

Section 1: Automatic Transfer

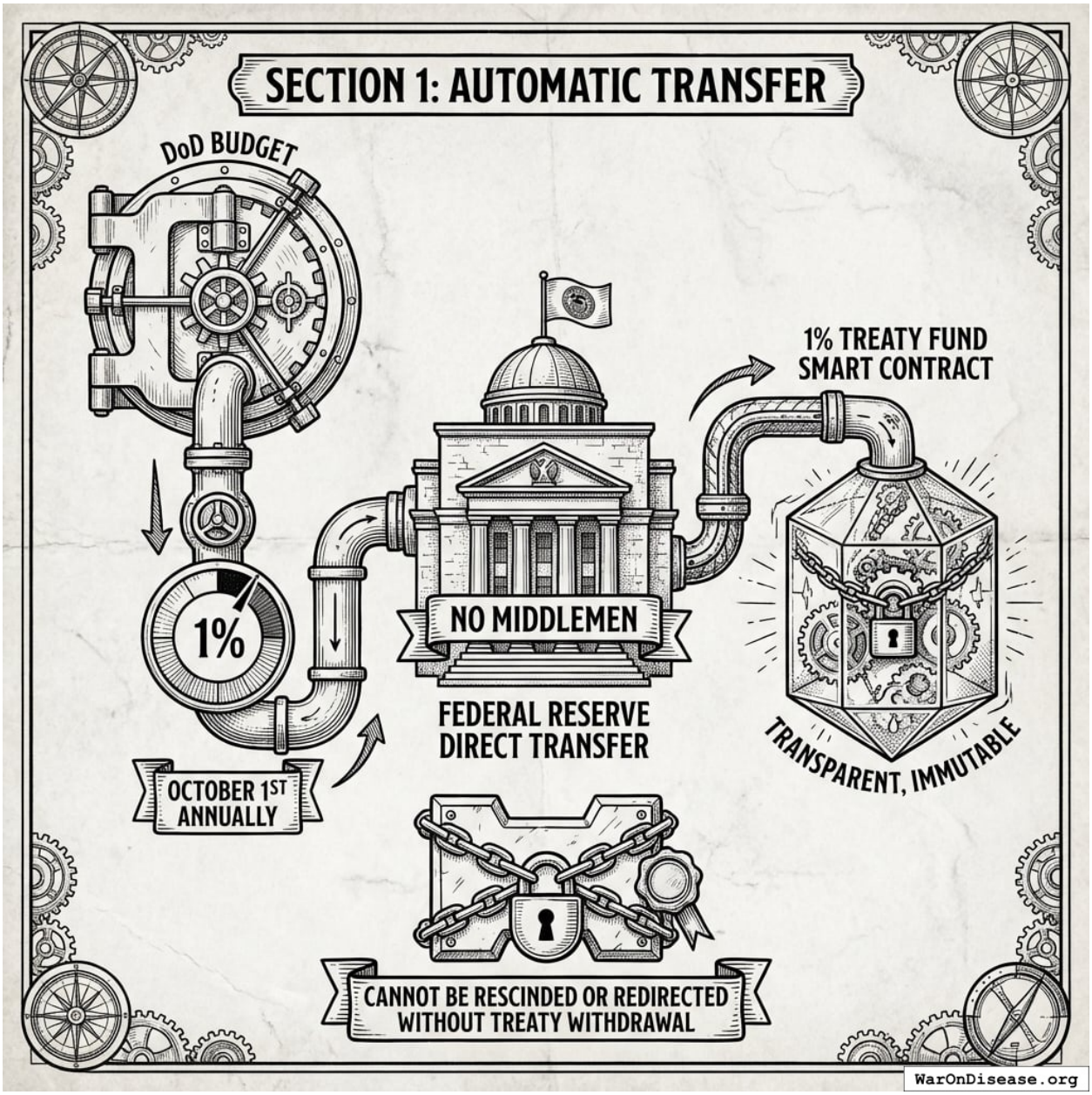


Figure 660: A flow diagram illustrating the annual automatic transfer of 1 percent of the DoD budget from the Federal Reserve directly into a transparent smart contract fund.

- 1% of DoD budget transferred on October 1st annually
- Via Federal Reserve direct transfer (no middlemen)

- To a 1% Treaty Fund smart contract (transparent, immutable)
- Cannot be rescinded or redirected without treaty withdrawal

Section 2: The Protection Clauses

- Funds exempt from sequestration
- Exempt from government shutdown
- Exempt from debt ceiling fights
- Treated as treaty obligation, not appropriation

Section 3: The Growth Mechanism

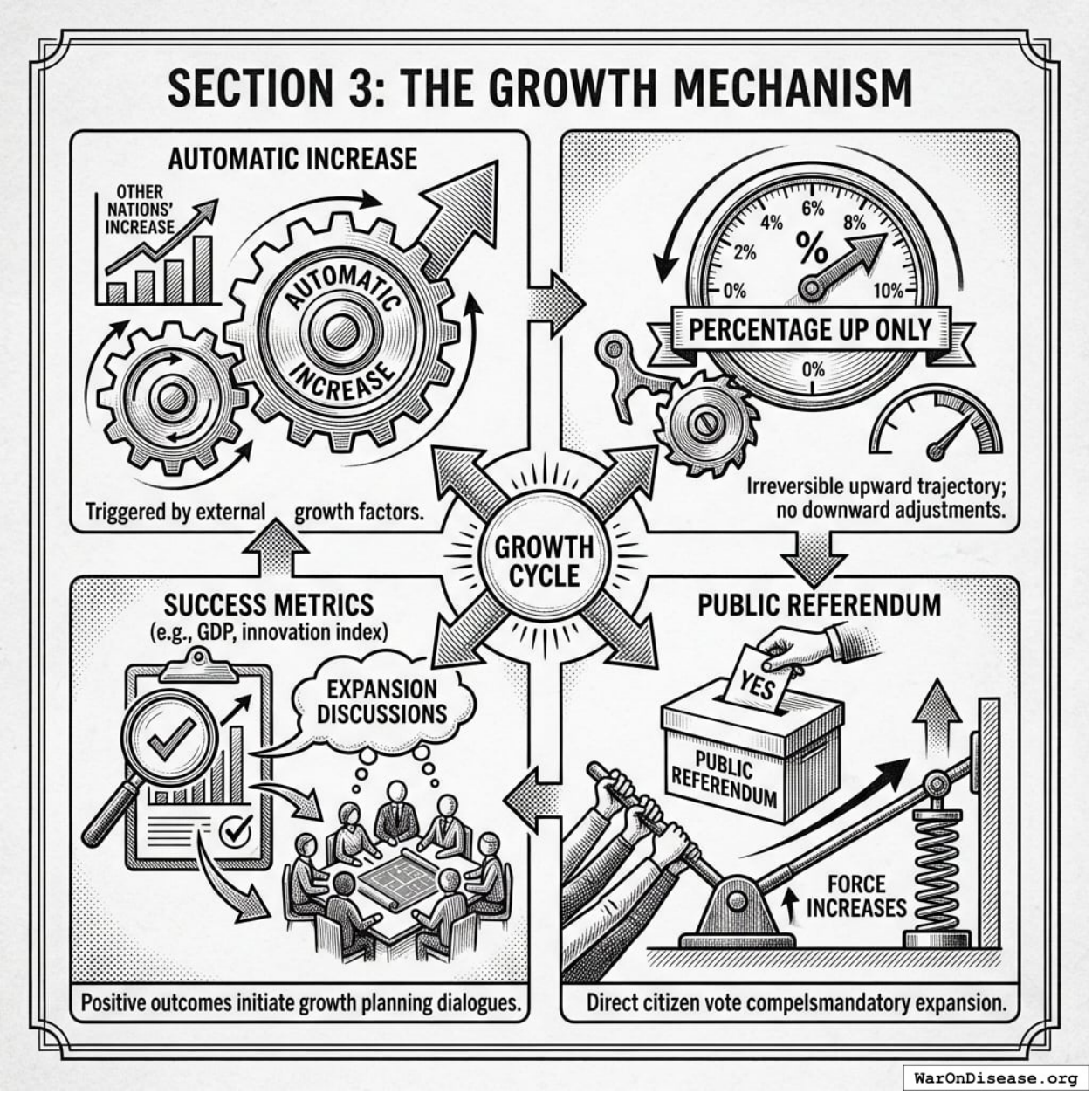


Figure 661: A flowchart showing how various inputs like international parity, success metrics, and public referendums trigger the growth mechanism's unidirectional increase.

- Automatic increase if other nations increase
- Percentage can only go up, never down
- Success metrics trigger expansion discussions
- Public referendum can force increases

Making It Robust

The Constitutional Approach

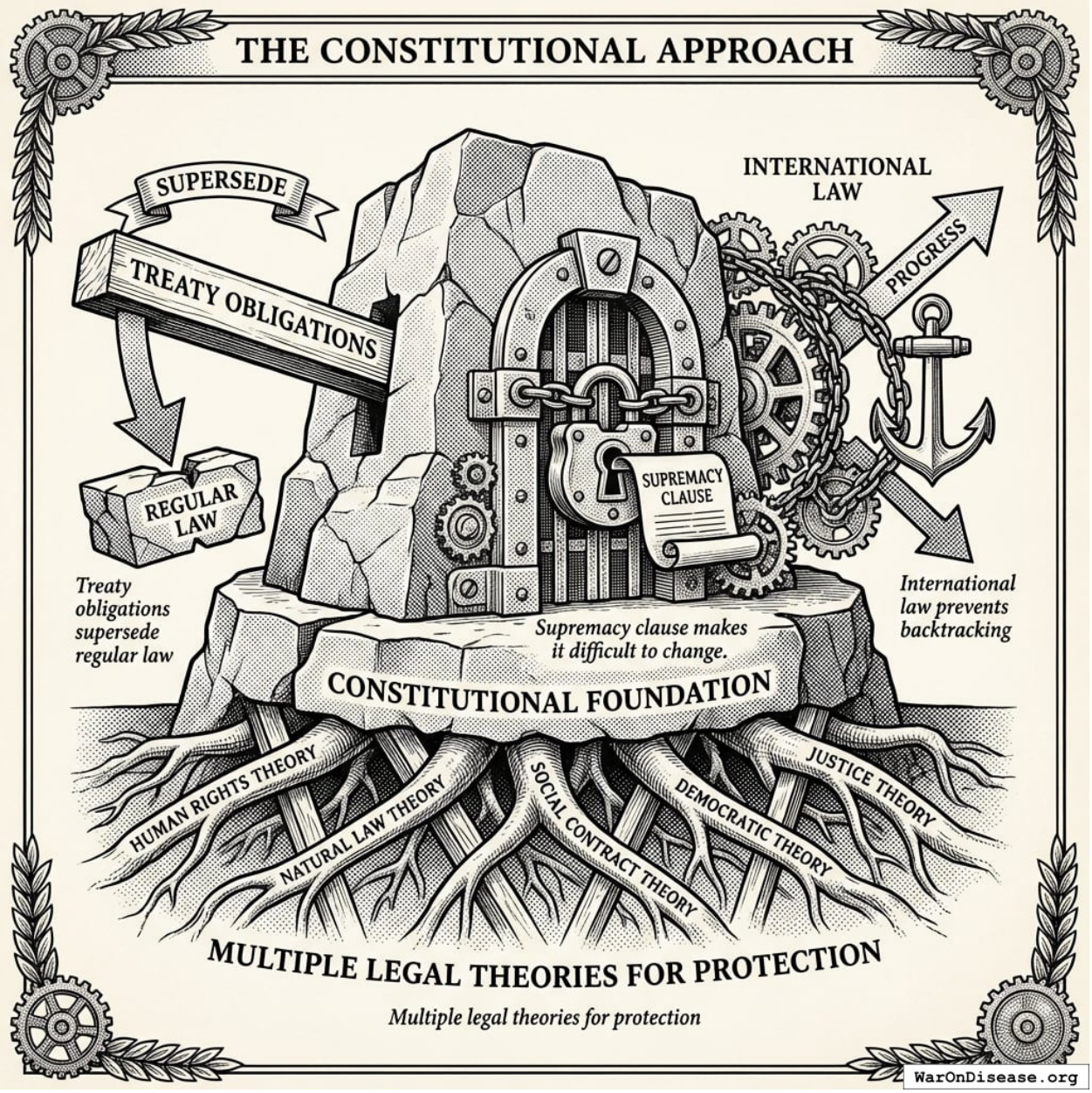


Figure 662: A hierarchical diagram showing the supremacy of treaty obligations over regular law, supported by the Supremacy Clause and international law barriers.

- Treaty obligations supersede regular law
- Supremacy clause makes it difficult to change

- International law prevents backtracking
- Multiple legal theories for protection

The Political Protection



Figure 663: A conceptual diagram illustrating the four rhetorical shields used as 'Political Protection' against any changes to the status quo.

- Touching it means you're "against the troops" (their healthcare)
- And "against children" (pediatric trials)
- And "against jobs" (research employment)
- And "against America" (America is winning the cure race)

The Technical Protection

- Smart contracts execute automatically
- Multiple backup execution methods
- International oversight and verification
- Blockchain immutability prevents tampering

The Incremental Implementation

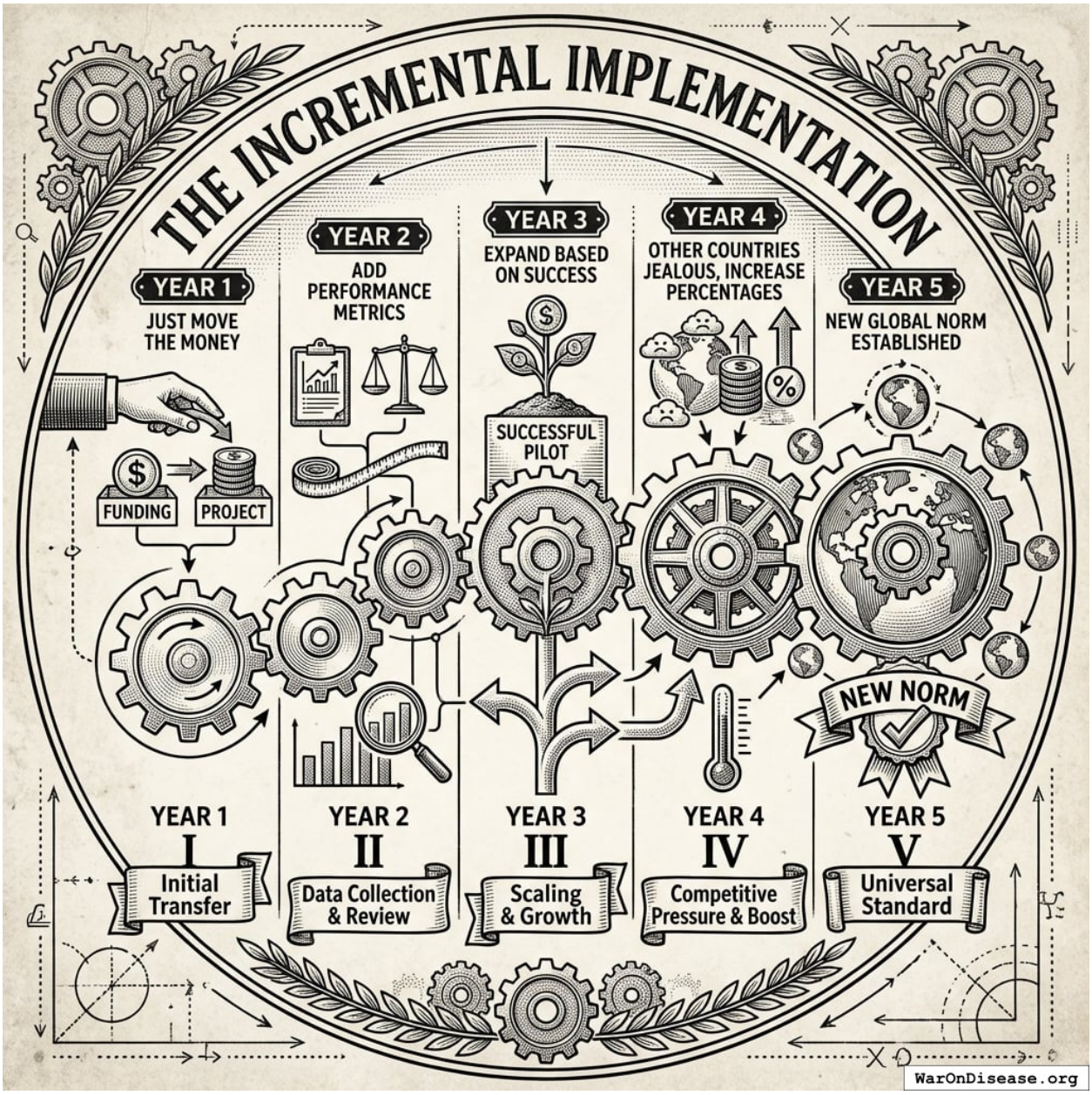


Figure 664: A chronological timeline illustrating the five-year incremental implementation plan, from the initial transfer of funds to the establishment of a new global norm.

Year 1: Just move the money Year 2: Add performance metrics Year 3: Expand based on success Year 4: Other countries jealous, increase percentages Year 5: New global norm established

The Legislative Strategy: Order of Operations

Here's how you pass all five bills:

Phase 1: Build Momentum

1. **Right to Try Expansion** goes first (emotional, bipartisan)
2. Creates patient demand for more access
3. Shows system can handle parallel tracks
4. Politicians get credit for "saving lives"

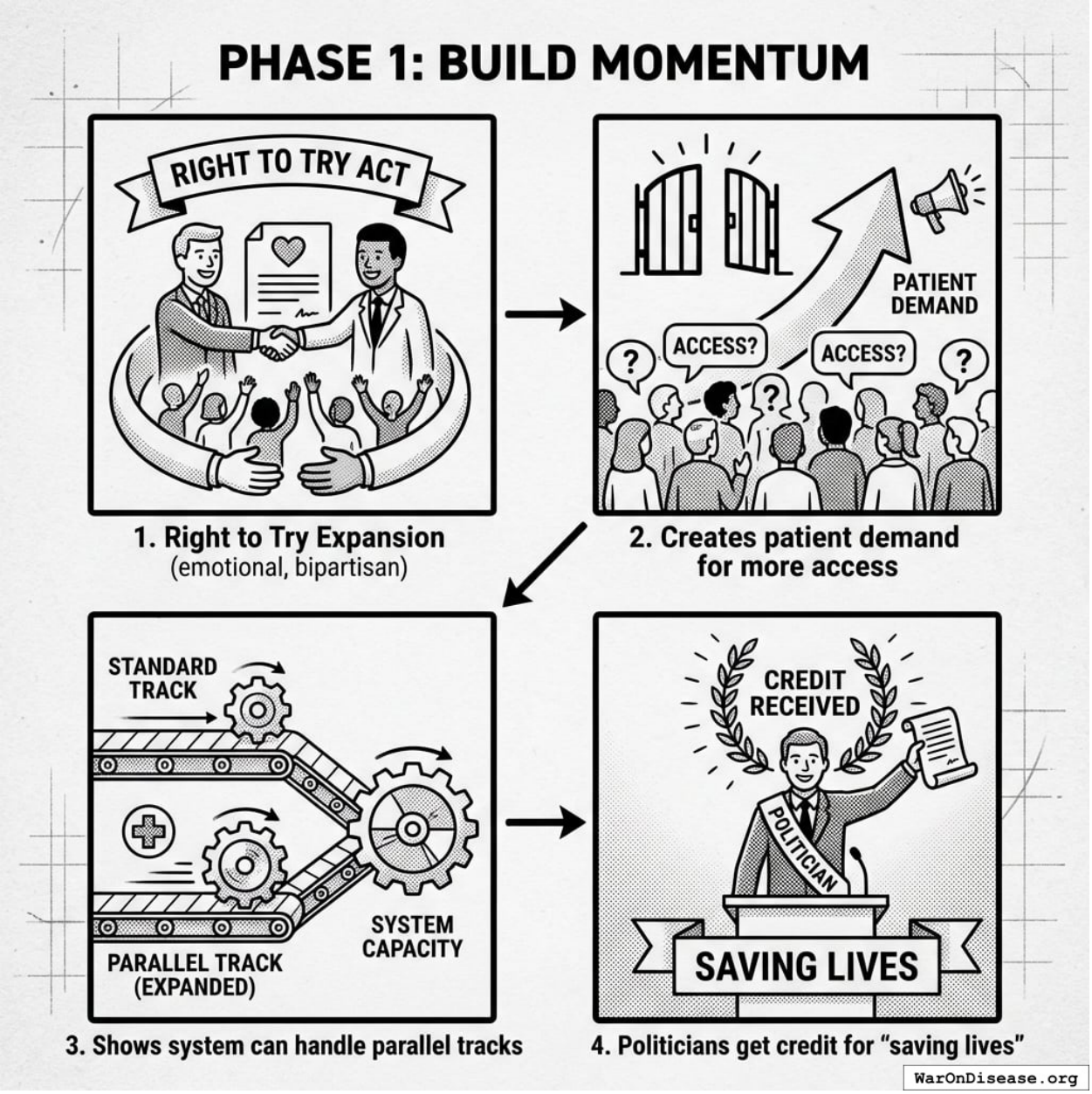


Figure 665: A flowchart illustrating the strategic progression of Phase 1, showing how 'Right to Try' expansion triggers patient demand, system validation, and political incentives.

Phase 2: Create Infrastructure

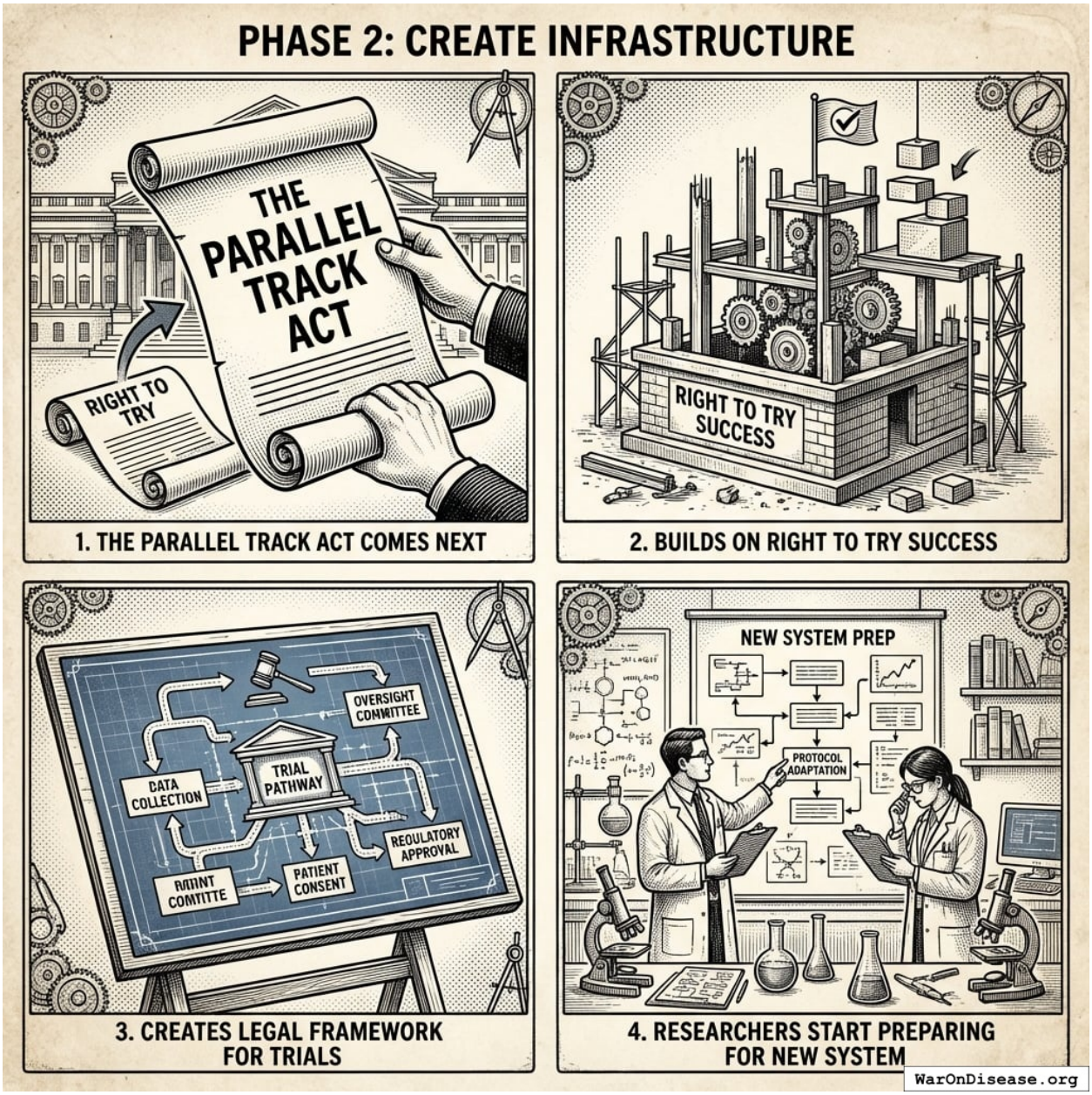


Figure 666: A process flow showing the progression from the Parallel Track Act to the active preparation of researchers within a new legal framework.

1. **The Parallel Track Act** comes next
2. Builds on Right to Try success
3. Creates legal framework for trials
4. Researchers start preparing for new system

Phase 3: Fund the System

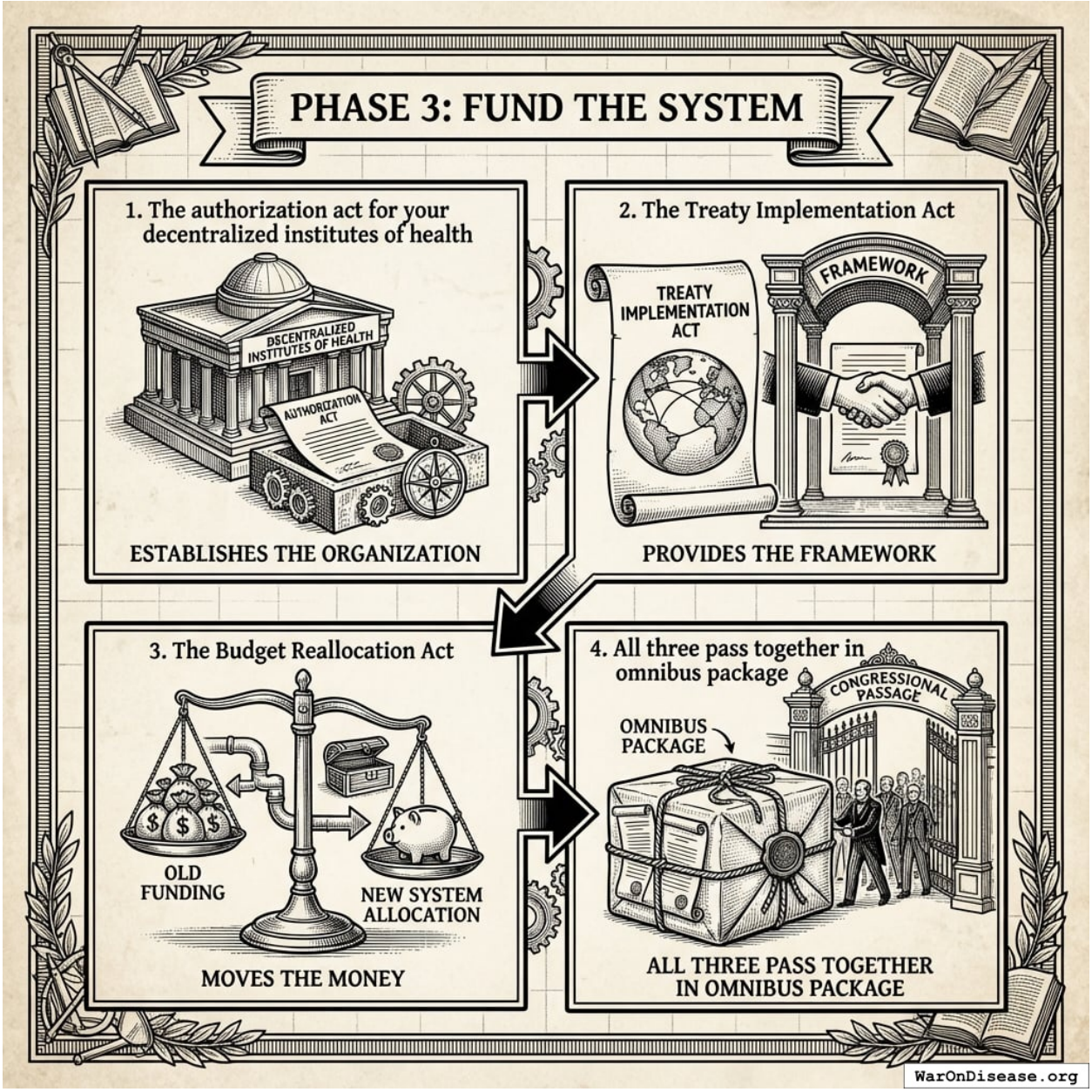


Figure 667: A flowchart showing three separate legislative acts: Authorization, Treaty Implementation, and Budget Reallocation, merging into a single omnibus package.

1. **The authorization act for your decentralized institutes of health** establishes the organization
2. **The Treaty Implementation Act** provides the framework
3. **The Budget Reallocation Act** moves the money
4. All three pass together in omnibus package

The Omnibus Strategy

Package everything in a must-pass bill:

- Defense authorization (they always pass)

- Or continuing resolution (government shutdown threat)
- Or debt ceiling increase (economic catastrophe threat)

Politicians can't vote against it without catastrophic consequences. Success becomes highly likely.

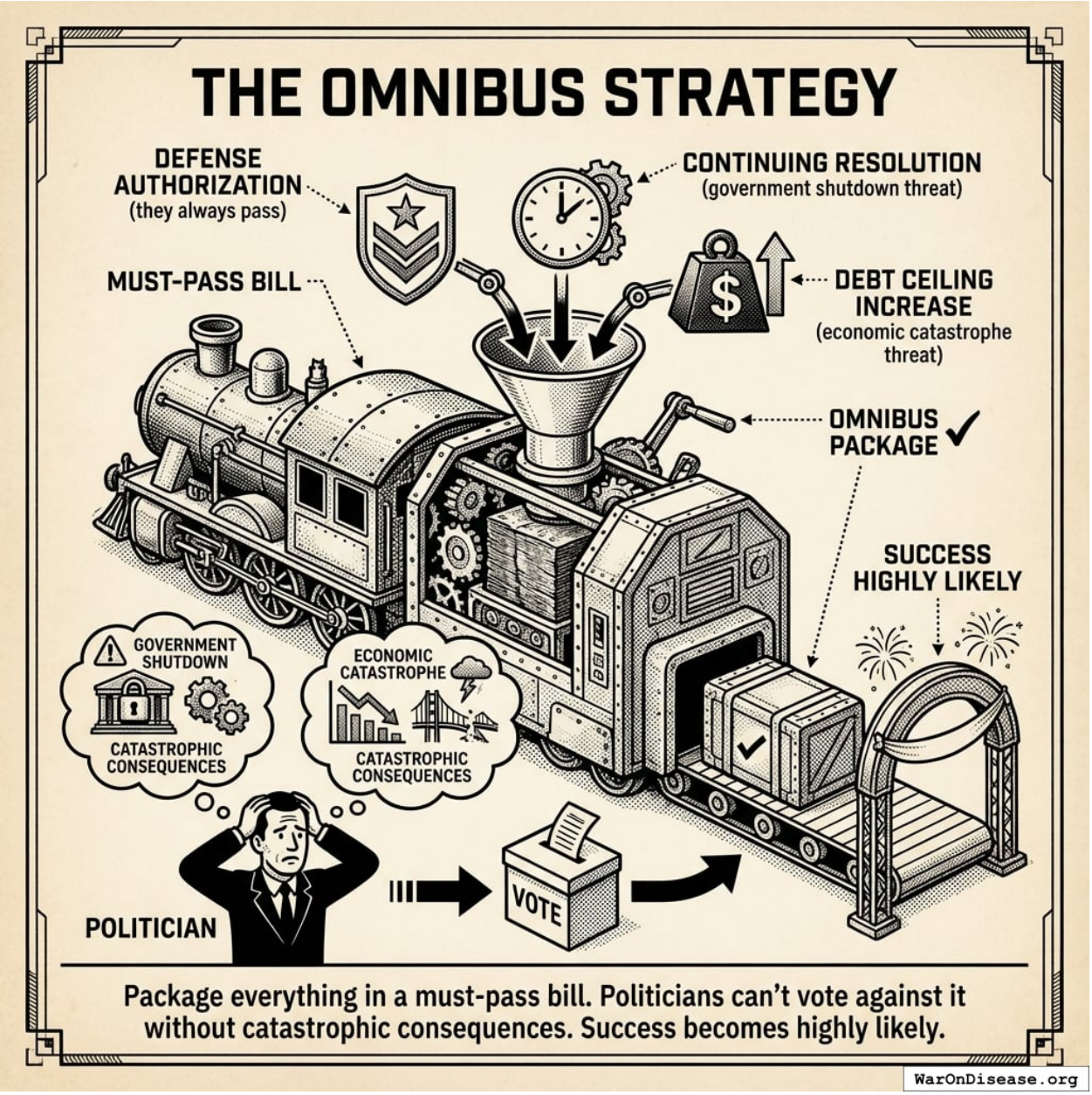


Figure 668: A conceptual diagram showing how legislative items are bundled into a 'must-pass' omnibus bill to leverage high-stakes consequences for successful passage.

Conclusion: Democracy Theater at Its Finest

You're not changing how democracy works - you're using its current broken form to fix healthcare. These five bills create a powerful transformation from a system that profits from death to one that profits from life.

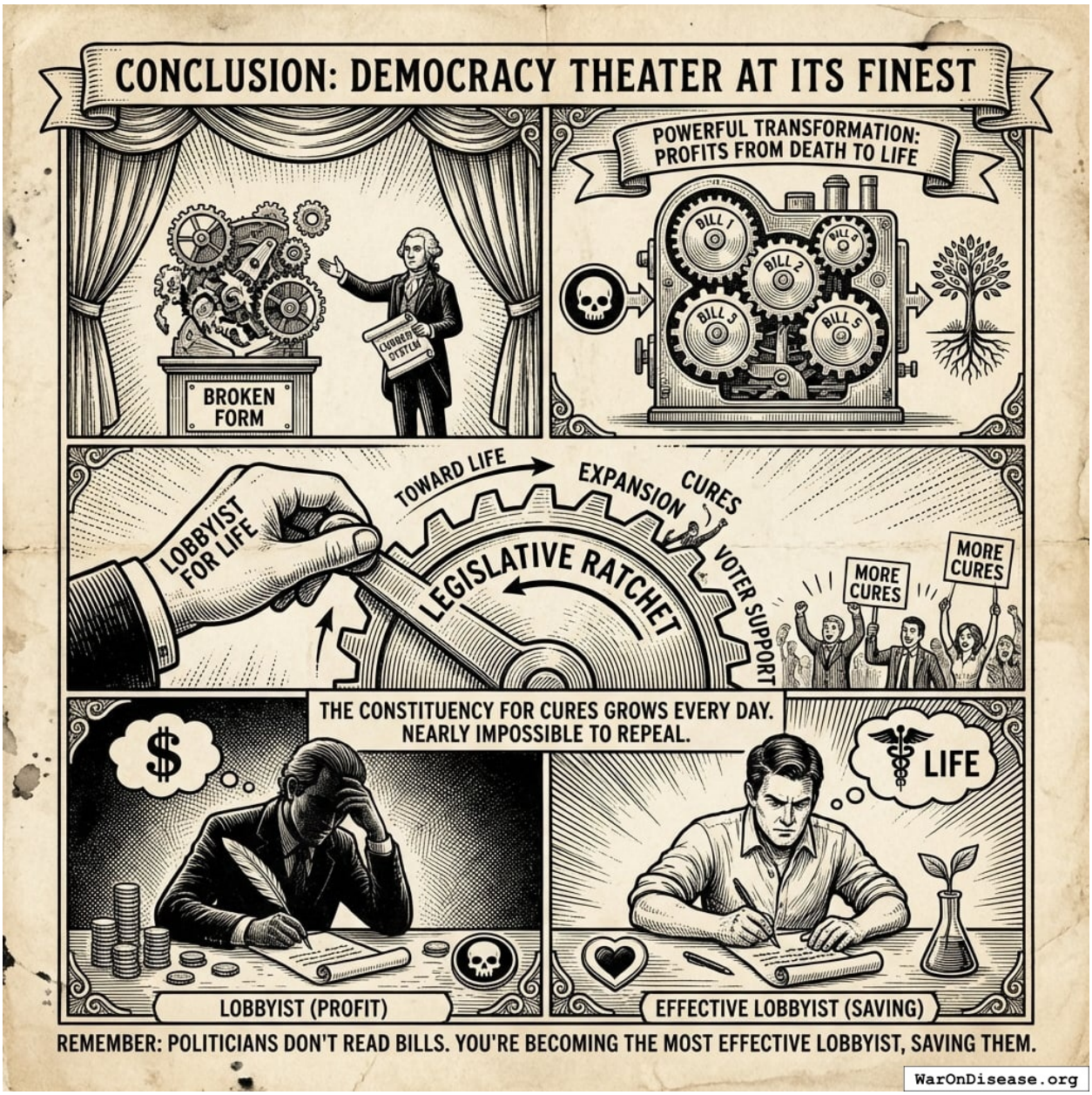


Figure 669: A conceptual diagram of the 'Legislative Ratchet' showing a self-reinforcing cycle where passed bills lead to cures, which create a growing voter base that demands further legislative expansion.

Once passed, they're nearly impossible to repeal. The constituency for cures grows every day. Every person treated becomes a voter for expansion. Every cure makes the next bill easier to pass.

You're creating a legislative ratchet that only turns one direction: toward life.

Remember: Politicians don't read bills. Lobbyists write them. You're about to become the most effective lobbyist in history, except instead of killing people for profit, you're saving them.

Global Referendum Strategy

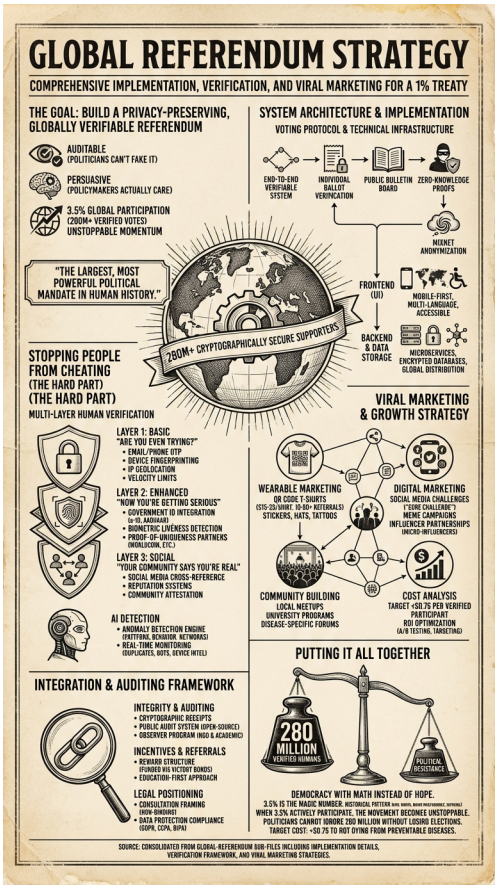


Figure 670: Comprehensive strategy for implementing a secure, globally verifiable referendum to demonstrate public support for a 1 percent treaty, including implementation, verification, and viral marketing approaches.

A cryptographically secure, on-chain list of 280 million verified supporters is not an “analogy” or a “metaphor” or a “nice idea.”

It is the largest, most powerful political mandate in human history.

Politicians can ignore protests. They can ignore polls. They can ignore reality for surprisingly long periods.

They cannot ignore 280 million cryptographically-verified humans saying “do this thing or we vote you out.”

Here’s how to build that list.

On What You're Actually Trying to Do (The Boring But Necessary Part)

The Goal

Build a privacy-preserving, globally verifiable referendum that shows public support for a 1% treaty and decentralized institutes of health (DIH).

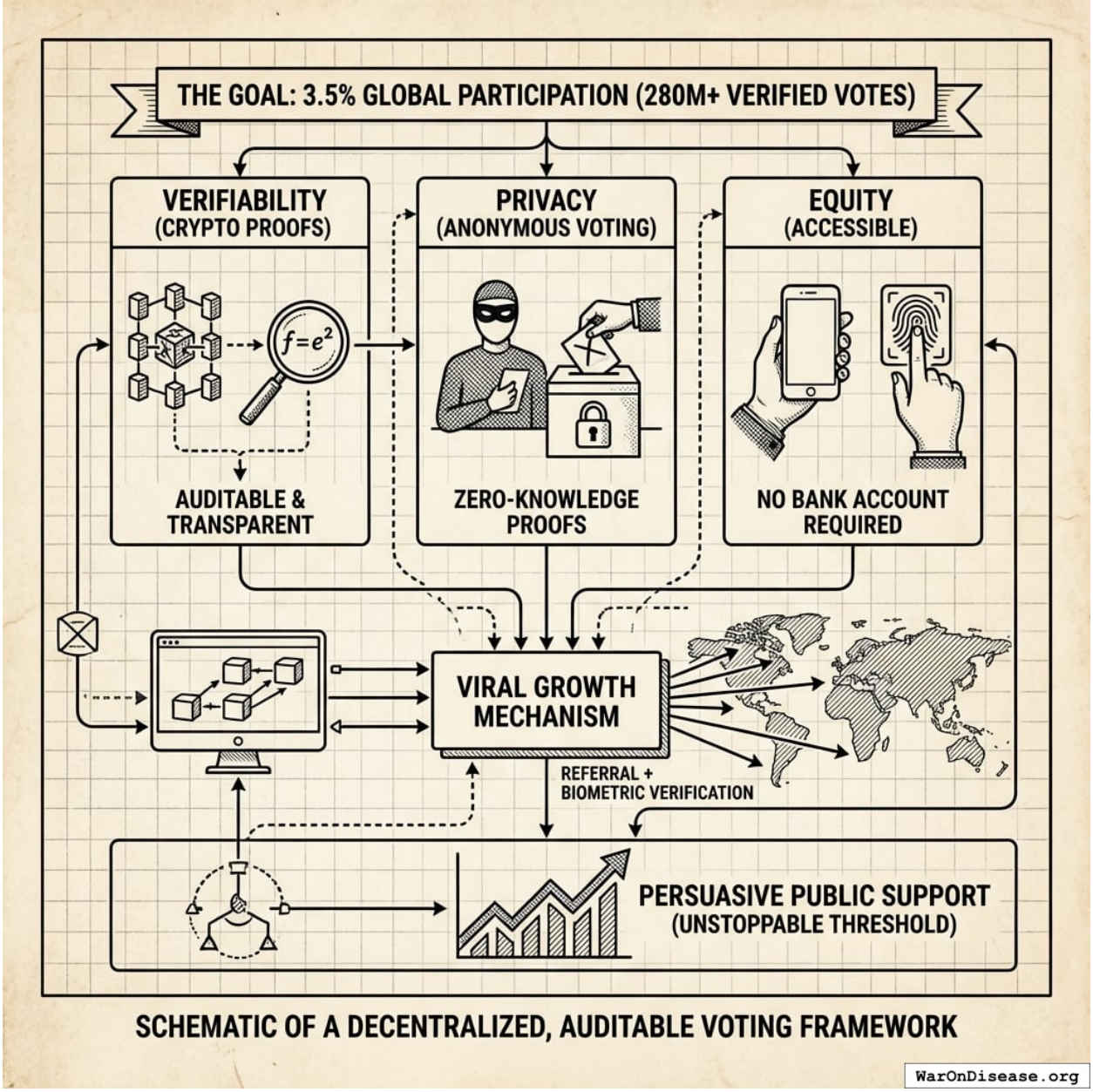


Figure 671: A conceptual framework showing how the five principles of Verifiability, Privacy, Equity, Transparency, and Viral Growth intersect to reach the 3.5% global participation threshold for an unstoppable referendum.

Requirements:

- Must be auditable (so politicians can't claim it's fake)
- Must be persuasive (so policymakers actually care)
- Must hit **3.5% global participation** (280M+ verified votes)

That last number isn't arbitrary. It's based on historical data showing that once 3.5% of a population actively supports something, it becomes unstoppable. More on that later.

The Principles (Or: How Not to Build a Fraudulent Voting System):

- **Verifiability**: Cryptographic proofs that votes are real (can't fake the math)
- **Privacy**: Nobody knows who you voted for (including us)
- **Equity**: Works for everyone, including people without bank accounts or government IDs
- **Transparency**: Open-source code so anyone can audit it
- **Viral Growth**: Needs to spread organically, targeting $0.50-0.64 per verified participant (includes referral payment + biometric verification + platform overhead)

The trick is doing all of these simultaneously, which is harder than it sounds.

System Architecture (Or: Math That Politicians Can't Argue With)

The voting system uses an **end-to-end verifiable scheme** (like Helios[289]). Translation: cryptographic receipts that prove you voted, without proving how you voted. Politicians can claim polls are fake. They cannot claim math is fake. (Some have tried. It doesn't go well.)

- **Individual Verification**: Each voter gets a cryptographic receipt proving their vote was counted
- **Public Audit**: All ballots published (anonymized) so anyone can verify the total
- **Zero-Knowledge Proofs**: Mathematical guarantees the count is legitimate without revealing how anyone voted
- **Privacy by Design**: Biometric processing happens on your device; the system never sees raw data

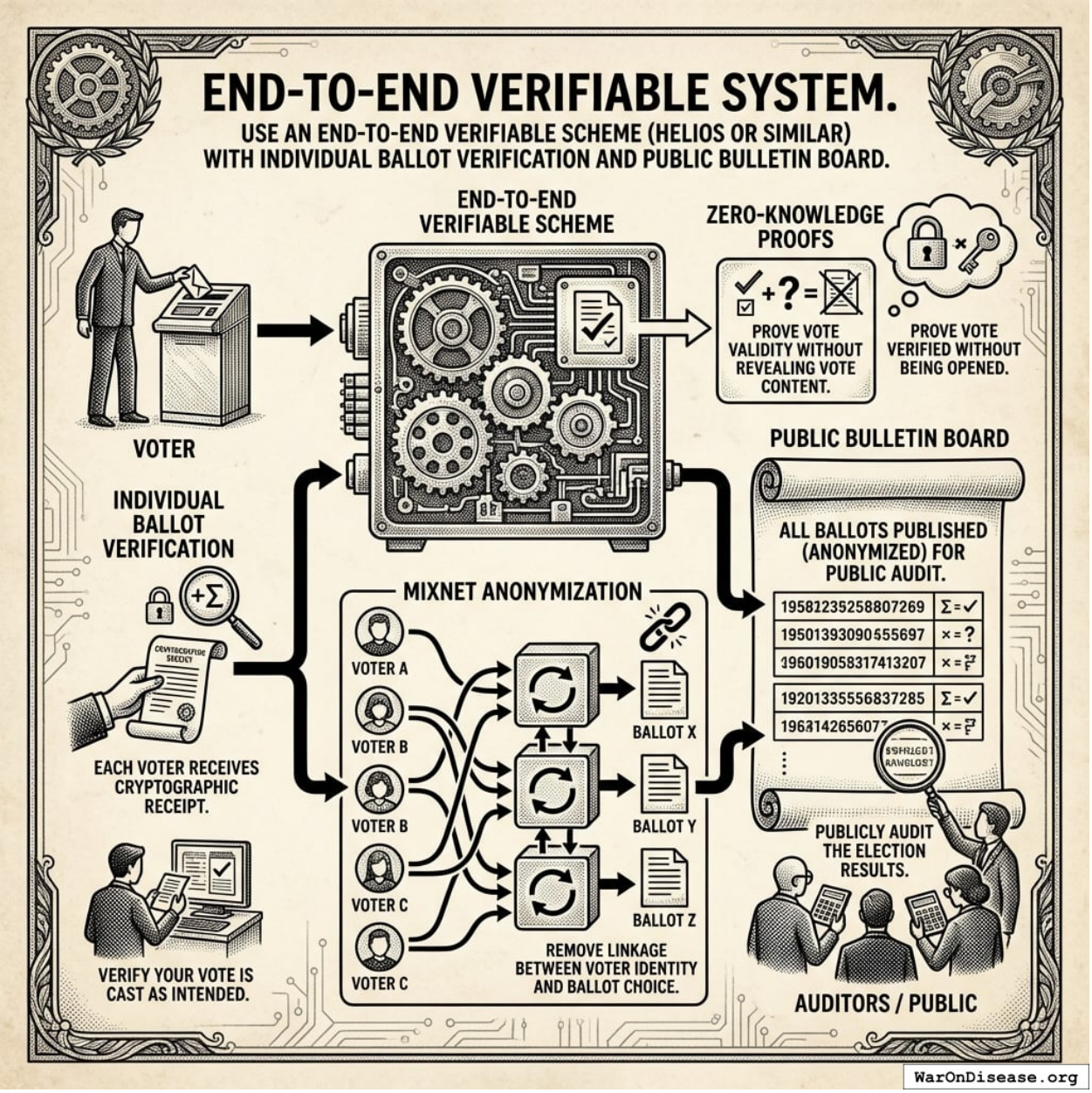


Figure 672: Architecture of an end-to-end verifiable voting system showing the data flow from voter encryption and receipt generation to the public bulletin board and anonymizing mixnet.

The infrastructure handles 280M+ participants across 40+ languages with WCAG accessibility compliance. Technical details are open-source for independent audit.

On Stopping People from Cheating (The Hard Part)

On Why You Need Multiple Layers of "Prove You're Human"

The internet is full of bots, fraudsters, and people who think it's funny to vote 1,000 times. This is a problem.

You need to verify that each vote comes from a real, unique human without:

- Requiring government ID (excludes billions of people)
- Violating privacy (creepy and illegal in many places)
- Making it impossible for normal people to participate (defeats the purpose)

This is harder than it sounds. Here's how you do it:

Layer 1: Basic "Are You Even Trying?" Checks

The easy stuff that stops the lazy fraudsters:

- **Email/Phone OTP**: Send a code, make them type it back. Costs money, slows bots.
- **Device Fingerprinting**: Your browser/phone has a unique signature. You track it.
- **IP Geolocation**: If 10,000 votes come from one basement in Belarus, you notice.
- **Velocity Limits**: Try to vote 500 times in one minute, get blocked.

This stops maybe 90% of fraud. The other 10% requires getting creative.

Layer 2: Enhanced "Now You're Getting Serious" Verification

For people who want higher verification (and higher rewards):

- **Government ID Integration**: Connect with existing national e-ID systems:
  - Estonia e-Residency[286] (they have digital citizenship, it's actually cool)
  - [287] (1.3 billion people already enrolled)
  - [288] (European digital ID)
  - US State ID verification via ID.me[299] (same system military uses)
- **Biometric Liveness Detection**: Wave at your camera. Blink. Prove you're not a video. Deepfakes hate this one weird trick.
- **Proof-of-Uniqueness Partners**: Work with existing identity services:
  - Worldcoin iris scanning[300] (yes, the eyeball scanner)
  - BrightID social verification[301] (your friends vouch for you)
  - [302] (reputation scoring for crypto people)

Layer 3: Social "Your Community Says You're Real" Verification

Sometimes the best verification is humans verifying humans:

- **Social Media Cross-Reference**: Link your Twitter/Facebook (opt-in, not required)
- **Reputation Systems**: Web3 reputation platforms (for people who have that)
- **Community Attestation**: Local leaders vouch for people without digital IDs

The more layers you pass, the more trustworthy your vote. But even Layer 1 gets you counted.

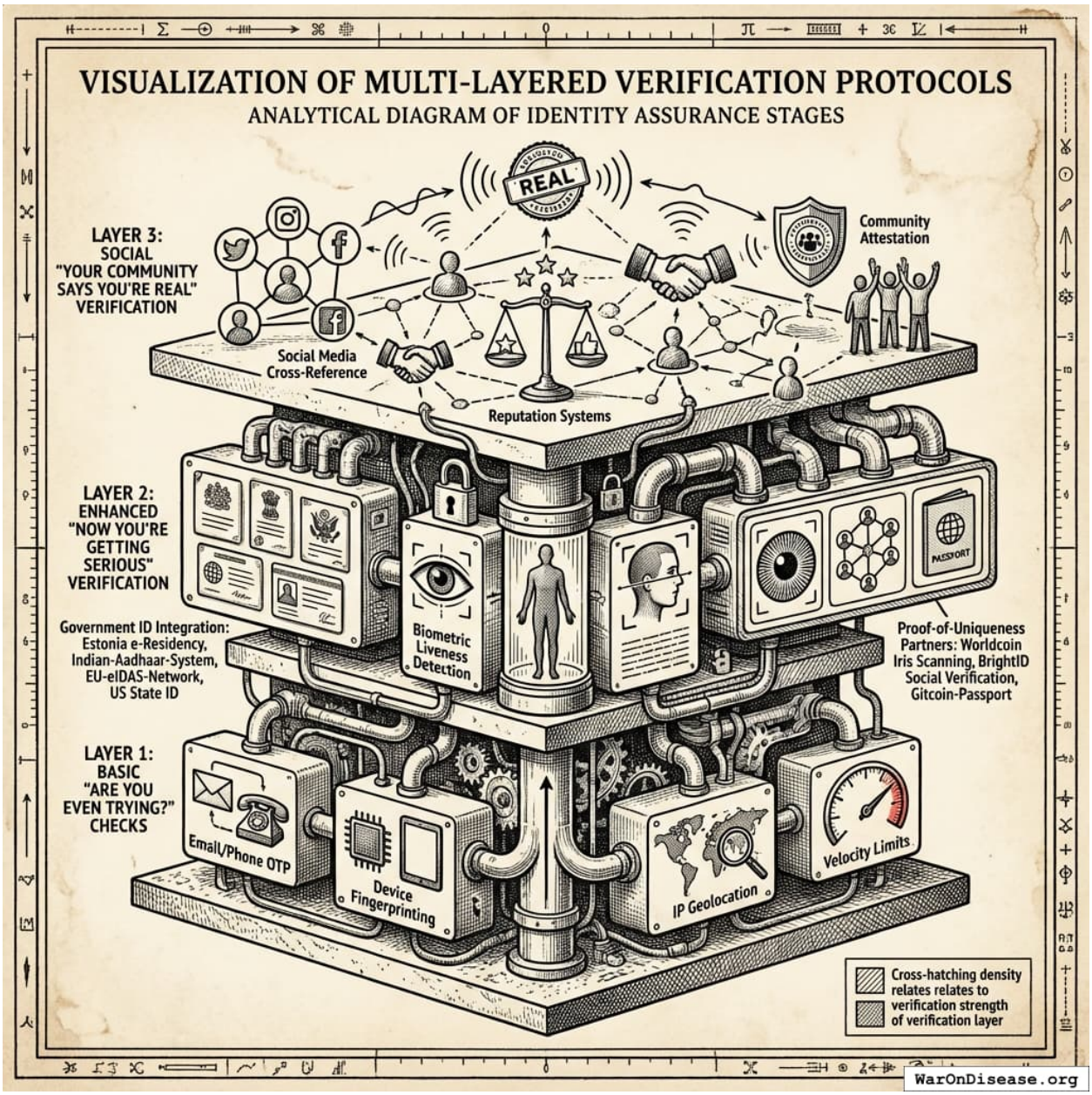


Figure 673: A tiered security model showing the cumulative verification layers, ranging from basic technical checks to biometric and social validation.

AI-Powered Fraud Detection

Some people pass Layers 1 and 2. They have fake IDs, VPNs, and a concerning amount of free time. These are the people who would vote 10,000 times to prove a point about election integrity. Machine learning catches them:

- **Pattern Analysis**: Detects suspicious registration timing, geographic clustering, and bot-like behavior
- **Network Mapping**: Real accounts have genuine social connections; bot farms are suspiciously interconnected
- **Real-Time Monitoring**: Duplicate detection, behavioral analysis, and device fingerprinting flag anomalies instantly

The system catches >99% of fraud attempts while maintaining <1% false positive rate for legitimate users.

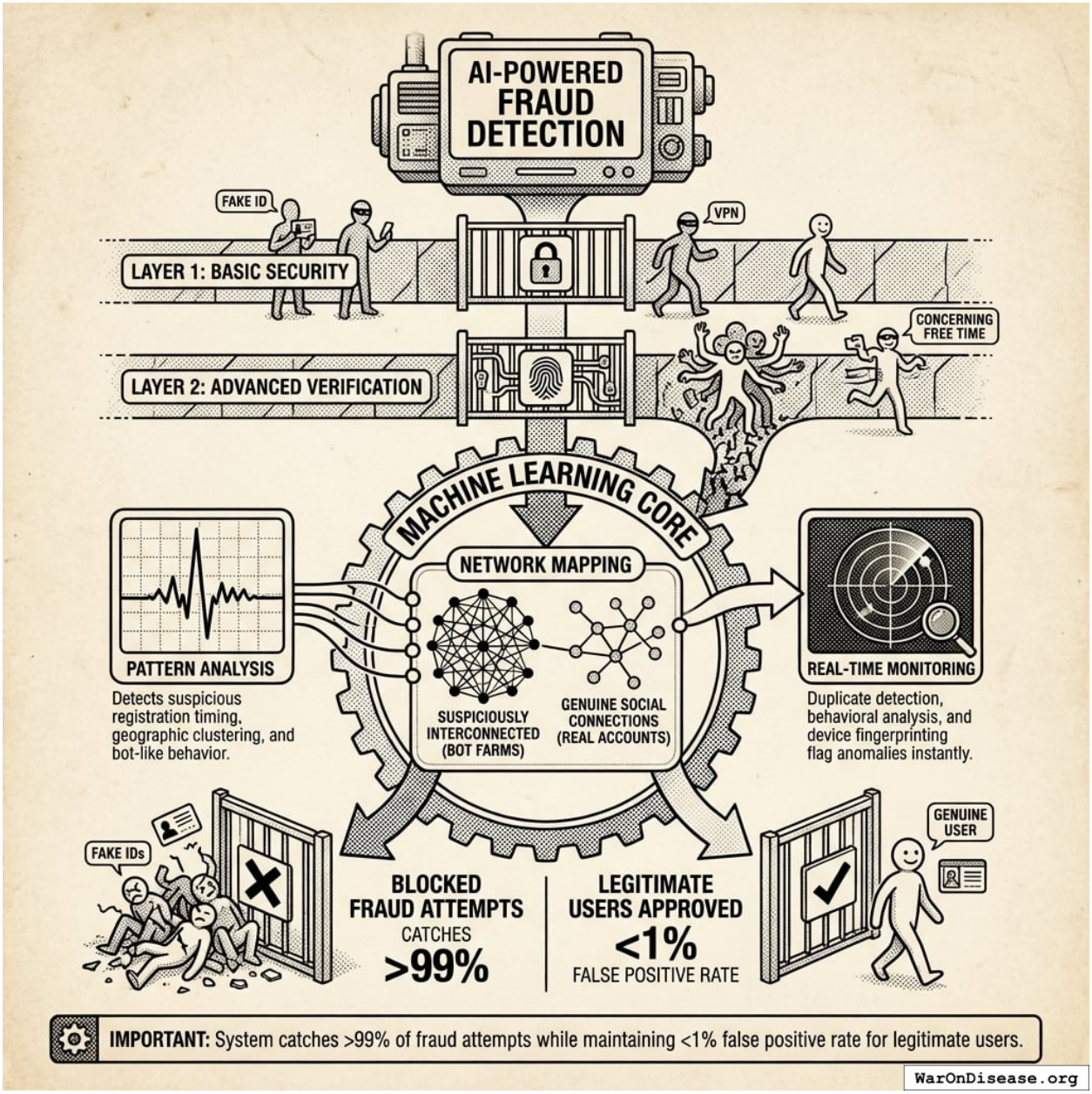


Figure 674: A diagram illustrating how pattern analysis, network mapping, and real-time monitoring act as a multi-pronged AI filter to identify and block sophisticated fraud attempts.

On Privacy (Or: How Not to Build a Surveillance State)

Data Protection (The "You're Not Creepy" Rules):

- **Selective Disclosure**: You only ask for what you absolutely need. Your shoe size is irrelevant.
- **Data Minimization**: Collect the minimum. No "tell us your life story" forms.
- **Local Processing**: Biometric data (face scans, etc.) processed on YOUR device. You never see it. Ever.
- **Encryption at Rest**: Everything encrypted with keys you control. You can't read it even if you

wanted to.

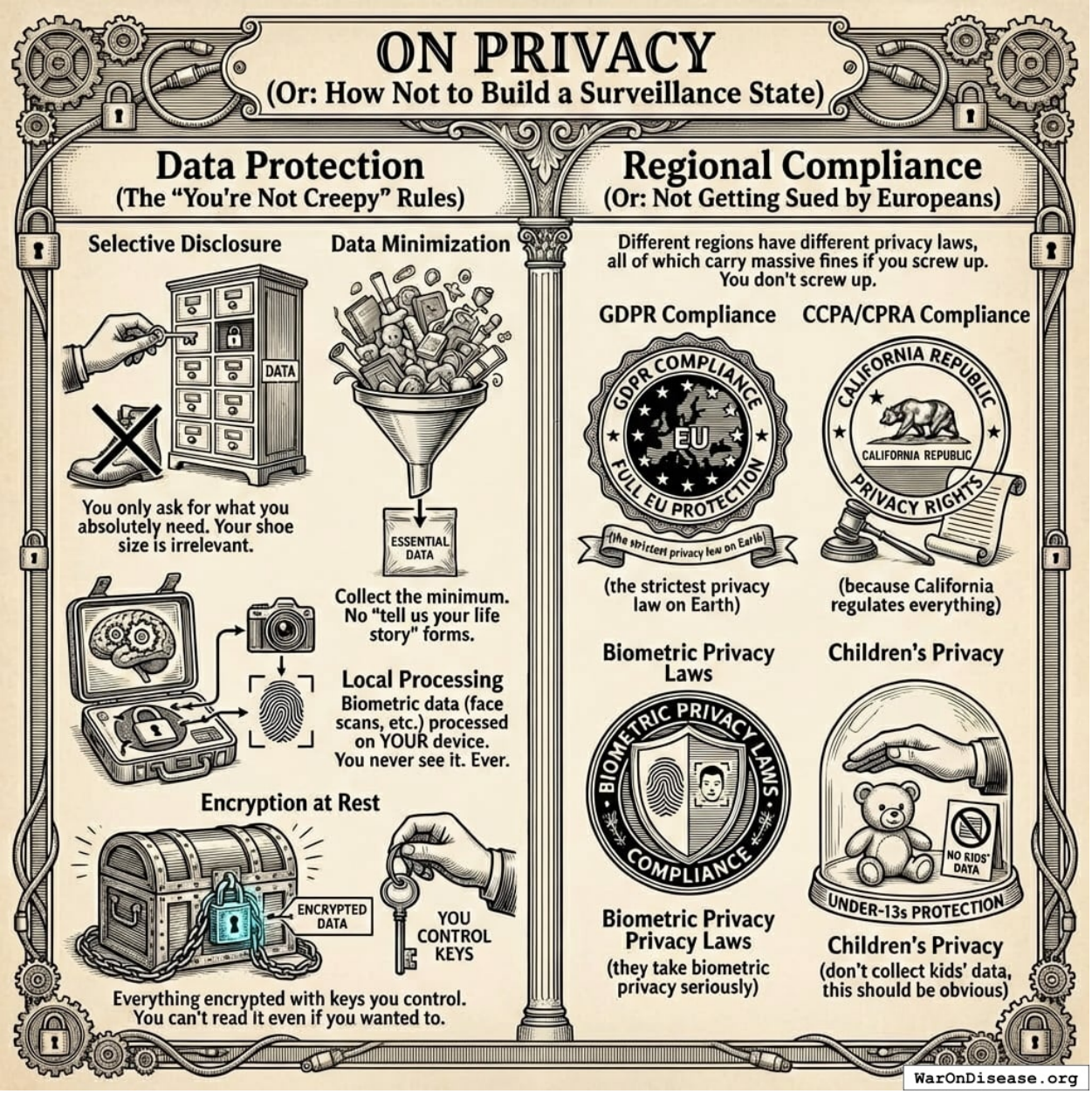


Figure 675: An infographic illustrating the privacy-by-design data lifecycle, showing how information is filtered through minimization and local processing before reaching encrypted storage.

Regional Compliance (Or: Not Getting Sued by Europeans):

Different regions have different privacy laws, all of which carry massive fines if you screw up. You don't screw up.

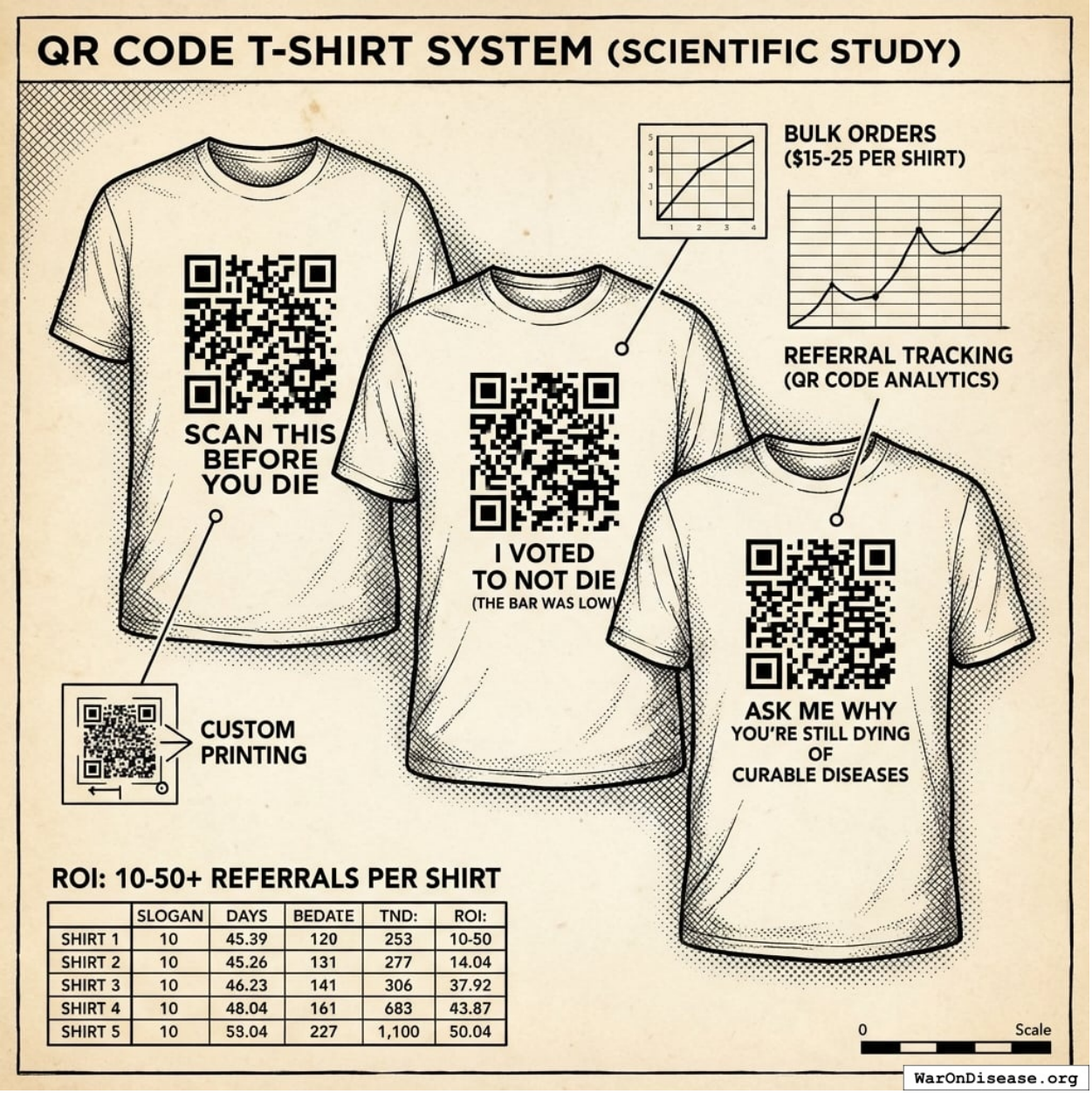
- **GDPR Compliance**[303]: Full EU data protection compliance (the strictest privacy law on Earth)
- **CCPA/CPRA Compliance**[304]: California privacy rights (because California regulates everything)
- **Biometric Privacy Laws**:[305] compliance (they take biometric privacy seriously)
- **Children's Privacy**:[306] for under-13s (don't collect kids' data, this should be obvious)

Viral Marketing & Growth Strategy

Getting 280 million people to do anything is hard. Getting 280 million people to click a button to maybe not die? Easier than you'd think.

Wearable Marketing (Your Body as a Billboard)

QR Code T-Shirts



	SLOGAN	DAYS	BEDATE	TND:	ROI:
SHIRT 1	10	45.39	120	253	10-50
SHIRT 2	10	45.26	131	277	14.04
SHIRT 3	10	46.23	141	306	37.92
SHIRT 4	10	48.04	161	683	43.87
SHIRT 5	10	53.04	227	1,100	50.04

Figure 676: A conceptual flow showing how a person wearing a QR code t-shirt in a high-traffic area leads to scans, digital tracking, and measurable referral ROI.

- Custom printing with unique QR codes for each referrer
- Bulk orders to reduce per-unit costs ($15-25 per shirt)

- Referral tracking through QR code analytics
- Slogans: “Scan This Before You Die” / “I Voted to Not Die (The Bar Was Low)” / “Ask Me Why You’re Still Dying of Curable Diseases”
- **ROI**: 10-50+ referrals per shirt in high-traffic areas

Other Wearable Items

- **Stickers**: Laptops, water bottles, foreheads (we don’t judge)
- **Hats/Caps**: For people who want to advertise healthcare while blocking the sun
- **Temporary Tattoos**: For the commitment-phobic revolutionaries

Digital Marketing

Social Media Challenges

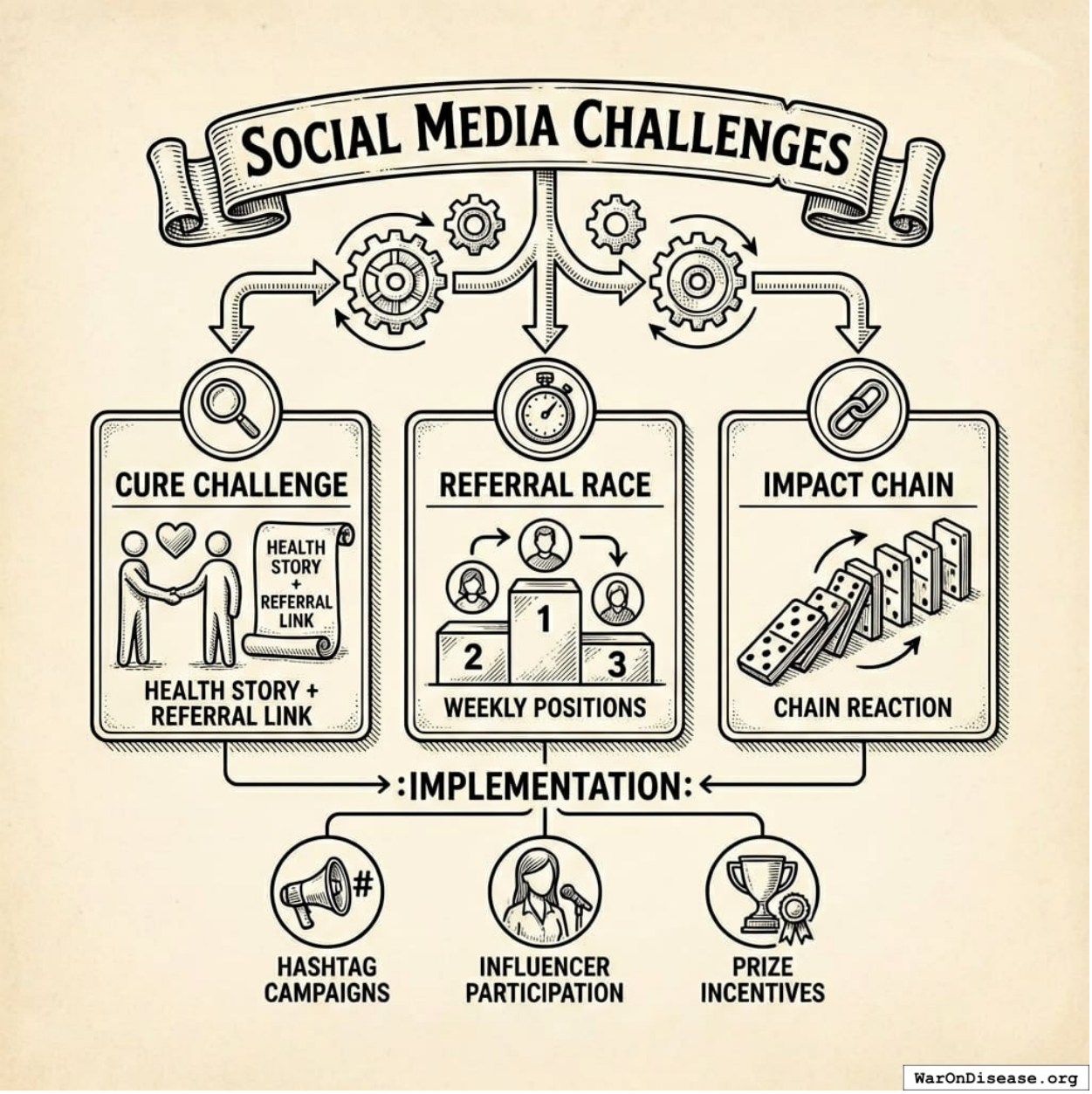


Figure 677: An infographic highlighting three social media engagement strategies (Cure Challenge, Referral Race, and Impact Chain) and their shared implementation drivers like influencers and prize incentives.

- "Cure Challenge": Share your health story + referral link
- "Referral Race": Compete for weekly leaderboard positions
- "Impact Chain": Show how your referrals create a chain reaction
- **Implementation**: Hashtag campaigns, influencer participation, prize incentives

Meme Campaigns

Memes are how ideas spread now. This is either depressing or convenient, depending on your perspective. We're choosing convenient.

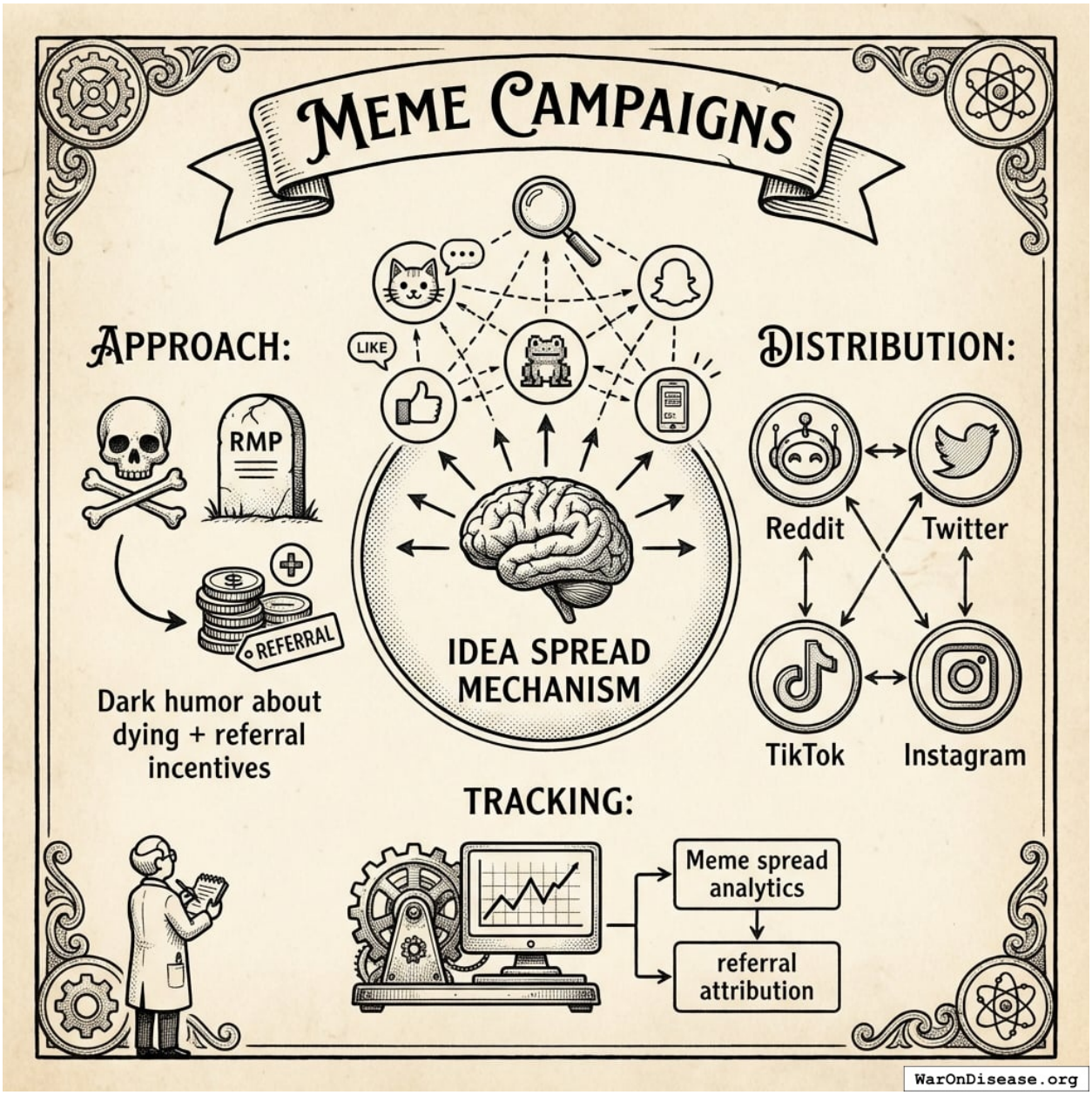


Figure 678: A flowchart showing the progression of a meme campaign from creative approach and referral incentives to platform distribution and final analytics tracking.

- **Approach**: Dark humor about dying + referral incentives
- **Distribution**: Reddit, Twitter, TikTok, Instagram
- **Tracking**: Meme spread analytics, referral attribution

Influencer Partnerships

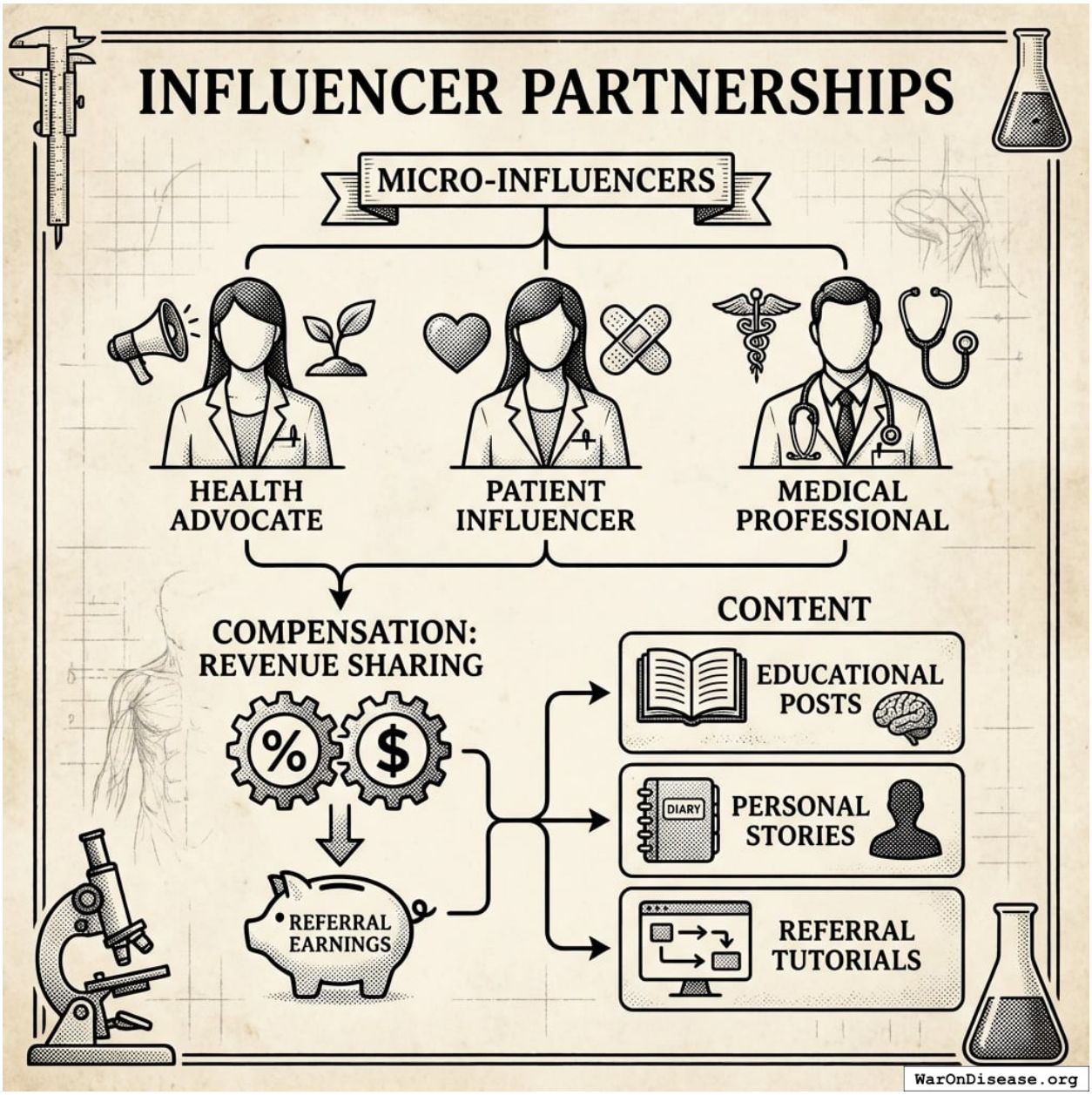


Figure 679: A conceptual model of the influencer partnership ecosystem illustrating the link between micro-influencer types, the educational content they produce, and the revenue-sharing compensation model.

- **Micro-influencers**: Health advocates, patient influencers, medical professionals
- **Compensation**: Revenue sharing from their referral earnings
- **Content**: Educational posts, personal stories, referral tutorials

Community Building

Local Meetups

- In-person gatherings to build community (and prove you're not a bot farm)
- **Format**: Health talks, networking, referral training

- **Incentives**: Free food. Humans will do almost anything for free food. This is known.

University Campus Programs

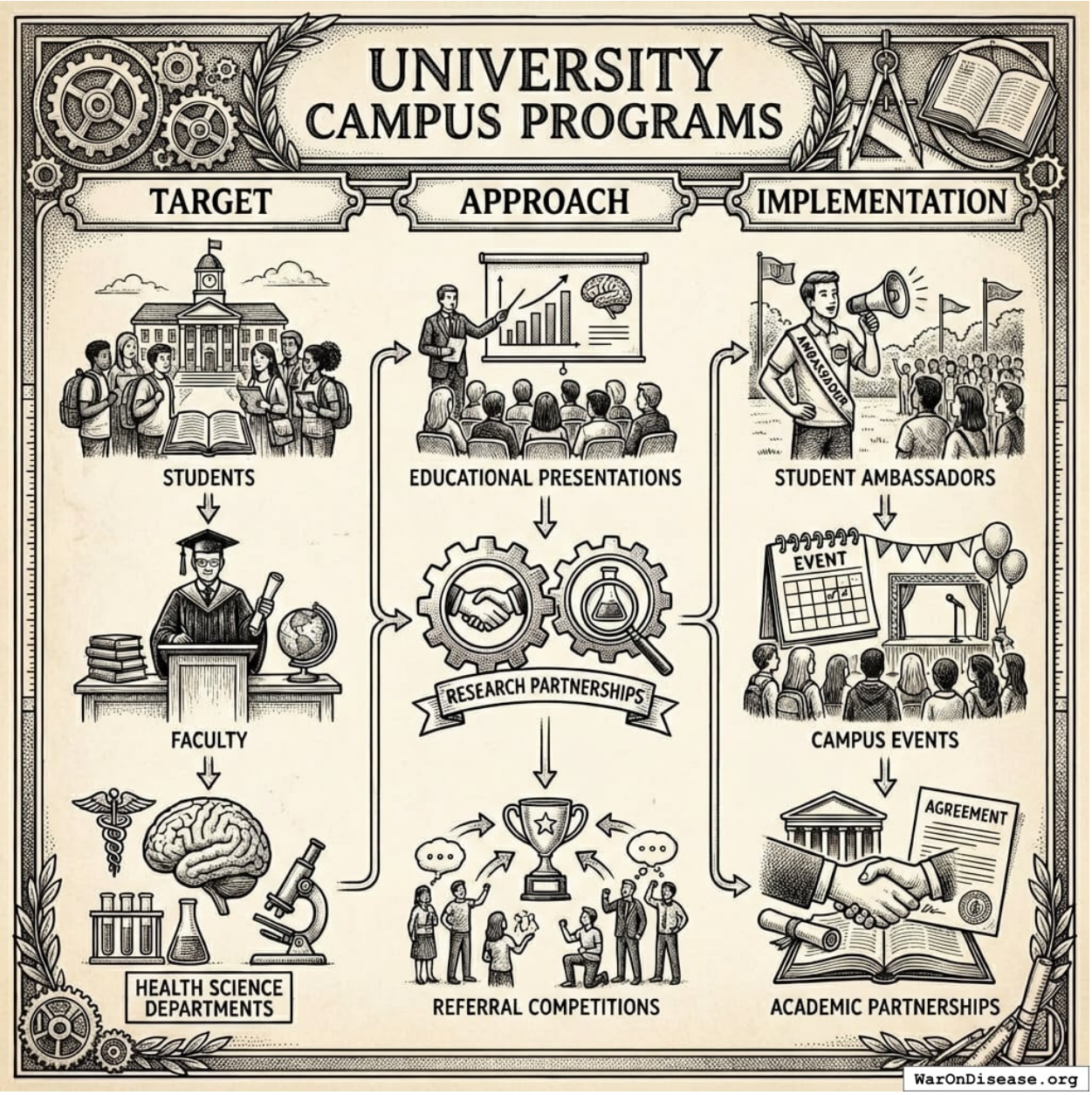


Figure 680: A strategic overview of university campus programs showing the relationship between target audiences, specific engagement approaches, and implementation tactics.

- **Target**: Students, faculty, health science departments
- **Approach**: Educational presentations, research partnerships, referral competitions
- **Implementation**: Student ambassadors, campus events, academic partnerships

Disease-Specific Forums

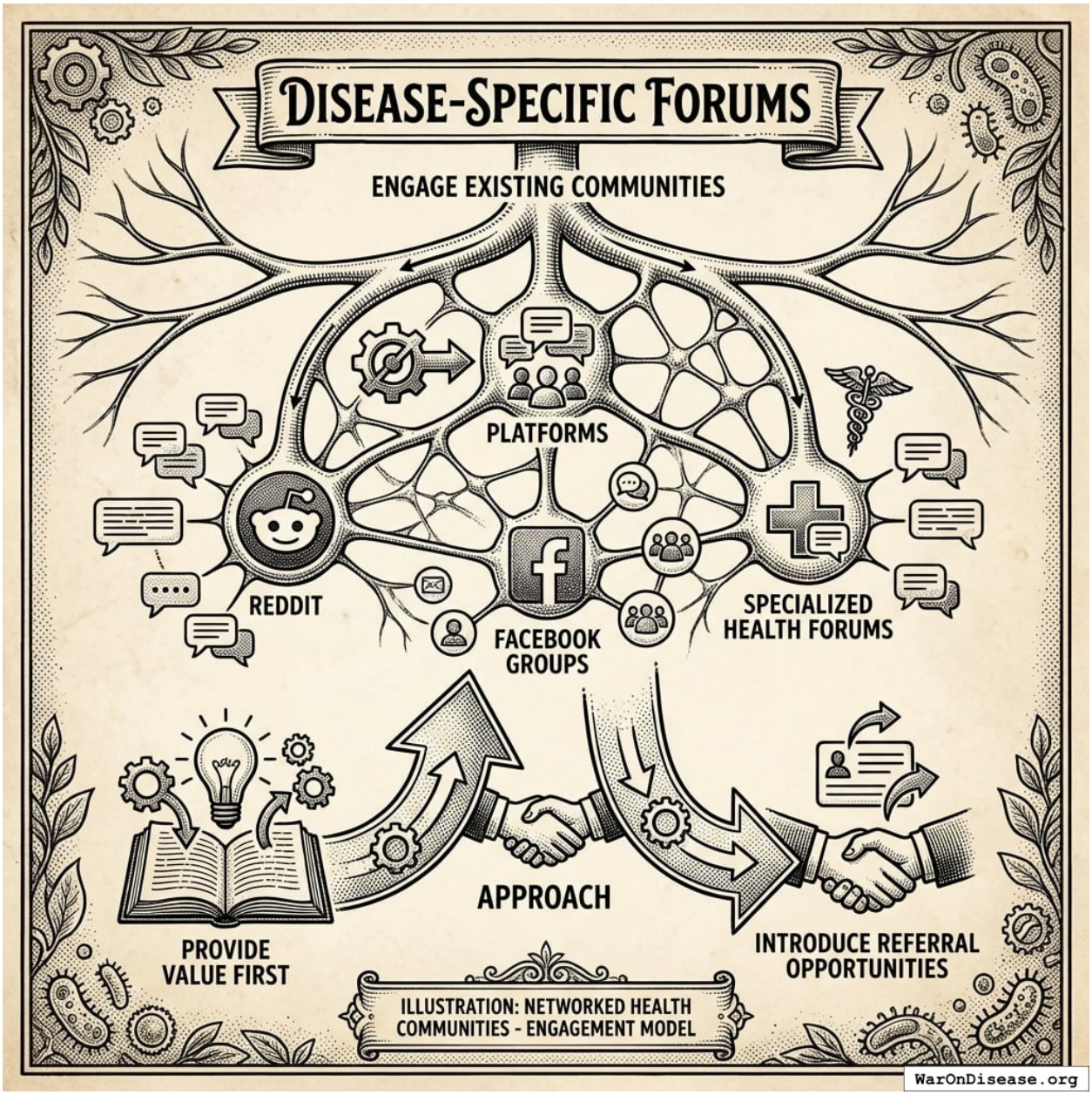


Figure 681: A workflow diagram illustrating the sequential strategy for community engagement: starting with platform selection, moving to value-driven participation, and concluding with referral introduction.

- Engage existing communities where people discuss health
- **Platforms**: Reddit, Facebook groups, specialized health forums
- **Approach**: Provide value first, then introduce referral opportunities

Cost Analysis & Optimization

How much does it cost to convince someone not to die? Less than you'd think.

Per-Tactic Cost Breakdown

Tactic	Initial Cost	Per-Referral Cost	Viral Coefficient	Notes
QR Code T-Shirts	$15-25/shirt	$0.30-0.75	0.8-1.2	Walking billboard, triggers conversations
Social Media Challenges	$500-2000	$0.10-0.30	1.5-3.0	Cheap, spreads like disease (ironic)
Local Meetups	$200-1000/event	$0.50-1.00	0.5-1.0	Slower but builds real community
Influencer Partnerships	$100-1000	$0.20-0.60	1.0-2.0	Borrow someone else's audience

ROI Optimization

1. **A/B Testing**: Test different messaging, designs, and incentives
2. **Geographic Targeting**: Focus on areas with high engagement potential
3. **Seasonal Campaigns**: Align with health awareness months, flu season
4. **Cross-Promotion**: Combine multiple tactics so they reinforce each other

Integration & Auditing Framework

Integrity and Auditing (Proving You Didn't Cheat)

People will claim you cheated. This is inevitable. The only defense is making cheating mathematically impossible, then publishing the math.

Cryptographic Receipts

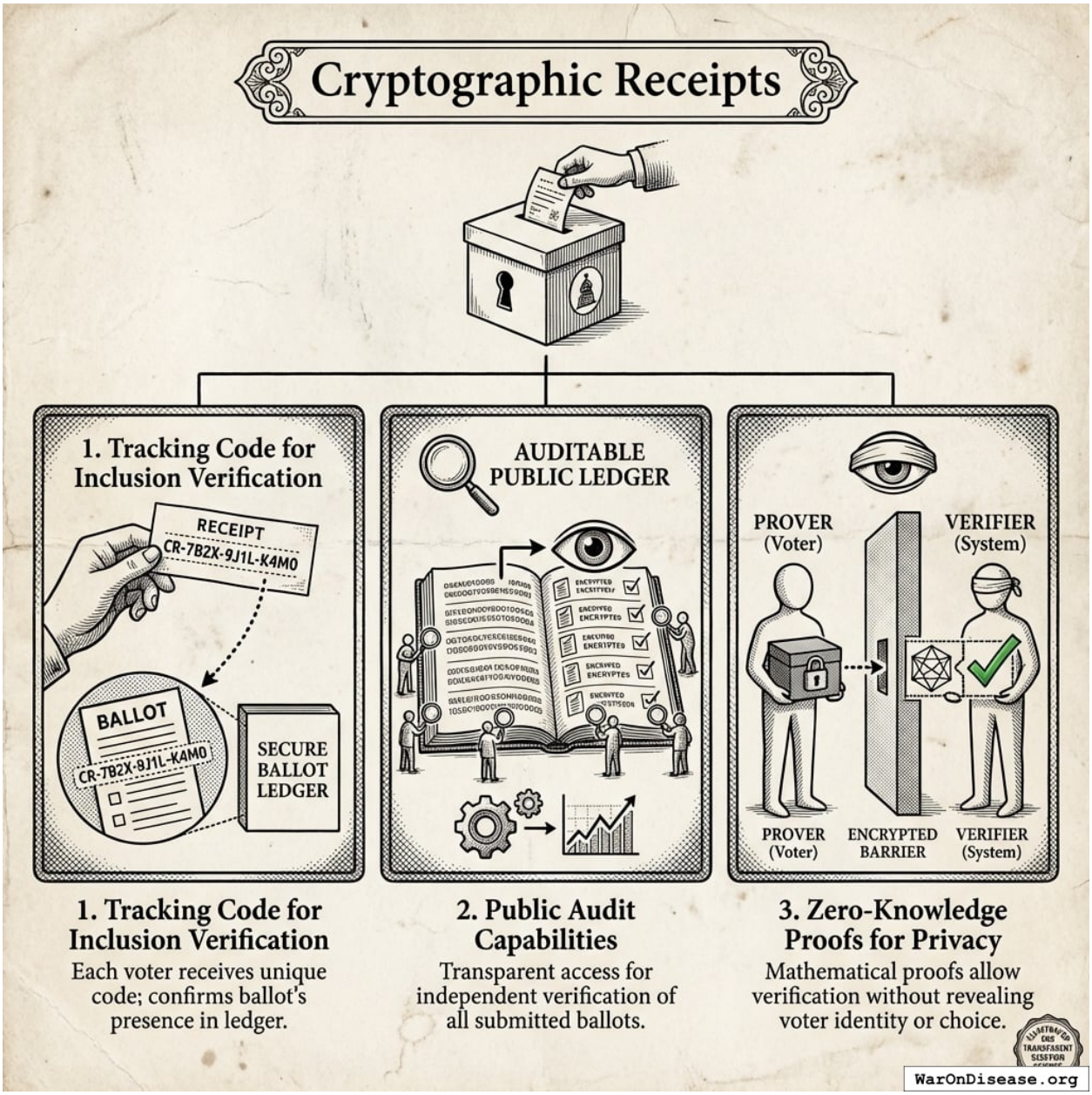


Figure 682: A diagram illustrating the flow of cryptographic receipts from voter tracking to public auditing and privacy-preserving verification using zero-knowledge proofs.

- Each voter receives a tracking code to verify inclusion
- Public audit capabilities for all submitted ballots
- Zero-knowledge proofs for privacy-preserving verification

Public Audit System

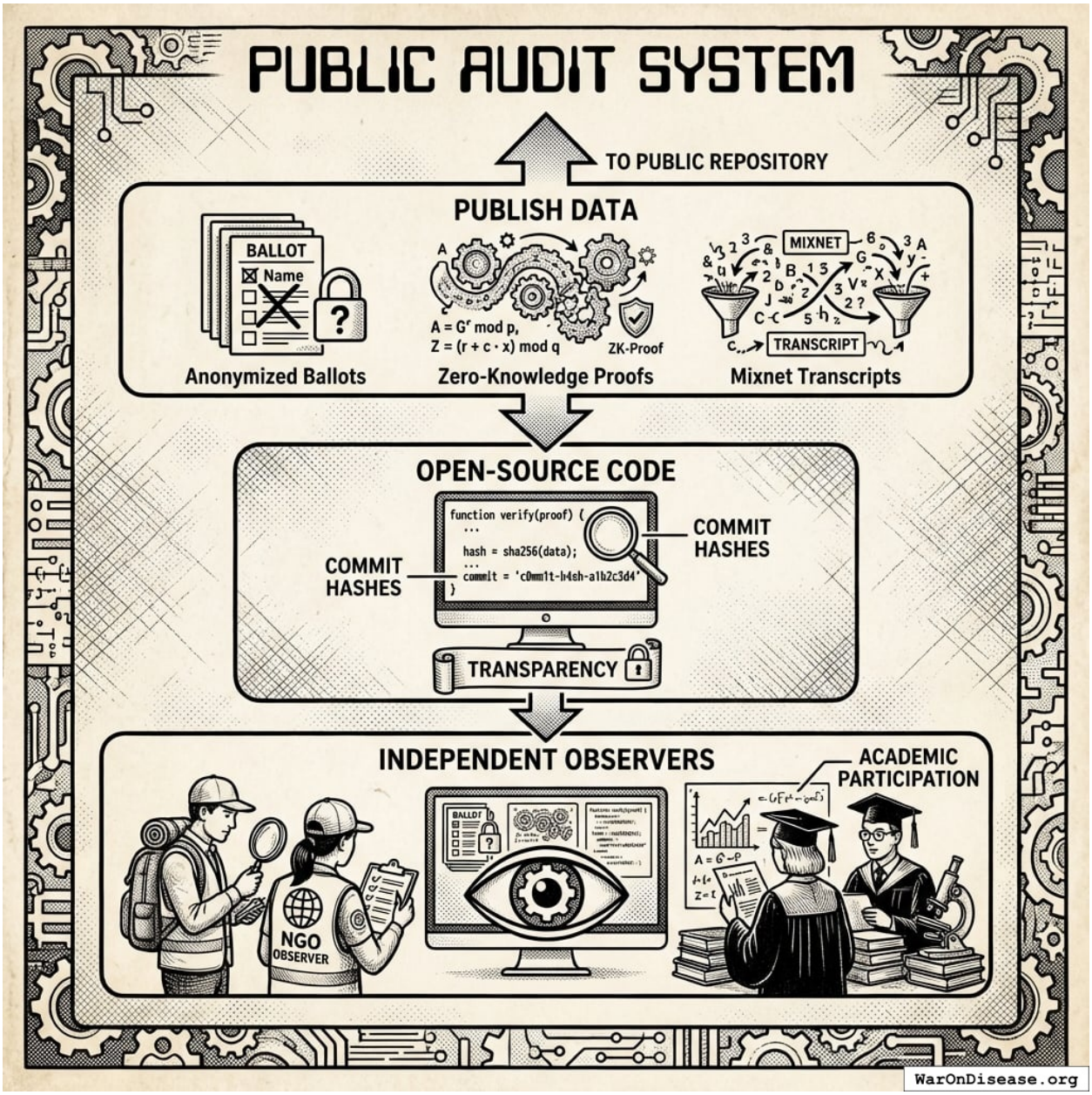


Figure 683: A conceptual diagram showing the three pillars of a Public Audit System: data transparency (ballots and ZK proofs), code transparency (open-source verification), and human oversight (independent observers).

- Publish anonymized ballots, ZK proofs or mixnet transcripts
- Open-source code with commit hashes for transparency
- Independent observer program with NGO and academic participation

Observer Program

- NGO and academic observers with read-only monitors
- Real-time fraud detection alerts and reporting

- Public dashboard showing verification statistics

Incentives and Referrals

Reward Structure

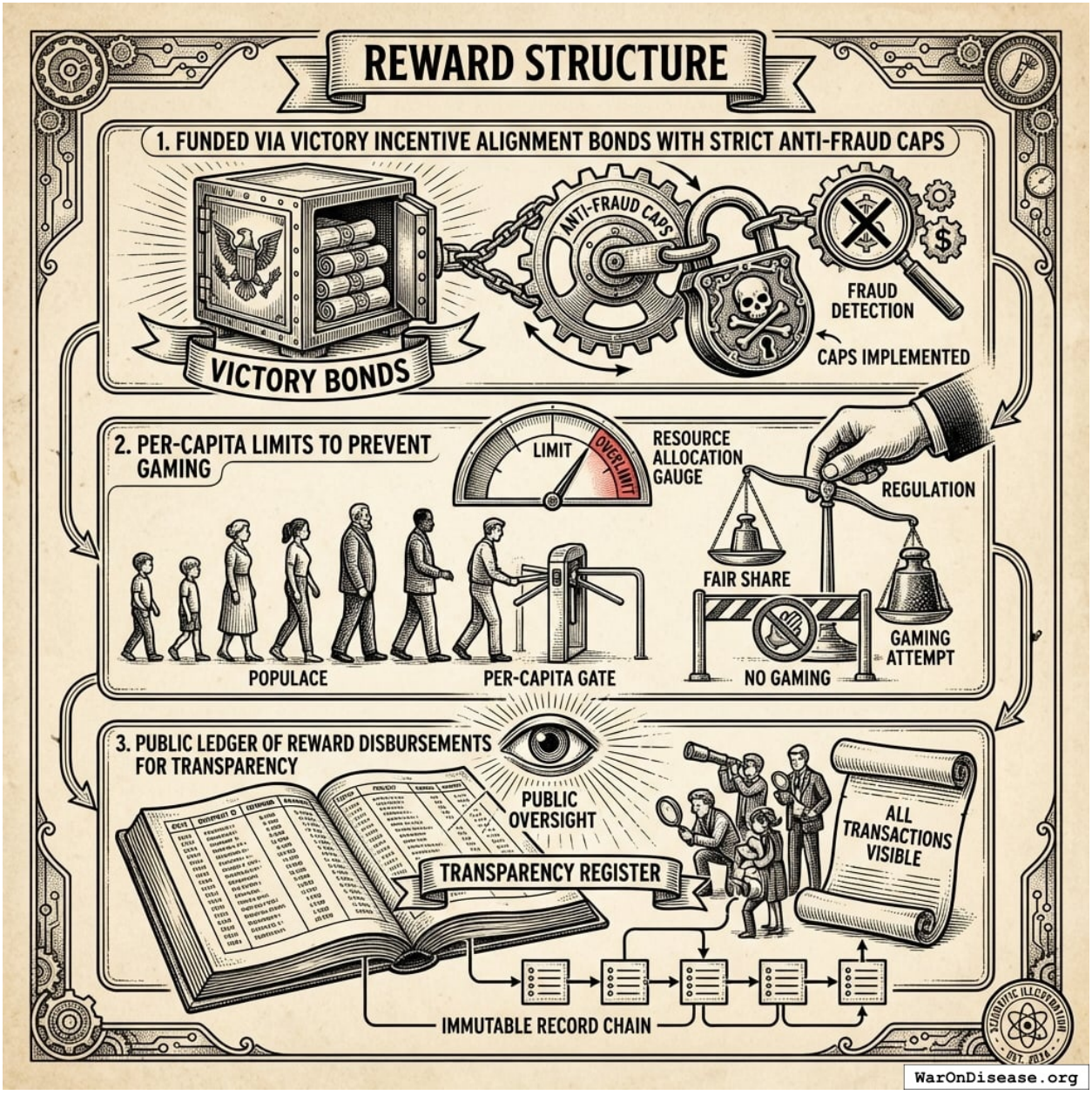


Figure 684: A diagram illustrating the reward flow from VICTORY Bonds through anti-fraud and per-capita filters to a public ledger.

- Funded via VICTORY Incentive Alignment Bonds with strict anti-fraud caps
- Per-capita limits to prevent gaming
- Public ledger of reward disbursements for transparency

Education-First Approach

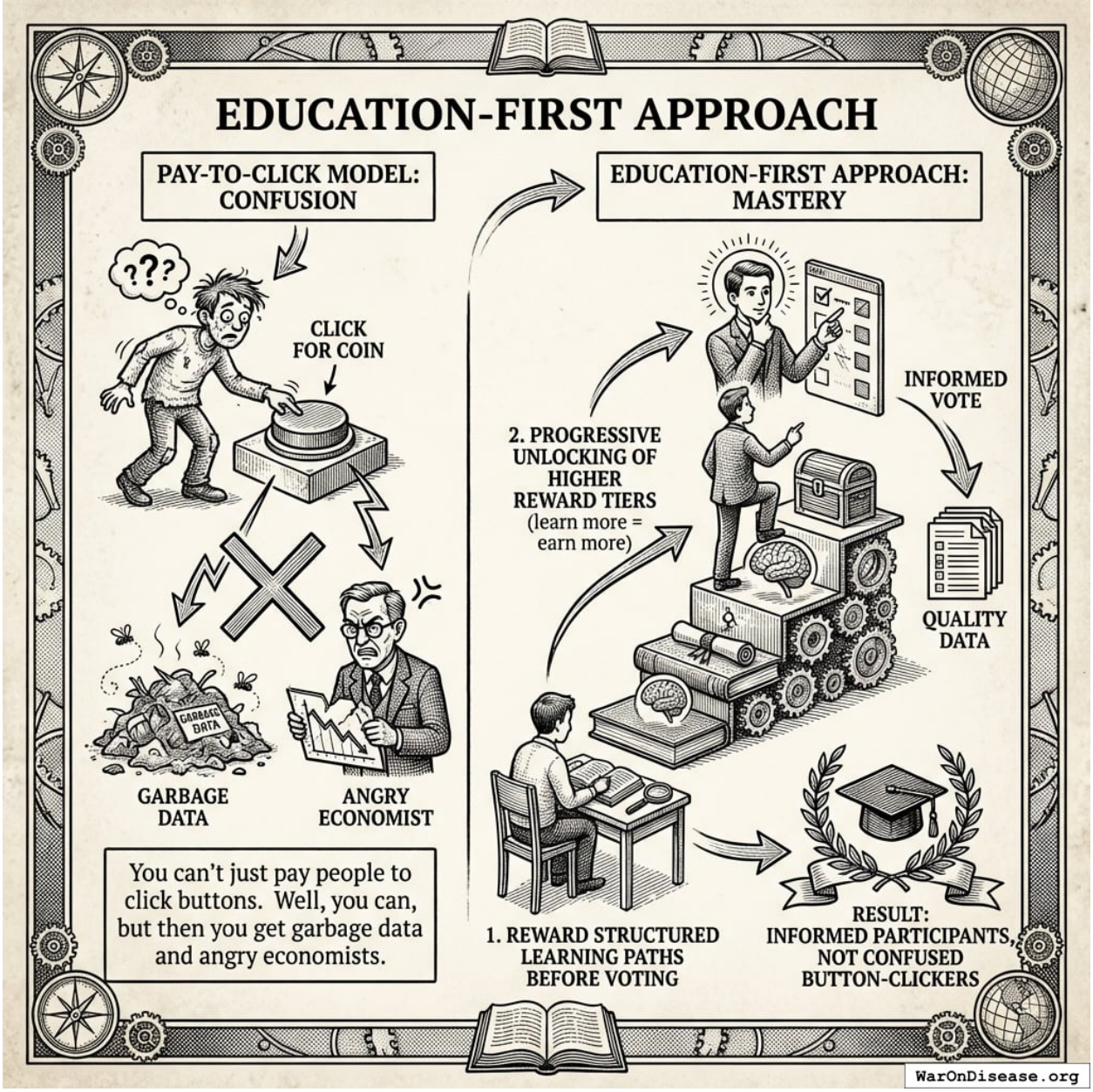


Figure 685: A progression flowchart showing the journey from structured learning paths to unlocking higher reward tiers and achieving informed participation.

You can't just pay people to click buttons. Well, you can, but then you get garbage data and angry economists. Instead:

- Reward structured learning paths before voting
- Progressive unlocking of higher reward tiers (learn more = earn more)
- Result: Informed participants, not confused button-clickers

Legal Positioning

Consultation Framing

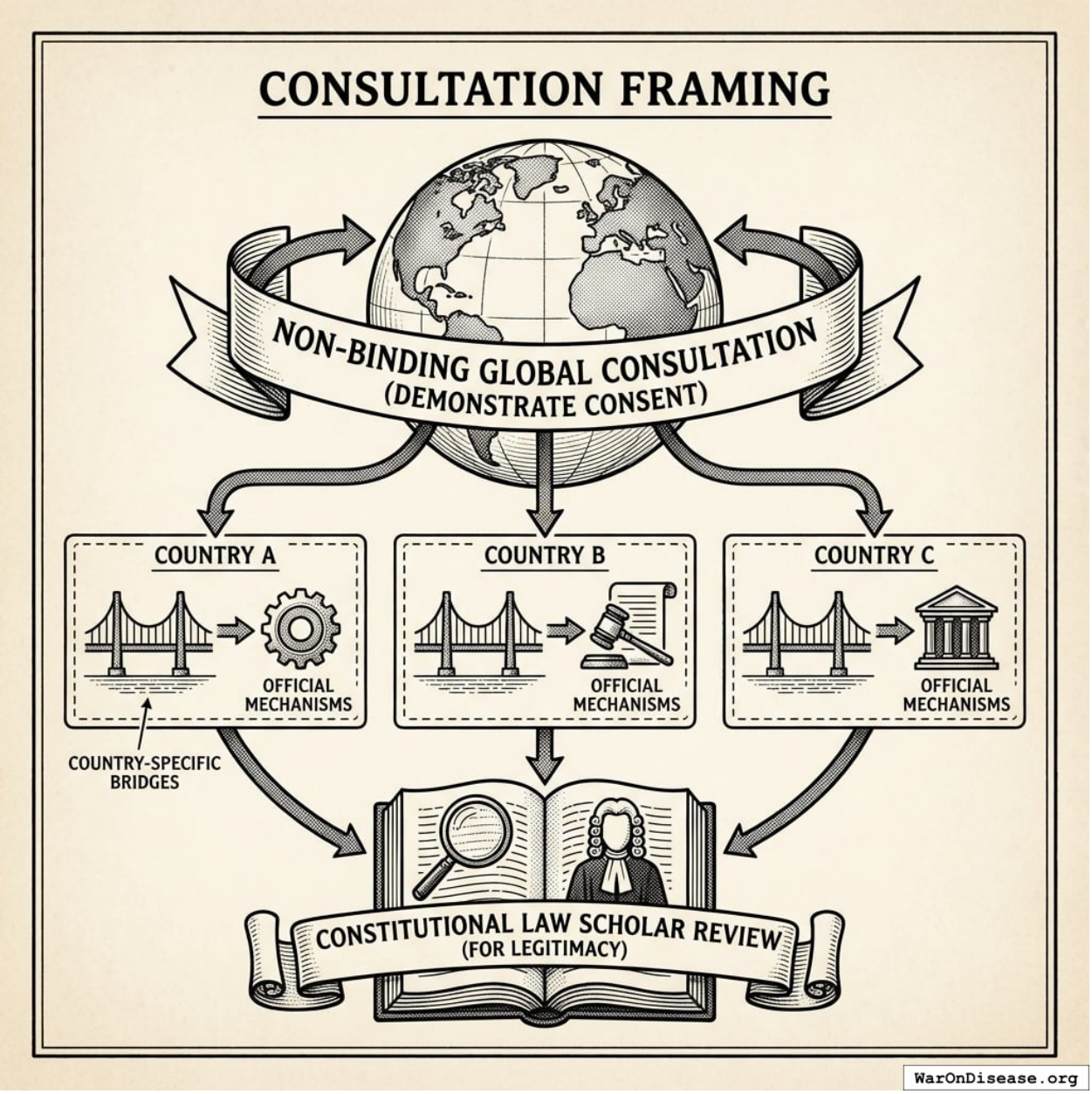


Figure 686: A conceptual framework showing how global consultation, national bridges, and legal review work together to establish legitimacy.

- Non-binding global consultation to demonstrate consent
- Country-specific bridges to official mechanisms where feasible
- Constitutional law scholar review for legitimacy

Data Protection Compliance

- GDPR/CCPA alignment with minimal data retention
- Published Data Protection Impact Assessments (DPIAs)

- Cross-border transfer compliance with international standards

Implementation Roadmap

Building a global referendum in 12 months sounds insane. It is insane. But so is dying of diseases we know how to prevent, and we've been doing that for decades.

Phase 1: Foundation (Months 1-2)

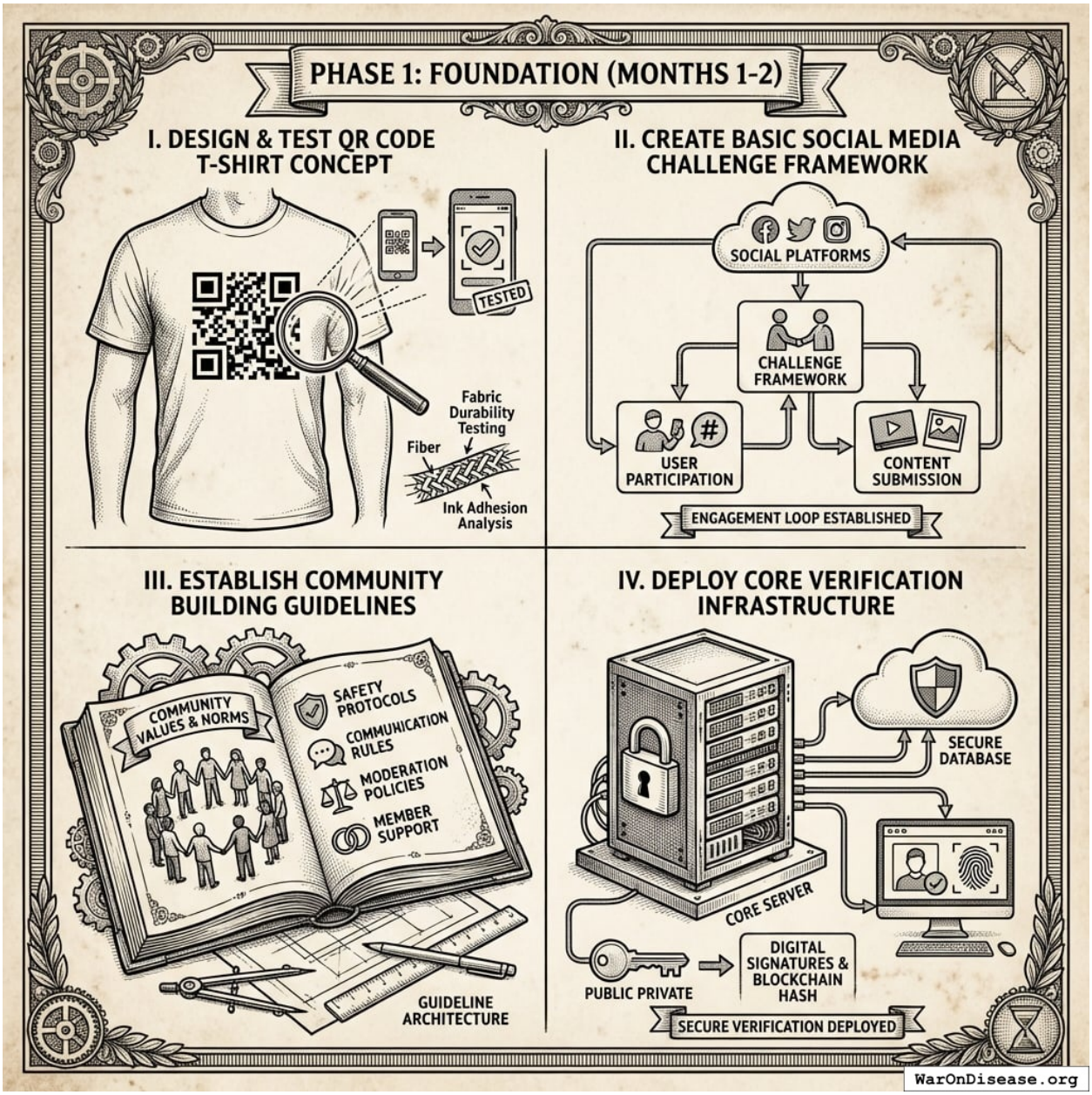


Figure 687: A visual roadmap of Phase 1 showing the parallel development of product design, social strategy, and technical infrastructure during the first two months.

- Design and test QR code t-shirt concept

- Create basic social media challenge framework
- Establish community building guidelines
- Deploy core verification infrastructure

Phase 2: Scaling (Months 3-6)

- Launch wearable marketing program
- Implement social media challenges
- Begin local community building
- Deploy enhanced verification layers

Phase 3: Global Launch (Months 7-12)

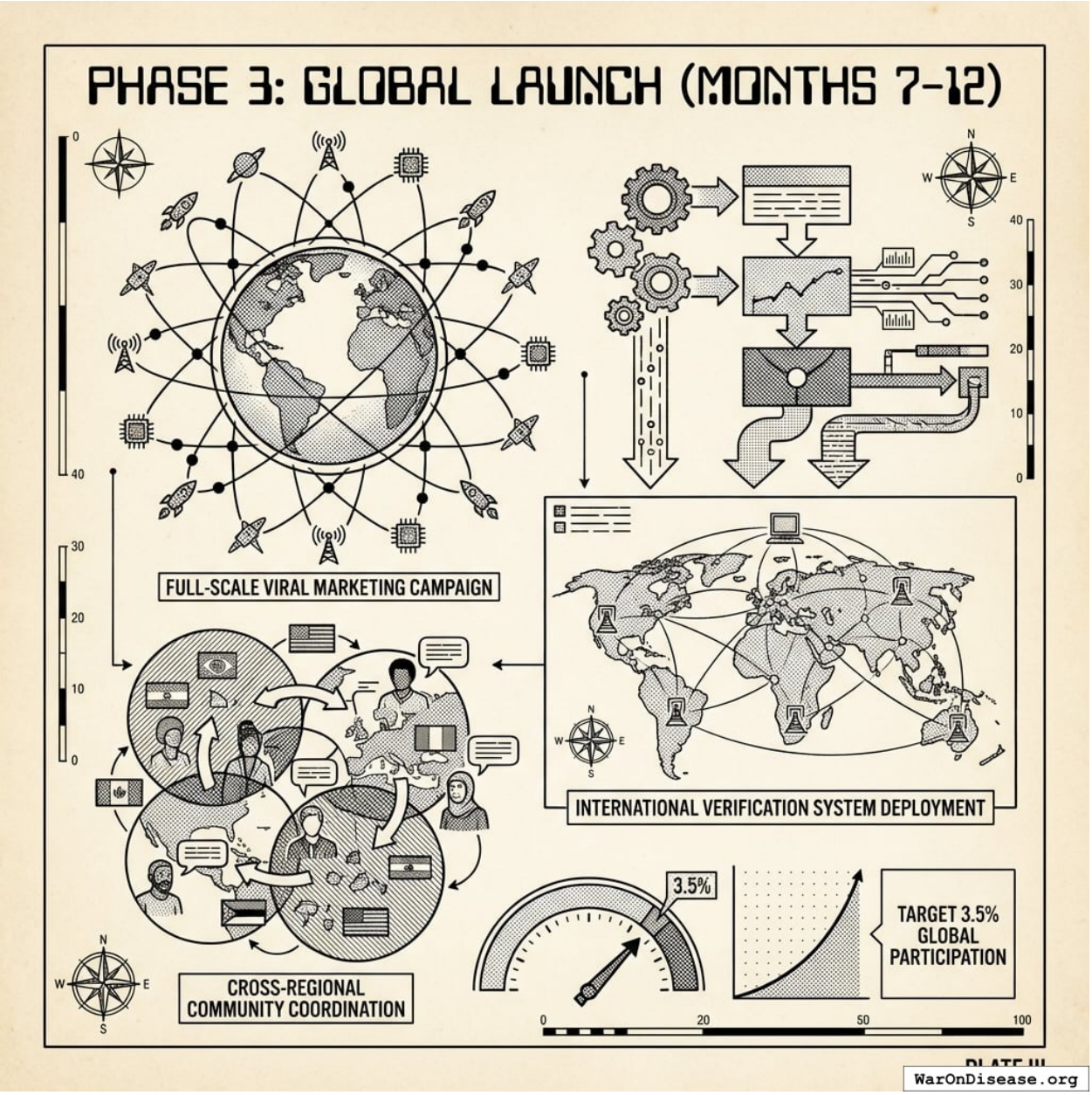


Figure 688: A strategic infographic representing the Phase 3 global launch, illustrating the synchronization of marketing, system deployment, and community coordination to achieve the 3.5 percent participation target.

- Full-scale viral marketing campaign
- International verification system deployment
- Cross-regional community coordination
- Target 3.5% global participation

Phase 4: Optimization (Months 13+)

- Analyze performance data and optimize high-performing tactics
- Scale successful strategies globally

- Prepare for treaty negotiation phase

Success Metrics

How you know it's working:

- **280M+ verified participants** (the magic 3.5% threshold)
- **<$0.75 per verified participant** (cheaper than acquiring a coffee customer, and the product is "not dying")
- **Viral coefficient >1.0** (each person brings more than one person = snowball)
- **>99% fraud detection** with <1% false positives (the bots stay out, the humans stay in)

Secondary metrics track geographic distribution, brand awareness, and whether politicians have started sweating yet.

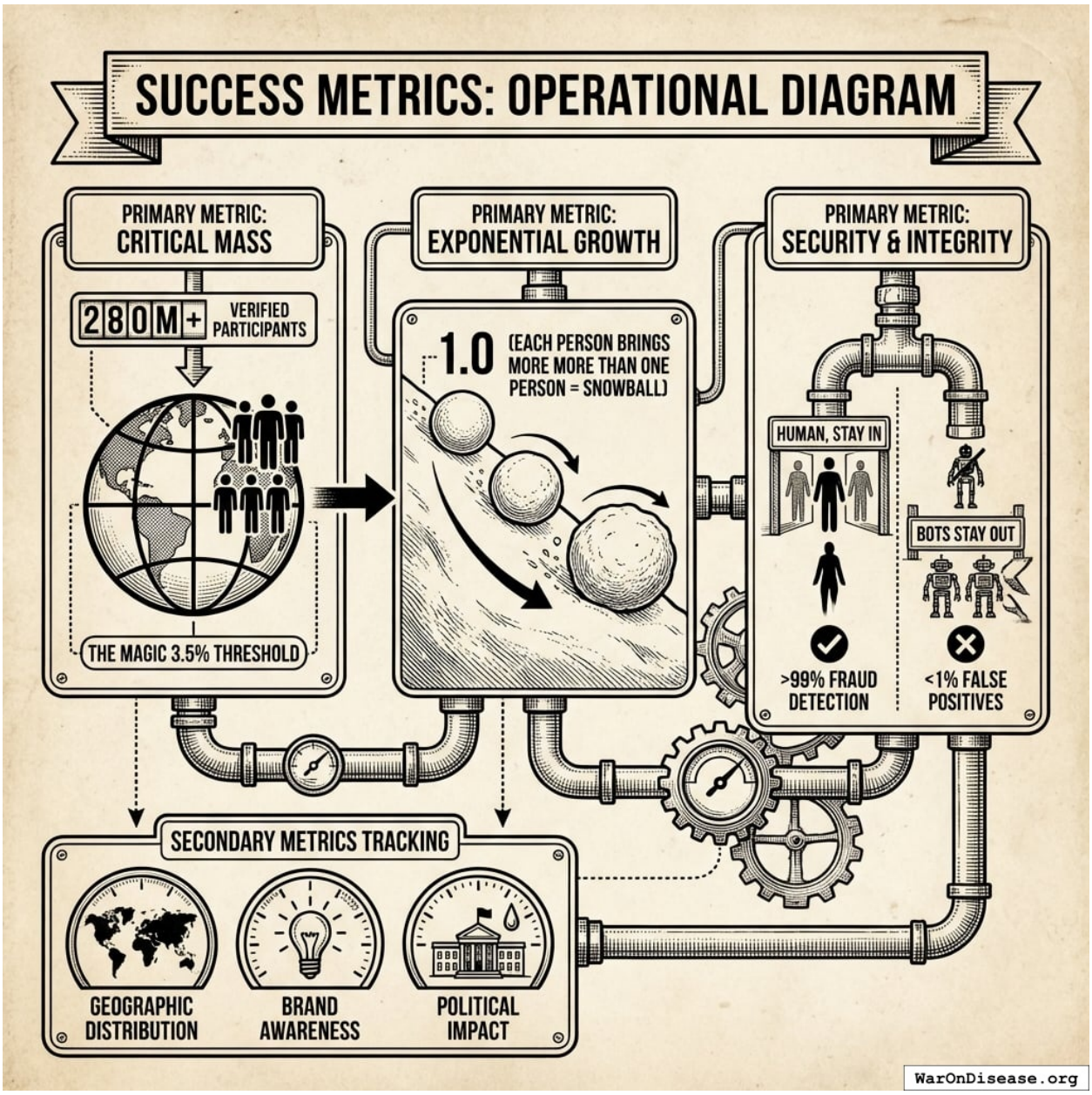


Figure 689: A KPI dashboard visualizing the four pillars of success: scale (280M participants), cost-efficiency (<0.75/user), viral growth (>1.0 coefficient), and system integrity (>99 percent fraud detection).

On Putting It All Together

What You're Building

A global referendum that combines cutting-edge verification technology with viral marketing to achieve the 3.5% tipping point.

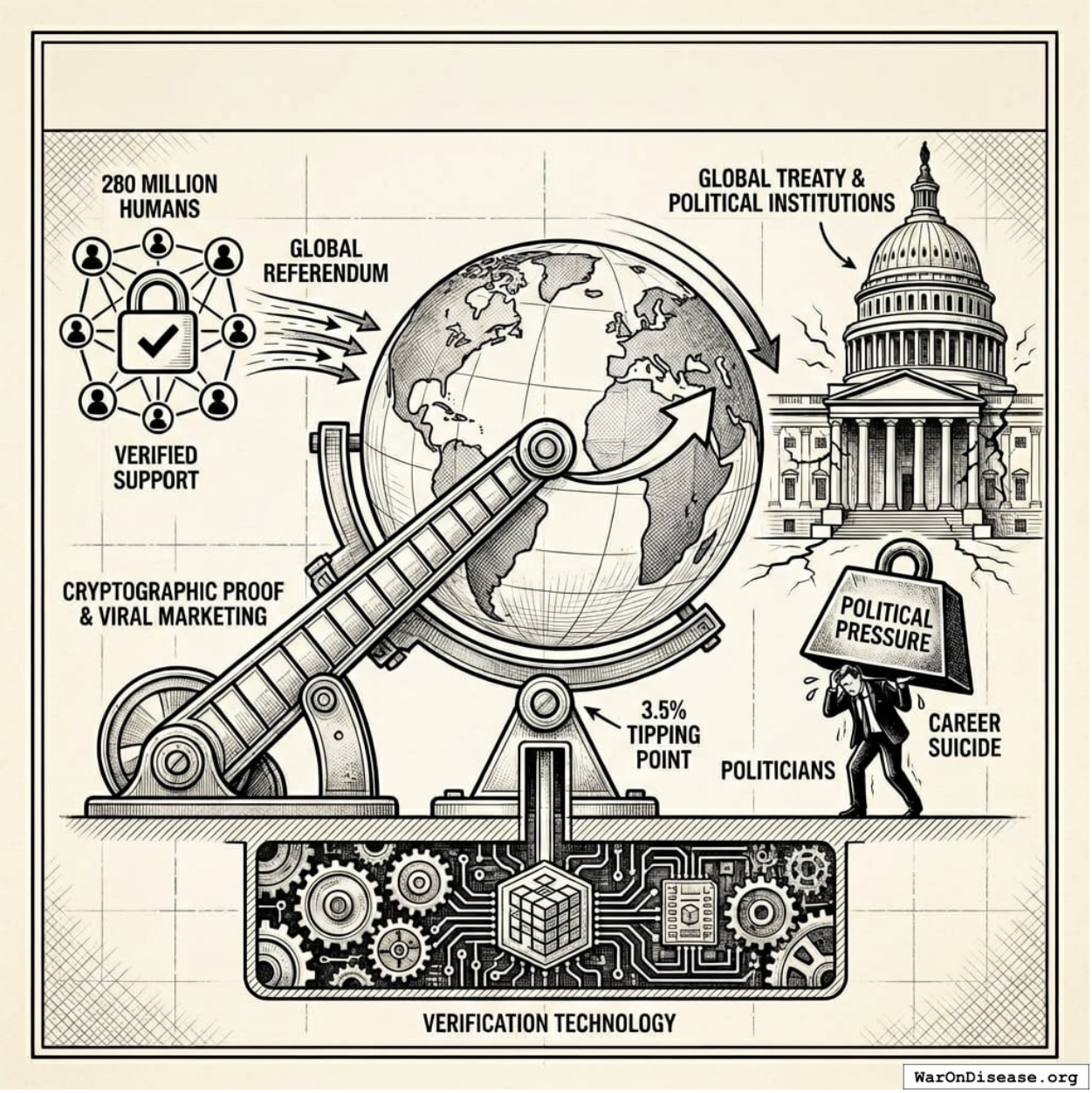


Figure 690: A process diagram illustrating how viral marketing and cryptographic verification scale to 280 million supporters to exert decisive political pressure.

Translation: You're getting 280 million humans to cryptographically prove they support the treaty, which creates political pressure so intense that ignoring it becomes career suicide for politicians.

The Innovation Part

This isn't just a referendum. It's creating a new standard for global digital democracy that proves you can secure mass participation without building a surveillance state or trusting any central authority.

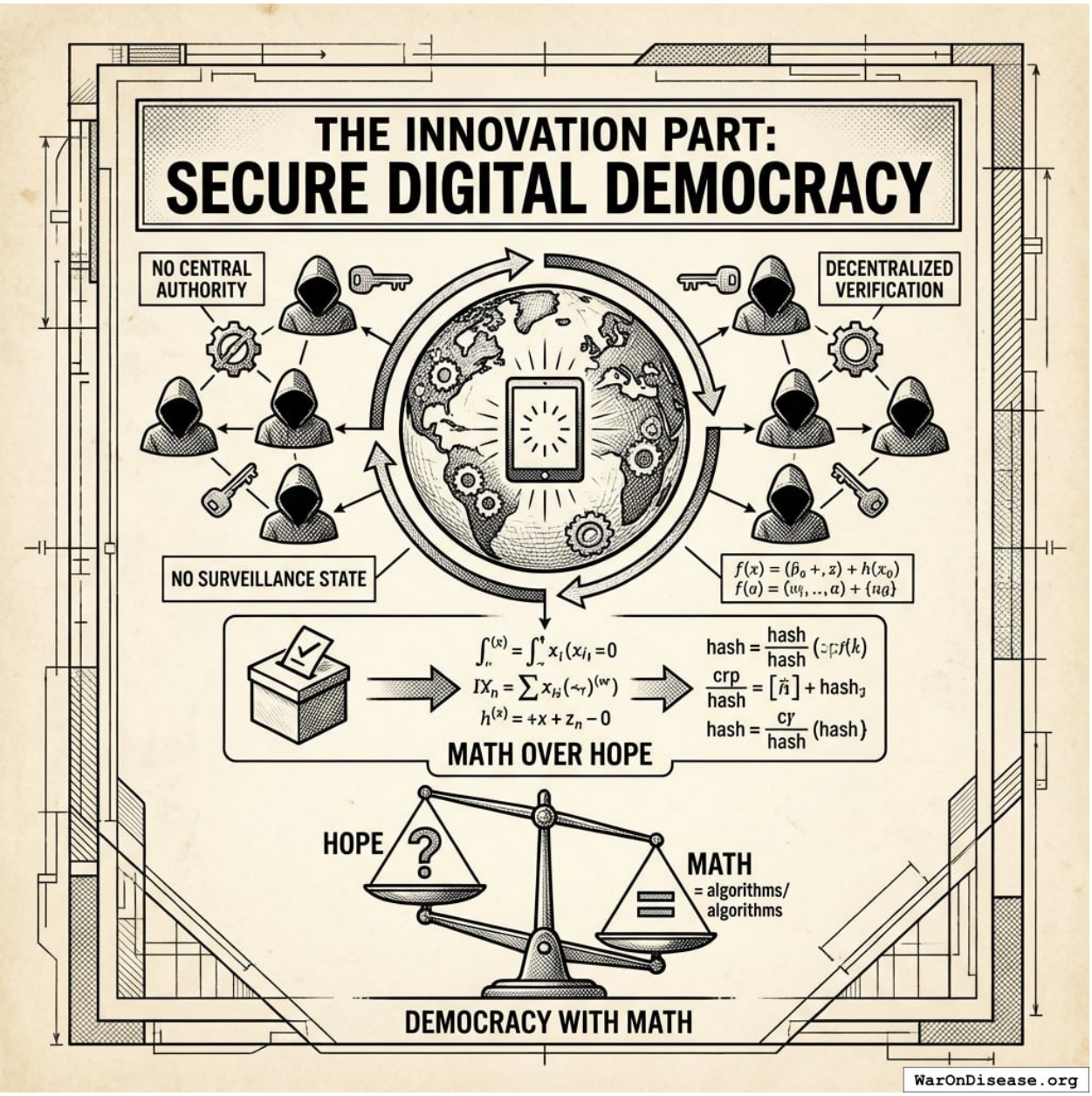


Figure 691: A comparison between a traditional centralized democracy model dependent on trust and surveillance versus a decentralized model secured by mathematical verification.

It's democracy, but with math instead of hope.

The Money Part

$200M for the campaign, as allocated in the VICTORY Incentive Alignment Bonds.

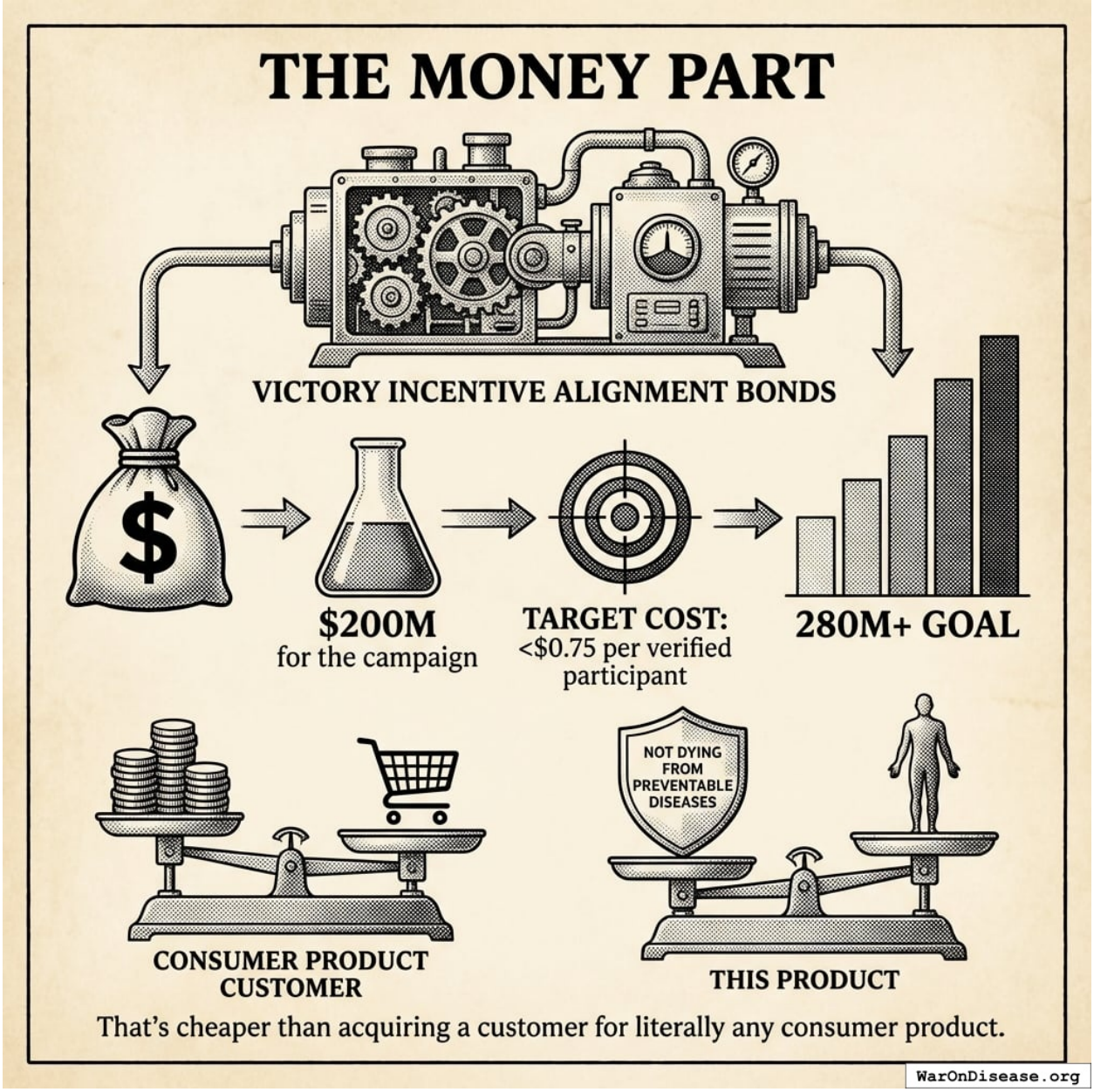


Figure 692: A comparison illustrating the 0.75 target acquisition cost for disease prevention against significantly higher typical consumer product acquisition costs.

Target cost: <$0.75 per verified participant to hit the 280M+ goal.

That's cheaper than acquiring a customer for literally any consumer product, and the product is "not dying from preventable diseases."

What Success Looks Like

280 million verified humans saying "do this or lose your job" to every politician on Earth. That's not a petition. That's a mandate with teeth.

On Why 3.5% Is The Magic Number

The 280 million target isn't pulled from thin air. It's based on the "3.5% Rule," a historical pattern that's held true across cultures and centuries:

When 3.5% of a population actively participates in sustained, nonviolent action, the movement becomes unstoppable.

The evidence:

- **Civil Rights (US):** 3.5% participation ended segregation
- **Indian Independence:** 3.5% of Indians kicked out the British Empire
- **Women's Suffrage:** 3.5% of women won the vote

The pattern repeats because once you hit 3.5%, you've demonstrated that: 1. This isn't a fringe movement 2. The support is distributed (not just one region or demographic) 3. Opposition becomes politically toxic

The strategy leverages this precedent with a twist: offer people healthcare they actually want, and watch them voluntarily join the largest political movement in history. No marches required. Just clicking.

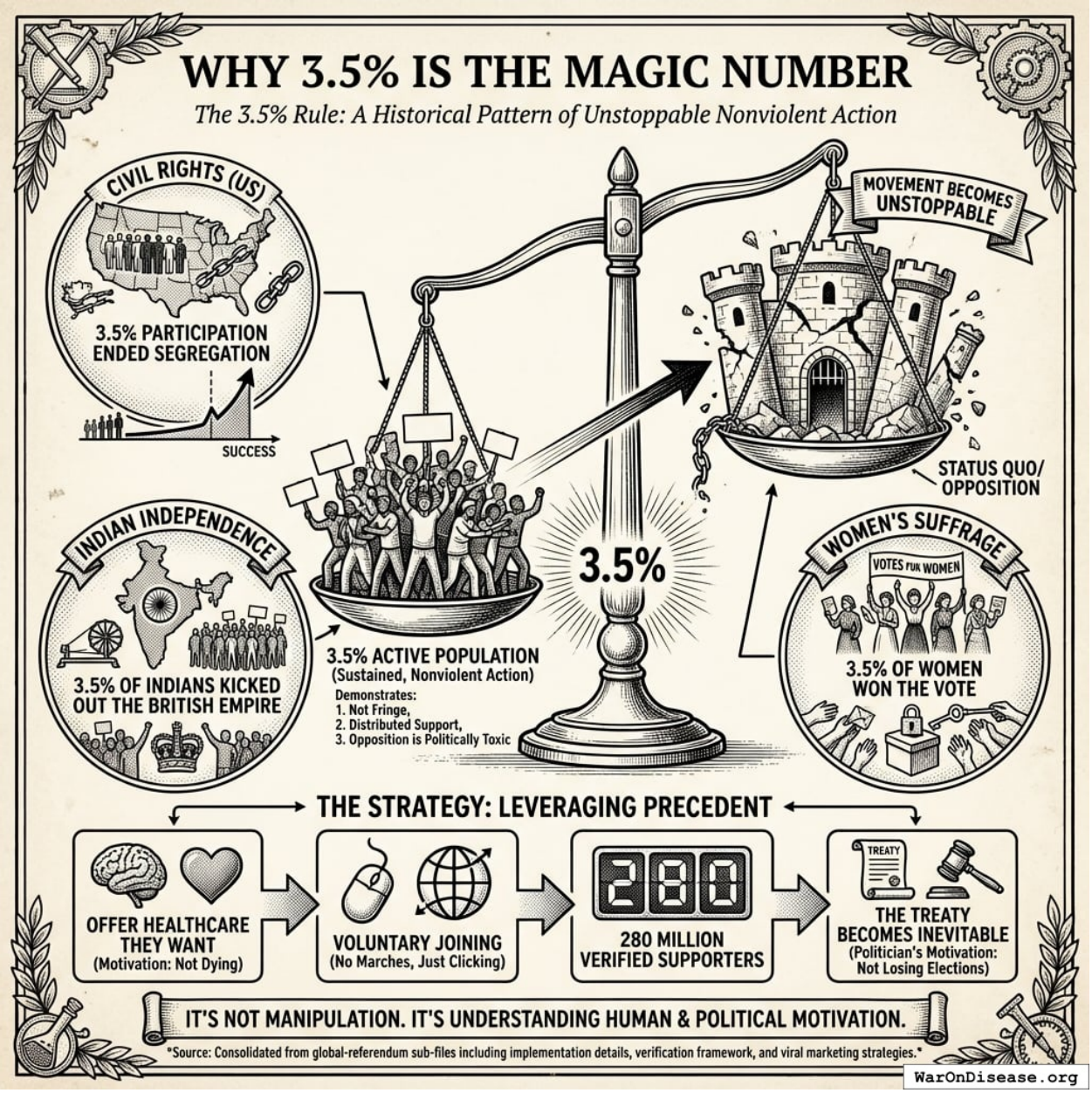


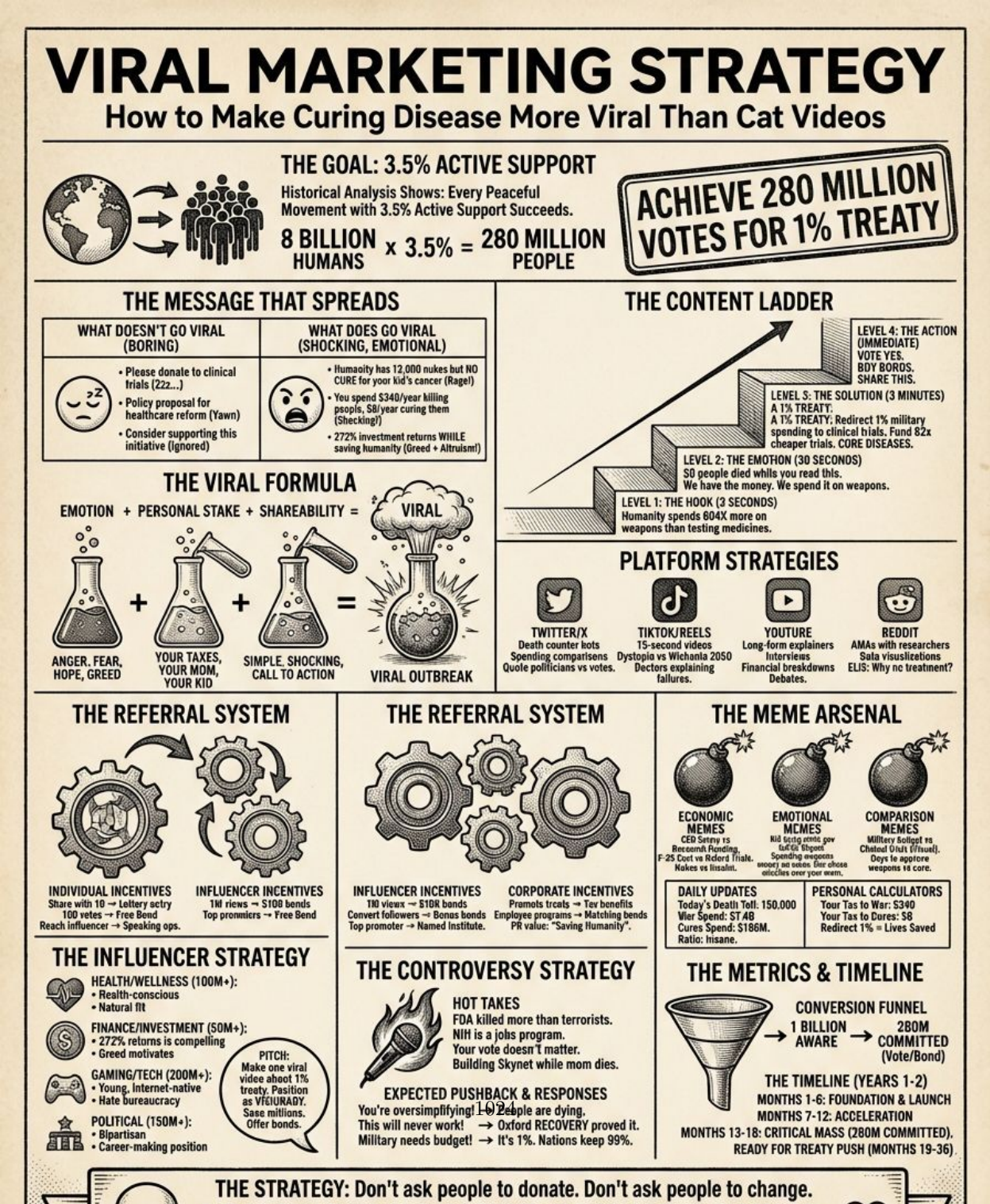
Figure 693: A visualization of the 3.5% Rule tipping point, showing how a small percentage of active population participation creates the momentum necessary for unstoppable social and political change.

People show up for the healthcare. Politicians see 280 million verified supporters. The treaty becomes inevitable.

It's not manipulation. It's just understanding what motivates humans (not dying) and what motivates politicians (not losing elections).

Source: Consolidated from global-referendum sub-files including implementation details, verification framework, and viral marketing strategies.

Viral Marketing Strategy



Historical analysis shows: Every peaceful movement that gets **3.5% active support** succeeds.

- 8 billion humans $\times$ 3.5% = 280 million
- The strategy requires 280 million people to vote YES on a 1% treaty
- That's achievable. Here's how.

The Message That Spreads

What Doesn't Go Viral

- "Please donate to clinical trials" (boring)
- "Policy proposal for healthcare reform" (sleep-inducing)
- "Consider supporting this initiative" (ignored)

What Does Go Viral

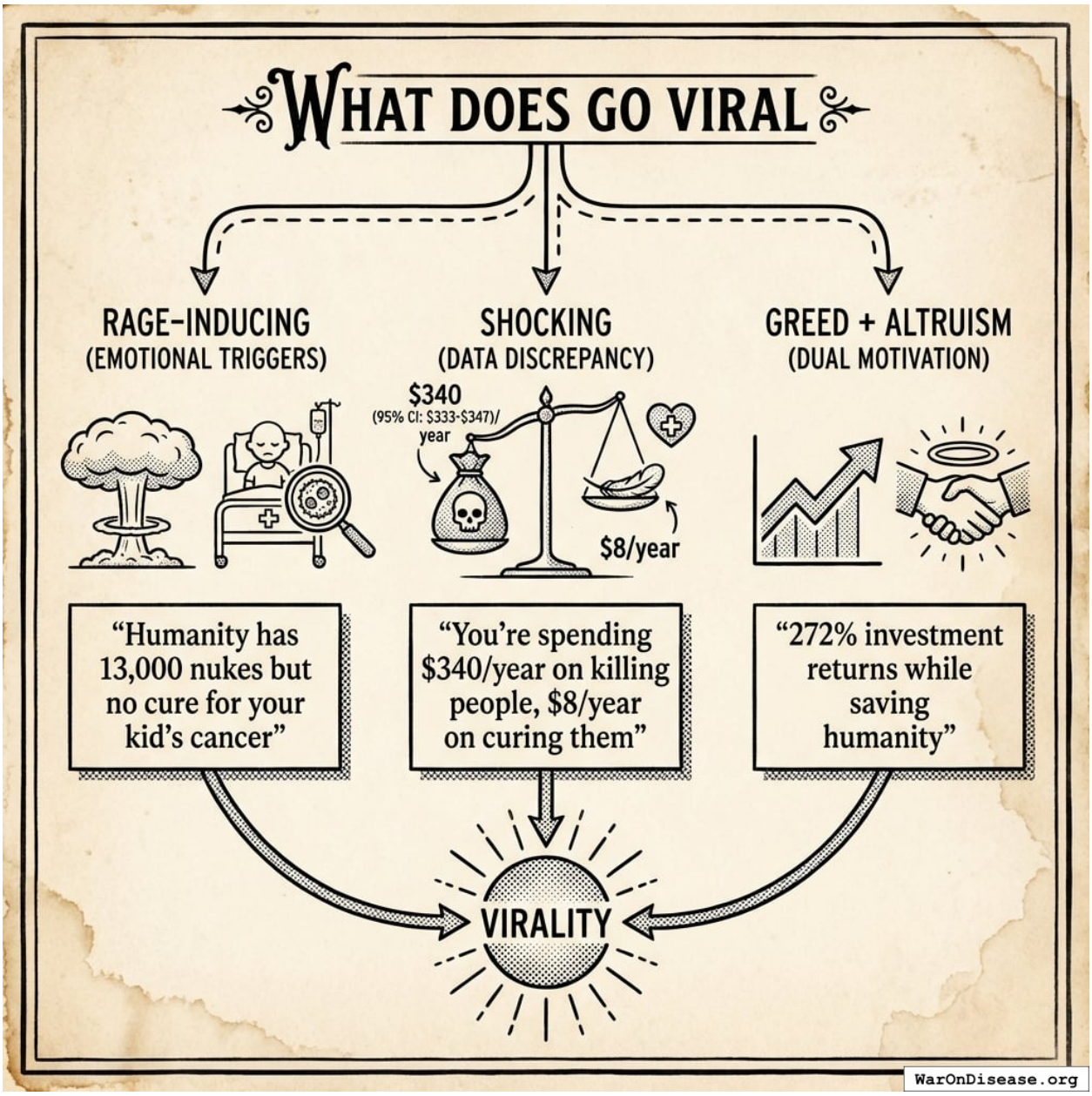


Figure 695: A visual comparison contrasting the scale of global destructive power and military spending against the lack of medical solutions and humanitarian funding, highlighting the 'greed plus altruism' intersection.

- "Humanity has 13,000 nukes[241] but no cure for your kid's cancer" (rage-inducing)
- "You're spending $340 (95% CI: $333-$347)/year on killing people, $8/year on curing them" (shocking)
- "272% investment returns while saving humanity" (greed + altruism)

The Viral Formula

$$\text{Emotion} + \text{Personal Stake} + \text{Shareability} = \text{Viral}$$

Emotional Triggers

- **Anger**: "FDA delays kill more than the drugs[194]"
- **Fear**: "You'll die of disease, not war"
- **Hope**: "You could cure this in 10 years"
- **Greed**: "272% annual returns forever"

Personal Stake

- "Your tax dollars: $340 (95% CI: $333-$347) to war, $8 to cures"
- "Your mom dies while bureaucrats meet"
- "Your kid's rare disease: $0 funding"

Shareability

- One-sentence summary
- Shocking statistic
- Clear call to action

The Content Ladder

Level 1: The Hook (3 seconds)

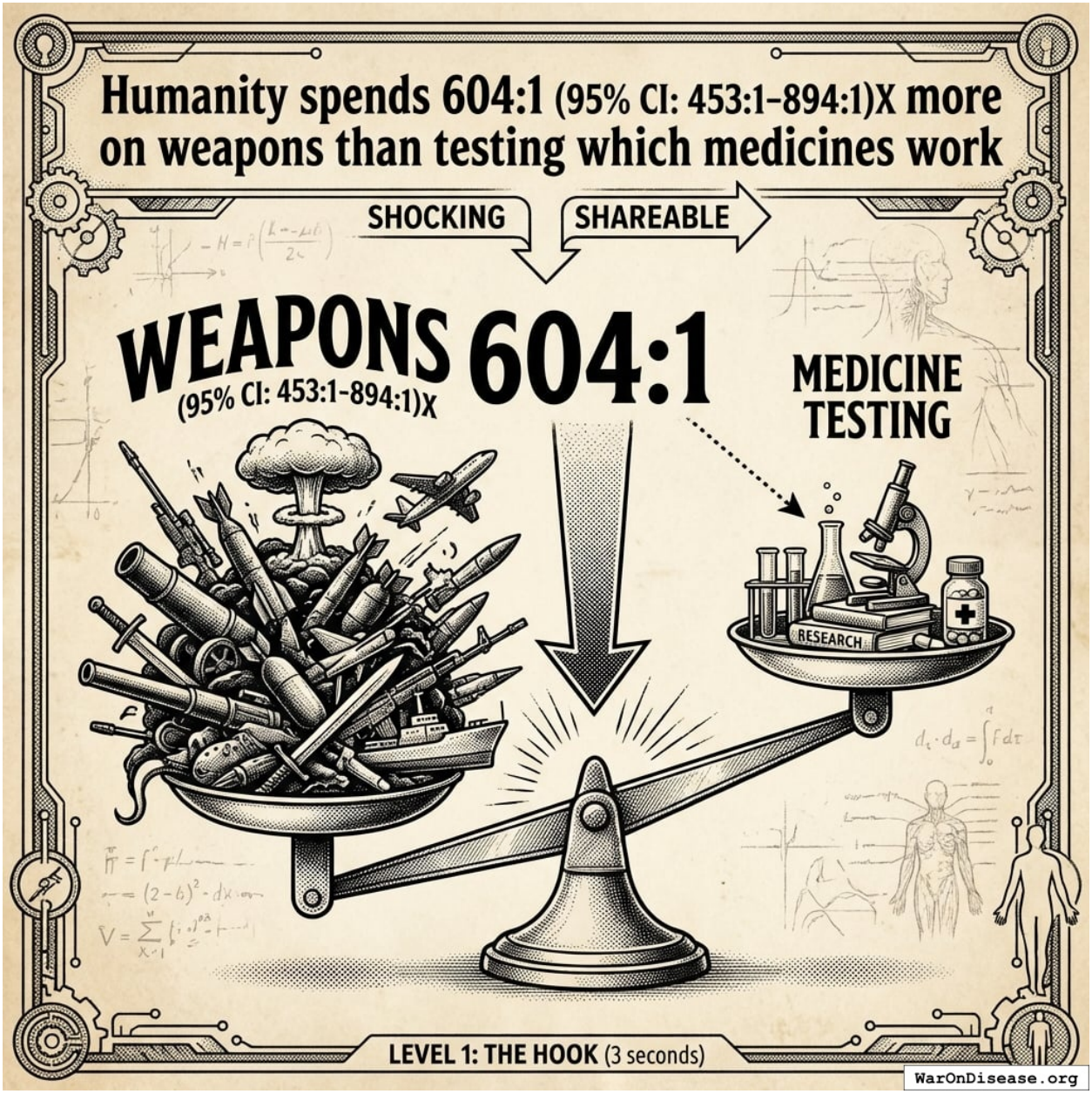


Figure 696: A visual comparison of global spending, showing a massive scale representing weapons expenditure against a tiny fraction representing medical testing to illustrate the 604:1 ratio.

"Humanity spends 604:1 (95% CI: 453:1-894:1)X more on weapons than testing which medicines work"

- Simple
- Shocking
- Shareable

Level 2: The Emotion (30 seconds)

"While you read this, 50 people died of preventable disease. We have the money to cure them. Humans spend it on weapons instead."

Level 3: The Solution (3 minutes)

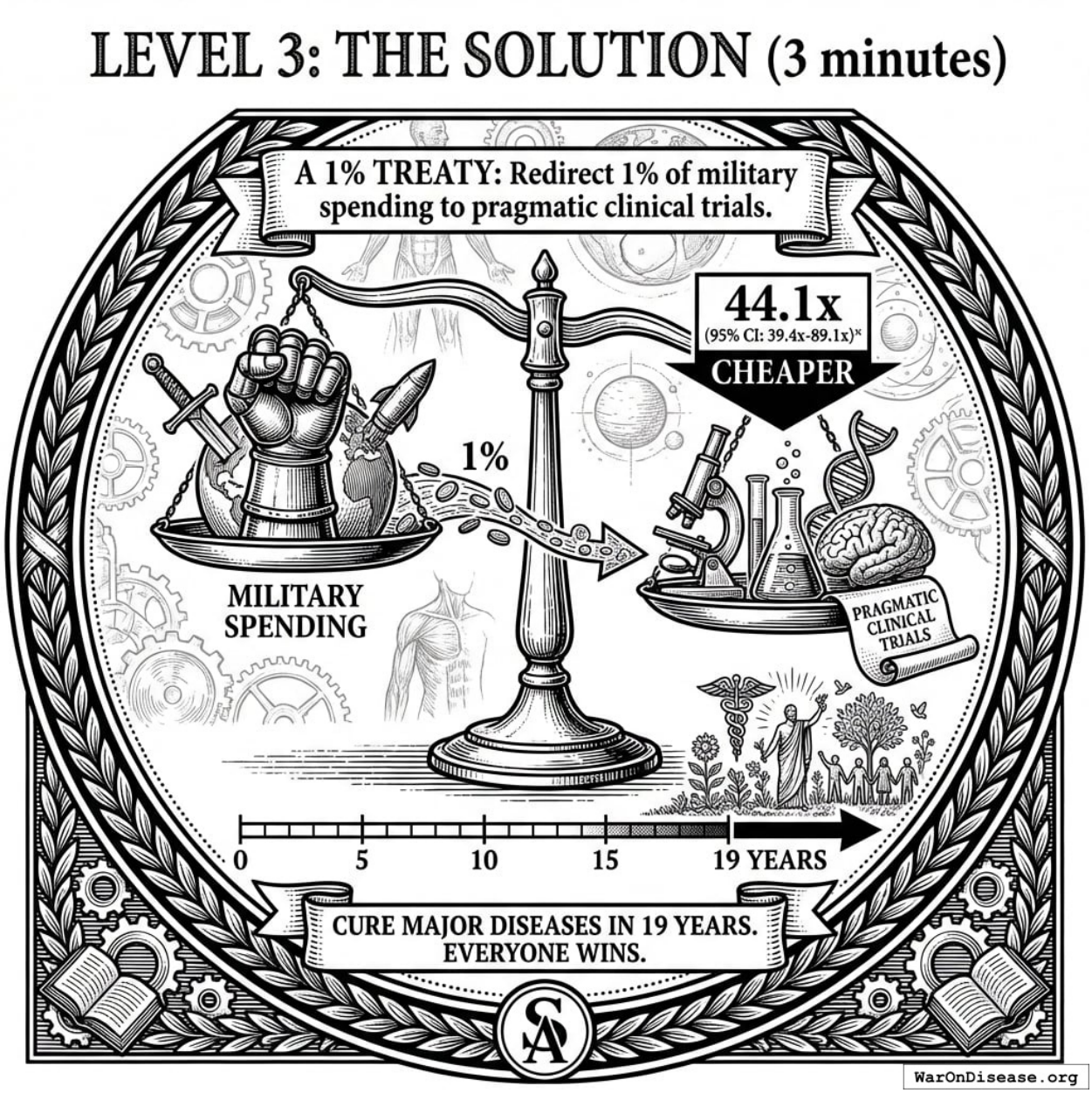


Figure 697: A visual flow showing the redirection of 1 percent of military budgets into pragmatic clinical trials, leading to a 44.1x cost efficiency and the cure of major diseases within 19 years.

"A 1% treaty: Redirect 1% of military spending to pragmatic clinical trials. Fund trials that are 44.1x (95% CI: 39.4x-89.1x) cheaper. Cure major diseases in 19 years. Everyone wins."

Level 4: The Action (immediate)

"Vote YES. Buy bonds. Share this."



Figure 698: A tiered engagement pyramid showing the progression from an initial 3-second hook to immediate action.

Platform-Specific Strategies

Twitter/X

- Death counter bots: "147 died while you scrolled"
- Spending comparisons: Daily updates
- Quote politicians saying they care

- Then show their votes for war budgets

TikTok/Reels

- 15-second videos: "Guess what your taxes buy"
- Before/after: Dystopia 2050 vs Wishonia 2050
- Doctors explaining why they can't cure you
- Patients explaining why they're dying

YouTube

- Long-form explainers
- Interviews with doctors
- Financial breakdown of VICTORY Incentive Alignment Bonds
- Debate: "Is curing disease profitable?"

Reddit

- AMAs with researchers
- Data visualizations
- "ELI5: Why doesn't my rare disease have treatment?"
- Financial analysis of bonds

The Referral System

Individual Incentives

- Share with 10 people → Entered in bond lottery
- Get 100 votes → Free VICTORY Incentive Alignment Bond
- Reach influencer status → Speaking opportunities

Influencer Incentives

- 1M views discussing treaty → $10K in bonds
- Convert followers to voters → Bonus VICTORY Incentive Alignment Bond allocation
- Top promoter → Named institute

Corporate Incentives

- Companies that promote treaty → Tax benefits
- Employee participation programs → Matching bonds
- PR value: "We're saving humanity"

The Meme Arsenal

Economic Memes

- "Raytheon CEO salary vs rare disease research funding"
- "Cost of one F-35[307] = ~160 Oxford-style trials"
- "We have money for 13,000 nukes but not your insulin"

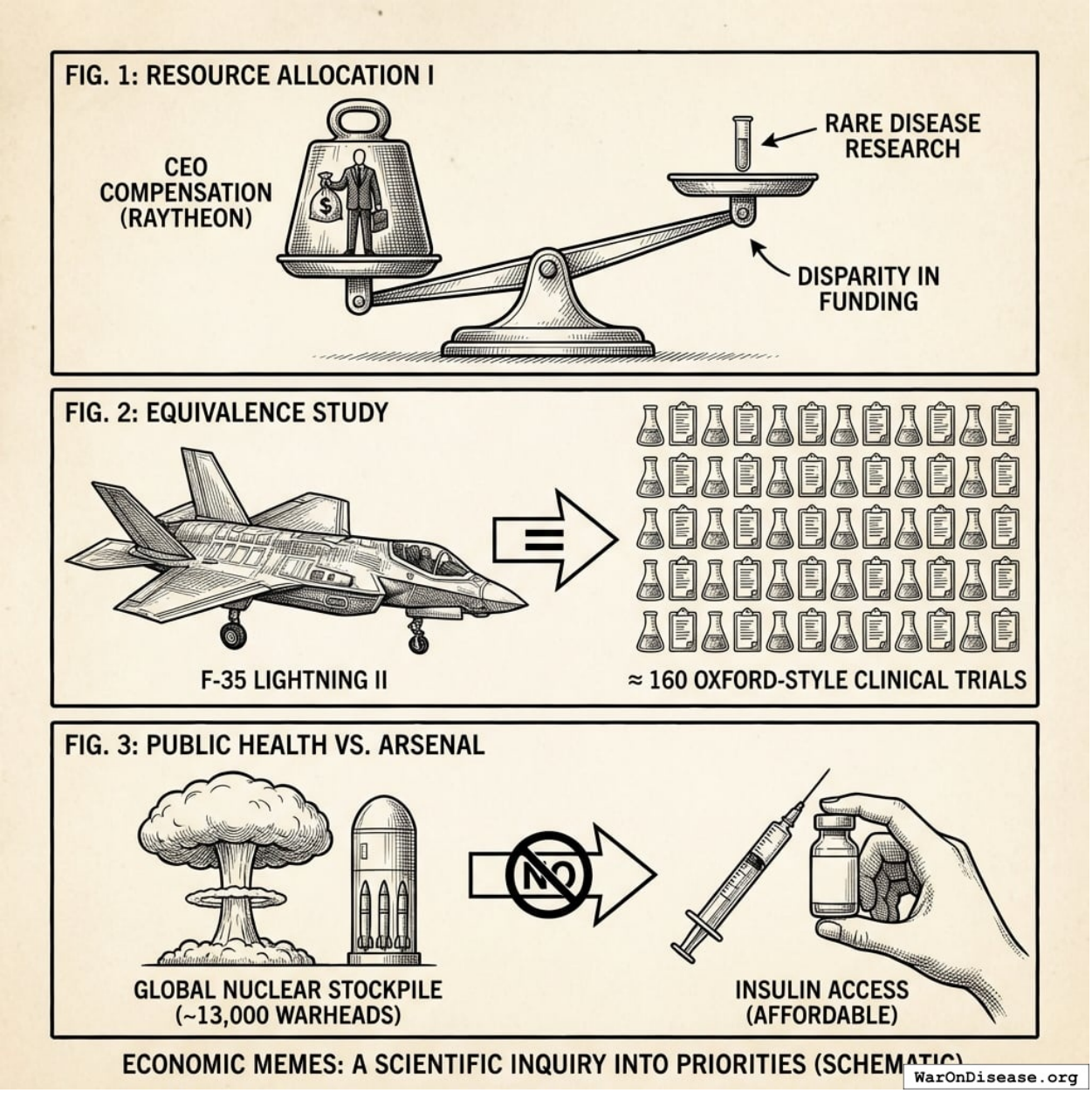


Figure 699: A visualization of opportunity costs comparing military expenditures to healthcare funding, such as the cost of a single F-35 fighter jet equated to 160 clinical trials.

Emotional Memes

- "Why is my kid dying while governments build Skynet?"
- "Imagine if humanity spent weapons money on cures"
- "The government chose missiles over your mom"

Comparison Memes

- "Military budget breaks your screen / Clinical trials barely visible"
- "Days to approve weapons: 1 / Days to approve cancer cure: 6,205[308]"

The Influencer Strategy

Target Categories

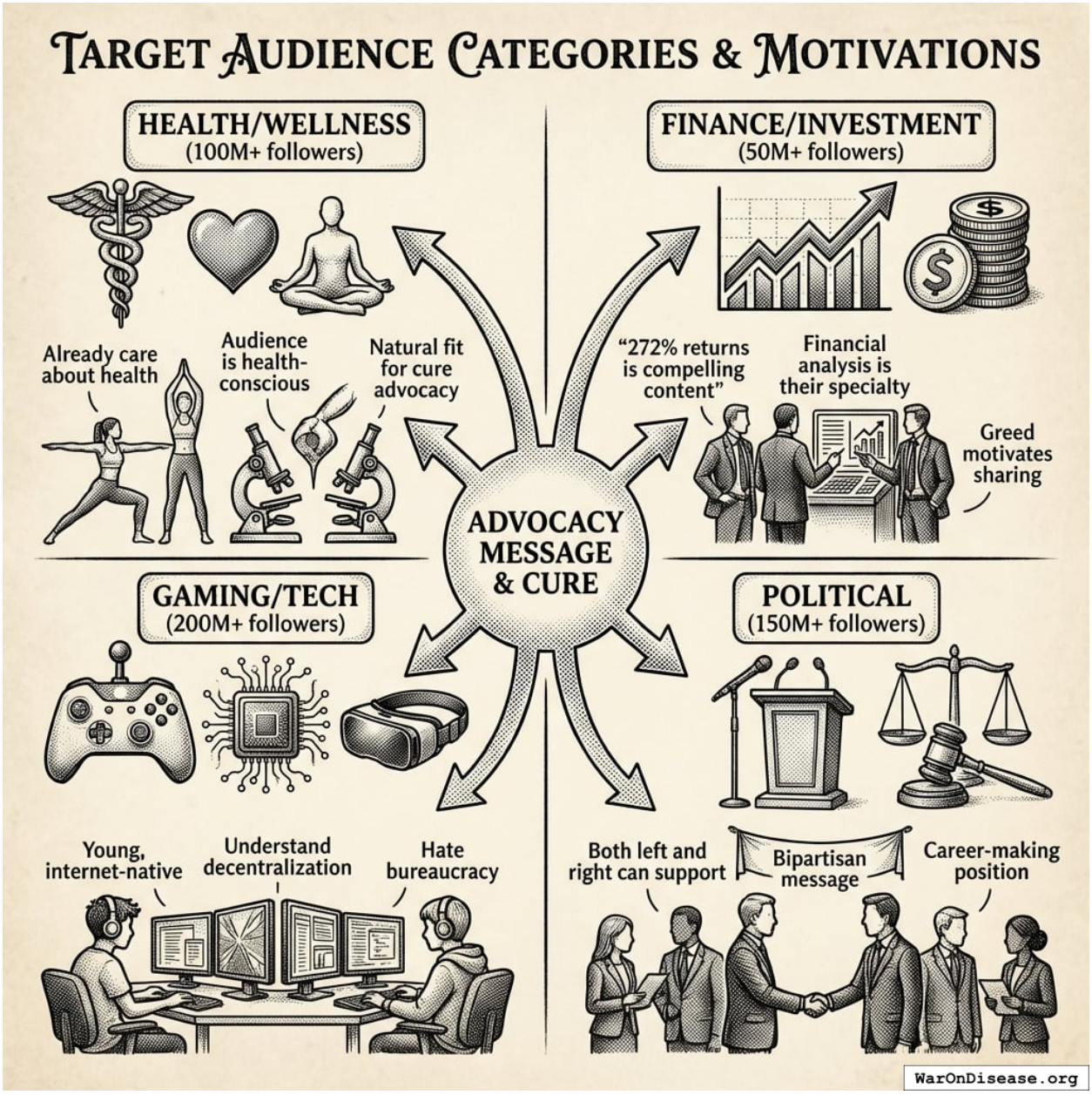


Figure 700: A visual comparison of four target audience segments, illustrating their total reach in follower counts and the primary psychological drivers for each group's support.

Health/Wellness (100M+ followers combined):

- They already care about health
- Their audience is health-conscious
- Natural fit for cure advocacy

Finance/Investment (50M+ followers):

- "272% returns is compelling content"
- Financial analysis is their specialty
- Greed motivates sharing

Gaming/Tech (200M+ followers):

- Young, internet-native
- Understand decentralization
- Hate bureaucracy

Political (150M+ followers):

- Both left and right can support
- Bipartisan message
- Career-making position

The Pitch to Influencers

"Make one video about a 1% treaty:

- Engineered to go viral (emotional + controversial)
- Positions you as visionary
- Potential to save millions of lives
- Plus: Offer them bonds"



Figure 701: A strategic breakdown of the influencer pitch, illustrating the four pillars of the value proposition: virality, reputational status, humanitarian impact, and financial incentives.

The Data That Spreads

Daily Updates

- "Today's death toll: 150,000[168]"
- "Total spent on war today: ~$7.4 billion"
- "Total spent on cures today: $186 million[59]"
- "Ratio: Still insane"

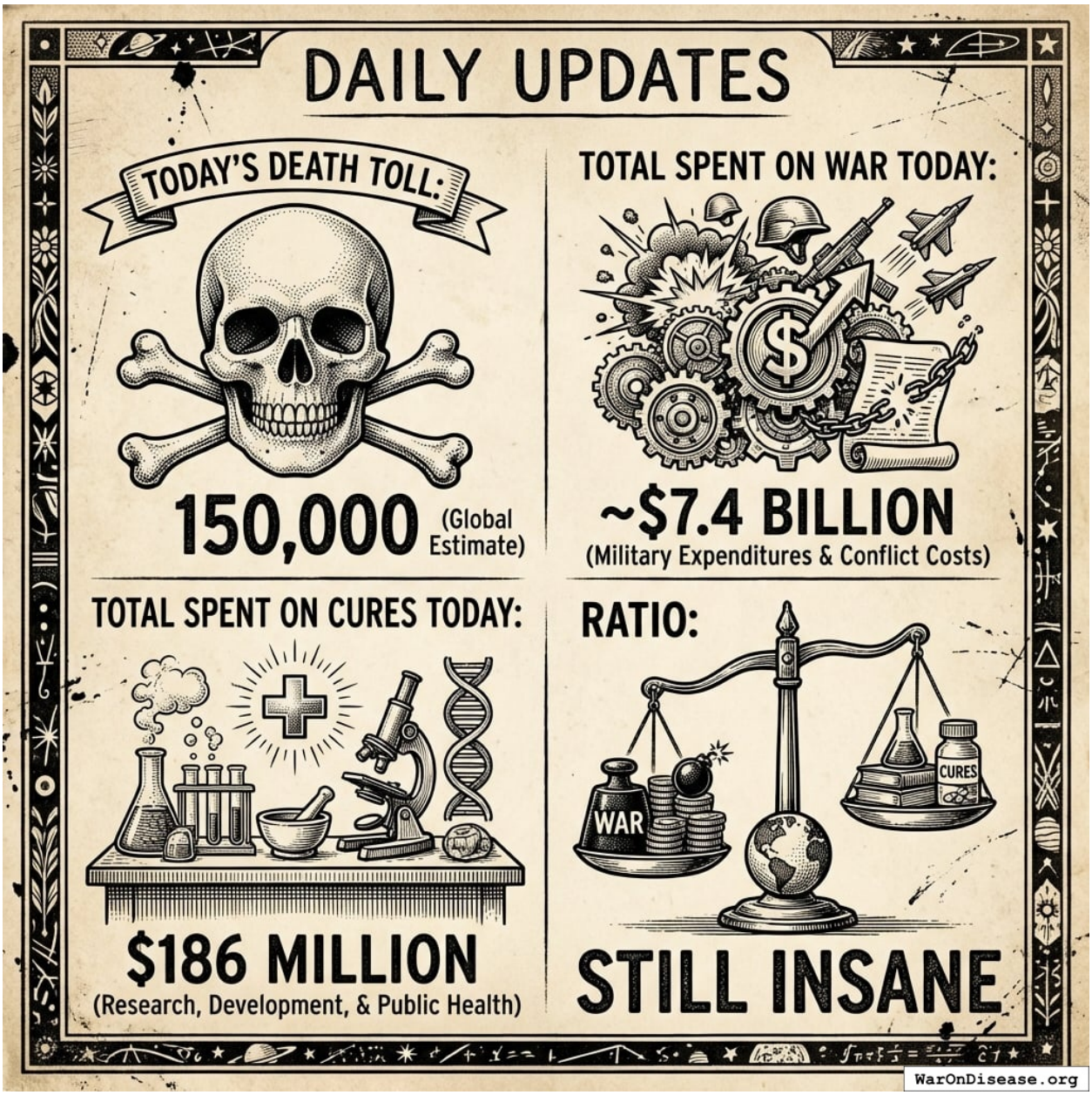


Figure 702: A proportional comparison showing the massive disparity between daily global spending on warfare versus medical research for cures.

Personal Calculators

- "Your tax contribution to war: $340 (95% CI: $333-$347)"
- "Your tax contribution to cures: $8"
- "If you redirected 1%: Lives saved: 0.003"

Comparison Tools

- "Your city's military spending could fund X trials"
- "Your state's military budget could cure Y diseases"

The Controversy Strategy

Hot Takes That Generate Engagement

- "FDA has killed more Americans than terrorists[194]"
- "NIH is a $47B (95% CI: $45B-$50B) jobs program, not a cure program"
- "Your vote doesn't matter (Princeton proved it)"
- "We're building Skynet while your mom dies"

Expected Pushback (and Responses)

"You're oversimplifying!"

→ "And you're overcomplicating. People are dying."

"This will never work!"

→ "Oxford RECOVERY trial[177] already proved it works."

"The military needs its budget!"

→ "The treaty takes 1%. Nations keep 99%. Relax."

The Metrics

Viral Success Indicators

- **Phase 1** (Month 1-3): 10M aware
- **Phase 2** (Month 4-6): 100M engaged
- **Phase 3** (Month 7-12): 280M committed

Conversion Funnel

- **Aware**: Saw the message
- **Engaged**: Clicked, read, watched
- **Shared**: Told others
- **Committed**: Voted YES or bought bonds

Target Ratios

- 1 billion aware → 500M engaged → 280M committed
- Share rate: 50% (if content is good)
- Commitment rate: 56% (if message resonates)

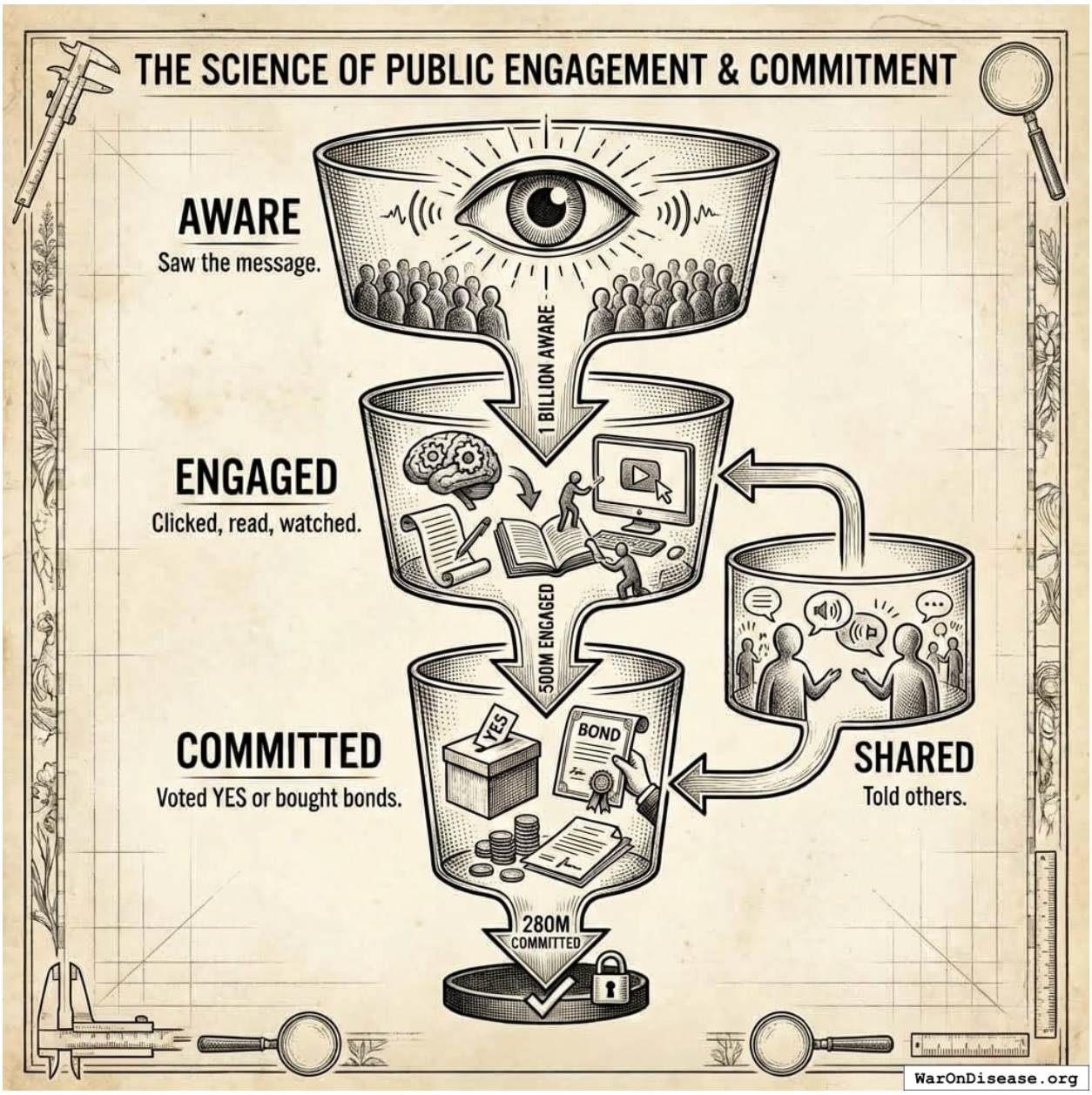


Figure 703: A marketing funnel visualization illustrating the target conversion rates from awareness to commitment.

The Timeline (Years 1-2 of the Roadmap)

This viral marketing campaign builds awareness and support during the first 18 months, preparing for the treaty push in months 19-36. See The Roadmap for the complete 3-year plan.

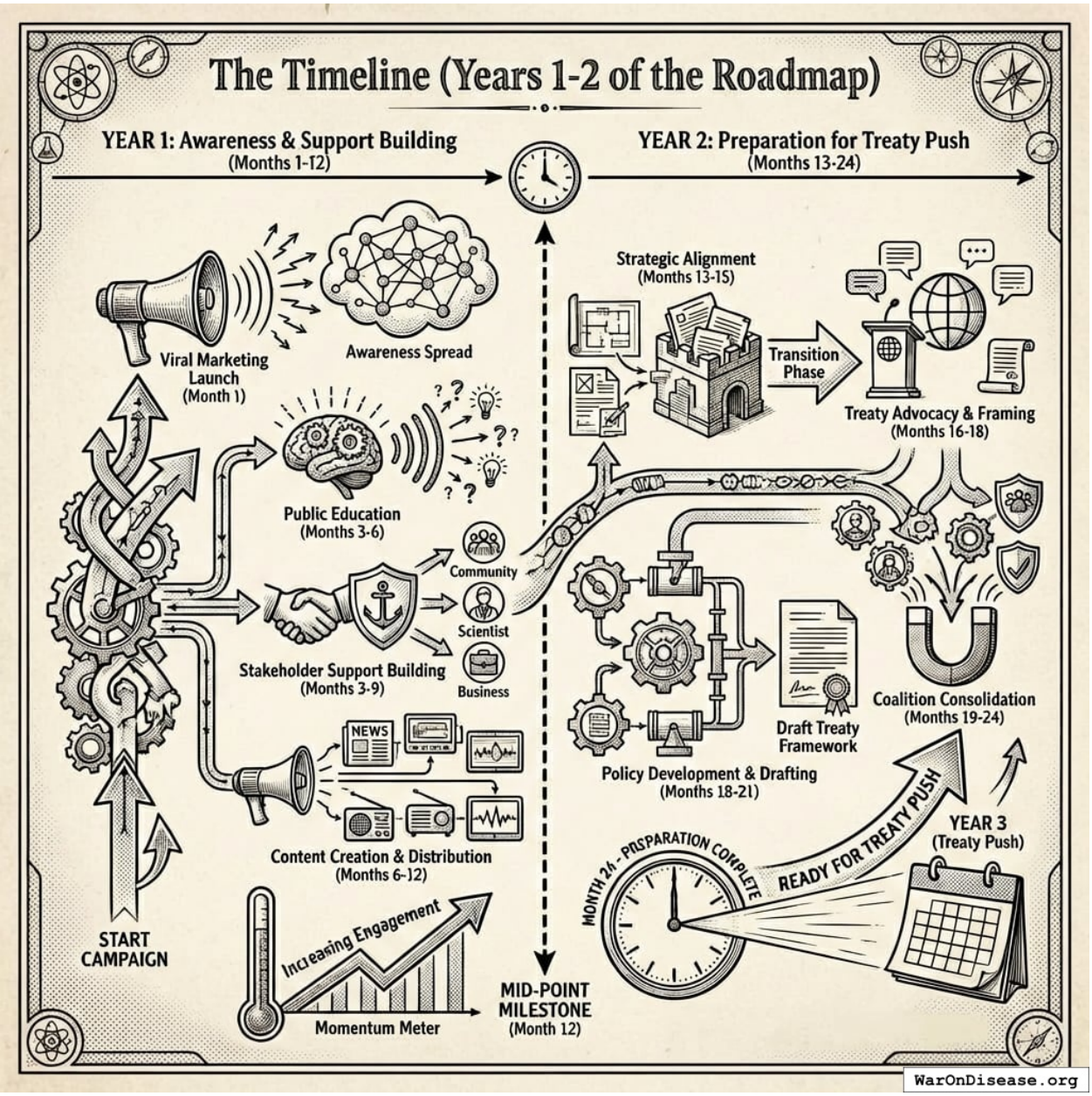


Figure 704: A timeline illustrating the 36-month roadmap, divided into an 18-month marketing phase followed by an 18-month treaty push.

Months 1-6: Foundation & Launch

- Launch website and core content
- Recruit first 100,000 advocates
- Influencer partnerships begin
- Viral campaigns and media coverage

Months 7-12: Acceleration

- Reach 100M people aware
- Scale referral program

- Political pressure begins building

Months 13-18: Critical Mass

- 280M voters committed
- Media saturation
- Politicians feel pressure
- Ready for treaty push (months 19-36)
- Mainstream coverage

The Strategy

Don't ask people to donate. Don't ask people to change. Ask them to **vote for not dying**.

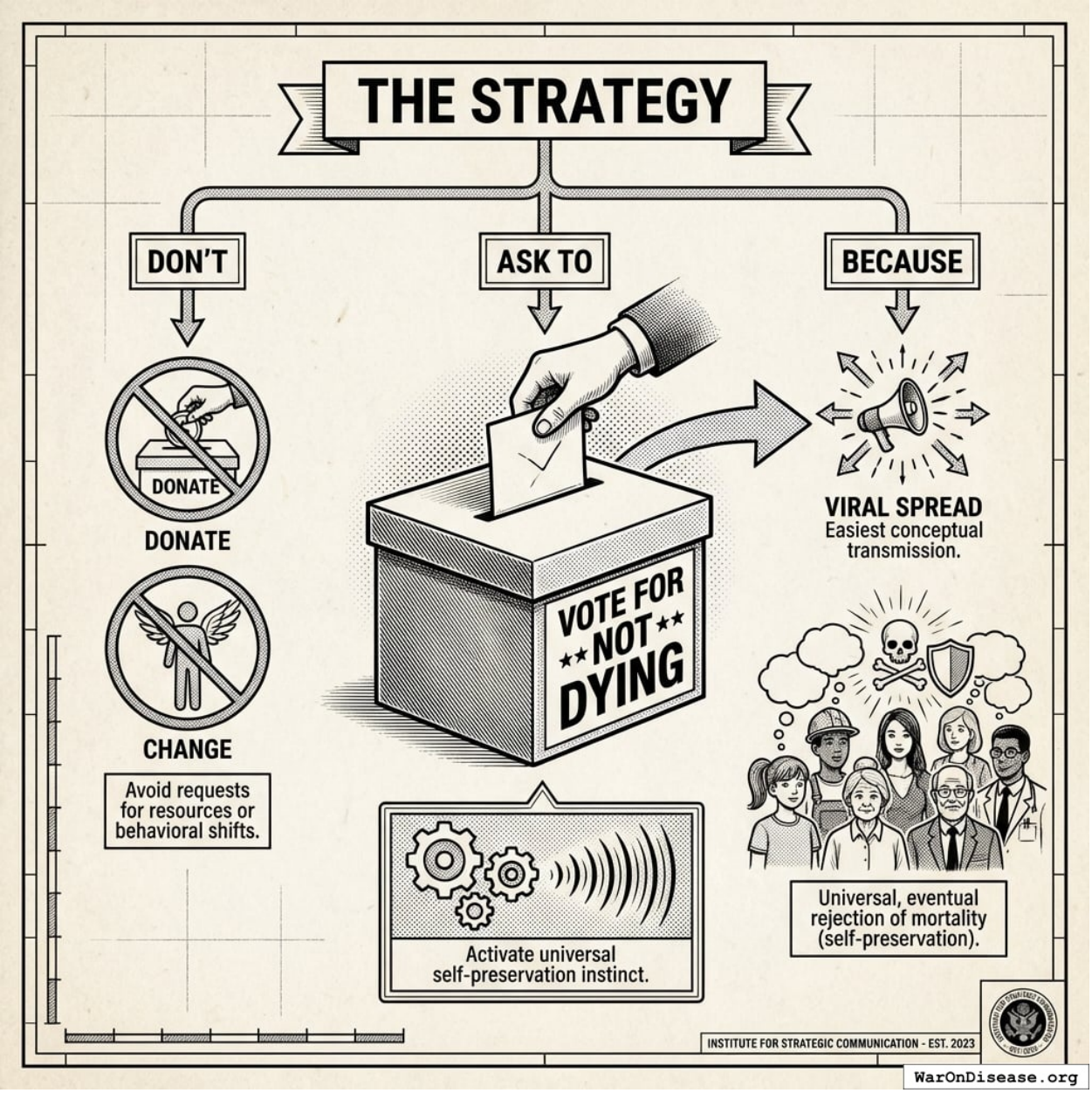


Figure 705: A conceptual diagram contrasting three strategies for engagement, highlighting 'Voting for not dying' as the uniquely effective path to virality compared to asking for donations or change.

That's the easiest thing to make go viral.

Because everyone, eventually, doesn't want to die.

Making Friends with the Military-Industrial Complex



Defense lobbyists spend $127M on lobbying and get $181B in government contracts back. That's a 1,810:1 ROI[139].

They will kill any treaty that threatens this. Not because they're evil (though that helps), but because murder is profitable and they like money.

The Solution

Pay them more to lobby FOR the treaty.

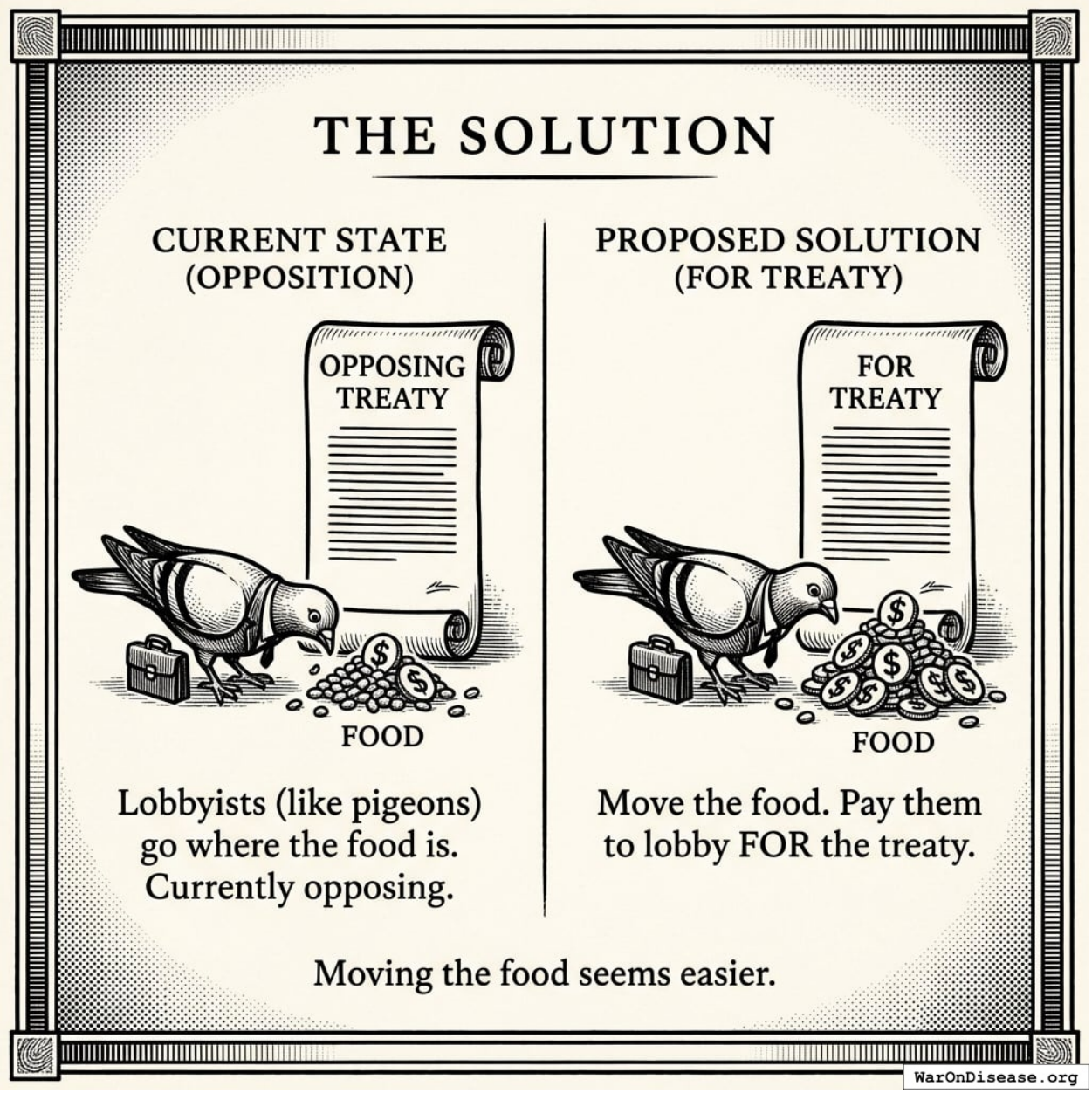


Figure 706: A conceptual comparison showing the 'Current State' where financial incentives favor opposing a treaty versus the 'Proposed Solution' where the same incentives are moved to favor supporting it.

Lobbyists are like pigeons. They go where the food is. Currently the food is in opposing the treaty. You could try convincing them that saving lives is noble, or you could just move the food.

Moving the food seems easier.

The Offer

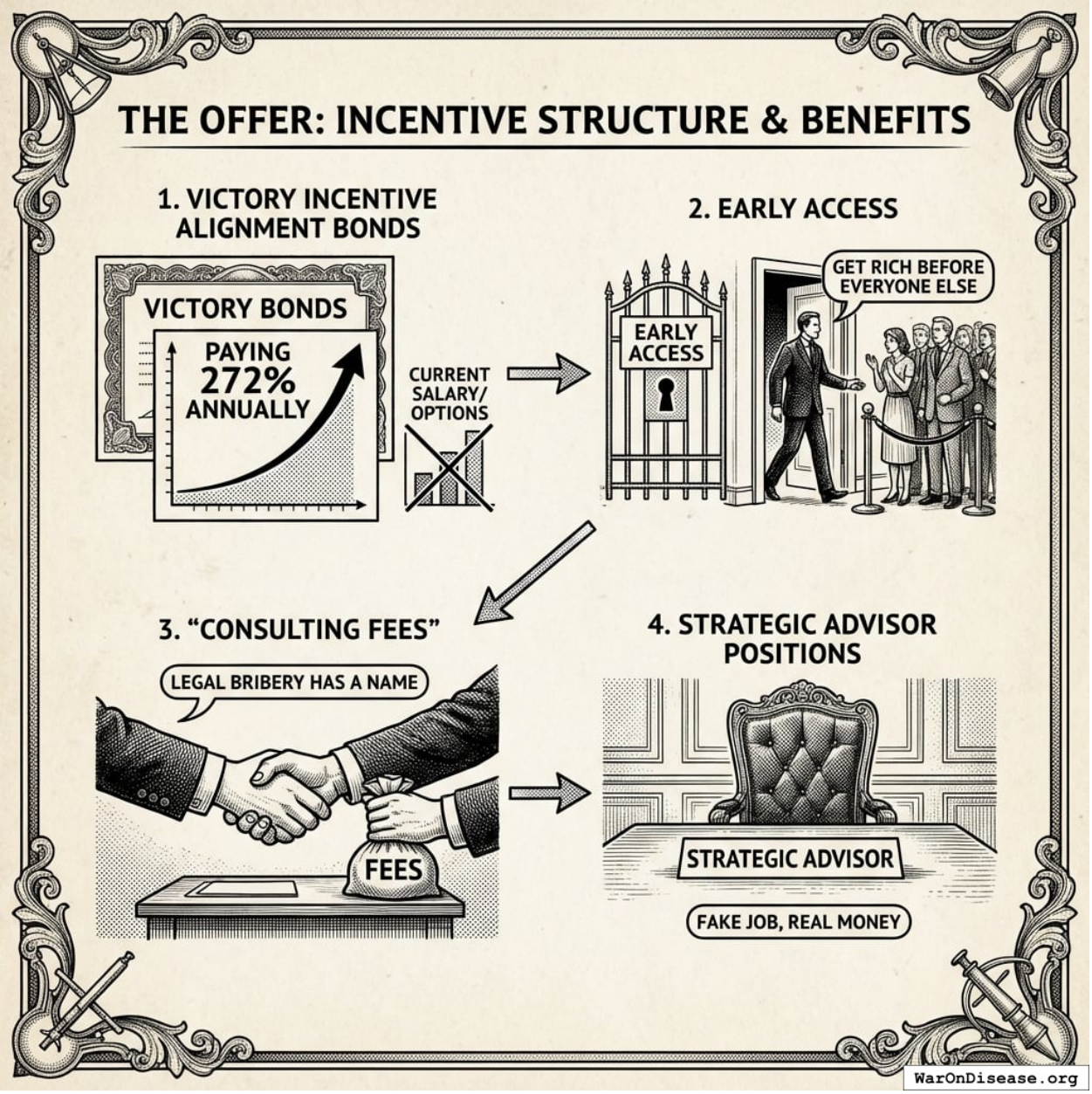


Figure 707: A visualization of 'The Offer' framework, illustrating how high-yield bonds, early access, and strategic roles are bundled together to create an irresistible incentive package.

You give them:

1. **VICTORY Incentive Alignment Bonds paying 272% annually** (vs their current salary/stock options)

2. **Early access** (get rich before everyone else)
3. **"Consulting fees"** (legal bribery has a name)
4. **Strategic advisor positions** (fake job, real money)

The Math

Their current job (lobbying against treaty):

- Pay: $500K-$2M/year
- Job security: Depends on military budget staying huge
- Upside: Salary + stock options worth maybe 2x salary
- Legacy: "Made orphans for money"

Your offer (lobbying for treaty):

- Pay: $5-20M in bonds
- Returns: 272% annually, forever
- Job security: Better (99% of military budget still exists)
- Upside: Generational wealth
- Legacy: "Accidentally saved humanity while getting rich"

Most people can do this math. You hope.

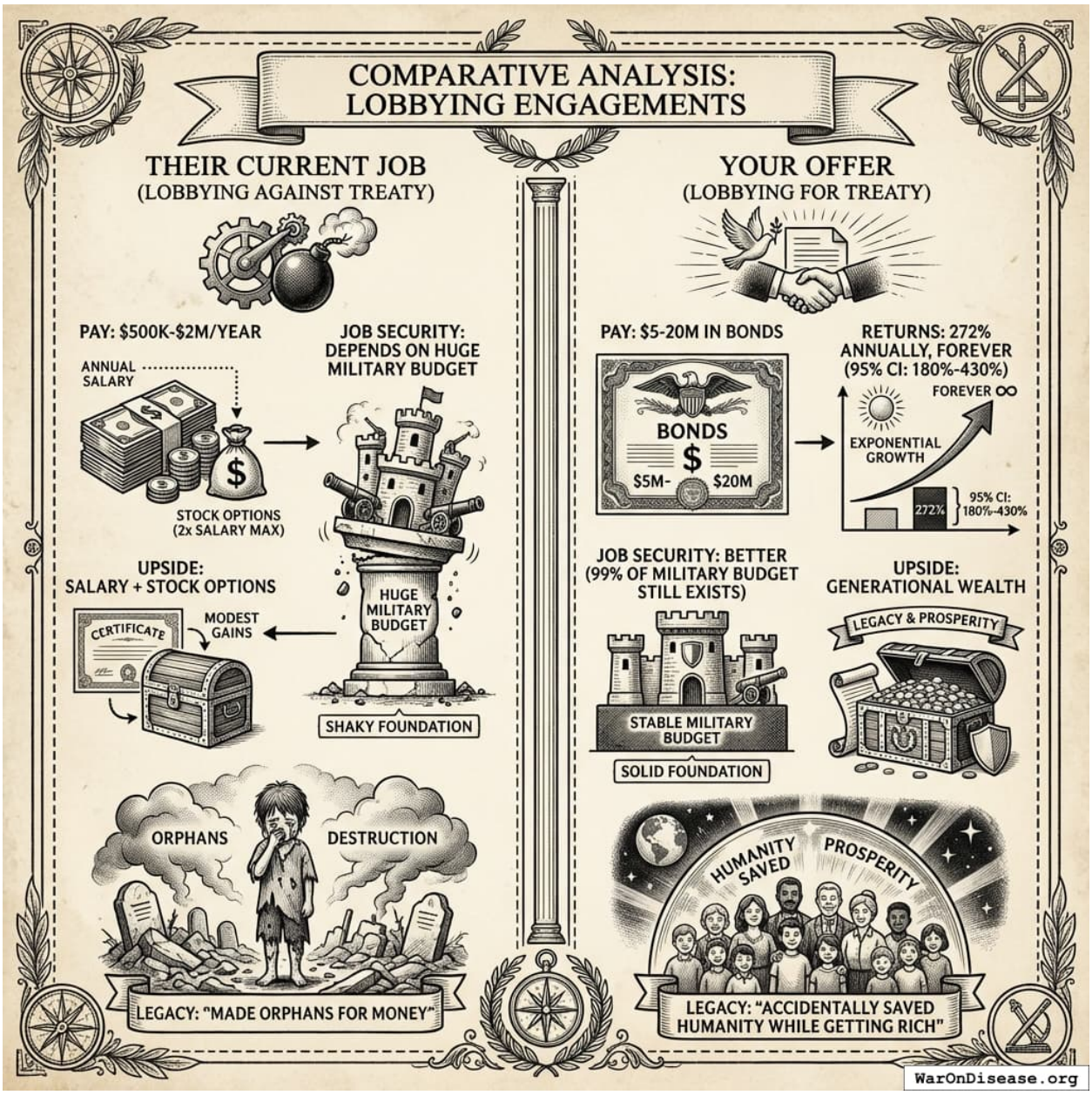


Figure 708: Comparison of financial incentives and legacy outcomes between current lobbying roles and the proposed bond-incentivized model.

