Medicare, Medicaid and Commercial Health Ins

Commercial Health Insurance and Medicare

A Continuing Education Text for Health Insurance Professionals

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Section I: Introduction

The Role of Social Values in Health Insurance System Design

The US healthcare system is a mess. There is a persistent and widening gap between the scientific achievements of American medicine and the delivery failures of the American healthcare system.

We now spend approximately $4.9 trillion annually on healthcare — roughly $14,500 per person — more than any other country on earth by a substantial margin. We have more medical technology per capita than any other country. We have brilliant physicians, world-class research institutions, and hospitals that attract patients from around the globe for specialized care. And yet:[1]

- Our life expectancy of approximately 78.5 years ranks us around 47th in the world — behind not only Western Europe and Japan, but behind Cyprus, Slovenia, Lebanon, and Chile.
- Our infant mortality rate of roughly 5.4 deaths per thousand live births lags behind most of Western Europe, Japan, South Korea, and even some Eastern European countries.
- We leave a meaningful share of our population with inadequate coverage or facing financial catastrophe from medical bills — even after the Affordable Care Act's significant coverage expansions.
- We have the highest rates of obesity, diabetes, and preventable chronic disease in the developed world.

How do we explain the gap between what we spend and what we get?

Many point to the healthcare delivery system itself — that Byzantine collection of for-profit and not-for-profit hospitals, independent and employed physicians, insurance carriers of every variety, employer-based coverage, government programs, federal legislation, state mandates, and a host of overlapping tax treatments and regulatory requirements that we have assembled, incrementally and without any coherent design, over the past eighty years. Each player in this system operates to maximize its own revenue stream, because absent sufficient cash flow it will cease to exist. No carrier, hospital, physician group, pharmaceutical manufacturer, or device maker operates outside these cash-flow constraints. The result is a system that is very good at generating healthcare jobs and healthcare revenue, and considerably less good at generating healthcare value.

The numbers are difficult to argue with. A landmark 2019 JAMA analysis estimated that between $760 billion and $935 billion in annual US healthcare spending — roughly 25 percent of the total — is wasted on unnecessary or low-value care. With total spending now approaching $5 trillion, even the lower-end waste estimate has almost certainly exceeded $1 trillion annually by now. We spend more on healthcare waste alone than most developed countries spend on healthcare.[2] Stated differently, at $1 trillion, our healthcare waste alone equals 45% of Russia's *total* economy, estimated at $2.2 trillion by the World Bank in 2024.

There is little serious dispute that American healthcare is broken. The debate is entirely about what to do about it. That debate is as old as the system itself, has produced more heat than light for the better part of a century, and shows no sign of resolution. Understanding why requires understanding something that most healthcare policy discussions carefully avoid: the role of social values in system design.

Three Orientations to Healthcare Reform

Every proposal for healthcare system reform rests on a set of values, whether explicitly stated or not. Those values determine what problem the reformer is trying to solve, what metrics they use to measure success, and what tradeoffs they are willing to accept. The three broad orientations to reform that existed when the first version of this text was written in 2011 remain essentially unchanged today — which tells you something about both the depth of the disagreements and the resilience of the underlying value systems.

First, some believe that the core problem is **insufficient governmental regulation** and that the appropriate solution is more government intervention. This group tends to emphasize coverage gaps, equity of access, and the moral claim that healthcare is a right rather than a commodity. Their preferred solutions range from public options to single-payer systems to aggressive regulation of insurance market practices.

Second, others believe that the core problem is **too much governmental interference** in the healthcare market and that less regulation, more competition, and greater consumer control will produce both better outcomes and lower costs. This group tends to emphasize innovation, individual responsibility, and the efficiency advantages of market mechanisms. Their preferred solutions include health savings accounts, high-deductible plans, and price transparency requirements.

Third, still others believe the answer lies **somewhere between these poles**, emphasizing transparency, rational incentive design, and the systematic measurement of outcomes and costs. This group tends to be most comfortable with evidence-based medicine, comparative effectiveness research, and the managed competition models that animated the ACA's exchange architecture.

Why the persistent disagreement? Because each group defines the problem differently — and each definition reflects genuine, deeply held values.

- Those who see the high rate of uninsured as the central problem hold equality of access as a primary social value and design solutions from there.
- Those who see cost and innovation as the central problems hold technological progress and economic efficiency as primary values and design solutions accordingly.
- Those who see overtreatment and low-value care as the central problems hold evidence-based appropriateness as the primary value and push for outcomes measurement and payment reform.
- Those who see the social determinants of health — housing, nutrition, education, employment — as primary see the entire medical system framing as missing the point.

Based on these genuinely different value systems, there is no single obviously superior national healthcare system. Canada, the United Kingdom, Germany, France, Singapore, and the American Veterans Health Administration have each developed healthcare systems that reflect their own shared value definitions — however well or loosely those values are articulated. These systems evolve as their societies evolve, and each involves tradeoffs that different populations weigh differently.

The key question is not 'is that healthcare system good from my point of view, based on my values?' but rather 'does that system work for that population, given its history, its values, and the resources it has chosen to allocate?' Having more MRI machines per capita is not necessarily evidence of a better healthcare system — it may indicate an underinvestment in disease prevention. Performing more coronary bypass surgeries per capita may indicate a superior treatment capacity or it may indicate a failure to manage the cardiovascular risk factors that make bypass surgery necessary. Even longevity is not an absolute measure: a society that invests heavily in extending the final years of the very elderly at the expense of childhood nutrition and preventive care has made a social value decision, not a neutral technical one.

As we discuss solutions to American healthcare problems throughout this text, we will try to surface those underlying values — because they are rarely well articulated by proponents of any particular solution, and because understanding them is essential to understanding why the debates take the form they do.

A Statistical Overview of US Healthcare

American healthcare spending in 2024, the last year for which I have reasonably comprehensive data, reached approximately $4.9 trillion — about 17.6 percent of Gross Domestic Product. For context, comparable figures for other high-income countries:

Germany .... ~12.8% of GDP
France .... ~12.2% of GDP

Switzerland	~11.3% of GDP
Canada	~11.6% of GDP
United Kingdom	~11.3% of GDP
Australia	~10.7% of GDP
Japan	~10.9% of GDP

Every percentage point of GDP devoted to healthcare is a percentage point not available for education, infrastructure, environmental protection, housing, or any other public or private investment. By this arithmetic, American healthcare spending crowds out roughly six percentage points of GDP annually relative to the average of our peer nations — an amount approaching $1.7 trillion per year in foregone alternative investment.[3]

This spending has grown relentlessly for more than sixty years:

1960	5.0% of GDP
1970	6.9%
1980	8.9%
1990	12.1%
2000	13.3%
2010	17.3%
2020	19.7% (COVID-19 peak)
2024	~17.6%

The COVID spike reflected both elevated healthcare utilization and a contraction in overall economic output; the subsequent partial decline to 17.6 percent reflects economic recovery more than healthcare cost moderation and more closely fits the historical trend.

What does this mean for the average American worker? Consider this comparison of 2024 to 1964. In 2024, average hourly wages for all wage and salary workers was about $35. Average annual healthcare spending per person was approximately $15,400. That means the average American worker devoted roughly 440 hours — eleven weeks of full-time work — to pay for healthcare, compared to about 80 hours (two weeks) in 1964. Healthcare has consumed an increasing share of total compensation for sixty years, which is the primary reason that inflation-adjusted take-home wages have grown far more slowly than productivity over the same period.

Many employees believe their employer 'pays' most of their health insurance premium and therefore their personal healthcare cost is limited to their share. This misunderstands the economics. From the employer's perspective, health insurance is a component of total labor cost. As healthcare costs rise, wage growth slows to compensate. The employee who gratefully accepts a 70 percent employer premium contribution and a 2 percent annual raise is, in many cases, simply receiving their compensation in a different form than they imagine — with the healthcare portion extracting an increasing share of the total.[4]

What We Bought With the Money

The spending increases have produced genuine medical progress. Since 1960, American medicine has developed cardiac catheterization, kidney dialysis, organ transplants, CT and MRI scanning, endoscopy, laparoscopic surgery, recombinant DNA pharmaceuticals, targeted cancer therapies, joint replacement, and most recently a class of GLP-1 receptor agonist medications that appear capable of addressing obesity, type 2 diabetes, cardiovascular disease, and possibly several other chronic conditions in ways that prior pharmacology could not. American life expectancy at birth increased by approximately 9.5 years between 1960 and to its peak of about 78.9 years in 2019.

This overall life expectancy increase masks an upsetting other trend. From 2010 to 2019, the beginning of Covid, American average life expectancy at birth rose only .2 (2 tenths of 1) year, from 78.7 in 2010 to 78.9 in 2019. During the same 9-year period, average healthcare spending per capita rose from $8,402 to $11,582. What exactly we purchased with that additional $3,180 or 38% spending increase remains a mystery, at least to me.

The pandemic reversed even that modest gain: life expectancy fell to approximately 76.1 years in 2021, its lowest level since 1996, before partially recovering to roughly 78.5 years by 2023. The pandemic mortality was not evenly distributed — it fell disproportionately on older Americans, lower-income Americans, and communities of color — a pattern consistent with the broader inequalities that characterize American health outcomes.[5]

More troubling than the absolute level is the trend relative to peer nations. Between 1980 and today, the United States fell from near the middle of OECD life expectancy rankings to near the bottom among high-income countries. While American life expectancy gains have been modest, peer nations have gained substantially more. The gap between US life expectancy and the OECD average has widened, not narrowed, as American healthcare spending has grown.

In 2023, the average American life expectancy at birth lagged the average in a basket of OECD countries – Australia, Austria, Belgium, Canada, France, Germany, Japan, the Netherlands, Sweden, Switzerland and the UK – by 4.1 years, despite Americans spending about twice as much per person on healthcare.

The distribution of healthcare spending has remained remarkably stable over decades and is worth understanding clearly because it has profound implications for system design:

The top 1% of healthcare users account for approximately 22% of total spending

The top 5% account for approximately 50% of total spending

The top 10% account for approximately 65% of total spending

The bottom 50% account for approximately 3% of total spending

In dollar terms at current spending levels: the top 1 percent of users (roughly 3.3 million people) average approximately $107,000 each in annual healthcare spending. The bottom 50 percent (roughly 165 million people) average approximately $900 each. The extraordinary concentration of spending in a small, sick population is not a failure of the system — it is a feature of human biology. But it has major implications for insurance design, prevention investment, and the economics of coverage expansion.[6]

The five conditions that together account for roughly half of all US healthcare spending have not changed dramatically since this text was first written:

- Cardiovascular disease (heart disease and hypertension)
- Diabetes and metabolic disorders
- Mental health and substance use disorders
- Cancer
- Musculoskeletal conditions

The GLP-1 medications noted above represent the first pharmacological intervention with demonstrated potential to meaningfully reduce several of these simultaneously — addressing obesity as a root driver of cardiovascular disease, type 2 diabetes, and metabolic syndrome. Their impact on total healthcare spending over the next decade is genuinely uncertain: they are extraordinarily expensive (current list prices exceed $1,000 per month per patient), but if they reduce downstream cardiovascular events, hospitalizations, and diabetes complications at scale, the net cost-effectiveness calculation may be favorable. This is the most significant pharmacological development in the cost-effectiveness discussion since statins, and it is moving too rapidly for any current text to capture definitively.

The International Comparison Problem

American performance on the standard international health metrics remains poor relative to what our spending would predict. Life expectancy of approximately 78.5 years leaves us ranked around 47th globally — behind not only the obvious comparators (France, Germany, Japan, Canada, Australia) but behind countries with substantially lower incomes and healthcare systems that most Americans would not trade for their own.

Our infant mortality rate of roughly 5.4 deaths per 1,000 live births is better than it was a decade ago but still lags substantially behind peer nations. Iceland, Japan, Finland, Norway, and Singapore all achieve rates below 2.5 per thousand. The UK, with a National Health Service that American critics frequently cite as an example of socialized medicine's failures, achieves roughly 3.7 per thousand. The gap between US infant mortality and our peer nations is not primarily explained by differences in medical technology — it is explained by differences in social investment, prenatal care access, and the social determinants of maternal and infant health.

Some analysts argue that international health statistics are distorted by demographic differences — that the US has a more diverse population with higher rates of poverty and worse social determinants of health than more homogeneous European countries, and that controlling for those factors would close the gap. This argument has some validity at the margins. It does not come close to explaining the magnitude of the gap. A country that spends twice as much per capita on healthcare as France, Germany, or the United Kingdom should not have a life expectancy two to four years lower than those countries regardless of demographic adjustments.

Others argue that American longevity statistics are distorted by high rates of homicide and traffic fatalities — causes of death unrelated to healthcare quality. This is also partially true and partially irrelevant: deaths from violence and traffic accidents are not entirely separate from healthcare system performance, and removing them from the calculation, while it closes the gap somewhat, does not reverse the fundamental conclusion.

The more interesting argument — and the one that should inform how health insurance professionals think about their work — is that longevity and infant mortality are not primarily determined by healthcare. They are primarily determined by social and economic conditions: income distribution, housing stability, nutritional quality, educational attainment, environmental quality, and early childhood experience. Healthcare intervenes after the social and economic foundations of health have already been laid — or not laid. A system that invests heavily in treating the consequences of poverty, poor nutrition, and environmental exposure while underinvesting in the social conditions that produce ill health will consistently produce exactly the results we observe: technically impressive care delivered at enormous expense to populations whose underlying health conditions are worse than those of people in countries with stronger social investments.

Consider the OECD data on combined medical and social spending. The United States ranks first in medical spending per capita and near last among high-income countries in social spending per capita — spending on housing subsidies, nutrition programs, disability cash benefits, early childhood education, and social services. The OECD average is roughly two-thirds social spending, one-third medical; we are roughly the inverse. We have the ratios backwards. We treat sickness expensively and underinvest in the conditions that prevent it.[7]

Value, Overspending, and the Central Question

The concept of value in healthcare is simple to state and difficult to apply. Value is the relationship between what we spend and what we get — outcomes per dollar. Overspending does not mean spending more than other countries in absolute terms; it means getting a poor return on investment. A country could theoretically spend more than others and still be spending appropriately if it achieved substantially better outcomes. The problem with American healthcare is not that we spend a lot. It is that we spend a lot and get mediocre results by international standards.

The reasons for the gap between spending and outcomes are the subject of this entire text, but the short version is this: our payment system rewards volume rather than value, our structural design separates the people who pay for care from the people who receive it and the people who provide it in ways that suppress normal market efficiency, our historical reliance on employment-based insurance has produced a fragmented multi-payer system with enormous administrative overhead, and our underinvestment in social determinants of health means we spend heavily treating conditions that could have been prevented.

None of this is new information. Researchers have documented these patterns for decades. The political challenge is not analytical — we understand the problems reasonably well. The political challenge is that every inefficiency in the American healthcare system is someone else's revenue stream, and the people whose revenue streams are at risk are considerably better organized, better funded, and more politically effective than the people who would benefit from the efficiencies.

That is the environment in which health insurance professionals work. Understanding it is not optional — it is the prerequisite for understanding why the products you sell are designed the way they are, why your clients face the choices they face, and why the system produces the results it produces. The chapters that follow attempt to provide that understanding, section by section, beginning with the commercial insurance system that sits at the center of American healthcare financing and extending outward to Medicare, Medicaid, and the ongoing political struggles over what, if anything, comes next.

Notes

[1] KFF Health System Tracker, "How does health spending in the U.S. compare to other countries?", updated 2024; CMS National Health Expenditure Accounts, 2024.