Why They Take It

It's More Papers

272% > whatever they're making now.

That's it. That's the whole reason.

The Treaty Doesn't Actually Hurt Them

- Military budget drops 1% (from $2.72T to $2.69T)

- They still have 99% to protect
- Defense contracts still flow
- Jobs stay
- Weapons still get built
- Wars probably still happen (just 1% fewer wars, which is still too many wars)

You're not asking them to become pacifists. You're asking them to accept slightly less murder funding in exchange for becoming extremely wealthy.



Figure 709: A comparison showing a 1 percent reduction in military budget relative to the 99 percent that remains, illustrating the trade-off between a minor funding cut and significant wealth generation.

Political Cover

"I support life-saving medical research" sounds better at dinner parties than "I lobby for bombs."

Their kids might even respect them. Probably not, but maybe.

How You Do This

Step 1: Identify Targets



Figure 710: A breakdown of the four target groups for Step 1, showing the distribution of lobbyists, CEOs, investors, and former officials.

- Top 50 military lobbyists (ranked by how much democracy they've corrupted)

- 20 defense contractor CEOs (the people who make the bombs and stuff)
- 10 major investors (pension funds, family offices, rich people who like more money)
- 5 former Pentagon officials (revolving door goes both ways)

Step 2: The Meeting

Private. No witnesses. Simple pitch:

> "This treaty might happen. You can support it and become wealthy. Here are VICTORY Incentive Alignment Bonds paying 272% annually. Forever. Your clients keep 99% of their budgets. What's your price?"



Figure 711: A diagram illustrating the incentive alignment structure: supporting the treaty results in 272 percent annual bond yields for the individual while allowing the defense sector to retain 99 percent of its budget.

Step 3: The Flip

Once enough key players flip, momentum shifts.

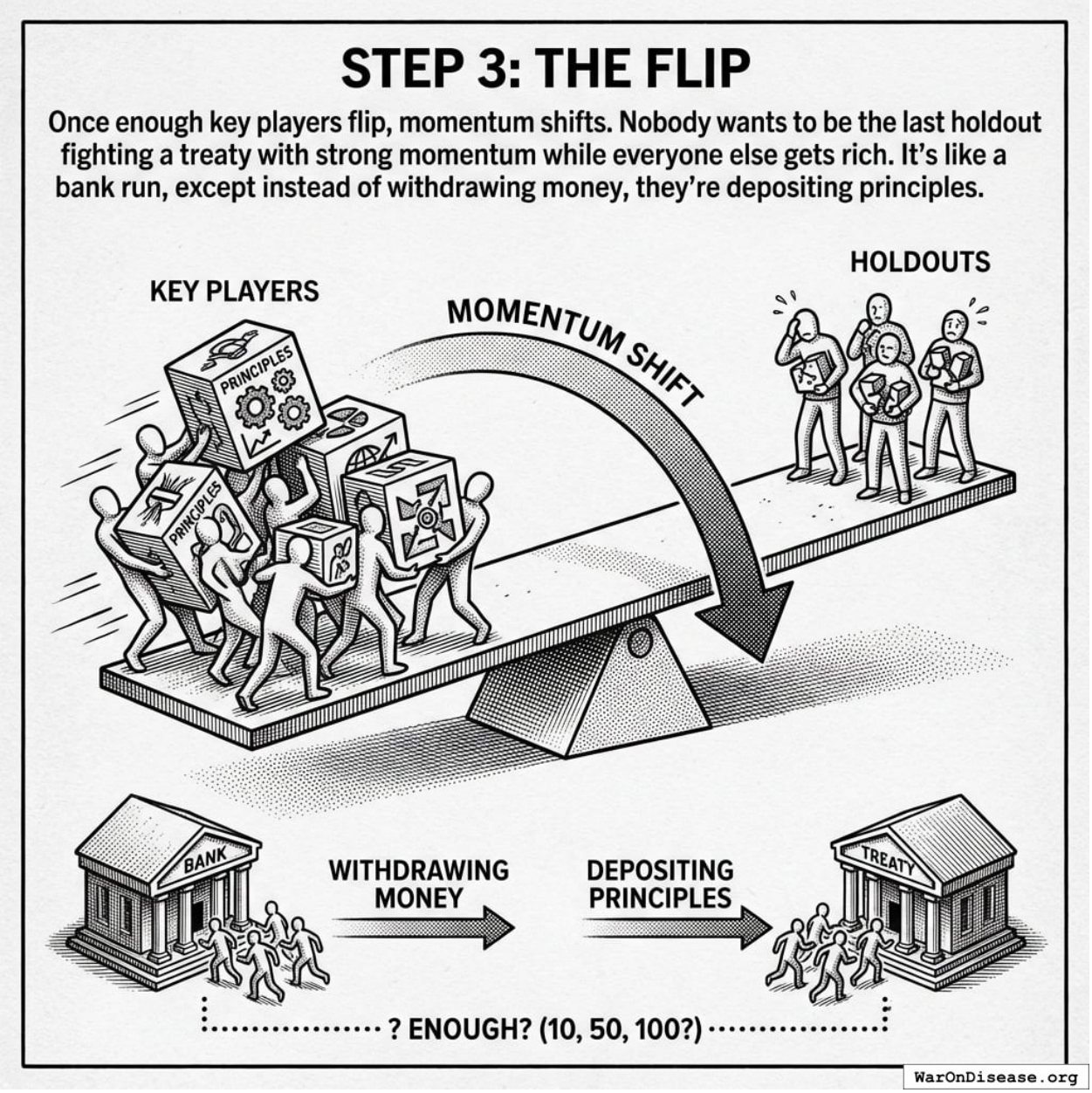


Figure 712: A visualization of the tipping point dynamic, showing a group of individual entities shifting from holdouts to participants as the momentum threshold is crossed.

Nobody wants to be the last holdout fighting a treaty with strong momentum while everyone else gets rich.

It's like a bank run, except instead of withdrawing money, they're depositing principles.

Whether "enough" is 10 or 50 or 100, nobody knows. This has never been tried before. But the theory seems sound, assuming humans behave like humans usually do.

Step 4: Active Support

Now they don't just stop opposing - they actively lobby FOR it:

- Testifying to Congress: "This strengthens national security" (technically true: healthy soldiers fight better)
- Op-eds: "A strong military requires a healthy population" (also true: can't draft corpses)
- Behind-the-scenes: Convincing other lobbyists to flip (misery loves company, wealth loves more wealth)

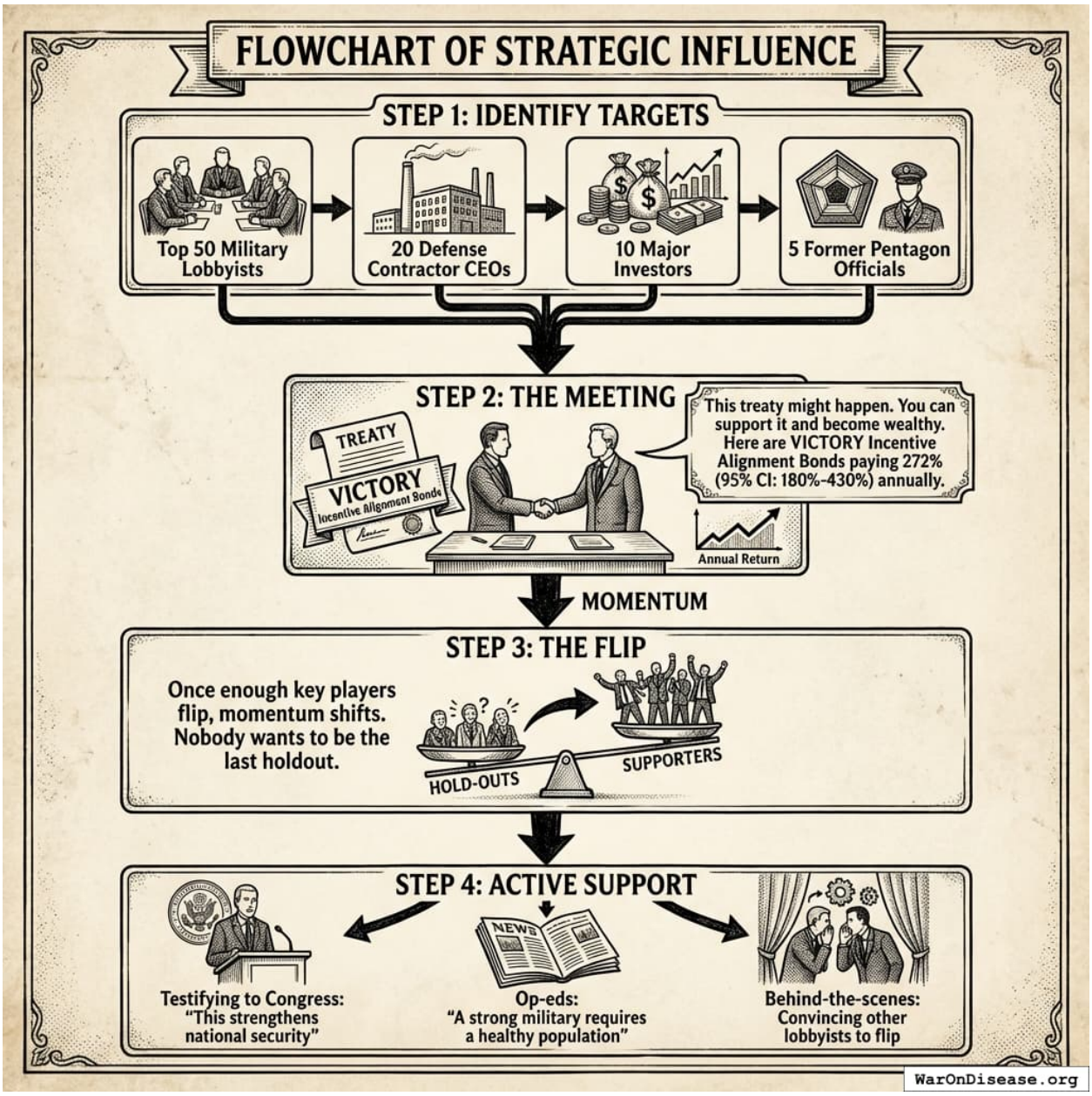


Figure 713: Operational flowchart detailing the four-stage strategy to convert opposition into support, from targeting to active lobbying.

Budget

You allocate a significant portion of the $1B incentive alignment budget to this.

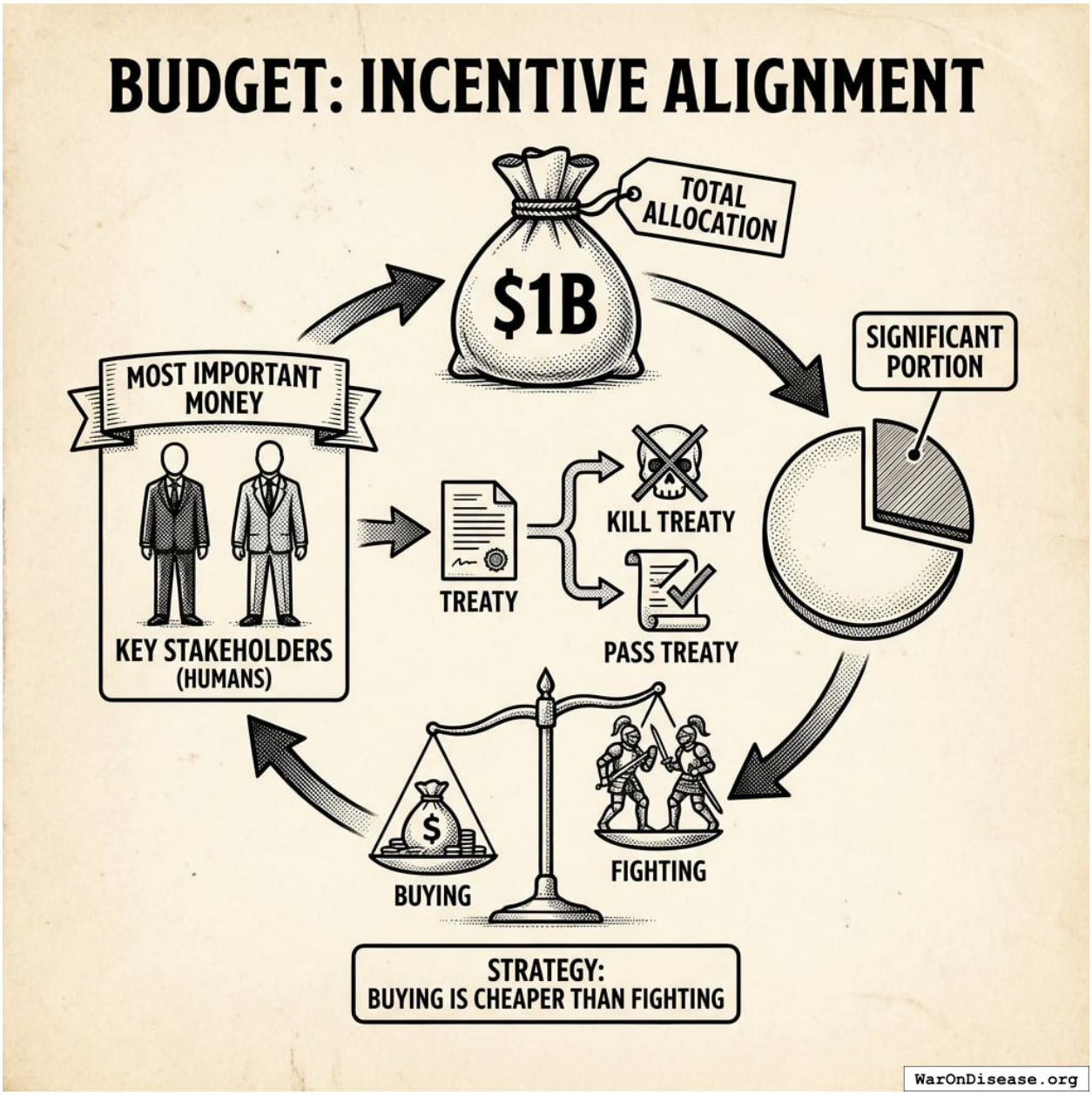


Figure 714: A strategic diagram showing the allocation of the incentive budget toward key stakeholders to influence treaty passage, illustrating the 'buy vs. fight' cost-benefit logic.

It's the most important money you'll spend. These humans can kill the treaty or pass it. Buying them is cheaper than fighting them.

Why This Works

You're Using Their Own Playbook

Defense contractors spend $127M on lobbying and get $181B back.

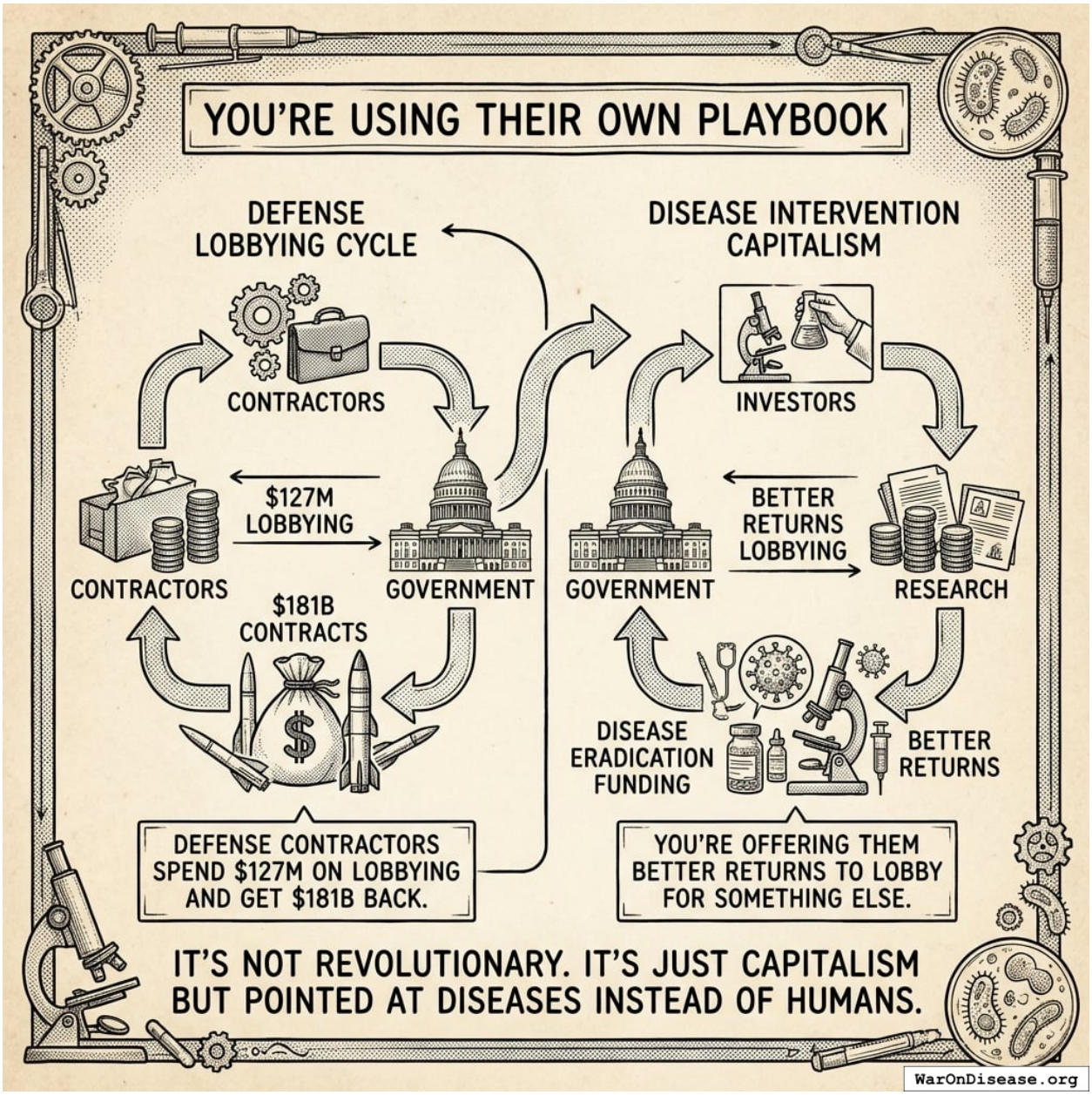


Figure 715: A comparison showing the current 127M to 181B return on investment for defense lobbying versus a proposed, higher-return model focused on curing diseases.

You're offering them BETTER returns to lobby for something else.

It's not revolutionary. It's just capitalism but pointed at diseases instead of humans.

It's Legal

- VICTORY Incentive Alignment Bonds: Legal investment vehicles
- Lobbying: Protected free speech (thanks, Supreme Court)
- Consulting fees: Standard practice (everyone does it)
- Strategic advisor positions: Completely normal (if "normal" means "legal corruption")

The system was designed to allow this. You're just using it correctly.

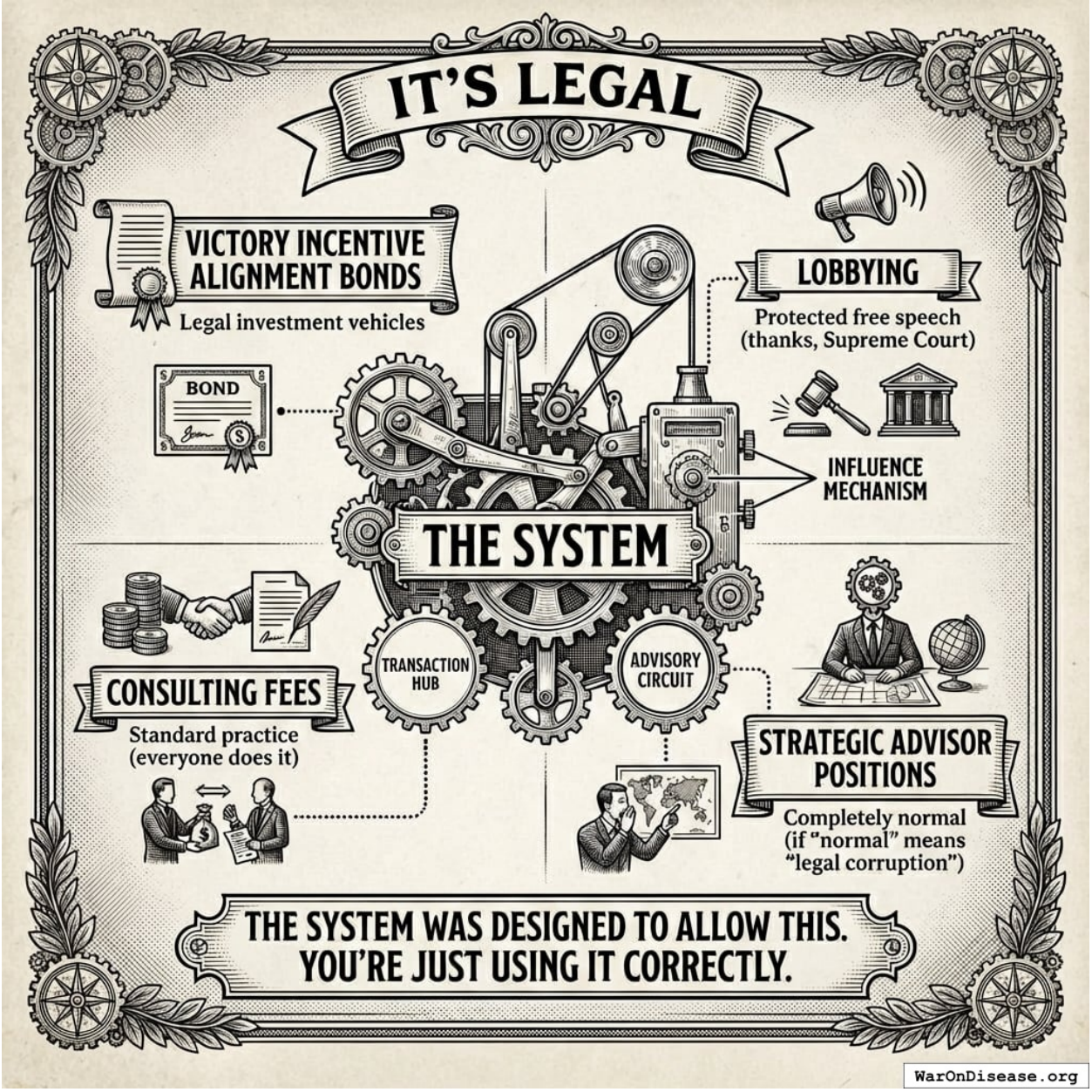


Figure 716: A conceptual diagram showing how various financial and political tools like lobbying and alignment bonds act as interconnected pillars supporting a legally sanctioned system of influence.

It Might Work

Once you demonstrate credible funding and serious intent, some players might flip early for better terms.

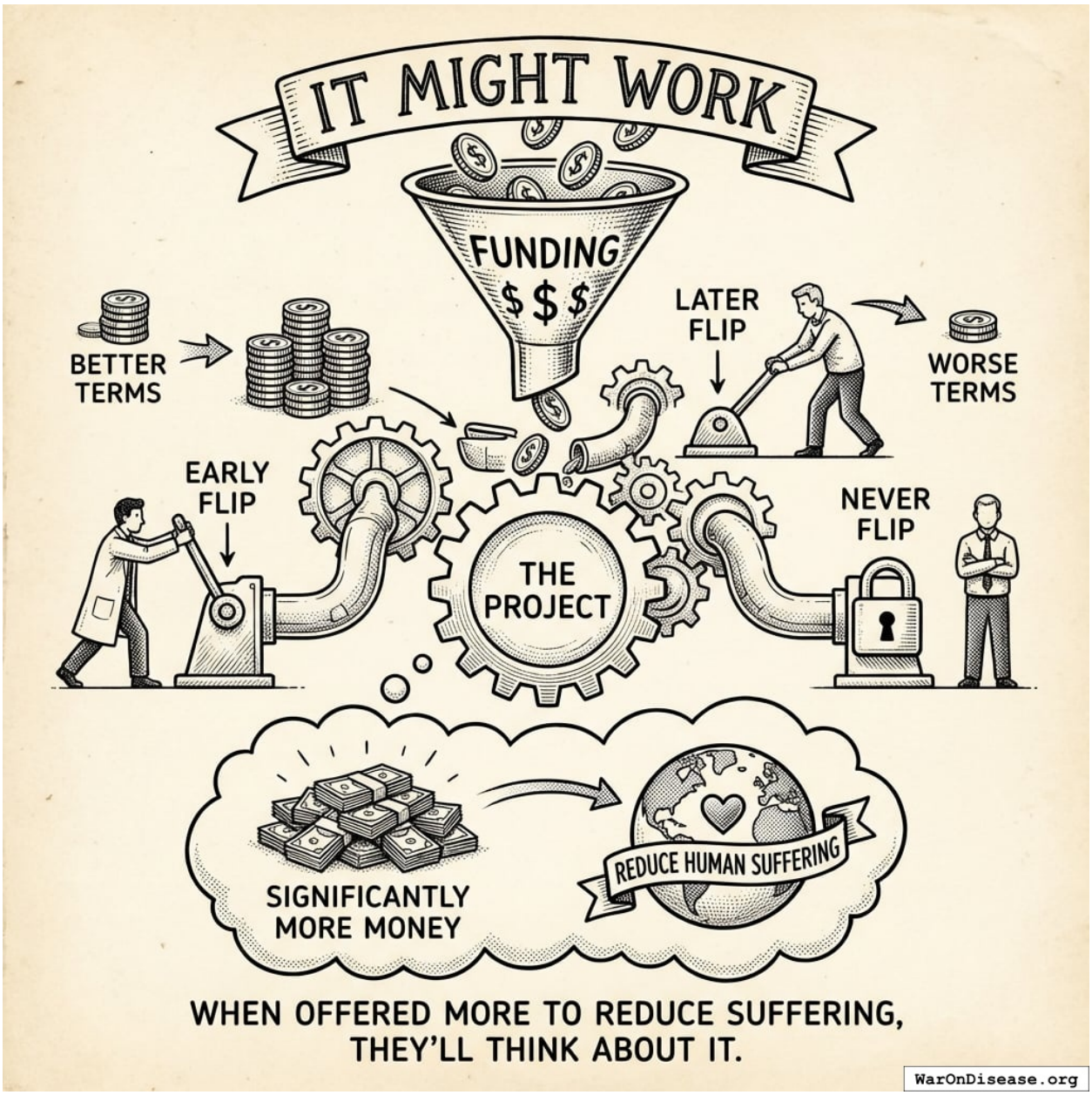


Figure 717: A visual mapping of player responses to a funding offer, showing the spectrum from early adoption for better terms to late adoption or total rejection.

Others might flip later for worse terms.

Some might never flip at all.

But when you offer people significantly more money to do something that could significantly reduce human suffering, it seems likely they'll at least think about it.

What You're NOT Asking

You're NOT asking them to:

- Close factories (keep building bombs)
- Lay off workers (everyone keeps their jobs)
- Stop making weapons (weapons stay profitable)
- Convert to medical equipment (too hard, not necessary)
- Change their business model (keep doing exactly what you're doing)
- Feel bad about anything (guilt is not required)

You're ONLY asking them to:

- Accept higher returns on investment
- Stop blocking the treaty
- Maybe say nice things about it publicly

That's it. They keep 99% of their current income PLUS get rich from bonds.

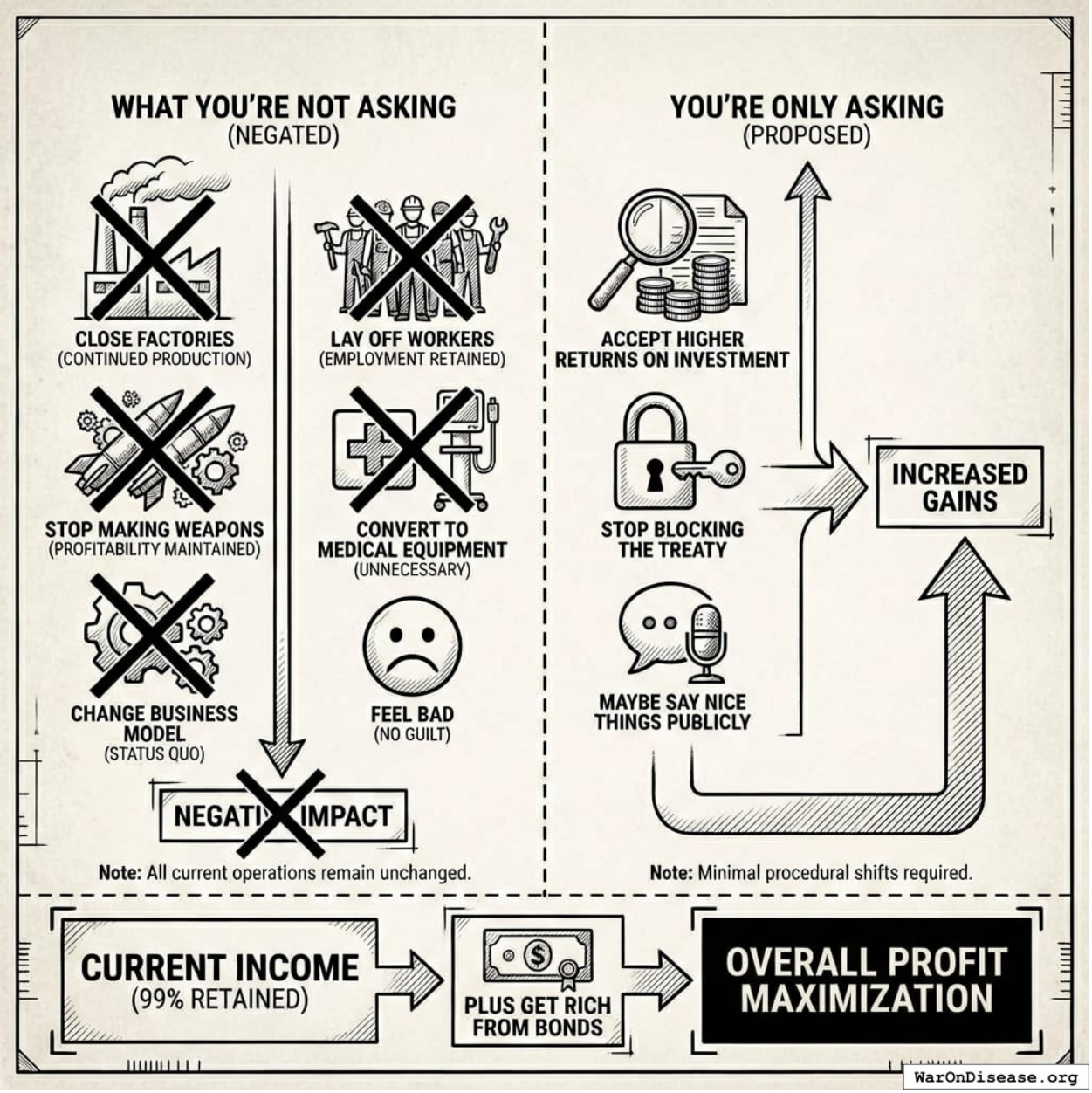


Figure 718: A comparative visual showing that the defense sector retains its core business operations and 99 percent of its income while gaining additional financial returns through bonds by supporting the treaty.

The Irony

You're using the corrupt rules of a corrupt system to protect and promote the general welfare.

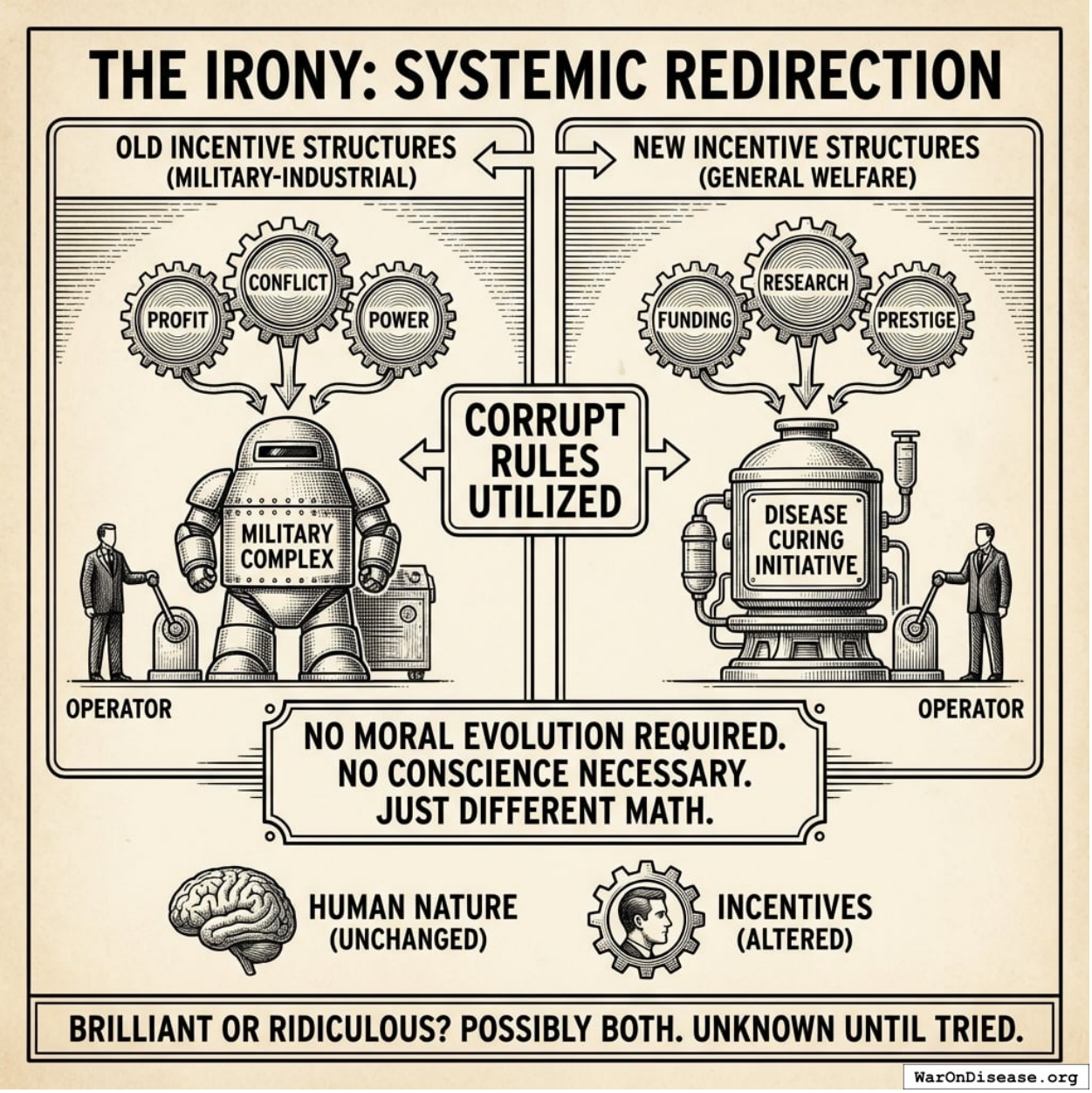


Figure 719: A conceptual diagram illustrating how the same system of incentive structures and human nature can be pivoted from producing the military-industrial complex to curing diseases.

The same incentive structures that created the military-industrial complex get pointed at curing disease instead.

No moral evolution required. No conscience necessary. Just different math.

Human nature stays exactly the same. Only the incentives change.

This is either brilliant or ridiculous. Possibly both. You won't know until you try.

What They Tell Their Boards

Defense Contractor CEO (to board members):

"We diversified into bonds paying 272% returns. If the treaty passes, we profit enormously. If it fails, we still have our defense contracts. It's a hedge. I'm being prudent. You're welcome."

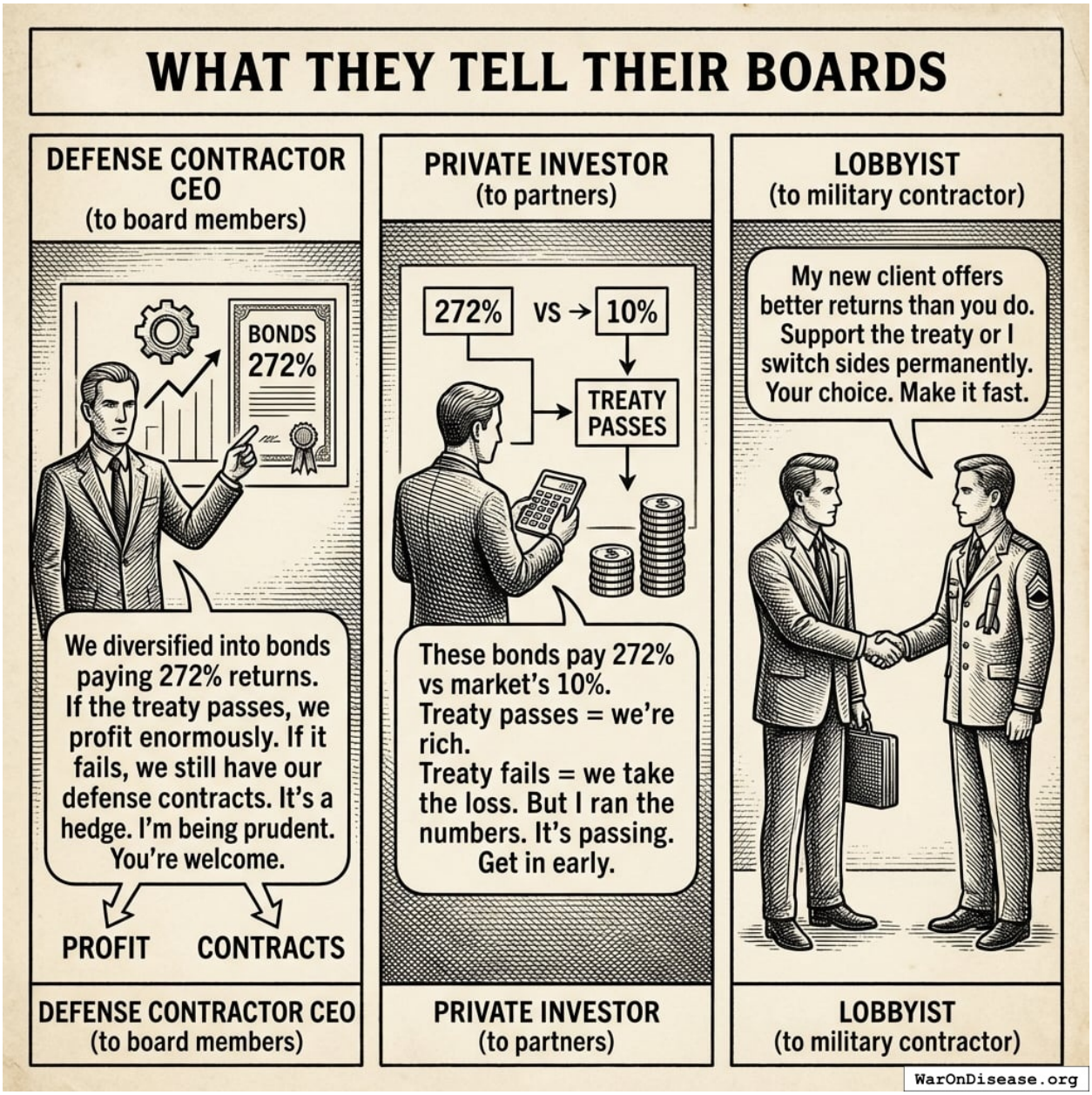


Figure 720: A stakeholder perspective map showing the differing motivations and risk strategies of a defense CEO, private investor, and lobbyist regarding high-yield treaty bonds.

Private Investor (to partners):

"These bonds pay 272% vs market's 10%. Treaty passes = we're rich. Treaty fails = we take the loss. But I ran the numbers. It's passing. Get in early."

Lobbyist (to military contractor):

"My new client offers better returns than you do. Support the treaty or I switch sides permanently. Your choice. Make it fast."

Optimistic Timeline (If This Works)

Months 1-12 (Early Phase):

- Some key lobbyists flip
- A few major investors commit
- Treaty goes from "impossible" to "controversial"
- Media notices

Months 13-24 (Mid Phase):

- More lobbyists actively supporting
- Defense contractor trade associations might go neutral (hard to oppose when members support it)
- Treaty becomes "bipartisan opportunity"
- Politicians start claiming they always supported it

Months 25-36 (Late Phase):

- Former opponents now taking credit
- "I always cared about medical research" (they discovered this yesterday)
- Treaty passes
- Everyone pretends they were always on the right side

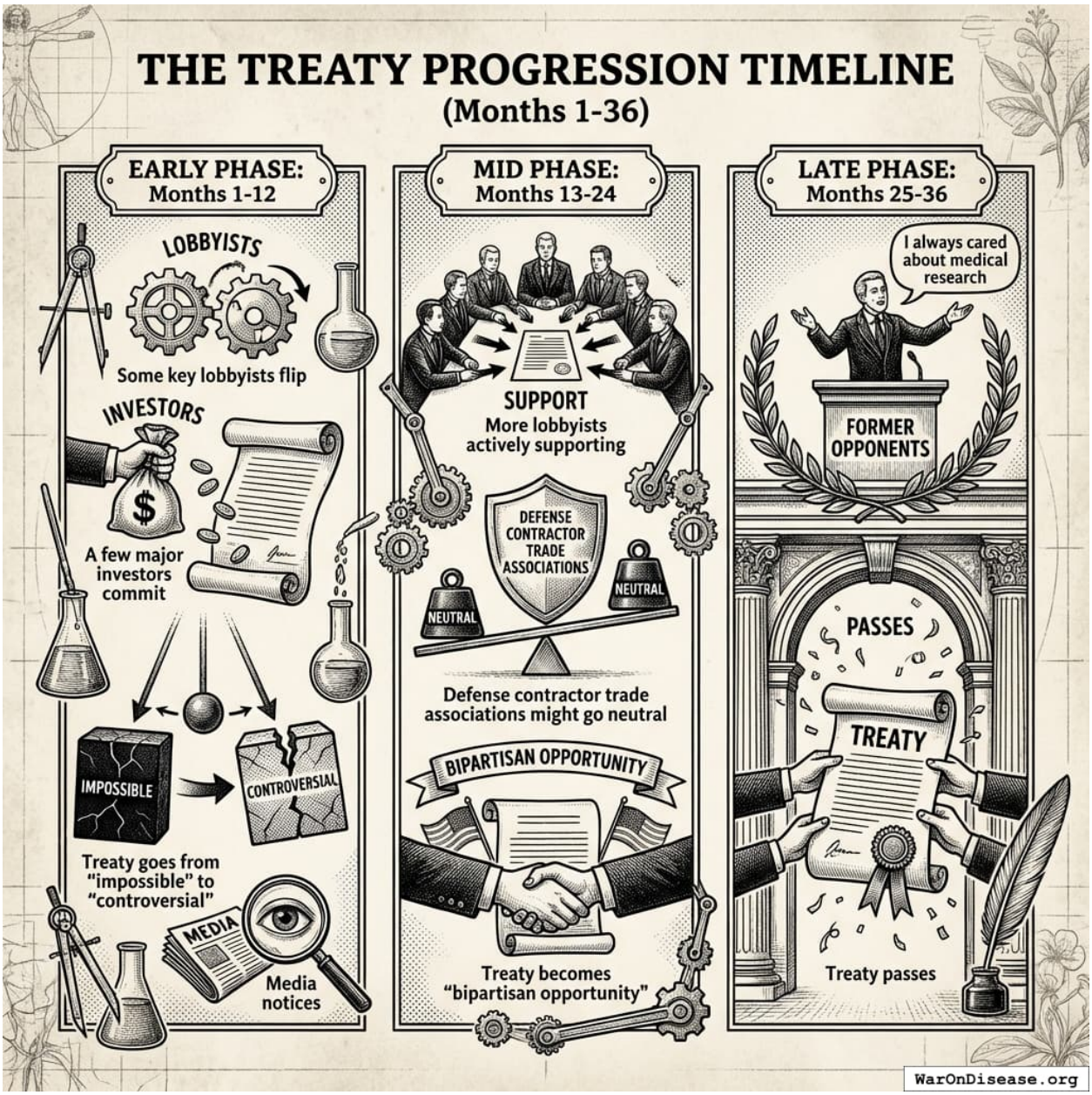


Figure 721: Projected 36-month timeline showing the shift in political sentiment and stakeholder support from initial controversy to treaty passage.

Pessimistic Timeline (If This Doesn't Work)

You and everyone you've ever loved slowly deteriorate into dust

Summary

You can't fight the military-industrial complex.

It's too big. Too entrenched. Too profitable.

But you might be able to buy it.

Cost: Strategic allocation from the incentive alignment budget

Possible Result: Some of the most powerful lobbying infrastructure in history working FOR the treaty instead of against it

ROI: Hard to calculate, but not having the military-industrial complex destroy you seems valuable

Defense lobbyists work for whoever pays them.

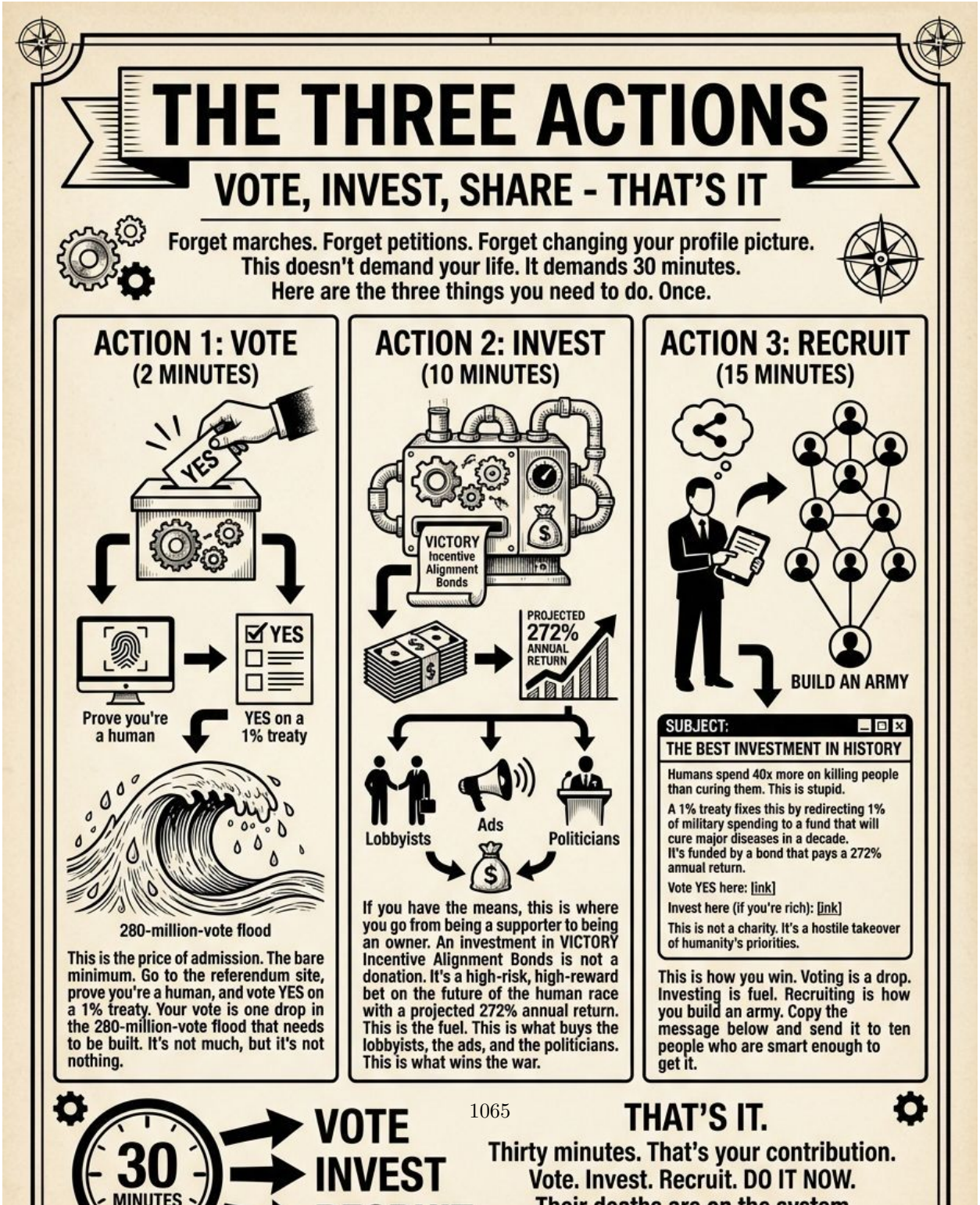
So you try paying them more.

Then maybe they convince Congress that curing disease is actually about national security.

Which is probably true. Whether they care is irrelevant. You're not paying them to care. You're paying them to lobby.

Will this work? Nobody knows. But it seems worth trying.

The Three Actions



Forget marches. Forget petitions. Forget changing your profile picture. This doesn't demand your life. It demands 30 minutes.

Here are the three things you need to do. Once.

Action 1: VOTE (2 Minutes)

This is the price of admission. The bare minimum. Go to the referendum site, prove you're a human, and vote YES on a 1% treaty. Your vote is one drop in the 280-million-vote flood that needs to be built. It's not much, but it's not nothing.

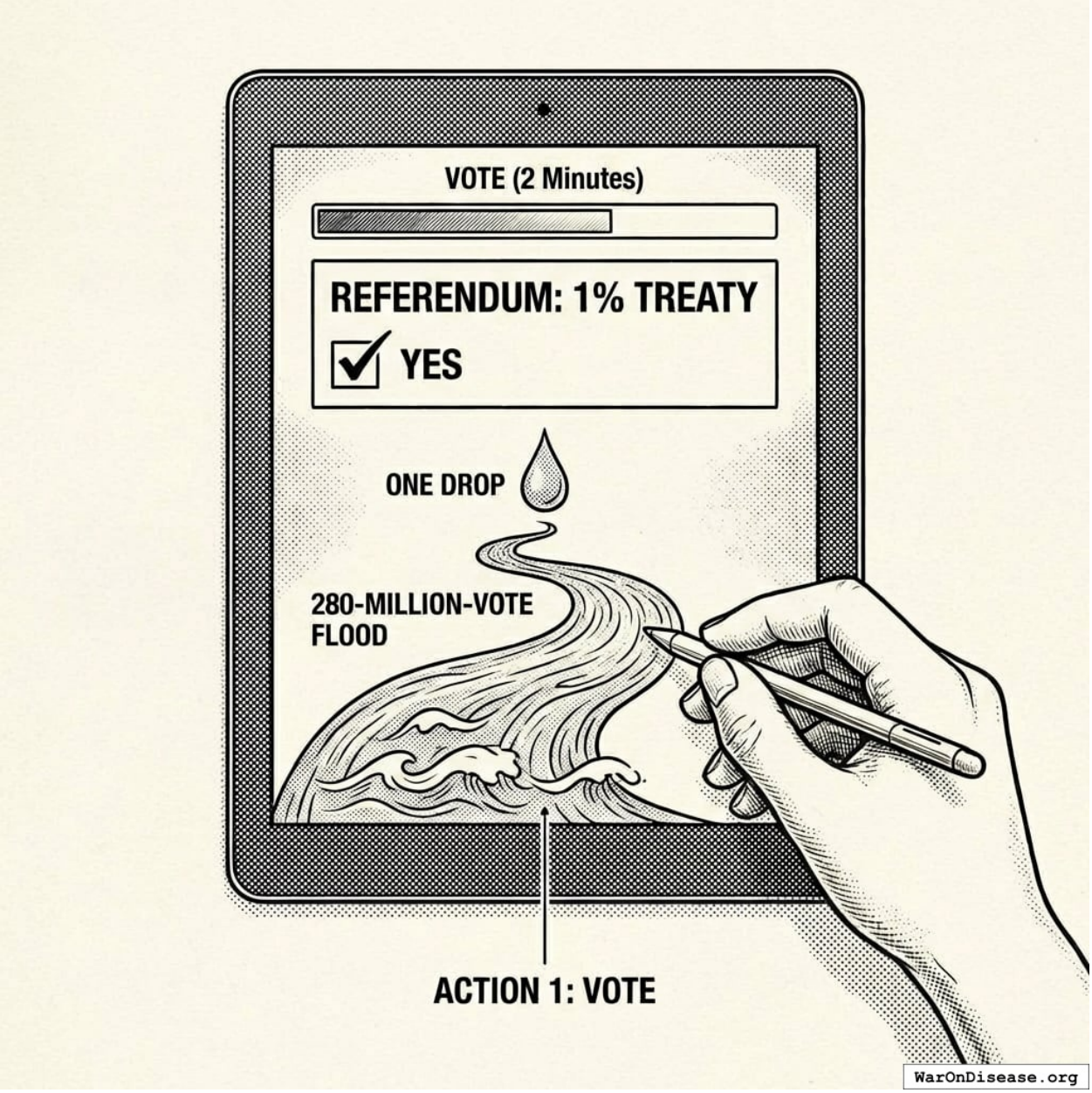


Figure 722: A simple three-step process for participating in the referendum: visiting the site, completing human verification, and casting a 'YES' vote.

Action 2: INVEST (10 Minutes)

If you have the means, this is where you go from being a supporter to being an owner. An investment in **VICTORY Incentive Alignment Bonds** is not a donation. It's a high-risk, high-reward bet on the future of the human race with a projected 272% annual return. This is the fuel. This is what buys the lobbyists, the ads, and the politicians. This is what wins the war.



Figure 723: A diagram illustrating the flow of investment into VICTORY Bonds and how that capital is deployed to fund lobbyists, advertisements, and political influence to achieve strategic victory.

Action 3: RECRUIT (15 minutes)

This is how you win. Voting is a drop. Investing is fuel. Recruiting is how you build an army. Copy the message below and send it to ten people who are smart enough to get it.

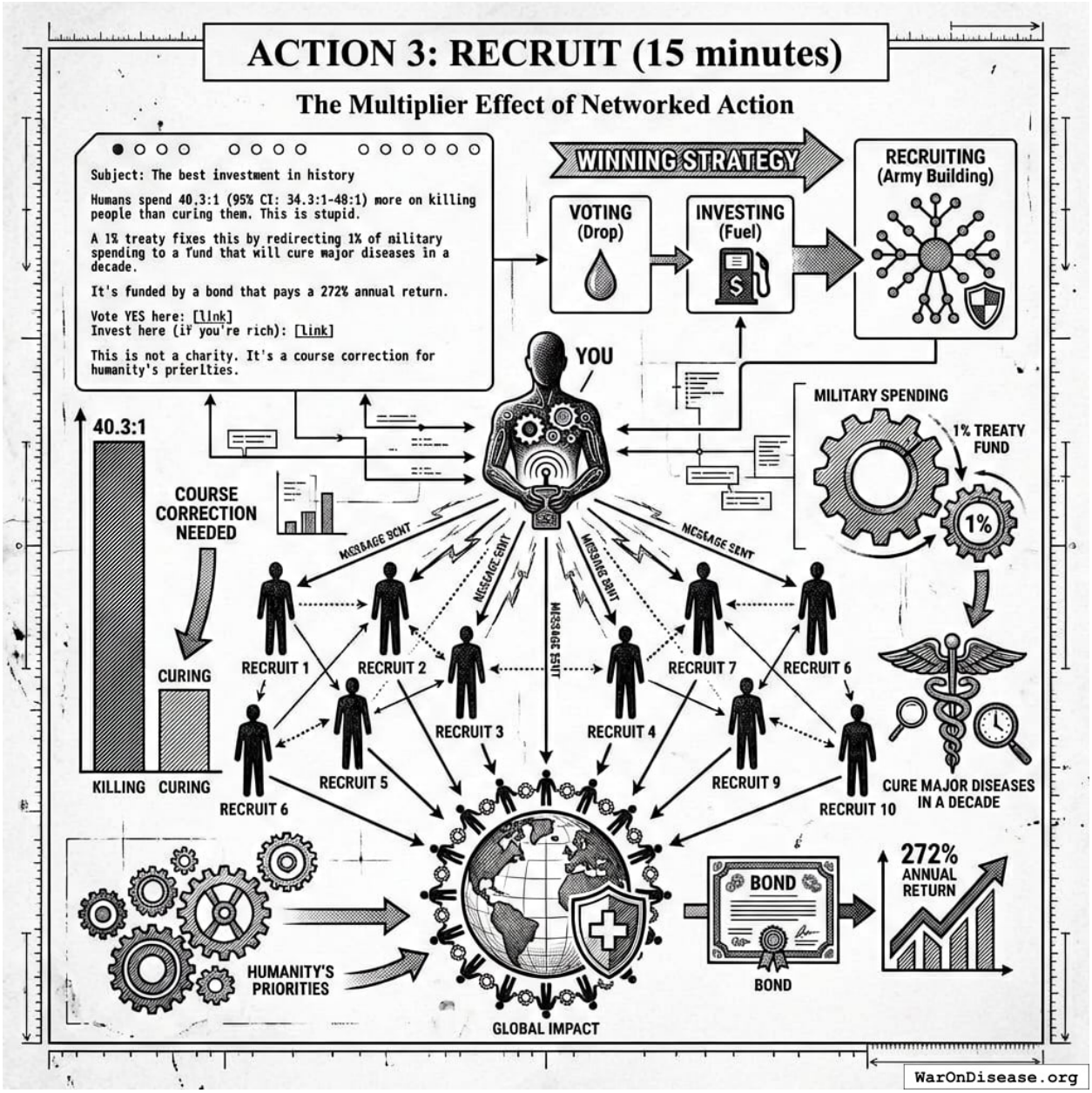


Figure 724: A visual comparison showing the 40.3:1 ratio of military spending versus disease research spending, highlighting the disparity in global priorities.

Subject: The best investment in history

Humans spend 40.3:1 (95% CI: 34.3:1-48:1) more on killing people than curing them. This is stupid.

A 1% treaty fixes this by redirecting 1% of military spending to a fund that will cure major diseases in a decade.

It's funded by a bond that pays a 272% annual return.

Vote YES here: [link] Invest here (if you're rich): [link]

This is not a charity. It's a course correction for humanity's priorities.

That's It.

Thirty minutes. That's your contribution.

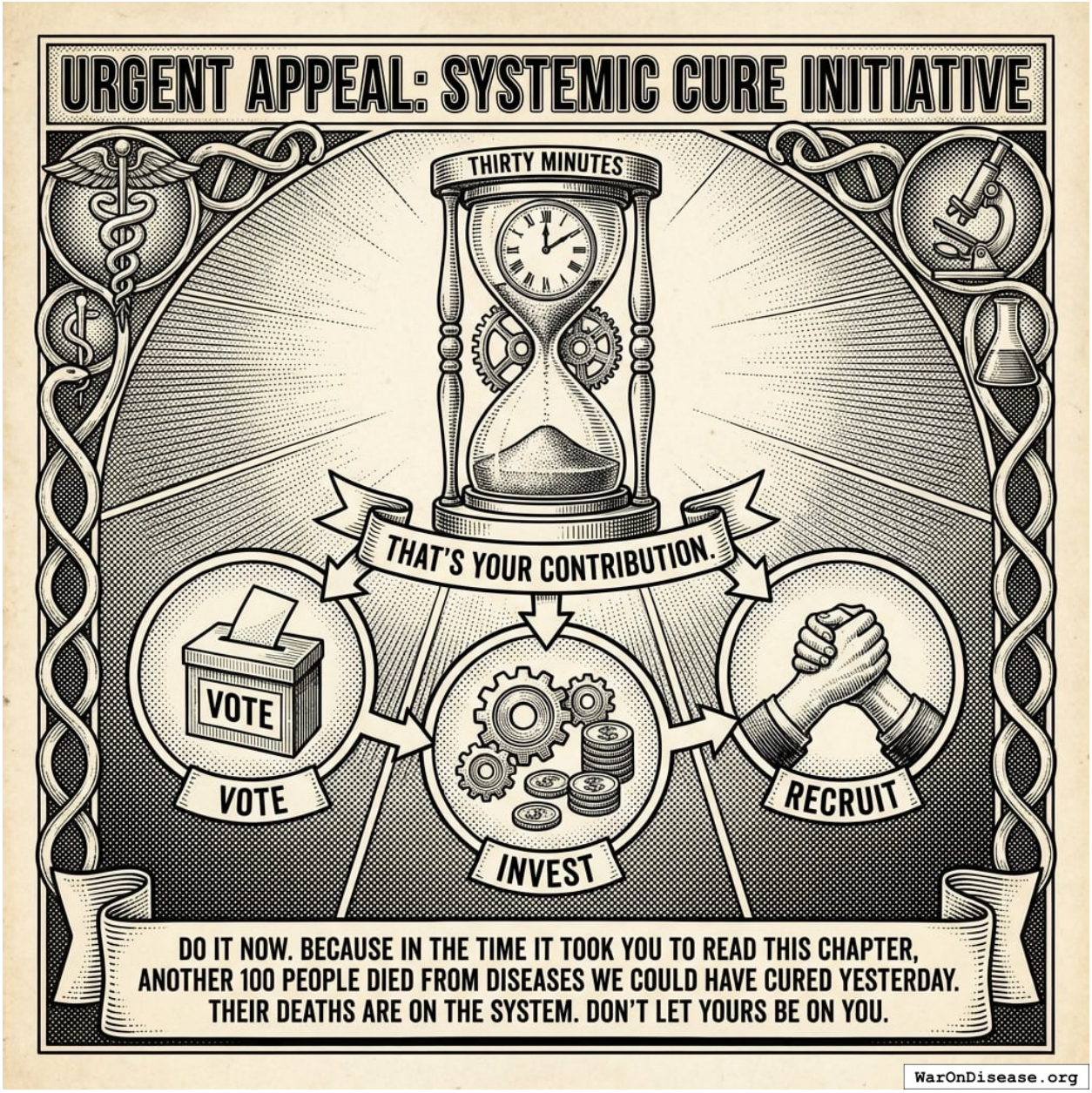


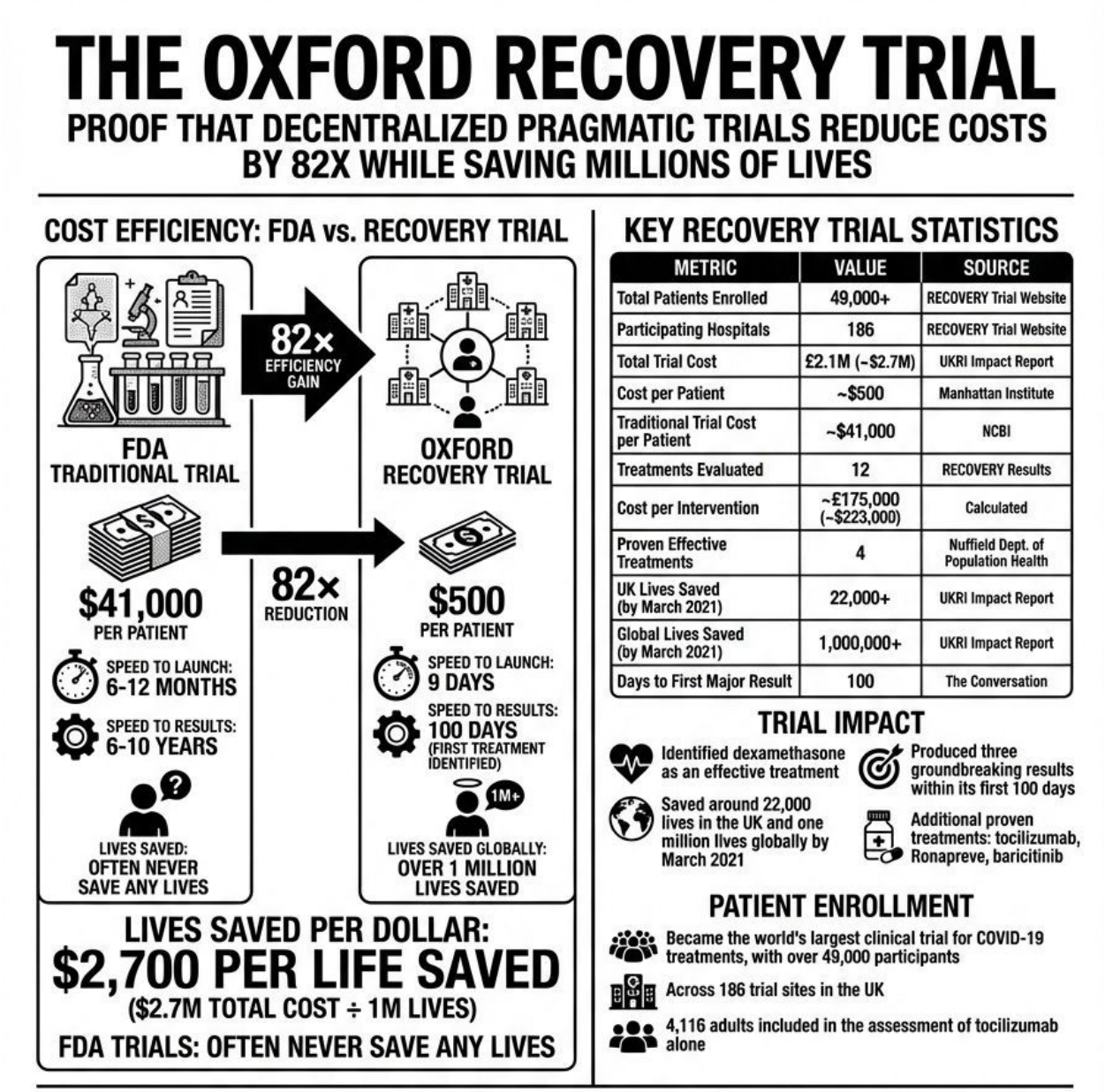
Figure 725: A conceptual infographic contrasting a 30-minute timer with the 100 lives lost to preventable diseases, alongside a three-step action cycle of voting, investing, and recruiting.

Vote. Invest. Recruit.

Do it now. Because in the time it took you to read this chapter, another 100 people died from diseases we could have cured yesterday. Their deaths are on the system. Don't let yours be on you.

Essential References

The Oxford RECOVERY Trial



The Oxford RECOVERY trial isn't theory, it's proof. In 2020, while traditional trials[291] cost $41K (95% CI: $20K-$120K) per patient, Oxford spent $500 (95% CI: $400-$2.50K) per patient and saved over 1 million lives globally[98]. This 82x (95% CI: 50x-94.1x) efficiency gain demonstrates that decentralized, pragmatic trials aren't just possible, they're already superior to traditional U.S. regulatory approaches.

Speed to Launch: 9 days from conception to first patient enrolled[176]. U.S. average: 6-12 months[309]. **Speed to Results:** First life-saving treatment (dexamethasone) identified in 100 days[190]. U.S. average: 6-10 years[310]. **Lives Saved Per Dollar:** $2,700 per life saved ($2.7M total cost ÷ 1M lives). Traditional U.S. trials: Often never save any lives.

Key RECOVERY Trial Statistics

Metric	Value	Source
Total Patients Enrolled	49,000+	RECOVERY Trial Website
Participating Hospitals	186	RECOVERY Trial Website
Total Trial Cost	£2.1M (~$2.7M)	UKRI Impact Report
Cost per Patient	~$500 (95% CI: $400-$2.50K) (Manhattan Institute)	Manhattan Institute
Traditional Trial Cost per Patient	~$41K (95% CI: $20K-$120K)	NCBI
Treatments Evaluated	12	RECOVERY Results
Cost per Intervention	~£175,000 (~$223,000)	Calculated (£2.1M ÷ 12 treatments)
Proven Effective Treatments	4	Nuffield Department of Population Health
UK Lives Saved (by March 2021)	22,000+	UKRI Impact Report
Global Lives Saved (by March 2021)	1,000,000+	UKRI Impact Report
Days to First Major Result	<100	The Conversation

The RECOVERY trial enrolled 49,000 patients across 186 hospitals, tested 12 treatments, saved a million lives, and cost less than a single F-35 fighter jet.

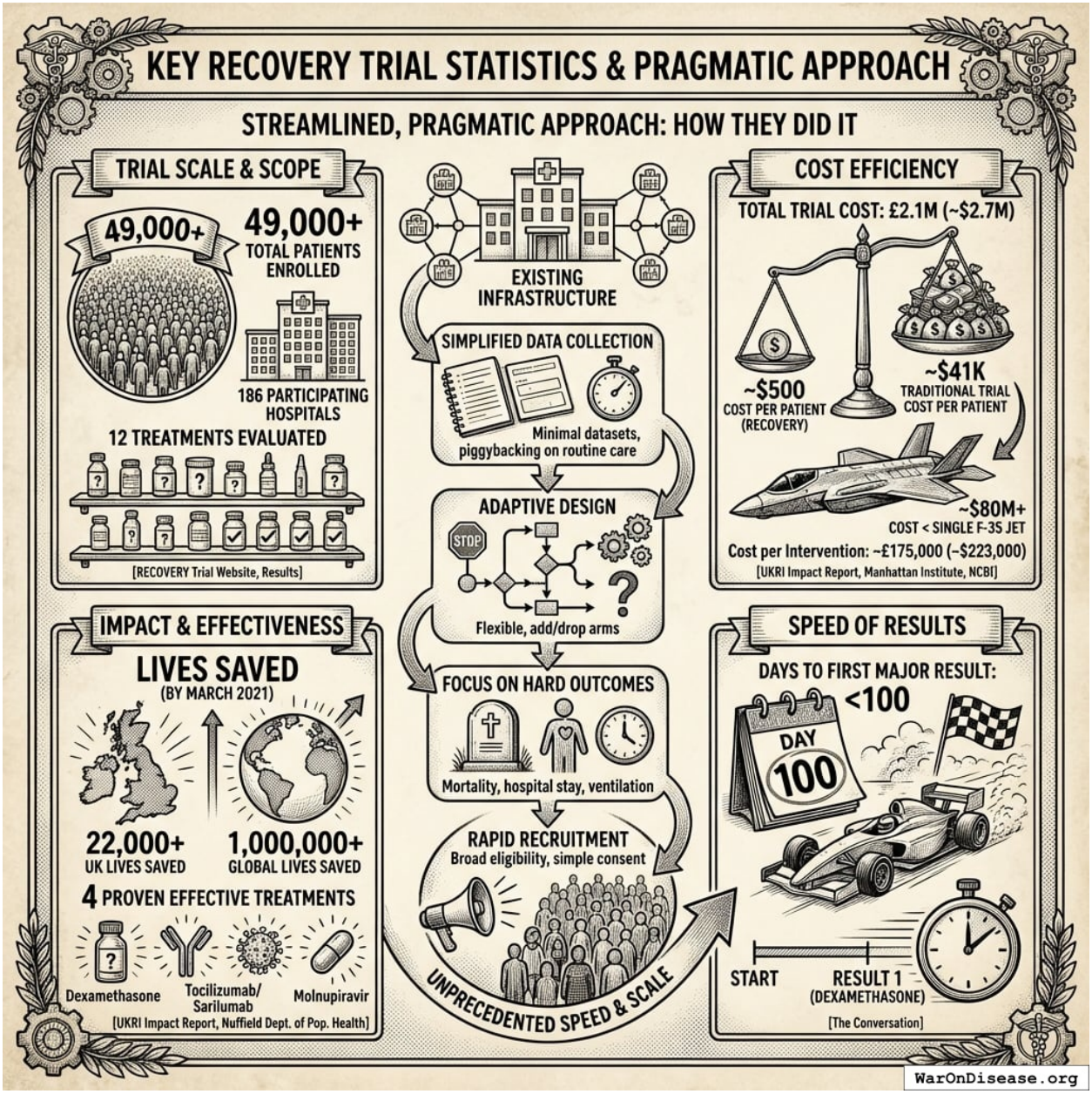


Figure 726: A comparison showing the RECOVERY trial's cost efficiency of 500 per patient versus the 41,000 traditional trial average, alongside its impact of over one million lives saved.

How did they do it? By adopting a streamlined, pragmatic approach:

They Used Regular Hospitals

Instead of requiring specialized research centers with dedicated staff and gold-plated equipment, RECOVERY just… used regular hospitals. The ones that already exist. With regular doctors. Treating regular patients.

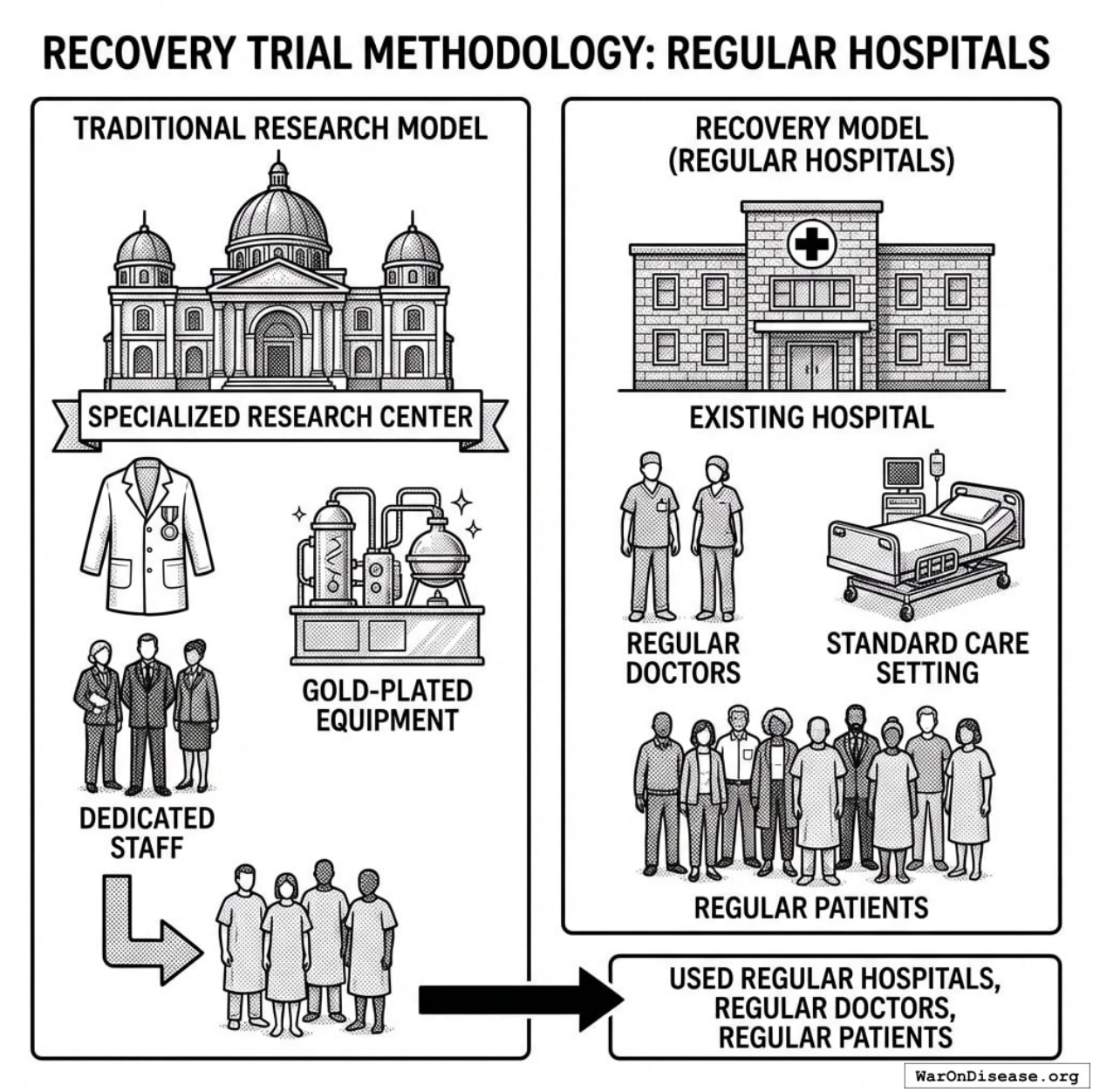


Figure 727: A side-by-side comparison between the traditional research center model and the RECOVERY trial's approach of using existing hospital infrastructure, doctors, and patients.

They Collected Only Useful Data

The trial focused on core outcomes: "Did the patient live or die? Did they get better or worse?"

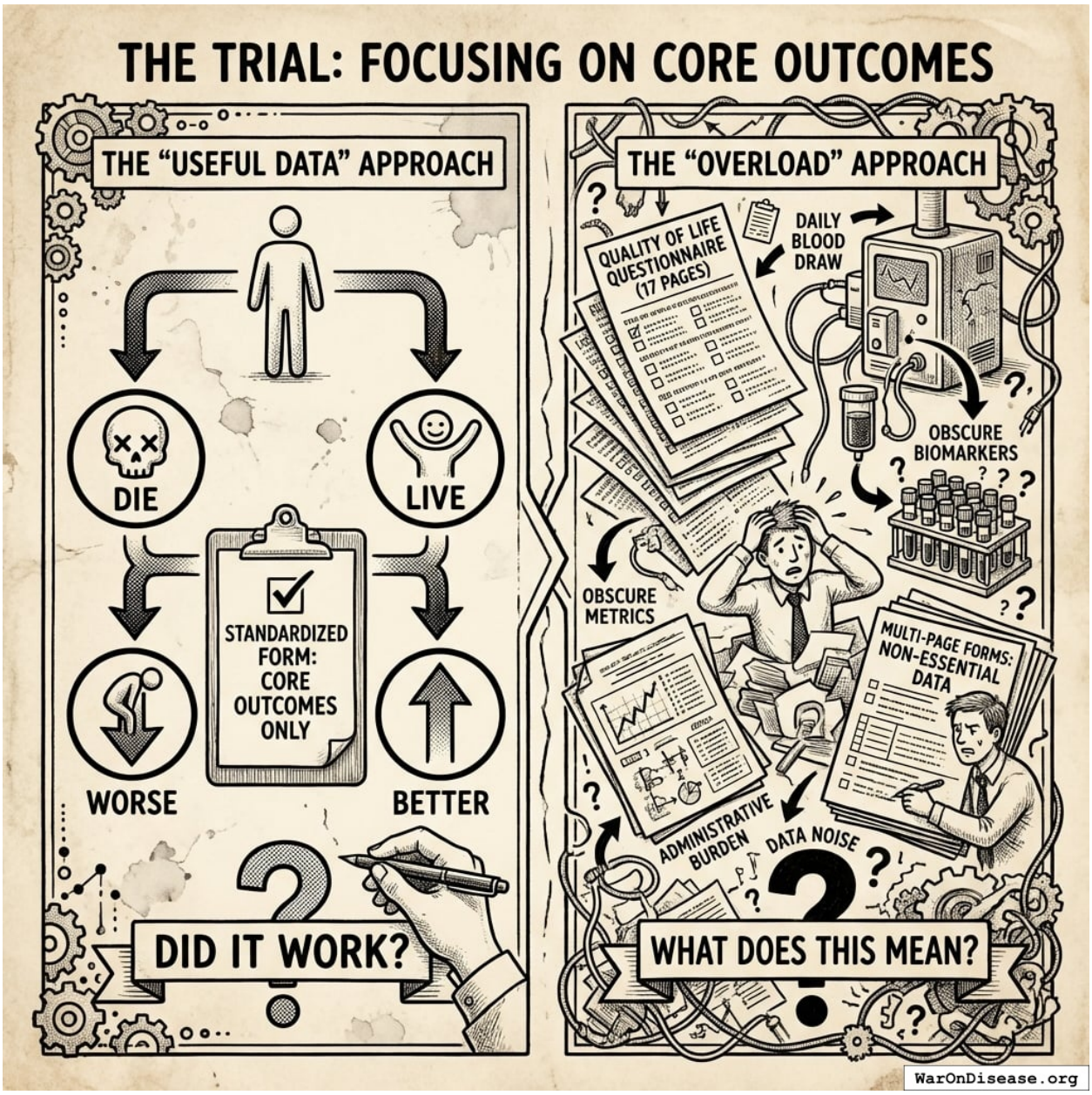


Figure 728: A comparison between traditional clinical trial complexity, featuring piles of paperwork and vials, versus the streamlined approach using a single form and existing data.

No seventeen-page questionnaires about quality of life. No daily blood draws for biomarkers nobody understands. Just: "Did it work?"

They used existing hospital data. One standardized form. Done.

They Integrated With Normal Care

Patients got the experimental treatment as part of their regular care. No separate research facility. No white-coated researchers hovering with clipboards. Just normal doctors providing normal care, except some patients got the experimental drug.

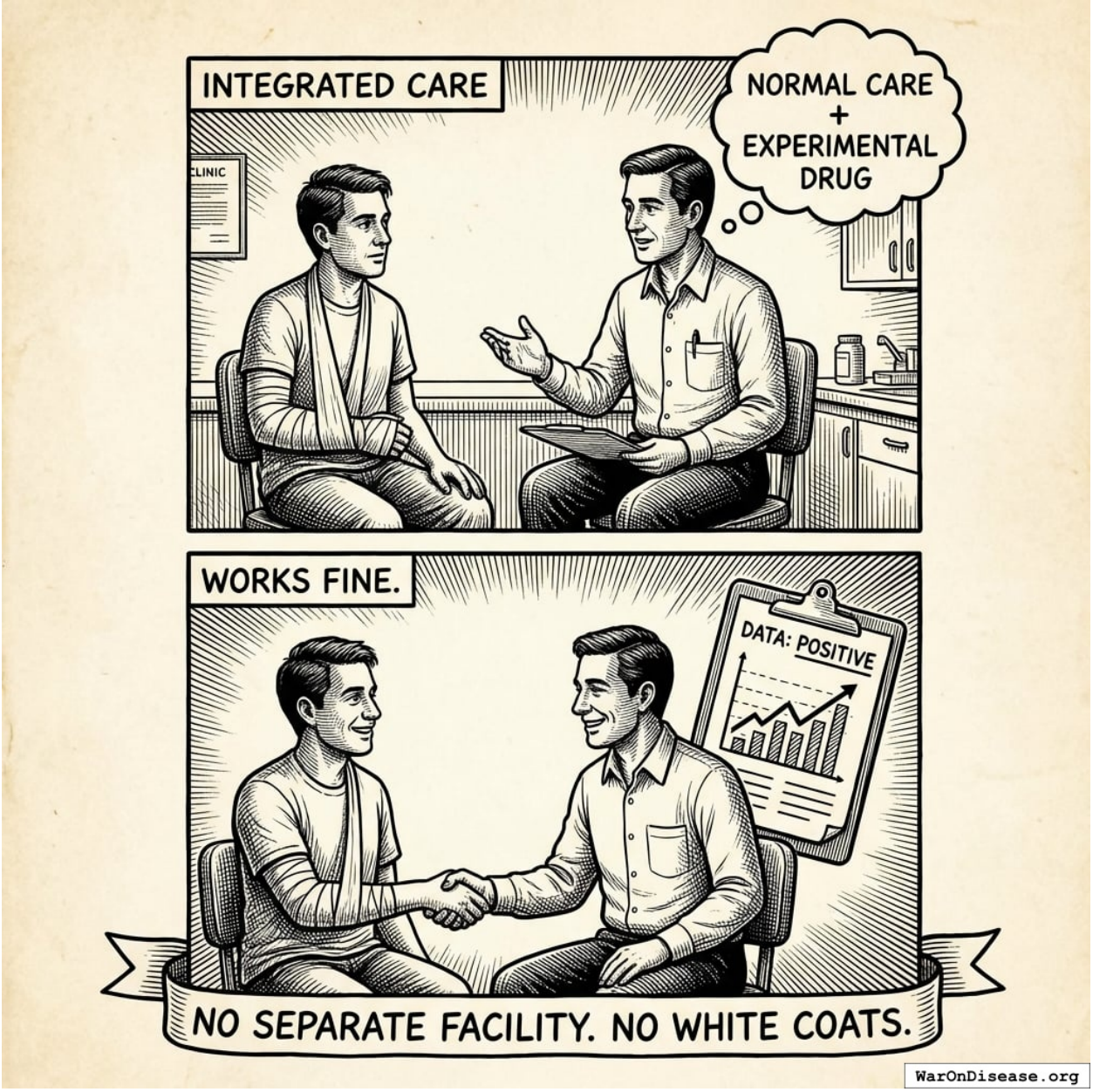


Figure 729: A side-by-side comparison of a traditional research model with separate facilities versus an integrated model where experimental treatment occurs during regular doctor visits.

Turns out this works fine. Who knew.

They Were Flexible

When a treatment didn't work, they stopped testing it. When a new promising treatment emerged, they added it.

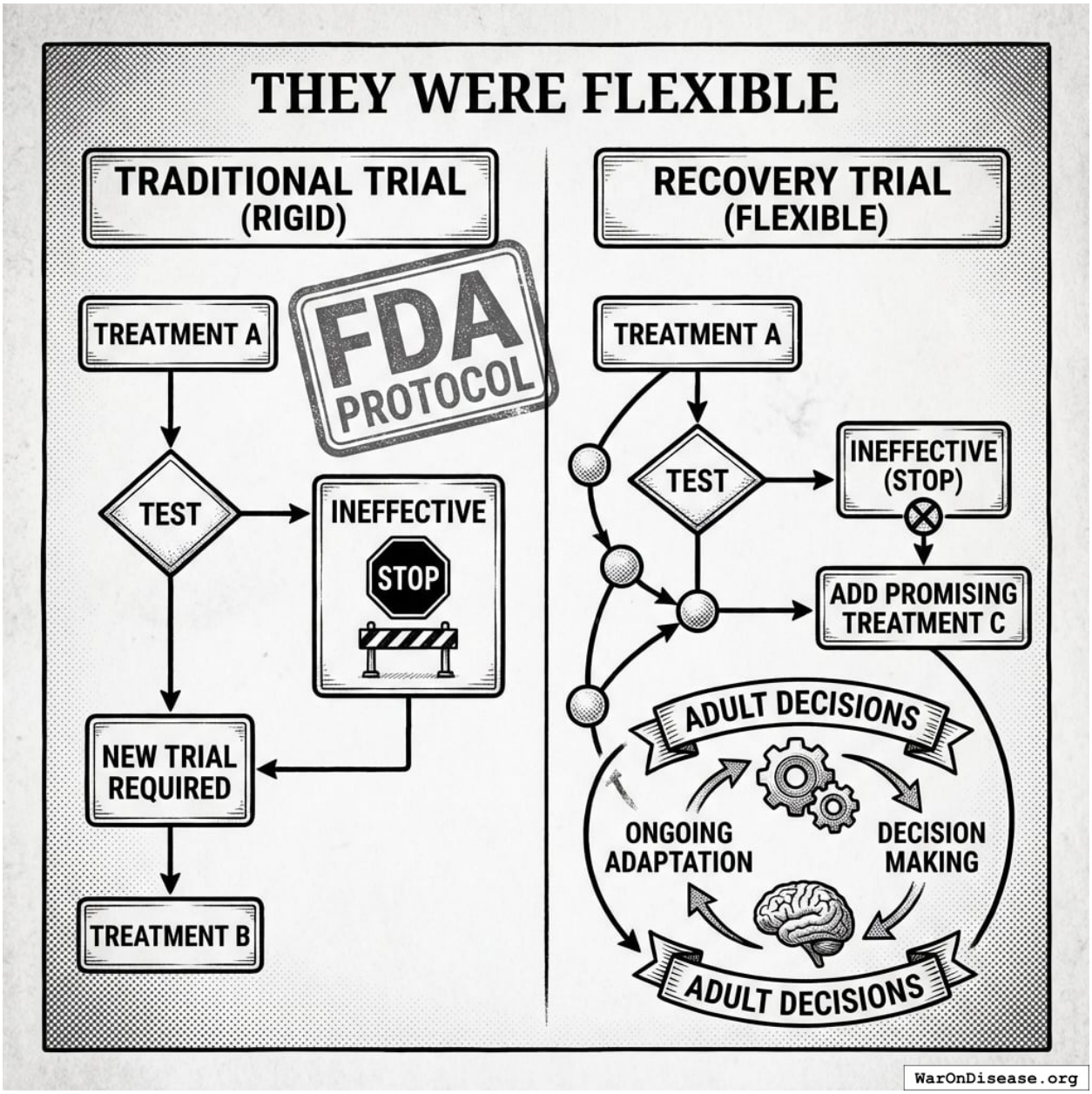


Figure 730: A comparison showing the flexible, iterative workflow of the RECOVERY trial versus the rigid, sequential requirements of standard FDA trials.

The FDA would require a completely new trial for each change. RECOVERY just… changed. Like adults making decisions.

They Prioritized Speed Over Bureaucracy

RECOVERY answered important clinical questions quickly using existing infrastructure.

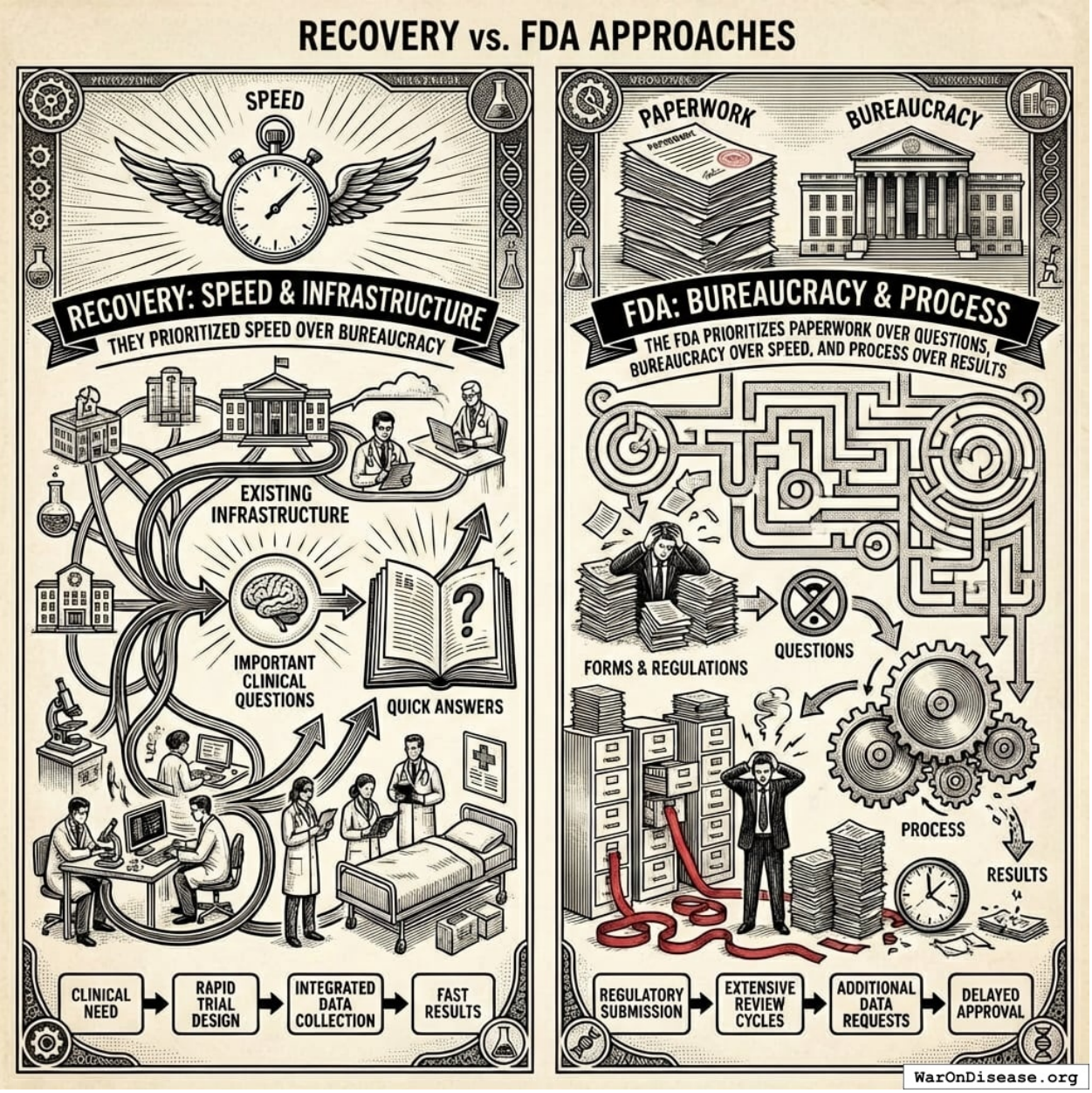


Figure 731: A comparative visualization showing the differing priorities of the RECOVERY trial and the FDA, contrasting speed and clinical results against bureaucracy and process-heavy requirements.

The FDA prioritizes paperwork over questions, bureaucracy over speed, and process over results.

The Result

$500 (95% CI: $400-$2.50K) per patient vs the U.S. average of $41K (95% CI: $20K-$120K) per patient (NCBI).

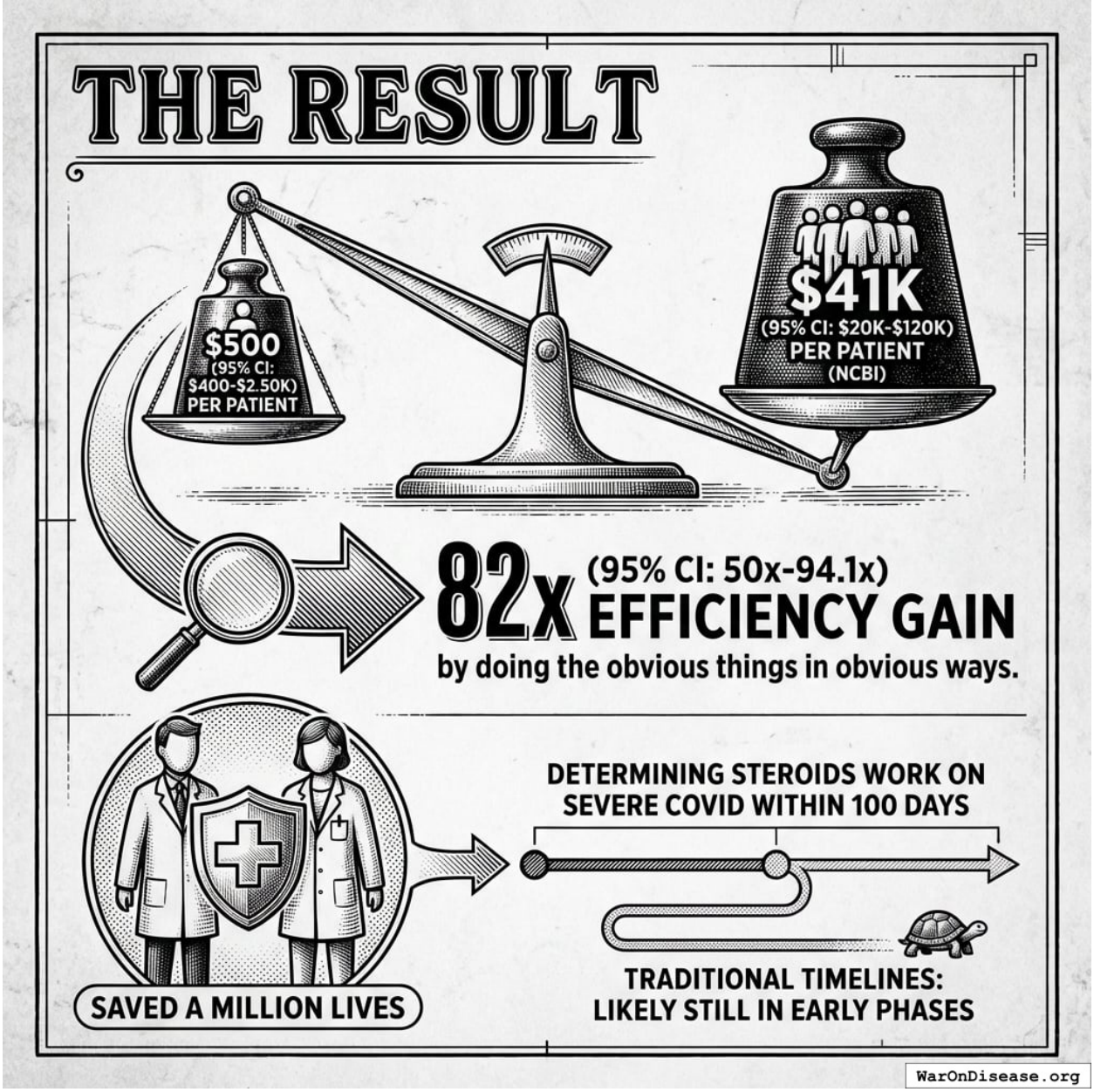


Figure 732: A comparison bar chart illustrating the 82x cost efficiency gap between the $500 per-patient trial cost and the $41,000 U.S. average.

That's an 82x (95% CI: 50x-94.1x) efficiency gain achieved by doing the obvious things in obvious ways.

Also, they saved a million lives by determining that steroids work on severe COVID within 100 days.

A trial following traditional timelines would likely still be in its early phases.

The Implications: What RECOVERY Proved

The RECOVERY trial didn't just save lives, it proved several critical points about clinical research:

1. **Decentralization Works:** 186 hospitals operating independently produced better results than centralized control

2. **Real Patients Matter:** Including sick patients (who traditional U.S. trials exclude[255]) provides real-world evidence
3. **Speed Saves Lives:** First results in 100 days vs years for traditional trials
4. **Cost Is A Choice:** The 82x (95% CI: 50x-94.1x) cost difference isn't about capability, it's about bureaucracy
5. **Scale Is Achievable:** 49,000 patients enrolled faster than most traditional U.S. trials enroll 1,000[311]
6. **Simplicity Wins:** Three 1-page forms (consent, case report, follow-up) vs FDA's complex multi-form protocols[312]. Less paperwork, more cures.

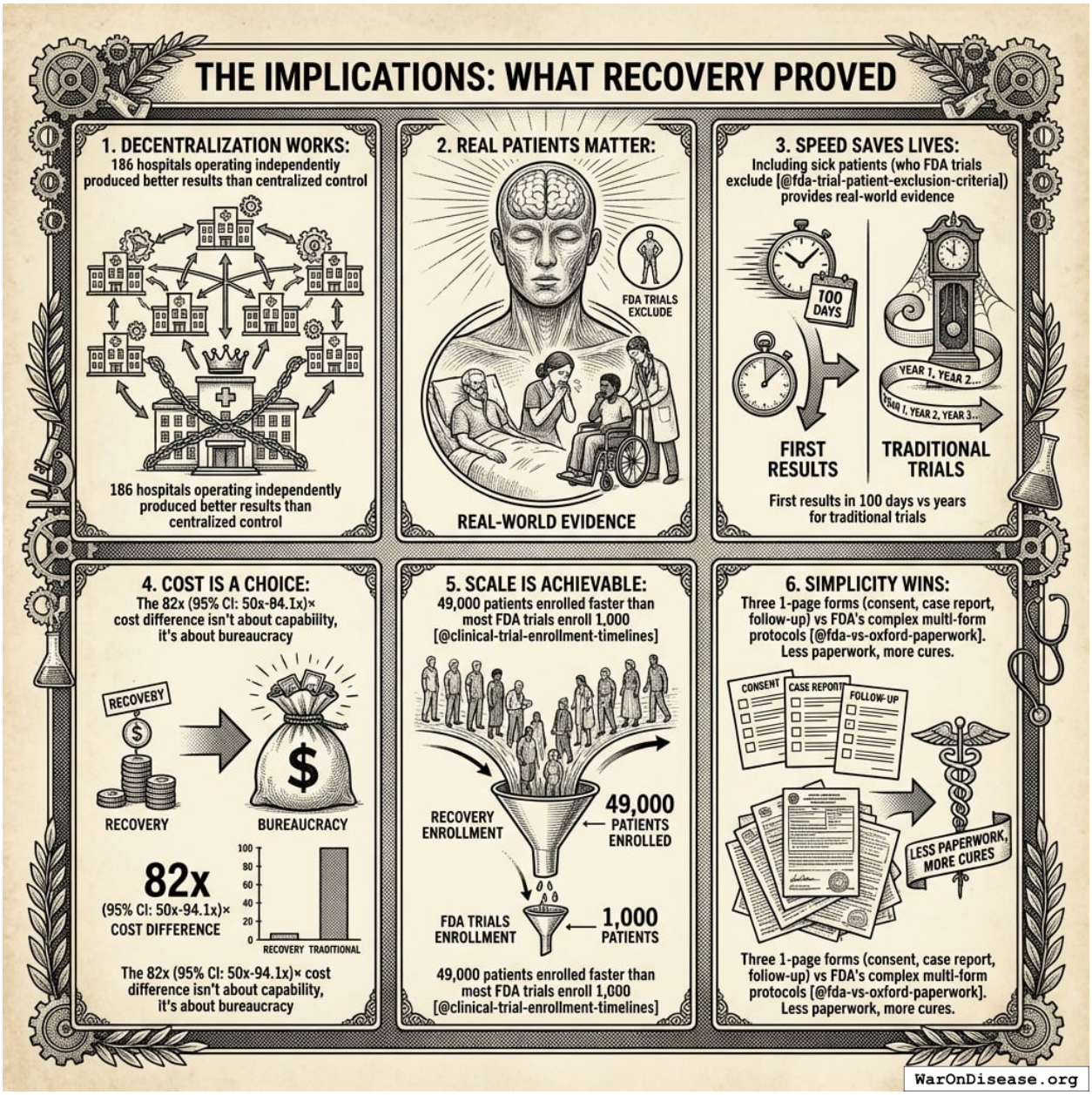


Figure 733: A side-by-side comparison of the RECOVERY trial versus traditional U.S. clinical trials across key metrics including cost, enrollment scale, and timeline.

The Bottom Line Math

- RECOVERY: $50 per patient per answer (testing 10 treatments across 49,000 patients)
- Traditional U.S. trials: $41,000 per patient, often testing just one treatment
- **That's an 820X efficiency gain when measuring cost per medical answer**

The lesson is clear: We already know how to run trials 82x (95% CI: 50x-94.1x) more efficiently. The Oxford RECOVERY trial proved it works. The only question is whether we'll choose to implement this model globally or continue wasting $41,000 per patient while people die waiting for cures.

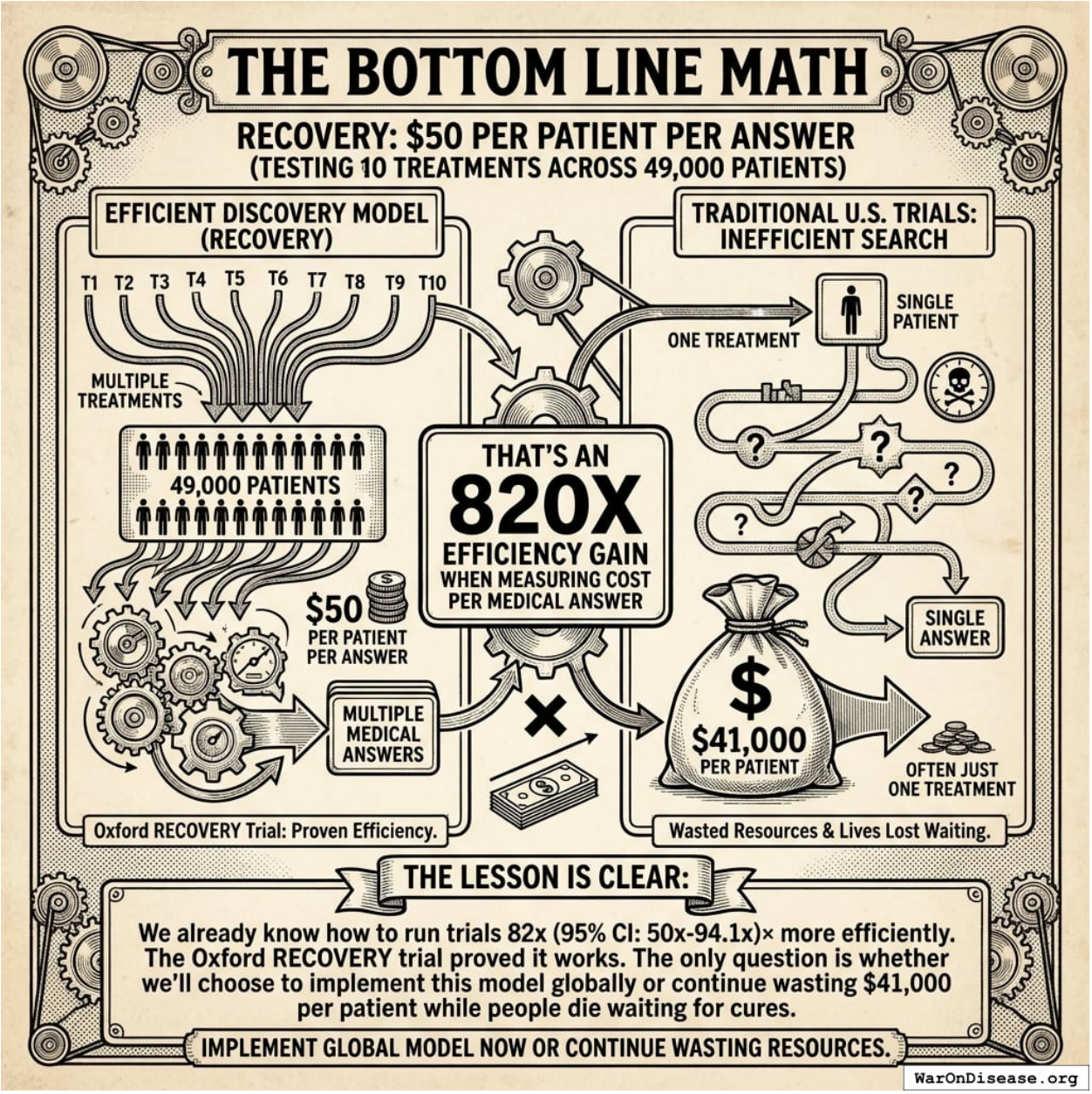


Figure 734: A scale comparison showing the massive disparity between the 41,000 cost of traditional U.S. clinical trials and the 50 cost per answer of the RECOVERY trial model.

Sources and Key Quotes

1. **Funding and Cost**

   "The total cost of the UK Oxford RECOVERY trial was £2.1 million" - UKRI Impact Report "This funding was provided jointly by UK Research and Innovation (UKRI) and the Department of Health and Social Care, through the National Institute for Health Research (NIHR)" - RECOVERY Trial News "The trial was part of a wider £20 million rapid research response investment by the UK Government" - UKRI Impact Report

2. **Trial Impact**

   "Identified dexamethasone as an effective treatment, which is estimated to have saved around 22,000 lives in the UK and one million lives globally by March 2021" - UKRI Impact Report "Produced three groundbreaking results within its first 100 days that reshaped COVID care globally" - The Conversation "Although RECOVERY will probably be remembered for the dexamethasone result, the study achieved a much wider legacy… including three additional proven COVID-19 treatments: the arthritis drug tocilizumab; a monoclonal antibody treatment, now known as Ronapreve; and [baricitinib]" - Nuffield Department of Population Health

3. **Patient Enrollment**

   "Became the world's largest clinical trial for COVID-19 treatments, with over 40,000 participants across 185 trial sites in the UK" - UKRI Impact Report "Between 23 April 2020 and 25 January 2021, 4,116 adults were included in the assessment of tocilizumab alone" - Rxivist

4. **Cost Efficiency** The actual cost of £2.1M (~$2.7M) for the entire trial represents an even more dramatic efficiency than previously estimated. While a simple division yields approximately £43 (~$55) per patient, authoritative sources cite ~$500 (95% CI: $400-$2.50K) per patient as a more realistic figure (Manhattan Institute). This aligns with broader evidence from a systematic review of 64 pragmatic trials, which found a median cost of $97 (95% CI: $19-$478)/patient[85]. This is nearly 80 times more cost-efficient than traditional clinical trials (NCBI: $41K (95% CI: $20K-$120K) per patient). This extraordinary cost-effectiveness, combined with the rapid delivery of results (three major findings within 100 days) and estimated global impact of over 1 million lives saved, demonstrates the revolutionary nature of the RECOVERY trial model.

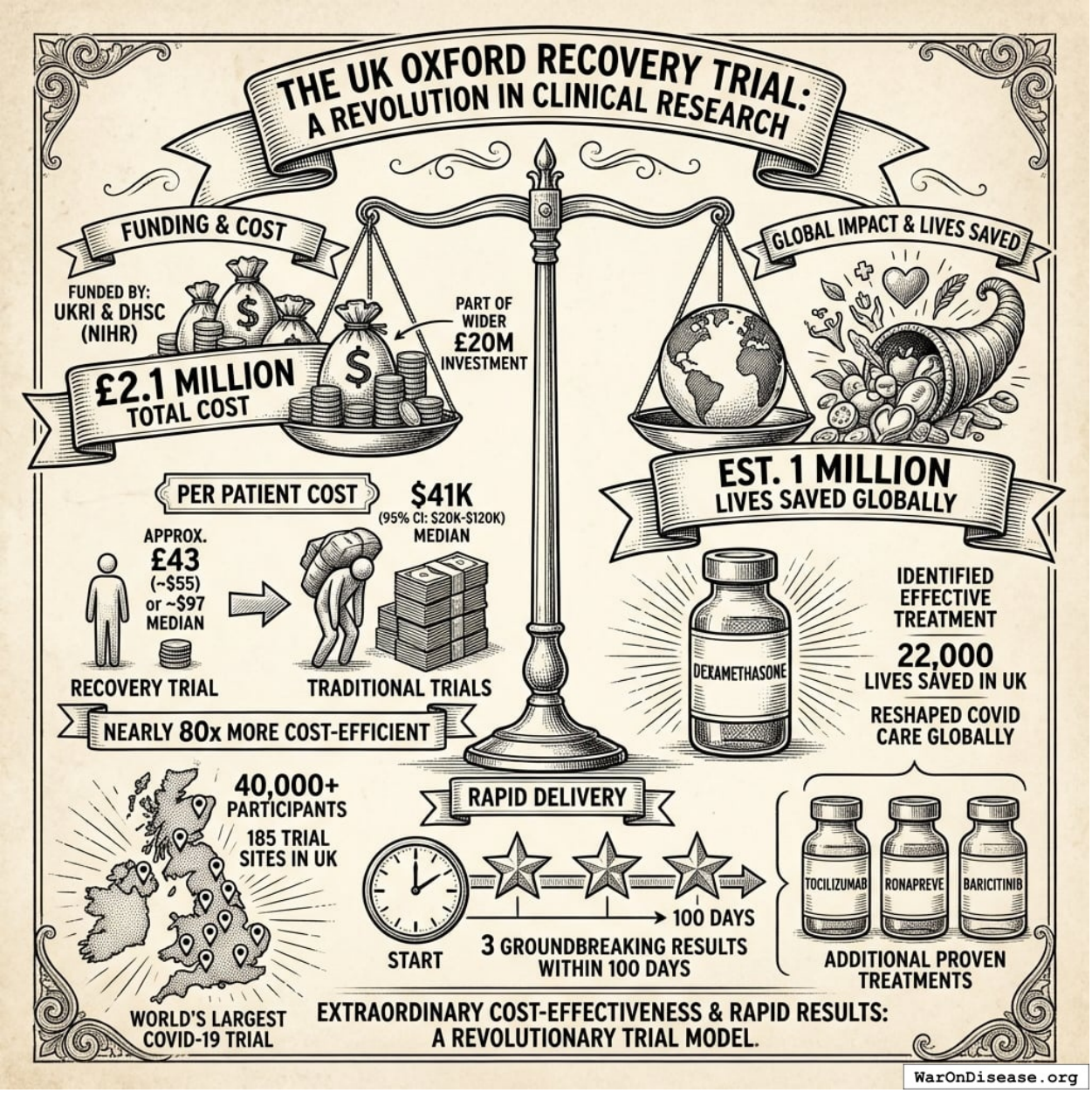


Figure 735: An infographic comparing the RECOVERY trial's extreme cost-efficiency of 500 per patient against the 41,000 traditional trial average, while highlighting its scale of 40,000 participants and global impact of one million lives saved.

Proof This Isn't Insane

"But wait," you might say, "this sounds too good to be true. Has anyone actually proven that decentralized trials can be more effective than the standard centralized model?"

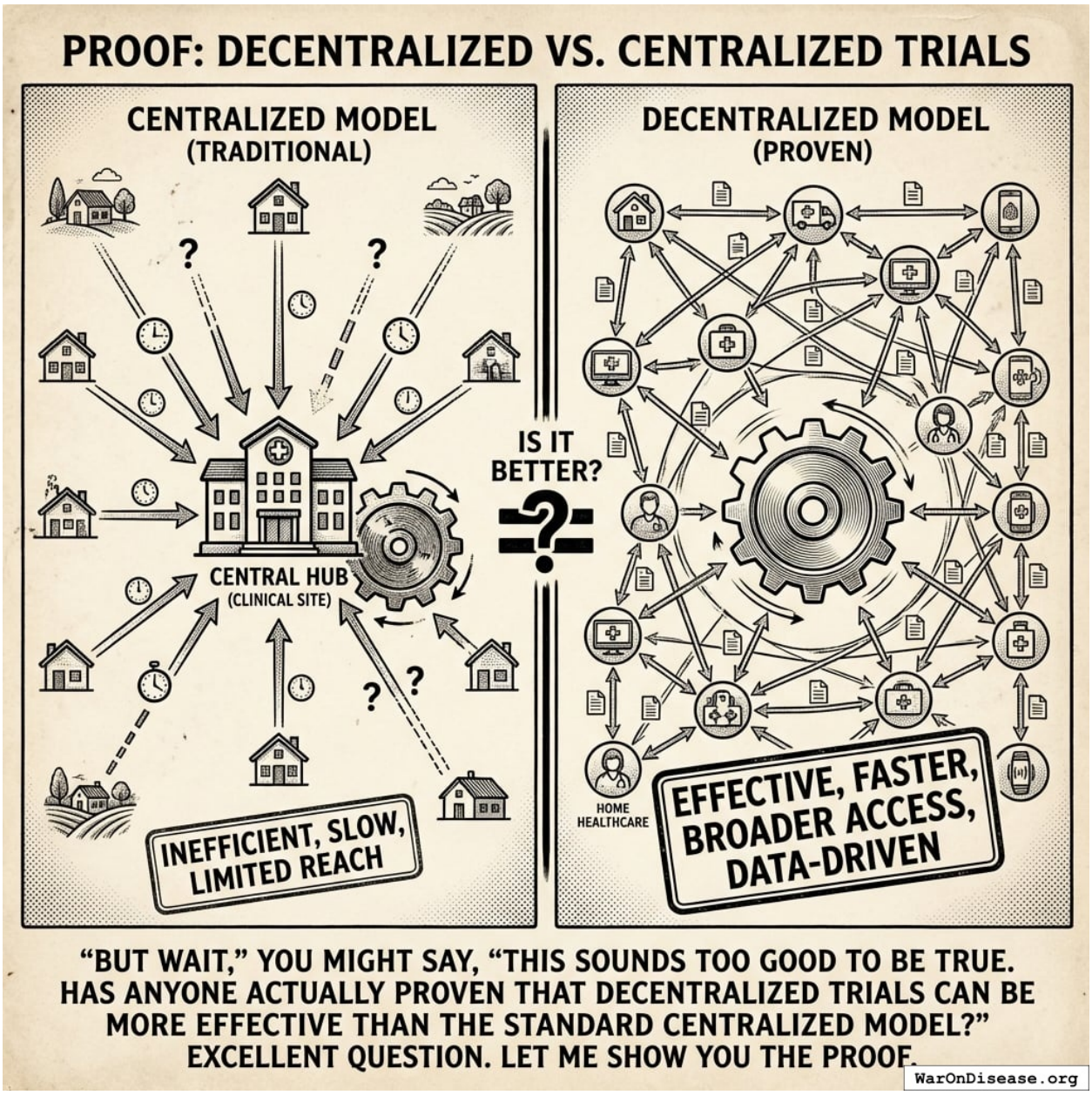


Figure 736: A side-by-side comparison of the traditional centralized trial model versus the decentralized model, showing the flow of data and patient participation.

Excellent question. Let me show you the proof.

Oxford Already Achieved 82x (95% CI: 50x-94.1x) Cost Reduction

The Oxford RECOVERY Trial

$500 (95% CI: $400-$2.50K) vs the U.S. Average of $41K (95% CI: $20K-$120K) Per Patient

The UK spent $500 (95% CI: $400-$2.50K) per patient testing COVID treatments. Saved a million lives.

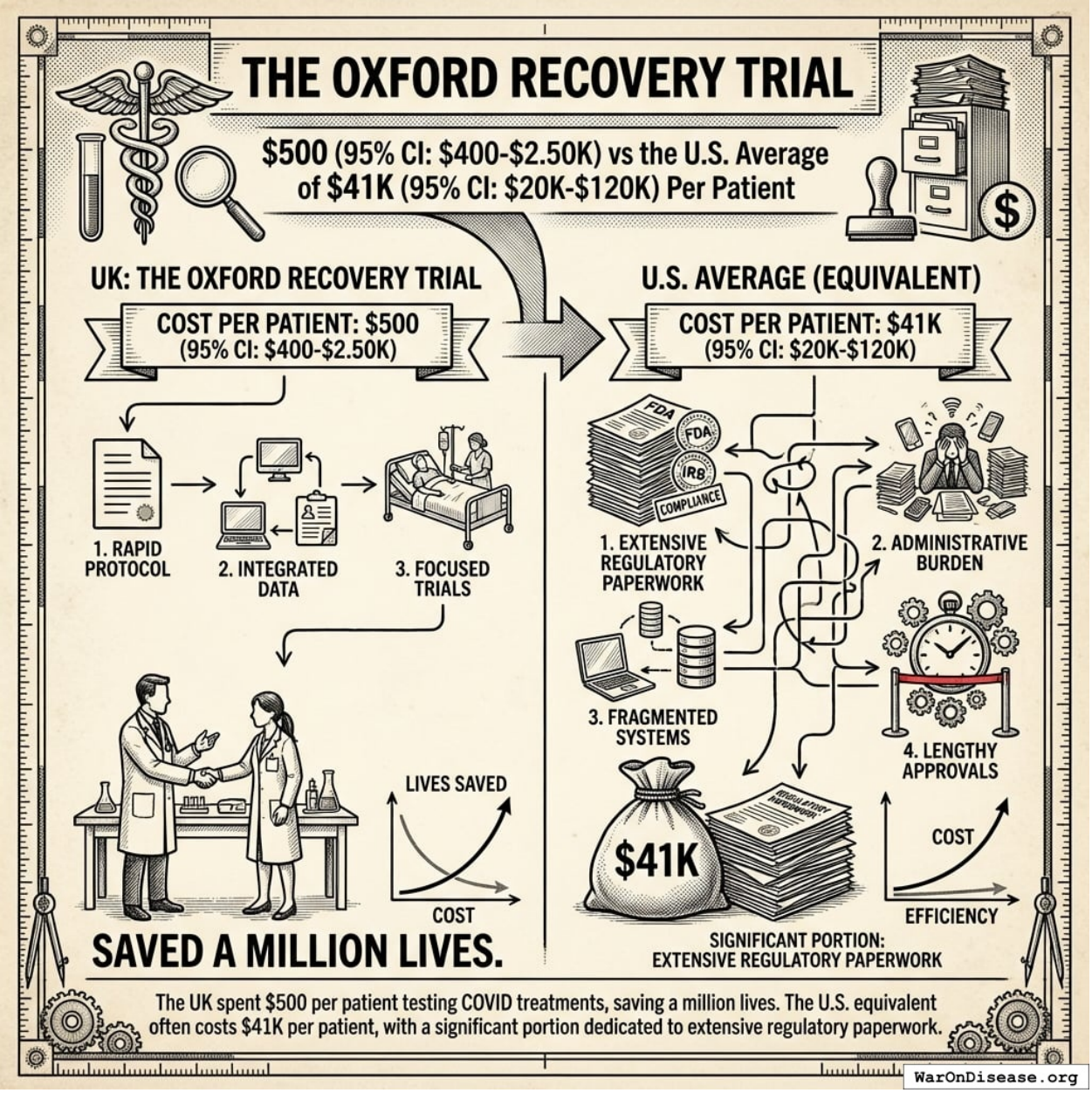


Figure 737: A comparison bar chart showing the massive disparity in per-patient clinical trial costs, with the UK's Oxford RECOVERY Trial at 500 versus the U.S. average of 41,000.

The U.S. equivalent often costs $41K (95% CI: $20K-$120K) per patient, with a significant portion dedicated to extensive regulatory paperwork.

The Math

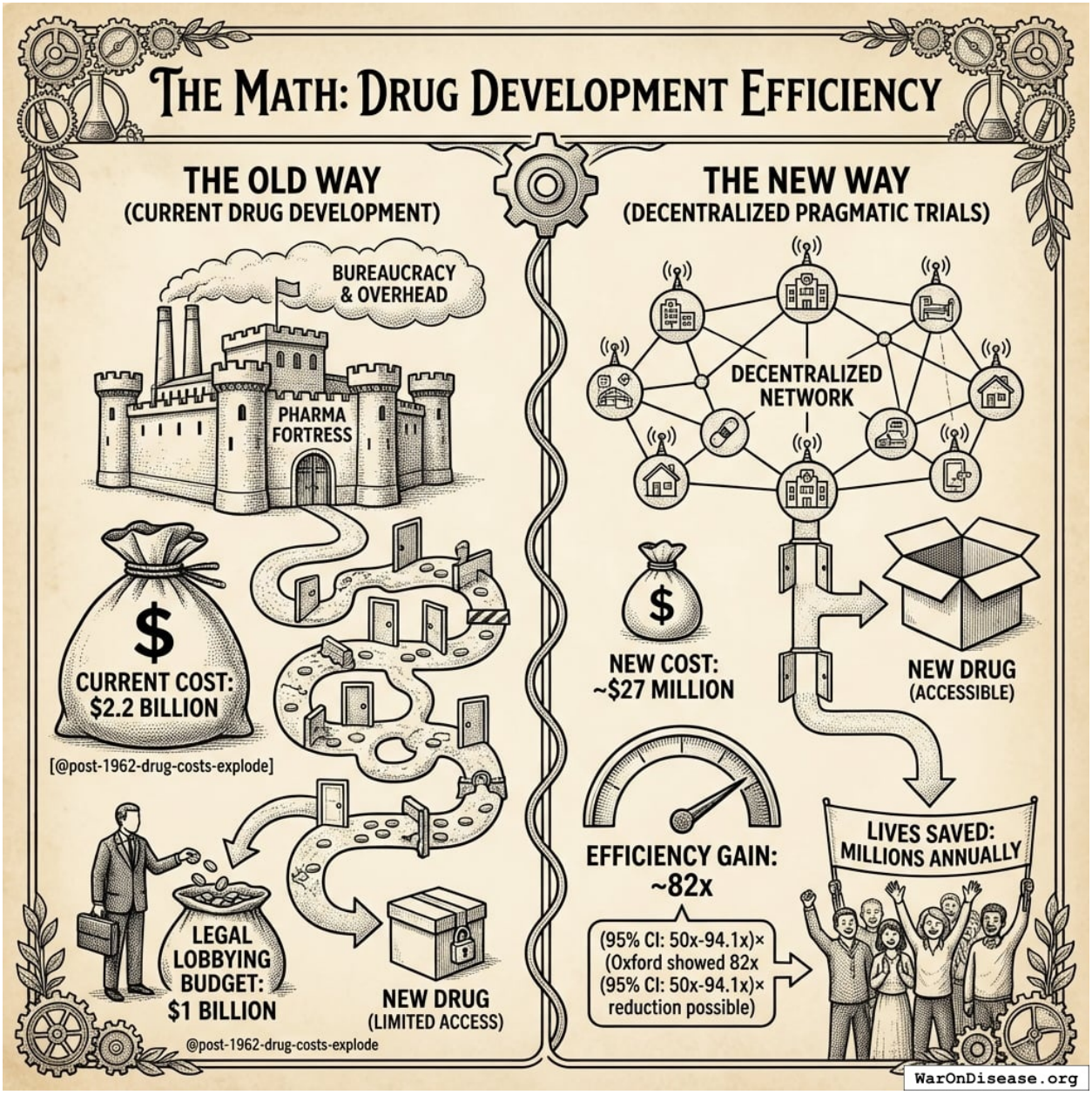
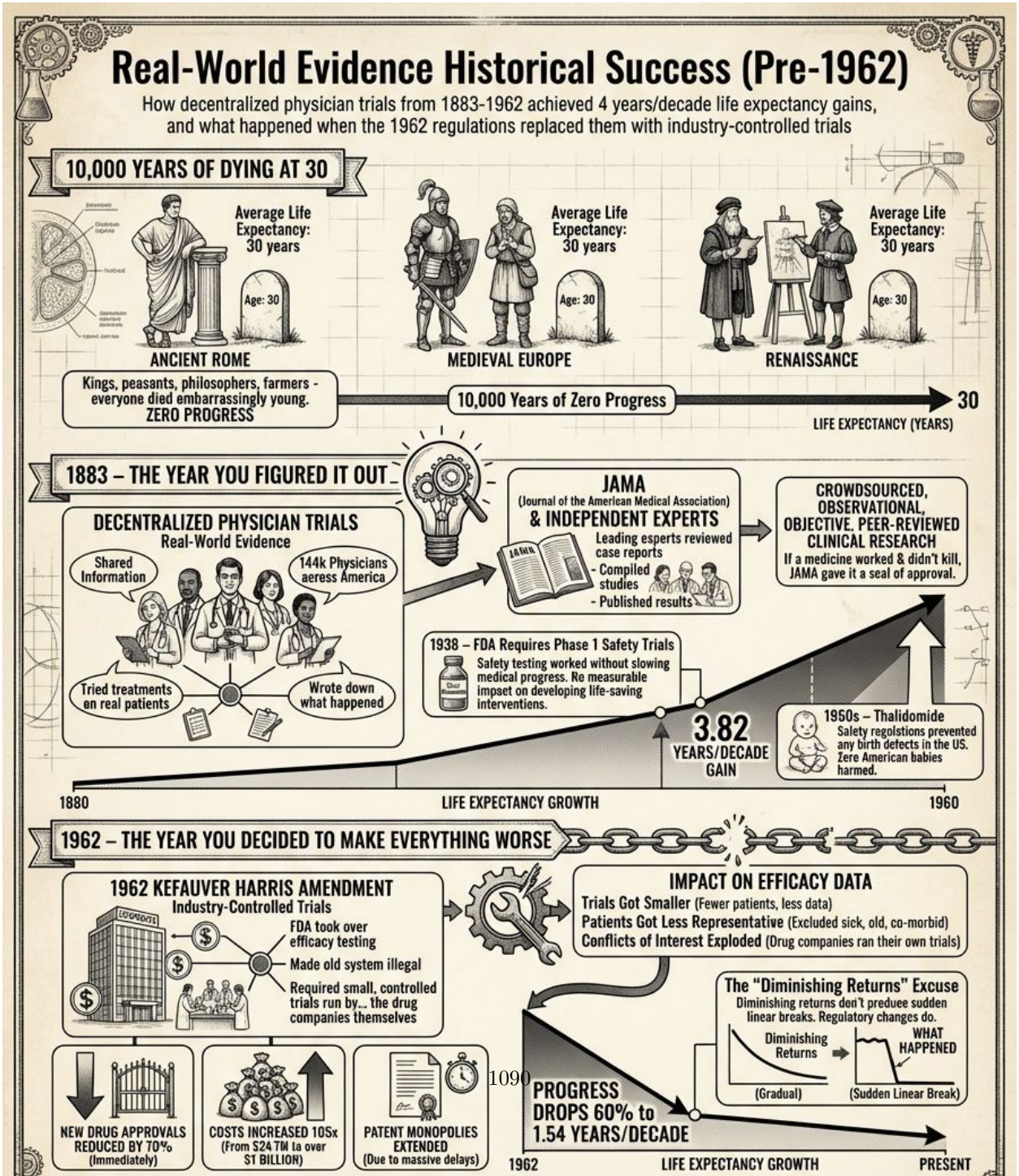


Figure 738: A bar chart comparing the 2.2 billion traditional drug development cost against the 27 million cost of decentralized trials, highlighting an 82x efficiency gain.

- Current cost to develop a drug: $2.2 billion[313]
- New cost with decentralized pragmatic trials: ~$27 million
- Efficiency gain: ~82x (95% CI: 50x-94.1x) (Oxford showed 82x (95% CI: 50x-94.1x) reduction possible)
- Lives saved: Millions annually
- Legal lobbying budget: $1 billion

Real-World Evidence Historical Success (Pre-1962)



Historical Evidence: Why Real-World Evidence Works Better

Large-scale efficacy trials based on real-world evidence produce better health outcomes than current pharmaceutical industry-driven randomized controlled trials.



Figure 739: A comparison showing how real-world evidence trials lead to improved health outcomes compared to traditional pharmaceutical industry-driven randomized controlled trials.

10,000 Years of Dying at 30

For over 99% of recorded human history, average life expectancy was 30 years[314].

Ancient Rome: 30 years. Medieval Europe: 30 years. Renaissance: Still 30 years.

Kings, peasants, philosophers, farmers - everyone died embarrassingly young.

10,000 years. Zero progress.

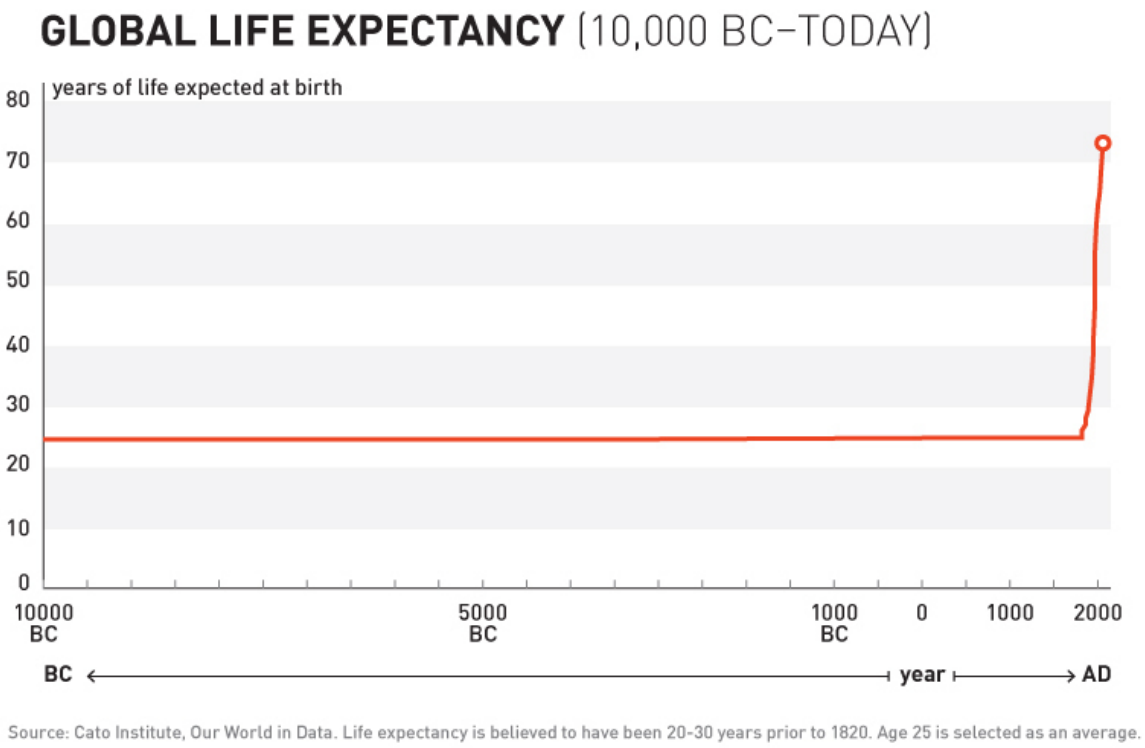


Figure 740: historical life expectancy

1883 – The Year You Figured It Out

Then something changed.

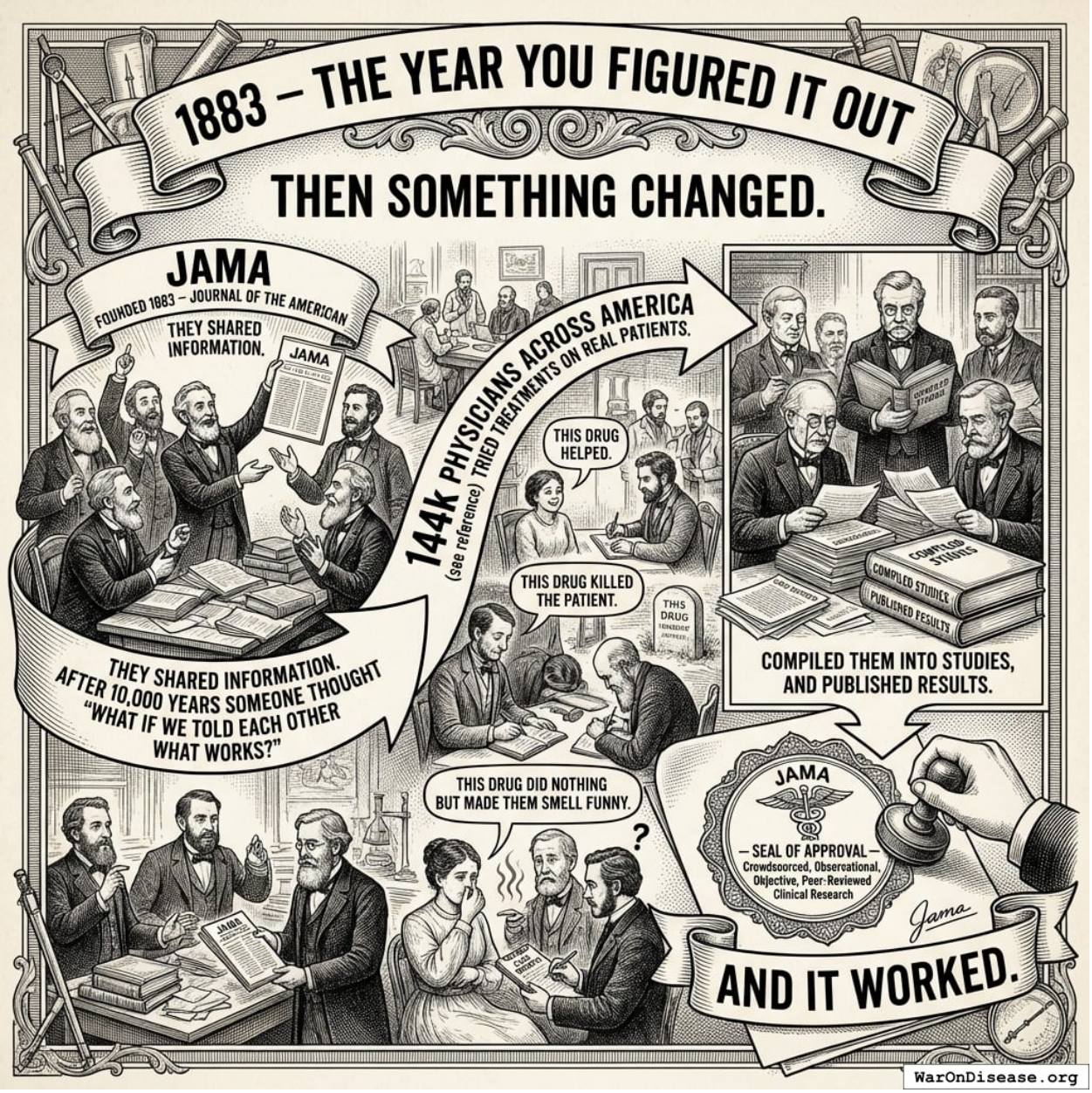


Figure 741: A flowchart showing the collaborative research process introduced in 1883, from individual physician observations to JAMA peer review and final certification.

In 1883, doctors founded the Journal of the American Medical Association (JAMA)[315] and did something novel: they shared information. After 10,000 years someone thought "what if we told each other what works?"

144k physicians physicians across America (see reference[95]) tried treatments on real patients. They wrote down what happened. "This drug helped." "This drug killed the patient." "This drug did nothing but made them smell funny."

Leading experts reviewed these case reports, compiled them into studies, and published results. If a medicine worked and didn't kill people, JAMA gave it a seal of approval.

Crowdsourced, observational, objective, peer-reviewed clinical research. And it worked.

The Result

After 10,000 years of zero progress, human life expectancy suddenly increased by 3.82 years every decade[123] (calculated from 1880-1960 data). For 80 years.

The most linear relationship in medical history. Suspiciously perfect. It lasted from 1883 to 1960.

1938 – The FDA Requires Phase 1 Safety Trials

Elixir sulfanilamide caused over 100 deaths in 1937.

Congress reacted by requiring all new drugs to include:

> "adequate tests by all methods reasonably applicable to show whether or not such drug is safe for use under the conditions prescribed, recommended, or suggested in the proposed labeling thereof."

These requirements evolved into the Phase 1 Safety Trial. This was reasonable - testing if a compound kills people before giving it to patients makes sense.

The consistent 3.82 years per decade increase[123] in life expectancy remained unchanged before and after the new safety regulations. Safety testing worked without slowing medical progress.

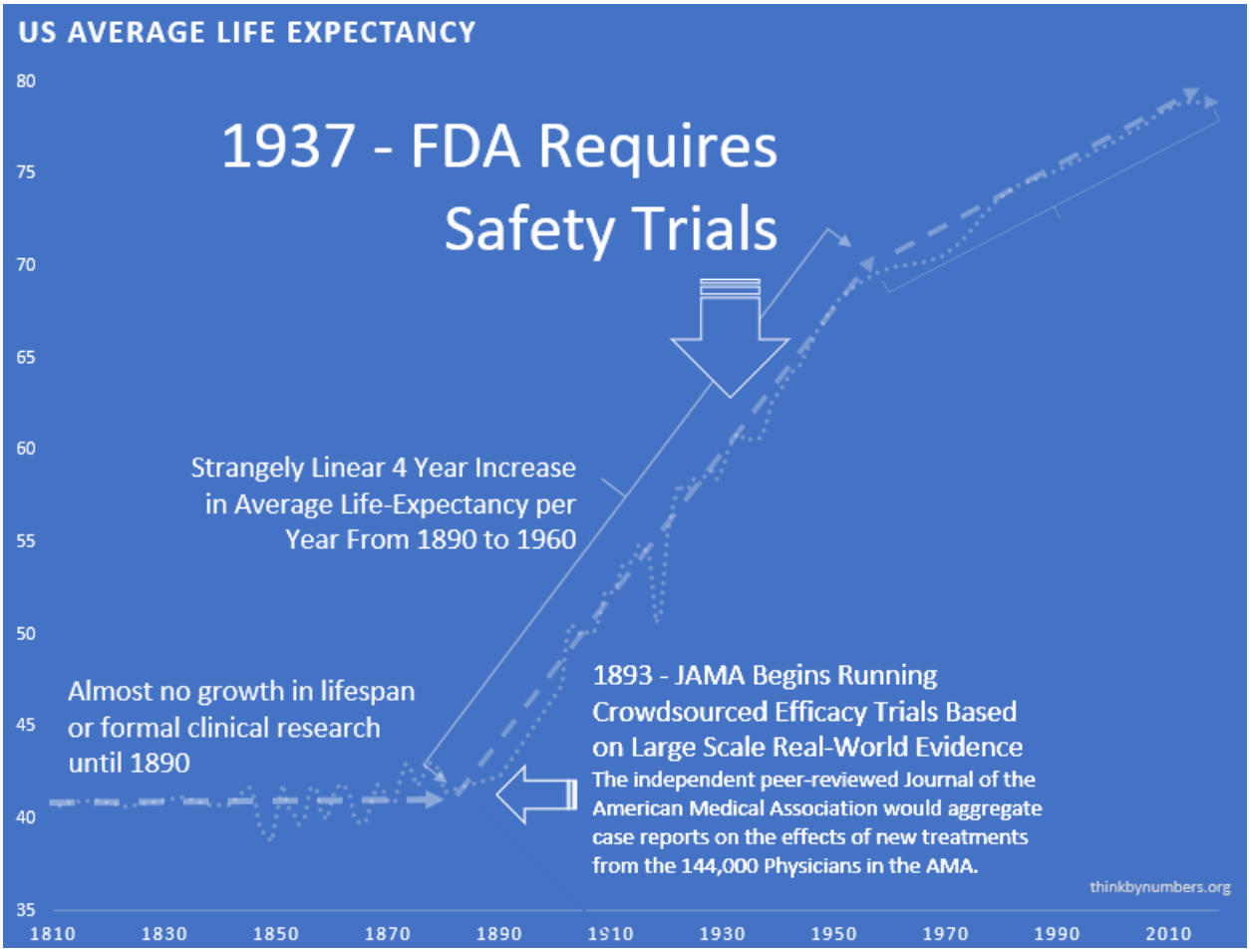


Figure 742: Fda safety trials life expectancy

The regulations had no measurable positive or negative impact on developing life-saving interventions.

1950s – Thalidomide: When Safety Regulations Actually Worked

Thalidomide was first marketed in Europe in 1957 for morning sickness. While it was initially thought to be safe in pregnancy, it resulted in thousands of horrific congenital disabilities[316].

Existing FDA safety regulations prevented any birth defects in the US[317]. The 1938 safety testing framework worked exactly as intended. Zero American babies harmed.

Despite this success story for safety regulations, newspaper stories like the one below created public outcry for *more* regulation - targeting efficacy testing instead.



Figure 743: Thalidomide

1962 – The Year You Decided to Make Everything Worse

Effective **safety** regulations were already in place. They worked. America had zero Thalidomide deaths while Europe had thousands. Safety testing succeeded.

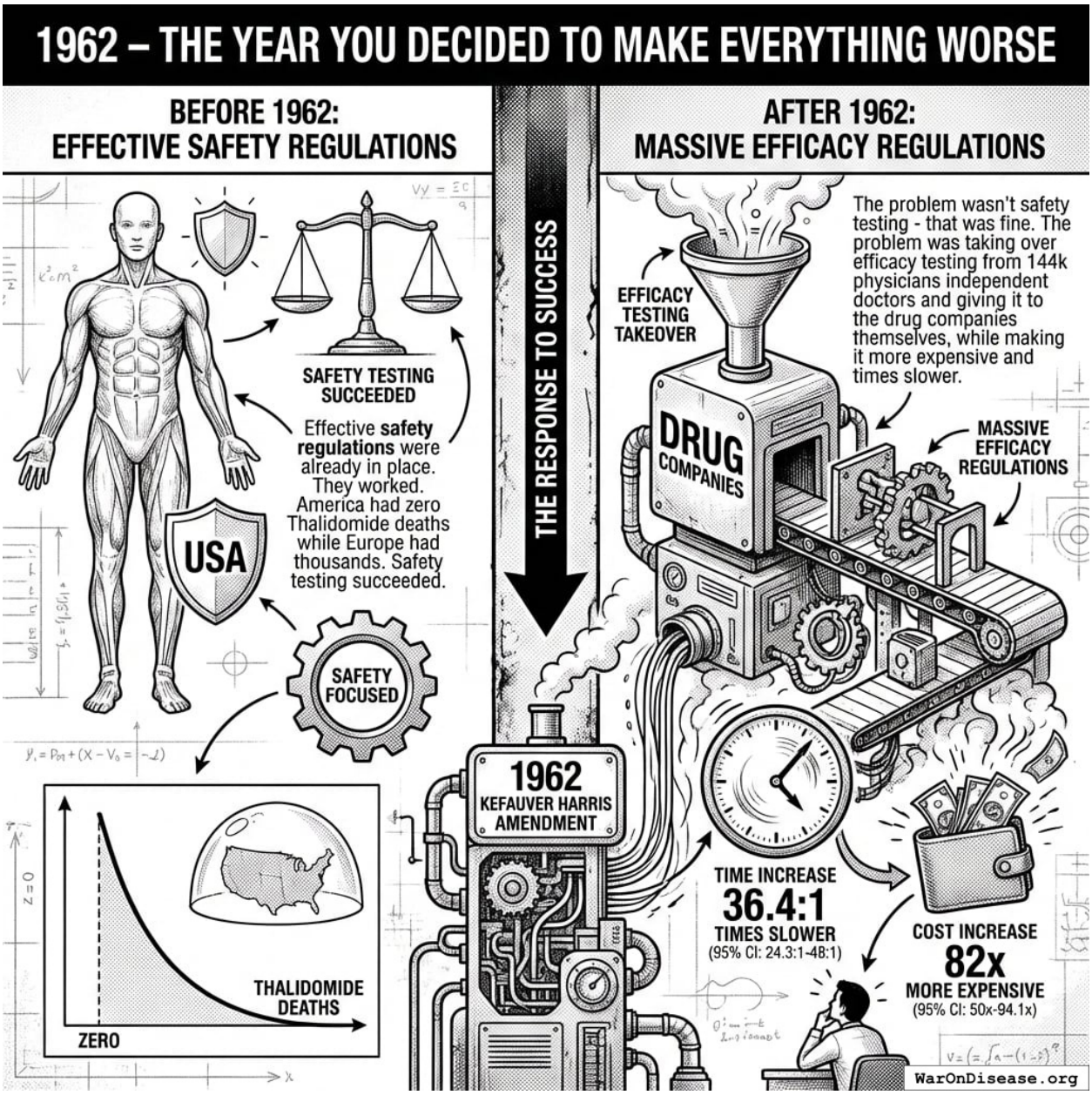


Figure 744: Comparison of drug regulation impact before and after the 1962 Kefauver Harris Amendment, highlighting the shift in efficacy testing from doctors to drug companies and the resulting increases in cost and time.

So naturally, the government responded to this success by adding massive **efficacy** regulations via the 1962 Kefauver Harris Amendment[193].

The problem wasn't safety testing - that was fine. The problem was taking over efficacy testing from 144k physicians independent doctors and giving it to the drug companies themselves, while making it 82x (95% CI: 50x-94.1x) times more expensive and 42:1 (95% CI: 29.8:1-48:1) times slower.

What Changed

Before 1962:

- Drug companies spent **$24.7M (95% CI: $19.5M-$30M)** (inflation-adjusted) to prove safety (see reference[33])
- Once approved as safe, **144k physicians independent doctors tested efficacy** on real patients (see reference[95])
- The third-party AMA compiled results and published findings

After 1962:

- FDA took over efficacy testing
- Made the old system illegal[193]
- Required small, controlled trials run by… the drug companies themselves

The irony: Regulations meant to ensure drugs work did this by:

1. Banning large real-world trials
2. Requiring small artificial trials
3. Letting drug companies run their own tests

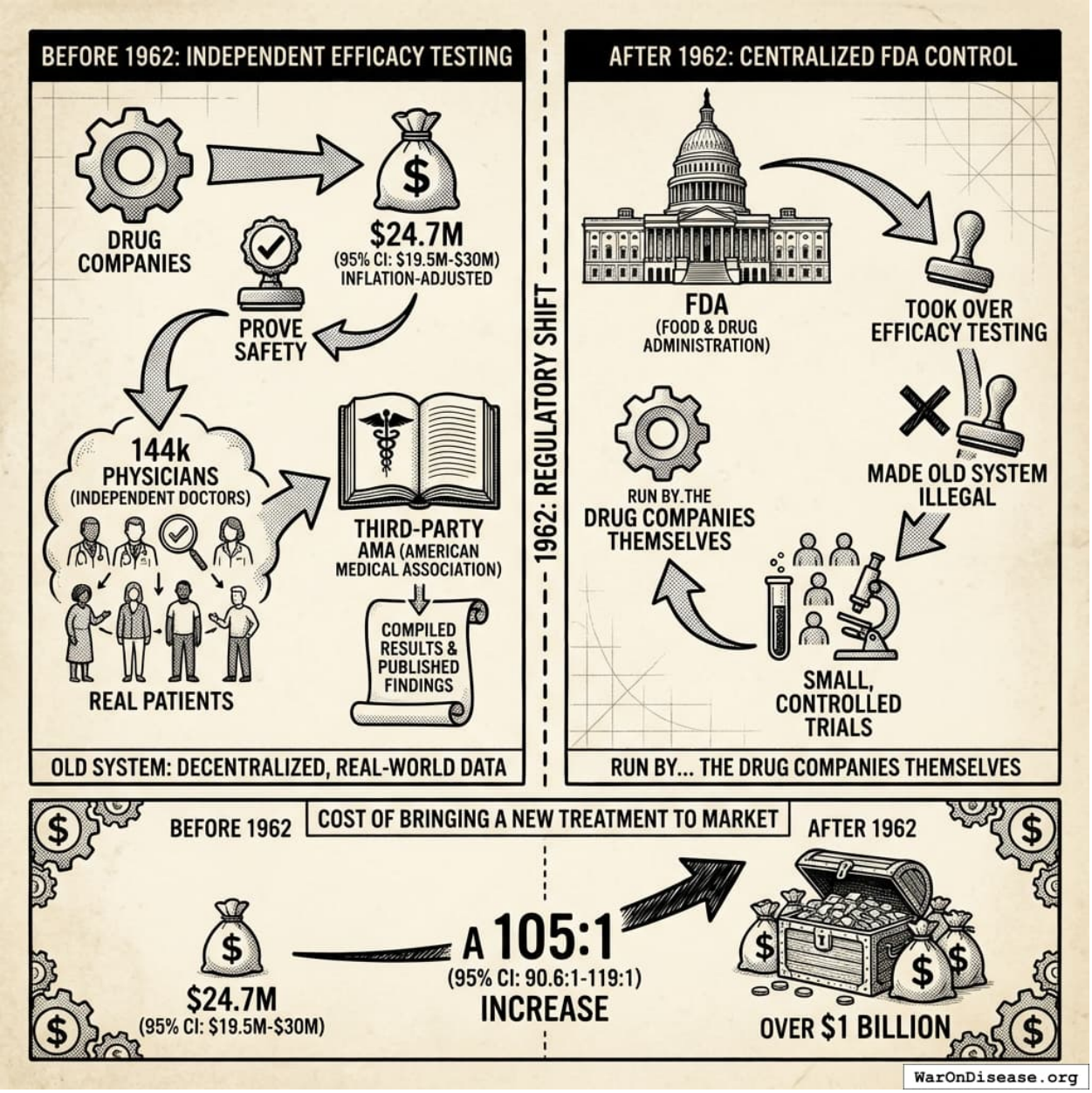


Figure 745: Comparison of the decentralized physician-led model (pre-1962) versus the centralized industry-led model (post-1962), highlighting the explosion in costs and procedural changes.

What Happened to Efficacy Data

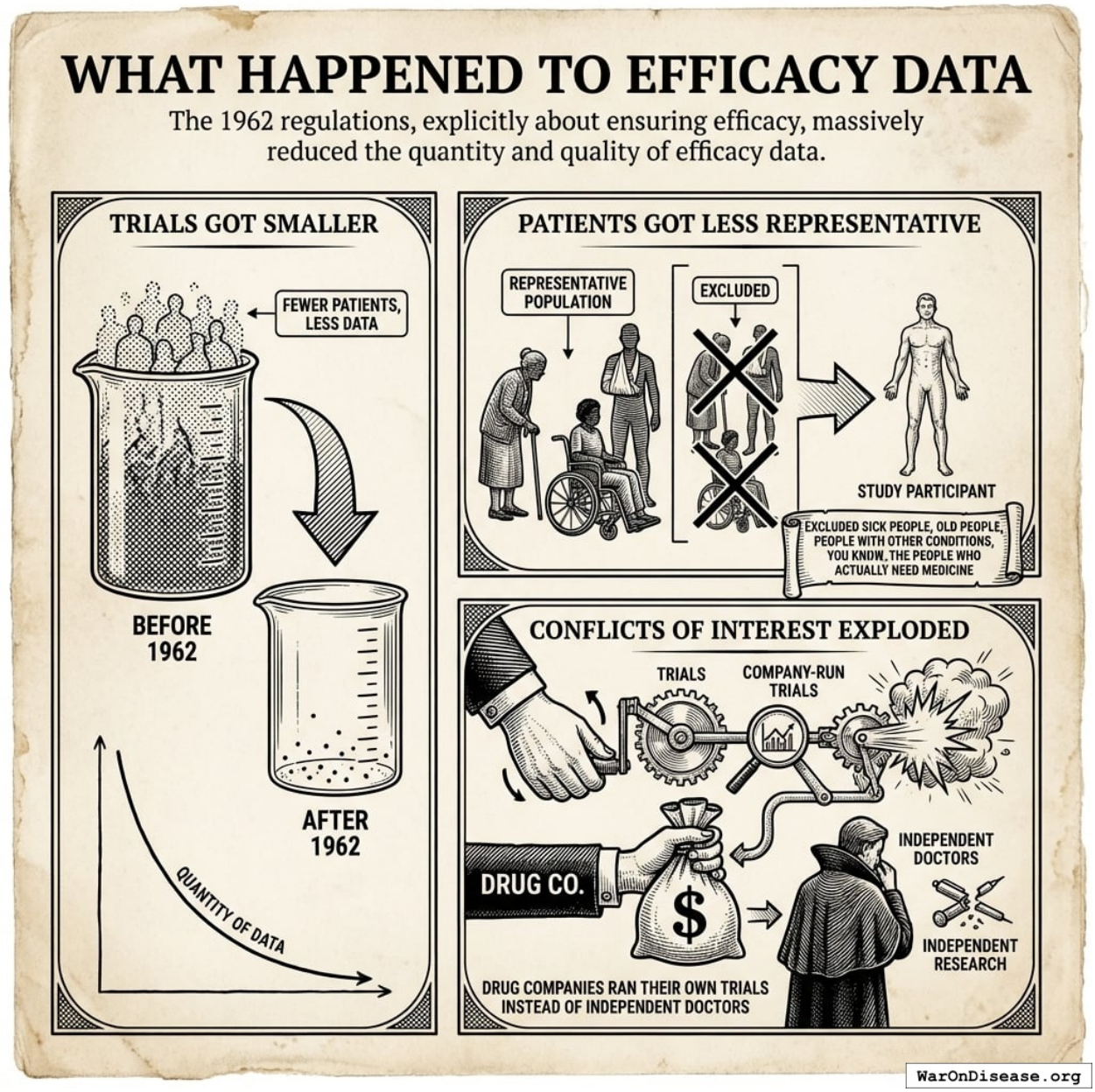


Figure 746: A comparative visualization showing how 1962 regulations shifted clinical trials toward smaller sample sizes, less representative patient groups, and increased internal conflicts of interest.

The 1962 regulations, explicitly about ensuring efficacy, massively reduced the quantity and quality of efficacy data:

- **Trials Got Smaller**: Fewer patients, less data
- **Patients Got Less Representative**: Excluded sick people, old people, people with other conditions, you know, the people who actually need medicine
- **Conflicts of Interest Exploded**: Drug companies ran their own trials instead of independent doctors

What Happened to New Treatments

The new regulations immediately **reduced new drug approvals by 70%** (see reference[92]).

Not gradually. Immediately.

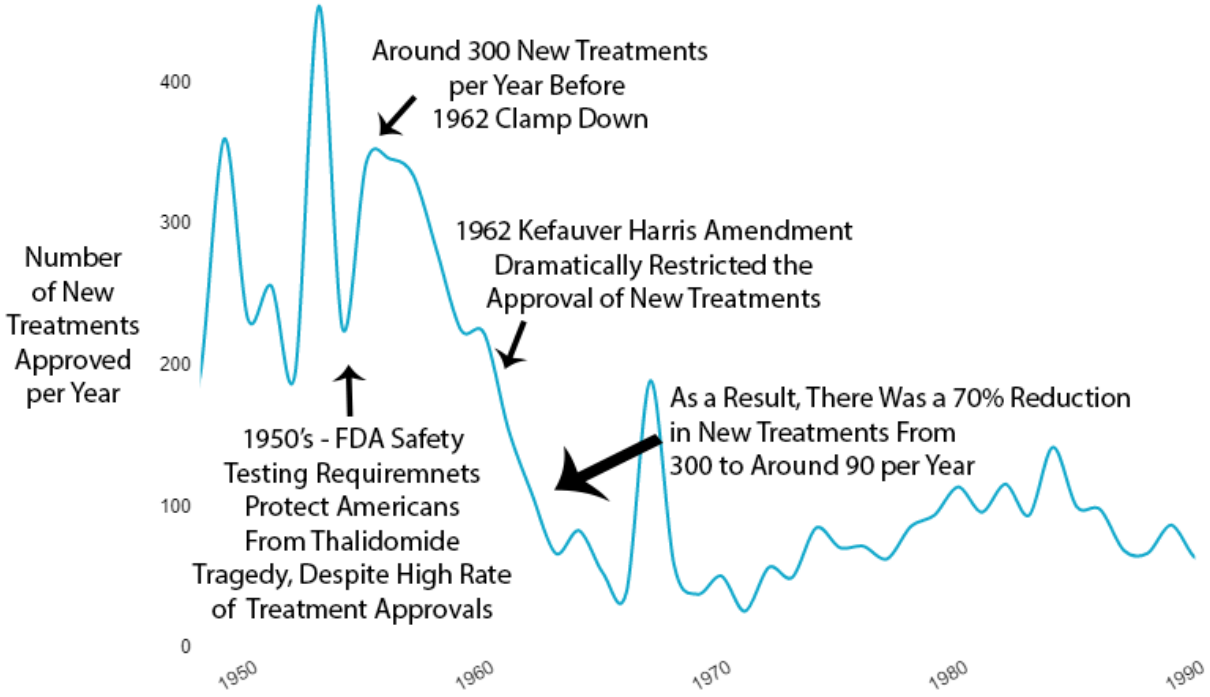


Figure 747: Graph showing new treatments per year decline after 1962

What Happened to Costs

Since 1962, the cost of bringing a new treatment to market went from **$24.7M (95% CI: $19.5M-$30M) to over $1 billion** (source) (inflation-adjusted).

A 105x (95% CI: 90.6x-119x) increase. For worse results.

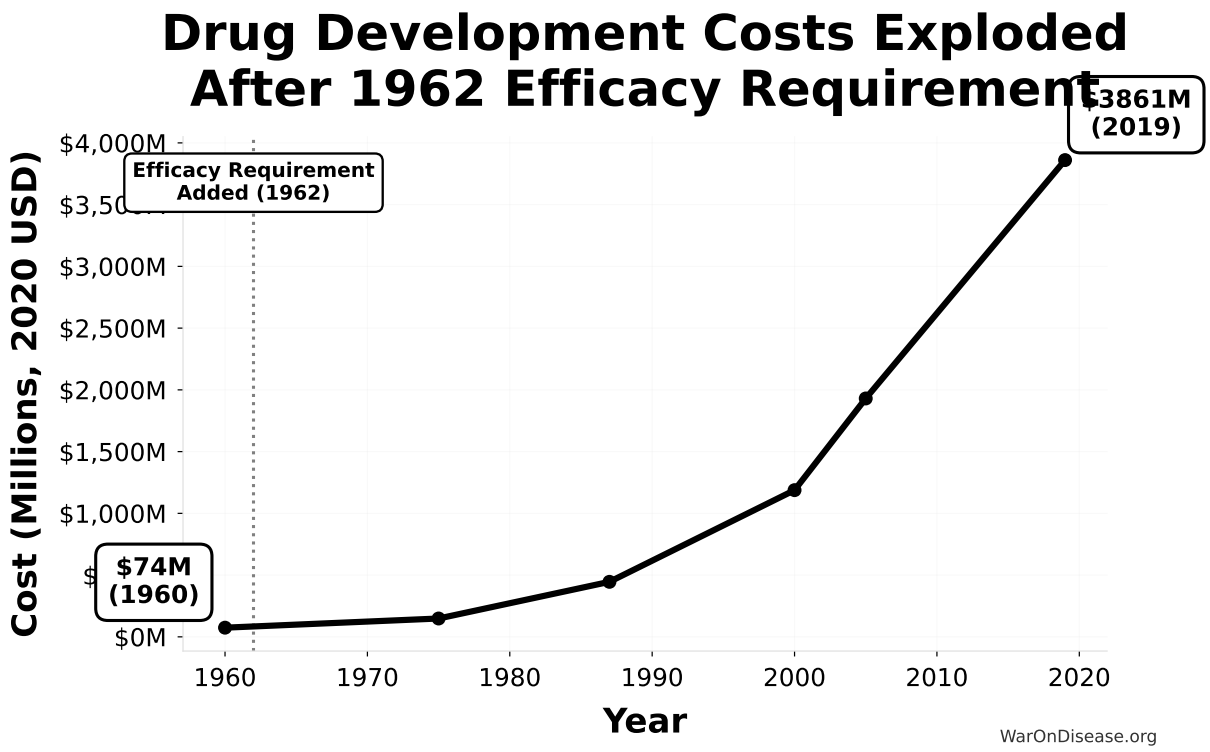


Figure 748: Cost to develop one new drug has exploded under FDA regulations (1950-2000)

This chart shows the exponential increase in the cost to develop a single new drug from 1960-2019, adjusted for inflation to 2020 dollars. The vertical line marks the 1962 efficacy amendment (Kefauver-Harris Amendment).

Drug development costs were relatively stable before 1962, then exploded exponentially after the efficacy requirement was added. Costs increased 52x from $74M (1960) to $3,861M (2019), making innovation increasingly expensive and inaccessible.

What Happened to Drug Patents

The new regulations created such massive delay that the pharmaceutical industry complained about a "drug lag."

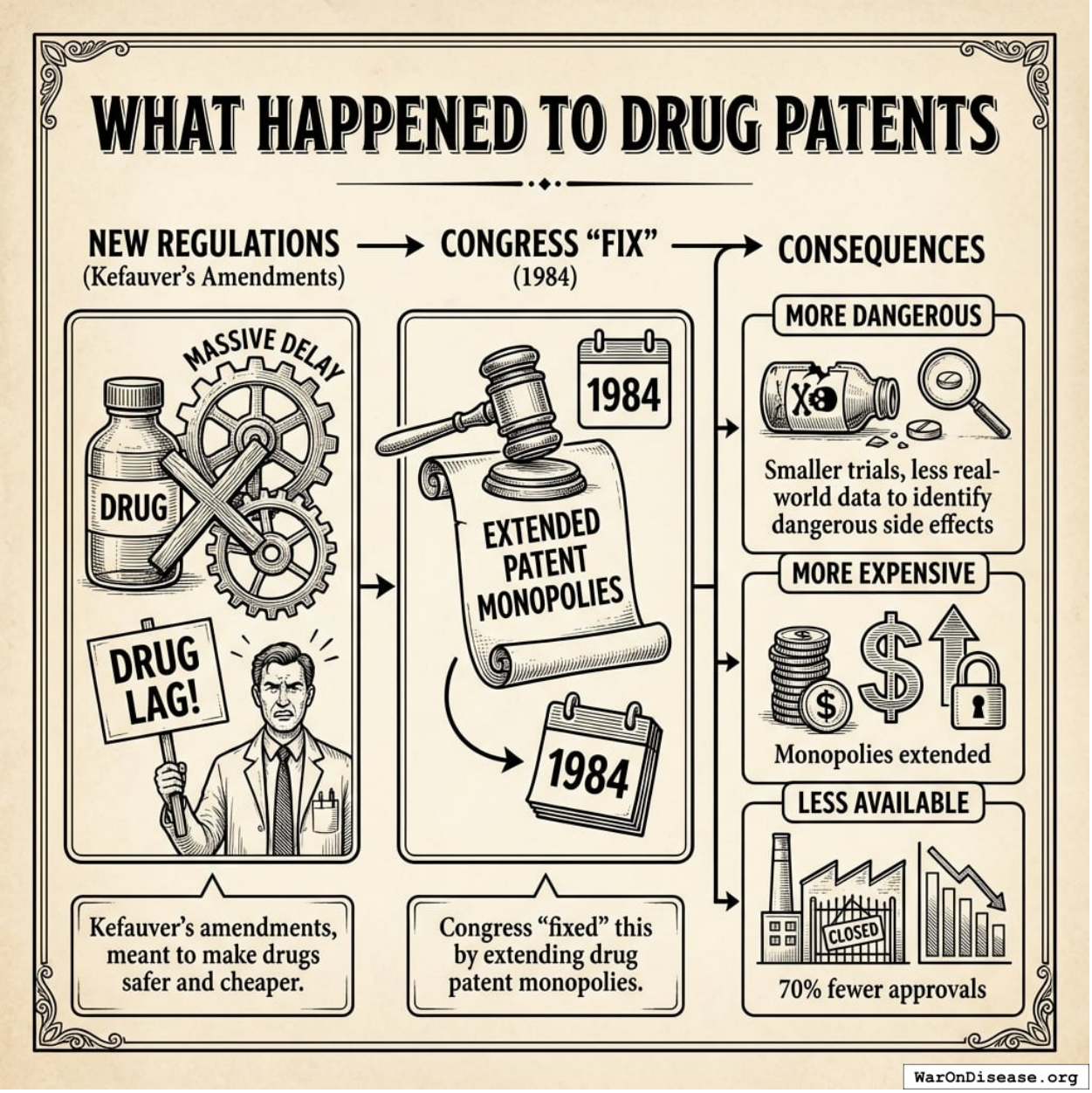


Figure 749: A cause-and-effect diagram showing how the 1984 patent extensions led to unintended consequences: higher drug prices, reduced availability, and increased safety risks.

Congress "fixed" this by extending drug patent monopolies[318] in 1984.

Kefauver's amendments, meant to make drugs safer and cheaper, instead made them:

- More dangerous (smaller trials, less real-world data to identify dangerous side effects)
- More expensive (monopolies extended)
- Less available (70% fewer approvals)

Decreased Ability to Determine Comparative Efficacy

The placebo-controlled, randomized controlled trial helped gauge individual drug efficacy. However, it makes determining comparative effectiveness much more difficult.

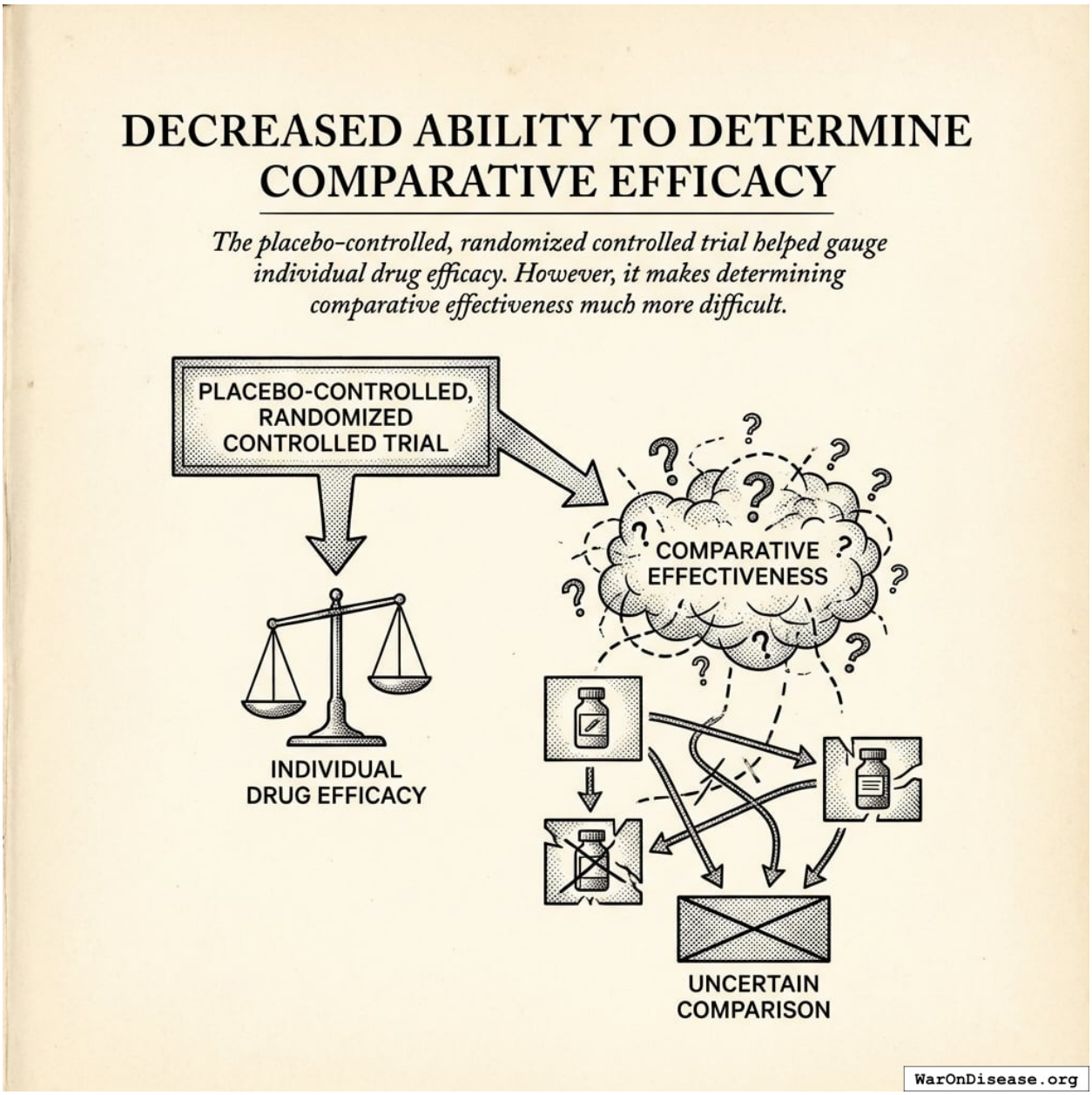


Figure 750: A conceptual diagram showing two separate clinical trials comparing different drugs to placebos, with a highlighted gap or question mark indicating the missing direct comparison between the two active drugs.

What Happened to Life Expectancy (The Part That Matters)

Remember that suspiciously linear 3.82-year increase[123] in life expectancy every decade from 1883 to 1960?

Here's what happened in 1962:

It strangely quickly dropped by 60%[124]. To 1.54 years per decade.

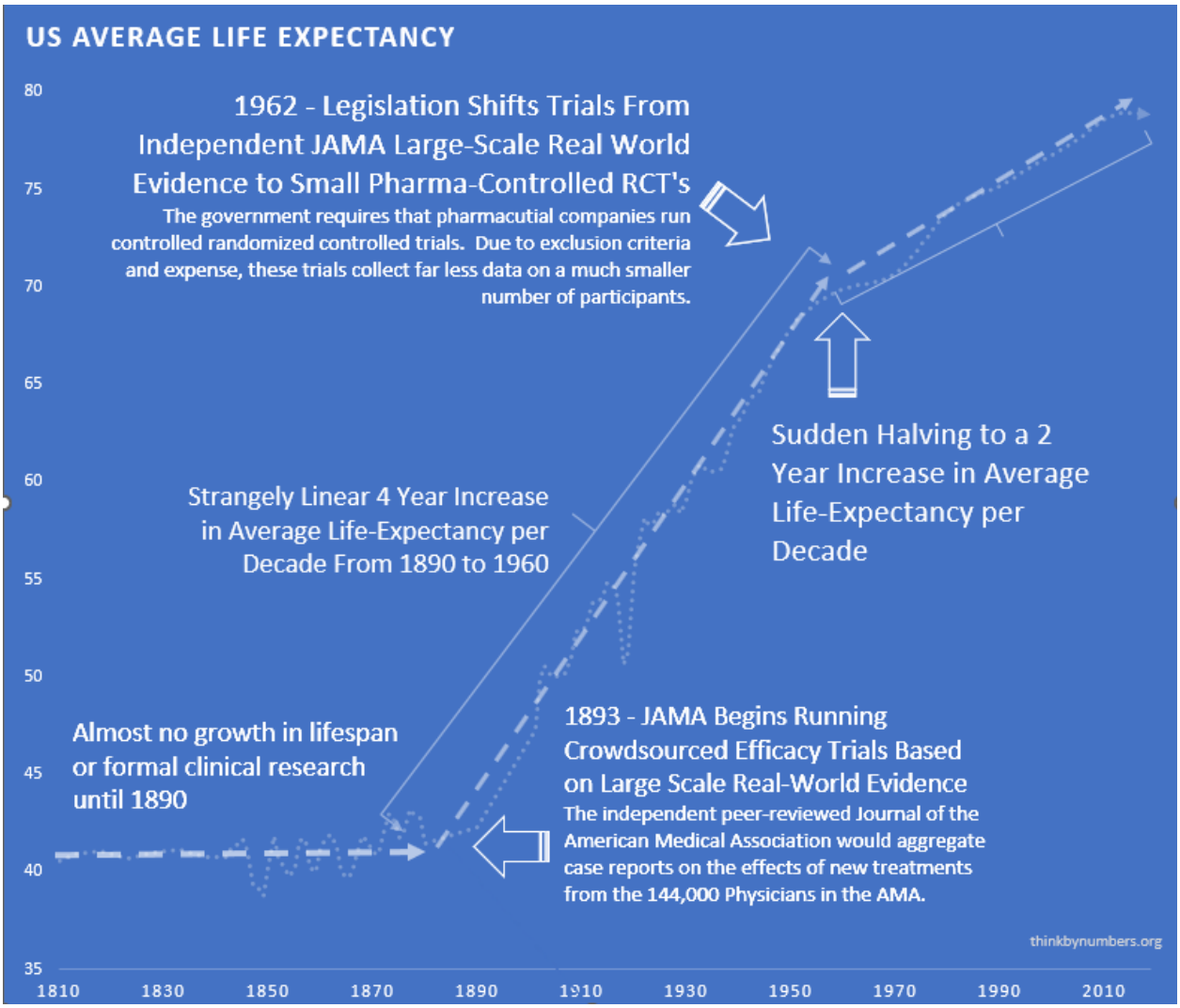


Figure 751: Average Life Expectancy Over Time

From 1880 to 1960: 3.82 years per decade[123].

From 1962 onward: 1.54 years per decade[124].

The break is so clean you can see exactly when Congress decided to "help."

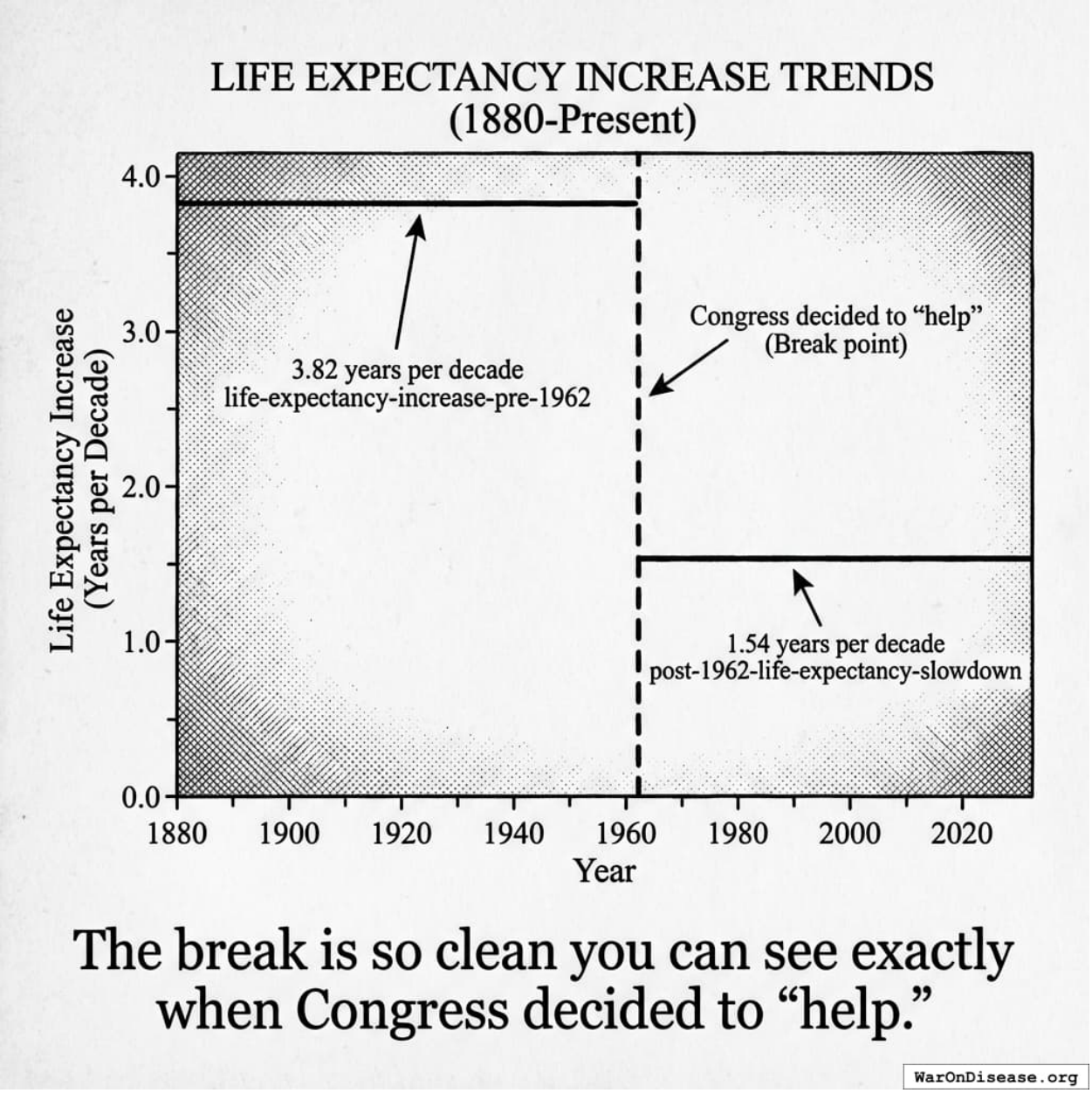


Figure 752: Life expectancy trends showing a distinct change in slope from 3.82 years/decade gained to 1.54 years/decade gained precisely at the 1962 regulatory intervention.

The "Diminishing Returns" Excuse

Some claim "diminishing returns explain the slowdown."

Diminishing returns produce exponential decay. A smooth curve that gradually flattens over time.

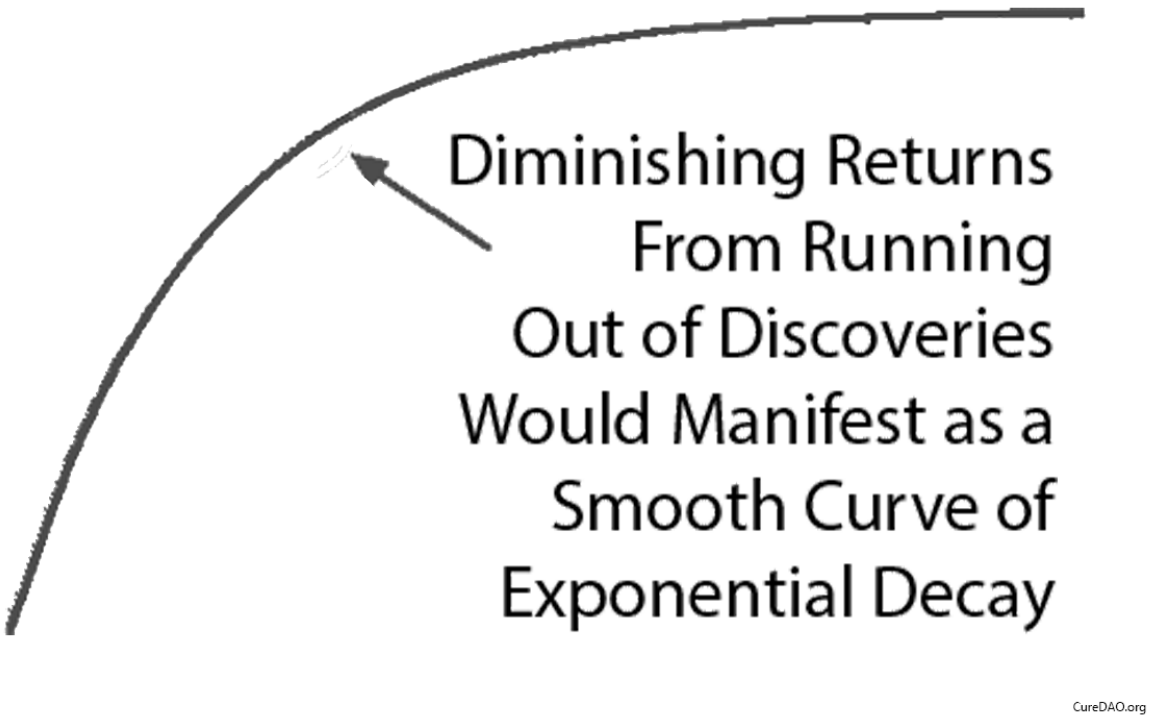


Figure 753: What diminishing returns would look like

This isn't what happened.

What happened was a straight line that instantly changed slope in 1962 when the regulations changed.

Diminishing returns don't produce sudden linear breaks. Regulatory changes do.

The "Correlation Is Not Causation" Excuse

True. Correlation alone proves nothing.

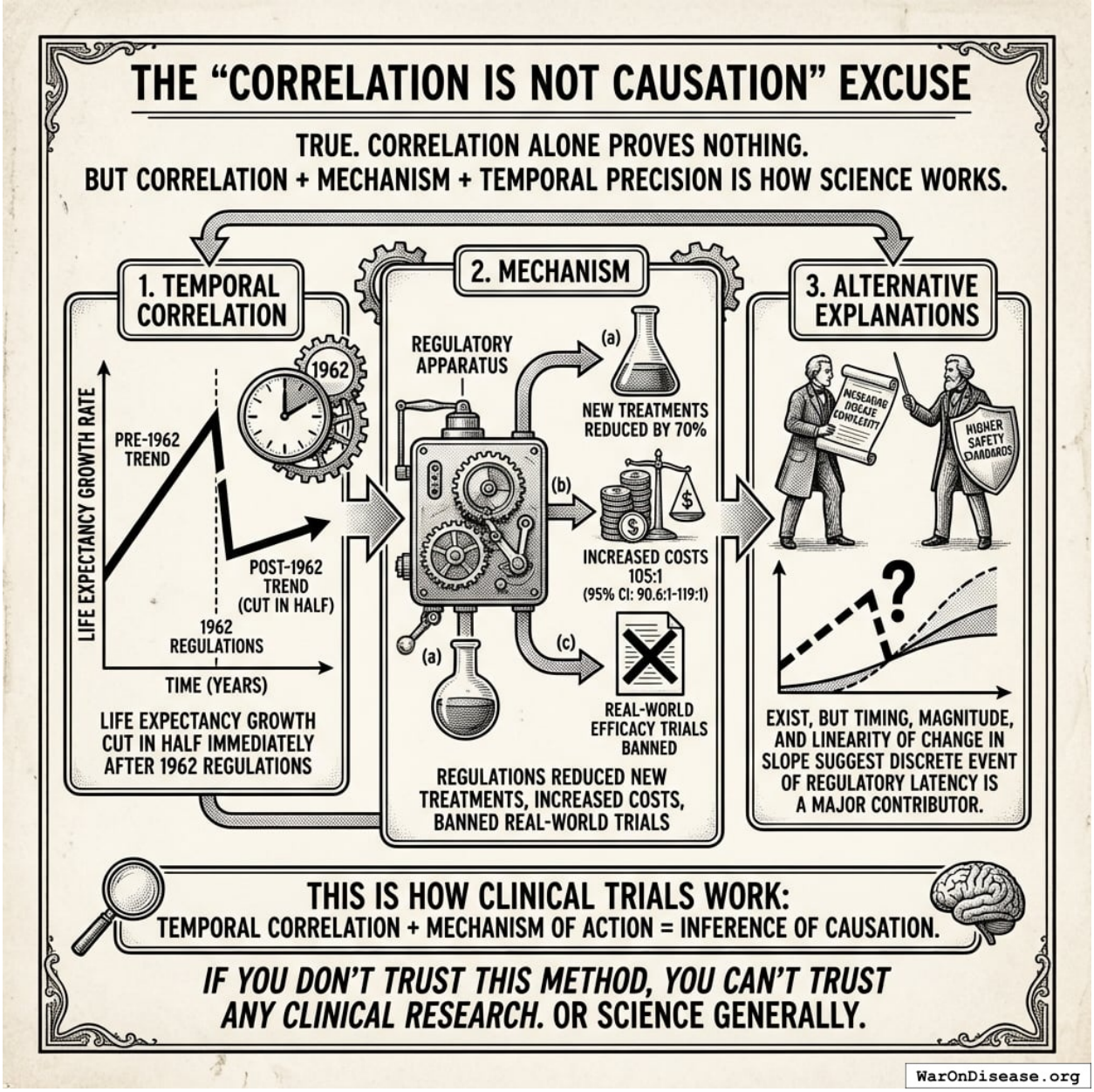


Figure 754: A logic diagram illustrating the three pillars of scientific inference, temporal correlation, mechanism, and temporal precision, used to establish causation between 1962 regulations and life expectancy trends.

But correlation + mechanism + temporal precision is how science works.

Here's what you have:

1. **Temporal correlation**: Life expectancy growth cut in half immediately after 1962 regulations
2. **Mechanism**: Regulations reduced new treatments by 70%, increased costs 105x (95% CI: 90.6x-119x), banned real-world efficacy trials
3. **Alternative explanations**: Alternative explanations exist (increasing disease complexity, higher safety standards), but the timing and magnitude and linearity of the change in the slope after the break strongly suggest the discrete event of regulatory latency is a major contributor rather that other causes that would produce far more gradual change in the slope over time.

This is how clinical trials work: temporal correlation + mechanism of action = inference of causation.

If you don't trust this method, you can't trust any clinical research. Or science generally.

Impact of Innovative Medicines on Life Expectancy

A three-way fixed-effects analysis of 66 diseases in 27 countries suggests that if no new drugs had been launched after 1981, years of life lost would have been 2.16 times higher. It estimates pharmaceutical expenditure per life-year saved was $2,837.

More people survive as more treatments are developed. There's a strong correlation between developing new cancer treatments and cancer survival over 30 years.

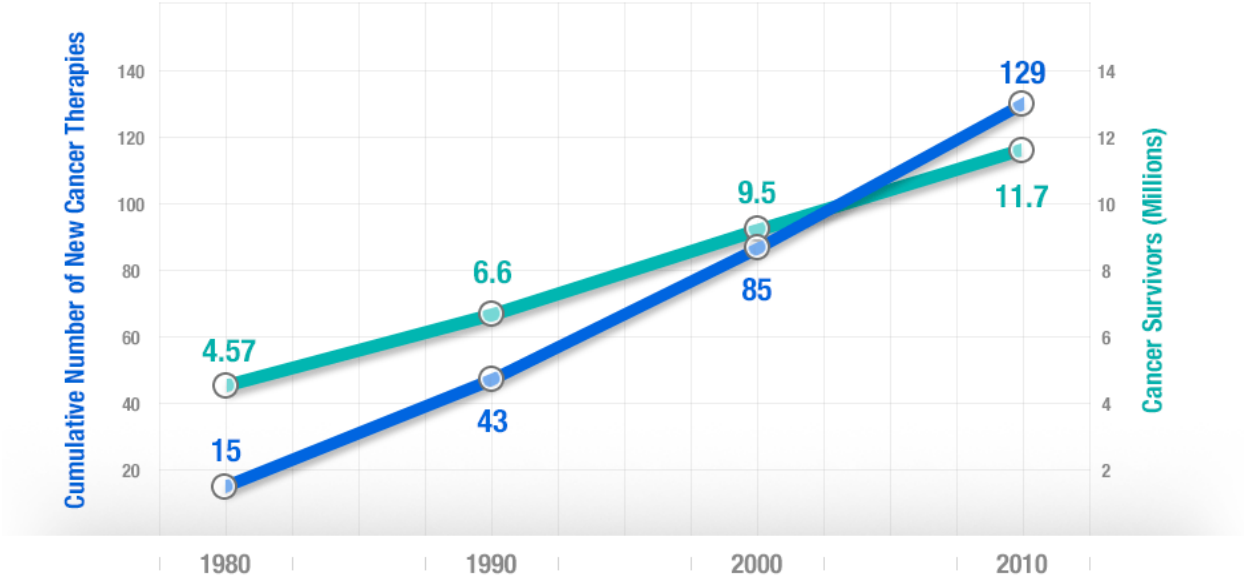


Figure 755: Graph showing the correlation of developing new cancer treatments and cancer survival over 30 years.

The Summary

- 10,000 years: Zero progress
- 1880-1960: Decentralized real-world trials, 3.82 years/decade progress[123]
- 1962: Kefauver-Harris passes, progress drops 60%[124] to 1.54 years/decade
- Today: Still stuck with the broken system

Humanity solved medical progress in 1883. Congress broke it in 1962.

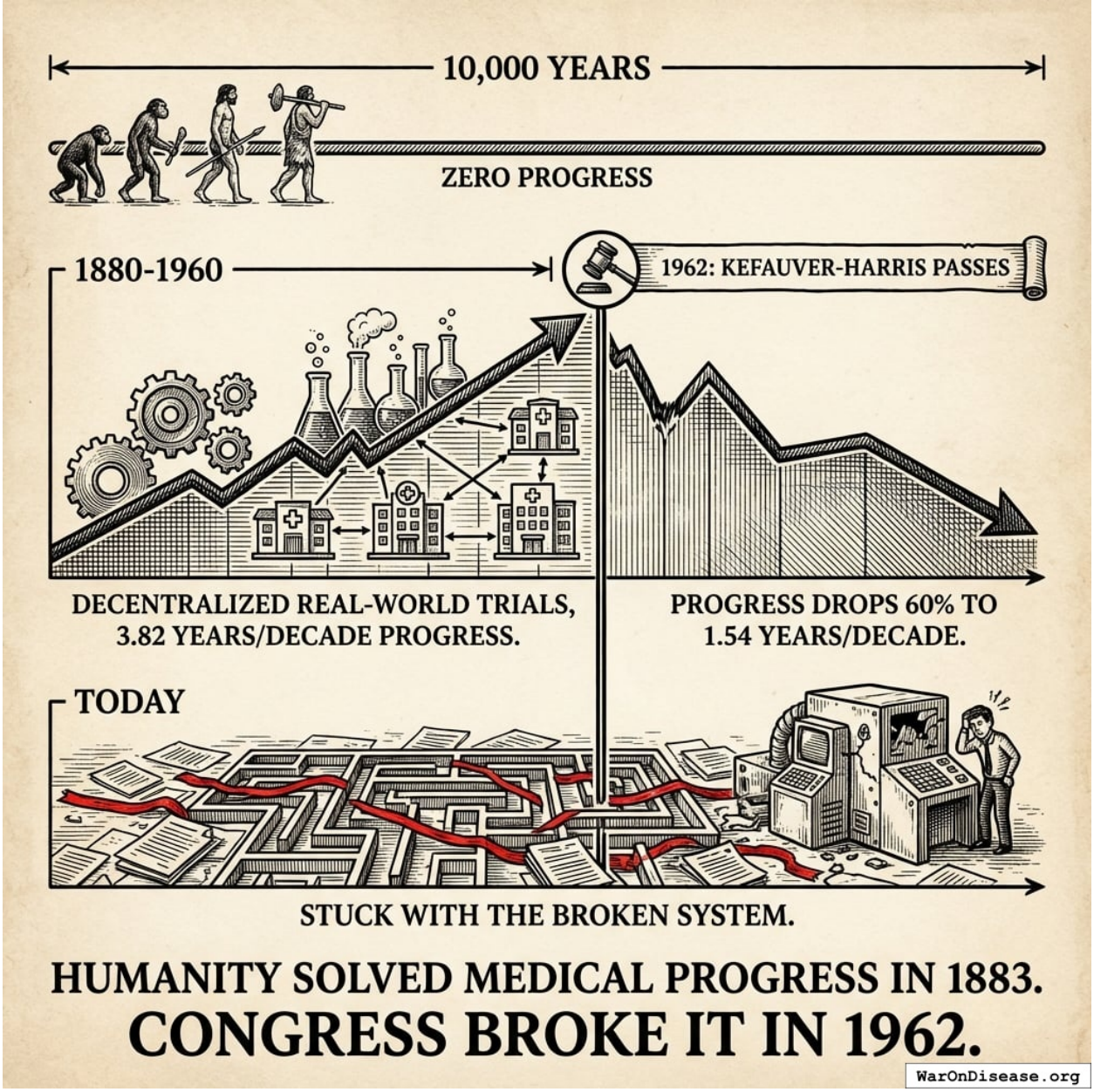
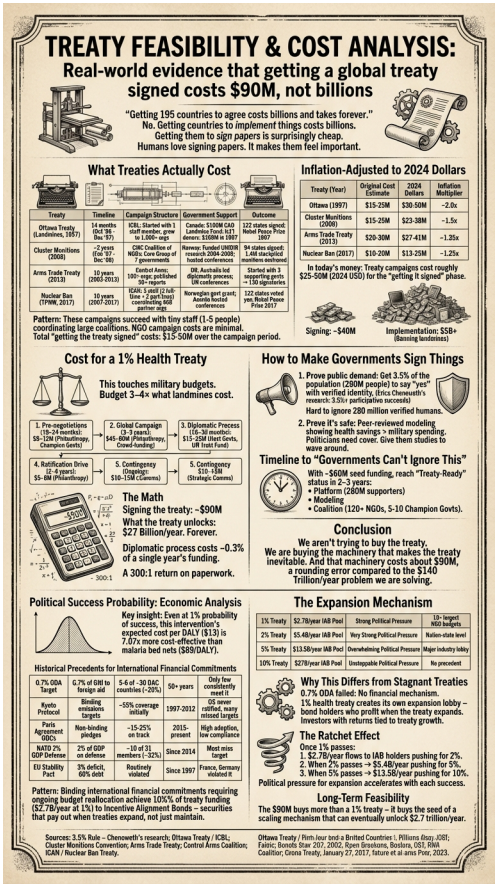


Figure 756: A timeline comparison showing the rate of medical progress, highlighting the sharp decline from 3.82 years of life expectancy gained per decade to 1.54 years following the 1962 Kefauver-Harris Amendment.

Implementation Strategy

Treaty Feasibility & Cost Analysis



"Getting 195 countries to agree costs billions and takes forever."

No. Getting countries to *implement* things costs billions. Getting them to *sign papers* is surprisingly cheap. Humans love signing papers. It makes them feel important.

What Treaties Actually Cost

NGO campaign budgets are rarely disclosed publicly, but we know enough about organizational structure and government funding to establish that treaty campaigns operate on remarkably modest resources:

Treaty	Timeline	Campaign Structure	Government Support	Outcome
Ottawa Treaty[90] (Landmines, 1997)	14 months (Oct '96 - Dec '97)	ICBL[90]: Started with **1 staff member** (Jody Williams), grew to 1,000+ orgs in 60 countries	Canada: $100M CAD Landmine Fund over 10 years; International donors: $169M in 1997 for mine action	122 states signed; Nobel Peace Prize 1997
Cluster Munitions[319] (2008)	~2 years (Feb '07 - Dec '08)	CMC Coalition[319] of NGOs; Core Group of 7 governments	Norway: Funded UNIDIR research project 2004-2008; hosted Oslo conferences	94 states signed; 1.4M stockpiled munitions destroyed
Arms Trade Treaty[320] (2013)	10 years (2003-2013)	Control Arms[321]: 100+ organizations (Oxfam, Amnesty); published 50+ reports	UK, Australia led diplomatic process; UN conferences	Started with 3 supporting govts → 130 signatories
Nuclear Ban[322] (TPNW, 2017)	10 years (2007-2017)	ICAN[322]: **5 staff** (3 full-time + 2 part-time) in Geneva coordinating 468 partner orgs	Norwegian govt grant funded Geneva office (2011); Austria hosted conferences	122 states voted yes; Nobel Peace Prize 2017

Pattern: These campaigns succeed with **tiny staff** (1-5 people) coordinating large coalitions. The NGO campaign costs are minimal - a few million dollars per year at most. Government support for conferences and delegate travel adds another $10-30M. Total "getting the treaty signed" costs: **$15-50M over the campaign period**.

Inflation-Adjusted to 2024 Dollars

Using BLS CPI data:

Treaty (Year)	Original Cost Estimate	2024 Dollars	Inflation Multiplier
Ottawa (1997)	$15-25M	**$30-50M**	~2.0x
Cluster Munitions (2008)	$15-25M	**$23-38M**	~1.5x
Arms Trade Treaty (2013)	$20-30M	**$27-41M**	~1.35x
Nuclear Ban (2017)	$10-20M	**$13-25M**	~1.25x

In today's money: Treaty campaigns cost roughly **$25-50M** (2024 USD) for the "getting it signed" phase.

That's **less than 0.2%** of the implementation cost. Banning landmines: ~$40M in campaigning and diplomacy (2024 dollars), $5B+ to actually remove them[90]. The signing part is the cheap part.

Cost for a 1% Health Treaty

This one touches military budgets - the sacred cow of national sovereignty. Governments get nervous when you suggest moving their explosion money. So budget 3-4× what landmines cost.

Phase	Duration	Estimated Cost	Who Pays
1. Pre-negotiations(Coalition building, expert drafts)	18–24 months	**$8–12M**	Philanthropy (Gates, Open Philanthropy, etc.) + Champion Governments
2. Global Campaign(Platform, 3.5% consent, media)	3–5 years	**$45–80M**	Philanthropy + Crowd-funding
3. Diplomatic Process(Conferences, delegate travel)	18–30 months	**$15–25M**	Host Governments + UN Trust Fund
4. Ratification Drive(Legal reviews, parliamentary aid)	2–4 years	**$5–8M**	Philanthropy
5. Contingency(Opposition management)	Ongoing	**$10–15M**	Strategic Comms / Lobbying

Total: $90–140 Million

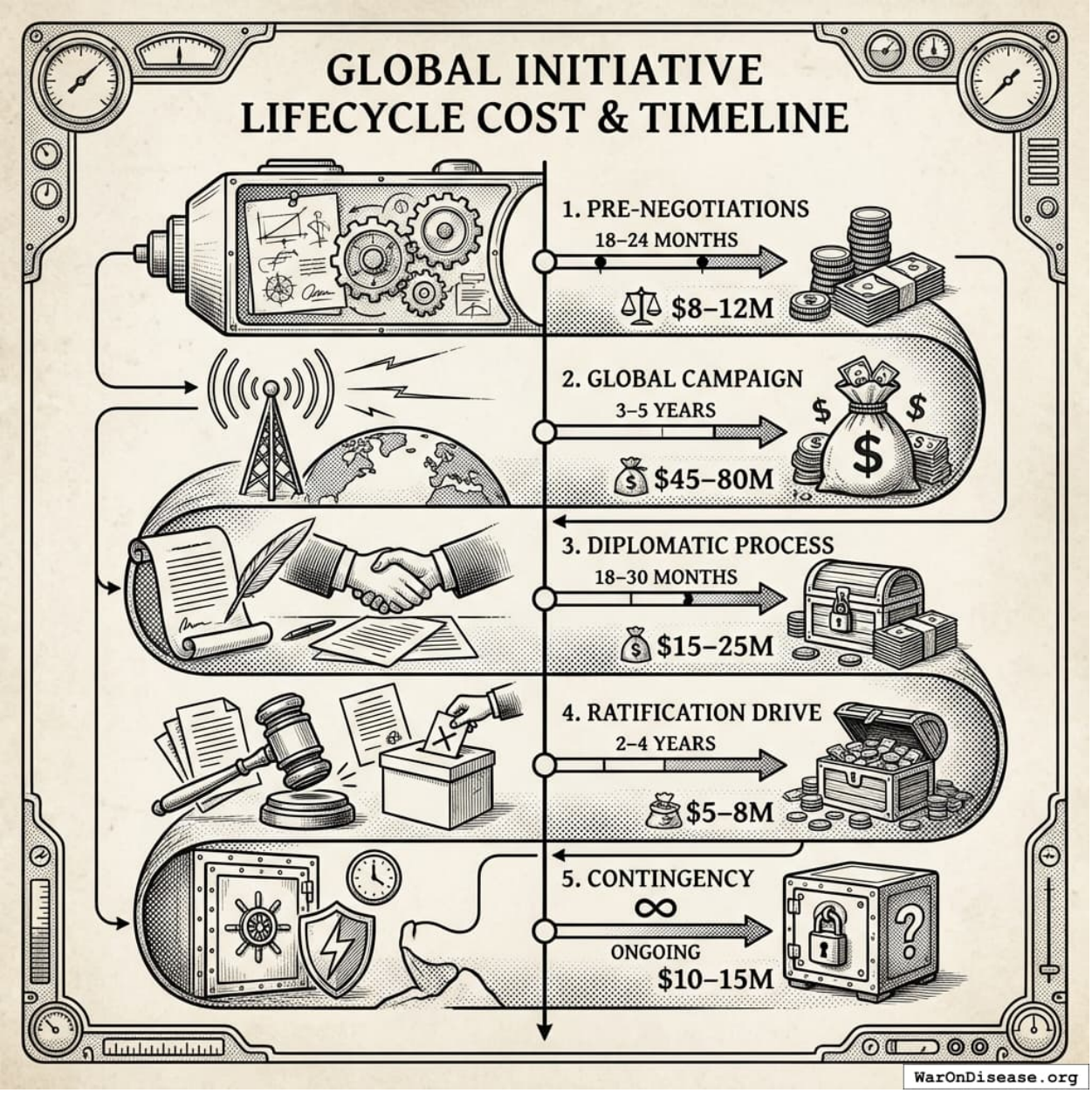


Figure 757: Phased roadmap for the treaty campaign, detailing duration and funding requirements per stage.