[2] William H. Shrank, Teresa L. Rogstad, and Natasha Parekh, "Waste in the US Health Care System: Estimated Costs and Potential for Savings," JAMA, October 2019. The $760 billion to $935 billion estimate covered 2019 spending levels of roughly $3.8 trillion; the proportional waste at current spending levels is almost certainly higher in absolute terms.

[3] OECD Health at a Glance 2023; KFF Health System Tracker, 2024. GDP figures are approximate and vary by year and data source.

[4] This analysis is developed at greater length in Part 1. The foundational argument — that employer healthcare spending and employee wages are economically equivalent as components of total labor cost — is well established in labor economics. See Gruber and Madrian, "Health Insurance, Labor Supply and Job Mobility," NBER Working Paper 8817, 2002.

[5] National Center for Health Statistics, "Life Expectancy in the United States," 2024. The 2021 trough of 76.1 years represented a decline of 2.7 years from the 2019 peak of 78.9 — the largest two-year decline since the influenza pandemic of 1918–1919.

[6] KFF Health System Tracker, citing Medical Expenditure Panel Survey data, 2023. The concentration ratios are remarkably stable across years and data sources. See also Cohen and Yu, "The Concentration and Persistence in the Level of Health Expenditures over Time," MEPS Statistical Brief #354, January 2012.

[7] Bradley and Taylor, The American Healthcare Paradox, 2013; OECD Social Expenditure Database, 2023. The US ranks 28th out of 30 OECD countries in combined social and health spending efficiency by most measures.

Part 1: Commercial Health Insurance

Exquisite inefficiency

The US is the only advanced industrialized country to finance medical care primarily through employment. Most other countries use employer based financing either to supplement a national healthcare system (e.g. the United Kingdom) or ban it from competing with the national system (Canada).

Employer-based health coverage peaked at about 168 million people in 2000, slipped during the 2000s and early 2010s, partially recovered, and by 2024 covered approximately 165 million people (KFF, 2025). [1]

The US Census Bureau estimates that the percentage of *employed* people receiving employer sponsored health insurance has shifted substantially since 1997. By 2024, approximately 80% of adult workers under 65 worked for an employer that offered ESI to at least some employees, yet only about 54.6% of the overall population — around 182 million people — was enrolled in ESI coverage, according to SHADAC research using federal MEPS-IC data. [2]

These coverage rates generate a different focus of healthcare system concerns here and abroad

- We worry about *coverage* and costs
- They worry about *outcomes* and costs

Three structural problems with employer based healthcare financing

#1: Moral hazard

Our employer based system finances all medical care with **insurance** rather than **payment plans** probably for historical reasons that we'll discuss shortly.

This confuses *insurance* (protection against financial harm caused by random events) with financing normal, routine and expected medical events like flu shots and knee replacements.

Compare health insurance to auto insurance. Auto insurance pays for *un*expected events, like crashes; it doesn't pay for expected events like oil changes, tire rotations or transmission rebuilds. Yet we expect health insurance to cover all medical events, from

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[1] EBRI Issue Brief # 321, September 2008

[2] Ibid.

the most routine and predictable to the most random and unpredictable. This leads to enormous inefficiencies because, many argue, insurance is the wrong financing mechanism for routine medical events.

- Insurance pools risk inefficiently based on timing; those *not having* medical events this year pay for those having.
- This suppresses any market mechanisms from pooling more efficiently and developing better, more targeted, more actuarially based medical financing products - orthopedic payment plans for example, or pediatric immunization payment plans.

  We can imagine lots of medical payment programs, underwritten and priced for individuals or banded for groups. Middle aged men might buy 5 or 10 year orthopedic and urologic plans but not birthing; younger women the opposite.

  This kind of program pools need more efficiently than blanket insurance plans that cover every possible medical situation, for all people, that might occur this year. ‘Insurance’ then provides a safety net for the unexpected or random events not covered by specific payment plans.[3]

A fundamental problem using insurance to finance all medical activities is **moral hazard**. Insurance programs *always* face concerns about moral hazard. Moral hazard is the phenomenon in which people get more care than they need because it appears free to them. Insurance financing that includes this moral hazard component is a great foundation for a healthcare jobs program but a poor one for an efficient medical care financing system.

The moral hazard concept originated when home fire insurance was developed centuries ago. Underwriters were concerned that people with ‘poor moral character’ would burn their houses to collect the insurance proceeds then rebuild a less expensive house and pocket the difference. This translates in the health insurance arena to people having tests and treatments because –why not? It’s free to me and may offer some benefits.

Medical care providers understand this issue and can generate income from it: ‘let’s send you for another test just to rule something out. Don’t worry – it’s covered by insurance’ and medical testing and treatment industries develop. Dr. Sandeep Jauhar, Director of the Heart Failure Program at Long Island Jewish Medical Center, has written

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[3] Regina Herzlinger has written extensively and creatively about this type of program. See especially her book Who Killed Healthcare.

eloquently and painfully about this. Consider these various quotes from his 2014 book Doctored:

> Bob and Joe and Dave have an unwritten agreement to call one another when patient issues arise outside their scope of expertise. If Bob, the nephrologist, sees a patient, he finds a cardiac and a gastrointestinal issue and consults the other two specialists and vice versa…a mutual scratching of backs…**Insurance companies can restrict medications, tests and payments. But they still cannot tell us who or when we can ask for help.** (page 97, emphasis added)
>
> A large percentage of healthcare cost is a consequence of induced demand – that is, physicians persuading patients to consume services that they would not have chosen if they were better educated. (page 107)
>
> [Describing one particular physician] …he was doing a plethora of tests – eye exams, audiometry, pulmonary function tests, even Holter monitoring – to generate revenue … he avoided the high-risk cases… ‘Those we would send to a cardiologist’ …[and, quoting a gastroenterologist] ‘If a doctor doesn’t do excess testing, forget it, he isn’t going to be able to live.’ (page 167)

Dr. Jauhar’s unsettling conclusion about the impact of moral hazard:

> In our healthcare system, if you have a slew of physicians and a willing patient, almost any sort of terrible excess can occur. (page 94)

Others have, of course, also written expansively about the impact of moral hazard on our healthcare system. My point in this discussion: by relying on insurance to finance all aspects of healthcare, the employer based model exacerbates, rather than ameliorates, this problem. By basing our entire healthcare financing system on and around the employer model, the moral hazard problems permeate all aspects of American healthcare financing, creating more healthcare jobs and less healthcare value.

While we can’t calculate an exact cost of moral hazard in our healthcare system, credible research suggests that approximately 25% of all medical spending is wasted on unnecessary or low-value care. A landmark 2019 JAMA analysis estimated healthcare waste at between $760 billion and $935 billion annually — roughly $2,600 or more per employer-based policy. The Dartmouth researchers primarily responsible for earlier estimates, though, are quick to note that we ‘view these as an underestimate given the potential savings even in low cost regions' [4] meaning that even they have no real solid idea how much moral hazard exists in our system.

But they and others admit that it's a lot.

A very lot.

Structural problem #2: Disconnecting payers from users

Payers in the employer based model are employers, often acting through their benefits department. Payers decide what network size employees want, what deductible levels, what drugs to include in the formulary and what copayments to have. This is particularly true in small companies covering the bulk of American workers that may offer only 1 policy to all employees.

Consider the impact of payer's decisions. A company opting for a wide provider network decides that each employee would prefer *paying more for health insurance* to *having more disposable income available* (and using a smaller network).

Or a company opting for a smaller network decides that employees prefer *more disposable income* to *having the most expensive doctors and hospitals available in-network.*

Employees, though, are the consumers and each may seek different things from our healthcare financing system. One may want higher deductibles or lower, wider networks or smaller, bigger drug formularies or not. Each facing his or her own specific medical issues can reasonably have his or her own set of preferences.

We call this 'consumer sovereignty' meaning that the most efficient economic distribution system is one in which consumers express their desires through purchases. We have seen this work quite effectively in other markets for hundreds of years.

Take the grocery market for example. A typical supermarket has thousands of products available because some people like expensive cuts of meat while others are vegetarians. Some people like ice cream while others are lactose intolerant. Some people like rye bread, others white bread and still others prefer bagels. And so on, for canned foods, soups, fruit and many other food products.

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[4] Dartmouth Atlas of Healthcare, Reflections on Variation, answer to the question 'The Atlas is often cited as a source for the estimate that 30% of the nation's spending is unnecessary --- what is the evidence? http://www.dartmouthatlas.org/keyissues/issue.aspx?con=1338

Our food distribution system is ‘efficient’, or so goes the argument, because individual consumers, casting their own dollar-votes, decide which products should be available and how much shelf space stores should allocate to each product. As consumers demand more soup, the store supplies more soup. Ditto for apples, mangoes and bread.

Imagine the impact on our food choices if these decisions were made by your employer! ‘Apples are good for my employees, so stock a lot. Cut down on cookies and fatty meats. And, since more and more people are lactose intolerant, switch to carrying more skim milk.’ (As if your employer had any interest in making those decisions. Your employer wants to make and sell widgets, not decide what you should eat. Hmmm, sounds like healthcare, doesn’t it?)

Restrictions on consumer sovereignty lead to higher prices, less choice and sometimes poorer quality. Would apple producers focus as much energy on their product quality if they knew that all stores had to buy more apples from them? Maybe – or maybe they’d focus more on quantity and price.

In the employer-based health insurance model, consumers have far less sovereignty than many would like, since benefits administrators make many of their key consumption decisions. But remember the economic axiom: the more consumer sovereignty, the more efficiency. And vice versa.

Structural Problem #3: One year long policies

Some 70% of healthcare expenditures go toward chronic, long term and on-going medical care as opposed to episodic, acute care. A chronic condition is, for example diabetes and an on-going care example might be post-operative cancer treatment. Dozens more examples exist. The best outcomes result from continuity of treatment from the same provider. Medically, thus, *long term financing programs* tend to generate the best outcomes, generally at the lowest costs since care discontinuities can lead to errors, which add treatment costs.

Employers, however, oppose funding multi-year health insurance policies. Business conditions may change they reason, their employee census may change, prices may fall – why encumber themselves with long term liabilities? Employers like 1 year long policies so they can change the program if business conditions warrant.

This creates a conflict between *employee medical needs* and the *employer’s business considerations*. We have, nationally, adopted the employer’s position as the basis of our healthcare financing system, not the medical need position. Financing medicine based on anything other than medical concerns adds inefficiencies (costs) to the system without any related benefits or value increases.

The employer financing model forces health insurance carriers to compete on short term medical cost controls rather than long term patient outcomes. I'll explain how all this works and some impacts later in this chapter.

These three structural problems – financing routine medical care through insurance, disconnecting payers from users and embracing 1 year health insurance plans - lead to an inefficient system with skewed incentives. Good for healthcare jobs growth but bad for system value creation.

But that's what we get with employer-based financing as the core of our national healthcare financing system.

Three consequences of employer based health insurance

Uwe Reinhardt, former professor of healthcare economics at Princeton, suggests 3 consequences of placing employer based health insurance at the center of healthcare financing. [5]

First, it is tremendously expensive. In 2025, for example, the average family health insurance plan cost about $27,000, up $10,000 over the previous decade. This compares to the median household income in 2024 of about $84,000 — meaning a typical family health plan costs roughly one-third of median household income. Under what definition of 'affordable' does this make any sense?

Reinhardt wonders how any employer who finances employee healthcare, carrier that designs plans or broker who implements benefit programs can take pride in his/her work product over the past decade. So do I.

Second, having employment at the center of our healthcare financing system requires lots of 'fill in' programs for people unable to obtain employer-based insurance. Each of those programs – Medicare and Medicaid, for example – develops their own regulations, licensure requirement, codes and prices resulting in overlapping and confusing payment categories.

We have, as a result:

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[5] This section based on Uwe Reinhardt's lecture at the Pioneer Institute in Boston, 2014. Reinhardt (1937–2017) was professor of economics at Princeton and one of the most influential health economists of his era.

- One healthcare system for fulltime, employed people. This system has its own access rules, reporting rules, prices and payment rules.
- A second healthcare system for elderly people, with its own (different) access rules, reporting rules, prices and payment rules.
- A third healthcare system for very poor, unemployed people who (for lots of bureaucratic and political reasons but no medical ones) must *also* be either i children, ii blind or disabled, iii elderly, iv mentally ill, v pregnant or vi mothers. [6] This system, as the two previously mentioned, also has its own access rules, reporting rules, prices and payment rules
- A fourth healthcare system for slightly poor, partly employed people (we sometimes call this 'non-group', a financial distinction but not a medical one)
- A fifth system for children not otherwise accounted for
- A sixth system for military veterans, but only if they're also either old or accessing medical care as a result of combat injuries, or both, and finally
- A seventh system for people with kidney disease, provided it's end-stage.[7]

Inefficient and irrational are two polite ways to summarize this chaos: 'nuts' might be more appropriate. Having all these overlapping, irrational categories creates confusion and complexity that makes our system far less efficient and effective than we would like or hope for, leading to more jobs, higher costs and, unfortunately, poorer outcomes than patients would hope for.

These different categories exist, again, because of the employer basis of healthcare financing. We needed to develop all these programs to address groups left out of the employer coverage model.

And **third**, having all these different categories has led to different prices for the same service. [8]

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[6] Ezekiel Emanuel makes this point in Redefining American Healthcare, page 47

[7] We also have the Indian Healthcare System which, you'll be pleased to read, is funded under the Indian Healthcare Improvement Act, signed by President Obama in 2010 and which is included in the Affordable Care Act. Probably others too, but that falls outside my area of expertise.

[8] This section comes from Ezekiel Emanuel's book Reinventing American Healthcare, pages 72 -76. It follows from Reinhardt's analysis.

- The **List Price** exists though is rarely paid. It's reserved for rich foreigners and uninsured Americans. It's the highest price hospitals charge.
- The **Medicare rate**, completely transparent, is stipulated by Medicare. It's generally about 80% of hospital costs, meaning hospitals must overbill some other category of patients to remain financially solvent.
- The **Commercial Insurance rate**, higher than Medicare and lower than List Price, varies by carrier based on their market clout and negotiating skills. It tends to run about $135% of hospital costs though this can vary significantly.

  One reason for the high price and variation: market clout. A carrier with 8% of the market in one region may negotiate relatively ineffectively with a hospital network that controls 60% of the beds.
- The **Usual and Customary rate** is the rate hospitals charge carriers with which they don't have a contract – a Colorado hospital that treats Florida insureds who injures themselves while skiing for example.
- The **Medicaid rate** is typically the hospital's lowest rate, often quoted as a percentage of Medicare's rate.
- The **Actual Cost** of providing the service is generally unknown. Many medical professionals may interact with each patient, requiring detailed time-and-motion studies which are expensive to produce.

Note that in other – efficient – parts of our economy, the service provider determines his/her price for the service and then sells it to anyone who will buy with, perhaps, some quantity discounts to account for scale. But in medical care, the same service varies in price by patient and the same patient can switch from category to category, thus inducing different prices from the same providers for the same care. See why I suggested this is nuts?

This huge, complex, irrational and inefficient system exists, again, because of the employer centric structure of our healthcare financing system.

Two problems that employer based health insurance fails to address

#1: Unnecessary Care

Unnecessary care, defined as care that does not improve patient health, is the largest single category of medical spending in this country. A landmark 2019 JAMA analysis estimated waste in the US healthcare system at between $760 billion and $935 billion annually — roughly 25% of total healthcare spending. That figure has almost certainly grown as total spending has climbed; with the US now spending $5.3 trillion annually on healthcare, even 25% waste translates to well over $1 trillion per year. Even at the lower JAMA estimate, wasteful spending exceeds

- Heart disease spending, about 10% of total medical spending
- Diabetes and cancer spending, about 5% of total medical spending each.