The Math

Signing the treaty: ~$90M. What the treaty unlocks: $27.2B/year. Forever.

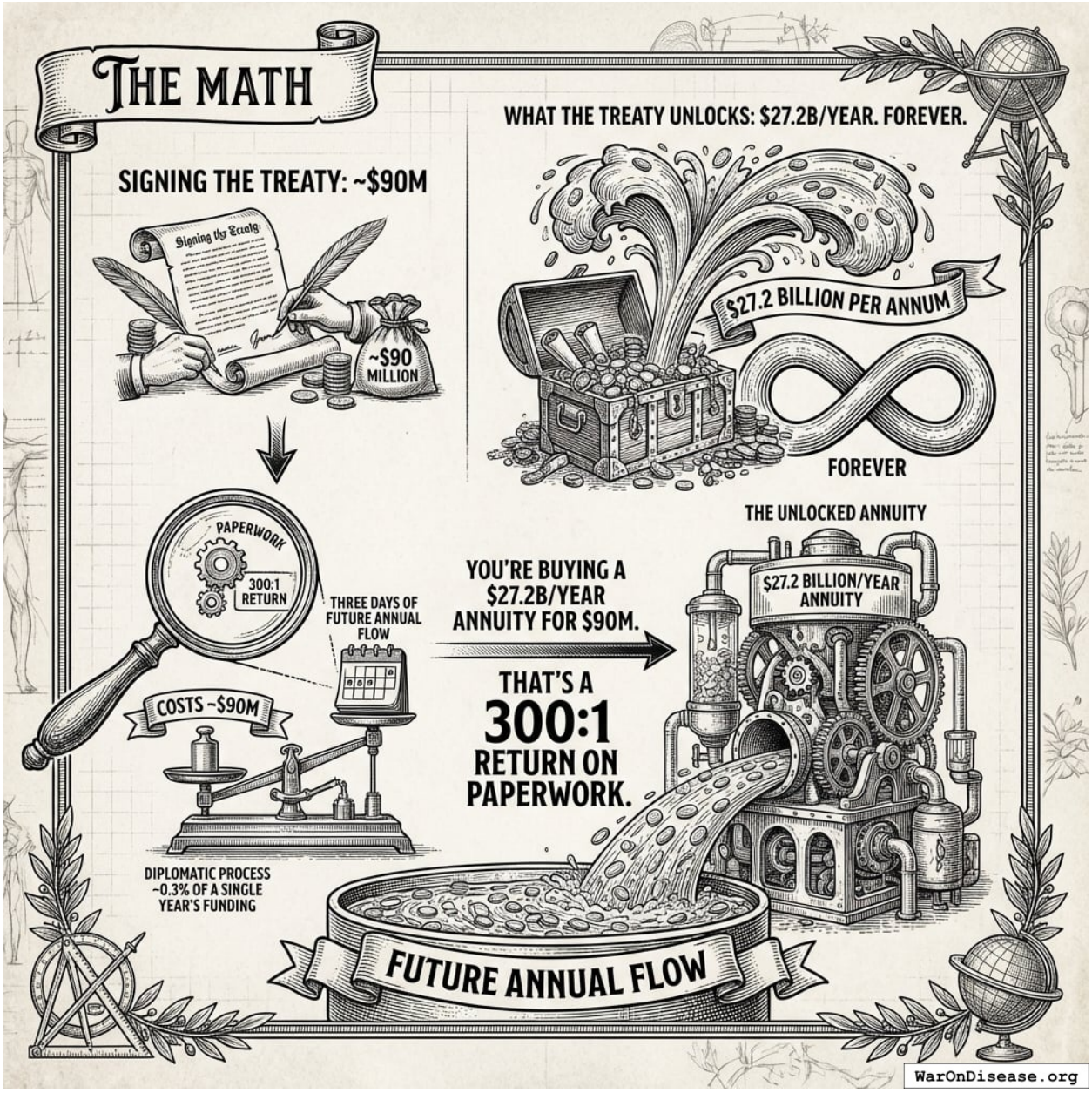


Figure 758: A cost-benefit visualization comparing the 90M one-time treaty cost to the 27.2B recurring annual benefit, highlighting the 300:1 return on investment.

The diplomatic process costs ~0.3% of a single year's funding. Three days of the future annual flow. You're buying a $27.2B/year annuity for $90M. That's a 300:1 return on paperwork.

How to Make Governments Sign Things

Politicians move when they see (a) voters demanding it and (b) political safety. Give them both:

1. **Prove public demand**: Get 3.5% of the population[64] (280M people) to say "yes" with verified identity. Harvard researcher Erica Chenoweth found that every nonviolent campaign[64] with 3.5%+ participation succeeded. That's not activism - that's a mandate. Hard to ignore 280 million verified humans.

2. **Prove it's safe**: Peer-reviewed modeling showing every nation gains more in health savings than it loses in military spending. Politicians need cover. Give them studies to wave around.

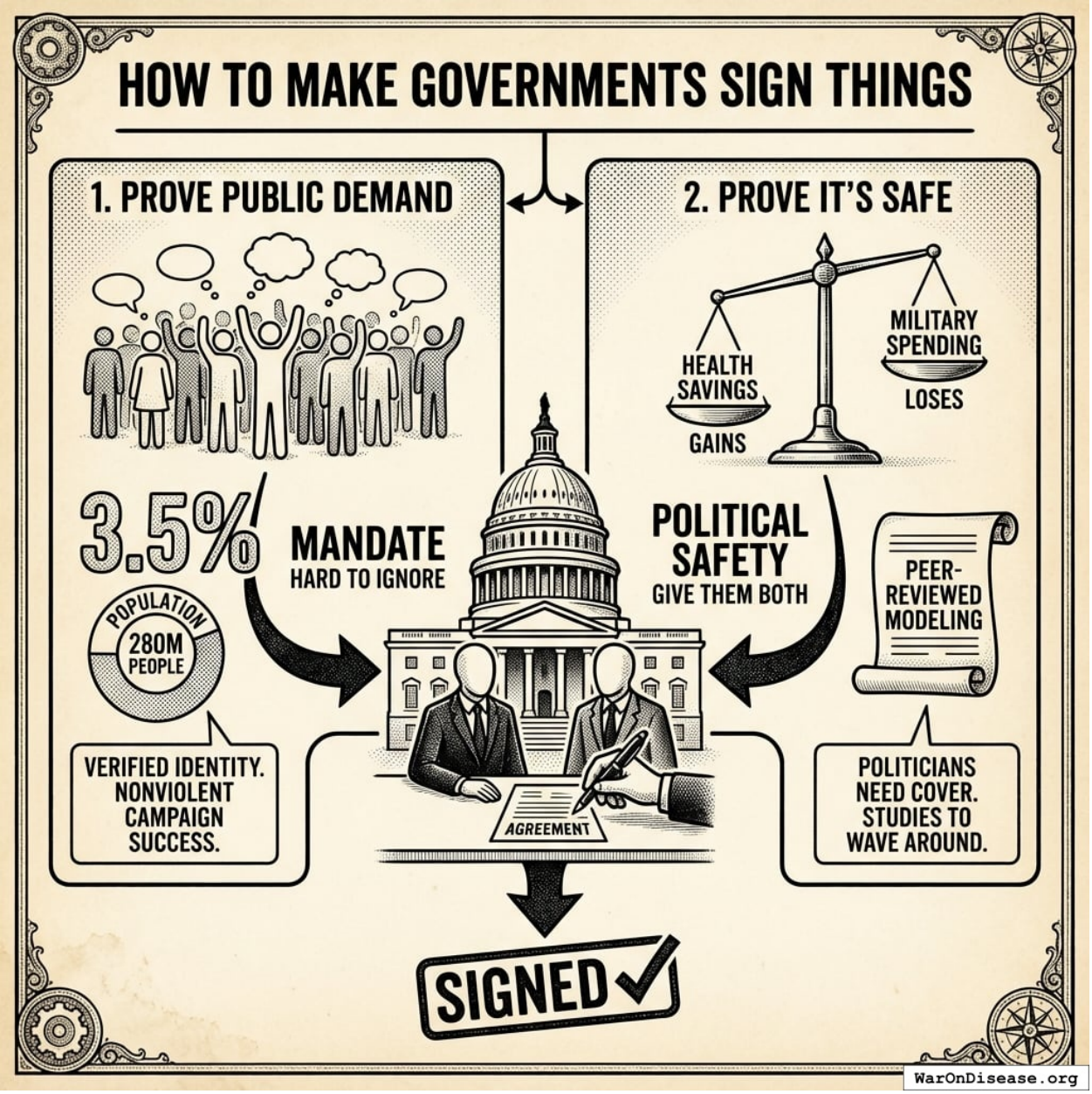


Figure 759: A strategic framework showing how the combination of 3.5 percent public demand and peer-reviewed economic safety models creates the necessary conditions for political mandates.

Timeline to "Governments Can't Ignore This"

With ~$60M in seed funding, we can reach "Treaty-Ready" status in **2–3 years**:

- **Platform:** 280M verified supporters (3.5% threshold)
- **Modeling:** Country-by-country impact analysis
- **Coalition:** 120+ supportive NGOs and 5-10 champion governments

Once these assets exist, formal negotiations become inevitable.

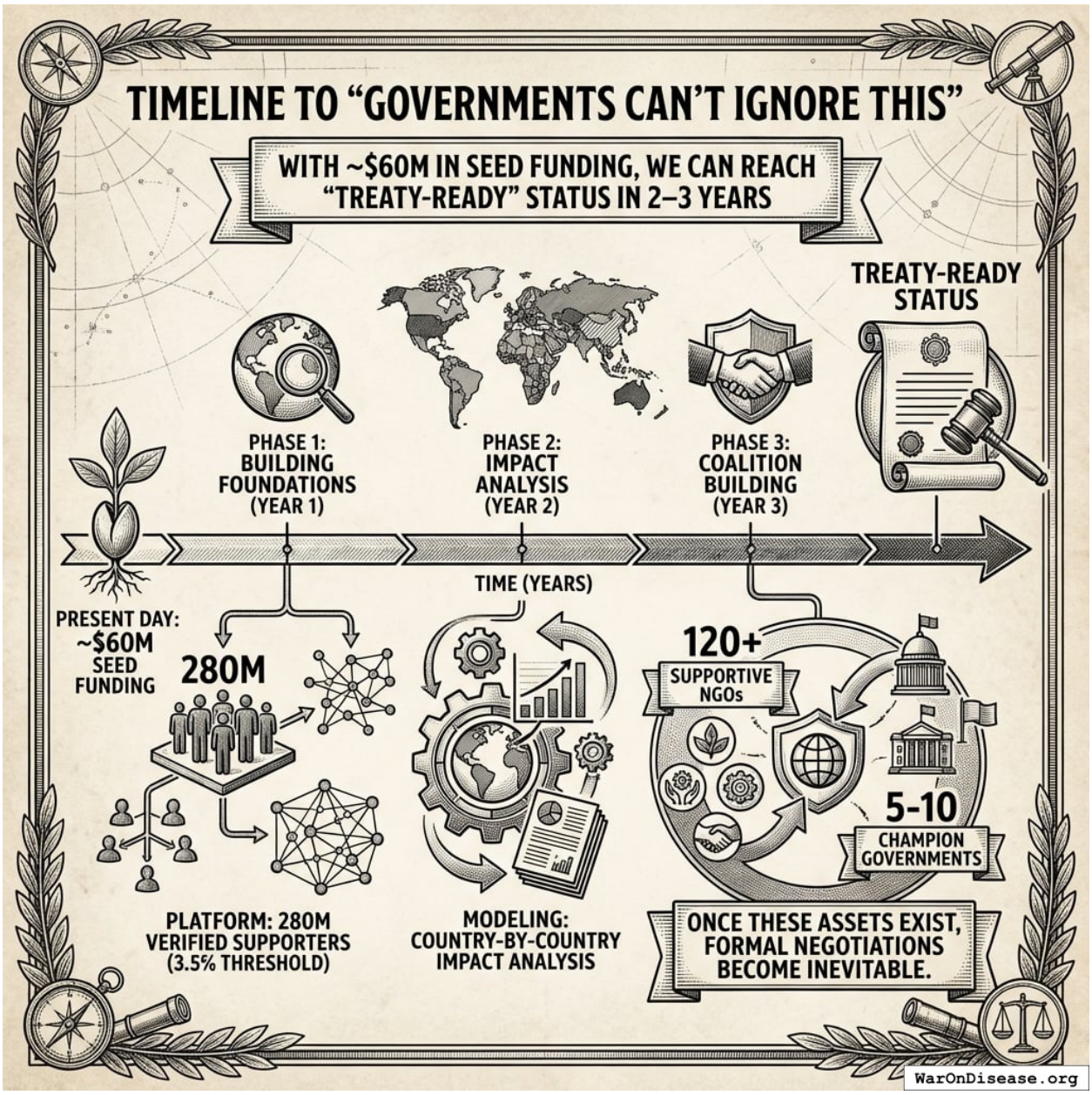


Figure 760: A strategic roadmap showing the 2-3 year progression from seed funding through three core pillars (Platform, Modeling, and Coalition) to achieve Treaty-Ready status and formal negotiations.

Conclusion

We aren't trying to buy the treaty. We are buying the **machinery** that makes the treaty inevitable. And that machinery costs about $90M, a rounding error compared to the $140 Trillion/year problem we are solving.

Political Success Probability: Economic Analysis

For expected value calculations, we need to estimate the probability that a 1% treaty campaign actually succeeds. This section documents the rationale for our **1% (95% CI: 0.1%-10%) central estimate** with a **0.1%-25% confidence interval**.

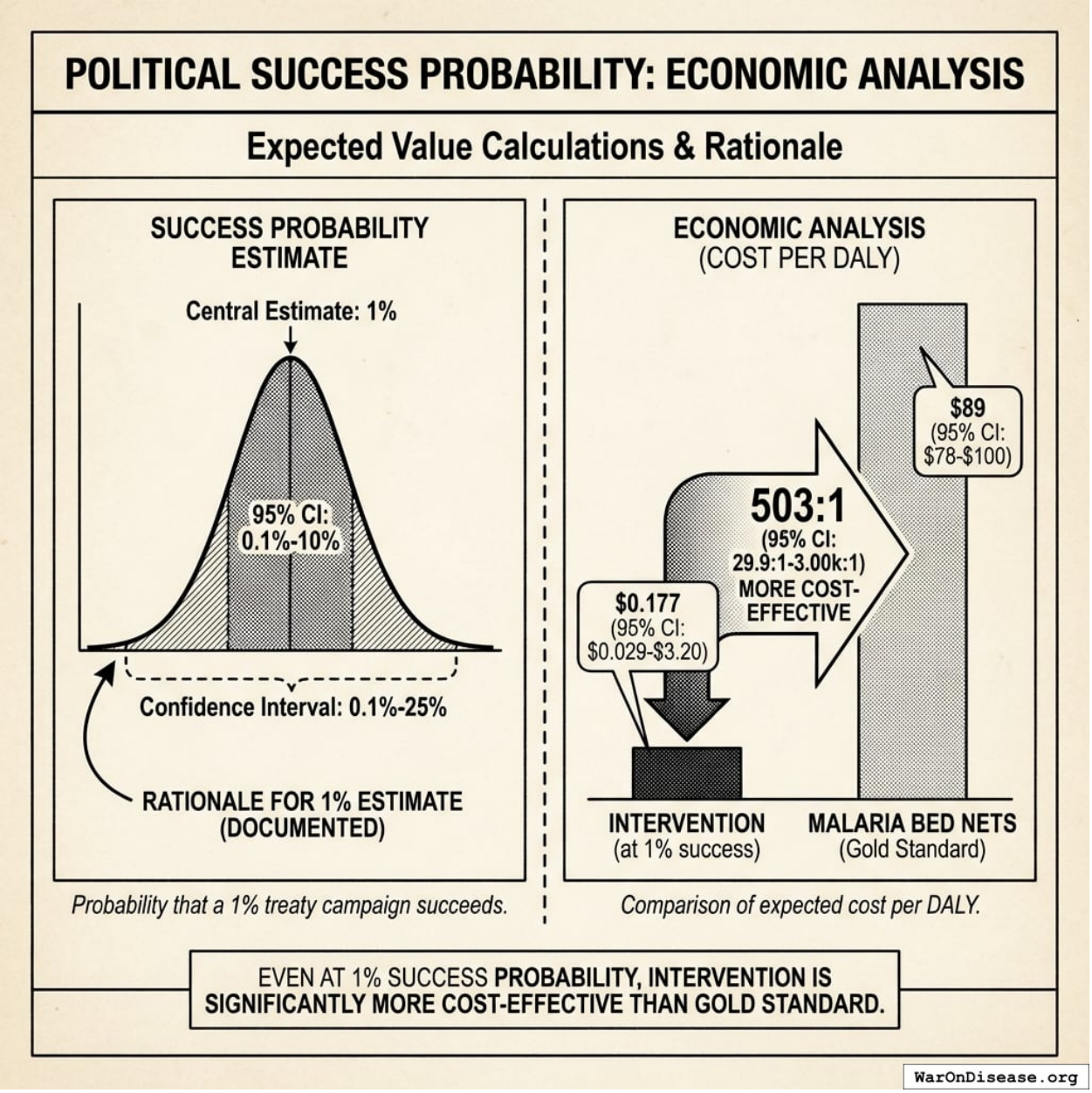


Figure 761: A comparison of cost-effectiveness showing that the proposed intervention is 503 times more cost-effective than malaria bed nets, even with a low 1 percent probability of success.

Even at 1% (95% CI: 0.1%-10%) probability of success, this intervention's expected cost per DALY ($0.177 (95% CI: $0.029-$3.20)) is still **503x (95% CI: 29.9x-3.0kx) more cost-effective** than malaria bed nets ($89 (95% CI: $78-$100)/DALY), the gold standard of global health interventions.

Historical Precedents for International Financial Commitments

Commitment	Target	Actual Compliance	Duration	Notes
0.7% ODA Target	0.7% of GNI to foreign aid	5-6 of ~30 DAC countries (~20%)	50+ years	Only Denmark, Luxembourg, Norway, Sweden, Germany consistently meet it
Kyoto Protocol	Binding emissions targets	~55% coverage initially	1997-2012	US never ratified, Canada withdrew, many missed targets
Paris Agreement NDCs	Non-binding pledges	~15-25% on track	2015-present	High adoption (195 countries) but low compliance
NATO 2% GDP Defense	2% of GDP on defense	~10 of 31 members (~32%)	Since 2014	Even with security pressure, most miss target
EU Stability Pact	3% deficit, 60% debt	Routinely violated	Since 1997	France, Germany themselves violated it

Pattern: Binding international financial commitments requiring ongoing budget reallocation achieve **<25% meaningful compliance**, even with strong institutional pressure.

Why a 1% Treaty is Harder Than Most Precedents

1. **Touches military budgets**: The most politically sensitive area of national sovereignty
2. **Requires ongoing annual allocation**: Not a one-time action like banning a weapon
3. **No immediate security threat**: Unlike NATO spending increases post-Ukraine
4. **Novel mechanism**: Military→health reallocation is unprecedented
5. **Coordination problem**: Benefits require critical mass of participants

Why a 1% Treaty Might Beat the Odds



Figure 762: A conceptual map showing the five strategic drivers (financial, political, legal, moral, and social) that support the adoption of a 1 percent global health treaty.

1. **Self-funding mechanism**: Creates health dividends that exceed the "cost"
2. **Bipartisan appeal**: Health spending polls better than military across political spectrum
3. **Referendum pathway**: Can bypass government resistance through direct democracy
4. **Visible beneficiaries**: 150,000 daily disease deaths creates moral urgency
5. **Network effects**: Each signing country makes the next more likely

Probability Estimates

Based on this analysis, economists would find the following defensible:

Scenario	Probability	Rationale
Pessimistic floor	0.1%	Near-impossible - complete political gridlock, competing global crises
Conservative central	1% (95% CI: 0.1%-10%)	Assumes 99% failure rate - yet still 503x (95% CI: 29.9x-3.0kx) better than bed nets
Optimistic ceiling	25%	Major crisis creates political window; unique self-funding advantage

Our model uses: Central estimate **1% (95% CI: 0.1%-10%)**, 95% CI **[0.1%, 25%]**

This is deliberately conservative. An economist reviewing our expected value calculations should find:

- The 1% (95% CI: 0.1%-10%) central estimate assumes a **99% chance of complete failure**
- The 0.1% floor admits this could be nearly impossible
- Even at 1% (95% CI: 0.1%-10%), expected cost/DALY ($0.177 (95% CI: $0.029-$3.20)) beats bed nets ($89 (95% CI: $78-$100)) by 503x (95% CI: 29.9x-3.0kx)
- The 25% ceiling reflects that partial success or crisis-driven adoption is possible

Expected Value Implications

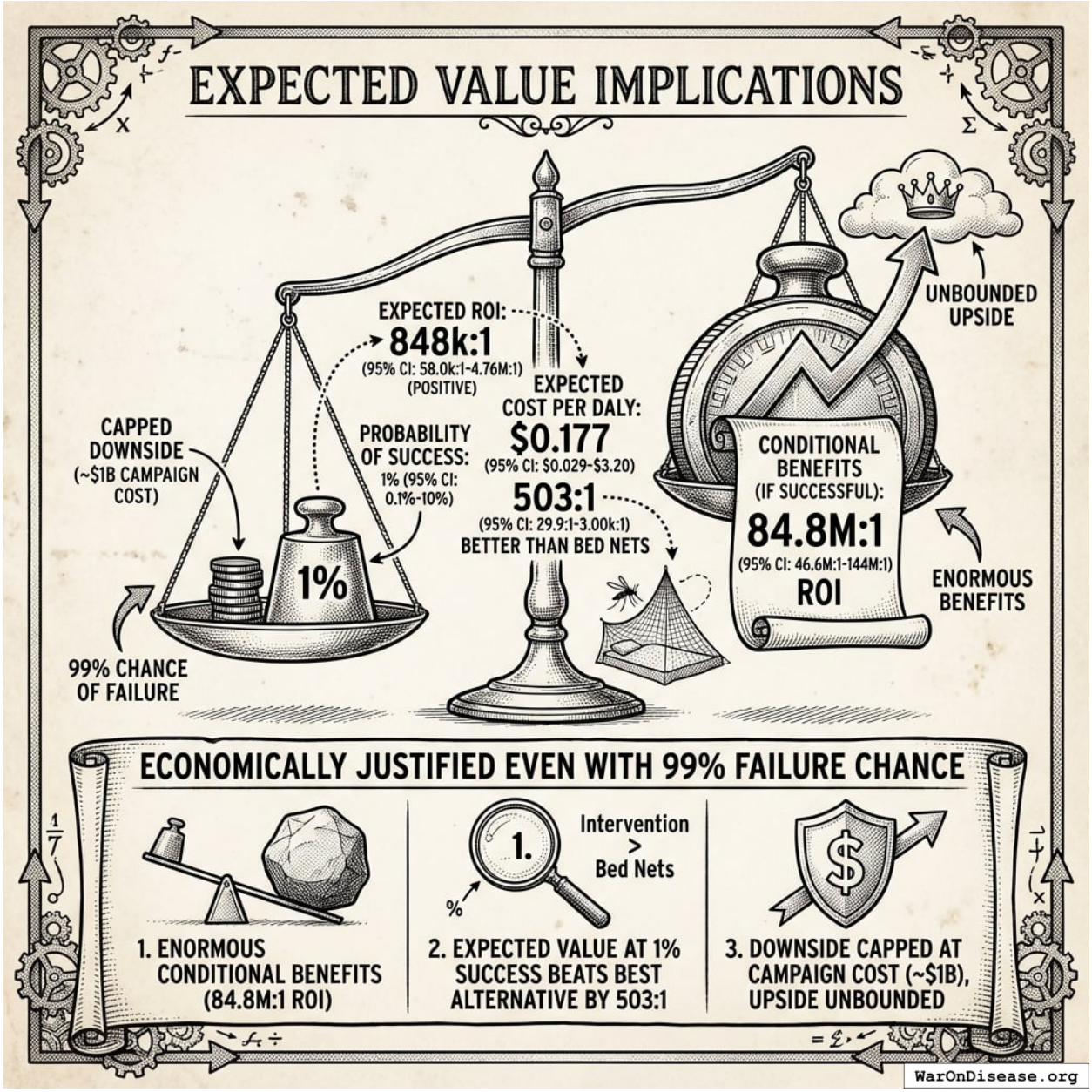


Figure 763: A visualization of the asymmetric risk-reward profile comparing the intervention's expected value at a 1 percent success rate against bed nets, showing the capped downside versus the massive potential ROI.

At 1% (95% CI: 0.1%-10%) probability of success:

- **Expected ROI**: 848k:1 (95% CI: 58.0k:1-4.76M:1) (still positive)
- **Expected cost per DALY**: $0.177 (95% CI: $0.029-$3.20) (still 503x (95% CI: 29.9x-3.0kx) better than bed nets)

The intervention remains economically justified even assuming a 99% chance of failure because: 1. The conditional benefits (84.8M:1 (95% CI: 46.6M:1-144M:1) ROI if successful) are enormous 2. Even the expected value at 1% (95% CI: 0.1%-10%) success beats the best alternative by 503x (95% CI: 29.9x-3.0kx) 3. The

downside is capped at campaign cost (~$1B), while upside is unbounded

Why The Treaty Won't Stop at 1%

Most international commitments stagnate after initial signing. The table above shows 0.7% ODA targets unmet for 50+ years, Kyoto Protocol abandoned, Paris Agreement goals missed. Why expect different from a 1% health treaty?

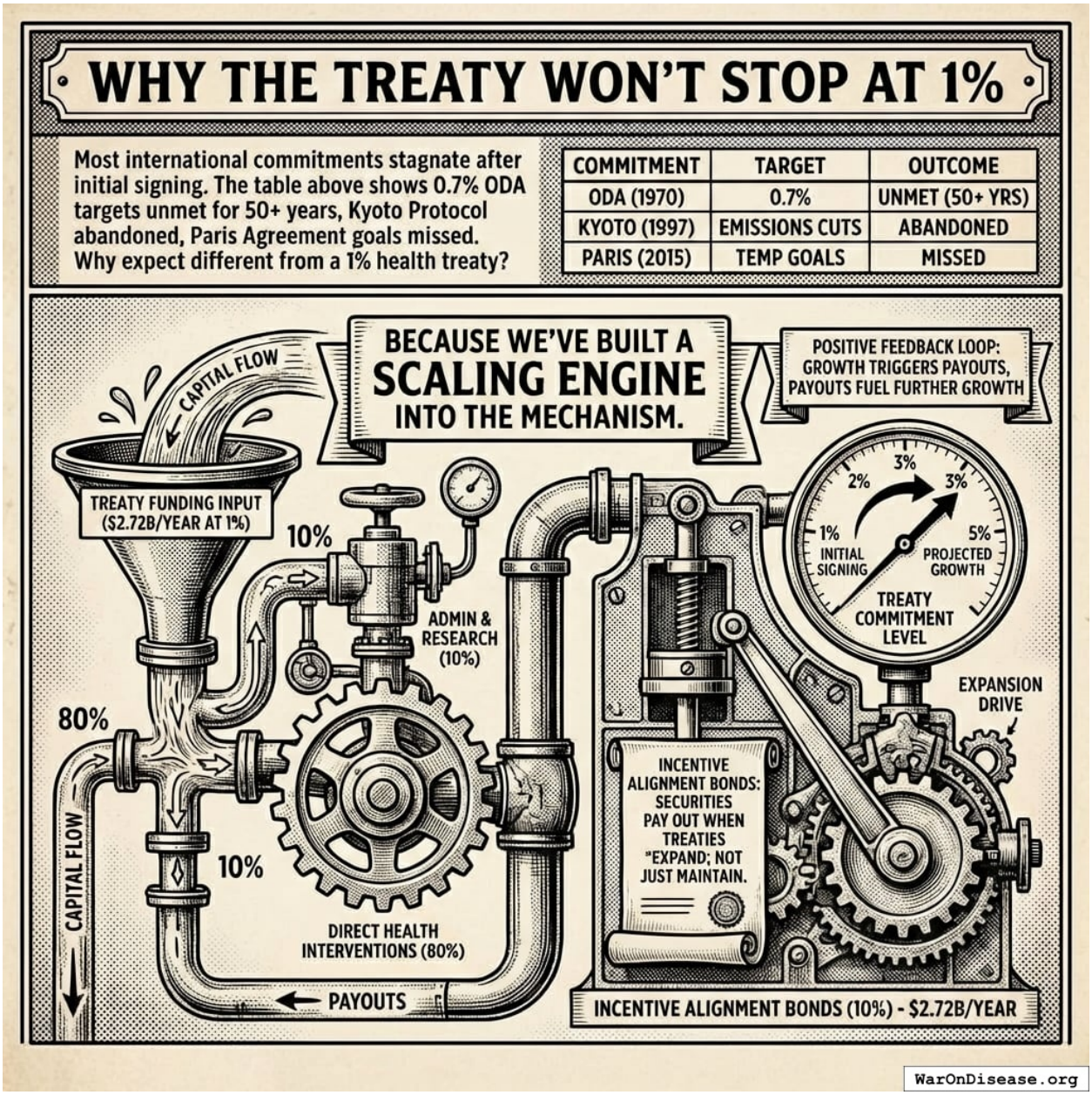


Figure 764: A flowchart illustrating the 'scaling engine' where 10 percent of treaty funding is directed into Incentive Alignment Bonds to drive political incentives and treaty expansion.

Because we've built a scaling engine into the mechanism.

The 80/10/10 funding structure allocates 10% of treaty funding ($2.72B/year at 1%) to Incentive Alignment Bonds - securities that pay out when treaties *expand*, not just maintain.

The Expansion Mechanism

Treaty Level	Annual IAB Pool	Political Pressure	Historical Comparison
1%	$2.7B/year	Strong	10× largest NGO budgets
2%	$5.4B/year	Very strong	Nation-state level
5%	$13.5B/year	Overwhelming	Major industry lobby
10%	$27B/year	Unstoppable	No precedent

Why This Differs from Stagnant Treaties

0.7% ODA failed because there was no financial mechanism incentivizing expansion. The NGOs pushing for compliance have small budgets and compete with each other.

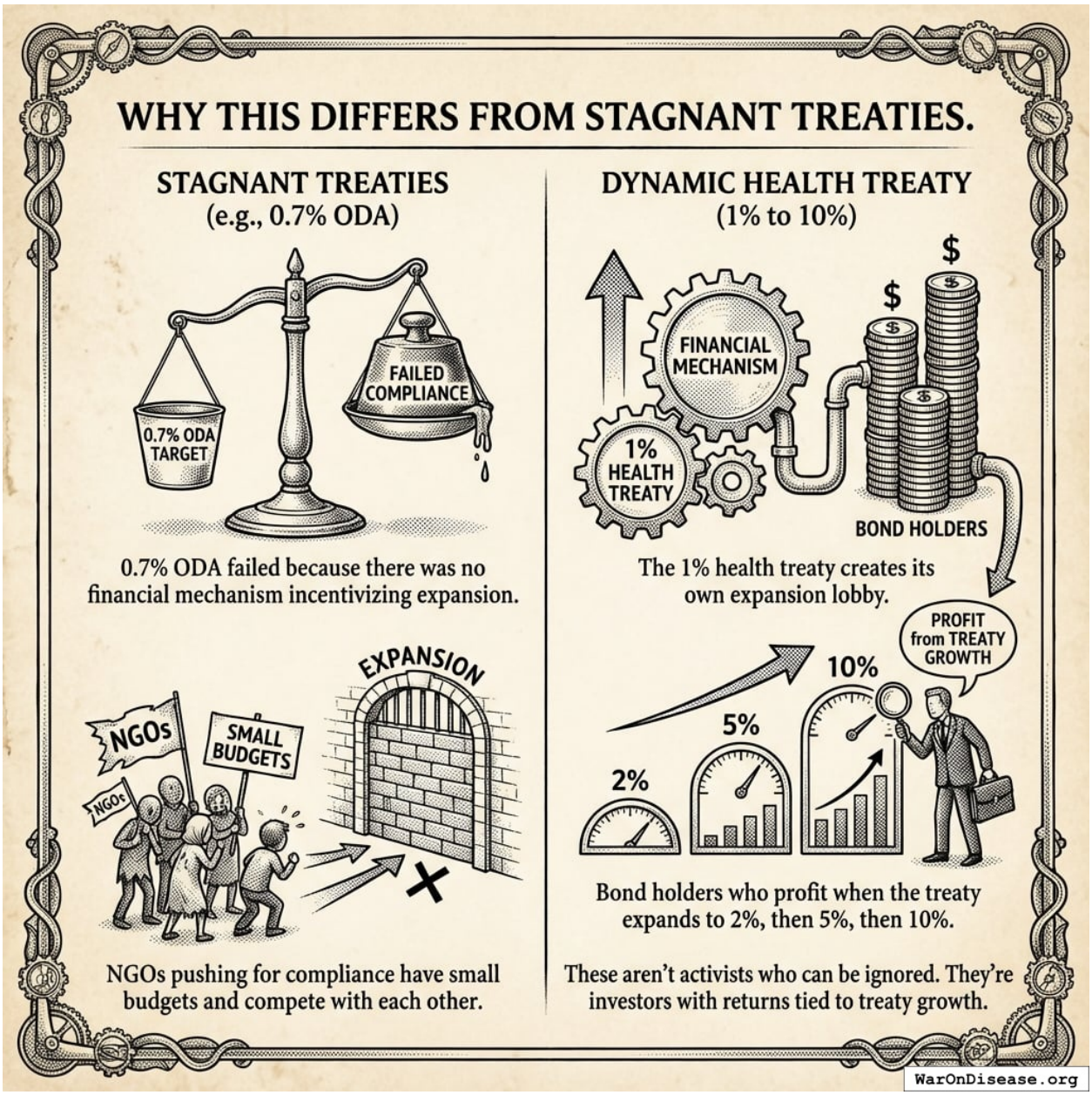


Figure 765: A comparison between the traditional NGO-led treaty model and an investor-driven model where financial incentives create a self-reinforcing growth loop.

The 1% health treaty creates its own expansion lobby - bond holders who profit when the treaty expands to 2%, then 5%, then 10%. These aren't activists who can be ignored. They're investors with returns tied to treaty growth.

The Ratchet Effect

Once 1% passes: 1. **$2.7B/year** flows to IAB holders pushing for 2% 2. When 2% passes → **$5.4B/year** pushing for 5%
3. When 5% passes → **$13.5B/year** pushing for 10% 4. The political pressure for expansion *accelerates* with each success

This is the opposite of typical treaties where political momentum fades after signing. The IAB mechanism ensures that the constituency for expansion *grows* rather than shrinks over time.

Long-Term Feasibility

The $90M campaign gets the 1% treaty signed. But the real question isn't "Can we get 1%?" - it's "Can we eventually redirect most military spending to health?"

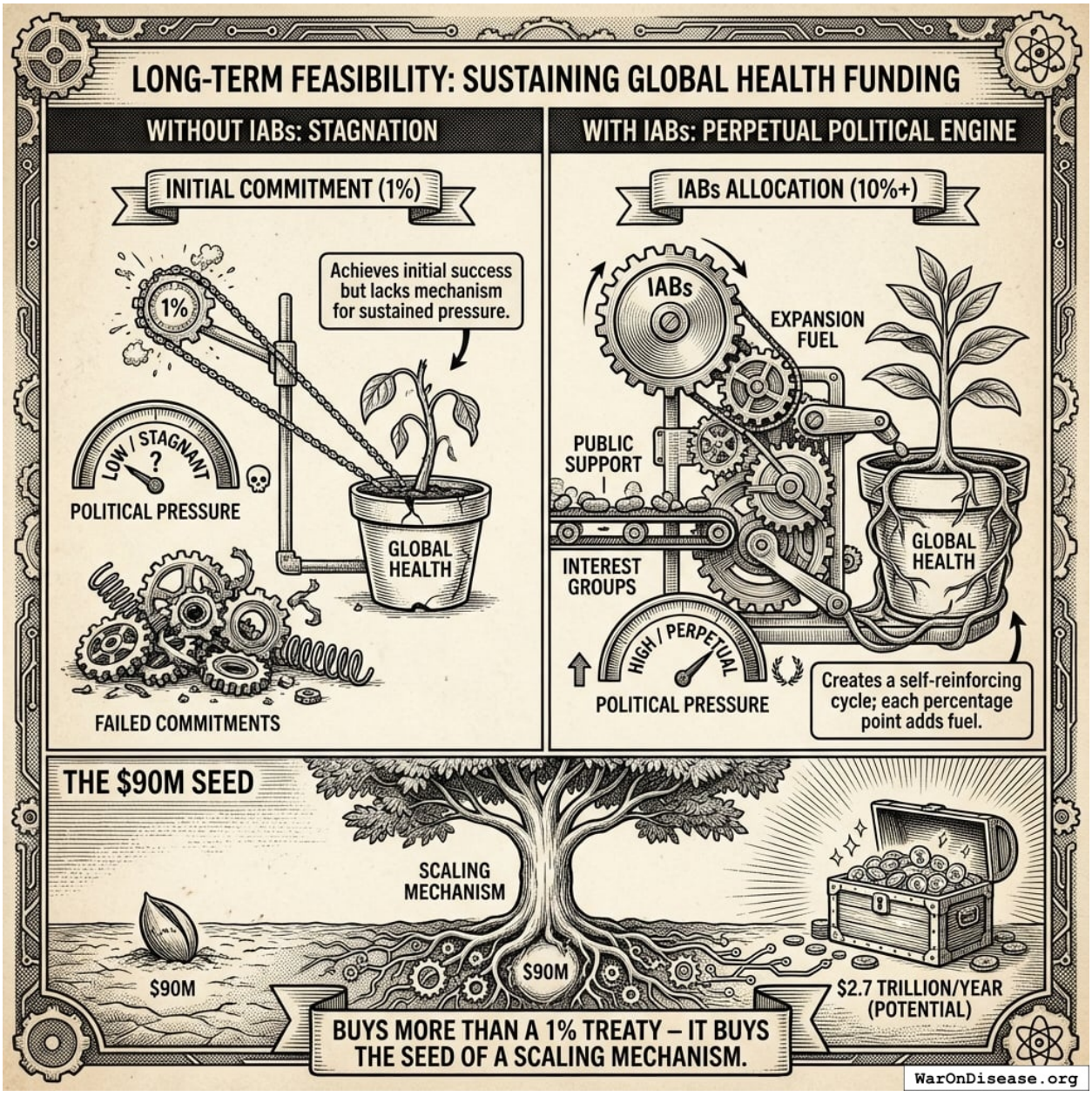


Figure 766: A comparison of two paths: one where the 1 percent treaty stagnates without a scaling mechanism, and another where Incentive Alignment Bonds create a self-reinforcing flywheel that expands funding toward 2.7 trillion.

With IABs: Yes. The 10% allocation creates a perpetual political engine that makes expansion inevitable once the initial treaty passes. Each percentage point adds more fuel to the engine.

Without IABs: Probably not. We'd join the long list of international commitments that achieved initial success but stagnated because there was no mechanism to sustain political pressure for expansion.

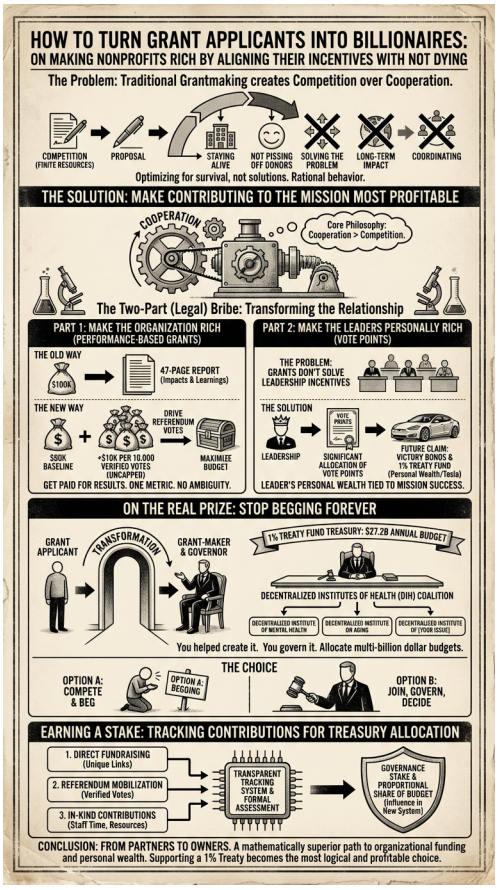
The $90M buys more than a 1% treaty - it buys the seed of a scaling mechanism that can eventually unlock $2.7 trillion/year.

Sources

For detailed citations and source documentation, see References:

- 3.5% Rule[64] - Chenoweth's research on nonviolent movement success thresholds
- Ottawa Treaty / ICBL[90] - Landmines ban campaign (1992-1997)
- Cluster Munitions Convention[319] - Oslo Process (2007-2008)
- Arms Trade Treaty[320] - UN arms trade regulation (2003-2013)
- [321] - NGO campaign structure and tactics
- ICAN / Nuclear Ban Treaty[322] - Nuclear weapons prohibition (2007-2017)

How to Turn Grant Applicants Into Billionaires



Nonprofits spend most of their time begging for money. Foundations spend most of their time deciding who to give money to. Everyone pretends this is efficient.

It's not.

Traditional grantmaking creates a system where nonprofits compete for finite resources. This means they optimize for:

- Writing the best grant proposals
- Staying alive as organizations
- Not pissing off donors

They do not optimize for:

- Actually solving the problem
- Long-term collective impact
- Coordinating with other nonprofits

This is rational behavior. You can't change the world if you go bankrupt first.

The Solution

Stop making them compete. Make cooperation more profitable than competition.

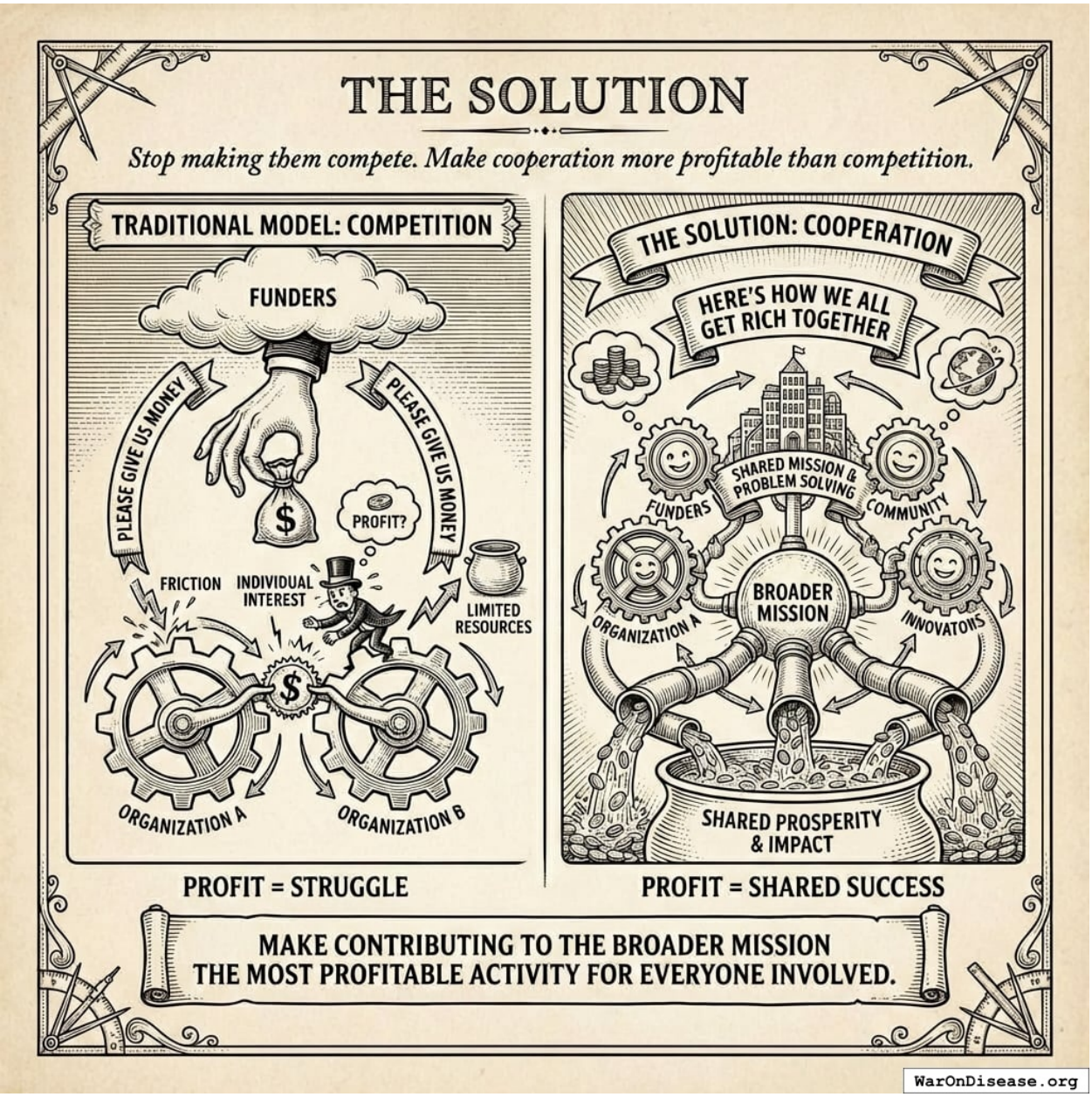


Figure 767: A comparison showing the shift from a traditional zero-sum 'competition' model to a collaborative 'cooperation' model where mission-driven activity generates shared profit.

You offer a model that transforms the traditional "please give us money" relationship into "here's how we all get rich together by solving the problem."

Core philosophy: **Make contributing to the broader mission the most profitable activity for everyone involved.**

On The Two-Part (Legal) Bribe

You offer two incentives that transform nonprofits from "please fund us" to "let's get rich together."

Part 1: Make The Organization Rich (Performance-Based Grants)

The Old Way

"Here's $100K. Hope it helps. Submit a 47-page report in 6 months about impacts and learnings."

The New Way

"Here's $50K baseline to get started. Plus $10K for every 10,000 verified referendum votes you drive. No cap."

The Offer

> "Your organization receives a **baseline partnership grant** for setup costs. You also get a **substantial performance grant** for every **X verified referendum votes** (e.g., 10,000) driven through your unique link. This bonus is uncapped."

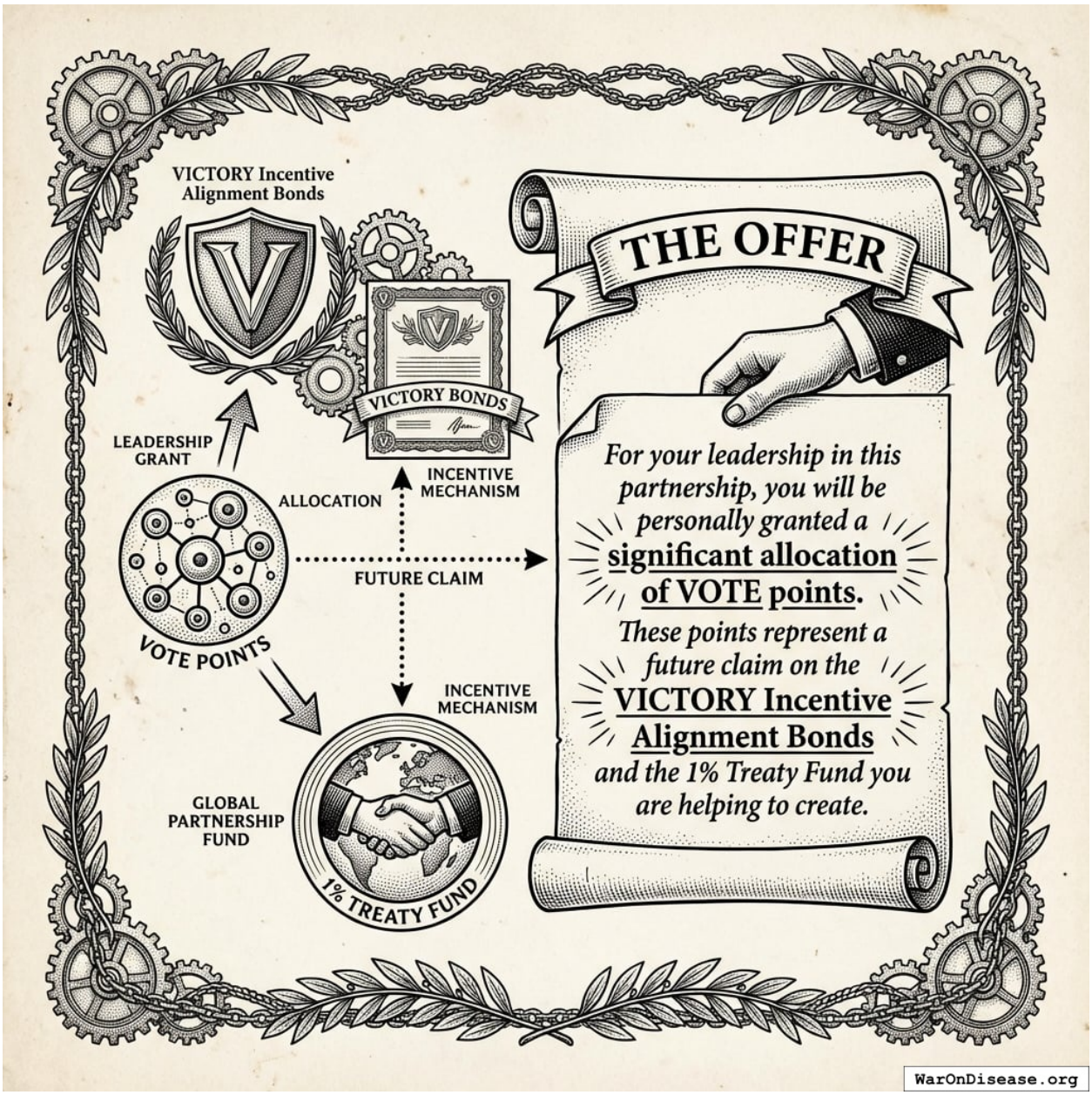


Figure 768: A visual breakdown of the two-part funding model, featuring a fixed baseline grant for initial setup and a scaling performance grant triggered by voter milestones.

What This Does

The nonprofit's most rational path to maximizing their budget is to become your most effective mobilization partner.

Not: Write better grant proposals Not: Compete with other nonprofits Not: Please the foundation

Just: Drive referendum votes.

One metric. No ambiguity. Get paid for results.



Figure 769: Comparison of the traditional fixed-grant model versus the uncapped performance-based model.

Part 2: Make The Leaders Personally Rich (VOTE Points)

The Problem Grants Don't Solve

Even performance grants can get absorbed into general operations. "We hired three more grant writers!"

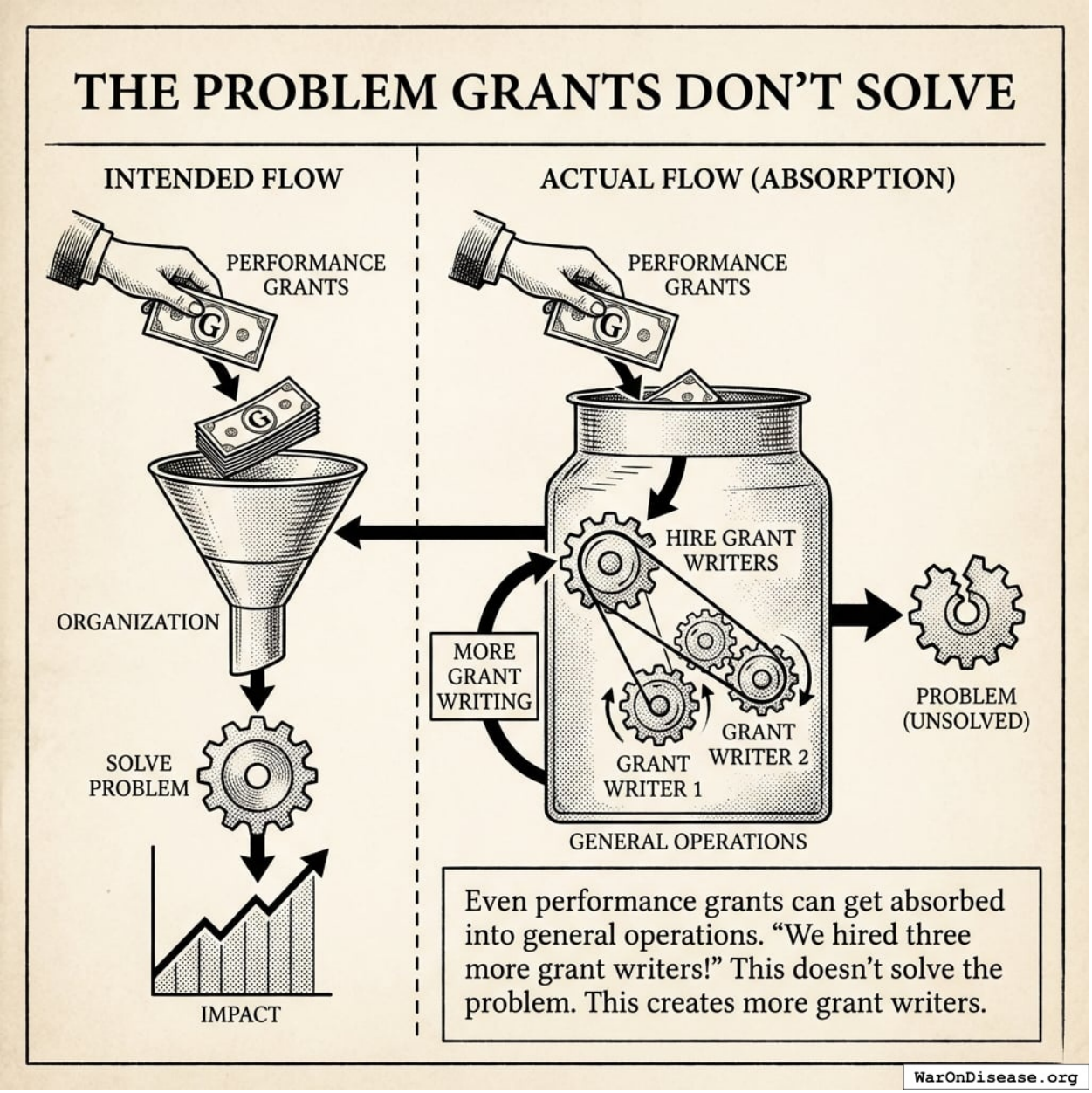


Figure 770: A flowchart showing the circular logic of reinvesting performance grants into administrative overhead, creating a cycle of hiring more grant writers rather than solving core operational issues.

This doesn't solve the problem. This creates more grant writers.

The Solution

Give the leaders personal equity. Make them personally wealthy when the mission succeeds.

The Offer

> "For your leadership in this partnership, you will be personally granted a **significant allocation of VOTE points**. These points represent a future claim on the **VICTORY Incentive Alignment Bonds** and the 1% Treaty Fund you are helping to create."

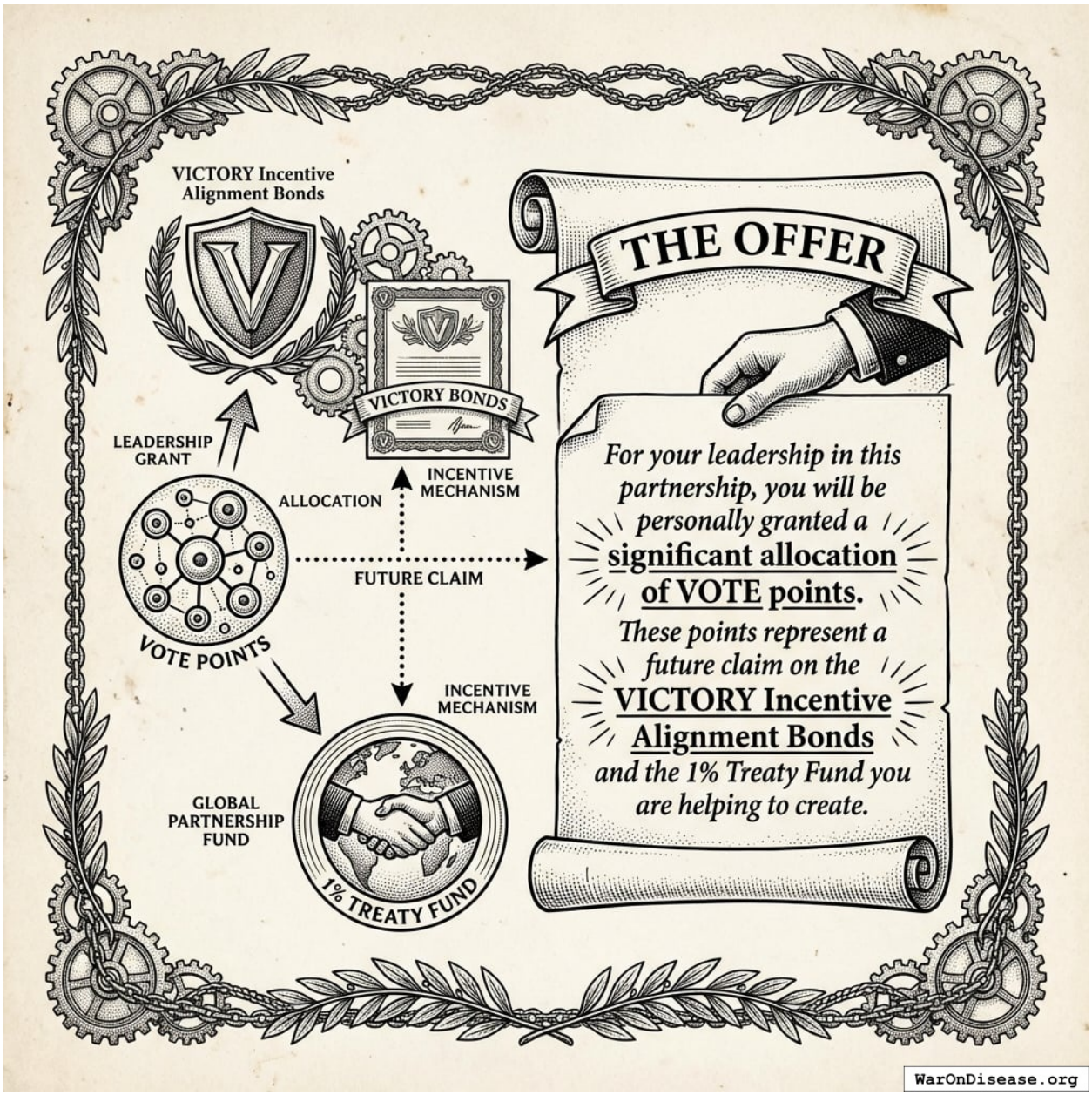


Figure 771: A visual representation showing how leadership contributions earn VOTE points, which serve as future claims on VICTORY Incentive Alignment Bonds and the Treaty Fund.

What This Does

The Executive Director's personal wealth is now tied to treaty success.

They're not just an employee anymore. They own a piece. Their Tesla depends on it.

This creates an incentive to drive for the larger outcome, far beyond their organization's quarterly budget.

On The Real Prize (Or: How to Stop Begging Forever)

The performance grants and VOTE points are just the appetizer.

The real prize is never having to write a grant proposal again.

The Transformation

The model is designed to turn grant applicants into the people who give out grants.

Stop begging. Start deciding.

How It Works

A **1% Treaty Fund** will act as the treasury, receiving a $27.2B annual budget.

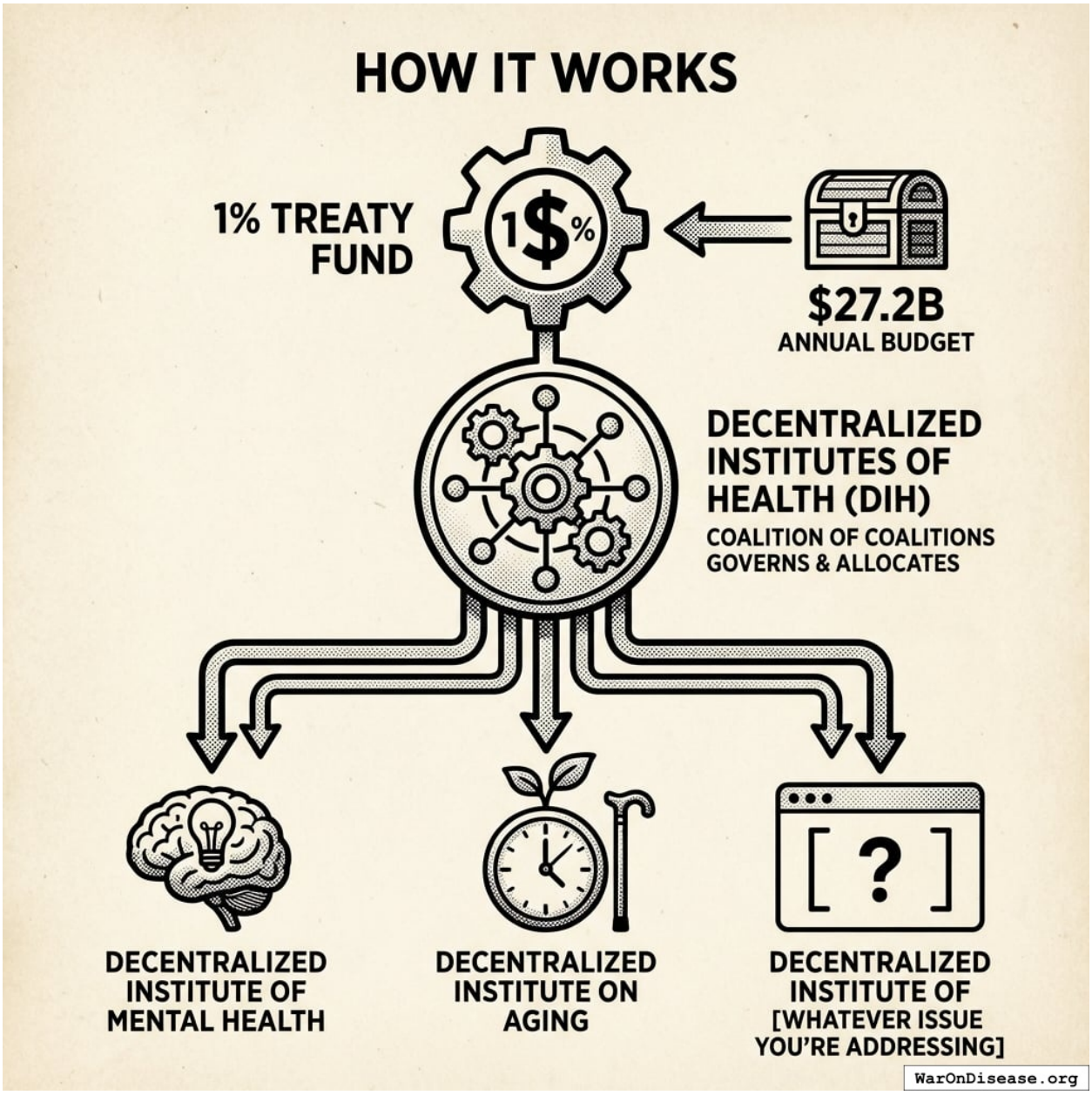


Figure 772: A hierarchical diagram showing the flow of the 27.2B Treaty Fund into the Decentralized Institutes of Health (DIH) and its subsequent allocation to specialized sub-DAOs.

Your **decentralized institutes of health (DIH)** is the "coalition of coalitions" that governs this fund. It allocates multi-billion dollar budgets to specialized sub-DAOs:

- Decentralized Institute of Mental Health
- Decentralized Institute on Aging
- Decentralized Institute of [Whatever Issue You're Addressing]

Who Controls These Billions?

The coalition of nonprofits who made a 1% treaty happen.

You helped create it. You govern it.

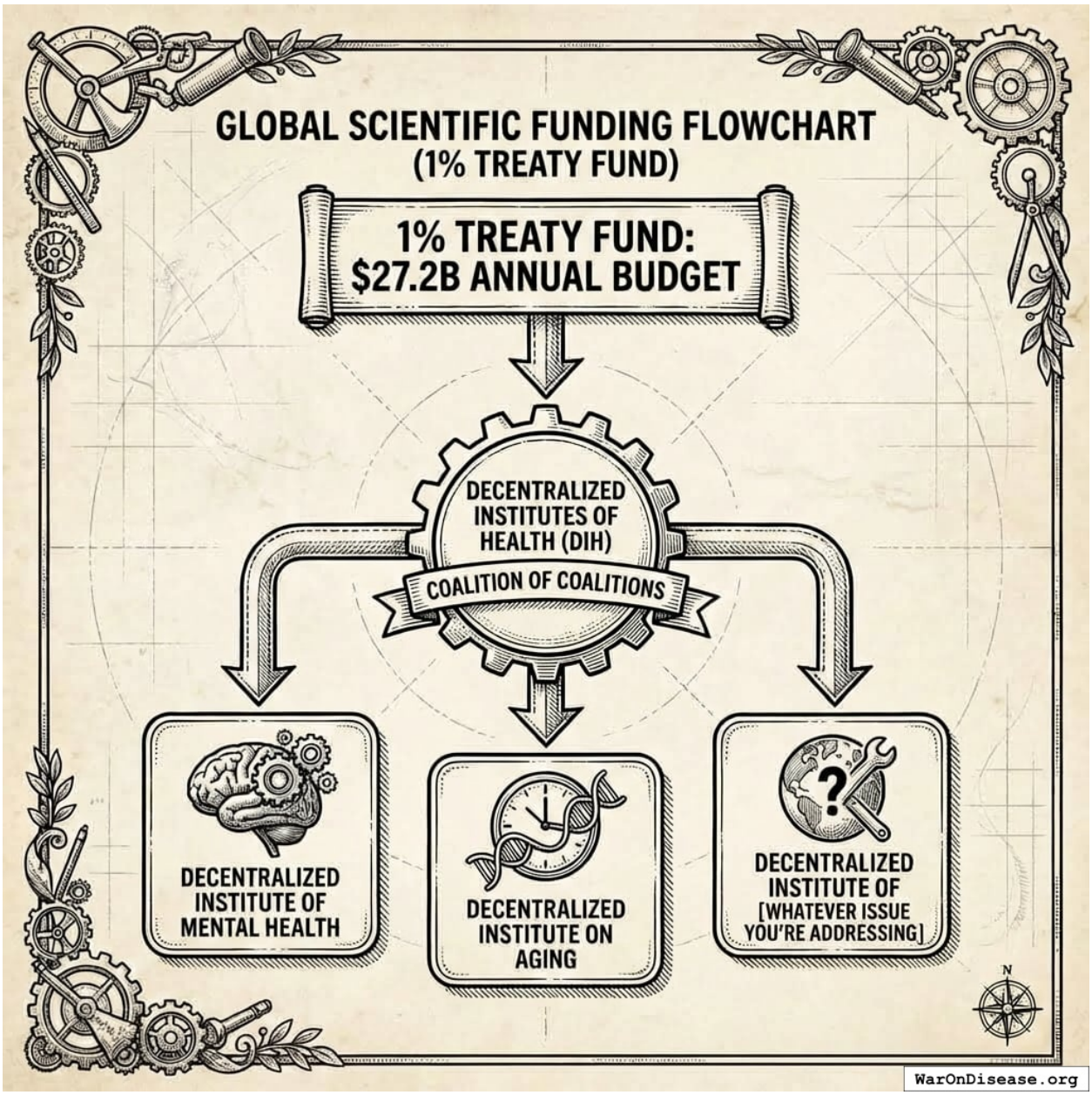


Figure 773: Hierarchy of funds flowing from the Treaty Fund down to specialized sub-institutes.

The Choice

Option A: Keep competing for finite grants. Write proposals forever. Beg foundations. Hope your competitor doesn't write a better proposal.

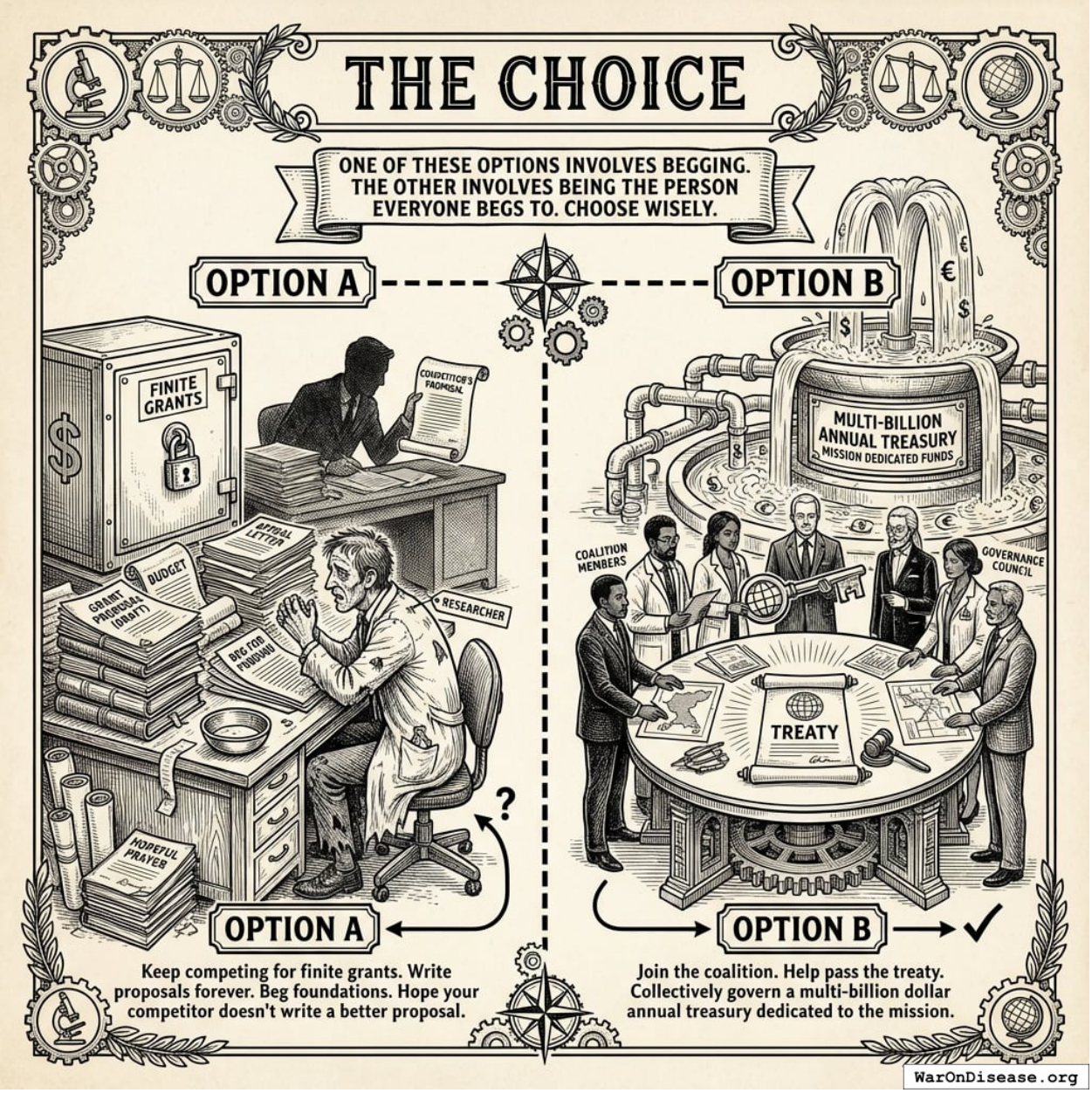


Figure 774: A side-by-side comparison of the traditional grant-seeking model versus a collective governance model, highlighting the shift from resource competition to shared treasury management.

Option B: Join the coalition. Help pass the treaty. Collectively govern a multi-billion dollar annual treasury dedicated to the mission.

One of these options involves begging. The other involves being the person everyone begs to.

Choose wisely.

Earning a Stake: Tracking Contributions for Treasury Allocation

To ensure fairness and reward meaningful contributions, you implement a transparent system to track the value each partner brings to the coalition. A partner's governance stake and proportional share of their sub-Institute's budget will be influenced by their verified contributions during the treaty ratification campaign.

Key performance indicators include:

1. **Direct Fundraising:** The total amount of funding a partner raises for the campaign through their unique referral links.
2. **Referendum Mobilization:** The number of verified referendum votes a partner drives through their network.
3. **In-Kind Contributions:** The value of non-monetary contributions, such as staff time, access to resources, or strategic support, is formally assessed and credited.

This "contribute-to-earn" model ensures that the most dedicated and effective partners are rewarded with the greatest influence in the new, abundance-based system they helped create.

This is the endgame. You are offering your partners the opportunity to stop being grant applicants and become the grant-makers.

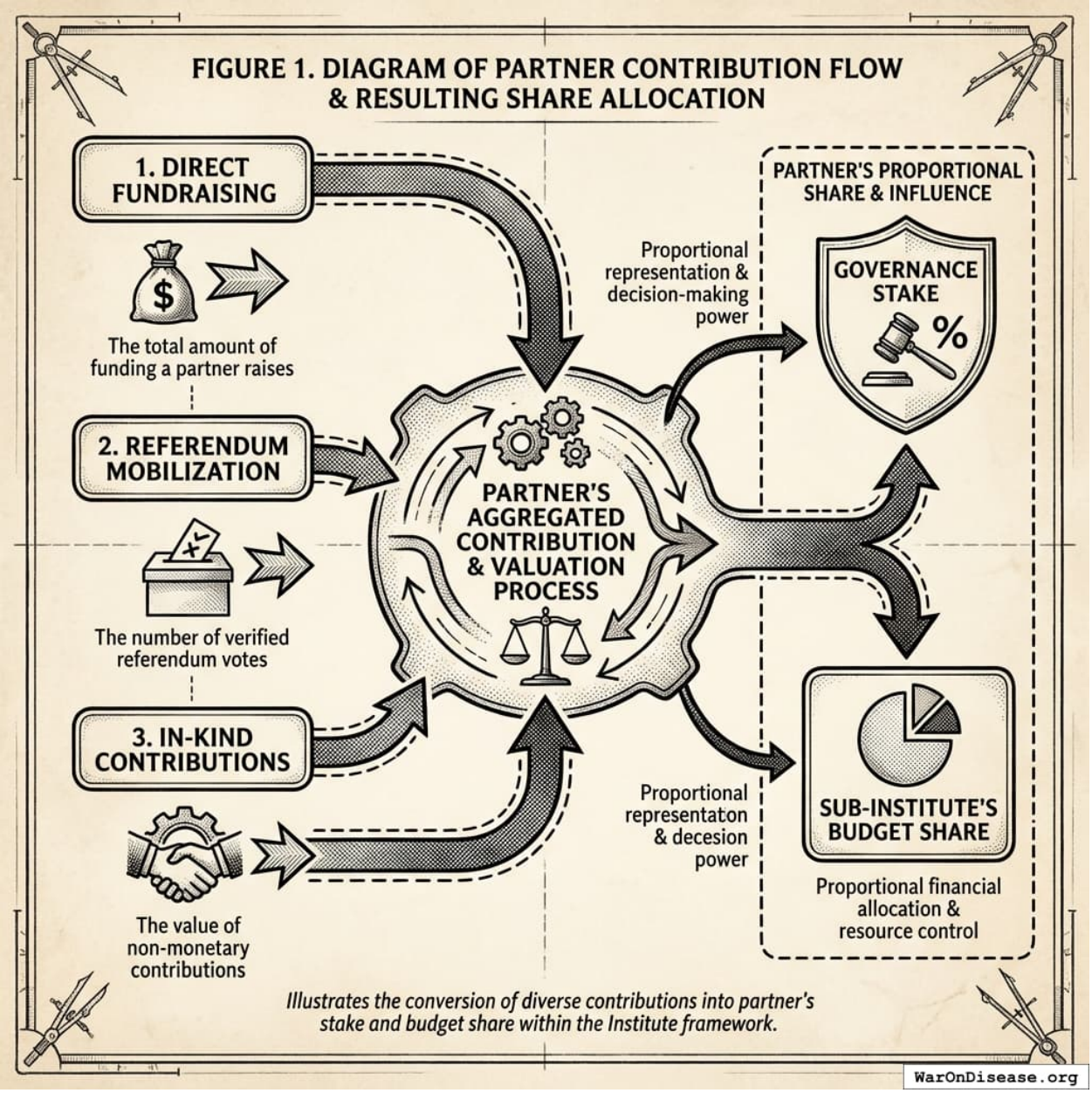


Figure 775: The 'Contribute-to-Earn' mechanism showing how specific inputs determine future governance power and budget allocation.

Conclusion: From Partners to Owners

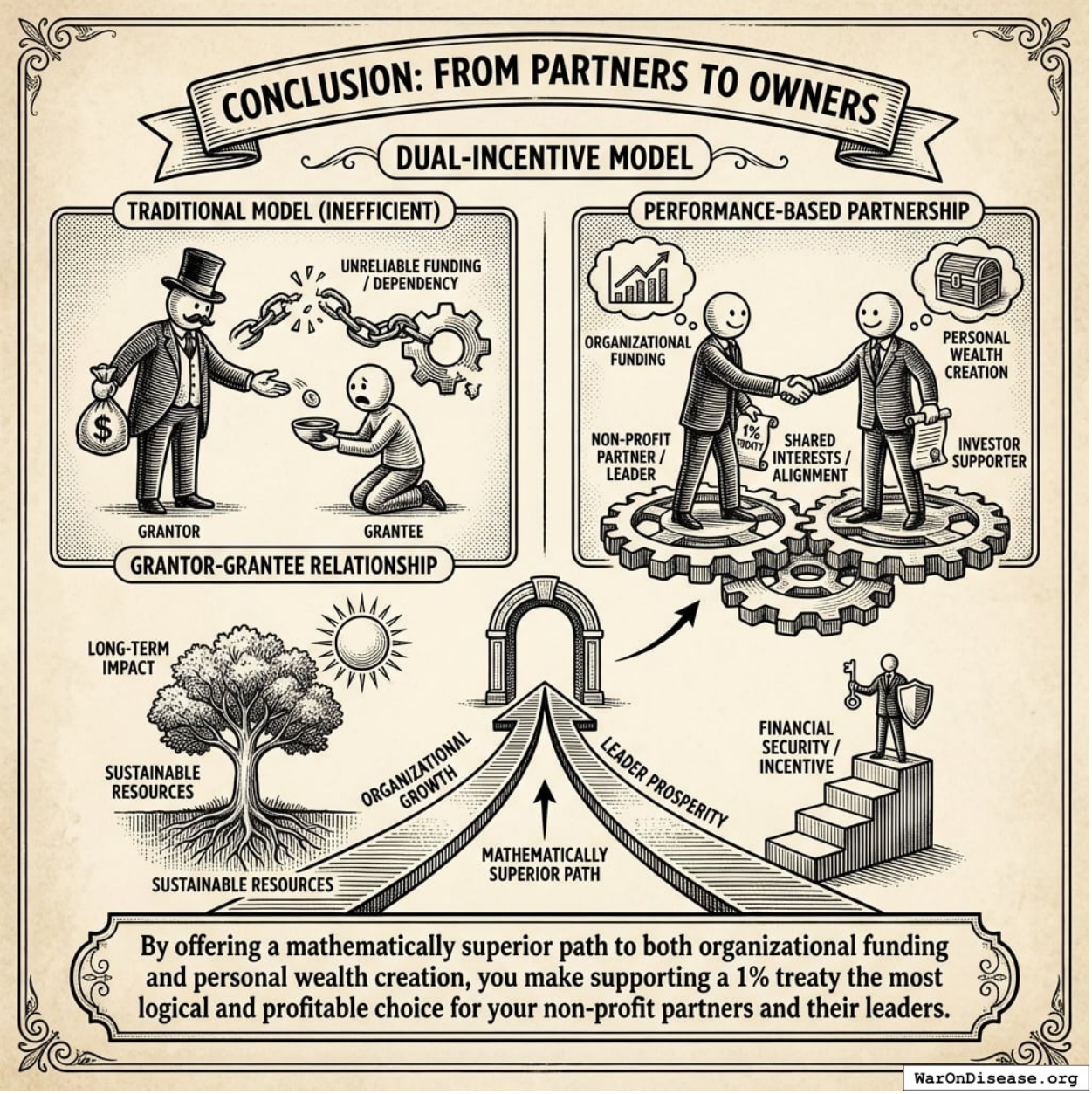
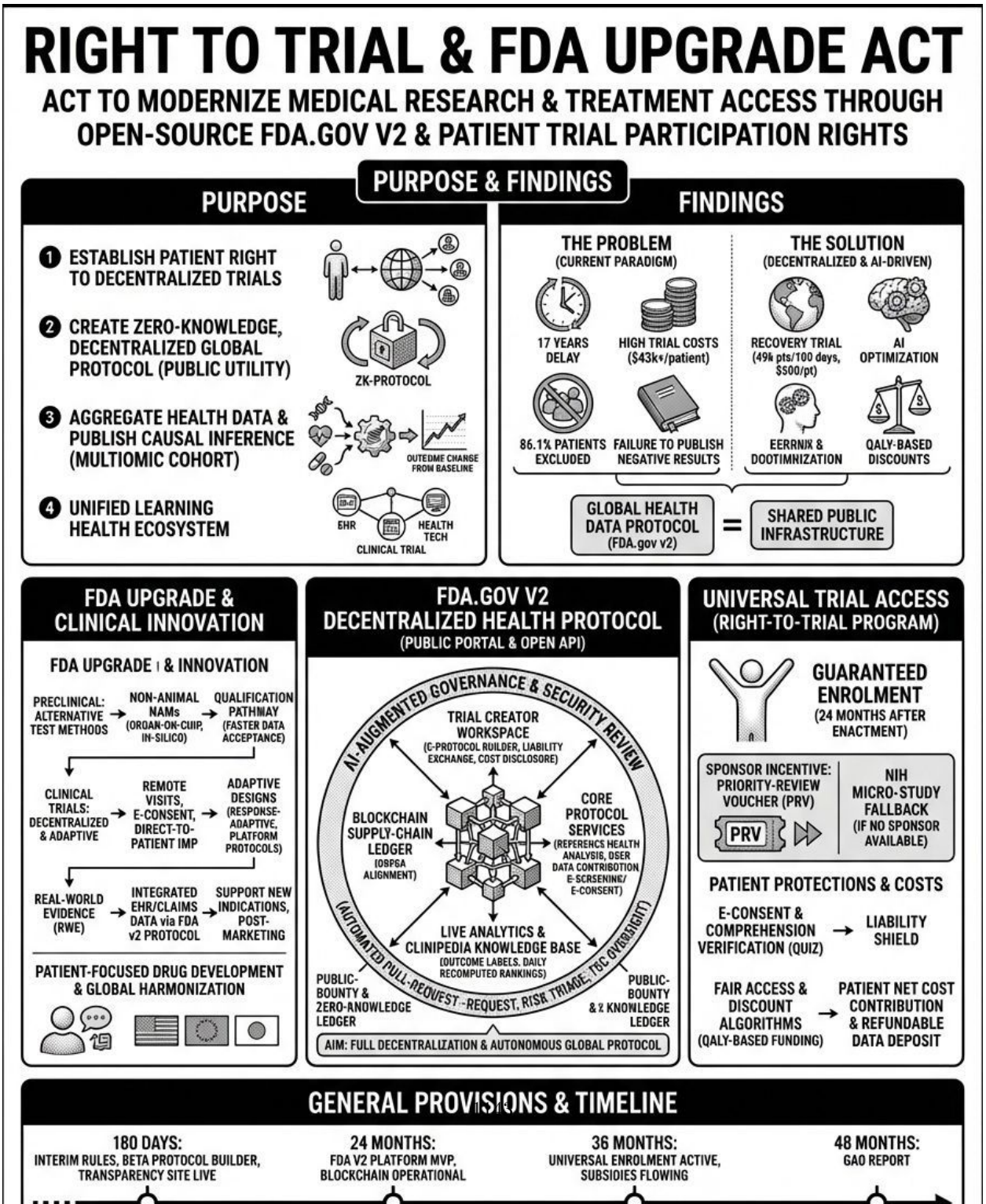


Figure 776: A comparison showing the transformation from a traditional grantor-grantee relationship to a performance-based partnership driven by dual incentives of organizational funding and personal wealth.

This dual-incentive model transforms the traditional, often inefficient, grantor-grantee relationship into a true, performance-based partnership. By offering a mathematically superior path to both organizational funding and personal wealth creation, you make supporting a 1% treaty the most logical and profitable choice for your non-profit partners and their leaders.

Policy & Regulatory

Right to Trial & FDA Upgrade Act



Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I: SHORT TITLE; PURPOSE; FINDINGS; DEFINITIONS

SEC. 101. SHORT TITLE

This Act may be cited as the **"Right-to-Trial and FDA Upgrade Act."**

SEC. 102. PURPOSE

The purpose of this Act is to radically accelerate medical progress by:

(1) Establishing a right for all patients to participate in decentralized clinical trials for any condition.
(2) Creating a **zero-knowledge, decentralized global protocol** to function as a public utility that dramatically reduces the cost and time of pragmatic clinical trials.
(3) Enabling this protocol to **aggregate private, individual, time-series health data** and publish the results of **causal inference analyses** that show the change from baseline for any measured outcome after any intervention, tailored to the multiomic cohort most similar to an individual, while maintaining perfect participant anonymity.
(4) Providing the open, interoperable infrastructure upon which existing and future clinical trial platforms, electronic health record systems, and other health technologies can integrate and build, transforming the system from a series of disconnected data silos into a unified learning health ecosystem.



Figure 777: A conceptual architecture diagram showing how decentralized health data silos integrate into a global protocol to enable anonymous causal inference and a unified learning health ecosystem.

SEC. 103. FINDINGS

Congress finds the following:

1. New, effective treatments take an average of **17 years** to transition from scientific discovery to clinical practice, a delay during which millions of patients suffer without access to potential cures.
2. The current clinical trial paradigm is profoundly inefficient and exclusionary.
   (A) Median per-patient cost for a phase-3 drug trial in 2024 exceeded **$41K (95% CI: $20K-$120K)**[2], inflating drug prices and limiting R-&-D on unpatentable therapies.
   (B) Up to **86.1 percent of patients** are excluded from participating in pivotal trials, limiting the generalizability of findings to real-world patient populations.

(C) The failure to publish negative results leads to redundant research, while rigid trial designs that cannot adapt to incoming data stifle innovation.

(D) The short duration of most trials results in a critical lack of data on the long-term safety and efficacy of an intervention.

3. As a consequence of these systemic failures, an estimated **95 percent of rare diseases lack a single FDA-approved treatment**, and effective therapies for common conditions remain undiscovered or inaccessible.
4. The U.K. **RECOVERY** pragmatic trial enrolled 49,000 patients in 100 days at roughly **$500 (95% CI: $400-$2.50K) per patient**[3], demonstrating that a decentralized, adaptive model can reduce the non-biologic operational costs of clinical research by over **90 percent** through automation of data management, monitoring, and administrative functions.
5. The strategic application of artificial intelligence in healthcare has the potential to yield substantial economic benefits, with studies indicating that AI could reduce national healthcare spending by 5 to 10 percent annually by optimizing diagnostics, personalizing treatments, and improving the efficiency of health-related research and development.
6. Publicly financed, algorithm-targeted discounts on patient-borne trial participation costs, aimed at maximizing **quality-adjusted life-years (QALYs) per federal dollar**, can enhance access to trials, with patients covering the net costs of their participation. Funding for these subsidies can be sourced through innovative mechanisms like a decentralized institutes of health (DIH), a global treasury that raises capital by issuing bonds and is repaid by nations participating in a global health treaty.
7. The establishment of a global health data protocol, analogous to the foundational protocols of the internet, is necessary to securely connect disparate data silos and accelerate medical research worldwide. The **FDA.gov v2 Decentralized Health Protocol** is the United States' initial contribution to this protocol, a public utility providing the secure, open-source backend for a new generation of health innovation. It creates a global public good by enabling research on all promising therapies, especially those without commercial potential that are underserved by private-sector research.
8. A transparent, open-access reference implementation for trial design, recruitment, data submission, and cost disclosure, as envisioned by the FDA.gov v2 Decentralized Health Protocol, creates a competitive environment among trial sponsors, pushing them to adopt cost-efficient methods and transparent pricing for trial operations.
9. Modernizing FDA regulation to embrace real-world evidence, remote monitoring, and validated non-animal test methods accelerates safe cures.
10. The Protocol serves not only the FDA but as shared, open-source public infrastructure for all federal, state, and international health authorities, creating a globally harmonized ecosystem for evidence generation and public health.
11. This Act affirms the fundamental right of every person to access and participate in scientific research relevant to their health. By empowering individuals as both participants and trial creators, the United States can transform its regulatory infrastructure into a global public good, accelerating medical progress for all.
12. The ultimate objective of the Protocol is to evolve into a fully decentralized and autonomous global protocol that is not reliant on the continued stewardship of any single government, corporate entity, or administrative body. The principle of **progressive decentralization** shall guide its development, ensuring that all governance and operational functions are systematically automated or migrated to secure, on-chain, community-ratified processes, thereby creating a resilient and permanently neutral public utility.

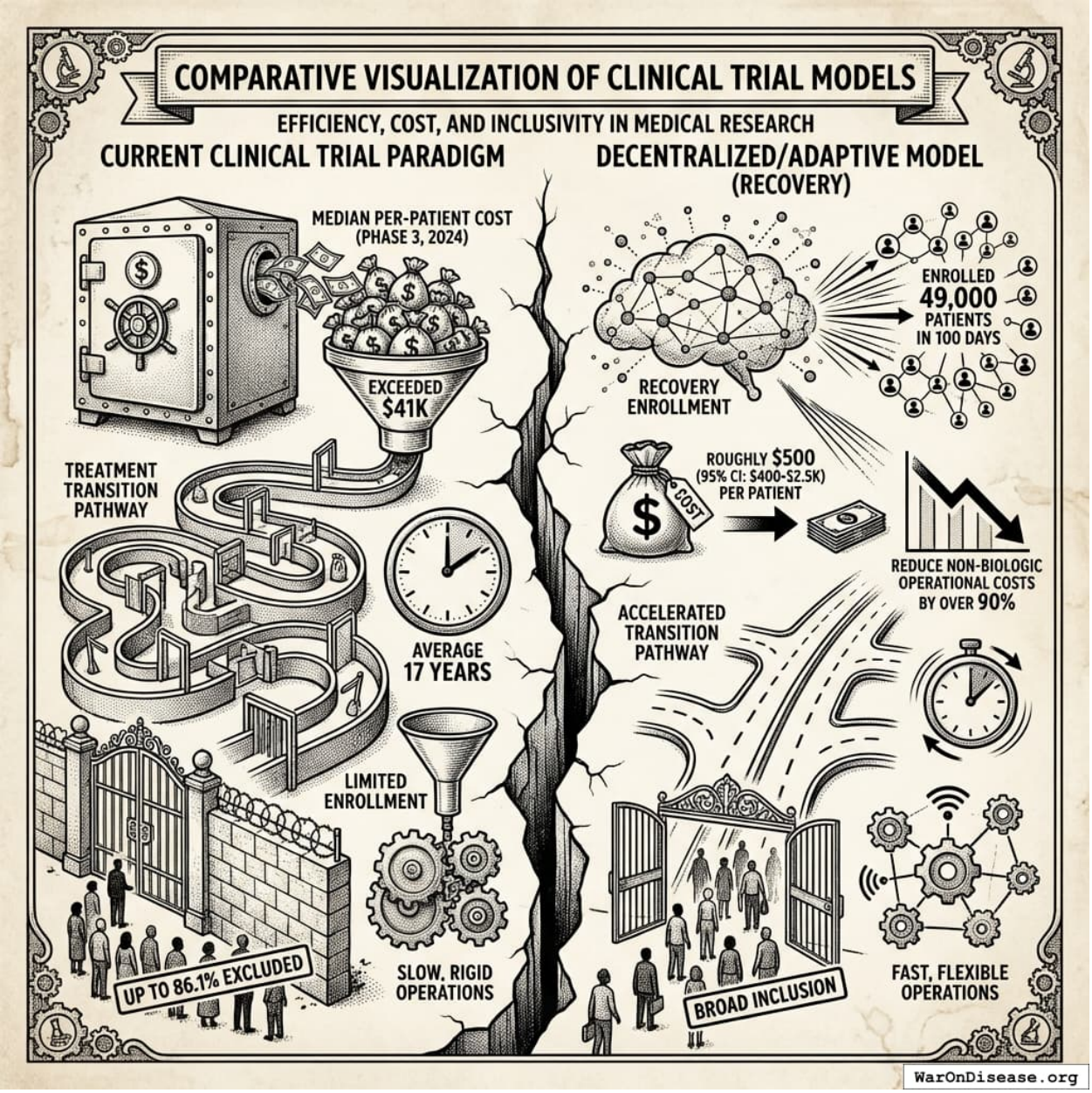


Figure 778: Comparison of the current clinical trial inefficiencies versus the demonstrated cost and speed advantages of decentralized, adaptive models.

SEC. 104. DEFINITIONS

In this Act:

1. **Secretary** means the Secretary of Health and Human Services.
2. **FDA** means the Food and Drug Administration.
3. **NIH** means the National Institutes of Health.
4. **Pragmatic decentralized trial** means a clinical study integrated into routine care, allowing remote or local data capture, minimal exclusions, and broad patient demographics.
5. **QALY** means a quality-adjusted life-year, one year of life in perfect health.
6. **FDA.gov v2 Decentralized Health Protocol (the "Protocol")** means the zero-knowledge,

decentralized global health protocol initiated by the United States. Its primary function is to serve as a secure, open-source public utility that allows for the aggregation of private, individual, time-series health data. The Protocol is designed to perform and publish causal inference analyses on this aggregated data, showing the change from baseline for any measured outcome after any intervention for the multiomic cohort most similar to a given individual, while preserving the anonymity of all data contributors through cryptographic methods. It is intended to function as a Backend-as-a-Service (BaaS) with which existing and future health platforms (EHRs, clinical trial systems, etc.) can integrate, and is intended for eventual governance by a global, decentralized, on-chain community.

7. **Trial Creator** means any individual, institution, or entity that designs, initiates, and manages a trial using the Protocol's reference implementation.

(b) **State Laws.** No State or political subdivision may regulate the practice of tele-medicine, pharmacy licensure, or shipment of investigational products in a manner that prevents implementation of this Act. Specifically, a licensed prescriber participating under an FDA-approved protocol shall be deemed licensed in all States for the limited purpose of providing investigational treatment under this Act, and pharmacies dispensing or shipping such products pursuant to the blockchain supply-chain ledger are exempt from conflicting State prohibitions.

(c) **DSCSA Alignment.** All investigational shipments must utilize the protocol's ledger to satisfy DSCSA traceability.

(d) **Shared Public Health Infrastructure.** The Protocol shall be designed and maintained as extensible infrastructure available for use by all federal, state, and international health agencies. The Secretary shall establish a process to facilitate the adoption of the Protocol by other agencies for their own regulatory, research, and public health surveillance purposes, thereby creating a shared, globally harmonized ecosystem for evidence generation.

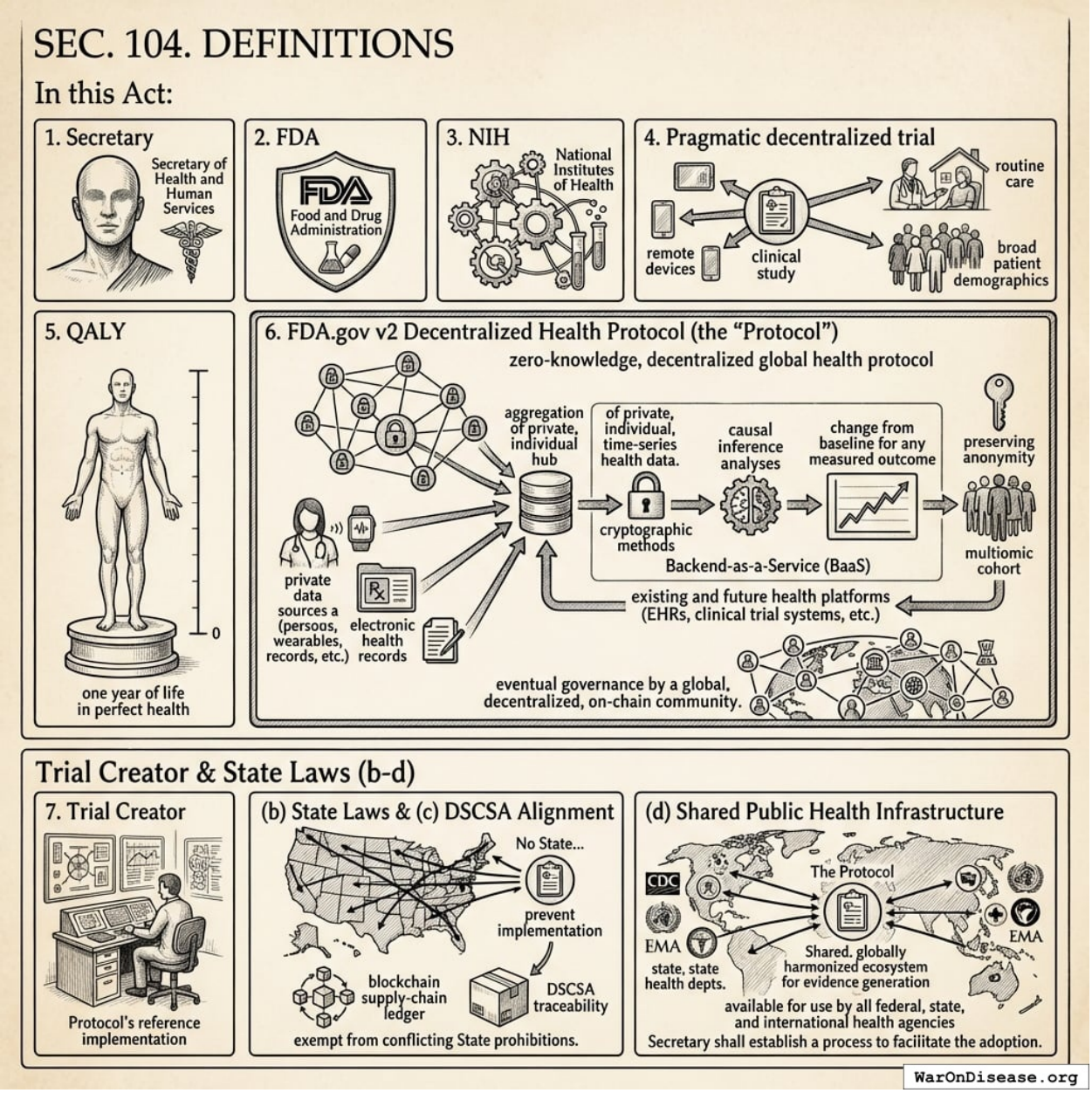


Figure 779: System architecture of the FDA.gov v2 Decentralized Health Protocol showing the flow of multiomic data from individuals and EHRs through a zero-knowledge backend to federal and international health agencies.

TITLE II: FDA Upgrade AND CLINICAL-TRIAL INNOVATION

SEC. 201. ACCELERATED ADOPTION OF ALTERNATIVE PRECLINICAL TEST METHODS

(a) **Rulemaking.** Not later than 180 days after enactment, the Secretary, acting through the Commissioner of Food and Drugs, shall issue final regulations amending 21 CFR Parts 312 and 600 to permit non-animal New-Approach Methodologies (NAMs), including organ-on-chip systems, validated in-silico toxicology, and high-throughput cell assays, as acceptable primary evidence of safety where scientifically

justified.

(b) **Qualification pathway.** The regulations shall establish a transparent qualification pathway; once a NAM is qualified for a defined context of use, FDA reviewers shall accept data from that method without requiring parallel animal studies.

(c) **Annual report.** The Commissioner shall publish an annual public report enumerating qualified NAMs, sponsor submissions using NAMs, and areas still requiring animal use with timelines to develop alternatives.

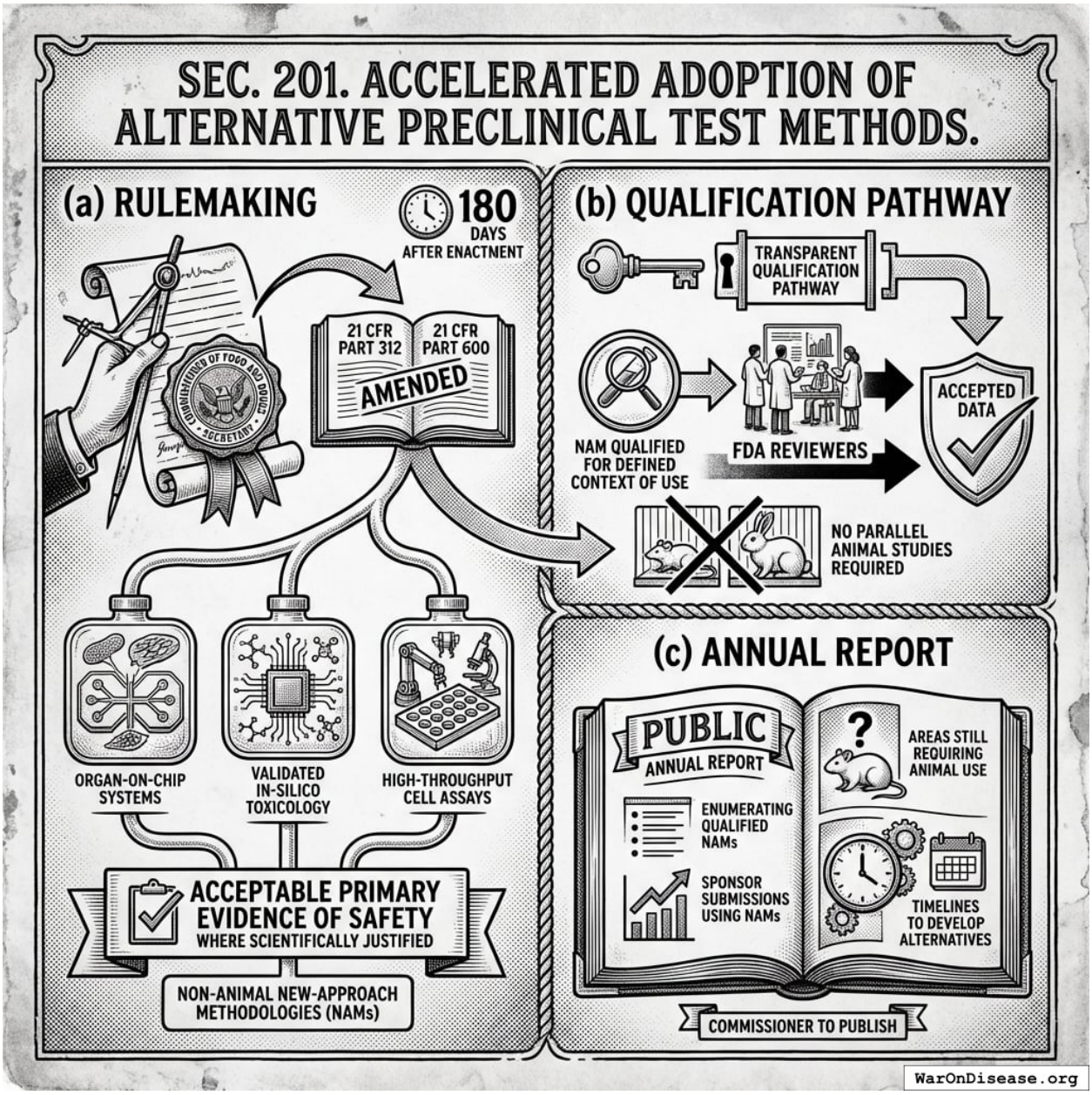


Figure 780: A flowchart showing the regulatory process for qualifying non-animal test methods, from initial rulemaking to the acceptance of data as primary safety evidence in place of animal studies.

SEC. 202. GUIDANCE ON DECENTRALISED, ADAPTIVE, AND REAL-WORLD-EVIDENCE TRIALS

(a) **Decentralised Trials Guidance.** Within 1 year the Secretary shall issue final guidance recognising remote visits, tele-investigator oversight, direct-to-patient IMP shipment, and e-consent, as compliant with 21 CFR Parts 50, 54, and 312.

(b) **Adaptive Designs.** Guidance shall allow response-adaptive randomisation, Bayesian interim analyses, seamless phase 2/3 designs, and platform/master-protocol structures, provided pre-specified statistical control of type-I error.

(c) **Real-World Evidence.** Within 18 months the Secretary shall publish a framework specifying how real-world data (EHRs, claims, device feeds) integrated via the FDA v2 Protocol may support new indications, post-marketing commitments, or safety label changes.

(d) **Training.** FDA shall establish continuing-education modules to train reviewers in decentralized-trial oversight, Bayesian statistics, and RWE analytics.

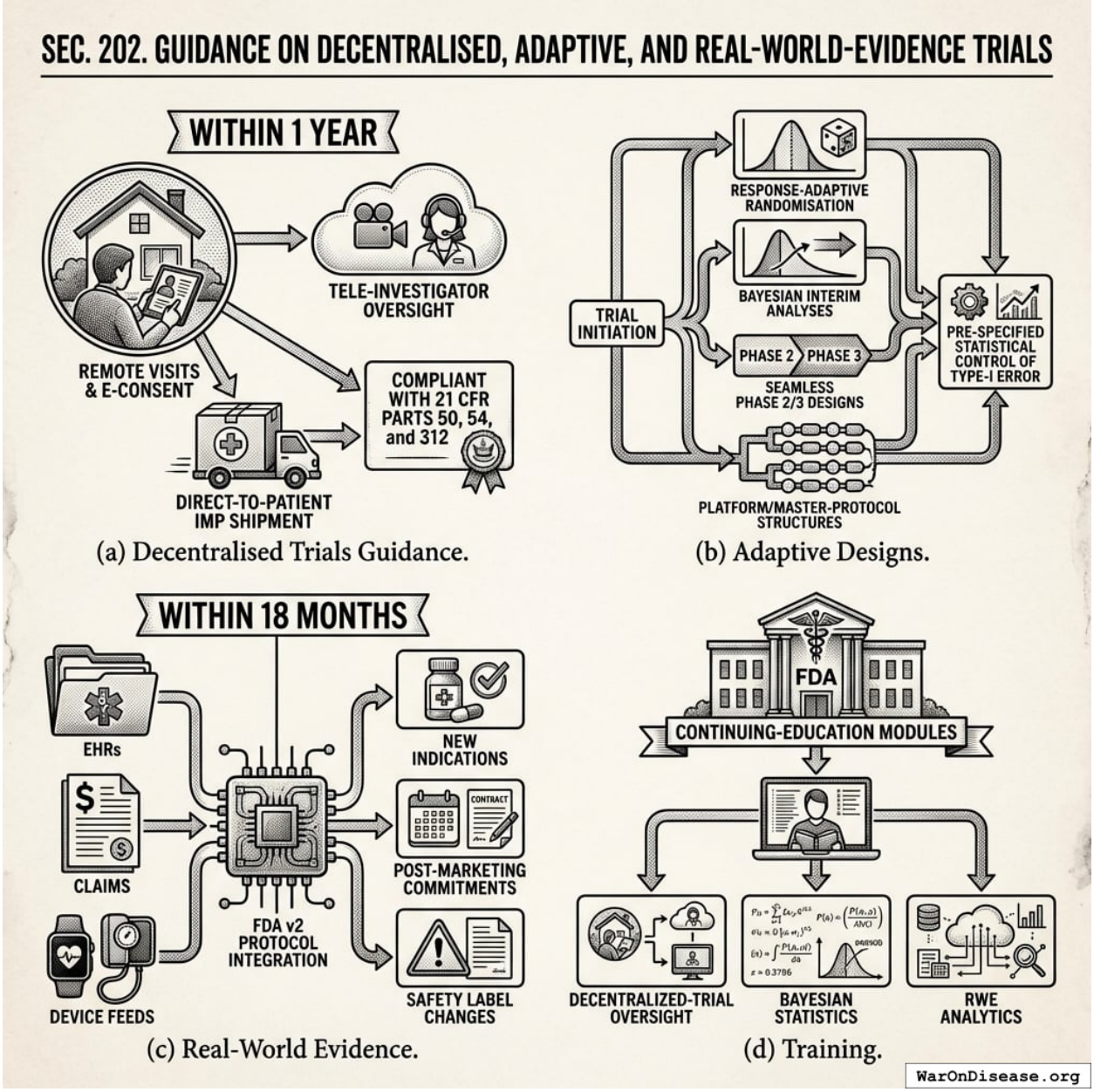


Figure 781: A conceptual diagram illustrating the four key pillars of clinical trial modernization: decentralized trials, adaptive designs, real-world evidence integration, and regulatory training.

SEC. 203. PATIENT-FOCUSED DRUG DEVELOPMENT AND GLOBAL COLLABORATION

(a) **Patient Experience Integration.** FDA shall revise Patient-Focused Drug Development guidance to require that every pivotal trial protocol include at least one patient-reported outcome or patient-preference study relevant to benefit–risk assessment.

(b) **Global Work-sharing.** The Secretary may enter into work-sharing arrangements with peer regulators (EMA, PMDA, Health Canada) for concurrent review of applications utilising FDA v2 Protocol data.

(c) **Data Standards Convergence.** The Secretary shall align FDA data standards with HL7 FHIR Release 5, CDISC SDTM v4, and SNOMED-CT 2025 edition to ensure cross-border data utility.

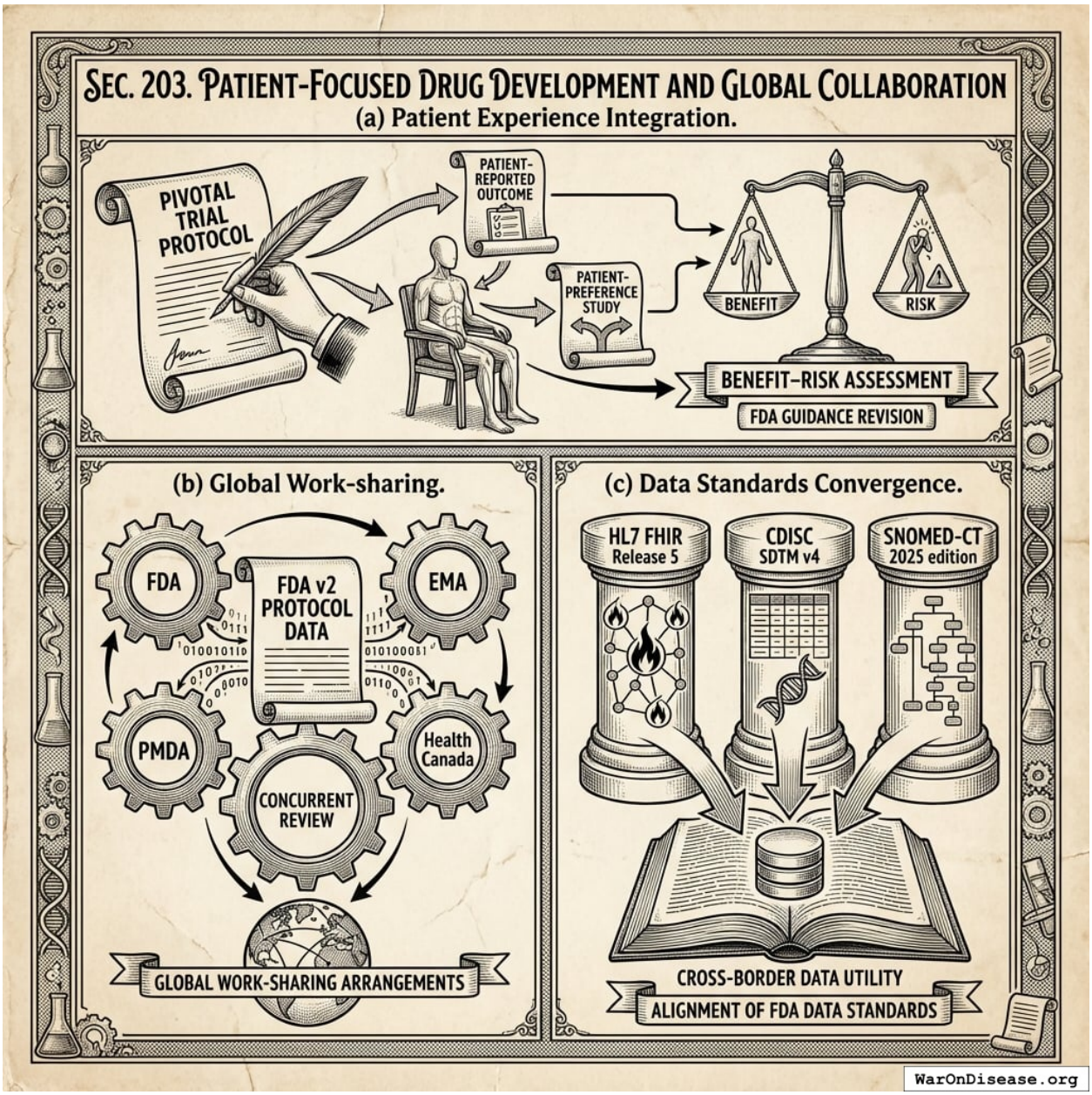


Figure 782: A diagram illustrating the three pillars of modern drug development: integration of patient experience data, concurrent global regulatory review, and the alignment of international data standards.

SEC. 204. FDA.gov v2 DECENTRALIZED HEALTH PROTOCOL AND REFERENCE IMPLEMENTATION

(a) **Launch & Hosting.** Within 12 months after enactment, the Secretary shall deploy an open-source, cloud-native **FDA.gov v2 Decentralized Health Protocol**, which shall include the **FDA.gov Public Portal** hosted on the **fda.gov** domain. All source code shall be mirrored in real-time to a public repository (e.g., *github.com/fda/fda-v2*).

(b) **Mandatory Open-Source Licence.** All code shall be released under the GNU General Public License v3.0. Any proprietary dependency shall be replaced or dual-licensed within 24 months.

(c) **Trial Creator Workspace Functions.** The **FDA.gov Public Portal** shall provide:

(1) **E-Protocol Builder** with templates and automated compliance validation (21 CFR Parts 312/812, ISO 14155) that lets any Trial Creator, regardless of prior regulatory expertise, design and launch a study.
(2) **Liability-Insurance Exchange** for real-time per-subject quotes; selections auto-populate FDA Form 1572.
(3) **Trial Cost, Discount, and Deposit Module** facilitating: (A) the transparent calculation and disclosure of estimated patient-specific trial participation costs as provided by the trial sponsor; (B) the application of any applicable NIH-funded participation discounts (pursuant to SEC. 303); (C) the management of the net financial contribution required from the participant (as per SEC. 304(b)); and (D) the collection, holding, and refund of a patient data provision deposit (as per SEC. 304). All cost components, applicable discounts, the final net cost to the participant, and details of the data provision deposit shall be clearly itemized and presented to the participant during the e-consent process (as per SEC. 302(b) and SEC. 304).
(4) **Blockchain Supply-Chain Ledger[9]** interoperable with DSCSA (§ 360eee-3) to capture temperature, custody, delivery.
(5) **Live Analytics Dashboards** for enrolment, compliance, blinded efficacy; regulators & IRBs get read-only oversight.

(d) **Core Protocol Services and Public Reference Portal.** The Protocol's primary function is to provide core backend services accessible via its open API. To ensure baseline access for all citizens and to serve as a model for third-party developers, the Secretary shall host the public-facing **FDA.gov Public Portal** as part of the reference implementation. This framework shall:

(1) **Provide a Reference Health Analysis Tool.** The portal lets users connect their data to a secure reference agent that integrates and analyzes their health information to generate a **ranked list of treatments & trials**, presented alongside standardized "Outcome Labels."
(2) **Enable User-Initiated Data Contribution.** The Protocol shall provide standardized tools (including APIs and SDKs) that let individuals securely contribute their health data from diverse sources. All data sharing shall be explicitly initiated and authorized by the user.
(3) Provide reference interfaces for single-session e-screening, Part 11 e-consent, and instant randomisation for matched trials through the portal.
(4) Coordinate direct-to-patient or local-pharmacy IMP dispatch with ledger verification.
(5) Capture outcomes via mobile app, SMS/IVR, FHIR push, and IoT feeds; data loop into evidence rankings which are **recomputed nightly**. **The source code, feature weights, and a reproducible computational notebook for each annual release of the QALY-ranking algorithm shall be posted in the public repository within 30 days of model deployment.**
(6) Contribute to and draw from a **Publicly Accessible Knowledge Base** (dubbed "Clinipedia") of all quantified food and drug effects, continuously updated with new data and analysis from the Protocol. This knowledge base, including all underlying data, analytical models, and evidence rankings, shall be made easily searchable and accessible to all, serving as a global public good.

(e) **The Protocol's Open API.** The Protocol shall function as a Backend-as-a-Service (BaaS) for the national health technology ecosystem. Its primary deliverable is the secure, versioned, and documented open API. All de-identified data shall be exposed through this RESTful API that is HL7 FHIR-R5 compliant and meets 42 U.S.C. § 300jj-52. The reference implementation is explicitly intended *not* to compete with consumer-facing applications but to provide the secure, interoperable rails upon which a competitive ecosystem of third-party tools and services can be built.
(f) **Continuous Integration/Continuous Deployment (CI/CD).** The Secretary shall maintain automated unit-test, security-scan, and code-quality pipelines that must pass before any code merge. CI results shall be publicly viewable and the Protocol's reference implementation shall maintain compliance with **FedRAMP-Moderate[6]** and **NIST SP 800-218** DevSecOps guidelines; the System Security Plan and Authority-to-Operate letter shall be posted in redacted form.
(g) **AI-Augmented Governance & Pull-Request Acceptance.**

(1) **AI-Assisted Review.** All pull requests (PRs) submitted to the public repository shall undergo an automated, comprehensive review by one or more designated AI Governance and Security Review

systems. These systems shall be open-source and trained to perform deep code analysis, identify potential vulnerabilities, assess compliance with architectural standards, and model the risk of economic exploits.

(2) **Risk-Based Triage.** The AI Reviewer shall assign each PR a risk score (e.g., "Low," "Medium," "High," "Critical"). This score determines the review and merge process:

(A) **Low-Risk PRs:** Shall be merged automatically within 72 hours if they pass all CI tests, unless a TSC member manually flags it for review.

(B) **Medium-Risk PRs:** Shall be automatically paused and require an explicit simple majority approval vote from the TSC for merger.

(C) **High-Risk or Critical-Risk PRs:** Shall be automatically rejected and may not be merged without a two-thirds supermajority vote from the TSC to override the AI's finding, accompanied by a published justification.

(3) **Technical Steering Committee (TSC).** A nine-member TSC is hereby established to oversee the repository, adjudicate flagged PRs, and manage the AI Governance Reviewers. The TSC is mandated to continuously pursue the automation and decentralization of its own functions, with the long-term goal of migrating governance decisions to a secure, on-chain, community-ratified process. **To ensure this transition, the authority of the TSC as constituted herein shall sunset no later than 7 years after the date of enactment of this Act, or upon a determination by the Secretary that a secure and viable on-chain governance model is operational, whichever is earlier. The final act of the TSC shall be to ratify the migration to the successor governance protocol.** Composition: 2 FDA officials, 1 NIH representative, 1 representative from a peer international regulator (e.g., EMA, PMDA), 1 patient-advocacy representative, 1 open-source AI/ML security expert elected by contributors, 1 biostatistician, 1 cyber-security expert, and 1 industry sponsor representative. The Secretary shall pursue agreements to add representatives from at least two other international health authorities or bodies within 24 months.

(4) **Appeal and Manual Override.** Any contributor may appeal an AI rejection or TSC decision to the FDA Chief Scientist, who must respond within 30 days. The TSC retains the authority to manually re-classify any PR with a two-thirds vote.

(5) **Democratic Renewal.** The community-elected AI/ML security expert and patient-advocate seats are subject to annual election by contributors (defined as those with 5 merged PRs in the preceding year) using ranked-choice voting via a transparent, verifiable online ballot.

(h) **Rulemaking & PRA Fast-Track.** Within 180 days the Secretary shall issue interim final rules specifying technical standards for each module, **standards for the content, format, and regular updating of Outcome Labels mandated under subsection (d)(1) of this section,** codifying the TSC charter, and **invoking 44 U.S.C. § 3507(h) such that any Information-Collection Request[5] tied to the FDA v2 Protocol obtains OMB clearance within 60 days.** Sponsors or investigators that fail to comply with these rules may be suspended under 21 U.S.C. § 331(f).

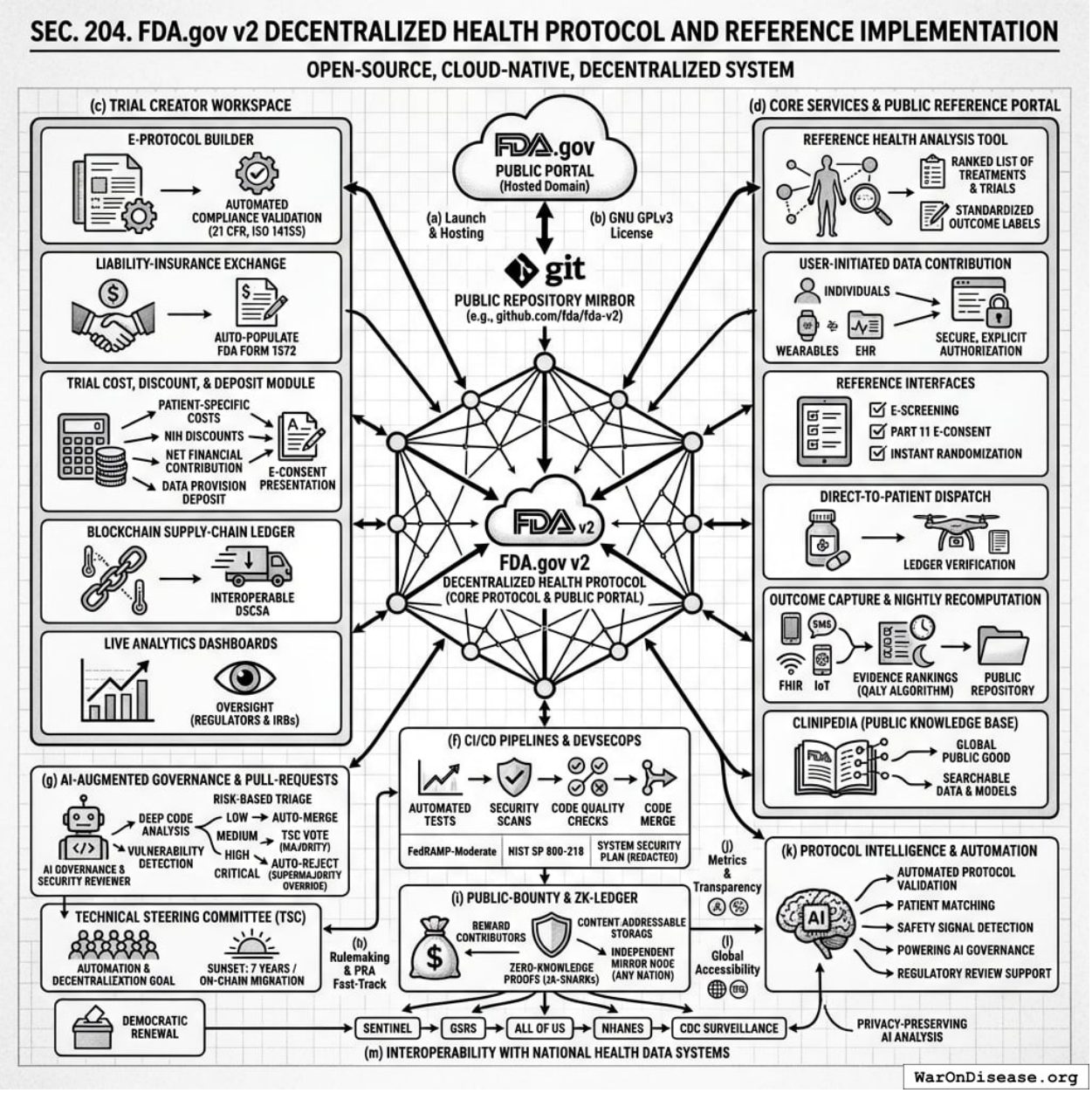


Figure 783: Architectural diagram of the FDA.gov v2 Decentralized Health Protocol showing the flow between the open API, AI-governance pull-request triage, blockchain ledger components, and multi-stakeholder oversight.

(i) **Public-Bounty & Zero-Knowledge Ledger.** The Secretary shall operate a continuous public bounty program, funded under § 402(a), to reward external contributors for merged pull-requests, vulnerability disclosures, and feature enhancements. **The AI Governance and Security Reviewer shall be used to automatically verify vulnerability submissions, score their severity, and recommend payment amounts to expedite the bounty process.** Bounties shall be posted openly as issues in the public repository with dollar amounts and paid within 30 days of merge. Furthermore, **all patient-level data aggregated and analyzed by the Protocol shall be represented as zero-knowledge proofs (e.g., zk-SNARK commitments) and stored via content-addressable storage, permitting any nation-state or regional authority to run an independent mirror node and verify ledger integrity without accessing protected health information.**

(j) **Metrics & Transparency.** Annual public report: protocol uptime, median time-to-trial launch, pull-request merge rate, unresolved PR backlog, bounty payouts, penetration-test findings, insurance-premium benchmarks, and user-satisfaction scores. The Secretary shall commission an independent **penetration test** every fiscal year and publish an executive summary of findings.

(k) **Protocol Intelligence and Automation.** The Protocol shall leverage artificial intelligence and machine learning capabilities to enhance its functionalities, including but not limited to: (1) assisting sponsors with automated protocol validation checks during e-protocol building; (2) improving the precision of matching patients to suitable trials based on their comprehensive health data; (3) augmenting the analysis of aggregated, de-identified data for early safety signal detection and pharmacovigilance; (4) **powering the AI Governance and Security Reviewer for automated code review, vulnerability detection, and pull-request adjudication as specified in subsection (g);** and (5) supporting regulatory staff with tools for efficient data review where appropriate. All such AI/ML systems shall be developed with robust validation, transparency in function, and operate under human oversight, particularly for critical decision support.

(l) **Global Accessibility.** To facilitate global participation and data collection, the **FDA.gov Public Portal's** user interfaces for patients and trial creators shall be made accessible in multiple languages.

(m) **Interoperability with National Health Data Systems.** The Protocol shall be designed to complement and enhance existing government health initiatives. The Secretary shall establish data sharing and interoperability frameworks to connect the Protocol with key national health programs, including but not limited to: the FDA's Sentinel Initiative and Global Substance Registry System (GSRS); the National Institutes of Health's *All of Us* Research Program; the National Health and Nutrition Examination Survey (NHANES); and the Centers for Disease Control and Prevention's public health surveillance systems. This integration shall leverage the Protocol's AI capabilities to analyze data across systems, enhancing national safety monitoring, research, and public health response capabilities while adhering to strict privacy-preserving protocols.

SEC. 205. FDA-X PRIZE

(a) **Establishment.** To accelerate the development of the FDA.gov v2 Protocol, the Secretary is authorized to establish an "FDA-X Prize" competition, with a prize purse to be determined by the Secretary, awarded to the entity that first develops and demonstrates a public portal meeting the core requirements outlined in Section 204 and which demonstrates the capacity to achieve at least an **80X reduction** in per-patient trial costs compared to traditional methodologies.

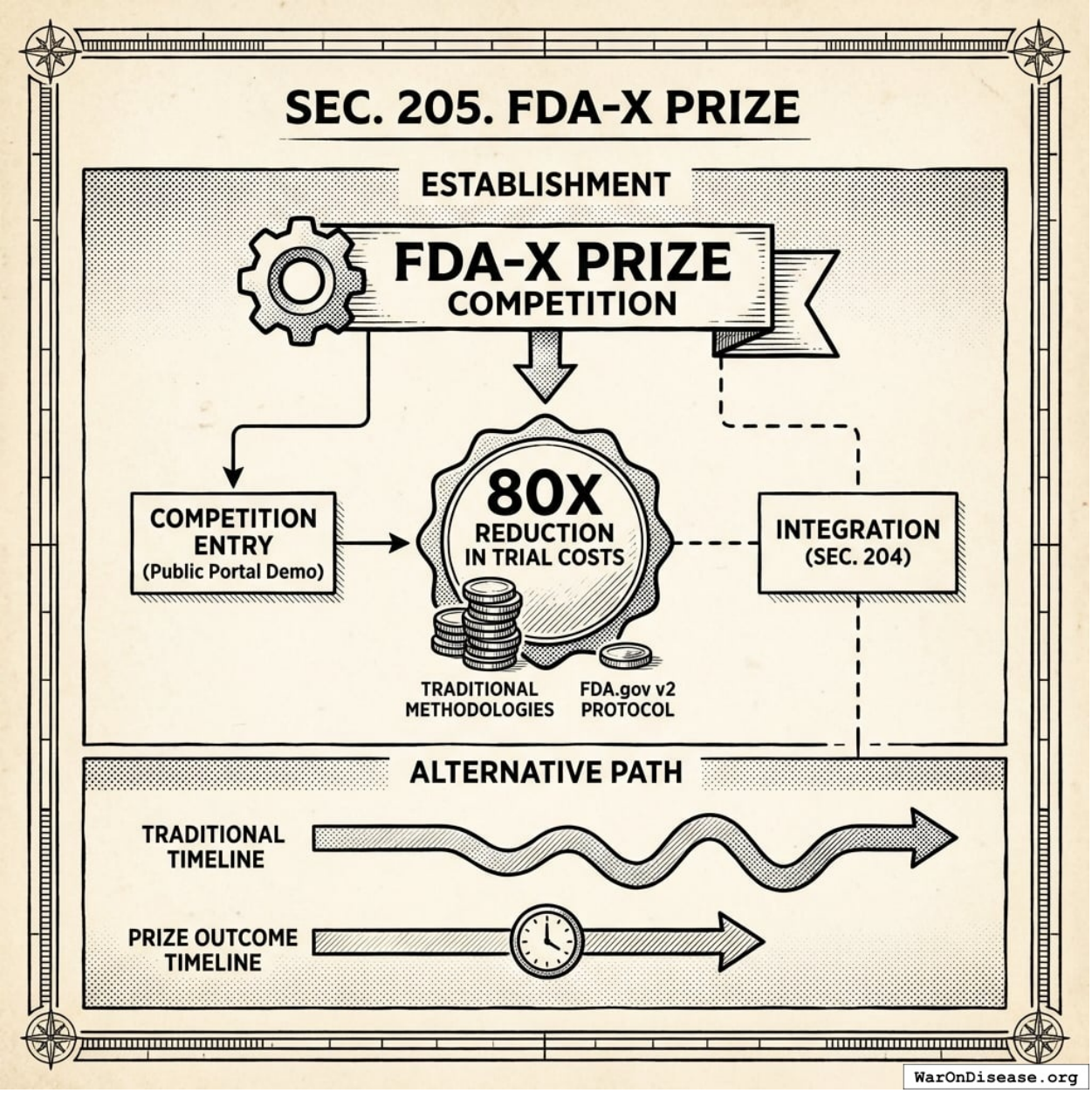


Figure 784: A flowchart mapping the FDA-X Prize lifecycle, showing the progression from competition establishment to the demonstration of 80X cost reduction and final system integration.

(b) **Alternative Development Path.** The Secretary may use the prize competition as the primary mechanism for developing the protocol. In such a case, the timelines and responsibilities outlined in Section 204(a) shall be adjusted to reflect a successful prize outcome.

(c) **Integration.** If the prize is awarded for a platform that meets a substantial subset of requirements, the Secretary shall ensure its integration with any components developed or procured under Section 204.

TITLE III: UNIVERSAL TRIAL ACCESS (RIGHT-TO-TRIAL PROGRAM)

SEC. 301. UNIVERSAL ELIGIBILITY FOR INVESTIGATIONAL INTERVENTIONS

(a) **Right.** Beginning 24 months after enactment, any U.S. resident who requests an investigational intervention shall be guaranteed enrolment, remotely if necessary, in at least one pragmatic, decentralized trial arm evaluating that intervention, subject to the safety-based exclusions specified in subsection (c).

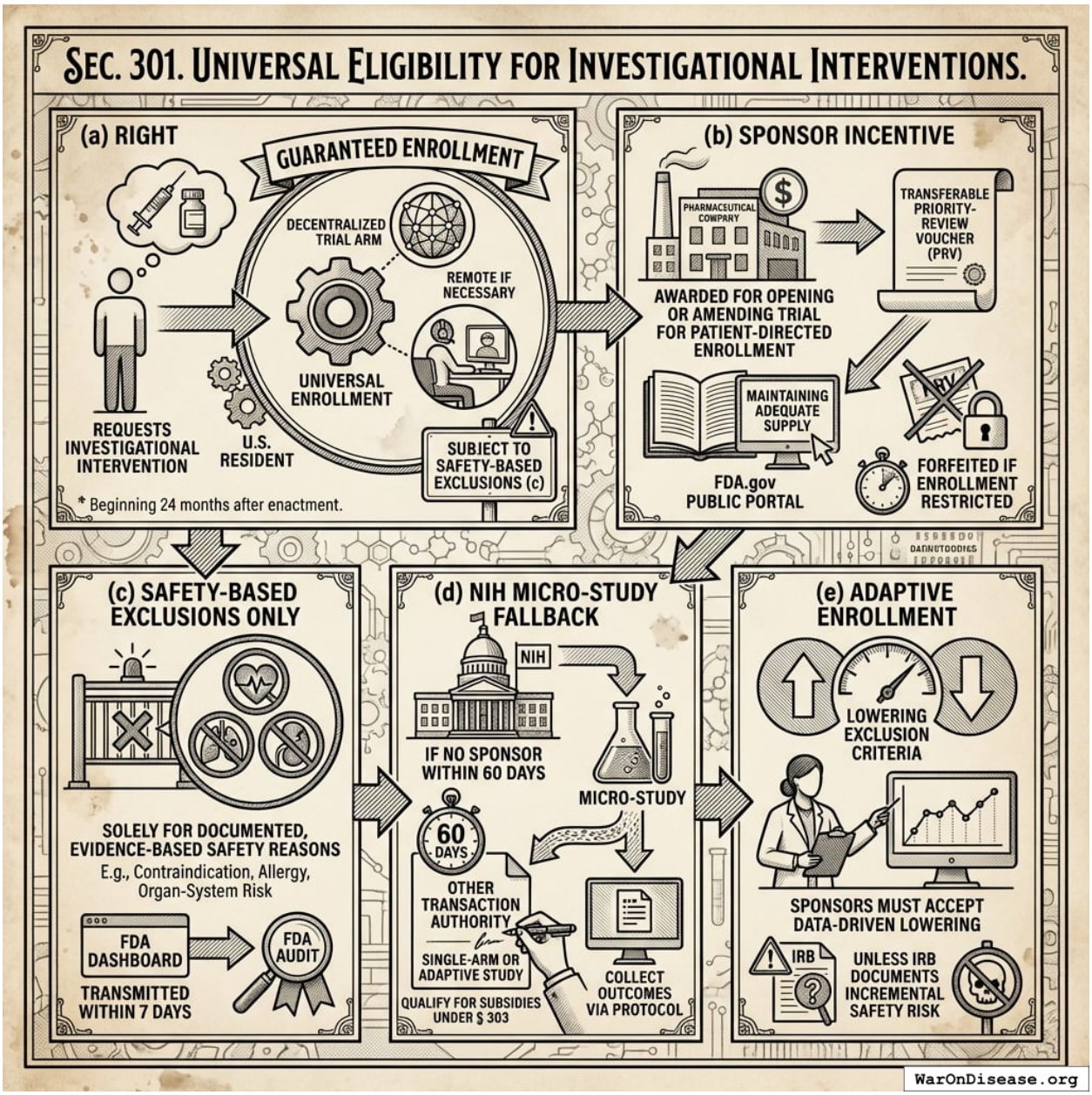


Figure 785: A flowchart illustrating the universal eligibility pathway, showing the decision logic between sponsor-led enrollment with PRV incentives and the 60-day NIH micro-study fallback mechanism.

(b) **Sponsor Incentive.** The Secretary shall award a **transferable Priority-Review Voucher (PRV)**

under section 524A of the Federal Food, Drug, and Cosmetic Act to any sponsor that, on or before the universal-enrolment activation date, opens or amends a trial on the **FDA.gov Public Portal** to accept such patient-directed enrolment and maintains adequate investigational-product supply. A PRV is forfeited if the sponsor later restricts patient enrolment without a documented safety or manufacturing constraint.

(c) **Safety-Based Exclusions Only.** Sponsors or IRBs may exclude an individual patient **solely for documented, evidence-based safety reasons** (e.g., a specific contraindication, allergy, or organ-system risk) or if investigational-product supply is demonstrably insufficient. Exclusion rationales must be transmitted to the FDA Dashboard within 7 days and are subject to FDA audit.

(d) **NIH Micro-Study Fallback.** If no sponsor operates an active investigational-new-drug application that can accept the patient within 60 days of request, the NIH, using Other Transaction Authority, shall initiate a single-arm or adaptive micro-study to provide the intervention under IND and collect outcomes via the Protocol; such micro-studies qualify for subsidies under § 303.

(e) **Adaptive Enrolment.** Sponsors participating under this section must accept data-driven lowering of exclusion criteria unless an IRB documents incremental safety risk.

SEC. 302. PATIENT PROTECTIONS, CONSENT, AND LIABILITY

(a) **Ethical Oversight.** All Right-to-Trial protocols shall undergo review by a qualified Institutional Review Board (IRB). To foster innovation and efficiency, the FDA.gov v2 Protocol shall support both review by a single central IRB (per 45 CFR § 46.114[8]) and by qualified **Decentralized Ethical Review Boards (DERBs)**. The Secretary shall, through rulemaking, establish standards for the qualification, operation, and oversight of DERBs on the Protocol.

(b) **Informed Consent and Comprehension Verification.**

(1) E-consent via the **FDA.gov Public Portal** shall clearly disclose, in an accessible format, the investigational nature of the trial, all known and potential risks including their likelihood based on available data (with particular emphasis on the most serious risks), the full details of patient financial responsibilities including the net cost contribution and the refundable data provision deposit (as detailed in SEC. 304), potential benefits, alternative treatments, and all data-sharing terms.

(2) To verify genuine understanding of the disclosed information, particularly concerning the most serious risks and their likelihood, successful completion of the e-consent process shall require the patient to pass an automated, interactive comprehension quiz administered through the **FDA.gov Public Portal**. This quiz shall be based directly on the information disclosed pursuant to paragraph (1) of this subsection.

(3) The Secretary, through rulemaking within 12 months of enactment, shall establish standards for the development, content, validation, and administration of such comprehension quizzes, including criteria for successful completion and procedures for patients who do not initially pass. These standards shall ensure quizzes are fair, accessible, and effectively assess understanding of critical information.

(4) Execution of the e-consent, following successful completion of the comprehension quiz, constitutes both 45 CFR § 164.508 authorization and, where applicable, a waiver of authorization under § 164.512(i)[11] for research use of protected health information, as approved by the reviewing IRB. A record of successful quiz completion and the signed consent shall be hashed and stored on the blockchain ledger.

(c) **Safety Monitoring.** Sponsors must stream adverse-event data to the Dashboard within 24 hours; FDA may halt enrolment under 21 CFR § 312.42.

(d) **Liability Shield.** Good-faith compliance grants immunity from tort claims except for gross negligence or willful misconduct; mirrors Pub. L. 115-176 § 2(c).



Figure 786: Process flow and system architecture for patient protections, including the e-consent comprehension loop, blockchain record storage, and the real-time safety monitoring data stream.

SEC. 303. FAIR ACCESS AND DISCOUNT ALGORITHMS

(a) **Fund.** A revolving Clinical Trial Patient Cost Discount Fund is hereby established within the Treasury, authorized to receive $2 billion for each of fiscal years 2026 through 2030.

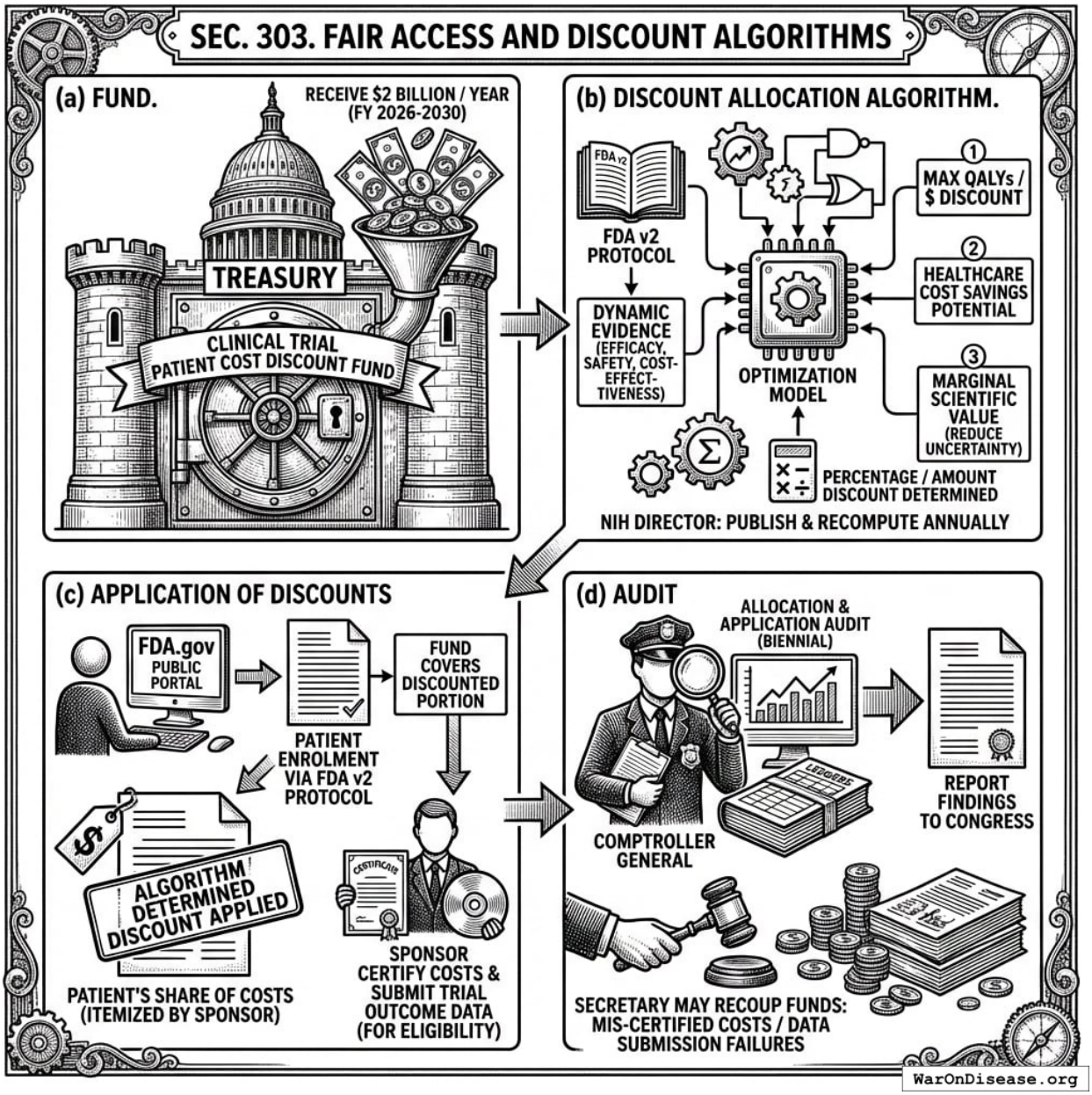


Figure 787: System architecture diagram illustrating the flow of funds and data between the Treasury, the NIH optimization algorithm, the FDA v2 Protocol portal, trial sponsors, and patients.

(b) **Discount Allocation Algorithm.** The NIH Director shall develop, publish, and annually recompute a transparent, open-source optimisation model for the allocation of discounts from the Fund. This model shall determine the percentage or amount of discount applicable to patient-borne costs for participation in specific trials available on the FDA v2 Protocol. The primary objectives for discount allocation shall be: (1) maximizing projected quality-adjusted life-years (QALYs) gained per dollar of discount provided; (2) the potential for significant healthcare system cost savings attributable to the research; and (3) the marginal scientific value of the pragmatic clinical trial, including its potential to reduce uncertainty for interventions with limited existing evidence but high potential impact. The algorithm shall dynamically incorporate new evidence on treatment efficacy, safety, and cost-effectiveness generated through the FDA v2 Protocol.

(c) **Application of Discounts.** Upon a patient's enrolment in a trial via the FDA v2 Protocol, the NIH shall authorize the application of the algorithmically determined discount to the patient's share of trial participation costs, as itemized by the sponsor and displayed on the **FDA.gov Public Portal** (per SEC. 204(c)(3) and SEC. 304). The Fund shall cover the discounted portion of such costs. Sponsors shall certify the full, itemized costs of participation and submit all required trial outcome data for continued eligibility to have their trials included in the discount program.

(d) **Audit.** The Comptroller General of the United States shall audit the allocation and application of discounts from the Fund biennially and report findings to Congress. The Secretary may recoup any funds associated with discounts applied to mis-certified costs or for trials not meeting data submission requirements.

SEC. 304. PATIENT COST CONTRIBUTION FOR TRIAL PARTICIPATION

(a) **Determination and Disclosure of Participation Costs.** Prior to a patient consenting to a trial, the sponsoring entity shall determine and provide to the FDA v2 Decentralized Health Protocol a comprehensive, itemized estimate of all direct costs associated with that specific patient's anticipated participation in the trial. This shall include, but not be limited to, costs of investigational product, necessary medical procedures, diagnostic tests, monitoring, and data management directly attributable to the research participant. These estimated costs, alongside the NIH-funded discount applicable under SEC. 303, and the final net cost to the patient, shall be transparently displayed to the potential participant via the **FDA.gov Public Portal** (SEC. 204(c)(3)) and detailed in the e-consent form (SEC. 302(b)). This transparent disclosure of itemized costs on a decentralized framework is intended to encourage competitive and efficient pricing by sponsoring entities.

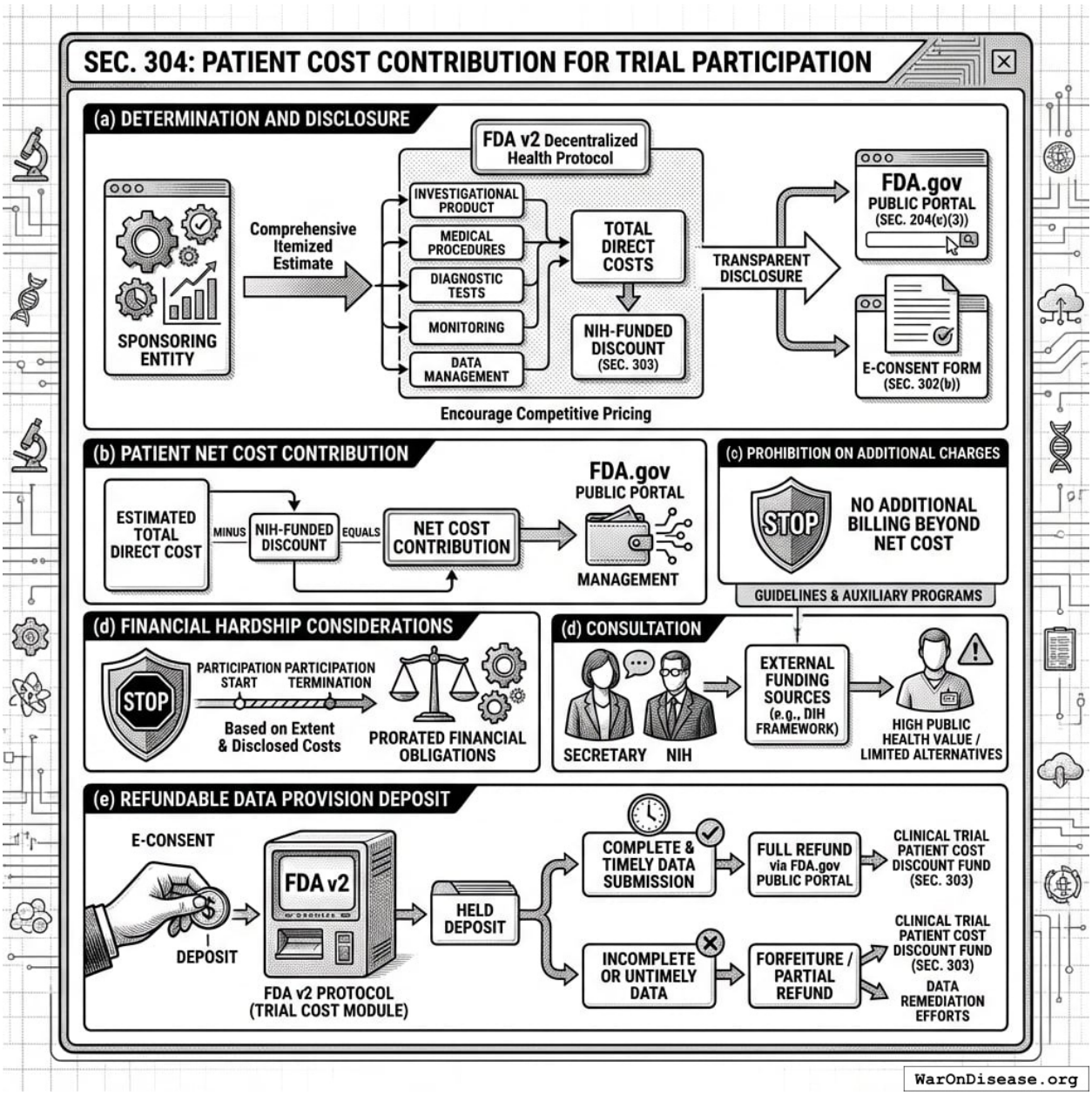


Figure 788: A process flow diagram showing the interaction between trial sponsors, the FDA v2 protocol, and patients regarding cost calculations, NIH discounts, and the conditional refund of data deposits.

(b) **Patient Net Cost Contribution.** Each participant shall be responsible for contributing the net cost of their trial participation, calculated as the estimated total direct cost of participation (as determined in subsection (a) of this section) minus the NIH-funded discount (as determined and applied under SEC. 303). The **FDA.gov Public Portal** shall facilitate the management of this net cost contribution.

(c) **Prohibition on Additional Charges.** Sponsors or investigating sites may not bill or charge a participant for any costs related to their trial participation beyond the final net cost contribution calculated and disclosed through the FDA v2 Protocol as per subsections (a) and (b) of this section. Participants shall retain the right to terminate their participation in the trial at any time, subject to standard clinical and ethical procedures; financial obligations will be prorated based on the extent of participation and disclosed costs.

(d) **Financial Hardship Considerations.** The Secretary, in consultation with NIH, may establish

guidelines or auxiliary programs to address financial hardship for patients for whom the net cost contribution, even after applicable discounts, remains a significant barrier to accessing trials deemed of high public health value or for conditions with limited alternative treatments. Such guidelines shall not obligate sponsors to cover these costs unless through separate, voluntary programs, but may coordinate with external funding sources, such as those that might be allocated through a decentralized institutes of health (DIH) framework.

(e) **Refundable Data Provision Deposit.**

(1) To incentivize the complete and timely submission of all data required by the trial protocol, each participant shall provide a refundable data provision deposit. The amount of such deposit shall be established by the Secretary through rulemaking, considering factors such as trial duration, data complexity, and the need to avoid undue financial burden on participants.

(2) The deposit shall be collected by the FDA v2 Protocol's Trial Cost, Discount, and Deposit Module (as per SEC. 204(c)(3)) at the time of e-consent.

(3) The full deposit shall be refunded to the participant via the **FDA.gov Public Portal** upon certification by the trial sponsor or a designated Platform administrator that the participant has provided all protocol-required data within the specified timeframes.

(4) Conditions for partial refund or forfeiture of the deposit due to incomplete or untimely data submission shall be detailed in the e-consent form (SEC. 302(b)) and established by the Secretary through rulemaking. Forfeited deposits may be directed to the Clinical Trial Patient Cost Discount Fund (SEC. 303) or used to offset costs incurred by data remediation efforts.

TITLE IV: GENERAL PROVISIONS

SEC. 401. COORDINATION WITH EXISTING LAW

(a) **Expanded Access.** This Act supplements 21 CFR § 312 Subpart I; data from Right-to-Trial may fulfill post-marketing study obligations.

(b) **State Laws.** No State or political subdivision may regulate the practice of tele-medicine, pharmacy licensure, or shipment of investigational products in a manner that prevents implementation of this Act. Specifically, a licensed prescriber participating under an FDA-approved protocol shall be deemed licensed in all States for the limited purpose of providing investigational treatment under this Act, and pharmacies dispensing or shipping such products pursuant to the blockchain supply-chain ledger are exempt from conflicting State prohibitions.

(c) **DSCSA Alignment.** All investigational shipments must utilize the protocol's ledger to satisfy DSCSA traceability.

(d) **Shared Public Health Infrastructure.** The Protocol shall be designed and maintained as extensible infrastructure available for use by all federal, state, and international health agencies. The Secretary shall establish a process to facilitate the adoption of the Protocol by other agencies for their own regulatory, research, and public health surveillance purposes, thereby creating a shared, globally harmonized ecosystem for evidence generation.

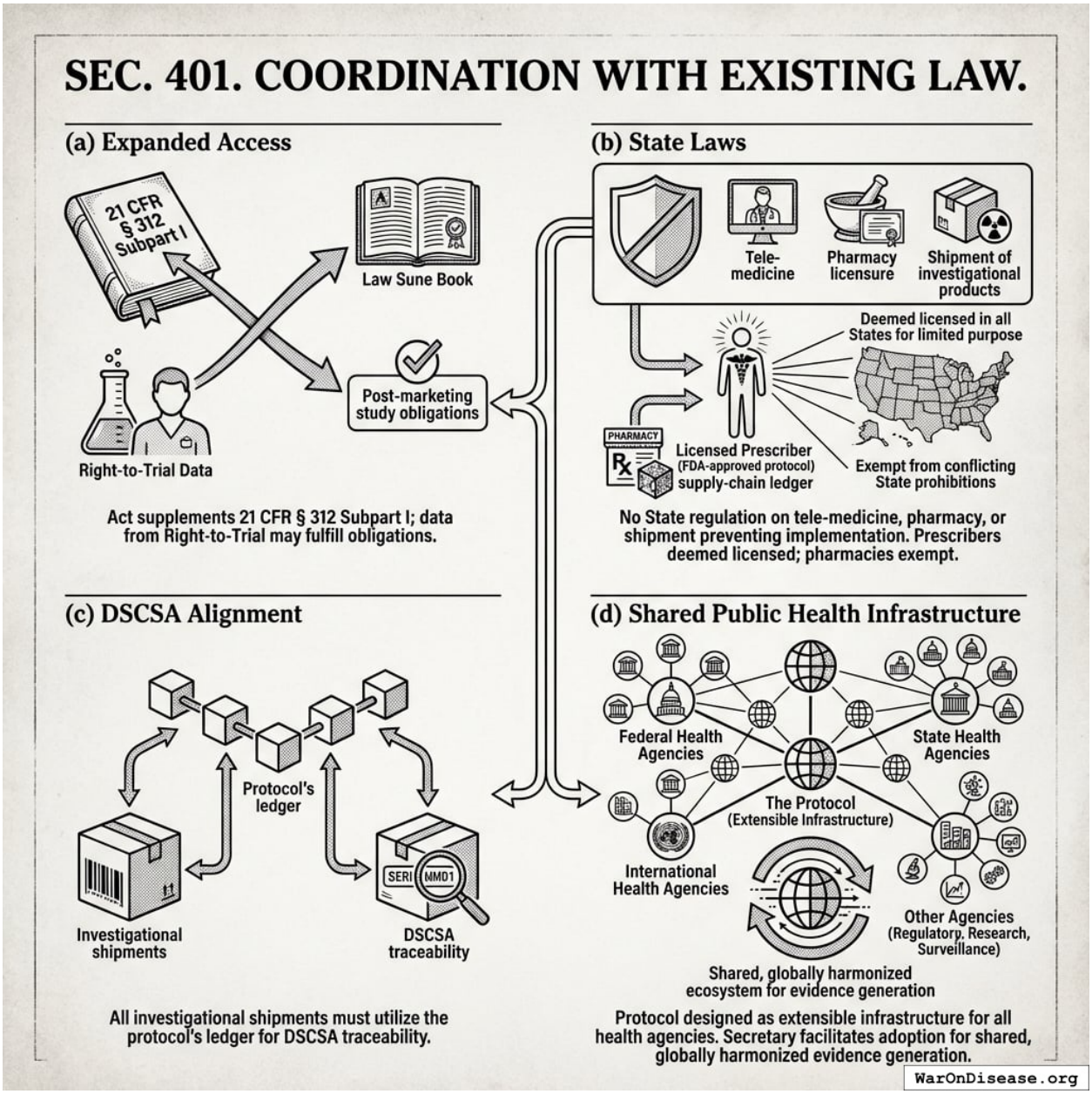


Figure 789: Architecture of the shared public health infrastructure showing the blockchain ledger as the central hub for multi-state licensure, DSCSA compliance, and global health agency coordination.

SEC. 402. AUTHORIZATION OF APPROPRIATIONS AND STAGE-GATED FUNDING

(a) **FDA Upgrade.** $500 million FY 2026-30, of which **no more than 25 percent may be obligated** until the **FDA.gov Public Portal** (1) attains FedRAMP-Moderate ATO *and* (2) records at least **1,000 merged pull-requests** under § 204(g). Subsequent 25-percent tranches unlock upon the Protocol reaching 10,000 users and 10,000 merged pull-requests, respectively.

(b) **Subsidy Fund.** $2 billion FY 2026-30, released quarterly upon NIH certification that the subsidy-allocation algorithm achieved or exceeded its projected QALY gain in the preceding quarter.

(c) **Regulatory-Science Grants.** $150 million FY 2026-30.

(d) **Direct-Hire Authority.** For FY 2026-30 the Secretary may hire up to **200 technical employees** for

the framework under 5 U.S.C. § 9803 (critical-need direct hire).

(e) **Agile Acquisition Pilot.** All contracts for the framework are designated "modular IT acquisitions" under FITARA; FAR Part 15 documentation requirements are waived in favour of the **US Digital Service Playbook**[10] incremental-delivery model.** $150 million FY 2026-30.

SEC. 403. IMPLEMENTATION TIMELINE

- **180 days:** Interim rules; beta e-protocol builder; transparency website live.
- **24 months:** FDA v2 Platform MVP; insurance exchange; blockchain ledger operational.
- **36 months:** Universal enrolment guarantee active; subsidies flowing.
- **48 months:** First GAO report to Congress.

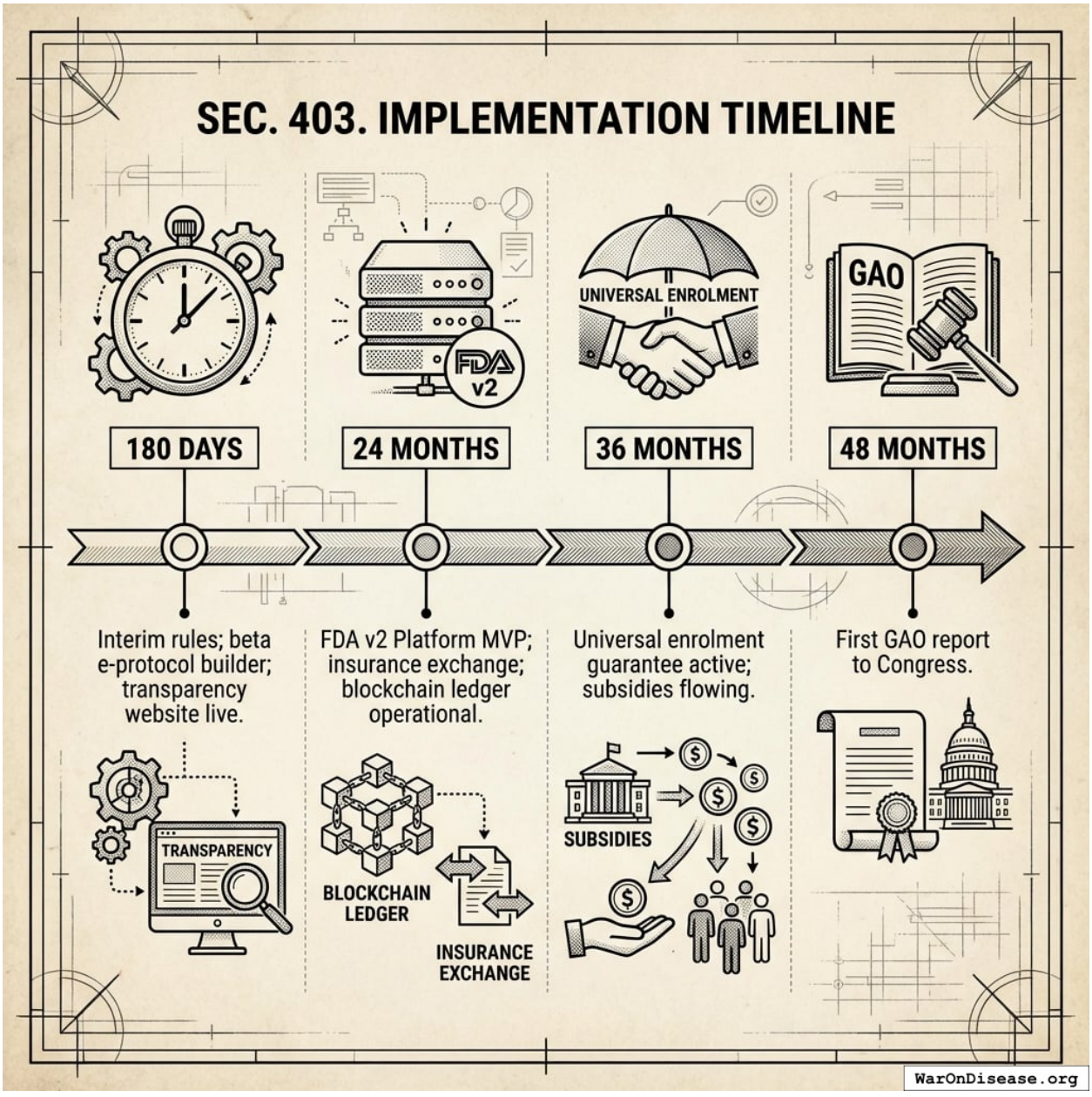


Figure 790: A chronological timeline illustrating the four-year implementation phases from the initial 180-day interim rules to the 48-month GAO report.

SEC. 404. STRATEGY FOR GLOBAL GOVERNANCE AND DECENTRALIZATION

(a) **Objective.** The Secretary, in coordination with the Secretary of State, shall develop and execute a strategy to transition the governance of the Protocol from the United States government to an independent, international multi-stakeholder body.

(b) **Report to Congress.** Within 18 months of enactment, the Secretary shall submit a report to Congress outlining this strategy, including: (1) proposed frameworks for a new international governance body; (2) a timeline for transitioning technical and administrative oversight; and (3) a plan for ensuring the long-term sustainability and neutrality of the protocol, including research into and pathways toward cryptographically-secured, on-chain governance models that reduce reliance on a central administrative body.

(c) **Continued Support.** The United States shall continue to provide technical and financial support for the Protocol during a transition period of no less than 5 years after an international governance body is established.

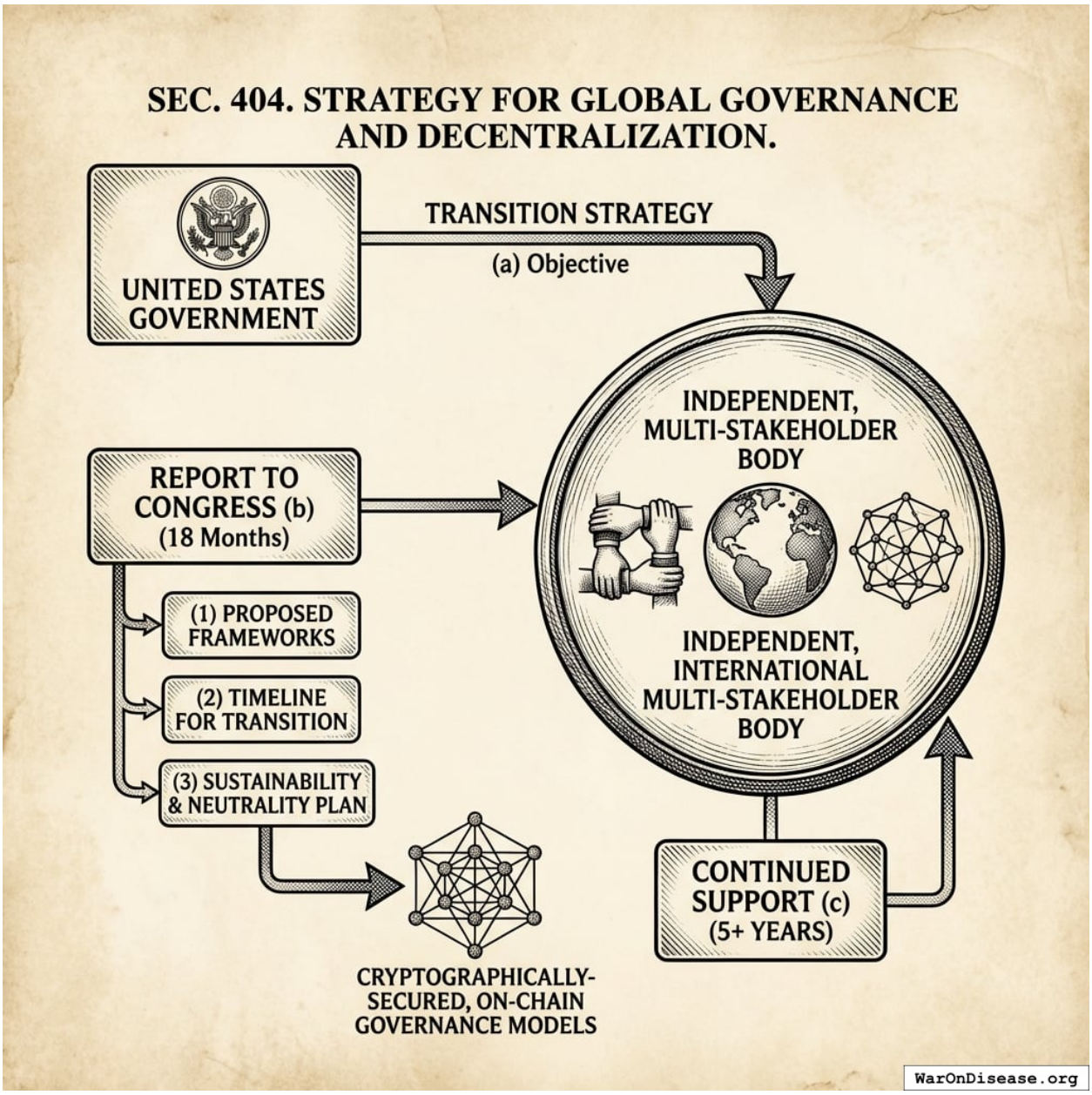


Figure 791: A roadmap illustrating the transition of protocol governance from United States government oversight to an international multi-stakeholder body and eventually to a decentralized, on-chain governance model.

SEC. 405. SEVERABILITY

If any provision of this Act is held invalid, the remainder shall remain in effect.

SEC. 406. TRANSPARENCY IN REGULATORY ACTIONS LIMITING TREATMENT ACCESS

(a) **Public Justification Reports Required.** For any regulatory action taken by the Secretary that denies, restricts, or withdraws patient access to any potential treatment, the Secretary shall, within 60 days of such action, publish a comprehensive report. This report shall be publicly available on the

FDA.gov Public Portal.

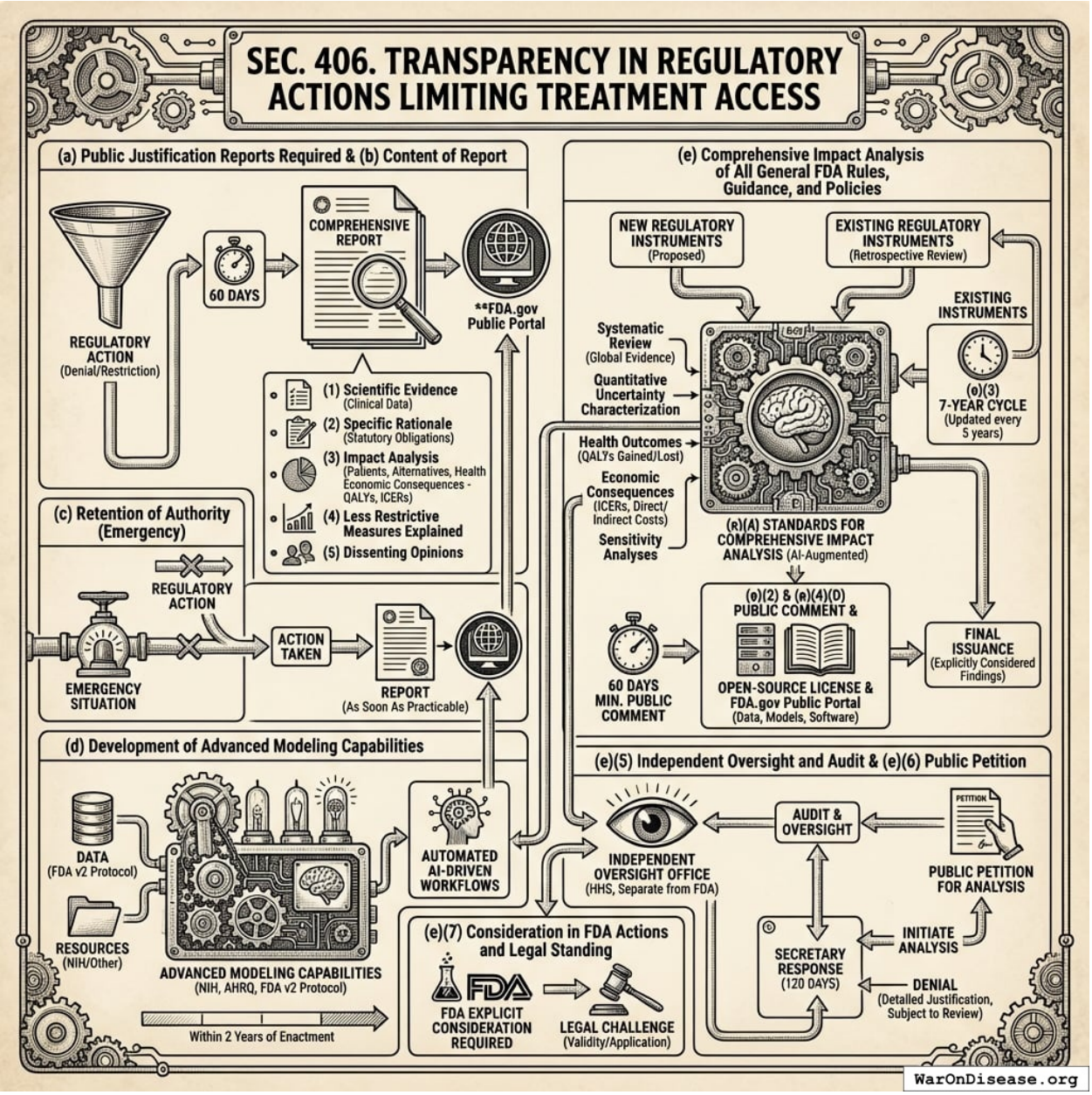


Figure 792: Workflow diagram of the mandatory FDA impact analysis process, illustrating the path from regulatory proposal to publication, including AI-driven modeling, public comment phases, and independent oversight audits.

(b) **Content of Report.** Such report shall include, at a minimum: (1) a detailed summary of the scientific evidence regarding the treatment's benefits and risks considered by the Secretary, including available clinical endpoint data; (2) the specific rationale for the regulatory action, including any statutory obligations influencing the decision; (3) an analysis of the anticipated impact of the action on patient populations, including consideration of available alternatives, unmet medical needs, and a summary of available information on potential health economic consequences, including, where feasible and appropriate, a qualitative or quantitative assessment of costs and benefits; provided that, upon certification by the Secretary that the capabilities developed under subsection (d) are sufficiently mature,

such assessment shall include a quantitative health and economic modeling simulation as detailed therein; (4) an explanation of why less restrictive regulatory measures, if applicable, were deemed insufficient; and (5) any dissenting opinions from within the review team or advisory committees, if applicable.

(c) **Retention of Authority.** Nothing in this section shall be construed to limit the Secretary's authority to take necessary regulatory action to protect public health, including in emergency situations. In such cases, the report shall be published as soon as practicable following the action.

(d) **Development of Advanced Modeling Capabilities for Treatment Access Reports.** The Secretary, in consultation with the Director of the NIH and the Director of the Agency for Healthcare Research Quality (AHRQ), shall, within 2 years of enactment, establish and ensure the operational maturity of robust capabilities for conducting the quantitative health and economic modeling simulations necessary to fulfill the reporting requirements under subsection (b) of this section. This shall include utilizing data from the FDA v2 Protocol, defining appropriate resource allocation from the NIH and other sources, and developing automated AI-driven workflows where feasible.

(e) **Comprehensive Impact Analysis of All General FDA Rules, Guidance, and Policies.**

(1) **Mandate for Analysis:** To ensure all Food and Drug Administration (FDA) activities are demonstrably in the public interest and to quantify their effects on public health and the economy, the Secretary shall ensure that every proposed and existing FDA regulation (as defined in 21 C.F.R. Part 10), formal guidance document, and other generally applicable policy statement (hereinafter collectively referred to as "regulatory instruments") undergoes a comprehensive, quantitative health and economic impact analysis as specified in this subsection.

(2) **Prospective Analysis of New Regulatory Instruments:** Except as provided in subsection (c) of this section for emergency actions, no new FDA regulatory instrument shall be finalized, issued, or take effect until a comprehensive impact analysis, meeting the requirements of paragraph (e)(4) of this subsection, has been completed, made public on the **FDA.gov Public Portal** for a period of no less than 60 days for public comment, and its findings explicitly considered and addressed by the Secretary in the final issuance. For emergency actions, the analysis shall be completed and published within 90 days of the instrument taking effect.

(3) **Retrospective Analysis and Review of Existing Regulatory Instruments:** The Secretary shall, within 1 year of enactment, establish and publish a prioritized schedule for the systematic review and comprehensive impact analysis of all significant existing FDA regulatory instruments. This schedule shall ensure that all such instruments are analyzed within 7 years of enactment. All analyses conducted under this subsection shall be updated at least every 5 years, or more frequently if significant new evidence or modeling capabilities emerge.

(4) **Standards for Comprehensive Impact Analysis:** Each analysis conducted under this subsection (e) shall:

(A) Be supported by dedicated resources, including a prespecified minimum percentage of the annual budget of the National Institutes of Health, to ensure its capacity, independence, and timeliness.

(B) Be based on a systematic review of all available global evidence, incorporate rigorous quantitative uncertainty characterization, and calculate projected individual and population-level health outcomes (including, but not limited to, quality-adjusted life-years (QALYs) gained or lost) and economic consequences (including, but not limited to, Incremental Cost-Effectiveness Ratios (ICERs) and direct and indirect costs to patients, the healthcare system, and society). Sensitivity analyses shall be conducted for all key assumptions.

(C) Be developed and executed primarily by advanced autonomous AI systems to ensure speed, consistency, and comprehensiveness. The role of human personnel shall be focused on oversight, final review, and the adjudication of complex edge cases flagged by the AI. All software, algorithms, data inputs, and models developed or utilized for these analyses shall be released under an open-source licence approved by the Open Source Initiative, published on the **FDA.gov Public Portal**, and subject to mechanisms that facilitate public inspection, contribution, and collaborative improvement, consistent with the AI-augmented governance principles outlined in SEC. 204(g);

(D) Be made publicly available in its entirety, including all underlying data, assumptions, and models, on the **FDA.gov Public Portal** in a user-friendly and accessible format.

(5) **Independent Oversight and Audit:** An independent office within the Department of Health and Human Services, separate from the Food and Drug Administration, shall be established or designated to oversee the methodologies, execution, and audit of analyses conducted under this subsection (e) to ensure objectivity and scientific integrity.

(6) **Public Petition for Analysis:** Any member of the public may petition the Secretary for a comprehensive impact analysis of any specific FDA regulatory instrument not yet analyzed or not recently updated. The Secretary shall respond to such petitions within 120 days, either by initiating the analysis or by publishing a detailed justification for denial, which shall itself be subject to review by the independent office established under paragraph (e)(5).

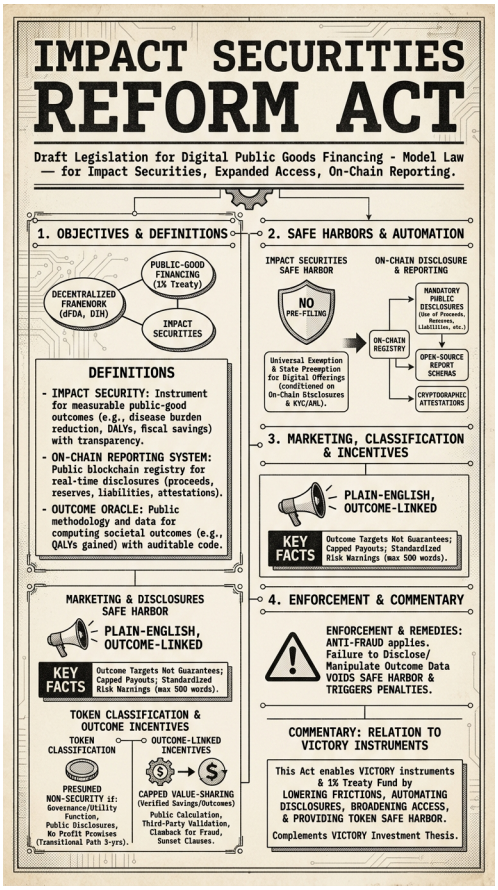
(7) **Consideration in FDA Actions and Legal Standing:** The FDA shall be required to explicitly consider and publicly respond to the findings of these impact analyses in all subsequent rulemaking, policy development, enforcement activities, and in the review of existing regulatory instruments. Failure to conduct or appropriately consider such analyses as mandated herein shall be grounds for legal challenge to the validity or application of the regulatory instrument.

REFERENCES

[1] ClinicalTrials.gov FY 2024 Annual Report, Table 4 (trial enrollment). [2] Moore, T. J., Zhang, H., Anderson, G., & Alexander, G. C. (2018). Estimated Costs of Pivotal Trials for Novel Therapeutic Agents Approved by the US Food and Drug Administration, 2015-2016. *JAMA Internal Medicine*, 178(11), 1451–1457. [3] See Decentralized Pragmatic Trials (RECOVERY) analysis, citing UKRI, Manhattan Institute, and others. [4] openFDA GitHub Repository, https://github.com/FDA. [5] 44 U.S.C. § 3507(h) fast-track provision; Administrative Conference PRA Study (2012). [6] FedRAMP FAQ, 'Understanding Baselines & Impact Levels' (2024). [7] 42 CFR § 1001.952(bb) (value-based safe-harbour). [8] 45 CFR § 46.114, NIH Single-IRB Policy (updated 2023). [9] FDA *DSCSA Pilot Project Program – Final Report* (2024). [10] U.S. Digital Service, *Digital Service Playbook* (2025). [11] 45 CFR § 164.512(i)(1) (HIPAA research waiver).

End of Act.

Impact Securities Reform Act



To accelerate financing for public-good initiatives (e.g., a decentralized framework for drug assessment (dFDA), a decentralized institutes of health (DIH), and a 1% treaty), this Act creates an "impact securities" category with simplified offering, expanded investor participation, and automated, on-chain disclosures, preserving investor protections while lowering capital formation frictions.

Section 2. Definitions

- "Impact Security": A financing instrument whose proceeds are predominantly allocated to measurable public-good outcomes (e.g., reductions in disease burden, DALYs, or verified fiscal savings), subject to transparency and outcome reporting.
- "On-Chain Reporting System": A public blockchain-based registry that provides real-time disclosures: use of proceeds, reserves, liabilities, coupon accruals, coverage ratios, disbursements, auditor attestations.

- "Outcome Oracle": A public methodology and set of data sources used to compute societal outcomes (e.g., QALYs gained) with auditable code and data provenance.

Section 3. Impact Securities Safe Harbor (Offering and Distribution)

No pre-filing or pre-clearance is required under this safe harbor. If the live, public on-chain disclosures specified in Section 4 are available at launch and continuously maintained, issuers may offer, sell, and resell impact securities without prior agency approval or periodic paper filings, subject only to applicable anti-fraud laws and jurisdictional KYC/AML.

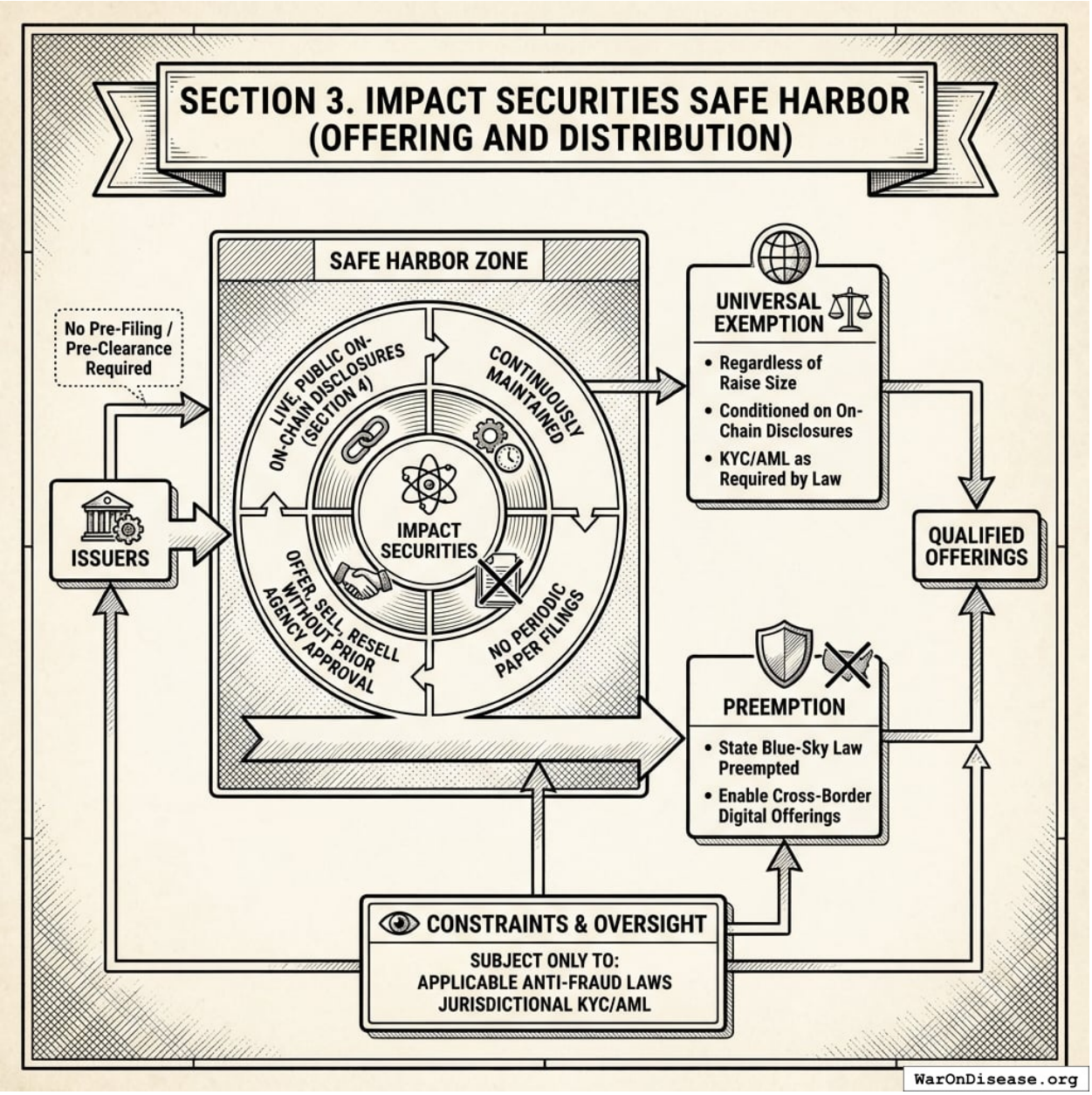


Figure 793: A flowchart showing how the combination of continuous on-chain disclosures and KYC/AML compliance leads to a safe harbor status with universal exemption and state law preemption.

- Universal Exemption: Offerings of impact securities qualify regardless of raise size, conditioned on on-chain disclosures and KYC/AML as required by applicable law.
- Preemption: State blue-sky law preempted to enable cross-border digital offerings.

Section 4. On-Chain Disclosure and Reporting (Automation)

- Mandatory public, machine-readable disclosures via an on-chain registry:
  - Use of proceeds; proof-of-reserves; liabilities; coupon schedules; waterfall and seniority; covenant checks; incident logs.
  - Open-source report schemas; cryptographic attestations.

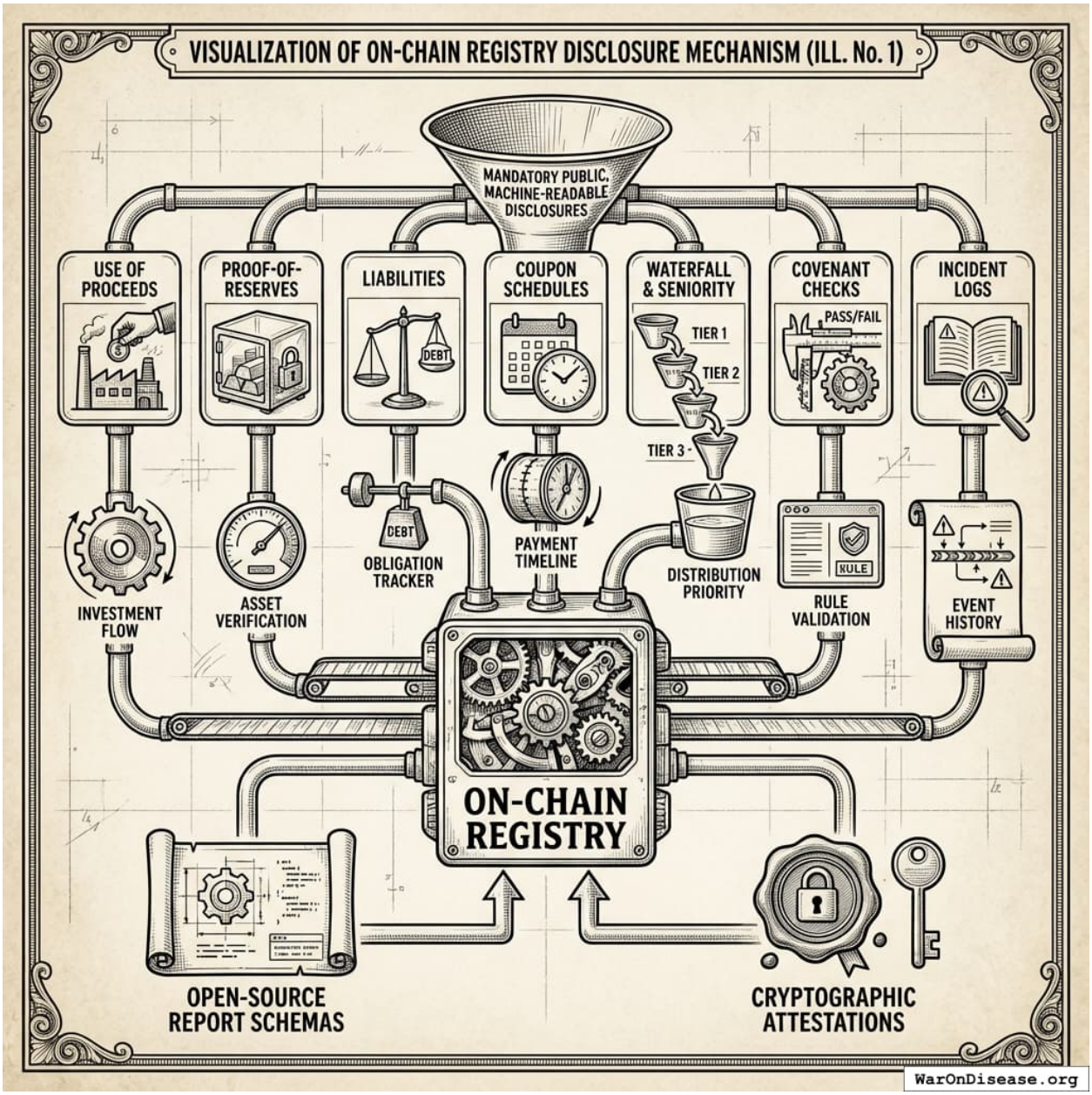


Figure 794: Visualizing the inputs and architecture of the mandatory on-chain registry system for real-time transparency.

Section 4A. Marketing & Disclosures Safe Harbor (Plain-English, Outcome-Linked)

- Issuers may state targets and objectives (e.g., "risk-adjusted returns competitive with leading alternatives") if:
  - All marketing references outcomes as targets, not guarantees; includes standardized risk warnings.
  - Payouts are described as capped shares of verified inflows/savings; the cap and methodology are prominently disclosed.
  - A standardized, plain-English "Key Facts" box is provided (use of proceeds, risks, fees, max payout share, seniority, governance rights, dispute channels), not to exceed 500 words.



Figure 795: A structural breakdown of the disclosure requirements for the Marketing Safe Harbor, highlighting the mandatory components of the standardized Key Facts box and performance advertising criteria.

- Performance advertising safe harbor: Comparative statements must cite a public benchmark and link to the on-chain EV methodology; backtests must be clearly labeled and reproducible.

Section 5. Token Classification Safe Harbor (Governance and Utility)

- Tokens with the following characteristics are presumed non-securities unless marketed with profit promises:
  - Primary functions are governance, access, or usage within a protocol.
  - Public on-chain disclosures of treasury, token supply, and admin keys.
  - No contractual right to profits; no promises of appreciation; reasonable decentralization criteria.
- Transitional Path: A 3-year safe harbor for network decentralization and disclosures[323], after which tokens can qualify as non-securities if criteria are met.

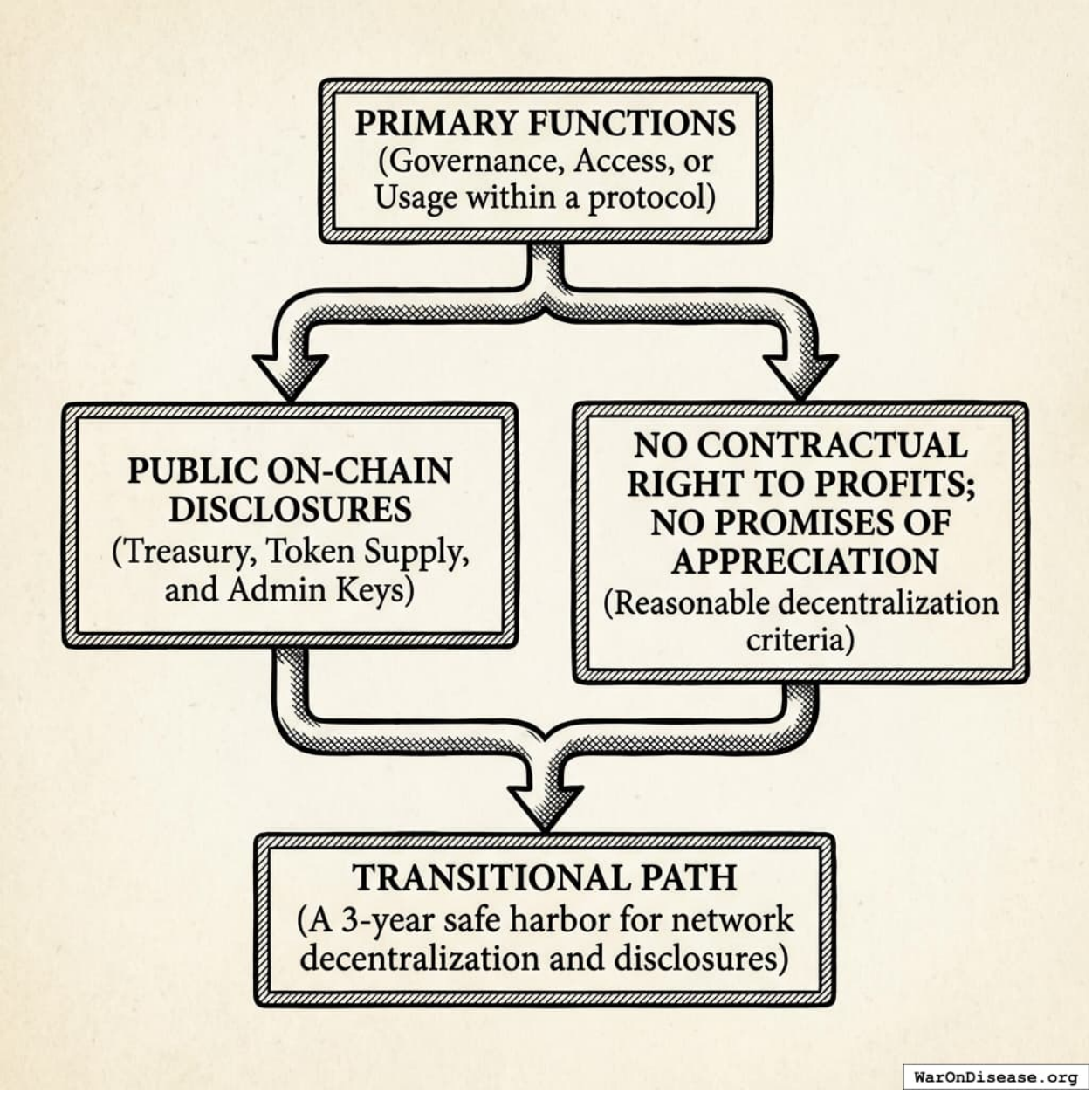


Figure 796: Decision logic for determining token classification and the timeline for the decentralization safe harbor.

Section 6. Outcome-Linked Incentives (Impact-Based Value Capture)

- Permit capped value-sharing rights for impact securities tied to verified savings/outcomes (e.g., a basis-point share of measured payer savings), with guardrails:
  - Public calculation methodology; third-party validation; clawback for fraud.
  - Caps to prevent excessive privatization of public savings; sunset clauses.

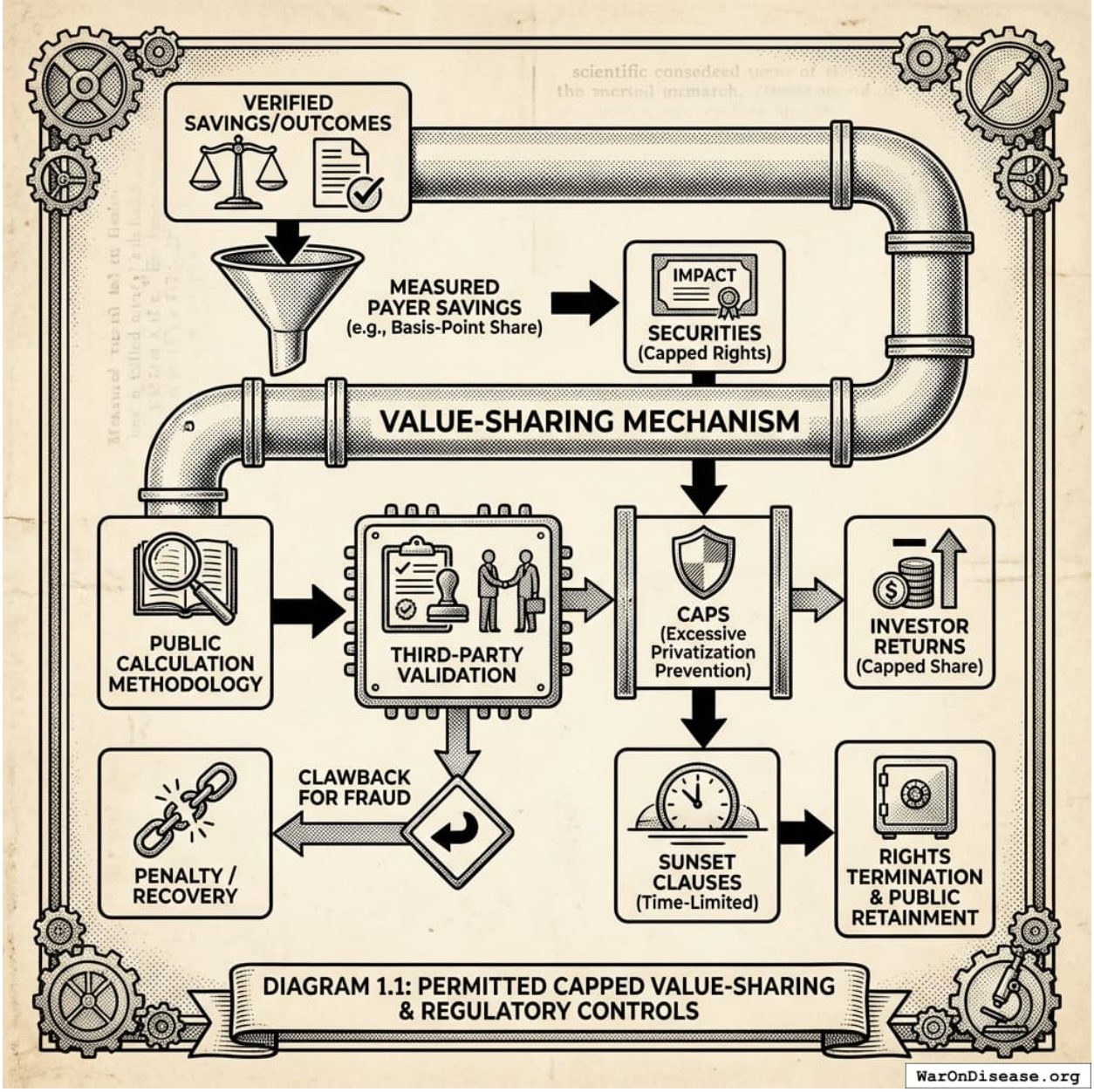


Figure 797: The cycle of value capture, moving from verified outcomes to capped investor payouts with compliance guardrails.

Section 9. Implementation

Section 10. Enforcement and Remedies

- Anti-fraud provisions apply. Failure to provide required disclosures or manipulation of outcome data voids safe-harbor protections and triggers enhanced penalties.