Jonathan Bush, founder and CEO of Athenahealth, puts it this way: ‘unnecessary care is part of the hospital business model’. [9]

The interesting question for this section: who, in the employer financing model, tackles unnecessary care as a function of his/her job?

- **Does the benefits administrator care?**

  Probably not. The benefits administrator generally wants to keep premium inflation around ‘trend’, the industry definition of healthcare inflation.

  If his/her company’s premiums inflate at trend, then he or she can take a CYA approach: ‘I did my job. Our premiums reflect trend.’

  If his/her company’s premiums inflate faster than trend, then alter plan designs, generally by increasing deductibles and copayments and shrinking the provider network.

  Engaging with carriers and providers to reduce unnecessary care is time consuming, a task for which the benefits administrator probably doesn’t get paid and is probably ill-equipped. It will likely be an unsuccessful effort anyway. That’s why most benefits people tend to take the CYA approach and settle for the ‘we’re at trend’ justification for mediocrity.

- **Does the CFO care?**

  Again, probably not. The CFO is busy, responsible for the company’s financial health and less interested in the internal operations of a hospital. As long as premiums inflate at an ‘appropriate’ rate, then the CFO will focus on his/her company’s core business, making widgets for example, and generate profit on those.

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[9] Jonathan Bush, Where Does It Hurt?

CFO's lack both the time and expertise to work with doctors and hospitals on reducing unnecessary care. A huge company CFO might have the time and interest to work with a select group of providers on this issue. But hospitals that engage with this particular large company may well then turn around and bill other, smaller companies more to make up the difference.

- **Does the employer care, especially the small and mid-sized ones?**

  Again, probably not. Most economists argue that employers simply reduce wage increases to fund health premiums. We discussed this previously. If premiums rise quickly, wages rise more slowly.

  The employer corporation doesn't care – economically – if it pays employees wages or premiums. The employer corporation is only concerned with the total employee costs.

#2: Underfunded Social Programs

Among developed countries, the US has the highest rates of diabetes, sexually transmitted diseases, teen pregnancy and auto mortality. We also have the second highest rates of heart and lung disease and lose more years of life before age 50 to drug and alcohol abuse. [10]

Are sexually transmitted disease and teen pregnancy the *employer's* problem? The patients typically don't work for the employer but the employer pays for treatments through 'trend'.

We know that social and behavioral factors affect more than

- 70% of colon cancer and strokes.
- 80% of coronary heart disease
- 90% of adult on-set diabetes, and
- Probably most leg amputations (we lead the developed world)

But the underlying social and behavioral factors exacerbating these problems are not addressed by employer based health insurance. These are 'social' problems, appropriate for some government agency or non-profit to address – or so believe many employers and benefits administrators.

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[10] For Americans Under 50, Stark Findings on Health, Tavernise, NY Times, Jan 9, 2013

Perhaps as a result, we spend far less on social determinants of health (housing and rent subsidies, training programs for poorly educated or unemployed folks, disability cash benefits and social services in general) and far more on medical treatments after someone gets sick than do most other developed countries.

In fact, though we're #1 in medical spending per capita in the world, we're #13 in 'medical and social spending' combined. We have the ratios reversed from most others. The OECD average is about 2/3 of combined 'medical and social spending' going to social and about 1/3 going to medical; we're the opposite, joining only Korea and Japan as spending the majority of 'medical and social' on medical. [11]

This situation developed largely because employers lobbied more successfully for health insurance premium tax breaks than did social service agencies for funding. (More on this below when we discuss the history of employer based health insurance.)

How well do employers negotiate for their employees?

In 1964, the average wage in this country was $2.53/hour and the average health expenditure $197 per person per year, requiring the average person to work about 78 hours (2 weeks) to pay for healthcare. [12] Divide $197 by $2.53 to see this.

In 2024, average hourly wage was about $35. Average annual healthcare spending per person was approximately $15,400. That means the average American worker now devotes roughly 440 hours — eleven weeks of full-time work — to pay for healthcare.

This strikes many as a pretty poor track record. One wonders if individuals, negotiating for their own policies, might have done better than employers and brokers working together.

'But my employer pays 75% of my premiums'

This misconception pervades the employer based health insurance model. Let me explain what most people believe first, and then show the real costs. [13]

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[11] See The American Healthcare Paradox by Bradley and Taylor for more on this. I only summarized their research here.

[12] This example comes from Philip Longman's excellent book on the Veteran's Administration Healthcare system, Best Care Anywhere

[13] This analysis comes from David Goldhill's 'Catastrophic Care', chapter 2 'The Hidden Beast'. I've adjusted the numbers slightly and changed the woman's name to Mary, though unclear exactly why.

Consider Mary, a single woman who earns $45,000 a year. In this hypothetical example, the company's single premium is $777/month ($9,325 annually) of which Mary pays 16% or $1,492 per year. She also pays a $1,886 annual deductible and has 4 office visits at $40 each.

Mary thinks her healthcare costs about $3,538, or roughly 8% of salary. Not too bad.

There's only one problem with this analysis: it's completely wrong. Not even close to correct.

Here's what Mary actually pays:

- The entire **$9,325** premium in foregone wages. Remember that her employer doesn't care if Mary receives compensation as salary or benefits. The employer only cares about the total annual cost of employing Mary.
- $1,620 in state taxes at a 3.6% state tax rate. Since states average spending about 10% of their budgets on healthcare costs for employees and Medicaid, Mary pays about **$162** in healthcare costs to the state.
- $4,950 in Federal taxes, about 11% of her income. Since 20% of the federal budget goes to healthcare, Mary pays another **$990** here.
- Medicare taxes (1.45%) plus the employer match (foregone wages again), another **$1,305**.

Mary actually spends about **$12,000** on healthcare annually, not $3,538. See why all the healthcare system inefficiencies we've been discussing really matter?

Part 2: How did Employer Based Health Insurance Develop?

Let's consider two historical themes to understand both why we have an employer-centric healthcare financing model and why it works so poorly.

First, remember that healthcare and social services evolved independently and differently. Healthcare was a profitable industry, supported by powerful special interests; social services were not but, but rather were disorganized, politically weak and stigmatized for helping the 'undeserving'. [14]

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[14] See Bradley and Taylor, The American Healthcare Paradox for a longer explanation of this point.

Consider this story from Bradley and Taylor's book The American Healthcare Paradox about Joe, a 28 year old, very low income diabetic: [15]

- His poor diet, including very little fresh food, exacerbates his condition
- He wears old, holey shoes that keep his feet constantly damp.
- His doctor admonishes him to eat better, take his insulin and keep his feet dry, but he can't afford to do these things often enough
- Last year he had 2 toes removed costing $7000 and next year likely two more for $14,000
- His doctor discussed the possibility of a foot amputation ($18,000) plus rehab (total medical costs about $30,000), plus a wheelchair ($1000). This would make finding a job far more difficult, reducing Joe's chance of earning much income and consequently paying taxes (more or less paying for the social welfare of others). A leg amputation might permanently relegate him to surviving on government benefits, not a job.

Perhaps the most ironic or depressing part of this story: new shoes cost $75 and an apple costs $1 per day. Our (underfunded, disorganized) social services can't manage these minimal costs while our (well funded, powerful) medical system racks up tens of thousands in fees by implementing medical solutions to social problems.

Second, our healthcare financing system evolved inefficiently, from a vertically integrated 'financing + care provision' system to a non-vertically integrated one.

- Vertical integration means medical care and medical financing are the same entity with salaried physicians. Both the financing arm and medical care arm work together to generate the best patient outcomes at the lowest cost, at least in theory.

  'Managed competition' is competition among vertically integrated healthcare providers. Those generating the best outcomes at the lowest costs will gain customers; those operating at higher costs and generating poorer outcomes will lose. [16]

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[15] Ibid. page 1

[16] Alain Enthoven of Stanford University, perhaps our greatest managed care theorists and proponent, has written widely about this which is somewhat outside the scope of this particular chapter. See his

Vertically integrated healthcare entities compete with each other on *value*: outcomes per dollar spent, since they control their own income (i.e. the premiums they charge customers.)

- A ‘non-vertically integrated system’ has separate companies handling financing and medical care. Today we call financing companies ‘insurance carriers’ and medical care provision companies ‘providers’, generally hospitals and physician groups.

  In this system, financiers always want to pay service providers less and service providers always want to bill more. The relationship between the two is ‘war’ - according to Atul Gawande, professor at Harvard Medical School and staff writer for the New Yorker – ‘every step of the way’. [17]

  In a non-vertically integrated system, carriers and hospitals argue over payment formulas since hospitals do not control premiums. A very different focus from the vertically integrated model above.

How Employer Based Healthcare Started

The myth – or perhaps truth - is that it started in Dallas around 1929 as a reaction to the stock market crash and financial meltdown. [18] The business problem for Baylor University Hospital in Dallas was that it didn’t have enough money to pay its bills.

Prior to the stock market cash, hospitals raised funds in two ways. First they had paying customers who were billed for services rendered - a fairly modest percentage of the population because most people didn’t have a lot of money. Second, the community chest, the charitable organizations - the wealthy would donate to the hospital because it was a good place to donate your extra money. Charity made you feel good and was good for the community.

But with the stock market crash, the wealthy didn’t have as much money to donate, unemployment increased (reducing the number of patients able to pay), and the hospital

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seminal article The History and Principles of Managed Competition for more. http://elsa.berkeley.edu/pub/users/webfac/held/157_VC2.pdf

[17] See Gawande’s second book ‘Better’, chapter entitled Piecework

[18] This suggestion comes from Richmond and Fein, The Healthcare Mess, page 30.

faced a difficult financial landscape. So Baylor University Hospital made a deal with the Dallas School System. They said, “School system, you raise money from taxes. You always have money. Pay us $.50 every other week, $.25 a week, for each of your employees and when they get sick, they come to us and we’ll take care of them.” Employer based health insurance arrives.

A few comments about this.

First, it’s a nice deal. It’s a nice deal for the hospital because they stay in business. They don’t have to worry about going out of business. They don’t have to worry about turning people away as long as they get the numbers right (which apparently they did), $.50 per employee every other week. That was the true cost. The school system payments protected the hospital’s cash flow, so the hospital stayed in business.

Second, this was very efficient. The hospital signs one contract with one employer group and received back enough money to stay in business. Sweet. That’s a pretty good incentive to look for more large employer groups.

Third, there was no prevention or provider choice, but theoretically the teachers and other employees of the school system were happy because they got medical care essentially for free.

Fourth, this was for hospitalization only. There was no outpatient doctor’s coverage.

Fifth, community rating. The Dallas School System paid $.50 per person every other week, regardless of individual medical status. There was no medical underwriting.

Sixth, there were no quality controls, no outcome based incentives, no holdbacks for poor hospital performance. Health insurance began simply to save the financial health of the hospital.

This was a vertically integrated system, almost textbook variety. And it exhibited the classic flaw of vertically integrated healthcare system: lack of consumer choice. As developed initially with Baylor University Hospital, the Dallas school system employees could only go to one hospital. This has advantages and disadvantages.

Advantages:

1. Lower Costs
2. Reasonable medical care from a small number of ‘in-network’ providers

Disadvantage:

1. Little provider choice as few hospitals ‘in-network’

The Baylor Hospital / Dallas School System deal worked so well that other hospitals soon copied it. Different hospitals looked for different large employers, offering the same kind of deal. Large manufacturers, the Dallas Morning News, and others. What problem begins to arise?

The Choice Problem

Consumers (school system employees or manufacturing workers, for example) wanted to chose among various hospitals. ‘What do I know about Baylor University Hospital? I only know one thing. I know someone who went there and didn’t get good treatment, so I want to go somewhere else.’ Someone always knows of someone else who had a negative experience there. So you want to go somewhere else - consumers want choice.

Remember vertical integration, where finance and service provision are the same company? Once you introduce choice, then you have one group handling finance and another handling service provision. You have a split and you lost vertical integration. (More on this coming up soon.)

Back to Dallas. The hospitals are cranking along with the employer based financing model. They’re very happy. They’re making money. And then one of the Blues brothers comes along – Cross or Shield, I don’t remember which – and offers to provide financing for lots of Dallas hospitals. ‘Dallas teachers’ they might have said, ‘you can sign up with Baylor University Hospital only, or, for just a little more money, sign up with us and we’ll give you the choice of many hospitals in Dallas. We contract with lots of hospitals. We have a large network.’ Sounds pretty appealing, right?

Doctors looked at this and said, “Hey, we want in on this too.” They organized a second Blues brother so doctors could get paid because the same depression was affecting all medical providers, both hospitals and physicians. Blue Cross for your doctor’s bills and Blue Shield for your hospital bills (or maybe the other way around. Wikipedia didn’t say when I looked it up.) Both organized to protect provider incomes.

And both – conceptually, if not in real life – competed with vertically integrated hospitals, like Baylor University Hospital was at the beginning with the Dallas School System.

The Blues developed a couple of very clever ideas in the 1930s. First, from a marketing point of view, they offered this very attractive provider choice option. Very appealing to many consumers.

Second, they began searching for the healthiest subscribers. An interesting business idea: if they could find the healthiest people, they could offer lower priced policies and gain a competitive edge vs. their vertically integrated competitors signing up large employers at a fixed price per person.

Underwriting vs. Community Rating

The Blues figured that they would underwrite better than the competition so people would join them because their premiums would be a little bit lower. The community rating folks faced higher premiums because they took all employees.

Underwriting serves the economic interests of the carriers. It doesn't improve healthcare outcomes. It doesn't improve the healthcare system. It doesn't differentiate medical quality. It doesn't create patient value. It only makes one carrier lower cost than another carrier by having sick people pay more. The healthy pay less, the sick pay more but there's no value created: the total medical costs remain the same. But some people win and others lose.

This financing system has little to do with getting people healthy, or creating value. That was not its intention. It was designed to protect physician and hospital income. That was the original Baylor idea. Then carriers came along to make a profit on consumer demand for choice. The demand for choice leads to the Split.

The Split and the Provider Payment Problem

Once you split finance from service provision, you have a wider consumer choice and you have to figure out how to pay doctors and hospitals. We're still, today, trying to get this one right.

The original and still most popular payment mechanism is fee-for-service. The doctor gets paid $100 for treating each broken arm and $350 for each rotator cuff surgery.

As soon as you split finance and service provision there's an incentive on me, the doctor, to do more treatments. You're paying me by treatments, so I will do more treatments. 'That guy's got a sore shoulder that's probably due to a rotator cuff tear, so I'll operate on his rotator cuff.' Fee for service provides an incentive for doctors to do more procedures and hospitals to admit more people.

You, on the other hand, the carrier, want to limit the number of treatments. You want to ask if I have to do that procedure. We fight all the time. My clinical judgment (influenced, perhaps – at least psychologically – by the fee-for-service payment formula) vs. your financial judgment (influenced, perhaps – at least psychologically – by the same fee-for-service formula. You don't really trust my clinical judgment.) That's the conflict between healthcare payers and medical service providers.

Let's remember where we are. We're still in the 1930's and we're talking about the growth of the employer based system. Little cost control. We've developed the split between finance and service provision. Finance people will say, "You really don't need to do that procedure," and the service provider says, "Yes I do. Yes I do."

The Problem of Measurement in Fee for Service Medicine

There's a related problem in fee-for-service medicine – the problem of measurement. How well does a particular physician treat his/her patients? How well does a particular hospital perform certain surgical procedures? How well does a particular treatment work?

These are enormously difficult questions to answer. We do not even today have good measurement criteria or good data – and we had even poorer criteria and data in the 1930s. The data that we can measure might not be the most important. Remember that our healthcare goal is to extend life or improve life quality. We do not yet fully understand which treatments today will lead to longer lives in 30 or 40 years. Nor do we fully understand which treatment qualities will lead to long term life quality improvements.