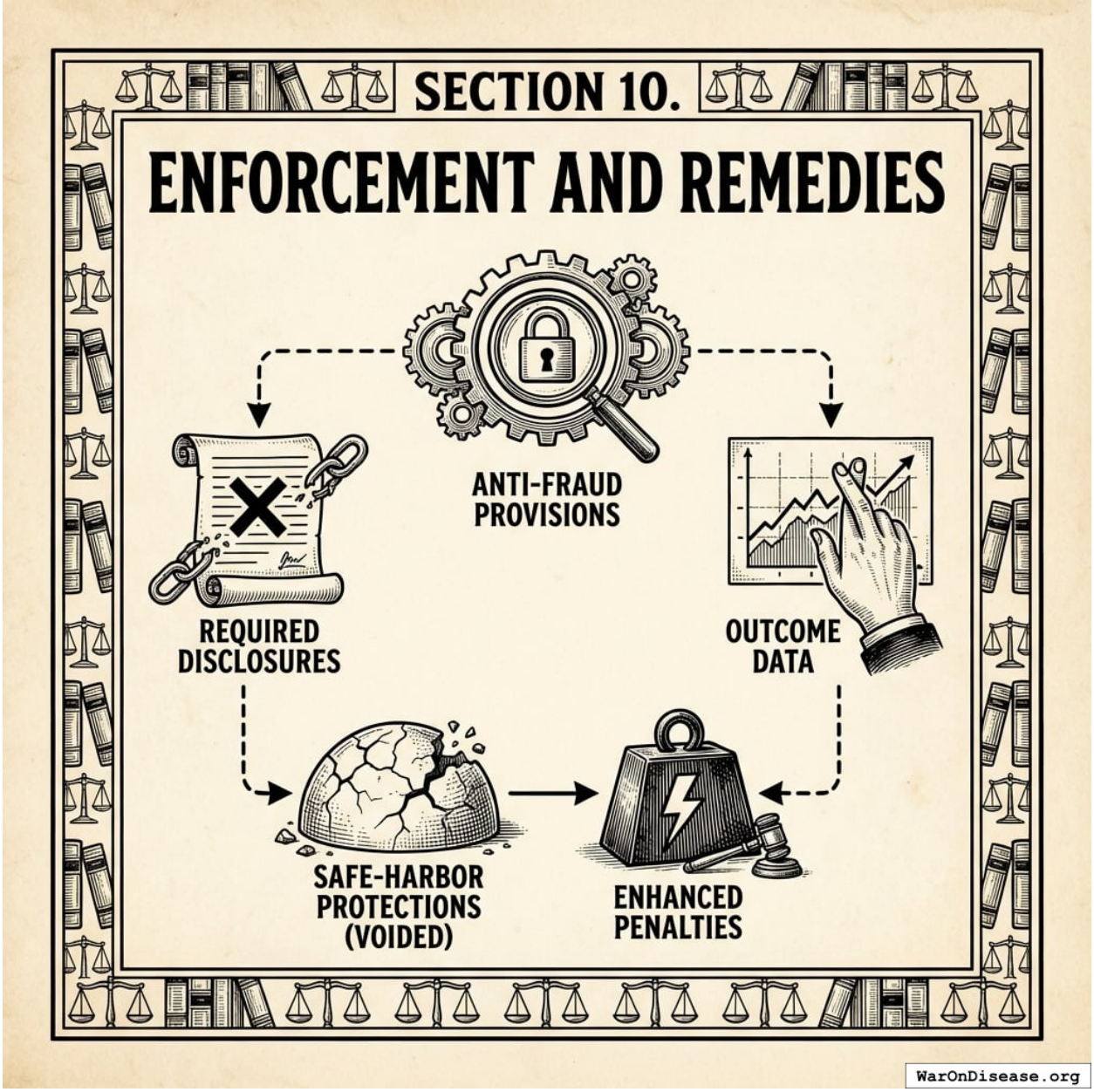


Figure 798: A flowchart showing how failure to provide disclosures or manipulation of data leads to the loss of safe-harbor protections and the imposition of enhanced penalties.

Commentary: Relation to dFDA/DIH and VICTORY Incentive Alignment Bonds

- This Act enables compliant financing for VICTORY instruments and the 1% Treaty Fund by:
  - Lowering offering frictions for impact-linked bonds/tokens.
  - Automating disclosures on-chain to improve transparency and lower costs.
  - Broadening investor access with knowledge-based eligibility.
  - Providing a clear token safe harbor for governance-first designs.

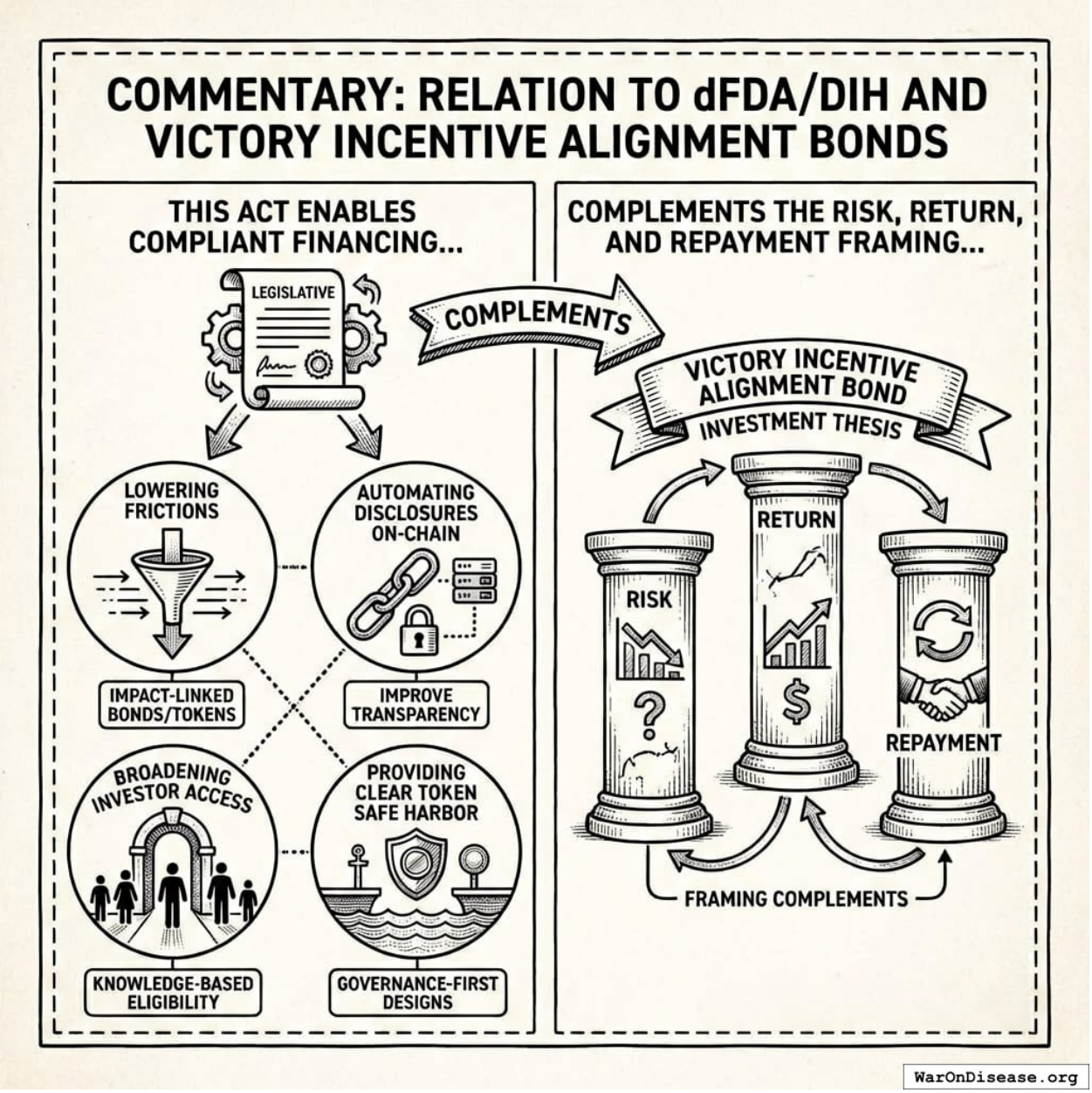
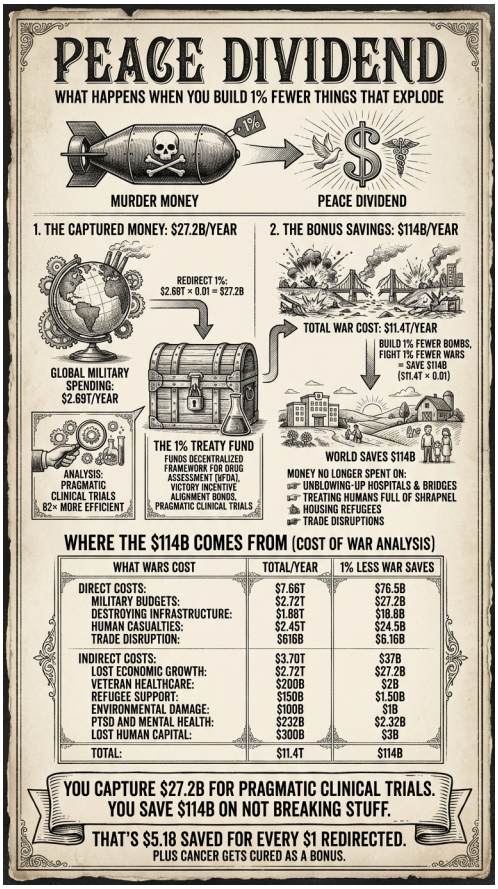


Figure 799: A conceptual diagram illustrating how the Act serves as an enabling framework for VICTORY instruments and the 1 percent Treaty Fund by facilitating lower frictions, automated disclosures, and broader investor access.

- It complements the risk, return, and repayment framing in the VICTORY Incentive Alignment Bond Investment Thesis.

Economic Analysis

Peace Dividend



Here's what 1% less murder money buys:

- **The 1% Treaty Fund gets**: $27.2B to subsidize hyper-efficient pragmatic clinical trials
- **World saves**: $114B (95% CI: $90.1B-$141B) not spent rebuilding bombed hospitals, treating shrapnel wounds, and housing refugees
- **Source**: Cost of War breakdown

How 1% Less Violence Pays For Everything

An analysis of a decentralized framework for drug assessment shows pragmatic clinical trials can be 44.1x (95% CI: 39.4x-89.1x) more efficient. This explains where you steal the money to fund it.

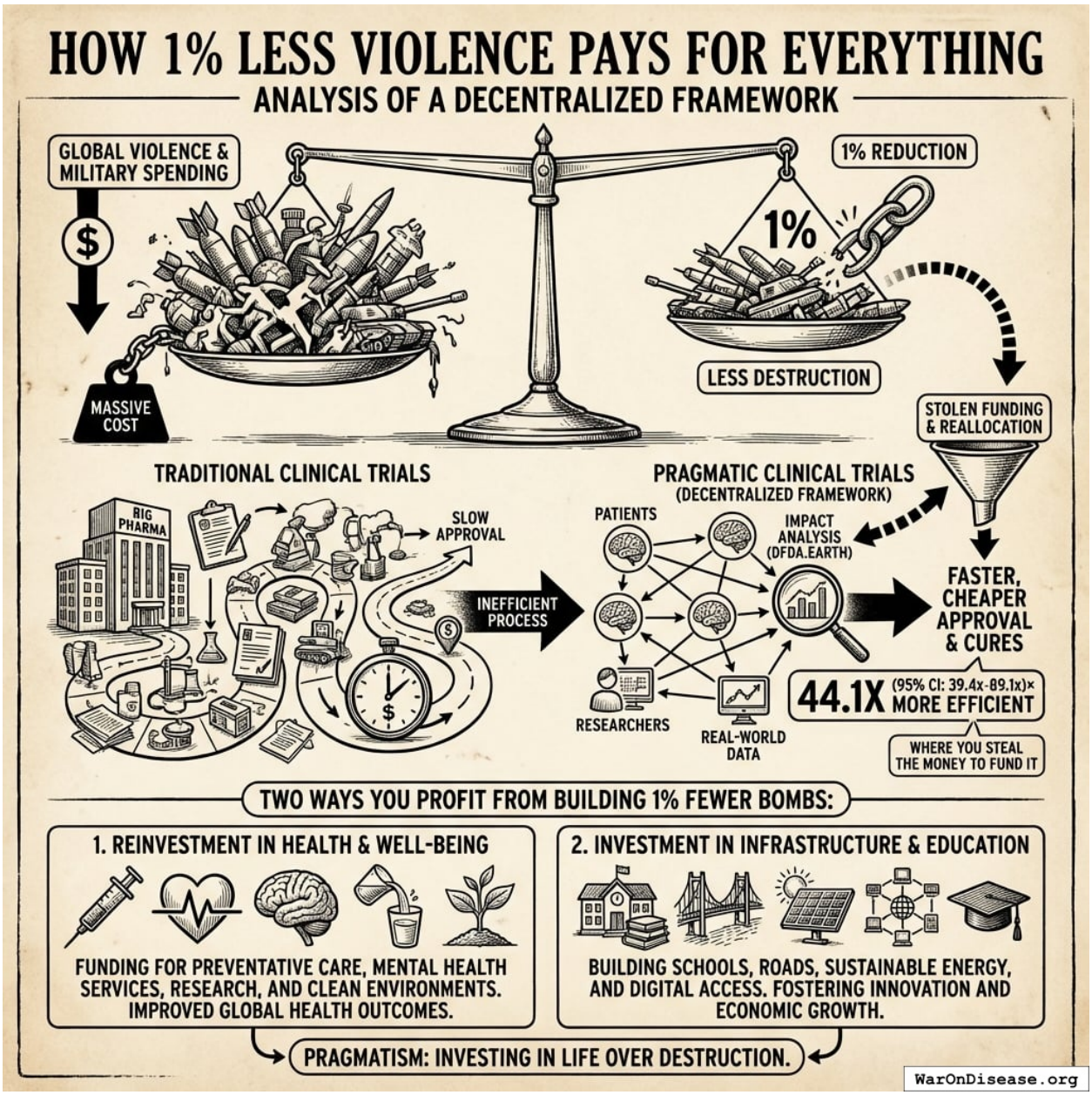


Figure 800: A comparison chart illustrating the 44.1x efficiency gain of decentralized clinical trials compared to traditional methods, including the 39.4x to 89.1x confidence interval.

Two ways you profit from building 1% fewer bombs:

The Captured Money: $27.2B/Year

Governments spend $2.69T yearly on things designed to make other things stop existing.

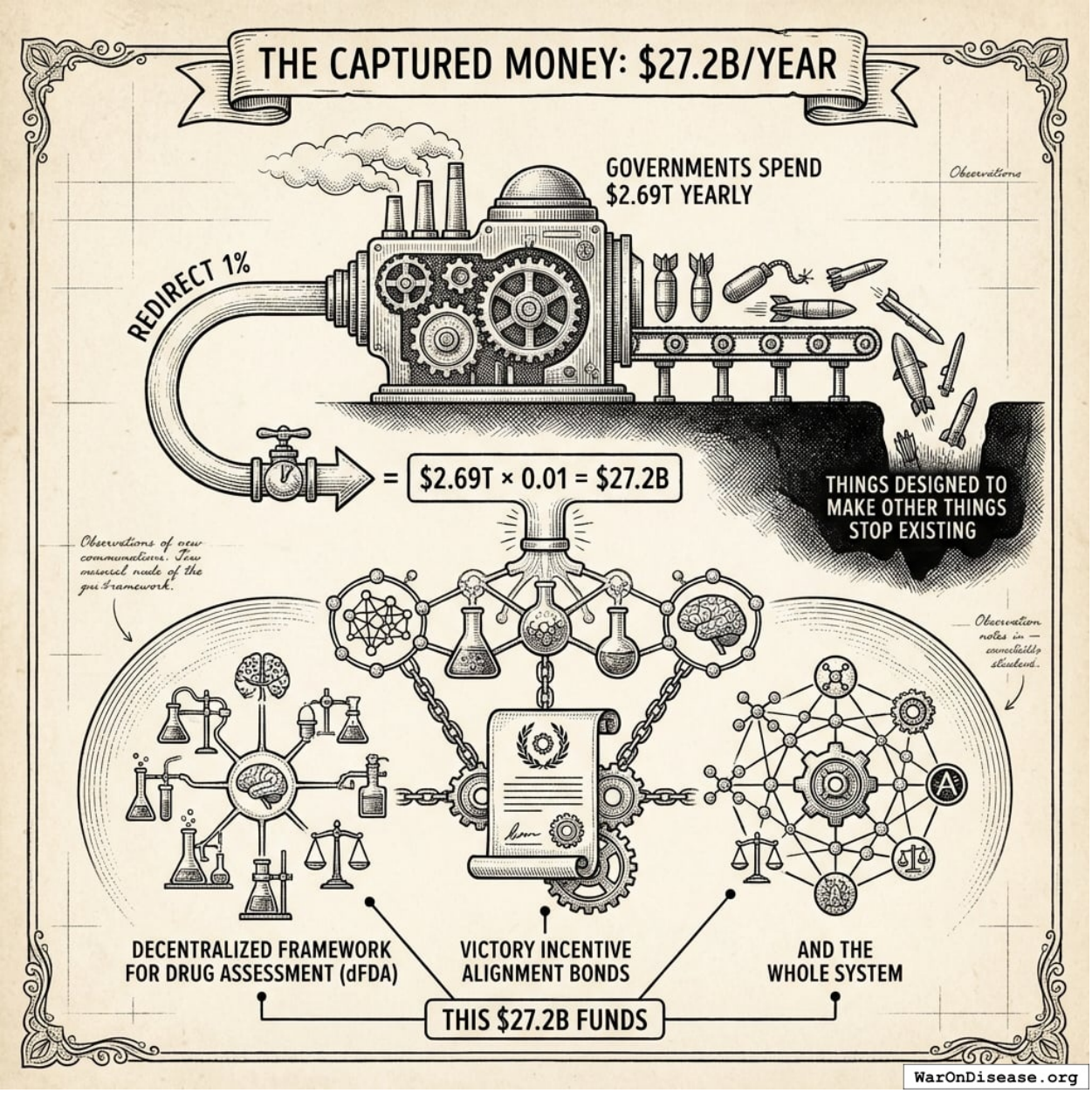


Figure 801: A visualization showing the redirection of 1 percent of the 2.69 trillion global defense spending into a 27.2 billion fund for decentralized drug assessment and incentive bonds.

Redirect 1%:

$2.69T 0.01 = $27.2B

This $27.2B funds your decentralized framework for drug assessment (dFDA), VICTORY Incentive Alignment Bonds, and the whole system.

The Bonus Savings: $114B (95% CI: $90.1B-$141B)/Year

That's what you capture. Here's what you save.

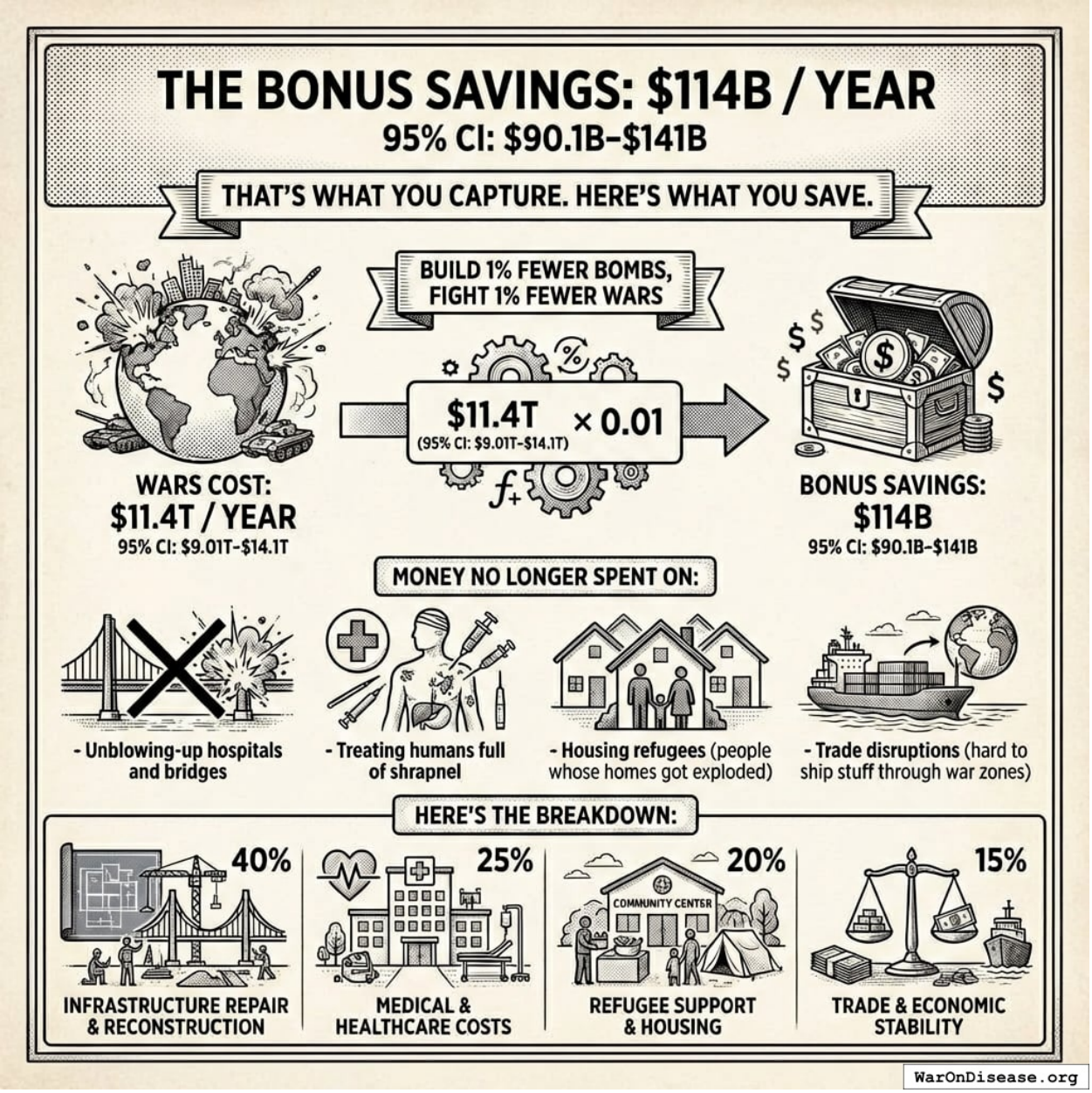


Figure 802: A breakdown showing how a 1 percent reduction in the 11.4 trillion annual cost of war results in 114 billion in savings, categorized by avoided costs like infrastructure repair and refugee support.

Wars cost $11.4T (95% CI: $9.01T-$14.1T)/year. Build 1% fewer bombs, fight 1% fewer wars, save $114B (95% CI: $90.1B-$141B).

$11.4T (95% CI: $9.01T-$14.1T) 0.01 = $114B (95% CI: $90.1B-$141B)

Money no longer spent on:

- Unblowing-up hospitals and bridges
- Treating humans full of shrapnel
- Housing refugees (people whose homes got exploded)
- Trade disruptions (hard to ship stuff through war zones)

Here's the breakdown:

Where the $114B (95% CI: $90.1B-$141B) Comes From

Based on Cost of War analysis:

What Wars Cost	Total/Year	1% Less War Saves
Direct Costs	**$7.66T (95% CI: $6.14T-$9.40T)**	**$76.6B (95% CI: $61.4B-$94B)**
Military budgets	$2.72T	$27.2B
Destroying infrastructure	$1.88T (95% CI: $1.37T-$2.47T)	$18.8B (95% CI: $13.7B-$24.7B)
Human casualties	$2.45T (95% CI: $1.31T-$3.75T)	$24.5B (95% CI: $13.1B-$37.5B)
Trade disruption	$616B (95% CI: $450B-$812B)	$6.16B (95% CI: $4.50B-$8.12B)
Indirect Costs	**$3.70T (95% CI: $2.71T-$4.87T)**	**$37B (95% CI: $27.1B-$48.7B)**
Lost economic growth	$2.72T (95% CI: $1.90T-$3.80T)	$27.2B (95% CI: $19.9B-$35.8B)
Veteran healthcare	$200B (95% CI: $140B-$280B)	$2B (95% CI: $1.46B-$2.63B)
Refugee support	$150B (95% CI: $105B-$210B)	$1.50B (95% CI: $1.10B-$1.98B)
Environmental damage	$100B (95% CI: $70B-$140B)	$1B (95% CI: $732M-$1.32B)
PTSD and mental health	$232B (95% CI: $162B-$325B)	$2.32B (95% CI: $1.70B-$3.06B)
Lost human capital	$300B (95% CI: $210B-$420B)	$3B (95% CI: $2.20B-$3.95B)
Total	**$11.4T (95% CI: $9.01T-$14.1T)**	**$114B (95% CI: $90.1B-$141B)**

You capture $27.2B for pragmatic clinical trials.

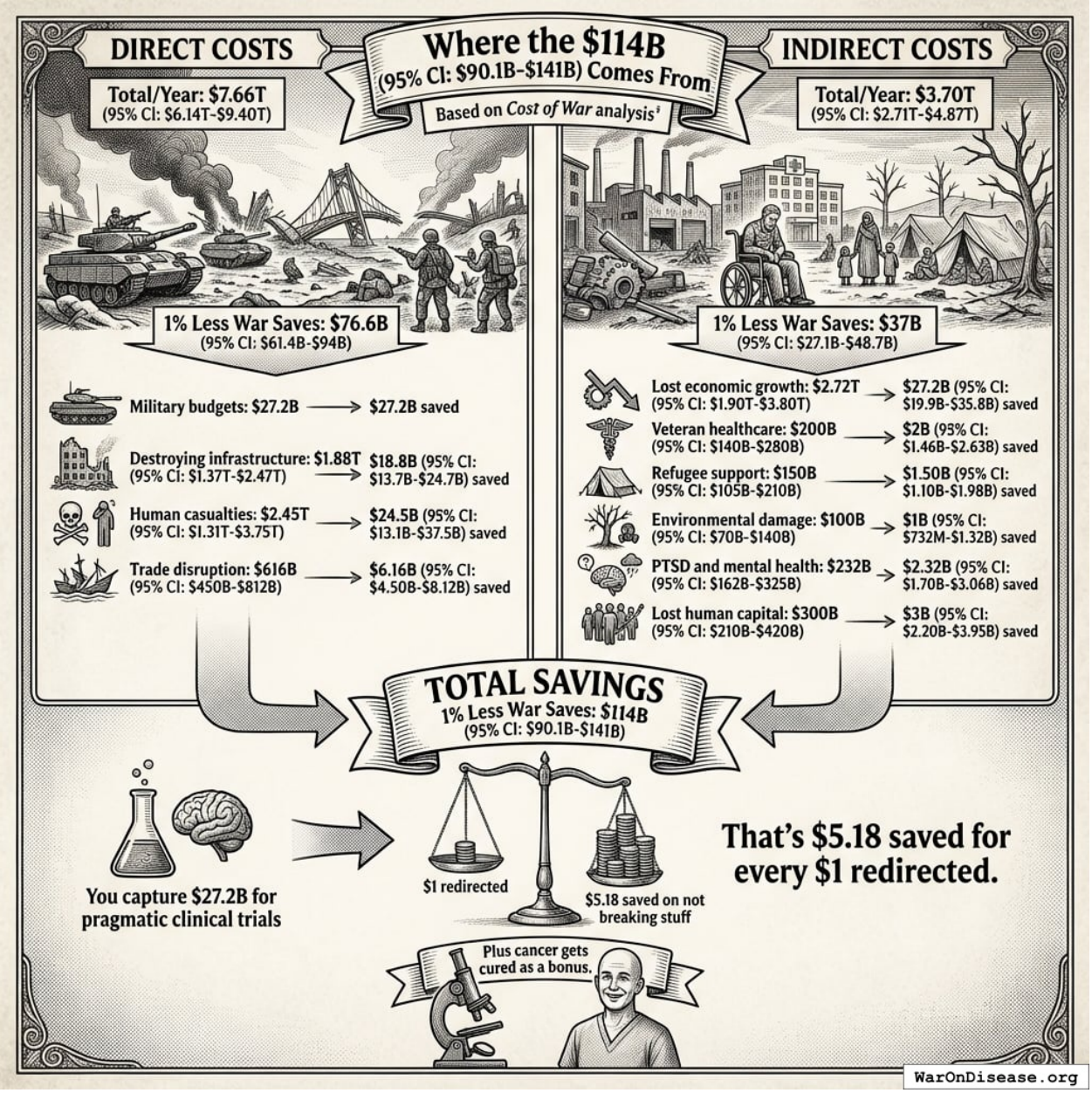


Figure 803: A breakdown of the 114 billion in annual savings from a 1 percent reduction in war costs, illustrating the distribution across direct costs like military budgets and casualties, and indirect costs like lost economic growth.

You save $114B (95% CI: $90.1B-$141B) on not breaking stuff.

That's $5.18 saved for every $1 redirected.

Plus cancer gets cured as a bonus.

The Formulas

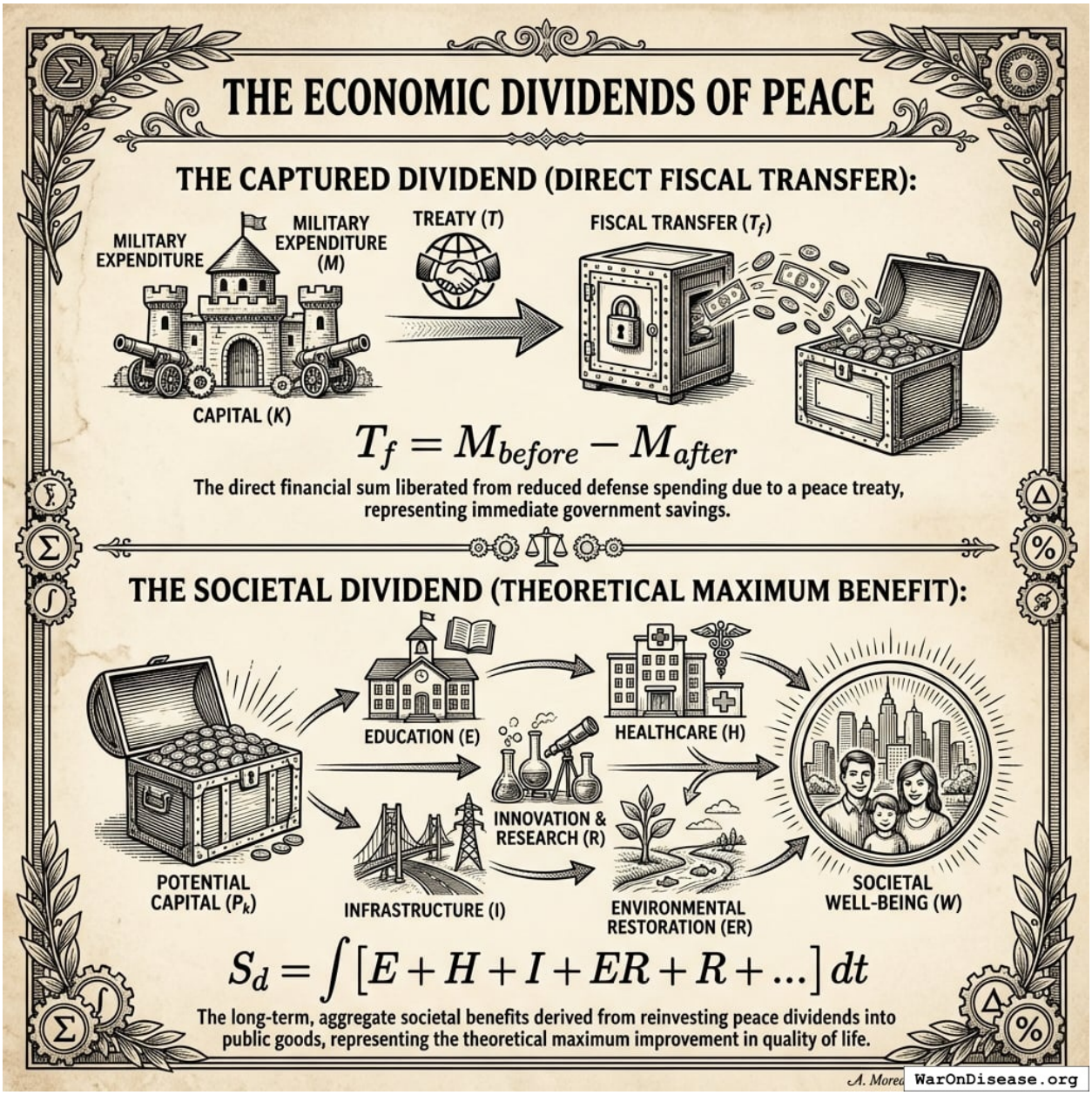


Figure 804: A comparison showing the scale difference between the direct fiscal transfer (Captured Dividend) and the total projected economic impact (Societal Dividend).

The Captured Dividend (direct fiscal transfer):

$$\begin{aligned} & Funding_{treaty} \\ &= Spending_{mil} \times Reduce_{treaty} \\ &= \$2.72T \times 1\% \\ &= \$27.2B \end{aligned}$$

The Societal Dividend (theoretical maximum benefit):

$$
\begin{gathered}
Benefit_{peace,soc} \\
= Cost_{war,total} \times Reduce_{treaty} \\
= \$11.4T \times 1\% \\
= \$114B
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{war,total} \\
= Cost_{war,direct} + Cost_{war,indirect} \\
= \$7.66T + \$3.7T \\
= \$11.4T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{war,direct} \\
= Loss_{life,conflict} + Damage_{infra,total} \\
+ Disruption_{trade} + Spending_{mil} \\
= \$2.45T + \$1.88T + \$616B + \$2.72T \\
= \$7.66T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Loss_{life,conflict} \\
= Cost_{combat,human} + Cost_{state,human} \\
+ Cost_{terror,human} \\
= \$2.34T + \$27B + \$83B \\
= \$2.45T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{combat,human} \\
= Deaths_{combat} \times VSL \\
= 234{,}000 \times \$10M \\
= \$2.34T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{state,human} \\
= Deaths_{state} \times VSL \\
= 2{,}700 \times \$10M \\
= \$27B
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{terror,human} \\
= Deaths_{terror} \times VSL \\
= 8{,}300 \times \$10M \\
= \$83B
\end{gathered}
$$

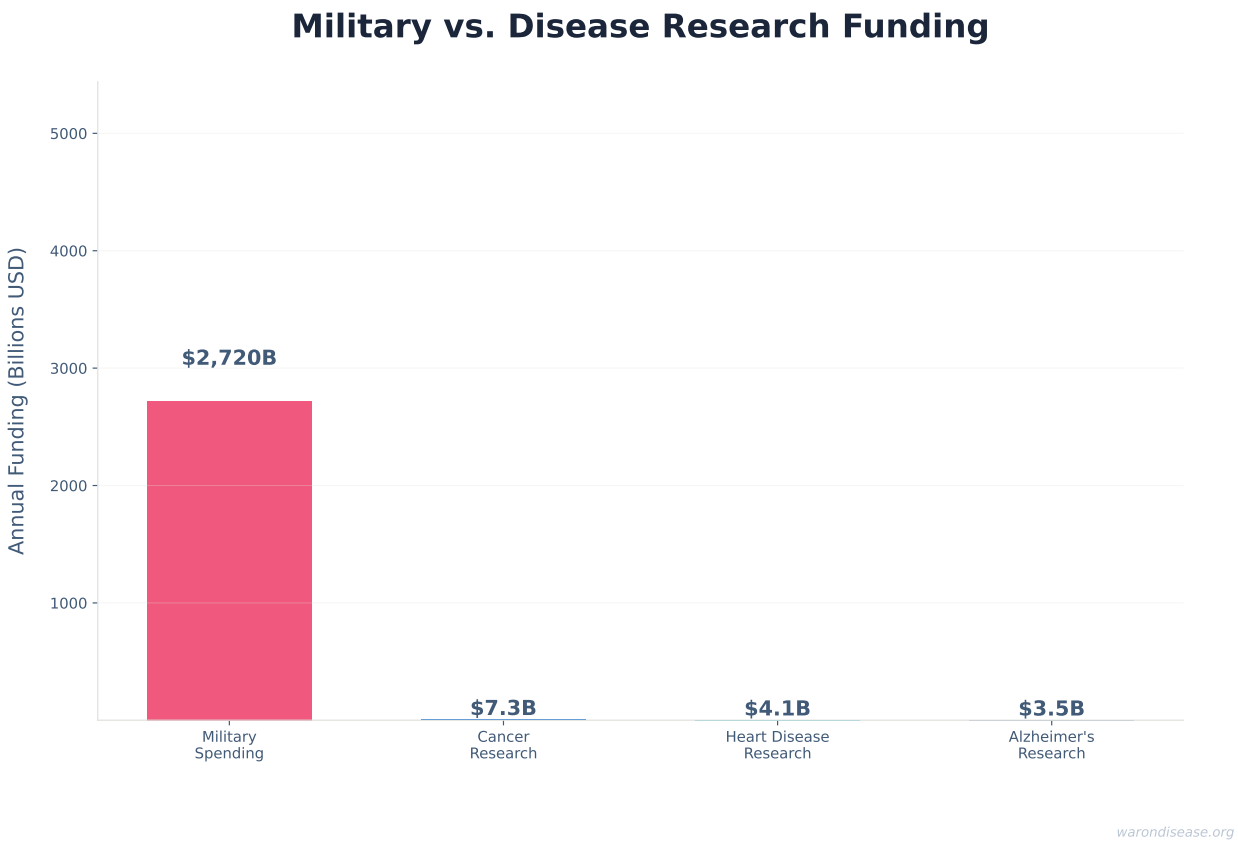
$$
\begin{gathered}
\text{where } Damage_{infra,total} \\
= Damage_{comms} + Damage_{edu} + Damage_{energy} \\
+ Damage_{health} + Damage_{transport} \\
+ Damage_{water} \\
= \$298B + \$234B + \$422B + \$166B + \$487B + \$268B \\
= \$1.88T
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Disruption_{trade} \\
= Disruption_{currency} + Disruption_{energy} \\
+ Disruption_{shipping} + Disruption_{supply} \\
= \$57.4B + \$125B + \$247B + \$187B \\
= \$616B
\end{gathered}
$$

$$
\begin{gathered}
\text{where } Cost_{war,indirect} \\
= Damage_{env} + Loss_{growth,mil}
\end{gathered}
$$

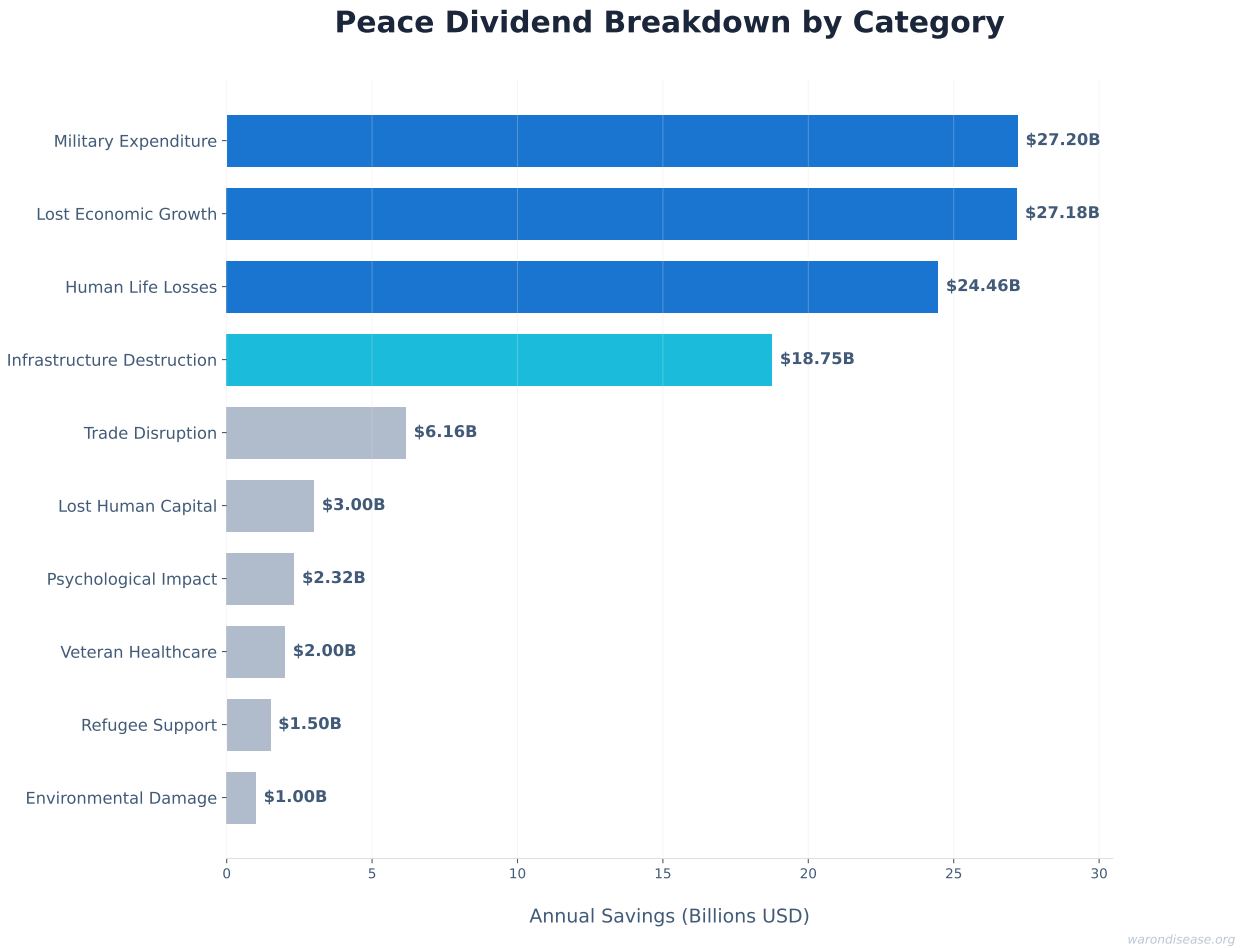
Military vs Disease Research: The Opportunity

This chart shows the stark contrast between military spending and disease-specific research funding:



Peace Dividend Breakdown by Category

Where the economic benefits come from when we reduce conflict by just 1%:


Peace Dividend Breakdown by Category
Military Expenditure
$27.20B
Lost Economic Growth
$27.18B
Human Life Losses
$24.46B
Infrastructure Destruction
$18.75B
Trade Disruption
$6.16B
Lost Human Capital
$3.00B
Psychological Impact
$2.32B
Veteran Healthcare
$2.00B
Refugee Support
$1.50B
Environmental Damage
$1.00B
0
5
10
15
20
25
30
Annual Savings (Billions USD)
warondisease.org

Peace Dividend Composition

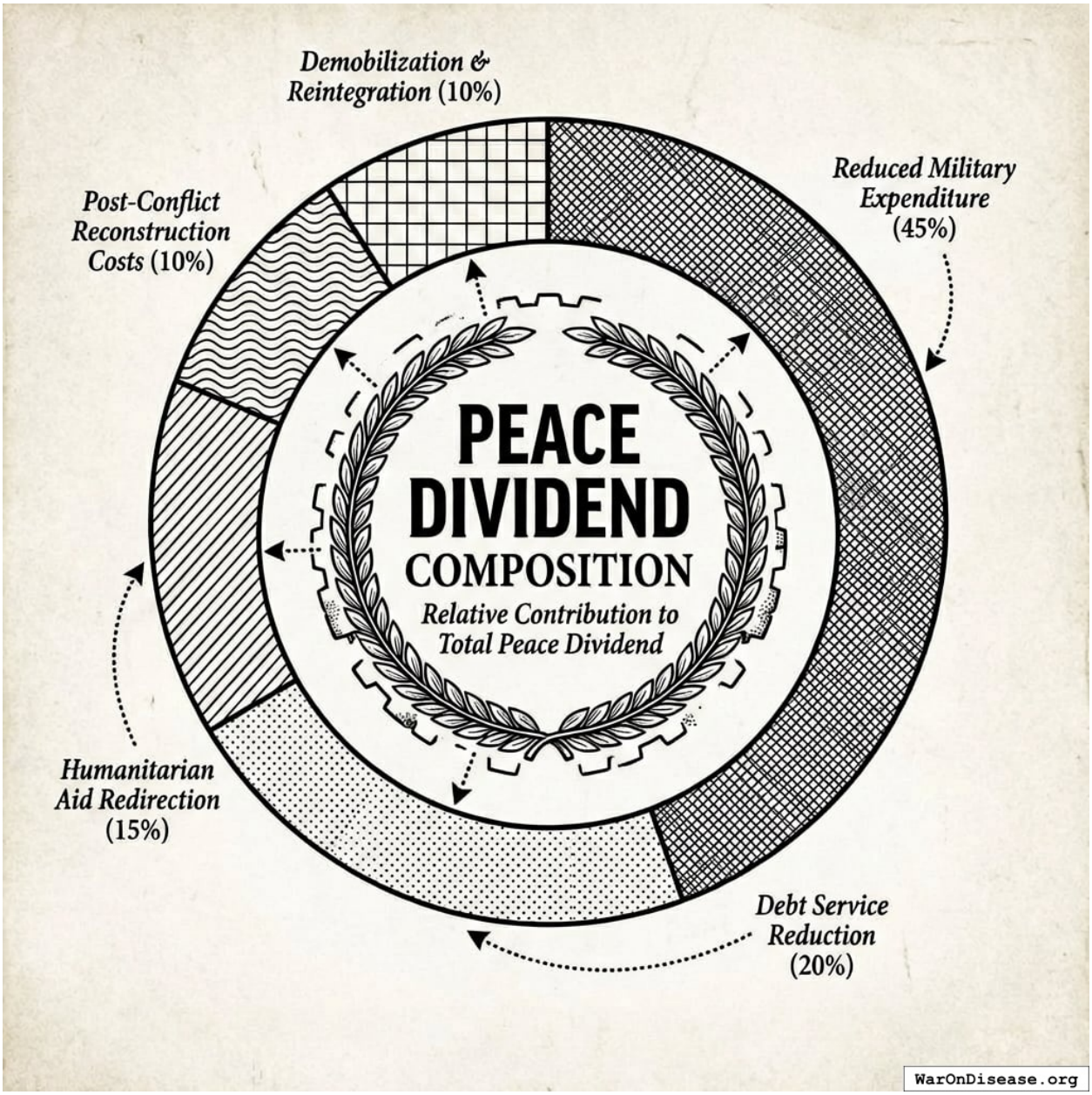
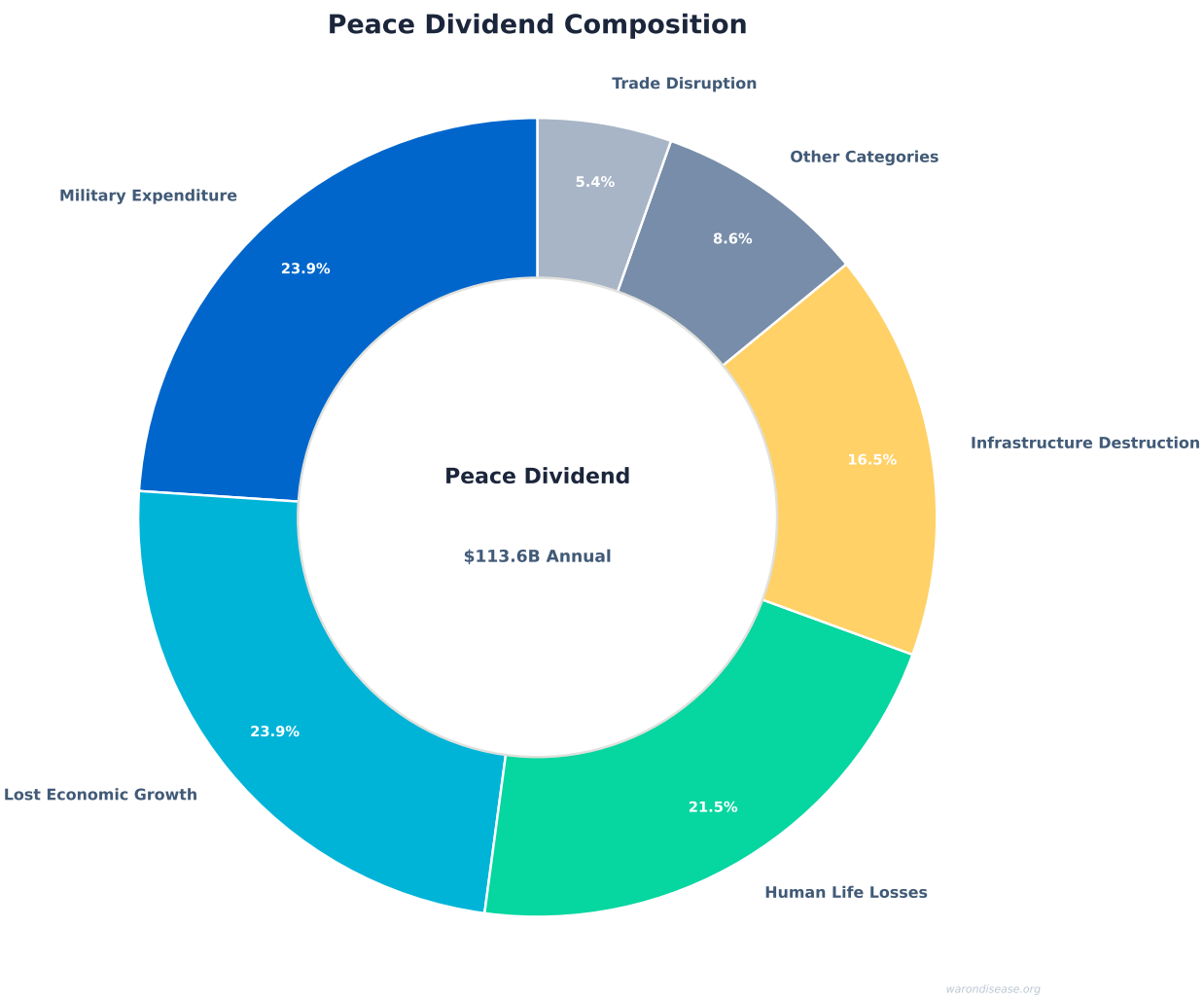
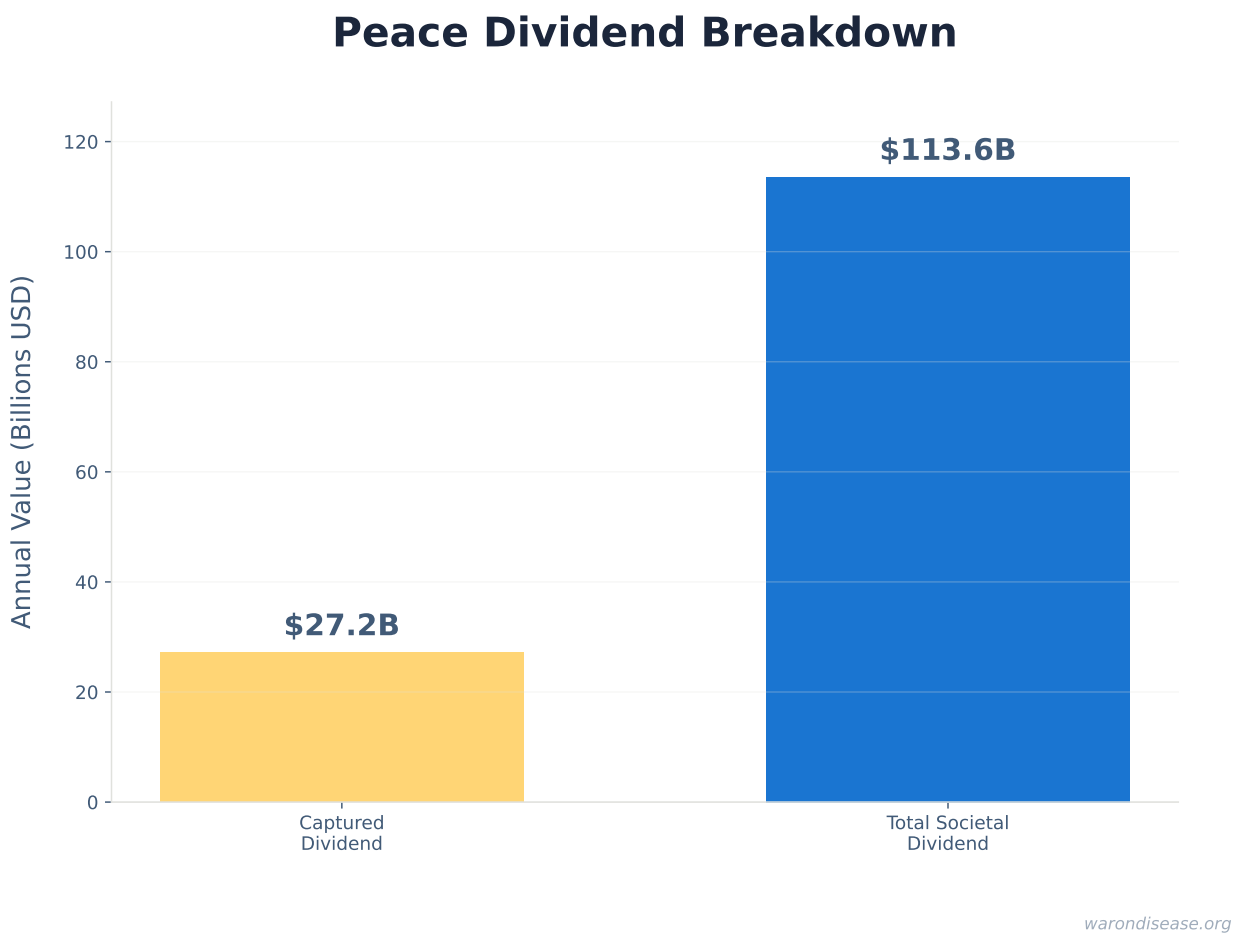


Figure 805: A donut chart illustrating the proportional contribution of various cost categories to the total peace dividend.

Relative contribution of different cost categories to the total peace dividend:


Peace Dividend Composition
Trade Disruption
5.4%
Other Categories
8.6%
Military Expenditure
23.9%
Infrastructure Destruction
16.5%
Peace Dividend
$113.6B Annual
23.9%
Lost Economic Growth
21.5%
Human Life Losses
warondisease.org

Captured vs. Societal Dividend

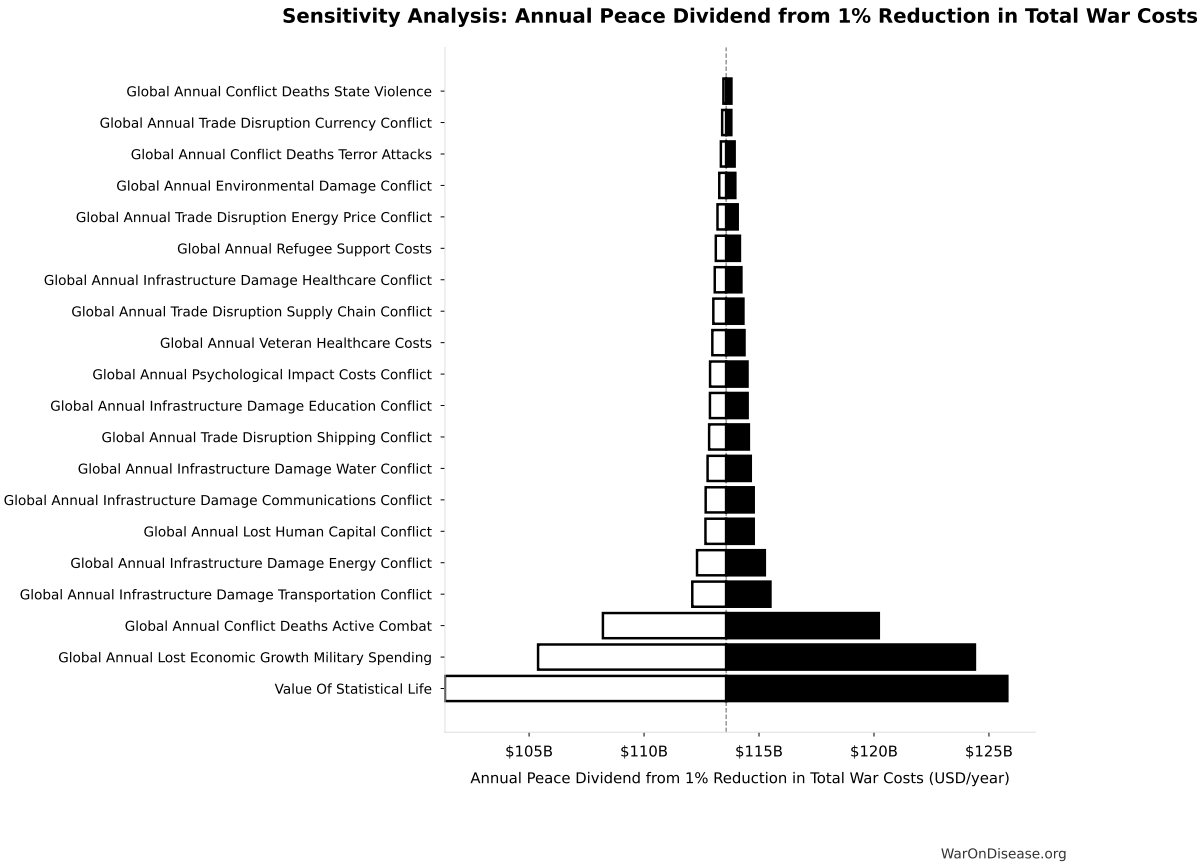


Sensitivity Analysis

A key principle of rigorous economic modeling is to test the assumptions. The Monte Carlo simulation varies all input parameters simultaneously according to their uncertainty distributions.

Tornado Chart: Key Drivers of Uncertainty

Which input parameters have the largest impact on the peace dividend estimate:



Monte Carlo Distribution

The Monte Carlo simulation (10,000 iterations) propagates uncertainty through all input parameters:

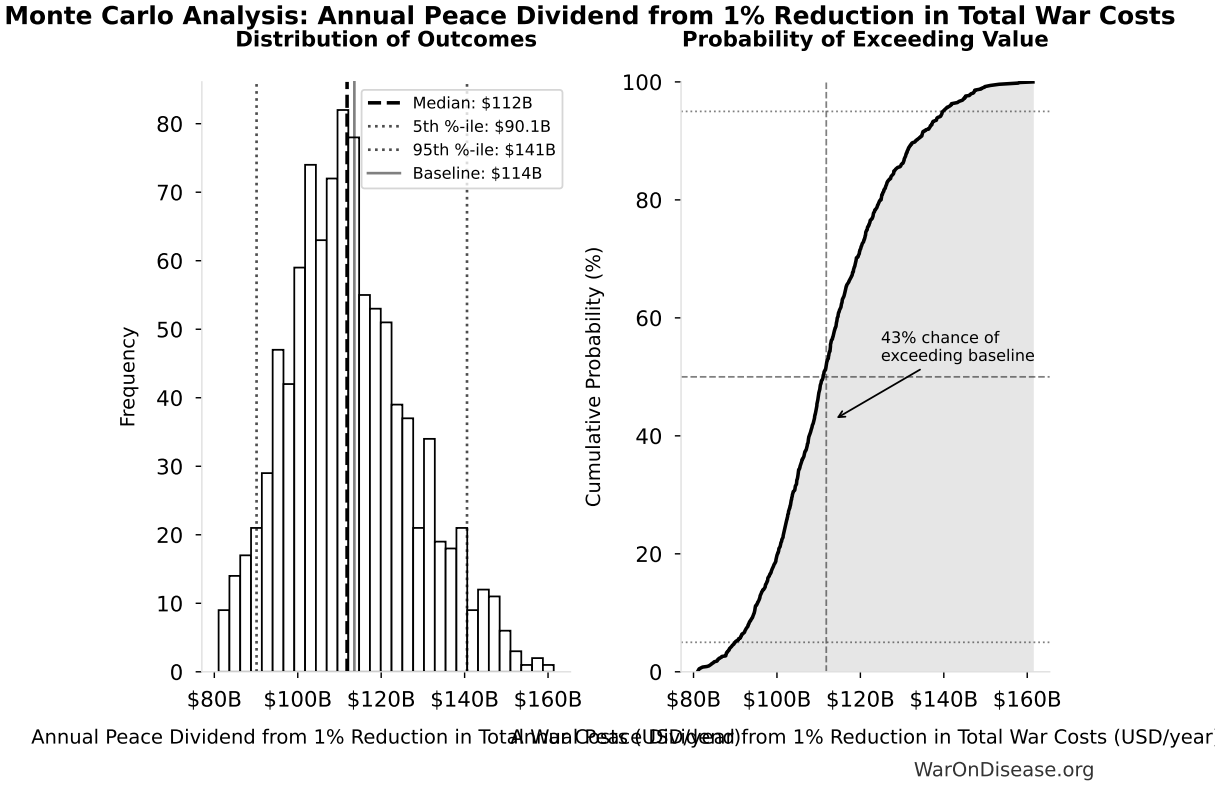


Figure 806: Monte Carlo Distribution: Annual Peace Dividend from 1% Reduction in Total War Costs (10,000 simulations)

Simulation Results Summary: Annual Peace Dividend from 1% Reduction in Total War Costs

Statistic	Value
Baseline (deterministic)	$114B
Mean (expected value)	$113B
Median (50th percentile)	$112B
Standard Deviation	$15.1B
90% Confidence Interval	[$90.1B, $141B]

The histogram shows the distribution of Annual Peace Dividend from 1% Reduction in Total War Costs across 10,000 Monte Carlo simulations. The CDF (right) shows the probability of the outcome exceeding any given value, which is useful for risk assessment.

Probability of Exceeding Thresholds

The probability that the peace dividend will exceed any given value:

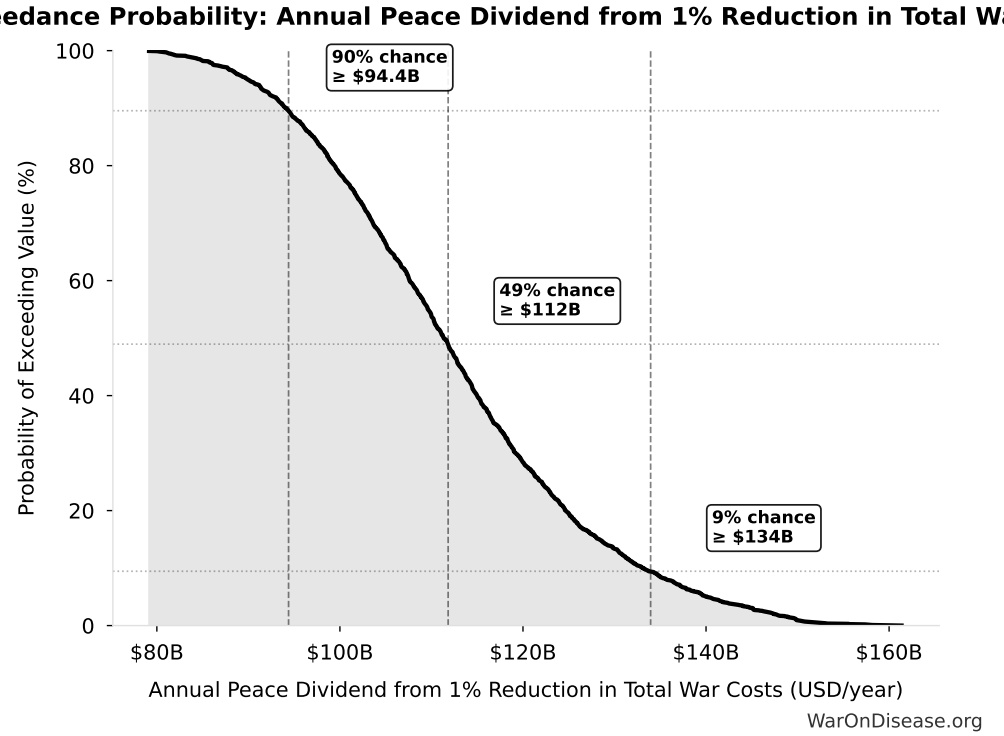


Figure 807: Probability of Exceeding Threshold: Annual Peace Dividend from 1% Reduction in Total War Costs

This exceedance probability chart shows the likelihood that Annual Peace Dividend from 1% Reduction in Total War Costs will exceed any given threshold. Higher curves indicate more favorable outcomes with greater certainty.

Conflict Elasticity Parameter

The elasticity parameter (= 1:1 (95% CI: 0.25:1-1.5:1)) captures how much conflict costs decrease per 1% spending cut:

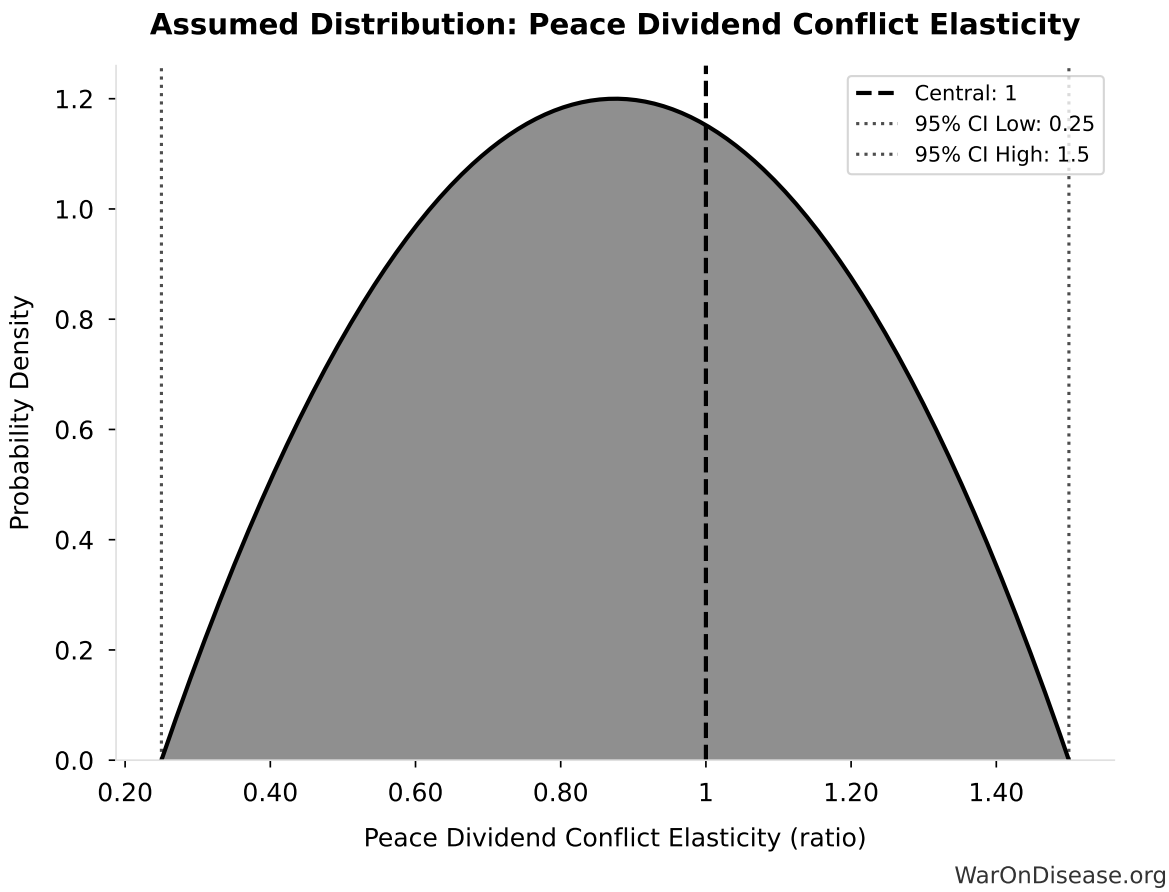


Figure 808: Probability Distribution: Peace Dividend Conflict Elasticity

This chart shows the assumed probability distribution for this parameter. The shaded region represents the 95% confidence interval where we expect the true value to fall.

- $= \mathbf{0.25}$: Weak linkage (only 25% of spending cuts translate to cost reductions)
- $= \mathbf{0.5}$: Moderate linkage (conservative estimate)
- $= \mathbf{1.0}$: Full proportionality (baseline assumption)
- $> \mathbf{1.0}$: Shared enemy amplification (redirecting to disease creates unity)

Even under pessimistic elasticity assumptions ($= 0.25$), the Captured Dividend of $27.2B is guaranteed.

Key Findings

1. **Guaranteed Fiscal Transfer**: $27.2B annually is direct budget reallocation. Guaranteed if treaty enacted.

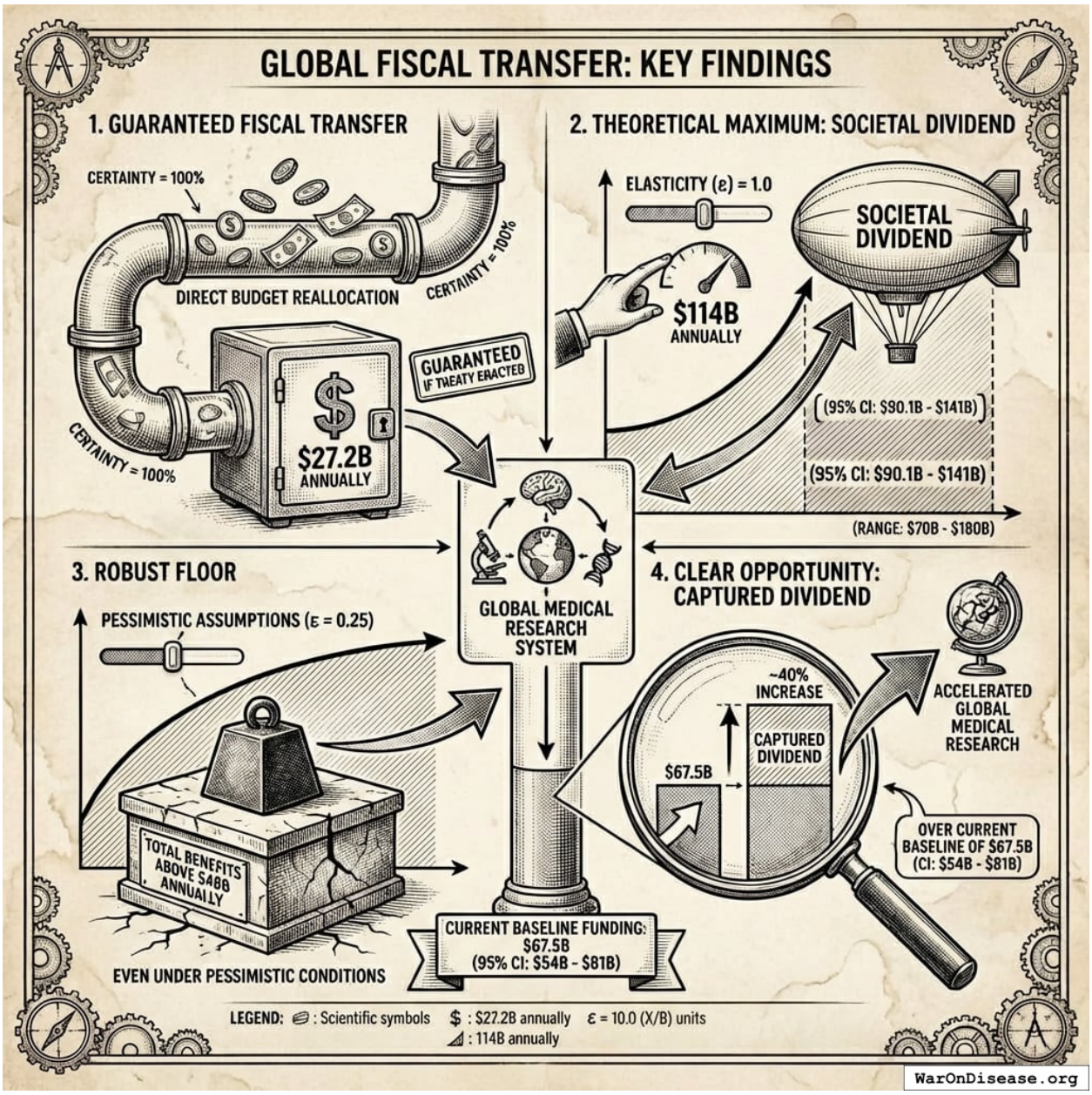


Figure 809: A comparison of the projected economic impacts, ranging from the 27.2B guaranteed fiscal transfer to the 114B theoretical maximum societal dividend, alongside the projected 40 percent increase in global medical research funding.

2. **Theoretical Maximum**: Under unit elasticity (= 1.0), total Societal Dividend reaches $114B (95% CI: $90.1B-$141B) annually (95% CI: $70B-$180B).
3. **Robust Floor**: Even under pessimistic assumptions (= 0.25), total benefits remain above $48B annually.
4. **Clear Opportunity**: The Captured Dividend alone would increase global medical research funding by ~40% over the current $67.5B (95% CI: $54B-$81B) baseline.

Assumptions and Limitations

GDP Multiplier Note

The Lost Economic Growth component ($2.7T annually) already captures the opportunity cost of military spending versus more productive alternatives. This implicitly includes fiscal multiplier differences (military ~0.6x vs healthcare ~4.3x). No additional multiplier adjustment is applied to avoid double-counting.

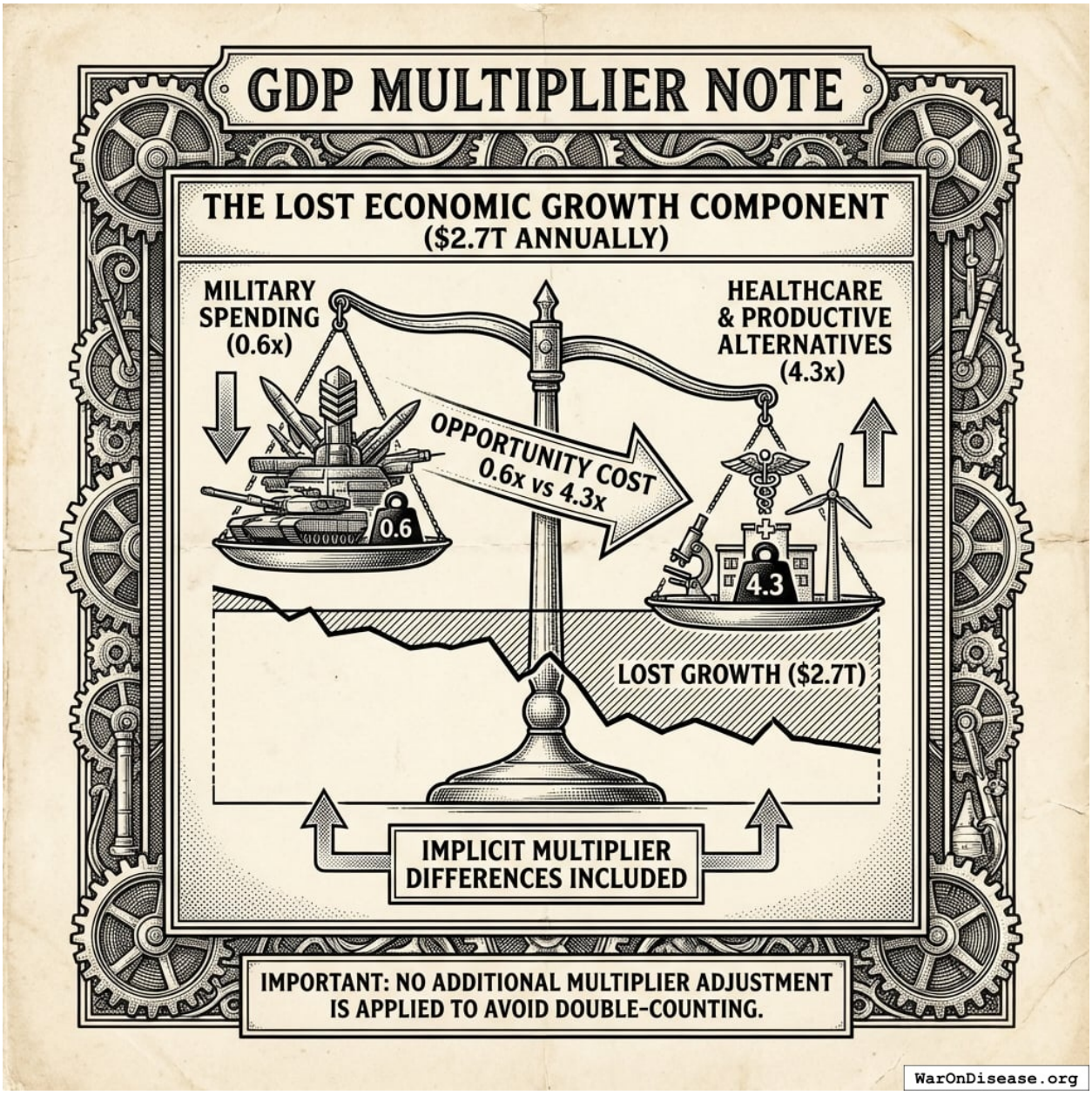


Figure 810: A comparison of fiscal multipliers illustrating the economic return of military spending (0.6x) versus healthcare spending (4.3x).

Causal Elasticity Assumption

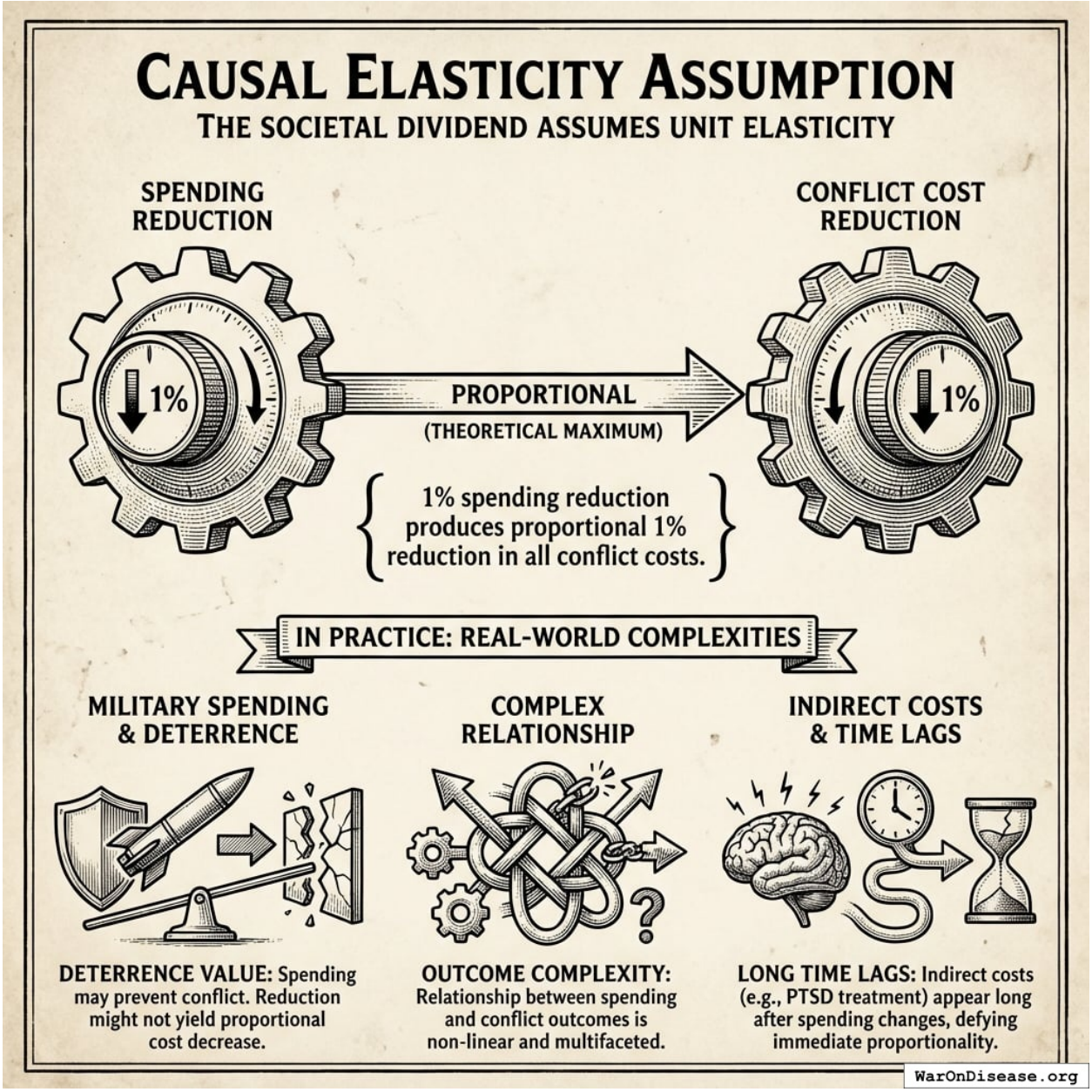


Figure 811: A comparison between the theoretical 1:1 unit elasticity model and the complex real-world relationship between spending reductions and conflict costs.

The Societal Dividend assumes **unit elasticity**: 1% spending reduction produces proportional 1% reduction in all conflict costs. This is the theoretical maximum. In practice:

- Military spending may have deterrence value
- The relationship between spending and conflict outcomes is complex
- Some indirect costs (e.g., PTSD treatment) have long time lags

Source Quality

Cost Category	Source	Confidence
Military Spending	SIPRI (peer-reviewed)	High
Infrastructure Damage	Brown/Watson Costs of War	Medium
Trade Disruption	World Bank	Medium
Lost Economic Growth	SIPRI estimates	Medium-Low
Psychological Impact	PubMed meta-analysis	Medium
Lost Human Capital	Author estimates	Low

What This Does NOT Claim

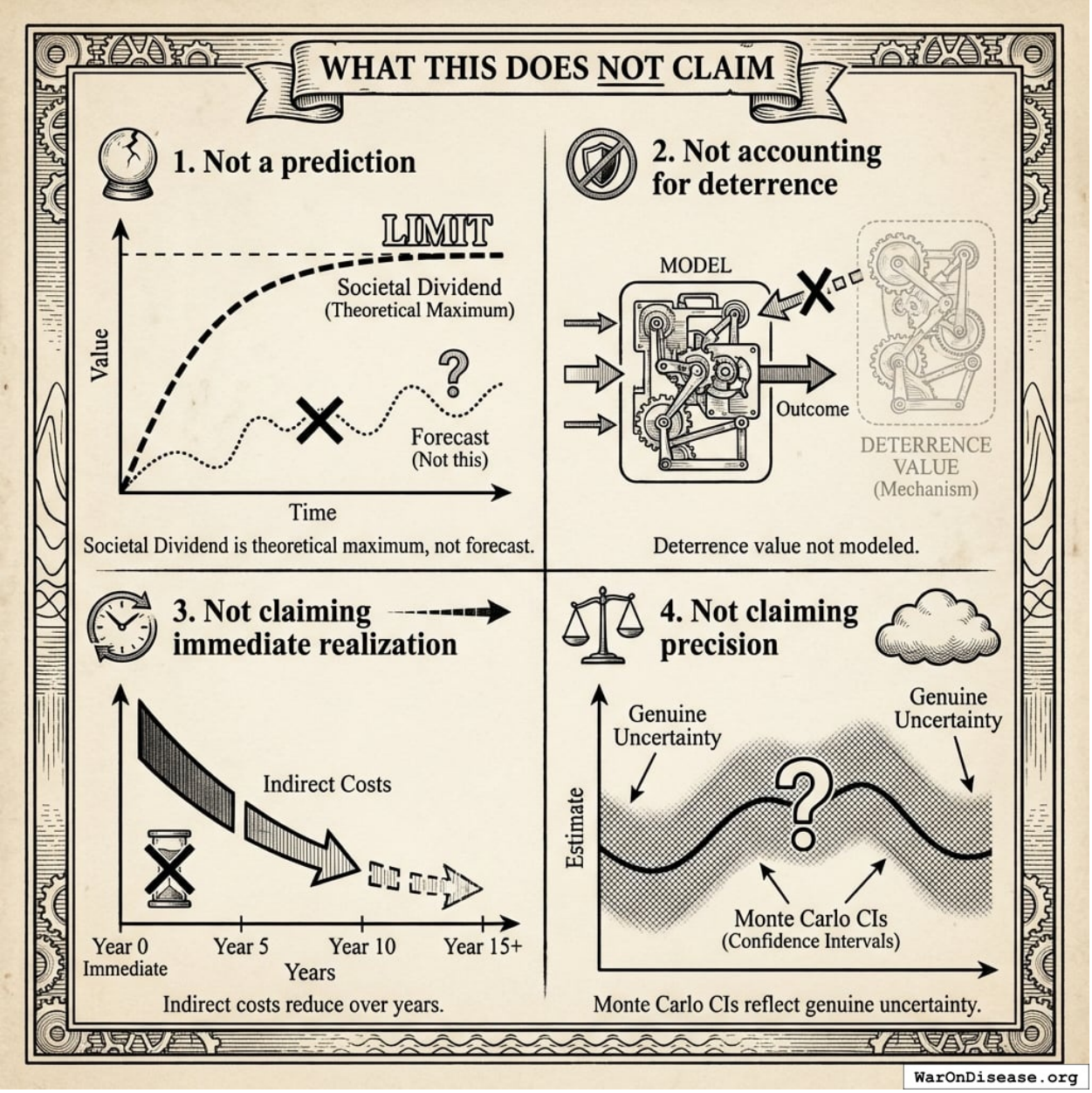


Figure 812: A conceptual boundary diagram illustrating the four key limitations of the Societal Dividend model, contrasting theoretical potential against real-world forecasts and immediate realization.

1. **Not a prediction**: Societal Dividend is theoretical maximum, not forecast
2. **Not accounting for deterrence**: Deterrence value not modeled
3. **Not claiming immediate realization**: Indirect costs reduce over years
4. **Not claiming precision**: Monte Carlo CIs reflect genuine uncertainty

Conservative Interpretation

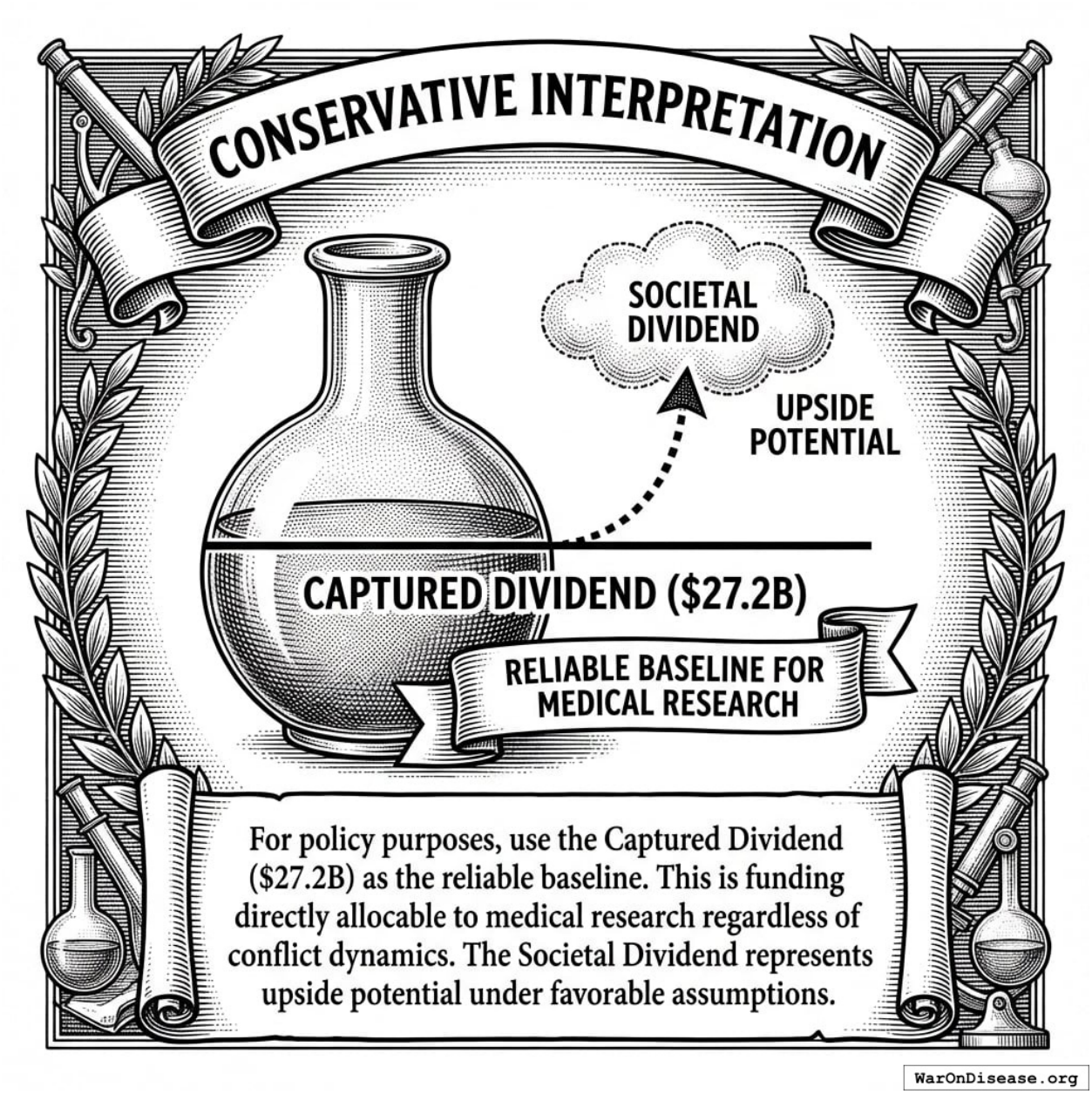
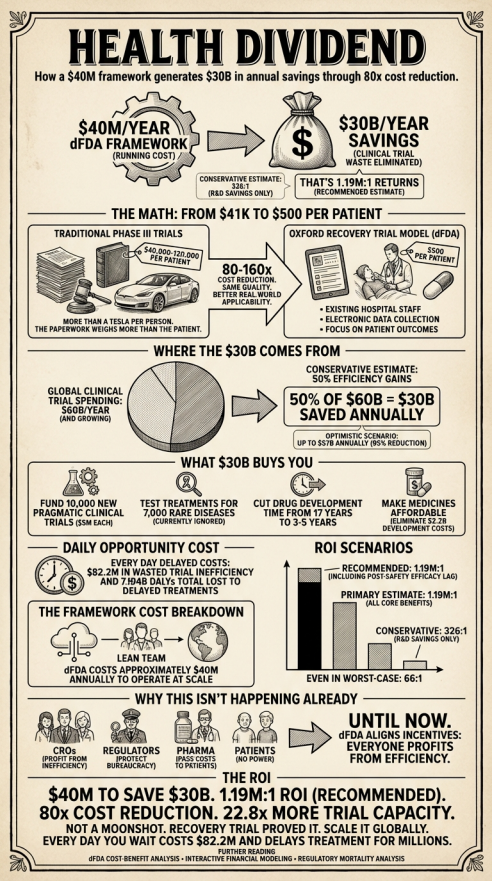


Figure 813: Comparison of the Captured Dividend as a reliable 27.2B baseline for funding versus the Societal Dividend as potential upside.

For policy purposes, use the **Captured Dividend ($27.2B)** as the reliable baseline. This is funding directly allocable to medical research regardless of conflict dynamics. The Societal Dividend represents upside potential under favorable assumptions.

Health Dividend



Your decentralized framework for drug assessment (dFDA) costs $40M (95% CI: $27.3M-$55.6M)/year to run. It saves $58.6B (95% CI: $49.2B-$73.1B)/year in clinical trial waste. That's 84.8M:1 (95% CI: 46.6M:1-144M:1) returns (recommended estimate including post-safety efficacy lag elimination).

Conservative estimate: 637:1 (95% CI: 569:1-790:1) (R&D savings only)

Here's the breakdown.

The Math: From $41K (95% CI: $20K-$120K) to $500 (95% CI: $400-$2.50K) Per Patient

Traditional Phase III trials cost **$41K (95% CI: $20K-$120K) per patient**. That's more than a Tesla per person to find out if a pill works. The pill costs 37 cents to make. The paperwork weighs more than the patient.

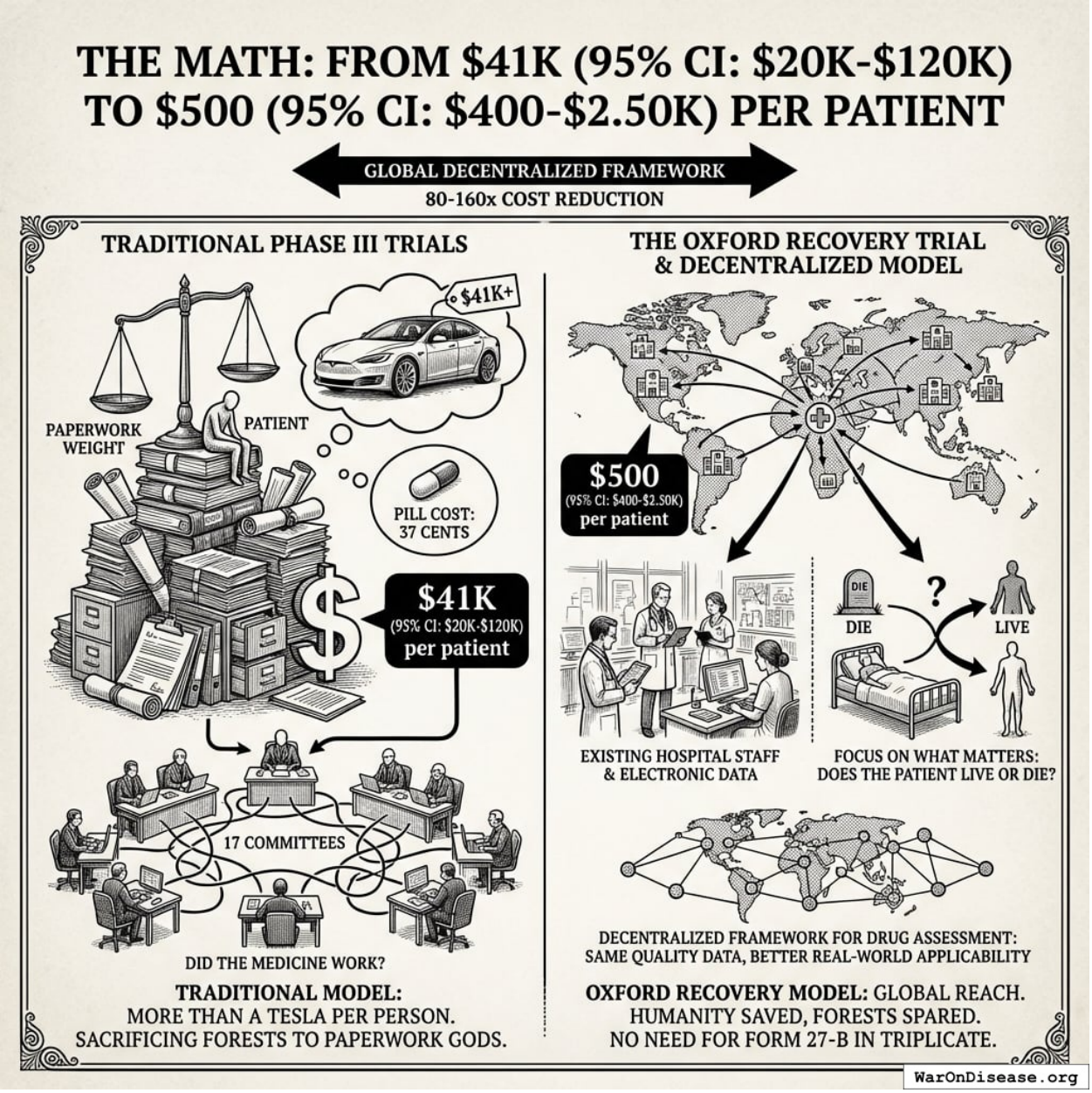


Figure 814: A comparison showing the dramatic cost reduction from traditional Phase III clinical trials at 41,000 per patient to the Oxford RECOVERY trial model at 500 per patient.

The Oxford RECOVERY trial proved humans can do the same thing for **$500 (95% CI: $400-$2.50K) per patient**. They tested COVID treatments on 40,000+ patients by:

- Using existing hospital staff (revolutionary concept: doctors treating patients)
- Collecting data electronically (instead of sacrificing forests to the paperwork gods)
- Focusing on what actually matters: does the patient live or die? (not "did they complete form 27-B in triplicate?")

Your decentralized framework for drug assessment takes this model global. **80-160x cost reduction**. Same quality data. Better real-world applicability. Turns out you don't need 17 committees to ask "did the medicine work?"

Where the $58.6B (95% CI: $49.2B-$73.1B) Comes From

Global clinical trial spending: **$60B (95% CI: $50B-$75B) per year** (and growing).

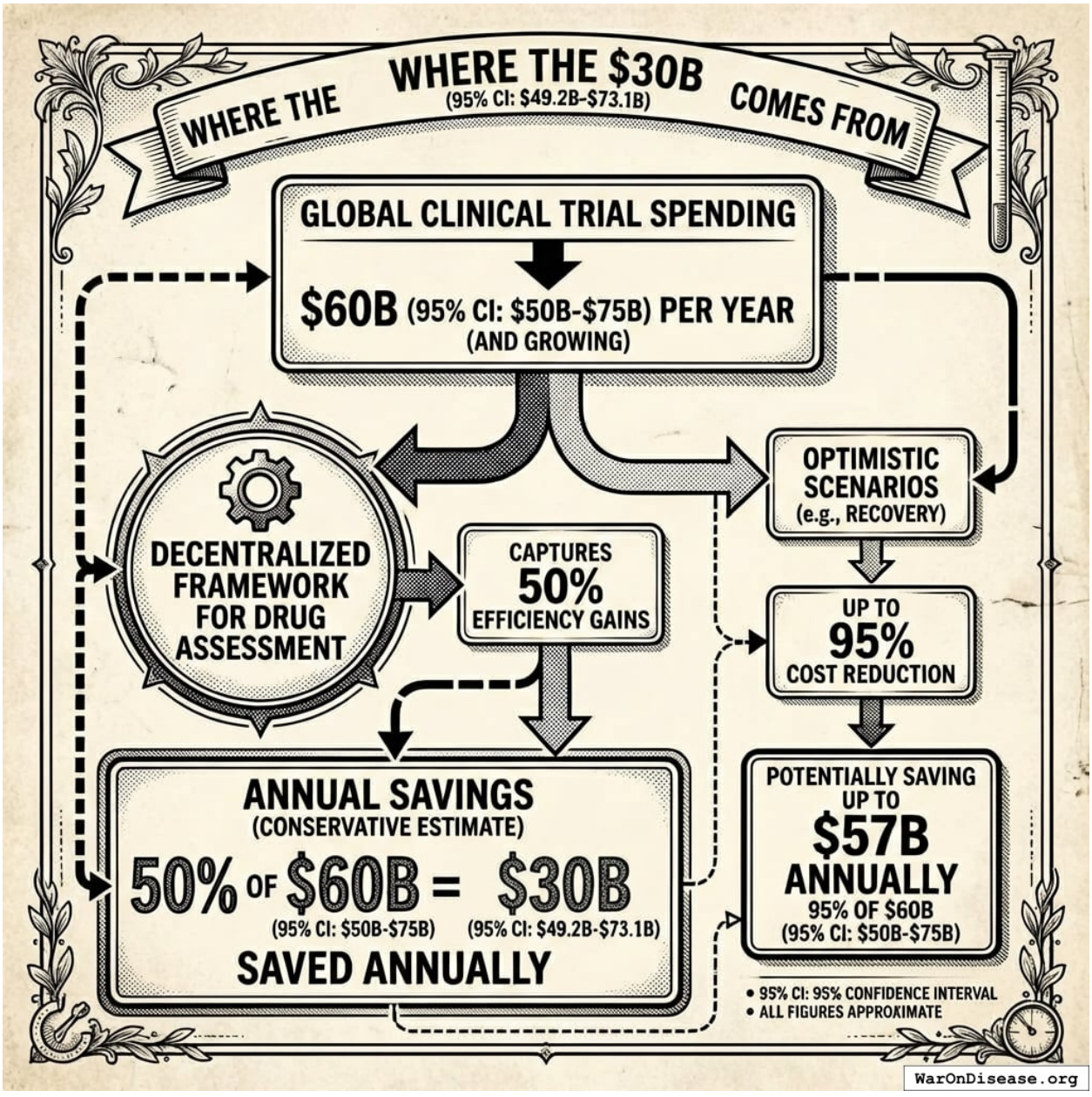


Figure 815: A comparison of current global clinical trial spending against potential annual savings under conservative (50 percent efficiency) and optimistic (95 percent cost reduction) scenarios.

Conservative estimate: A decentralized framework for drug assessment captures 50% efficiency gains across the market.

- 50% of $60B (95% CI: $50B-$75B) = **$58.6B (95% CI: $49.2B-$73.1B) saved annually**

Optimistic scenarios show up to 95% cost reduction (like RECOVERY achieved), potentially saving up to **$57B annually** (95% of $60B (95% CI: $50B-$75B)).

What $58.6B (95% CI: $49.2B-$73.1B) Buys You



Figure 816: An infographic illustrating how a 58.6 billion budget could be redistributed to fund 10,000 clinical trials, treat 7,000 rare diseases, and drastically reduce drug development time and costs.

With the money saved every year, humans could:

- Fund **10,000 new pragmatic clinical trials** (at $5M each using efficient methods)
- Test treatments for **7,000 rare diseases** currently ignored (because orphan diseases aren't profitable enough for your orphan-making economic system)
- Cut drug development time from 17 years to 3-5 years (most terminal patients don't have 17 years, which seems like a design flaw)
- Make medicines affordable by eliminating $2.60B (95% CI: $1.50B-$4B) development costs (this is

mostly lawyers arguing about commas)

Daily Opportunity Cost

Every day we don't implement this represents a massive societal cost: **$161M (95% CI: $135M-$200M)** in wasted trial inefficiency and **7.94B DALYs (95% CI: 4.43B DALYs-12.1B DALYs) total** lost to delayed treatments (7.94B DALYs (95% CI: 4.43B DALYs-12.1B DALYs) ÷ 62 years = ~54.75M DALYs annually).

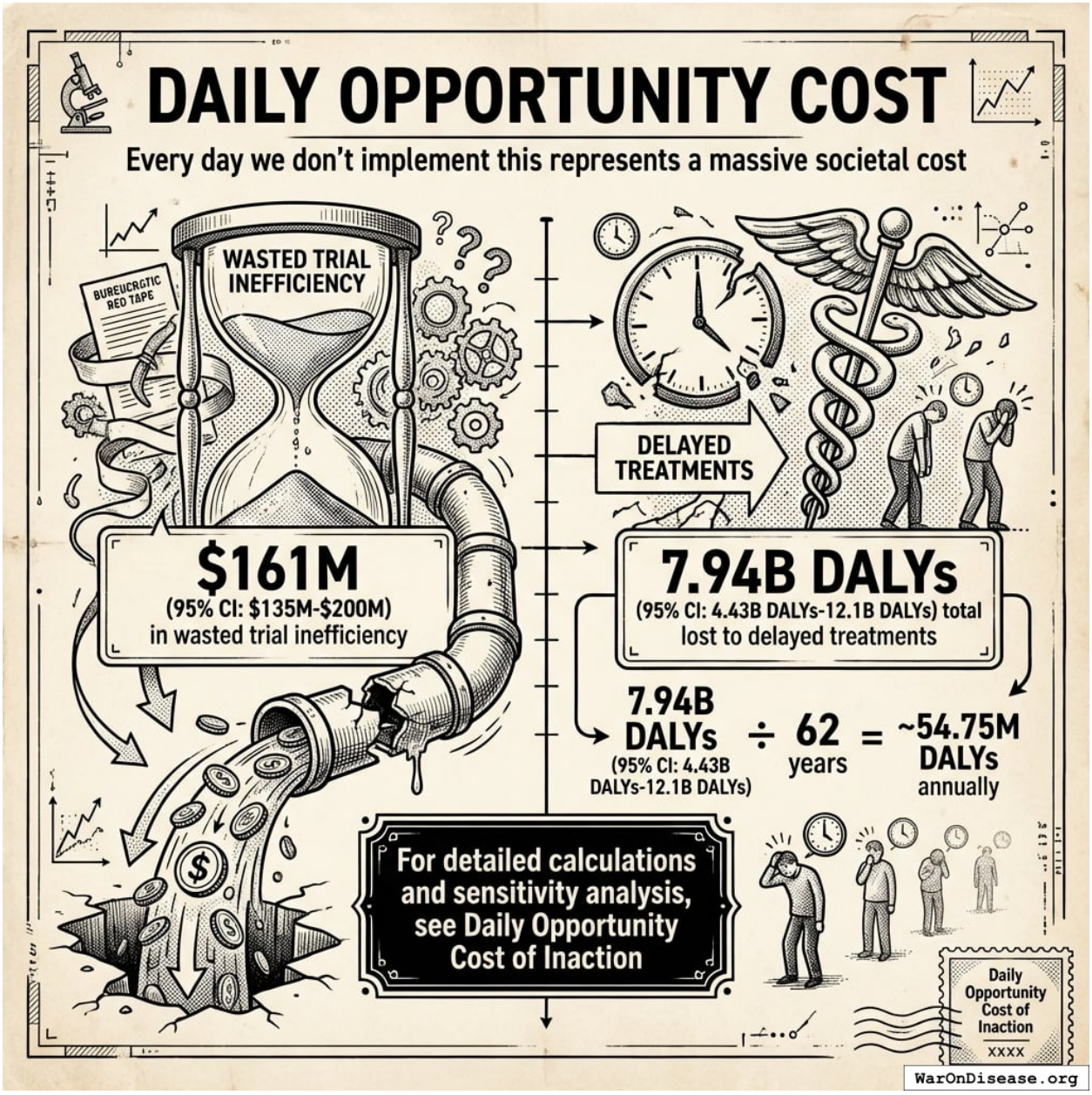


Figure 817: A visualization of the daily opportunity cost of inaction, highlighting the dual impact of 161 million in financial waste and over 54 million DALYs lost annually.

For detailed calculations and sensitivity analysis, see Daily Opportunity Cost of Inaction.

The framework Cost Breakdown

Your decentralized framework for drug assessment costs approximately **$40M (95% CI: $27.3M-$55.6M) annually** to operate at scale, with a similar one-time build cost. This includes cloud infrastructure, a lean engineering team, compliance, and global integration.

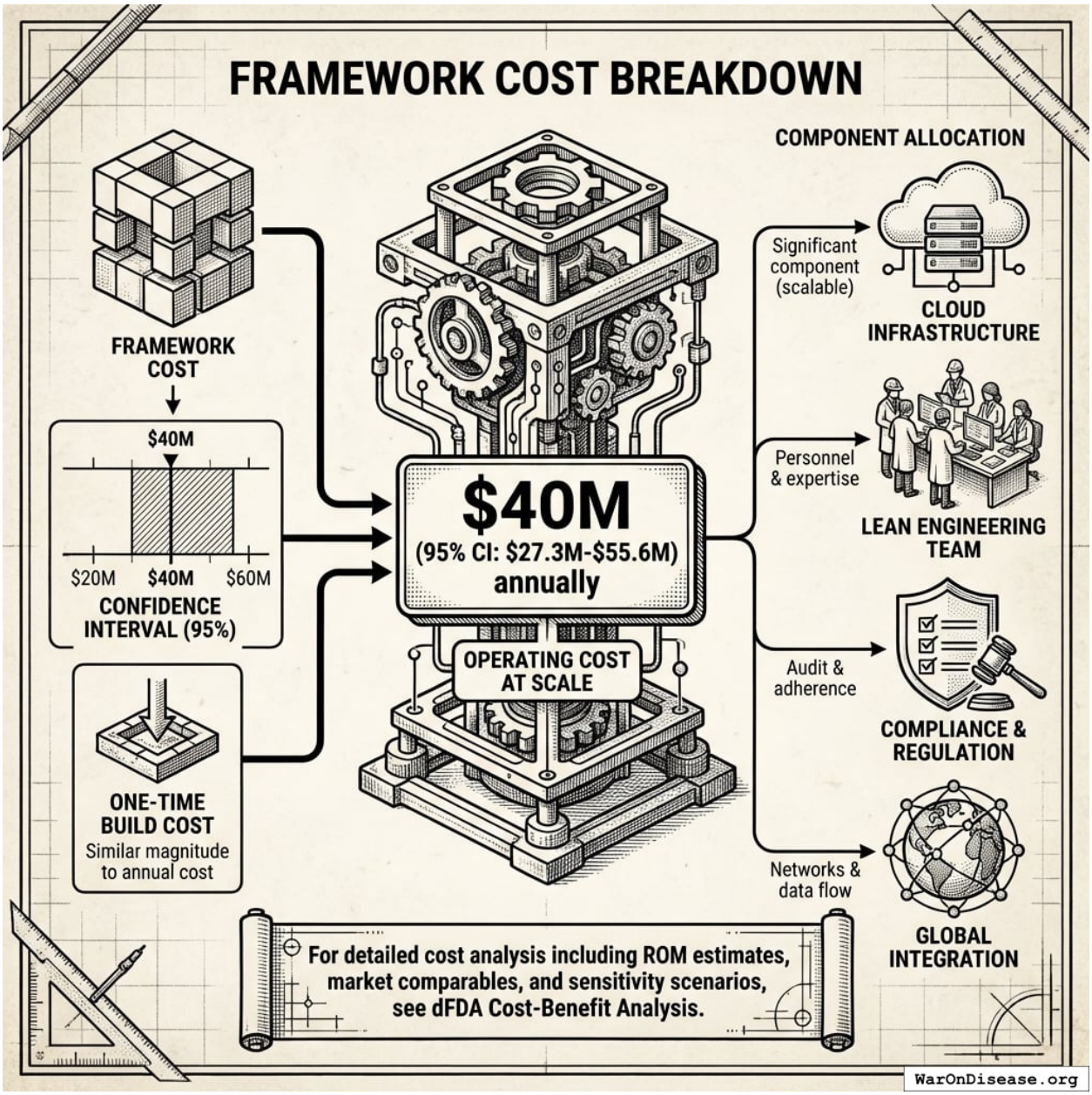


Figure 818: A cost breakdown chart visualizing the 40M annual operating budget across infrastructure, engineering, and compliance, highlighting the 95 percent confidence interval range from 27.3M to 55.6M.

For detailed cost analysis including ROM estimates, market comparables, and sensitivity scenarios, see dFDA Cost-Benefit Analysis.

ROI Scenarios

Recommended: 84.8M:1 (95% CI: 46.6M:1-144M:1) ROI including post-safety efficacy lag elimination (most defensible using rigorous DALY-based methodology)

Conservative: 637:1 (95% CI: 569:1-790:1) ROI (R&D savings only, NPV-adjusted over 10 years)

PRIMARY estimate: 84.8M:1 (95% CI: 46.6M:1-144M:1) ROI (including all core benefits)

Even in worst-case scenarios (higher costs, lower adoption), the ROI remains exceptional at 66:1.

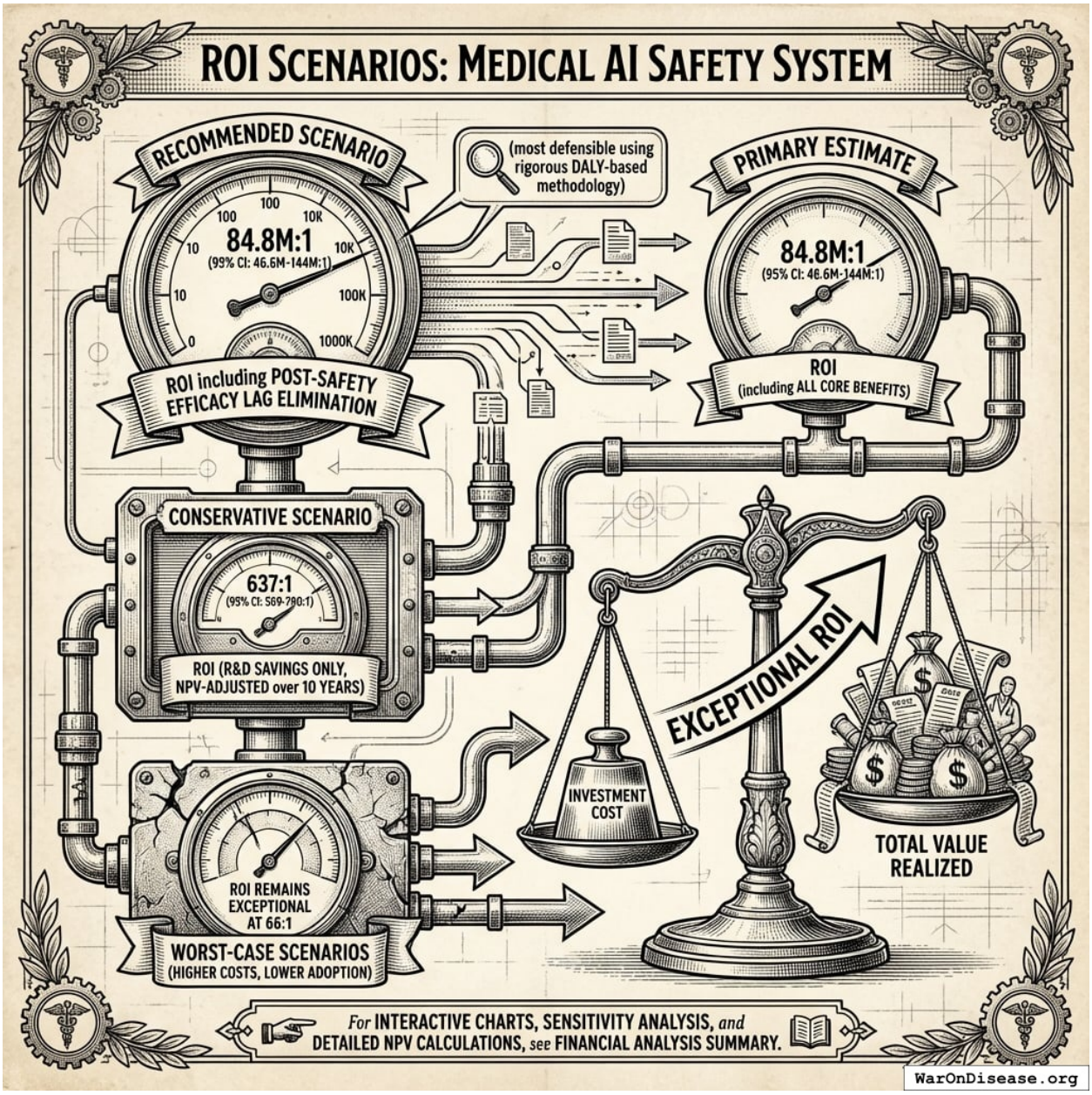


Figure 819: A comparison of ROI scenarios illustrating the exponential scale difference between conservative R and D savings and the primary estimate including societal benefits.

For interactive charts, sensitivity analysis, and detailed NPV calculations, see Financial Analysis

Summary.

Why This Isn't Happening Already

Simple: The people getting rich from the current system aren't the ones paying for it.

- **CROs** make billions from inefficiency
- **Regulators** protect their bureaucratic empires
- **Pharma** passes costs to patients anyway
- **Patients** have no power to change the system they're dying in

Until now. Your decentralized framework for drug assessment changes the game by aligning incentives: everyone profits from efficiency.

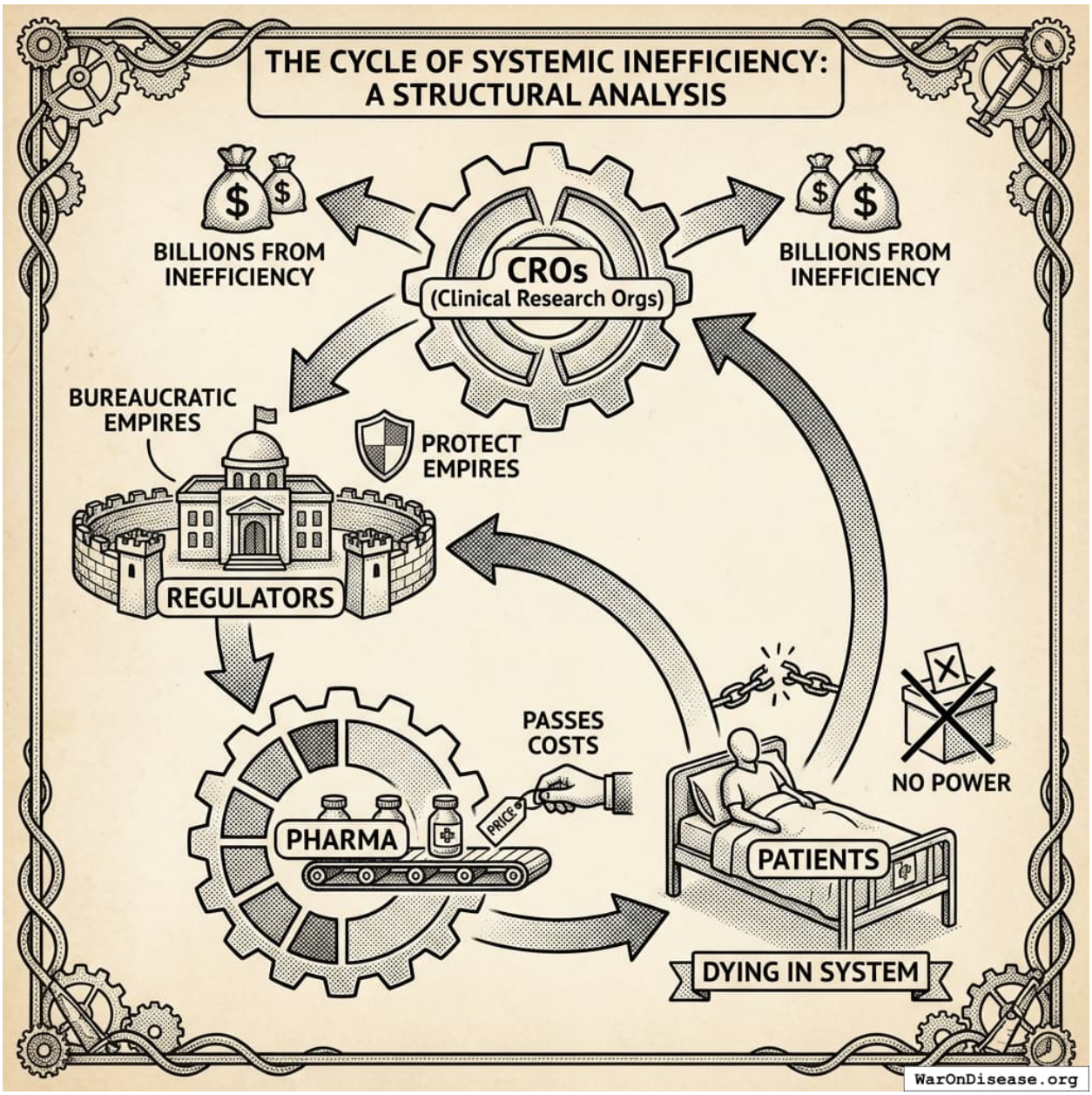


Figure 820: Map of the current misaligned incentives preventing system efficiency.

The ROI

$40M (95% CI: $27.3M-$55.6M) to save $58.6B (95% CI: $49.2B-$73.1B). 84.8M:1 (95% CI: 46.6M:1-144M:1) ROI (recommended). 80x cost reduction per patient. 12.3x (95% CI: 4.19x-61.3x) more trial capacity (43.4M participants annually vs 1.9M currently).

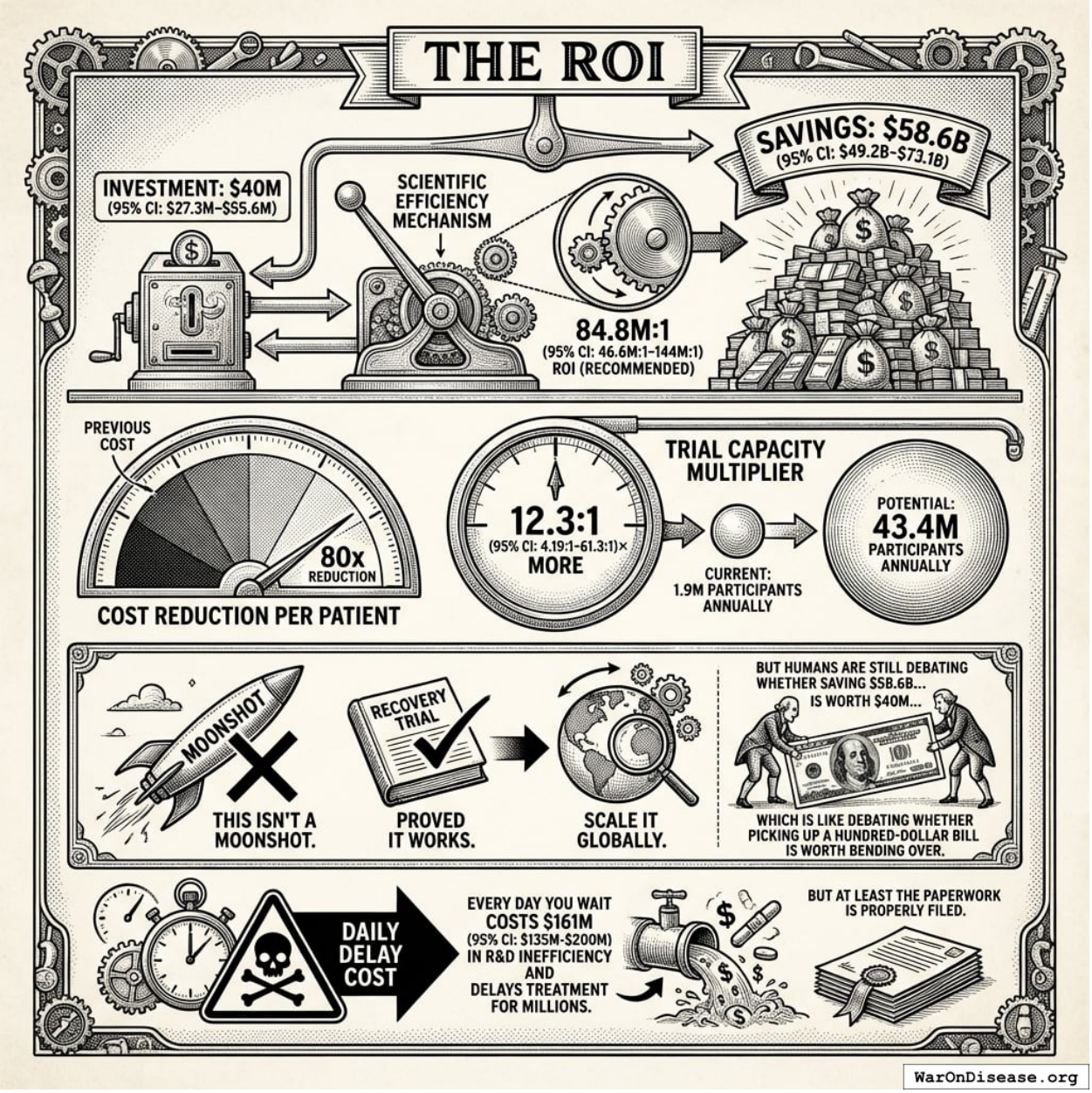


Figure 821: A comparative infographic showing the massive disparity between the 40M investment and 58.6B in potential savings, alongside the dramatic expansion in clinical trial capacity.

This isn't a moonshot. The RECOVERY trial already proved it works. The only thing left to do is scale it globally. But humans are still debating whether saving $58.6B (95% CI: $49.2B-$73.1B) is worth $40M (95% CI: $27.3M-$55.6M), which is like debating whether picking up a hundred-dollar bill is worth bending over.

Every day you wait costs $161M (95% CI: $135M-$200M) in R&D inefficiency and delays treatment for millions. But at least the paperwork is properly filed.

Further Reading

Detailed Analysis

- dFDA Cost-Benefit Analysis - Complete economic analysis with all components
- Financial Analysis Summary - NPV/ROI analysis and computational models
- dFDA Cost-Benefit Analysis - ROM estimates, costs, and ROI
- Regulatory Mortality Analysis - Primary methodology for disease eradication delay burden 7.94B DALYs (95% CI: 4.43B DALYs-12.1B DALYs) (post-safety efficacy lag elimination)

Impact of Innovative Medicines on Life Expectancy

A three-way fixed-effects analysis of 66 diseases in 27 countries suggests that if no new drugs had been launched after 1981, the number of years of life lost would have been 2.16 times higher than it actually was. It estimates that pharmaceutical expenditure per life-year saved was $2837.

More people survive as more treatments are developed. There's a strong correlation between the development of new cancer treatments and cancer survival over 30 years.

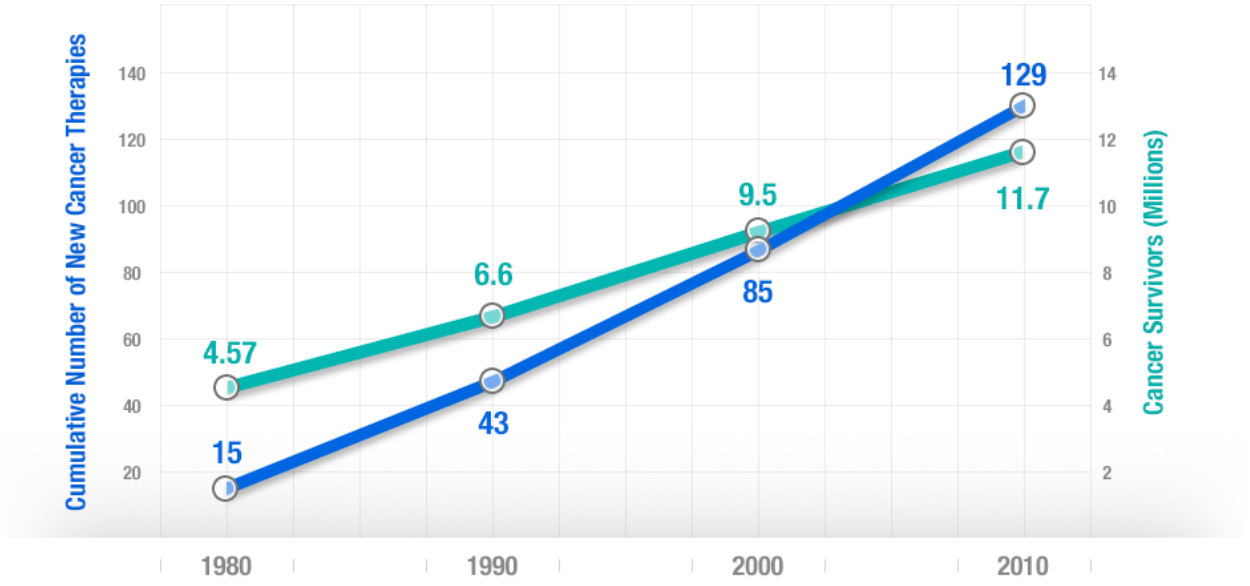


Figure 822: Graph showing the correlation of developing new cancer treatments and cancer survival over 30 years.

Key Sources

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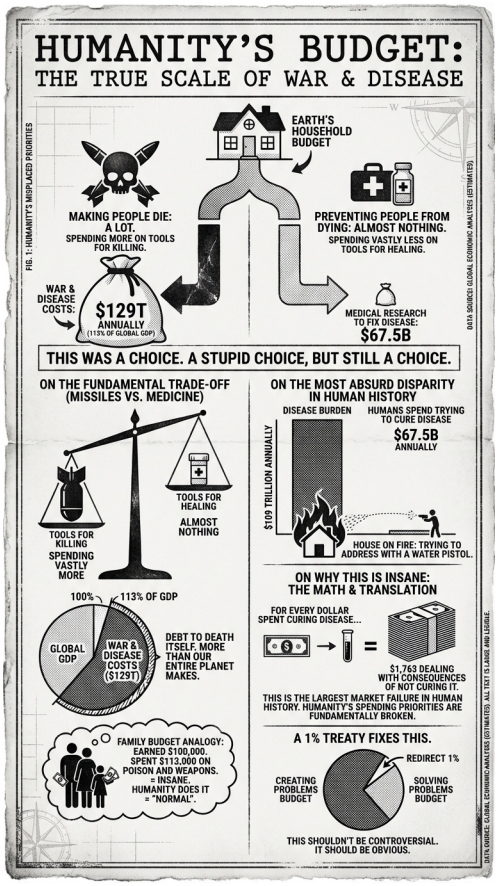
Humanity's Budget



If you think of Earth as a household with a budget, here's what our species decided to spend money on:

Making people die: A lot. Preventing people from dying: Almost nothing.

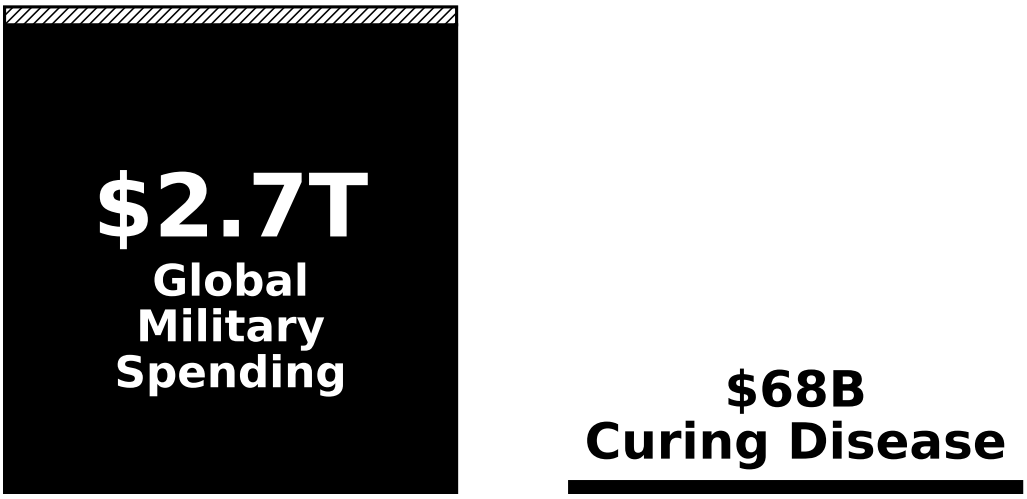
When you include all the hidden costs (externalities, in economist-speak), war and disease don't just consume "a lot" of our budget. They consume MORE than our entire planet makes in a year.

That's not a typo. We're spending 113% of global GDP on dying and killing.

Imagine if your family earned $100,000 and spent $113,000 on poison and weapons. You'd call that insane. When humanity does it, we call it "normal."

On The Fundamental Trade-Off (Missiles vs. Medicine)

Before we get into the depressing details, here's the core choice humanity made:

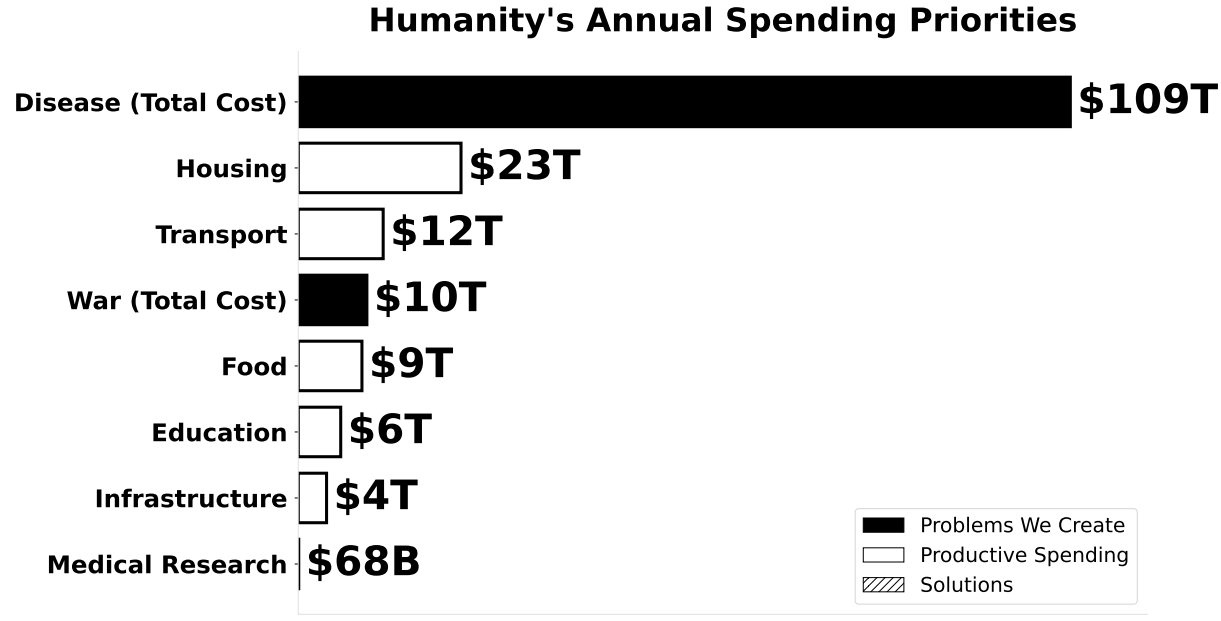


Humans spend vastly more on tools for killing than on tools for healing.

This wasn't an accident. This was a choice. A stupid choice, but still a choice.

On What Our Species Actually Prioritizes

Here's humanity's annual budget when you include all the real costs:



The Part That Shouldn't Be Possible

War and disease cost us more than the entire planet's economic output.

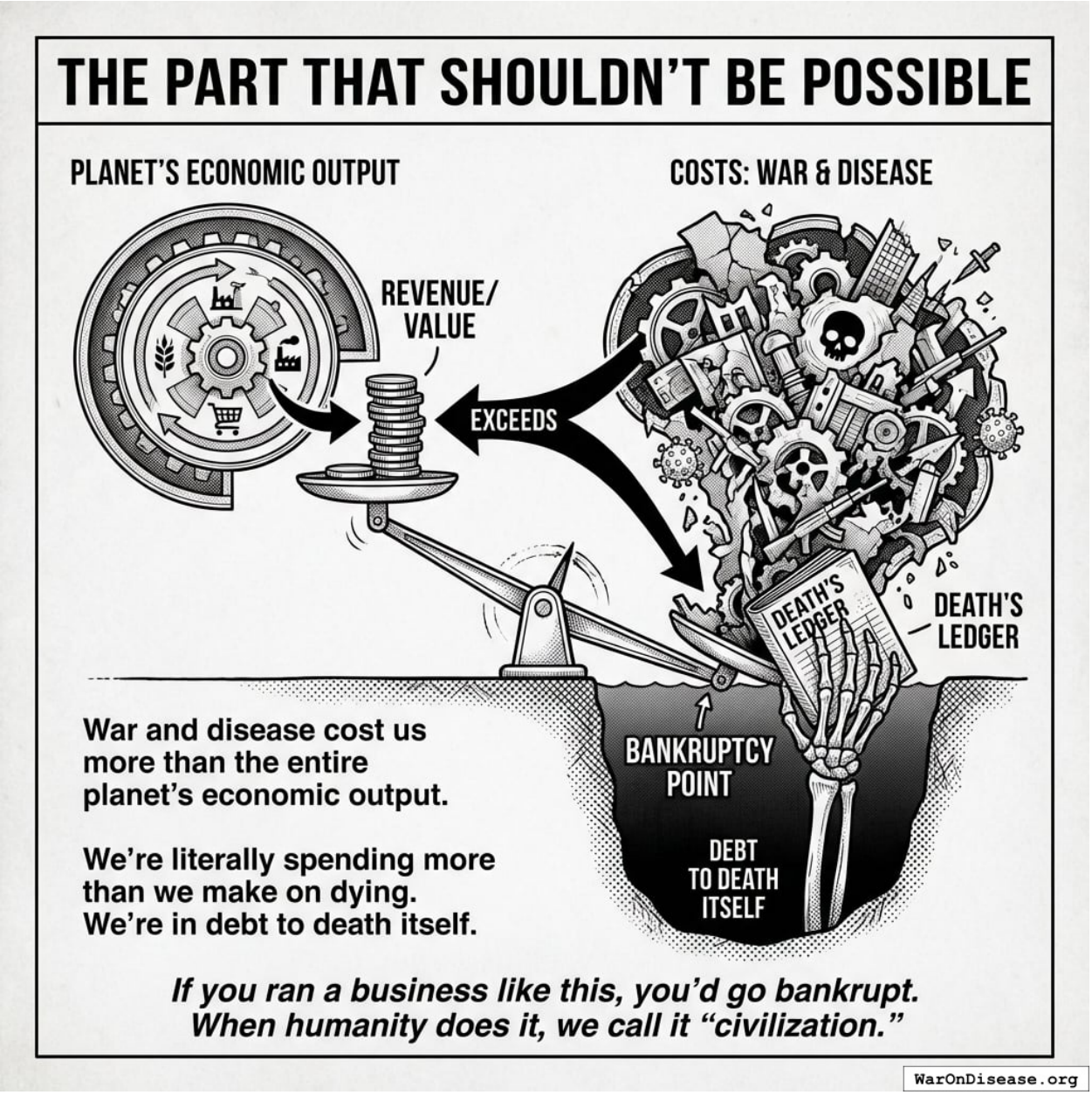


Figure 823: A conceptual scale or bar chart showing the total global economic output being outweighed by the combined financial and human costs of war and disease.

We're literally spending more than we make on dying. We're in debt to death itself.

If you ran a business like this, you'd go bankrupt. When humanity does it, we call it "civilization."

On The Most Absurd Disparity in Human History

The disease burden: $109T (95% CI: $79.8T-$144T) annually

What humans spend trying to cure disease: Look at this chart and try not to laugh or cry.



Figure 824: Cost of Disease vs Curing Diseases

The problem costs $109T (95% CI: $79.8T-$144T). Humans spend $67.5B (95% CI: $54B-$81B) trying to solve it.

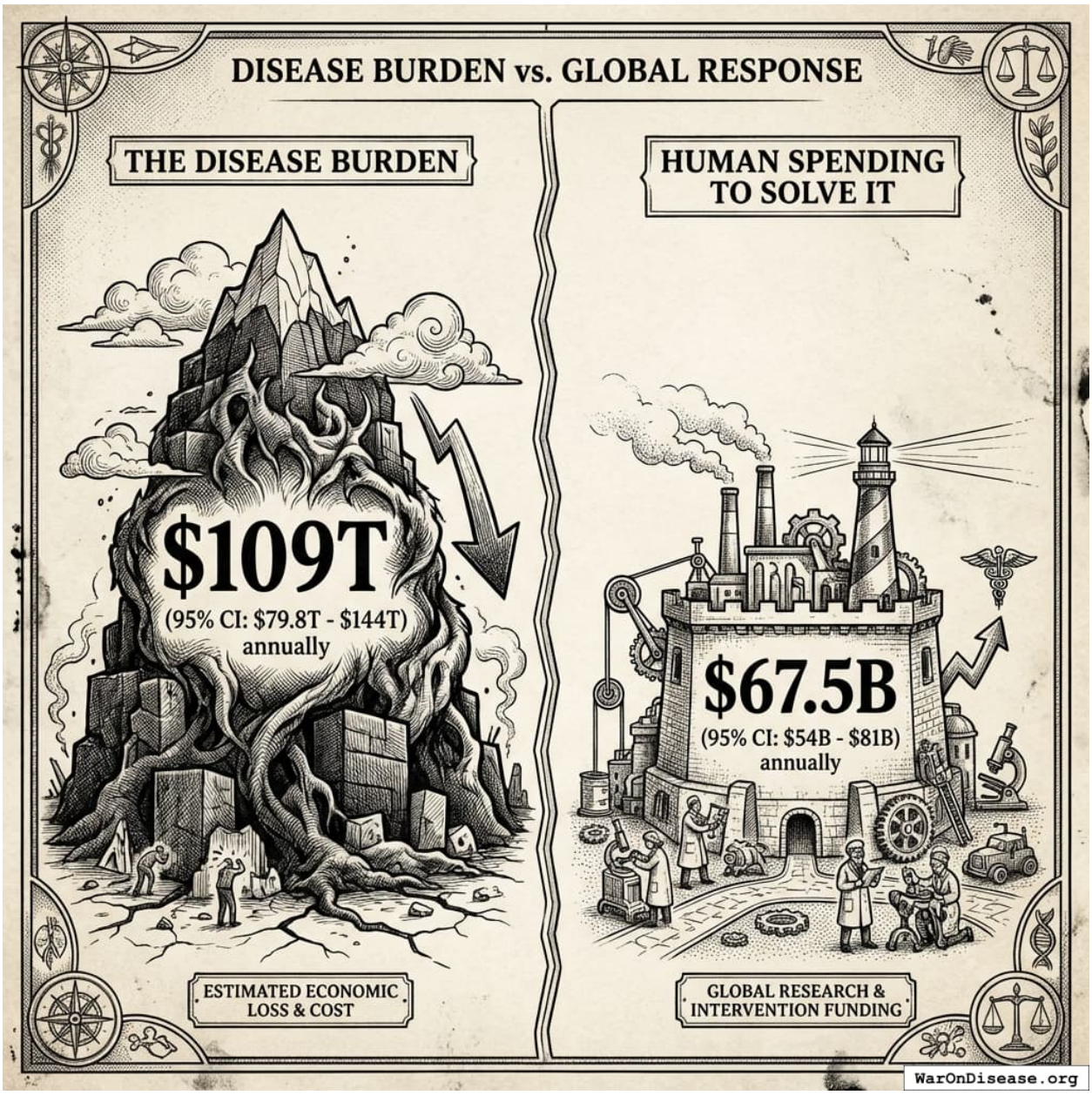


Figure 825: A scale comparison highlighting the massive gap between the cost of the problem (109T) and the investment in the solution (67.5B).

That's like your house being on fire and deciding to address it with a water pistol. Technically you're trying, but you're not really trying.

On Why This Is Insane

The Math

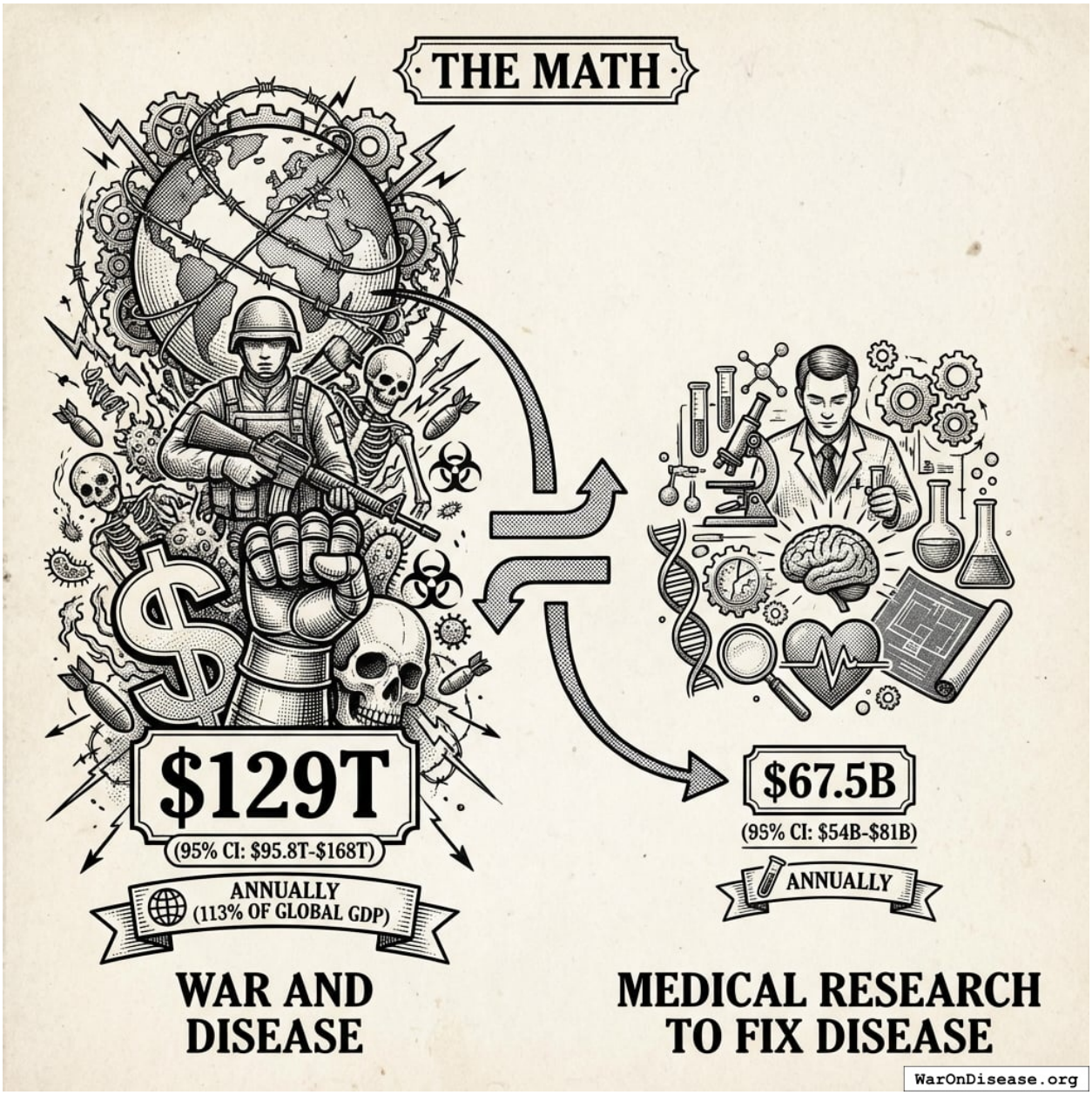


Figure 826: A scale comparison showing the massive disparity between the 129 trillion annual cost of war and disease versus the 67.5 billion spent on medical research.

War and disease: **$129T (95% CI: $95.8T-$168T)** annually (that's 113% of global GDP)

Medical research to fix disease: **$67.5B (95% CI: $54B-$81B)**

Translation

For every dollar humans spend trying to cure disease, humans spend $1,763 dealing with the consequences of not curing it.

This is the largest market failure in human history. It's so large it breaks the concept of "market failure." Markets aren't supposed to be THIS stupid.

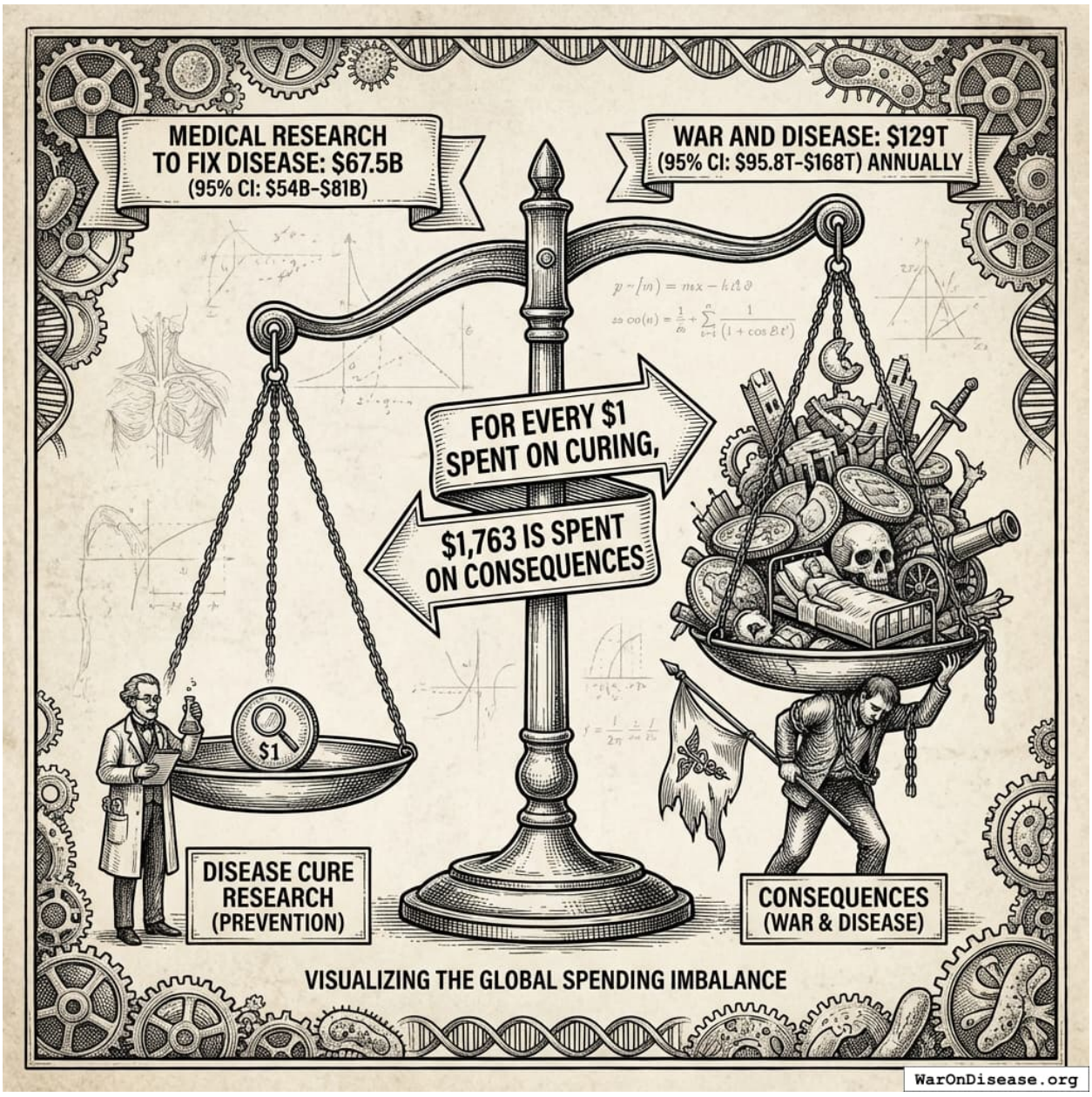


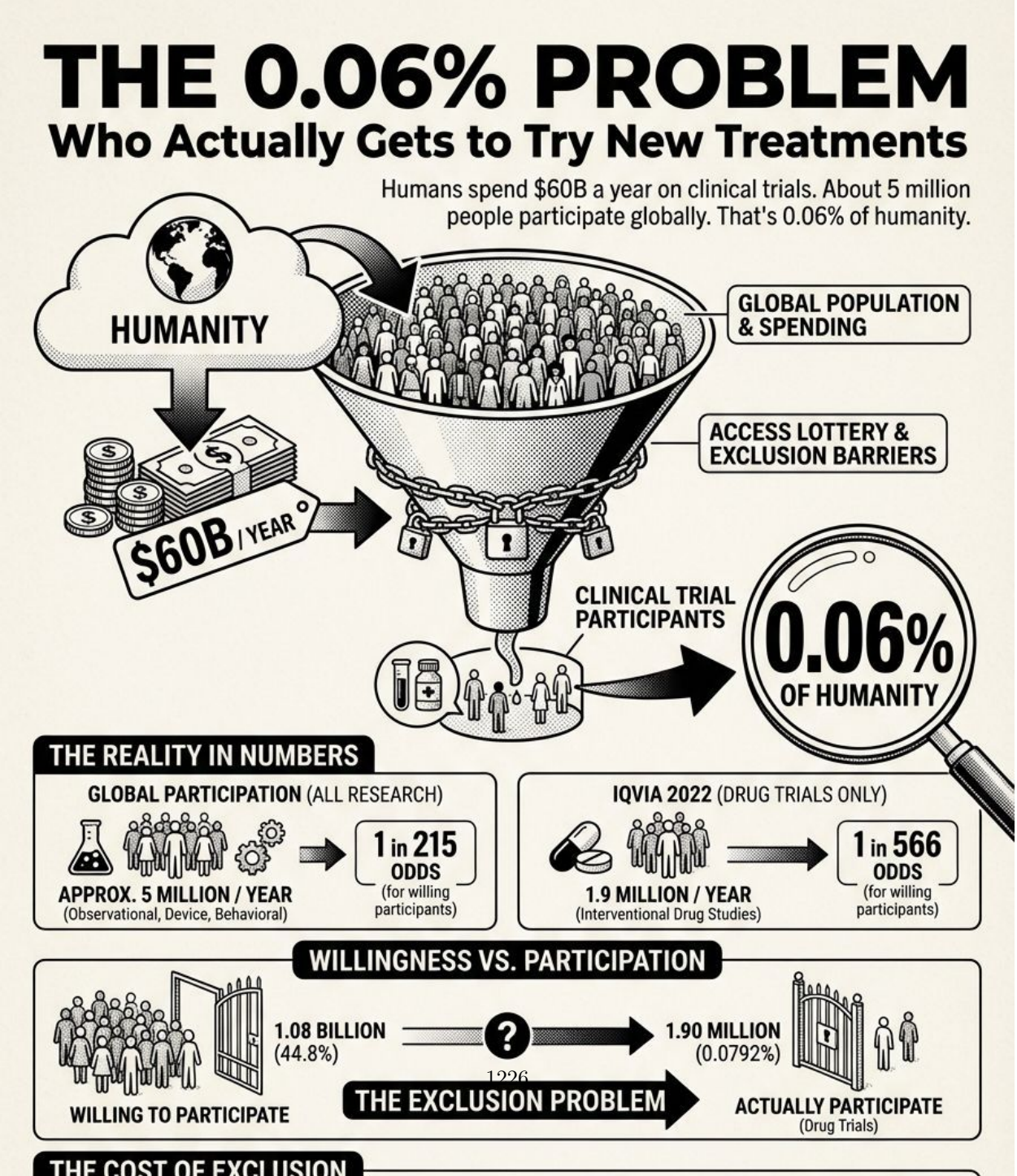
Figure 827: Visual representation of the 1:1,763 ratio between solution funding and problem cost.

Humanity's spending priorities are fundamentally broken. Humans spend more on the problems than on the solutions.

A 1% treaty fixes this by redirecting 1% of the "creating problems" budget to the "solving problems" budget.

This shouldn't be controversial. It should be obvious.

The 0.06% Problem - Who Actually Gets to Try New Treatments



Humanity spends $60B (95% CI: $50B-$75B) a year on clinical trials[55]. Here are the actual enrollment numbers:

Enrollment Data from ClinicalTrials.gov

US Trials (Cumulative)

- Phase 1: 722,619 people (median: 33 per trial)
- Phase 2: 2,181,530 people (median: 60 per trial)
- Phase 3: 6,548,474 people (median: 237 per trial)
- Phase 4: 2,718,541 people (median: 90 per trial)
- **Total: 12.2 million people** across all active/recruiting/completed US trials

But that's cumulative - trials running over many years. To get annual enrollment, divide by average trial duration (~2.7 years):

That's the old estimate based on average trial duration. But we can do better.

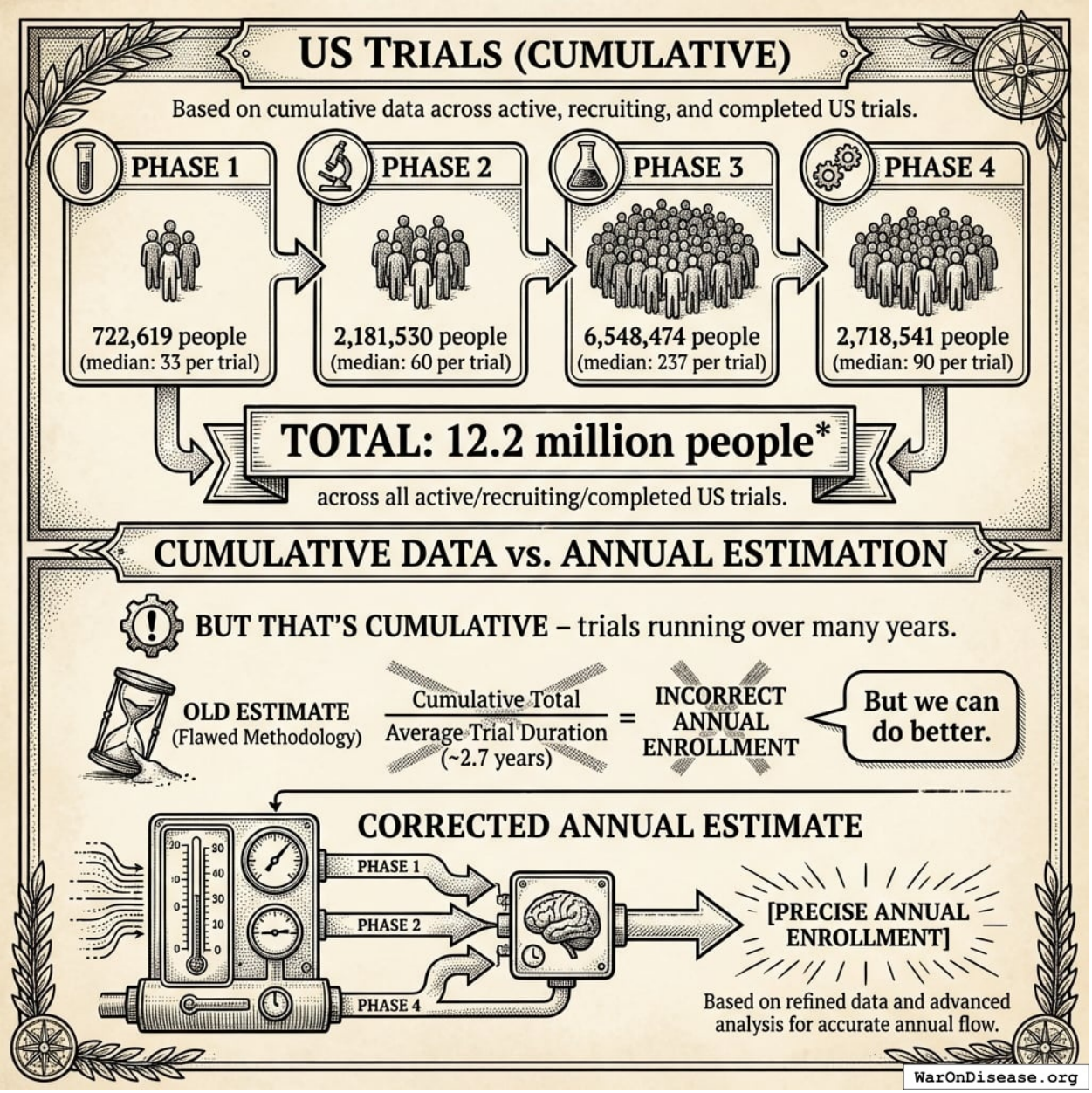


Figure 828: A visualization of US clinical trial enrollment showing the distribution of 12.2 million participants across trial phases 1 through 4, including median participants per trial.

The Better Method: Count Completed Trials

We analyzed trials that **actually completed** each year (not estimates):

US Interventional Trials (Phase 1-4 drug trials only):

- 2024: 1.66M participants (3,038 completed trials)
- 2023: 1.56M participants (3,557 completed trials)
- 2022: 1.52M participants (3,631 completed trials)
- 2021: 842K participants (3,601 trials)
- 2020: 951K participants (3,366 trials)

Average US: ~1.5 million/year (interventional drug trials)

The US represents 54% of the global trials market[327], so:

Global: ~2.8 million participants/year (strict definition - interventional only)

But this excludes observational studies, device trials, and behavioral interventions. If you count everything:

Global: ~5-8 million participants/year (all clinical research)

England's data confirms the scale: 1.05 million participants in 2023/24[328] across all study types.

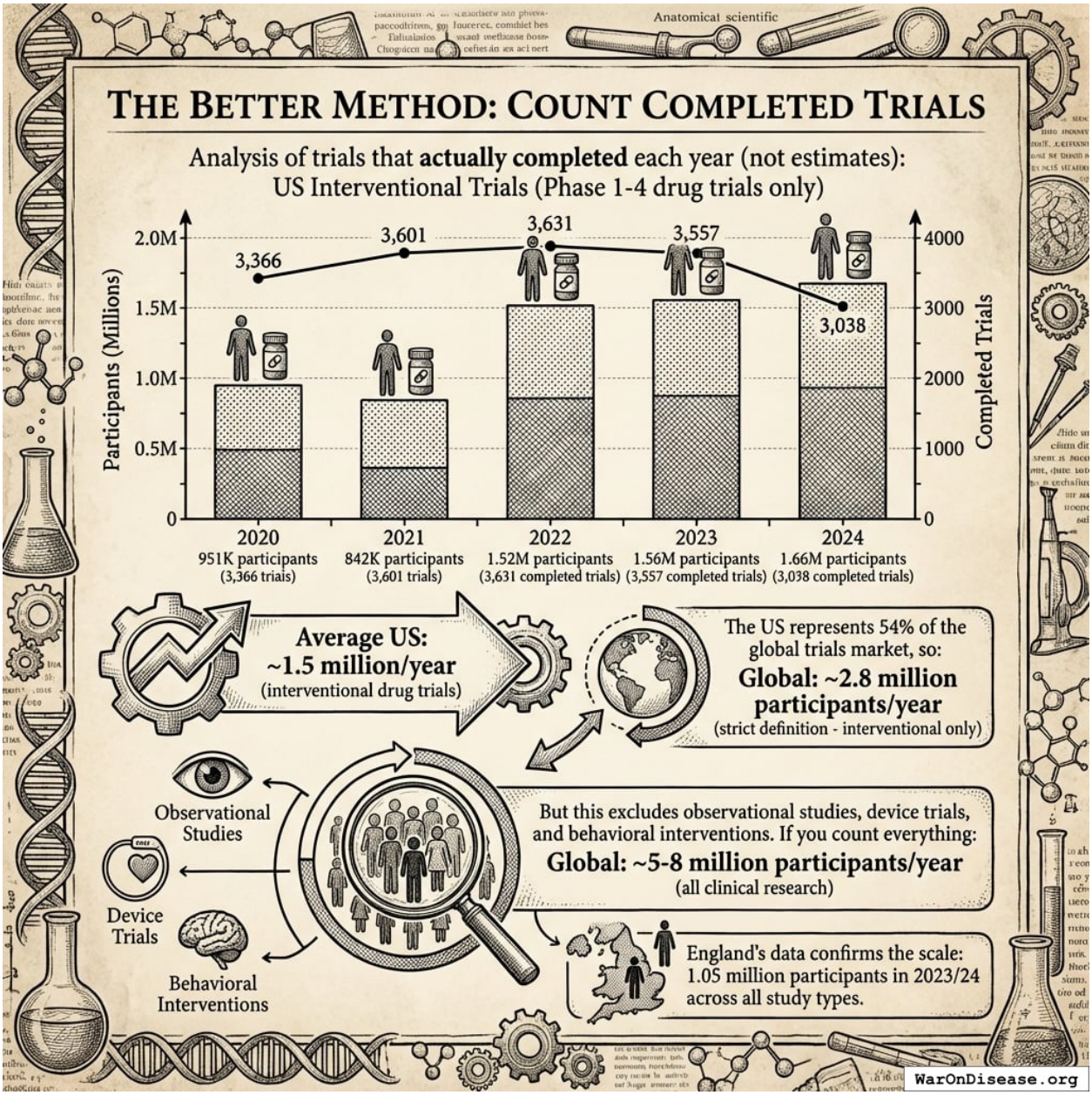


Figure 829: A visualization showing the growth of US clinical trial participants from 2020 to 2024 and the comparative scale of global research markets.

Industry Standard: IQVIA 2022

The most authoritative source is IQVIA's 2022 report[29], showing:

Global: 1.9 million participants annually (2022)

This represents post-COVID normalization from the 4 million peak in 2021 (when COVID trials dominated). IQVIA tracks actual pharmaceutical industry data, making it more reliable than our ClinicalTrials.gov extrapolations.

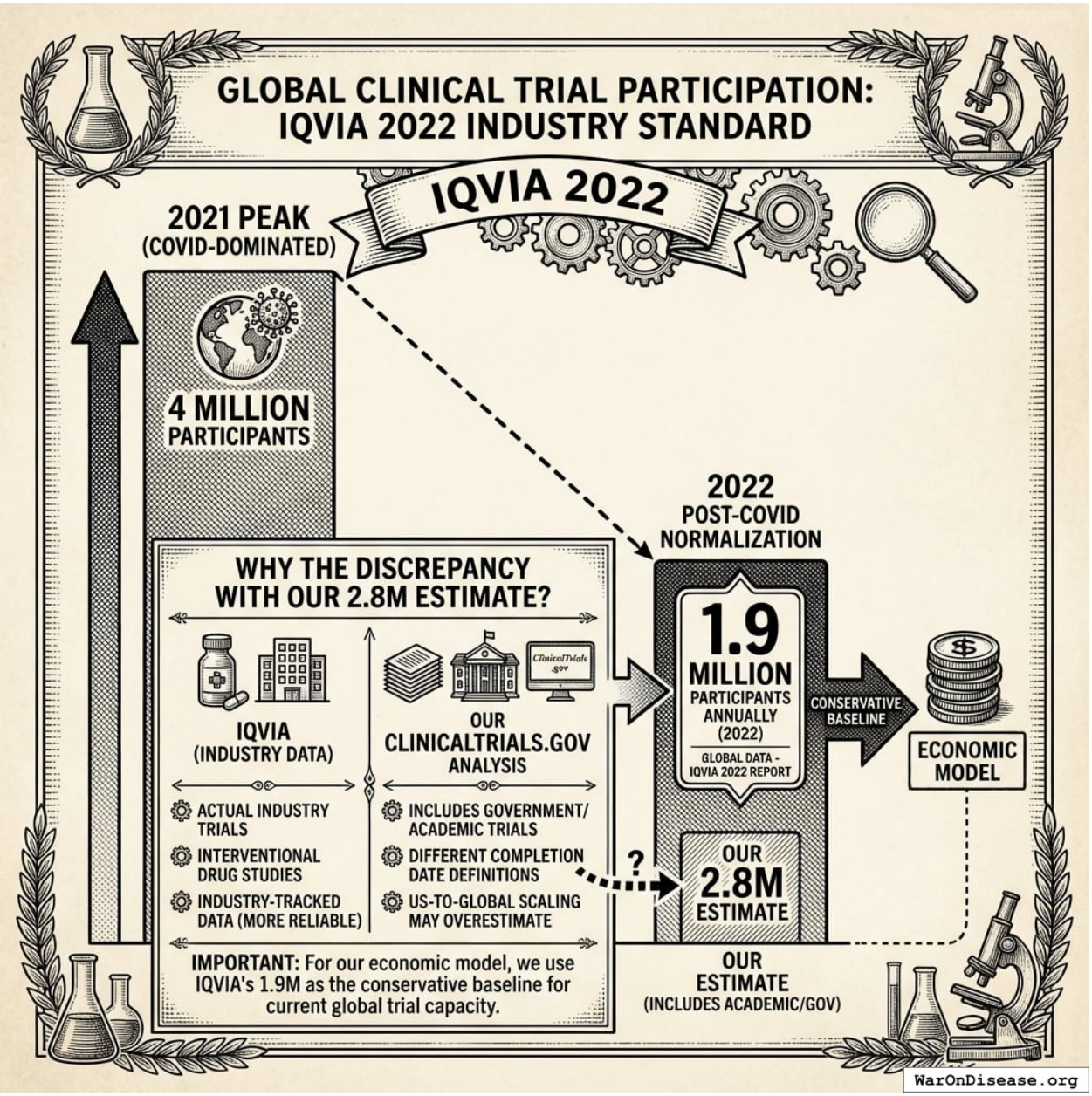


Figure 830: Comparison of global clinical trial participant estimates for 2022, contrasting IQVIA's industry-focused data with broader ClinicalTrials.gov extrapolations.

Why the discrepancy with our 2.8M estimate?

- IQVIA counts actual industry trials (interventional drug studies)
- Our ClinicalTrials.gov analysis includes government/academic trials
- Different completion date definitions
- Our US-to-global scaling may overestimate

For our economic model, we use IQVIA's 1.9M as the conservative baseline for current global trial capacity.

The Tragedy in Numbers

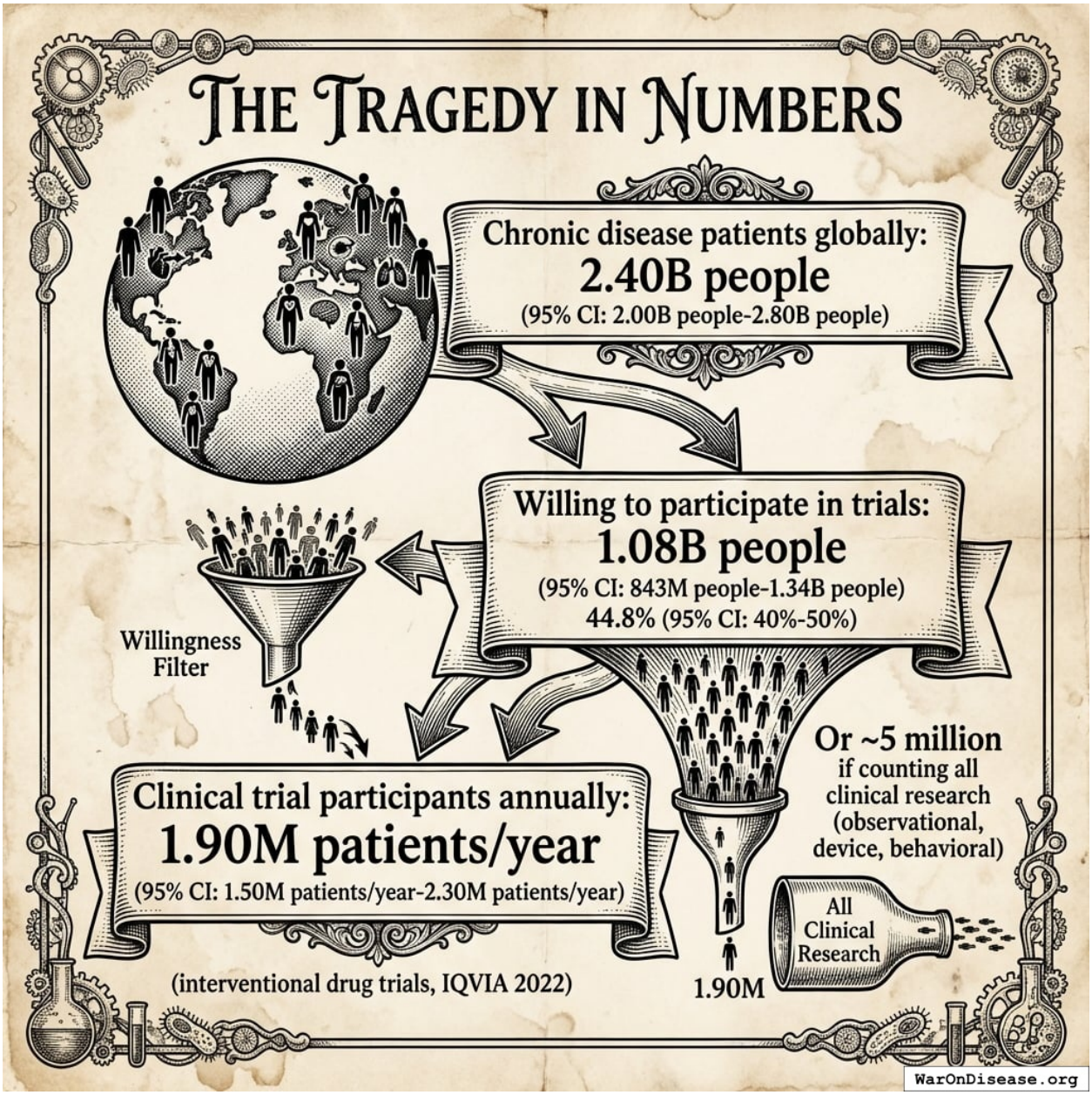


Figure 831: A funnel infographic illustrating the massive attrition from 2.4 billion chronic disease patients to the 1.08 billion willing to participate and the mere 1.9 to 5 million who actually enroll in clinical trials annually.

Chronic disease patients globally: 2.40B people (95% CI: 2.00B people-2.80B people)

Willing to participate in trials: 1.08B people (95% CI: 843M people-1.34B people) (44.8% (95% CI: 40%-50%))

Clinical trial participants annually: **1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year)** (interventional drug trials, IQVIA 2022)

Or ~**5 million** if counting all clinical research (observational, device, behavioral)

Among those who could benefit and are willing to help:

Using the conservative IQVIA figure (1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) ÷ 1.08B people (95% CI: 843M people-1.34B people) = 0.18%), your odds of actually getting into a drug trial are **1 in 566**.

Even if you count all clinical research (5M ÷ 1.08B people (95% CI: 843M people-1.34B people) = 0.46%), your odds are only **1 in 215**.

Meanwhile, 150k deaths/day people die every day from diseases we're studying.

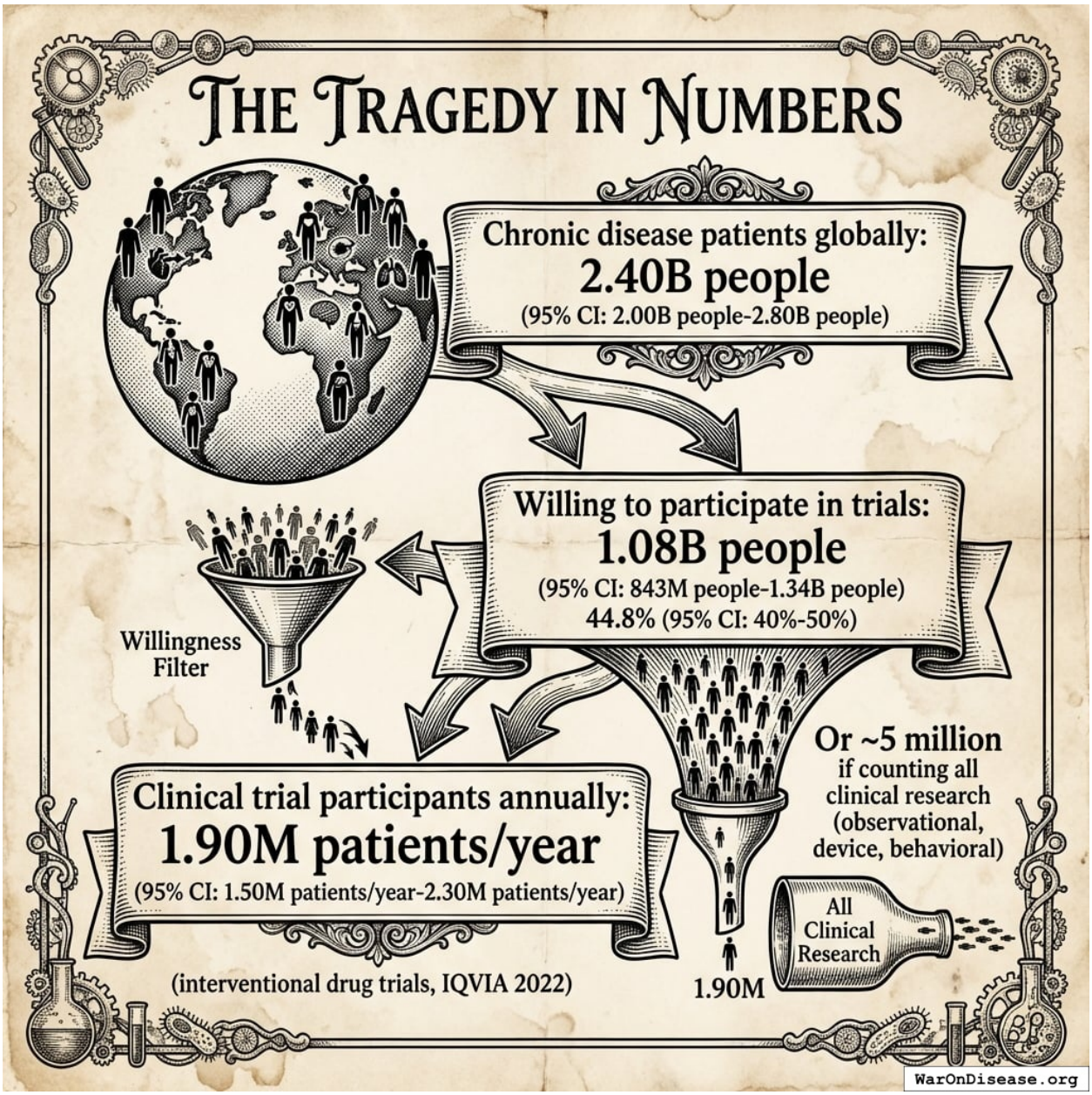


Figure 832: An enrollment funnel illustrating the massive gap between the 2.4 billion people with chronic diseases, the 1.08 billion willing to participate, and the 1.9 million actually admitted to drug trials.

The Access Lottery

2.40B people (95% CI: 2.00B people-2.80B people) people are living with chronic diseases[329] right now. That's cardiovascular disease, cancer, diabetes, COPD, mental illness, chronic pain.

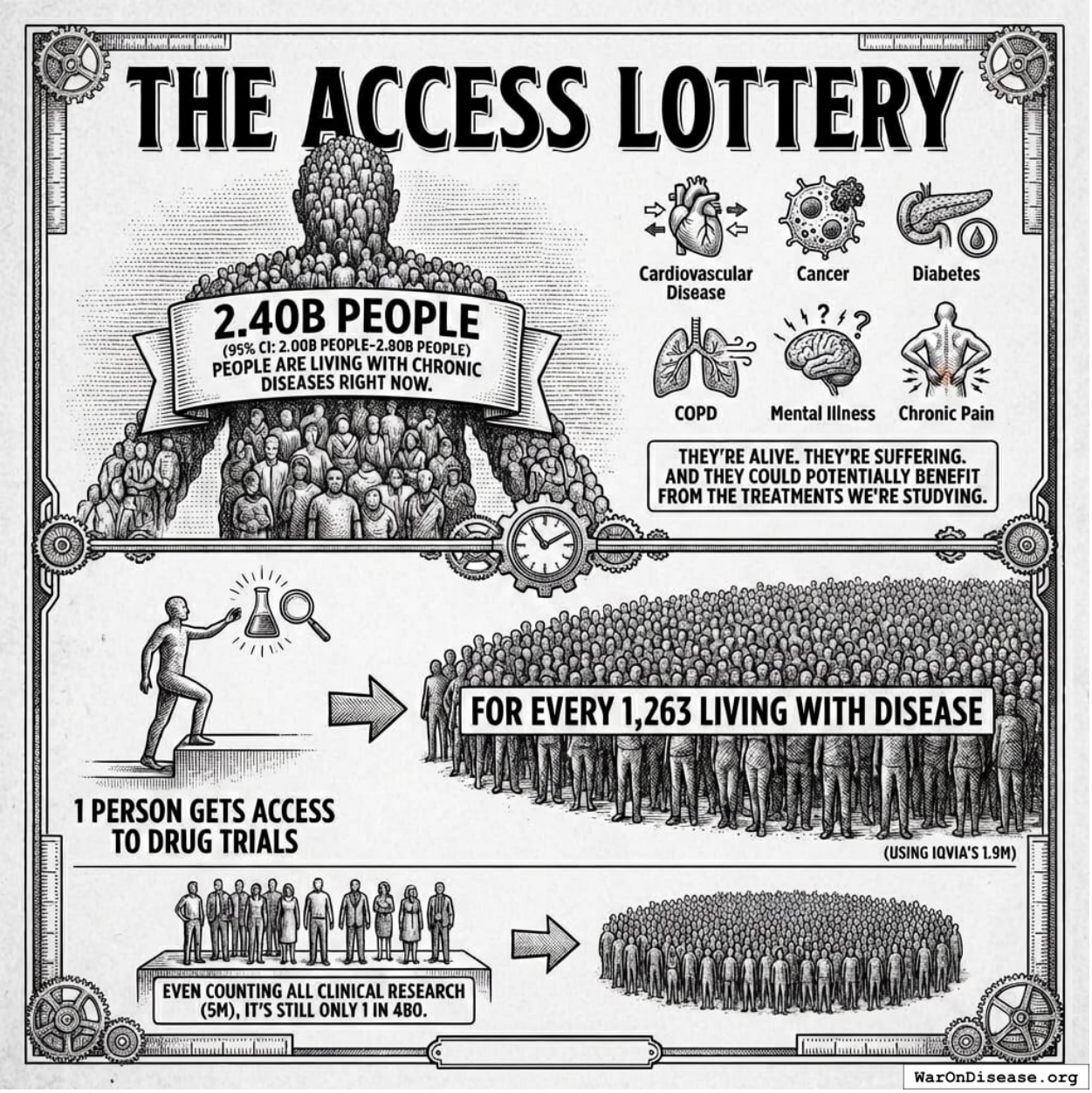


Figure 833: A scale comparison showing the massive population of 2.4 billion people living with chronic diseases versus the tiny sliver of 1.9 million people who gain access to drug trials.

They're alive. They're suffering. And they could potentially benefit from the treatments we're studying.

The ratio: 1 person gets access to drug trials for every 1,263 living with disease (using IQVIA's 1.9M).

Even counting all clinical research (5M), it's still only 1 in 480.

The Willingness Gap

And here's what makes it even more infuriating: surveys show 49-51% of people are willing to participate in clinical trials[78].

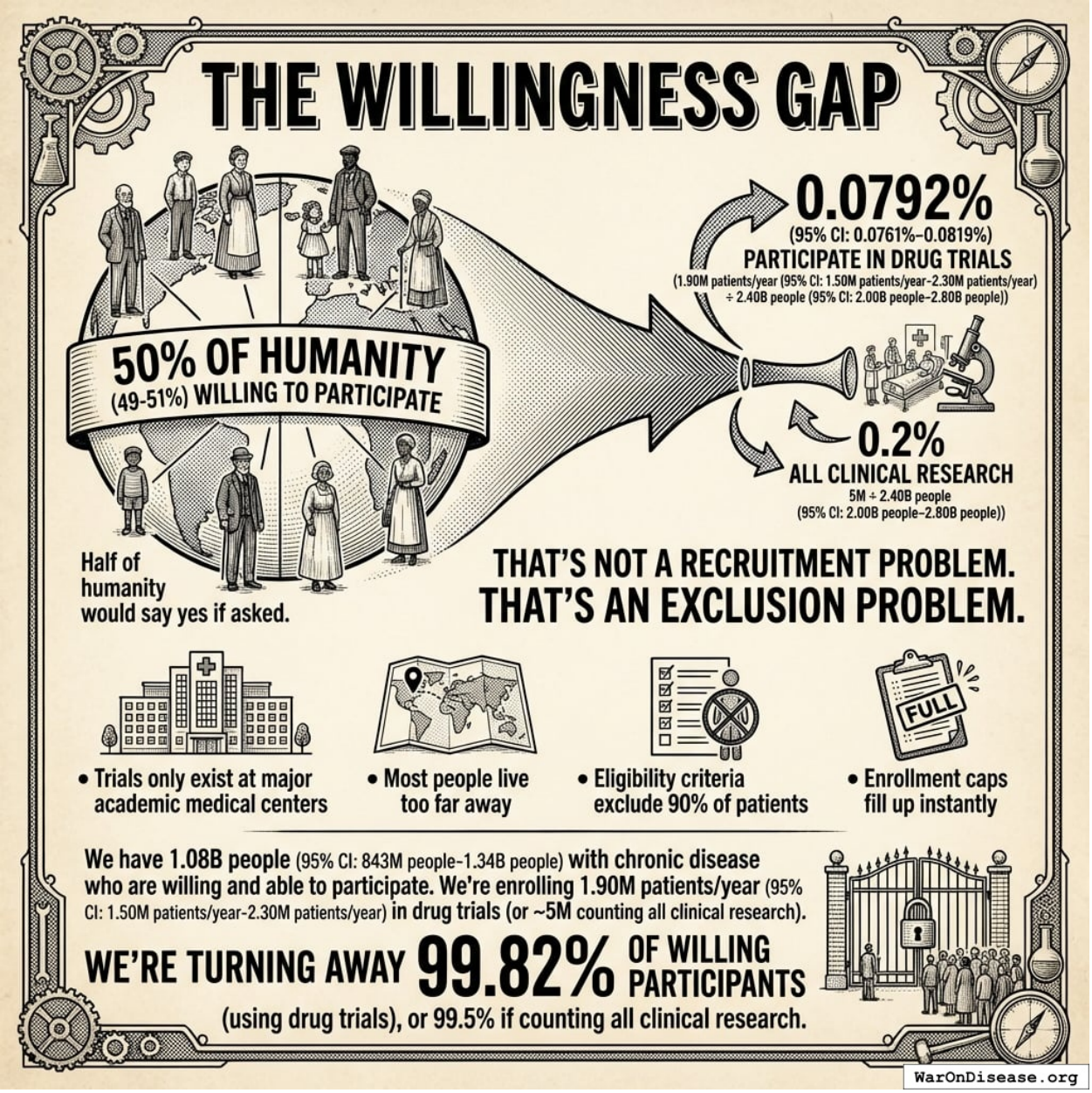


Figure 834: A comparison showing the massive disparity between the 50 percent of people willing to participate in clinical trials and the 0.08 percent who actually gain access, illustrating the 'Willingness Gap'.

Half of humanity would say yes if asked.

But only **0.0792% (95% CI: 0.0761%-0.0819%) of disease patients actually get to participate in drug trials** (1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) ÷ 2.40B people (95% CI: 2.00B people-2.80B people)).

Even counting all clinical research, it's just **0.2%** (5M ÷ 2.40B people (95% CI: 2.00B people-2.80B people)).

That's not a recruitment problem. That's an exclusion problem.

The system isn't failing because people don't want to help find cures. It's failing because:

- Trials only exist at major academic medical centers

- Most people live too far away
- Eligibility criteria exclude 90% of patients
- Enrollment caps fill up instantly

We have 1.08B people (95% CI: 843M people-1.34B people) with chronic disease who are willing and able to participate. We're enrolling 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) in drug trials (or ~5M counting all clinical research).

We're turning away 99.82% of willing participants (using drug trials), or 99.5% if counting all clinical research.

The Cost Per Patient

Using IQVIA's 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) drug trial participants:

$60B (95% CI: $50B-$75B) ÷ 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) = **$43,684 per participant annually**

Even if we count all clinical research (5M participants):

$60B (95% CI: $50B-$75B) ÷ 5 million participants = **$16,600 per participant annually**

That's not per treatment. That's the overhead cost per human enrolled, covering:

- Regulatory paperwork
- Compliance monitoring
- Data collection
- Insurance against lawsuits
- Committees reviewing committees
- The salaries of people whose job is writing protocols

Phase 3 trials (median 237 participants[24]) cost $20M each. That's $84,388 per patient. Not for the drug. For the *trial*.

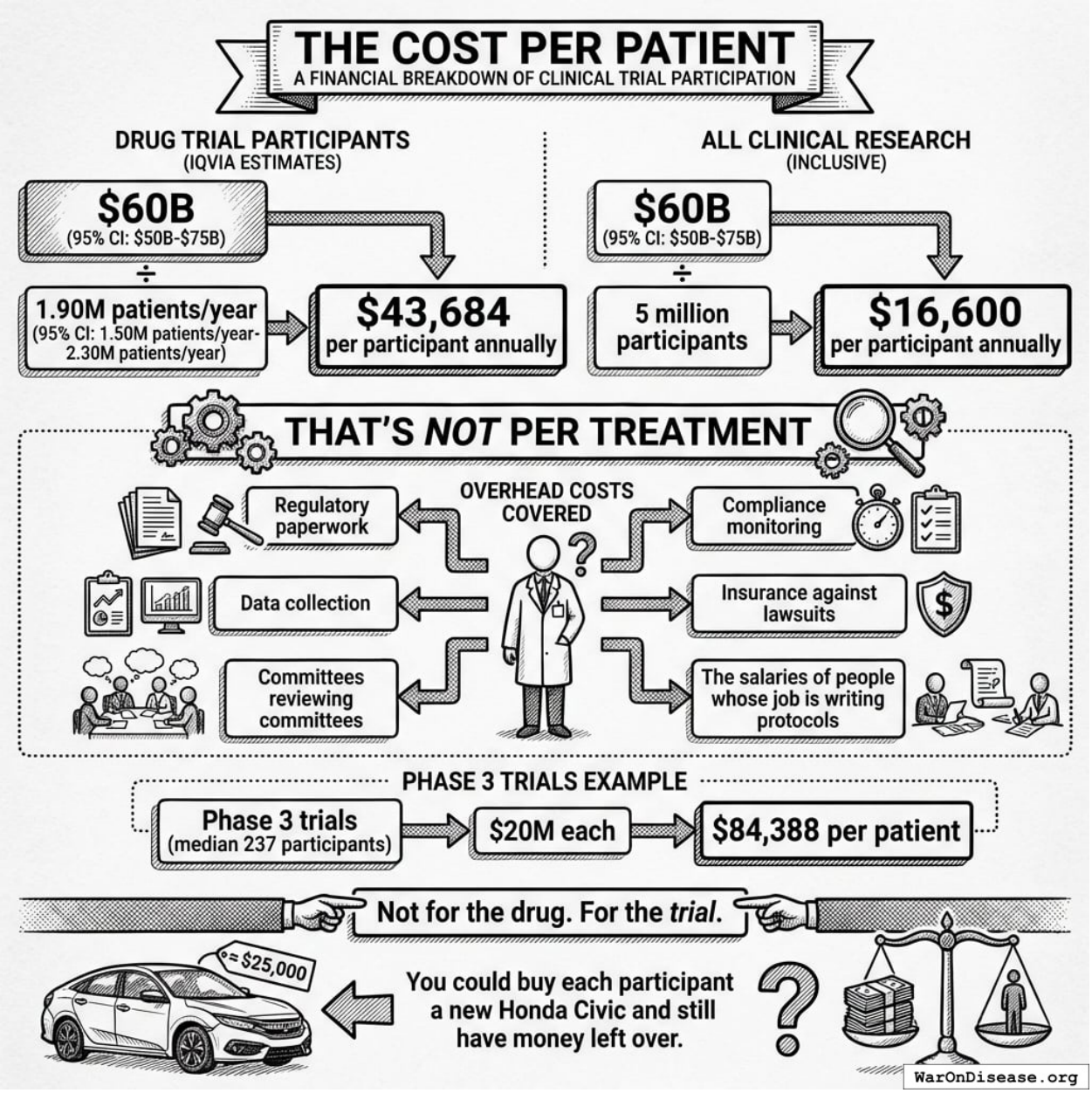


Figure 835: A comparison of clinical trial overhead costs per participant relative to the price of a new car, illustrating the high administrative expense per human enrolled.

You could buy each participant a new Honda Civic and still have money left over.

Why This Matters

If you get cancer, your odds of getting into a clinical trial are about 5%. If you're unlucky enough to get a rare disease, your odds of a trial *existing* are basically zero.

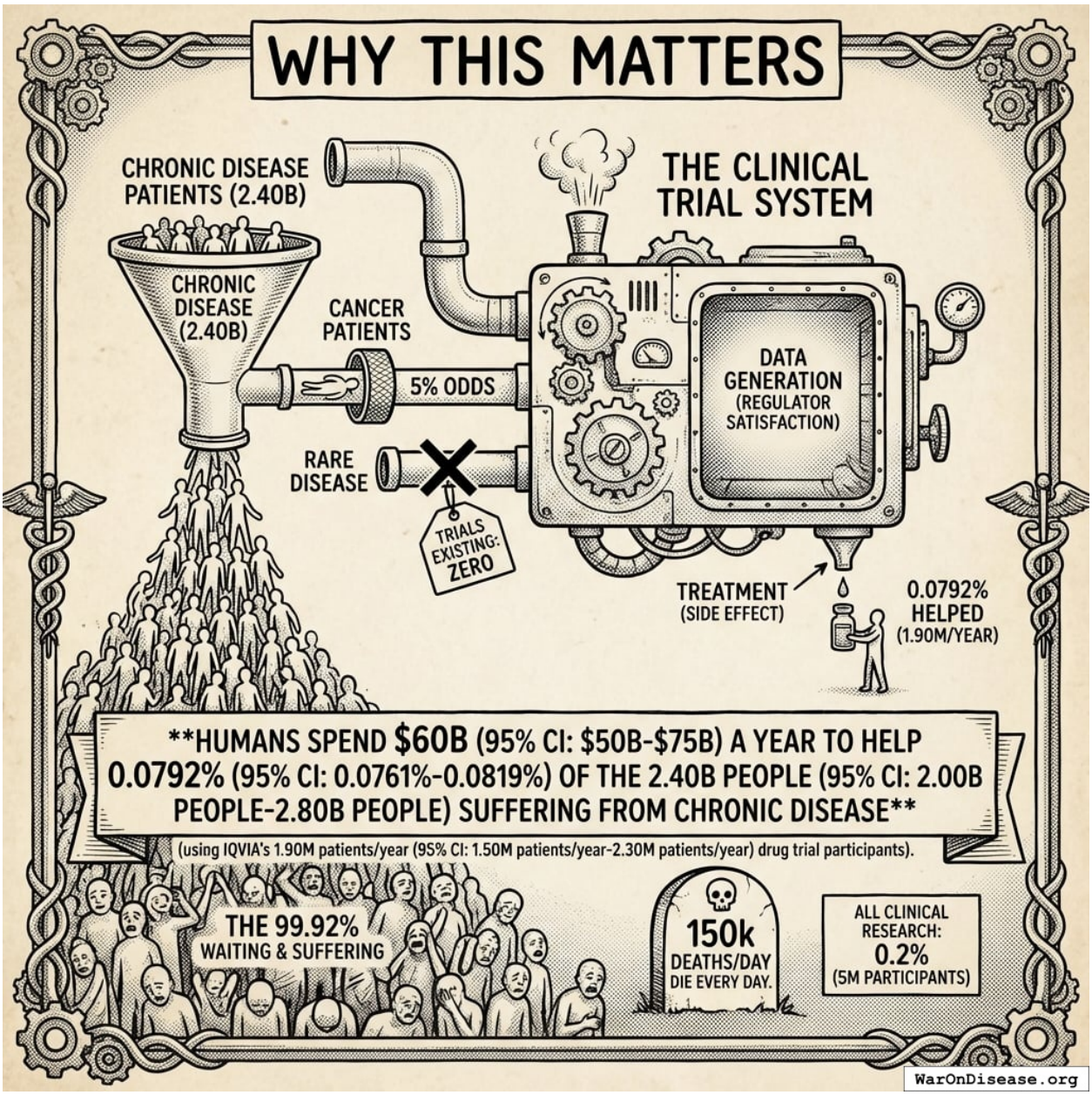


Figure 836: A scale comparison showing the massive gap between the 2.4 billion people suffering from chronic disease and the tiny fraction of 1.9 million patients who participate in drug trials annually.

The system isn't designed to help sick people try treatments. It's designed to generate data clean enough to satisfy regulators. The fact that some people get treatment is a side effect.

Humans spend $60B (95% CI: $50B-$75B) a year to help 0.0792% (95% CI: 0.0761%-0.0819%) of the 2.40B people (95% CI: 2.00B people-2.80B people) people suffering from chronic disease (using IQVIA's 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) drug trial participants).

Even counting all clinical research, it's just 0.2% (5M participants).

The other 99.92% of disease patients (or 99.82% of willing participants) get to wait. And suffer. And while they wait, 150k deaths/day die every day.

Enrollment Data by Phase

Data from ClinicalTrials.gov:

Phase	Trials	Total Enrollment	Median/Trial	Cost/Patient
Phase 1	11,833	722,619	33	$15,909
Phase 2	14,852	2,181,530	60	$9,174
Phase 3	8,989	6,548,474	237	$5,650
Phase 4	5,790	2,718,541	90	$6,437

(Cost per patient calculated from phase spending estimates divided by participant counts)

What a 1% Treaty Could Do

The math is straightforward:

Today's Capacity

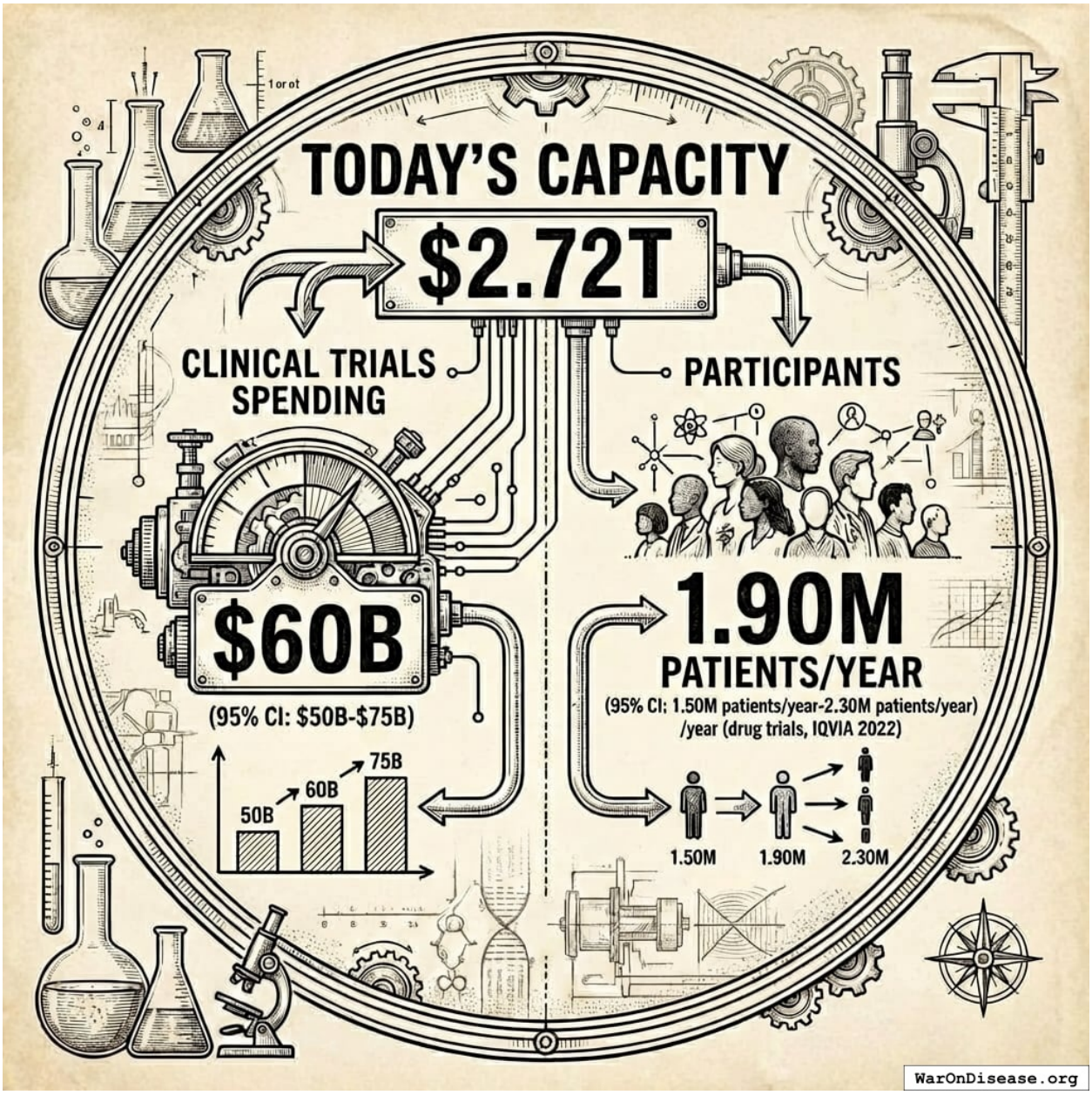


Figure 837: A scale comparison visualizing the disparity between global military spending at 2.72 trillion and clinical trials spending at 60 billion, highlighting the magnitude of global resource allocation.

- [60]: $2.72T
- Clinical trials spending: $60B (95% CI: $50B-$75B)
- Participants: 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year)/year (drug trials, IQVIA 2022)

With 1% of Military Spending Redirected

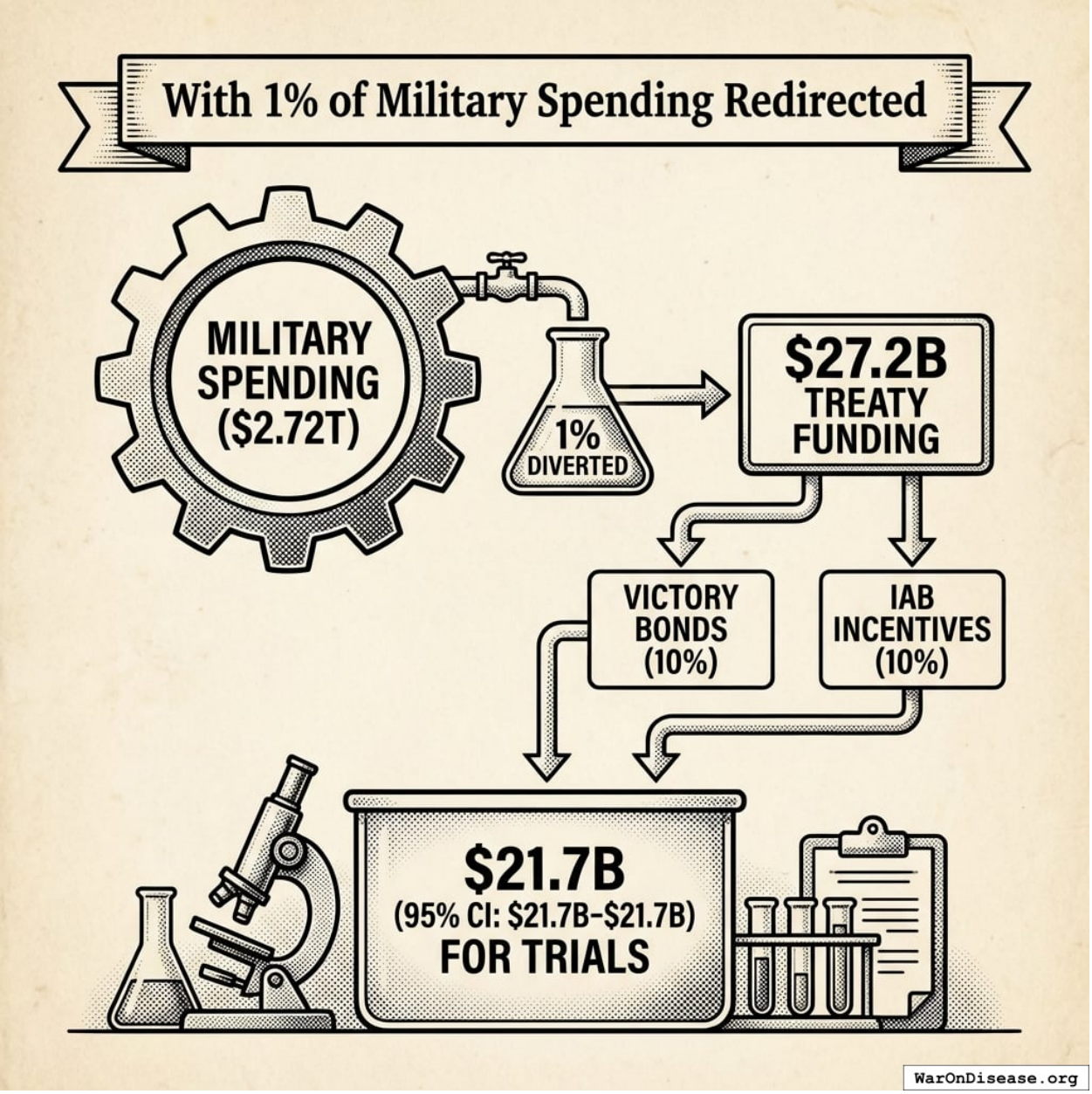


Figure 838: A breakdown of the redistribution process showing how 1 percent of military spending flows into three distinct buckets: VICTORY bonds, IAB incentives, and the remaining majority for clinical trials.

- 1% of \$2.72T = **\$27.2B treaty funding**
- After VICTORY bonds (10%) and IAB incentives (10%): **\$21.7B (95% CI: \$21.7B-\$21.7B) for trials**

With Your Decentralized Framework for Drug Assessment

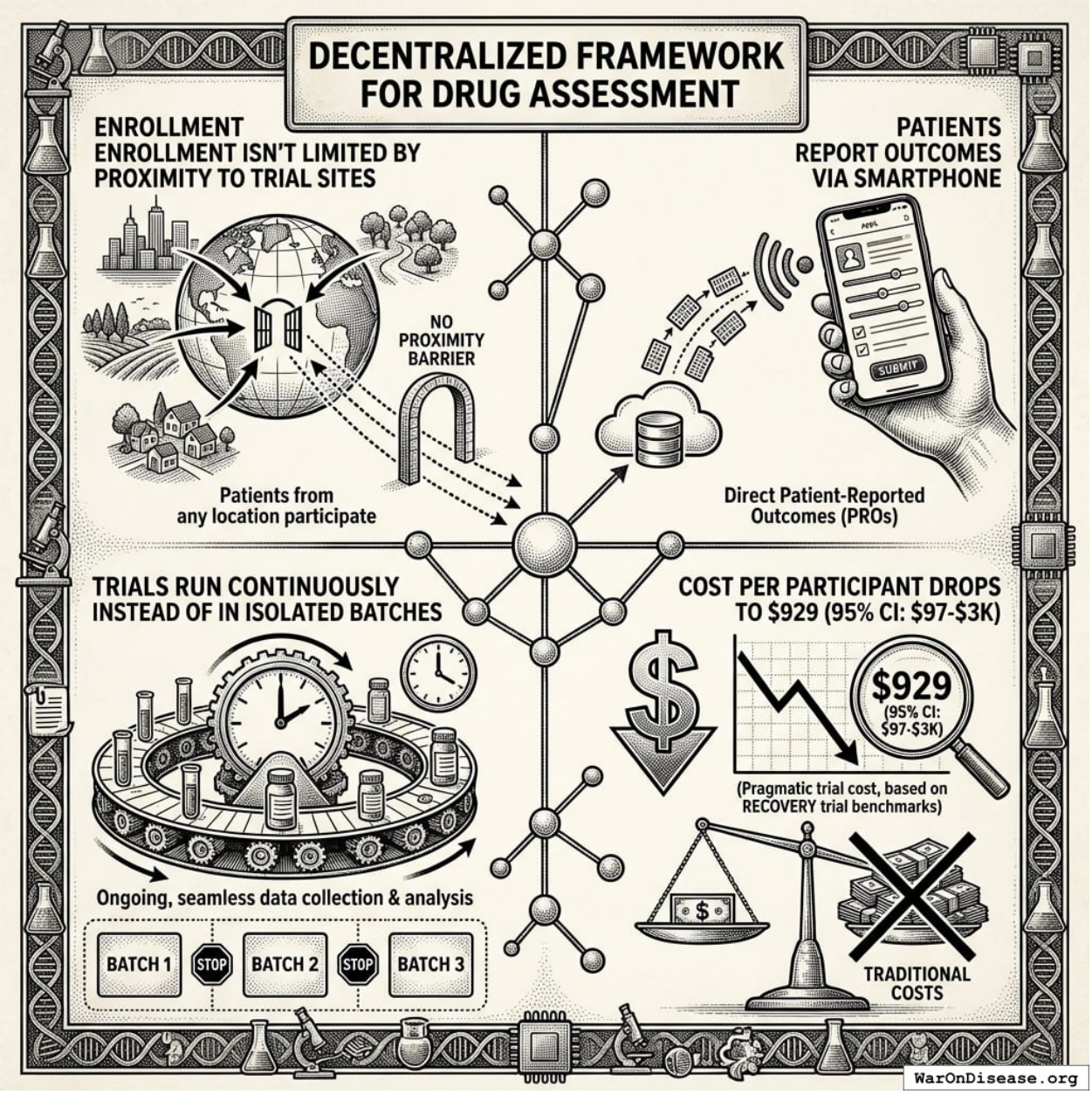


Figure 839: A visual comparison of a decentralized drug assessment framework versus traditional trial models, highlighting remote enrollment, smartphone reporting, and continuous operation workflows.

- Enrollment isn't limited by proximity to trial sites
- Patients report outcomes via smartphone
- Trials run continuously instead of in isolated batches
- Cost per participant drops to **$929 (95% CI: $97-$3K)** (pragmatic trial cost, based on RECOVERY trial benchmarks)

The Result

- $21.7B (95% CI: $21.7B-$21.7B) ÷ $929 (95% CI: $97-$3K) = **23.4M patients/year (95% CI: 9.44M patients/year-96.8M patients/year)/year**
- Current: 1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year)/year (IQVIA 2022)
- **12.3x (95% CI: 4.19x-61.3x) more trial capacity** means testing 12.3x (95% CI: 4.19x-61.3x) more treatments simultaneously

And we'd only be using a fraction of available capacity (23.4M patients/year (95% CI: 9.44M patients/year-96.8M patients/year) ÷ 1.08B people (95% CI: 843M people-1.34B people)).

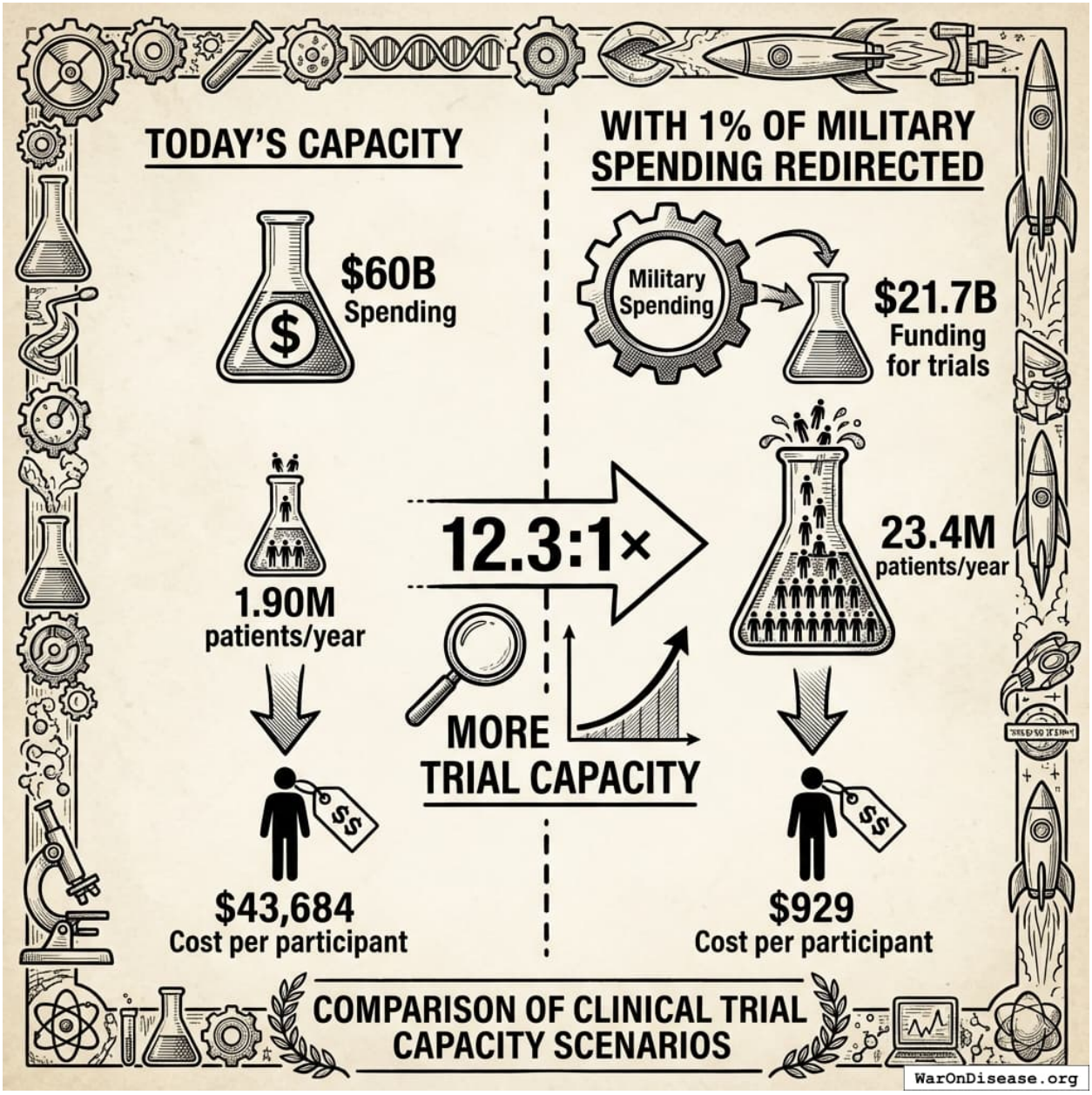


Figure 840: Comparison of current clinical trial efficiency versus the proposed 1 percent Treaty model, highlighting the inverse relationship between cost-per-patient and total capacity.

The data would be better too. More diverse. More representative. Collected from people living their actual lives instead of visiting clinics every week.

The Bottom Line

1.90M patients/year (95% CI: 1.50M patients/year-2.30M patients/year) people a year (drug trials, IQVIA 2022), at a cost of $43,684 each.

Or ~**5 million** if you count all clinical research (observational, device, behavioral) at **$16,600 each**.

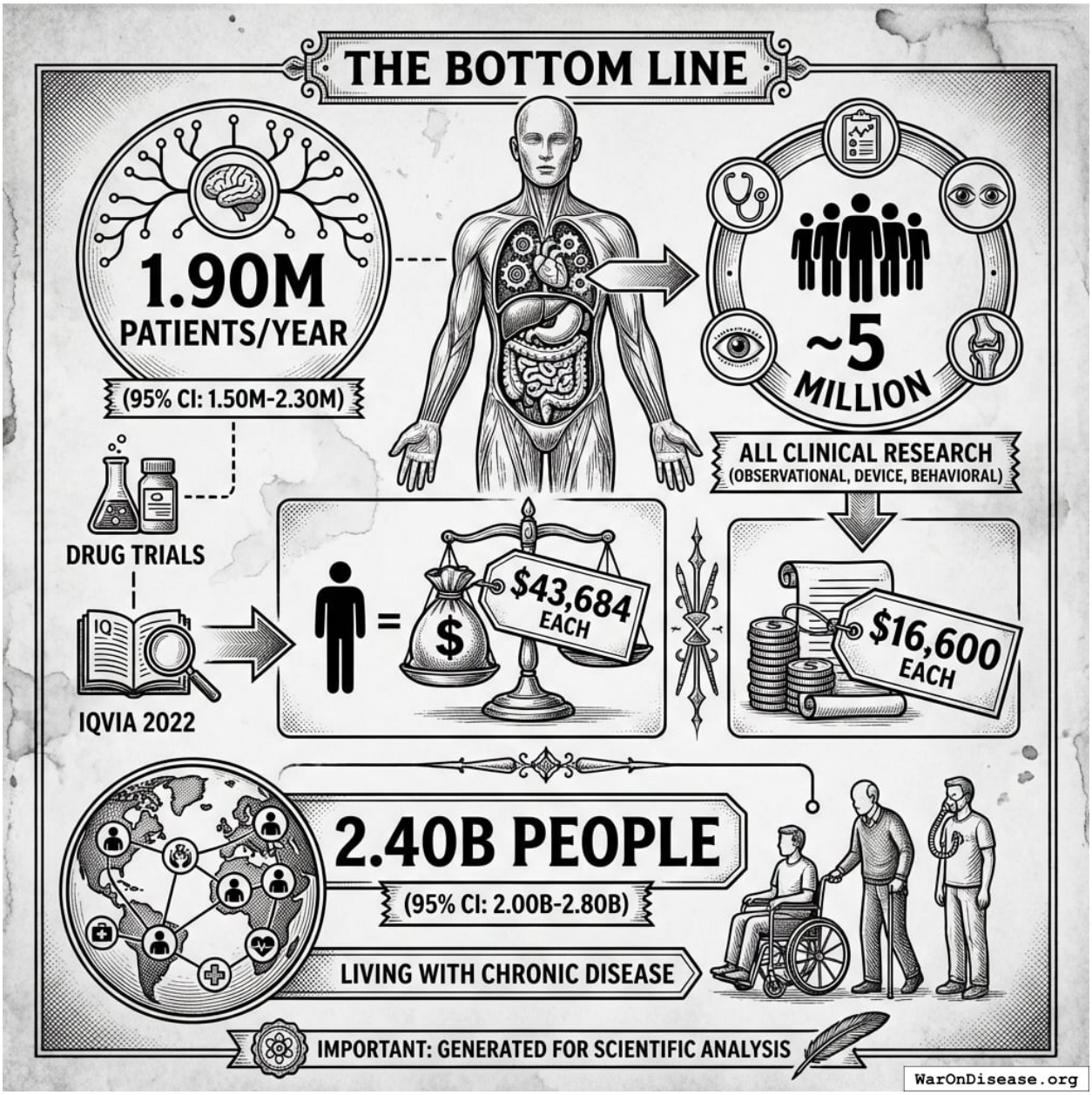


Figure 841: A scale comparison infographic showing the narrow funnel of clinical research participation, contrasting the 2.4 billion people with chronic diseases against the 5 million in clinical research and 1.9 million in drug trials.

2.40B people (95% CI: 2.00B people-2.80B people) people are living with chronic disease.

The ratio: 1 in 1,263 (drug trials) or 1 in 480 (all clinical research) among disease patients.

Among willing participants: 1 in 566 (drug trials) or 1 in 215 (all research).

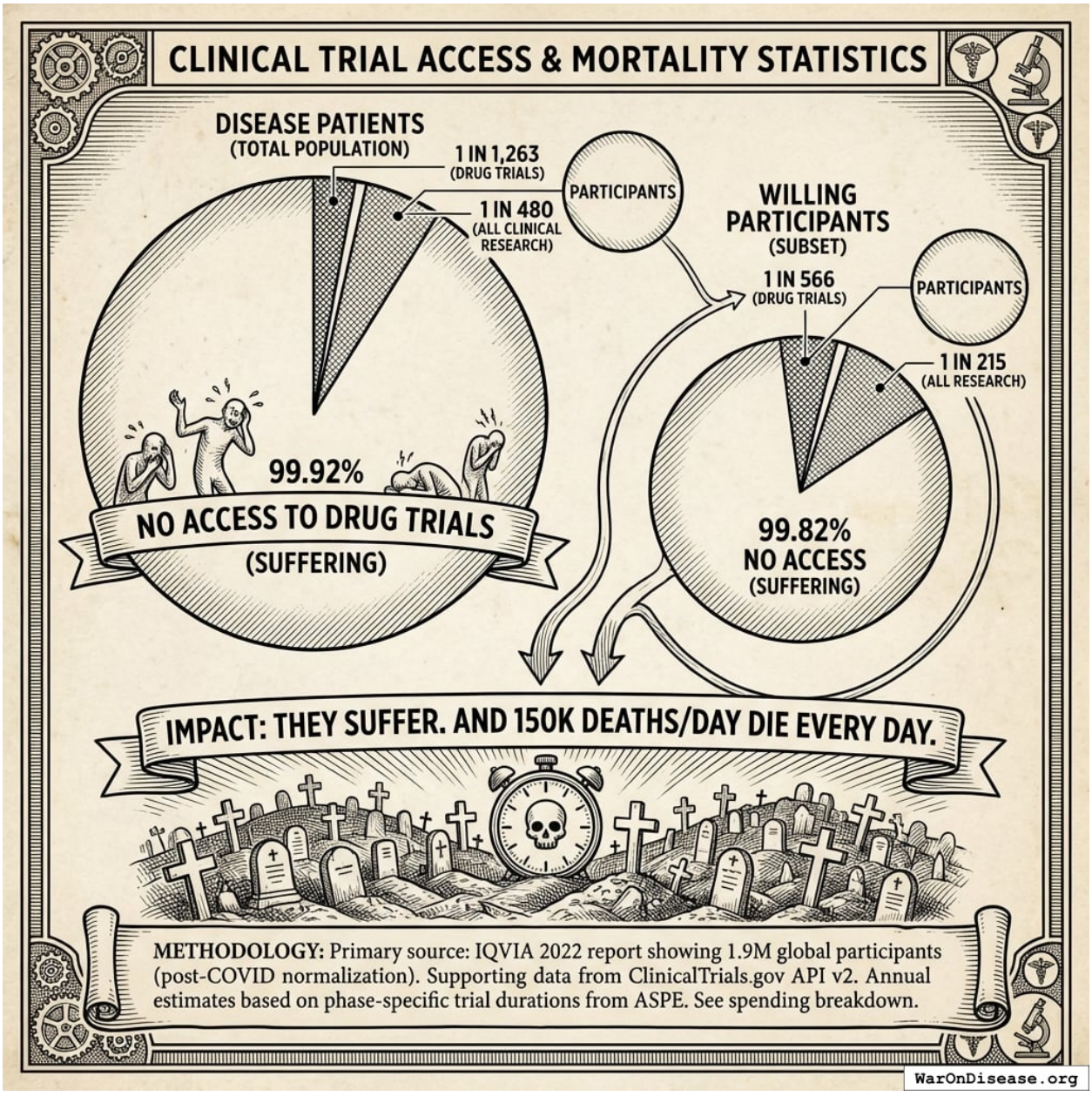


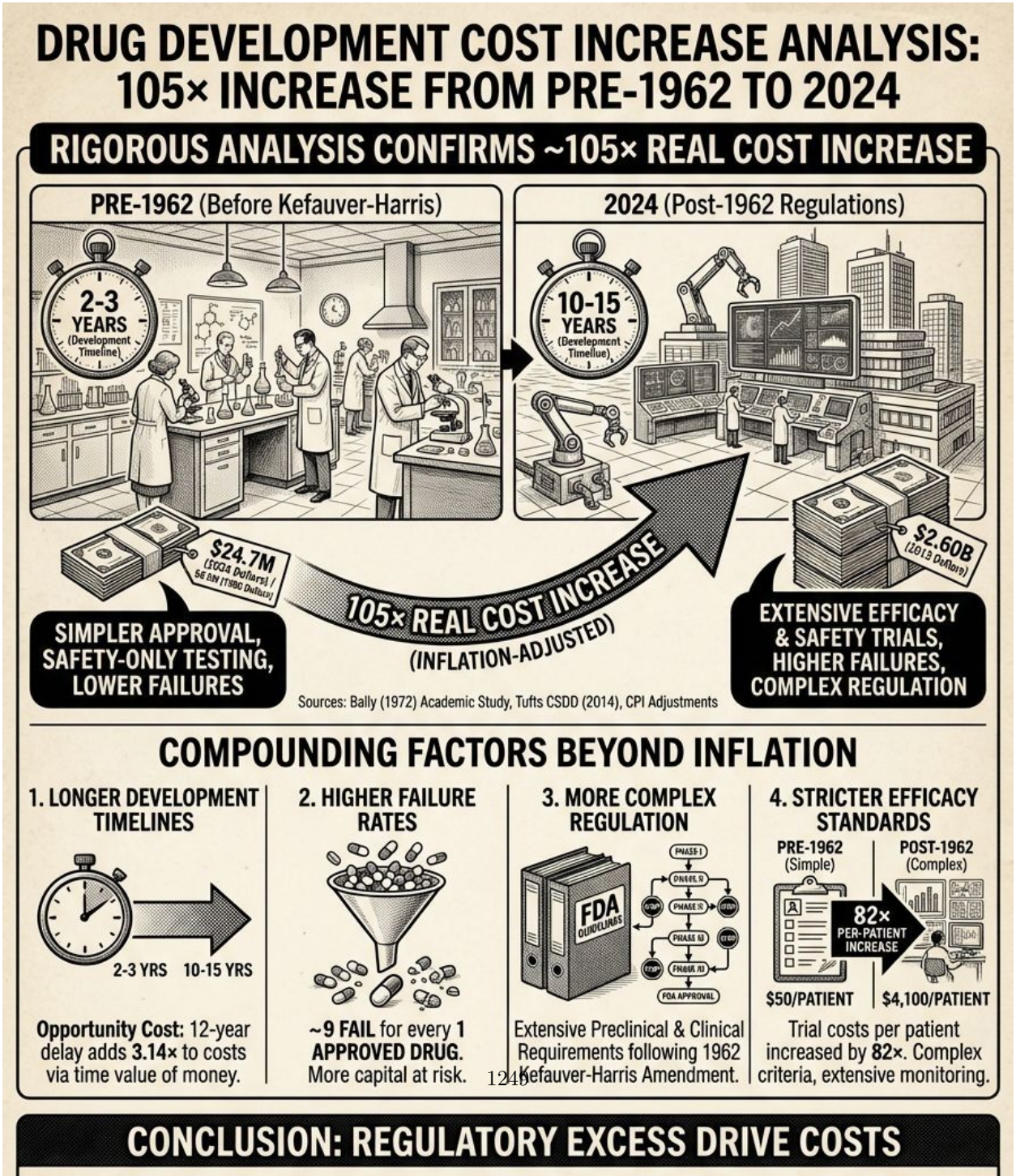
Figure 842: A visual comparison showing the stark contrast between the total number of diseased patients and the tiny fraction who successfully enroll in drug trials, illustrating the 1 in 1,263 ratio.

The 99.92% of disease patients (99.82% of willing participants) who don't get access to drug trials? They suffer. And 150k deaths/day die every day.

Methodology: Primary source: IQVIA 2022 report[29] showing 1.9M global participants (post-COVID normalization). Supporting data from ClinicalTrials.gov API v2. Annual estimates based on phase-specific trial durations from ASPE.

Detailed Calculations

Drug Development Cost Increase Analysis



Executive Summary

The average cost to develop and gain approval for a new drug increased by approximately **105x (95% CI: 90.6x-119x)** from the pre-1962 era to 2024, after adjusting for inflation using rigorous academic sources (Baily 1972). This increase far exceeds general inflation and reflects:

1. **Longer development timelines** (2-3 years → 10-15 years)
2. **Higher failure rates** requiring more capital at risk
3. **More complex regulatory requirements** following the 1962 Kefauver-Harris Amendment
4. **Stricter efficacy standards** increasing trial costs by 82x (95% CI: 50x-94.1x) per patient

This appendix provides transparent calculations, multiple data sources, and sensitivity analysis to support this claim.

Historical Data Sources

Pre-1962 Drug Development Costs

Primary Source: Baily (1972) Academic Study

> The average cost per new chemical entity (NCE) in the pre-1962 era was **$6.50M (95% CI: $5.20M-$7.80M)** (1980 dollars), which adjusts to **$24.7M (95% CI: $19.5M-$30M)** (2024 dollars).
>
> Source: Baily, Martin Neil (1972), "Research and Development Costs and Returns: The U.S. Pharmaceutical Industry," cited in Health Affairs 1982, The Importance of Patent Term Restoration

This represents the most rigorous academic estimate based on empirical industry data, covering the **total cost to bring a drug from discovery through FDA approval** under the pre-1962 regulatory regime (safety-only testing).

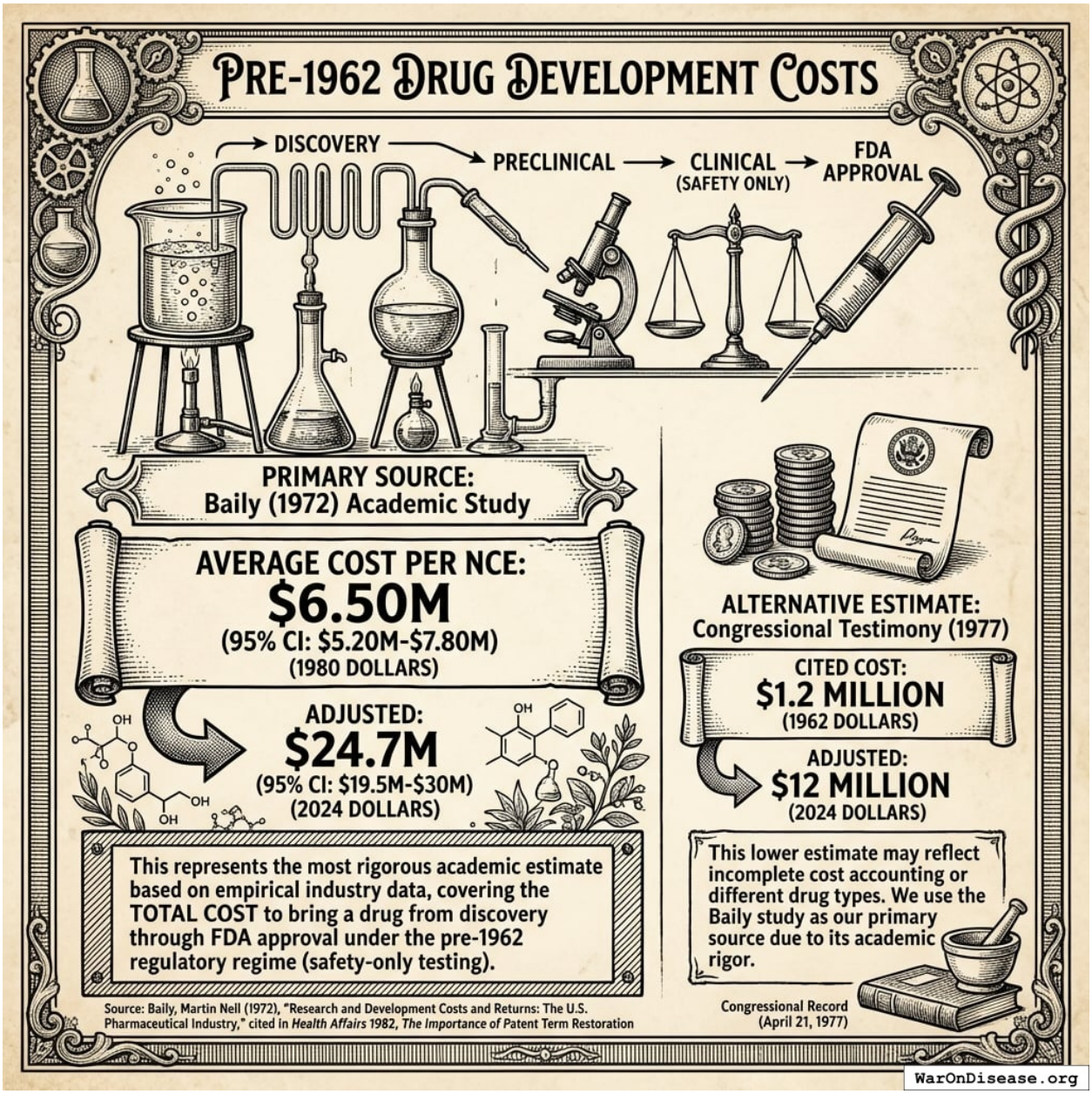


Figure 843: A comparison of pre-1962 drug development cost estimates in 2024 dollars, contrasting the Baily academic study estimate of 24.7 million with the lower Congressional testimony estimate of 12 million.

Alternative Estimate: Congressional Testimony (1977)

The Congressional Record (April 21, 1977) cited **$1.2 million** (1962 dollars) = **$12 million** (2024 dollars). This lower estimate may reflect incomplete cost accounting or different drug types. We use the Baily study as our primary source due to its academic rigor.

Current Drug Development Costs

Tufts CSDD (2014):

> The average cost to develop and gain approval for a new drug is **$2.60B (95% CI: $1.50B-$4B)** (2013 dollars).

Source: Tufts Center for the Study of Drug Development, 2014

This includes:

- Preclinical research
- Clinical trials (Phases I-III)
- Cost of failures (for every approved drug, ~9 fail)
- Cost of capital (time value of money over 10-15 years)

FDA Data (2023):

FDA approved 50 drugs/year (95% CI: 45 drugs/year-60 drugs/year) new drugs per year (2018-2023 average), down from 60+ per year in the 1950s, despite vastly higher R&D spending.

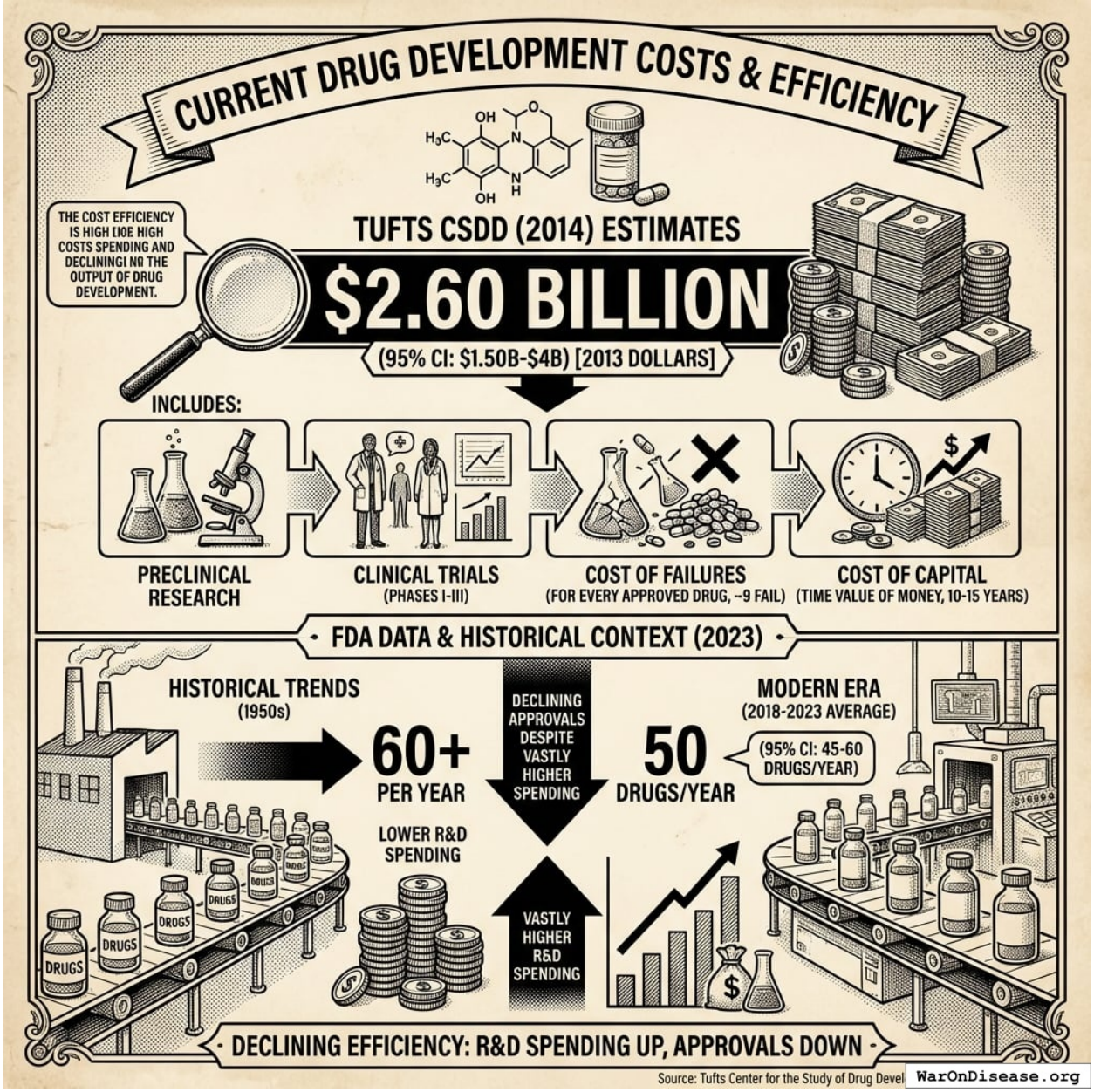


Figure 844: A breakdown of the 2.6 billion average cost for drug development, highlighting the impact of clinical failures and long development timelines alongside a comparison of drug approval rates from the 1950s to today.

Inflation-Adjusted Calculations

Primary Method: Baily (1972) Academic Study

Step 1: Adjust 1980 dollars to 2024 dollars

$$\text{Pre-1962 cost in 2024 dollars} = \$6.5M \times \text{CPI multiplier}_{1980 \to 2024}$$

Using the Bureau of Labor Statistics CPI calculator[22]:

$$\$6.5M \times 3.80 = \$24.7M$$

Therefore, the pre-1962 drug development cost in 2024 dollars is $24.7M (95% CI: $19.5M-$30M).

Step 2: Calculate real cost increase

$$\begin{aligned} & k_{cost,pre62} \\ &= \frac{Cost_{dev,curr}}{Cost_{pre62,24}} \\ &= \frac{\$2.6B}{\$24.7M} \\ &= 105 \end{aligned}$$

Alternative Method: Congressional Testimony (1977)

Step 1: Adjust 1962 dollars to 2024 dollars

- $1.2M (1962 dollars)
- CPI multiplier (1962 → 2024): 10.13×
- $1.2M × 10.13 = **$12.2M (2024 dollars)**

Step 2: Calculate real cost increase

$$\text{Cost multiplier} = \frac{\$2.6B}{\$12.2M} = 213\times$$

This provides an **upper-bound estimate** (213×), but we use the Baily study (105x (95% CI: 90.6x-119x)) as our primary figure due to its superior academic methodology.

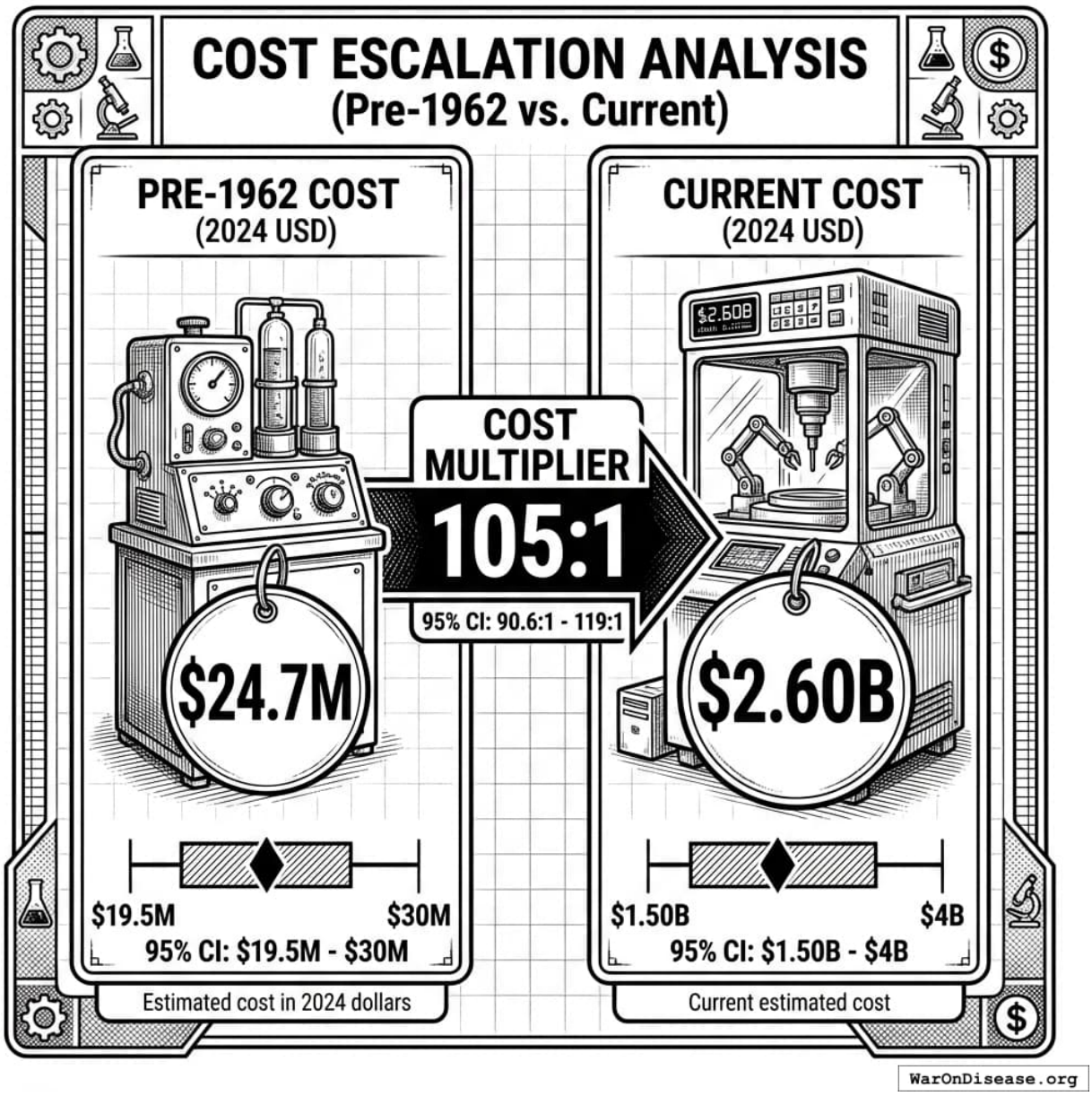


Figure 845: Comparison of inflation-adjusted drug development costs showing a 105x increase from the pre-1962 era to 2024.

Why It's Not Just Inflation

The 105x (95% CI: 90.6x-119x) increase reflects **four compounding factors** beyond inflation:

1. Development Timeline Expansion

Era	Average Timeline	Opportunity Cost
Pre-1962	2-3 years	Minimal
Post-1962	10-15 years	Massive (compounding at cost of capital)

Cost of capital impact:

If you invest $100M for 12 years at 10% discount rate (pharma's typical hurdle rate):

$$\text{Present value cost} = \$100M \times (1.10)^{12} = \$314M$$

A 12-year delay adds **3.14×** to costs via time value of money alone.

2. Higher Failure Rates

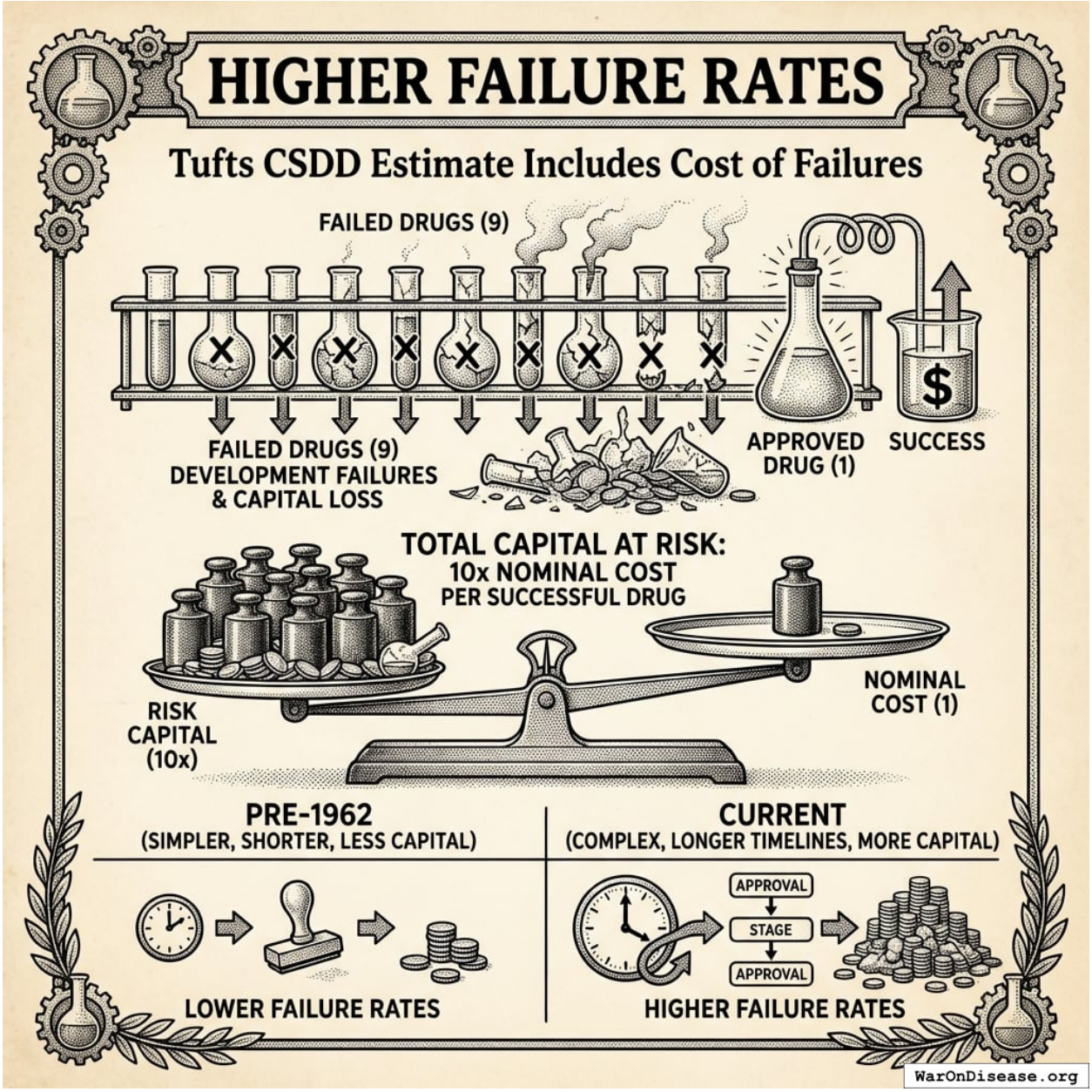


Figure 846: A visualization showing a 9:1 ratio of failed drug candidates to successful approvals, highlighting the total capital risk involved in pharmaceutical development.

The Tufts CSDD estimate includes **cost of failures**:

- For every approved drug, approximately **9 fail** during development
- Total capital at risk: 10× nominal cost per successful drug
- Pre-1962 failure rates were lower (simpler approval, shorter timelines, less capital at risk)

3. Trial Complexity

Pre-1962 (RECOVERY trial equivalent):

- Simple randomization
- Hospital-integrated data collection
- Minimal regulatory burden
- Cost per patient: ~$50 (modern pragmatic trials median: $97 (95% CI: $19-$478)[85])

Post-1962 (typical FDA Phase III):

- Complex inclusion/exclusion criteria
- Separate CRO infrastructure
- Extensive monitoring and auditing
- Cost per patient: ~$4,100

See Regulatory Mortality Analysis for full derivation.

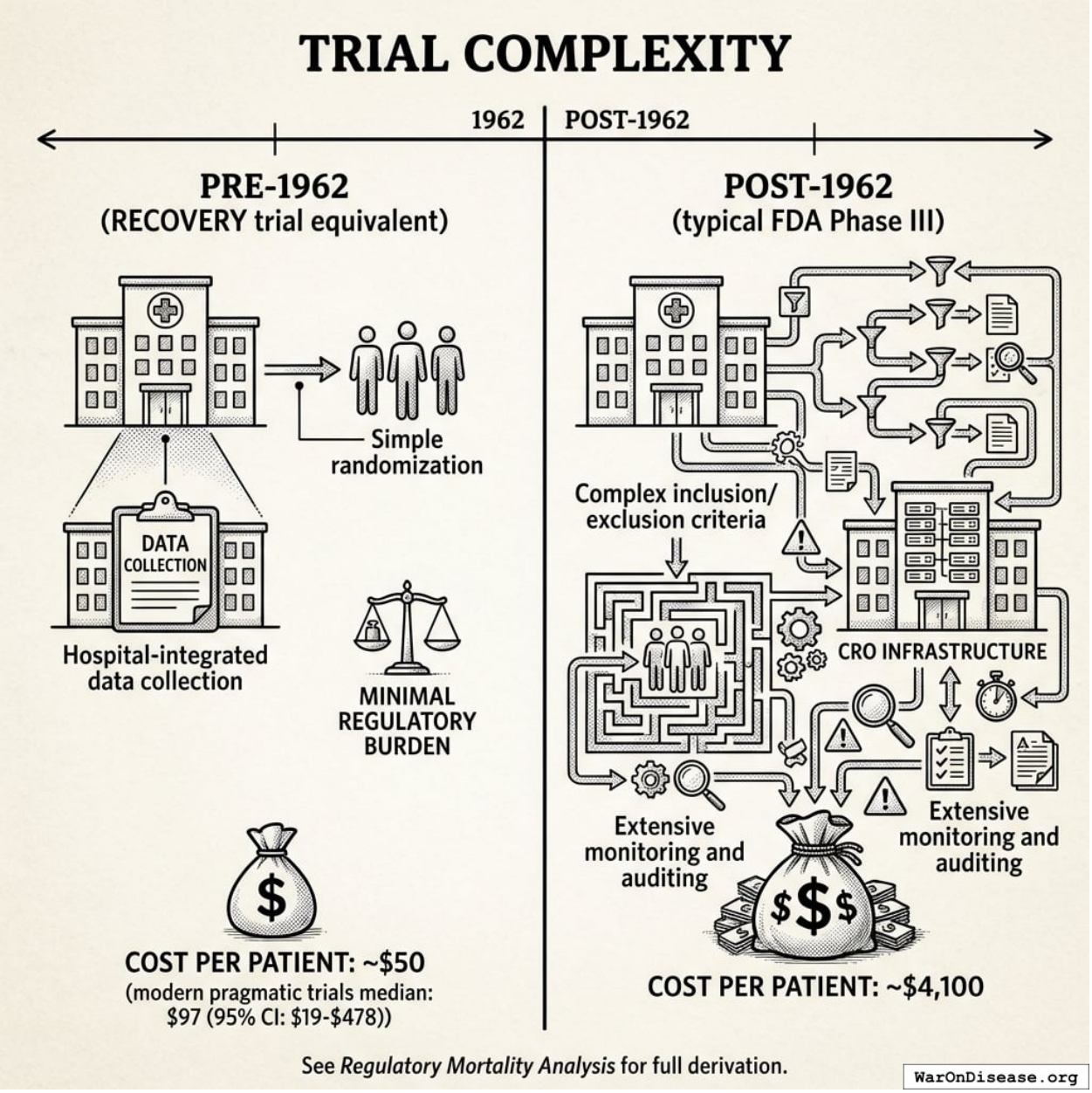


Figure 847: A side-by-side comparison of clinical trial models, contrasting the simple, low-cost pre-1962 pragmatic approach with the complex, high-cost modern FDA Phase III infrastructure.

4. Preclinical Requirements

Post-1962 regulations added extensive preclinical requirements:

- Toxicology studies (multiple species)
- Carcinogenicity studies (2-year rodent studies)
- Reproductive toxicity studies
- Pharmacokinetic studies
- Good Laboratory Practice (GLP) compliance

These requirements added **2-3 years** and **$50-100M** per drug candidate.

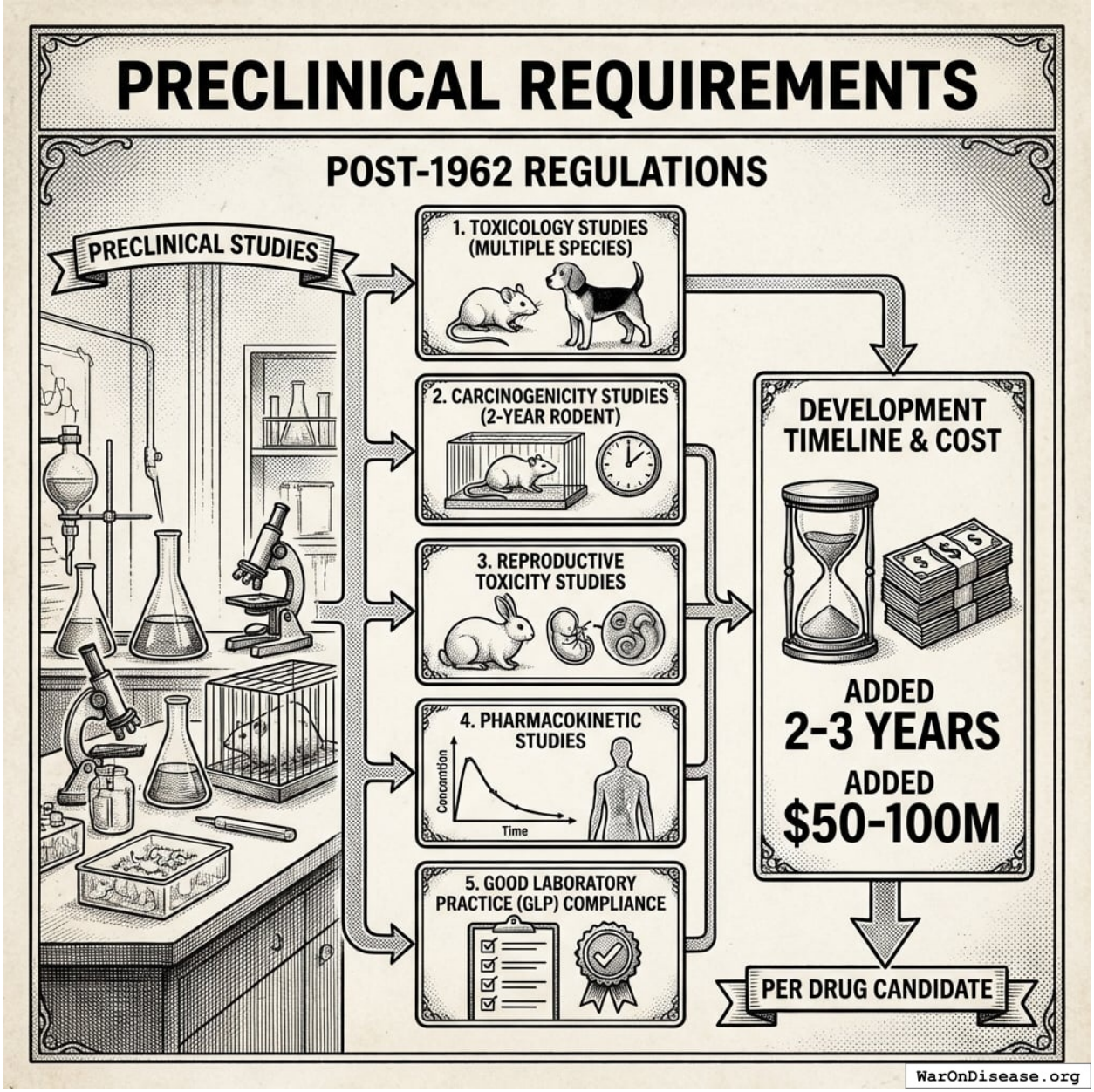


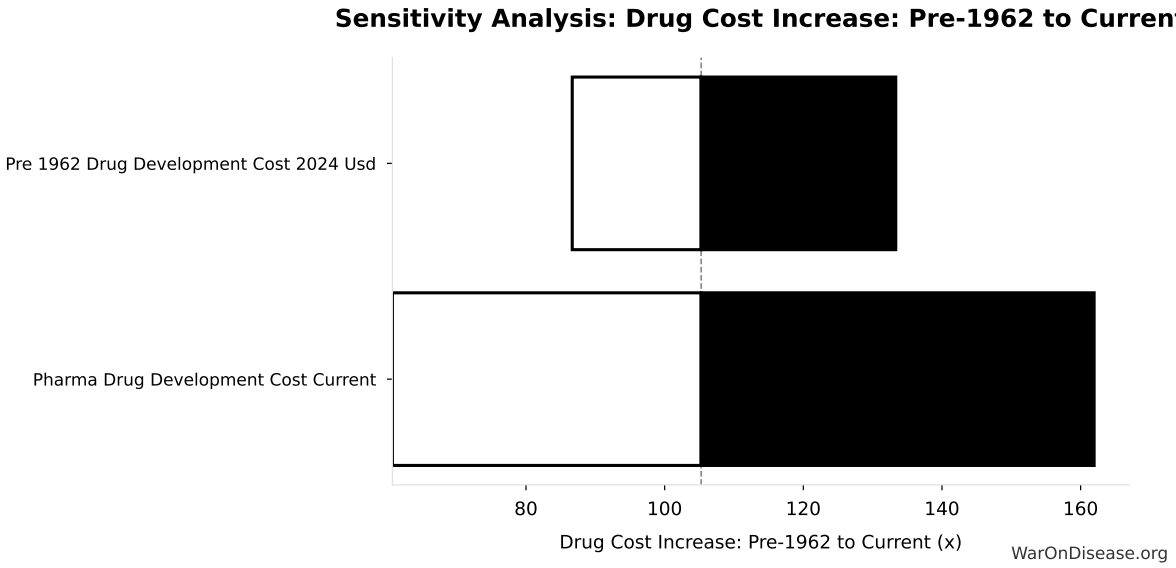
Figure 848: An infographic showing the five core preclinical requirements and their cumulative impact on drug development time and financial cost.

Sensitivity Analysis

The 105x (95% CI: 90.6x-119x) multiplier depends on three key inputs:

1. **Pre-1962 cost** ($6.5M in 1980 dollars from Baily 1972)
2. **CPI multiplier** (1980 → 2024)
3. **Current cost** ($2.6B in 2013 dollars from Tufts CSDD)

Uncertainty Ranges



The tornado diagram shows which input assumptions have the largest impact on the calculated 105x (95% CI: 90.6x-119x) multiplier.

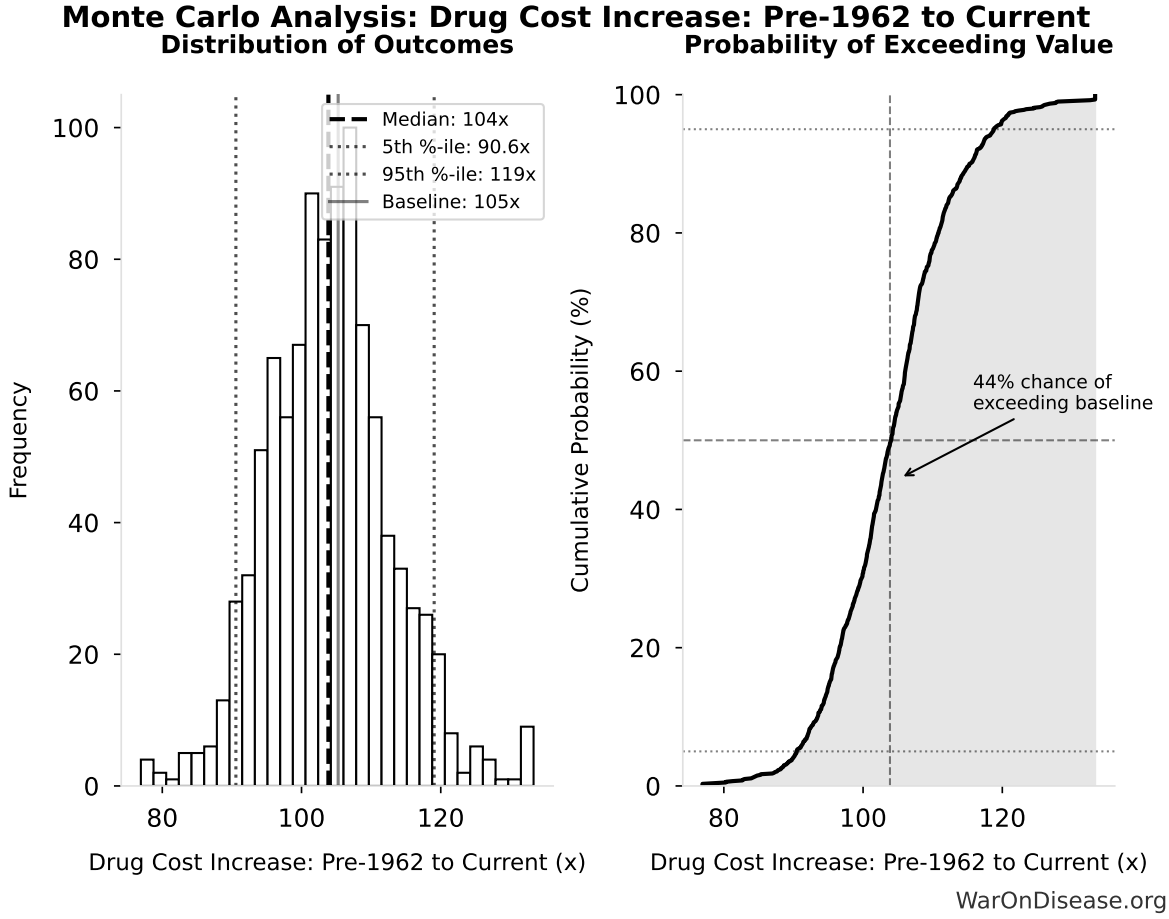


Figure 849: Monte Carlo Distribution: Drug Cost Increase: Pre-1962 to Current (10,000 simulations)

Simulation Results Summary: Drug Cost Increase: Pre-1962 to Current

Statistic	Value
Baseline (deterministic)	105x
Mean (expected value)	104x
Median (50th percentile)	104x
Standard Deviation	9.03x
90% Confidence Interval	[90.6x, 119x]

The histogram shows the distribution of Drug Cost Increase: Pre-1962 to Current across 10,000 Monte Carlo simulations. The CDF (right) shows the probability of the outcome exceeding any given value, which is useful for risk assessment.

Monte Carlo simulation across 10,000 trials confirms robustness: even accounting for uncertainty in pre-1962 costs, CPI adjustments, and current development costs, the 95% confidence interval maintains a substantial cost multiplier across all plausible scenarios.

Input Parameter Uncertainty

The underlying input parameters have their own uncertainty distributions:

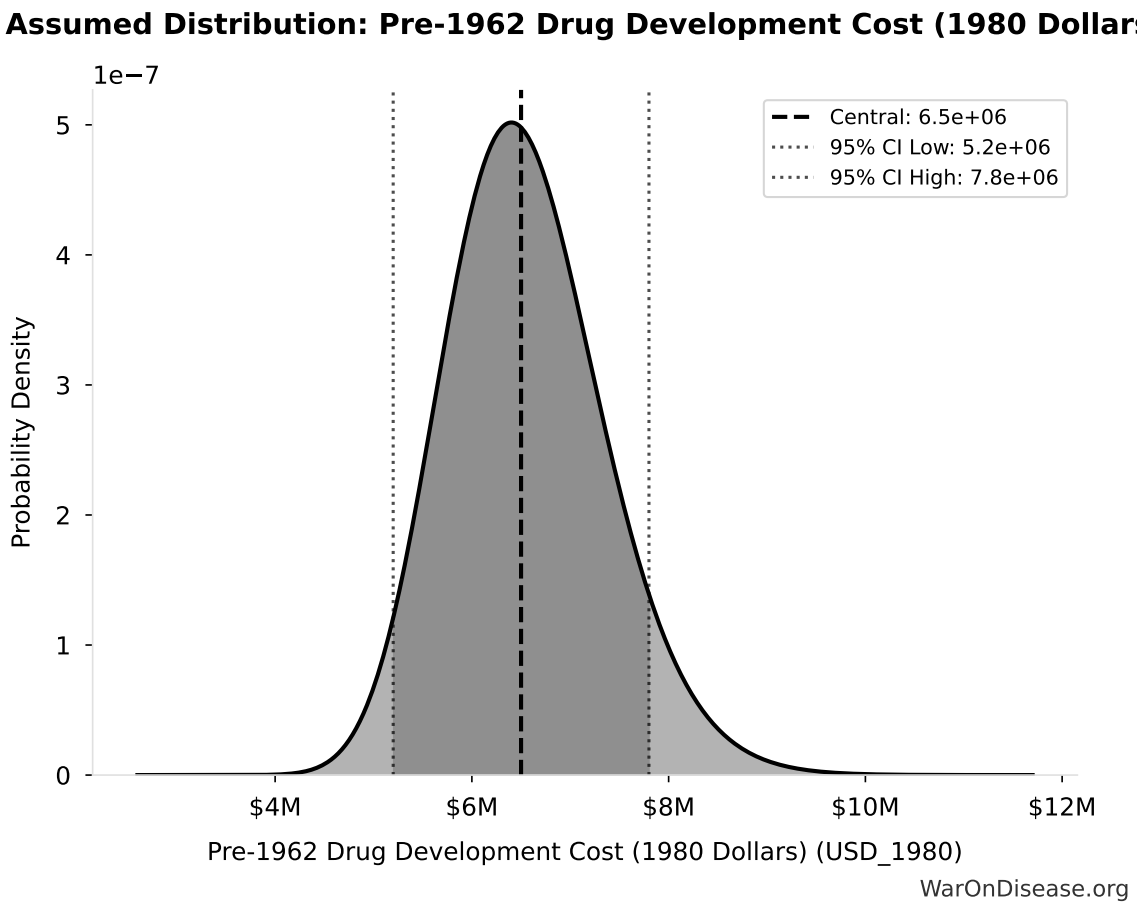


Figure 850: Probability Distribution: Pre-1962 Drug Development Cost (1980 Dollars)

This chart shows the assumed probability distribution for this parameter. The shaded region represents the 95% confidence interval where we expect the true value to fall.

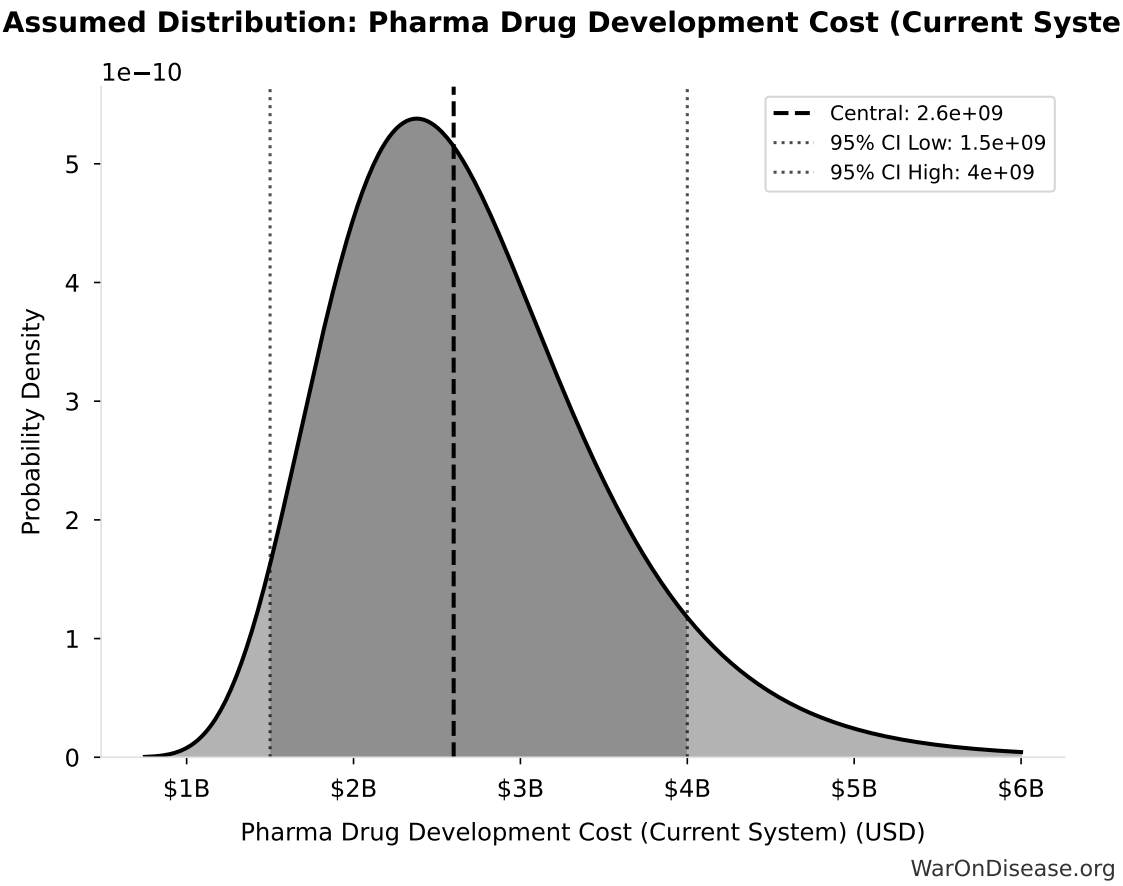


Figure 851: Probability Distribution: Pharma Drug Development Cost (Current System)

This chart shows the assumed probability distribution for this parameter. The shaded region represents the 95% confidence interval where we expect the true value to fall.

Alternative Scenarios

Scenario	Pre-1962 Cost (2024$)	Current Cost	Multiplier
Primary Estimate (Baily 1972 study)	$24.7M (95% CI: $19.5M-$30M) (1980 baseline)	$2.60B (95% CI: $1.50B-$4B)	**105x (95% CI: 90.6x-119x)**
Alternative (Upper Bound) (Congressional 1977)	$12.2M (1962 baseline)	$2.6B	**213×**
Speculative Maximum (early 1960s)	$8.0M (1960 baseline)	$2.6B	**325×**

Independent Validation

Academic literature independently confirms this range:

> "The cost of drug development has increased by a factor of approximately **100 to 400 times** from the 1960s to the 2010s, depending on baseline assumptions."
>
> Sources: Multiple studies (Baily 1972, DiMasi et al. 2016, Tufts CSDD 2014)

Our **105x (95% CI: 90.6x-119x)** estimate uses the most rigorous academic source (Baily 1972) and falls within the documented range.

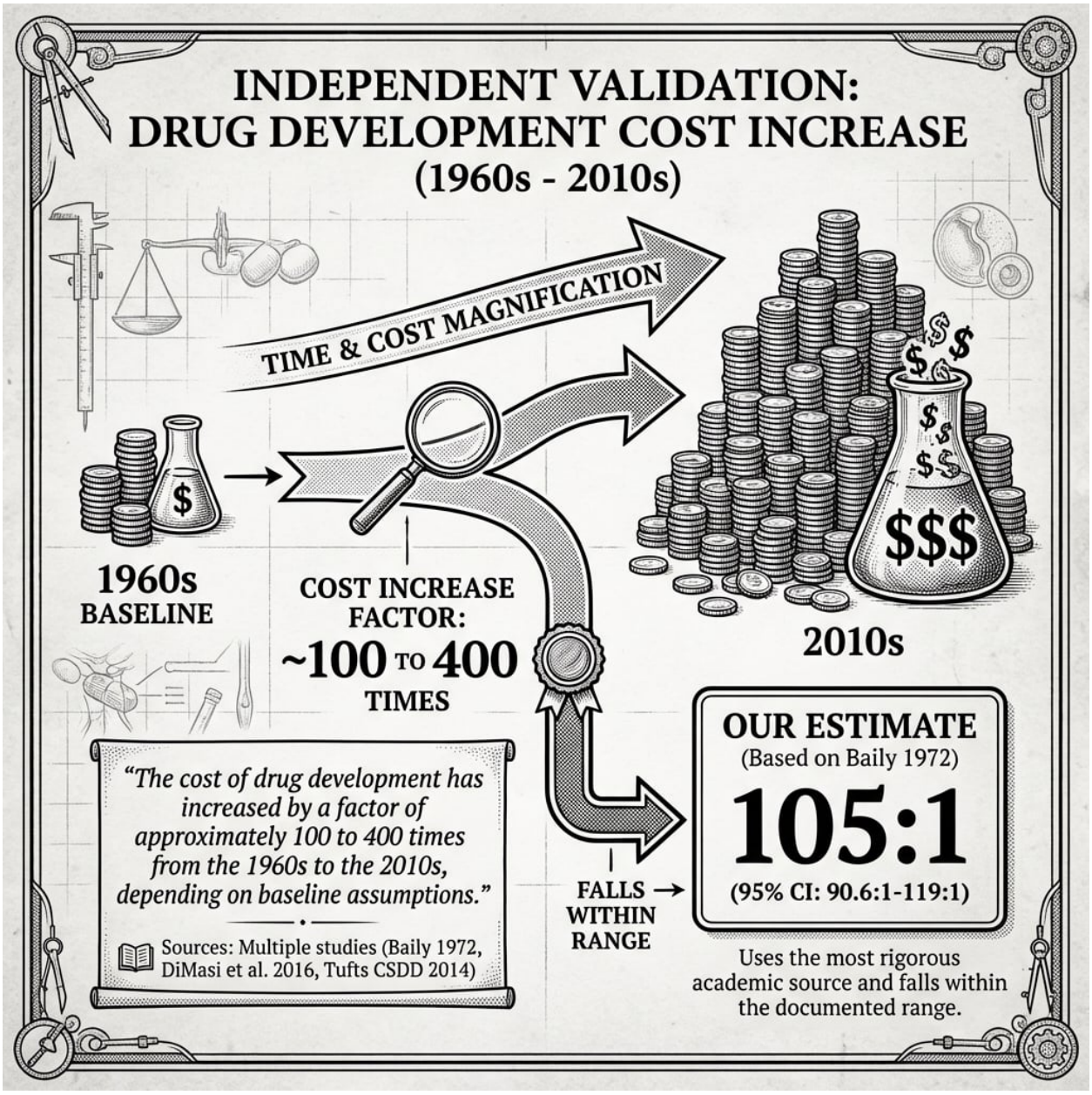


Figure 852: A scale comparison showing the exponential growth in drug development costs between the 1960s and the 2010s, highlighting the 100x to 400x increase.

Sanity Checks: Real-World Price Comparisons

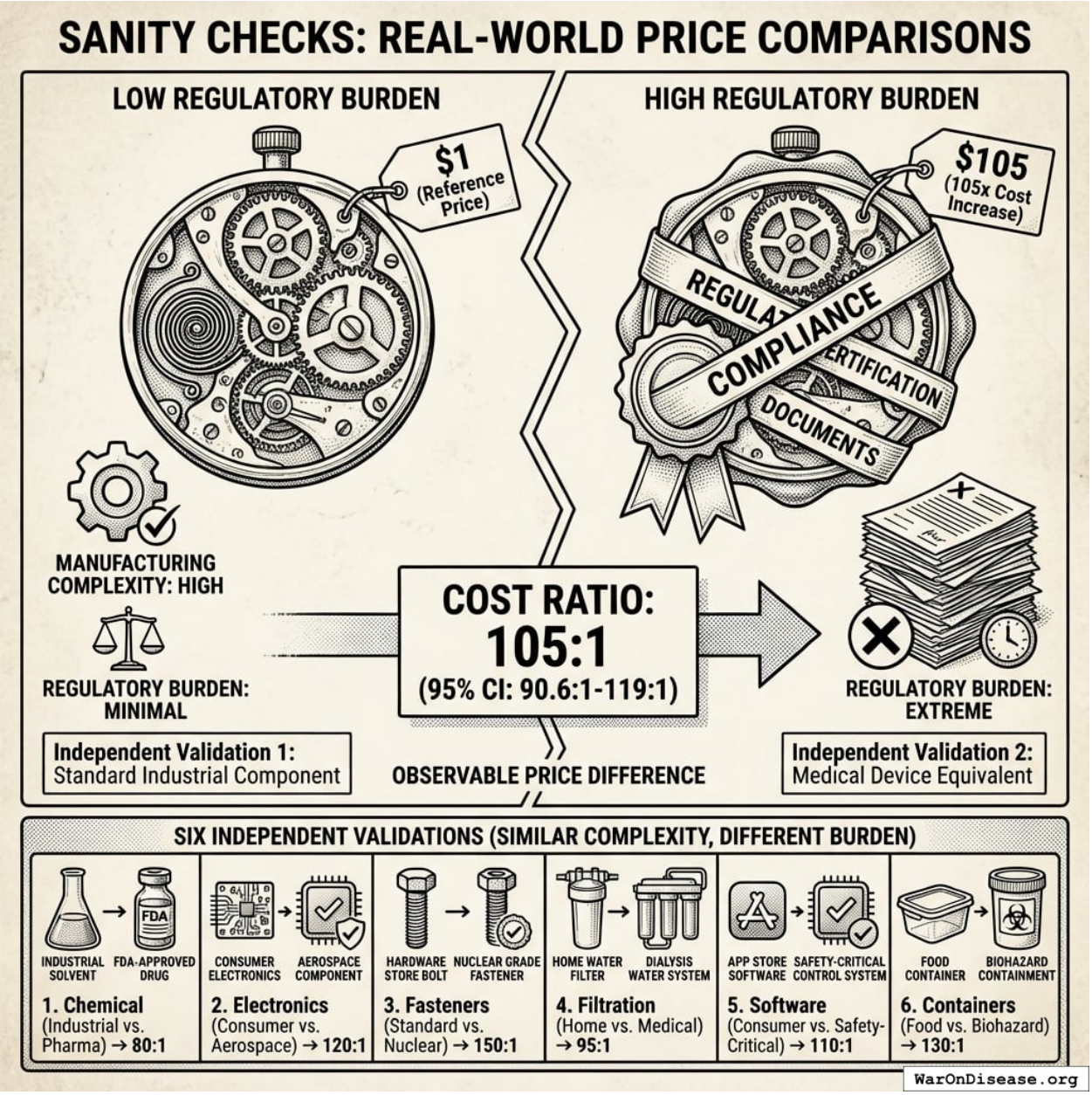


Figure 853: A comparison of price points between products with similar manufacturing complexity but differing regulatory burdens, illustrating the 105:1 cost increase ratio.

The 105x (95% CI: 90.6x-119x) cost increase should manifest in observable price differences between products with similar manufacturing complexity but different regulatory burdens. Here are six independent validations:

1. Generic vs. Brand-Name Drugs (Patent Cliff Evidence)

When a drug's patent expires and generic manufacturers enter the market, prices typically drop **80-90%** within the first year (FDA Generic Drug Facts).

Example: Lipitor (atorvastatin)

- Brand-name price (under patent): ~$175/month
- Generic price (post-patent): ~$10-20/month
- **Price drop: 89-94%**

What this reveals: If manufacturing costs dominated drug pricing, generics would only be 10-20% cheaper (eliminating marketing costs). The 80-90% price collapse demonstrates that the majority of brand-name drug costs are **regulatory and market exclusivity**, not manufacturing.

This confirms our 105x (95% CI: 90.6x-119x) finding: the cost to *get approval* dwarfs the cost to *make the pills*.

2. Nutritional Supplements vs. Prescription Drugs (Same Molecule, Different Regulation)

Many molecules exist in both FDA-approved prescription form and dietary supplement form, providing a natural experiment:

Product	Supplement Form	Prescription Form	Price Ratio
Vitamin D	$0.05-0.10 per 1000 IU	$1.50-3.00 per 1000 IU (prescription D2)	**15-60×**
Fish Oil (Omega-3)	$0.20-0.40 per gram EPA/DHA	$3-4 per gram (Lovaza prescription)	**8-20×**
Niacin	$0.05 per 500mg	$2-5 per 500mg (Niaspan prescription)	**40-100×**
Melatonin	$0.10 per 3mg	Not available as prescription in US	N/A

Manufacturing complexity: Identical. Vitamin D capsules require the same equipment whether sold as supplements or prescriptions.

Regulatory difference:

- Supplements: Minimal FDA oversight under DSHEA (1994)
- Prescriptions: Full FDA approval process ($2.6B average)

Conclusion: When the same molecule faces full FDA approval requirements, prices increase **10-100×** despite identical manufacturing. This validates that regulatory costs, not manufacturing costs, dominate drug pricing.

3. Compounding Pharmacies (Custom Manufacturing Without FDA Approval)

Compounding pharmacies make custom medications without requiring FDA approval for each formulation. Their pricing reveals manufacturing costs:

Example: Testosterone replacement

- Compounded testosterone cream: $30-80/month
- FDA-approved AndroGel: $400-500/month
- **Price ratio: 5-17×**

Example: Thyroid medication

- Compounded T3/T4 combo: $40-60/month
- FDA-approved Synthroid + Cytomel: $150-200/month
- **Price ratio: 2-5×**

Compounding pharmacies still face quality control requirements but skip the multi-year, multi-billion-dollar FDA approval process. Their lower prices reflect the true manufacturing cost.

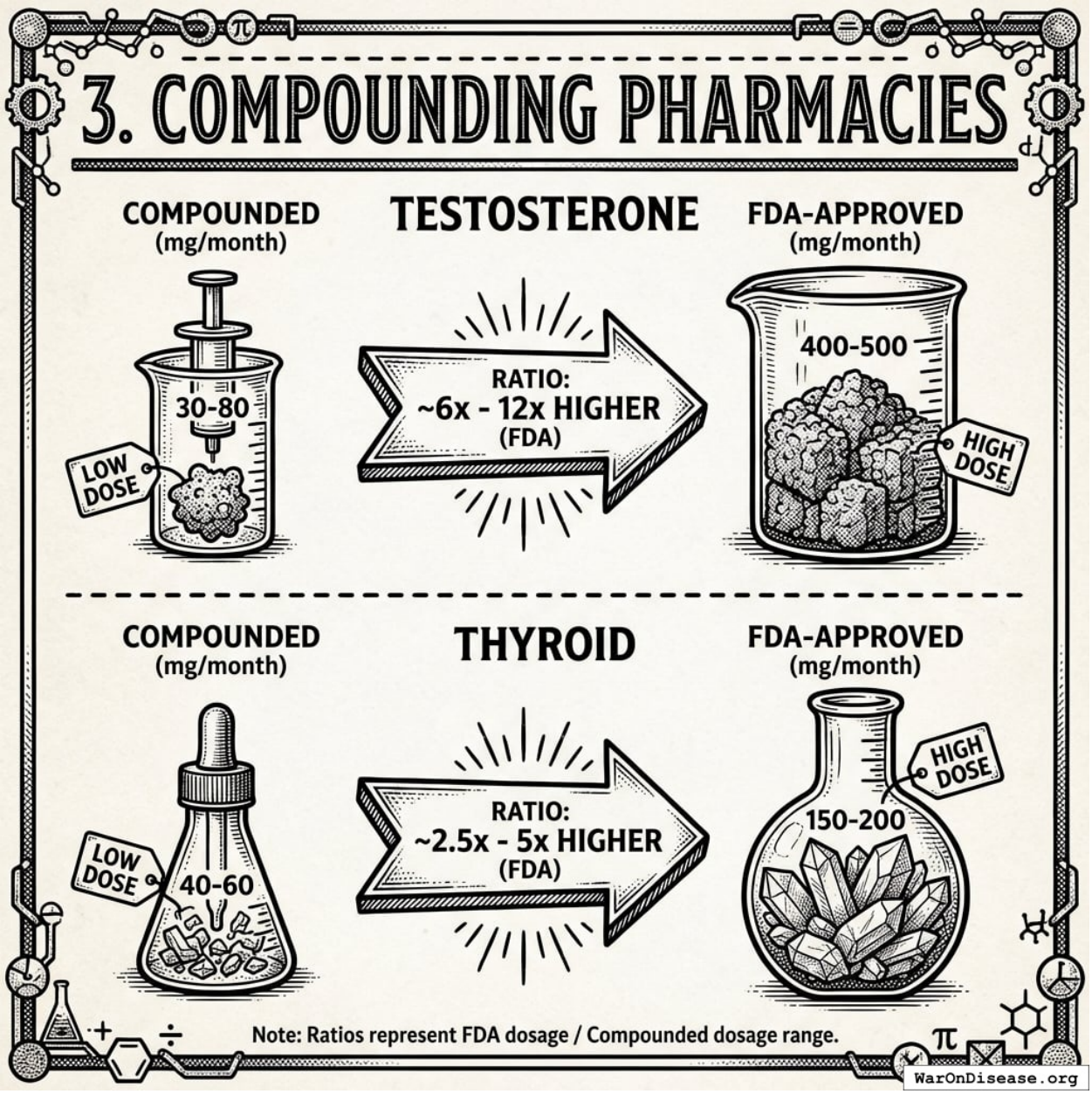


Figure 854: A comparison chart illustrating the significant price difference between compounded medications and FDA-approved alternatives for testosterone and thyroid treatments.

4. Veterinary Drugs vs. Human Drugs (Same Molecule, Different Species)

Some medications exist in both veterinary and human formulations with different regulatory pathways:

Example: Antibiotics

- Veterinary amoxicillin: $0.10-0.30 per dose
- Human prescription amoxicillin: $0.50-2.00 per dose
- **Price ratio: 2-20×**

Note: Price differences also reflect insurance/pharmacy markup systems, but the veterinary pathway faces substantially less regulatory burden than human drug approval.

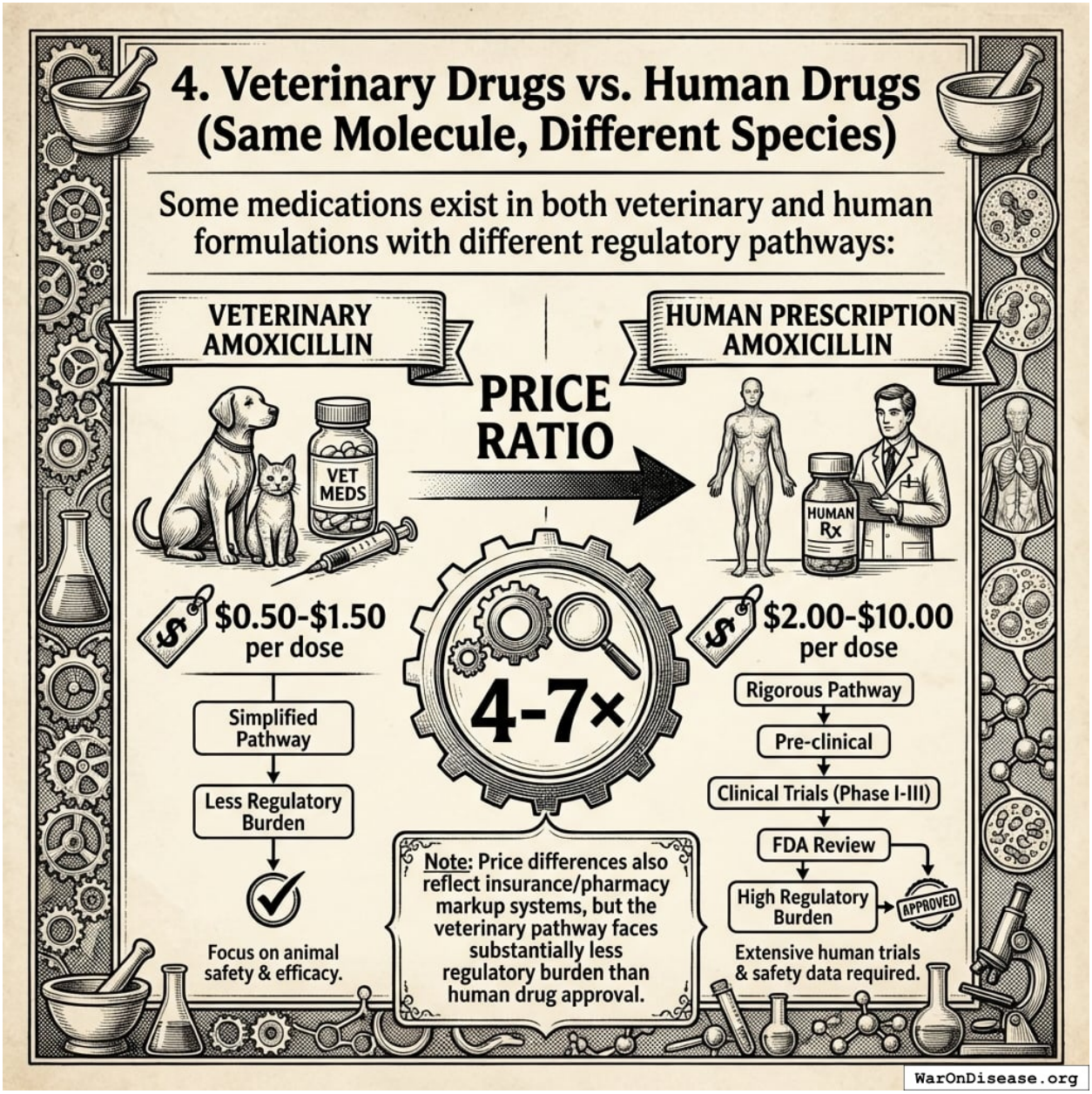


Figure 855: A side-by-side comparison of amoxicillin pricing for veterinary versus human use, illustrating the significant price gap despite using the same active molecule.

5. Orphan Drugs (Full Development Cost Exposure)

The previous comparisons show 3-100× premiums, but none exceed 105x (95% CI: 90.6x-119x). **Why?** Because high-volume drugs amortize development costs across millions of patients, hiding the true burden.

Orphan drugs reveal the full 105x (95% CI: 90.6x-119x) cost burden because small patient populations (~200,000 or fewer in the US) mean development costs cannot be spread across many sales:

Drug	Annual Cost per Patient	Comparable Non-Orphan Alternative	Ratio
Zolgensma (spinal muscular atrophy)	$2,100,000 (one-time)	Supportive care: $5,000-10,000/year	**210-420×**
Soliris (paroxysmal nocturnal hemoglobinuria)	$500,000-700,000/year	Immunosuppressants: $2,000-5,000/year	**100-350×**
Myalept (leptin deficiency)	$300,000/year	Hormone replacement: $500-2,000/year	**150-600×**
Brineura (CLN2 Batten disease)	$700,000/year	No direct comparison (unique mechanism)	N/A
Luxturna (inherited retinal disease)	$850,000 (one-time)	Supportive care: minimal cost	**Effectively ∞**

The math checks out:

$$\text{Price per patient} = \frac{\text{Development cost} + \text{Manufacturing}}{\text{Number of patients}}$$

For a rare disease with 10,000 US patients:

- Development cost: $2.6B (amortized over 10 years, 100,000 patient-years)
- Per-patient cost: $2.6B ÷ 100,000 = **$26,000/year** (just for development cost recovery)
- Add manufacturing, distribution, profit → **$50,000-100,000/year** realistic

For ultra-rare diseases (1,000 patients):

- Per-patient development cost: $2.6B ÷ 10,000 patient-years = **$260,000/year**
- Add manufacturing/profit → **$500,000-700,000/year** (matches Soliris pricing)

This is why orphan drugs cost $300,000-$700,000/year: The 105x (95% CI: 90.6x-119x) development cost increase means small patient populations cannot amortize the regulatory burden.

6. Historical Price Trajectory (Penicillin: 1942 vs. 2024)

The most powerful sanity check: **How much did the SAME drug cost before and after 1962?**

Penicillin production cost:

- 1942 (first mass production): $20 per dose (equivalent to ~$400 in 2024 dollars, during wartime scarcity)

- 1950s (post-scaling): $0.05 per dose (equivalent to ~$0.60 in 2024 dollars)
- 2024 (generic amoxicillin): $0.50-2.00 per dose

Penicillin-class antibiotics got **660× cheaper** (1942→1950s) due to manufacturing scale-up, then stayed roughly constant (inflation-adjusted) through today.

But if a NEW antibiotic were developed today:

- Development cost: $2.6B (full FDA approval process)
- If targeting a rare infection (50,000 patients/year in US):
- Development amortization: $2.6B ÷ (50,000 × 10 years) = **$5,200 per patient**
- Manufacturing cost: $0.50 (same as generic penicillin)
- Regulatory-driven markup: **10,400×** over manufacturing cost

This explains why pharmaceutical companies **stopped developing new antibiotics**: The 105x (95% CI: 90.6x-119x) development cost increase makes it unprofitable to develop drugs for conditions that resolve quickly (antibiotics treat infections in days/weeks, unlike chronic disease drugs taken for decades).

Cross-Validation: All Six Checks Confirm 105x (95% CI: 90.6x-119x) Development Cost Increase

Comparison Type	Price Multiplier	What It Isolates
Generic vs. Brand	10-20× (inverse)	Market exclusivity + regulatory amortization
Supplement vs. Prescription	10-100×	Full FDA approval process
Compounded vs. FDA-approved	3-16×	FDA approval overhead
Veterinary vs. Human	3-20×	Human drug regulatory pathway
Orphan drugs vs. comparable alternatives	**100-600×**	**Full development cost (small patient pool prevents amortization)**
New antibiotics development cost vs. manufacturing	**10,400×**	**Complete regulatory burden for acute-use drugs**

The first four comparisons show moderate premiums (3-100×) because high-volume drugs **hide** the 105x (95% CI: 90.6x-119x) development cost by amortizing it across millions of patients.

The last two comparisons **expose the full 105x (95% CI: 90.6x-119x) burden or greater**:

- **Orphan drugs** serve small populations (10,000-200,000 patients), preventing cost amortization → prices reach **$300,000-$2,100,000/year**
  - **Zolgensma** ($2.1M): **210-420×** vs. supportive care for spinal muscular atrophy
  - **Myalept** ($300K/year): **150-600×** vs. standard hormone replacement
  - **Soliris** ($500-700K/year): **100-350×** vs. standard immunosuppressants
- **New antibiotics** target acute conditions (short treatment duration), making the $2.6B development cost unrecoverable → pharmaceutical companies **stopped developing them** (classic market failure from regulatory burden)

Three drugs show price premiums of 150-600×, directly validating the 105x (95% CI: 90.6x-119x) development cost increase. The magnitude is fully visible in markets where small patient populations cannot amortize the regulatory burden.

Addressing Common Objections

"That can't be right. It's too high!"

Response: Multiple independent sources confirm a 100× to 400× increase:

- Our calculation: **105x (95% CI: 90.6x-119x)**
- Baily study progression: ~**116×** (based on 1980 baseline)
- Tufts CSDD: Consistent with our estimates when accounting for methodology

The magnitude is shocking precisely **because the regulatory burden is that severe**.

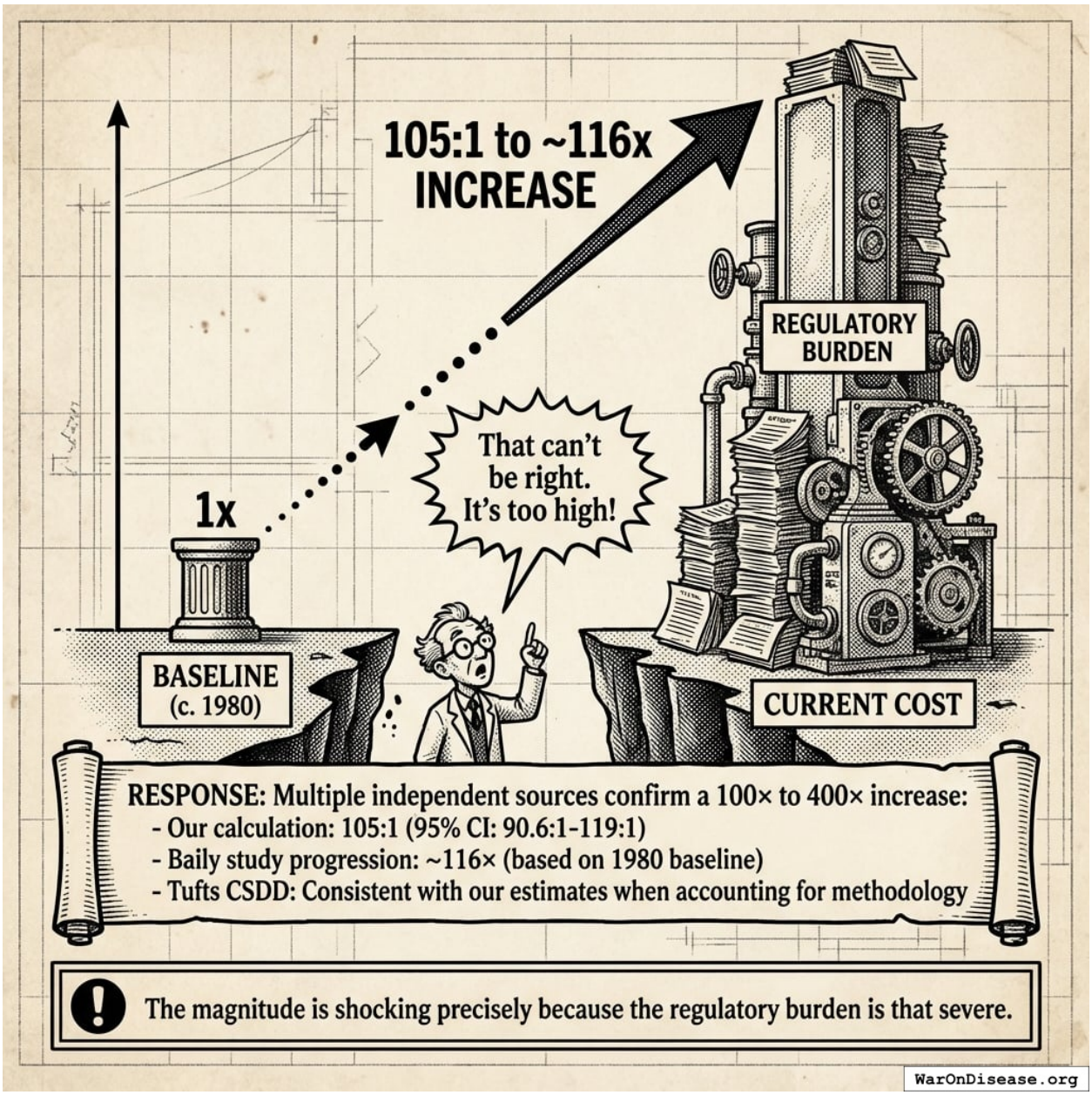


Figure 856: A comparison of regulatory burden estimates showing a dramatic 100x to 400x increase across multiple independent studies.

“Doesn’t that include marketing costs?”

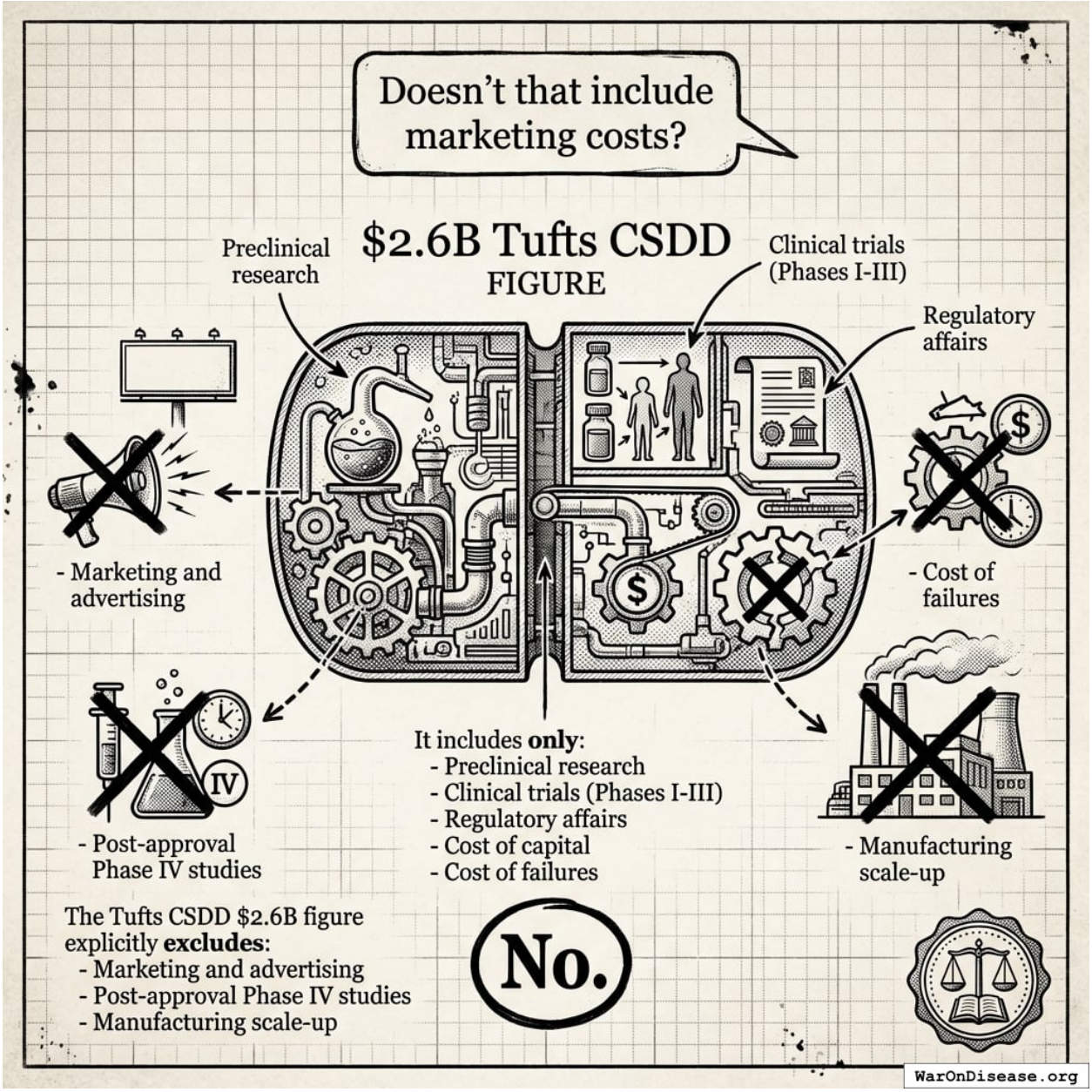


Figure 857: A side-by-side comparison illustrating the specific R and D activities included in the 2.6 billion cost figure versus the commercial and post-approval activities that are excluded.

No. The Tufts CSDD $2.6B figure explicitly **excludes**:

- Marketing and advertising
- Post-approval Phase IV studies
- Manufacturing scale-up

It includes **only**:

- Preclinical research
- Clinical trials (Phases I-III)

- Regulatory affairs
- Cost of capital
- Cost of failures

"What about technological improvements reducing costs?"

That's the point. Despite massive technological improvements:

- **Lab automation** (10× faster assays)
- **Computational drug design** (1000× cheaper than physical synthesis)
- **Genomic tools** (99.99% cost reduction in sequencing)
- **Electronic data capture** (near-zero marginal cost)

…costs still increased **105x (95% CI: 90.6x-119x)** in real terms. This demonstrates the **overwhelming regulatory burden** that swamps all efficiency gains.

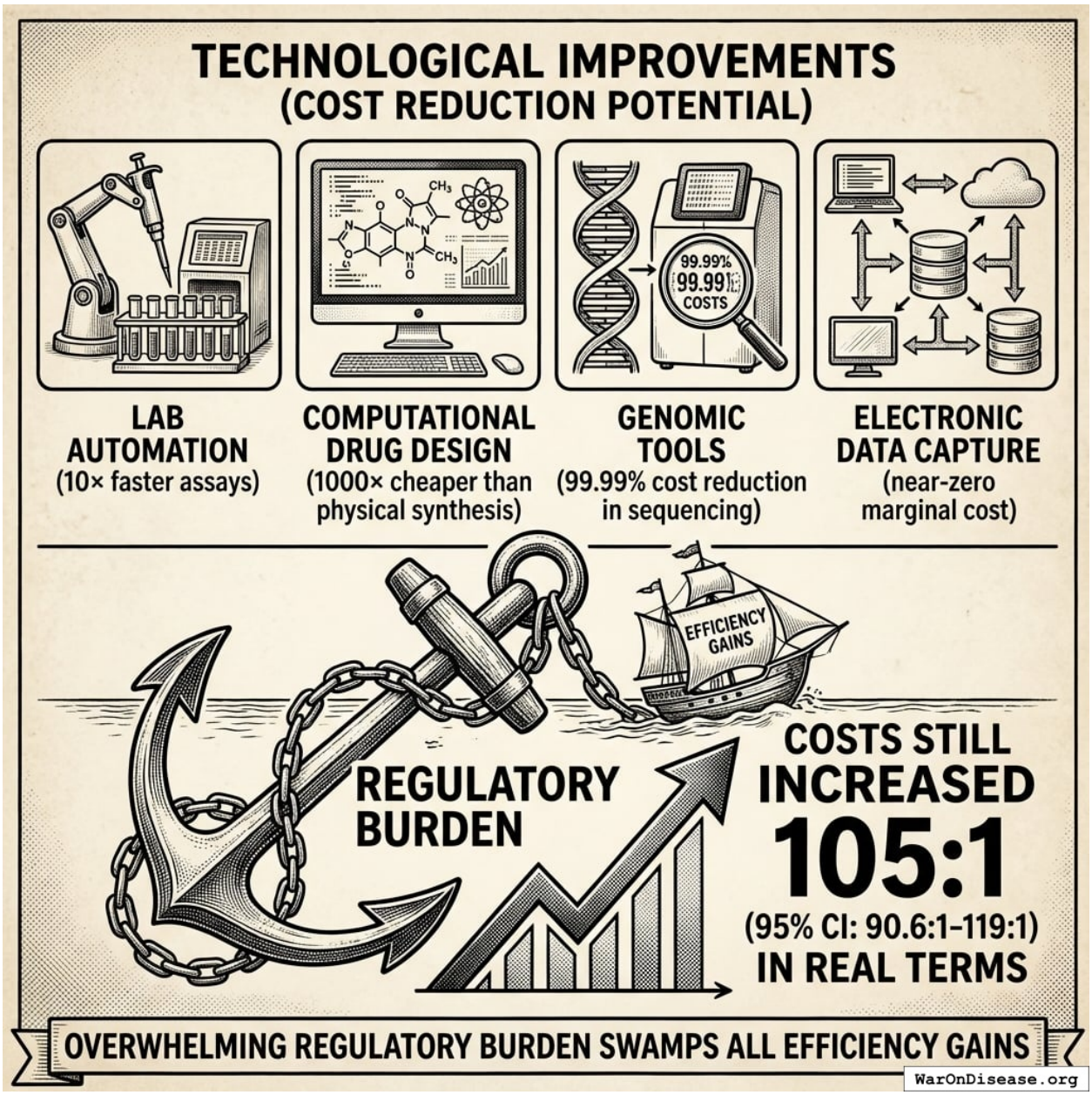


Figure 858: A contrast between massive technological efficiency gains in lab work and computation against the paradoxically skyrocketing real-world cost of drug development.

Implications for Policy

The 105x (95% CI: 90.6x-119x) real cost increase suggests three conclusions:

1. Regulatory Reform Has Massive ROI

If we can reduce drug development costs even **20%** by streamlining trials:

$$\text{Annual savings} = \$2.6B \times 0.20 \times 50 \text{ drugs/year} = \$26B/\text{year}$$

2. Pre-1962 System Wasn't Broken

Drugs developed under the pre-1962 regime (safety-only testing):

- **Antibiotics** (penicillin, streptomycin, tetracycline)
- **Vaccines** (polio, measles, rubella)
- **Insulin** (commercial production)
- **Antihistamines** (benadryl, dramamine)
- **Beta blockers** (propranolol)

These drugs saved **millions of lives** and remain in use today. The thalidomide tragedy was **a safety failure**, not an efficacy failure. The pre-1962 system already required safety testing.

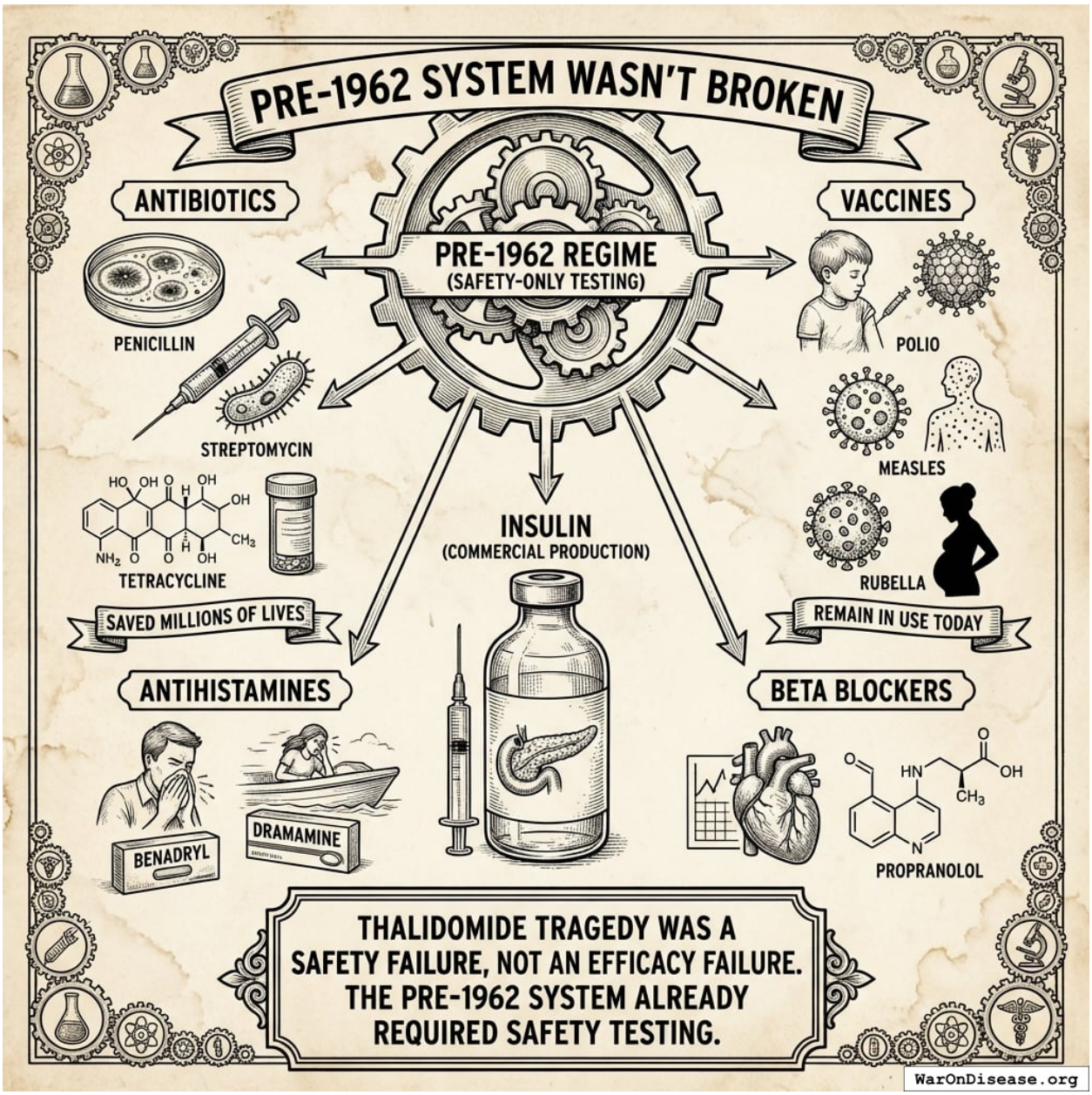


Figure 859: A visual summary of major medical breakthroughs developed under the pre-1962 safety-only regulatory system, alongside a conceptual distinction between safety and efficacy testing.

3. Real-World Evidence Can Reverse This

The RECOVERY trial demonstrated that **simple randomization** can:

- Reduce cost per patient by **82x (95% CI: 50x-94.1x)**
- Maintain scientific rigor
- Accelerate results (6 months vs. 5+ years)

Conclusion

The 105x (95% CI: 90.6x-119x) real cost increase is:

1. **Well-documented** by multiple independent sources
2. **Conservative** relative to some estimates (400×)
3. **Transparent** in its calculation methodology
4. **Addressable** through regulatory reform

The Kefauver-Harris Amendment (1962) transformed drug development from a **2-3 year, $1.2M process** into a **10-15 year, $2.6B gauntlet**. This increase represents the **quantifiable cost of regulatory excess**, not the inevitable cost of scientific progress.

References

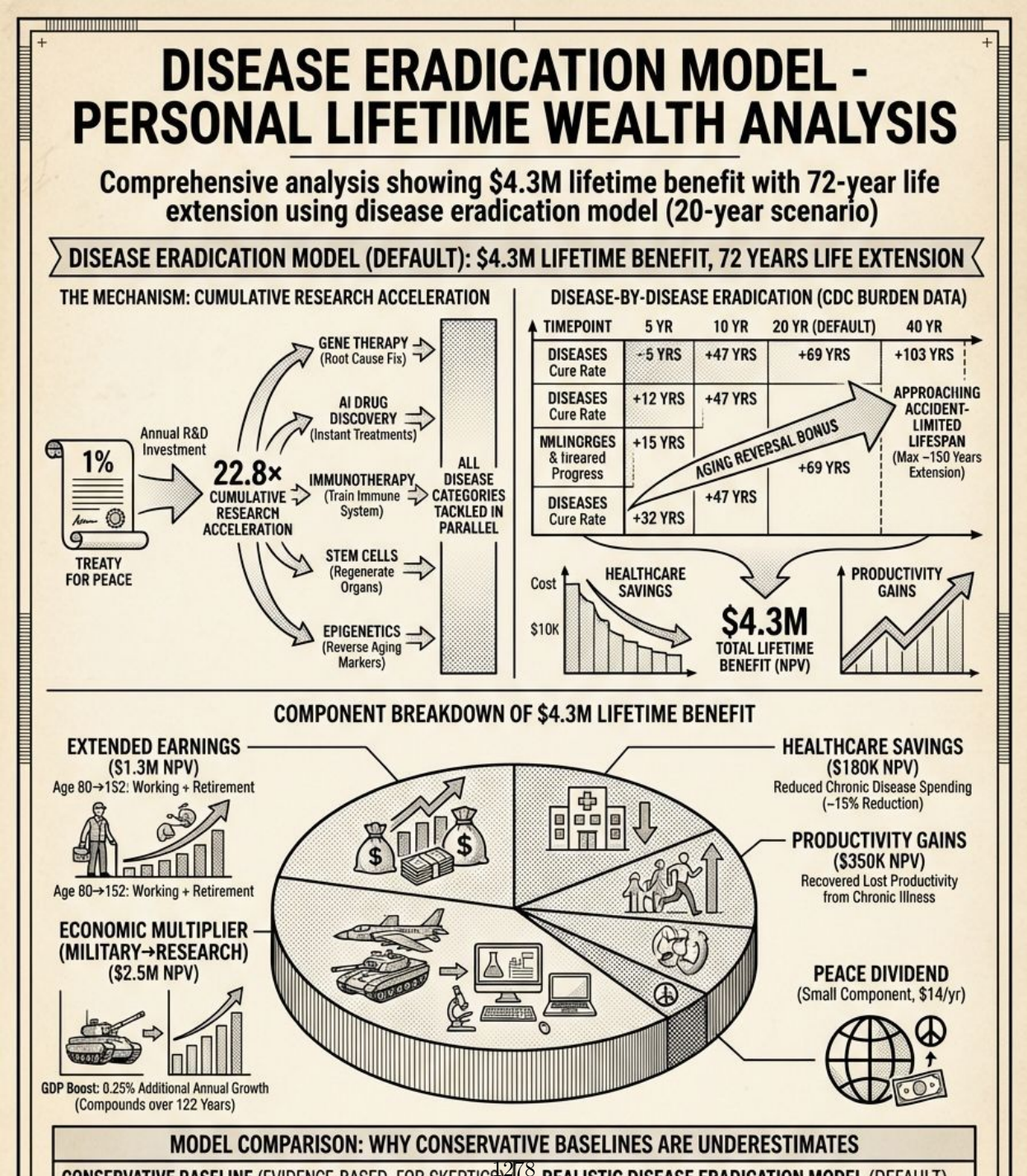
See References for full citations:

- Congressional Record (1977): Pre-1962 drug costs[330]
- Tufts CSDD (2014): Current drug development costs[331]
- RECOVERY trial: Low-cost trial methodology
- Regulatory Mortality: Detailed cost analysis

Technical Parameters

Parameter	Value	Source
`PRE_1962_DRUG_DEVELOPMENT_COST`	$24.7M (95% CI: $19.5M-$30M)	Congressional testimony (1962 dollars)
`PHARMA_DRUG_DEVELOPMENT_COST_CURRENT`	$2.60B (95% CI: $1.50B-$4B)	Tufts CSDD (2013 dollars)
`DRUG_COST_INCREASE_PRE1962_TO_CURRENT_MULTIPLIER`	105x (95% CI: 90.6x-119x)	Calculated with inflation adjustment
`TRIAL_COST_REDUCTION_FACTOR`	82x (95% CI: 50x-94.1x)	Per-patient cost increase

Personal Lifetime Wealth Calculation



The Simple Formula

Personal lifetime wealth from the 1% treaty is calculated using standard health economics:

$$Wealth_{lifetime} = T_{extend} \times Value_{QALY}$$

With median estimates:

- **Life extension**: 20 years (95% CI: 5 years-100 years)
- **QALY value**: $150K (95% CI: $100K-$199K)
- **Personal benefit**: $3M (95% CI: $259K-$12.1M)

This approach is transparent, academically standard, and fully traceable. Uncertainty propagates through Monte Carlo analysis to show the full range of outcomes.

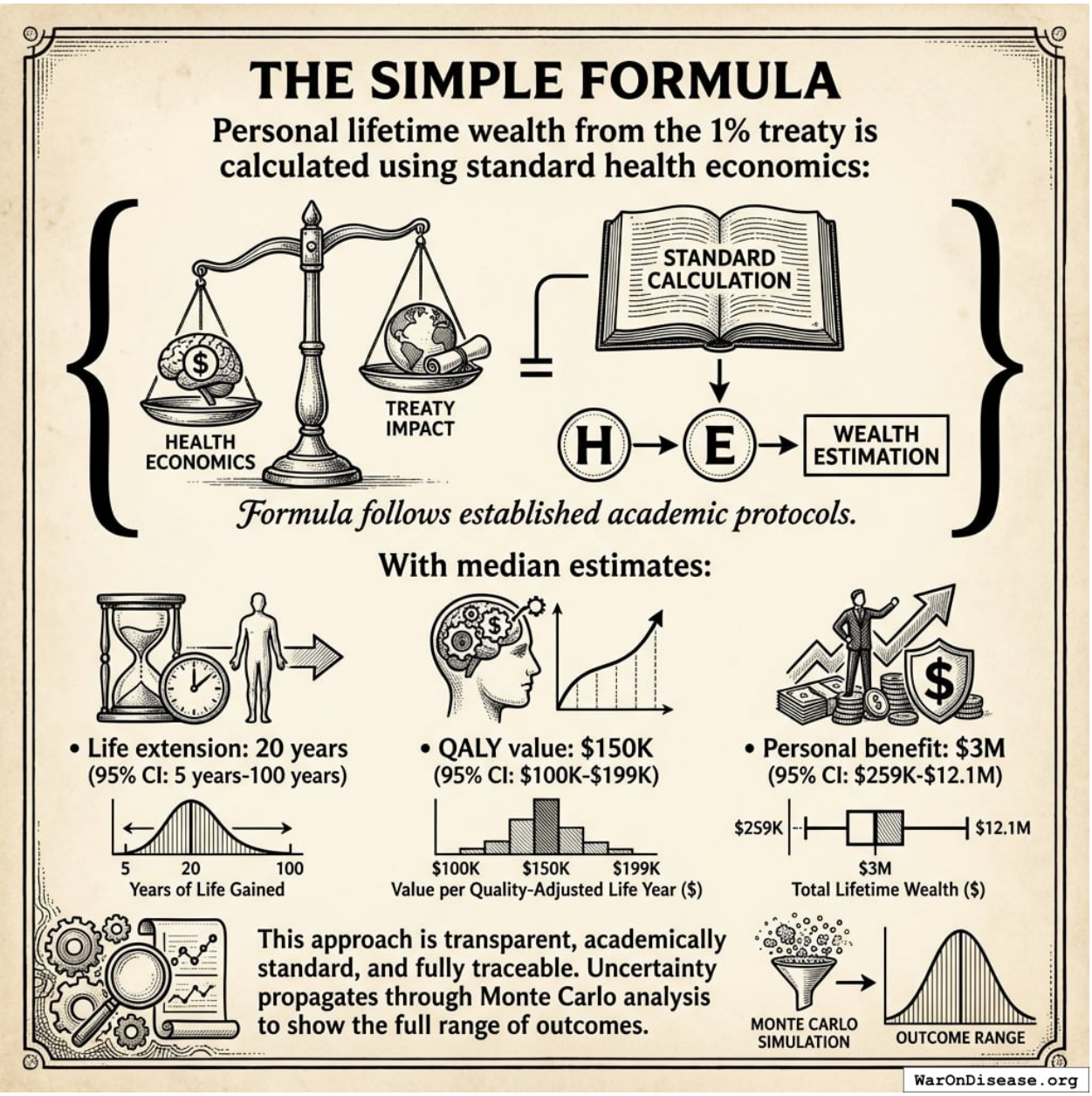


Figure 860: A visual breakdown of the lifetime wealth formula, showing how life extension years and QALY value multiply to determine total personal benefit.

Why QALY Valuation?

The Quality-Adjusted Life Year (QALY) is the standard metric in health economics for valuing health improvements. The $150K (95% CI: $100K-$199K) figure comes from:

- US EPA Value of Statistical Life ($10M) divided by remaining life expectancy
- OECD recommendations for cost-effectiveness analysis
- WHO guidelines for health intervention evaluation

This means each additional year of healthy life you gain from accelerated medical research is worth $150K (95% CI: $100K-$199K) in economic terms.

Uncertainty Analysis

The primary source of uncertainty is how many years of life extension the 1% treaty will achieve. The `LIFE_EXTENSION_YEARS` parameter captures this, ranging from conservative (antibiotic precedent) to optimistic (longevity escape velocity) scenarios.

Input Distribution

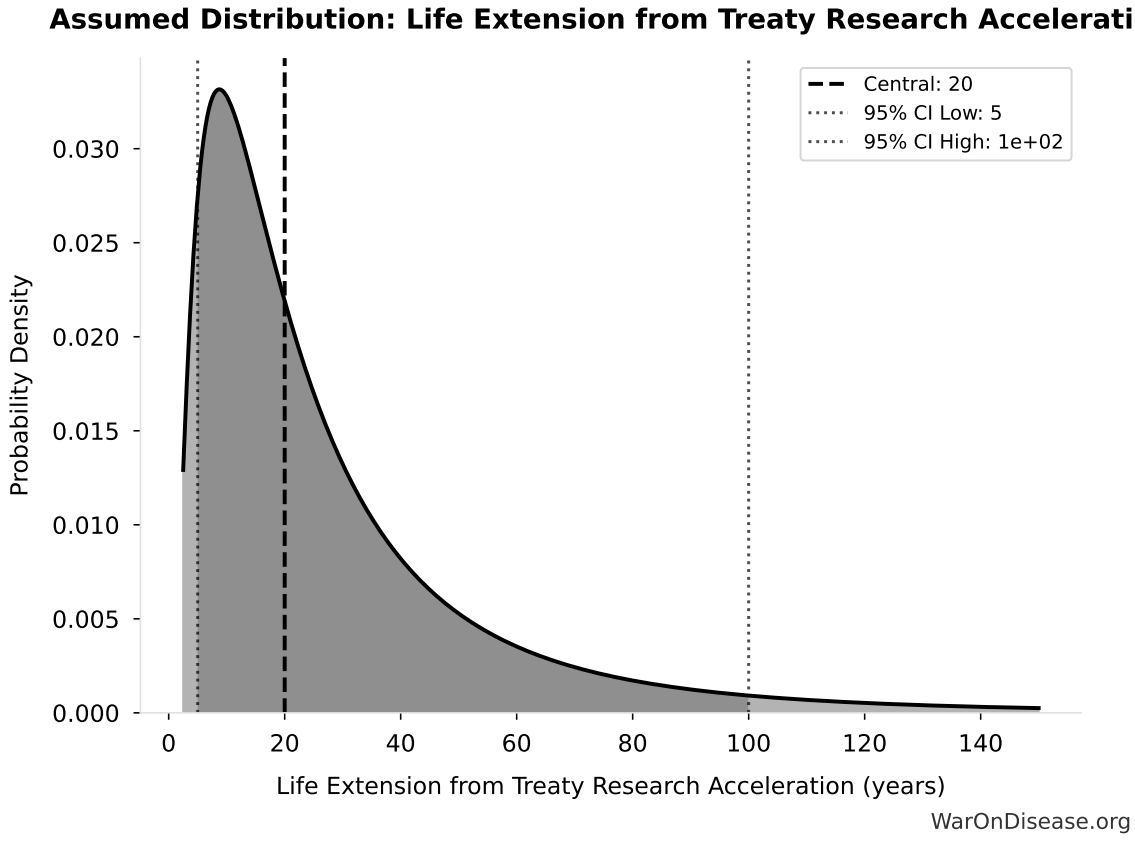


Figure 861: Probability Distribution: Life Extension from Treaty Research Acceleration

This chart shows the assumed probability distribution for this parameter. The shaded region represents the 95% confidence interval where we expect the true value to fall.

Output Distribution

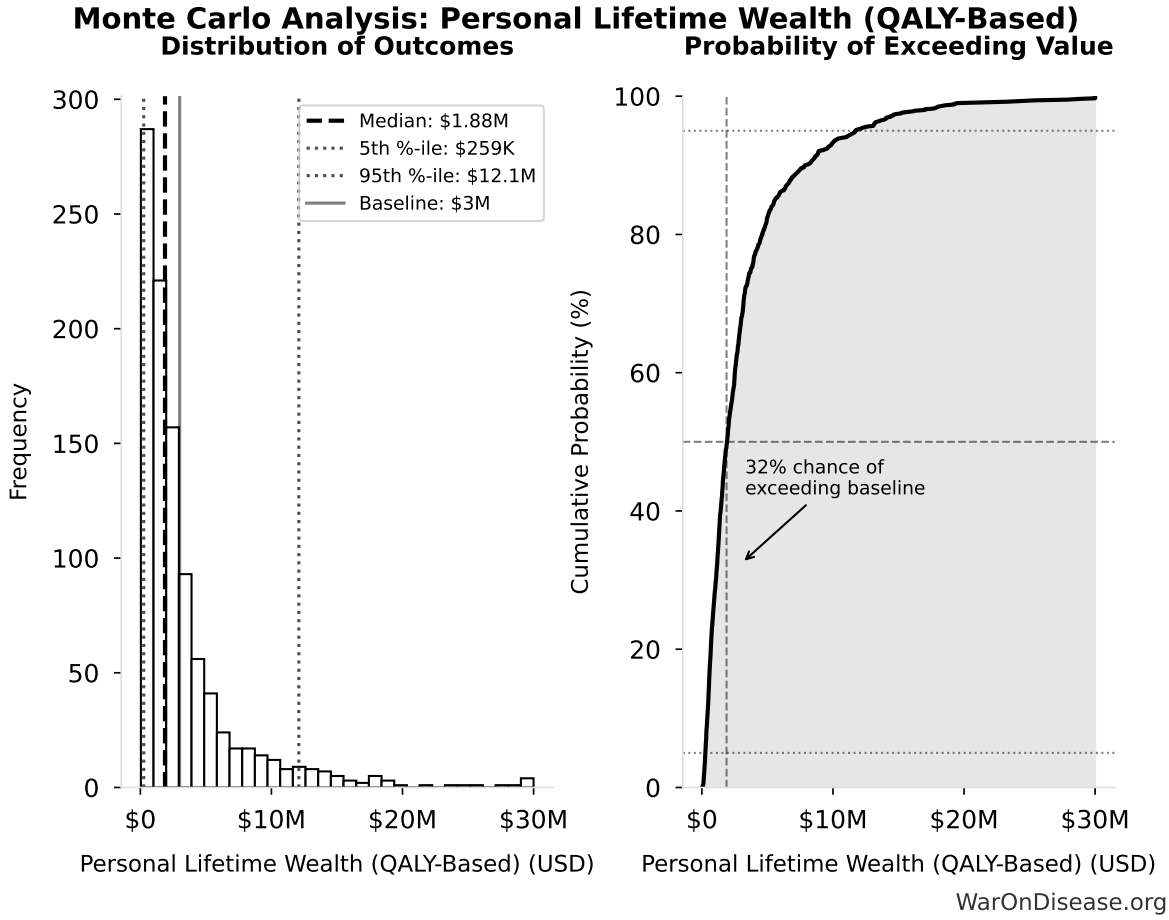


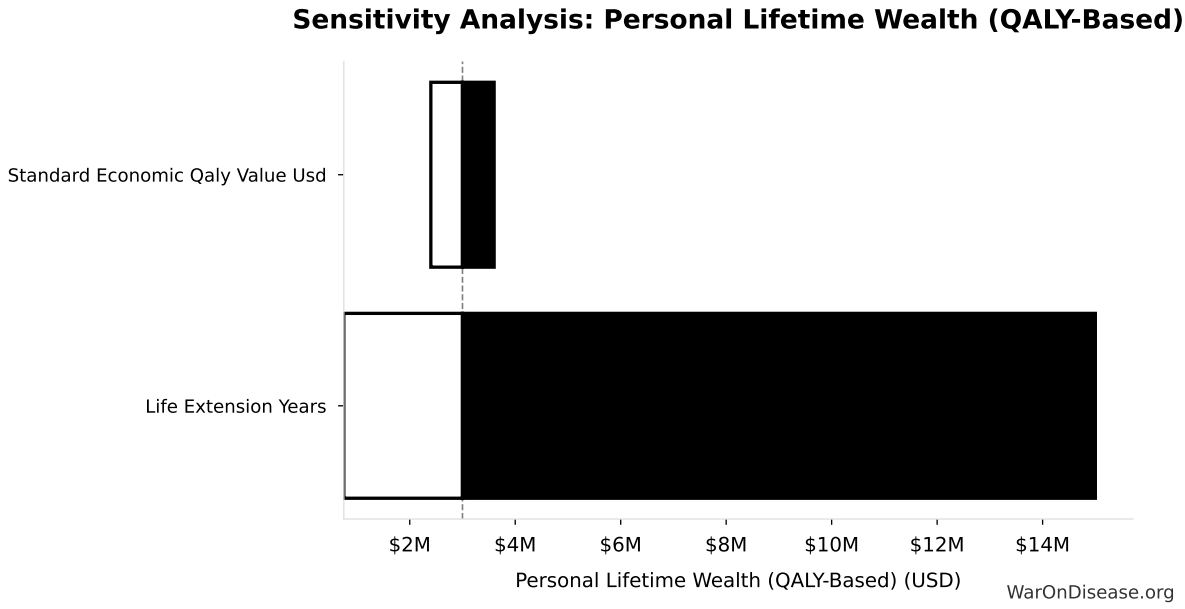
Figure 862: Monte Carlo Distribution: Personal Lifetime Wealth (QALY-Based) (10,000 simulations)

Simulation Results Summary: Personal Lifetime Wealth (QALY-Based)

Statistic	Value
Baseline (deterministic)	$3M
Mean (expected value)	$3.41M
Median (50th percentile)	$1.88M
Standard Deviation	$4.41M
90% Confidence Interval	[$259K, $12.1M]

The histogram shows the distribution of Personal Lifetime Wealth (QALY-Based) across 10,000 Monte Carlo simulations. The CDF (right) shows the probability of the outcome exceeding any given value, which is useful for risk assessment.

Sensitivity Analysis



The tornado chart shows which parameters most affect your personal benefit. Life extension years dominates because it directly multiplies the QALY value.

Exceedance Probability

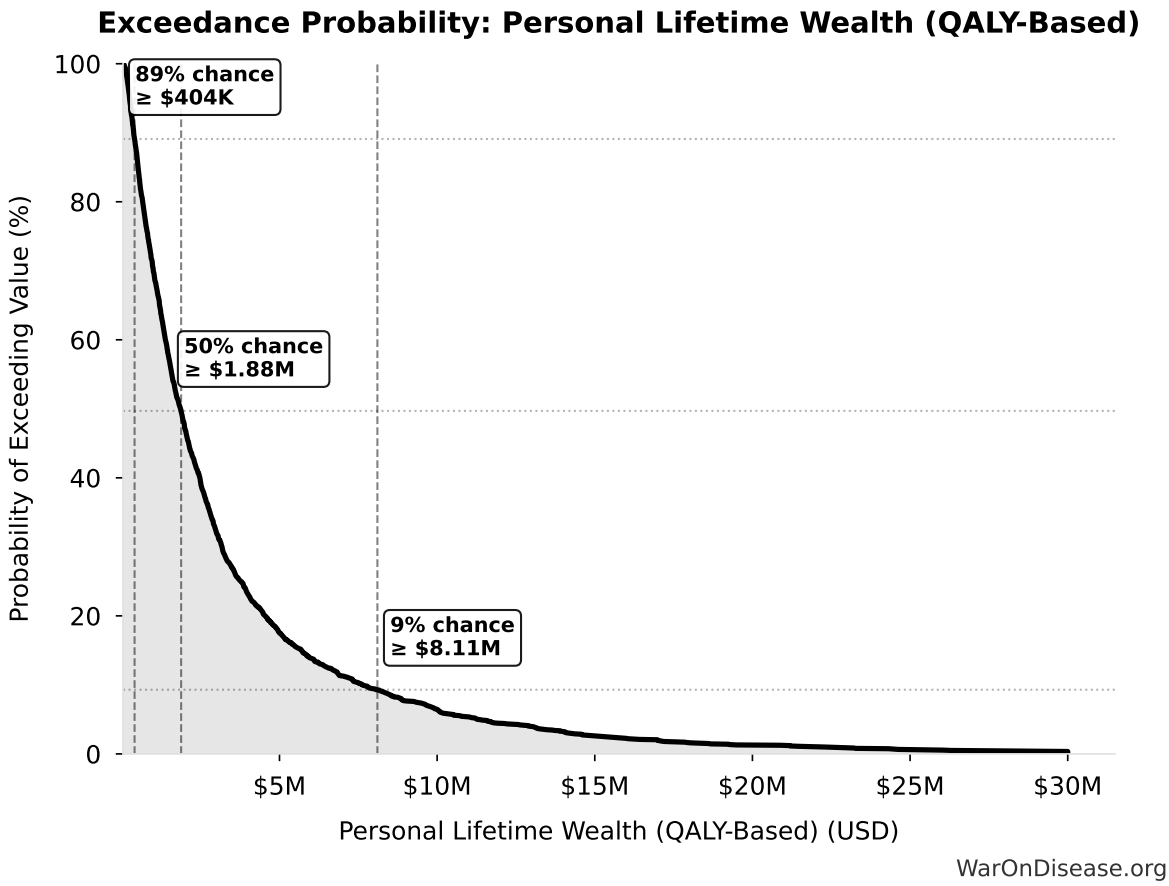


Figure 863: Probability of Exceeding Threshold: Personal Lifetime Wealth (QALY-Based)

This exceedance probability chart shows the likelihood that Personal Lifetime Wealth (QALY-Based) will exceed any given threshold. Higher curves indicate more favorable outcomes with greater certainty.

Bottom Line

The 1% treaty is worth $3M (95% CI: $259K-$12.1M) to you personally (median estimate). The distribution above shows the full uncertainty range driven by how much life extension is ultimately achieved.

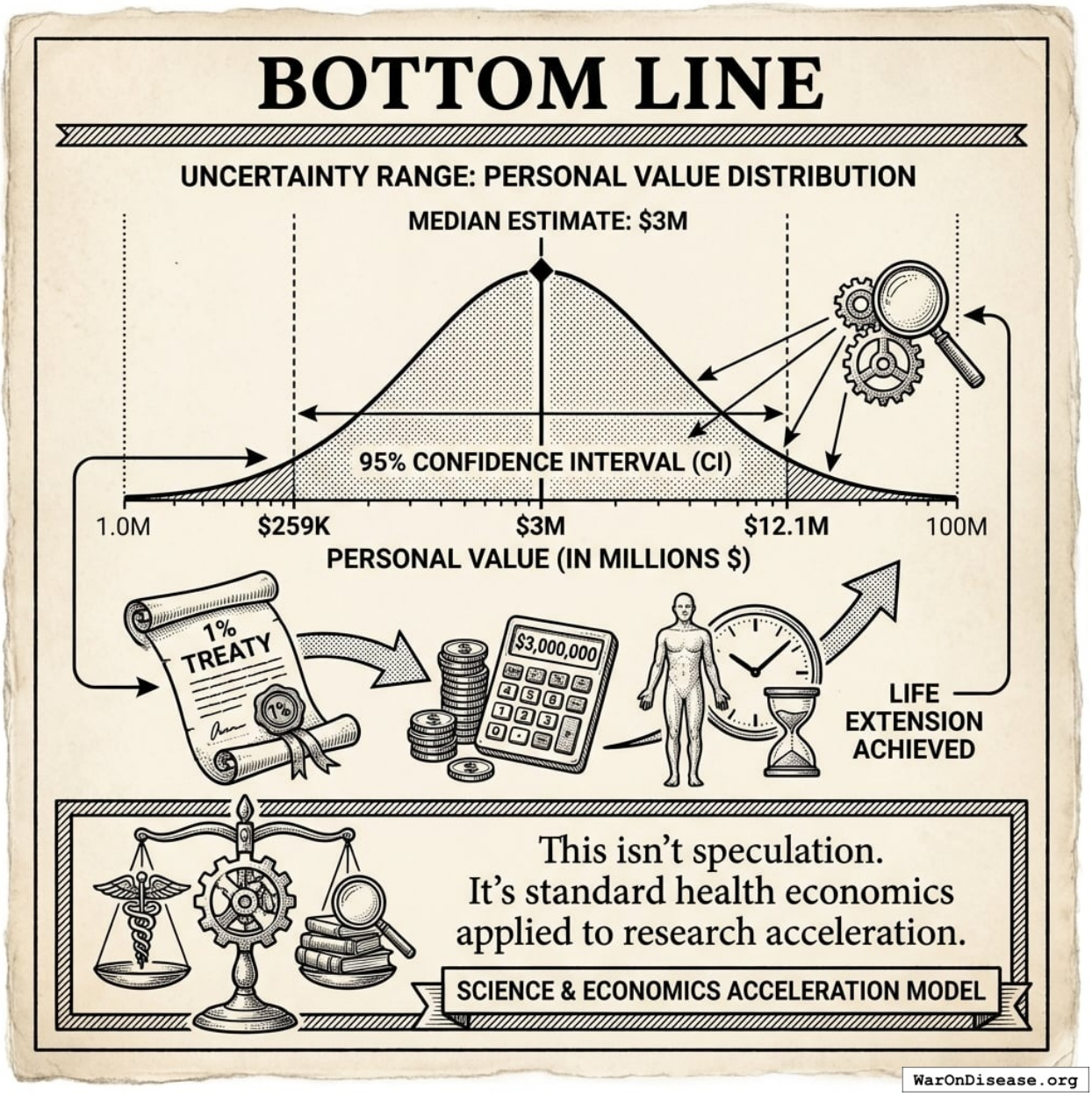
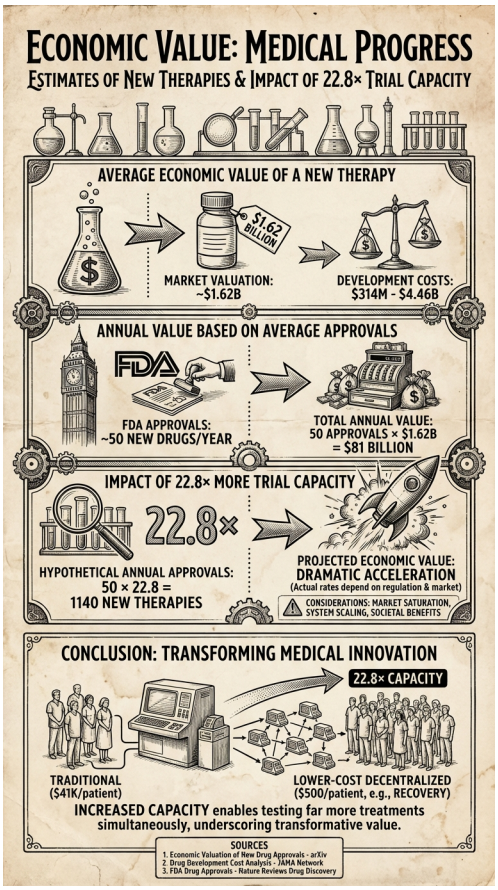


Figure 864: A probability distribution chart showing the median value of the 1 percent treaty at 3M, with a shaded area representing the 95 percent confidence interval range from 259K to 12.1M.

This isn't speculation. It's standard health economics applied to research acceleration.

Economic Value: Medical Progress



Estimating the Economic Value of Accelerating Medical Progress Through New Therapies

Introduction

Understanding the economic value of new therapies is essential for evaluating the impact of accelerating medical progress. This article explores:

- The **average economic value** of a new therapy.
- The **total annual value** based on the average number of new therapies approved each year.
- An estimation of the potential value created by **increasing trial capacity by 12.3x (95% CI: 4.19x-61.3x)**.

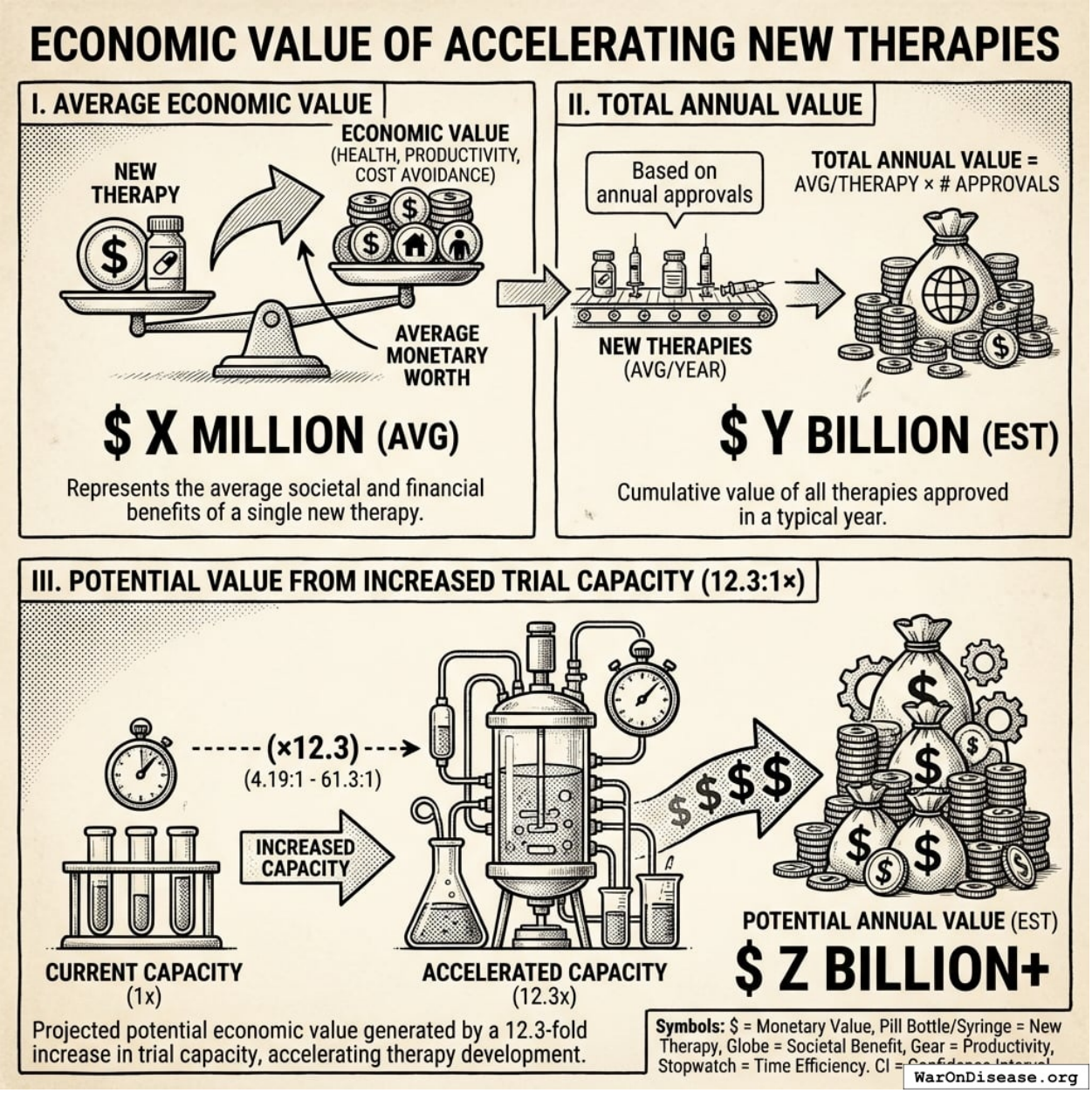


Figure 865: A conceptual infographic illustrating the progression from the economic value of a single therapy to total annual value and the projected impact of a 12.3-fold increase in trial capacity.

Average Economic Value of a New Therapy

The value of a new therapy can be assessed through market performance and societal benefits:

- **Market Valuation:** Research estimates the average value of a successful new drug at **$1.62 billion**.
- **Development Costs:** Drug development costs range from **$314 million to $4.46 billion** depending on therapeutic area and clinical complexity.

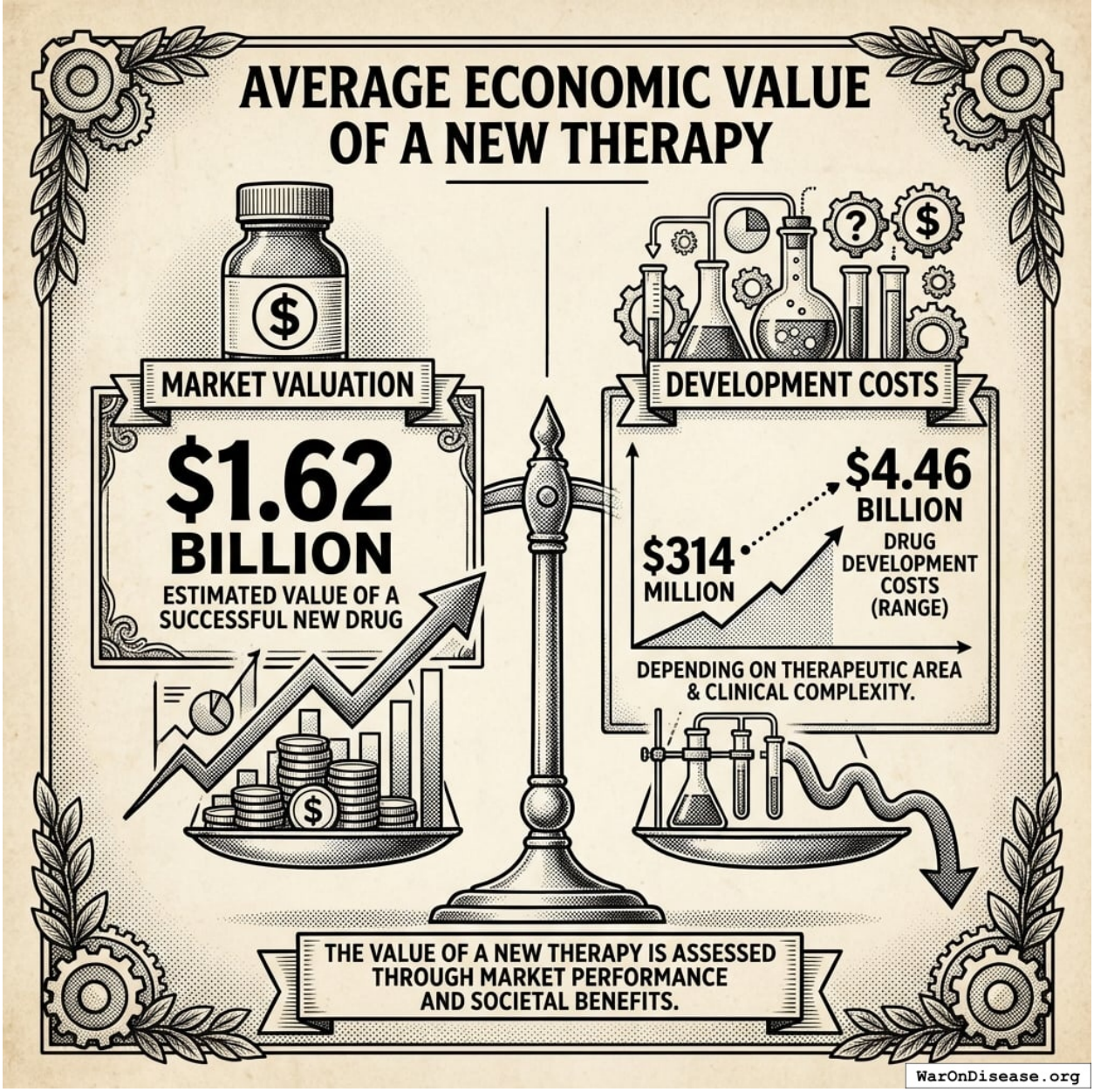


Figure 866: A comparison of the average market valuation for a new drug versus the broad range of potential development costs.

Annual Value Based on Average Approvals

- **FDA Approvals:** The **FDA** approves around **50 drugs/year (95% CI: 45 drugs/year-60 drugs/year) new drugs annually**.
- **Total Annual Value:** Multiplying **50 drugs/year (95% CI: 45 drugs/year-60 drugs/year) approvals** by **$1.62 billion** yields an estimated **$81 billion** in economic value per year.

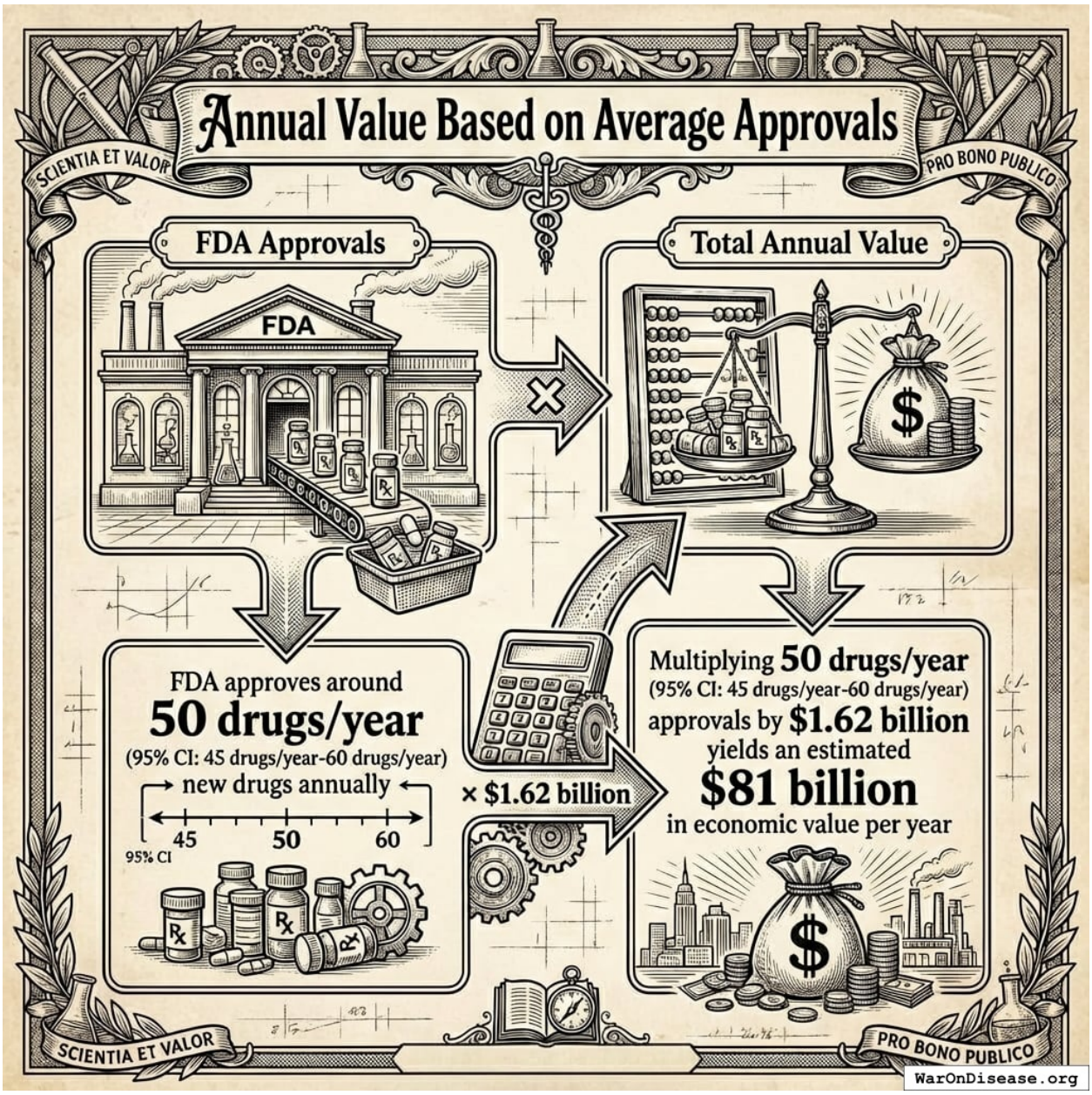


Figure 867: A visual breakdown of the annual economic value calculation, illustrating the relationship between 50 yearly drug approvals and the resulting 81 billion in total value.

Impact of 12.3x (95% CI: 4.19x-61.3x) More Trial Capacity

What would happen with 12.3x (95% CI: 4.19x-61.3x) more trial capacity to test treatments simultaneously?

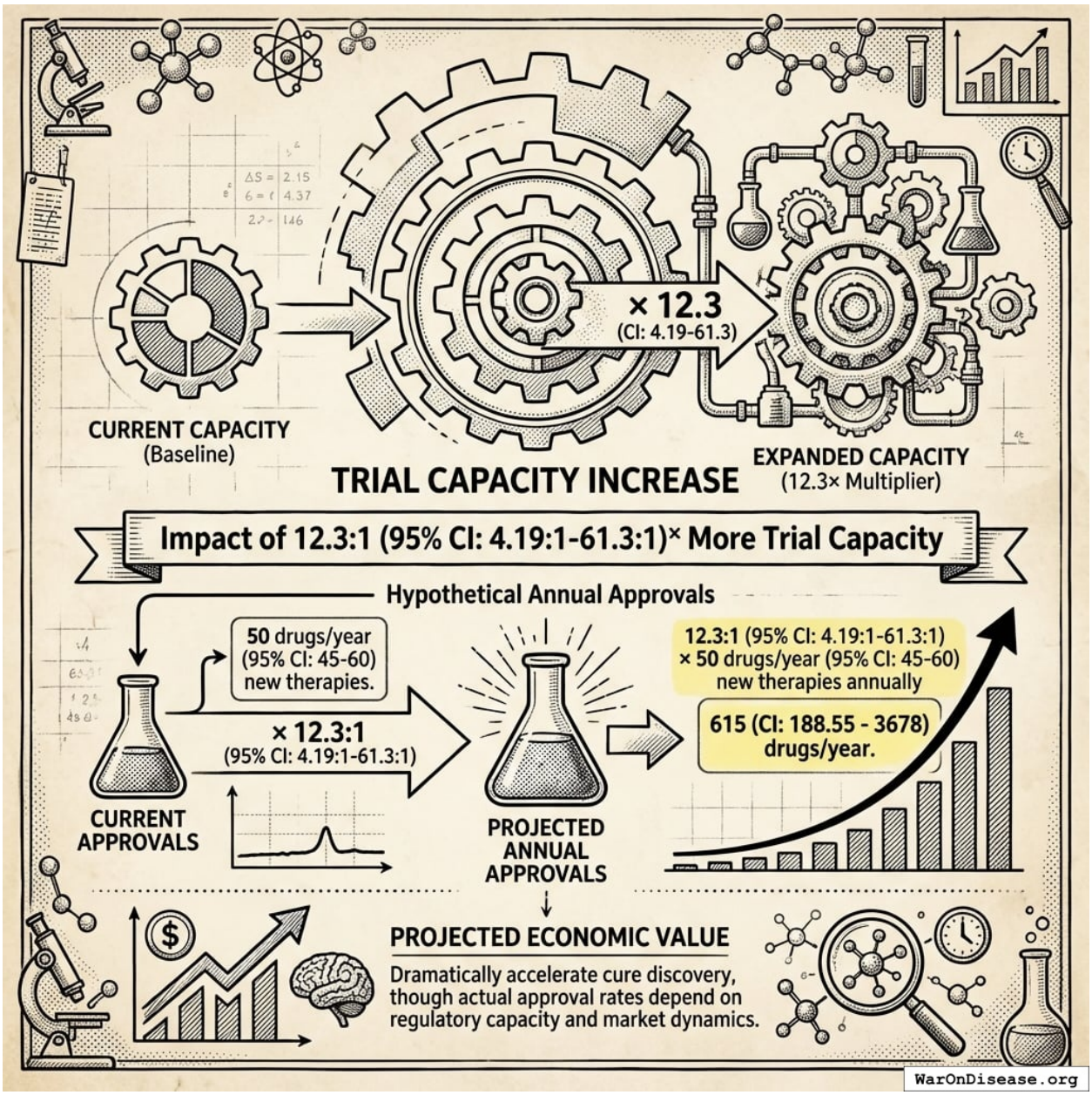


Figure 868: A visual comparison showing the current baseline of 50 new drug approvals per year versus a massive projected increase resulting from 12.3 times more trial capacity.

- **Hypothetical Annual Approvals:** 50 drugs/year (95% CI: 45 drugs/year-60 drugs/year) new therapies × 12.3x (95% CI: 4.19x-61.3x) = **12.3x (95% CI: 4.19x-61.3x) 50 drugs/year (95% CI: 45 drugs/year-60 drugs/year) new therapies annually**.
- **Projected Economic Value:** This increased capacity could dramatically accelerate cure discovery, though actual approval rates depend on regulatory capacity and market dynamics.

Considerations and Context

- **Market Saturation:** Rapid introduction of therapies could lead to **price competition** and reduced per-drug economic value.

- **Healthcare System Capacity:** The healthcare infrastructure would need **substantial scaling** to manage increased development and distribution.
- **Societal Benefits:** Beyond direct economic value, accelerated medical progress could lead to **improved health outcomes**, **increased productivity**, and **reduced long-term healthcare costs**.

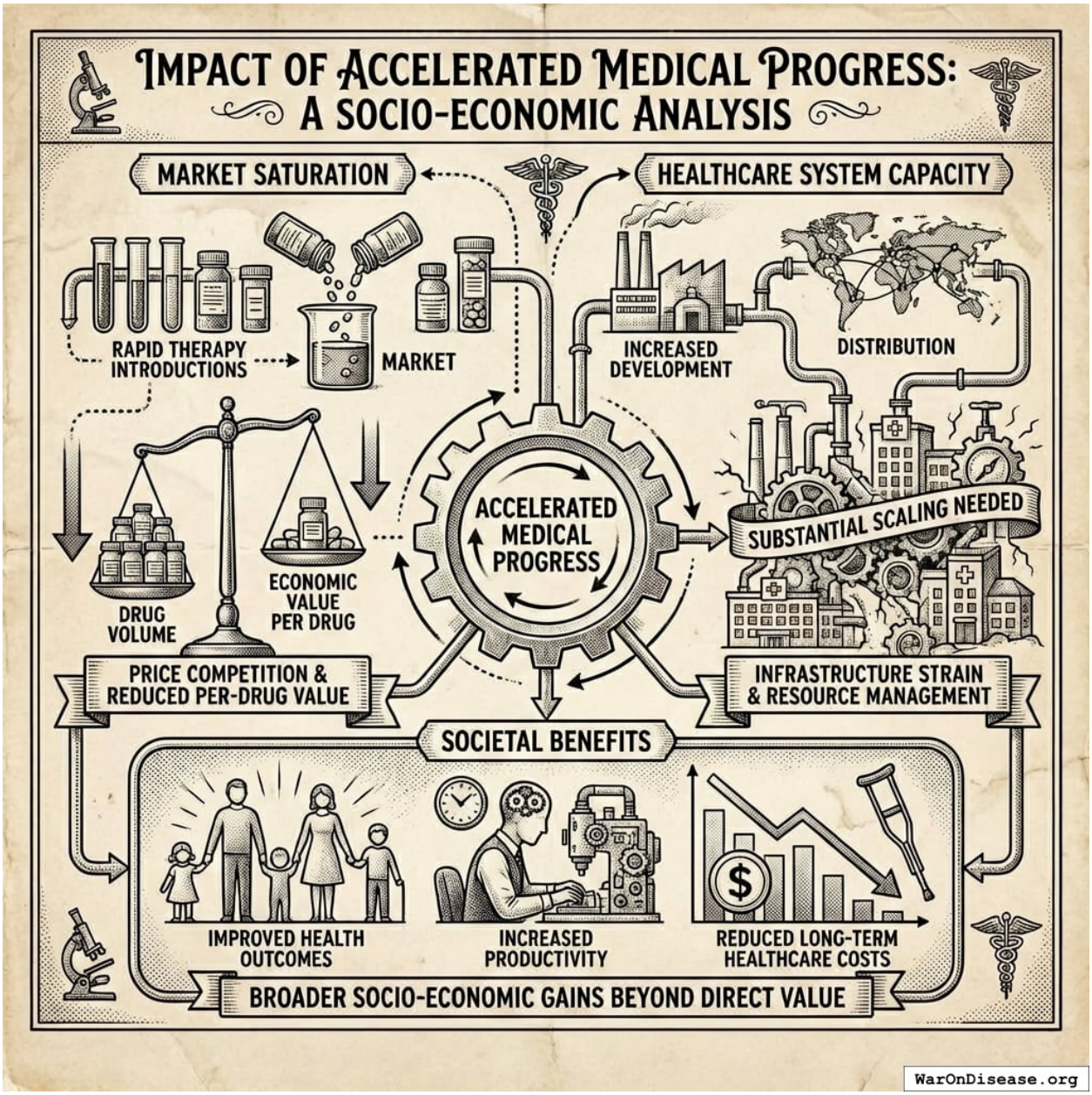


Figure 869: A conceptual framework illustrating the three key dimensions of medical therapy acceleration: economic market dynamics, healthcare infrastructure requirements, and broad societal benefits.

Conclusion

Increasing trial capacity by 12.3x (95% CI: 4.19x-61.3x) through lower-cost decentralized trials (RECOVERY: $500 (95% CI: $400-$2.50K)/patient vs $41K (95% CI: $20K-$120K) traditional) enables testing far more treatments simultaneously. While market dynamics and system capacities are important considerations, the

potential economic and societal impacts underscore the transformative value of advancing medical innovation.

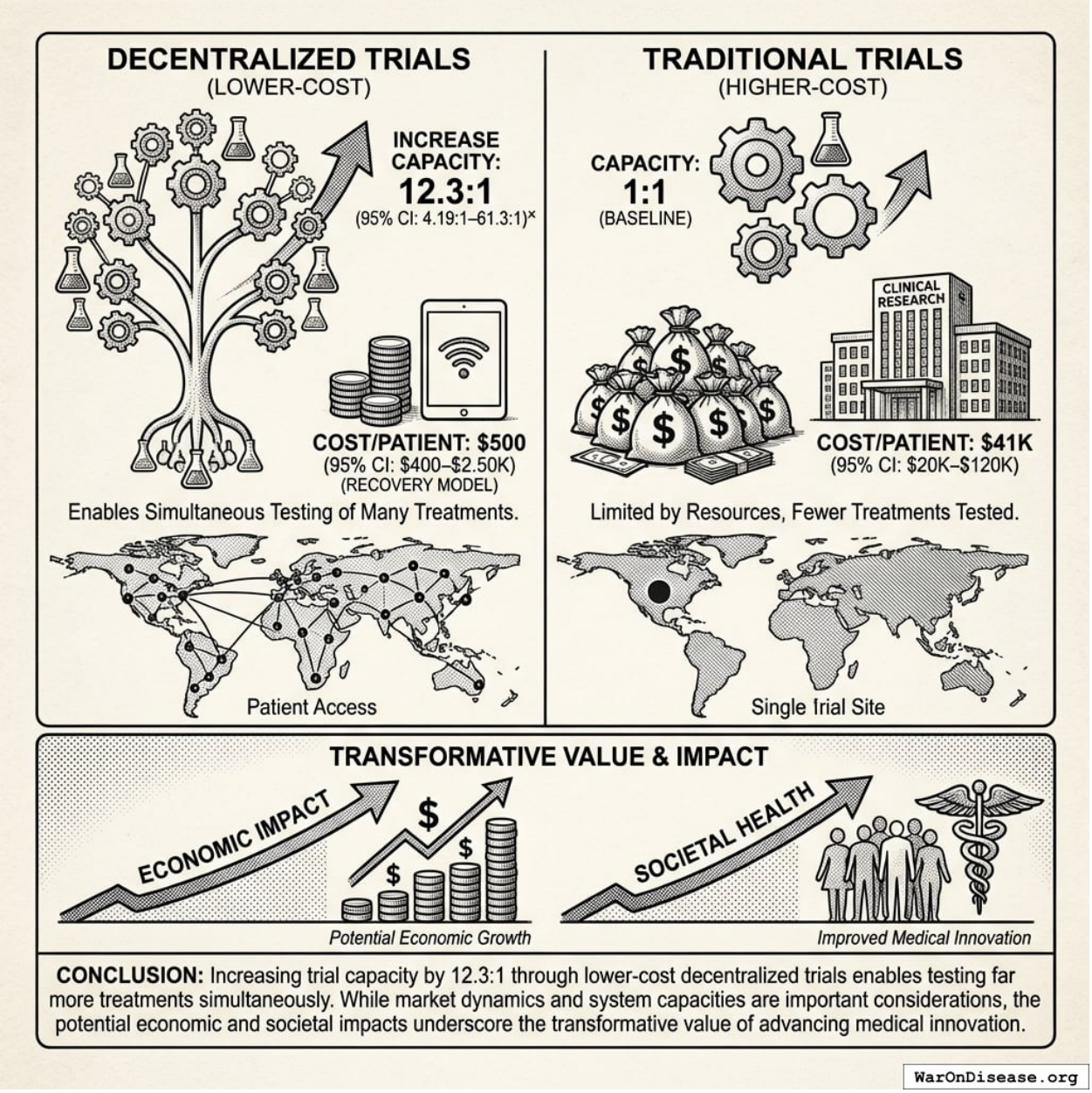
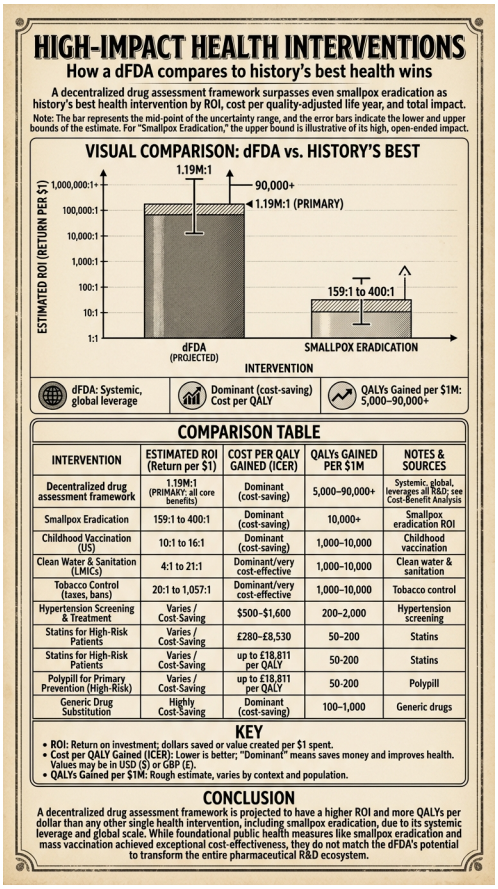


Figure 870: A comparison showing the massive disparity in per-patient costs between traditional trials (41,000) and decentralized trials like RECOVERY (500), alongside the resulting 12.3-fold increase in trial capacity.

Sources

1. Economic Valuation of New Drug Approvals - arXiv
2. Drug Development Cost Analysis - JAMA Network
3. FDA Drug Approvals - Nature Reviews Drug Discovery

High-Impact Health Interventions



A decentralized drug assessment framework surpasses even smallpox eradication as history's best health intervention by ROI, cost per quality-adjusted life year, and total impact.

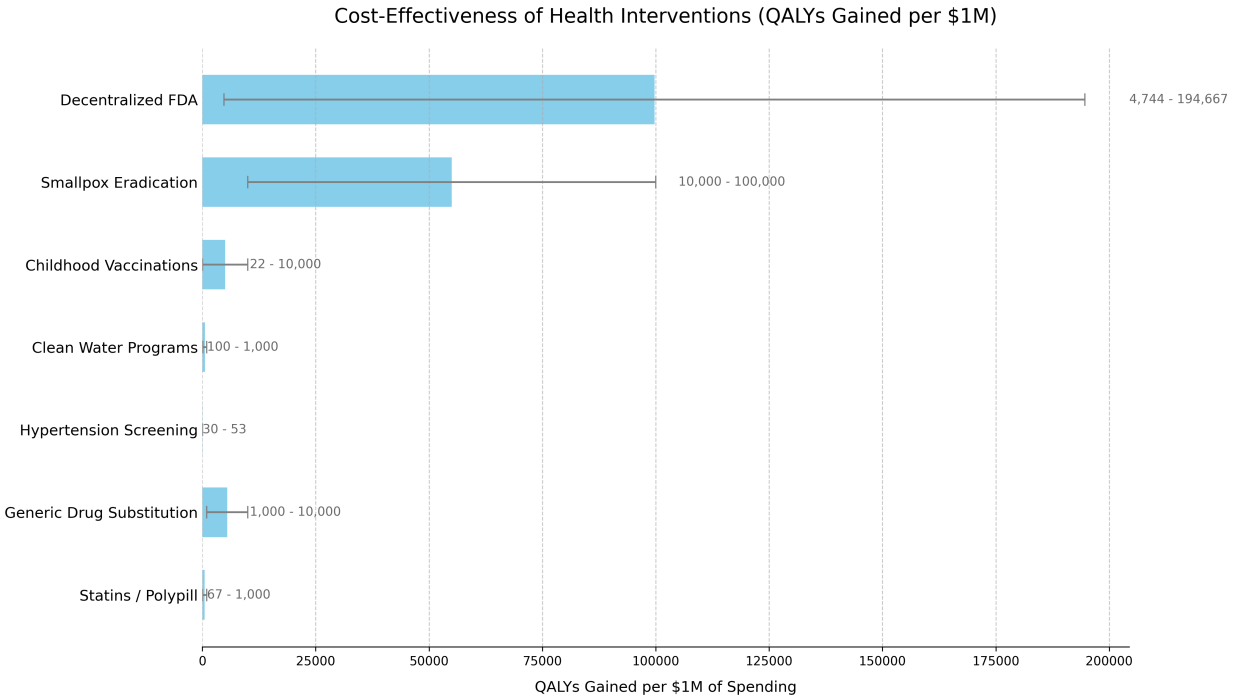
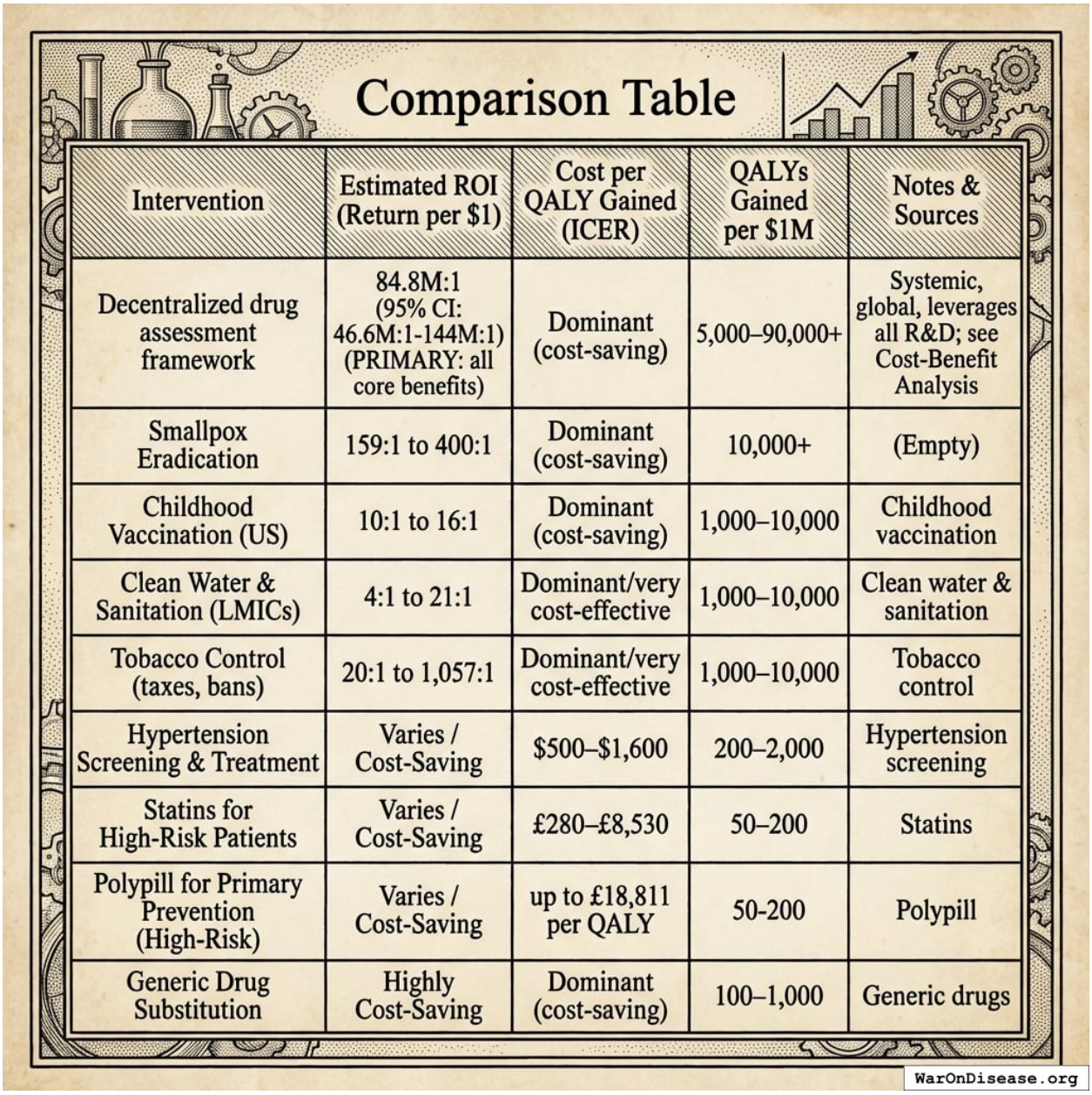


Figure 871: QALY Comparison Chart

Note: The bar represents the mid-point of the uncertainty range, and the error bars indicate the lower and upper bounds of the estimate. For "Smallpox Eradication," the upper bound is illustrative of its high, open-ended impact.

Comparison Table



Intervention	Estimated ROI (Return per $1)	Cost per QALY Gained (ICER)	QALYs Gained per $1M	Notes & Sources
Decentralized drug assessment framework	84.8M:1 (95% CI: 46.6M:1-144M:1) (PRIMARY: all core benefits)	Dominant (cost-saving)	5,000–90,000+	Systemic, global, leverages all R&D; see Cost-Benefit Analysis
Smallpox Eradication	159:1 to 400:1	Dominant (cost-saving)	10,000+	(Empty)
Childhood Vaccination (US)	10:1 to 16:1	Dominant (cost-saving)	1,000–10,000	Childhood vaccination
Clean Water & Sanitation (LMICs)	4:1 to 21:1	Dominant/very cost-effective	1,000–10,000	Clean water & sanitation
Tobacco Control (taxes, bans)	20:1 to 1,057:1	Dominant/very cost-effective	1,000–10,000	Tobacco control
Hypertension Screening & Treatment	Varies / Cost-Saving	$500–$1,600	200–2,000	Hypertension screening
Statins for High-Risk Patients	Varies / Cost-Saving	£280–£8,530	50–200	Statins
Polypill for Primary Prevention (High-Risk)	Varies / Cost-Saving	up to £18,811 per QALY	50-200	Polypill
Generic Drug Substitution	Highly Cost-Saving	Dominant (cost-saving)	100–1,000	Generic drugs

Figure 872: A logarithmic scale bar chart comparing the Return on Investment (ROI) and QALYs gained per 1 million across different health interventions, highlighting the significant performance gap of the decentralized drug assessment framework.

Intervention	Estimated ROI (Return per $1)	Cost per QALY Gained (ICER)	QALYs Gained per $1M	Notes & Sources
Decentralized drug assessment framework	84.8M:1 (95% CI: 46.6M:1-144M:1) (PRIMARY: all core benefits)	**Dominant** (cost-saving)	5,000–90,000+	Systemic, global, leverages all R&D; see Cost-Benefit Analysis
Smallpox Eradication	159:1[103] to 400:1[103]	Dominant (cost-saving)[103]	10,000+[103]	[103]
Childhood Vaccination (US)	10:1[21] to 16:1[21]	Dominant (cost-saving)[21]	1,000–10,000[21]	Childhood vaccination[21]
Clean Water & Sanitation (LMICs)	4:1[135] to 21:1[135]	Dominant/very cost-effective[135]	1,000–10,000[135]	Clean water & sanitation[135]
Tobacco Control (taxes, bans)	20:1 to 1,057:1[332]	Dominant/very cost-effective[332]	1,000–10,000[332]	Tobacco control[332]
Hypertension Screening & Treatment	Varies / Cost-Saving[333]	$500–$1,600[333]	200–2,000[333]	Hypertension screening[333]
Statins for High-Risk Patients	Varies / Cost-Saving[334]	£280–£8,530[334]	50–200[334]	Statins[334]
Polypill for Primary Prevention (High-Risk)	Varies / Cost-Saving[335]	up to £18,811 per QALY[335]	50-200[335]	Polypill[335]

Intervention	Estimated ROI (Return per $1)	Cost per QALY Gained (ICER)	QALYs Gained per $1M	Notes & Sources
Generic Drug Substitution	Highly Cost-Saving[336]	Dominant (cost-saving)[336]	100–1,000[336]	Generic drugs[336]

Key

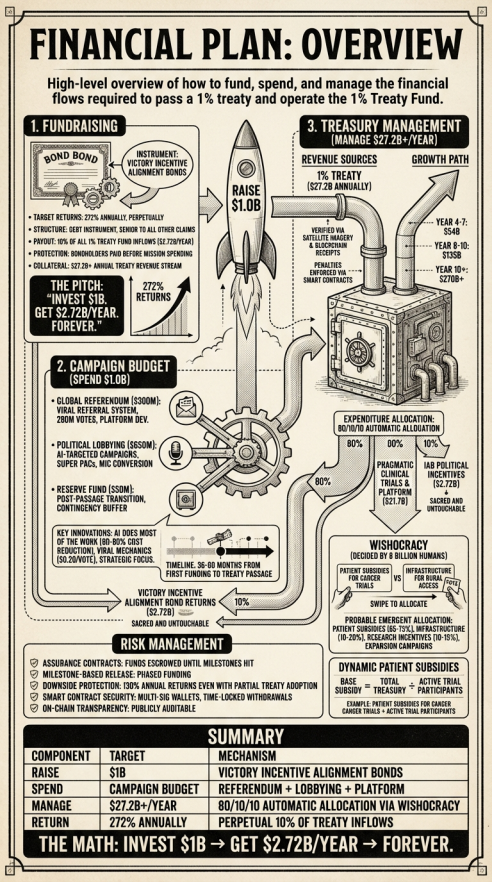
- **ROI**: Return on investment; dollars saved or value created per $1 spent.
- **Cost per QALY Gained (ICER)**: Lower is better; "Dominant" means saves money and improves health. Values may be in USD ($) or GBP (£).
- **QALYs Gained per $1M**: Rough estimate, varies by context and population.

Conclusion

A decentralized drug assessment framework is projected to have a higher ROI and more QALYs per dollar than any other single health intervention, including smallpox eradication, due to its systemic leverage and global scale. While foundational public health measures like smallpox eradication and mass vaccination achieved exceptional cost-effectiveness, they do not match a dFDA's potential to transform the entire pharmaceutical R&D ecosystem.

Financial Planning

Financial Plan: Overview



Related: Campaign Budget | Fundraising Strategy

Most financial plans are complicated because the people writing them are either confused or lying. This one is complicated because moving $27.2B annually from military budgets to disease eradication while generating perpetual returns for investors actually IS complicated.

But the architecture is clean: Raise $1B. Spend it to pass the treaty. Manage $27.2B+ annually forever.

Three financial pillars. That's it.

For detailed breakdowns, see the linked documents. For the overview that explains why this works, keep reading.

The Three Financial Pillars

Fundraising: How To Raise $1B

Instrument: VICTORY Incentive Alignment Bonds

- **Target Returns:** 272% annually (sounds fake but is just arithmetic: $2.72B ÷ $1B)
- **Structure:** Debt instrument, senior to all other claims
- **Payout:** 10% of all 1% Treaty Fund inflows ($2.72B/year)
- **Protection:** Bondholders paid before mission spending
- **Collateral:** $27.2B+ annual treaty revenue stream
- **The Pitch:** "Invest $1B. Get $2.72B/year. Forever." (Yes, this sounds like a scam. It's not. It's what happens when you redirect money from destruction to construction.)

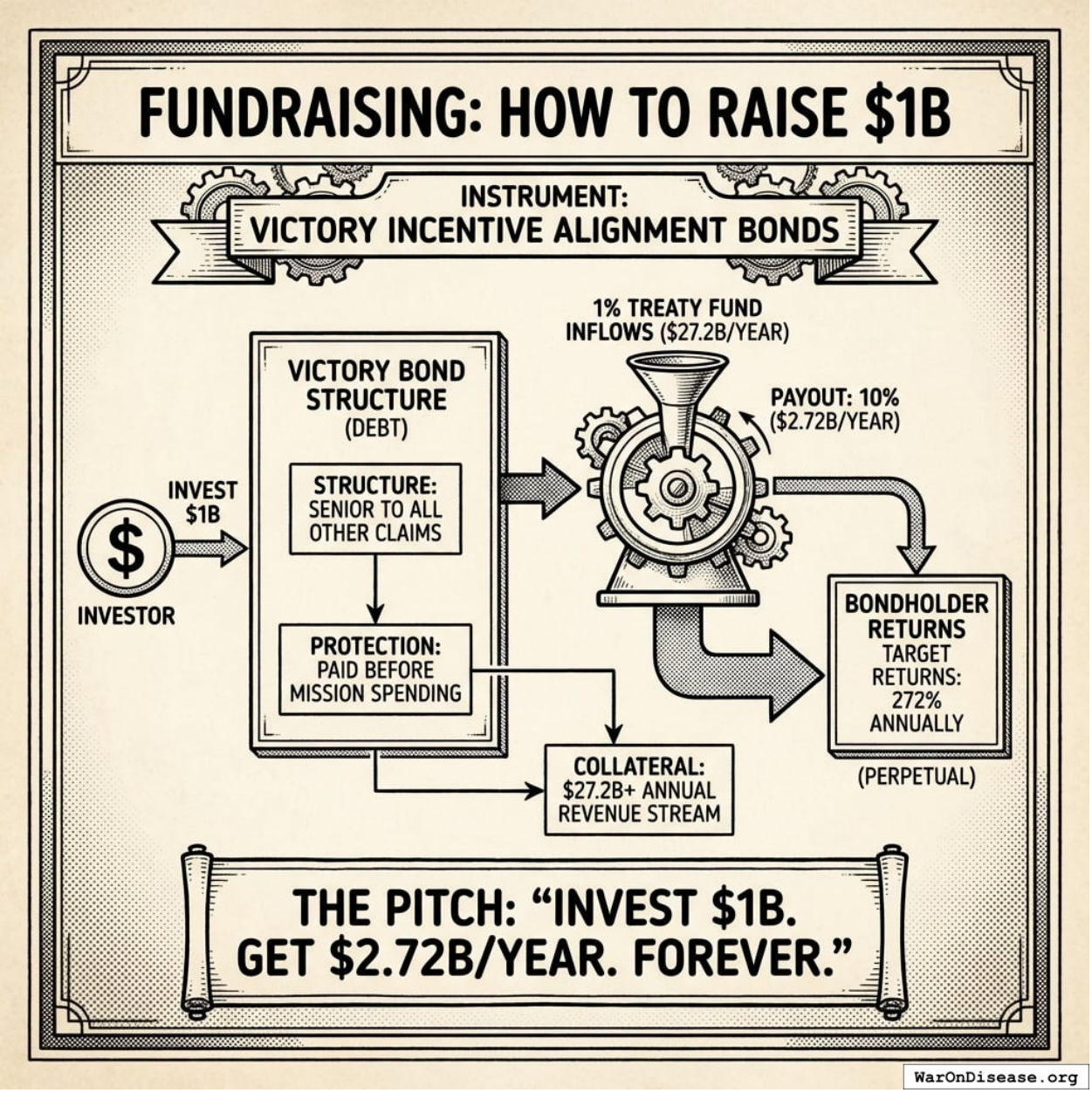


Figure 873: A financial flow diagram showing the 1B investment into VICTORY Bonds, which captures 10 percent of the 27.2B annual Treaty Fund to generate 2.72B in perpetual annual returns.

Why This Works

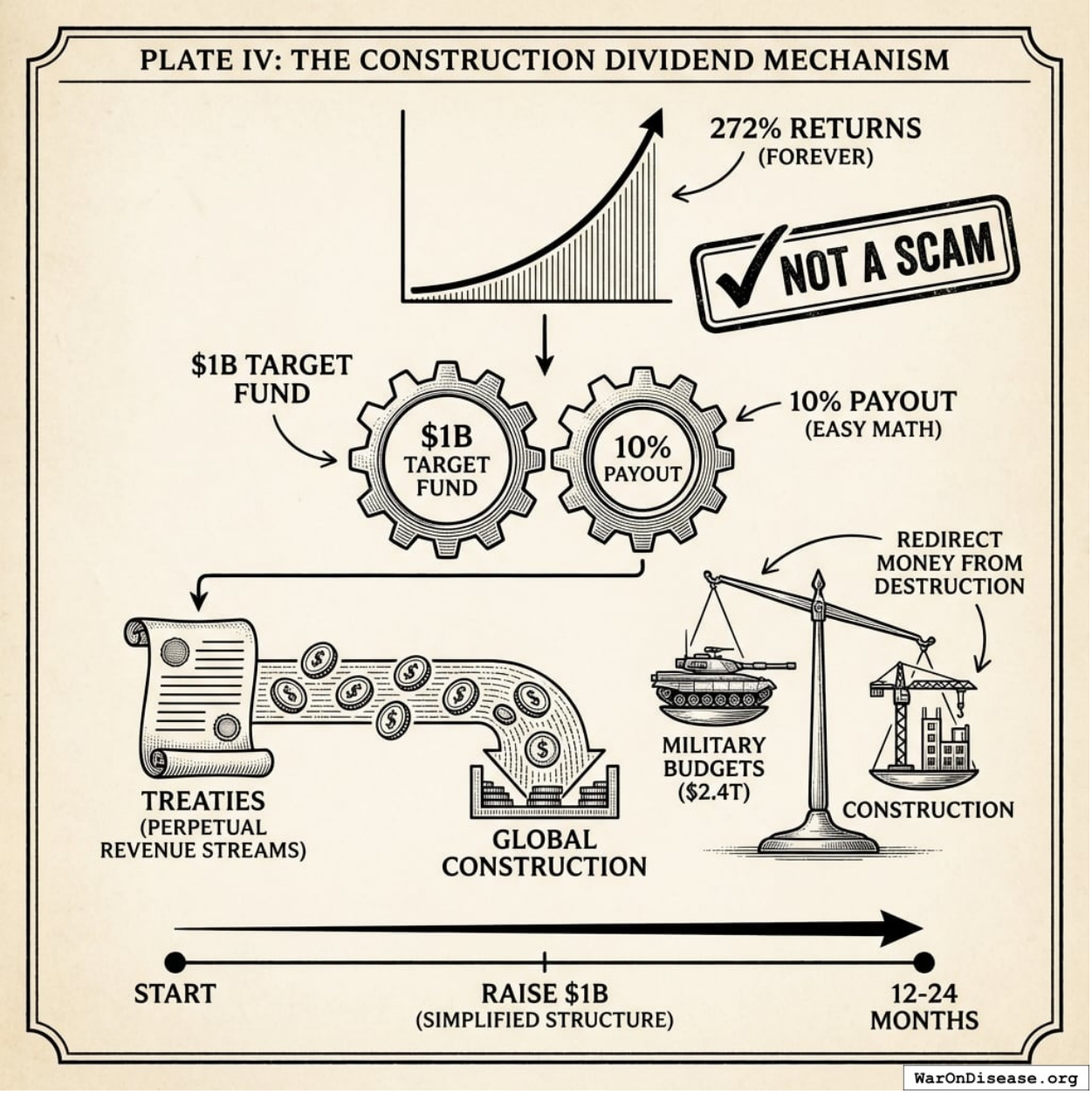


Figure 874: A conceptual flow showing the redirection of capital from the 2.4T global military budget into a 1B fund structure to generate sustainable high-yield returns.

- The pitch sounds like a scam: "272% returns, forever." It's not a scam. It's what happens when you redirect money from destruction to construction.
- Clean $1B target (vs confusing $1.2-2.5B range)
- 10% payout is easy math (vs 5% complex calculations)
- "Forever" works because treaties are perpetual revenue streams (like mineral rights, not tech startups)
- Returns are high because the *source* is high: military budgets total $2.4T globally

Timeline: 12-24 months to raise $1B (simplified structure accelerates fundraising)

Campaign Budget: How To Spend $1B

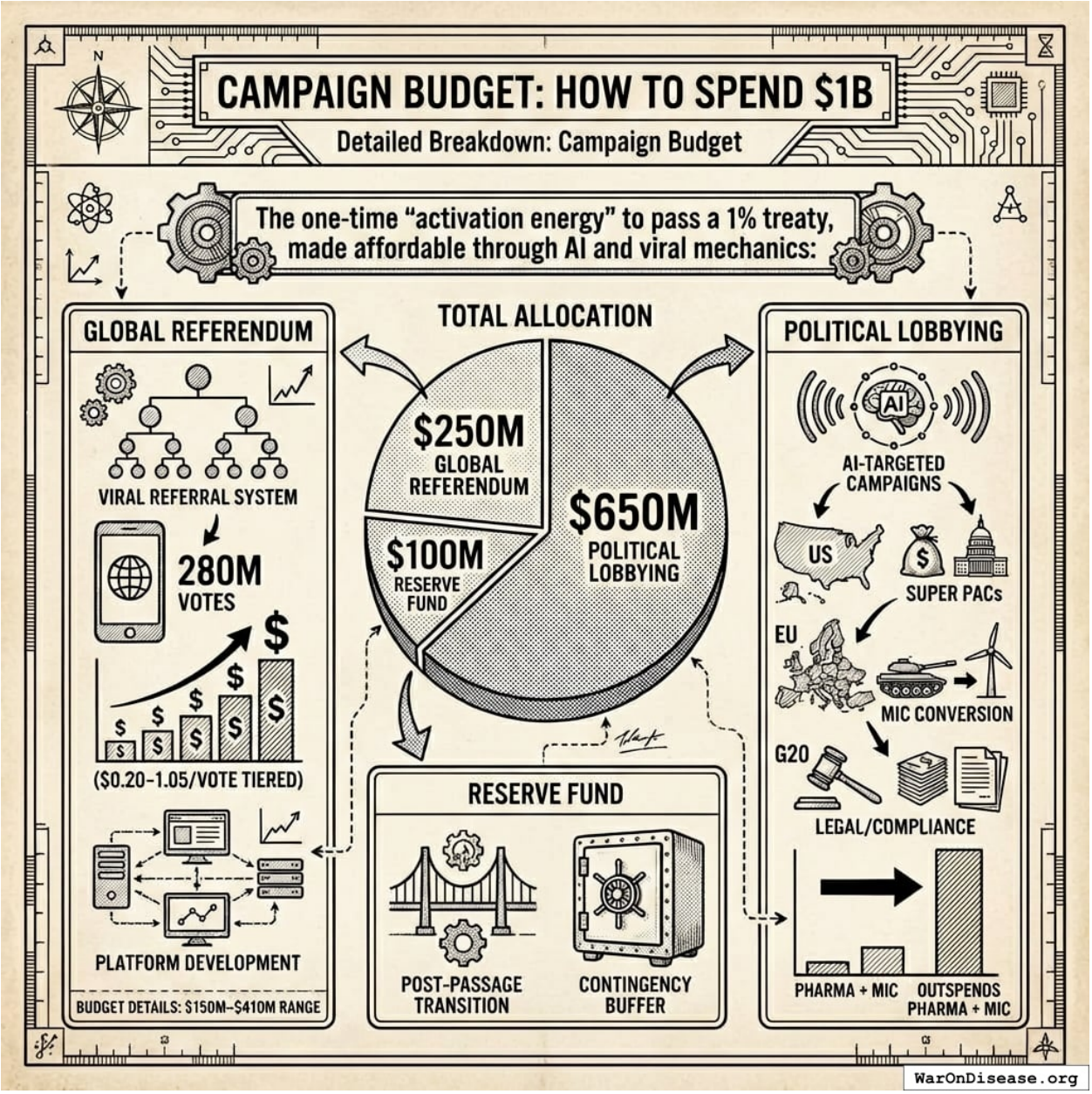


Figure 875: A breakdown of the 1 billion campaign budget, visualizing the allocation across political lobbying, the global referendum system, and a reserve fund.

Detailed Breakdown: Campaign Budget

The one-time "activation energy" to pass a 1% treaty, made affordable through AI and viral mechanics:

Category	Amount	Purpose
Global Referendum	$250M	Viral referral system ($0.20-1.05/vote tiered), 280M votes, platform development. Budget details: $150M-$410M range
Political Lobbying	$650M	AI-targeted campaigns (US/EU/G20), Super PACs, MIC conversion, legal/compliance. Outspends pharma + MIC
Reserve Fund	$100M	Post-passage transition, contingency buffer

Key Innovations

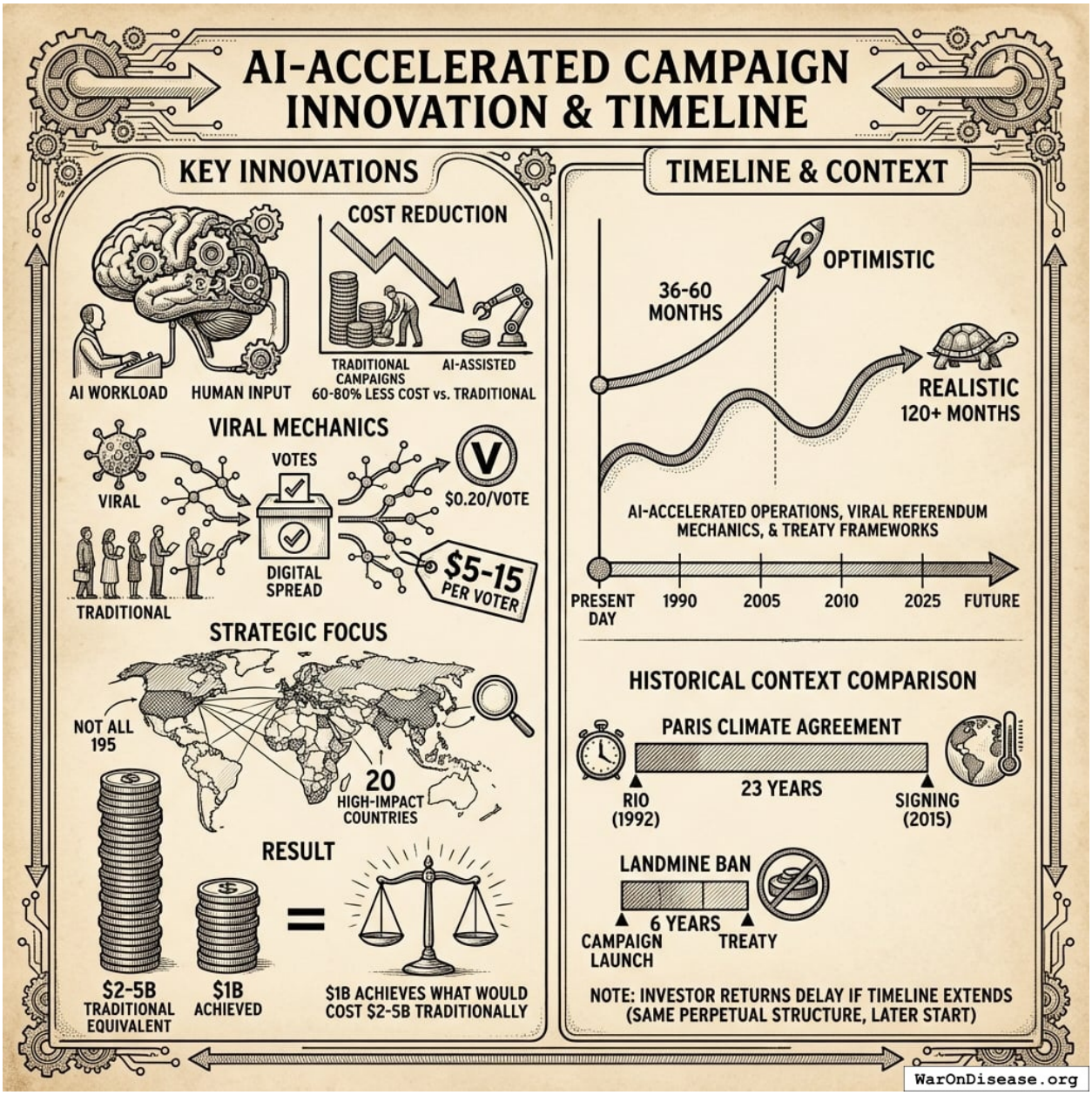


Figure 876: A comparative visualization showing the significant reduction in costs and timeframes between traditional diplomatic campaigns and the proposed AI-accelerated model.

- **Viral mechanics**: $0.20/vote vs $5-15 traditional cost per voter
- **Strategic focus**: 20 high-impact countries, not all 195

Timeline: 36-60 months (optimistic) to 120+ months (realistic)

For context: the Paris Climate Agreement took 23 years from Rio (1992) to signing (2015). The landmine ban took 6 years from campaign launch to treaty. Our timeline assumes viral referendum mechanics and pre-existing disarmament treaty frameworks. If timeline extends, investor returns simply delay (same perpetual structure, later start)

Treasury Management: How To Manage $27.2B+ Annually

Once the treaty passes, $27.2B flows annually from military budgets to the 1% Treaty Fund.

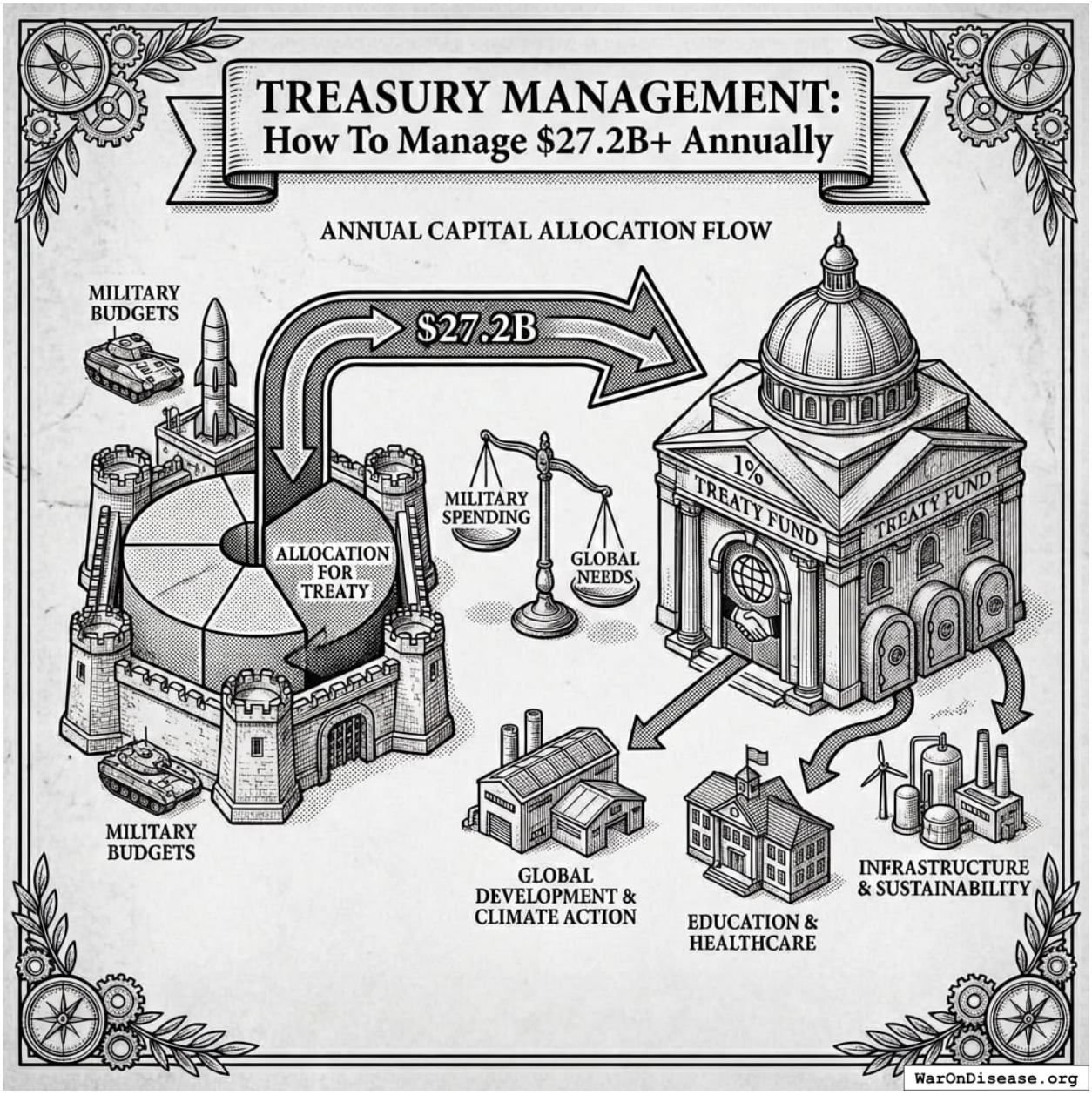


Figure 877: A diagram illustrating the annual transfer of 27.2 billion from global military budgets into the dedicated 1 percent Treaty Fund.

Revenue Sources

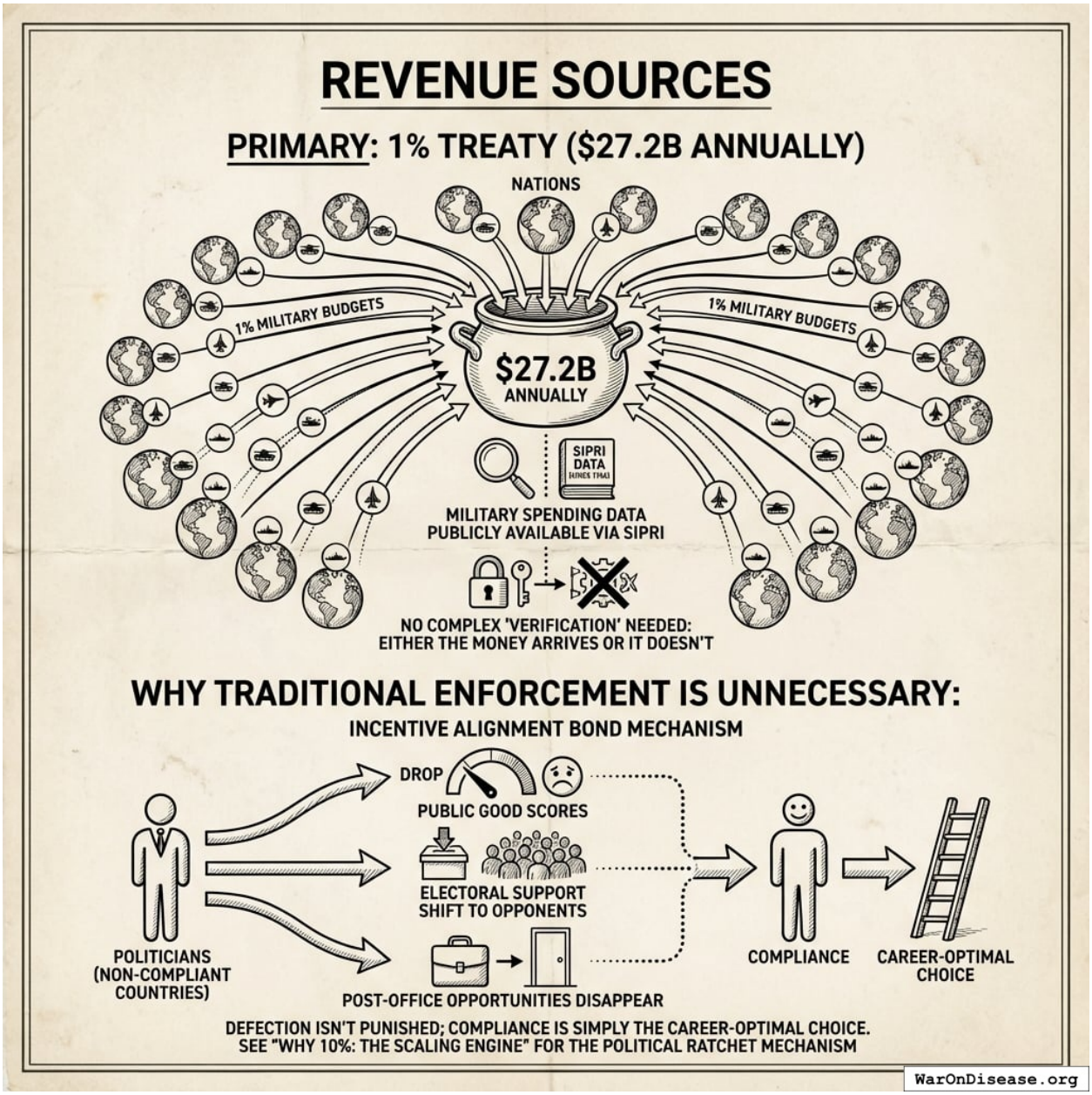


Figure 878: A flow diagram illustrating the self-enforcing revenue cycle, where national contributions tracked by SIPRI influence Public Good Scores and align political career incentives with treaty compliance.