We can only measure some aspects of medical treatments – surgical mortality rates, hospital infection rates, 30-day hospital readmission rates, for example. These may not always be the most significant outcome data, though they may be useful for some patients.

Whose interests are served by measuring or publicizing this information? Not the providers. They get paid fee-for-service for the *quantity* of medical care, not the *quality*. Publicizing outcome data may harm them economically. Thirty day hospital readmission rates may show that Hospital A provides poorer patient treatments than Hospital B. Or that Surgeon Z has a higher mortality rate than Surgeon X.

The risks of either inappropriate or unflattering outcome data becoming public were so great during the inception of our employer based system that providers fought against its release. The fee-for-service system suited their interests far better than any outcome based payment mechanism.

The fee-for-service / component payment structure suited their interests in a different way also. Absent good data collection, each physician – responsible only for his/her specific tasks – can argue 'I did my job correctly. The fault lies elsewhere.' Physicians act as subcontractors, narrowly defining their individual tasks, rather than as general contractors responsible for the life of the patient. This follows directly from payment systems that developed from the Split between finance and service delivery.

Fee-for-service / component financing serves provider interests, is inflationary and expensive, and is not designed to improve patient health. It's only designed to reward providers, which it did quite well historically. We, in the US, have traditionally performed more procedures / 1000 of population than similar developed countries around the world. Things today like spinal fusion surgery, hip replacements, knee replacements, coronary bypass surgeries. The Split between finance and service provision led us down this road.

The Impact of World War II

Let's continue with our historical / conceptual history of employer based health insurance.

During World War II, or perhaps as a function of it, more and more people got insured, most notably people in the military. They continued with insurance coverage after the war. In the relatively short post-war period we get lots more Americans covered for hospitalization insurance.

1942: 10 million hospital insurance / health insurance subscribers

1946: 32 million

1951: 77 million [19]

World War II plays an important role in our story for three main reasons.

First, the soldiers who received health coverage while in the military wanted to continue with it afterward. They saw the advantages of having health coverage. They married and wanted their families to receive coverage also. This created demand for health insurance.

Second, our wartime economy devoted significant resources to medical technology improvements. Perhaps most significant was the introduction of sulfa drugs to combat infections. These helped turn hospitals from infection breeding institutions into patient treatment and improvement centers. Other technological innovations followed. These improved the quality of medical care, or the supply.

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[19] Richmond and Fein, The Health Care Mess pages 30 - 38

Third, the Federal wartime wage and price freezes fostered the development of ‘fringe benefits’ such as health insurance. These reduced the cost of insurance to the individual consumer and further helped stimulate demand. It’s a pretty interesting story just how these developed.

The government decided during the War to freeze wages and prices - to avoid domestic economic difficulties and help focus our economy on war production. Employers could not raise wages to attract new workers or to reward their best employees. The government controlled this aspect of employee compensation very tightly.

But the government allowed employers to offer fringe benefits such as health insurance. This was how employers could attract new talent and retain their current employees. The concept of ‘fringe’ meant ‘outside the normal compensation’ and ‘benefits’ meant ‘advantages of working here’. Employers couldn’t simply raise wages – the traditional way of attracting labor – as that was illegal during the war. Fringe benefits were simply a mechanism to get around the wartime wage freeze.

As we grew in 9 years from having 10 million to 77 million insurance subscribers in this country, the health insurance industry developed and gained political power. It lobbied Congress for favorable legislation. It applied political pressure. It acted, in short, just like all other powerful industrial groups.

The Hill Burton Act and IRS decisions strengthen hospitals

Congress, just after World War II, passed the Hill Burton Act to fund hospital expansion. This increased the number of hospital beds in this country by about 40%, from 3.2 per 1000 people to 4.5. It also made hospitals the centerpiece of our medical care system; the travelling doctor who made house calls started to disappear.

Shortly thereafter, in 1953, the IRS decided that fringe benefits were exempt from federal income tax: those became *tax deductible to the employer* but *not income taxable to the employee.* **This was essentially a government subsidy for hospital care,** since that’s what health insurance ultimately financed. The government stimulated sales of employer based health insurance by subsidizing the price through the tax exemption.

To understand how this is a subsidy, let’s look at both the employer and employee tax situations. The employer buys a $100 insurance policy for an employee, and, prior to the IRS regs, pays corporate income tax on the $100 ---- let’s say that was 50%. So the employer’s total cost was $150: $100 for the policy and $50 for the income tax on that $100.

By making the payment tax deductible to the employer – that means by foregoing the corporate income tax on that $100 - the government reduced the cost. Health insurance now only costs the employer $50; the employer takes a 50% tax deduction on the $100 payment. That's a big savings compared to the previous $150 expense.

The employee received this $100 employment benefit. Prior to the IRS regulatory change, he/she would have paid their marginal tax rate on this income --- let's say 30%. By making this tax free to the employee – that means by foregoing the personal income tax on the $100 – the government contributed $30. In other words, the government subsidized the employee who received health insurance by $30.

An interesting note from the employee point of view. $100 in benefits is more valuable than $100 in salary. The $100 in salary is taxable, so nets only $70. Remember our discussion above that 'My employer pays 75% of my premium.' I suggested that the employer doesn't care if he/she pays salary or benefits – the employer only cares about the total cost.

But the employee, according to many economists, does care. The employee prefers benefits since they're not taxed. The employee's foregone salary, according to this argument, is more valuable than benefits since it's not taxed. (I'm not sure I buy this argument completely but it does give me pause to consider.)

This subsidy for health insurance was so effective that the rate of Americans with hospital coverage skyrocketed. In the mid-1950s, about 45% of Americans had hospital insurance. By 1963, 77% had hospital coverage, and an additional 50% had some form of physician coverage.[20]

The favorable tax treatment of fringe benefits led to healthcare inflation from higher *hospital* prices – because more people could afford to use hospitals.

Over this time period two strange incentives evolved in our healthcare marketplace: an *excessive hospitalization* incentive and an incentive to *cover the unemployed*. These two conditions merged in the late 1960s and 1970s. Their combined effect became clear by the 1980s as our health insurance costs skyrocketed and our employer based financing model became even more firmly entrenched.

Excessive Hospitalization Incentives

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[20] Enthoven and Fuchs, 'Employment Based Health Insurance: Past, Present and Future' Health Affairs, Nov/Dec 2006

By the mid-1960s over three quarters of Americans had hospitalization insurance, paid for by employers and subsidized by the government. Hospitalizations became essentially free to patients, creating, in the words of Harvard Professors Richmond and Fein a ‘not-so-subtle perverse incentive to hospitalize individuals.’

This was the case even for diagnostic tests that could have been performed on a less costly outpatient basis, they say. Over time the hospital became all the more important and central to the delivery of healthcare services.

This increased the need for health insurance:

Since medical care became more costly, insurance became more useful (indeed, necessary). In turn, the presence of insurance helped underwrite a buildup of resources and an upgrading of technology that added to costs and made insurance even more valuable. [21]

Remember the incentives here.

- Employees liked the system because it appeared free to them;
- Carriers liked the system because the government subsidized their product (health insurance policies);
- Hospitals loved the system because they received patients and insurance payments – a wonderful recipe for making money.
- Employers objected somewhat to this system, but not terribly strenuously. After all, the government was subsidizing their health insurance payments, so they felt the pain only partially.

Our healthcare system was hospital based – not really interested in preventive care (hospitals couldn’t charge much for that); not really interested in public health (the field was only just developing); not really interested in outpatient or chronic care. Providers focused on hospital care because that’s where the money was.

Hospital insurance stimulated the excess use of hospitals, which created more need for hospital insurance. Three byproducts:

- First, we used hospitals for almost all medical care, even if less expensive setting existed;

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[21] Richmond and Fein, op. cit., pages 38 - 39

- Second, we developed fewer outpatient, home based, preventive or non-hospital types of medical care;
- Third, we continued to underfund social program. All this hospital growth and funding (largely from government programs and tax subsidies) crowded out social service investments.

Yet this third issue was tremendously important. Let me quote Professors Richmond and Fein on the relative importance of hospital investment and public health investments. [22] And remember: these were two highly respected Harvard Medical School professors. Richmond, in fact, was US Surgeon General in the Carter administration.

- ‘A growing professional consensus holds that the health gains since WWII were largely **the consequence of applying our knowledge of health promotion and disease prevention rather than improved clinical care…’ (**i.e. public health investments**)**
- ‘The revolution in biology subsequent to World War II, a revolution that had brought many advances to clinical care, as yet **had only marginal effects on improving our vital statistics’**

Social spending had a bigger impact on our national health gains than did hospital investments! We invested the wrong way (assuming our healthcare investments were aimed at promoting health).

How Could Employers Afford Health Insurance Premiums after World War II?

What set of circumstances allowed this system to develop? Why was the employer based system healthy and growing until the late 1900’s, then in decline?

It turns out that for a number of years, this 40 year period more or less, many countries were (a) recovering from World War II or (b) gaining independence and expanding their educational systems. They were not economic threats to the United States – countries like Japan, India, Korea, China, or Western Europe. We dominated economically.

Our big firms in particular were very profitable. They didn’t have much foreign competition. They could afford to pay for employee healthcare. They could raise prices because nobody was competing with them to keep prices low. That’s the trend that you see from World War II to about the 1980s or so. Big firms could set the standard and

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[22] Richmond and Fein, op cit, pages 92 and 94

then small businesses filled in the holes. All competed for labor based on offering attractive ‘salary + benefits packages’ and all could because the big firms were managing the world economy.

This allowed the U.S. to have an extra cushion of money available for healthcare benefits. Even though people complained, the economy could support the excess premiums. Regulated industries - for political and various other reasons - were able to pass on the cost because our economy was stronger than any other. Unions were strong. They could demand health insurance and the big firms could afford it.

The key factors that fostered employer based health insurance post World War II all changed in the 1980s and 1990s:

World Economy, 1945 – 2000 +/-

Little foreign competition for American manufacturers;

Japan and Western Europe needed time to rebuild;

US manufacturers could keep prices high and afford health benefits

Importance of Large Firms, Regulated Industries and Unions

GM, US Steel, ALCOA, etc – profitable with little foreign competition. Able to share profits with employees as benefits;

Regulated industries (AT&T) – regulated monopolies were able to pass health insurance costs to consumers; they had little or no competition;

Unions were relatively strong, could bargain effectively for benefits

All these conditions changed in the 1980s and 1990s. Our ability to generate excess profits, if you will, to afford for the employers to pay for healthcare starts to disintegrate as foreign competition gets going. From World War II until about 1980 or 1990 we could afford employer based health insurance and there was no significant political group that was lobbying or arguing against it.

Medicare and Medicaid Remove Potential Political Threats to Employer Based Insurance

One major potential political threat to our employer based health insurance system could have come from the unemployed – that significant percent of the population that is too old to work or unable to find full time work with benefits. This is potentially a very potent political force that could have lobbied in favor of single payer healthcare, universal coverage or something like that – like in other countries.

By introducing Medicare and Medicaid in the 1960s, this political force goes away. People are happy. They're not under pressure. They're not demanding universal coverage because they've got coverage. Where are politicians going to find a block of supporters who are going to argue for single payer systems, universal healthcare? They don't exist because Medicare and Medicaid took the potential block off the table.

Here is an estimate of the population size that these two entitlement programs satisfied. I'll use Medicare, because this covers the elderly who vote in particularly high numbers and in particularly important electoral states like Florida. This large voting bloc could have become a potent political force for universal coverage. Instead it became satisfied with Medicare.

Medicare Enrollment 1970 – 2024

Year	Number Medicare Enrollees	% of US population
1970	20 million	10%
1980	28 million	12%
1990	34 million	13.5%
2000	39 million	13.8%
2010	47 million	15.2%
2024	68 million	20.1%

Medicaid covers about the same population size.

The argument is that Medicare and Medicaid are key supporters of our employer based health insurance system. They allowed the system to grow and become entrenched nationally in the second half of the last century.

The employer based system reached its peak of about 168 million people around 2000, dipped significantly through the 2010s, and by 2024 had partially recovered to roughly 165 million covered under age 65 (KFF, 2025). The system's long-term trajectory remains under pressure. Why the persistent stress? Because the international economic conditions that sustained it have changed. American firms can no longer freely pass on benefit costs to their customers the way they once did.

At the same time, the hospital lobbies and related groups had done such a good job of protecting their constituencies that healthcare became hugely expensive. Healthcare grew from about 4% of US GDP in 1950 to 14% in 2000 to 18% in 2024 — and CMS projects it will reach 20% by 2033.

Lower cost alternatives to large general hospitals – freestanding outpatient clinics, for example – never took hold, presumably due to hospital lobbying efforts. Similarly, specialty hospitals – local diabetes clinics, for example – also failed to establish themselves, again presumably, for the same reasons. The Affordable Care Act, for example, didn't actually prohibit establishment of physician-owned specialty hospitals, but placed such burdensome requirements on their establishment as to destroy this as a potential market force.

By the early 2000s we had developed a perfect storm for healthcare system financial catastrophe. Our healthcare costs – primarily hospitalizations due to the government subsidies of fringe benefits – rose far faster than GDP. Meanwhile, American businesses' abilities to pay for their employee's health coverage diminished in the face of foreign economic competition.

Mandates

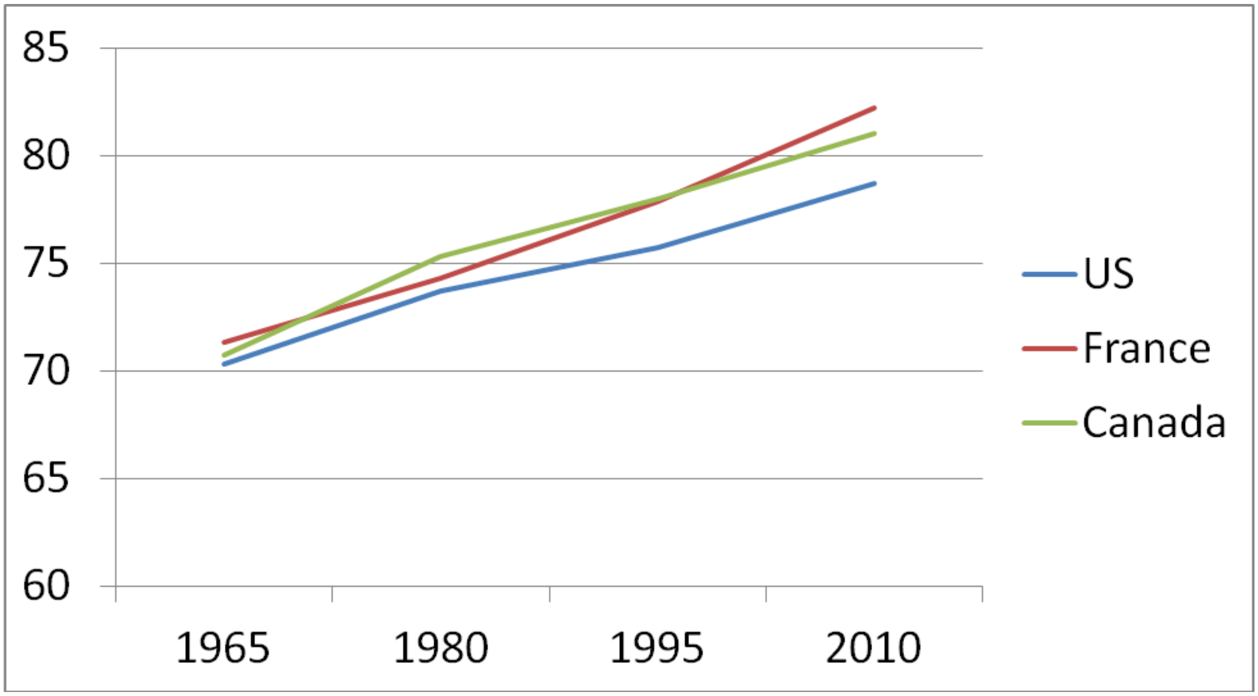
As healthcare became increasingly costly, carriers (reflecting employer's interests) tried denying services to patients. This spurred a political reaction, pitting patients and medical provider interests against employers. Perhaps the most impressive display of patient and special interest power presented itself by the growth of healthcare mandates.