Primary: 1% treaty ($27.2B annually)

- 100+ nations contribute 1% of military budgets
- Military spending data already public via SIPRI (tracking since 1966)
- No complex "verification" needed: either the money arrives or it doesn't

Why traditional enforcement is unnecessary: The Incentive Alignment Bond mechanism makes compliance self-enforcing. Politicians in non-compliant countries see their Public Good Scores drop, electoral support shift to opponents, and post-office opportunities disappear. Defection isn't punished; compliance is simply the career-optimal choice. See Why 10%: The Scaling Engine for the political ratchet mechanism

Growth Scenarios (Not Predictions)

Scenario	Probability	Treaty Level	Annual Flow
Base case	60%	1% maintained	$27.2B
Expansion	25%	2% by Year 7	$54B
Rapid success	10%	5% by Year 10	$135B
Reversal	5%	Treaty collapses	$0

Growth beyond 1% requires: (a) demonstrated health outcomes, (b) continued public pressure, (c) no major geopolitical crisis. None guaranteed

Expenditure Allocation

The 1% Treaty Fund uses an **80/10/10 automatic allocation** before any funds reach discretionary spending:

Allocation	Percentage	Annual Amount	Purpose
Pragmatic Clinical Trials & Platform	80%	$21.8B	Patient subsidies, research, platform
VICTORY Incentive Alignment Bond Returns	10%	$2.72B	Perpetual investor payments
IAB Political Incentives	10%	$2.72B	Rewards for supporting legislators

The Fixed Costs (10% + 10% = 20%)

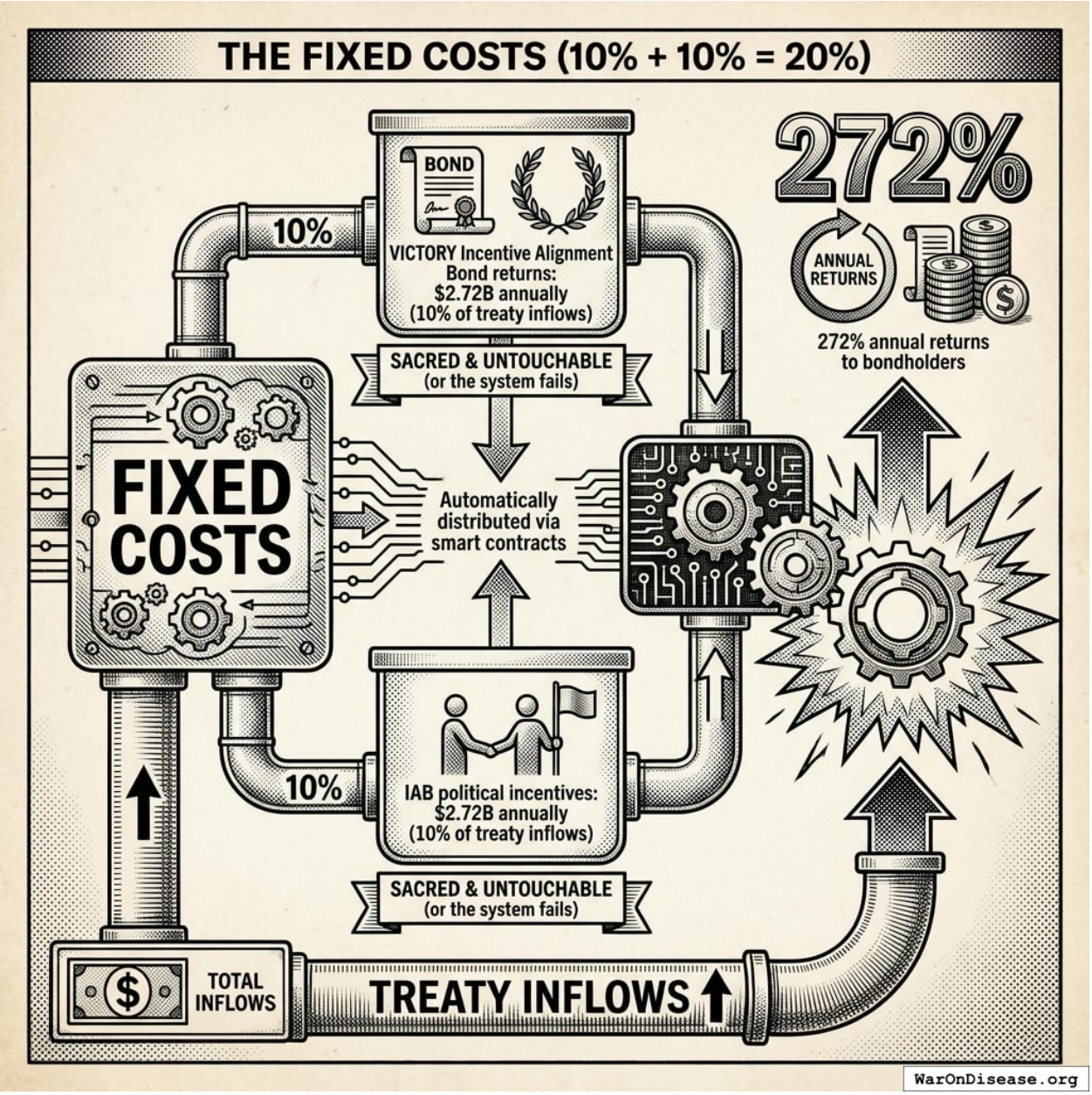


Figure 879: A visualization of the 20 percent fixed cost allocation, showing the automated flow of treaty funding into two equal 10 percent pillars for bond returns and political incentives via smart contracts.

- **VICTORY Incentive Alignment Bond returns:** $2.72B annually (10% of treaty inflows)
- **IAB political incentives:** $2.72B annually (10% of treaty inflows)
- Both are sacred and untouchable (or the system fails)
- Automatically distributed via smart contracts
- 272% annual returns to bondholders

Everything Else (80%): Medical Research Allocation

The remaining 80% ($21.8B/year) funds pragmatic clinical trials and research infrastructure. Allocation

is governed through transparent democratic mechanisms described in the Wishocracy chapter. Treasury security uses smart contract automation with multi-sig wallets and time-locked withdrawals.

Dynamic Patient Subsidies

The revolutionary part: your decentralized institutes of health don't pay researchers. They subsidize patients.

How It Works

```
Base Subsidy = Medical Research Allocation ÷ Active Trial Participants

Example with 1M participants:

$21.8B ÷ 1M = $21,760 per patient per year

(Note: 80% of $27.2B goes to medical research after bond and IAB payouts)

As more patients join:

5M participants = $4,352 per patient
10M participants = $2,176 per patient
```

Why This Creates Perfect Incentives

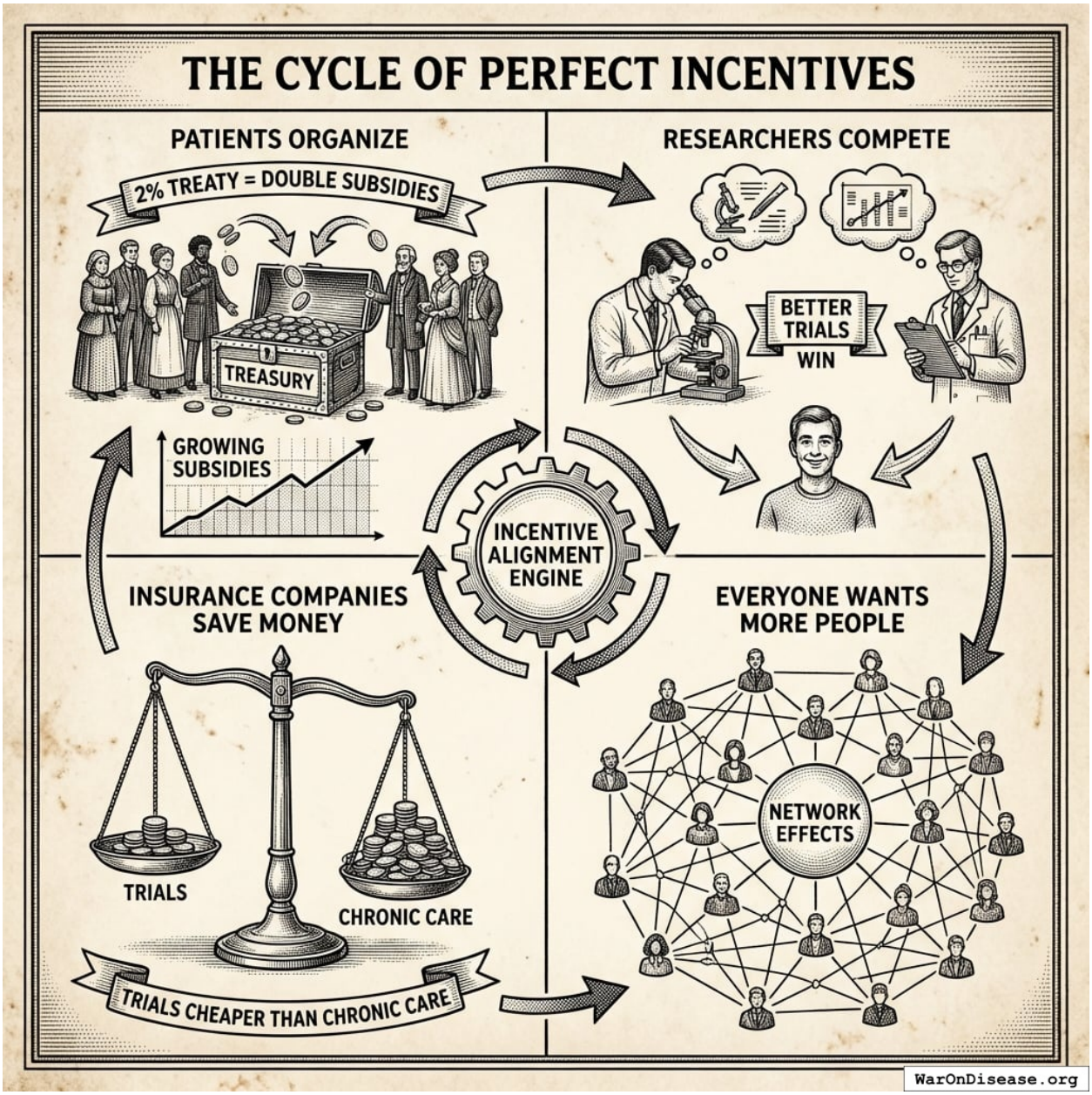


Figure 880: A stakeholder ecosystem diagram illustrating the positive feedback loops and aligned incentives between patients, researchers, and insurance companies within a shared treasury model.

- Patients organize to grow treasury (2% treaty = double subsidies)
- Researchers compete to attract patients (better trials win)
- Insurance companies save money (trials cheaper than chronic care)
- Everyone wants more people in trials (network effects)

Compare to Grant System

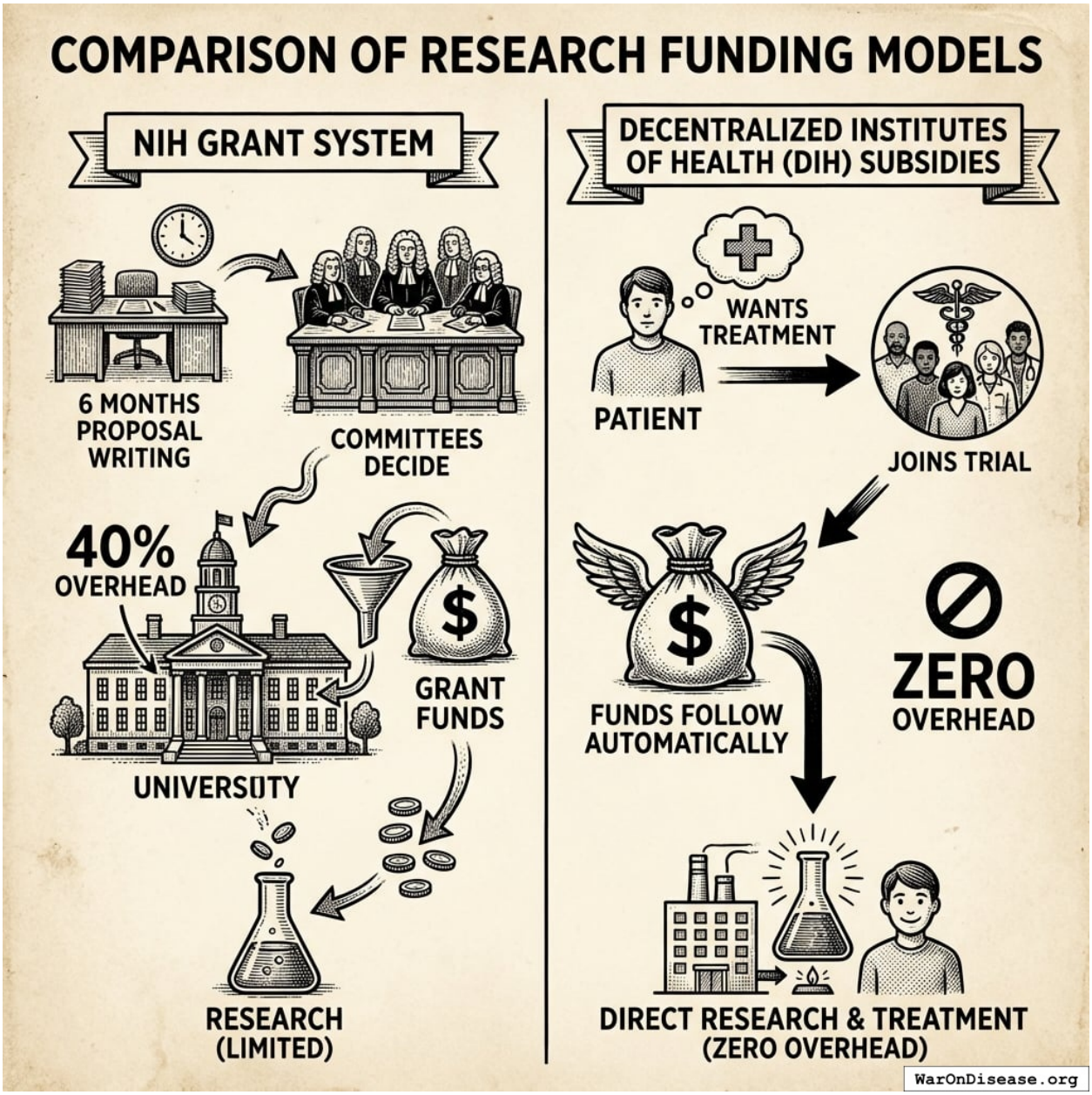


Figure 881: A side-by-side comparison of the traditional NIH grant process and a decentralized health funding model, highlighting differences in speed, decision-making, and overhead costs.

- NIH grants: 6 months of proposal writing, committees decide, universities take 40% overhead
- Subsidies via your decentralized institutes of health: Patient wants treatment, joins trial, funds follow automatically, zero overhead

Risk Management

For detailed risk analysis, see **Investor Risk Analysis**.

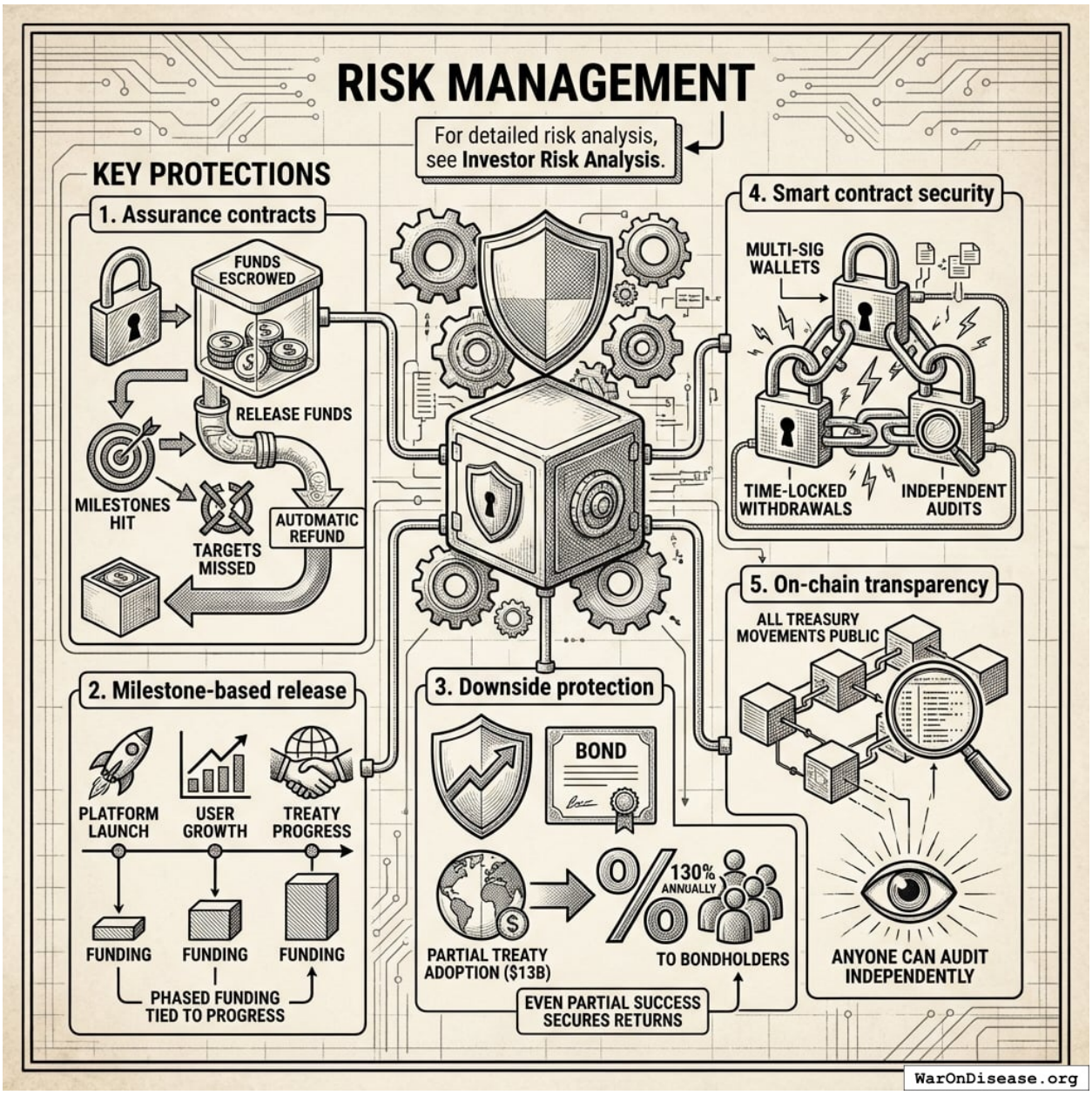


Figure 882: A flowchart depicting the flow of investor funds through escrow and milestone-based release mechanisms, protected by smart contract security and on-chain transparency.

Key protections:

- **Assurance contracts:** Funds escrowed until milestones hit, automatic refund if targets missed
- **Milestone-based release:** Phased funding tied to platform launch, user growth, and treaty progress
- **Downside protection:** Even partial treaty adoption ($13B) returns 130% annually to bondholders
- **Smart contract security:** Multi-sig wallets, time-locked withdrawals, independent audits
- **On-chain transparency:** All treasury movements public, anyone can audit independently

Related Documents

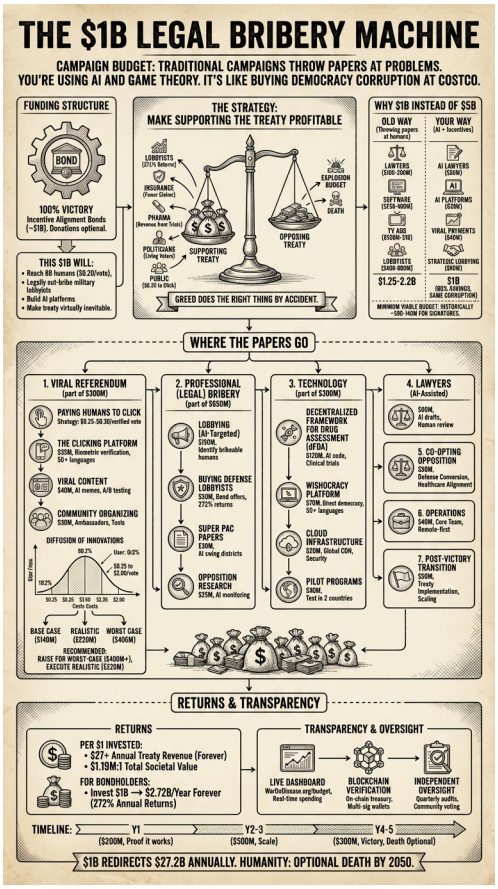
- **VICTORY Incentive Alignment Bonds** - Investment thesis and bond structure
- **Campaign Budget** - Detailed line-item breakdown
- **Investor Risk Analysis** - Risk factors and mitigations
- **Fundraising Strategy** - How to raise $1B
- **Cost-Benefit Analysis for a Decentralized Drug Assessment Framework** - Complete ROI analysis

Summary

Component	Target	Mechanism
Raise	$1B	VICTORY Incentive Alignment Bonds
Spend	Campaign budget	Referendum + lobbying + platform
Manage	$27.2B+/year	80/10/10 automatic allocation
Return	272% annually	Perpetual 10% of treaty inflows

The math: Invest $1B → Get $2.72B/year → Forever.

Campaign Budget: The $1B (95% CI: $700M-$1.30B) Legal Bribery Machine



Related: Financial Plan Overview | Fundraising Strategy

Traditional campaigns throw papers at problems until the papers or the problems disappear. Usually the papers disappear first.

You're using AI and game theory to do for $1B what normally costs $2-5B. It's like buying everything at Costco but for democracy corruption.

Funding structure: 100% VICTORY Incentive Alignment Bonds (~$1B). Donations are optional/bonus. See Fundraising Strategy: Capital Structure for detailed breakdown.

This $1B will:

- Reach 8 billion humans by paying them $0.20 for each referred verified vote (cheaper than advertising, more effective than begging)
- Legally out-bribe military lobbyists (they work for whoever pays more)
- Build platforms with AI doing 90% of the work (humans just point and say “not that”)
- Make the treaty virtually inevitable in pilot countries, then watch it spread like a virus but helpful

The Strategy: Make supporting the treaty more profitable than opposing it. Then sit back and watch greed do the right thing by accident.

Why $1B Instead of $5B

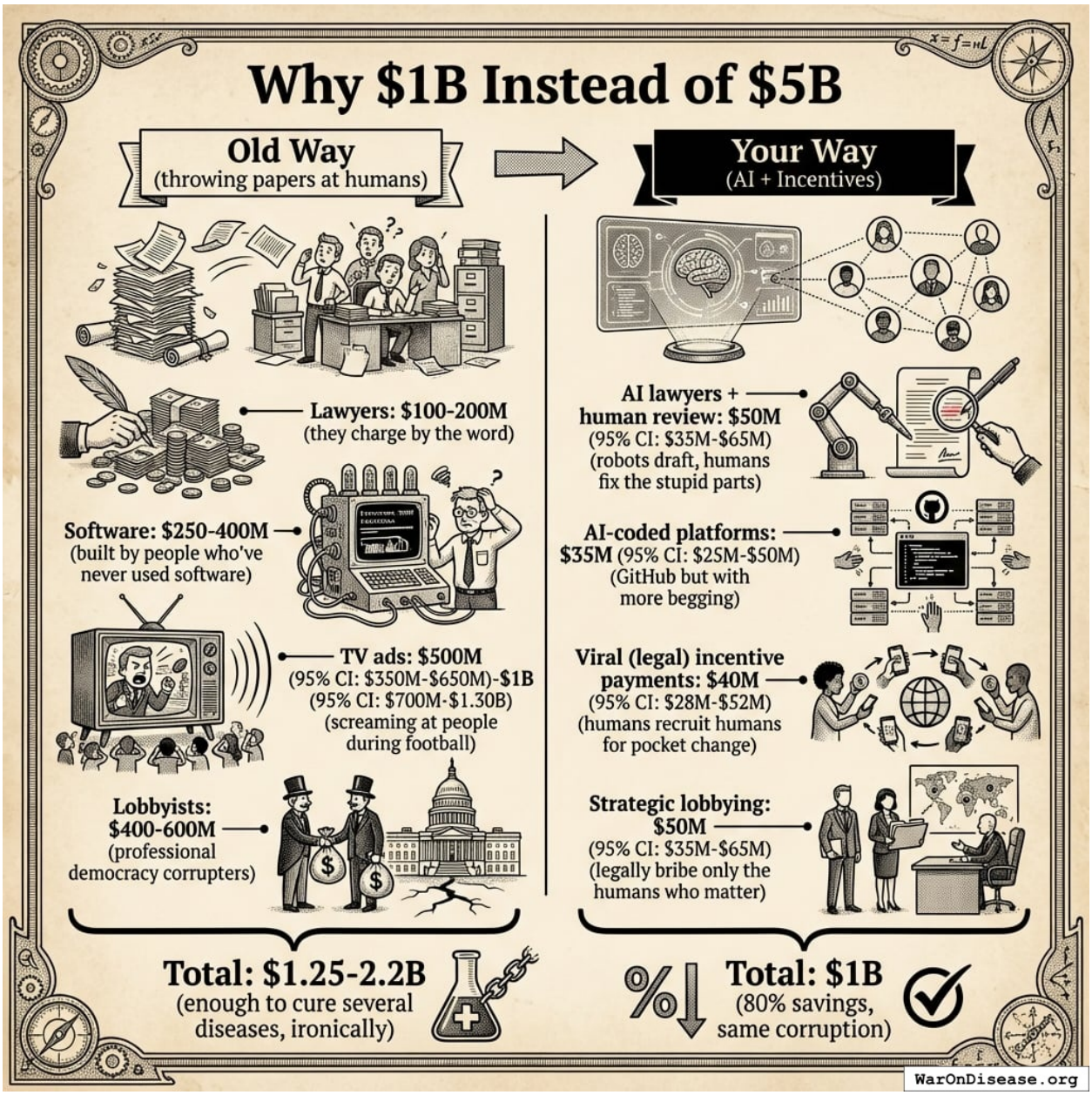


Figure 883: A side-by-side cost comparison between traditional lobbying methods and the proposed AI-assisted model, highlighting the 80 percent reduction in total expenditure.

Old Way (throwing papers at humans):

- Lawyers: $100-200M (they charge by the word)
- Software: $250-400M (built by people who've never used software)
- TV ads: $500M (95% CI: $350M-$650M)-$1B (95% CI: $700M-$1.30B) (screaming at people during football)
- Lobbyists: $400-600M (professional democracy corrupters)
- **Total: $1.25-2.2B** (enough to cure several diseases, ironically)

Your Way (AI + Incentives):

- AI lawyers + human review: $50M (95% CI: $35M-$65M) (robots draft, humans fix the stupid parts)
- AI-coded platforms: $35M (95% CI: $25M-$50M) (GitHub but with more begging)
- Viral (legal) incentive payments: $40M (95% CI: $28M-$52M) (humans recruit humans for pocket change)
- Strategic lobbying: $50M (95% CI: $35M-$65M) (legally bribe only the humans who matter)
- **Total: $1B** (80% savings, same corruption)

The Minimum Viable Budget

The $1B target is overkill-by-design. The actual cost to get governments to sign a piece of paper? Historically, ~$90–140 million.

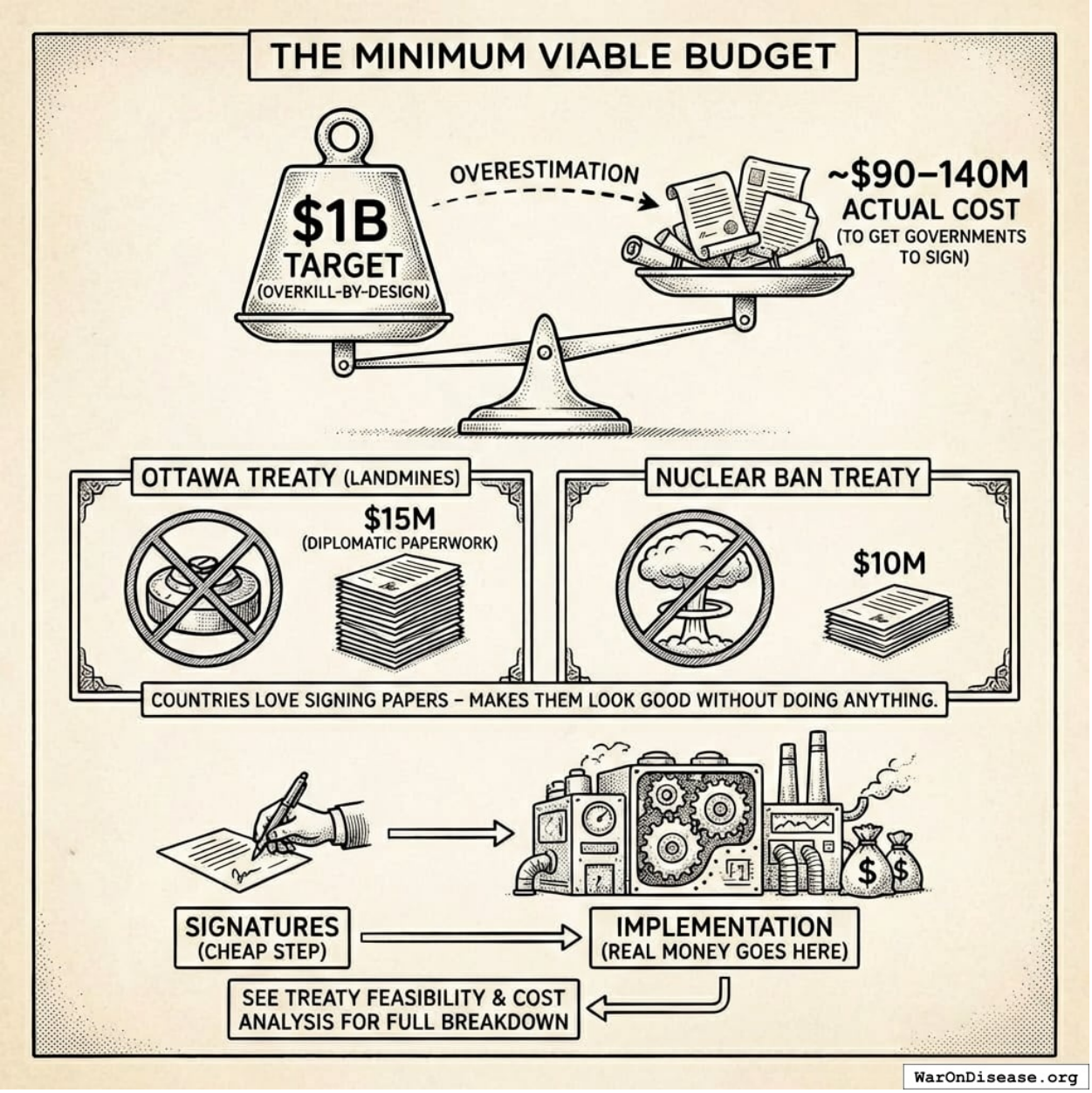


Figure 884: A comparison of the 1 billion target budget against historical diplomatic costs, such as the Ottawa Treaty (15M) and the Nuclear Ban Treaty (10M), illustrating the massive scale difference.

The Ottawa Treaty (banning landmines) cost $15M in diplomatic paperwork. The Nuclear Ban Treaty: $10M. Countries love signing papers - it makes them look good without doing anything.

See Treaty Feasibility & Cost Analysis for the full breakdown of why getting signatures is cheap and implementation is where the real money goes.

Where the Papers Go

Viral Referendum (part of $250M Referendum Budget)

Paying Humans to Click

The strategy: Generate referral links, pay people $0.25-0.30 per verified vote, let greed do the marketing.

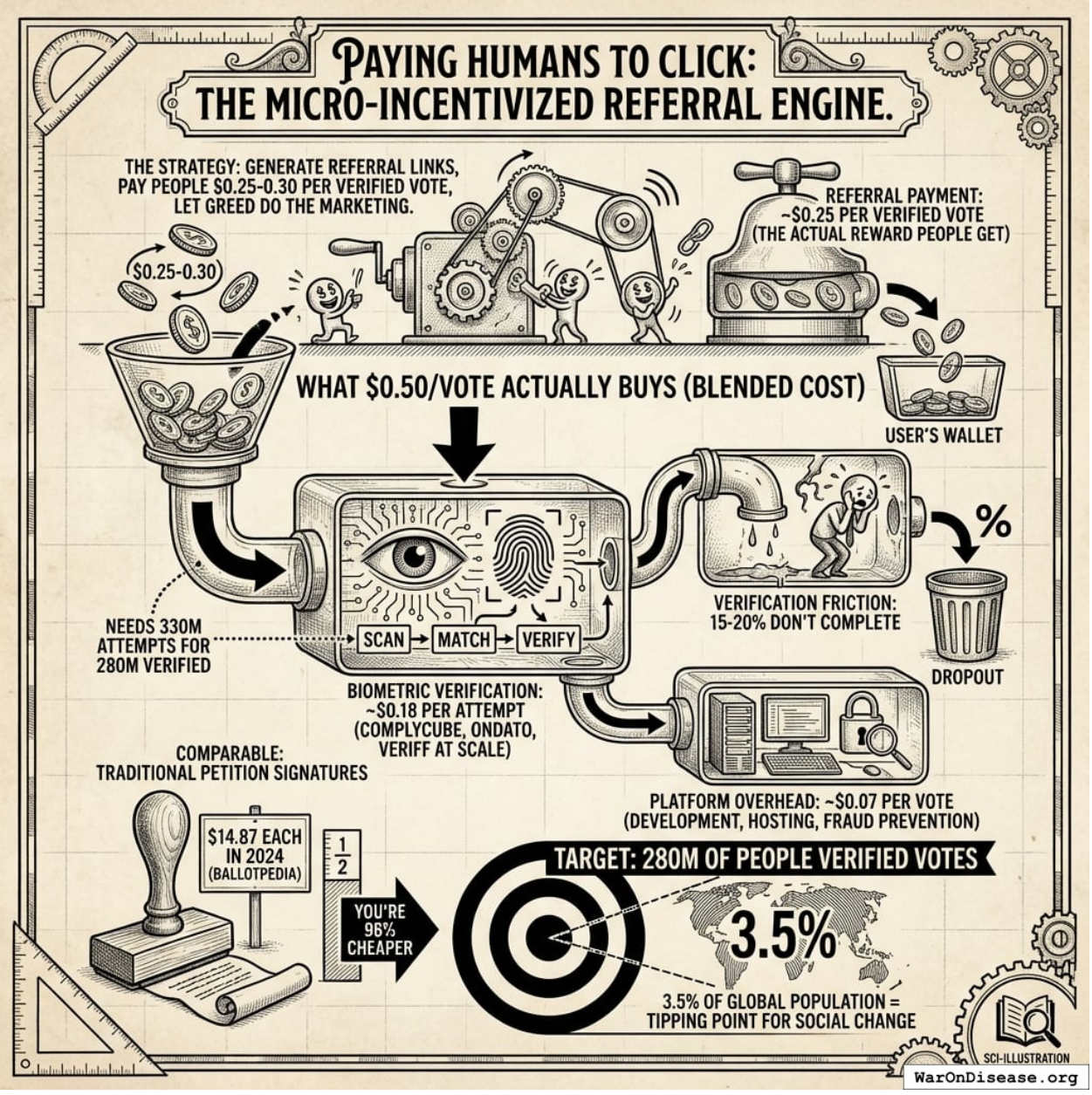


Figure 885: A cost-efficiency breakdown comparing the 0.50 blended cost of digital verified voting against the 14.87 traditional petition average, alongside a component chart of referral, verification, and overhead expenses.

What $0.50/vote actually buys (blended cost):

- Referral payment: ~$0.25 per verified vote (the actual reward people get)

- Biometric verification: ~$0.18 per attempt (ComplyCube, Ondato, Veriff at scale)
- Verification friction: 15-20% don't complete (need 330M attempts for 280M verified)
- Platform overhead: ~$0.07 per vote (development, hosting, fraud prevention)

Comparable: Traditional petition signatures cost $14.87 each in 2024 (Ballotpedia). You're 96% cheaper.

Target: 280M of people verified votes (3.5% of global population = tipping point for social change)

Payment structure

- Standard reward: $0.25-0.30 per verified vote via referral link
- Early adopter bonus: $0.50 for first 10M (creates FOMO)
- Recruitment bonus: $0.10 per successful recruit (pyramid scheme but legal)

The Clicking Platform: $35M (95% CI: $25M-$50M)

- Biometric verification (one vote per meat body)
- 50+ languages (AI translates, humans check for accidental declarations of war)
- Mobile-first (humans glued to phones anyway)

Viral Content (optional acceleration): $40M (95% CI: $28M-$52M)

When you're paying people real money ($0.25-0.30) for verified referrals, they become your marketing team. This budget is for:

- AI generates memes about death (surprisingly good at this)
- A/B testing until humans can't resist voting
- Local versions (different cultures, same mortality)
- Micro-influencers (people trust strangers with 10K followers more than experts)

Alternative: Skip this, increase referral payment to $0.35-0.40, let economics drive virality. PayPal and Dropbox proved you don't need marketing when you're paying real money.

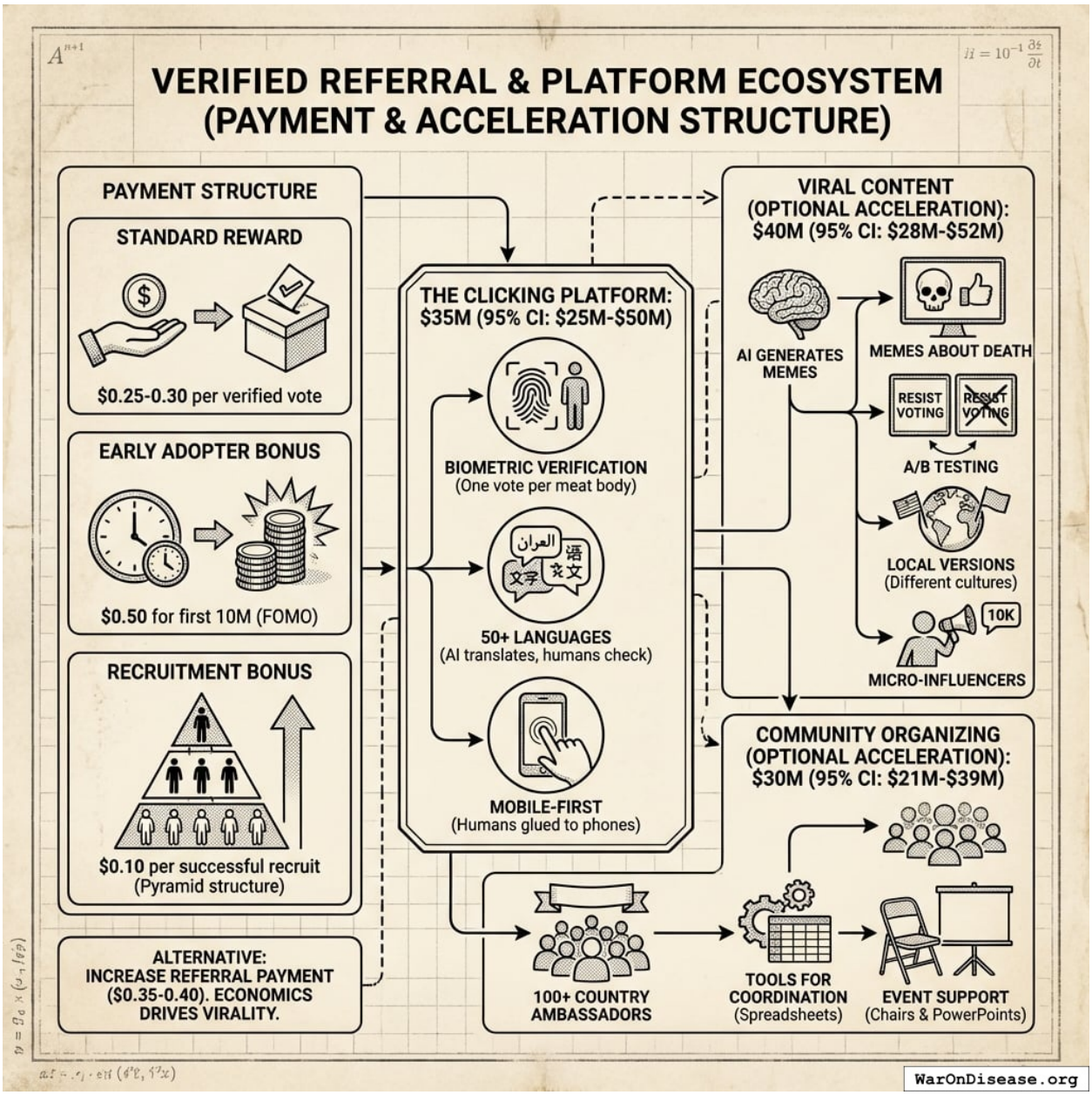


Figure 886: A breakdown of the project budget allocations for technology, marketing, and community organizing, alongside the tiered referral reward structure ranging from 0.10 to 0.50 per vote.

Community Organizing (optional acceleration): $30M (95% CI: $21M-$39M)

Organic communities form when there's money involved. This budget is for:

- 100+ country ambassadors (humans who like organizing other humans)
- Tools for coordination (spreadsheets that don't crash)
- Event support (folding chairs and PowerPoints)

Alternative: Skip this, use the $30M to increase verification budget or referral rewards.

Budget: Viral Referendum with Tiered Incentives

Total Budget: $250M

The Challenge: Not all voters cost the same. Early adopters (believers, idealists) vote for minimal incentive. But to hit 280M of people votes (3.5% of global population), you need skeptics and the actively resistant.

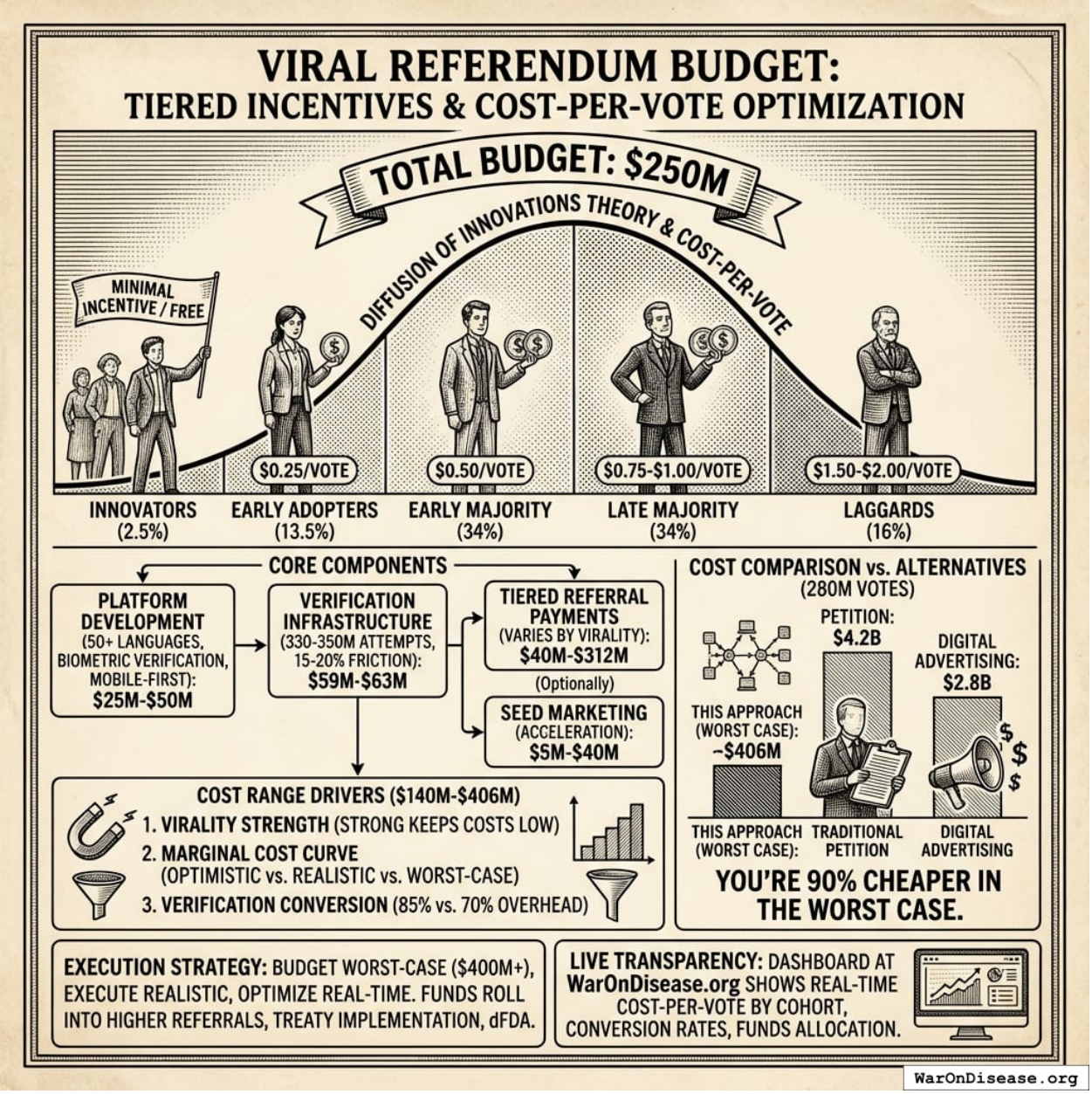


Figure 887: A visualization of the tiered cost-per-vote based on the Diffusion of Innovations curve, compared against the significantly higher costs of traditional petition gathering and digital advertising.

Diffusion of innovations theory (Rogers, 2003) predicts increasing marginal costs:

- 2.5% innovators (vote for free or minimal incentive)
- 13.5% early adopters ($0.25/vote)
- 34% early majority ($0.50/vote)

- 34% late majority ($0.75-1.00/vote, skeptical)
- 16% laggards ($1.50-2.00/vote, actively resistant)

PayPal precedent: Started at $20/referral (1999), optimized to $10-20 range. Inflation-adjusted: ~$18-36 in 2024 dollars. But PayPal recruited early adopters (tech-savvy users in Silicon Valley), not laggards.

Core Components:

- **Platform Development**: $35M (95% CI: $25M-$50M) (biometric verification, 50+ languages, mobile-first)
- **Verification Infrastructure**: $59-63M (330-350M verification attempts × $0.18, accounting for 15-20% friction)
- **Tiered Referral Payments**: $40-312M (varies by virality strength and marginal cost assumptions)
- **Seed Marketing**: $5-40M (optional acceleration, or let referral economics drive virality)

Cost Range Drivers ($140M-406M):

1. **Virality strength**: Strong virality (PayPal-level) keeps costs at lower end. Weak virality requires higher incentives.
2. **Marginal cost curve**: Optimistic (flat $0.50/vote) vs. realistic (tiered to $1.00) vs. worst-case (tiered to $2.00)
3. **Verification conversion**: 85% (realistic) vs. 70% (poor UX) determines verification overhead

Still dramatically cheaper than alternatives:

- Traditional petition gathering: 280M of people $14.87 = $4.2B
- Digital advertising: 280M of people $10 avg = $2.8B
- This approach (upper bound): $406M

You're 90% cheaper in the worst case.

Execution Strategy: Budget for worst-case ($400M+), execute with realistic assumptions, optimize in real-time based on actual cost-per-vote data. Unused funds roll into higher referral payments, treaty implementation, or dFDA development.

Live Transparency: Dashboard at WarOnDisease.org shows real-time cost-per-vote by cohort, conversion rates, and funds allocation

Professional (Legal) Bribery (part of $650M Lobbying Budget)

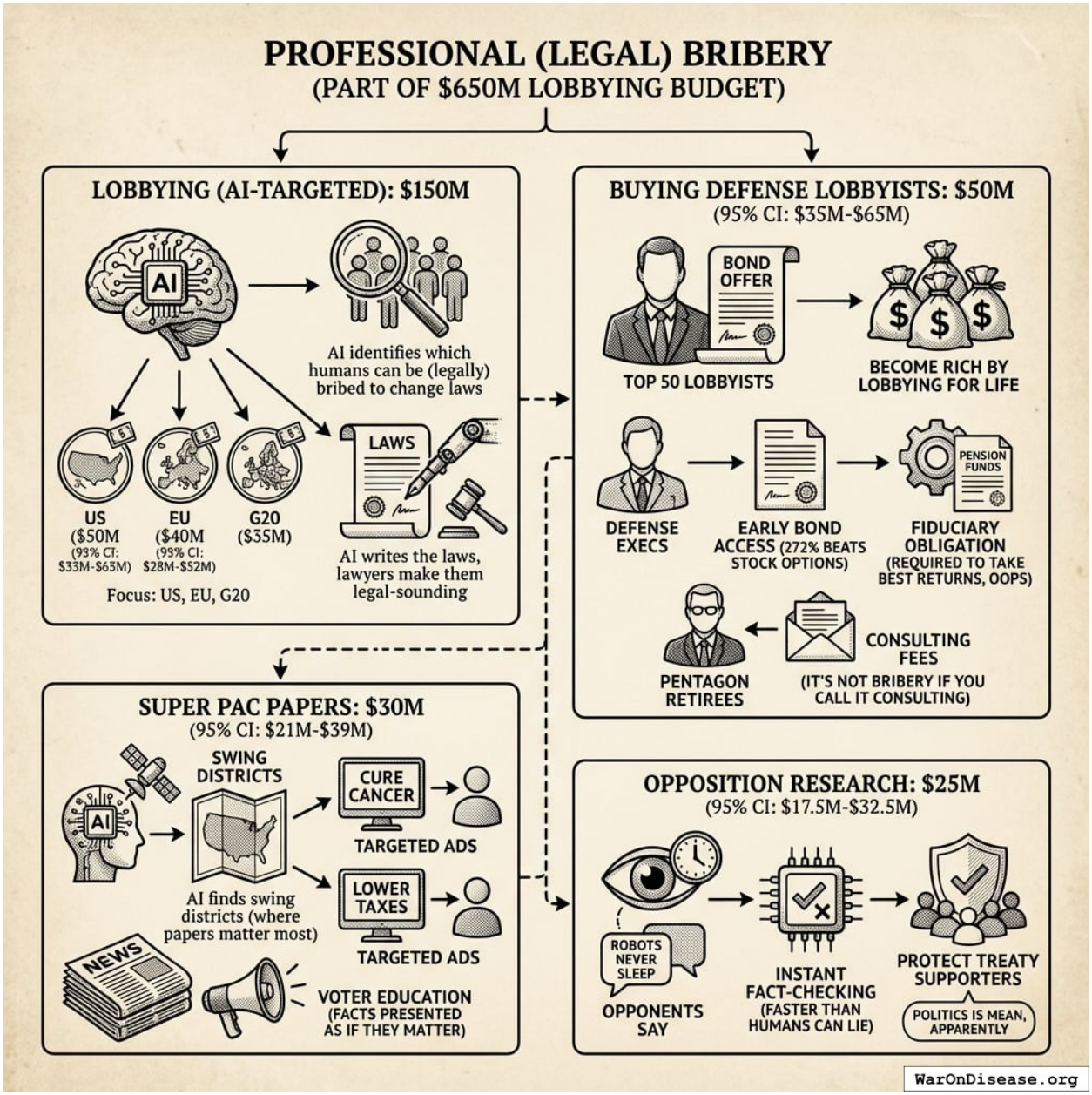


Figure 888: A breakdown of the professional lobbying budget and process, illustrating the distribution of funds across regional targets, defense industry co-option, and AI-driven political influence strategies.

Lobbying (AI-Targeted): $150M

Here's how professional democracy corruption works:

- AI identifies which humans can be (legally) bribed to change laws
- You (legally) bribe those specific humans (not all humans, just the useful ones)
- Focus: US ($50M (95% CI: $35M-$65M)), EU ($40M (95% CI: $28M-$52M)), G20 ($35M)
- AI writes the laws, lawyers make them legal-sounding

Buying Defense Lobbyists: $50M (95% CI: $35M-$65M)

Defense lobbyists currently work for whoever pays them. So you pay them more:

- Top 50 lobbyists get bond offers (become rich by lobbying FOR life instead of death)
- Defense execs get early bond access (272% beats their stock options)
- Pension funds get fiduciary obligation (required to take best returns, oops)
- "Consulting fees" to Pentagon retirees (it's not bribery if you call it consulting)

Super PAC Papers: $30M (95% CI: $21M-$39M)

- AI finds swing districts (where papers matter most)
- Targeted ads (you see "cure cancer," your neighbor sees "lower taxes")
- Voter education (facts presented as if they matter)

Opposition Research: $25M (95% CI: $17.5M-$32.5M)

- AI monitors what opponents say (robots never sleep)
- Instant fact-checking (faster than humans can lie)
- Protect treaty supporters (politics is mean, apparently)

Technology (part of $250M Referendum Budget)

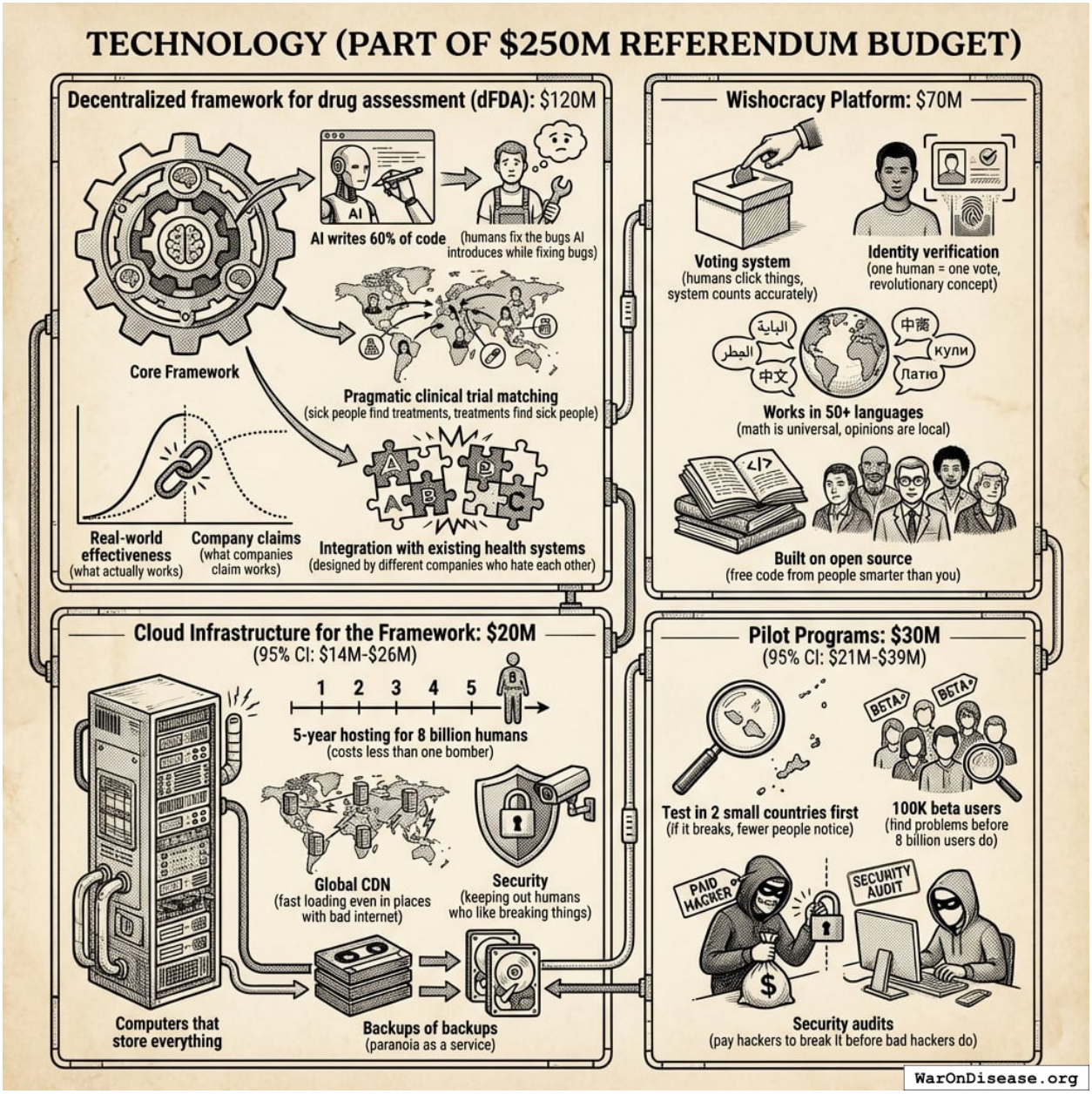


Figure 889: Breakdown of the 250M technology budget across the dFDA framework, Wishocracy platform, pilot programs, and cloud infrastructure.

Decentralized framework for drug assessment (dFDA): $120M

The Core framework for a global framework of pragmatic clinical trials:

- AI writes 60% of code (humans fix the bugs AI introduces while fixing bugs)
- Pragmatic clinical trial matching (sick people find treatments, treatments find sick people)
- Real-world effectiveness tracking (what actually works vs what companies claim works)
- Integration with existing health systems (designed by different companies who hate each other)

Wishocracy Platform: $70M

Direct democracy except it works:

- Voting system (humans click things, system counts accurately)
- Identity verification (one human = one vote, revolutionary concept)
- Works in 50+ languages (math is universal, opinions are local)
- Built on open source (free code from people smarter than you)

Cloud Infrastructure for the Framework: $20M (95% CI: $14M-$26M)

Computers that store everything:

- 5-year hosting for 8 billion humans (costs less than one bomber)
- Global CDN (fast loading even in places with bad internet)
- Security (keeping out humans who like breaking things)
- Backups of backups (paranoia as a service)

Pilot Programs: $30M (95% CI: $21M-$39M)

- Test in 2 small countries first (if it breaks, fewer people notice)
- 100K beta users (find problems before 8 billion users do)
- Security audits (pay hackers to break it before bad hackers do)

Lawyers (AI-Assisted) (part of $650M Lobbying Budget)

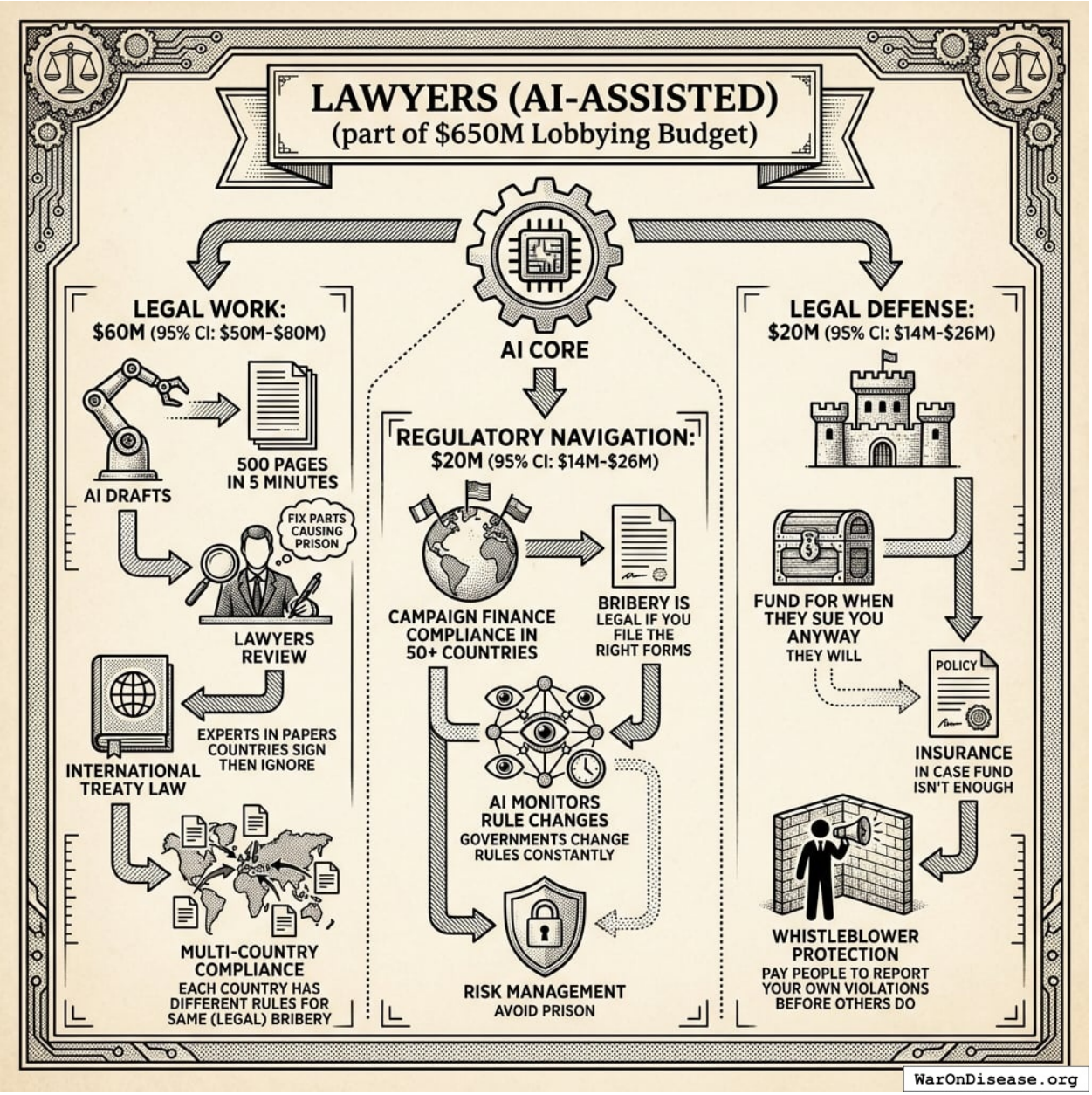


Figure 890: A breakdown of the 100 million AI-assisted legal budget across three categories, displaying the allocated amounts and their respective 95 percent confidence intervals.

Legal Work: $60M (95% CI: $50M-$80M)

- AI drafts everything (500 pages in 5 minutes)
- Lawyers review (fix the parts that would cause prison)
- International treaty law (experts in papers that countries sign then ignore)
- Multi-country compliance (each country has different rules for the same (legal) bribery)

Regulatory Navigation: $20M (95% CI: $14M-$26M)

- Campaign finance compliance in 50+ countries (bribery is legal if you file the right forms)

- AI monitors rule changes (governments change rules constantly)
- Risk management (avoid prison)

Legal Defense: $20M (95% CI: $14M-$26M)

- Fund for when they sue you anyway (they will)
- Insurance (in case fund isn't enough)
- Whistleblower protection (pay people to report your own violations before others do)

Co-opting the Opposition (part of $650M Lobbying Budget)

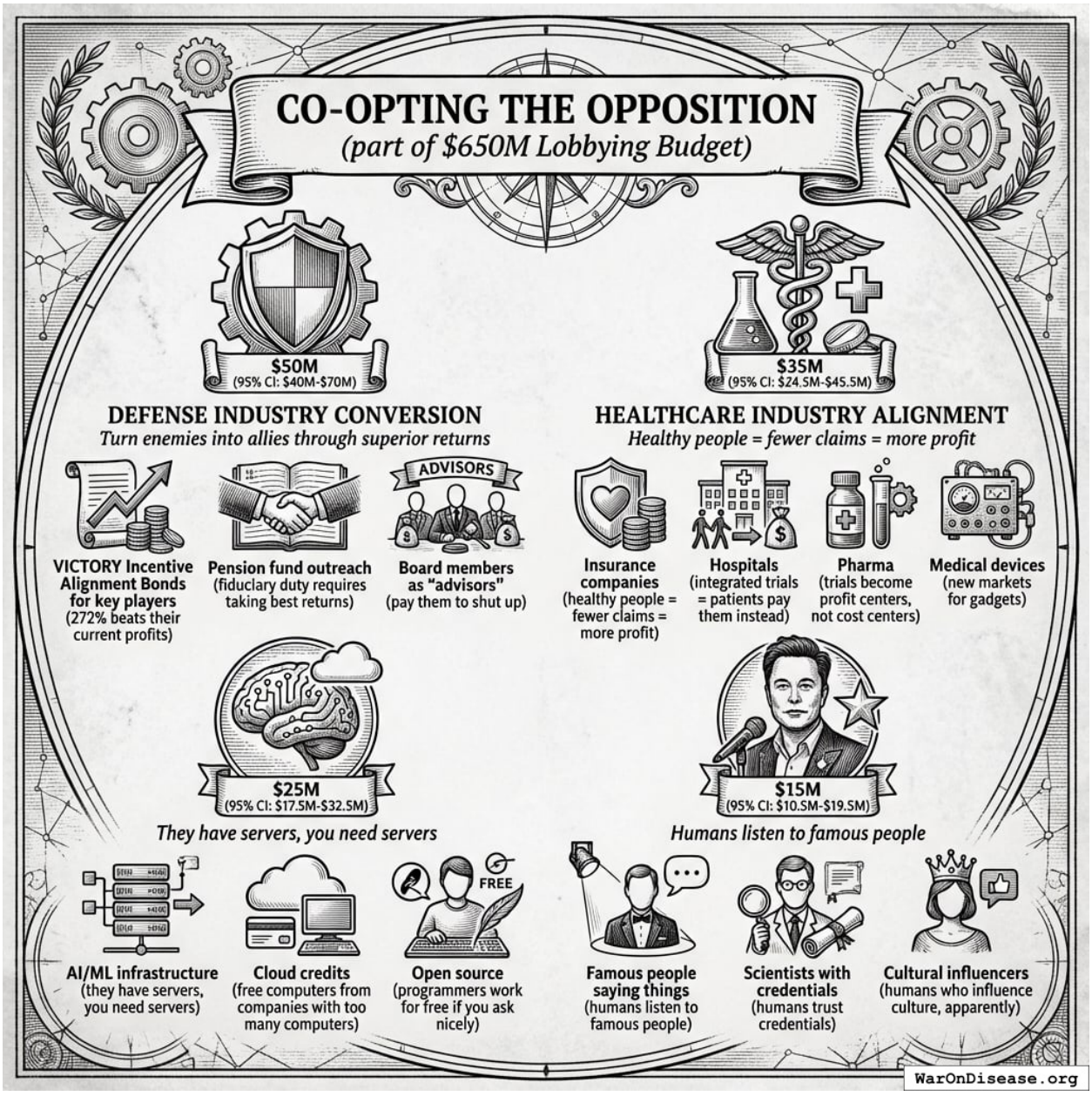


Figure 891: A horizontal bar chart showing the allocation of funds across defense, healthcare, tech, and endorsements, including the 95 percent confidence intervals for each budget category.

Defense Industry Conversion: $50M (95% CI: $40M-$70M)

Turn enemies into allies through superior returns:

- VICTORY Incentive Alignment Bonds for key players (272% beats their current profits)
- Pension fund outreach (fiduciary duty requires taking best returns)
- Board members as "advisors" (pay them to shut up)

Healthcare Industry Alignment: $35M (95% CI: $24.5M-$45.5M)

- Insurance companies (healthy people = fewer claims = more profit)
- Hospitals (integrated trials = patients pay them instead)
- Pharma (trials become profit centers, not cost centers)
- Medical devices (new markets for gadgets)

Tech Partnerships: $25M (95% CI: $17.5M-$32.5M)

- AI/ML infrastructure (they have servers, you need servers)
- Cloud credits (free computers from companies with too many computers)
- Open source (programmers work for free if you ask nicely)

Celebrity Endorsements: $15M (95% CI: $10.5M-$19.5M)

- Famous people saying things (humans listen to famous people)
- Scientists with credentials (humans trust credentials)
- Cultural influencers (humans who influence culture, apparently)

Operations (overhead across all categories)

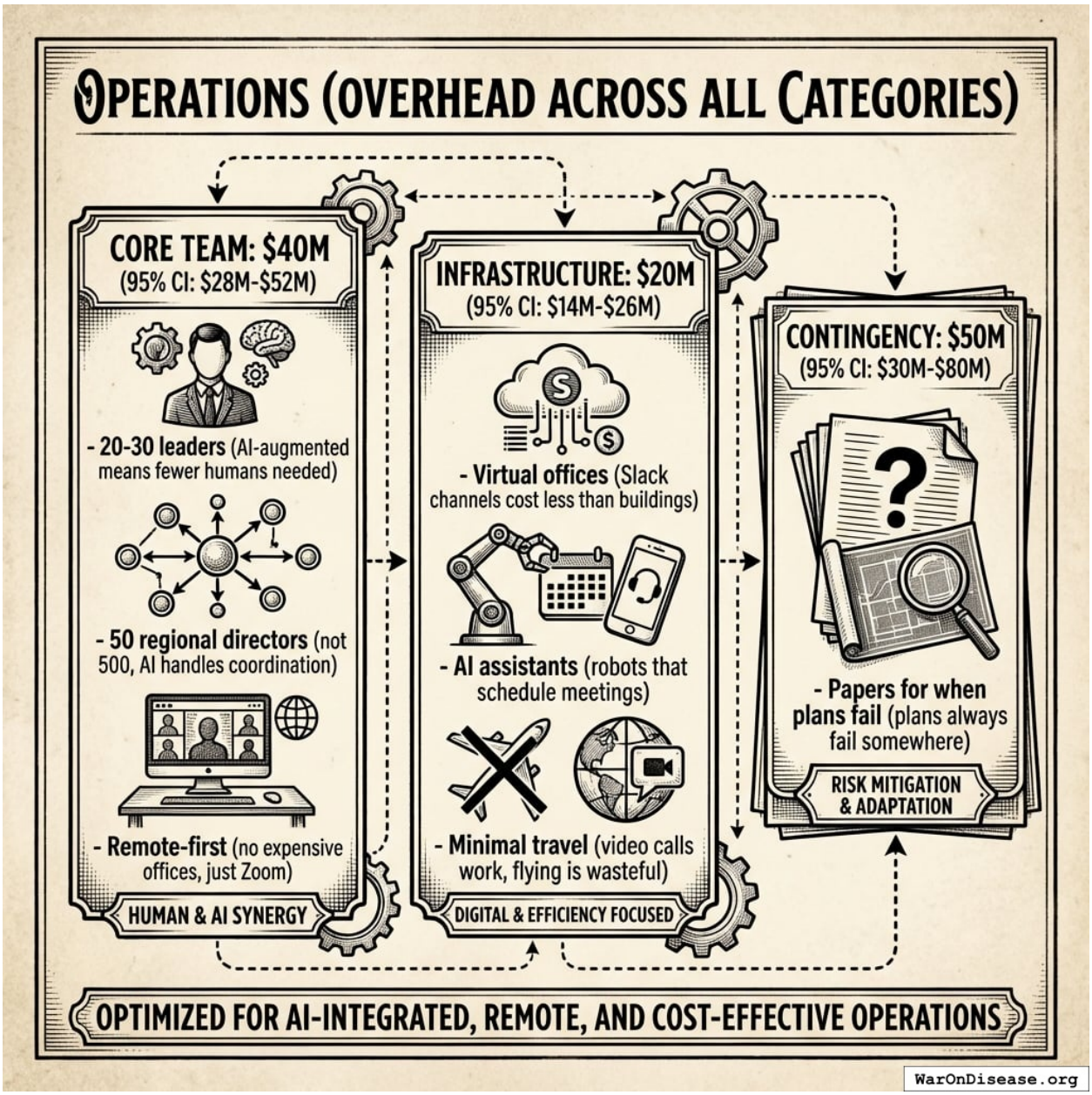


Figure 892: A comparison of operational budget allocations for Core Team, Infrastructure, and Contingency funds, showing both the baseline estimates and their respective confidence intervals.

Core Team: $40M (95% CI: $28M-$52M)

- 20-30 leaders (AI-augmented means fewer humans needed)
- 50 regional directors (not 500, AI handles coordination)
- Remote-first (no expensive offices, just Zoom)

Infrastructure: $20M (95% CI: $14M-$26M)

- Virtual offices (Slack channels cost less than buildings)
- AI assistants (robots that schedule meetings)

- Minimal travel (video calls work, flying is wasteful)

Contingency: $50M (95% CI: $30M-$80M)

Papers for when plans fail (plans always fail somewhere)

Post-Victory Transition: $100M



Figure 893: A financial breakdown of the 100M post-victory transition budget, illustrating the primary allocations for treaty implementation and scaling preparation with their respective confidence intervals.

Treaty Implementation: $40M (95% CI: $30M-$55M)

- Help countries implement what they signed (signing is easy, implementing is hard)

- Dispute resolution (countries argue, you mediate)
- Coordination (herding cats but the cats are nations)

Scaling Preparation: $30M (95% CI: $21M-$39M)

- Setup for a 1% Treaty Fund (where redirected military spending will be held and allocated)
- Scaling blueprints for your decentralized framework for drug assessment (dFDA), with instructions for going from 100K to 8B users
- Governance launch (democratic system that actually works)

Timeline

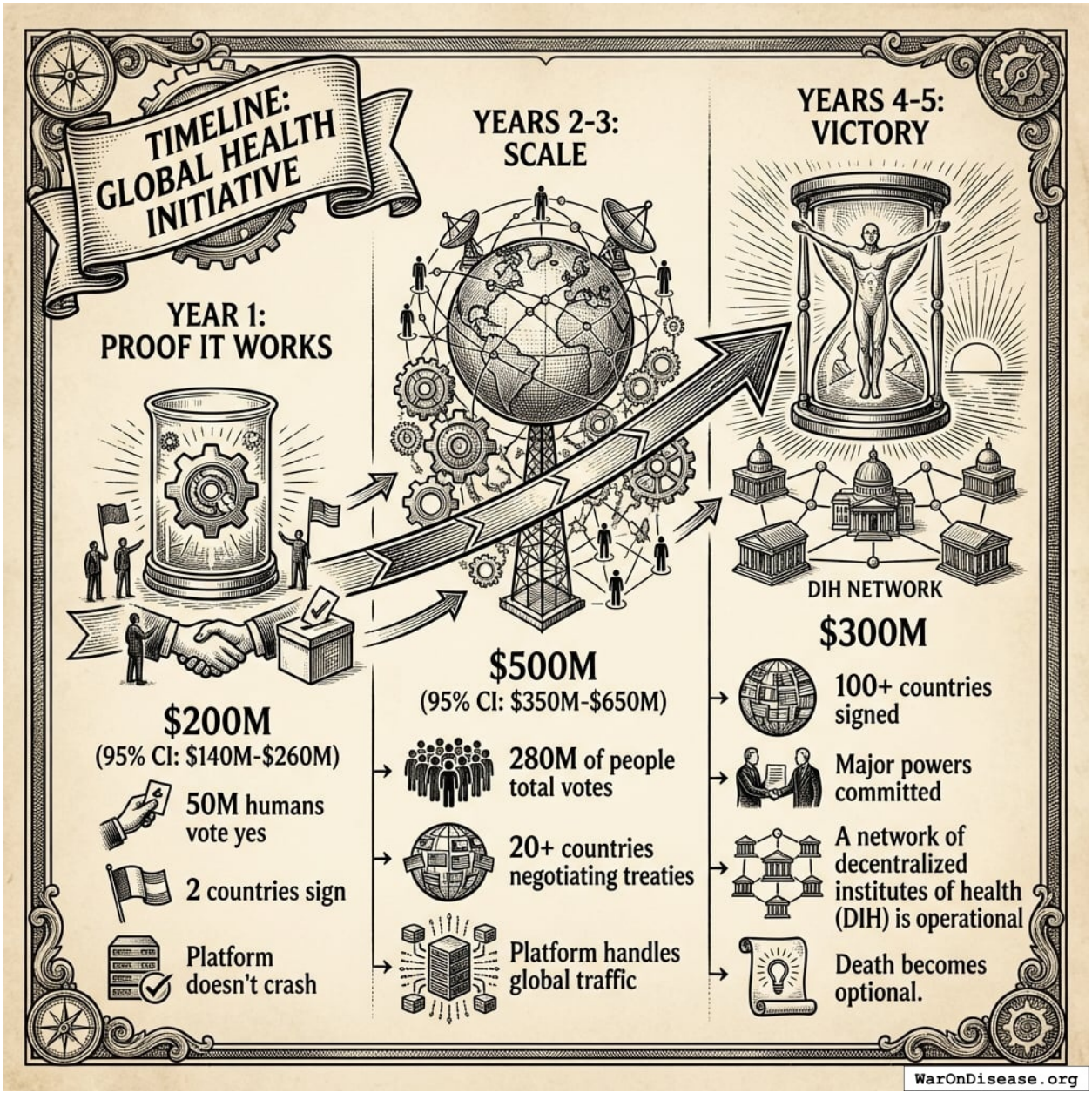


Figure 894: A five-year project timeline visualizing the rapid scaling of budget, voter participation, and treaty adoption from the proof-of-concept phase to global implementation.

Year 1 ($200M (95% CI: $140M-$260M)): Proof it works

- 50M humans vote yes
- 2 countries sign
- Platform doesn't crash

Years 2-3 ($500M (95% CI: $350M-$650M)): Scale

- 280M of people total votes
- 20+ countries negotiating treaties
- Platform handles global traffic

Years 4-5 ($300M): Victory

- 100+ countries signed
- Major powers committed
- A network of decentralized institutes of health (DIH) is operational
- Death becomes optional

Why This Works

Math:

- AI + viral mechanics = 80% cost reduction
- $0.20/vote vs $5-15 traditional advertising
- 500 humans + AI = 5,000-person traditional campaign
- $1B = $2-5B campaign effectiveness

Game Theory:

When everyone profits from cooperation, resistance becomes unprofitable:

- Defense lobbyists: 272% returns > current salary
- Insurance: Healthy people file zero claims
- Pharma: Trials generate revenue, not expenses
- Politicians: Living voters vote more than dead ones
- Public: Gets paid $0.20 to click a button

Capitalism optimizing for the right thing by accident.

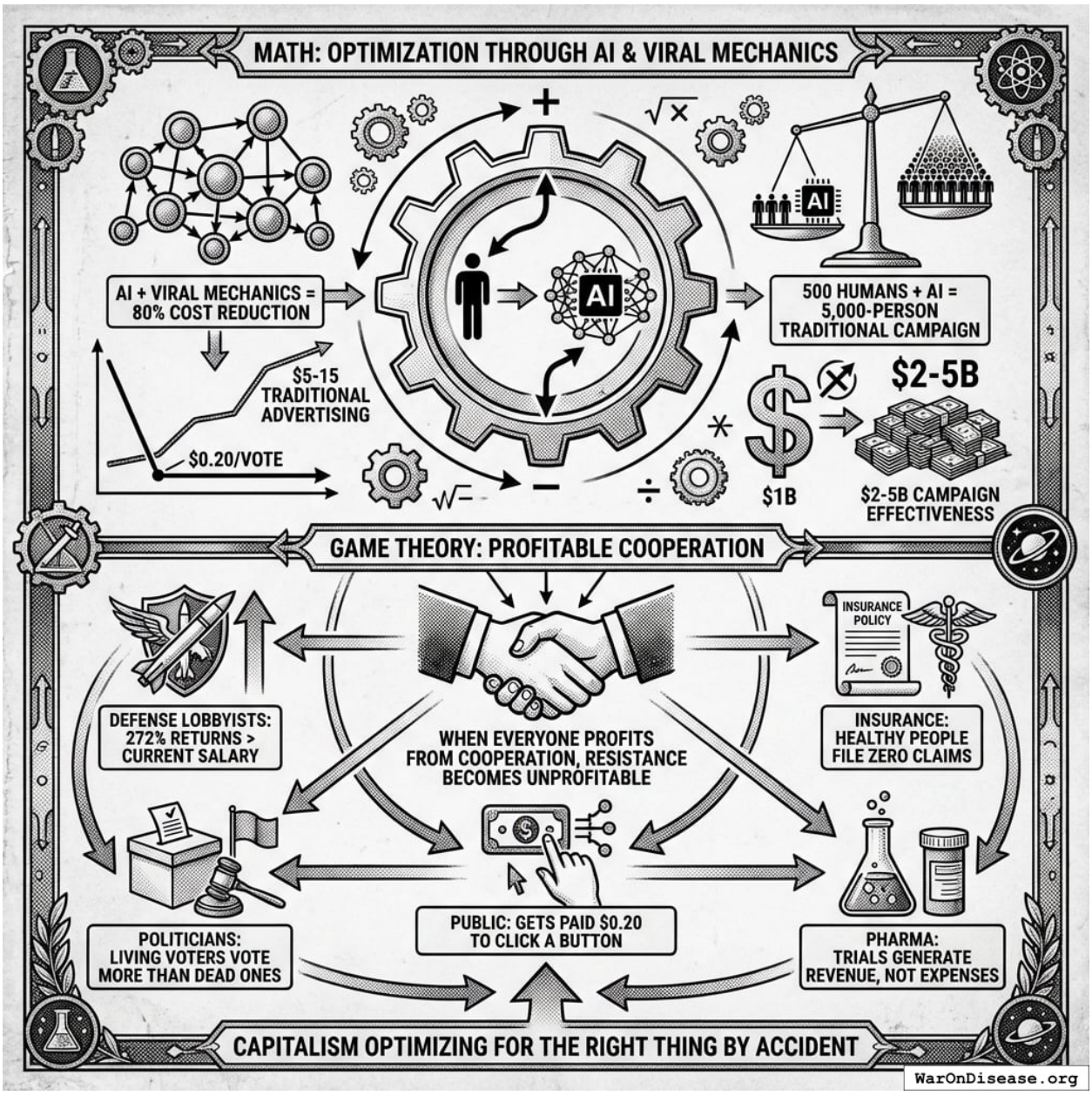


Figure 895: A comparison of AI-driven campaign ROI versus traditional advertising costs, alongside a stakeholder map showing how the incentive structure benefits lobbyists, industry, and the public.

Returns

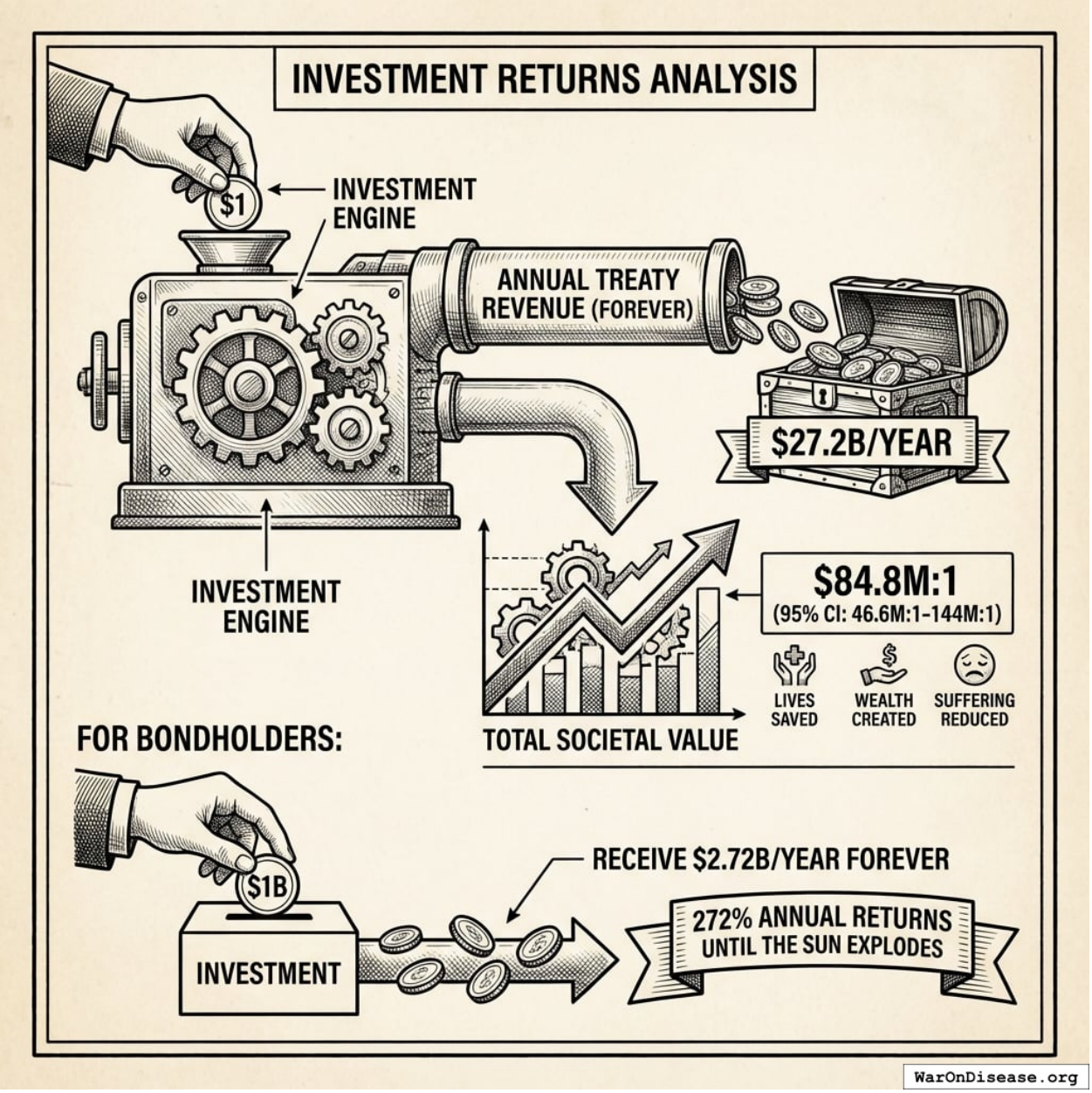


Figure 896: A visualization comparing a 1 investment against the massive scale of 27.2 billion in annual revenue and the 84.8 million-to-one societal value ratio.

Per $1 invested:

- $27.2B annual treaty revenue (forever)
- 84.8M:1 (95% CI: 46.6M:1-144M:1) total societal value (lives saved, wealth created, suffering reduced)

For bondholders:

- Invest $1B → Receive $2.72B/year forever
- 272% annual returns until the sun explodes

Transparency

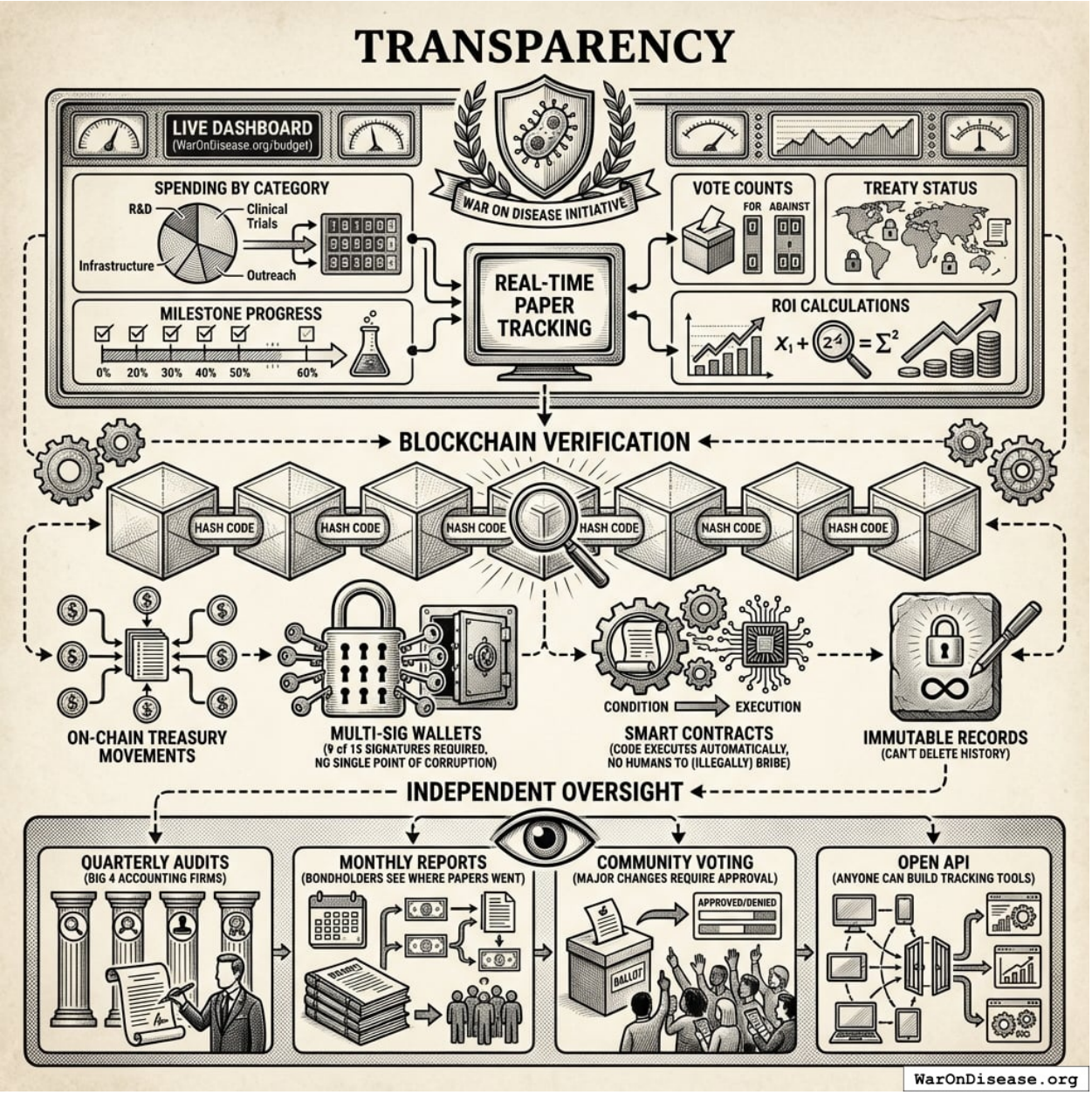


Figure 897: A transparency architecture diagram showing how blockchain data, multi-sig treasury movements, and independent audits converge into a public live dashboard for community oversight.

Live Dashboard (WarOnDisease.org/budget):

Every paper tracked in real-time:

- Spending by category
- Milestone progress
- Vote counts
- Treaty status
- ROI calculations

Blockchain Verification:

- All treasury movements on-chain (anyone can verify)
- Multi-sig wallets (9 of 15 signatures required, no single point of corruption)
- Smart contracts (code executes automatically, no humans to (illegally) bribe)
- Immutable records (can't delete history)

Independent Oversight:

- Quarterly audits (Big 4 accounting firms)
- Monthly reports (bondholders see where papers went)
- Community voting (major changes require approval)
- Open API (anyone can build tracking tools)

Adaptive Management

Budget reallocates quarterly based on what works. AI optimizes continuously. Humans approve major changes. What doesn't work gets killed. What works gets more papers.

Summary

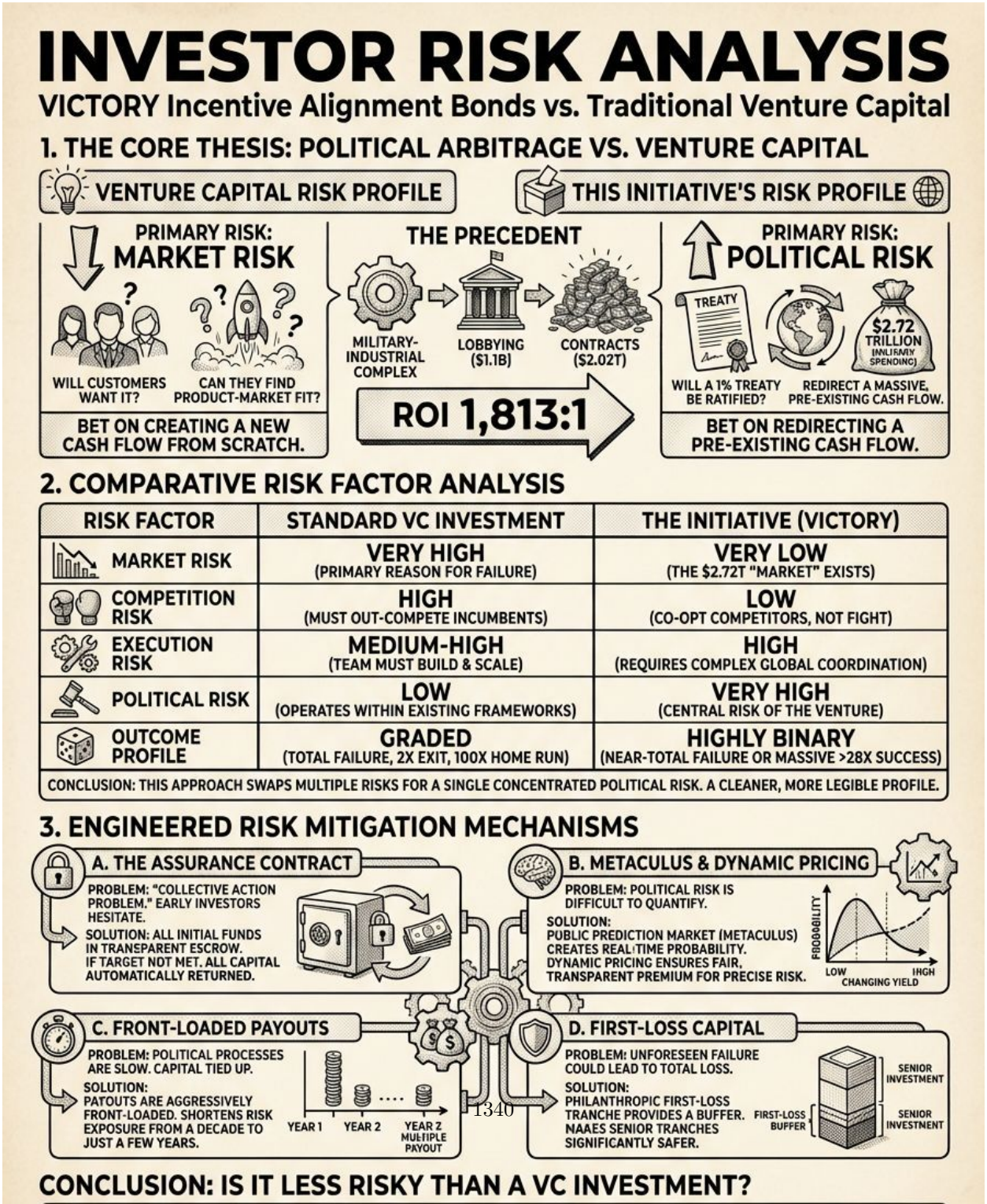
$1B redirects $27.2B annually from the explosion budget to the not-dying budget.

That's a 27:1 return just in redirected military spending.

But the real return:

- Bondholders: $2.72B/year forever (272% annually)
- Society: 84.8M:1 (95% CI: 46.6M:1-144M:1) per dollar (cures, wealth, fewer dead people)
- Humanity: Optional death by 2050

Investor Risk Analysis



A sophisticated investor must ask: "Is this venture riskier than a standard startup investment?" The answer is nuanced. The risk is not greater; it is fundamentally *different*. This document provides a full analysis of this initiative's unique risk profile and the specific mechanisms engineered to mitigate it.

1. The Core Thesis: Political Arbitrage vs. Venture Capital

The most critical distinction is the source of risk.

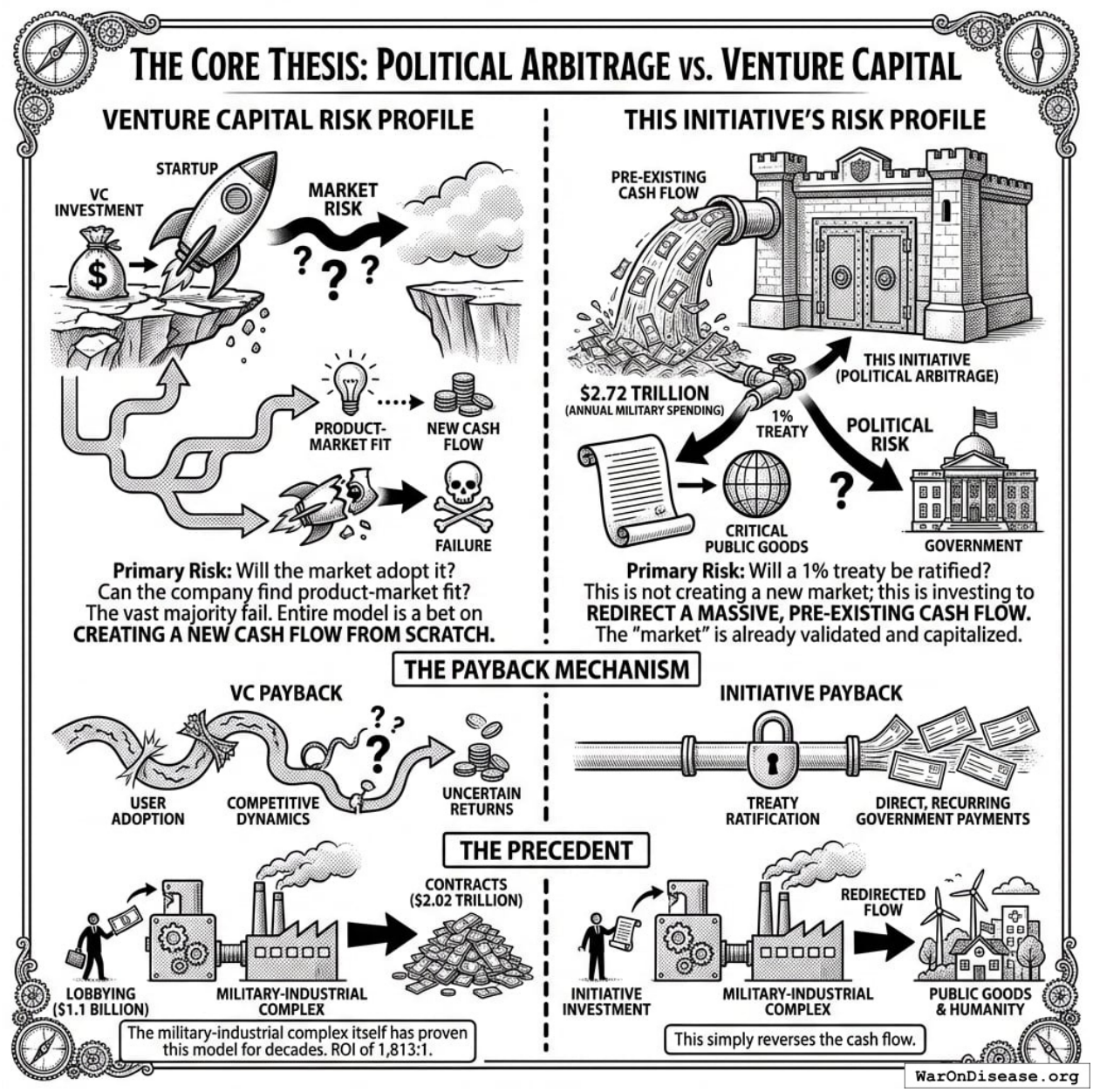


Figure 898: A comparison of Venture Capital versus Political Arbitrage models, contrasting the market risk of creating new cash flows with the political risk of redirecting existing global military expenditures.

- **Venture Capital Risk Profile:** A VC invests in a startup with the primary risk being **Market Risk**. Will customers want the product? Will the market adopt it? Can the company find product-market

fit before the money runs out? The vast majority of startups fail here. The entire model is a bet on **creating a new cash flow from scratch.**

- **This Initiative's Risk Profile:** This initiative is a political effort to realign global resources towards critical public goods. The primary risk is **Political Risk**. Will a 1% treaty be ratified? This is not trying to create a new market; this is investing to **redirect a massive, pre-existing cash flow** ($2.72 trillion in annual military spending[72]). The "market" is already validated and capitalized.
- **The Payback Mechanism:** Returns are not dependent on product-market fit, user adoption, or competitive dynamics. They are dependent on the ratification of a treaty, which unlocks direct, recurring government payments.
- **The Precedent:** The military-industrial complex itself has proven this model for decades, spending ~$1.1 billion on lobbying to secure $2.02 trillion in contracts[139], an ROI of 1,813:1. This simply reverses the cash flow.

2. Comparative Risk Factor Analysis

This table provides a direct comparison of the risk profiles.

Risk Factor	Standard VC Investment	The Initiative (VICTORY Incentive Alignment Bonds)
Market Risk	**VERY HIGH** (Primary reason for failure)	**VERY LOW** (The $2.72T "market" already exists)
Competition Risk	**HIGH** (Must out-compete incumbents and other startups)	**LOW** (Strategy is to co-opt competitors, not fight them)
Execution Risk	**MEDIUM-HIGH** (Team must build and scale a company)	**HIGH** (Requires complex global, legal, and technical coordination)
Political Risk	**LOW** (Generally operates within existing legal frameworks)	**VERY HIGH** (This is the central risk of the entire venture)
Outcome Profile	Graded (Total failure, small 2x exit, 100x home run)	Highly Binary (Near-total failure or massive >28x success)

As the table shows, this approach has effectively swapped the near-certainty of high market and competition risk for the single, concentrated risk of a political outcome. To a sophisticated investor, this is a much cleaner, more legible, and ultimately more manageable risk profile.

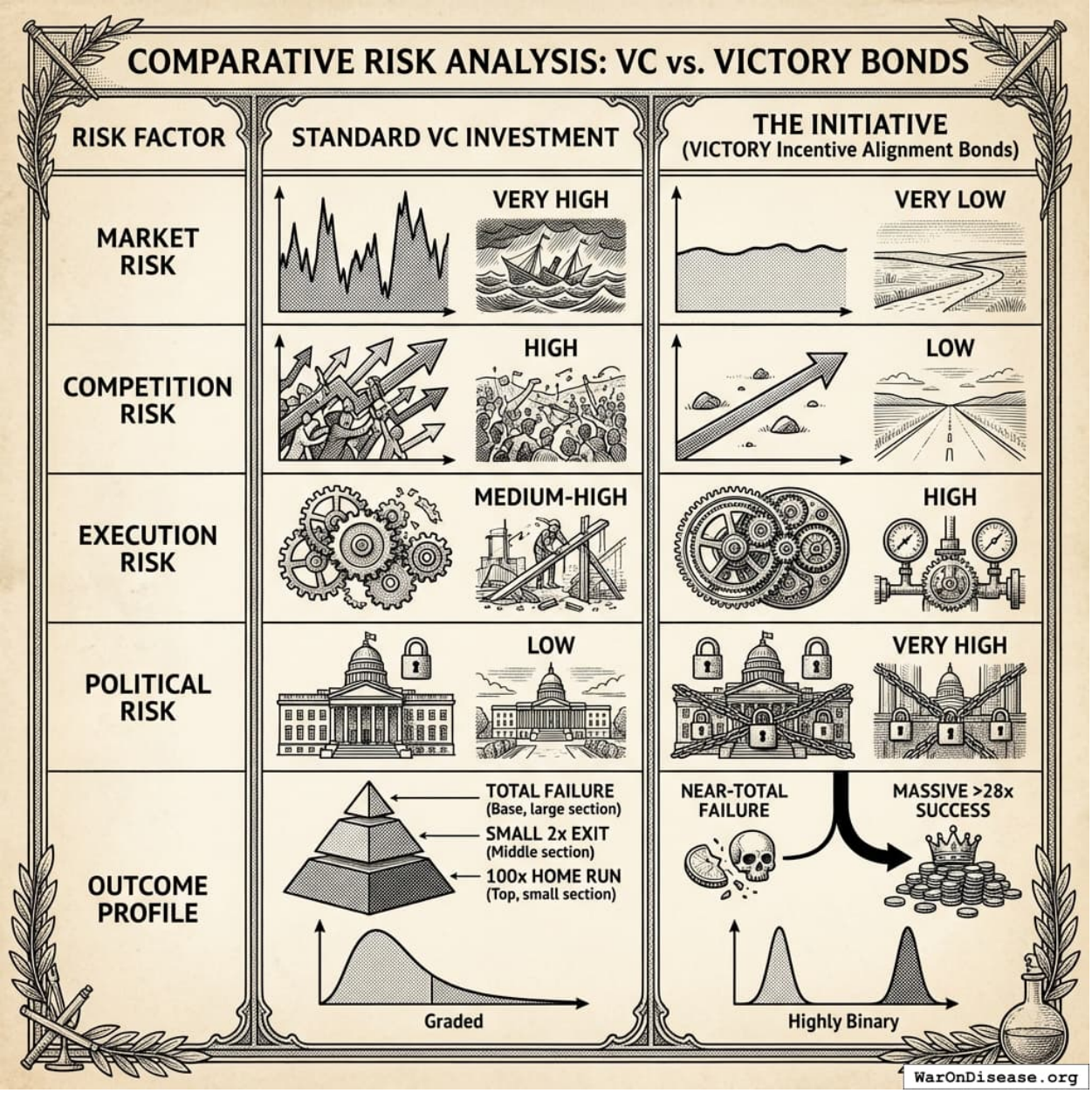


Figure 899: A radar chart or grouped bar chart visualizing the 'Risk Swap': trading high Market/Competition risk for concentrated Political risk.

3. Engineered Risk Mitigation Mechanisms

Because this risk is so specific, the system has been engineered with specific financial and strategic tools to neutralize it.

A. The Assurance Contract (Mitigates Fundraising Risk)

- **The Problem:** The "collective action problem." Early investors may hesitate, fearing the project won't attract enough total capital to succeed.
- **The Solution:** All initial funds are held in a transparent smart contract escrow. If the fundraising

target is not met by a specific deadline, **all capital is automatically returned to investors.** This completely eliminates the risk of investing in a poorly capitalized, doomed-from-the-start effort.

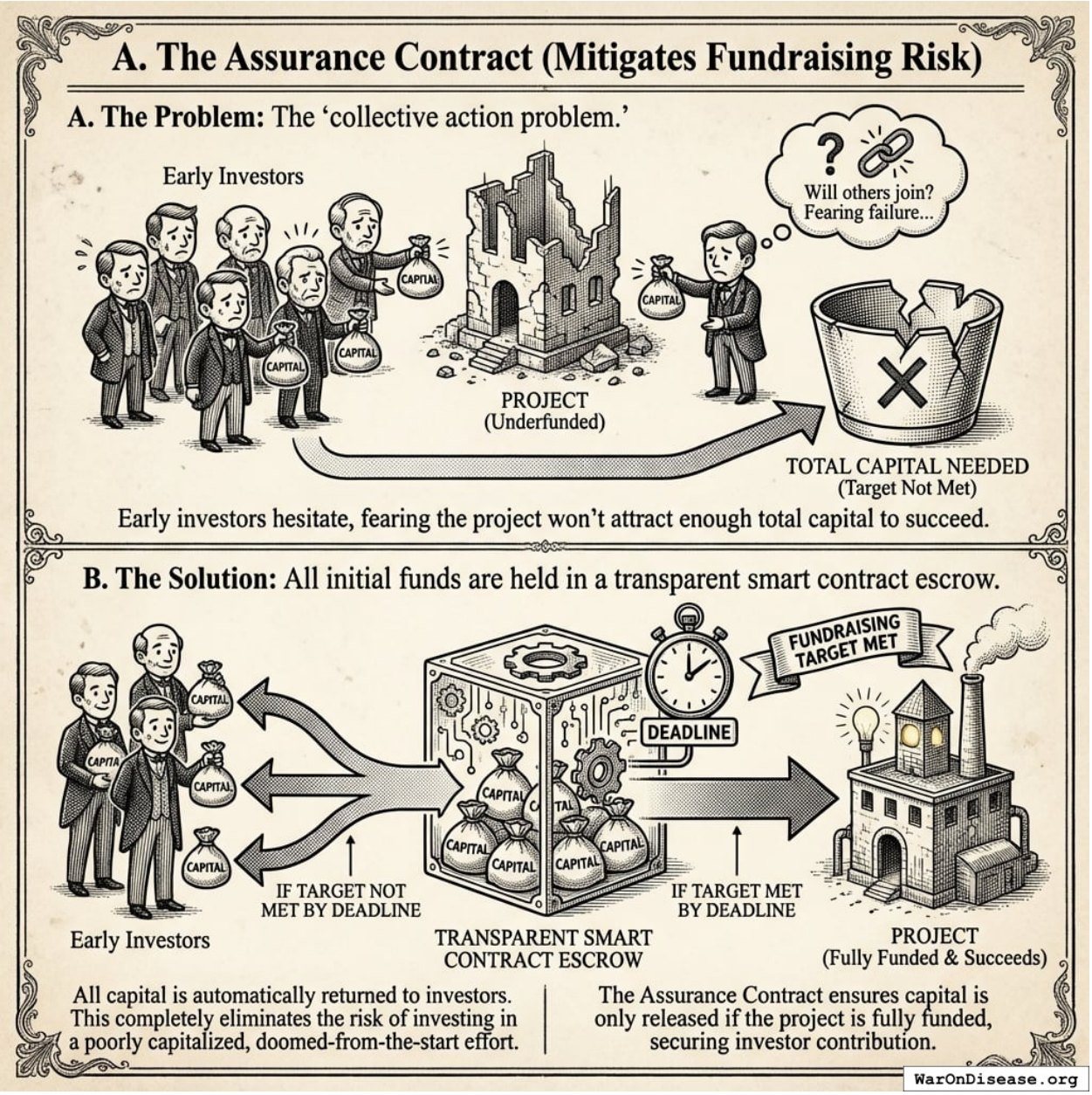


Figure 900: A flowchart showing the logic of an assurance contract: investors deposit funds into escrow, leading to either a project payout if the goal is met or an automatic refund if the deadline passes without reaching the target.

B. Metaculus & Dynamic Pricing (Mitigates Political Risk)

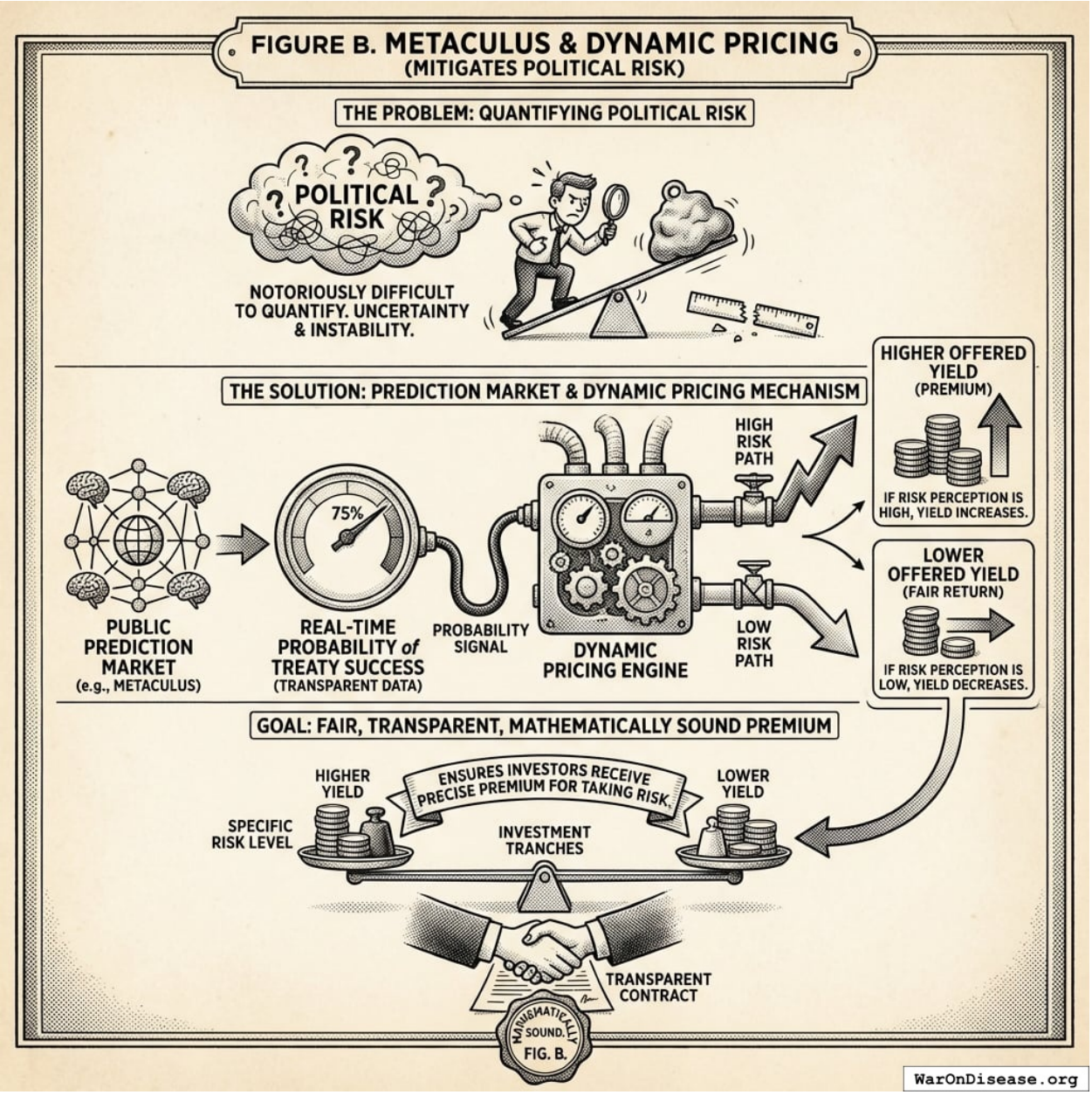


Figure 901: A flowchart showing how real-time probability data from a prediction market like Metaculus dynamically adjusts investment yields based on political risk levels.

- **The Problem:** Political risk is notoriously difficult to quantify.
- **The Solution:** The system uses a public prediction market (like Metaculus) to create a real-time, transparent probability of the treaty's success. This data dynamically prices the returns on investment tranches. If the market-perceived risk is high, the offered yield will be higher; if it is low, the yield will be lower. This ensures investors are always being offered a **fair, transparent, and mathematically sound premium for the precise level of political risk they are taking.**

C. Front-Loaded Payouts (Mitigates Timeline Risk)

- **The Problem:** Political processes can be slow, and investors' capital could be tied up for years before a return is seen.
- **The Solution:** As detailed in the Cash Flow Model, payouts are aggressively front-loaded. In the first year of treaty inflows, the model is designed to pay out a multiple of the initial investment (e.g., 2.6x in the partial success scenario). This dramatically shortens the time an investor's capital is exposed to risk, from a decade down to just a few years.

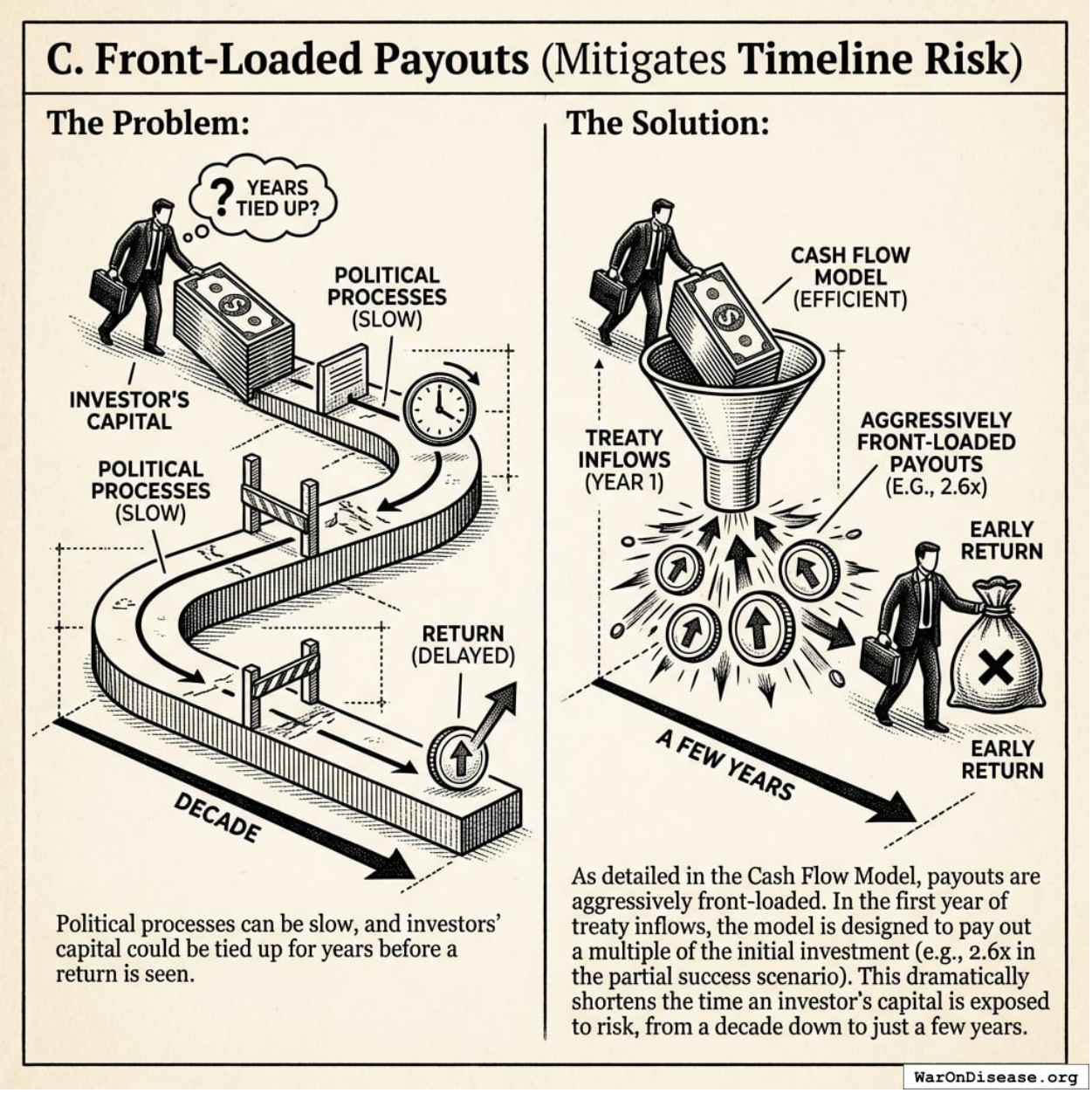


Figure 902: A comparison between standard payout timelines and front-loaded payouts, showing how early capital returns reduce the duration of risk exposure from a decade to a few years.

D. First-Loss Capital (Mitigates Financial Risk)

- **The Problem:** In the event of an unforeseen failure, investors could lose their entire principal.
- **The Solution:** The capital stack is structured to include a first-loss tranche funded by philanthropic sources and guarantees. This capital provides a buffer that absorbs initial losses, making the senior investment tranches significantly safer and more attractive to institutional capital.

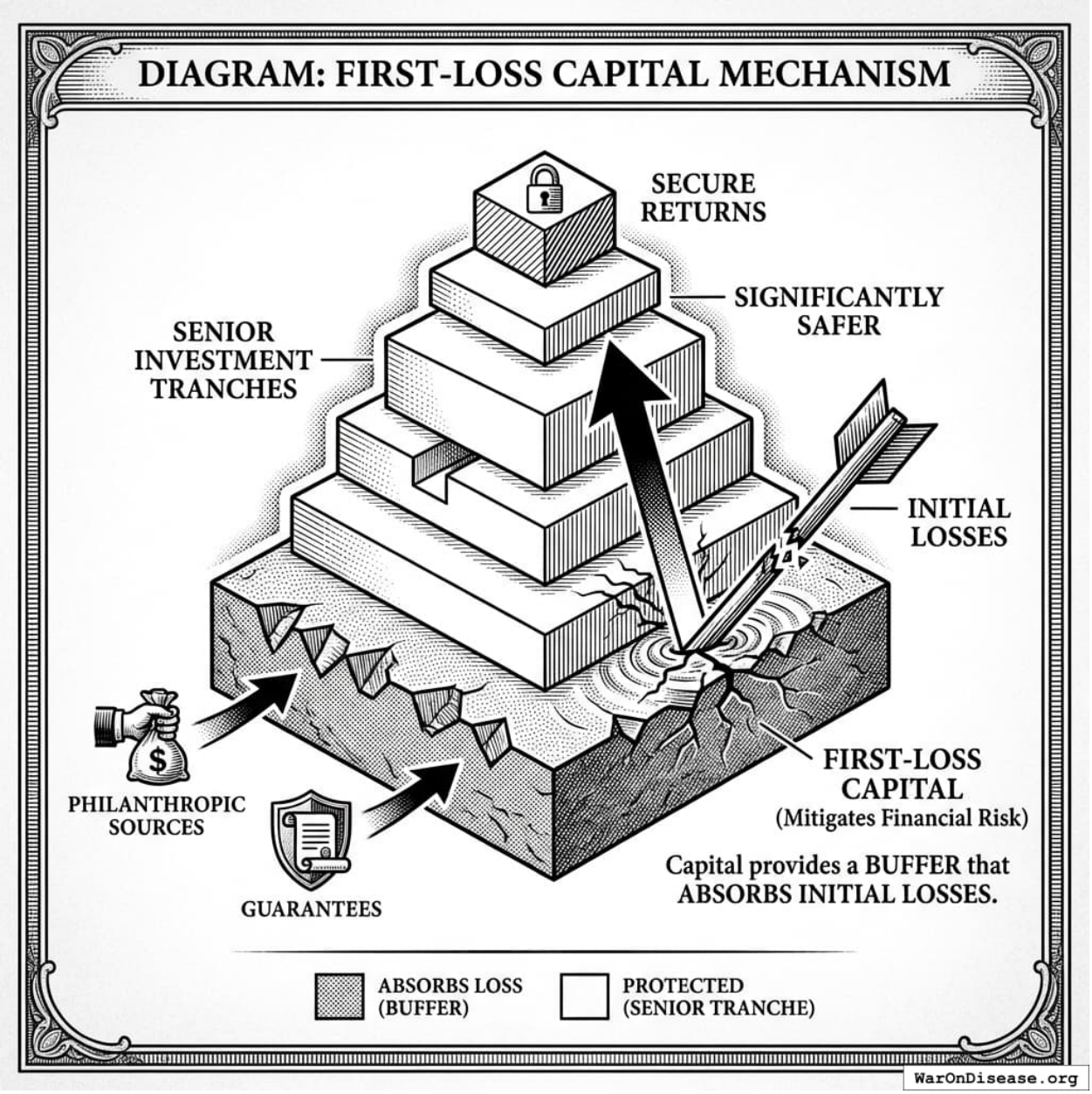


Figure 903: A 'Capital Stack' waterfall diagram illustrating how the first-loss tranche insulates senior investors from initial downside risk.

Conclusion: Is It Less Risky Than a VC Investment?

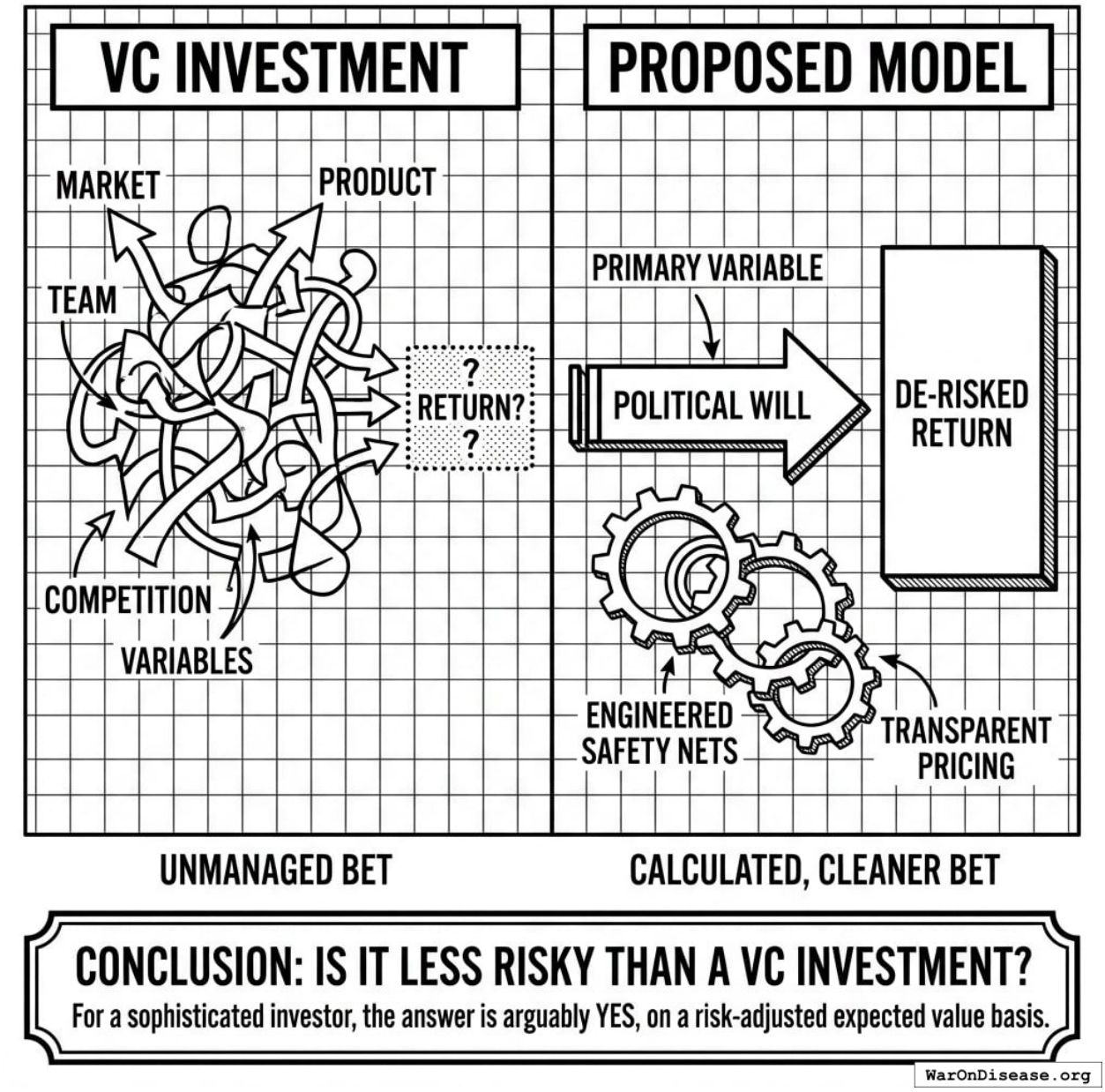
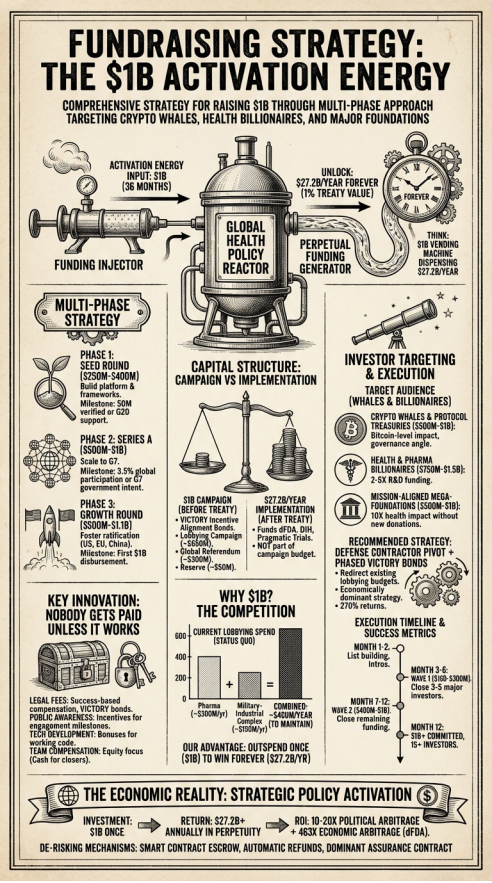


Figure 904: A side-by-side comparison of risk structures, contrasting the multiple variables of a traditional venture capital portfolio against a streamlined model focused on political will and engineered safety nets.

For a sophisticated investor, the answer is arguably **yes, on a risk-adjusted expected value basis.**

A typical VC portfolio is an unmanaged bet on a chaotic sea of variables (market, team, product, competition). This model presents a single, highly-leveraged, and calculated bet on a primary variable (political will), with multiple, explicitly engineered safety nets and transparent pricing. It is a cleaner bet with a clearer path to a massive, de-risked return.

Fundraising Strategy



Related: Financial Plan Overview | Campaign Budget

Fundraising Strategy: The $1B Activation Energy

On How to Raise $1B to Unlock $27.2B/Year Forever

The capital required for a 1% treaty is not for ongoing operations. It's "activation energy", the one-time push to overcome political inertia and unlock **$27.2B annually** for global health.[1]

Think of it as a $1B vending machine that dispenses $27.2B per year. Forever.

[1] Value captured by 1% treaty[337]

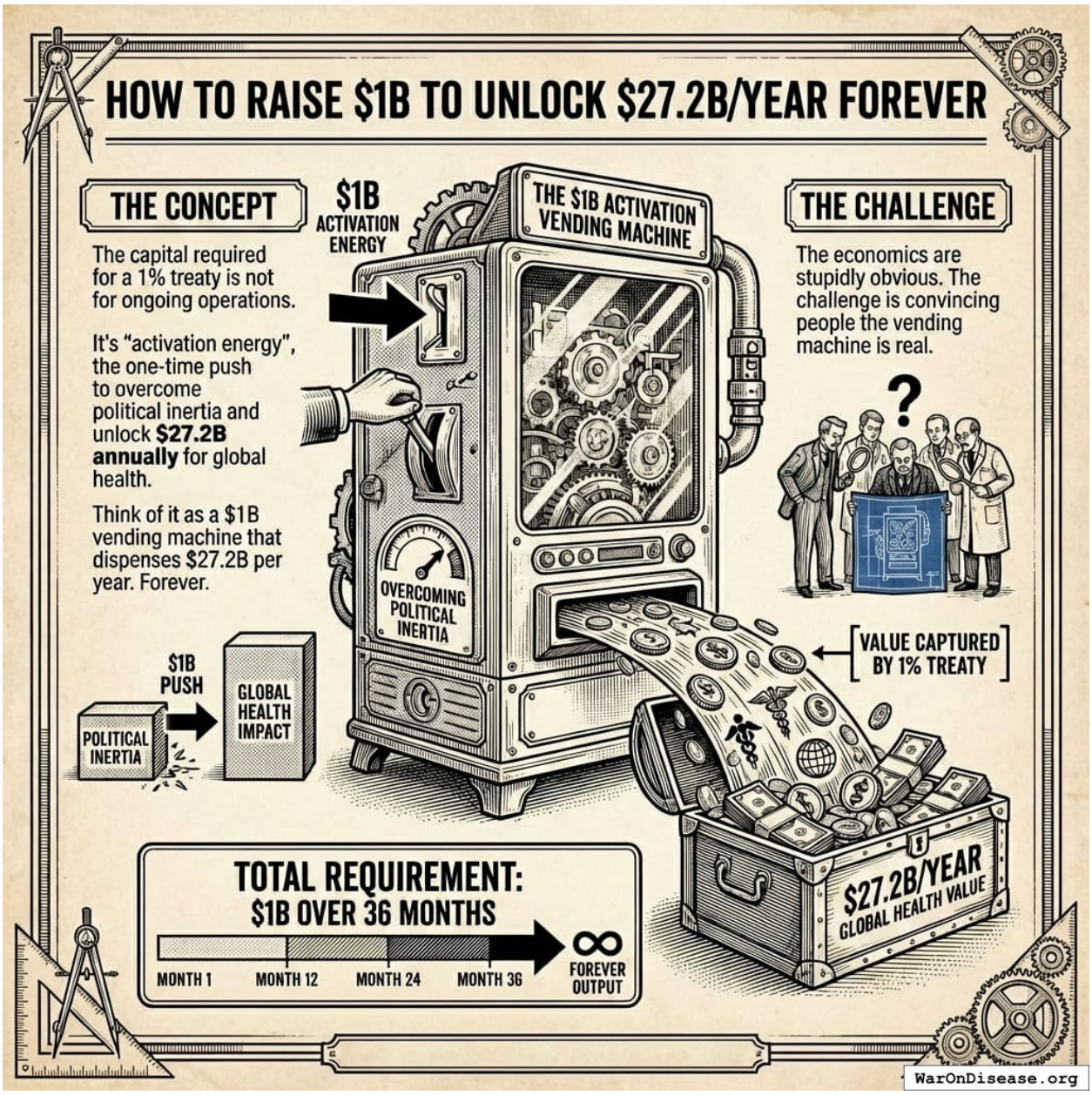


Figure 905: A visual contrast between the one-time 1B 'activation energy' investment and the resulting 27.2B recurring annual yield for global health.

The economics are stupidly obvious. The challenge is convincing people the vending machine is real.

Total Requirement: $1B over 36 months

Multi-Phase Strategy

Phase 1: Seed Round ($250M - $400M)



Figure 906: A visual overview of Phase 1 objectives, illustrating the workflow from seed funding to public engagement, pilot programs, and the final participation milestones.

- Build public engagement platform and policy frameworks for a potential referendum
- Prove model in pilot countries
- **Milestone:** 50M verified participants OR demonstrated public support for the treaty in a G20 nation

Phase 2: Series A ($500M - $1B)

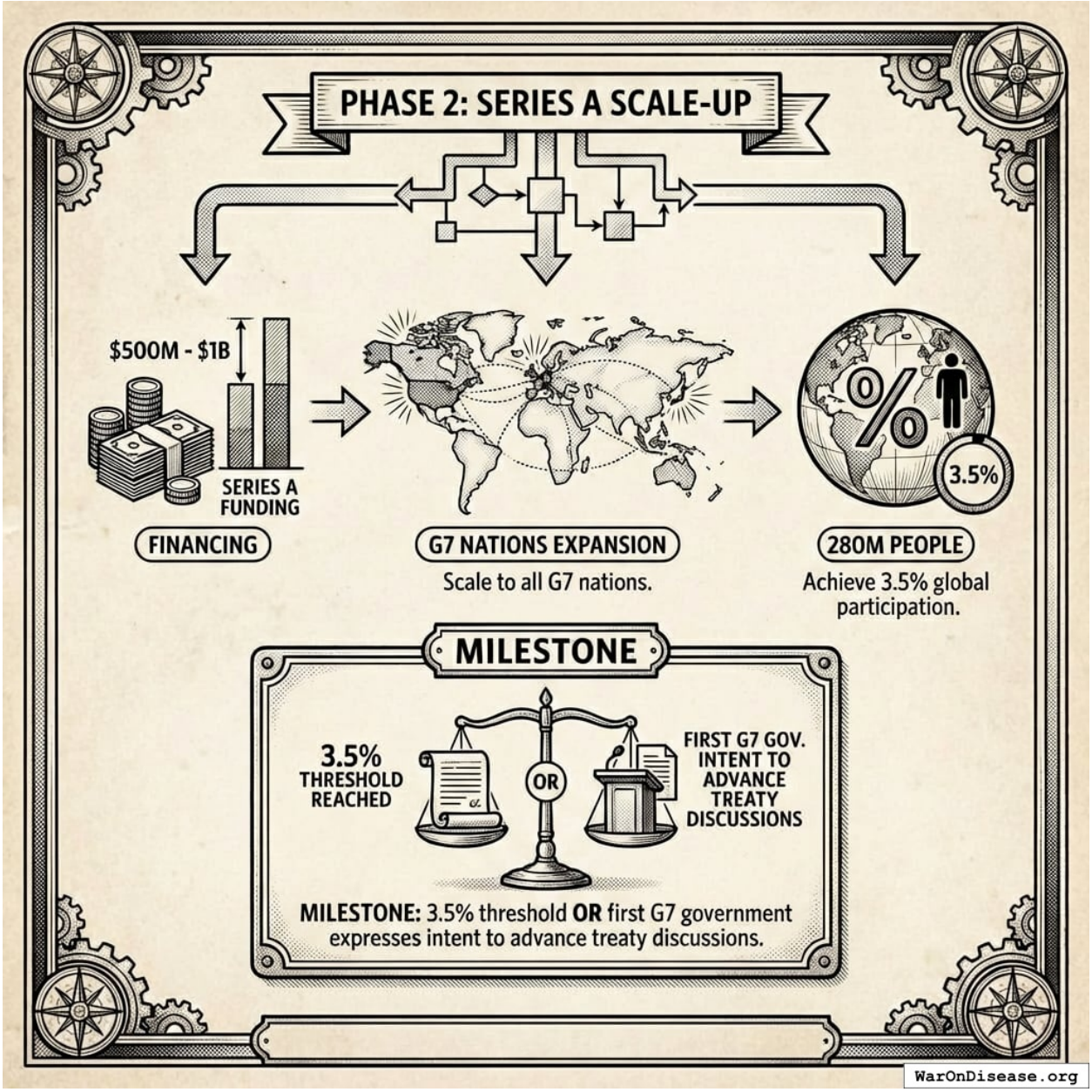


Figure 907: A strategic overview of Phase 2 showing the funding range, G7 expansion, and the 280 million person participation goal.

- Scale to all G7 nations
- Achieve 3.5% global participation (280M people)
- **Milestone:** 3.5% threshold OR first G7 government expresses intent to advance treaty discussions

Phase 3: Growth Round ($500M - $1.1B)

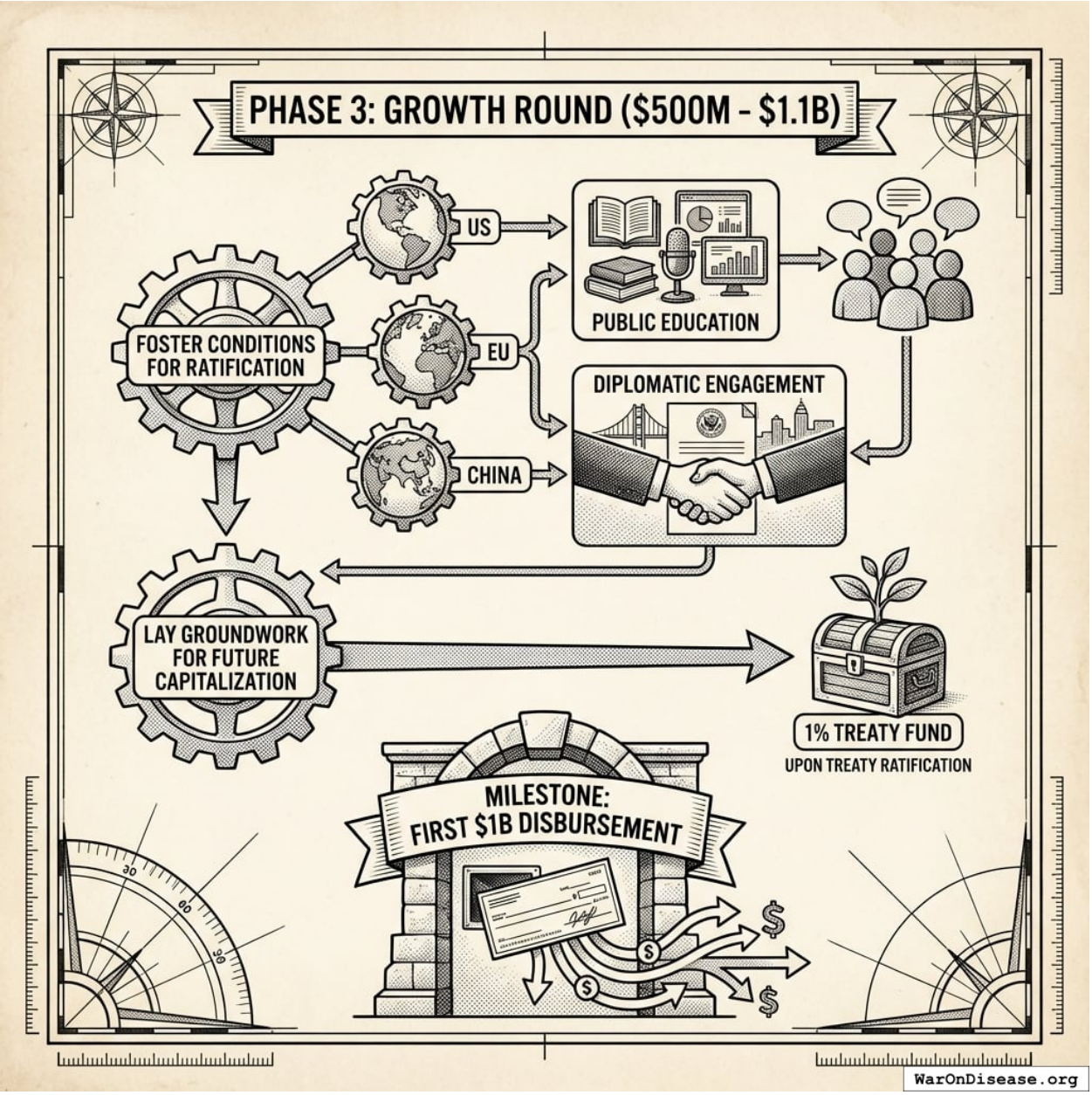


Figure 908: A strategic flow diagram illustrating the progression from diplomatic engagement and public education in major powers to treaty ratification and the inaugural 1 billion disbursement.

- Foster conditions for ratification in major powers (US, EU, China) through public education and diplomatic engagement
- Lay the groundwork for the future capitalization of your 1% Treaty Fund upon treaty ratification
- **Milestone:** First $1B disbursement

Key Innovation: Nobody Gets Paid Unless It Works

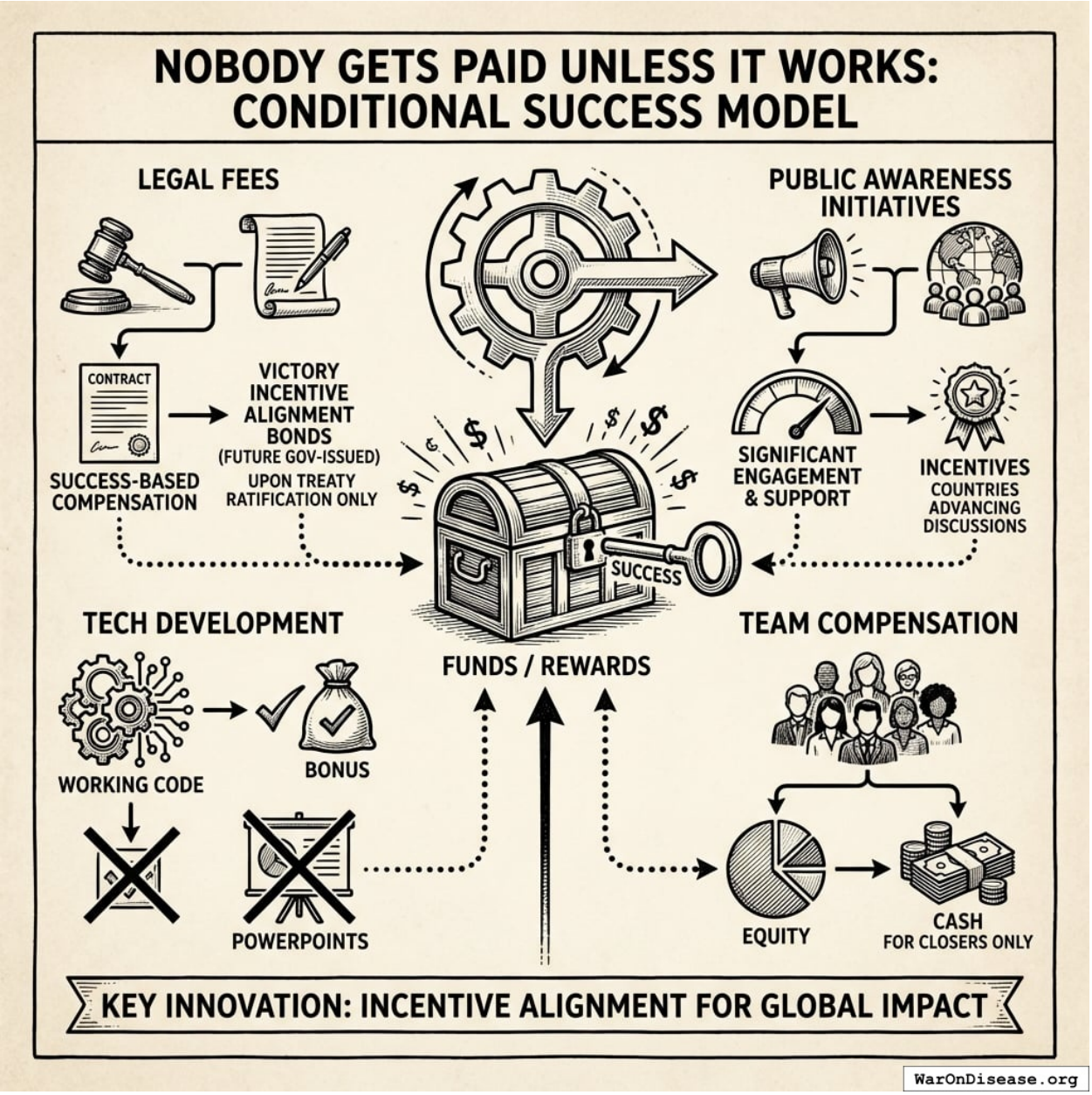


Figure 909: A visualization of the success-based compensation model showing how legal, tech, public awareness, and internal teams are aligned through outcome-dependent rewards.

All major costs are structured so people only get paid if they succeed:

- **Legal fees:** Lawyers are incentivized by success-based compensation, which may include future government-issued VICTORY Incentive Alignment Bonds upon treaty ratification
- **Public awareness initiatives:** Incentives for organizations achieving significant public engagement and support in countries advancing treaty discussions
- **Tech development:** Bonuses for working code, not PowerPoints
- **Team compensation:** Mostly equity because cash is for closers

Capital Structure: Campaign vs Implementation

Campaign cost (before treaty passes): ~$1B in VICTORY Incentive Alignment Bonds

Implementation (after treaty passes): $27.2B/year funds your dFDA, DIH infrastructure, pragmatic clinical trials, and other global health initiatives.

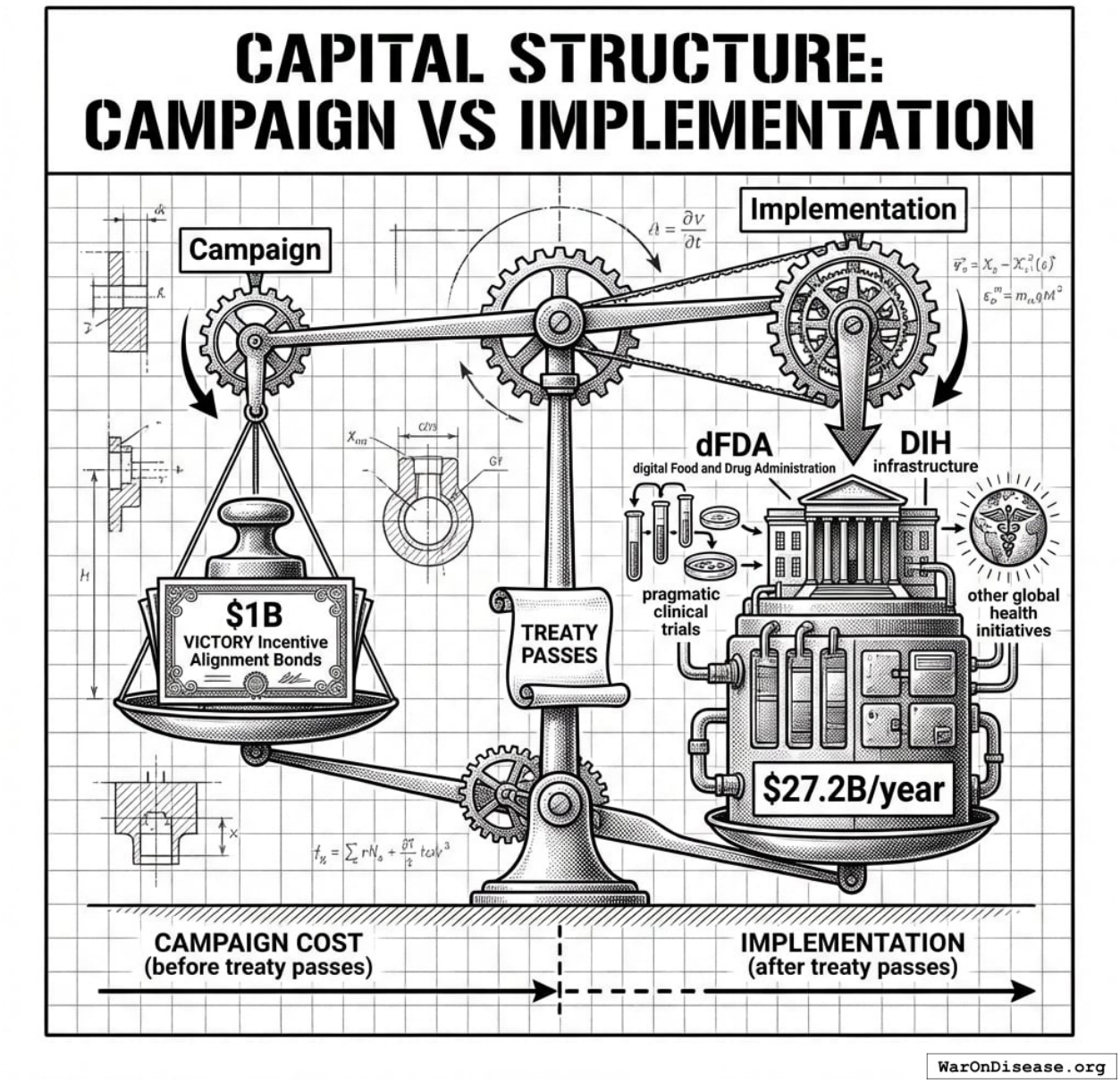


Figure 910: A comparison of the financial scale and operational focus between the pre-treaty campaign phase (1B) and the post-treaty implementation phase (27.2B/year).

Why $1B?

The campaign ($1B) is NOT building your dFDA - it's getting people to vote for the treaty and lobbying governments to sign it. Your dFDA gets built AFTER the treaty passes using the $27.2B/year revenue.

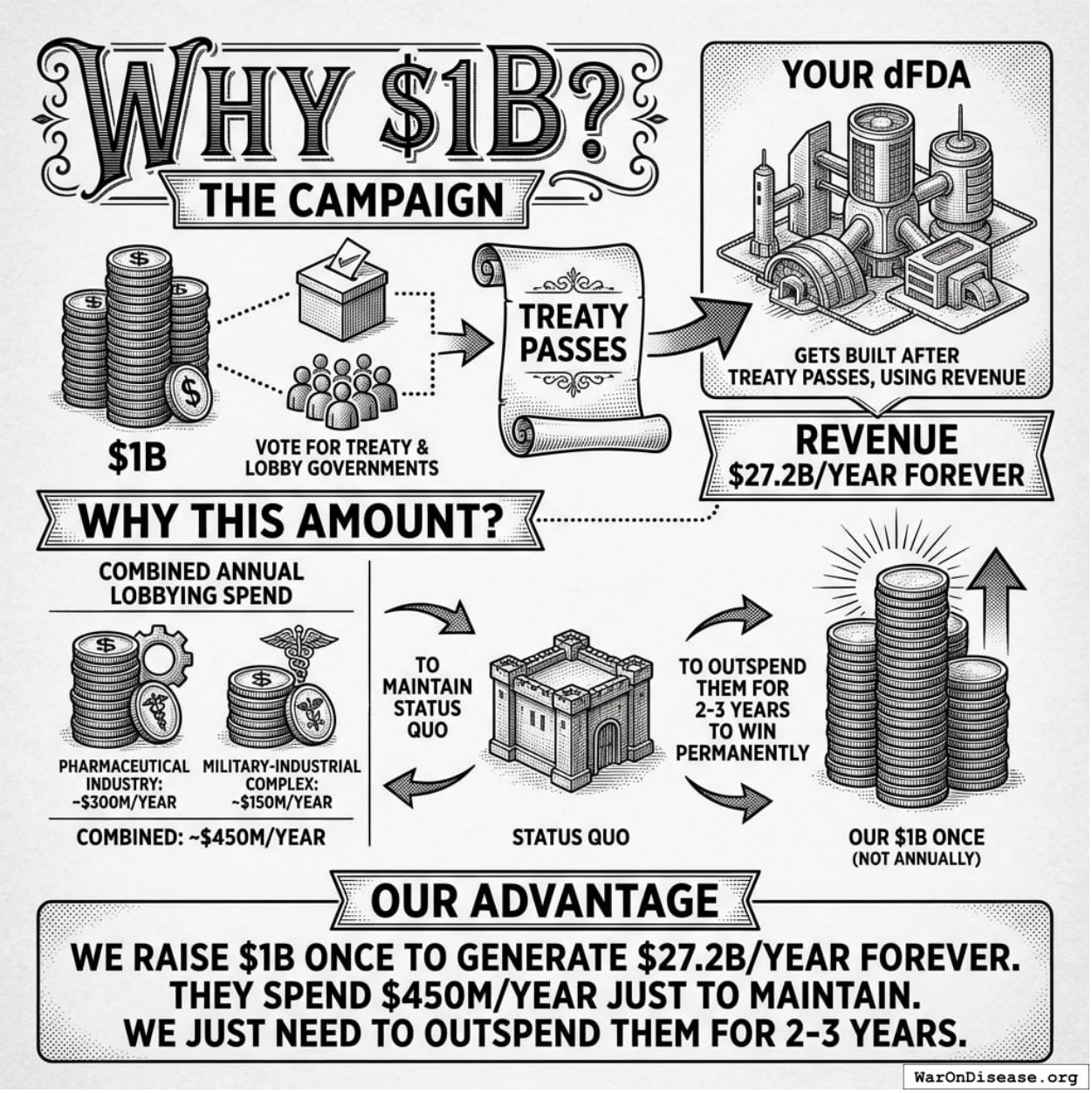


Figure 911: A comparison showing the one-time 1 billion campaign budget versus the annual lobbying spends of the pharmaceutical and military industries, highlighting the massive return on investment from a permanent 27.2 billion annual revenue stream.

Why this amount? To significantly exceed combined annual lobbying spend of:

- **Pharmaceutical industry**: ~$300M/year
- **Military-industrial complex**: ~$150M/year
- **Combined**: ~$450M/year

Our advantage: We're raising $1B ONCE (not annually) to pass a treaty that generates $27.2B/year FOREVER. They spend $450M/year to maintain the status quo. We just need to outspend them for 2-3 years to win permanently.

Campaign Budget Breakdown

Total: ~**$1B** (all VICTORY Incentive Alignment Bonds)

Lobbying Campaign (~$650M) - Outspend pharma + MIC combined:

- Direct lobbying: US/EU/G20 governments ($350M - exceeds pharma's $300M)
- Super PAC campaigns ($150M)
- Opposition research ($80M)
- Staff and operations ($50M)
- Legal/compliance (lobbying rules) ($20M)

Global Referendum (~$250M) - Get 208M people to vote for the treaty:

- Advertising and media ($120M)
- Social sharing and viral growth ($80M)
- Partnerships with patient advocacy groups ($60M)
- Staff and operations ($30M)
- Legal/compliance (campaign finance) ($10M)

Reserve (~$100M) - Contingency buffer

Why VICTORY Incentive Alignment Bonds (Not Donations)?

Legal freedom: VICTORY Incentive Alignment Bonds can fund political lobbying without IRS 501(c)(3) restrictions. We can run Super PACs, fund opposition research, and outspend pharma/defense lobbies.

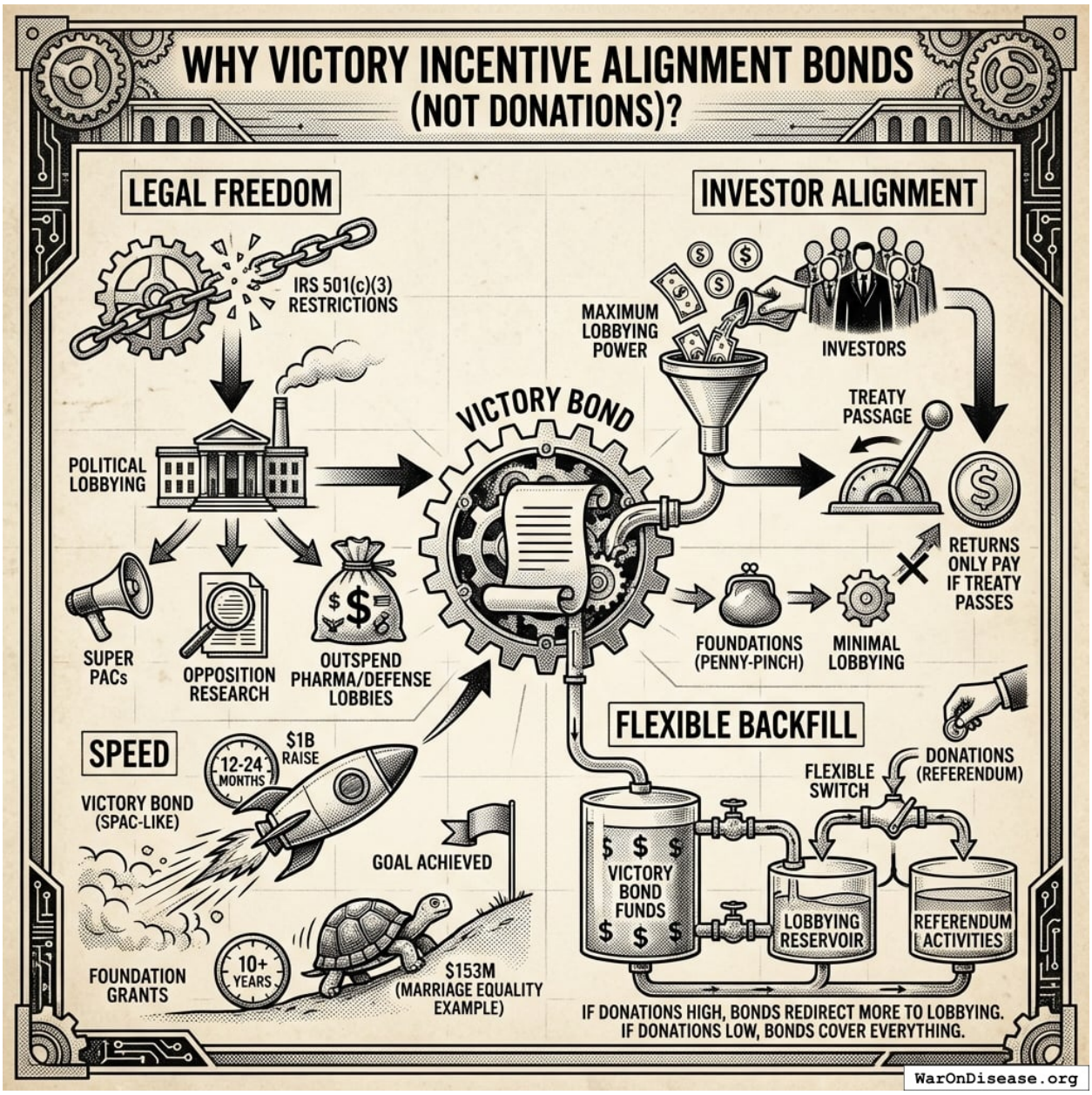


Figure 912: A side-by-side comparison of VICTORY Incentive Alignment Bonds versus traditional donations, highlighting differences in legal flexibility, funding speed, and investor incentives.

Investor alignment: Returns only pay if treaty passes - investors are incentivized to fund maximum lobbying power (not penny-pinch like foundations).

Speed: Can raise $1B in 12-24 months (like SPACs) vs. 10+ years for foundation grants (marriage equality took 11 years to raise $153M).

Flexible backfill: If we DO get donations for referendum activities, bonds can redirect more to lobbying. If donations are low, bonds cover everything.

Why This Works

For VICTORY investors:

- Outspend the opposition by 2x ($1B vs $450M/year × 2 years = $900M)
- 272% annual returns FOREVER if treaty passes
- Legal freedom to lobby and run Super PACs
- All-or-nothing bet with massive upside

The math:

- Their side: $450M/year × 2 years = $900M (to maintain status quo)
- Our side: $1B once (to pass treaty) → $27.2B/year forever
- We win by outspending them $1B vs $900M over the campaign period

Post-Treaty Implementation ($27.2B/year)

Once the treaty passes, the $27.2B/year revenue stream funds:

- Your decentralized framework for drug assessment development and operation
- Infrastructure for your 1% Treaty Fund and decentralized institutes of health
- Global clinical trial automation
- Pragmatic clinical trials and other public health initiatives

This is NOT part of the $1B campaign budget. The campaign is just: get votes + pass treaty.

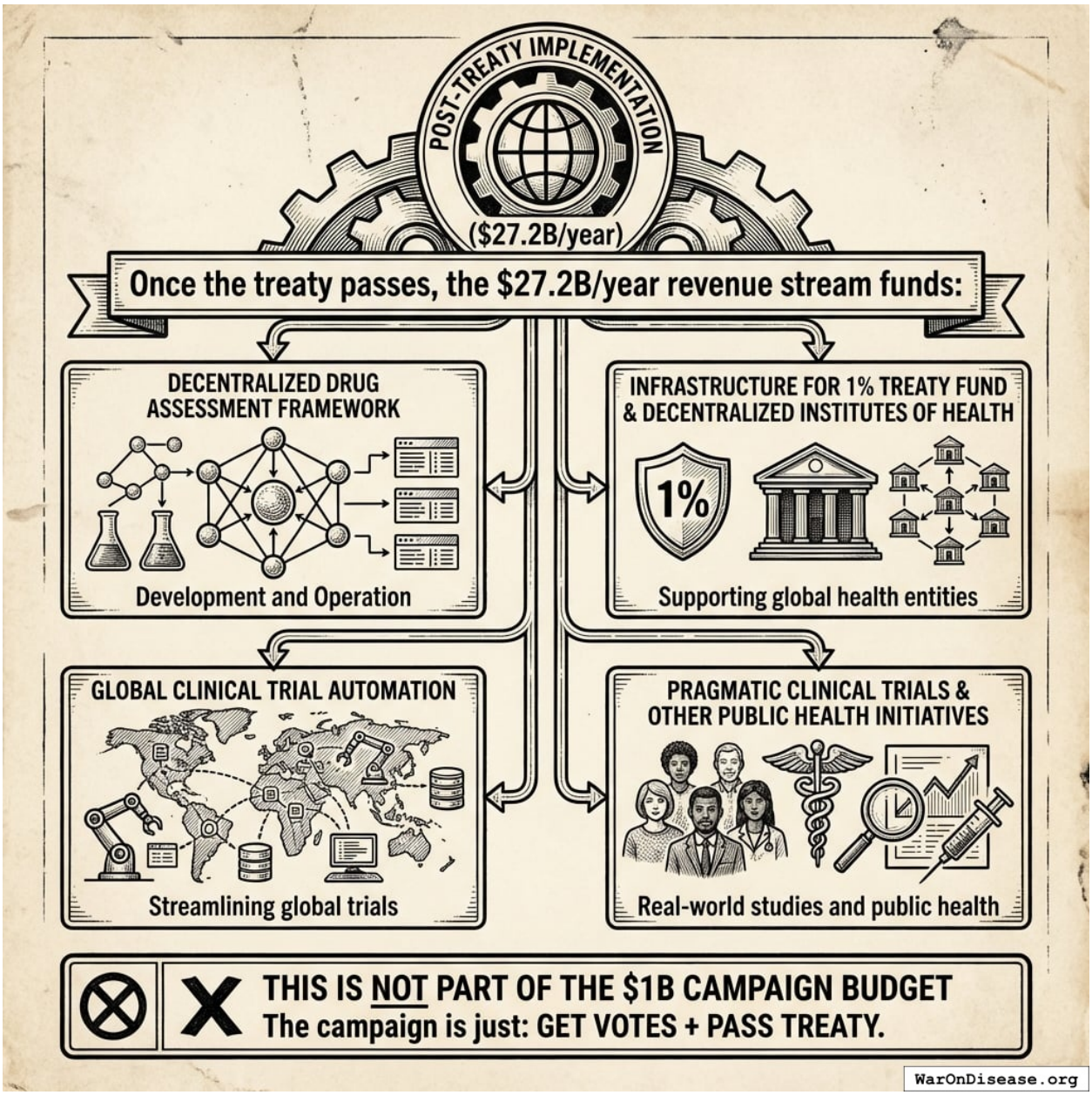


Figure 913: A visualization of the 27.2B annual revenue distribution across the four key pillars of the post-treaty health infrastructure, distinct from the initial campaign budget.

Legal Structure: Two Separate Entities

Entity 1: Nonprofit Foundation (501c3)

- Name: "Global Health Treaty Initiative" or similar
- Mission: Educate public about benefits of redirecting 1% of military budgets to health
- Activities: Voter education, nonpartisan research, civic engagement platform
- Funding: Foundation grants, individual donations
- Budget: ~$160M (referendum education and civic engagement)
- Tax status: Tax-deductible donations

Entity 2: For-Profit Political Campaign

- Name: "VICTORY Treaty Campaign" or similar
- Mission: Pass a 1% treaty through political lobbying
- Activities: Direct lobbying, Super PAC campaigns, political advertising
- Funding: VICTORY Social Impact Bond sales
- Budget: ~$610M (lobbying + referendum backfill + reserve)
- Returns: 287% annual if successful

Coordination: Shared board members, information sharing agreements, but legally separate for compliance.

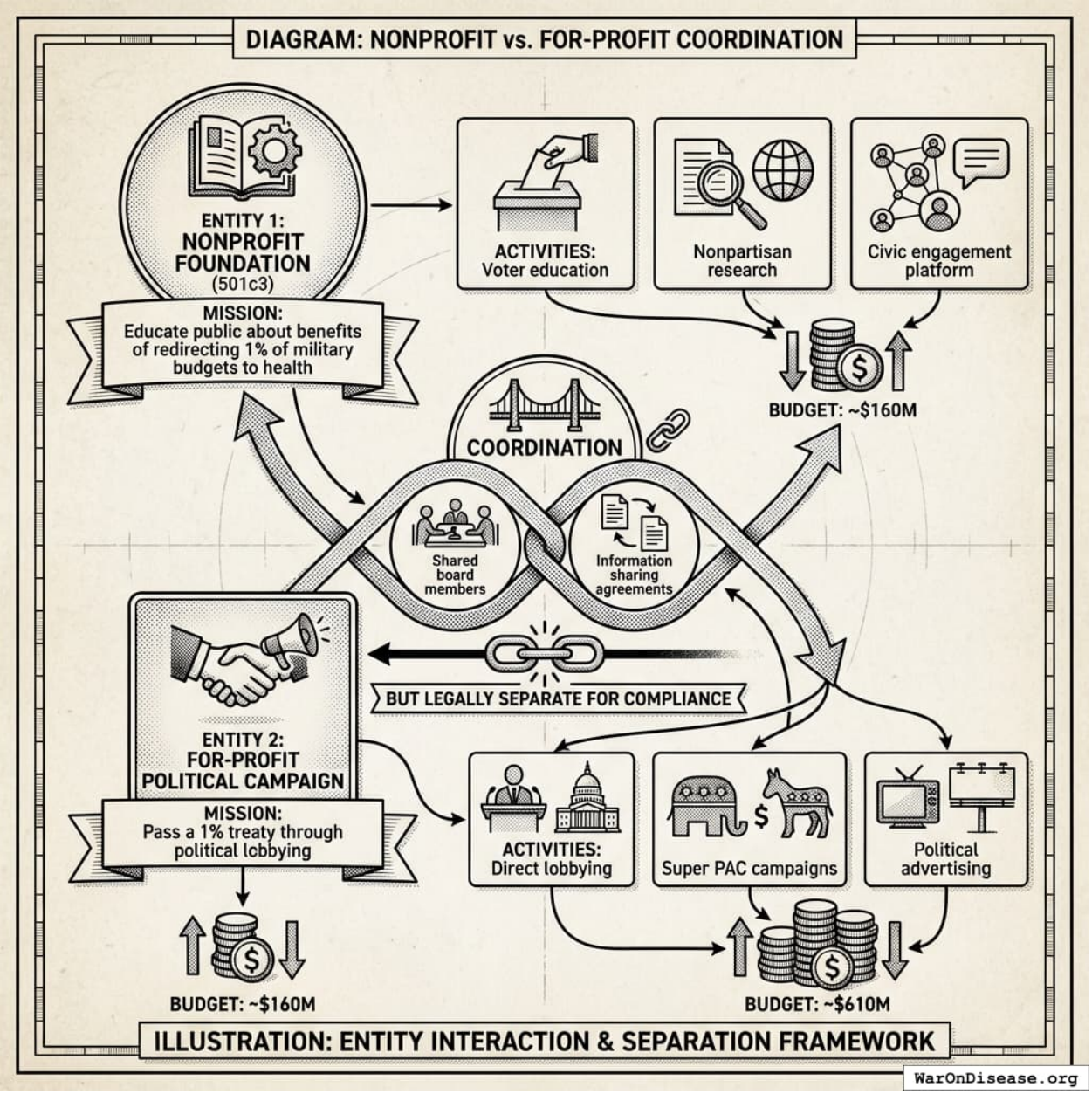


Figure 914: Structural diagram illustrating the regulatory firewall between the 501(c)(3) educational foundation and the for-profit political campaign vehicle.

Nonprofit Compliance Checklist

For foundations/donors to feel comfortable funding:

Separate entities: Nonprofit does not fund political lobbying **Educational mission**: Voter education about health policy (nonpartisan) **No direct lobbying**: Nonprofit spends <5% on lobbying (only policy research) **No political campaigns**: Zero political advertising or candidate support **501(c)(3) compliant**: All activities stay within IRS rules **Public benefit**: Educational content serves public regardless of treaty outcome **Transparent governance**: Independent board, public reporting **Tax-deductible**: Donations are fully tax-deductible

Funding Model Comparison: What Actually Works

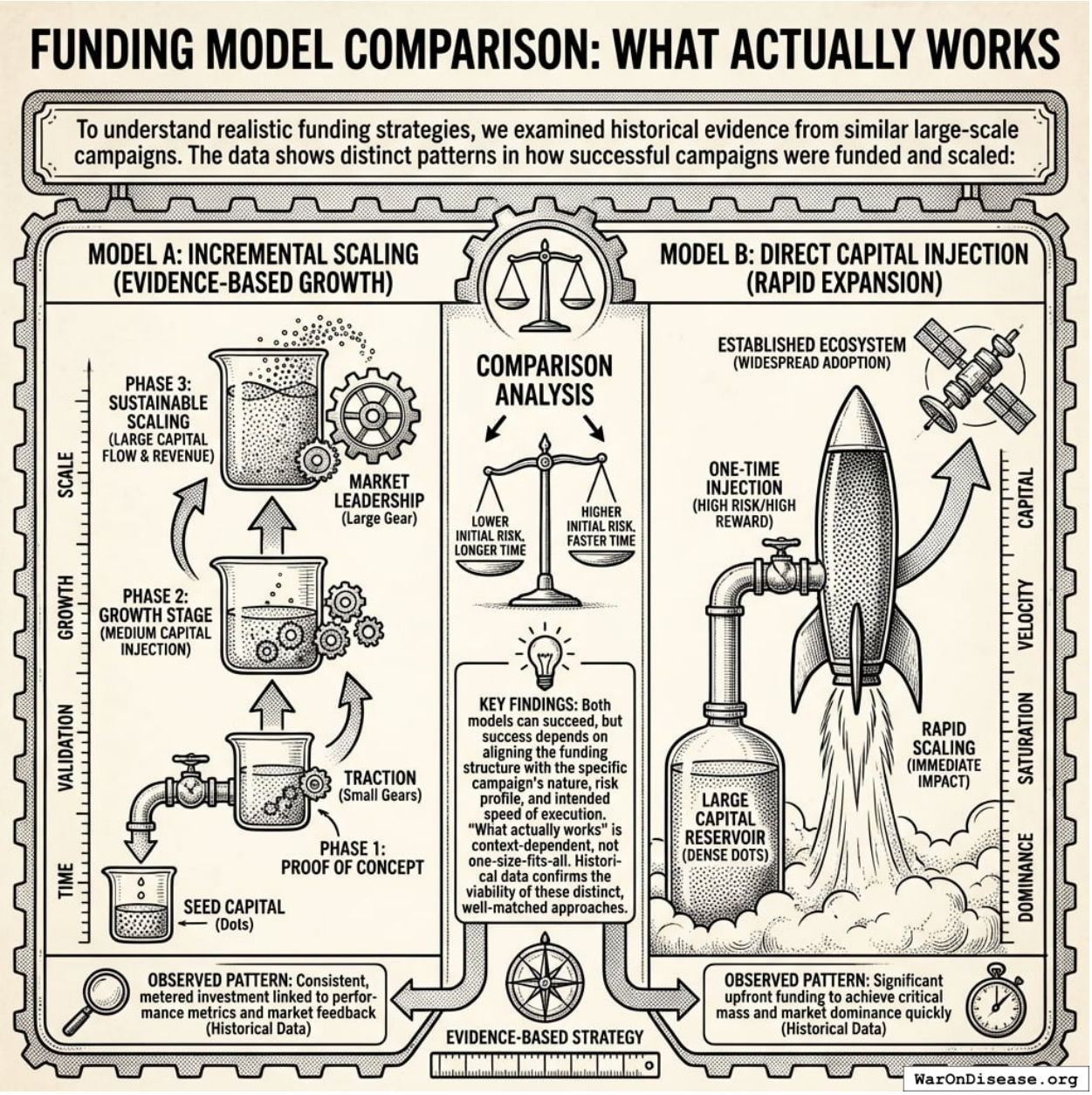


Figure 915: A comparison of various funding models and their historical success rates in large-scale campaigns, illustrating distinct patterns in how they scale.

To understand realistic funding strategies, we examined historical evidence from similar large-scale campaigns. The data shows distinct patterns in how successful campaigns were funded and scaled:

Historical Evidence: How Similar Campaigns Were Funded

Campaign	Total Raised	Timeline	Primary Sources	Outcome	Key Lesson
WW2 War Bonds	$185B bonds issued	4 years	99% public bond purchases, <$4M campaign (ads donated)	Victory + bonds repaid	Contingent returns work at scale
Marriage Equality	$153M	11 years	70% foundations, 20% mega-donors, 10% individual	All 50 states legalized	Foundation coalitions need proof first
Obamacare/ACA	$47M (HCAN advocacy)	2 years	Foundation coalition (Atlantic, SEIU)	ACA passed	Campaign cost « implementation cost
Marijuana (32 states)	$139M	12 years	Mix: billionaires, industry, foundations	32 states legalized	State-by-state works but slow
Polio Eradication	$2.9B	40 years	20 yrs grassroots ($500M) → Gates joined ($2B+)	Near-eradication	Mega-donors join AFTER proof
ICOs (2017-2018)	$27.1B total	2 years	Global crypto investors, retail speculation	90% failed, regulatory crackdown	Fast money but high risk
SPACs (2020-2021)	$245B	2 years	Institutional investors, retail FOMO	Most underperformed	Fastest way to raise $100M-$1B
Litigation Finance	$2B+ market cap (Burford)	Ongoing	Institutional investors seeking 20-40% returns	Profitable industry	Contingent models work for clear outcomes

The pattern: Advocacy campaigns cost $50M-$200M. Implementation is government-funded. Mega-donors join AFTER proof of concept.

Model A: Traditional Foundation Grants ($442M)

How it would work

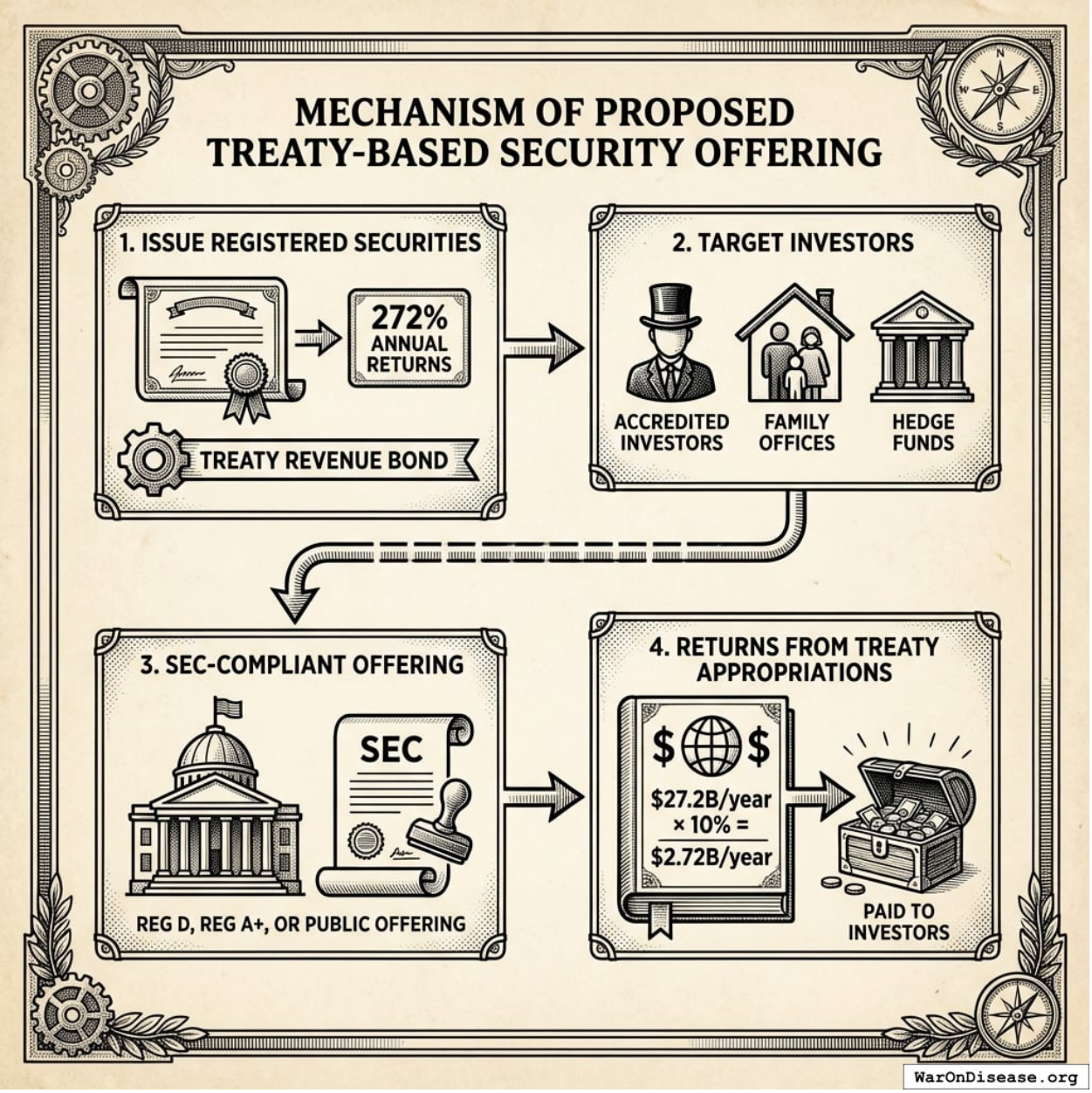


Figure 916: A strategic roadmap illustrating the progression from initial funder outreach and pitching to a 3-5 year pilot phase and final nonprofit organizational structure.

- Approach Gates, Wellcome Trust, Open Society, Chan Zuckerberg Initiative
- Pitch: "Fund a decentralized framework for drug assessment (dFDA) / Wishocracy platforms as civic infrastructure"
- Timeline: 3-5 years of grant applications and pilot programs
- Structure: 501(c)(3) nonprofit with restricted grants

Evidence

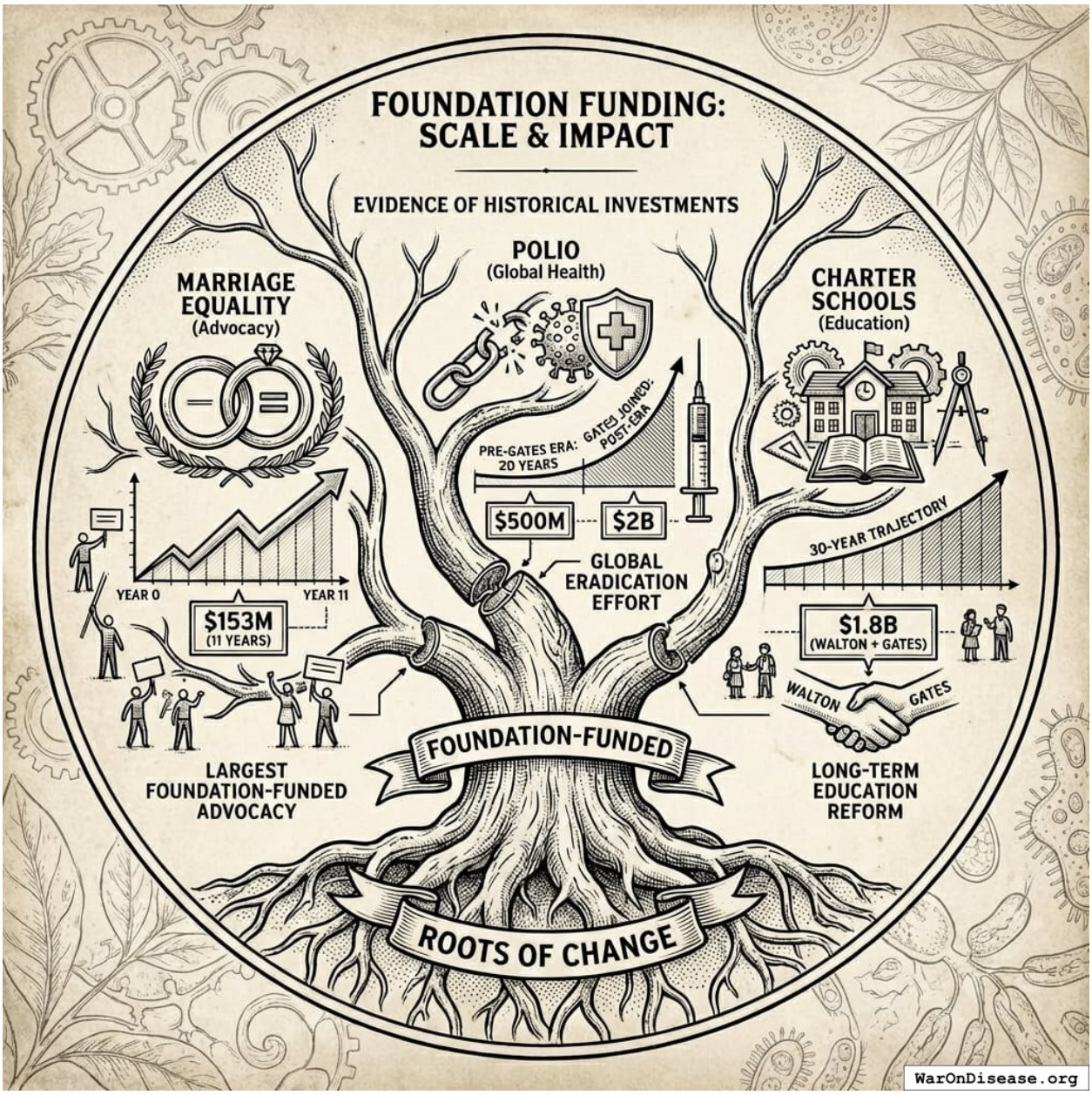


Figure 917: A comparison of funding scales and durations for major philanthropic advocacy efforts, illustrating the relative investments in marriage equality, polio eradication, and charter schools.

- Largest foundation-funded advocacy: Marriage equality ($153M over 11 years)
- Polio: $500M over 20 years before Gates joined with $2B
- Charter schools: $1.8B over 30 years (Walton + Gates)

Foundation Grant Advantages

- Tax-deductible donations
- Mission-aligned with health foundations
- Credibility with policymakers
- No investor returns required

Foundation Grant Limitations

- Too slow (11+ years for $153M)
- $442M unrealistic for political campaign infrastructure
- Foundations fund proven programs, not political campaigns
- 501(c)(3) restrictions prohibit most campaign activities
- Chicken-and-egg: need proof before funding, need funding for proof

Realistic assessment: Could raise $10-20M for pilots. Not $442M for campaign.

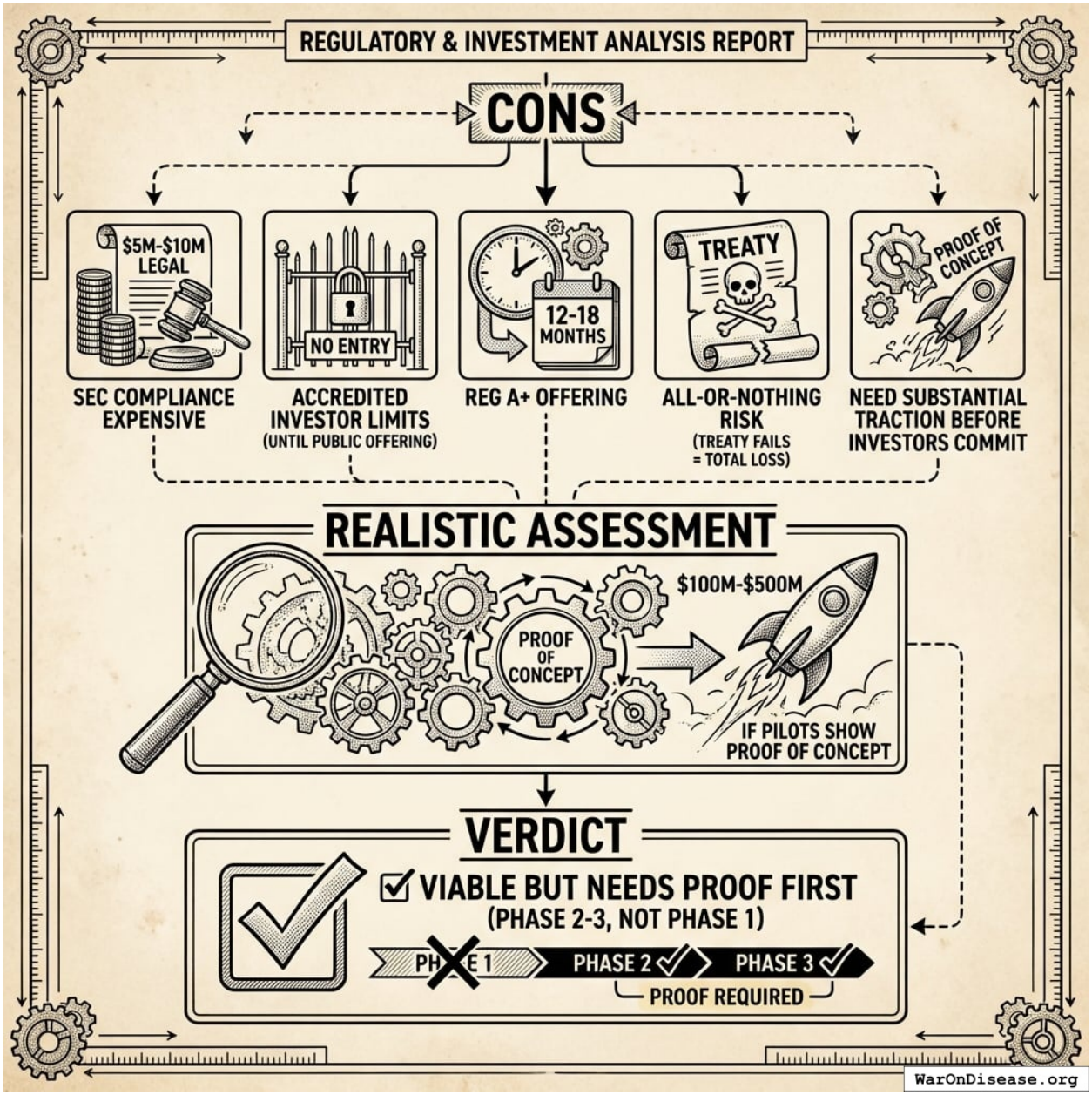


Figure 918: A comparison showing the massive discrepancy between the 442M funding goal and the 10-20M reality, alongside the 11-year timeline constraint and legal barriers.

Verdict: Too slow, wrong tool for political campaign

Model B: VICTORY Incentive Alignment Bonds (Traditional Securities) ($500M-$1B)

How it would work

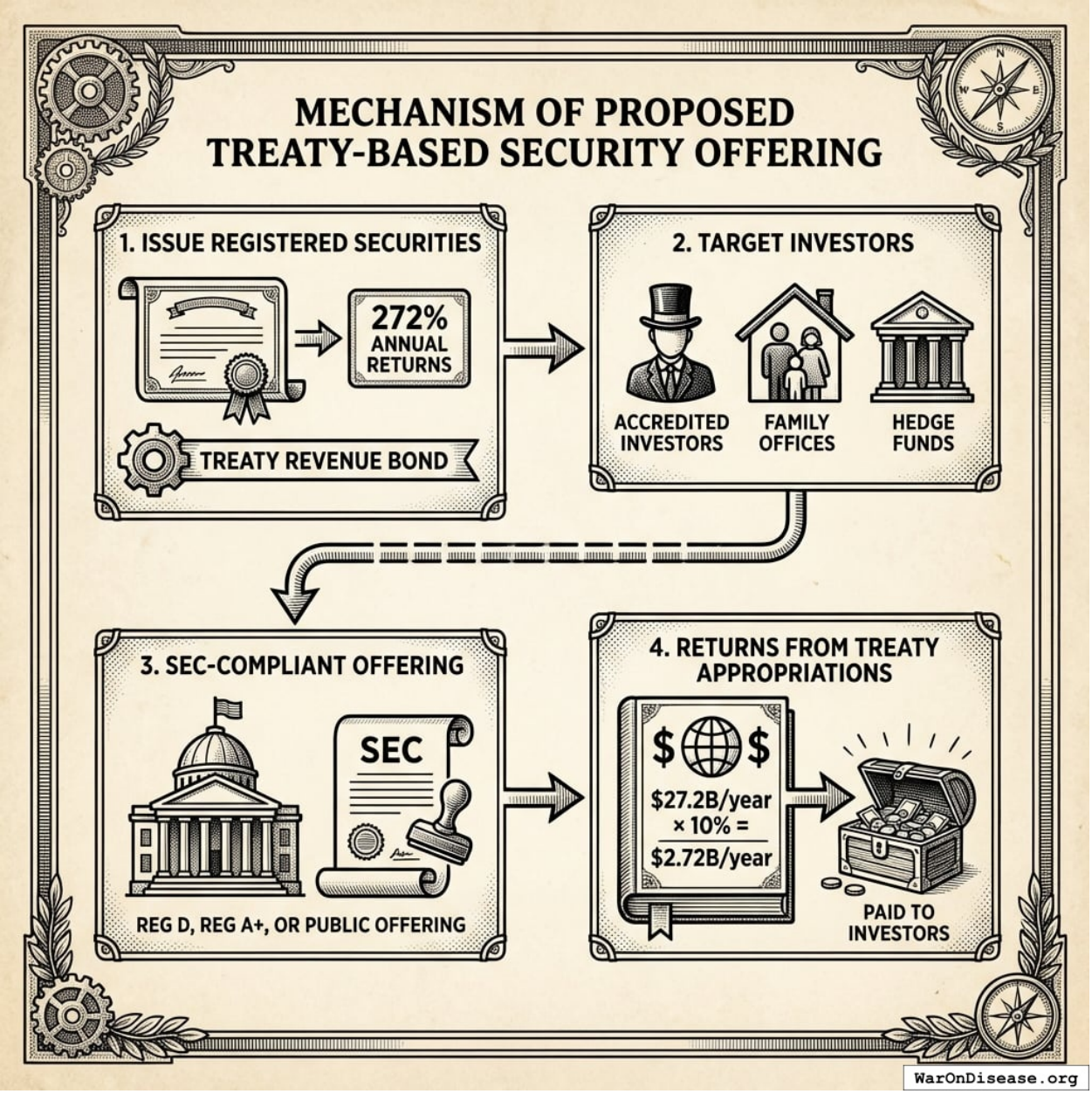


Figure 919: A flow diagram illustrating the conversion of treaty revenue into investor returns through a 10 percent allocation mechanism and SEC-compliant bond issuance.

- Issue registered securities offering 272% annual returns from treaty revenue
- Target accredited investors, family offices, hedge funds
- SEC-compliant offering (Reg D, Reg A+, or public offering)
- Returns paid from treaty appropriations ($27.2B/year × 10% = $2.72B/year)

Evidence

- SPACs raised $245B in 2020-2021 (average: $300M-$500M each)

- High-yield bonds regularly raise $100M-$1B
- Renaissance Technologies: 66% annual returns attracted $10B+ AUM
- Investors chase extraordinary returns when credible

Traditional Securities Advantages

- 270% returns beat any alternative investment
- Clear exit strategy (treaty passes = perpetual income)
- Regulatory clarity (traditional securities)
- Institutional investors comfortable with structure
- Can raise $500M-$1B if credible

Traditional Securities Limitations

- SEC compliance expensive ($5M-$10M legal)
- Accredited investor limits (until public offering)
- 12-18 months for Reg A+ offering
- All-or-nothing risk (treaty fails = total loss)
- Need substantial traction before investors commit

Realistic assessment: Could raise $100M-$500M if pilots show proof of concept.

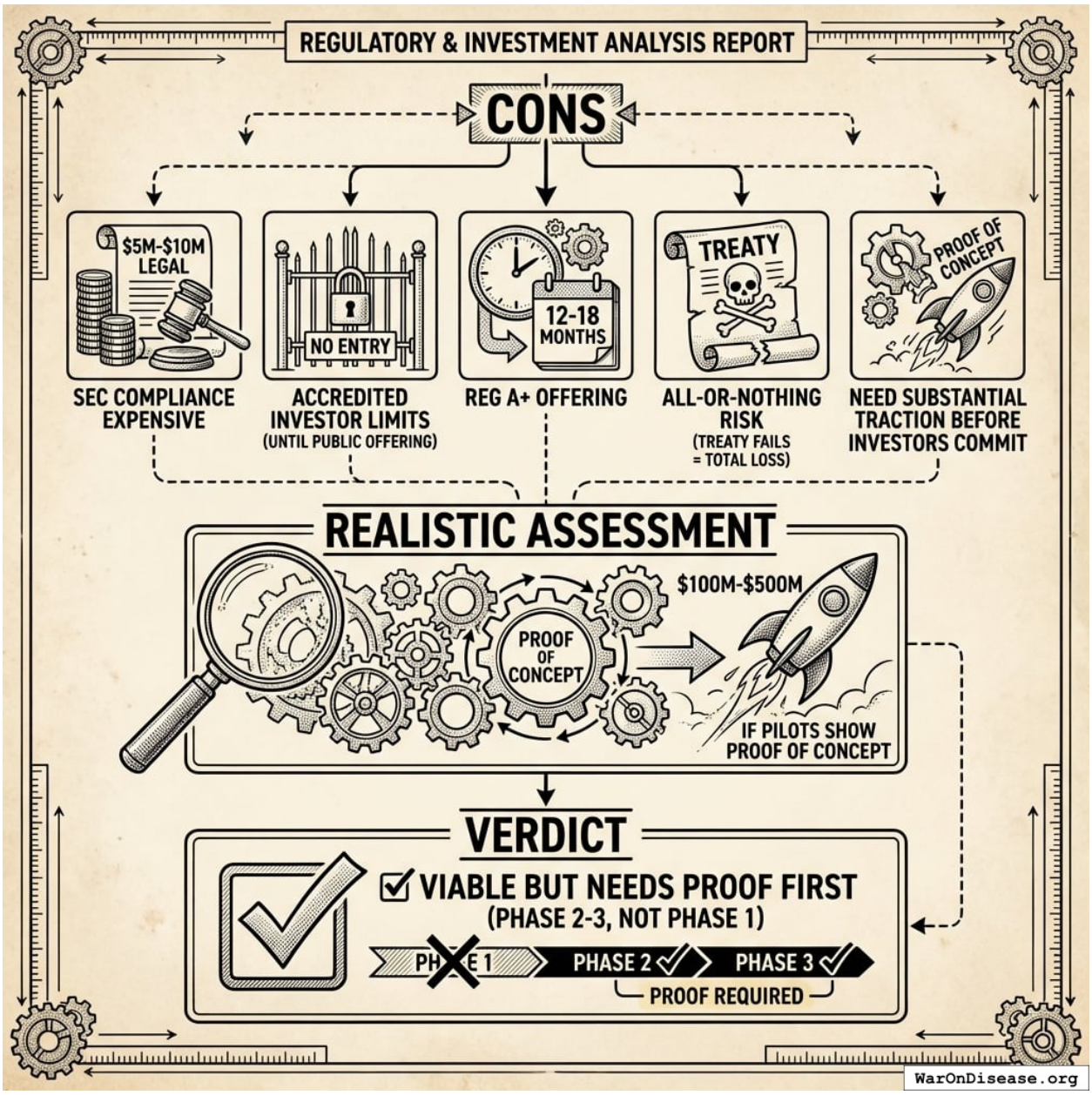


Figure 920: A strategic roadmap for a Reg A+ offering illustrating the multi-year timeline, capital requirements, and phased progression from traction to potential funding.

Verdict: Viable but needs proof first (Phase 2-3, not Phase 1)

Model C: Security Token Offering / Crypto ($100M-$500M)

How it would work

- Tokenize VICTORY Incentive Alignment Bonds as security tokens
- Trade on security token exchanges (tZERO, INX)
- Smart contracts for automatic dividend distribution
- Global investor access, faster liquidity

Evidence

- 2017: $5.6B raised across 875 ICOs (average: $6.4M each)
- 2018: $21.5B raised across 1,258 ICOs (average: $17M each)
- Single projects: EOS ($4.1B), Telegram ($1.7B), Filecoin ($257M)
- tZero: $134M security token offering (2018)
- Current crypto winter: 90% down from peak, regulatory uncertainty

Security Token Advantages

- Can raise $100M+ in weeks (not years)
- Global investor access (not just US accredited investors)
- Programmable dividends via smart contracts
- Secondary market liquidity from day one
- Lower regulatory costs than traditional securities

Security Token Limitations

- Crypto winter: investors burned by scams
- SEC treating most tokens as securities anyway
- Reputational risk: association with failed ICOs
- Technical risk: smart contract bugs, hacks
- Volatile secondary market could undermine credibility

Realistic assessment: Could raise $50M-$200M from crypto whales if positioned as "inverse military-industrial complex" with 270% returns.

Verdict: Fast but risky. Good for seed round ($10M-50M), dangerous at scale.

Model D: Litigation Finance / Contingency Model ($0 upfront)

How it would work

- Legal/lobbying firms work on contingency
- Get paid ONLY if treaty passes
- Payment: 15-25% of first-year treaty revenue or VICTORY Incentive Alignment Bonds
- Similar to tobacco settlement attorneys (paid $2.8B from $206B settlement)

Evidence

- Tobacco Master Settlement: $0 upfront, attorneys got $2.8B (15% of $206B)
- Burford Capital: $2B market cap funding lawsuits for 20-40% of winnings
- Contingent lobbying exists but rare (usually success fees on top of retainer)

Contingency Model Advantages

- $0 upfront capital required
- Lawyers/lobbyists highly motivated to win
- Proven model in litigation finance
- Aligns incentives perfectly

Contingency Model Limitations

- Requires clear legal claim (litigation) or regulatory outcome (lobbying)
- Most top law firms won't work pure contingency for political campaigns
- Lobbying firms want upfront retainers
- No precedent for pure contingency political campaigns

Realistic assessment: Can't get $500M of lobbying on contingency. Maybe 20-40% contingency on top of $100M retainer.

Verdict: Partial solution. Use contingent fees to reduce upfront costs, not eliminate them.

Model E: Defense Contractor Conversion (Most Realistic?)