The number of state mandated benefits grew from 7 in 1965 to over 2,200 by 2024, according to the Council for Affordable Health Coverage. These reflected the political power of special interests to protect the incomes of their members. Chiropractors lobbied for chiropractic to be included as a benefit in insurance policies. Nurses lobbied for minimum nurse-to-patient ratios. Voters generally supported mandates as protection against insurance carrier abuses.

Mandates raise prices. This increases the need for insurance but makes insurance less affordable, which increases the need for government subsidies (tax breaks and, in some states like Massachusetts, premium supports), which reduces the amount of money available for social programs and 'health promotion and disease prevention' activities (in the words of Richmond and Fein [23]) which in turn medicalizes social problems and raises costs.

But perhaps most disappointing of all, mandates don't improve patient health much. Consider the data comparing American life expectancies to French and Canadian as we increased the number of healthcare mandates between 1965 and 2024. As mandates multiplied from 7 to over 2,200, the US life expectancy gap versus peer nations widened rather than narrowed. By 2023, US life expectancy stood at 78.4 years – more than four years below the peer-country average of roughly 82.5 years – even as we required more healthcare services for our patients.

Instead, healthcare mandates are political reflections of the economic power of various healthcare groups. They have, apparently, little impact on health. But they insure that the various medical interest groups get paid.



Consumer Driven Healthcare to the rescue (or not)

The first major attempt to adapt employer based healthcare to these new economic realities was CDHC or Consumer Driven Health Care. The term 'consumer driven health care' arose primarily from the Medicare Modernization Act of 2003 which established Health Savings Accounts.

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[23] Richmond and Fein, The Healthcare Mess, page 92

‘Consumer driven products’ are high deductible health insurance policies with certain tax benefits. Each consumer spends the deductible as he/she sees fit – for physician visits, medications, tests, therapies etc – more or less employing the consumer sovereignty idea we discussed earlier in this chapter. Only after satisfying the deductible does insurance pay. Then, depending on the specific plan design, insurance pays all or part of additional medical expenses.

Problems equating high deductibles with consumerism in healthcare

Unfortunately, CDHC policies as ‘consumer sovereignty light’ fail in healthcare for two main reasons.

First, an annual $1000 deductible (or even $3000) is too small to act as a real medical spending brake. Once satisfied, and depending on the specific plan design, all other medical care is free.

A patient might satisfy that deductible hurdle in January and then enjoy lots of excessive and unnecessary medical care for free during the next 12 months.

Or the deductible has little impact on a patient facing an expensive procedure. What’s the difference to this patient if the procedure costs $45,000 …. $50,000….$60,000 or $100,000? Once the deductible is satisfied, the rest is free. ‘Consumerism’ fails to affect patient behavior in these expensive cases.

This fundamental flaw in the ‘high deductible = consumer driven healthcare’ thesis exists because the vast majority of healthcare spending goes to a very small group of high cost patients. Here’s spending by percentage of the population. These numbers have remained remarkably constant for the past several years.

Healthcare Consumption by % of Our Population [24]

1% of our population accounts for about 24% of medical spending

5% of our population accounts for about 49% of medical spending

10% of our population accounts for about 64% of medical spending

50% of our population accounts for about 97% of medical spending

So the healthiest 50% of our population accounts for only about 3% of medical spending. These are typically the folks who purchase CDHC products and who often

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[24] Yu, et al, ‘Medical Expenditure Panel Survey Statistical Brief #81’, May 2005, Agency for Healthcare Research and Quality

spend less than $1000 annually. Cutting their spending by 20 or 30% would have *virtually no impact* on *overall* medical spending or trend.

Here's the same chart using 2024 spending data. In 2024, total US healthcare costs reached $5.3 trillion for the approximately 335 million of us. Though the 2024 average annual healthcare spending per person was about $15,474,

The 1% heaviest users (3.4 million people) averaged about $470,000 each;

The 5% heaviest users (16.75 million people) averaged about $188,000 each;

The 10% heaviest users (33.5 million people) averaged about $96,000 each;

The 50% lightest users (167.5 million people) averaged about $940 each

Very few of the 10% of users who account for about 2/3 of all medical spending will change their medical choices based on a $1000 (or even $2500 or $5000) deductible. *Whatever* the deductible, their medical care needs far exceed it.

Second, medical consumers have little meaningful quality information, and even if they have it, they rarely know how to use it. This makes medical decisions different from, say, car purchasing decisions. The car buyer can compare the quality of various cars before deciding which to purchase. Large or small, good gas mileage or poor, lots of luxuries or few, high resale value or low, etc.

But the medical purchaser generally has very little similar information. Which doctor has the best outcomes? Which hospital? How effective is this medication compared to that one? How do I avoid overuse? How do I generate good health effectively and cost-appropriately? We generally lack detailed answers to these questions.

For these two reasons – unequal healthcare spending and lack of medical quality information / well educated medical consumers - so-called Consumer Driven Health Care had only a small impact on medical trend which has run at our gdp growth rate plus 3 – 5% annually for years.

Consider these data points:

- The US overall inflation rate averaged about 3% per year from 2002 – 2012. [25]
- US healthcare premium increases averaged about 6.2% between 2002 and 2009, and have continued in that range ever since. KFF's 2025 survey found

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[25] https://www.bls.gov/cpi/

family premiums rising 6% that year – right in the historical range of GDP + 3–5%. [26]

- The Congressional Budget Office projects average US GDP growth of about 4.3% annually through 2033. CMS projects healthcare spending will grow at 5.8% annually over the same period – again, right in our historical range of GDP + 3–5%.

Americans continue to spend far more on healthcare than other developed countries without getting commensurate value for the excess spending, just as we did prior to CDHC policy introduction. Here are estimates for 2023 and 2024, the most recent years available from the OECD and KFF Health System Tracker.[27] I also included estimates from China for comparative purposes.

	Spending	**LE at Birth**
US	$14,775	78.4
France	$5,765	83.0
Canada	$6,319	82.0
Germany	$8,011	81.1
Italy	$4,291	83.6
Netherlands	$6,753	81.6
Spain	$3,876	83.7
UK	$5,387	80.7
China	$375	79

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[26] OECD Health at a Glance 2025; KFF Health System Tracker, “How does health spending in the U.S. compare to other countries?” (2025).

[27] OECD Health at a Glance 2025; KFF Health System Tracker, “How does health spending in the U.S. compare to other countries?” (2025).

Americans take more medications than others. Here are some 2023 Rx consumption rates per capita.[28]

US	$1,432
Canada	$971
France	$803
Germany	$923
Netherlands	$613
Italy	$596
Spain	$607
UK	$498

Unfortunately, ‘consumerism as deductibles’ falls short of real healthcare consumerism as these charts and analysis suggest.

Healthcare Exchanges – a new twist from ObamaCare?

The Affordable Care Act’s Health Insurance Marketplaces have now been operating for over a decade. By 2024, about 21 million people were enrolled in Marketplace plans, with enhanced subsidies under the Inflation Reduction Act of 2022 having significantly expanded enrollment. Whether Exchanges will ultimately represent a paradigm shift or a supplementary channel remains an open question – their future depends substantially on whether Congress extends or allows those enhanced subsidies to expire. My chapter on the Affordable Care Act describes healthcare reform in more detail.

My chapter on the Affordable Care Act describes healthcare reform in some detail so I’ll refer readers to that.

Three additional problems with having employer based health insurance as the centerpiece of our healthcare financing system

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[28] Ibid.

Price structure: Today's health insurance policies are priced at 'employer contribution + employee contribution'. Losing your job may lead to a quadrupling of your health insurance premiums, assuming that your employer pays 75% of the premium.

Labor market distortions: Some employees either choose jobs or remain on their jobs for the health insurance. Two main reasons for this are

- cost – employer contributions reduce employee costs, and
- access – pre-existing conditions traditionally made health insurance unavailable to some people if they changed from their current jobs, though the Affordable Care Act has changed much of this.

One research paper estimated that employer based insurance reduced job mobility by 25 – 40% [29] at least until the ACA impacts work their way through our healthcare system.

Impact on the Federal budget: Tax breaks for employer based health insurance (not income taxable to the employer or employee) constitute the single largest tax exclusion in the federal budget, an estimated $384 billion annually in foregone revenue (KFF, 2024). [30] This is roughly 3x the mortgage interest tax deduction.

This tax break is regressive: higher income people with expensive policies are subsidized by lower income people with less expensive policies.

Many on Capitol Hill seek to reduce this tax break. Here, for example, is former Representative Paul Ryan, who served as Speaker of the House (2015–2019) and ran for Vice President in 2012. In his view, tax deductible employer based health premiums

> tilt the compensation scale toward ever-greater (tax free) benefits and away from higher (taxable) wages. This isn't just a big driver of runaway healthcare costs, as more dollars chase the same amount of services. It's also a big reason why too many Americans haven't seen a raise in a long time. [31]

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[29] Gruber & Madrian, 'Health Insurance, Labor Supply and Job Mobility' Workng Paper 8817, NBER, March 2002

[30] Health Affairs *Health Policy Brief*, August 1, 2013 'Premium Tax Credits', http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=97

[31] Turner, Capretta, Miller and Moffit, Why ObamaCare is Wrong for America, Forward

Ryan, among other things, echoes my suggestion that employers pay premiums by withholding wage increases from employees. $1 of benefits is worth more to the employee than $1 of wages since the wages are taxed.

Paul Starr, Princeton Professor of Sociology who normally sits far to the left of Ryan, agrees with him on this point, saying the employer based premium tax exclusion has

> long been the target of criticism on both distributive and allocative grounds: it provides the biggest subsidies to higher income employees with the most generous insurance, and it contributes to America's inflated health spending by obscuring the true costs. Nixon and Clinton considered limiting the exclusion, but each rejected the idea because of political opposition.[32]

Summary: Employer Based Health Insurance

Employer based insurance provides some 165 million Americans with health coverage. But it does so remarkably poorly.

- By setting powerful employer business interest groups against far weaker population health interest groups, it's a key cause of underfunding our various (health related) social services
- The employer based structure harms **employers** by putting an unnecessary (for widget production) economic and administrative burden on them.
- It harms **employees** by reducing their medical care options
- It harms **patients** by locking our system into one focused on short term cost control rather than long term outcome improvement, or, in economic terms, value creation
- It harms **carriers** by reducing their ability to develop high value products and by forcing them to satisfy employer needs rather than patient, and
- It harms **providers** – doctors and hospitals – by reducing their ability to focus on long term outcomes and treatment excellence, but rather on short term costs, carrier and network referral requirements and associated administrative tasks aimed at reducing moral hazard.

Where will this take our healthcare system? Former Stanford Business School Professor Alain Enthoven summarizes in prophetic terms. Our employer-based model,

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[32] Paul Starr, Remedy and Reaction, page 258

he suggests, will unfold 'like a Shakespearean tragedy: known, tragic flaws taking their inexorable toll.' [33]

Or, as Lady Macbeth might put it,

> *The employer-based healthcare financing system simply doesn't work. Band-Aids and piecemeal reforms cannot not fix this fundamentally flawed model.*

(I've admittedly taken some generous poetic liberties here. Lady Macbeth actually said 'Here's the smell of the blood still. All the perfumes of Arabia will not sweeten this little hand'. It's not easy ending a chapter on employer-based healthcare financing with a Shakespearean quote!)

Review Questions

Answers on next page

1. This chapter suggested that Moral Hazard is endemic to health insurance. What is moral hazard?

   a. People get more care than they need because it appears free to them
   b. People with poor moral standards get more care than appropriate because they are greedy
   c. There is a close correlation between high morals and low healthcare costs
   d. 'Moral hazard' addresses the mind-body relationship. Basically moral people sleep better so remain healthier than lose moral people who more typically suffer from sleep disorders

2. This chapter suggested that disconnecting health insurance payers from healthcare users leads to inefficiencies. What does 'disconnecting health insurance payers from users' mean?

   a. Payers are employers but users are employees
   b. Payers are generally government entities that pass rules and legislation but users – who must implement those rules – are employers
   c. Payers are, in reality, tax payers who fund most healthcare in this country even though employers are the biggest cohort of users
   d. Payers are carriers who actually pay doctors and hospitals for their services while 'users' are all the entities that make up the bills, like pharmaceuticals, device manufacturers etc

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[33] Health Affairs, Forum on Employer Sponsored Health Insurance, 2006 http://content.healthaffairs.org/content/25/6/1537.full

3. This chapter suggested that having 1 year long health insurance policies leads to systemic inefficiencies. Why?

a. Carriers and providers try to control short term spending to keep renewal increases low, while some 70% of spending goes to patients with chronic diseases that require a long term focus.
b. Renewing annually creates far more paperwork, and therefore costs, than a more efficient system would have
c. Most employers would prefer longer term policies – 10 or even 20 year long policies – so they could plan and cut overhead
d. One year long policies opens the door to expanded lobbying on Capitol Hill from groups that offer the 'newest and greatest' short term health insurance fixes

4. This chapter suggested that having employment as the core of our healthcare financing system leads to underfunding social programs (that often have a major impact on health). Why is that?

a. Many of the social causes of medical problems – poor nutrition or poor housing, for example – are not the employer's financial responsibility. As such, they are often left out of our health insurance discussion, since carriers and employers focus so intently on the next year's policy renewal price.
b. Social programs, as many studies have shown, have little to no impact on medical care or spending
c. Employers lobby aggressively to cut social spending programs which might, if they worked well, increase the employer's premium costs
d. Employers, brokers and carriers combine to develop fully comprehensive insurance plans. Anything not included in those plans, virtually by definition, is not relevant to promoting good health.

5. Who pays health insurance premiums?

a. The employee by foregoing wages
b. The employer by foregoing profits
c. The government by crediting the premiums equally to the employer and employee
d. Hospitals by undercharging for their service

6. Why do we have healthcare mandates in this country?

a. To improve care quality. Since the introduction of mandates our 30 day readmission rates have fallen almost to zero
b. To improve care outcomes. Since the introduction of mandates, our average

longevity at birth has increased by almost 100 years
c. To reduce infant mortality. Since the introduction of mandates, our infant mortality rates have fallen to the lowest in the world
d. To reward lobbying by influential groups like nurses (who lobby for nursing mandates), chiropractors (who lobby for chiropractic mandates), pharmaceuticals (who lobby for pharmaceutical mandates) and similar.

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Correct answers in bold

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Part 2: Medicare
The World’s Most Expensive Retirement Program

Medicare is the federal health insurance program for Americans aged 65 and older, as well as certain younger people with disabilities or end-stage renal disease. In 2024, Medicare covered approximately 68 million beneficiaries — about one in five Americans — and consumed $1.118 trillion in federal spending, or roughly 21% of all US healthcare expenditures (CMS, 2025). If Medicare were a country, its healthcare budget would rank among the largest in the world.

The average Medicare expenditure per beneficiary runs approximately $16,500 per year, though this figure masks enormous variation. As we saw in Part 1, a small fraction of beneficiaries generates the vast majority of costs: the sickest 10% of Medicare enrollees account for roughly two-thirds of all program spending, while the healthiest half consume almost nothing. That distribution, so familiar from the commercial insurance world, is even more pronounced in Medicare, because older and disabled populations carry higher baseline rates of chronic illness, multiple comorbidities, and end-of-life care needs.

What do Medicare’s beneficiaries get for that investment?

That is not an easy question to answer. On the one hand, Medicare finances care for a population that is both expensive to treat and politically powerful — and it does so with administrative costs far below those of private insurance (roughly 2% for traditional Medicare versus 12–15% for commercial carriers). On the other hand, the program faces chronic questions about quality, efficiency, and, most pointedly, outcomes.

Consider what the data tell us about how long Medicare’s beneficiaries actually live once they reach 65. According to the CDC’s most recent final mortality data (2024), an American who reaches age 65 can expect to live an additional 19.7 years on average — to roughly age 85. Women at 65 can expect 20.8 more years; men, 18.4 more years. That is a genuine improvement over prior decades, and Medicare deserves some credit for financing the treatments that contributed to it.

But compare those figures to peer nations. According to OECD data, the average remaining life expectancy at age 65 across comparable high-income countries is approximately 20.5 years for women and 18.5–19.0 years for men. Japan leads dramatically — a 65-year-old Japanese woman can expect nearly 25 more years of life. France, Switzerland, Australia, Canada, and most of Western Europe all outperform the United States at age 65, despite spending far less per person on healthcare overall.

Peterson-KFF data from 2024 capture this gap precisely. In that year, women in comparable countries exceeded US women in life expectancy at age 65 by 7.4% on average; men in comparable countries exceeded US men at 65 by 5.5%. As KFF researchers observe, while the absolute gap in life expectancy narrows somewhat at older ages compared to birth, the *relative* gap actually becomes more pronounced — particularly for women. The US system spends more on this population than any other country on earth and still delivers shorter lives.

This is not simply a Medicare design problem. The structural flaws we traced in Part 1 — the hospital-centric financing model, the fee-for-service payment incentives, the chronic underfunding of social determinants of health — carry directly into Medicare. The program inherited those structural features and, for the most part, has reinforced rather than corrected them. Understanding how Medicare is organized is the essential first step toward understanding why it produces these results, and what reforms might actually move the needle.

Medicare's Four Parts: An Overview

Medicare is organized into four distinct parts, each covering a different category of services, each financed differently, and each with its own cost-sharing rules. The four-part structure reflects Medicare's incremental legislative history rather than any coherent design logic — an origin story not unlike the employer-based system itself.

Part A: Hospital Insurance

Part A is the original Medicare, enacted in 1965 along with Part B. It covers inpatient hospital stays, skilled nursing facility care (following a qualifying hospital stay), hospice care, and some home health services. Most beneficiaries pay no premium for Part A — they or their spouses paid into it through payroll taxes during their working years (the 1.45% Medicare tax, matched by employers). In 2025, the Part A inpatient deductible is $1,676 per benefit period, with coinsurance charges applying after the 60th day of a hospital stay. Part A is financed primarily through the Medicare Hospital Insurance Trust Fund, which is funded by payroll taxes and which CMS trustees have periodically warned faces long-term solvency pressures as the baby boom generation ages through the program.

A critical limitation of Part A is what it does *not* cover: there is no cap on total out-of-pocket costs for extended or repeated hospitalizations. A beneficiary hospitalized multiple times in a year faces a new deductible for each separate benefit period. This exposure to catastrophic cost is one of the main reasons most Medicare beneficiaries purchase supplemental "Medigap" coverage or enroll in Medicare Advantage (Part C) plans that cap out-of-pocket spending.

Part B: Medical Insurance

Part B covers outpatient services: physician visits, preventive care, lab tests, durable medical equipment, outpatient surgery, and an expanding array of mental health services. Unlike Part A, Part B requires a monthly premium. In 2025, the standard Part B premium is $185.00 per month — though higher-income beneficiaries pay substantially more through Income-Related Monthly Adjustment Amounts (IRMAA), with premiums reaching as high as $628.90 per month for the highest earners. After an annual deductible ($257 in 2025), Medicare pays 80% of approved costs and the beneficiary is responsible for the remaining 20%, with no upper limit on that coinsurance exposure unless the beneficiary has supplemental coverage.

Part B is financed by a combination of beneficiary premiums (set by law to cover 25% of estimated program costs) and general federal revenues (covering the remaining 75%). That 75% general revenue subsidy makes Part B one of the largest ongoing federal expenditure commitments, and it grows automatically as healthcare costs rise — without any congressional vote required. This is the “mandatory spending” characteristic that makes Medicare so difficult to control through the normal appropriations process.

Part C: Medicare Advantage

Part C — officially Medicare Advantage — is not a separate set of benefits but an alternative delivery mechanism. Private insurance companies contract with CMS to provide all Part A and Part B benefits (and usually Part D drug coverage) to enrolled beneficiaries, receiving a per-capita payment from the government in return. In 2024, 32.8 million beneficiaries — more than half of all Medicare-eligible enrollees — were enrolled in Medicare Advantage plans, a dramatic shift from just 13% of beneficiaries in 2003 when the modern program took shape under the Medicare Modernization Act.

Medicare Advantage plans appeal to beneficiaries primarily because they typically cap out-of-pocket costs (a protection absent from traditional Medicare A and B), often include dental, vision, and hearing benefits not covered by original Medicare, and frequently charge no additional premium beyond the Part B amount. In theory, Part C was designed to harness private-sector competition to generate better outcomes at lower costs — the “managed competition” concept we discussed in Part 1.

In practice, the results have been mixed. The Medicare Payment Advisory Commission (MedPAC) has consistently found that Medicare Advantage plans are overpaid relative to what traditional Medicare would spend on the same beneficiaries — in some analyses by 20% or more. Plans use favorable risk selection, upcoding of diagnoses, and prior authorization restrictions in ways that generate profit without necessarily generating better health outcomes. The debate over Medicare Advantage’s value is one of the most consequential ongoing policy disputes in US healthcare, and we will explore it in depth in the chapters ahead.

Part D: Prescription Drug Coverage

Part D was added in 2006, also under the Medicare Modernization Act of 2003, and covers outpatient prescription drugs. It is delivered entirely through private insurers — either as stand-alone Prescription Drug Plans (PDPs) alongside traditional Medicare, or as the drug coverage component of Medicare Advantage plans. The average base beneficiary premium for a stand-alone Part D plan in 2025 is $46.50 per month, down from $53.95 in 2024 — a rare instance of a Medicare cost declining, attributable in part to the Inflation Reduction Act's new $2,000 annual out-of-pocket cap on drug costs, which took effect in 2025 and significantly reshaped plan designs.

Part D is financed primarily through general revenues (73%), beneficiary premiums (14%), and state payments for dual-eligible beneficiaries (12%). The 2025 $2,000 out-of-pocket cap represents the most significant structural change to Part D since its creation, finally eliminating the notorious "donut hole" coverage gap that had left millions of beneficiaries with no drug coverage after reaching an initial spending threshold. The Inflation Reduction Act also authorized CMS to negotiate drug prices directly with manufacturers for a defined set of high-cost, widely-used medications — a change that had been politically blocked for two decades and whose effects on program costs and pharmaceutical innovation will play out over the coming years.

The View from 30,000 Feet

Taken together, Medicare's four parts constitute a patchwork rather than an integrated system. Parts A and B reflect the hospital-and-physician-focused healthcare world of 1965. Part C reflects the managed-care optimism of the 1990s and early 2000s. Part D reflects both the political power of the pharmaceutical industry (which successfully blocked direct price negotiation for nearly twenty years) and the eventual counter-pressure of patient advocacy and fiscal reality. The $2,000 cap and drug price negotiation authority of the Inflation Reduction Act represent the most significant structural reforms to Medicare in two decades, but they address only the drug benefit — Parts A and B remain largely as Congress designed them in 1965, augmented by decades of fee schedules, payment formulas, and quality initiatives that have added complexity without fundamentally changing the underlying incentive structure.

How Medicare Came to Be — and Why It Costs So Much

Much of the historical account in this section draws on the outstanding undergraduate honors thesis of Sirmad Chaudhary, "The Cost of the Benefit: How Wilbur Mills's

Expansion of Medicare Led to Escalating Medical Costs" (East Tennessee State University, 2014). I recommend his thesis to any reader who wants to explore this history in greater depth.[34]

A Religious War With No End in Sight

Before we get into the history, let's be honest about the political environment in which that history took place — and in which it continues to unfold. Healthcare reform in the United States is not primarily a policy debate. It's a religious war. I mean that almost literally.

Traditional religious wars — the real ones, fought with swords and armies — generally end after a few years. Somebody wins, somebody loses, a treaty gets signed, and eventually the combatants find a way to coexist. American political religious wars never end. They just pause between battles.

The two opposing faiths are simple. Republicans believe that economic efficiency is the primary goal of public policy: the best products at the lowest cost, achieved by letting markets work. Government regulations, in this theology, reduce efficiency and ultimately harm people. Democrats believe that economic equality is the primary goal: treating everyone fairly and controlling market excesses that hurt the vulnerable. Government regulation, in their theology, is necessary to protect people.

Each side has abundant evidence that it's right. Each side is genuinely convinced the other side will destroy the country if it wins. And here's what makes healthcare the most intense battlefield in this ongoing war: it's personal. Not in the way that tax policy is personal. Personal in the way that birth and death and fear and pain are personal.

Franklin Roosevelt understood this. He fought for Social Security and succeeded. He fought for voting rights and made some progress. He dropped healthcare reform in the 1930s because he calculated — correctly — that it was too dangerous politically. Lyndon Johnson waited until after he'd passed voting rights legislation before taking on Medicare. Ronald Reagan and George H.W. Bush never even tried. They knew better.

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[34] Sirmad Chaudhary, "The Cost of the Benefit: How Wilbur Mills's Expansion of Medicare Led to Escalating Medical Costs," Undergraduate Honors Thesis, East Tennessee State University, 2014. Available at https://dc.etsu.edu/honors/194. The thesis draws on primary sources and the scholarship of Paul Starr, Theodore Marmor, Julian Zelizer, Stuart Altman and David Shactman, and Ira Rutkow, among others. Direct quotations from those underlying sources used in this text are attributed to the original authors.

Consider what that tells us. Expanding voting rights — one of the most contentious social issues in American history — was politically easier than reforming healthcare. That's not a commentary on voting rights. It's a commentary on how deeply entrenched the medical-financial complex is in American politics, and how viscerally people react when they think their healthcare might change.

The Socialism Playbook: A 75-Year-Old Script That Still Works

Every fifteen to twenty years, reformers come back with a new attempt at expanding healthcare coverage. And every fifteen to twenty years, opponents reach for the same weapon: socialism. It has worked with stunning consistency.

In 1946, the AMA labeled Truman's national health insurance proposal "socialized medicine." Senator Robert Taft of Ohio declared it had "come straight out of the Soviet constitution." In 1958, President Eisenhower called a modest hospital insurance proposal for the elderly "a definite step toward socialized medicine." In 1962, a young Ronald Reagan cut a record for the AMA warning that if Medicare passed, "we will awake to find that we have socialism."

Reagan lost that one — Medicare passed in 1965 — but the playbook was far from retired. In 1973, the Nixon administration's HMO proposals were attacked as socialist. In 1993, Hillary Clinton's managed competition plan was "socialized medicine." In 2010, the Affordable Care Act was "the hallmark of socialism," according to Bill O'Reilly on Fox News. In 2014, more of the same.

In March 2019, Seema Verma, the Trump-appointed administrator of CMS — the agency that actually runs Medicare — delivered a speech to the Federation of American Hospitals in which she declared that Medicare for All "mimics the failed socialist healthcare systems of Europe." The same month, Vice President Pence told the Conservative Political Action Conference that Democrats were "embracing the same tired theories that have impoverished nations and stifled the liberties of millions." Then he said the word: "That system is socialism."

Let's pause on this for a moment. The "socialist healthcare systems of Europe" that Verma described as "failed" include France, Germany, the Netherlands, Canada, Australia, the United Kingdom, and Sweden. Every one of those countries spends less than half of what we spend per person on healthcare. Every one of those countries has a higher life expectancy than ours. Every one of those countries covers its entire population. If that's what failure looks like, I shudder to imagine what success would require.

In April 2019, as Medicare for All discussions were gaining traction among Democratic presidential candidates, UnitedHealth Group — the country's largest health insurer — reported first-quarter earnings per share up 24 percent. Its stock price nevertheless dropped 6 percent, because investors feared reform. CEO David Wichmann went to the microphone and said that Medicare for All "would surely jeopardize the relationship people have with their doctors and limit the ability of clinicians to practice medicine at their best."

From the 1946 Republican playbook. Again. Not a word changed in 73 years. The actors rotate out; the script stays the same. The reason it keeps working is that fear is more motivating than hope. People will fight harder to protect what they have than to get something better. The insurance industry, the pharmaceutical industry, the hospital lobby — they all understand this instinctively. Reformers, frustratingly, keep forgetting it.

The Long Road to 1965: How We Got Here

Medicare did not arrive fully formed in 1965. It was the product of more than three decades of political struggle, near-misses, and outright failures. Understanding that history explains not just how the program came to exist, but why it was built the way it was built — and why its structural flaws have proven so difficult to correct.

The story begins with Franklin Roosevelt and the New Deal. When Roosevelt took office in 1933, the country was in economic freefall: stock prices down 85 percent, between a quarter and a third of the workforce unemployed, banks collapsing, farms being foreclosed. Against that backdrop, health insurance was at best a secondary concern. Roosevelt's Committee on Economic Security, created in June 1934 to develop a comprehensive social insurance plan, included health insurance in its research but never treated it as a real priority.

Three forces killed it. First, the Depression made unemployment insurance the dominant and urgent need — people were starving, not just uninsured. Second, the American Medical Association made crystal clear it would fight any government health insurance plan with everything it had, and the committee feared that fight would sink the entire Social Security bill. Third, Southern lawmakers were terrified that any federal healthcare program would force the desegregation of hospitals and clinics throughout the Jim Crow South. Better to have no program at all.

The Social Security Act of 1935, one of the transformative legislative achievements of the twentieth century, contained not a word about health insurance. A brief window opened in 1937 when Roosevelt authorized a new internal study group to develop a national health program. The National Health Conference was convened in July 1938. The AMA mobilized again. Roosevelt's political capital had been badly damaged by his failed Supreme Court-packing scheme. Conservatism surged in the 1938 midterms — Republicans nearly doubled their House seats — and the conservative coalition of Southern Democrats and Republicans that would block healthcare reform for another generation locked firmly into place.

That same year, a twenty-nine-year-old Arkansas Democrat arrived in Washington for his first congressional term. He had grown up in Kensett, Arkansas, gone to Harvard Law School to learn to "speak to President Roosevelt," and returned home to become White County judge before winning his congressional seat. His name was Wilbur Mills. He would become the most powerful man in Congress on matters of tax and social policy — and, in an irony that perfectly captures American healthcare politics, the unlikely architect of Medicare.

Truman Tries and Fails: The Blueprint Gets Written

With Roosevelt's death in April 1945, Harry Truman inherited the unfinished business of national health insurance. In November 1945 — just three months after the end of World War II — Truman stood before Congress and proposed a comprehensive national health program. It was universal, federally run, and compulsory. It covered physicians, hospitals, and preventive medicine, financed through payroll taxes. Truman said: "Millions of our citizens do not now have a full measure of opportunity to achieve and enjoy good health. Millions do not now have protection or security against the economic effects of sickness. The time has arrived for action to help them attain that opportunity and that protection."

I couldn't have said it better. That was 1945. We're still saying it today.