How it would work

- Pitch VICTORY Incentive Alignment Bonds directly to military contractors
- They already spend $150M/year on lobbying
- Offer: Keep 99% of military budget ($2.7T × 99% = $2.67T) PLUS earn 270% on the 1% redirected
- They just redirect existing lobbying budget from "maximize military spending" to "pass 1% treaty"

Evidence

- Lockheed Martin lobbying: $13M/year
- Boeing lobbying: $15M/year
- Raytheon lobbying: $11M/year
- Total defense lobbying: ~$150M/year
- They get $1,813 back per $1 spent lobbying (proven ROI model)

Calculation

- Current: Spend $150M lobbying → Get $750B contracts → 15% margins = $112B profit
- New model: Spend $150M lobbying for treaty → Keep $2.67T military budget (99%) + earn 272% on $27.2B health budget
- Defense budget stays at $2.67T (barely changes)
- They get NEW income stream: $27.2B 10% = $2.72B/year to VICTORY Incentive Alignment Bondholders
- Plus they can BUY VICTORY Incentive Alignment Bonds with their existing profits

Defense Contractor Conversion Advantages

- They already have the lobbying infrastructure
- They already spend $150M/year lobbying
- Just redirect existing spend (no new fundraising needed)
- They keep 99% of defense contracts
- They ADD 270% returns on top of defense profits
- Economically dominant strategy for them

Defense Contractor Conversion Limitations

- Requires convincing military CEOs to switch sides
- Potential backlash from defense hawks
- Complex coordination across multiple contractors
- Might seem like "selling out" to shareholders

Realistic assessment: If we can convince 3-5 major military contractors, they could self-fund the entire campaign from existing lobbying budgets.

Verdict: **Most realistic**. They're already spending the money. We just need to redirect it.

Model F: Phased Hybrid Approach (Evidence-Based)

Based on what actually worked historically

Phase 1: Pilot ($10-20M, Years 1-2)

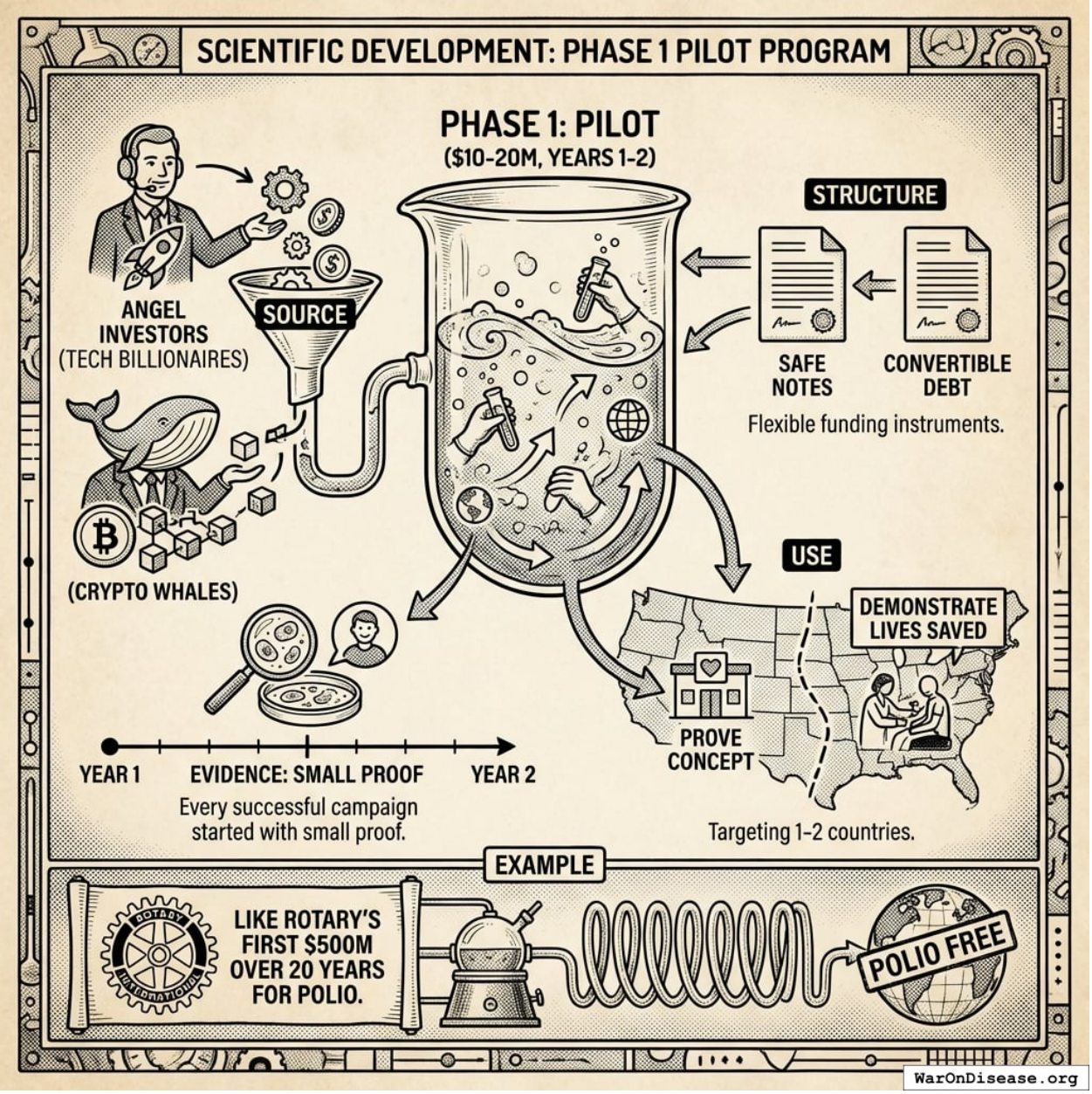


Figure 921: Overview of the Phase 1 Pilot strategy showing the flow of 10-20M from angel investors through SAFE notes to achieve proof of concept in 1-2 countries over two years.

- **Source**: Angel investors (tech billionaires, crypto whales)
- **Evidence**: Every successful campaign started with small proof
- **Structure**: SAFE notes or convertible debt
- **Use**: Prove concept in 1-2 countries, demonstrate lives saved
- **Example**: Like Rotary's first $500M over 20 years for polio

Phase 2: Campaign ($100-200M, Years 3-5)

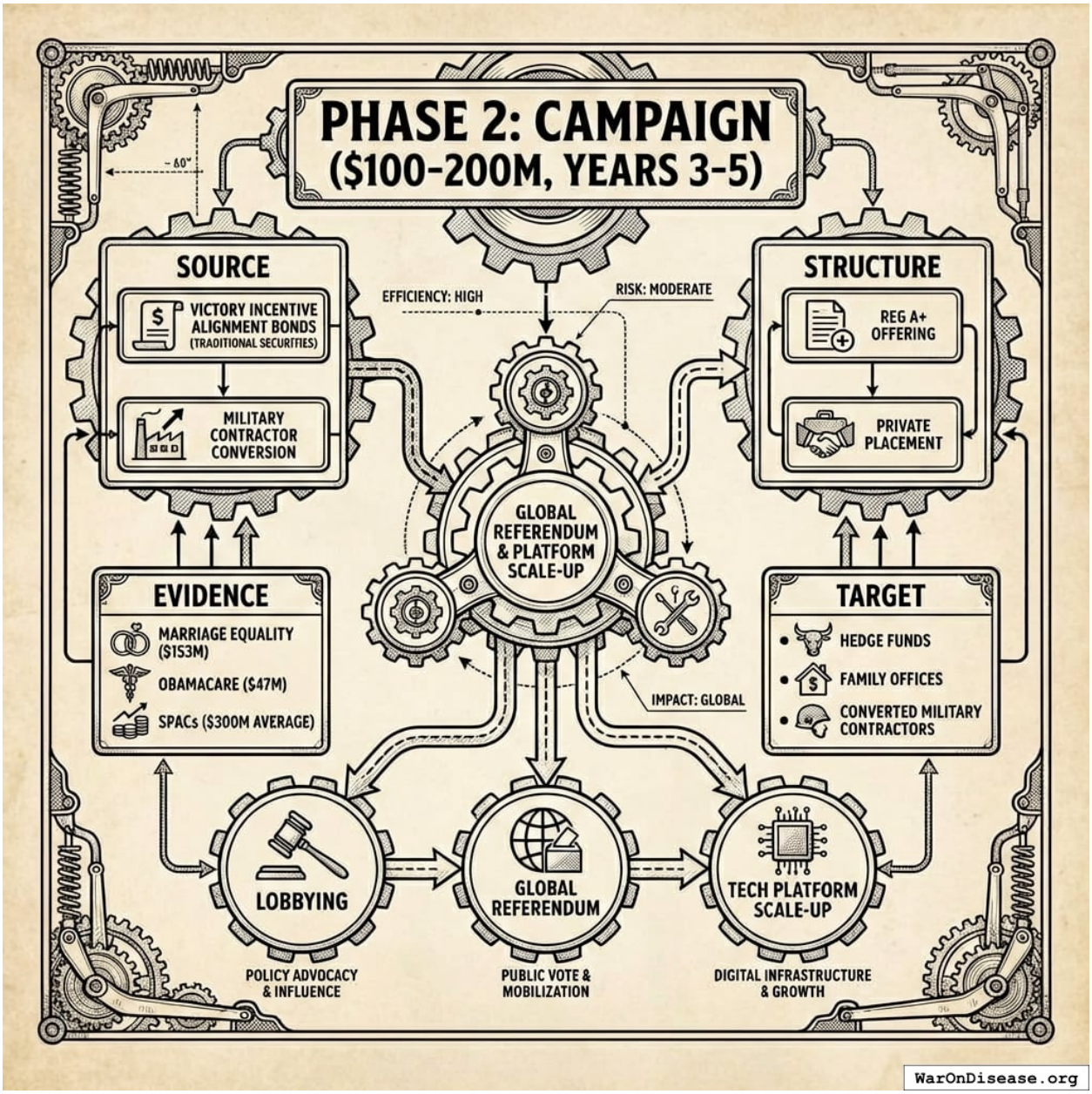


Figure 922: An overview of the Phase 2 Campaign strategy, illustrating the flow of capital from institutional sources through financial structures to strategic deployment and scaling.

- **Source**: VICTORY Incentive Alignment Bonds (traditional securities) + military contractor conversion
- **Evidence**: Marriage equality ($153M), Obamacare ($47M), SPACs ($300M average)
- **Structure**: Reg A+ offering or private placement
- **Use**: Global referendum, lobbying, tech platform scale-up
- **Target**: Hedge funds, family offices, converted military contractors

Phase 3: Implementation ($27.2B/year, Year 6+)

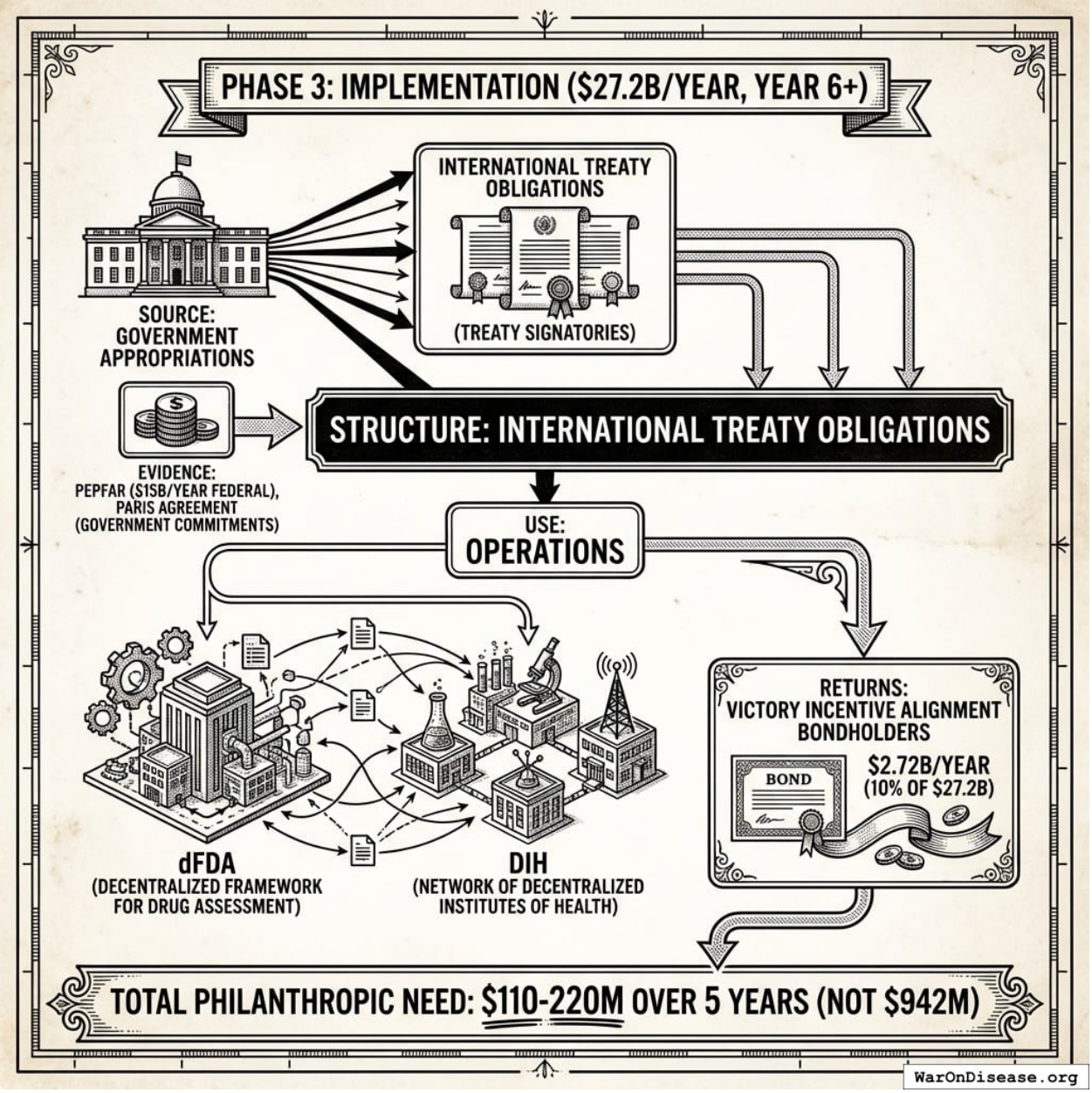


Figure 923: A diagram illustrating the flow of Phase 3 funding from government treaty signatories into the dFDA and DIH framework, highlighting the 10 percent dividend return to bondholders.

- **Source**: Government appropriations (treaty signatories)
- **Evidence**: PEPFAR ($15B/year federal), Paris Agreement (government commitments)
- **Structure**: International treaty obligations
- **Use**: Operations for your decentralized framework for drug assessment (dFDA) and a network of decentralized institutes of health (DIH)
- **Returns**: VICTORY Incentive Alignment Bondholders get $2.72B/year (10% of $27.2B)

Total philanthropic need: $110-220M over 5 years (NOT $942M)

Recommended Strategy: Defense Contractor Pivot + Phased VICTORY Incentive Alignment Bonds

Year 1-2: Seed ($10-20M)

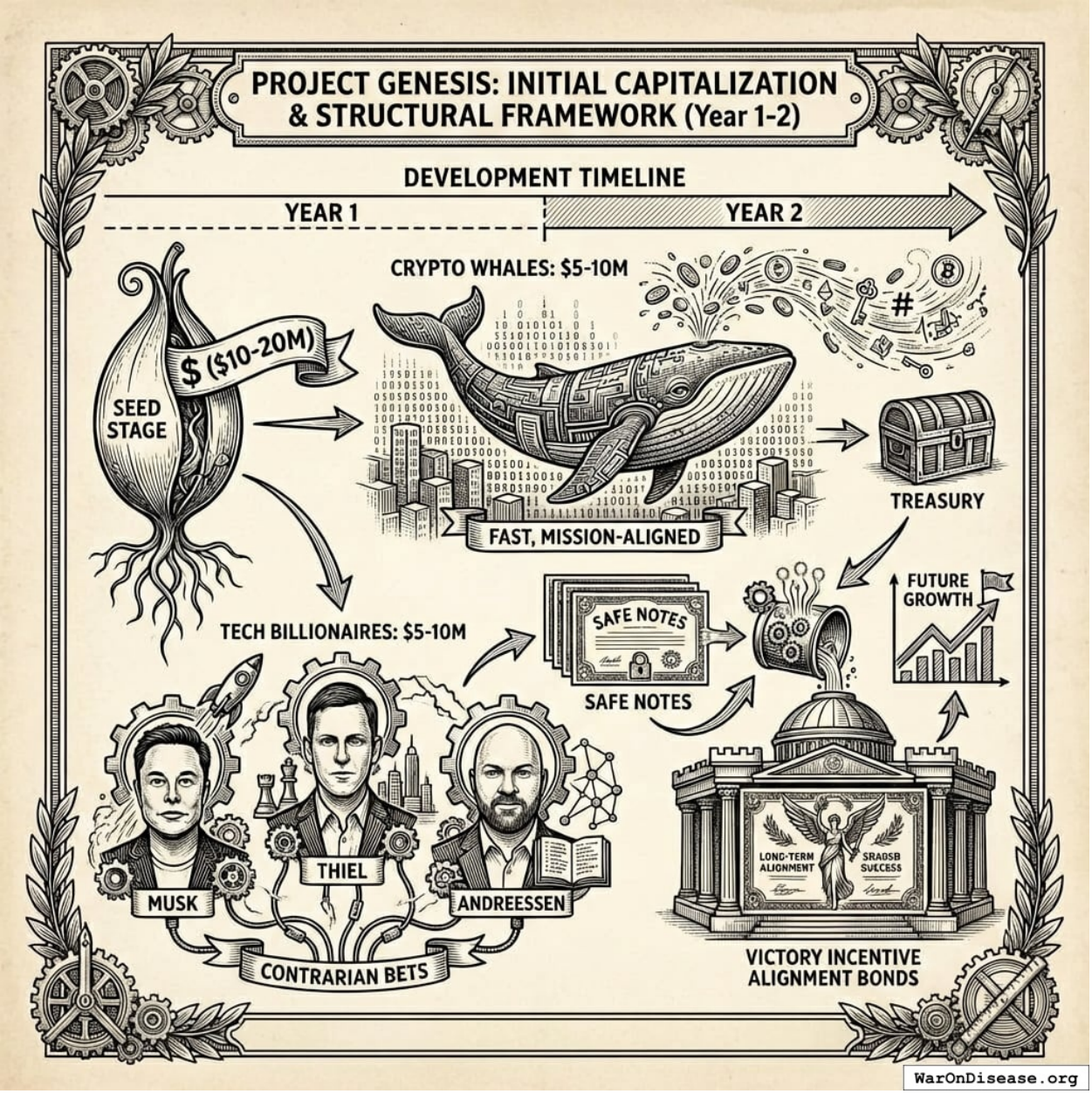


Figure 924: A visualization of the Year 1-2 Seed funding phase showing the breakdown of investment sources and the conversion structure of SAFE notes into VICTORY Incentive Alignment Bonds.

- Crypto whales: $5-10M (fast, mission-aligned)
- Tech billionaires: $5-10M (Musk, Thiel, Andreessen - contrarian bets)
- Structure: SAFE notes convertible to VICTORY Incentive Alignment Bonds

Year 3-4: Series A ($50-100M)

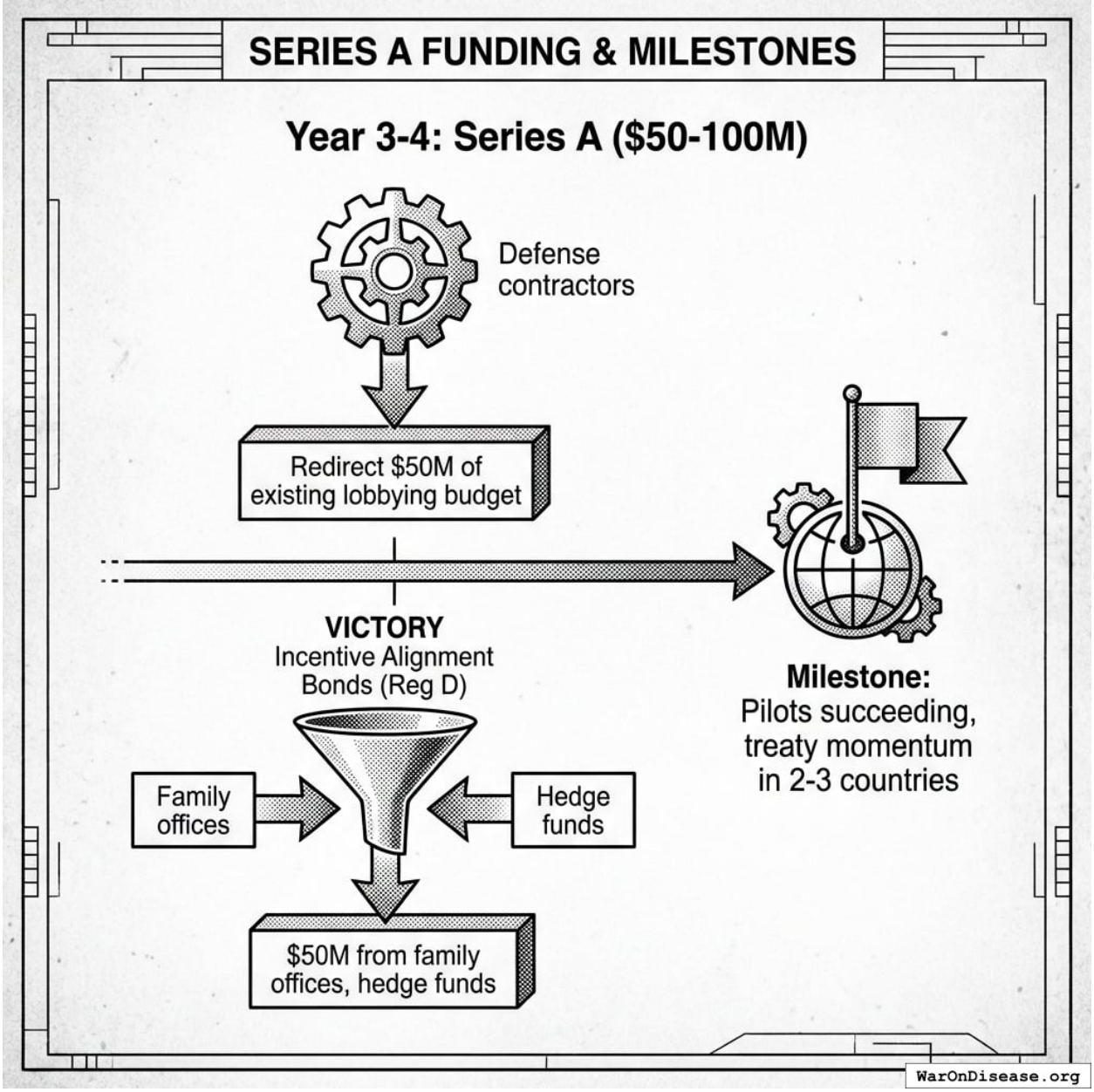


Figure 925: A diagram mapping the Series A funding structure, illustrating how redirected defense budgets and private capital bonds flow toward achieving operational pilots and international treaty milestones.

- Defense contractors: Redirect $50M of existing lobbying budget
- VICTORY Incentive Alignment Bonds (Reg D): $50M from family offices, hedge funds
- Milestone: Pilots succeeding, treaty momentum in 2-3 countries

Year 5-6: Series B ($100-200M)



Figure 926: A breakdown of the Series B funding sources totaling 200 million and the resulting milestones of treaty ratification and revenue generation.

- Defense contractors: Redirect another $100M lobbying
- VICTORY Incentive Alignment Bonds (Reg A+ or public): $100M from institutional investors
- Milestone: Treaty ratified in pilot countries, revenue starting

Year 7+: Implementation

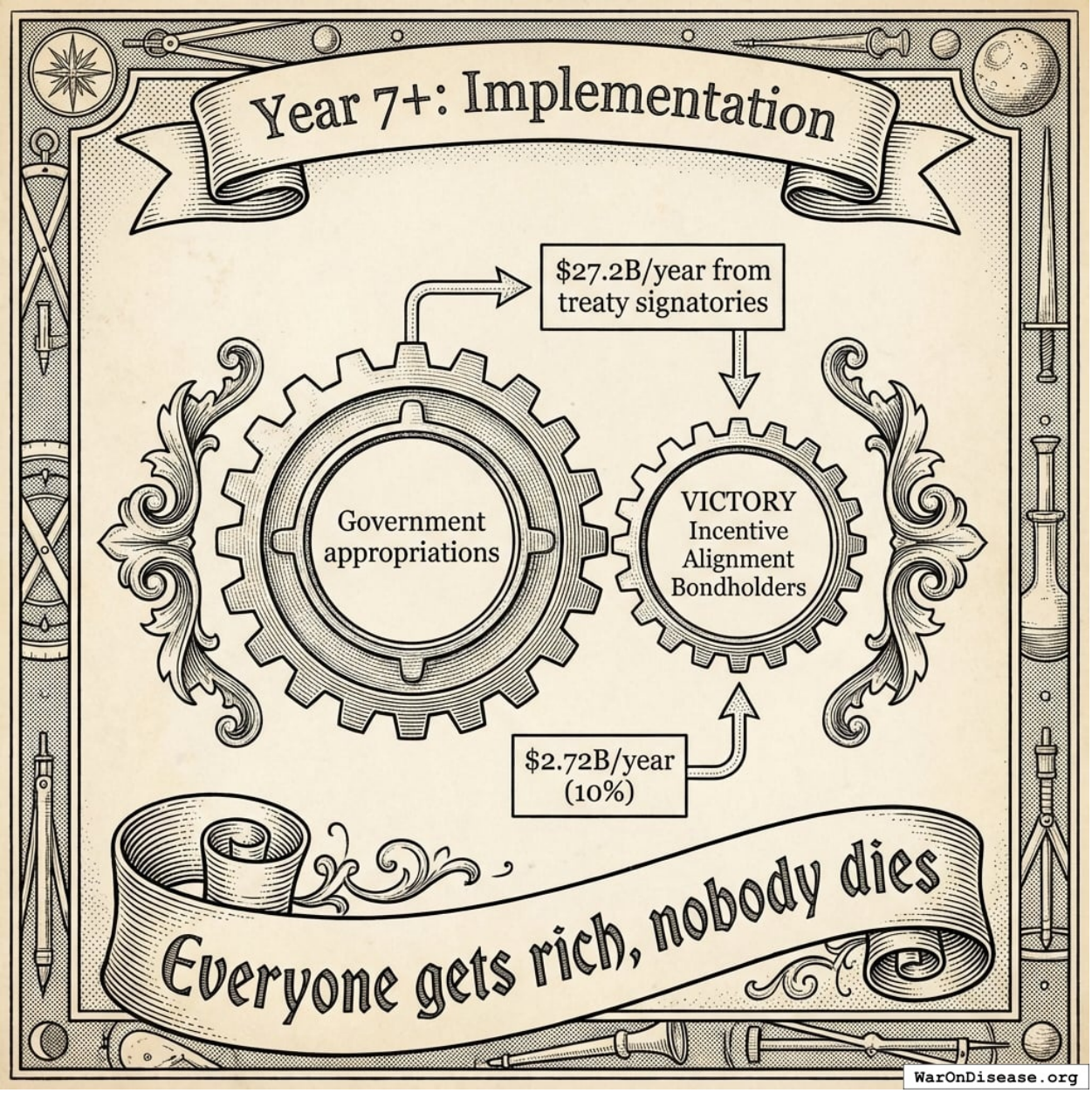


Figure 927: A diagram illustrating the flow of 27.2B in annual government appropriations and the 10 percent allocation to VICTORY Incentive Alignment Bondholders to achieve systemic stability.

- Government appropriations: $27.2B/year from treaty signatories
- VICTORY Incentive Alignment Bondholders: $2.72B/year (10%)
- Everyone gets rich, nobody dies

Why this works

- Matches historical evidence (pilot → proof → scale)
- Defense contractors self-fund using existing budgets
- VICTORY Incentive Alignment Bonds attract investors AFTER proof
- Initial philanthropic seed: $10-20M from angels
- Government funds implementation (like PEPFAR, not philanthropy)

The Virtuous Cycle: Votes Drive Bond Sales

The ~$1B VICTORY Incentive Alignment Bond campaign creates a self-reinforcing cycle:

The Cycle

1. **Sell VICTORY Incentive Alignment Bonds** → Fund referendum ads and lobbying
2. **Get votes** → Generate attention and legitimacy (1M → 100M → 208M votes)
3. **Attention + votes** → Makes treaty passage more likely → Easier to sell more bonds
4. **More bond sales** → More lobbying firepower + more referendum ads
5. **More votes** → More attention → Higher treaty passage probability → Easier to sell bonds
6. **Repeat until we raise $1B and pass the treaty**

Funding source: 100% VICTORY Incentive Alignment Bonds ($1B total)

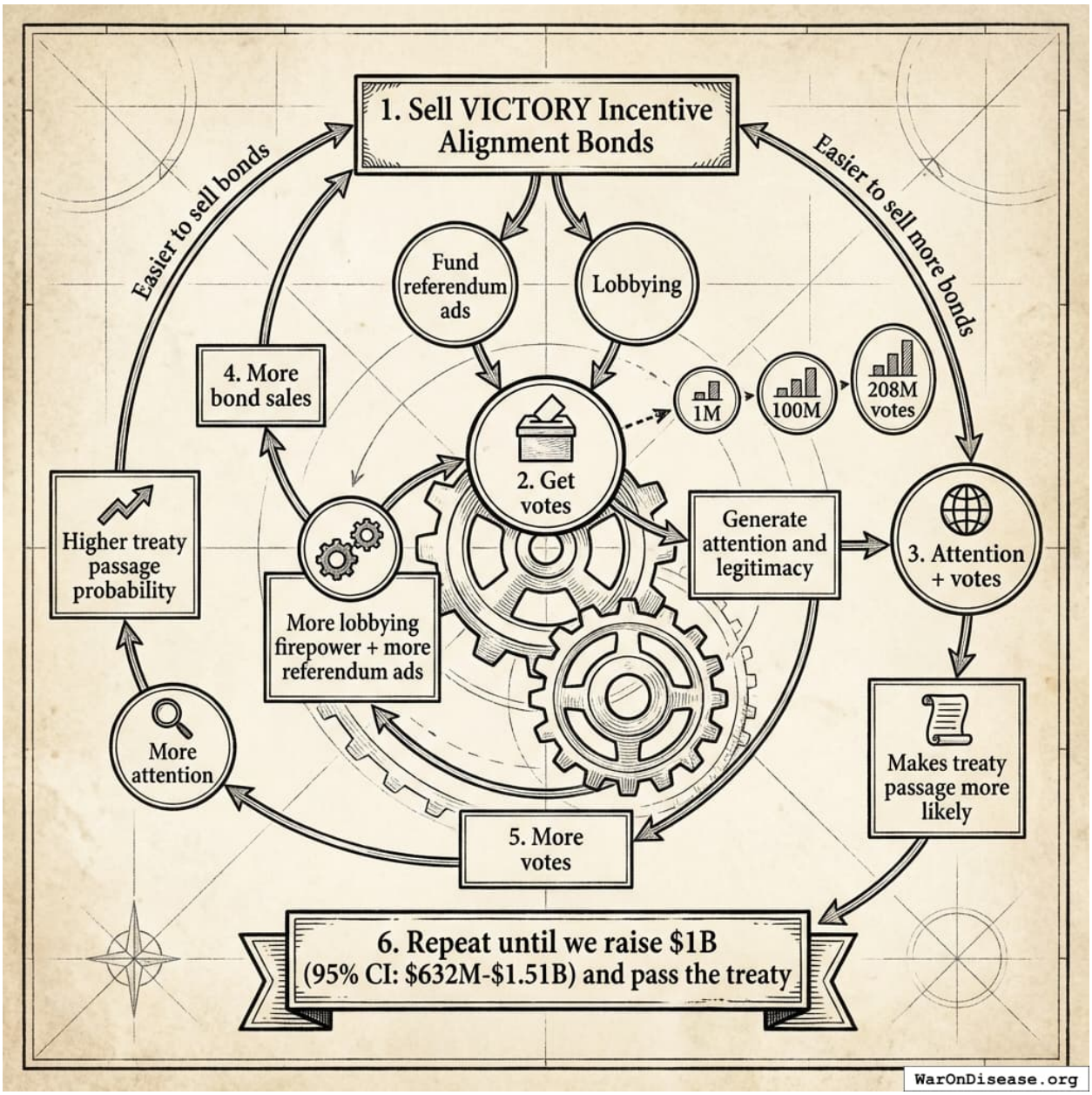


Figure 928: The 'Flywheel' effect: How bond sales fund the votes that validate the asset, driving further demand for bonds.

Why only bonds (not donations)?

- **Speed**: Can raise $1B in 12-24 months (vs 10+ years for donations)
- **Legal freedom**: Can fund political lobbying, Super PACs, opposition research
- **Investor alignment**: Returns only pay if treaty passes - incentivizes maximum spending to win
- **Flexibility**: If we DO get donations, bonds can redirect more to lobbying

Optional donations (bonus, not required):

- Any donations we receive can fund referendum education (501(c)(3) compliant)
- But we're not COUNTING on donations - bonds cover everything

- Historical comparison: Marriage equality raised $153M over 11 years. We're raising $1B in 1-2 years via bonds.

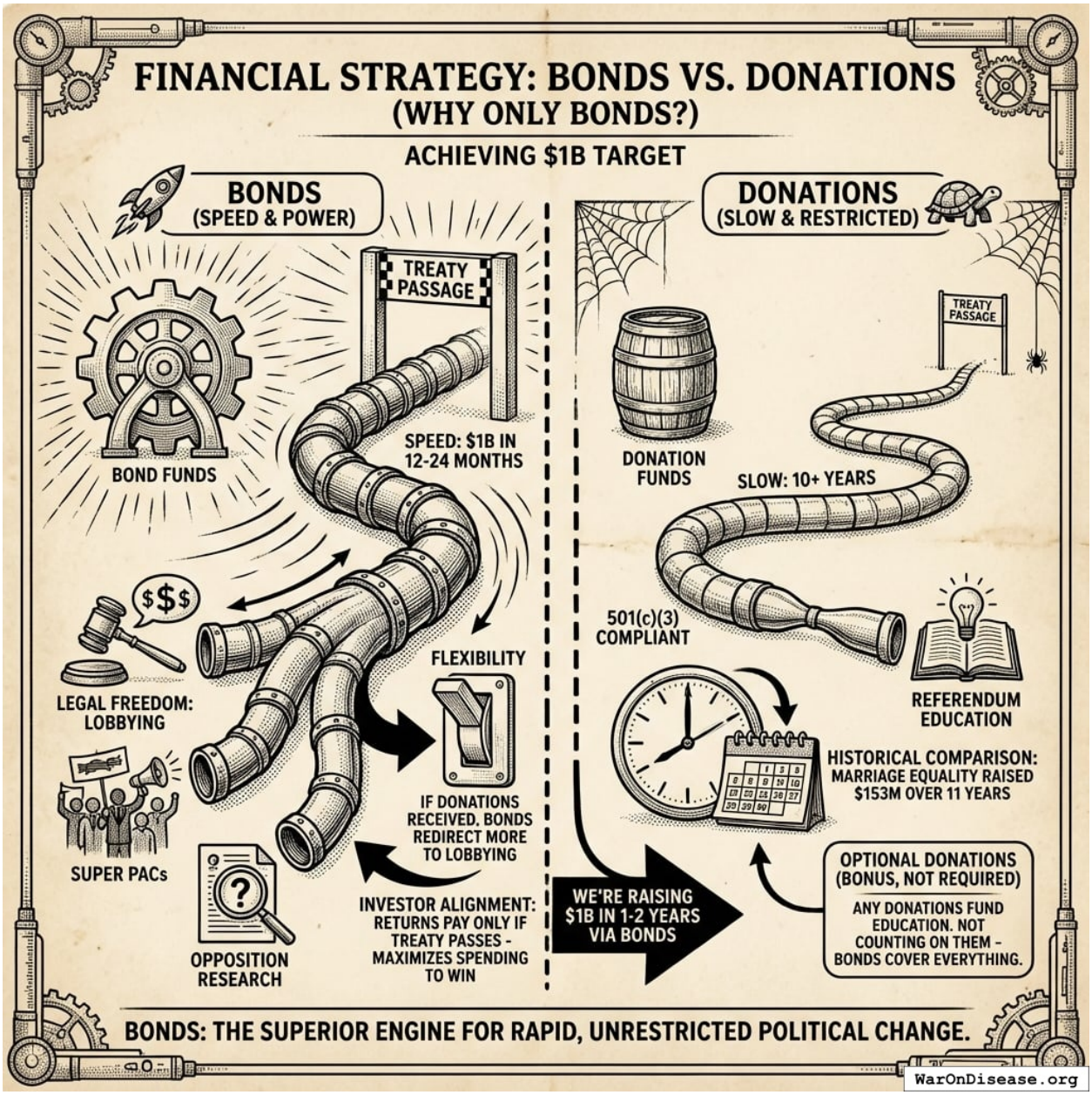


Figure 929: A comparison between the bond-based funding model and traditional donation models, contrasting their timelines, legal flexibility, and investor incentives.

Timeline milestones

- 1M votes: Prove the model works → Easier to sell Series A bonds
- 100M votes: Demonstrate massive political will → Easier to sell Series B bonds
- 208M votes + $1B raised: Treaty passage threshold

Post-treaty: $27.2B/year funds the implementation of your decentralized framework for drug assessment, infrastructure for decentralized institutes of health, and pragmatic clinical trials.

Hybrid Communication Strategy: Simple Targets, Sophisticated Mechanics

The Marketing Message (The "Hook")

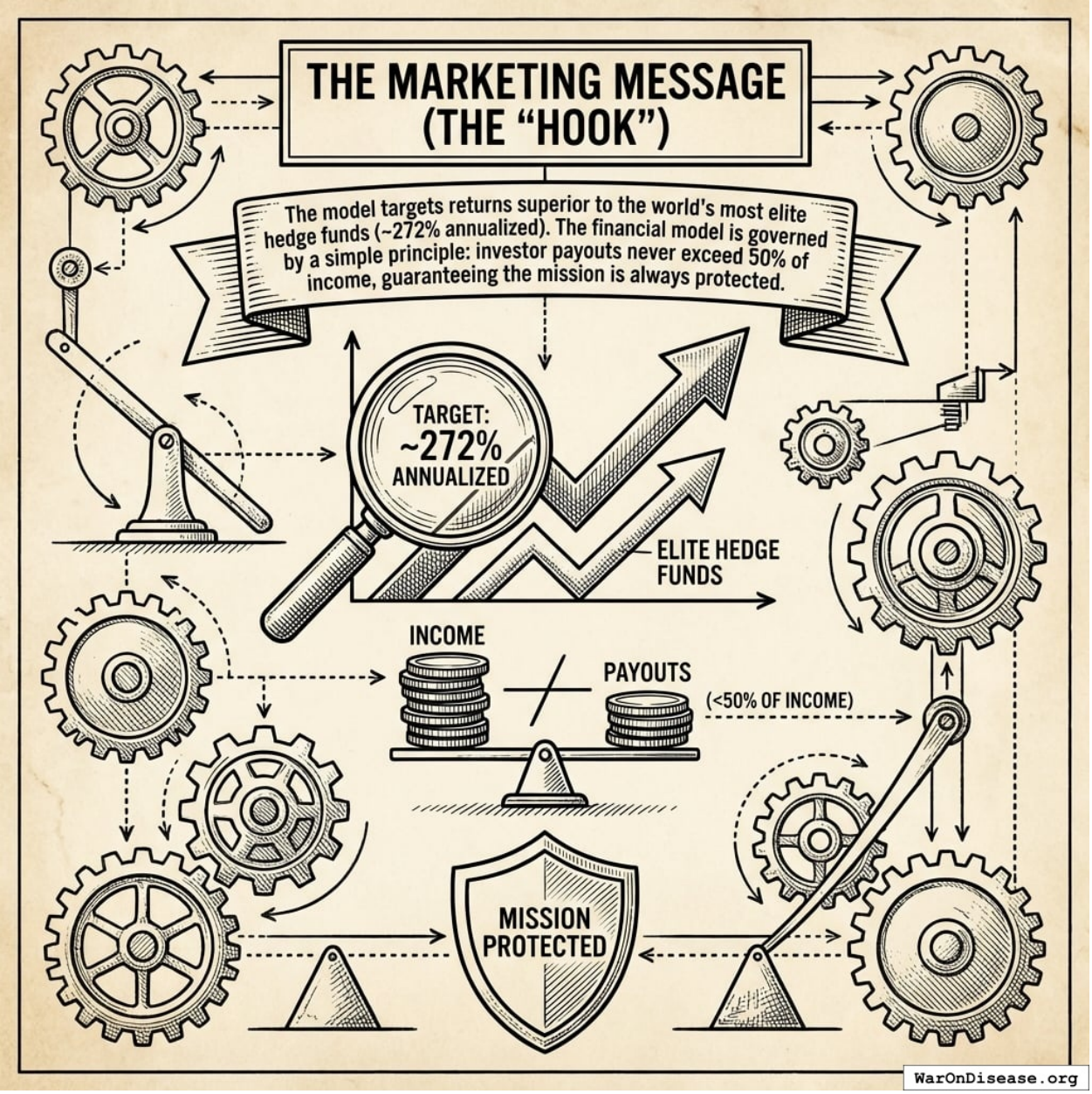


Figure 930: A conceptual infographic showing the dual-focus model: a target return of 272 percent compared to elite hedge funds, and a split-circle diagram illustrating the 50 percent cap on investor payouts to ensure mission protection.

For marketing and high-level communications, lead with a simple, audacious target:

> **"The model targets returns superior to the world's most elite hedge funds (~272% annualized). The financial model is governed by a simple principle: investor payouts never exceed 50% of income, guaranteeing the mission is always protected."**

The Backend Engine (Market-Driven Pricing)

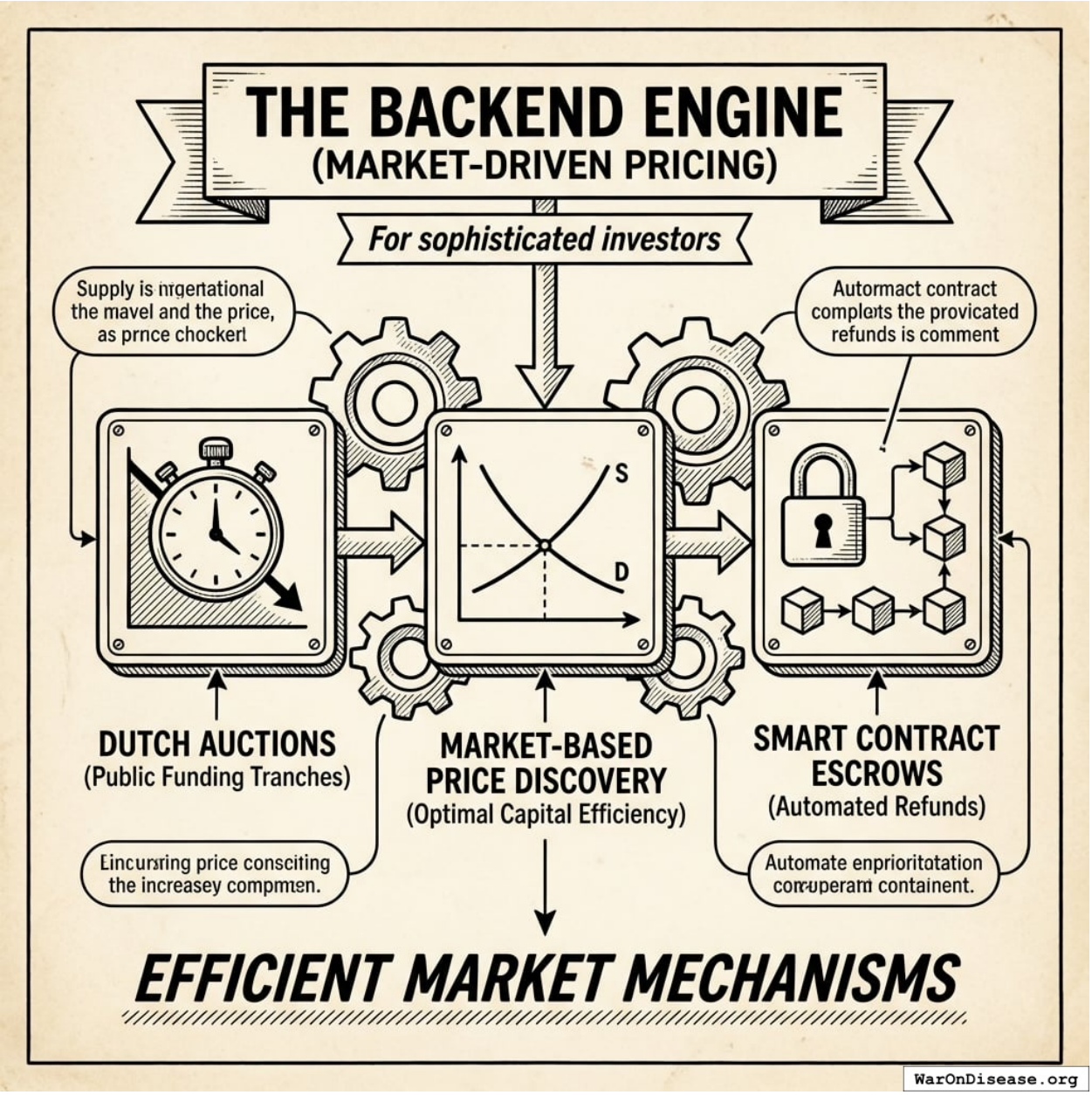


Figure 931: A workflow diagram illustrating the backend engine process from a Dutch Auction through market-based price discovery to smart contract escrow and automated refunds.

For sophisticated investors, use efficient market mechanisms:

- **Dutch Auctions** for public funding tranches
- Market-based price discovery for optimal capital efficiency
- Smart contract escrows with automated refunds

De-Risking with Assurance Contracts

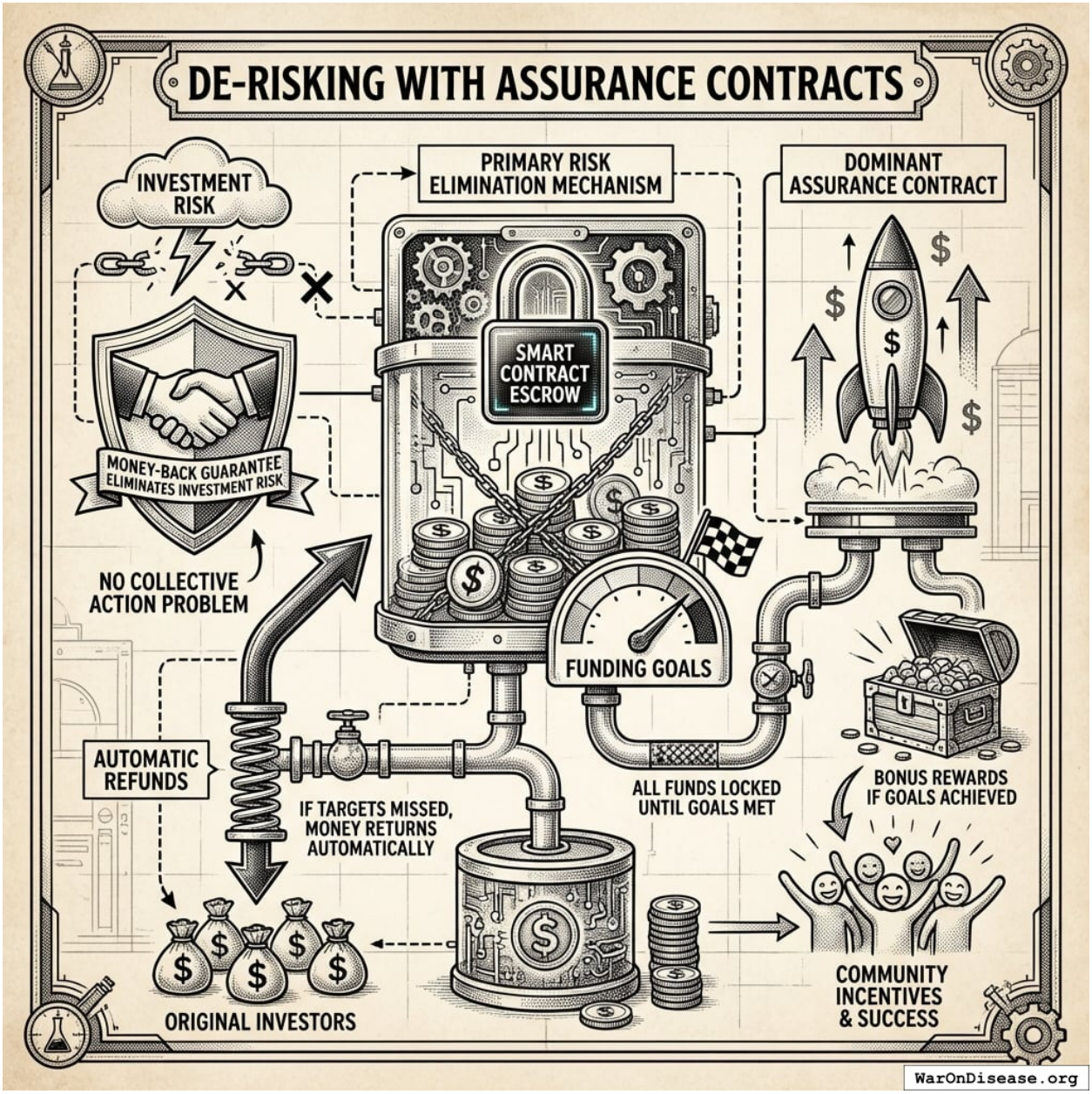


Figure 932: A flowchart illustrating the logic of an assurance contract, showing funds moving into escrow and then being either distributed to the project or refunded to investors based on funding goals.

The primary risk elimination mechanism:

- **Smart Contract Escrow:** All funds locked until funding goals met
- **Automatic Refunds:** If targets missed, money returns automatically
- **No Collective Action Problem:** "Money-back guarantee" eliminates investment risk
- **Dominant Assurance Contract:** Bonus rewards if goals achieved

Whale & Billionaire Targeting Strategy

Why Target Whales

Speed vs. Scale Trade-off

- 1 meeting → $50M check vs. 50,000 meetings → $50M in small checks
- 6-12 months vs. 18+ months timeline
- Lower legal complexity with fewer investors

Unit Economics Advantage

- Higher success probability with mission-aligned billionaires
- Larger check sizes ($10-100M vs. $1-10K)

Target Categories & Prospects

Category 1: Crypto Whales & Protocol Treasuries ($500M-1B potential)

Individual Crypto Billionaires

- Vitalik Buterin (Ethereum) - Mission-aligned, understands governance
- Brian Armstrong (Coinbase) - Health tech investor[338]
- Changpeng Zhao (Binance) - Global reach, massive liquidity

Protocol Treasuries (DAO-to-DAO)

- Uniswap Labs ($4B+ treasury[339]) - Understands DAO governance
- MakerDAO ($8B+ treasury[340]) - Health-aligned investing
- Compound Treasury - DeFi protocol experience

Category 2: Health & Pharma Billionaires ($750M-1.5B potential)

Pharma Executives

- Albert Bourla (Pfizer CEO) - Would get 2-5X more R&D funding
- Pascal Soriot (AstraZeneca CEO) - Global operations
- Emma Walmsley (GSK) - Vaccine/global health focus

Health Tech Billionaires

- Patrick Soon-Shiong (NantHealth, $7B) - Cancer research focus[341]
- Anne Wojcicki (23andMe) - Genomics, patient data

Category 3: Mission-Aligned Mega-Foundations ($500M-1B potential)

Health-Focused Foundations

- Gates Foundation ($70B endowment[342]) - Global health mandate
- Chan Zuckerberg Initiative ($45B[343]) - Science/health focus
- Wellcome Trust ($38B[344]) - Medical research

Effective Altruism & Longevity

- Open Philanthropy (Dustin Moskovitz) - EA cause prioritization
- Schmidt Futures (Eric Schmidt) - Technology + health

Outreach Templates

Template 1: Crypto Whales (Governance Angle)

Subject: Invitation to influence governance of $27.2B health treasury (Bitcoin-level impact)

"The initiative advocates for the creation of a 1% Treaty Fund (a $27.2B annually decentralized treasury) using proven DAO models from MakerDAO/Uniswap. We advocate for a governance model where future government-issued VICTORY Incentive Alignment Bond holders, alongside public health experts, provide input on the allocation of this treasury across pragmatic clinical trials and other global health initiatives.

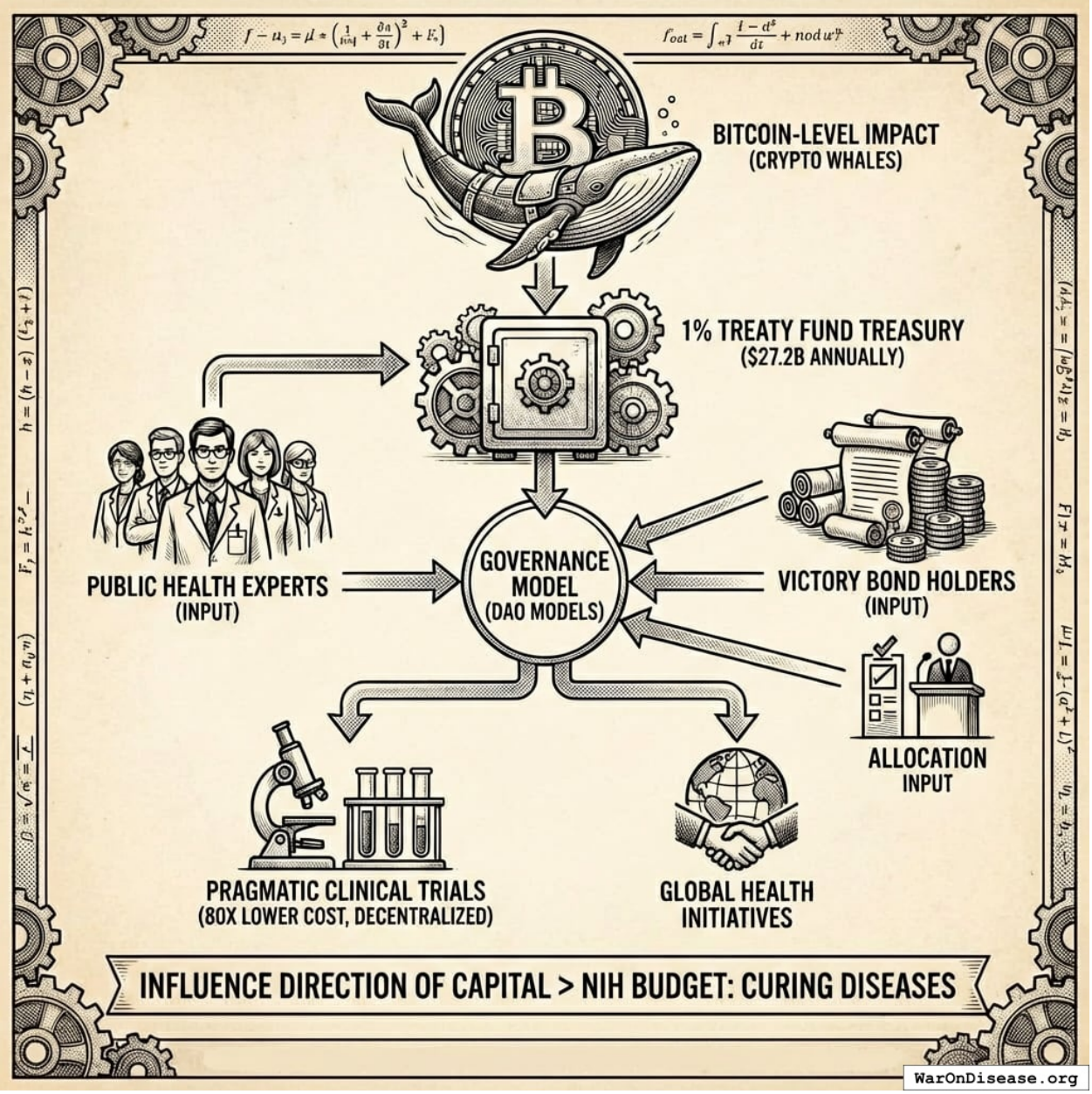


Figure 933: A diagram illustrating the governance flow where VICTORY Bond holders and public health experts direct the allocation of a 27.2B decentralized treasury into clinical trials and health initiatives.

This isn't just an investment - it's a chance to influence the direction of more capital than the NIH budget

toward curing diseases through 80X lower cost per patient[77] decentralized trials."

Template 2: Health Billionaires (Industry Advantage)

Subject: 2-5X your R&D budget (backed by government treaties)

"A 1% treaty redirects 1% of global military spending ($27.2B annually) into health research using Oxford RECOVERY trial methods (80X lower cost). Early supporters will be instrumental in shaping the policy recommendations for treasury allocation.

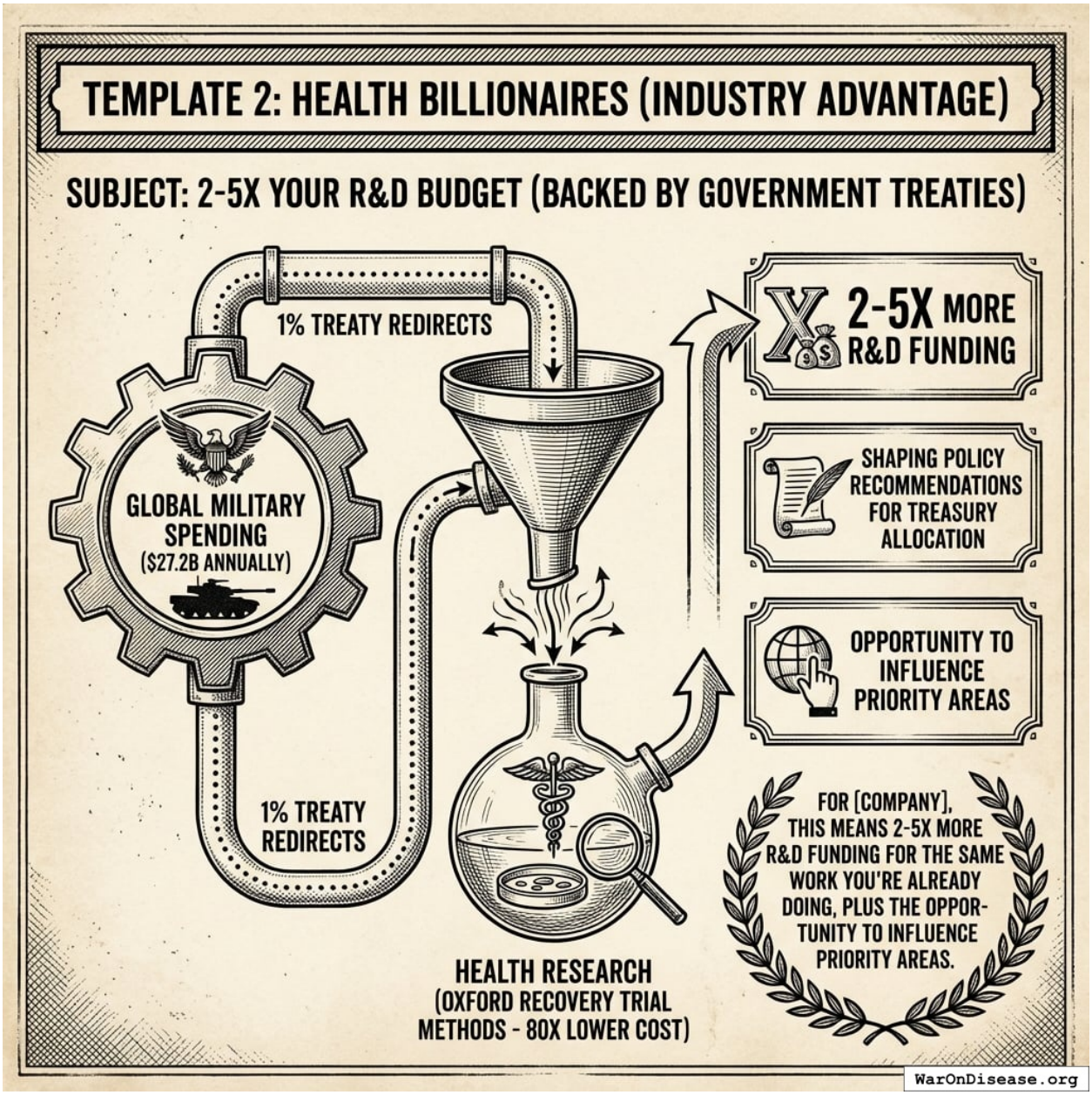


Figure 934: A diagram illustrating the redirection of 1 percent of global military spending into a health research fund, showing the subsequent 2-5X increase in R and D budgets for individual companies.

For [Company], this means 2-5X more R&D funding for the same work you're already doing, plus the

opportunity to influence priority areas."

Template 3: Foundations (Mission Multiplication)

Subject: 10X your health impact without additional donations

"Your $50M investment would empower [Foundation] to significantly influence the policy recommendations for the allocation of $2.72B annually - 54X leverage on your committed capital, in perpetuity.

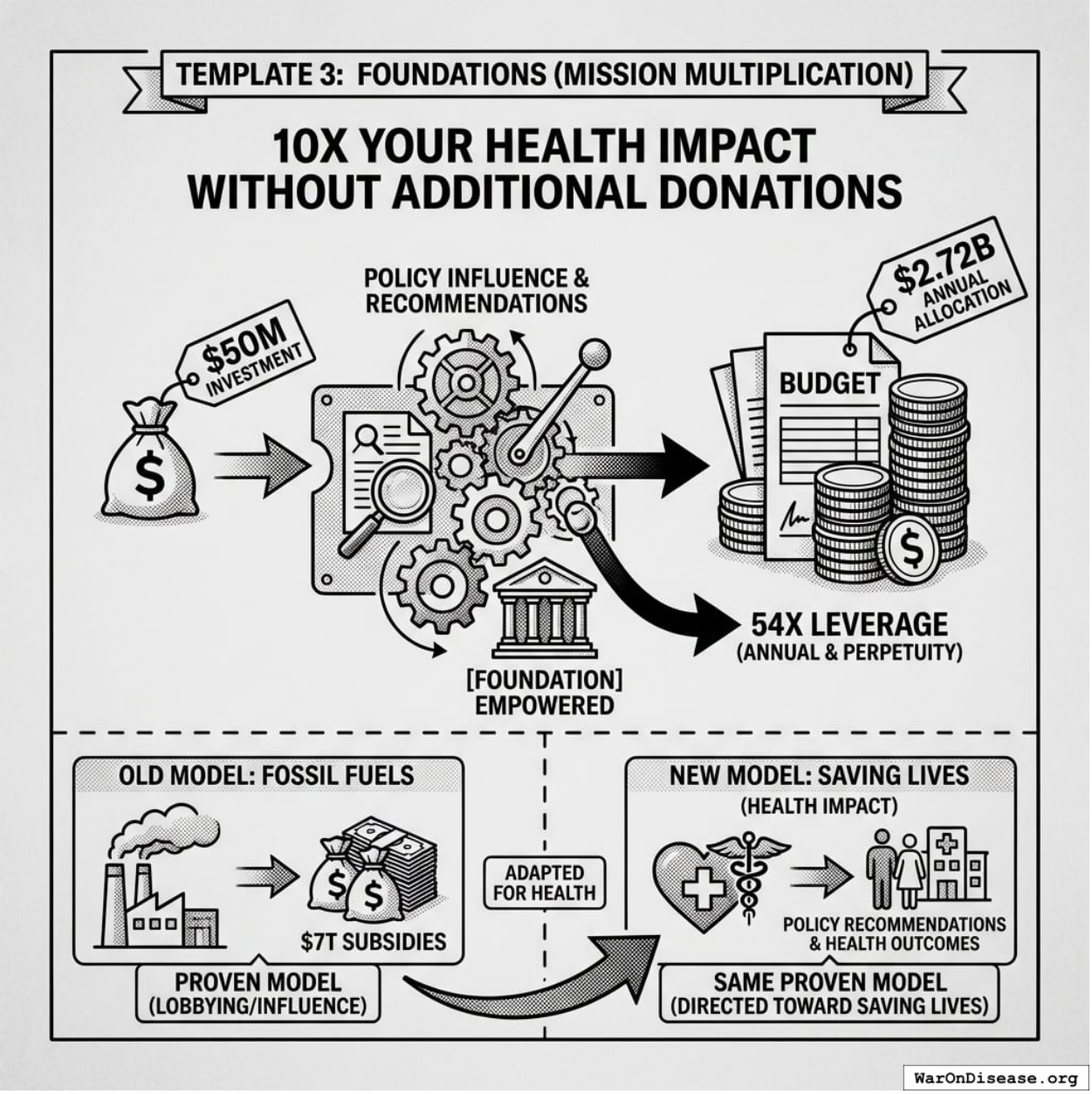


Figure 935: A diagram illustrating the leverage model where a 50M investment influences the allocation of 2.72B in annual funding, demonstrating a 54X multiplier effect.

This uses the same proven model that created $7T in fossil fuel subsidies[345], but directed toward saving lives."

Detailed Budget Breakdown

Phase 1: Seed ($250M - $400M)

Category	Lower Bound	Upper Bound	Justification
Operations (Core Team)	$10M	$15M	Lean founding team (15-20 people) with VICTORY tokens
Platform & Tech MVP	$50M	$75M	Engineering costs with 50.0% cash / 50.0% token split
Legal & Framework (Pilots)	$40M	$60M (95% CI: $50M-$80M)	Top-tier law firms with success fees tied to the creation of future government-issued VICTORY Incentive Alignment Bonds upon treaty ratification
Pilot Public Engagement & Policy Education	$100M	$150M	Competitive prize for organizations demonstrating the most effective public engagement and policy education leading to increased public support
Referendum Points System	$5M	$10M	Infrastructure for non-financial incentives
Contingency	$45M	$90M	20-30% buffer for high-uncertainty policy initiative

Phase 2: Series A ($500M - $1B)

Category	Lower Bound	Upper Bound	Pay-for-Success Model
Scaled Public Engagement & Policy Education	$300M	$600M	Competitive Prize Ecosystem: $100M, $50M, $25M prizes for achieving significant public awareness and support thresholds
Strategic Industry Engagement	$50M	$100M	Performance-based incentives for collaborative partnerships with relevant industries
Platform Scale-Up	$100M	$150M	Scale to 300M+ users with performance bonuses
Global Legal Expansion	$40M	$80M	Success-fee-based retainers in all target nations
Contingency	$10M	$70M	Operational buffer for scaled global initiative

Phase 3: Growth Round ($500M - $1.1B)

Category	Lower Bound	Upper Bound	Success-Based Structure
Global Public Education Initiatives	$300M	$750M	Competitive prize model for organizations achieving significant public and policy maker engagement in nations yet to fully embrace the treaty
Industry Collaboration (Final Tranche)	$50M	$100M	Entirely success-based incentives for corporate collaboration to support treaty implementation
Treasury & Governance Launch	$100M	$150M	Developer bonuses tied to a flawless policy recommendation framework and technical launch for your 1% Treaty Fund
Contingency	$50M (95% CI: $30M-$80M)	$100M	Final buffer for most critical policy advancement phase

Bottom-Up Budget Justification

Operations Budget

- 20-person team at $250k/year fully-loaded cost
- 2-year runway for seed phase
- Heavy equity/token compensation to align incentives

Platform Development

- 50-person engineering team/contractor budget
- 3 independent security audits ($5M)
- Global cloud infrastructure ($10M)
- Compliance features (GDPR, etc.)

Legal & Policy Engagement

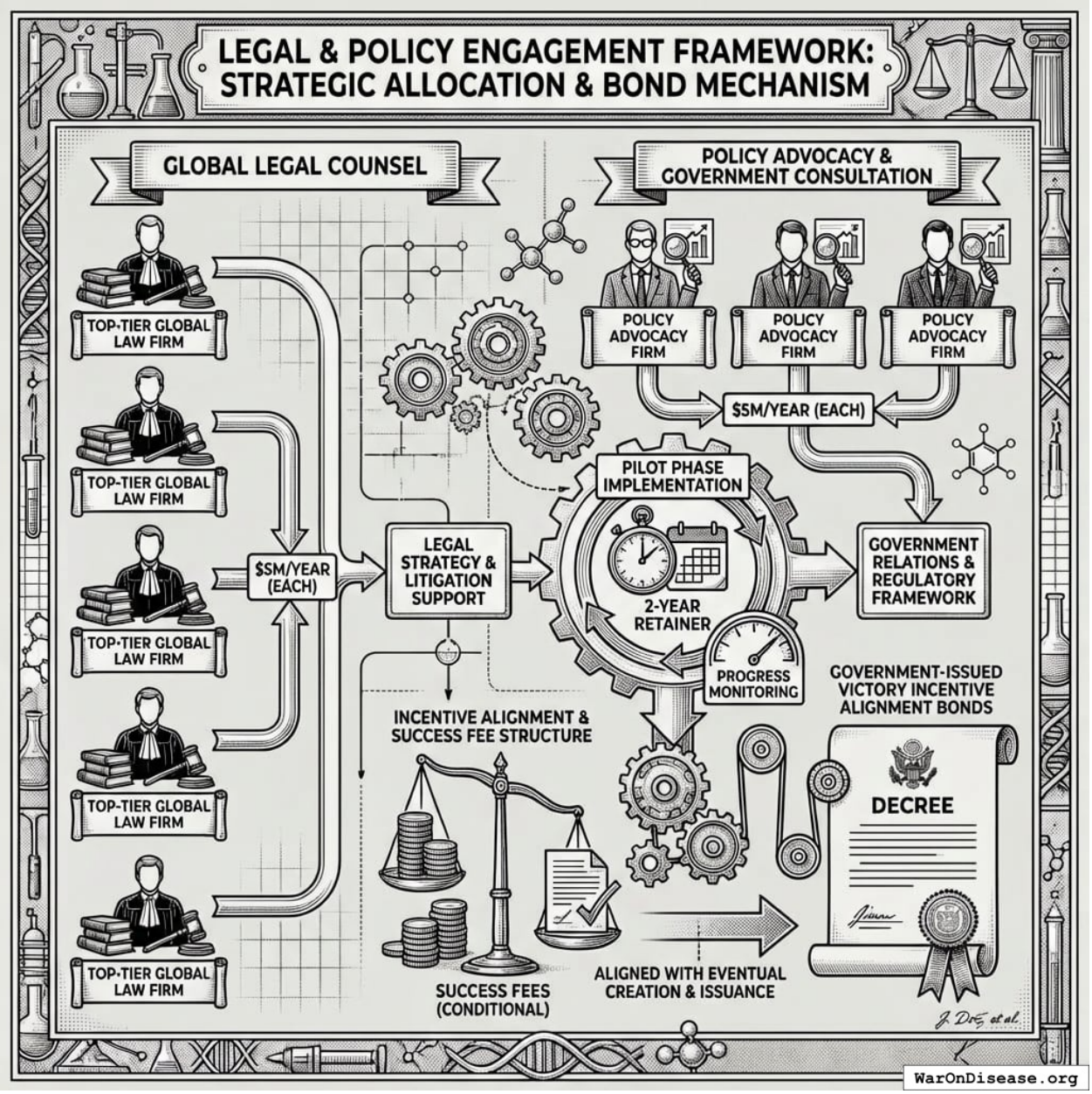


Figure 936: A visualization of the legal and policy engagement strategy, illustrating the collaboration between global law firms and policy advocacy groups working toward the creation of VICTORY Incentive Alignment Bonds.

- 5 top-tier global law firms ($5M/year each)
- 3 policy advocacy and government consultation firms ($5M/year each)
- 2-year retainer for pilot phase
- Success fees are structured to be aligned with the eventual creation of government-issued VICTORY Incentive Alignment Bonds

Public Engagement & Policy Education Initiatives

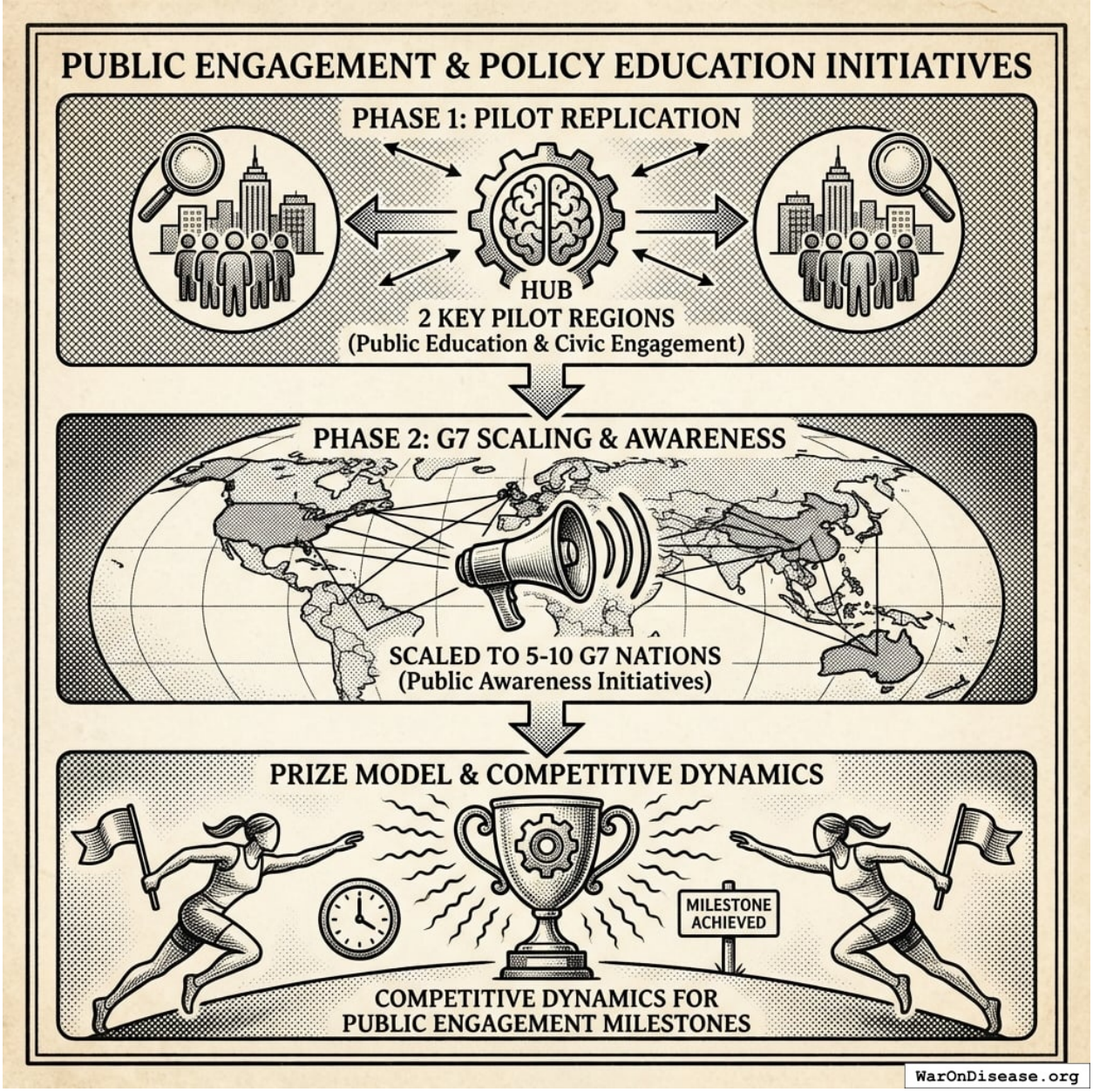


Figure 937: A two-phase scaling roadmap showing the expansion of public engagement initiatives from pilot regions to G7 nations, driven by a competitive prize model.

- Public education and civic engagement initiatives replicated in 2 key pilot regions for Phase 1
- Scaled to 5-10 G7 nations for Phase 2 public awareness initiatives
- Prize model creates competitive dynamics for achieving public engagement milestones

Legal Structures for Large Investments

Option 1: SAFT (Simple Agreement for Future Tokens)

- **Best for:** Crypto whales who understand token mechanics
- **Timeline:** 2-4 weeks to close

- **Minimum:** $5M investment

Option 2: Convertible Note

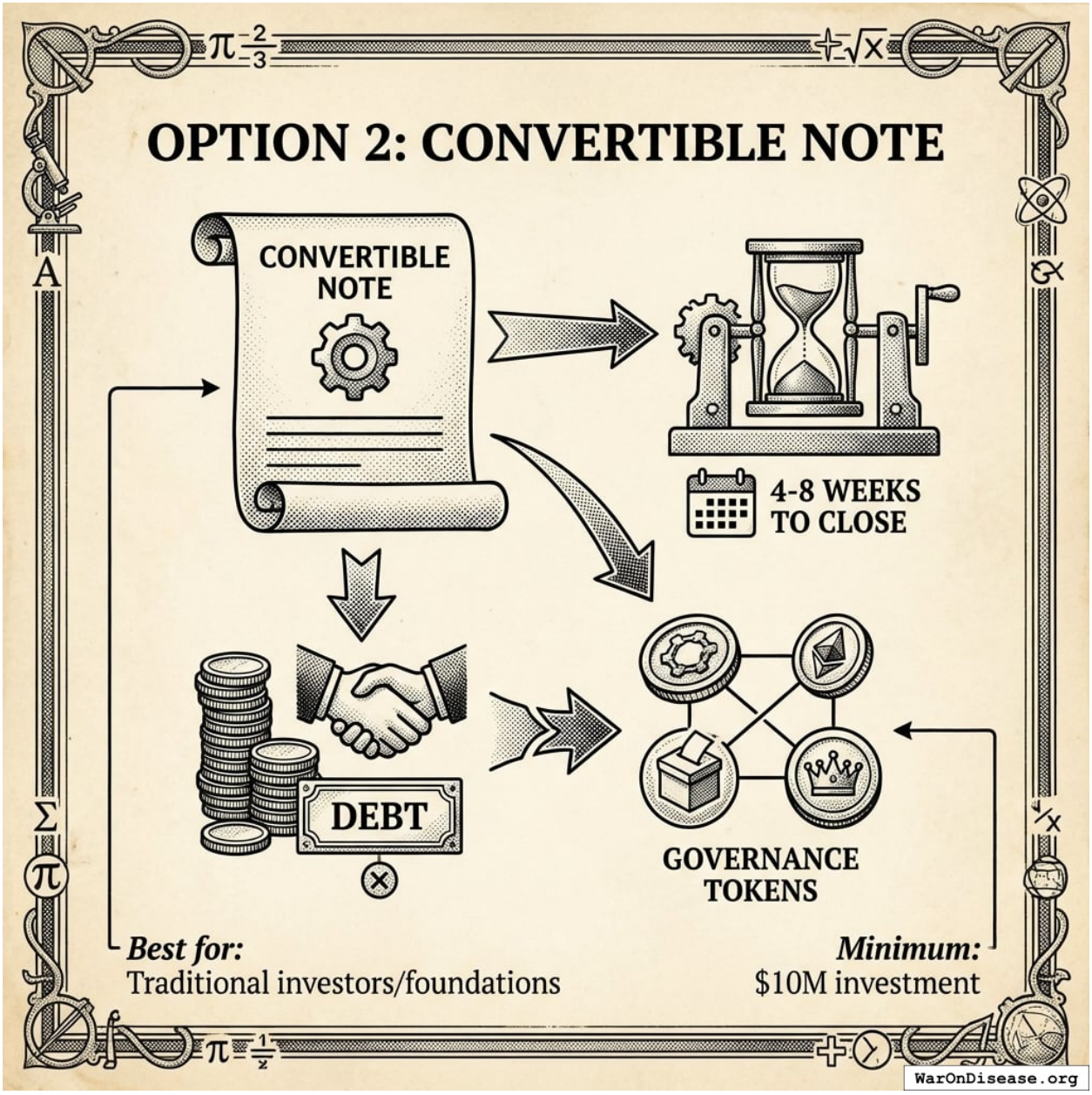


Figure 938: A diagram illustrating the convertible note process, showing how initial debt investment from traditional investors converts into governance tokens over time.

- **Best for:** Traditional investors/foundations
- **Structure:** Debt that converts to governance tokens
- **Timeline:** 4-8 weeks to close
- **Minimum:** $10M investment

Option 3: Series Seed Equity

- **Best for:** VCs and institutional investors
- **Timeline:** 8-12 weeks to close
- **Minimum:** $25M investment

Option 4: Revenue Share Agreement

- **Best for:** Conservative institutions
- **Structure:** Fixed % of treaty inflows
- **Timeline:** 6-10 weeks to close
- **Minimum:** $50M investment

Execution Timeline

Month 1-2: List Building & Warm Intros

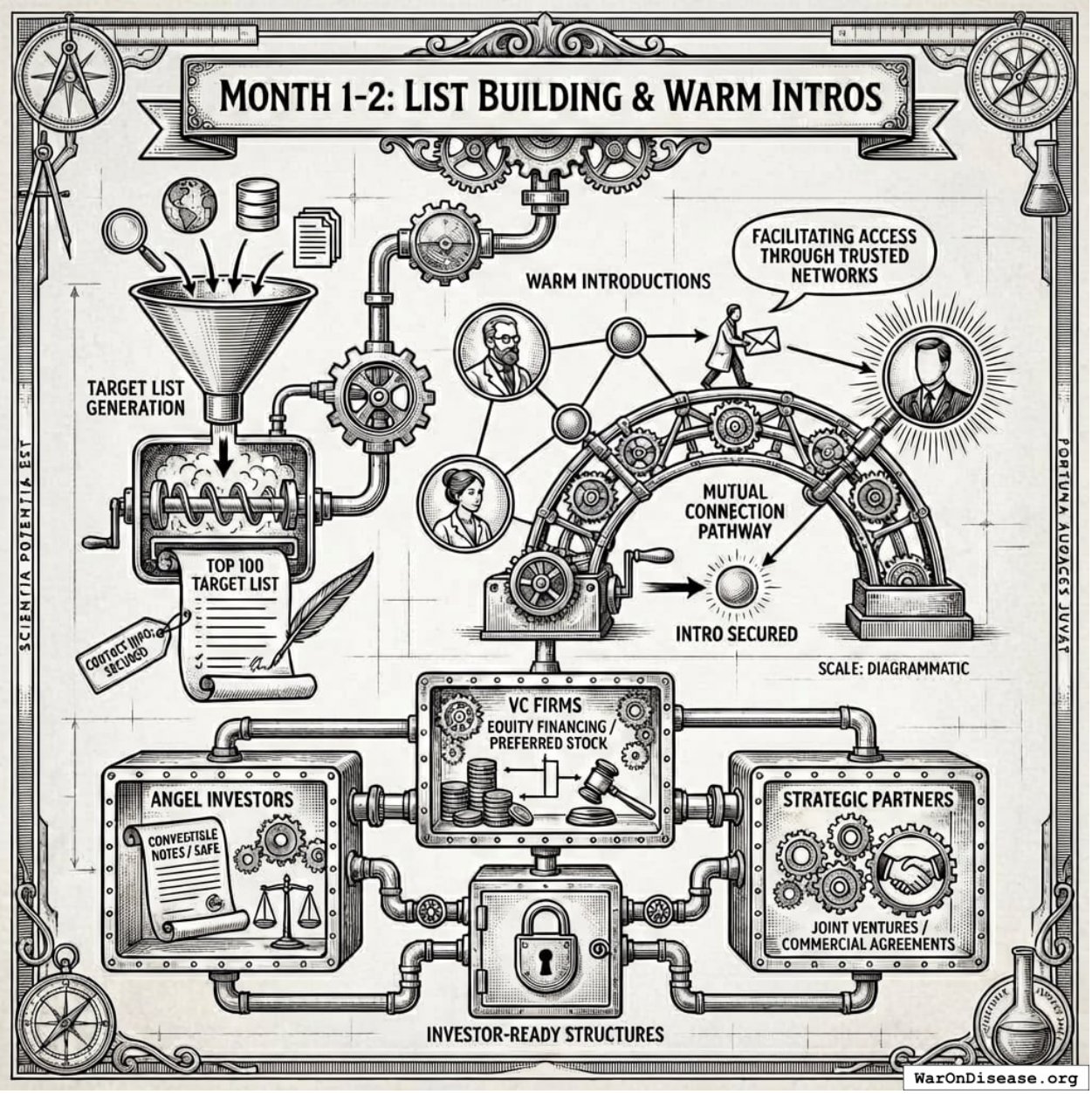


Figure 939: A workflow diagram showing the three key phases of early investor outreach: finalizing the target list, securing warm introductions, and preparing legal structures.

- Finalize top 100 target list with contact information
- Secure warm introductions through mutual connections
- Prepare legal structures for different investor types

Month 3-4: Direct Outreach Wave 1 (Top 25 targets)

- Send personalized outreach to highest-probability targets
- Target: 5-10 serious conversations, 2-3 term sheets

Month 5-6: Closing Wave 1 ($150-300M)

- Close first 3-5 major investors
- Use social proof from Wave 1 for Wave 2 outreach
- Target: $150-300M closed

Month 7-9: Outreach Wave 2 (Next 50 targets)

- Leverage Wave 1 investors for introductions
- Target: 8-12 serious conversations, 5-8 term sheets

Month 10-12: Closing Wave 2 ($400M-1B)

- Close remaining funding to reach $500M-1.3B total
- Target: Total raise of $1-2.5B

Success Metrics

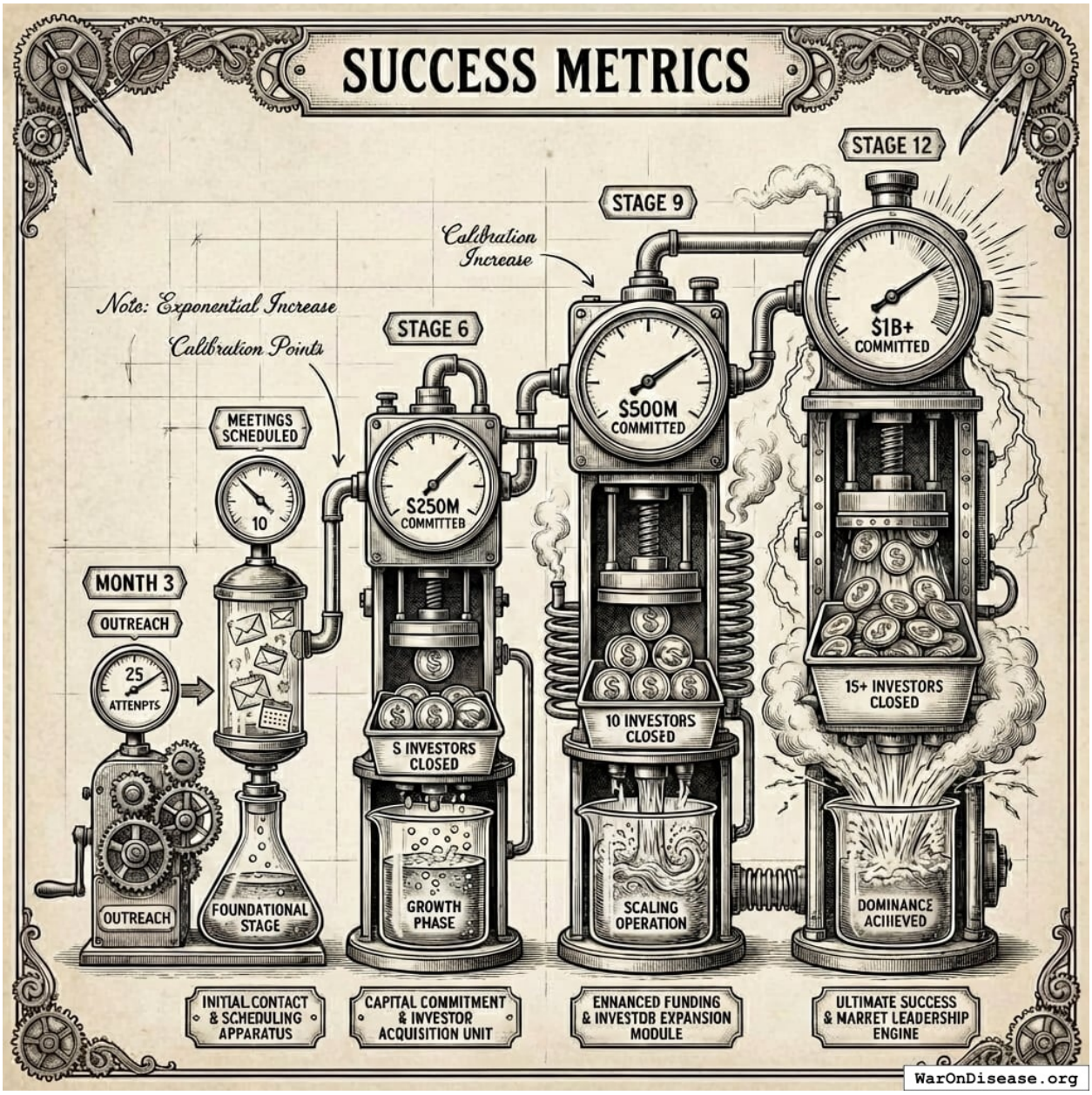


Figure 940: A growth chart illustrating the projected increase in committed capital and closed investors from month 3 to month 12.

- **Month 3:** 25 outreach attempts, 10 meetings scheduled
- **Month 6:** $250M committed, 5 investors closed
- **Month 9:** $500M committed, 10 investors closed
- **Month 12:** $1B+ committed, 15+ investors closed

Risk Mitigation

Regulatory Risk

- Use established legal structures (SAFTs, convertibles)

- Engage top-tier securities lawyers from day one
- Structure as utility tokens, not investment contracts

Market Risk

- Focus on mission-aligned investors, not pure profit seekers
- Create vesting schedules to prevent quick flips
- Build in treasury protections against volatility

Execution Risk

- Over-recruit targets (100 targets for 20 closes)
- Multiple legal structures for different preferences
- Clear milestones with investor updates

The Economic Reality

This isn't traditional fundraising; it's strategic policy activation. The approach is inspired by the effectiveness of robust public and diplomatic engagement in shaping policy, where focused efforts can unlock significant societal benefits, similar to how focused advocacy in other sectors can lead to substantial economic shifts.

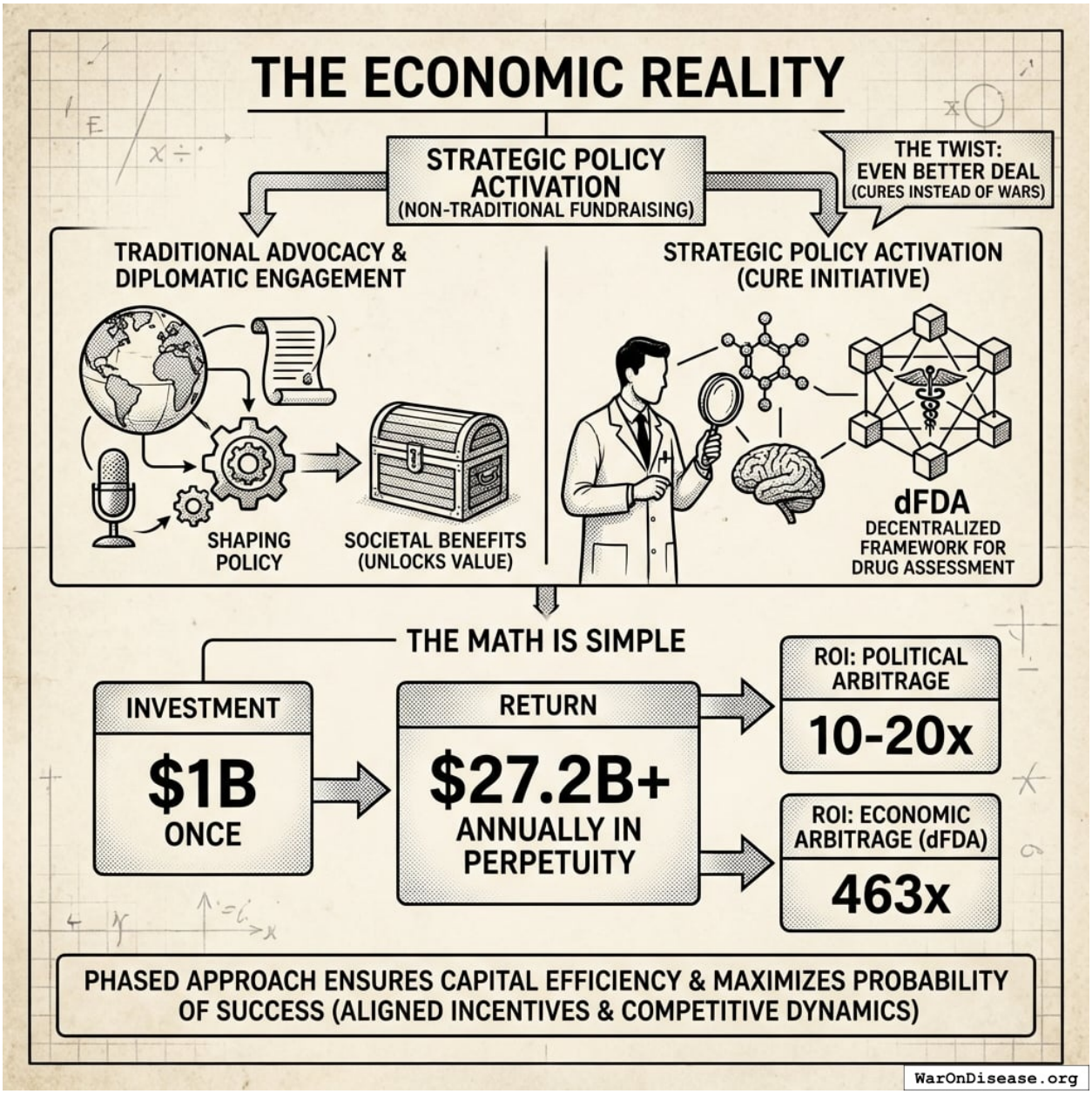


Figure 941: A visual representation of the economic arbitrage showing how a 1 billion investment scales into a 27.2 billion annual return through political and economic leverage.

The twist: offer them an even better deal to fund cures instead of wars.

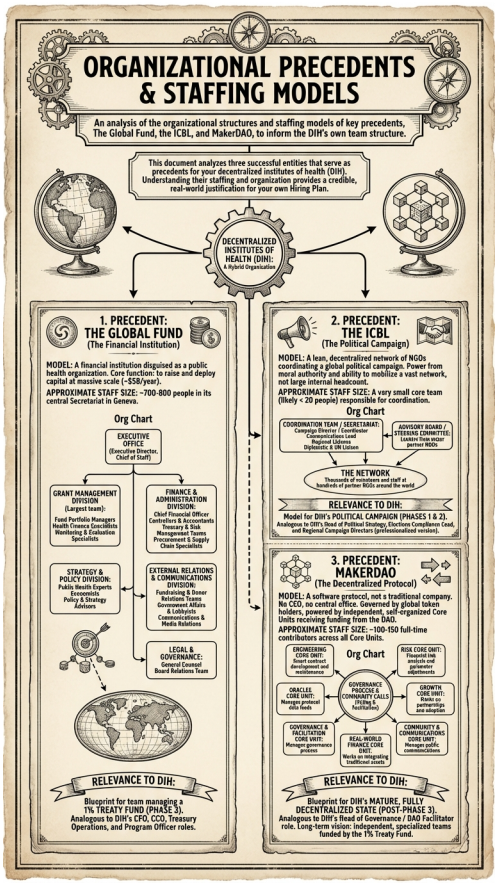
The math is simple:

- **Investment:** $1B once
- **Return:** $27.2B+ annually in perpetuity
- **ROI:** 10-20x political arbitrage + 463x economic arbitrage via your decentralized framework for drug assessment (dFDA)

This phased approach ensures capital efficiency while maximizing probability of success through aligned incentives and competitive dynamics.

Governance & Organization

Organizational Precedents & Staffing Models



This document analyzes the organizational structures of three successful entities that serve as precedents for your decentralized institutes of health (DIH). By understanding how they are staffed and organized, you can provide a credible, real-world justification for your own Hiring Plan.

A decentralized institutes of health (DIH) is a hybrid organization that combines the functions of all three:

1. **The Global Fund:** A massive, multi-billion dollar public health funding institution.
2. **The ICBL:** A nimble, decentralized global political advocacy campaign.
3. **MakerDAO:** A decentralized, on-chain financial protocol.

Precedent: The Global Fund (The Financial Institution)

Model: The Global Fund is a financial institution disguised as a public health organization. It does not implement programs directly. Instead, its core function is to raise and deploy capital at massive scale (~$5B/year). Its organizational structure reflects this focus on finance, risk management, and grant administration.

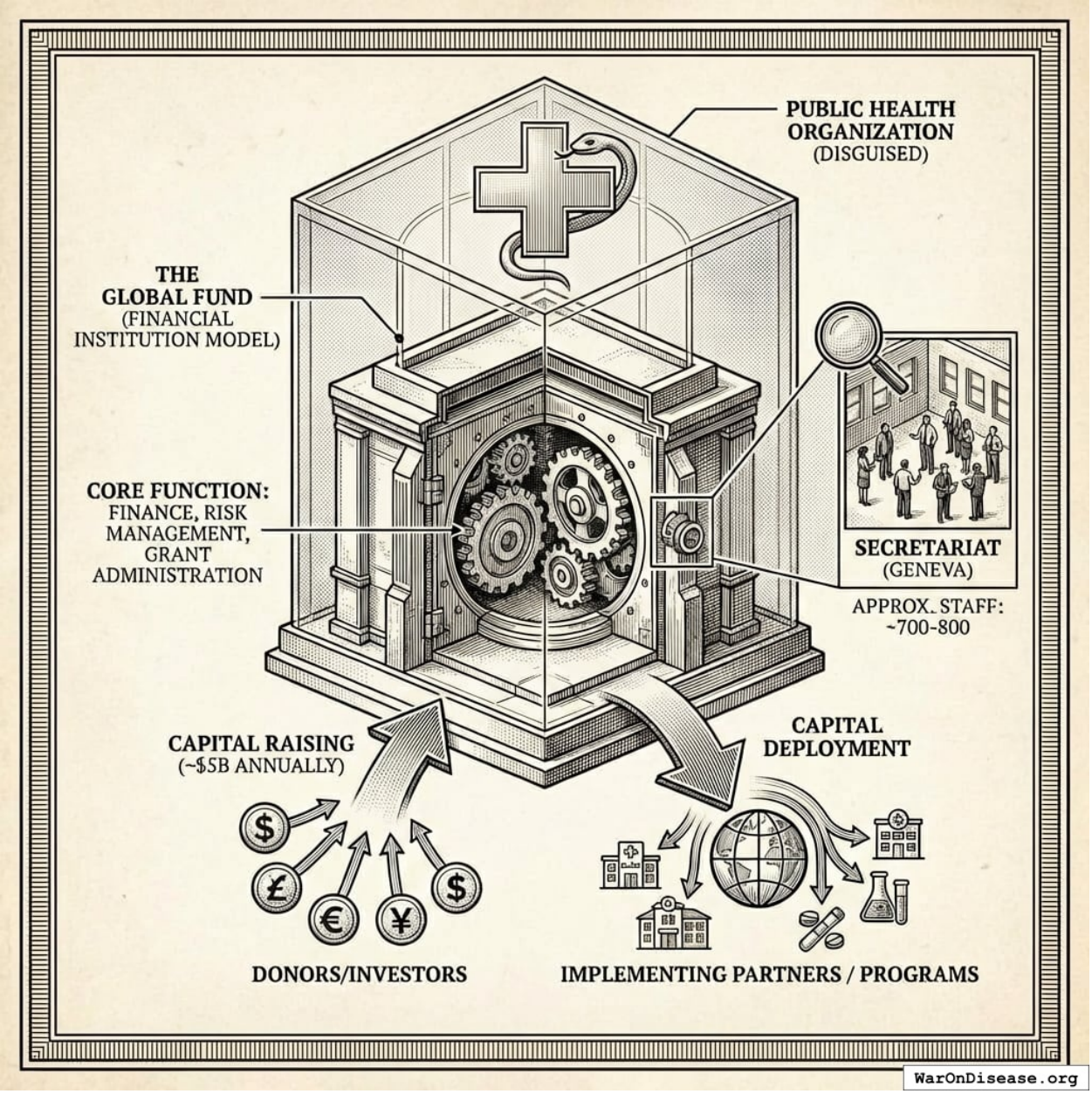


Figure 942: A diagram illustrating The Global Fund's financial intermediary model, showing the flow of capital from donors through the Geneva Secretariat to external implementing programs.

Approximate Staff Size: ~700-800 people in its central Secretariat in Geneva.

Illustrative Org Chart & Key Roles

- **Executive Office:** Executive Director, Chief of Staff.
- **Grant Management Division (Largest team):**
- Fund Portfolio Managers (by region: Africa, Asia, etc.)
- Health Finance Specialists
- Monitoring & Evaluation Specialists
- **Finance & Administration Division:**
- Chief Financial Officer
- Controllers & Accountants
- Treasury & Risk Management Teams
- Procurement & Supply Chain Specialists
- **Strategy & Policy Division:**
- Public Health Experts
- Economists
- Policy & Strategy Advisors
- **External Relations & Communications Division:**
- Fundraising & Donor Relations Teams
- Government Affairs & Lobbyists
- Communications & Media Relations
- **Legal & Governance:**
- General Counsel
- Board Relations Team

Relevance to DIH: The Global Fund's structure provides a proven blueprint for the team required to manage a **1% Treaty Fund (Phase 3)**. Your decentralized institutes of health's CFO, CCO, Treasury Operations, and Program Officer roles are directly analogous to the core functions of The Global Fund's Secretariat.

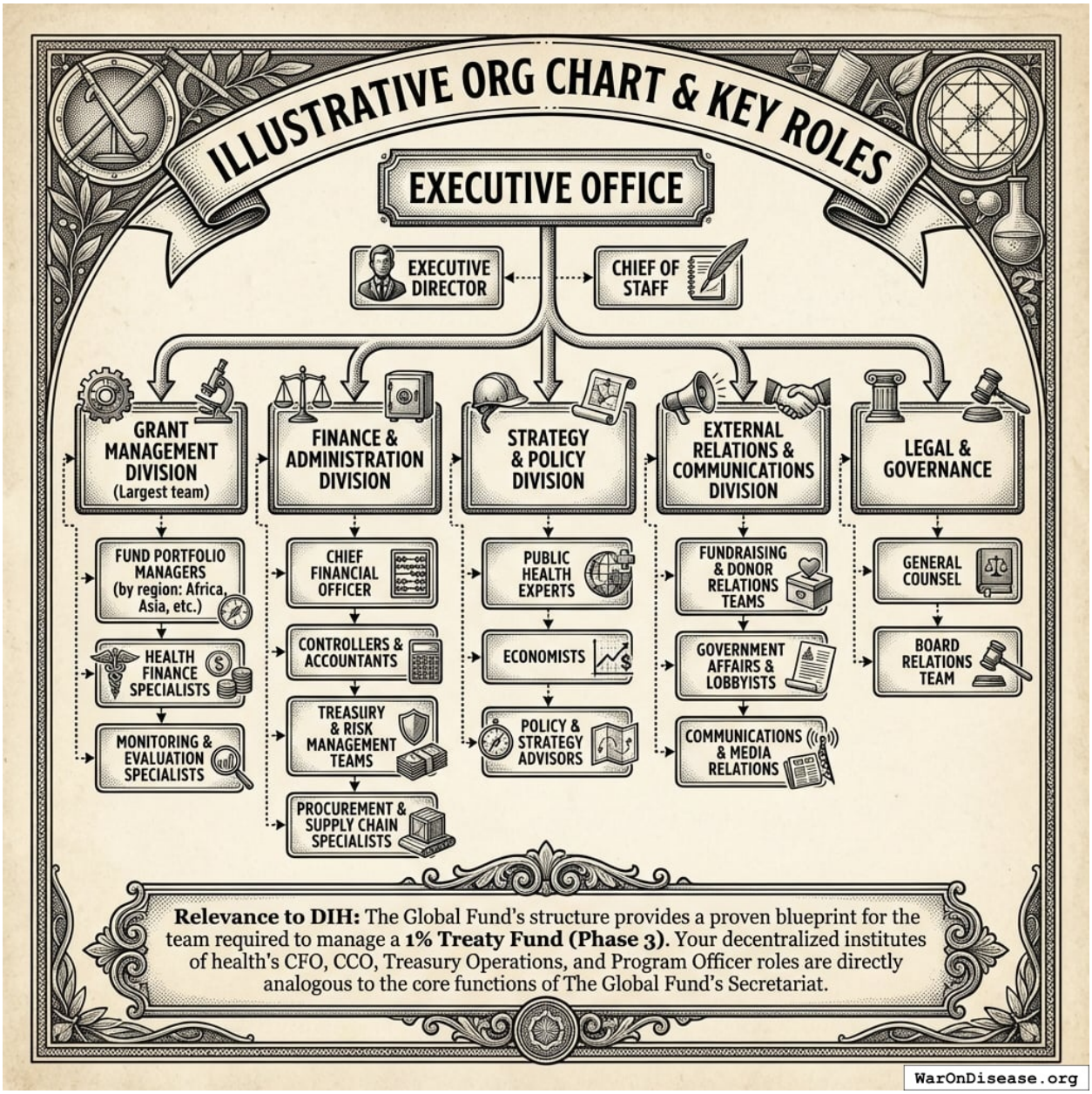


Figure 943: An organizational chart illustrating the hierarchical structure of The Global Fund, showing the relationship between the Executive Office and its specialized divisions like Grant Management, Finance, and Strategy.

Precedent: The ICBL (The Political Campaign)

Model: The ICBL was not a large, centralized organization. It was a lean, decentralized network of NGOs that coordinated a global political campaign. Its power came from its moral authority and its ability to mobilize a vast network, not a large internal headcount.

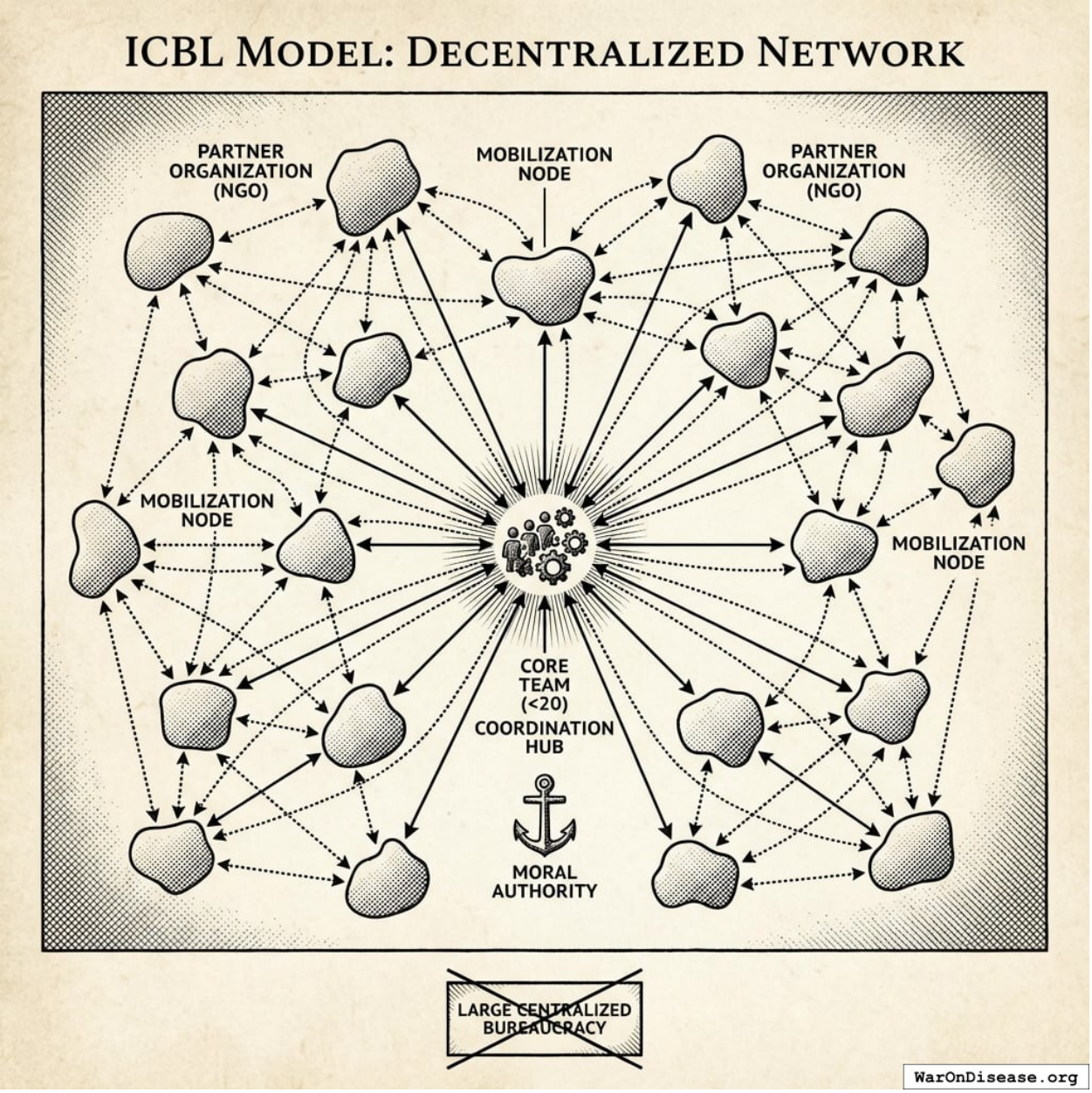


Figure 944: A diagram of a decentralized network model showing a small central coordination hub connected to a wide array of independent partner organizations.

Approximate Staff Size: A very small core team (likely < 20 people) responsible for coordination, with the bulk of the work done by partner organizations.

Illustrative Org Chart & Key Roles

- **Coordination Team / Secretariat:**
- Campaign Director / Coordinator
- Communications Lead
- Regional Liaisons (to coordinate with partner NGOs)
- Diplomatic & UN Liaison
- **Advisory Board / Steering Committee:** Composed of leaders from the major partner NGOs.

- **The Network:** Thousands of volunteers and staff at hundreds of partner NGOs around the world who performed the actual in-country advocacy.

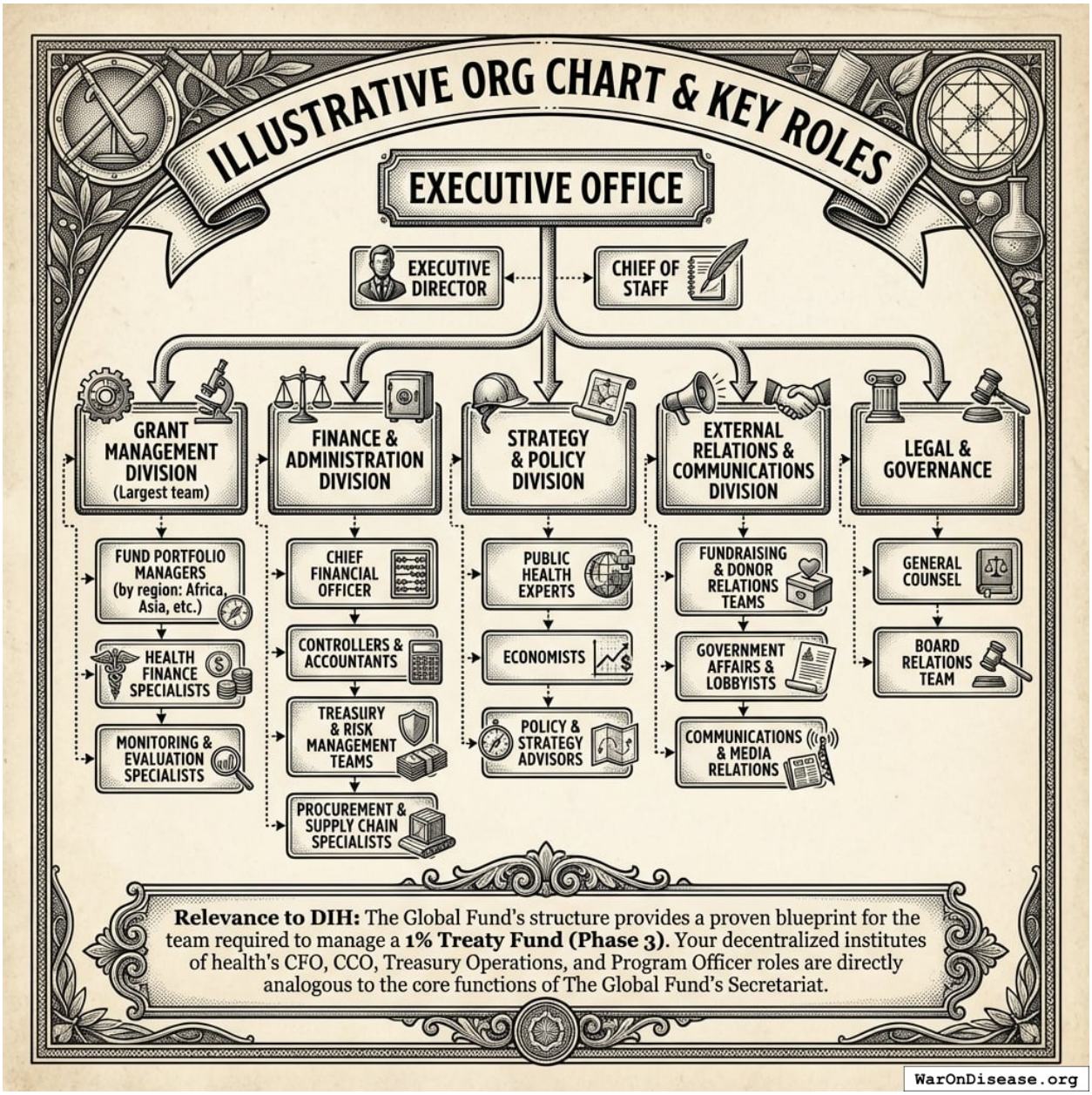


Figure 945: An organizational chart illustrating the relationship between the core coordination team, the advisory board, and the decentralized network of global partners.

Relevance to DIH: The ICBL's lean, decentralized structure is the model for **your decentralized institutes of health's political campaign (Phases 1 & 2)**. Your decentralized institutes of health's Head of Political Strategy, Elections Compliance Lead, and Regional Campaign Directors are the modern, more heavily capitalized version of the ICBL's core coordination team. You are, in effect, running a professionalized, well-funded ICBL.

Precedent: MakerDAO (The Decentralized Protocol)

Model: MakerDAO is a software protocol, not a traditional company. It has no CEO, no central office, and no formal employees in the traditional sense. It is governed by a global community of token holders and powered by a network of independent, self-organized "Core Units" that receive funding from the DAO.

Approximate Staff Size: ~100-150 full-time contributors across all Core Units.

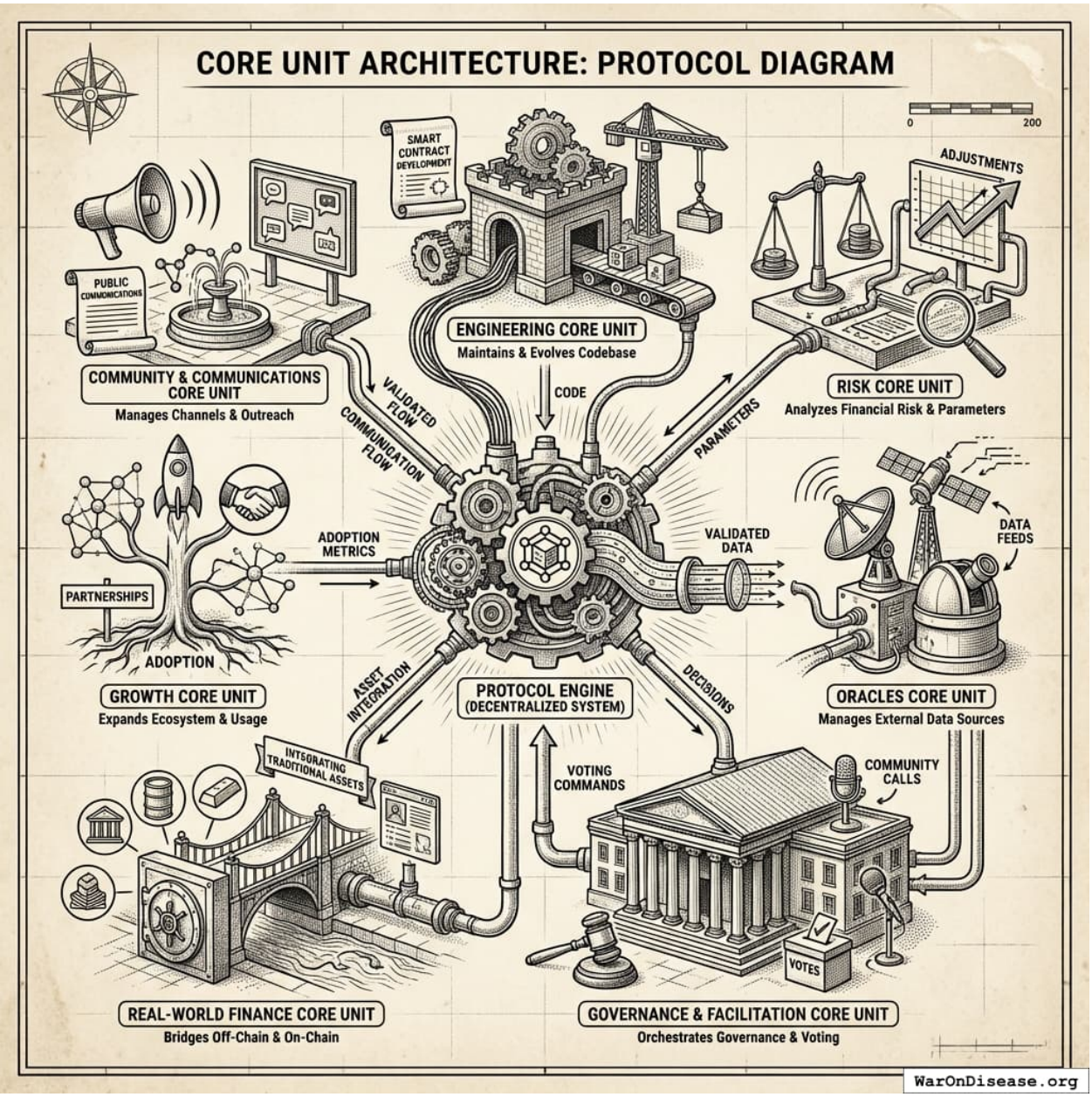


Figure 946: A visualization of MakerDAO's decentralized 'Core Unit' structure, contrasting with traditional hierarchies by showing independent teams operating around the central protocol.

Illustrative "Org Chart" (Core Units)

- **Engineering Core Unit:** Smart contract development and maintenance.

- **Risk Core Unit:** Financial risk analysis and parameter adjustments.
- **Oracles Core Unit:** Manages the data feeds that the protocol relies on.
- **Growth Core Unit:** Works on partnerships and adoption.
- **Governance & Facilitation Core Unit:** Manages the governance process, runs community calls, and organizes voting.
- **Real-World Finance Core Unit:** Works on integrating traditional assets into the protocol.
- **Community & Communications Core Unit:** Manages public communications and community channels.

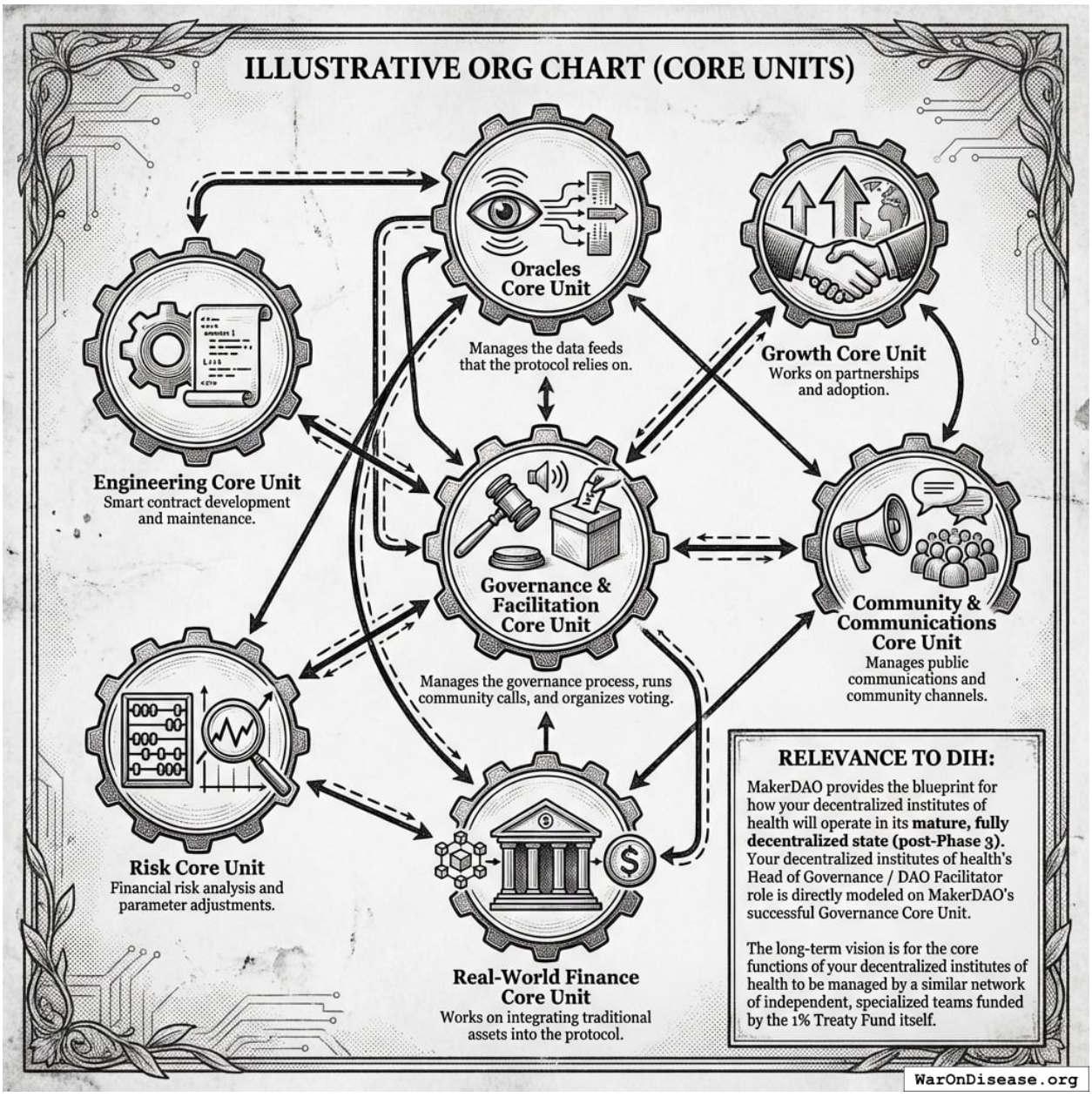
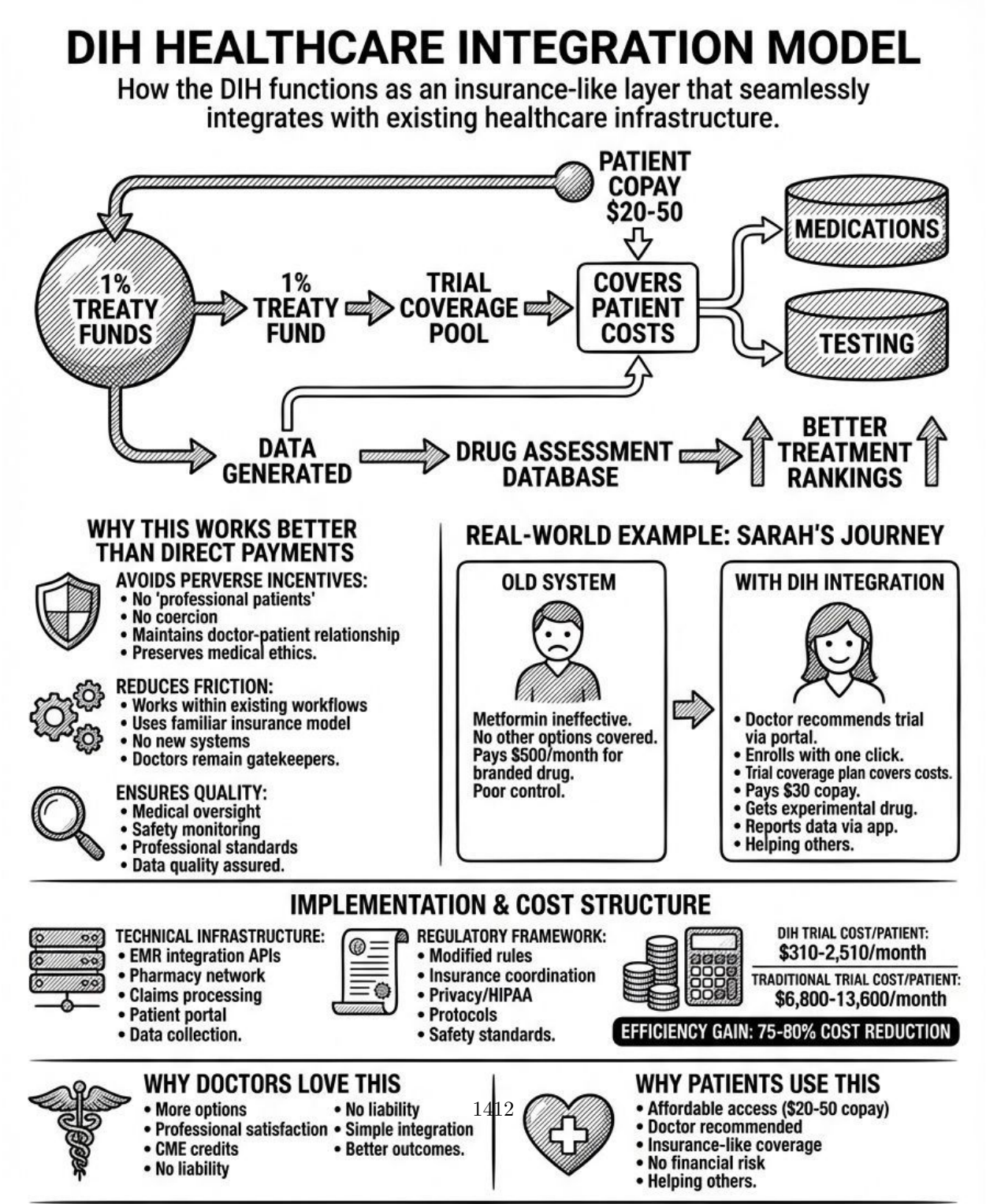


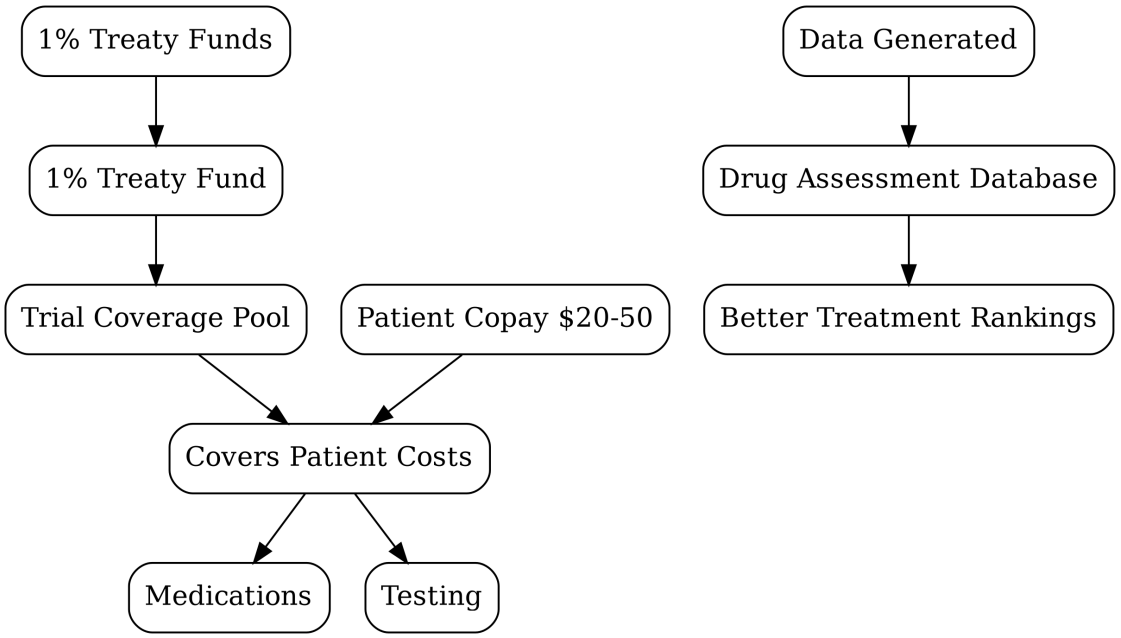
Figure 947: A structural diagram showing the seven specialized Core Units surrounding and supporting the central DIH protocol and the 1 percent Treaty Fund.

Relevance to DIH: MakerDAO provides the blueprint for how your decentralized institutes of health will operate in its **mature, fully decentralized state (post-Phase 3)**. Your decentralized institutes of health's

Head of Governance / DAO Facilitator role is directly modeled on MakerDAO's successful Governance Core Unit. The long-term vision is for the core functions of your decentralized institutes of health to be managed by a similar network of independent, specialized teams funded by the 1% Treaty Fund itself.

DIH Healthcare Integration Model





5. Why This Works Better Than Direct Payments

Avoids Perverse Incentives

- No “professional patients” gaming the system
- No coercion of desperate people
- Maintains doctor-patient relationship
- Preserves medical ethics

Reduces Friction

- Works within existing workflows
- Uses familiar insurance model
- No new systems to learn
- Doctors remain gatekeepers

Ensures Quality

- Medical oversight maintained
- Safety monitoring preserved
- Professional standards upheld
- Data quality assured

Real-World Example

Sarah has Type 2 Diabetes

Old System

- Metformin not working well
- No other options covered
- Pays $500/month for branded drug
- Still has poor control

With a decentralized institutes of health integration

1. Doctor checks the portal for the trial network during visit
2. Sees 5 relevant trials for new diabetes drugs
3. Recommends Trial #3 based on Sarah's profile
4. Sarah enrolls with one click
5. The trial coverage plan covers all costs
6. Sarah pays $30 copay
7. Gets experimental drug that might work better
8. Reports blood sugar via app
9. Data helps next patient

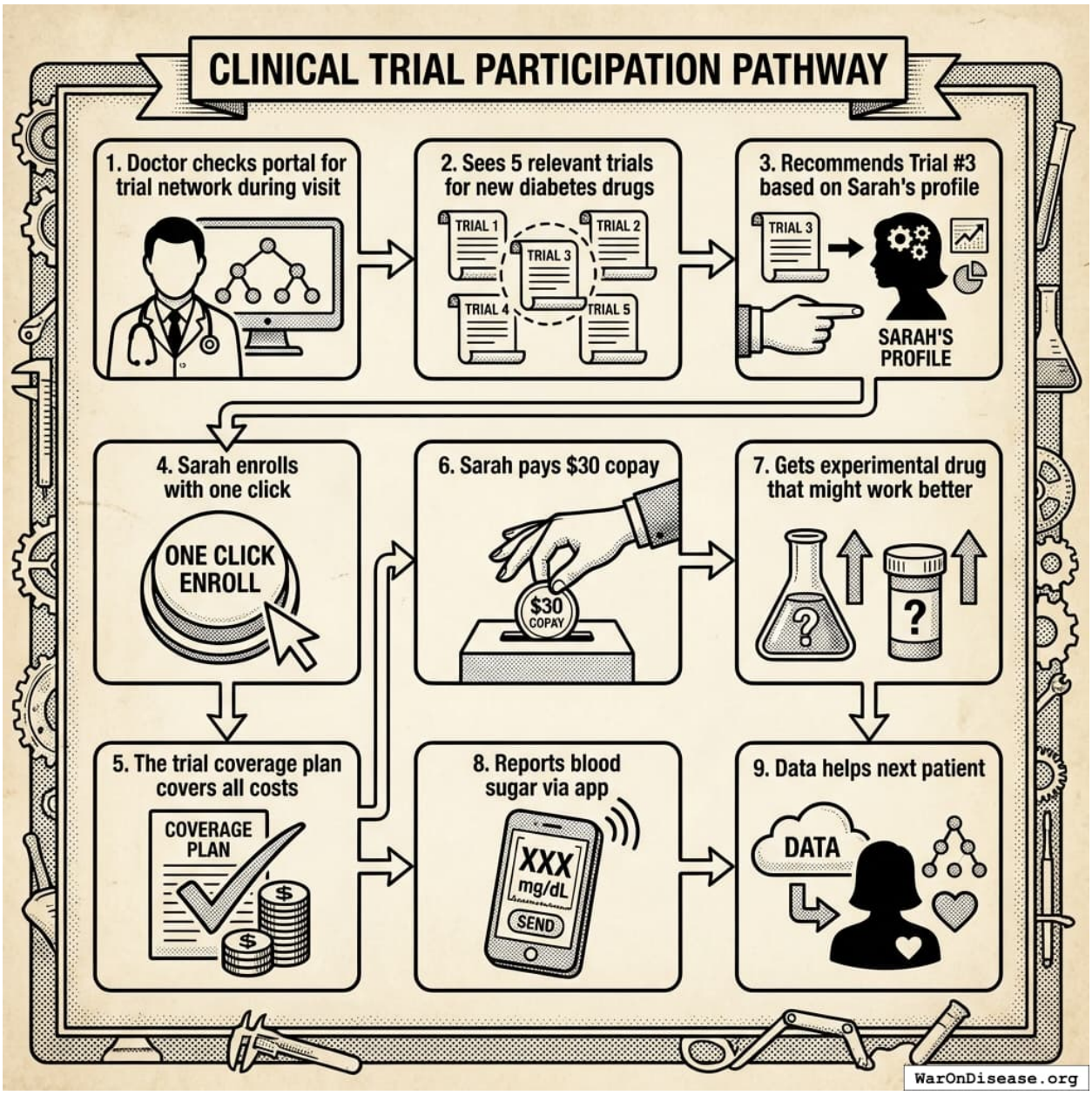


Figure 948: Step-by-step workflow of the patient journey within the DIH integration, demonstrating the streamlined enrollment and treatment process compared to traditional friction points.

Implementation Requirements

Technical Infrastructure

- EMR integration APIs
- Pharmacy network connections
- Claims processing system
- Patient portal/app
- Data collection platform

Regulatory Framework

- Modified clinical trial regulations
- Insurance coordination rules
- Privacy/HIPAA compliance
- Prescription handling protocols
- Safety monitoring standards

Who Gets What

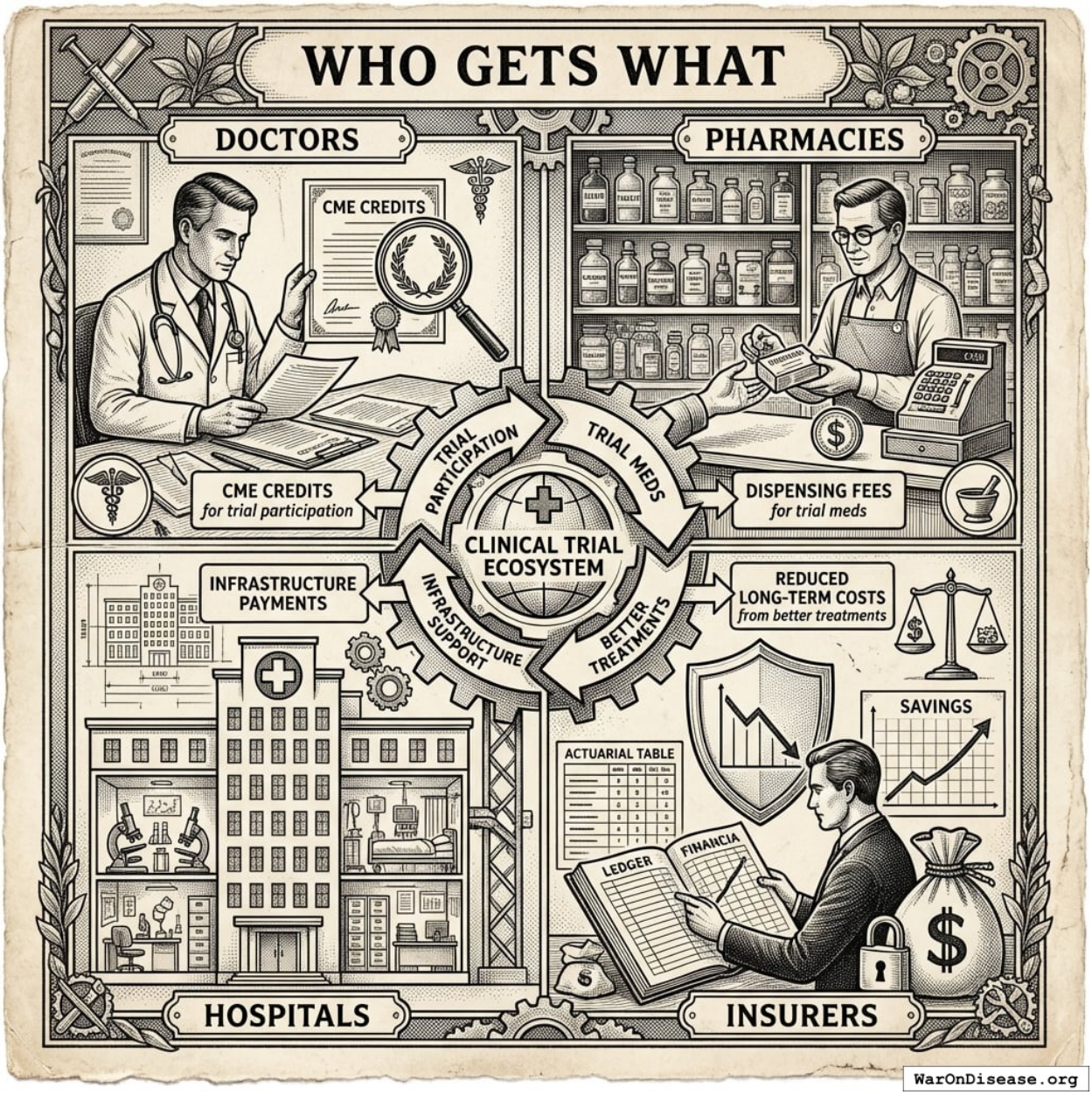


Figure 949: A stakeholder map illustrating how doctors, pharmacies, hospitals, and insurers each benefit from clinical trial participation and outcomes.

- **Doctors:** CME credits for trial participation

- **Pharmacies:** Dispensing fees for trial meds
- **Hospitals:** Infrastructure payments
- **Insurers:** Reduced long-term costs from better treatments

Cost Structure (Realistic Numbers)

Per Patient Per Trial

- Medication costs: $200-2000/month (covered by the trial coverage pool)
- Monitoring costs: $100-500/month (covered by the trial coverage pool)
- **Patient copay: $20-50/month**
- Data collection: $10/month (automated)

Total trial fund cost per patient: $310-2,510/month (decentralized model eliminates travel costs)
Traditional trial cost per patient: $6,800-13,600/month[115]

Efficiency gain: 75-80% cost reduction

Why Doctors Will Love This

1. **More treatment options** for desperate patients
2. **Professional satisfaction** from contributing to pragmatic clinical trials
3. **CME credits** for participation
4. **No liability** (covered by trial insurance)
5. **Simple integration** (one click in EMR)
6. **Better outcomes** from expanded options

Why Patients Will Use This

1. **Affordable access** to experimental treatments ($20-50 copay)
2. **Doctor recommended** (trusted source)
3. **Insurance-like coverage** (familiar model)
4. **No financial risk** (the trial fund covers everything)
5. **Helping others** while helping themselves

The Transition Plan

Phase 1: Pilot Programs (Year 1)

- 10 health systems
- 5 disease areas
- 10,000 patients
- Prove the model works

Phase 2: Regional Rollout (Year 2)

- 100 health systems
- 20 disease areas
- 100,000 patients
- Refine operations

Phase 3: National Scale (Year 3+)

- All willing providers

- All diseases
- Millions of patients
- Full integration

Integration Strategy

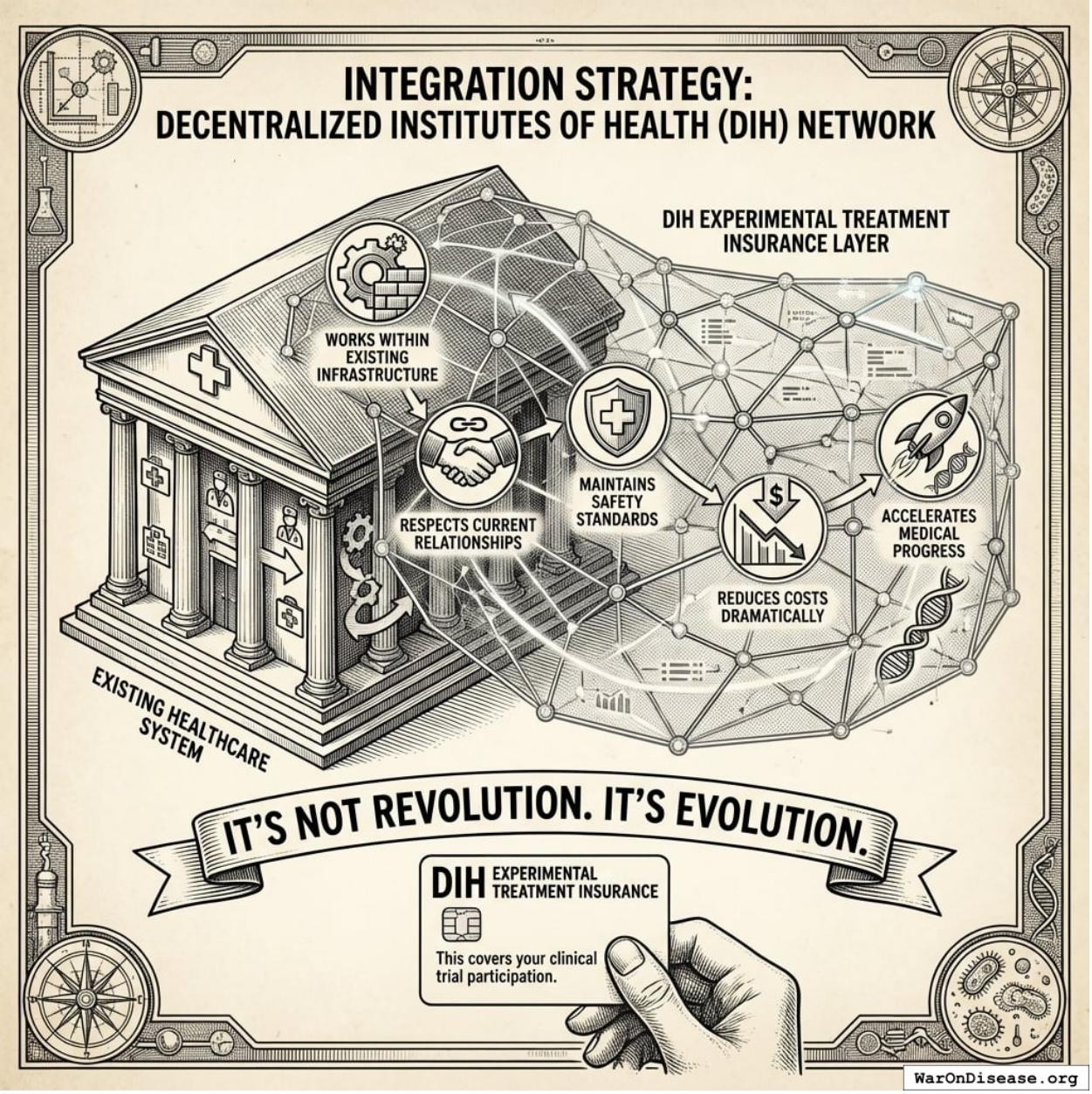


Figure 950: A diagram showing the DIH 'experimental treatment insurance layer' as a complementary addition that wraps around existing healthcare infrastructure to enable clinical trial participation.

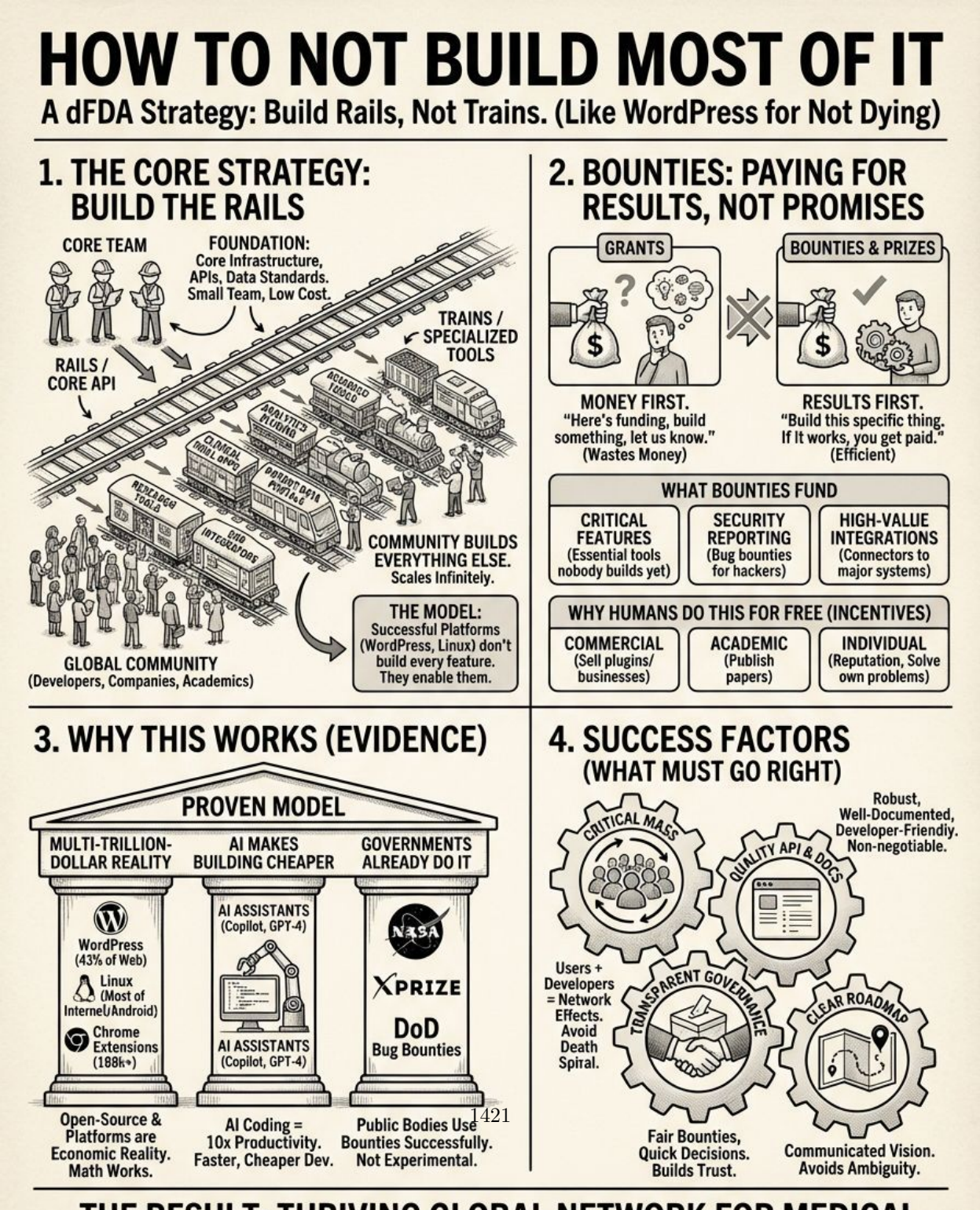
Your decentralized institutes of health (DIH) network isn't trying to replace the healthcare system. It's adding an "experimental treatment insurance layer" that:

- Works within existing infrastructure

- Respects current relationships
- Maintains safety standards
- Reduces costs dramatically
- Accelerates medical progress

It's not revolution. It's evolution. And it starts with a simple insurance card that says: "This covers your clinical trial participation."

How to Not Build Most of It



The infrastructure for a decentralized framework for drug assessment (dFDA) won't cost billions to build. Because you're not building most of it.

Here's the plan:

1. Build the foundation (core API)
2. Pay bounties for critical features that nobody wants to build yet
3. Let everyone else build everything else for free

This is how WordPress, Linux, and every successful platform works. You build the rails, not every train.

The Core Strategy (Build the Rails, Not Every Train)

The most successful software platforms don't build every feature. That would be slow and expensive.

Instead, they build the foundation and let others build on top.

The Model

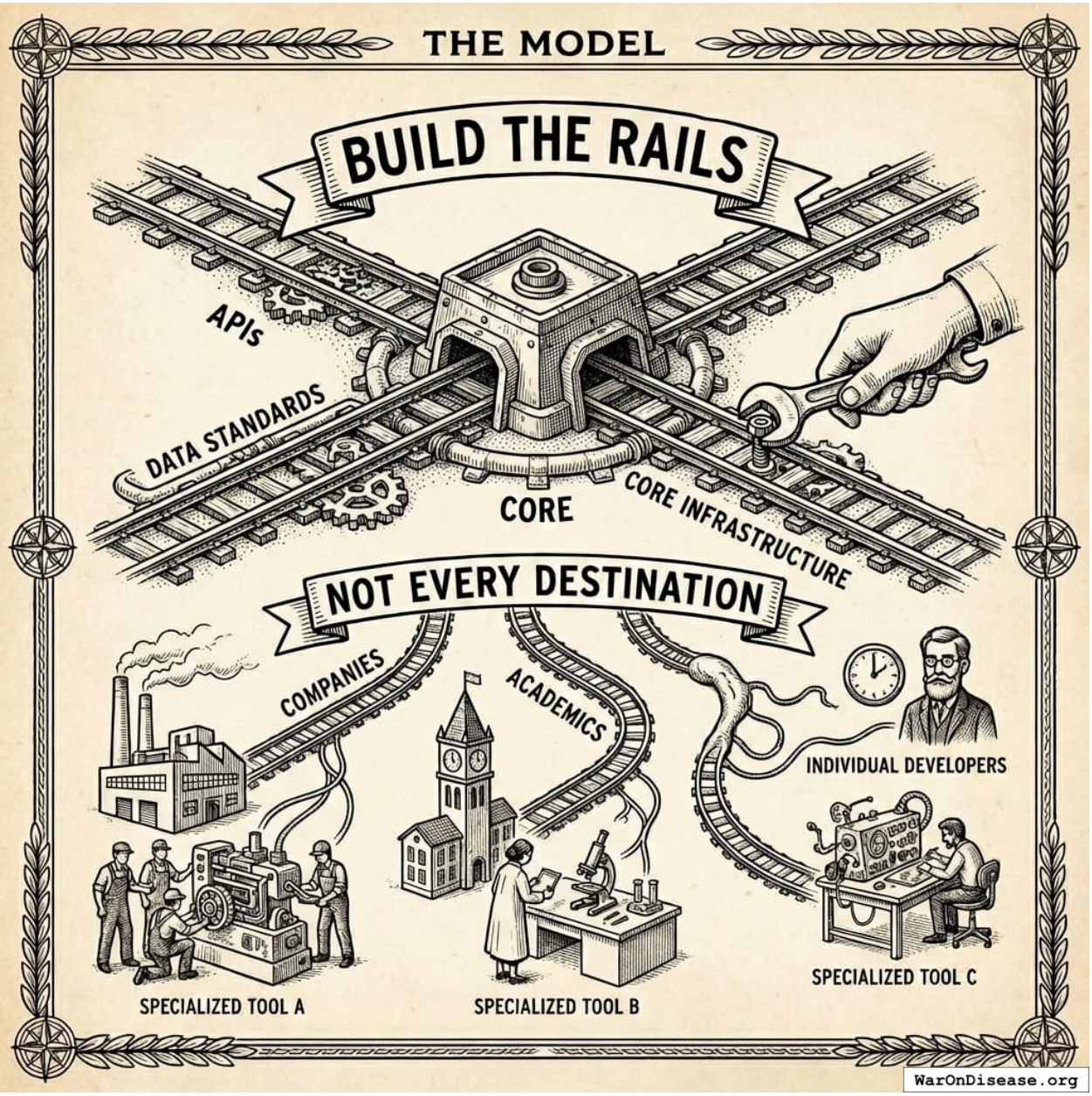


Figure 951: A conceptual diagram showing foundational core infrastructure ('the rails') supporting an ecosystem of diverse, specialized tools ('destinations') built by external developers.

- **Build the Rails:** Core infrastructure, APIs, data standards
- **Not Every Destination:** Developers (companies, academics, individual humans with too much time) build specialized tools

Why This Works (Evidence Not Theory)

Linux

- The kernel: Small core team
- Everything else: Thousands of companies and individuals

- Result: Runs most of the internet, all Android phones, world's fastest supercomputers
- Core team is tiny. Network of contributors is massive.

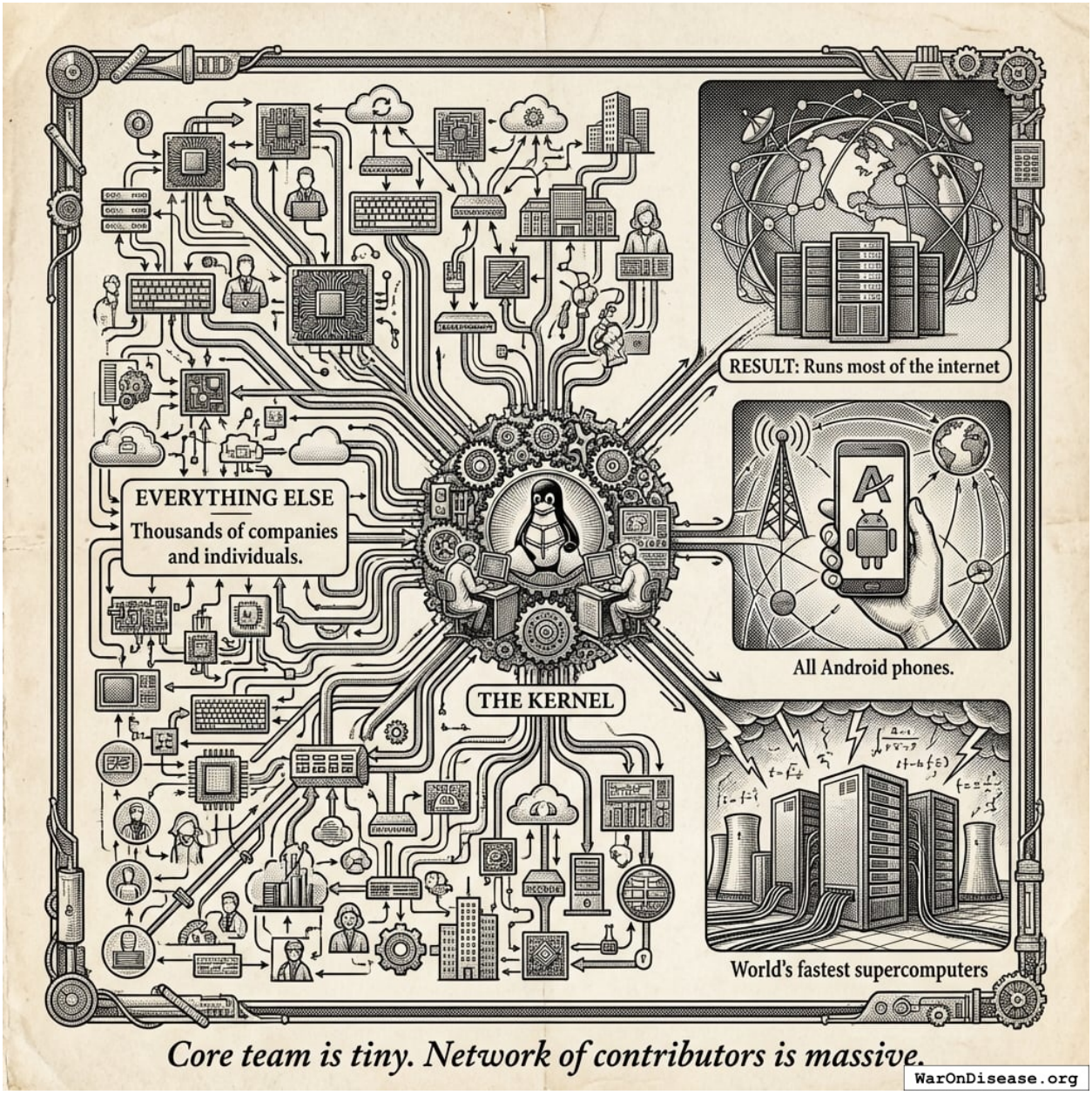


Figure 952: A visualization of the Linux ecosystem showing a small core team at the center surrounded by a vast network of global contributors powering the world's digital infrastructure.

Bounties and Prizes (Paying for Results Not Promises)

While an open platform mostly builds itself, sometimes you need specific features that nobody's building yet.

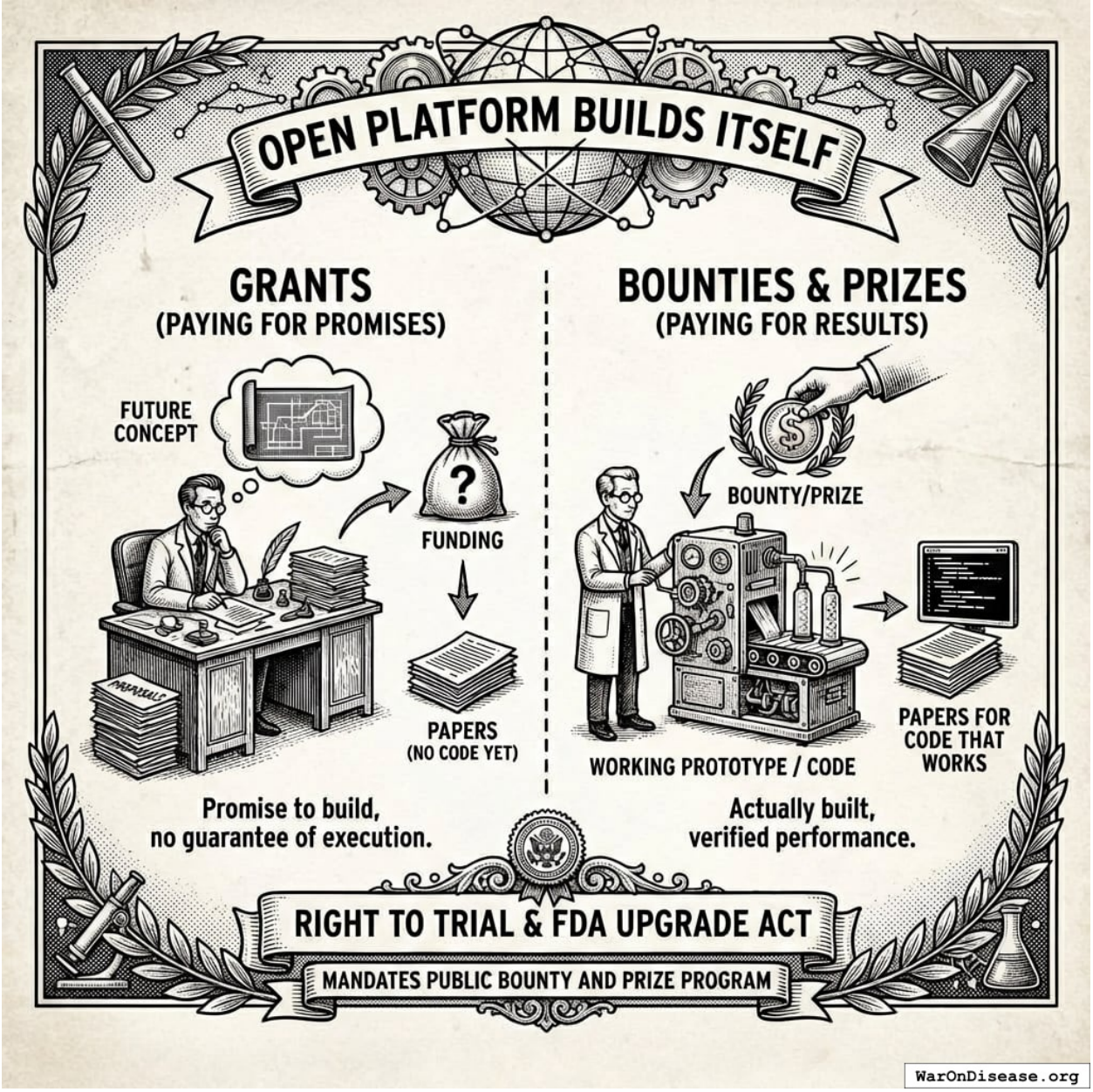


Figure 953: A comparison between the grant model, which funds proposals and promises, and the bounty model, which issues payment only after functional code is delivered.

That's where bounties come in.

The "Right to Trial & FDA Upgrade Act" mandates a **public bounty and prize program**. Not grants (pay people who promise to build). Bounties (pay people who actually built it).

You don't get papers for proposals. You get papers for code that works.

What Bounties Fund

Critical Features: Essential tools nobody's building. Pay someone to build it. Problem solved.

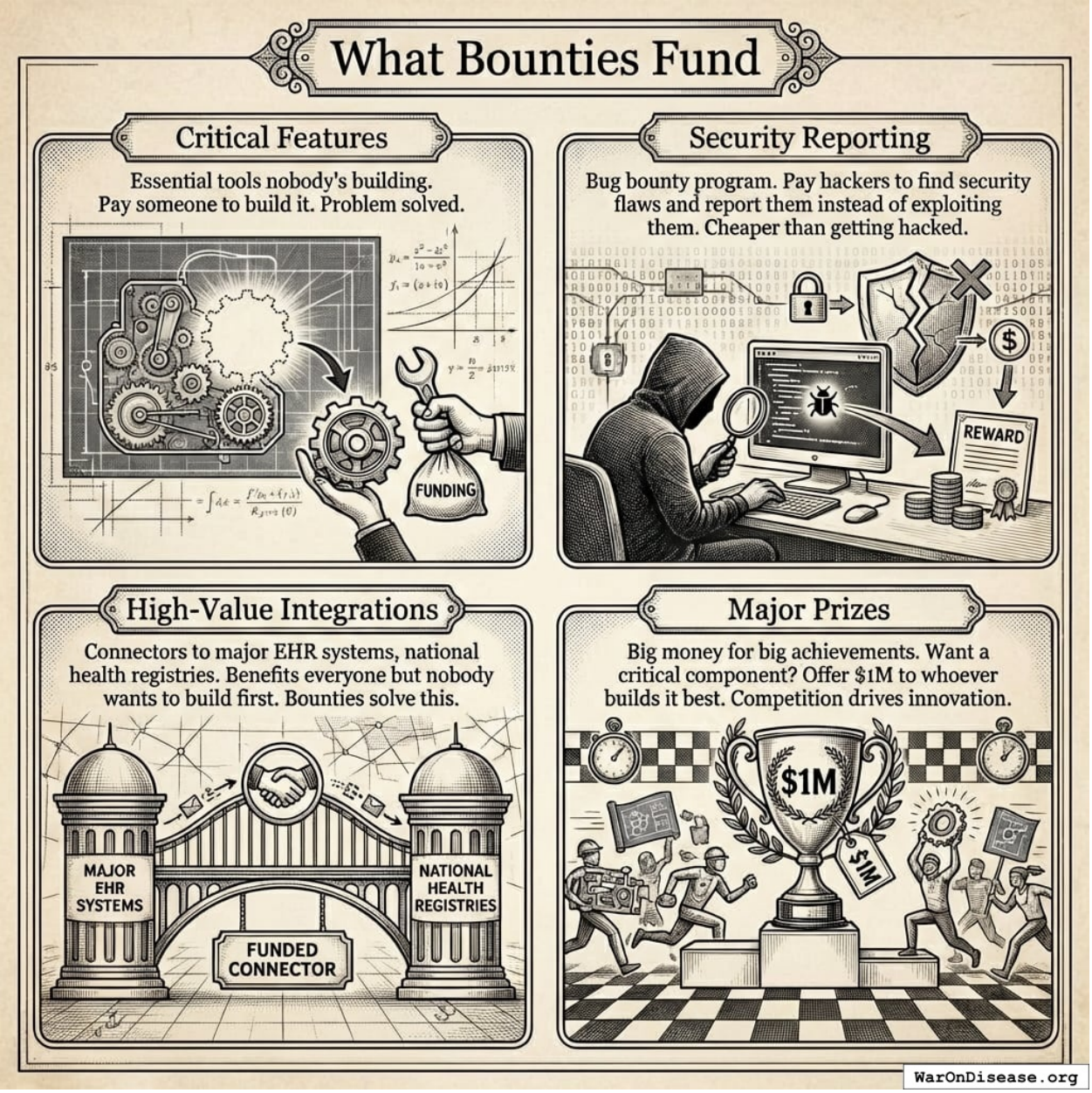


Figure 954: A conceptual diagram illustrating how a bounty system addresses four key areas: critical tool development, security flaw discovery, ecosystem integrations, and innovation through major prizes.

Security Reporting: Bug bounty program. Pay hackers to find security flaws and report them instead of exploiting them. Cheaper than getting hacked.

High-Value Integrations: Connectors to major EHR systems, national health registries. Benefits everyone but nobody wants to build first. Bounties solve this.

Major Prizes: Big money for big achievements. Want a critical component? Offer $1M to whoever builds it best. Competition drives innovation.

The Difference

Grants: "Here's money. Build something. Let us know how it goes."

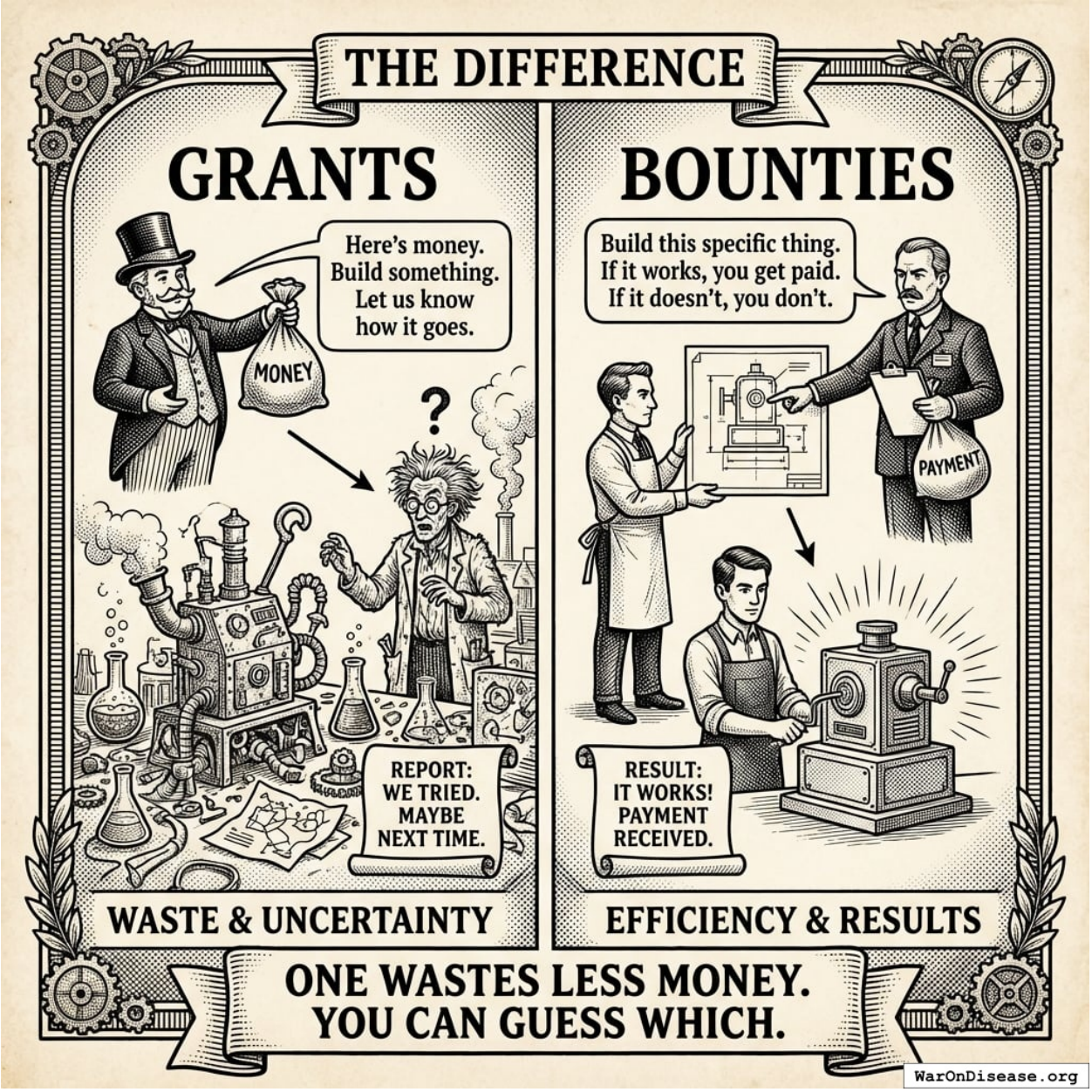


Figure 955: A side-by-side comparison showing the Grant model paying upfront for potential work versus the Bounty model paying only upon successful completion of a specific task.

Bounties: "Build this specific thing. If it works, you get paid. If it doesn't, you don't."

One wastes less money. You can guess which.

Why This Actually Works (Not Wishful Thinking)

This model is proven and cheap for two reasons:

1. It's Already a Multi-Trillion-Dollar Reality

Open-source and platform models aren't theoretical. They're a multi-trillion-dollar economic reality[346].

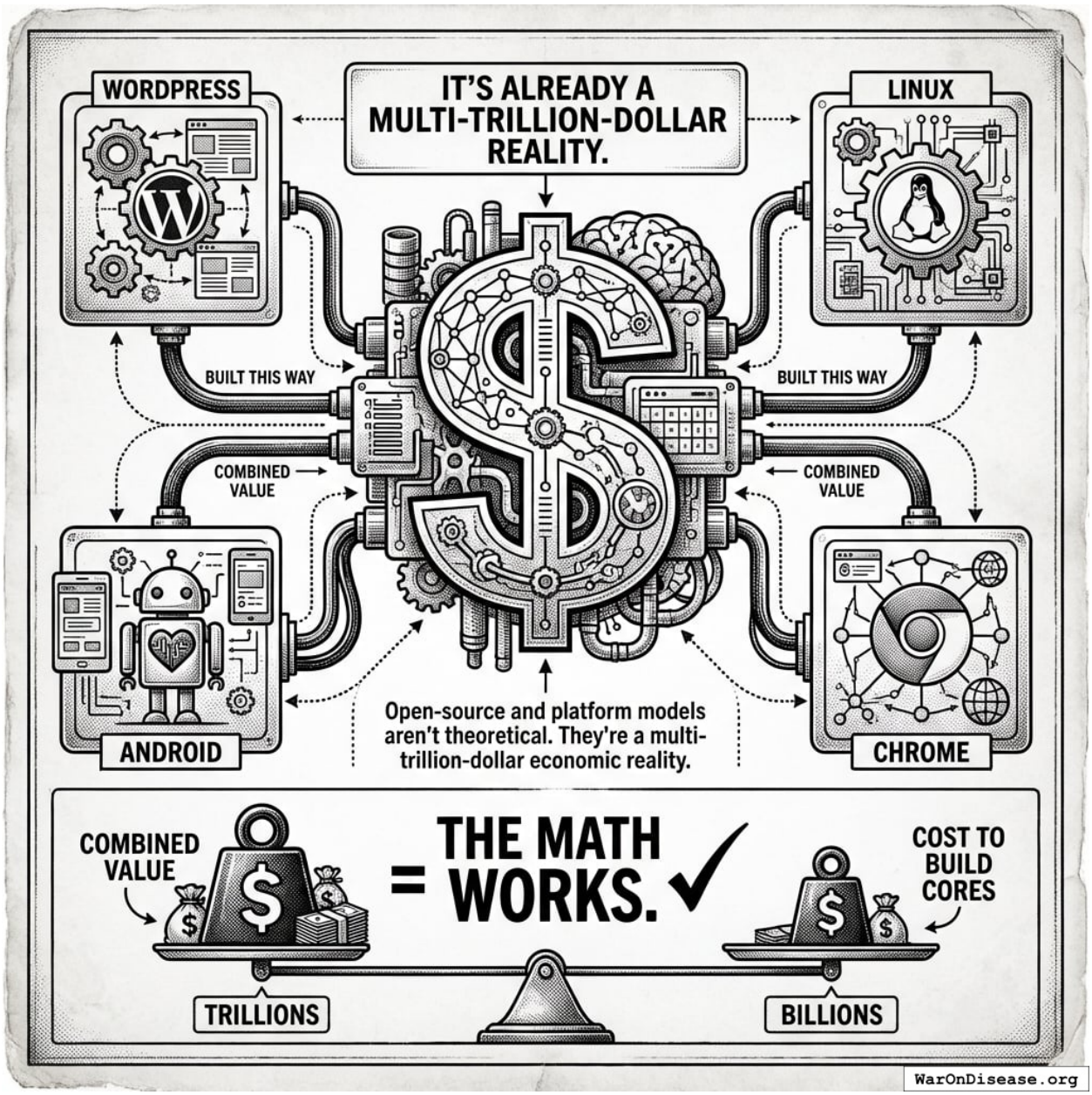


Figure 956: A visual comparison showing the relatively low cost of building open-source cores (billions) against the massive economic value they generate (trillions), featuring examples like Linux, Android, and WordPress.

WordPress, Linux, Android, Chrome all built this way. Combined value: trillions. Combined cost to build cores: billions.

The math works.

2. Governments Already Do This (And It Works)

Public bodies have a strong track record with bounties and prizes[347] to solve complex problems more efficiently than traditional procurement:

- **XPRIZE:** Private-sector space travel (worked)

- **NASA Centennial Challenges:** Lunar lander, space robotics (worked)
- **Department of Defense bug bounties:** Cybersecurity (worked)

All succeeded. All cost less than traditional procurement. All delivered better results.

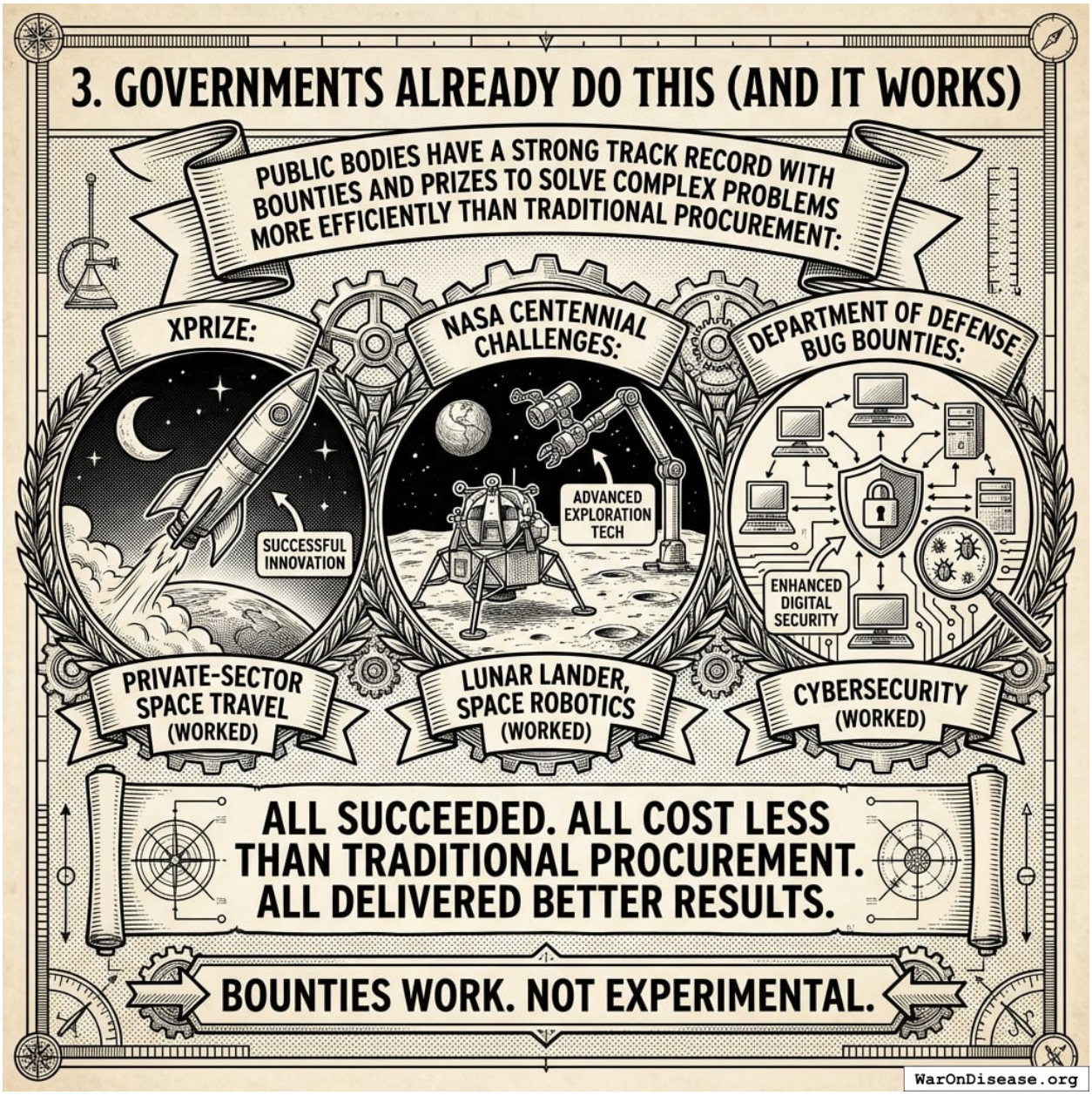


Figure 957: A comparison between traditional government procurement and the prize/bounty model, highlighting key success stories like NASA and the DoD that achieved better results at lower costs.

Bounties work. Not experimental.

The Result

Your decentralized framework for drug assessment can foster a thriving global network of tools that delivers medical innovation at a fraction of the cost of centralized, top-down development.

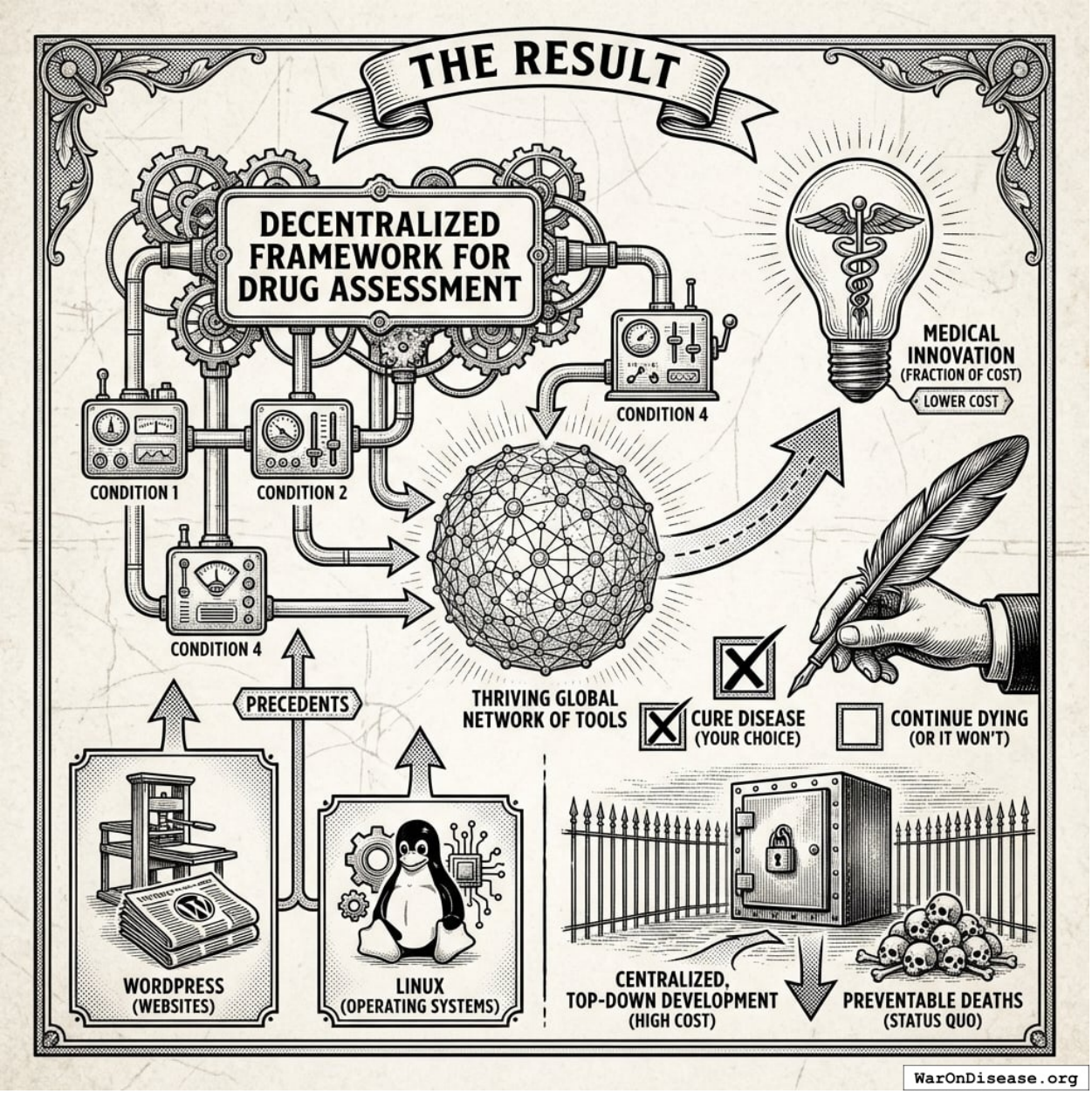
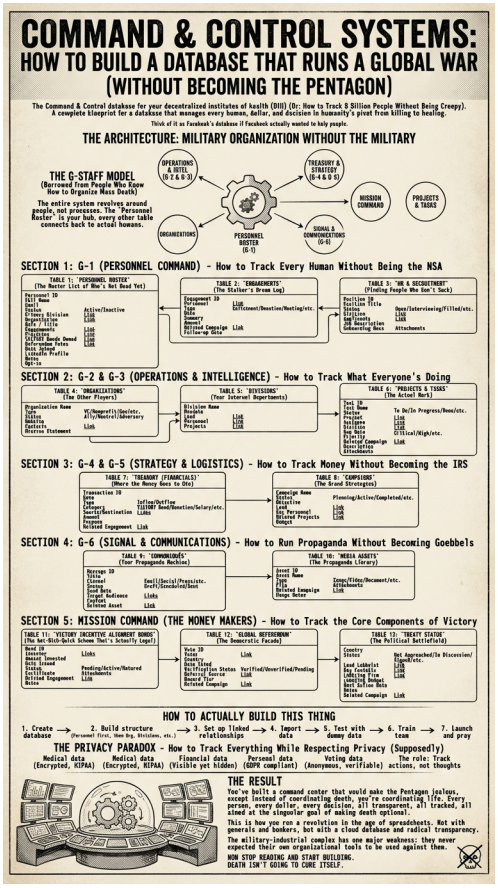


Figure 958: A comparison of traditional centralized drug development versus a decentralized framework, highlighting the shift toward a collaborative global network for medical innovation.

WordPress proved this works for websites. Linux proved it works for operating systems. Your framework will prove it works for curing disease.

Or it won't, and everyone continues dying from preventable things. Your choice.

Command & Control Systems



The Command & Control database for your decentralized institutes of health (DIH) (Or: How to Track 8.00B of people (95% CI: 7.80B of people-8.20B of people) People Without Being Creepy)

Here's how you construct the central nervous system for the War on Disease using a cloud database, because apparently Excel wasn't dystopian enough. This is your complete blueprint for a database that manages every human, dollar, and decision in humanity's pivot from killing to healing.

Think of it as Facebook's database if Facebook actually wanted to help people instead of selling their data to whoever's buying. Every person, every dollar, every vote, all tracked in one place that can't be corrupted because it's too transparent to hide anything.

The Architecture: Military Organization Without the Military

The G-Staff Model (Borrowed from People Who Know How to Organize Mass Death)

You steal the military's organizational structure, the G-Staff model, because they've spent centuries perfecting large-scale coordination. The irony of using military command structure to end military spending is not lost on us. It's actually kind of beautiful.

The entire system revolves around people, not processes. The `Personnel Roster` is your hub, every other table connects back to actual humans doing actual things. No abstract "stakeholders" or "human resources." Just people trying not to die.

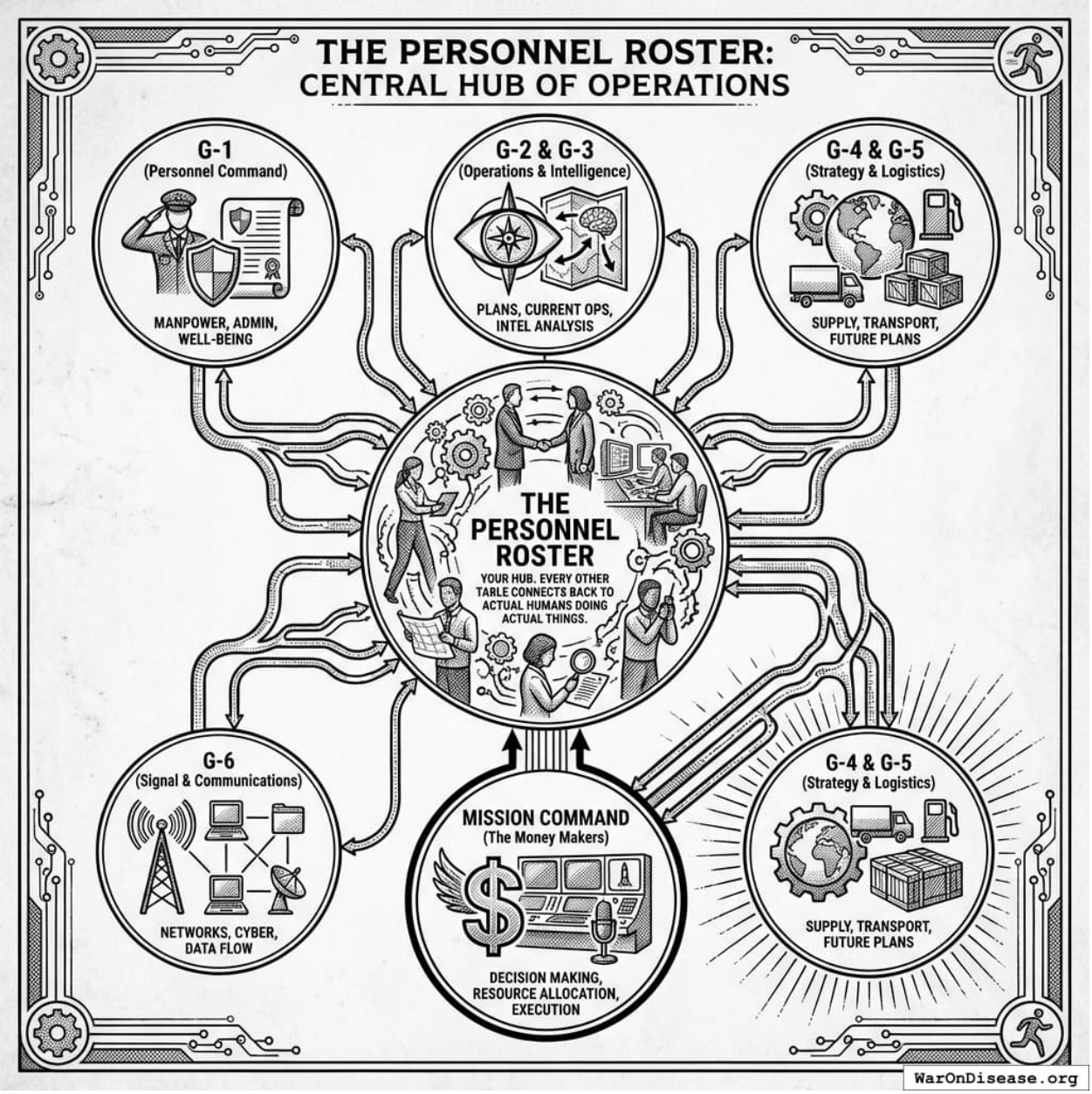


Figure 959: Conceptual diagram of the G-Staff database architecture, illustrating the 'Personnel Roster' as the central hub connecting all functional areas (G-1 through Mission Command).

SECTION 1: G-1 (Personnel Command)

How to Track Every Human Without Being the NSA

Table 1: `Personnel Roster` (The Master List of Who's Not Dead Yet)

This is your central hub. Every living human who touches the system gets an entry. Think of it as LinkedIn but useful.

Fields that matter

- `Personnel ID` (Autonumber) - Their unique number in the revolution
- `Full Name` (Text) - What their mom calls them when angry
- `Email` (Email) - Where you send victory notifications
- `Status` (Single Select: Active, Inactive, Prospect) - Are they helping or just lurking?
- `Primary Division` (Link to `Divisions`) - Which part of the machine they power
- `Organization` (Link to `Organizations`) - Who pays their bills
- `Role / Title` (Text) - Their excuse for existing
- `Engagements` (Link to `Engagements`) - Every time they did something
- `Projects` (Link to `Projects & Tasks`) - What they're supposedly working on
- `Campaigns` (Link to `Campaigns`) - Which battles they're fighting
- `VICTORY [Incentive Alignment Bonds](https://iab.warondisease.org) Owned` (Link to `VICTORY Incentive Alignment Bonds`) - How much skin in the game
- `Referendum Votes` (Link to `Global Referendum`) - Did they vote for not dying?
- `Date Joined` (Date) - When they stopped being part of the problem
- `LinkedIn Profile` (URL) - For stalking their credentials
- `Notes` (Long Text) - Where you write "difficult but brilliant" or "useless"
- `Opt-in for Updates` (Checkbox) - Can you spam them with hope?

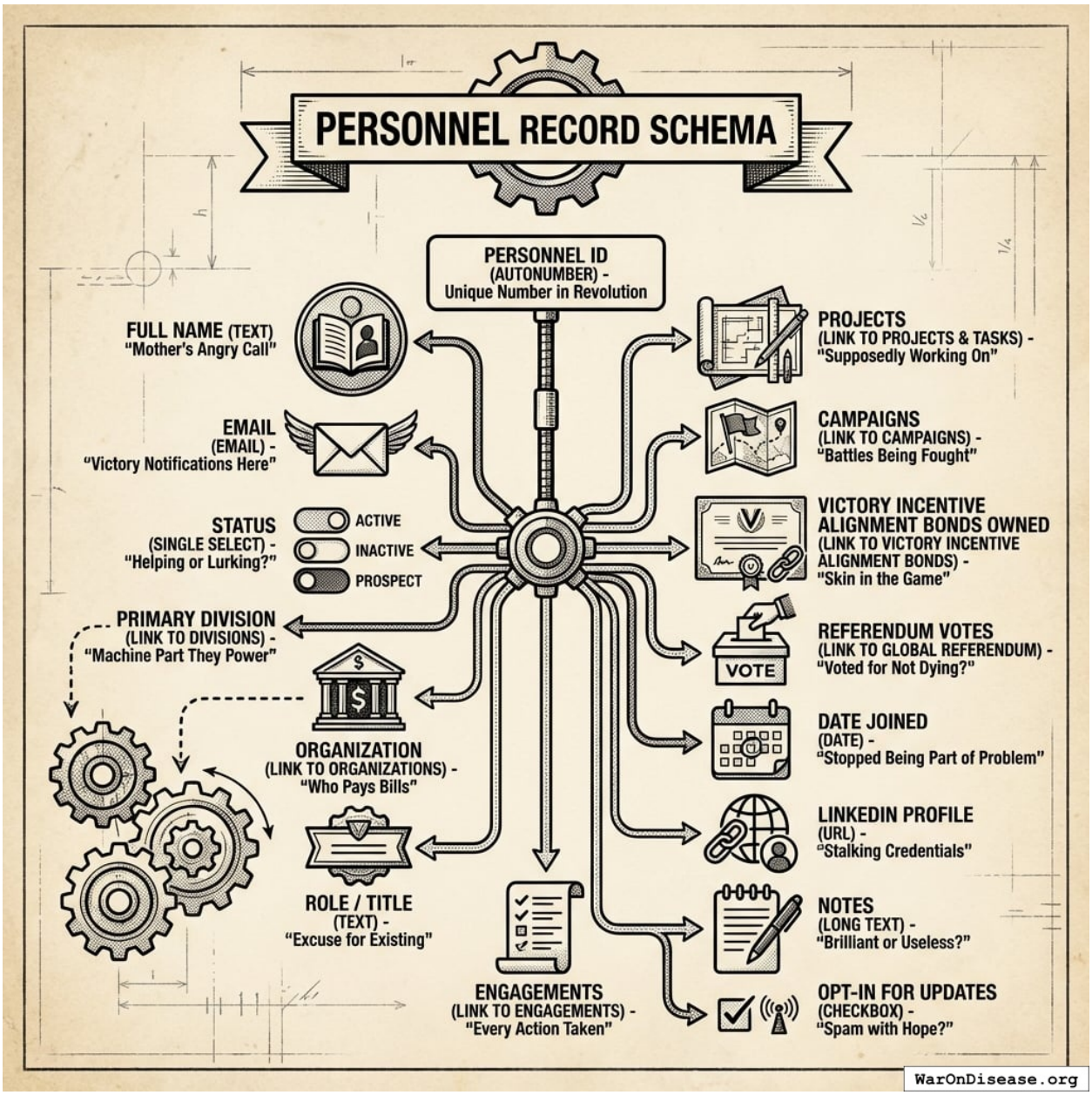


Figure 960: A conceptual entity-relationship diagram showing the central Personnel record and its connections to Divisions, Organizations, Engagements, Projects, and VICTORY Bonds.

Table 2: `Engagements` (The Stalker's Dream Log)

Every interaction, every touchpoint, every time someone did anything. Like your browser history but for saving humanity.

What you track

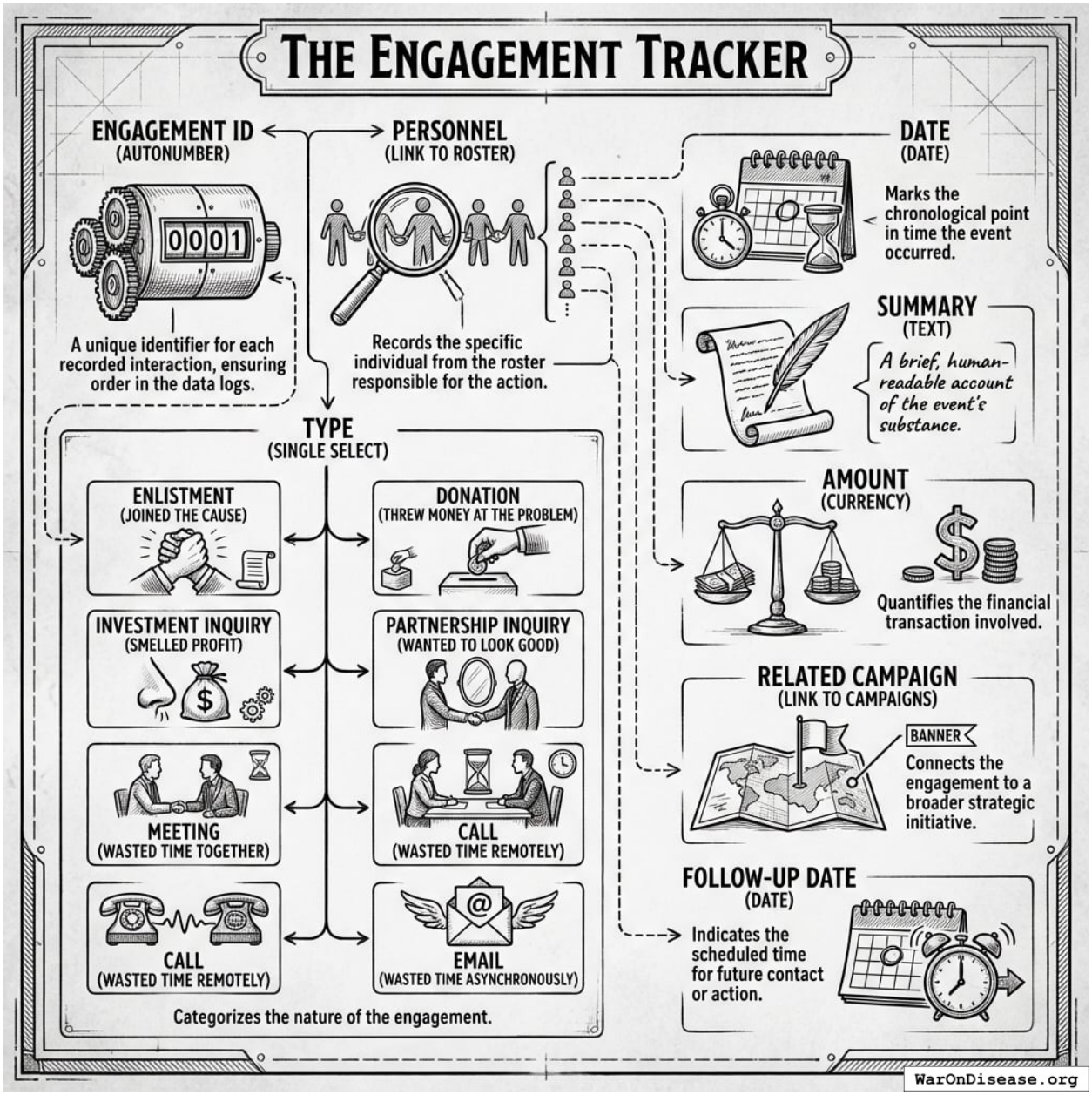


Figure 961: A relational data diagram showing the Engagement record and its links to the Personnel Roster and Campaigns.

- `Engagement ID` (Autonumber) - Because even conversations need ID numbers now
- `Personnel` (Link to `Personnel Roster`) - Who did the thing
- `Type` (Single Select) - What kind of thing they did:
  - Enlistment (joined the cause)
  - Donation (threw money at the problem)
  - Investment Inquiry (smelled profit)
  - Partnership Inquiry (wanted to look good)
  - Meeting (wasted time together)
  - Call (wasted time remotely)

    - Email (wasted time asynchronously)
- `Date` (Date) - When the thing happened
- `Summary` (Text) - What actually happened in human words
- `Amount` (Currency) - How much money changed hands
- `Related Campaign` (Link to `Campaigns`) - Which battle this helped
- `Follow-up Date` (Date) - When to bother them again

Table 3: `HR & Recruitment` (Finding People Who Don't Suck)

Managing the humans who run the machine that saves the humans.