The AMA responded with a lobbying campaign unlike anything the country had seen. It assessed each of its members a special $25 fee to fund the opposition — ultimately spending $1.5 million in 1949 and $1.3 million in 1950, more than any lobbying group had ever spent on a single issue. Its advertising campaigns exploited Cold War fears with surgical precision. A 1949 AMA pamphlet argued that "socialized medicine" was a cornerstone of communism. The ads ignored the actual provisions of Truman's bill and painted a dystopian picture of patients and doctors forced together against their will under government coercion.

The campaign was extraordinarily effective. In 1945, 75 percent of Americans supported national health insurance. By 1949 — after four years of AMA messaging — that figure had collapsed to 21 percent. Public opinion didn't change because the facts changed. It changed because the AMA outspent the reformers and frightened people. The lesson was not lost on the insurance and pharmaceutical industries that would wage similar campaigns in subsequent decades.

Senator Robert Taft of Ohio declared that Truman’s plan had “come straight out of the Soviet constitution” and boycotted hearings on the bill. Even after Democrats regained both chambers in 1948, the conservative coalition of Dixiecrats and Republicans proved as formidable as ever. Hearings were held in 1949, but the bill never made it out of committee. The loss of China to communist forces that October, the Korean War the following year, and McCarthy’s Second Red Scare all created a political atmosphere in which proposing universal healthcare coverage was practically an act of subversion.

Here’s what I want you to notice about Truman’s defeat. It wasn’t primarily a policy failure. His proposal was reasonable and well-designed. It failed because of a combination of ideology, fear-mongering, organizational muscle, and money. The AMA’s $25 assessment per member was, in effect, an early version of what the pharmaceutical industry now spends hundreds of millions of dollars on every year. And it worked for exactly the same reason modern lobbying works: people spend more to avoid losing something they have than to gain something they don’t.

But Truman’s defeat had a lasting positive consequence. It forced the reformers to narrow their ambitions and sharpen their strategy. If you can’t cover everyone, cover the most vulnerable group. If you can’t tackle all medical costs, tackle the most catastrophic ones. Over the next fifteen years, the target narrowed to hospital coverage for elderly Social Security recipients. This modest proposal was introduced in Congress every year from 1952 to 1960, not with any real hope of passage, but to keep the idea alive. That persistence eventually paid off — though not in quite the way anyone planned.

Meanwhile, the private insurance market filled some of the vacuum Truman’s failure created. The 1950s saw employer-based insurance become the dominant financing mechanism for working-age Americans, supported by the wartime wage-freeze legacy and the favorable IRS ruling we discussed in Part 1. The private health insurance market grew from a $1 billion industry in 1950 to an $8.7 billion industry by 1965. But the elderly, the poor, and minorities were largely left out. Even those elderly Americans who had some insurance coverage found it grossly inadequate: one survey found that only one-fourteenth of their total illness costs was covered by their insurance. The private sector had stepped up — for some people. But it had neither the incentive nor the capacity to handle the hardest cases.

Kennedy and Mills: The Irresistible Force Meets the Immovable Object

By the time John Kennedy arrived at the White House in January 1961, Wilbur Mills had chaired the House Ways and Means Committee for three years. The Ways and Means chairmanship was — and remains — one of the most powerful positions in Congress. Mills determined which bills were considered, controlled the committee agenda, called its meetings, directed its staff, managed bills on the floor, and was by universal agreement the most knowledgeable member of Congress on any issue involving taxes or social insurance.

His power went beyond formal authority. He had spent two decades mastering the Internal Revenue Code, the Social Security regulations, and every major piece of tax legislation since the committee's founding in 1789. As his biographer Kay Goss described it, he read everything. He wanted, in his own words, "to know it all." By the late 1950s, presidents and cabinet secretaries came to him. He did not go to them.

Kennedy knew this. He confided to his advisor Theodore Sorenson: "He knows that he was chairman of Ways and Means before I got here and he'll still be chairman after I've gone — and he knows I know it. I don't have any hold on him." That was not false modesty. It was an accurate description of the congressional power structure.

Mills was not reflexively opposed to helping the elderly with medical costs. He had, in fact, sponsored his own alternative in 1960 — the Kerr-Mills Act — which extended federal aid to states for the "medically indigent elderly." In theory it was generous. In practice, it was a disaster. Over 90 percent of Kerr-Mills funding flowed to just five states — New York, California, Massachusetts, Michigan, and Pennsylvania — because Southern states, as they had in 1935, imposed race-based eligibility restrictions that effectively excluded their Black elderly populations. Two-thirds of elderly Americans were still without meaningful protection.

His objection to Kennedy's King-Anderson bill — hospital coverage for Social Security recipients financed through higher payroll taxes — was actuarial, not ideological. Mills was genuinely and deeply worried about the long-term financial soundness of the Social Security system. He had spent the 1940s studying it, the 1950s mastering it, and he understood its financing mechanics better than almost anyone alive. He feared that once Medicare covered hospital costs, public pressure would force Congress to expand it to physician fees, dental care, long-term care — and that each expansion would push payroll taxes to levels that would destabilize the Social Security system. He was, as we'll see, exactly right about that risk. He just drew the wrong conclusion from it.

Kennedy tried to build public pressure to overcome Mills's resistance. On May 20, 1962, he traveled to Madison Square Garden and spoke before tens of thousands of senior citizens about the financial devastation that medical costs inflicted on elderly Americans. He described a man who had "worked hard all his life" and "always wanted to pay his own way," whose wife's illness had drained his life savings, forced him to mortgage his house, depleted his Social Security, and ultimately sent him to public assistance.

Kennedy called it what it was: financial ruin caused by medical costs. This was medical bankruptcy, though we hadn’t yet coined that phrase.

The AMA responded the next day. Dr. Edward Annis, who would later become AMA president, delivered a rebuttal speech from the same venue. The same stage, the same microphone, one day later. The AMA understood that the venue mattered as much as the message. They weren’t going to cede that ground.

From 1961 to 1963, Mills blocked the King-Anderson bill in committee. There simply weren’t enough votes — six of the fifteen Democrats on Ways and Means were Southern conservatives who opposed it, leaving supporters four votes short. Then, on November 22, 1963, the political landscape shattered. Kennedy was assassinated in Dallas, and Lyndon Johnson became president.

Johnson, the 1964 Landslide, and the Three-Layer Cake

Johnson was a different kind of political force than Kennedy. Where Kennedy was cerebral and sometimes cautious, Johnson was volcanic, relentless, and possessed of a legislative genius that bordered on supernatural. He had spent decades in the Senate mastering the art of what he called “the treatment” — an overwhelming, full-body assault of persuasion, flattery, pressure, and implicit threat that left few people capable of saying no.

In his first State of the Union address, delivered seven weeks after Kennedy’s assassination, Johnson declared war on poverty and announced his Great Society vision. Medicare, he said, would be first on the agenda. He then did something typically shrewd: he had congressional leadership assign the Medicare bills the symbolic numbers H.R. 1 and S. 1 — the first bills of the new session, the highest priority markers Congress could assign.

The 1964 election changed the arithmetic beyond anything Johnson could have hoped for. Democrats gained 38 House seats, reducing Republicans to their lowest numbers since the 1936 Roosevelt landslide. Three anti-Medicare Republicans on the Ways and Means Committee were defeated. In the Senate, Democrats held 68 seats to 32 for Republicans. Mills had promised Medicare would be first order of business. Now there was no hiding behind the numbers.

By January 1965, three distinct proposals were competing. The Democrats had reintroduced King-Anderson, covering hospital costs only. The Republicans, in a tactical move that would prove brilliant in retrospect, offered their own alternative called “Bettercare” — a voluntary, federally subsidized program covering physician fees as well as hospital costs, financed through general revenues rather than payroll taxes. The

AMA, for its part, countered with “Eldercare,” an expansion of Kerr-Mills offering voluntary medical insurance for the poor elderly.

Notice what the Republicans were doing. They weren’t opposing Medicare. They were proposing their own version — one that was, in some ways, more comprehensive than the Democratic proposal, adding physician coverage to the hospital coverage Democrats had proposed. And it was voluntary, which Republicans always love. It was a clever attempt to outflank the Democrats from the left on benefits while staying to the right on financing and government control.

Mills saw the opening. On March 2, 1965, in a Ways and Means Committee meeting that has become one of the most celebrated moments of legislative ingenuity in American history, he proposed combining all three approaches. The Democrats’ compulsory hospital insurance became Part A of Medicare. The Republicans’ voluntary physician coverage became Part B. The AMA’s expansion of Kerr-Mills became Medicaid. In one stroke, Mills had co-opted every competing proposal and built a coalition that none of the original proponents could oppose without looking ridiculous.

Wilbur Cohen, who had worked on healthcare legislation since the Social Security Act and would later serve as Secretary of Health, Education, and Welfare, called it “the most brilliant legislative move I’d seen in thirty years.” His full assessment deserves quoting: “The doctors couldn’t complain, because they had been carping about Medicare’s shortcomings and about it being compulsory. And the Republicans couldn’t complain, because it was their own idea. In effect, Mills had taken the AMA’s ammunition, put it in the Republicans’ gun, and blown both of them off the map.”

On July 30, 1965, President Johnson signed Medicare and Medicaid into law at Independence, Missouri — choosing that location deliberately, with Harry Truman sitting at his side. The twenty-year dream was finally realized. Johnson made sure Truman knew it.

Now here’s a critical point that is almost always left out of the triumphalist retelling of this story. Both sides in the Medicare debate understood that what they were creating was intentionally incomplete. Liberal Democrats saw Medicare as the first step in a longer march toward Truman’s original vision: first hospital coverage for the elderly, then hospital coverage for everyone, then long-term care, then physician coverage, then dental, then pharmaceutical. One step at a time, incrementally, until universal coverage was achieved.

Mills knew this. He deliberately built gaps and limitations into Medicare to prevent exactly that kind of expansion. No long-term care coverage. No dental coverage. No pharmaceutical coverage. Limited mental health benefits. Significant cost-sharing that made the program expensive for beneficiaries. As Mills himself later acknowledged, those gaps were intentional walls: “I put them in to create a wall around Medicare. I didn’t want it to expand.” He wanted to keep payroll taxes low and leave room for the private sector to fill the gaps.

This is why, sixty years later, Medicare still doesn’t cover dental care. It’s why millions of Medicare beneficiaries still buy supplemental “Medigap” insurance to cover the cost-sharing that Medicare leaves exposed. It’s why Part D prescription drug coverage wasn’t added until 2003 — and even then, without the government being allowed to negotiate drug prices. The gaps weren’t accidents or oversights. They were structural features, designed by a fiscally conservative congressman who wanted to contain the program’s ambitions before they got out of hand.

Mills’s long-term impact on the private sector is also worth noting. Because Medicare deliberately excluded so many services, it created enormous markets for private industry to fill. Private insurance carriers grew to sell Medigap supplements. The long-term care insurance industry emerged to cover nursing home costs Medicare excluded. Dental insurance and practice grew because Medicare covered no dental care. The pharmaceutical industry expanded partly because Medicare provided no drug coverage. Every gap Mills built into Medicare became a profit opportunity for private industry — and every one of those industries developed powerful lobbying operations to protect their turf.

In 1967, there were 64 registered lobbyists in Washington DC. By 2007, there were more than 15,000 registered lobbyists and another 100,000 informal ones, including CEOs who lobbied directly. By 2017, medical lobbying expenditures alone exceeded $560 million annually. All of that, ultimately, traces back to the structure Mills built in 1965. The gaps he created to contain Medicare instead created industries that now spend hundreds of millions of dollars to ensure those gaps stay exactly where they are.

The Cost Explosion: When “Reasonable” Turned Out to Be Unlimited

Medicare went into full effect in July 1966. The cost explosion that followed was immediate, severe, and in retrospect entirely predictable — if anyone had been paying attention to the incentive structure they’d just created.

The annual growth rate in medical costs more than doubled, from 3.2 percent in the seven years before 1965 to 7.9 percent in the five years after. From 1965 to 1970, combined state and federal health expenditures rose at an annual rate of 20.8 percent. Overall healthcare spending reached $70 billion by 1971, with government spending increasing by nearly 150 percent to almost $30 billion annually. As Senate Finance

Committee Chair Russell Long — son of the legendary Huey Long and one of the leading experts on Medicare financing — put it: it was “a runaway program.”

The mechanism driving the explosion was built into the law itself. To smooth implementation and bring the medical establishment on board, Congress had agreed to reimburse physician fees at rates deemed “customary, prevailing, and reasonable.” This sounded sensible. In practice, it was an invitation to inflation.

No one knew what physicians had been “customarily” charging, because no systematic records existed. There was no agreement on what constituted the upper limit of “prevailing” charges. And there was no consensus on what made a charge “reasonable.” So physicians simply started billing at whatever they thought they could get. Young doctors, who had no previous billing history, billed at unprecedented levels — and were paid. When their established colleagues saw what was possible, they raised their fees too. Soon what was “customary” was higher than it had ever been. Which meant the new “customary” standard ratified the higher fees, which physicians then raised again. A ratchet with no check.

Robert Ball, the head of Social Security during Medicare’s implementation, later acknowledged the naivety: “Perhaps we were a bit naïve . . . We thought that if we paid medical providers appropriately they would increase spending in a reasonable way. Well, their definition of reasonable and ours were not the same.”

Mills had made another concession that compounded the problem. As a promise to the AMA, he insisted that hospital-based specialists — pathologists, radiologists, and anesthesiologists — who had typically been salaried employees, would instead be paid fee-for-service under Part B. This single provision transformed the financial incentives for an entire stratum of medicine overnight. These were doctors who had previously earned fixed salaries regardless of how many tests they ordered or procedures they performed. Now they were paid per service. The volume of services increased accordingly.

The irony, as Chaudhary documents meticulously, was that the physicians who had most loudly opposed Medicare through the AMA — the community-based private practitioners — were the ones who benefited most from its passage. By 1970, most doctors not only accepted Medicare but, in the words of medical historian Ira Rutkow, “considered it a financial pot of gold.” Paul Starr identified the core mechanism precisely: “Since under fee-for-service, doctors and hospitals make more money the more services they provide, they have an incentive to maximize the volume of services. Third-party, fee-for-service payment was the central mechanism of medical inflation.”

President Nixon tried to explain the cost explosion as a supply problem — Medicare had increased demand without increasing the supply of providers and facilities. This explanation was politically convenient and factually wrong. In the twenty years after World War II, the Hill-Burton Act alone had generated 9,200 new hospitals, nursing homes, rehabilitation centers, and outreach clinics. The healthcare workforce had grown by 225 percent between 1950 and 1970, while the general population grew only 34 percent. Supply had increased dramatically. The problem was not inadequate supply. The problem was an incentive structure that rewarded unlimited volume with unlimited payment — and called it “reasonable.”

The shift toward specialization made things worse. The percentage of American doctors identifying as specialists rose from 50 percent in the early 1950s to 80 percent by 1970. The number of approved residency positions for specialists grew from 5,000 in 1940 to 65,000 by 1970. As general practitioners became scarcer, the town physician who handled everything at moderate fees was replaced by specialists who billed separately and expensively for narrowly defined procedures. Fee-for-service payment rewarded volume and complexity, and specialists were ideally positioned to maximize both.

Actual Medicare expenditures exceeded estimates by $2 billion in the program’s first year alone. Hospital spending in 1970 reached $15.1 billion — double the original projections of $7.1 billion. The fence that Wilbur Mills had sought to build around Medicare had been demolished by provisions within the legislation itself — provisions that he had agreed to in order to get the bill passed.

Nixon Tries to Fix It: Price Controls and HMOs

The cost explosion after 1965 was so severe and so alarming that it pushed political adversaries toward the negotiating table in ways that would have seemed impossible just five years earlier. In July 1969, Nixon declared that the country faced “a massive crisis” in healthcare and that without action “within the next two or three years . . . we will have a breakdown in our medical system.” This from a Republican president who had campaigned on free markets and limited government.