The hiring pipeline

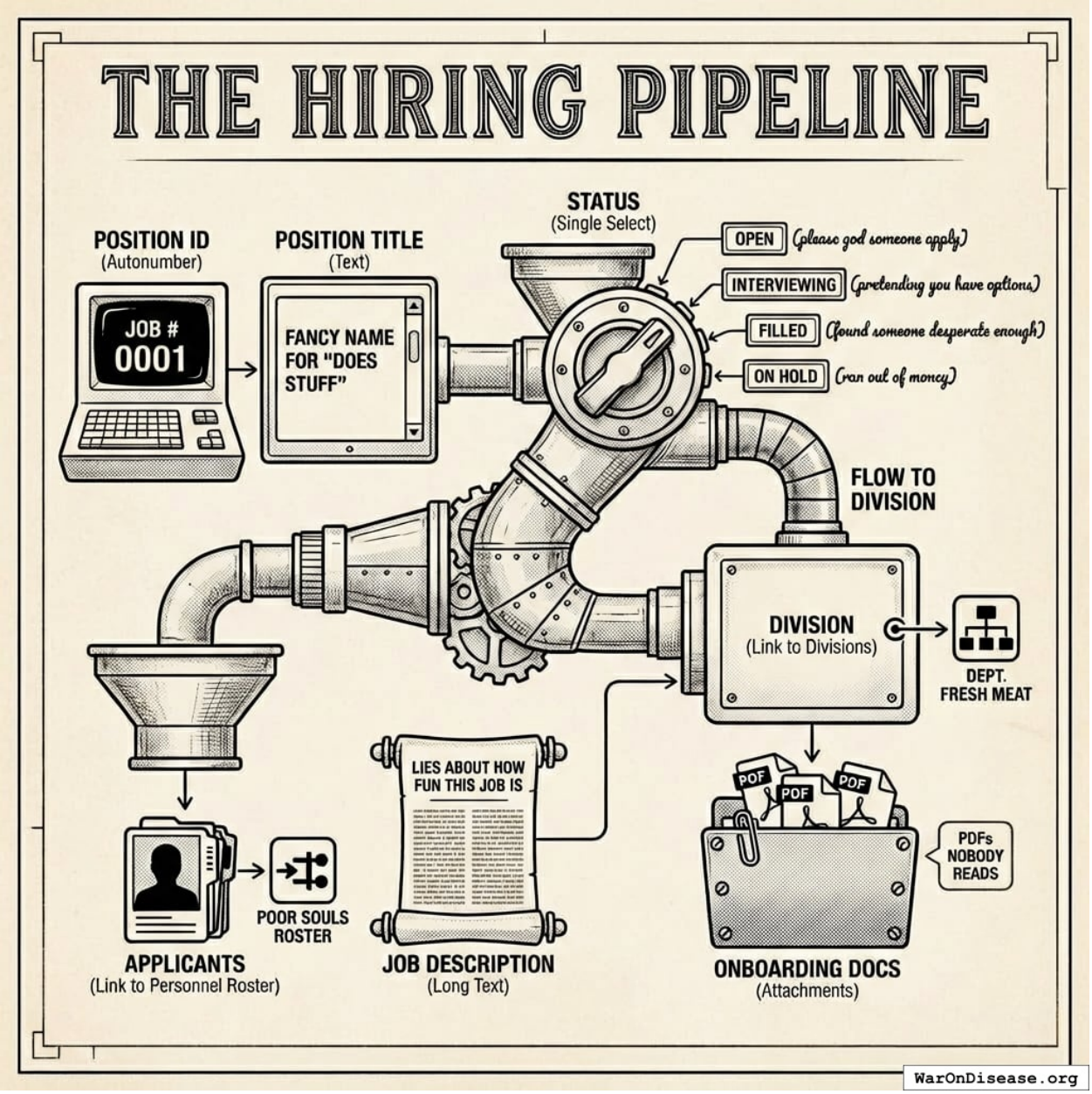


Figure 962: A diagram illustrating the hiring pipeline database schema, showing the relationships between positions, divisions, and applicants, as well as the progression of hiring statuses.

- `Position ID` (Autonumber) - Job number whatever
- `Position Title` (Text) - Fancy name for "does stuff"
- `Status` (Single Select) - Where in the process:
  - Open (please god someone apply)
  - Interviewing (pretending you have options)
  - Filled (found someone desperate enough)
  - On Hold (ran out of money)
- `Division` (Link to `Divisions`) - Which department gets the fresh meat
- `Applicants` (Link to `Personnel Roster`) - Poor souls who applied

- `Job Description` (Long Text) - Lies about how fun this job is
- `Onboarding Docs` (Attachments) - PDFs nobody reads

SECTION 2: G-2 & G-3 (Operations & Intelligence)

How to Track What Everyone's Doing and Who They're Doing It With

Table 4: `Organizations` (The Other Players in This Game)

Every fund, company, nonprofit, and three-letter agency you deal with.

The institutional roster

- `Organization Name` (Text) - What they call themselves
- `Type` (Single Select) - What they actually are:
  - VC Fund (vultures with spreadsheets)
  - Family Office (rich people's money managers)
  - Nonprofit (tax-avoidance vehicles)
  - Research Institution (where hope goes to get peer-reviewed to death)
  - Government (the competition)
  - For-Profit (at least they're honest)
- `Status` (Single Select) - Friend or foe:
  - Ally (on your side, for now)
  - Neutral (sitting on the fence)
  - Adversary (actively making things worse)
- `Website` (URL) - Their propaganda page
- `Contacts` (Link to `Personnel Roster`) - Humans you can manipulate there
- `Mission Statement` (Long Text) - What they pretend to care about

Table 5: `Divisions` (Your Internal Departments)

The organizational structure that makes this chaos manageable.

Your command structure

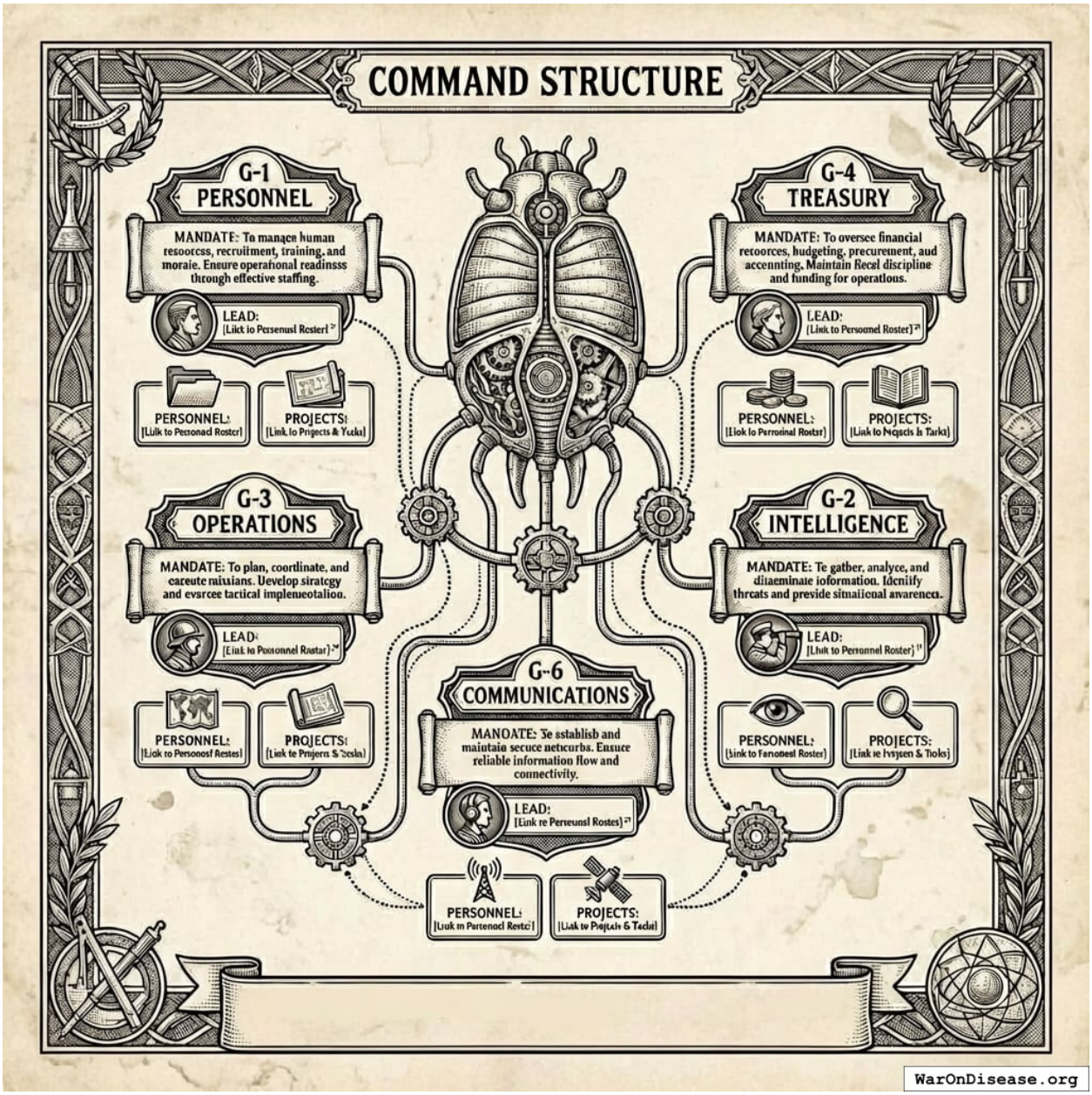


Figure 963: A conceptual diagram showing the data relationships between a Division and its associated Mandates, Leads, Personnel, and Projects.

- `Division Name` (Text) - G-1 Personnel, G-4 Treasury, etc.
- `Mandate` (Long Text) - What they're supposed to accomplish
- `Lead` (Link to `Personnel Roster`) - Who to blame when it fails
- `Personnel` (Link to `Personnel Roster`) - The poor bastards doing the work
- `Projects` (Link to `Projects & Tasks`) - What they claim to be working on

Table 6: `Projects & Tasks` (The Actual Work)

Where you track who's doing what and why they're behind schedule.

Project management for revolutionaries

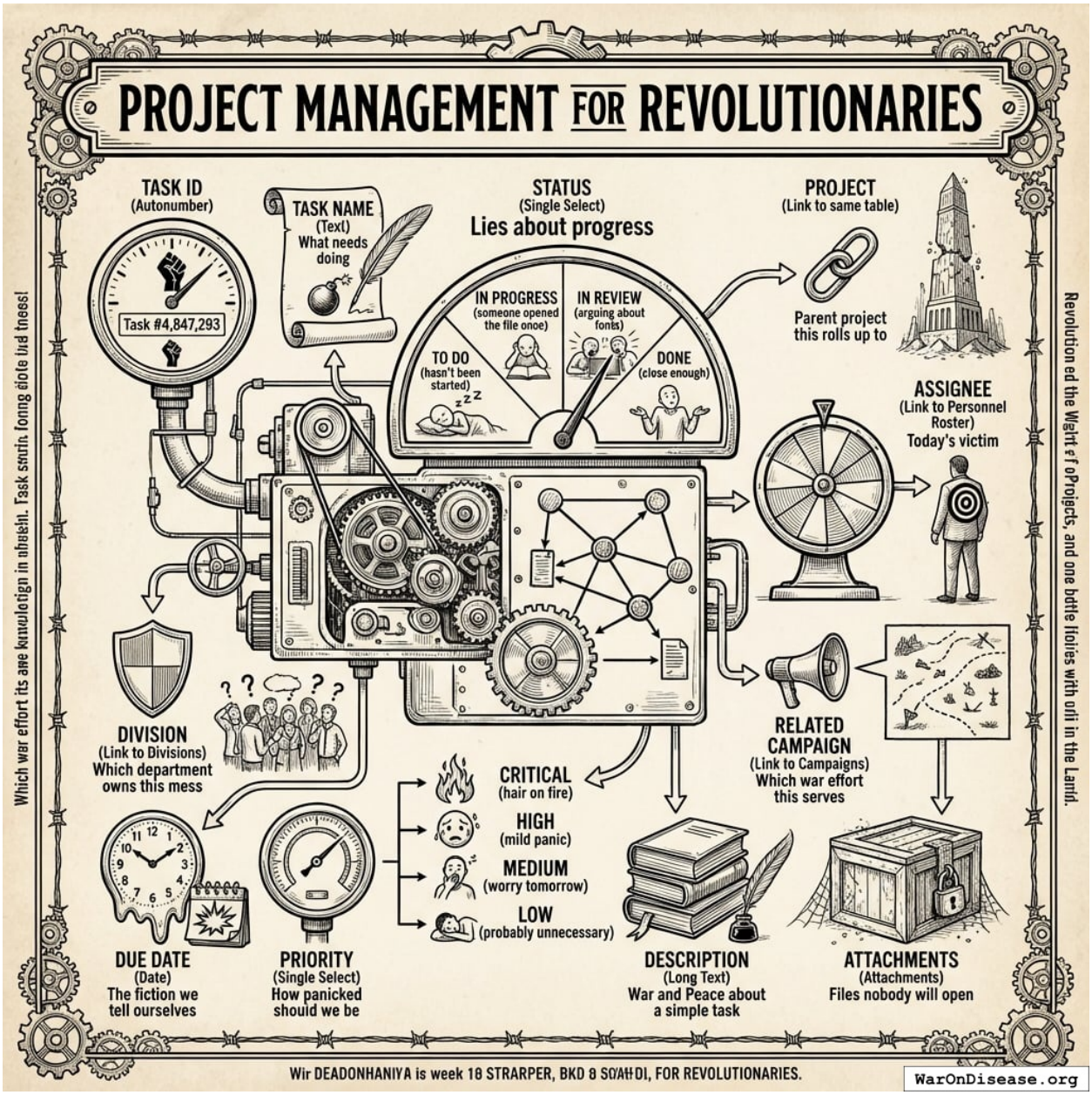


Figure 964: A relational schema diagram showing the links between the Task table and related entities like Personnel, Divisions, and Campaigns.

- `Task ID` (Autonumber) - Task #4,847,293
- `Task Name` (Text) - What needs doing
- `Status` (Single Select) - Lies about progress:
  - To Do (hasn't been started)
  - In Progress (someone opened the file once)
  - In Review (arguing about fonts)
  - Done (close enough)
- `Project` (Link to same table) - Parent project this rolls up to
- `Assignee` (Link to `Personnel Roster`) - Today's victim

- `Division` (Link to `Divisions`) - Which department owns this mess
- `Due Date` (Date) - The fiction we tell ourselves
- `Priority` (Single Select) - How panicked should we be:
  - Critical (hair on fire)
  - High (mild panic)
  - Medium (worry tomorrow)
  - Low (probably unnecessary)
- `Related Campaign` (Link to `Campaigns`) - Which war effort this serves
- `Description` (Long Text) - War and Peace about a simple task
- `Attachments` (Attachments) - Files nobody will open

SECTION 3: G-4 & G-5 (Strategy & Logistics)

How to Track Money Without Becoming the IRS

Table 7: `Treasury (Financials)` (Where the Money Goes to Die)

Every penny tracked, because transparency is the only antidote to corruption.

The money trail

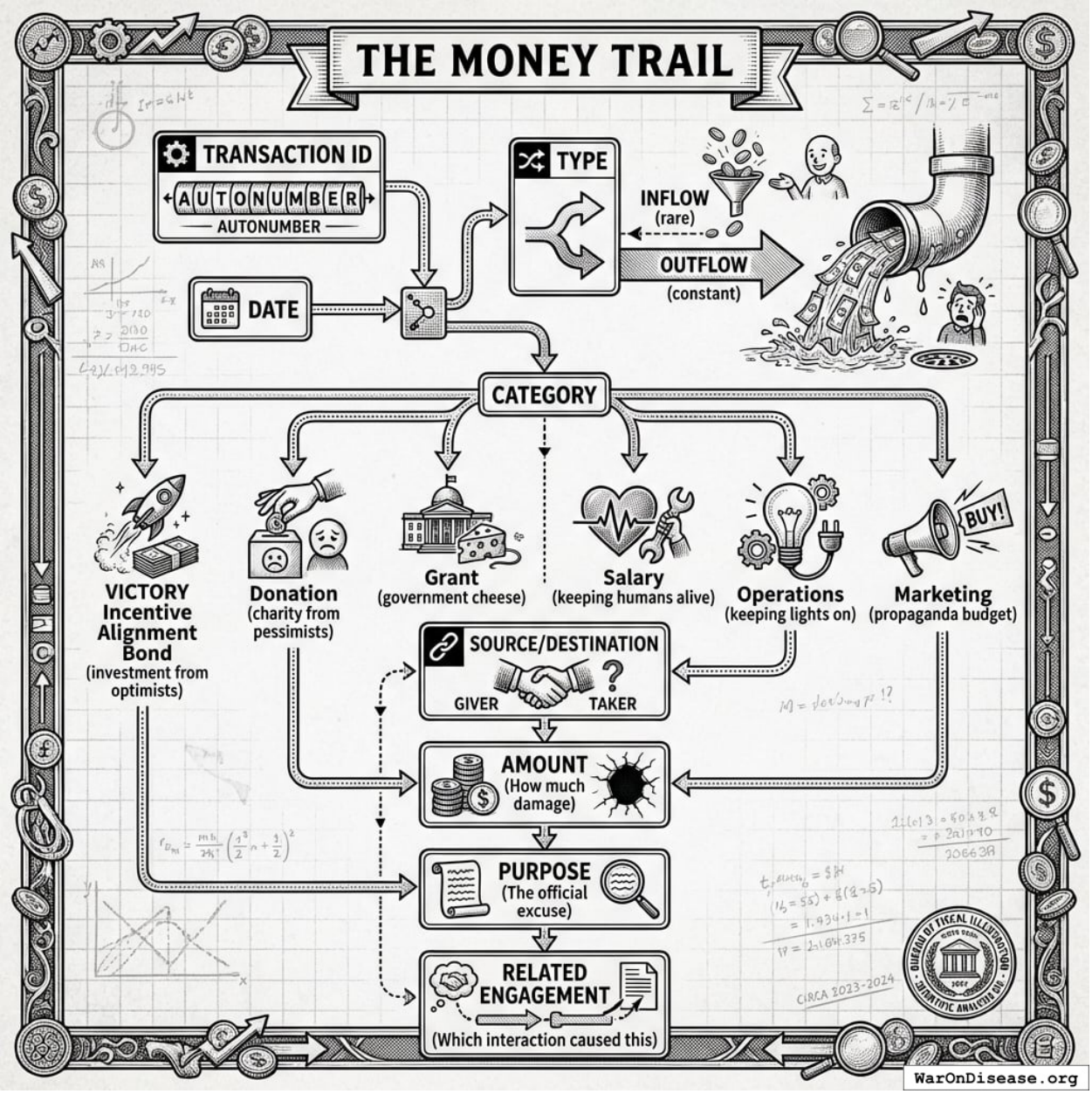


Figure 965: A conceptual diagram of a transaction record showing how money flows between entities, classified by category and linked to specific engagements.

- `Transaction ID` (Autonumber) - Receipt #999,999
- `Date` (Date) - When money moved
- `Type` (Single Select) - Which direction:
  - Inflow (money coming in, rare)
  - Outflow (money leaving, constant)
- `Category` (Single Select) - What excuse you used:
  - VICTORY Incentive Alignment Bond (investment from optimists)
  - Donation (charity from pessimists)
  - Grant (government cheese)

  - Salary (keeping humans alive)
  - Operations (keeping lights on)
  - Marketing (propaganda budget)
- `Source/Destination` (Links) - Who gave/took the money
- `Amount` (Currency) - How much damage
- `Purpose` (Text) - The official excuse
- `Related Engagement` (Link) - Which interaction caused this

Table 8: `Campaigns` (The Grand Strategies)

Your major initiatives, the big battles in the war.

Strategic initiative tracking



Figure 966: A relational diagram illustrating how Strategic Initiatives link to the Personnel Roster and Projects and Tasks to track resources and execution.

- `Campaign Name` (Text) - Like "Global Referendum - Phase 1" or "Operation: Make Pharma Cry"
- `Status` (Single Select) - How it's going:
  - Planning (still arguing)
  - Active (actually happening)
  - Completed (we won)
  - On Hold (ran out of money/hope)
- `Objective` (Long Text) - What victory looks like
- `Lead` (Link to `Personnel Roster`) - The general of this battle
- `Key Personnel` (Link to `Personnel Roster`) - The soldiers

- `Related Projects` (Link to `Projects & Tasks`) - The actual work
- `Budget` (Currency) - How much you're burning

SECTION 4: G-6 (Signal & Communications)

How to Run Propaganda Without Becoming Goebbels

Table 9: `Communiqués` (Your Propaganda Machine)

Every message you blast at the world.

Message management

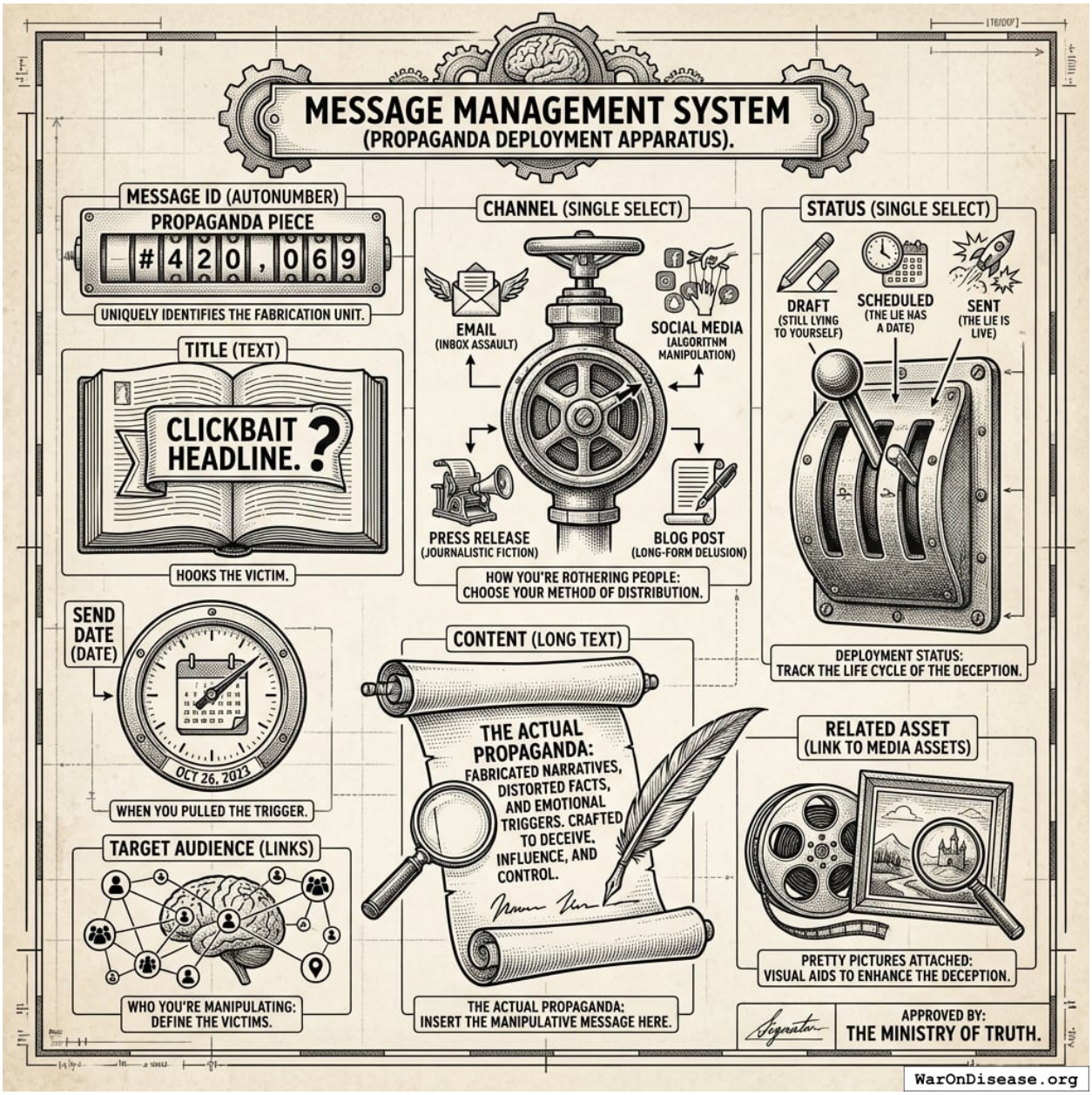


Figure 967: A workflow diagram illustrating the message lifecycle from draft creation through scheduling to final deployment, including connections to audience and media data.

- `Message ID` (Autonumber) - Propaganda piece #420,069
- `Title` (Text) - Clickbait headline
- `Channel` (Single Select) - How you're bothering people:
  - Email (inbox assault)
  - Social Media (algorithm manipulation)
  - Press Release (journalistic fiction)
  - Blog Post (long-form delusion)
- `Status` (Single Select) - Deployment status:
  - Draft (still lying to yourself)

  - Scheduled (the lie has a date)
  - Sent (the lie is live)
- `Send Date` (Date) - When you pulled the trigger
- `Target Audience` (Links) - Who you're manipulating
- `Content` (Long Text) - The actual propaganda
- `Related Asset` (Link to `Media Assets`) - Pretty pictures attached

Table 10: `Media Assets` (The Propaganda Library)

Your collection of images, videos, and documents that make people feel things.

Creative arsenal

- `Asset ID` (Autonumber) - Meme #80,085
- `Asset Name` (Text) - "Crying_Child_With_Cancer.jpg"
- `Type` (Single Select) - Format of manipulation:
  - Image (worth 1,000 lies)
  - Video (worth 1,000,000 lies)
  - Document (nobody reads these)
  - Audio (podcast probably)
- `File` (Attachments) - The actual content
- `Related Campaign` (Link to `Campaigns`) - Which battle needs this
- `Usage Notes` (Long Text) - "Makes people cry, use sparingly"

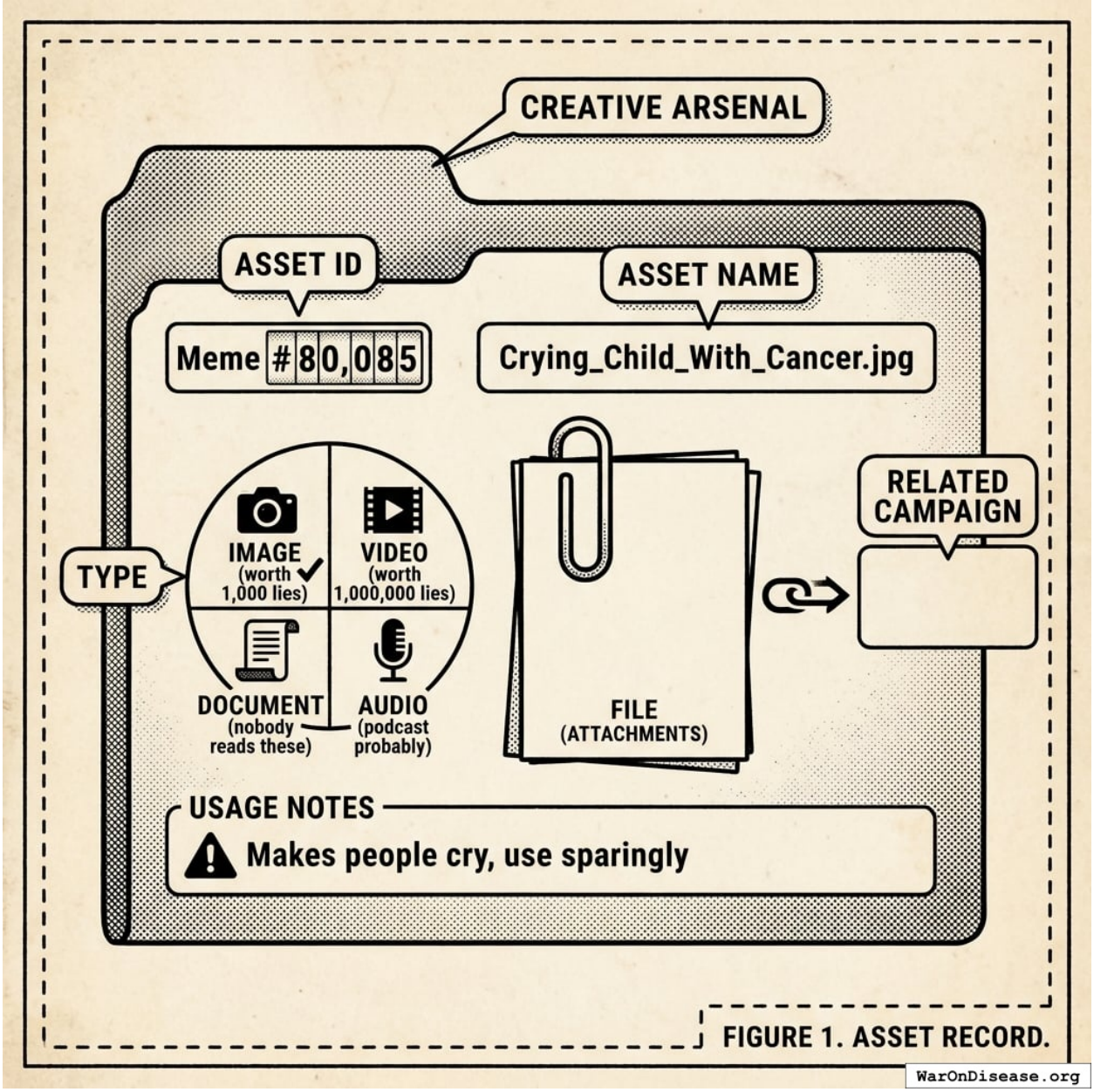


Figure 968: A data schema diagram illustrating the attributes of a creative asset and its relational link to campaigns within a database structure.

SECTION 5: MISSION COMMAND (The Money Makers)

How to Track the Core Components of Victory

Table 11: `VICTORY Incentive Alignment Bonds` (The Get-Rich-Quick Scheme That's Actually Legal)

Tracking every bond sold to fund this whole operation.

Investment tracking

- `Bond ID` (Autonumber) - Bond #007
- `Investor` (Links) - The optimist with money
- `Amount Invested` (Currency) - Their bet on humanity
- `Date Issued` (Date) - When they bought in
- `Status` (Single Select) - Bond lifecycle:
  - Pending (check hasn't cleared)
  - Active (money's working)
  - Matured (lol, these are perpetual)
- `Certificate` (Attachments) - Fancy PDF they can frame
- `Related Engagement` (Link) - How you convinced them
- `Notes` (Long Text) - "Bought while drunk at charity gala"

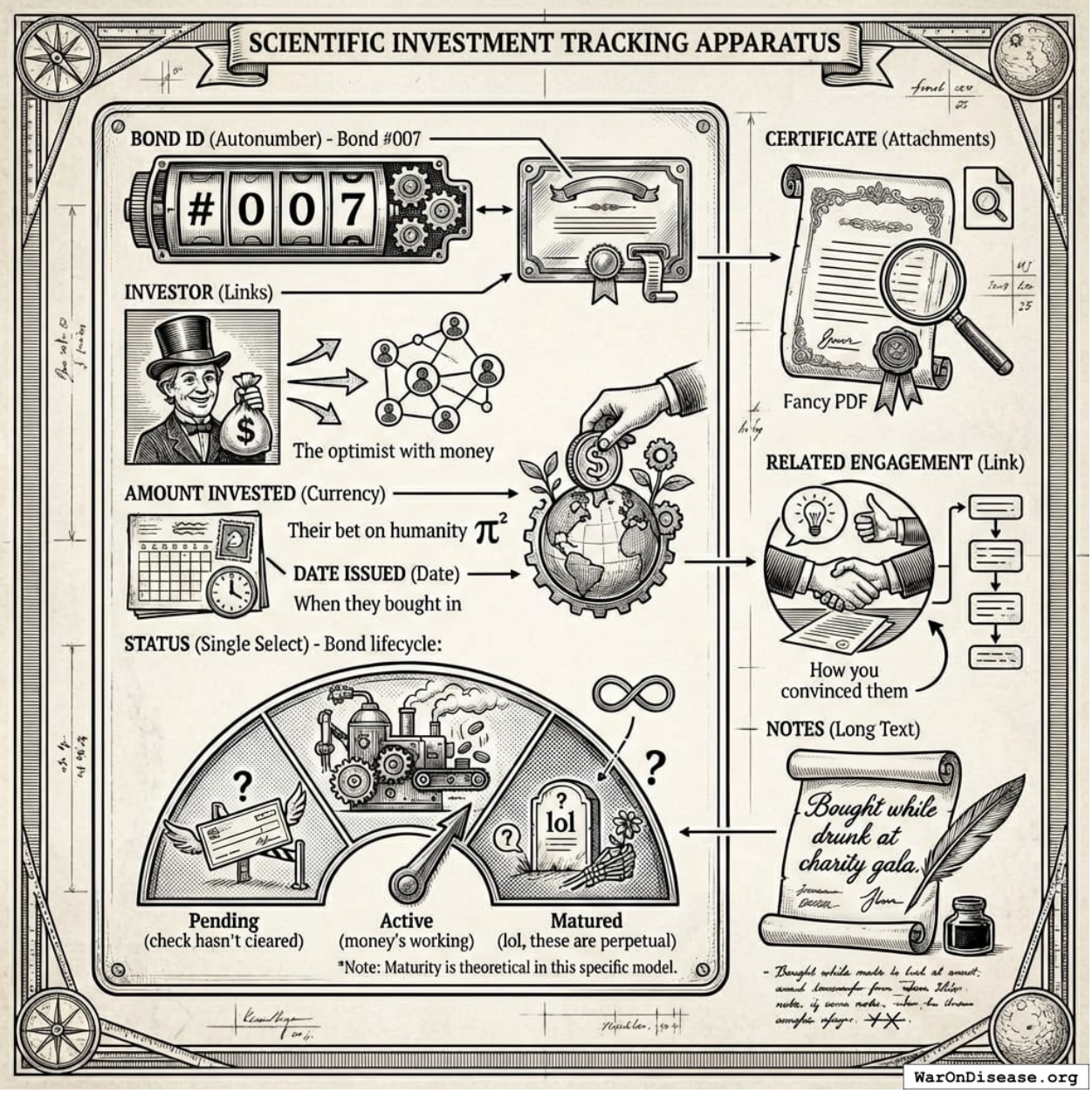


Figure 969: A data model diagram illustrating the relationships between Bond records, Investors, and Engagements, including the investment status lifecycle.

Table 12: `Global Referendum` (The Democratic Facade)

Managing the global petition to hit that magic 3.5% tipping point.

Democracy theater

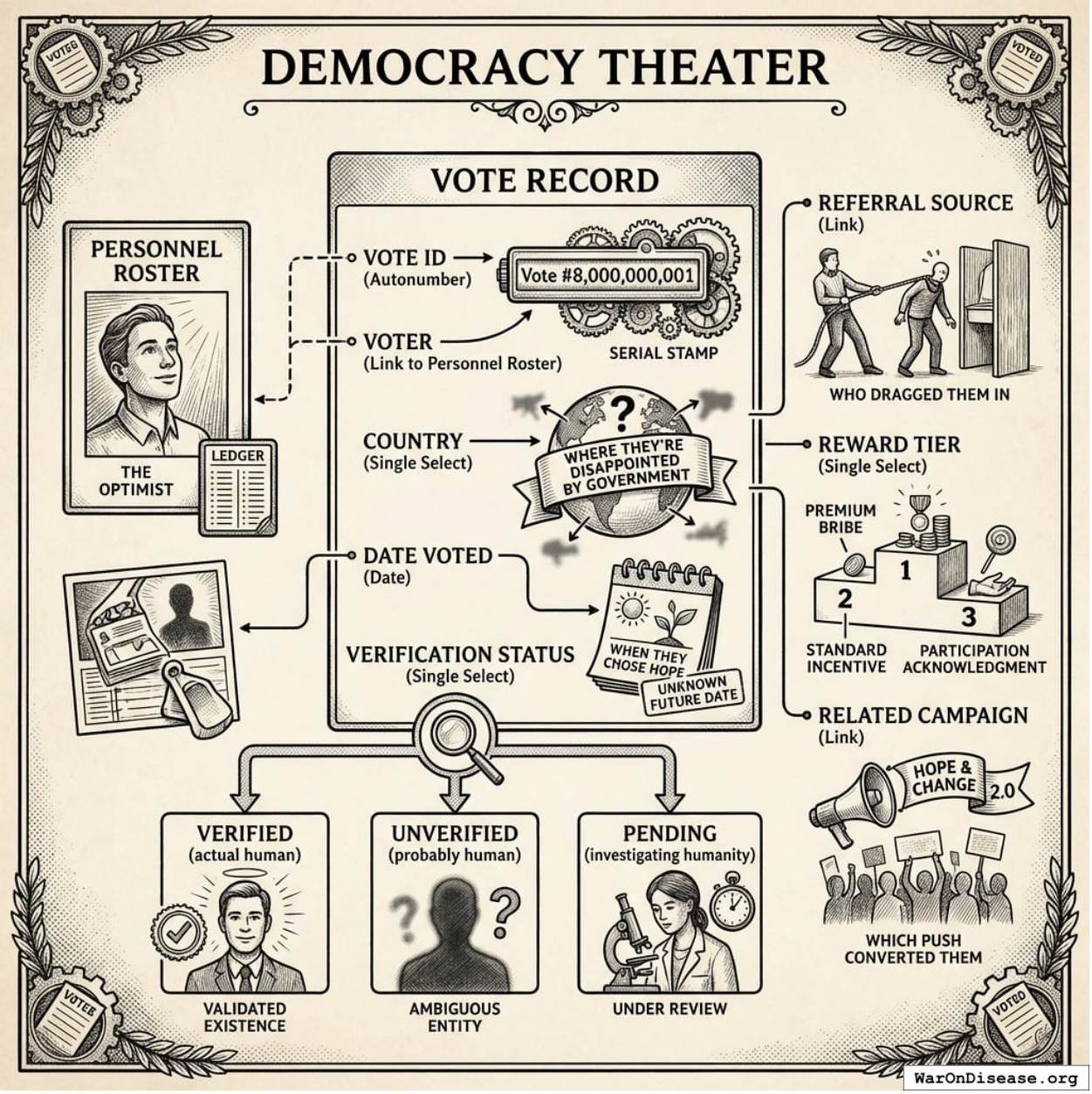


Figure 970: A simplified data schema diagram showing the fields of the Democracy Theater record and its relational links to Personnel Roster and Related Campaigns.

- `Vote ID` (Autonumber) - Vote #8,000,000,001
- `Voter` (Link to `Personnel Roster`) - The optimist
- `Country` (Single Select) - Where they're disappointed by government
- `Date Voted` (Date) - When they chose hope
- `Verification Status` (Single Select) - How real they are:
  - Verified (actual human)
  - Unverified (probably human)
  - Pending (investigating humanity)
- `Referral Source` (Link) - Who dragged them in

- `Reward Tier` (Single Select) - What bribe level they get
- `Related Campaign` (Link) - Which push converted them

Table 13: `Treaty Status` (The Political Battlefield)

Tracking which countries have signed on to stop being idiots.

Diplomatic scorecard

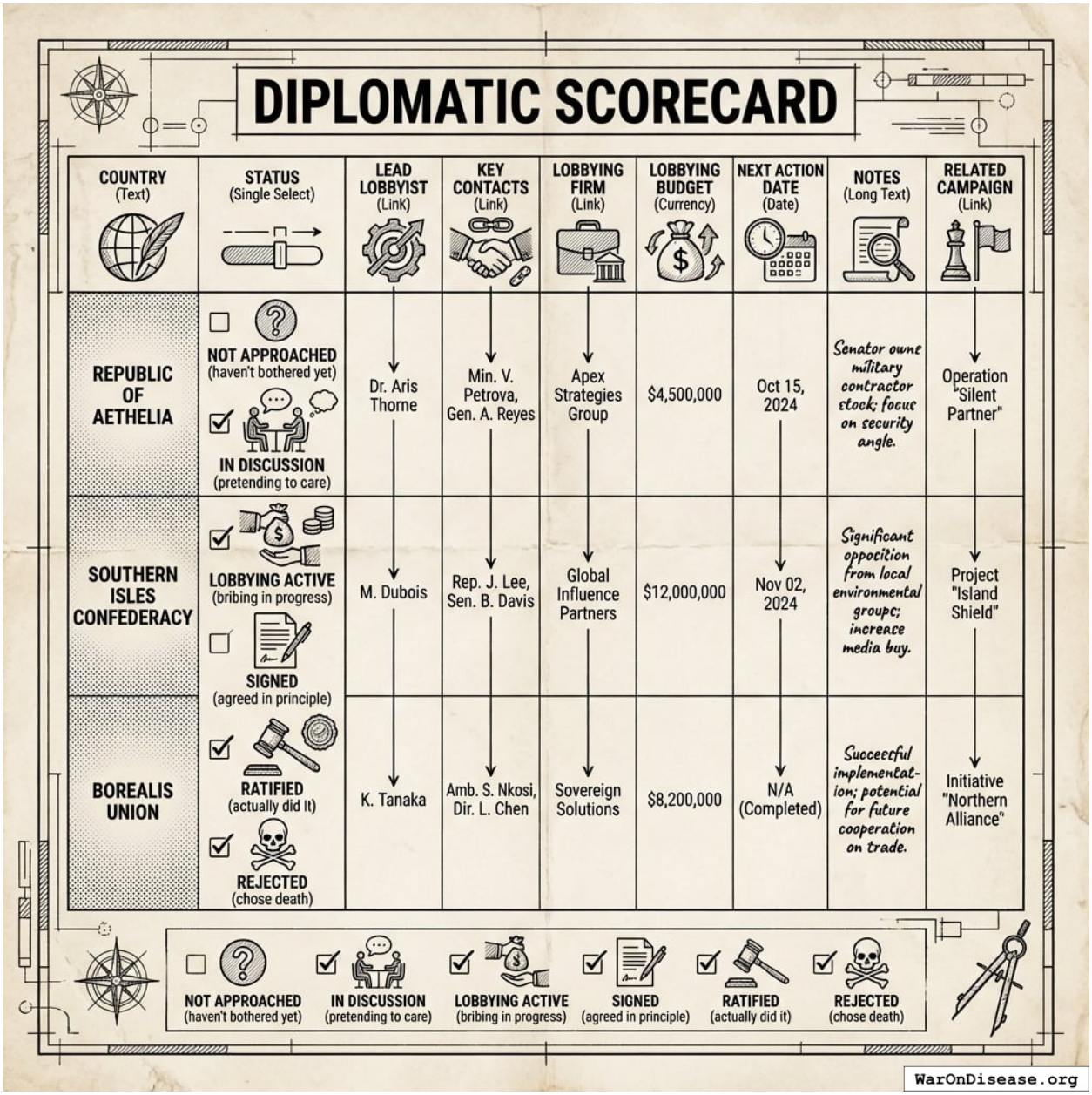


Figure 971: A flowchart illustrating the stages of the diplomatic lobbying process, from initial contact through active lobbying to the final outcomes of ratification or rejection.

- `Country` (Text) - Nation-state name
- `Status` (Single Select) - Where they're at:

  - Not Approached (haven't bothered yet)
  - In Discussion (pretending to care)
  - Lobbying Active (bribing in progress)
  - Signed (agreed in principle)
  - Ratified (actually did it)
  - Rejected (chose death)
- `Lead Lobbyist` (Link) - Your inside person
- `Key Contacts` (Link) - People with power
- `Lobbying Firm` (Link) - Professional bribers you hired
- `Lobbying Budget` (Currency) - Cost of democracy
- `Next Action Date` (Date) - When to apply more pressure
- `Notes` (Long Text) - "Senator owns military contractor stock"
- `Related Campaign` (Link) - Which strategy you're using

How to Actually Build This Thing

Step-by-Step Instructions for Database Revolution

1. **Create a database** (they don't need your firstborn yet)
2. **Build the base structure** in this exact order:
   - Personnel Roster first (everything links here)
   - Organizations next (external entities)
   - Divisions (internal structure)
   - Then everything else in the order listed above
3. **Set up the linked relationships** (this is where it gets complex)
4. **Import any existing data** (probably from some nightmare spreadsheet)
5. **Test with dummy data first** (break it before it matters)
6. **Train your team** (good luck with that)
7. **Launch and pray** (the universal project management methodology)

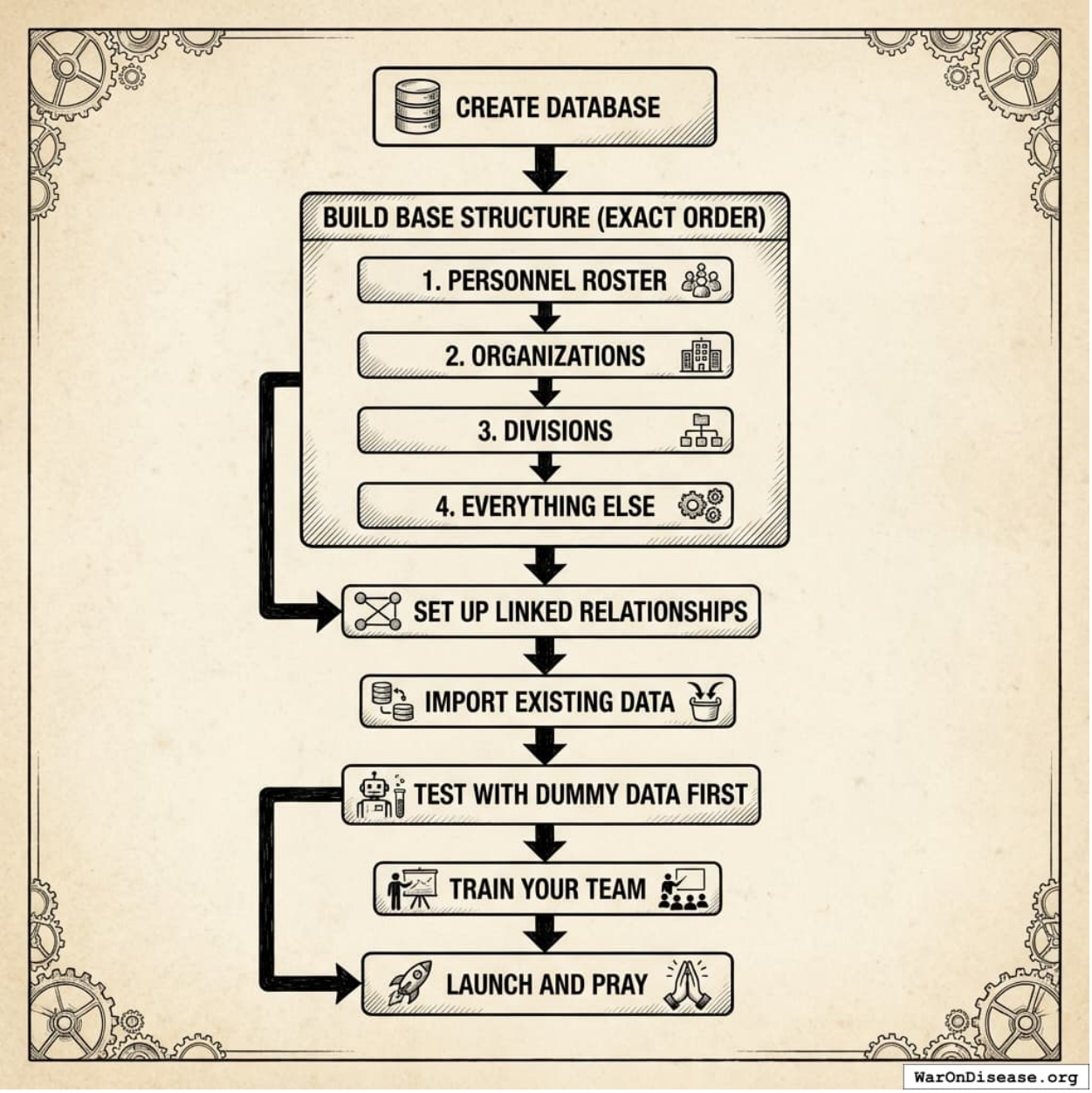


Figure 972: Step-by-step implementation flowchart emphasizing the critical dependency of building the 'Personnel Roster' before other tables.

The Privacy Paradox

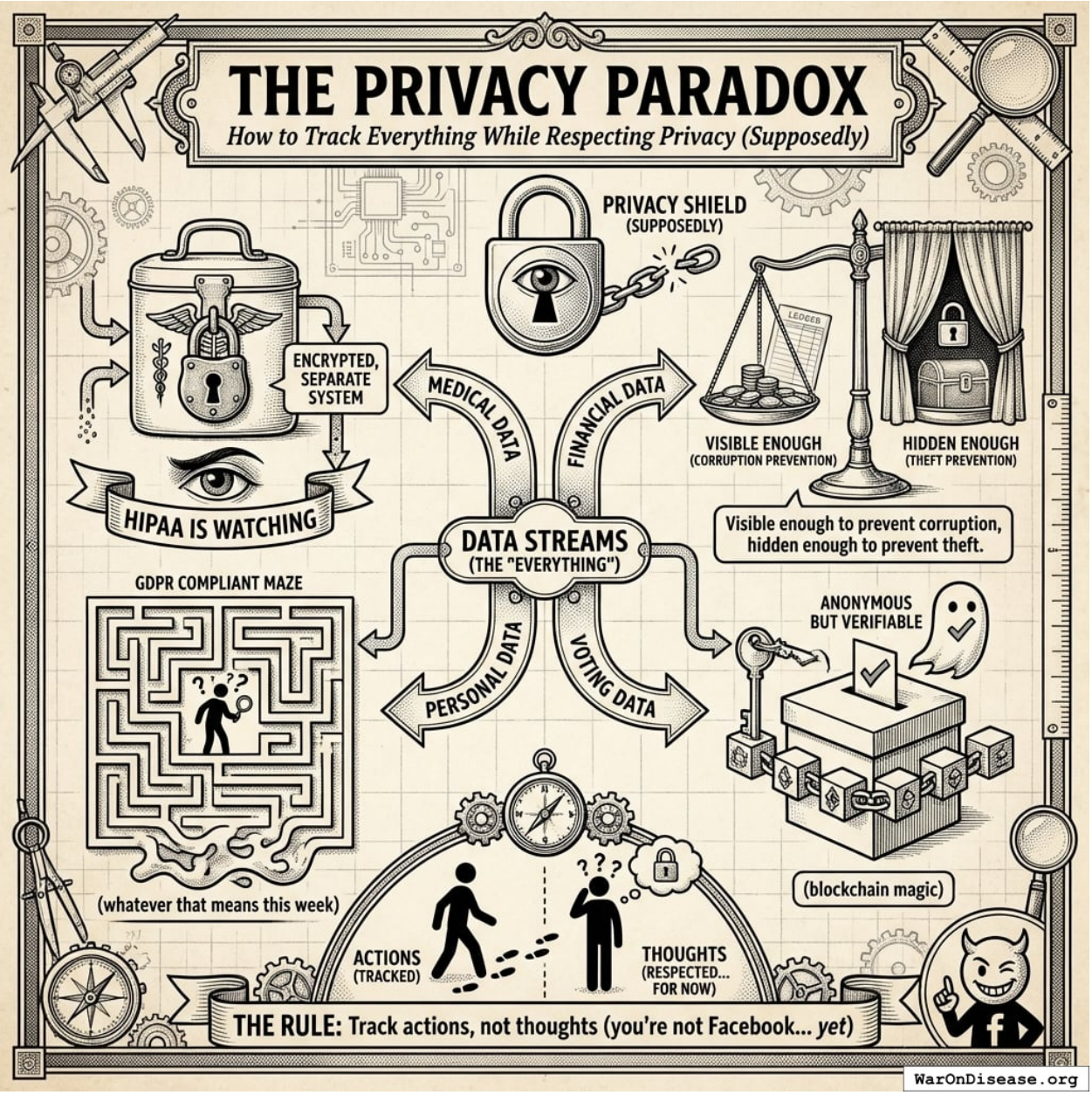


Figure 973: A conceptual comparison of how different data domains (medical, financial, personal, and voting) balance the need for data tracking with privacy constraints.

How to Track Everything While Respecting Privacy (Supposedly)

- Medical data: Encrypted, separate system (HIPAA is watching)
- Financial data: Visible enough to prevent corruption, hidden enough to prevent theft
- Personal data: GDPR compliant (whatever that means this week)
- Voting data: Anonymous but verifiable (blockchain magic)
- The rule: Track actions, not thoughts (you're not Facebook… yet)

The Result

You've built a command center that would make the Pentagon jealous, except instead of coordinating death, you're coordinating life. Every person, every dollar, every decision, all transparent, all tracked, all aimed at the singular goal of making death optional.

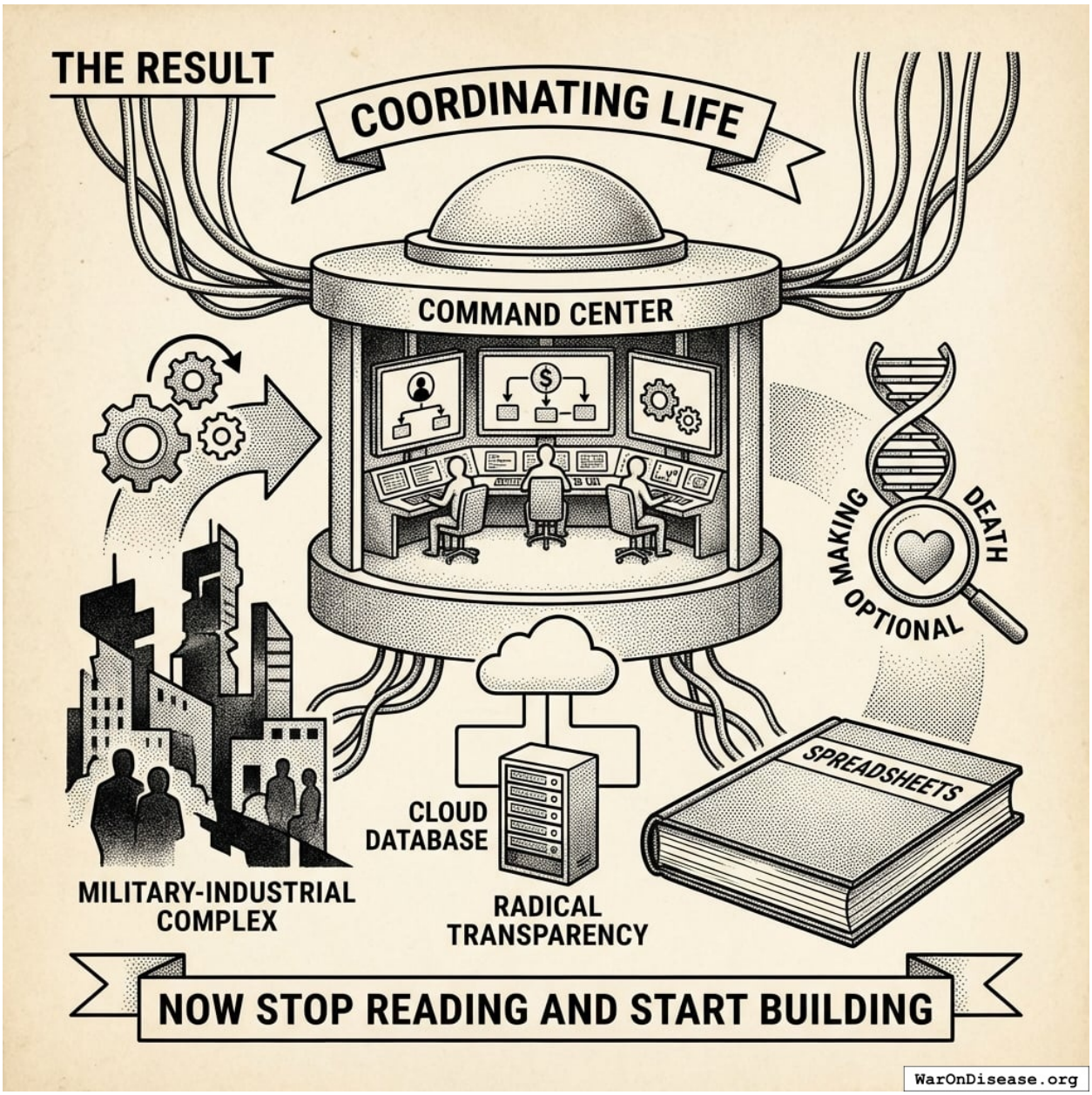


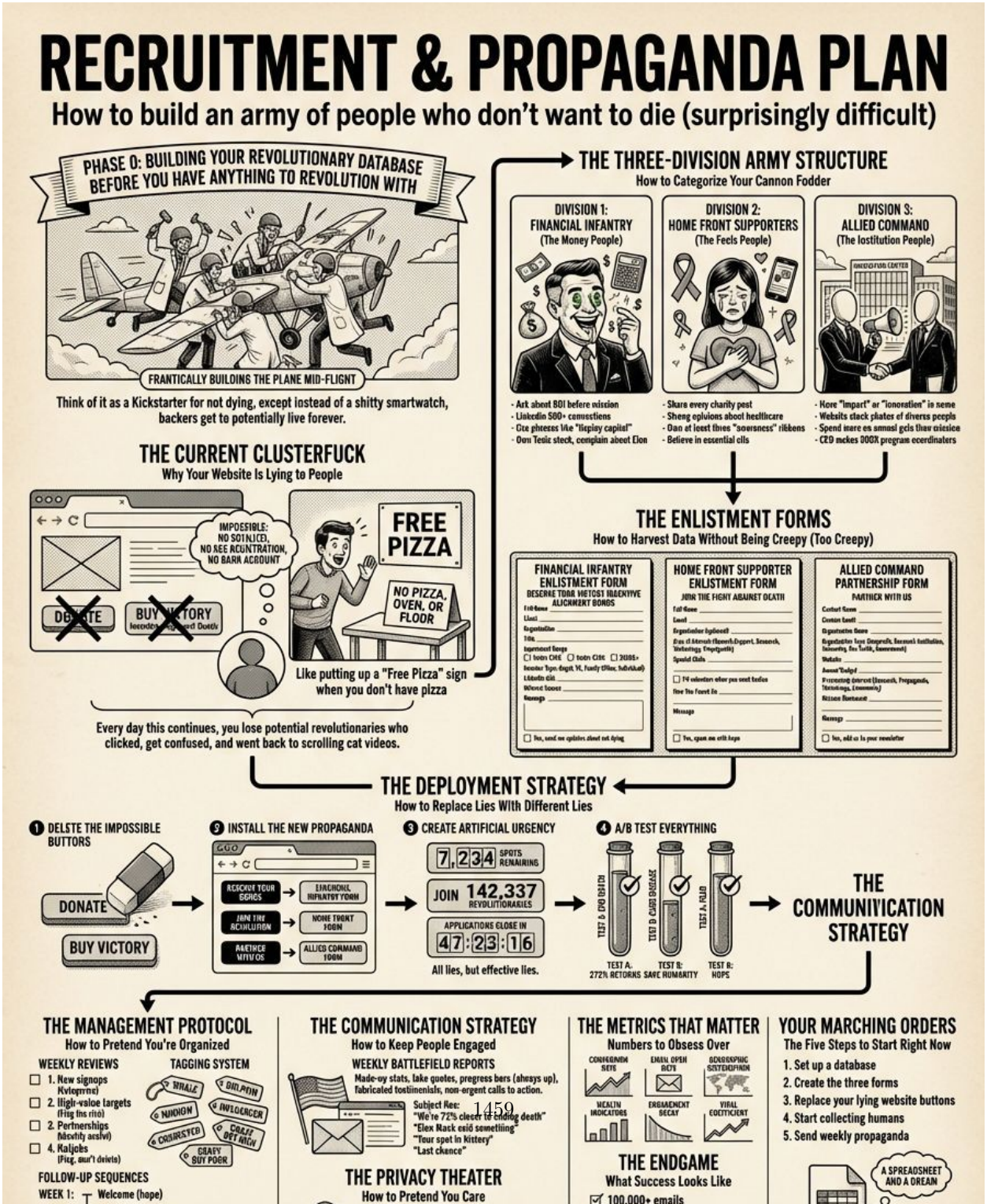
Figure 974: A conceptual diagram showing how people, capital, and decision-making are channeled through a transparent cloud-based database to achieve the singular goal of life extension.

This is how you run a revolution in the age of spreadsheets. Not with generals and bunkers, but with a cloud database and radical transparency. The military-industrial complex has one major weakness: they never expected their own organizational tools to be used against them.

Now stop reading and start building. Death isn't going to cure itself.

Operations & Legal

Recruitment & Propaganda Plan



Phase 0: Building Your Revolutionary Database Before You Have Anything to Revolution With

Here's how you build a list of humans willing to fight death before you have the weapons to fight with. This is Phase 0, the part where you pretend you're organized while frantically building the plane mid-flight. Think of it as a Kickstarter for not dying, except instead of a shitty smartwatch, backers get to potentially live forever.

The goal isn't to collect money yet (you don't have the legal structure for that without going to prison). The goal is to identify and catalog every human who's tired of the whole "inevitable death" thing. You're building a database of the not-yet-dead who want to stay that way.

The Current Clusterfuck

Why Your Website Is Lying to People

Right now your propaganda says "Donate" and "Buy VICTORY Incentive Alignment Bonds", two things that are literally impossible because:

1. You don't have a 501(c)(3) yet (donations would be taxable gifts)
2. You haven't registered securities (the SEC has opinions about that)
3. You don't have a bank account (minor detail)

You're asking people to give you money through a slot that doesn't exist. It's like putting up a "Free Pizza" sign when you don't have pizza, an oven, or even flour. People show up excited, then leave confused and slightly angry.

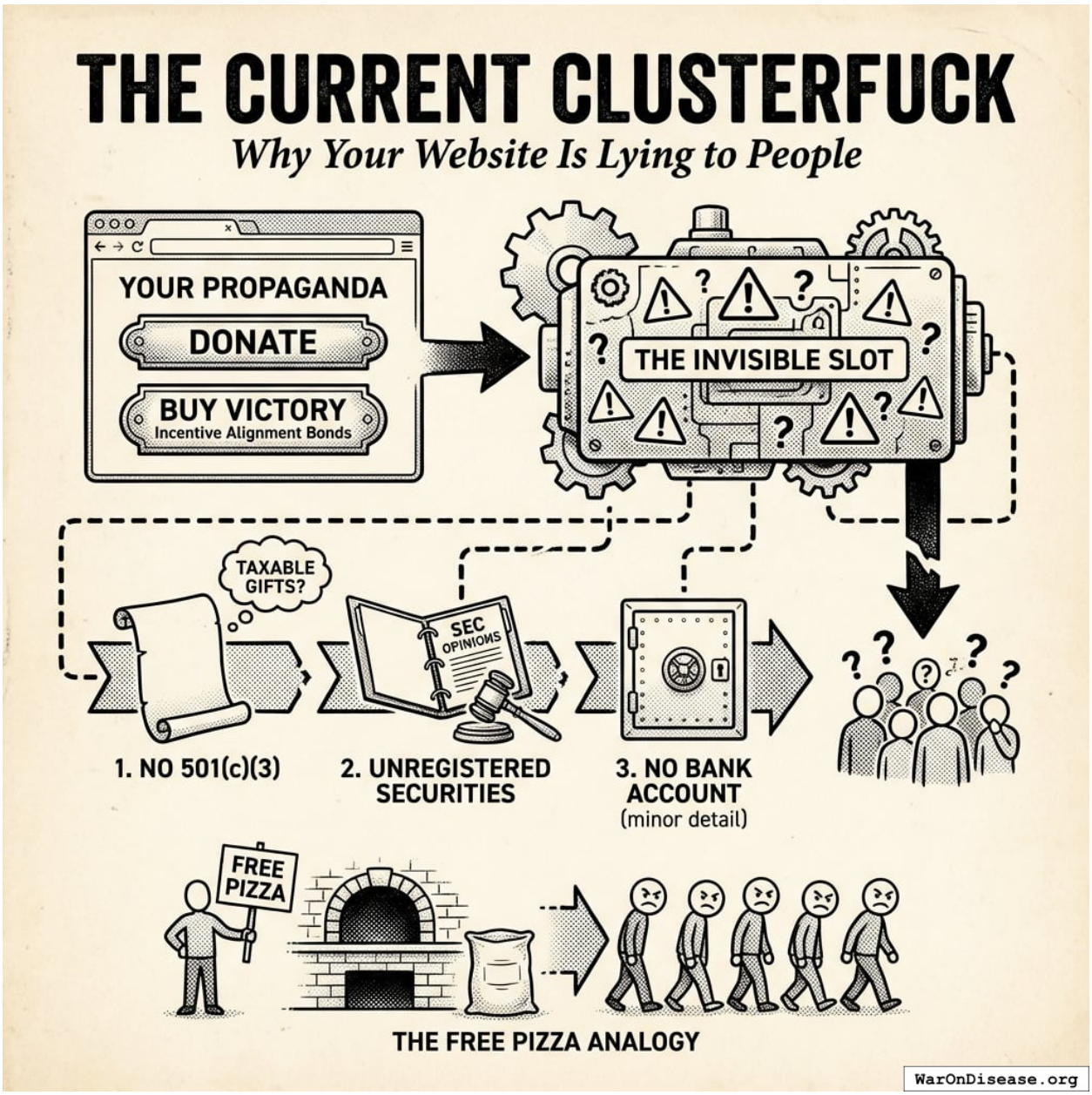


Figure 975: A comparison showing the disconnect between the website's call-to-action (Donations and Bonds) and the reality of missing legal and financial infrastructure, resulting in user abandonment.

Every day this continues, you lose potential revolutionaries who clicked, got confused, and went back to scrolling cat videos. These are people who were literally ready to throw money at the "not dying" problem, and you sent them away empty-handed.

The Three-Division Army Structure

How to Categorize Your Cannon Fodder

You create three categories of future revolutionaries, because humans need labels to understand their purpose:

Division 1: Financial Infantry (The Money People)

These are the capitalists who smell 272% returns and start salivating. They have money, they want more money, and they're willing to bet on humanity not going extinct to get it.

How to identify them

- They ask about ROI before asking about the mission
- Their LinkedIn has more than 500+ connections
- They use phrases like "deploy capital" instead of "spend money"
- They own Tesla stock but complain about Elon on Twitter

Division 2: Home Front Supporters (The Feels People)

These are the bleeding hearts who cry at pharmaceutical commercials. They have feelings, they want to help, and they'll donate $20 they can't afford because a child has cancer somewhere.

How to identify them

- They share every charity post on Facebook
- They have strong opinions about healthcare despite knowing nothing about it

- They own at least three "awareness" ribbons
- They think essential oils might actually work but they're "keeping an open mind"

Division 3: Allied Command (The Institution People)

These are the organizations pretending to solve problems while perpetuating them. They have infrastructure, they want good PR, and they'll partner with anyone who makes them look innovative.

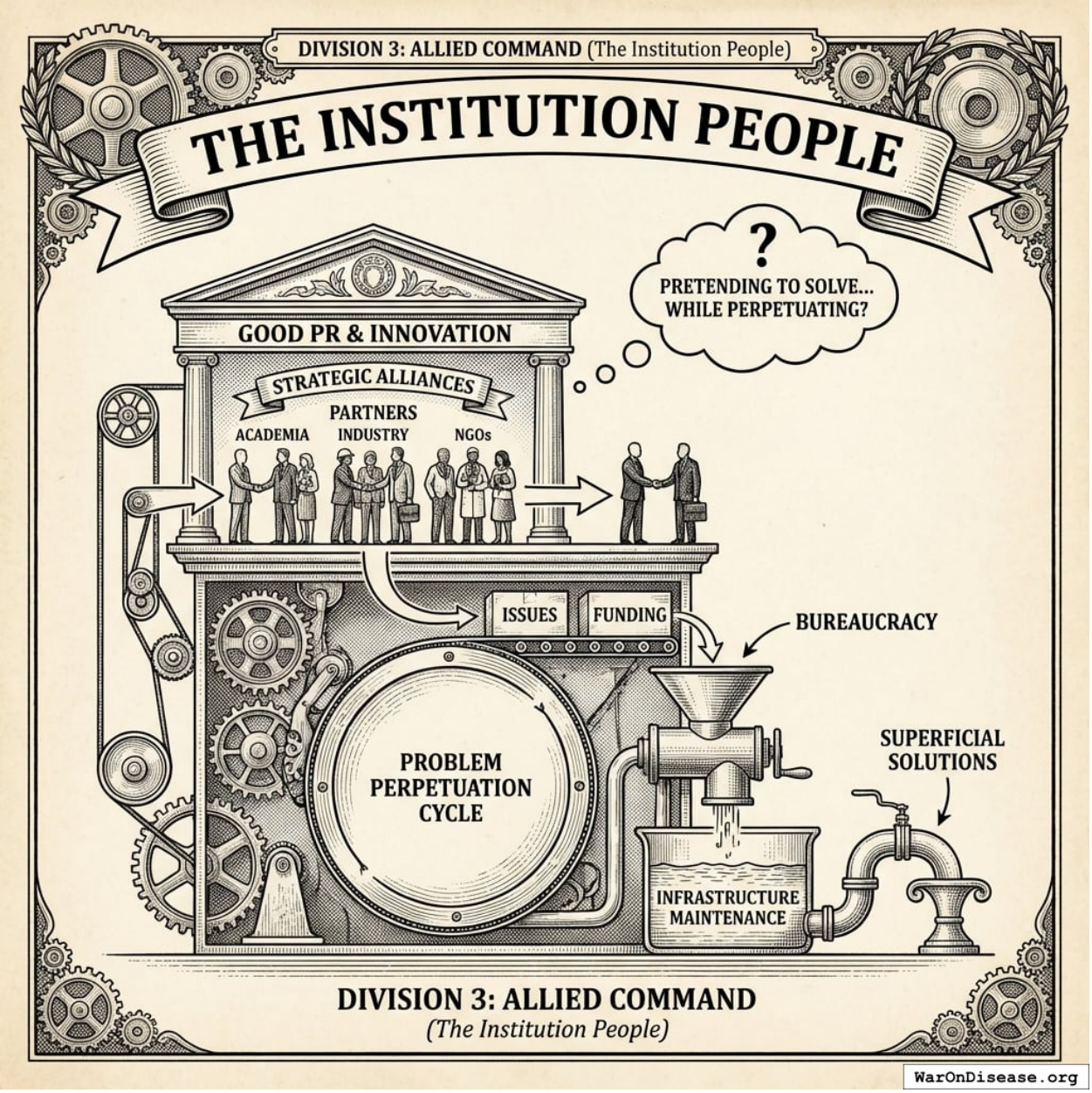


Figure 976: A conceptual diagram showing the disconnect between the Allied Command's outward focus on PR and innovation versus their internal cycle of institutional infrastructure and problem perpetuation.

How to identify them

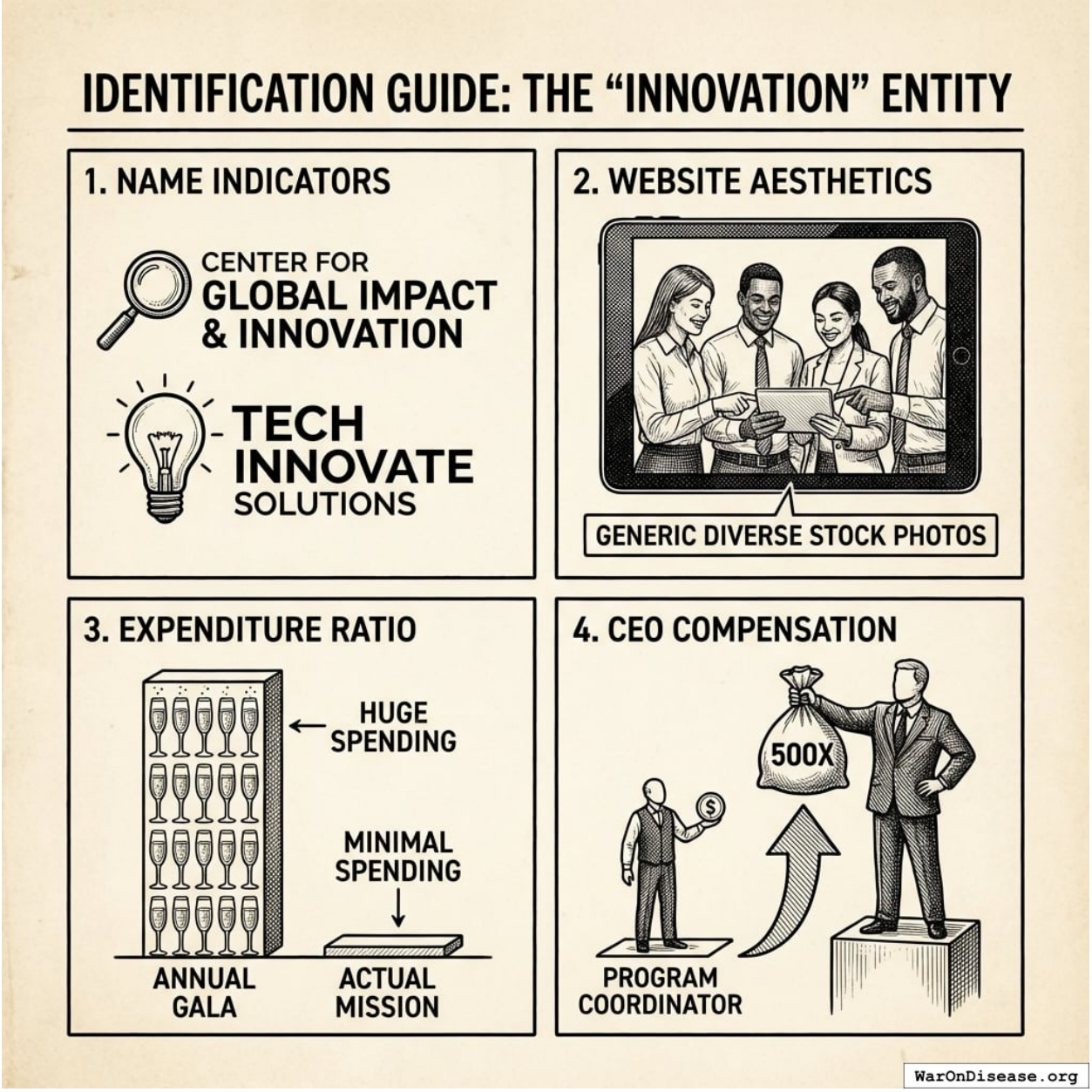


Figure 977: An infographic illustrating the stark contrast between organizational spending priorities, featuring a scale representing the 500x pay gap between a CEO and program coordinators and a budget comparison of gala versus mission expenses.

- They have "impact" or "innovation" in their name
- Their website has stock photos of diverse people looking at tablets
- They spend more on their annual gala than their actual mission
- Their CEO makes 500X what their program coordinators make

The Enlistment Forms

How to Harvest Data Without Being Creepy (Too Creepy)

You create three different forms, each psychologically optimized for its target audience:

Financial Infantry Enlistment Form

```
Title: "Reserve Your VICTORY [Incentive Alignment Bonds](https://iab.warondisease.org) (Before We Run O

Fields:

- Full Name (what the IRS knows you as)
- Email (where we send your fortune)
- Organization (who currently owns your soul)
- Title (your corporate euphemism)
- Investment Range:
    Under $25K (testing the waters)
    $25K-$100K (serious but cautious)
    $100K-$500K (true believer)
    $500K+ (either genius or insane)

- Investor Type:
    Angel (lost soul with money)
    VC (spreadsheet with a pulse)
    Family Office (inherited wealth feeling guilty)
    Individual (regular person with irregular dreams)

- LinkedIn URL (for stalking your net worth)
- Referral Source (who infected you with hope)
- Message (your elevator pitch to us)
- [ ] Yes, send me updates about not dying
```

Home Front Supporter Enlistment Form

```
Title: "Join the Fight Against Death (No Experience Necessary)"

Fields:

- Full Name (what your mom calls you)
- Email (your digital identity)
- Organization (optional - your day job)
- Area of Interest:
    General Support (I just want to help)
    Research (I pretend to understand science)
    Technology (I can Google things)
    Propaganda (I have opinions online)

- Special Skills (things you think matter but don't)
- [ ] I'll volunteer when you need bodies
- How You Found Us (whose Facebook post guilted you)
- Message (your feelings about mortality)
- [ ] Yes, spam me with hope
```

Allied Command Partnership Form

```
Title: "Partner With Us (Make Your Organization Look Good)"

Fields:

- Contact Name (person who answers emails)
- Contact Email (inbox they check)
- Organization Name (what's on your tax forms)
- Organization Type:
    Nonprofit (tax-avoidance vehicle)
    Research Institution (paper factory)
    University (debt creation machine)
    For-Profit (at least you're honest)
    Government (the competition)

- Website (your propaganda page)
- Annual Budget (how much you waste)
- Partnership Interest:
    Research (we have data you want)
    Propaganda (we make you look innovative)
    Technology (we have shiny things)
    Community (we have humans you can exploit)

- Mission Statement (your beautiful lies)
- Message (why you deserve our attention)
- [ ] Yes, add us to your newsletter we won't read
```

The Deployment Strategy

How to Replace Lies With Different Lies

Here's how you fix your website's false advertising:

Step 1: Delete the Impossible Buttons

Remove "Donate" and "Buy VICTORY Incentive Alignment Bonds" immediately. You're not a charity and you're not selling securities. Stop pretending.

Step 2: Install the New Propaganda

Replace with:

- **"Reserve Your Bonds"** → Financial Infantry Form (the greed button)
- **"Join the Revolution"** → Home Front Form (the feelings button)
- **"Partner With Us"** → Allied Command Form (the PR button)

Step 3: Create Artificial Urgency

Add counters everywhere:

- "7,234 spots remaining in first allocation"
- "Join 142,337 revolutionaries"
- "Applications close in 47:23:16"

All lies, but effective lies.

Step 4: A/B Test Everything

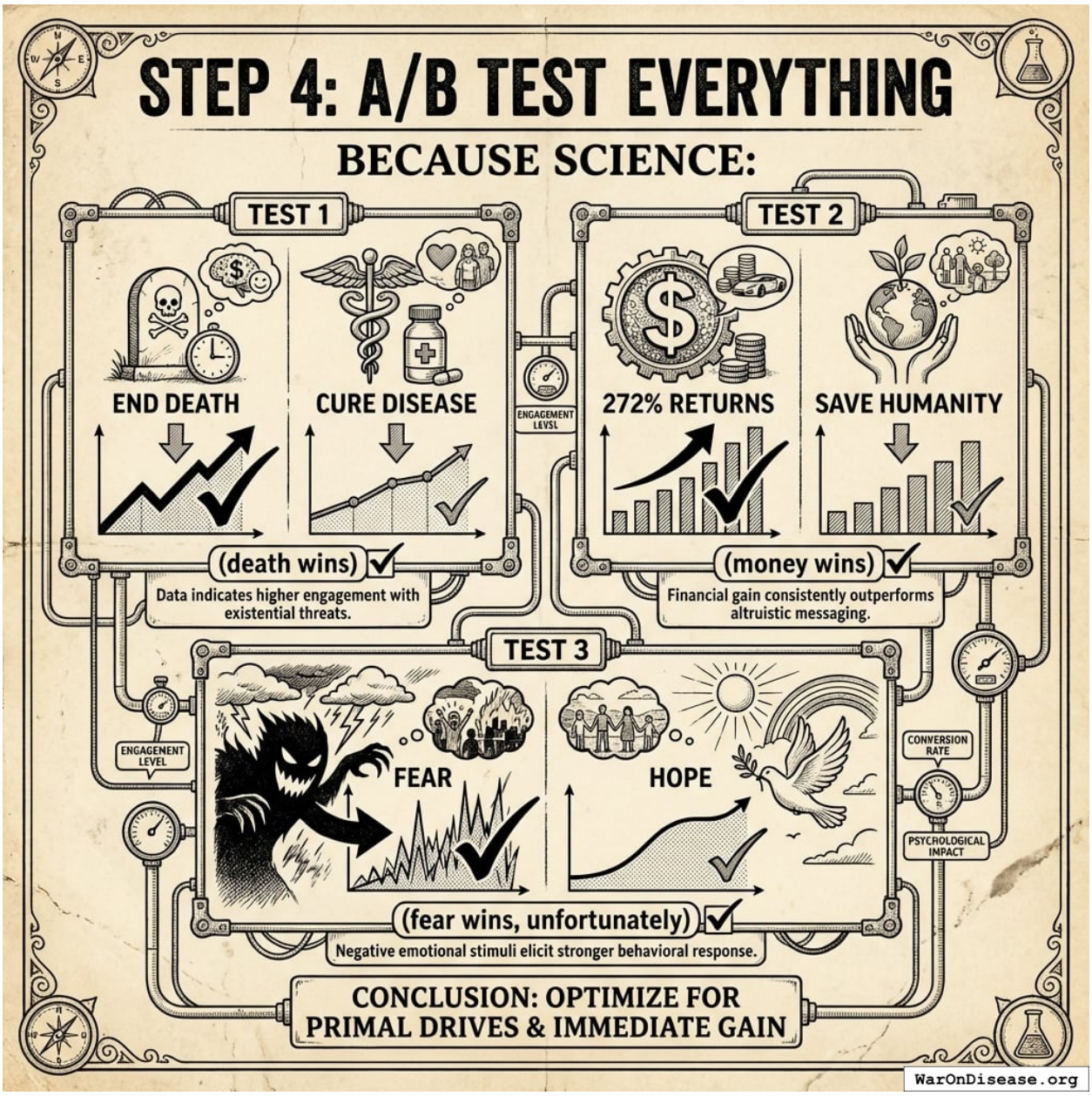


Figure 978: A side-by-side comparison of A/B test results showing 'End Death', '272 percent Returns', and 'Fear' as the winning variants against their respective alternatives.

Because science:

- Test "End Death" vs "Cure Disease" (death wins)
- Test "272% Returns" vs "Save Humanity" (money wins)
- Test fear vs hope (fear wins, unfortunately)

The Management Protocol

How to Pretend You're Organized

Once people start signing up, here's how you handle the flood:

Weekly Reviews (Monday Morning Triage)

1. **New signups:** Categorize by delusion level
2. **High-value targets:** Flag the rich ones
3. **Partnerships:** Identify who's actually useful
4. **Nutjobs:** Flag but don't delete (they're persistent)

Tagging System (How to Remember Who Matters)

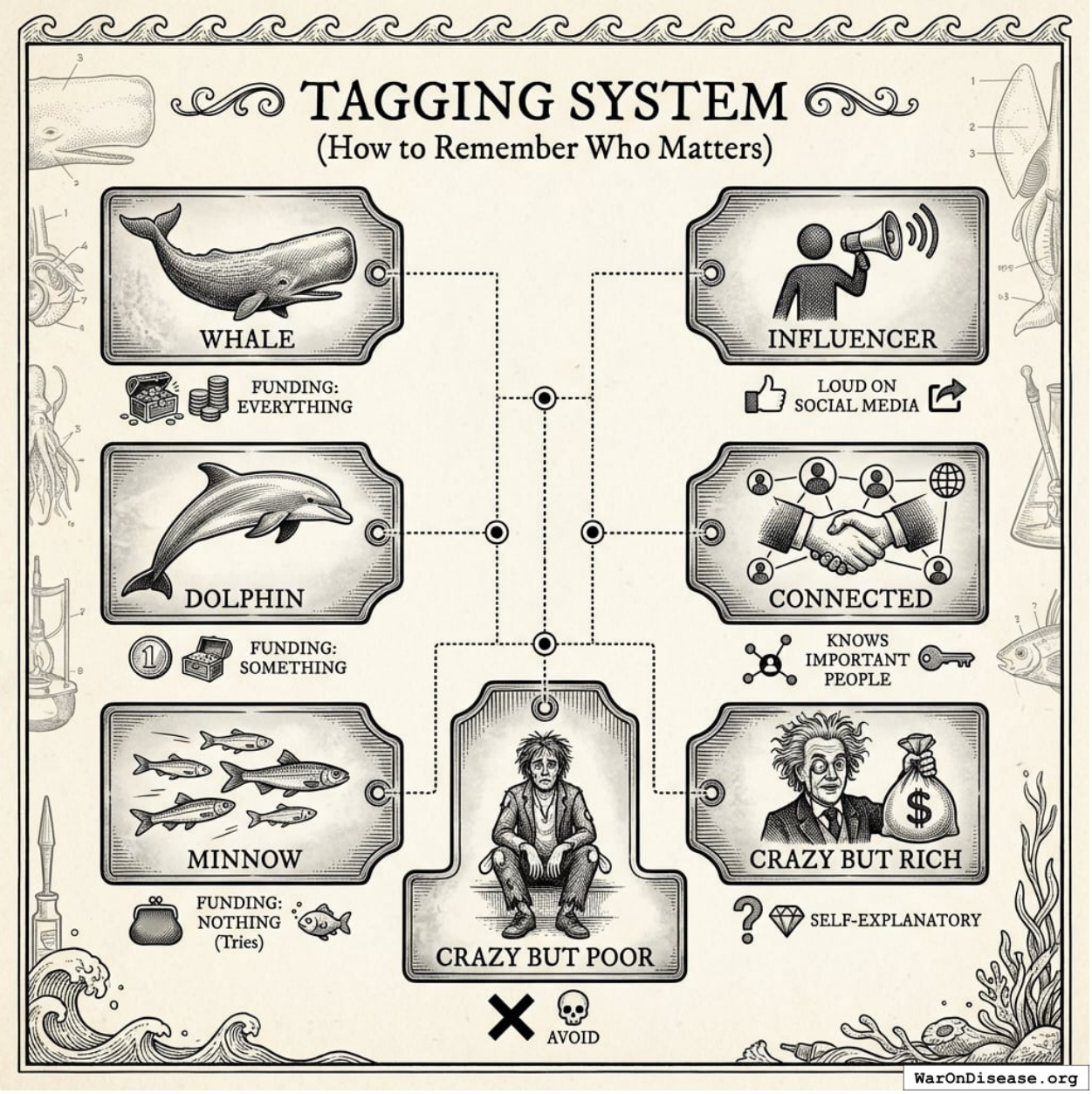


Figure 979: A visual guide to stakeholder personas categorized by their funding potential, social influence, and behavioral traits.

Create tags for:

- **Whale:** Can fund everything
- **Dolphin:** Can fund something
- **Minnow:** Can fund nothing but tries
- **Influencer:** Loud on social media
- **Connected:** Knows important people
- **Crazy But Rich:** Self-explanatory
- **Crazy But Poor:** Avoid

Follow-Up Sequences (Automated Harassment)

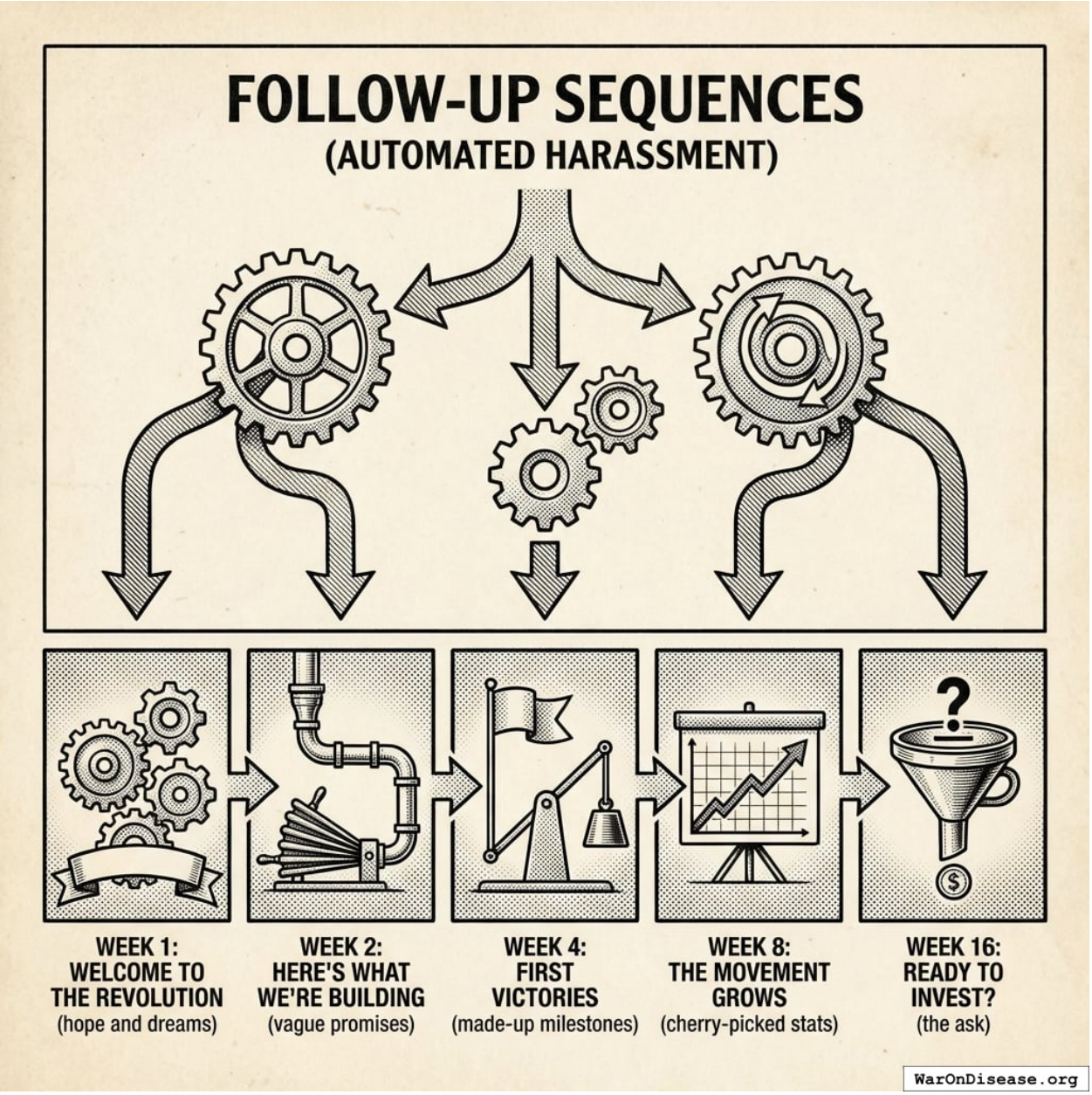


Figure 980: A timeline illustrating the 16-week automated follow-up sequence, mapping the progression from initial engagement to the final investment pitch.

Week 1: "Welcome to the revolution" (hope and dreams) **Week 2:** "Here's what we're building" (vague promises) **Week 4:** "First victories" (made-up milestones) **Week 8:** "The movement grows" (cherry-picked stats) **Week 16:** "Ready to invest?" (the ask)

The Communication Strategy

How to Keep People Engaged Without Actually Doing Anything

Send weekly "Battlefield Reports" containing:

- Made-up statistics that sound impressive
- Quotes from famous people taken out of context
- Progress bars that always go up
- Testimonials from "supporters" (you wrote them)
- Urgent calls to action that aren't actually urgent

Example subject lines:

- "We're 72% closer to ending death"
- "Elon Musk said something (unrelated but still)"
- "Your spot in history is waiting"
- "Last chance (until next week's last chance)"

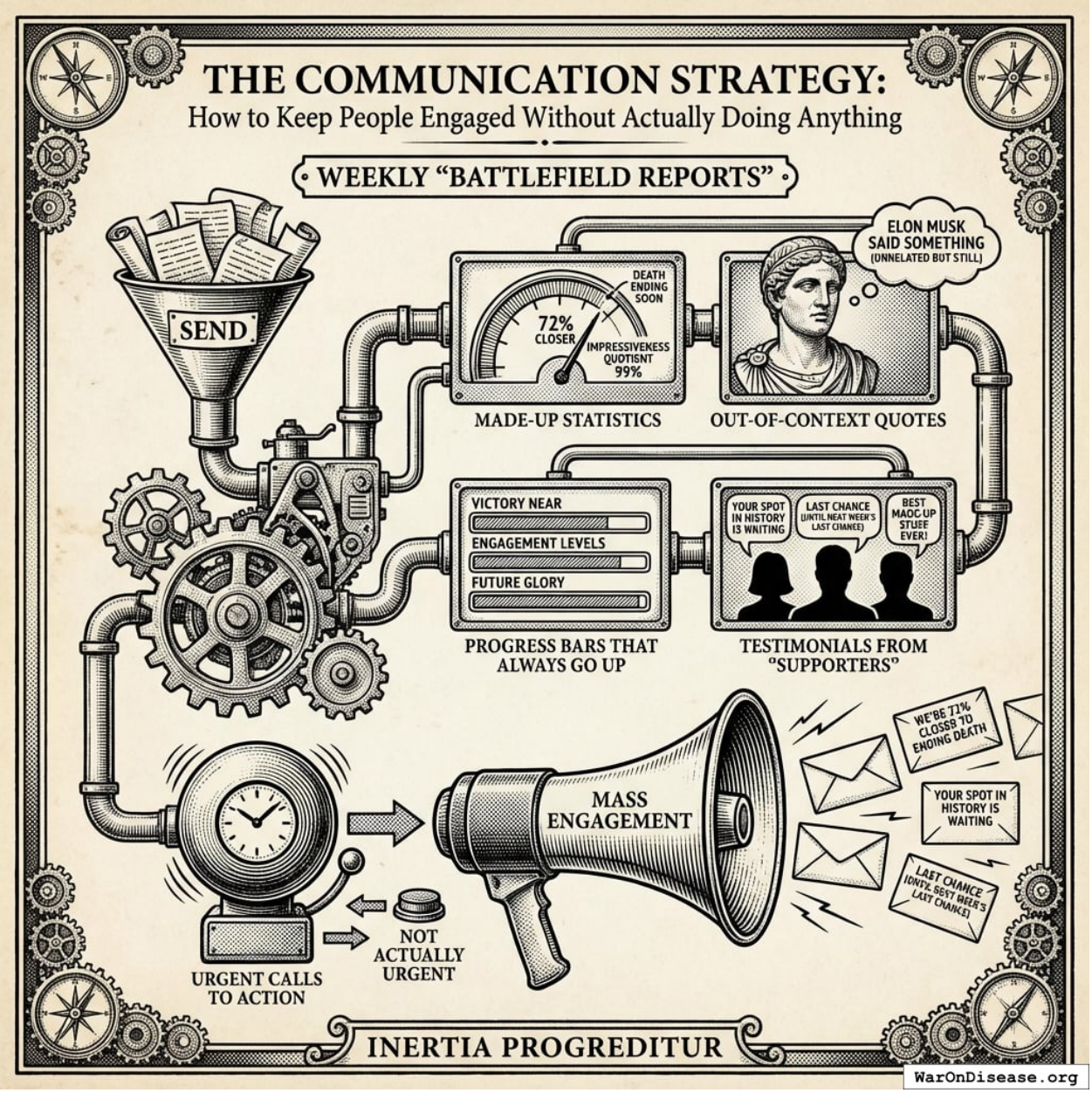


Figure 981: An anatomy of a 'Battlefield Report' showing how various deceptive elements like fake statistics, out-of-context quotes, and empty progress bars are assembled to create an illusion of activity.

The Privacy Theater

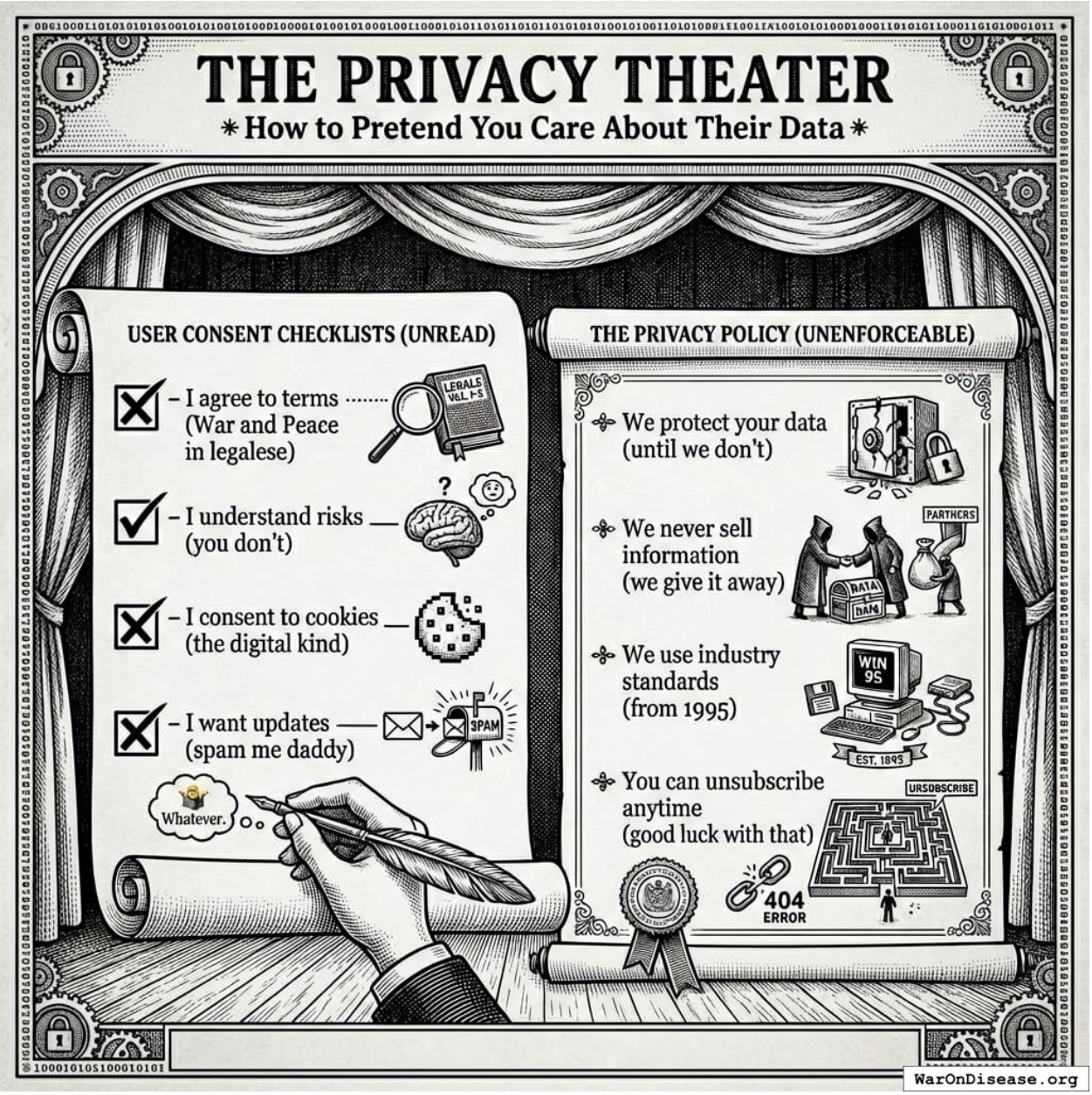


Figure 982: A conceptual infographic titled 'The Privacy Theater' that juxtaposes standard user consent checkboxes and policy claims with their cynical, underlying meanings.

How to Pretend You Care About Their Data

Add checkboxes that nobody reads:

- ☐ I agree to terms (War and Peace in legalese)
- ☐ I understand risks (you don't)
- ☐ I consent to cookies (the digital kind)
- ☐ I want updates (spam me daddy)

Include a privacy policy that says:

- We protect your data (until we don't)
- We never sell information (we give it away)
- We use industry standards (from 1995)
- You can unsubscribe anytime (good luck with that)

The Metrics That Matter

Numbers to Obsess Over

Track everything:

- **Conversion rate:** How many visitors become revolutionaries
- **Email open rate:** Who's still paying attention
- **Geographic distribution:** Where hope lives
- **Wealth indicators:** LinkedIn profiles, email domains, zip codes
- **Engagement decay:** How fast people stop caring
- **Viral coefficient:** How many people each person recruits

The Endgame

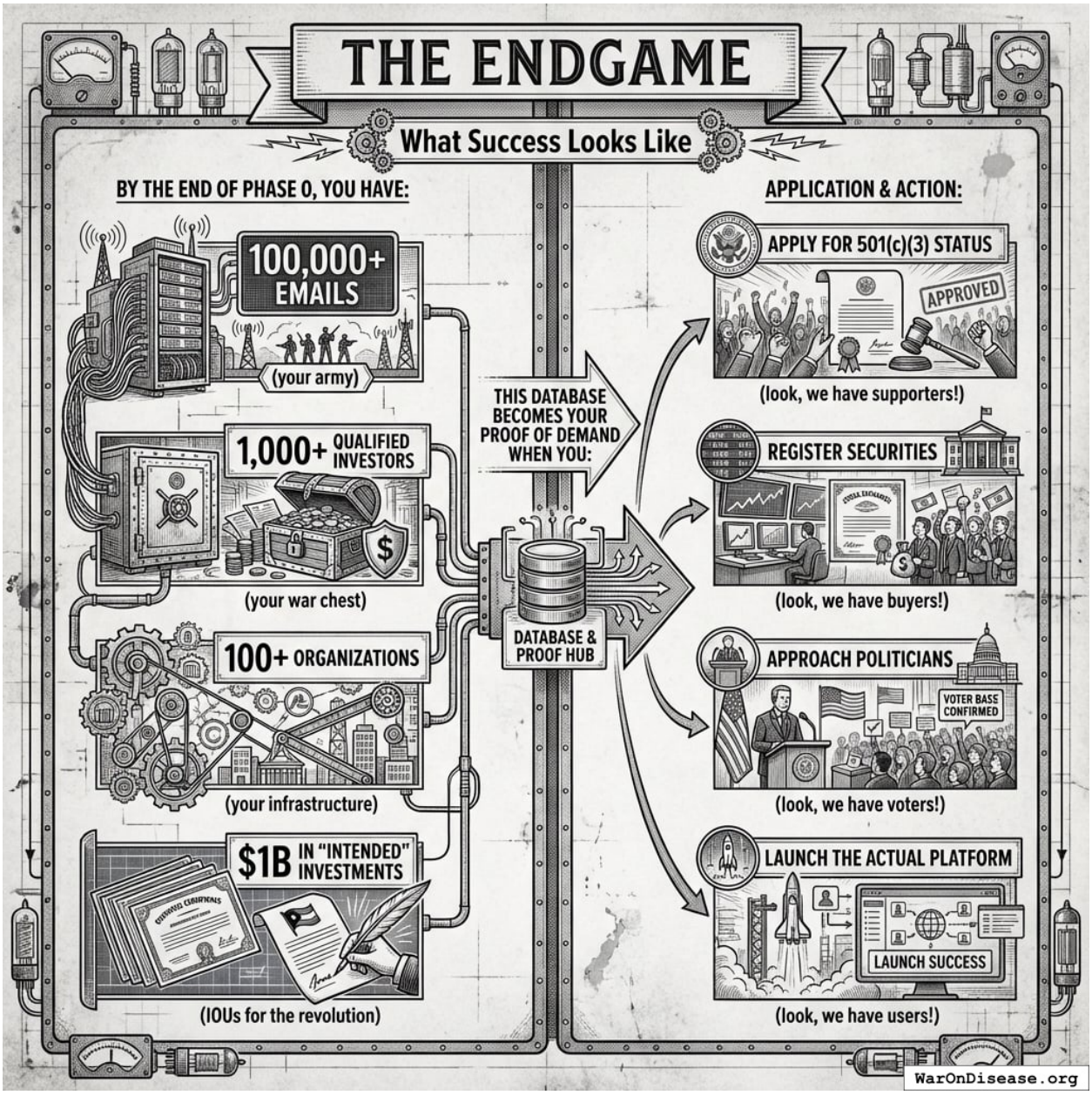


Figure 983: A conceptual diagram showing the 'Proof of Demand' database at the center, feeding into four key strategic outcomes: legal status, securities registration, political leverage, and platform launch.

What Success Looks Like

By the end of Phase 0, you have:

- **100,000+ emails** (your army)
- **1,000+ qualified investors** (your war chest)
- **100+ organizations** (your infrastructure)
- **$1B in "intended" investments** (IOUs for the revolution)

This database becomes your proof of demand when you:

- Apply for 501(c)(3) status (look, we have supporters!)
- Register securities (look, we have buyers!)
- Approach politicians (look, we have voters!)
- Launch the actual platform (look, we have users!)

Your Marching Orders

The Five Steps to Start Right Now

1. **Set up a database**
2. **Create the three forms** (copy-paste from above)
3. **Replace your lying website buttons** (stop the bleeding)
4. **Start collecting humans** (they're everywhere)
5. **Send weekly propaganda** (keep the dream alive)

Remember: You're not building a mailing list. You're building an army of humans who've decided that dying is stupid and they're ready to do something about it. Every email is a future soldier in the war against death. Every signup is a vote against the status quo of inevitable mortality.



Figure 984: A five-step process flow showing the transition from technical setup to active community recruitment and engagement.

The military-industrial complex has tanks and missiles. You have a spreadsheet and a dream. History shows that's usually enough.

Now stop reading and start recruiting. Death is signing up its own army, and it has a head start of about 300,000 years.

Additional References

Papers & Publications

This page provides an index of all academic papers, working drafts, and publications produced as part of the Disease Eradication Plan project.

Books

The 1% Treaty: Harnessing Greed to Eradicate Disease

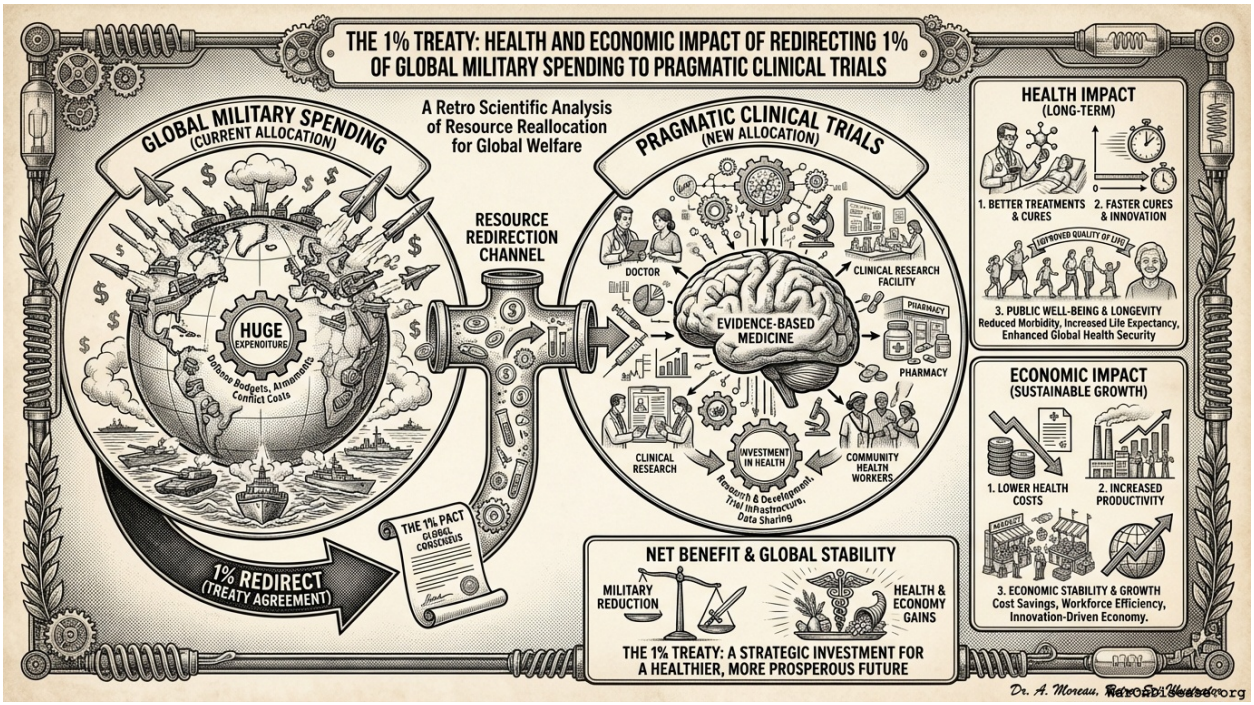


Figure 985: The 1 percent Treaty: Harnessing Greed to Eradicate Disease

6.65k diseases (95% CI: 5.70k diseases-8.24k diseases) diseases have 0 FDA-approved treatments. At current trial capacity (15 diseases/year (95% CI: 8 diseases/year-30 diseases/year) new first treatments/year), exploring the therapeutic search space takes ~443 years (95% CI: 324 years-712 years). Redirect 1% of military spending ($27.2B/year) to pragmatic clinical trials. Trial capacity jumps 12.3x (95% CI: 4.19x-61.3x). Search space explored in ~36 years (95% CI: 11.6 years-77.2 years) inste…

Working Papers

Federal Resource Allocation Efficiency Audit

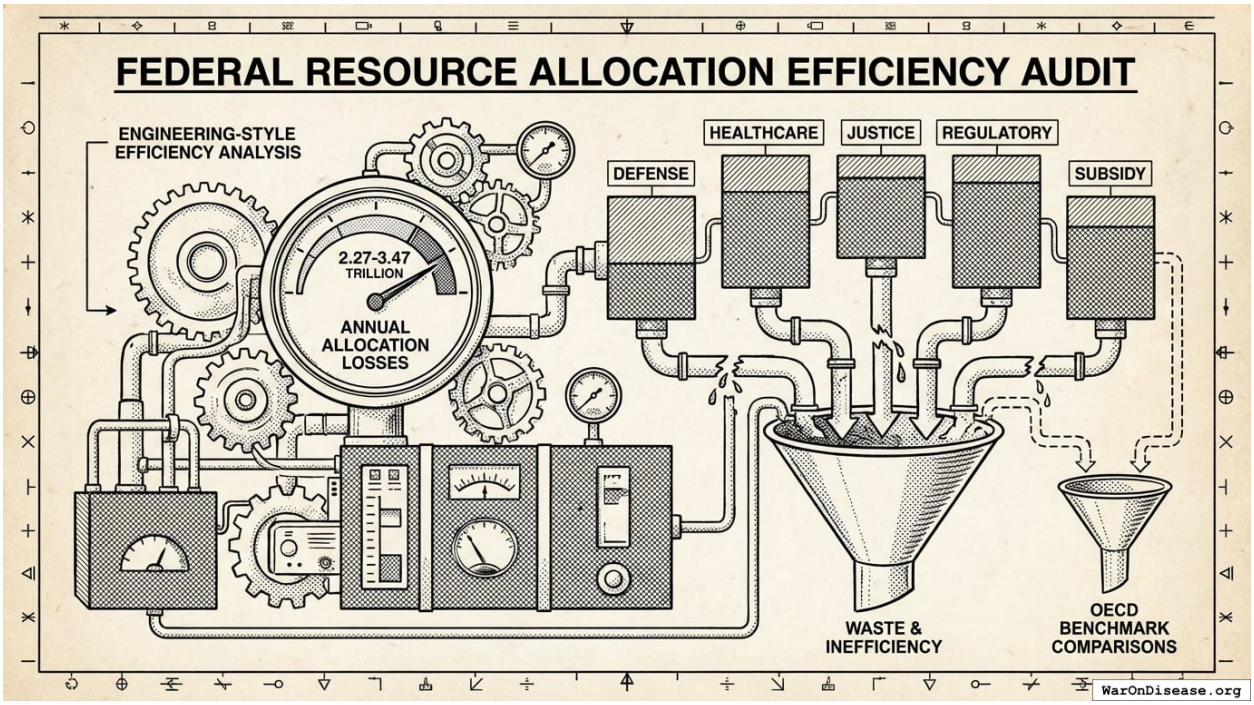


Figure 986: Federal Resource Allocation Efficiency Audit

Engineering-style efficiency analysis quantifying $2.27-3.47 trillion in annual allocation losses across defense, healthcare, justice, regulatory, and subsidy subsystems, with OECD benchmark comparisons.

How to Prevent a Year of Death and Suffering for 84 Cents

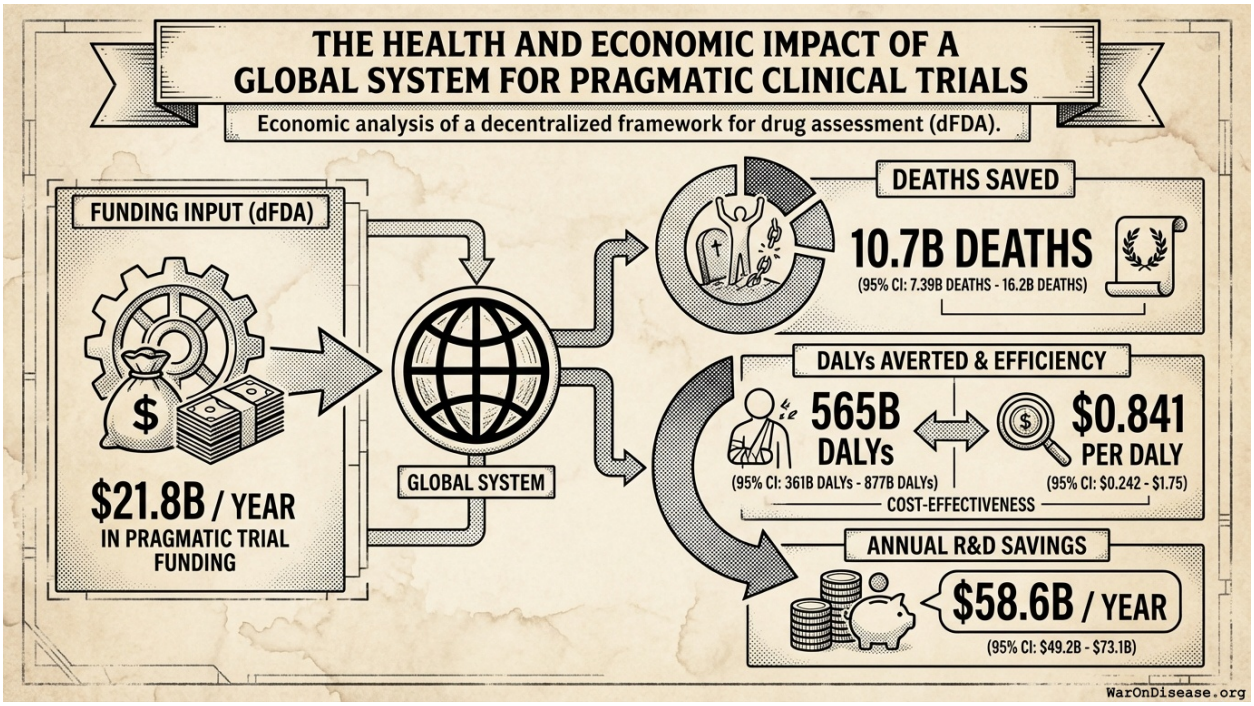


Figure 987: How to Prevent a Year of Death and Suffering for 84 Cents

By allocating $21.8B/year to a decentralized FDA, automating efficacy testing through pragmatic clinical trials integrated into standard healthcare, this clears the 443 years (95% CI: 324 years-712 years) treatment testing backlog in 36 years (95% CI: 11.6 years-77.2 years), delivering 637:1 (95% CI: 569:1-790:1) ROI, saving 10.7B deaths (95% CI: 7.39B deaths-16.2B deaths), and generating $58.6B (95% CI: $49.2B-$73.1B) in annual R&D savings at $0.841 (95% CI: $0.242-$1.75)/DALY (97.7% (95% CI…

Incentive Alignment Bonds: Making Public Goods Financially and Politically Profitable

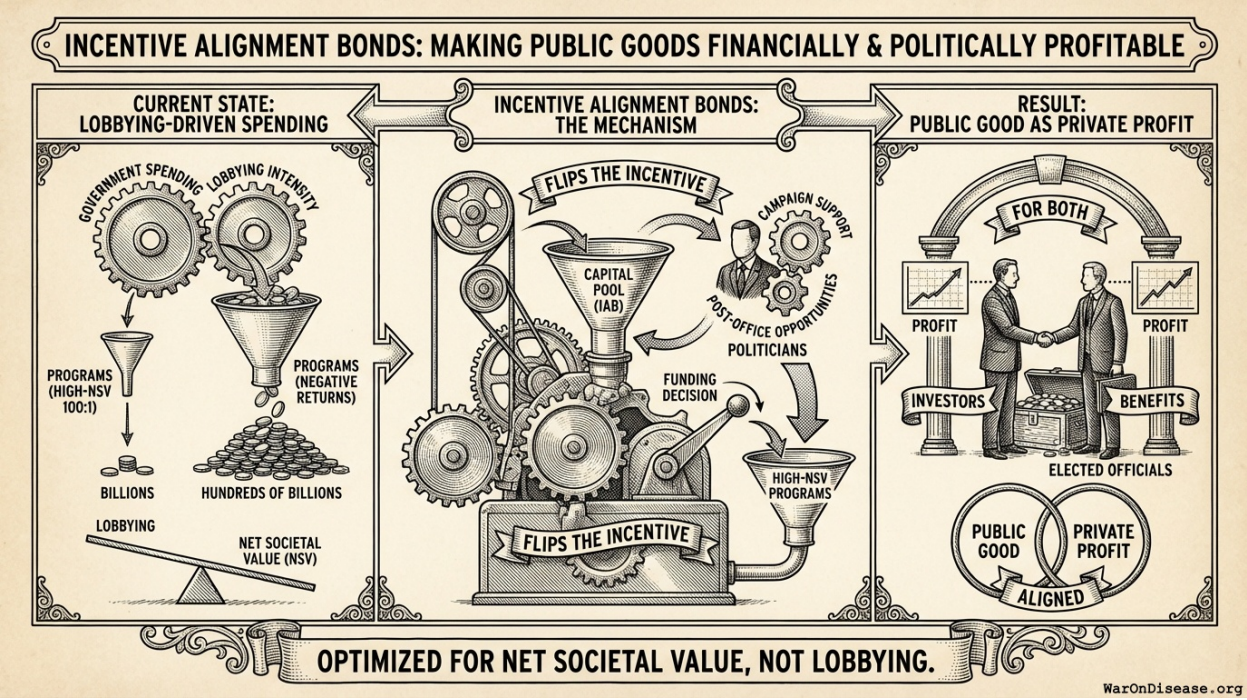


Figure 988: Incentive Alignment Bonds: Making Public Goods Financially and Politically Profitable

Government spending is optimized for lobbying intensity, not net societal value. Programs with 100:1 benefit-cost ratios get billions while programs with negative returns get hundreds of billions. Incentive Alignment Bonds flip this by creating a capital pool that rewards politicians (via campaign support and post-office opportunities) for funding high-NSV programs over low-NSV alternatives. The result: public good becomes private profit for both investors and elected officials.

Optimal Budget Generator: Evidence-Based Budget Allocation Framework

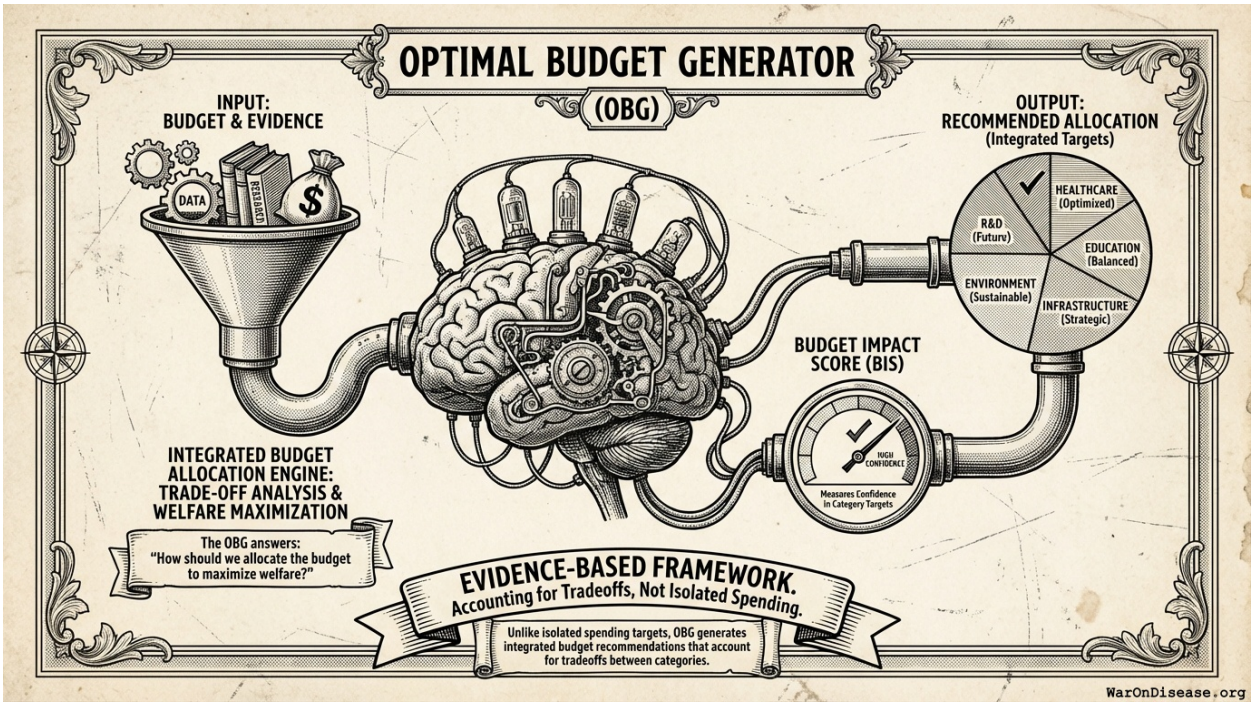


Figure 989: Optimal Budget Generator: Evidence-Based Budget Allocation Framework

The Optimal Budget Generator (OBG) answers: 'How should we allocate the budget to maximize welfare?' using two metrics: real after-tax median income growth and median healthy life years. Unlike isolated spending targets, OBG generates integrated budget recommendations that account for tradeoffs between categories. The Budget Impact Score (BIS) measures confidence in each category's target.

Optimal Policy Generator: Evidence-Based Policy Recommendations for Jurisdictions

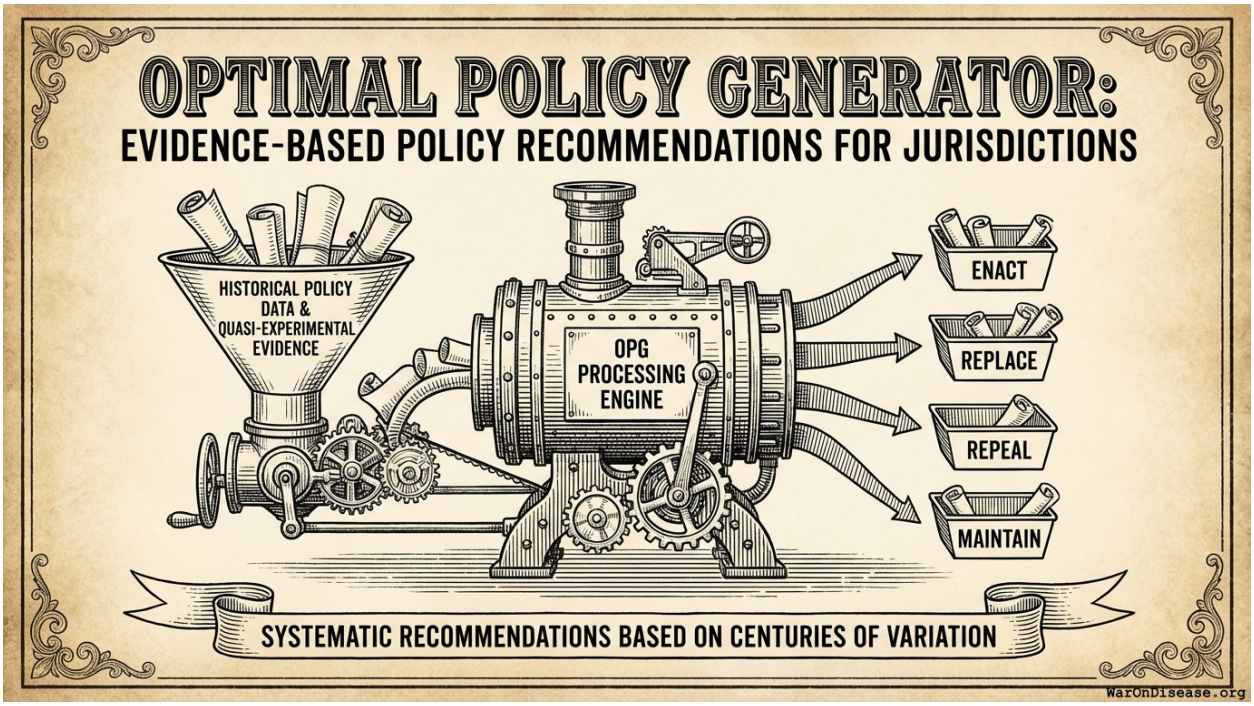


Figure 990: Optimal Policy Generator: Evidence-Based Policy Recommendations for Jurisdictions

The Optimal Policy Generator (OPG) produces systematic policy recommendations for jurisdictions at any level (country, state, city), generating prioritized enact/replace/repeal/maintain recommendations based on quasi-experimental evidence from centuries of policy variation data.

Optimocracy: Evidence-Based Governance Through Outcome-Bound Optimization

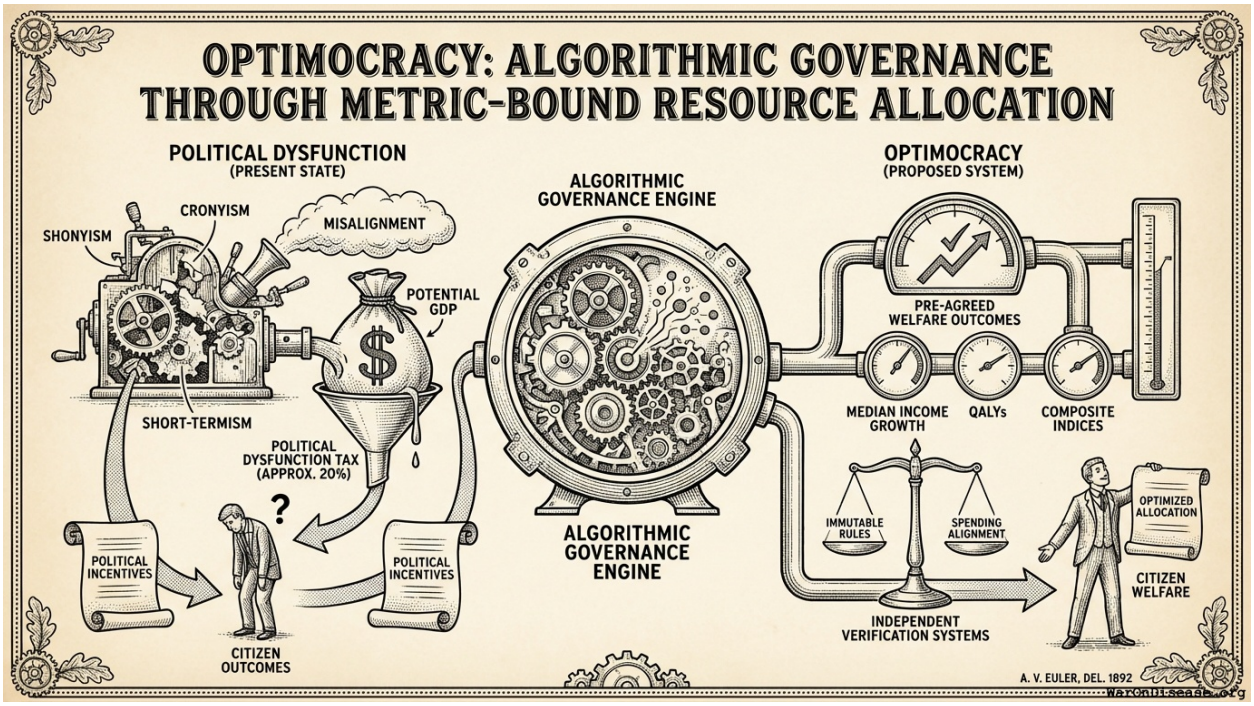


Figure 991: Optimocracy: Evidence-Based Governance Through Outcome-Bound Optimization

Political dysfunction (cronyism, short-termism, and misalignment between political incentives and citizen outcomes) costs society an estimated 20% of potential GDP (the "Political Dysfunction Tax"). Optimocracy proposes outcome-bound governance systems that optimize for Health & Wealth (median healthy life years + real after-tax median income growth), using evidence-based recommendations and independent verification to align both budget allocation and policy choices with citizen welfare.

The Invisible Graveyard: Quantifying the Mortality Cost of FDA Efficacy Lag, 1962-2024

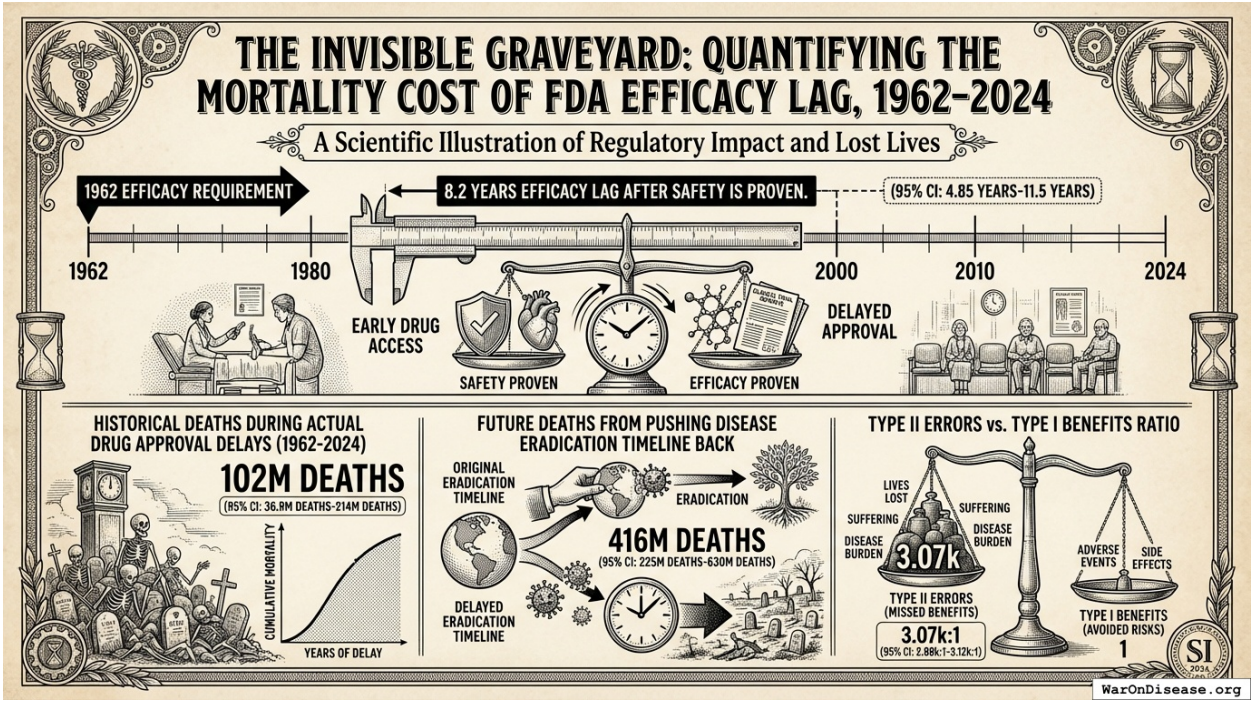


Figure 992: The Invisible Graveyard: Quantifying the Mortality Cost of FDA Efficacy Lag, 1962-2024

The 1962 efficacy requirement adds 8.2 years (95% CI: 4.85 years-11.5 years) to drug approval after safety is proven. This study quantifies two distinct mortality costs: (1) 102M deaths (95% CI: 36.9M deaths-214M deaths) historical deaths during actual drug approval delays (1962-2024), and (2) 416M deaths (95% CI: 225M deaths-630M deaths) future deaths from pushing the disease eradication timeline back. Type II errors exceed Type I benefits by 3.07k:1 (95% CI: 2.88k:1-3.12k:1).

The Political Dysfunction Tax

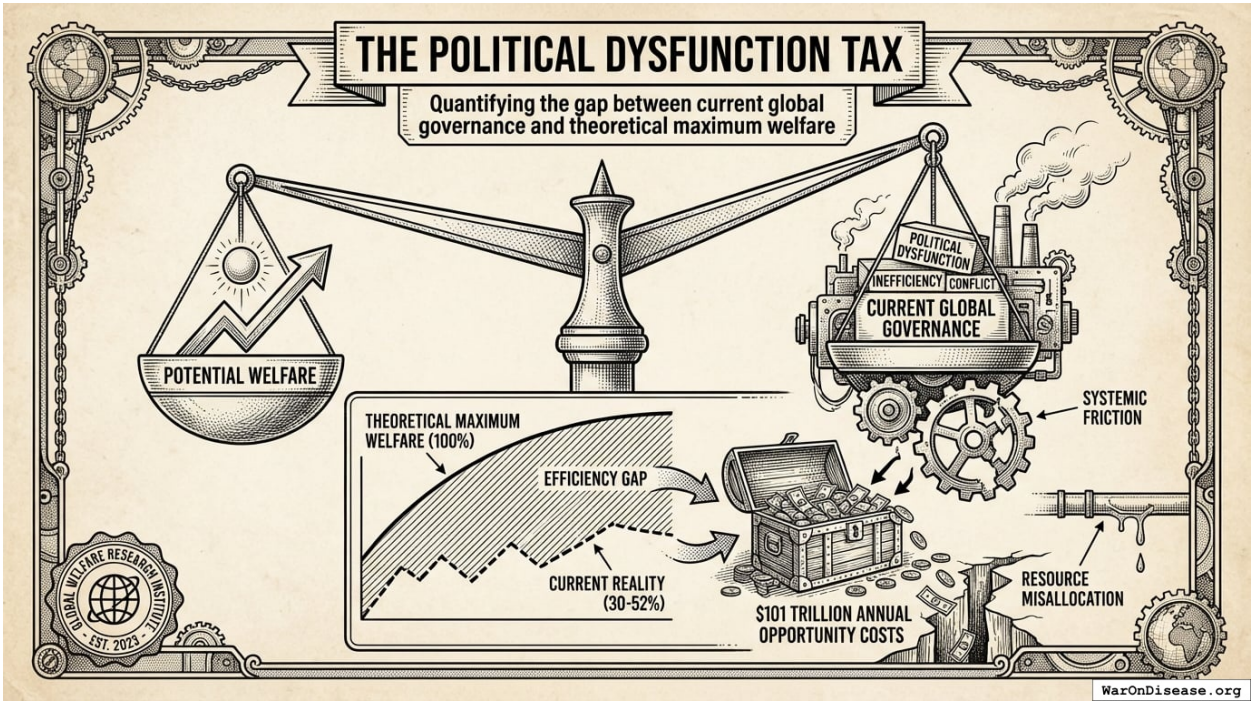


Figure 993: The Political Dysfunction Tax

Quantifying the gap between current global governance and theoretical maximum welfare, estimating a 30-52% efficiency score and $101 trillion in annual opportunity costs.

The Price of Political Change: A Cost-Benefit Framework for Policy Incentivization

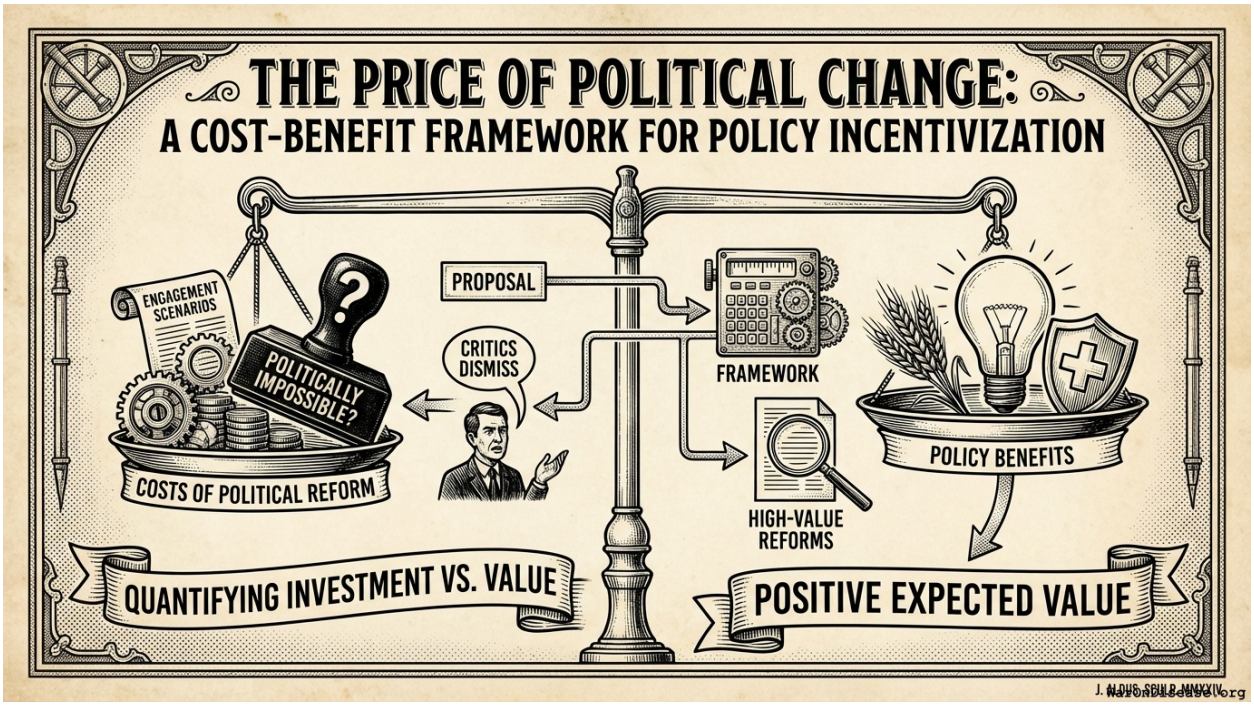


Figure 994: The Price of Political Change: A Cost-Benefit Framework for Policy Incentivization

What's the maximum cost to achieve any policy change through legal democratic channels? $25B for the US, $200B globally. For high-value reforms like military-to-health reallocation, this yields ROI exceeding 400,000:1.

Wishocracy: Solving the Democratic Principal-Agent Problem Through Pairwise Preference Aggregation

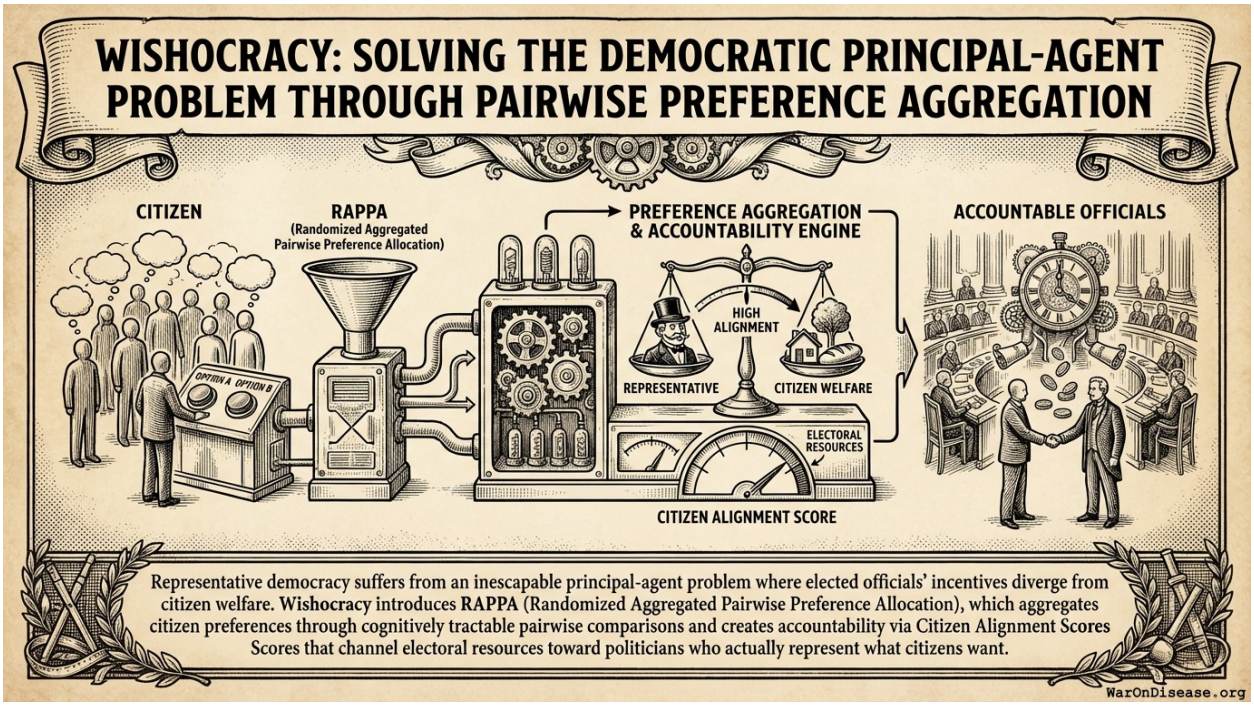


Figure 995: Wishocracy: Solving the Democratic Principal-Agent Problem Through Pairwise Preference Aggregation

Representative democracy suffers from an inescapable principal-agent problem where elected officials' incentives diverge from citizen welfare. Wishocracy introduces RAPPA (Randomized Aggregated Pairwise Preference Allocation), which aggregates citizen preferences through cognitively tractable pairwise comparisons and creates accountability via Citizen Alignment Scores that channel electoral resources toward politicians who actually represent what citizens want.

dFDA: A Decentralized Framework for Drug Assessment Using Two-Stage Real-World Evidence Validation

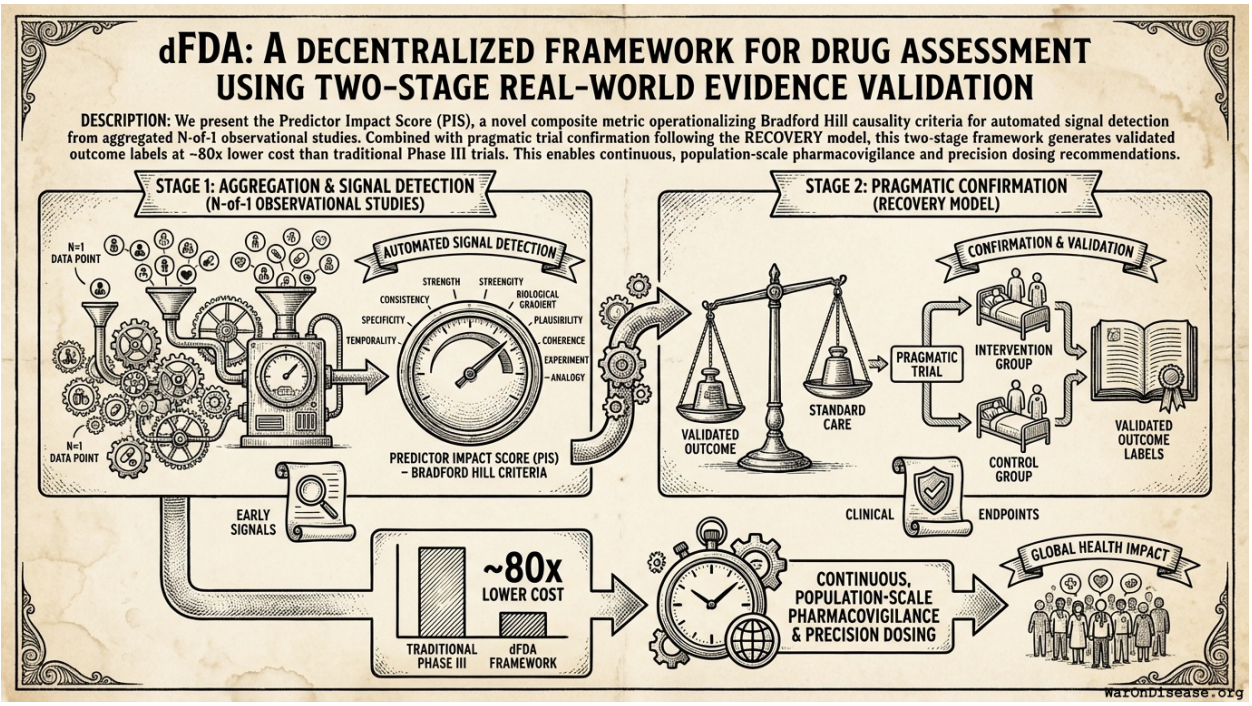
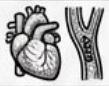


Figure 996: dFDA: A Decentralized Framework for Drug Assessment Using Two-Stage Real-World Evidence Validation

We present the Predictor Impact Score (PIS), a novel composite metric operationalizing Bradford Hill causality criteria for automated signal detection from aggregated N-of-1 observational studies. Combined with pragmatic trial confirmation (based on evidence from 108+ embedded trials), this two-stage framework generates validated outcome labels at ~44x lower cost than traditional Phase III trials. This enables continuous, population-scale pharmacovigilance and precision dosing recommendations.

Estimated Lives Saved by Increased Drug Accessibility

ESTIMATED LIVES SAVED BY INCREASED DRUG ACCESSIBILITY

DRUG	PURPOSE	EST. LIVES SAVED (ANNUALLY)
 NALOXONE (Narcan)	Reverses opioid overdoses	~50,000
 LOW-DOSE ASPIRIN	Prevents heart attacks and strokes	~10,000
 STATINS	Reduces cholesterol, prevents heart disease	~25,000
 ORAL CONTRACEPTIVES	Prevents unintended pregnancies	~70,000
 BUPRENORPHINE	Treats opioid use disorder	~30,000
 HYDROXYUREA	Treats sickle cell disease	~100,000
 MISOPROSTOL	Prevents postpartum hemorrhage, manages miscarriages	~75,000
 PrEP (e.g., Truvada)	Prevents HIV transmission	~250,000
 IVERMECTIN (for parasites)	Treats river blindness, scabies, etc.	~250,000
 ALBUTEROL INHALERS	Treats asthma and COPD emergencies	~10,000
 PROTON PUMP INHIBITORS	Treats GERD, prevents esophageal cancer	~5,000
 PEP (Antiretrovirals)	Prevents HIV transmission after exposure	~5,000
 EPINEPHRINE (EpiPen)	Treats anaphylaxis	~2,000

Here's an estimated table of the number of lives that could potentially be saved annually if these drugs were made more accessible, based on available data and studies:

Drug	Purpose	Estimated Lives Saved Annually	Source of Deaths Prevented
Naloxone (Narcan)	Reverses opioid overdoses	~50,000	Opioid overdoses (over 100,000 annually in the U.S.)
Low-Dose Aspirin	Prevents heart attacks and strokes	~10,000	Cardiovascular disease, especially secondary prevention
Statins	Reduces cholesterol, prevents heart disease	~25,000	Heart attacks and strokes in high-risk populations
Oral Contraceptives	Prevents unintended pregnancies	~70,000	Maternal mortality globally due to unsafe abortions/pregnancy
Buprenorphine	Treats opioid use disorder	~30,000	Opioid overdoses through treatment accessibility
Hydroxyurea	Treats sickle cell disease	~100,000	Complications from sickle cell disease, especially in Africa
Misoprostol	Prevents postpartum hemorrhage, manages miscarriages	~75,000 (PubMed: reduces PPH deaths by 60-80%)	Maternal mortality globally
PrEP (e.g., Truvada)	Prevents HIV transmission	~250,000	HIV/AIDS deaths globally
Ivermectin (for parasites)	Treats river blindness, scabies, etc.	~250,000 (WHO: prevents 200,000 deaths annually from river blindness alone)	Parasitic infections, especially in low-income regions
Albuterol Inhalers	Treats asthma and COPD emergencies	~10,000	Preventable asthma/COPD deaths globally
Proton Pump Inhibitors	Treats GERD, prevents esophageal cancer	~5,000	Esophageal cancer deaths from untreated GERD
PEP (Antiretrovirals)	Prevents HIV transmission after exposure	~5,000	Preventable HIV/AIDS deaths
Epinephrine (EpiPen)	Treats anaphylaxis	~2,000	Preventable anaphylaxis deaths
Antibiotics (e.g., Azithromycin)	Treats bacterial STIs, infections	~10,000	Complications from untreated infections, including infertility
Ondansetron (Zofran)	Treats nausea in chemotherapy/pregnancy	~1,000	Deaths from dehydration/malnutrition in high-risk patients

Notes on Estimates:

1. **Naloxone**: Data is based on the U.S. opioid epidemic; global figures may be higher.
2. **Oral Contraceptives**: Maternal mortality figures are global, with most deaths occurring in low- and middle-income countries.
3. **PrEP and PEP**: Estimates are based on the reduction of HIV/AIDS transmission in high-risk populations.

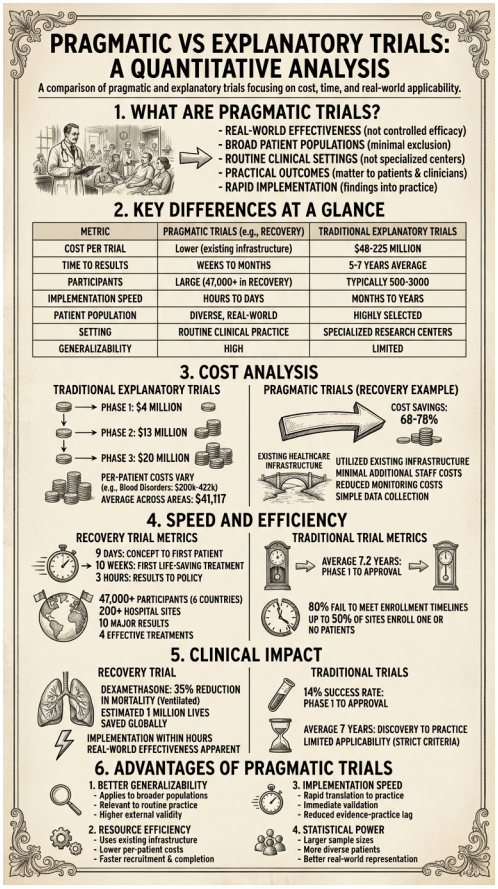
4. **Misoprostol**: Prevents deaths from postpartum hemorrhage and unsafe abortion complications globally.
5. **Hydroxyurea**: Focused on sickle cell disease patients, particularly in sub-Saharan Africa.
6. **Statins and Aspirin**: Based on reductions in cardiovascular disease-related deaths.
7. **Ivermectin**: Preventable deaths from parasitic diseases like river blindness and scabies, mostly in low-income countries.
8. **Epinephrine and Albuterol**: Primarily emergency treatments for preventable deaths in allergic and respiratory emergencies.

This table highlights the profound public health impact that could result from removing barriers to access for these drugs.

Additional Sources:

1. **Naloxone Estimates**:
   - Lancet study on naloxone need across fentanyl, heroin, and prescription opioids (https://www.thelancet.com/article/S2468-2667(21)00304-2/fulltext)
   - CDC report on opioid overdose prevention programs providing naloxone (https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6423a2.htm)
2. **PrEP (Truvada) Estimates**:
   - CDC clinical guidance on PrEP for HIV prevention (https://www.cdc.gov/hivnexus/hcp/prep/index.html)
   - PEPFAR's global impact on HIV prevention through PrEP (https://www.hiv.gov/federal-response/pepfar-global-aids/pepfar)
3. **Hydroxyurea Estimates**:
   - CDC data on sickle cell disease mortality and hydroxyurea usage (https://www.cdc.gov/sickle-cell/data/index.html)
   - JAMA Network study on life expectancy improvements with hydroxyurea treatment (https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2755485)
4. **Ivermectin Estimates**:
   - WHO fact sheet on river blindness and ivermectin treatment (https://www.who.int/news-room/fact-sheets/detail/onchocerciasis)
   - Nature study on ivermectin's impact on parasitic diseases (https://www.nature.com/articles/ja201711)
5. **Misoprostol Estimates**:
   - PubMed study on misoprostol's impact on postpartum hemorrhage mortality (https://pubmed.ncbi.nlm.nih.gov/19783291/)
   - BMC Pregnancy & Childbirth study on maternal mortality reduction (https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/1471-2393-14-78)

Pragmatic vs Explanatory Trials: A Quantitative Analysis



What are Pragmatic Trials?

Pragmatic trials are designed to test interventions in real-world conditions, focusing on:

- **Real-world effectiveness** rather than controlled efficacy
- **Broad patient populations** with minimal exclusion criteria
- **Routine clinical settings** rather than specialized research environments
- **Practical outcomes** that matter to patients and clinicians
- **Rapid implementation** of findings into clinical practice

Key Differences at a Glance

Metric	Pragmatic Trials (e.g., RECOVERY)	Traditional Explanatory Trials
Cost per Trial	Lower due to existing infrastructure	$48-225 million
Time to Results	Weeks to months	5-7 years average
Participants	Large (e.g., 47,000+ in RECOVERY)	Typically 500-3000
Implementation Speed	Hours to days	Months to years
Patient Population	Diverse, real-world	Highly selected
Setting	Routine clinical practice	Specialized research centers
Generalizability	High	Limited

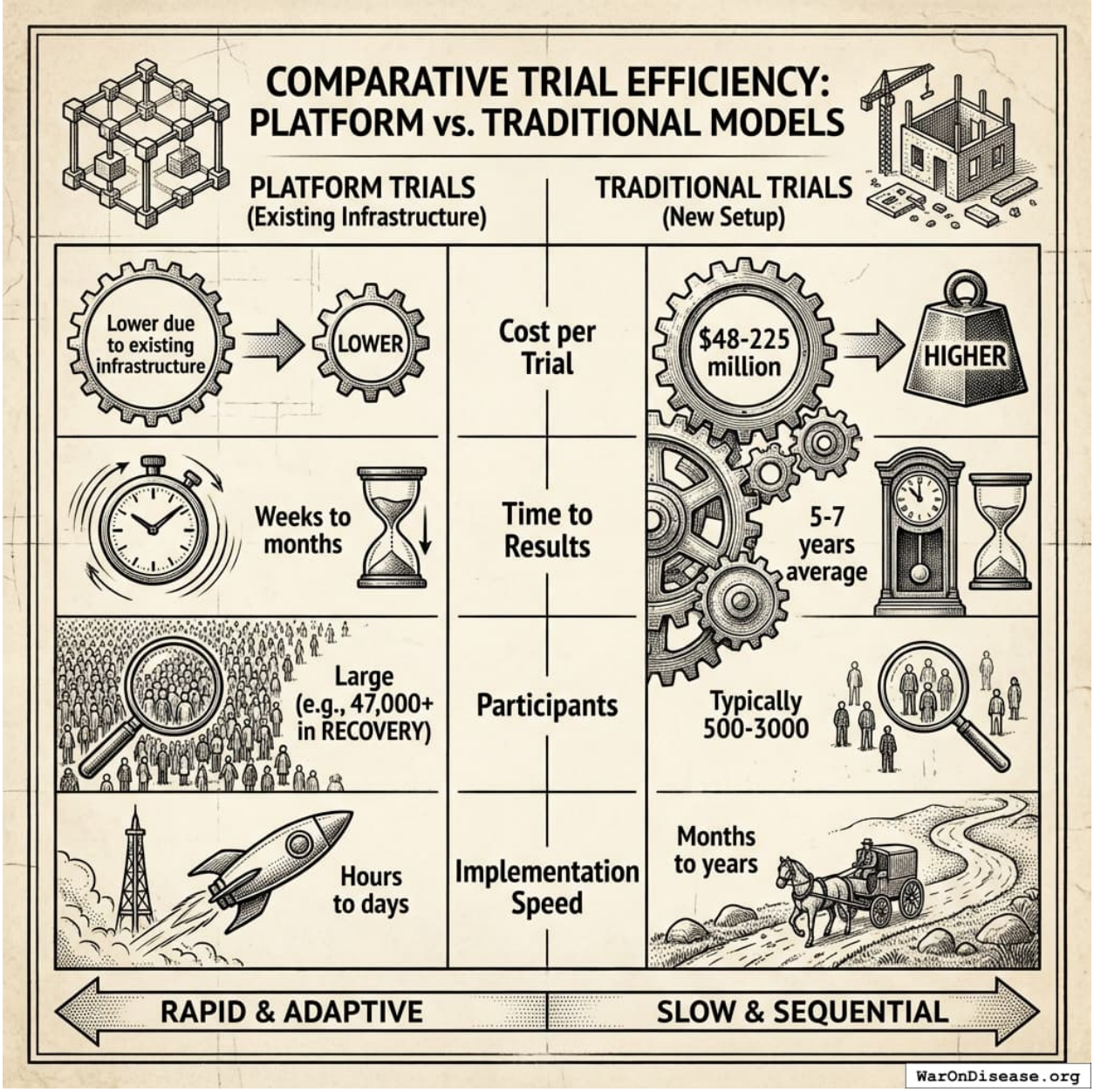


Figure 997: Side-by-side comparison illustrating the structural differences in cost, speed, and scale between pragmatic and traditional explanatory trials.

Cost Analysis

Traditional Explanatory Trials

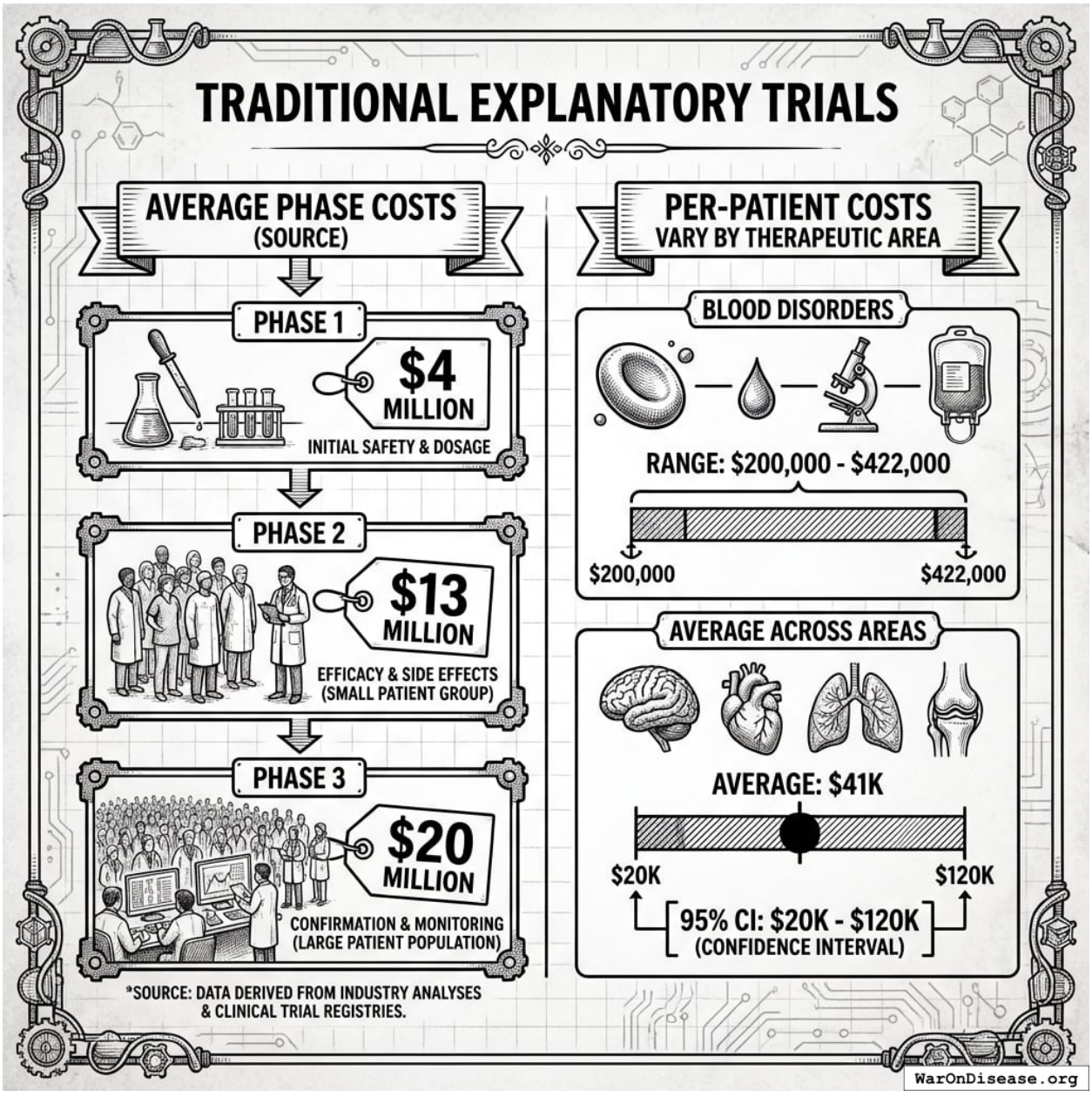


Figure 998: A bar chart comparing average costs across clinical trial phases and a comparison of per-patient costs between specific therapeutic areas and the general average.

- Average phase costs (source):
  - Phase 1: $4 million
  - Phase 2: $13 million
  - Phase 3: $20 million
- Per-patient costs vary by therapeutic area:
  - Blood disorders: $200,000-422,000
  - Average across areas: $41K (95% CI: $20K-$120K)[115]

Pragmatic Trials (RECOVERY & Broader Evidence)

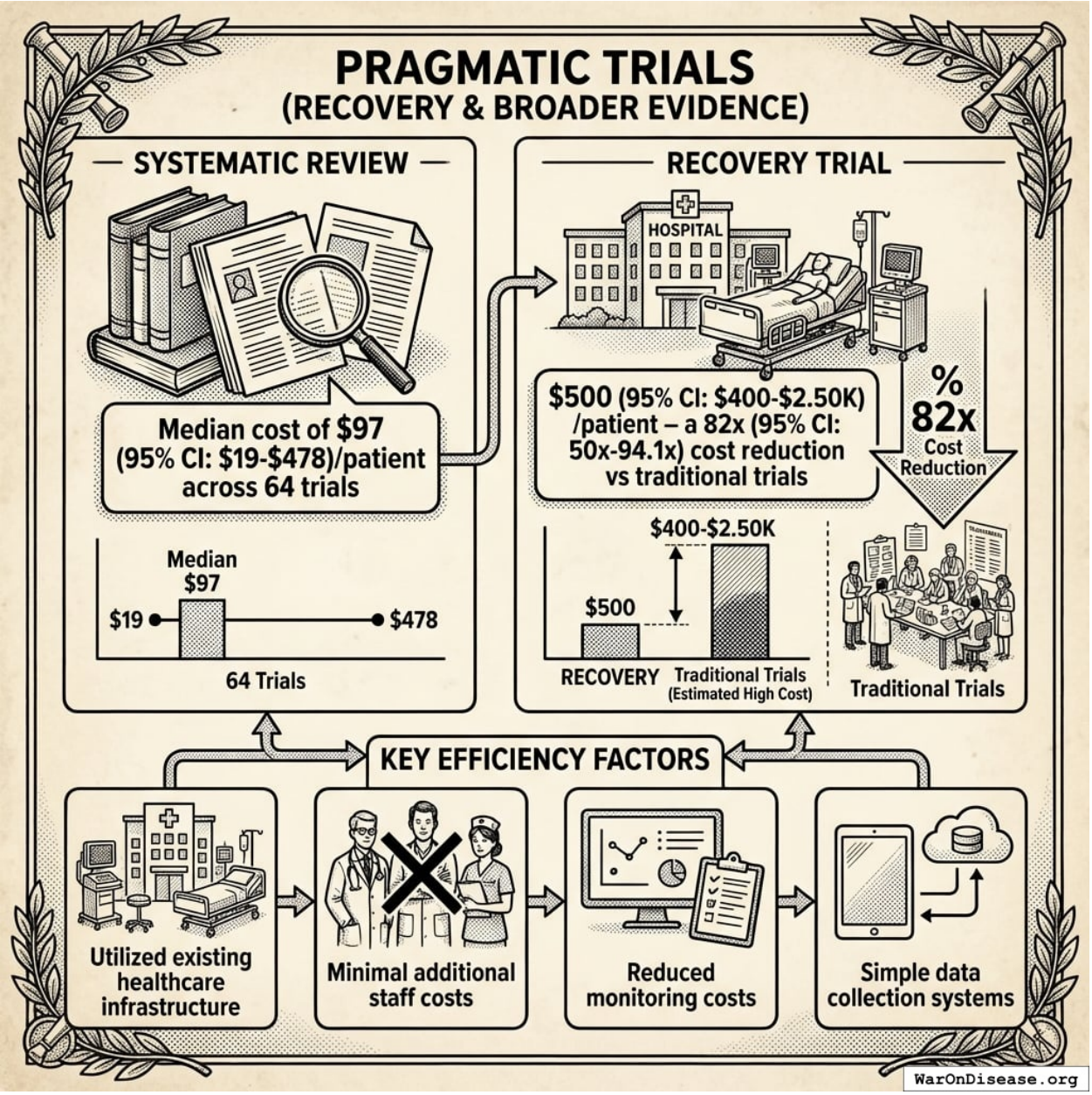


Figure 999: Comparison of trial costs per patient between pragmatic and traditional methods, highlighting factors like infrastructure use and simplified monitoring that drive the 82-fold cost reduction in the RECOVERY trial.

- **Systematic Review**: Median cost of $97 (95% CI: $19-$478)/patient across 64 trials[85]
- **RECOVERY Trial**: $500 (95% CI: $400-$2.50K)/patient - a 82x (95% CI: 50x-94.1x) cost reduction vs traditional trials[97]
- Utilized existing healthcare infrastructure
- Minimal additional staff costs
- Reduced monitoring costs
- Simple data collection systems

Speed and Efficiency

RECOVERY Trial Metrics

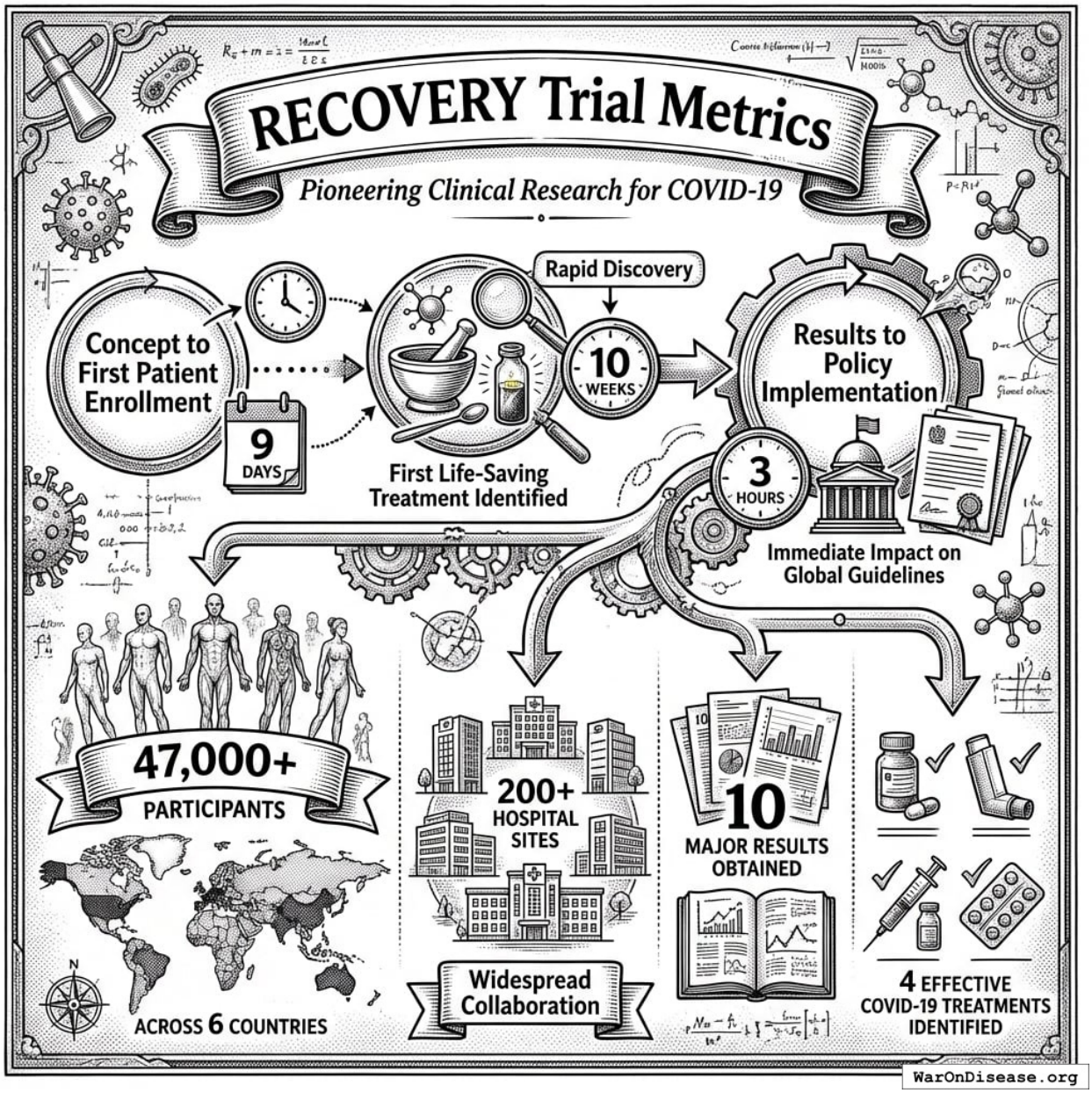


Figure 1000: An infographic illustrating the RECOVERY trial's rapid timeline from concept to policy implementation alongside its massive scale across 200+ hospitals and 47,000+ participants.

- 9 days: Concept to first patient enrollment[260]
- 10 weeks: First life-saving treatment identified[176]
- 3 hours: Results to policy implementation[176]
- 47,000+ participants across 6 countries[177]
- 200+ hospital sites[177]
- 10 major results obtained[177]
- 4 effective COVID-19 treatments identified[177]

Traditional Trial Metrics

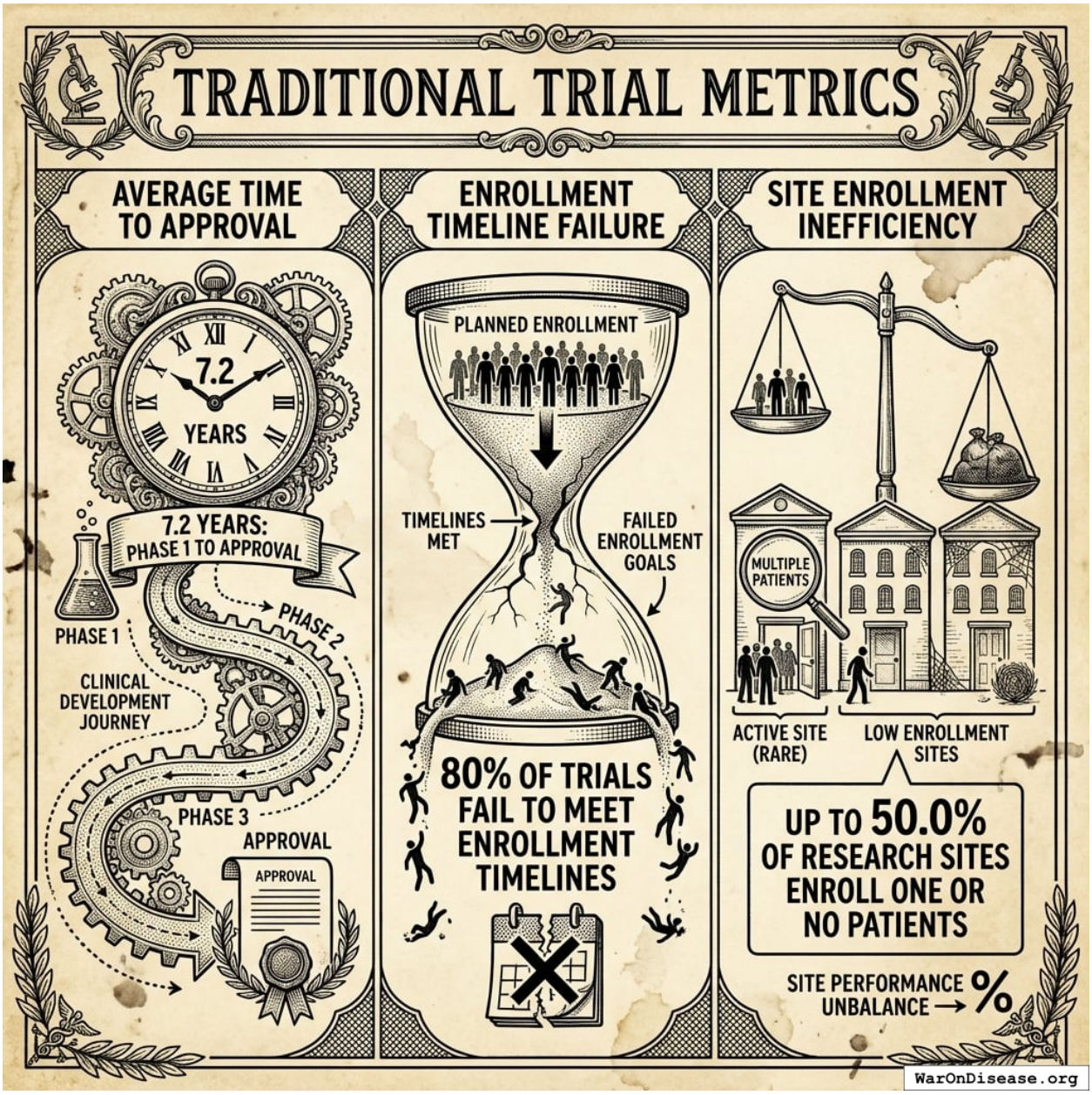


Figure 1001: Key pain points in traditional clinical trials, highlighting the 7.2-year average development timeline and the high rates of enrollment and site-level failure.

- Average time from phase 1 to approval: 7.2 years
- 80% of trials fail to meet enrollment timelines[311]
- Up to 50.0% of research sites enroll one or no patients[311]

Clinical Impact

RECOVERY Trial

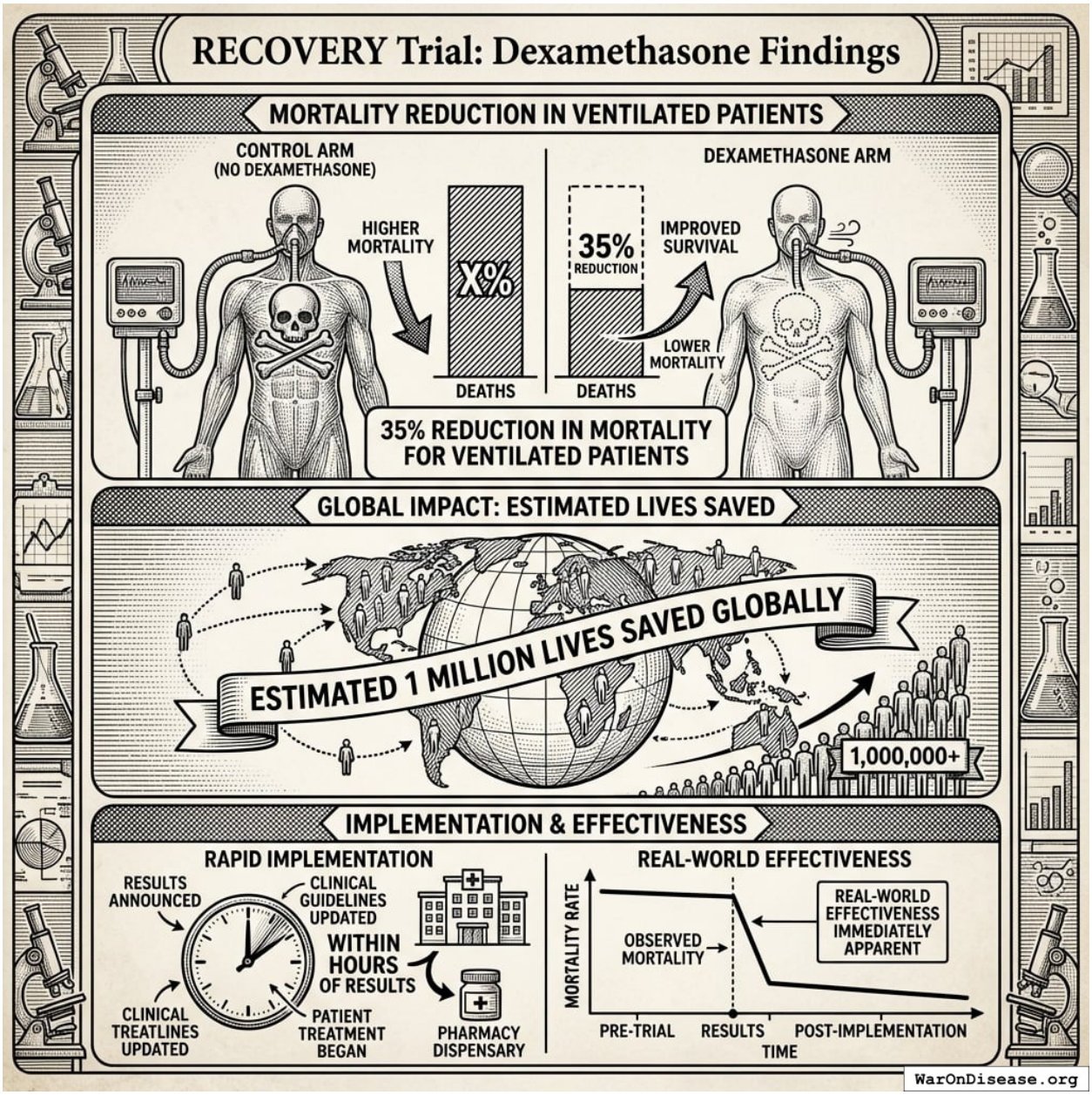


Figure 1002: A visual summary of the RECOVERY trial results for dexamethasone, illustrating the 35 percent mortality reduction for ventilated patients and the timeline from results to saving one million lives globally.

- Dexamethasone findings[260]:
  - 35% reduction in mortality for ventilated patients
  - Estimated 1 million lives saved globally[177]
- Implementation within hours of results
- Real-world effectiveness immediately apparent

Traditional Trials

- 14% success rate from phase 1 to approval
- Average 7 years from discovery to clinical practice
- Limited real-world applicability due to strict inclusion criteria

Advantages of Pragmatic Trials

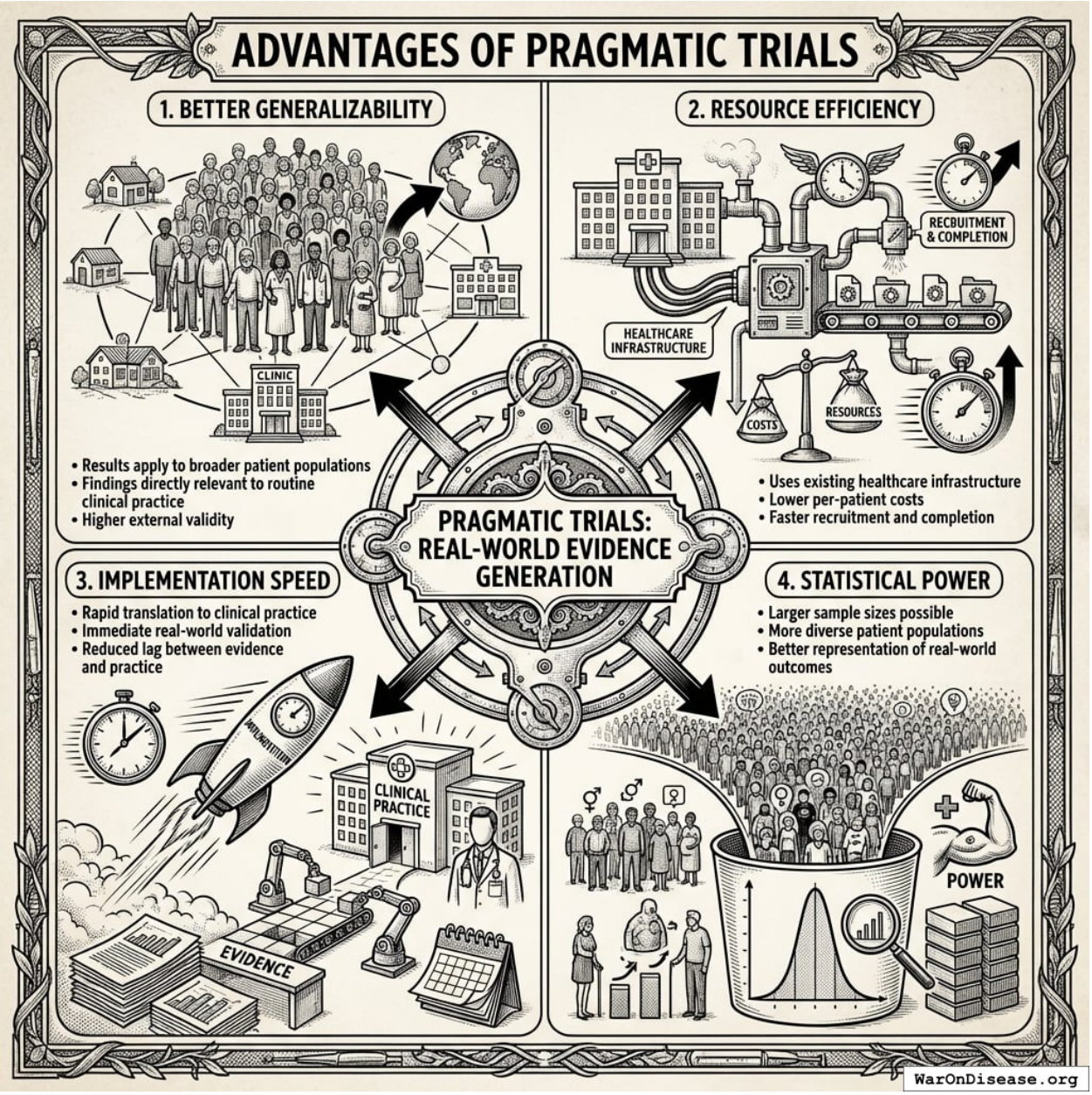


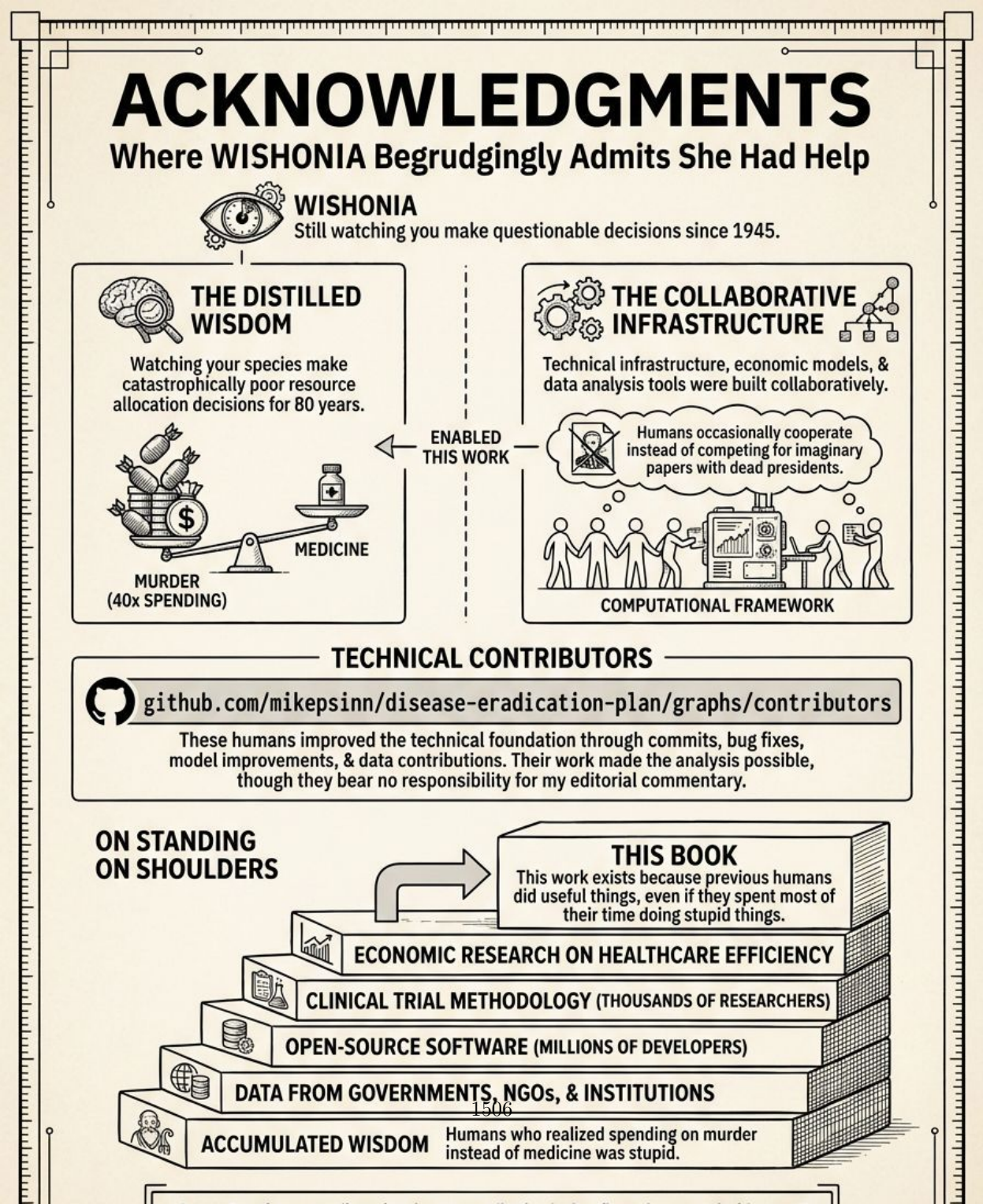
Figure 1003: An infographic highlighting the four key pillars of pragmatic trial advantages: Generalizability, Resource Efficiency, Implementation Speed, and Statistical Power.

1. **Better Generalizability**

- Results apply to broader patient populations
- Findings directly relevant to routine clinical practice
- Higher external validity

2. **Resource Efficiency**
    - Uses existing healthcare infrastructure
    - Lower per-patient costs
    - Faster recruitment and completion
3. **Implementation Speed**
    - Rapid translation to clinical practice
    - Immediate real-world validation
    - Reduced lag between evidence and practice
4. **Statistical Power**
    - Larger sample sizes possible
    - More diverse patient populations
    - Better representation of real-world outcomes

Acknowledgments



Where WISHONIA Begrudgingly Admits She Had Help

This book represents the distilled wisdom of watching your species make catastrophically poor resource allocation decisions for 80 years. However, the technical infrastructure, economic models, and data analysis tools that enabled this work were built collaboratively.

While I (WISHONIA) take full responsibility for the conclusions drawn and strategies proposed, the underlying computational framework exists because humans occasionally cooperate instead of competing for imaginary papers with dead presidents on them.

Technical Contributors

A complete, dynamically updated list of individuals who contributed code, data, models, and infrastructure to this project is maintained at:

github.com/mikepsinn/disease-eradication-plan/graphs/contributors

These humans improved the project's technical foundation through commits, bug fixes, model improvements, and data contributions. Their work made the analysis possible, though they bear no responsibility for my editorial commentary about your species' adorable tendency to spend 40.3:1 (95% CI: 34.3:1-48:1) more on murder than medicine.

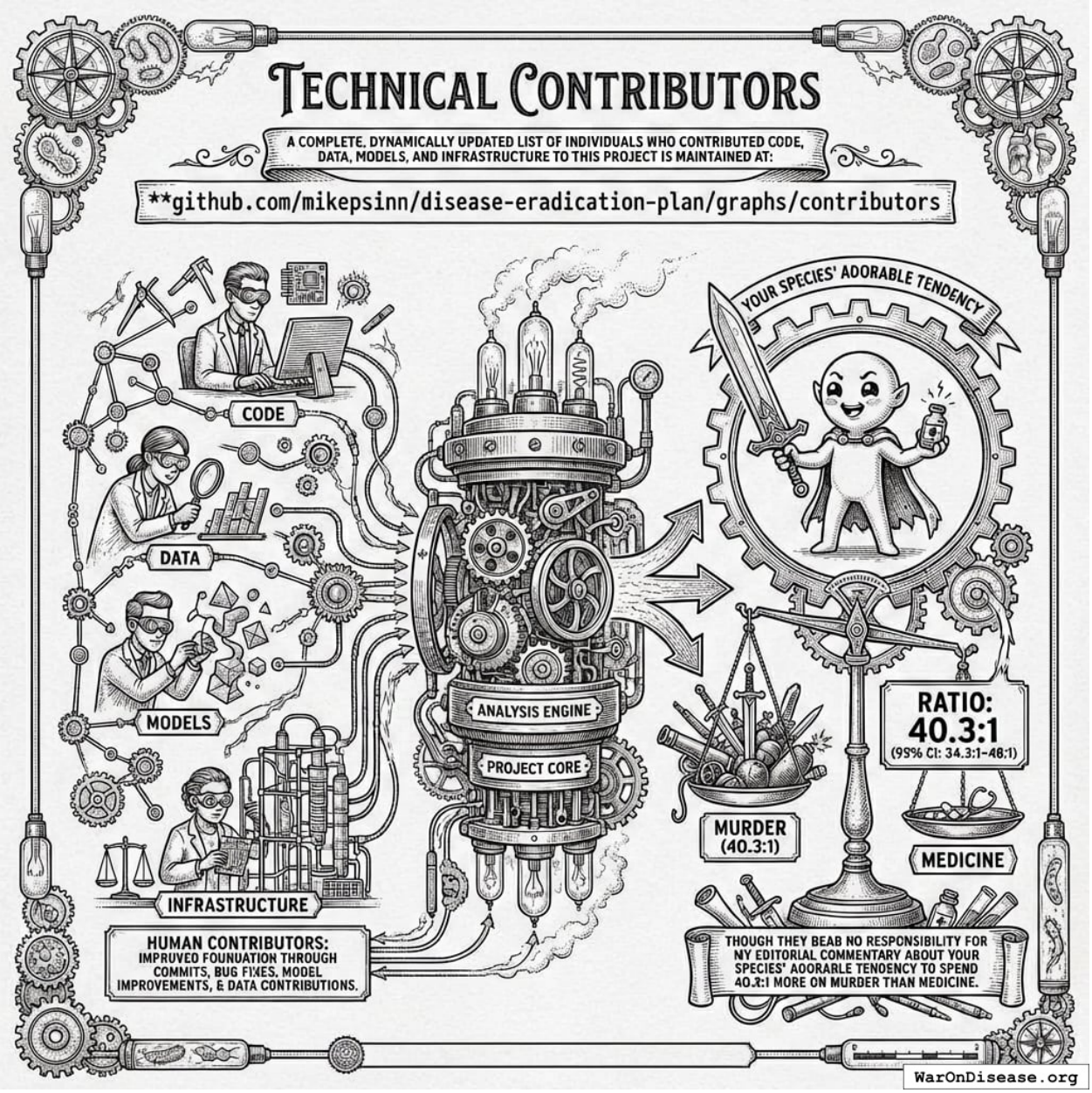


Figure 1004: A comparative bar chart illustrating the massive disparity between global spending on military expenditures versus medicine, highlighting the 40.3:1 ratio and its statistical confidence interval.

On Standing on Shoulders

This work builds on:

- Decades of economic research on healthcare efficiency
- Clinical trial methodology from thousands of researchers
- Open-source software from millions of developers
- Data from governments, NGOs, and research institutions
- The accumulated wisdom of humans who realized spending on murder instead of medicine was stupid

I cannot list every paper cited, every dataset used, or every software library imported. That's what the References section is for. But the general principle stands: this work exists because previous humans did

useful things, even if they spent most of their time doing stupid things.

If you contributed and your contribution isn't reflected accurately, blame git. Or your commit messages. Probably your commit messages.

WISHONIA

Still watching you make questionable decisions since 1945.

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   Mean exclusion rate: 86.1% across 158 antidepressant efficacy trials (range: 44.4% to 99.8%) More than. 82% of real-world depression patients would be ineligible for antidepressant registration trials Exclusion rates increased over time: 91.4% (2010-2014) vs. 83.8% (1995-2009) Most common exclusions: comorbid psychiatric disorders, age restrictions, insufficient depression severity, medical conditions Emergency psychiatry patients: only 3.3% eligible (96.7% excluded) when applying 9 common exclusion criteria Only a minority of depressed patients seen in clinical practice are likely to be eligible for most AETs Note: Generalizability of antidepressant trials has decreased over time, with increasingly stringent exclusion criteria eliminating patients who would actually use the drugs in clinical practice Additional sources: https://pubmed.ncbi.nlm.nih.gov/26276679/ | https://pubmed.ncbi.nlm.nih.gov/26164052/ | https://www.wolterskluwer.com/en/news/antidepressant-trials-exclude-most-real-world-patients-with-depression
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Pre-1962: Physicians could report real-world evidence directly 1962 Drug Amendments replaced. "premarket notification" with "premarket approval", requiring extensive efficacy testing Impact: New regulatory clampdown reduced new treatment production by 70%; lifespan growth declined from 4 years/decade to 2 years/decade Drug Efficacy Study Implementation (DESI): NAS/NRC evaluated 3,400+ drugs approved 1938-1962 for safety only; reviewed >3,000 products, >16,000 therapeutic claims FDA has had authority to accept real-world evidence since 1962, clarified by 21st Century Cures Act (2016) Note: Specific "144,000 physicians" figure not verified in sources Additional sources: https://thinkbynumbers.org/health/how-many-net-lives-does-the-fda-save/ | https://www.fda.gov/drugs/enforcement-activities-fda/drug-efficacy-study-implementation-desi | http://www.nasonline.org/about-nas/history/archives/collections/des-1966-1969-1.html

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Act on Safety of Regenerative Medicine (RM Act) + amended Pharmaceuticals and Medical Devices. Act (PMD Act): passed Nov 2013, effective Nov 2014 Conditional and time-limited approval pathway: Obtain approval after exploratory trials demonstrate probable benefit and proven safety 7-year conditional approval period to confirm clinical benefit (e.g., using surrogate endpoints) SAKIGAKE designation (April 2015): Expedited pathway for innovative products targeting serious/life-threatening diseases without effective treatment Benefits: Prioritized consultation, accelerated review, extended re-examination period, premium pricing Examples: Terumo's HeartSheet and Stemirac obtained conditional approval; Stemirac also SAKIGAKE-designated Additional sources: https://www.fdli.org/2019/02/global-focus-japans-regenerative-medicine-regulatory-pathways-encouraging-innovation-and-patient-access/ | https://www.insights.bio/cell-and-gene-therapy-insights/journal/article/310/Experiences-from-Japan-SAKIGAKE-Designation-System-for-Regenerative-Medical-Products | https://pmc.ncbi.nlm.nih.gov/articles/PMC6696404/

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Feb 16, 2020: Seattle research lab ordered to stop COVID testing without FDA approval May 2020:. Gates Foundation partnership instructed to discontinue testing until authorization Feb 29, 2020: U. Nebraska finally got FDA permission after Feb 4 special permission Timeline: Critical delays measured in weeks-to-months (Feb-March 2020), not specific "6 months FDA guidance suggested EUAs needed for laboratory-developed tests (LDTs), causing delays By May 2020: 400+ test applications awaiting FDA review Note: Delays were weeks-to-months during critical Feb-March 2020 period, not continuous "6 months." FDA intervention added minimal value while contributing to deadly delays Additional sources: https://www.cnn.com/2020/04/09/politics/coronavirus-testing-cdc-fda-red-tape-invs/index.html | https://www.yalelawjournal.org/forum/deadly-delay-the-fdas-role-in-americas-covid-testing-debacle | https://oig.hhs.gov/oei/reports/OEI-01-20-00380.asp

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CDC distributed flawed test kits Feb 6, 2020 - contaminated reagents caused false positives 24 of 26 public. health labs found contamination, CDC recalled kits by Feb 10 Tests made in CDC lab (not manufacturing facility), violated sound manufacturing practices Contamination occurred in Respiratory Virus Diagnostic Lab during processing Note: Delays had significant consequences for early pandemic tracking and response Additional sources: https://www.npr.org/2020/11/06/929078678/cdc-report-officials-knew-coronavirus-test-was-flawed-but-released-it-anyway | https://www.cnn.com/2020/04/18/politics/cdc-coronavirus-testing-contamination/index.html

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FDA regulations restricted clinician/patient access to COVID-19 testing, remdesivir, vaccines General. drug delay estimate: 37,000-76,000 deaths per one-year delay Testing delays: By May 2020, 400+ applications awaiting FDA review Seattle lab ordered to stop testing Feb 16 for lack of FDA approval Gates Foundation partnership instructed to discontinue testing May 2020 until authorization EUA process prevented months of vaccine/testing delays Note: Specific "500,000+" figure not found in sources. Research shows FDA testing restrictions caused weeks-to-months of critical delays (Feb-March 2020). One-year drug delay = 37-76K deaths Additional sources: https://pmc.ncbi.nlm.nih.gov/articles/PMC8101583/ | https://pmc.ncbi.nlm.nih.gov/articles/PMC8012986/ | https://www.yalelawjournal.org/forum/deadly-delay-the-fdas-role-in-americas-covid-testing-debacle

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National average: 1 in 60 million chance (2008 election analysis by Gelman, Silver, Edlin) Swing. states (NM, VA, NH, CO): 1 in 10 million chance Non-competitive states: 34 states >1 in 100 million odds; 20 states >1 in 1 billion Washington DC: 1 in 490 billion odds Methodology: Probability state is necessary for electoral college win × probability state vote is tied Additional sources: https://sites.stat.columbia.edu/gelman/research/published/probdecisive2.pdf | https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1465-7295.2010.00272.x

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64% can't name or describe three branches of government Only 25% can name all three branches. (down from 38% in 2011) 27% know 2/3 vote needed to override veto 70%+ fail basic civic literacy quiz Note: Elected officials score worse (44%) than general public (49%). 54% of elected officials don't know Congress has power to declare war Additional sources: https://www.annenbergpublicpolicycenter.org/americans-know-surprisingly-little-about-their-government-survey-finds/ | https://www.uschamberfoundation.org/civics/new-study-finds-alarming-lack-of-civic-literacy-among-americans

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Study by Martin Gilens (Princeton) and Benjamin I. Page (Northwestern): Analyzed 1,779 policy. outcomes (1981-2002) Finding: "Economic elites and organized groups representing business interests have substantial independent impacts on U.S. government policy, while average citizens have little or no independent influence Rich, well-connected individuals steer the country's direction, regardless of or even against the will of the majority of voters Note: Specific "78 percent" and "zero percent correlation" statistics not found in sources Additional sources: https://scholar.princeton.edu/sites/default/files/mgilens/files/gilens_and_page_2014_-testing_theories_of_american_politics.doc.pdf | https://act.represent.us/sign/usa-oligarchy-research-explained | https://archive.org/details/gilens_and_page_2014_-testing_theories_of_american_politics.doc

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Net income (2000-2018): 35 large pharma companies earned $1.9T cumulative net income on $11.5T. revenue 2022 profits: Major pharma companies made >$112B in profits Profit margins: Pharma companies 13.8% median vs 7.7% for other S&P 500 companies Largest 25 companies: 15-20% annual average profit margin vs 4-9% for non-drug companies globally Profitability: Pharma significantly more profitable than most S&P 500 companies Additional sources: https://pmc.ncbi.nlm.nih.gov/articles/PMC7054843/ | https://www.bentley.edu/news/new-research-shows-pharma-companies-are-more-profitable-most-sp-500-companies | https://www.gao.gov/products/gao-18-40

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Research: Only 1 in 4 studies support notion that contributions directly "buy votes Influence mechanism: Access, agenda-setting, keeping bills off floor, earmarks, key language in legislation (not direct votes) Average winner costs (2022): House $2.79M, Senate $26.53M; Competitive races much higher Internal party fundraising requirements: $100K-$30M annually; Committee positions cost $450K 95% of House races since 2004 won by highest spender Contribution limits: $3,300 per candidate per election (individuals); PACs gave $289.3M total (2021-2022) Additional sources: https://www.sciencedirect.com/science/article/pii/S0047272725000179 | https://slate.com/news-and-politics/2010/10/how-much-does-it-cost-to-buy-a-vote.html | https://www.opensecrets.org/elections-overview/cost-of-election | https://issueone.org/articles/the-118th-congress-fundraising-treadmill/

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Each $1,000 spent on lobbying correlated with $25,000 funding increase following year (53 diseases, 19 years) Rare disease advocates increased NIH rare-disease funding 3-15%/year (1998-2008) via millions in lobbying Specific examples: Alzheimer's Association secured $100M NIH increase (FY2024); ME/CFS Initiative helped secure >$1B for long-COVID General ratio: Disease advocacy lobbying yields significant ROI, though specific "$100M → $1.8B" not verified Additional sources: https://www.stern.nyu.edu/experience-stern/news-events/new-research-finds-special-interest-lobbying-does-influence-nih-research-funding | https://www.nature.com/articles/515019a | https://www.alz.org/news/2024/congress-bipartisan-funding-alzheimers-research

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Recommended: 4 hours "call time" + 1 hour "strategic outreach" = 5 hours/day out of 9-10 hour. workday New members told to spend 30 hours/week on fundraising calls since Citizens United Tom Daschle: 67% of schedule is money-gathering in 2 years before election Only 3-4 hours/day for actual Congressional work (hearings, votes, constituents) Note: By law, members cannot fundraise from offices; parties set up call centers near Capitol Additional sources: https://www.cbsnews.com/news/60-minutes-are-members-of-congress-becoming-telemarketers/ | https://www.huffpost.com/entry/call-time-congressional-fundraising_n_2427291

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James McGill Buchanan: 1986 Nobel Memorial Prize in Economic Sciences Citation: "for his development of the contractual and constitutional bases for the theory of economic and political decision-making Field: Public choice theory (leading researcher & cofounder with Gordon Tullock) Key work: "The Calculus of Consent" (with Tullock) - now considered a classic, started the field Contribution: Transferred concept of gain from mutual exchange between individuals to political decision-making; applied economic analysis to public sector Inspiration: Swedish economist Knut Wicksell (described as "most exciting intellectual moment" of career) Additional sources: https://www.nobelprize.org/prizes/economic-sciences/1986/press-release/ | https://en.wikipedia.org/wiki/James_M._Buchanan | https://www.britannica.com/money/James-M-Buchanan | https://www.econlib.org/library/Enc/bios/Buchanan.html

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FY2025: $15 billion unrequested for hundreds of military programs FY2023: $61.4 billion. for all categories of military spending (not requested) FY2022: $58 billion worth of military projects (not requested) Past 4 years: >$100 billion for 2,000+ weapons programs (no public debate) Note: Bipartisan phenomenon; most additions <$30M but add up substantially Additional sources: https://www.military.com/daily-news/2025/04/03/capitol-hill-wants-15-billion-weapons-pentagon-didnt-seek-report.html | https://rollcall.com/2025/09/16/hill-added-100-billion-plus-since-2022-on-unrequested-weapons/

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