Nixon’s first response was extraordinary by any measure. On August 15, 1971, he issued an executive order freezing all wages and prices in the country — a breathtaking intervention in a capitalist economy. By December 1971, the program specifically limited doctors’ fee increases to 2.5 percent annually and hospital charges to 6 percent (about half the prevailing inflation rate in medical care). When the broader price controls were lifted in January 1973, healthcare was specifically exempted, along with food, oil, and construction — industries deemed too structurally prone to inflation to release. A

Republican president was controlling doctors’ fees by executive order. The AMA was livid. But the math was undeniable.

Nixon also pursued a structural solution. On the advice of Dr. Paul Ellwood of the University of Minnesota, he promoted the Health Maintenance Organization model — capitated, prepaid coverage that gave providers a financial incentive to keep patients healthy rather than to maximize the volume of procedures performed. The HMO Act of 1973 provided federal support for HMO development and establishment. In concept, this was exactly the kind of vertically integrated, outcome-oriented model that critics of fee-for-service had been advocating since the 1930s. It was, interestingly, what the original Baylor University Hospital arrangement with the Dallas school system had looked like back in 1929 — the very founding model of what became Blue Cross.

The HMO approach had real merit. But it also had real limitations. HMOs required patients to accept narrow provider networks and referral restrictions that many found burdensome. The resentment this generated would eventually fuel the “patients’ rights” backlash of the 1990s and contribute to the managed care industry’s political difficulties. The fundamental tension between cost control and consumer choice — the same tension we saw in Part 1’s discussion of vertically integrated versus non-vertically integrated healthcare — proved as resistant to solution in the 1970s as it had been in the 1930s.

The Reform That Almost Happened: 1974

By 1974, a genuinely remarkable political convergence had taken place. Nixon proposed his Comprehensive Health Insurance Program — an employer mandate combined with a public program for the uninsured. Senator Edward Kennedy countered with a proposal for a single-payer system financed through general revenues. And Wilbur Mills — the man who had blocked national health insurance for years, who had insisted that separate trust funds rather than general revenue were the only sound basis for social insurance — signed on to co-sponsor Kennedy’s bill.

Think about what that meant. The most fiscally conservative major figure in the Medicare debate, the man who had built walls into Medicare to prevent its expansion, the man who had killed Kennedy’s proposal in committee year after year, was now willing to support a single-payer national health insurance system financed through general revenues. He had been deceived by the cost projections he’d been given in 1965. The program had blown past its estimated costs almost immediately. And he had concluded that incremental reform within the existing fee-for-service structure was not going to work.

In the basement of St. Mark's Episcopal Church in Washington, administration officials, Kennedy staffers, and Mills's people met secretly to try to bridge the gap. For a brief, genuinely remarkable moment, comprehensive national health insurance seemed possible. There were more proposals on the table than at any time since 1945 — at least thirteen of the twenty-five members of the Ways and Means Committee were sponsors of their own bills.

It fell apart for reasons that tell us something important about the limits of the possible in American politics. Kennedy, under intense pressure from organized labor, refused to accept Nixon's employer mandate structure. Labor viewed any insurance role for private carriers as unacceptable, and the senator who had championed workers' rights his entire career couldn't bring himself to override that. The Nixon administration, already weakened by Watergate, couldn't move to single-payer. No one could bridge the gap between them.

Then, in the second half of 1974, the political landscape collapsed entirely. Nixon resigned in August. Wilbur Mills became embroiled in a highly public personal scandal involving his alcoholism and an affair, and surrendered the Ways and Means chairmanship — ending one of the most consequential congressional careers of the twentieth century in the most embarrassing possible way. The moment passed.

Kennedy reflected later that his refusal to compromise with Nixon in 1974 was one of the great mistakes of his career. He would spend the rest of his Senate career trying to get back to that moment — fighting for the ACA in 2009 from a hospital bed, dying before he could see it signed into law. The reform that might have restructured American healthcare financing thirty-one years before the Affordable Care Act slipped away because organized labor wouldn't accept private insurance carriers and because a Republican president was being consumed by a criminal cover-up.

Nothin' ever changes.

How to Pass Healthcare Reform — and How Not To

The history from Truman through Nixon teaches clear lessons about what works and what doesn't in American healthcare reform. I find it useful to lay these out explicitly, because they're as relevant in 2025 as they were in 1965.

The successful approach — exemplified by Medicare and Medicaid in 1965 — follows a pattern. You identify a specific problem faced by a specific group. "We will help the elderly get hospital coverage." "We will help the poor get basic medical care." You build a broad coalition, because interest groups will spend more to fight losing something they have than to gain something new. You don't try to fix all of healthcare at once. You pick one problem, solve it for one group, and come back in fifteen years for the next piece.

This is how American healthcare reform has actually worked throughout its history. Medicare in 1965 for the elderly. Medicaid in 1965 for the poor. The Medicare Modernization Act in 2003 for seniors needing prescription drug coverage. The Affordable Care Act in 2010 for low-income self-employed individuals and others in the individual market. Each law was targeted, incremental, and carefully scoped to minimize the coalition of opposition.

The unsuccessful approach — attempted by Truman in 1946, Clinton in 1993, and every "Medicare for All" proposal — tries to address global problems rather than local or personal ones. Former Speaker Tip O'Neill's most famous observation was that all politics is local. Healthcare reform adds another layer: all healthcare is personal. When you tell people their healthcare will change, they hear threat, not opportunity. The reformers who have succeeded understood this. The ones who have failed kept forgetting it.

There's a second lesson embedded in this history that reformers consistently ignore: justifying healthcare reform with promises like "we'll bring down the cost of healthcare for everyone" or "we'll provide great coverage at lower cost for more people" has never worked. Not once. Trump promised exactly this in 2016 and 2017 — great healthcare for everybody at less cost — and it got nowhere. Clinton made essentially the same promise in 1993. Truman in 1946.

Why doesn't it work? Because the people who currently have good insurance don't believe it. They think "lower cost" means their care gets worse. They think "for more people" means longer waits and overcrowded facilities. They're not being irrational. They're protecting what they have against a promise they've heard before and don't trust. The successful reforms targeted people who didn't have something — the elderly didn't have hospital insurance in 1965, seniors didn't have prescription drug coverage in 2003 — and promised to give it to them specifically, without threatening what others had.

The Bipartisanship Problem: Why Medicare Survived and the ACA Didn't

There is one more lesson from this history that I want to linger on, because it has profound implications for the durability of any healthcare legislation.

Medicare and Medicaid passed with overwhelming bipartisan support. The final Senate vote was 68-21; the final House vote was 307-116. Republicans voted for Medicare in large numbers — not because they loved it, but because Wilbur Mills had structured it in a way that gave them something to support. Part B was their idea. Medicaid was based on their 1940s proposal. Mills had given them ownership, and that ownership translated into votes, and those votes translated into legitimacy.

The consequence of that bipartisanship has been extraordinary. In the sixty years since Medicare's passage, there have been no serious attempts to repeal it. When the Reagan administration attempted to add catastrophic insurance coverage to Medicare in 1988, the elderly revolted — they feared it would change what they had — and both chambers voted overwhelmingly to repeal it within a year. That was a case of Medicare beneficiaries protecting Medicare, not opponents attacking it. The program itself has never faced an existential threat, because both parties voted for it and both parties own it.

Now compare that to the Affordable Care Act. The final Senate vote: 60 Democrats in favor, 39 Republicans against. The final House vote: 219 Democrats and 1 Republican in favor, 39 Democrats and 176 Republicans against. Almost perfectly partisan. Not a single Republican senator voted for it. One Republican congressman voted for it and promptly faced primary challenges. The ACA was passed by Democrats, for Democrats, and Republicans had every political incentive to kill it.

The result: multiple, regular, repeated attempts to repeal, defund, or gut the law in the years following passage. More than 50 House repeal votes. A Supreme Court challenge in 2012 that came within one justice of invalidating the entire law. A second Supreme Court challenge in 2015 over subsidy language. A near-repeal in 2017 that failed by a single vote in the Senate — John McCain's famous thumbs-down. Court challenge after court challenge, because if you didn't vote for a law, you have no reason to defend it and every political incentive to attack it.

The Senate voting pattern data tells this story visually. In the 1960s, there was substantial ideological overlap between the two parties — conservative Democrats and moderate Republicans occupied a shared middle ground where compromises could be struck and coalitions assembled. By the 2010s, that overlap had essentially vanished. The most liberal Republican senator was to the right of the most conservative Democratic senator. There is no shared ground, and therefore no path to a Mills-style synthesis that gives both sides something to own.

This is what makes healthcare reform genuinely harder today than it was in 1965 — not the policy complexity, not the cost, not the special interests (though those have certainly grown), but the absence of the political bipartisanship that made Medicare's passage and survival possible. Can anyone play Wilbur Mills's role today? That would require a powerful Republican committee chairman willing to engage seriously with moderate Democrats, build consensus across party lines, and actually produce something that both sides could defend. In the current political environment, that person would face a primary challenge before the bill was signed.

The Lobbyist Explosion: Mills's Most Durable Legacy

I want to return to something I mentioned earlier about Mills's long-term impact on the private sector, because the numbers are staggering and their implications for any future reform are profound.

In 1967, two years after Medicare's passage, there were 64 registered lobbyists in Washington DC. By 2007, that number had grown to more than 15,000 registered lobbyists — plus another 100,000 "informal" lobbyists, meaning CEOs and senior executives who lobby directly without registering. Healthcare and pharmaceutical lobbying expenditures reached $560 million in 2017 alone. By 2019, the pharmaceutical industry was spending nearly $300 million annually on federal lobbying, more than any other industry sector.

The mechanism is exactly what we discussed in Part 1: organizations spend more to fight losing something they have than to gain something they don't. The gaps Mills built into Medicare in 1965 — the deliberate exclusions of dental care, long-term care, pharmaceutical coverage, and mental healthcare — created private markets worth hundreds of billions of dollars annually. Those markets have developed sophisticated, well-funded political operations to ensure they remain exactly where they are.

When Congress considered reducing drug prices during the Trump administration, PhRMA spent $145 million on lobbying in just the first six months. The pharmaceutical industry made six-figure campaign contributions to the Speaker of the House, the Chairman of the House Energy and Commerce Committee, and the Chairman of the Senate Finance Committee — the three people with the most control over drug pricing legislation. No drug price reduction legislation passed. This is not cynicism. This is the documented, publicly available record of American democracy in the healthcare arena.

Steven Brill, in his book Tailspin, documented how well-financed business lobbies hire extraordinarily creative attorneys to challenge every clause of any reform legislation, generating the kind of legal complexity that explains why the Affordable Care Act ran to more than a thousand pages. Every paragraph had to be written defensively, anticipating the specific legal challenges that specific industries would mount. The ACA's complexity wasn't incompetence. It was the price of trying to legislate in an environment where every provision will be immediately challenged by entities with unlimited legal resources.

The contrast with 1965 is instructive. Medicare passed because Mills was able to move quickly, build a coalition before opposition could fully mobilize, and exploit a rare political window — a landslide election that briefly gave reformers overwhelming congressional majorities. By 1971, there were already 175 firms with registered lobbyists in Washington; by 2016, that number had grown to 1,400. By 2017, there were 2,353 business-affiliated Political Action Committees. The window that Mills exploited in 1965 no longer exists, and the forces that would oppose any similar effort have grown enormously stronger.

Medicare's Structural Flaws: What the History Built

All of this history — the political compromises, the accommodations to organized medicine, the intentional gaps, the absence of cost controls — left Medicare with structural features that persist today and that explain much of what is frustrating about the program.

The most consequential is the fee-for-service payment system at the core of Parts A and B. As we noted, Congress agreed in 1965 that it had no authority to supervise or control the compensation of medical providers. That principle, embedded in the law itself, made Medicare an open-ended payment commitment with no mechanism to resist provider-driven inflation. The "customary, prevailing, and reasonable" standard was gamed immediately and comprehensively by the medical profession.

Subsequent reforms have tried to retrofit cost controls onto a structure never designed to have them. The 1972 Medicare amendments strengthened the reimbursement standards. The Prospective Payment System introduced in 1983 replaced cost-based hospital reimbursement with fixed diagnosis-related group (DRG) payments — a genuinely significant step toward price discipline. Resource-Based Relative Value Scales, introduced in 1992, attempted to rationalize physician fee schedules. Each reform was, in effect, an attempt to build retroactively the cost controls that should have been in the original 1965 bill.

The absence of an out-of-pocket maximum in traditional Medicare Parts A and B — which means that a severely ill beneficiary faces theoretically unlimited financial exposure — is a direct legacy of Mills's deliberate design. He built that gap to create market space for private Medigap insurance. Today, approximately 80 percent of traditional Medicare beneficiaries purchase some form of supplemental coverage, paying additional premiums to fill the holes Mills built. In 2019, Medicare's own estimate for the average annual cost of premiums plus out-of-pocket costs in the Boston zip code 02375 was $8,100. That's not free healthcare. It's expensive healthcare with an additional layer of insurance on top.

The Part C Medicare Advantage program — which by 2024 enrolled more than half of all Medicare-eligible beneficiaries — is in some ways the most successful and most troubling feature of the current Medicare landscape. It is successful because it provides the out-of-pocket cap that traditional Medicare lacks, often includes dental, vision, and hearing benefits, and charges no additional premium. It is troubling because the Medicare Payment Advisory Commission has consistently found that Medicare Advantage plans are overpaid relative to what traditional Medicare would spend on the same beneficiaries — sometimes by 20 percent or more. Plans achieve this through a combination of favorable risk selection (enrolling healthier beneficiaries), upcoding of diagnoses to make enrollees appear sicker than they are, and prior authorization restrictions that limit care. The government pays more; patients may or may not receive more care; the insurance carriers extract the difference as profit.

Part D's history is, in some ways, the clearest example of the lesson not being learned. When prescription drug coverage was added in 2003 under the Medicare Modernization Act, Congress explicitly prohibited CMS from negotiating drug prices with pharmaceutical manufacturers — the exact same "no government supervision or control" principle that had been embedded in the original 1965 law. Medicare was simply required to accept whatever prices drug manufacturers charged, with a formula of "average sales price plus 6 percent" that effectively guaranteed profit margins. The cost of cancer medication alone ballooned from $3 billion in 1997 to $11 billion in 2004 and continued rising.

The original Part D benefit structure was so Byzantine that it defied comprehension. The so-called "donut hole" — a coverage gap in which beneficiaries who had spent a certain amount on drugs suddenly owed full retail prices before catastrophic coverage kicked in — was not a design feature. It was the result of fitting the benefit into a predetermined budget constraint without thinking seriously about what it meant for actual beneficiaries. As a description of the 2019 benefit, the Wikipedia entry — which I once used verbatim in a lecture and then put up a slide that said "that's as clear as mud" — ran to several hundred words of interlocking thresholds, percentages, and exceptions that most beneficiaries could not follow even with help.

The Inflation Reduction Act of 2022 finally authorized CMS to negotiate drug prices directly — a change blocked for nearly twenty years by pharmaceutical industry lobbying. It also capped Medicare beneficiaries' annual out-of-pocket drug costs at $2,000 beginning in 2025, eliminating the catastrophic exposure that the original Part D design had created. These are genuine improvements. They are also, in historical terms, the corrective measures that should have been built into the original 2003 bill, just as the 1972 and 1983 payment reforms were corrective measures that should have been in the 1965 bill.

The pattern is consistent: design a major Medicare benefit without adequate cost controls because the political environment makes cost controls impossible, watch the costs explode, spend the next decade retrofitting controls that work imperfectly because they're fighting against the incentive structure baked into the original design. Repeat.

So Where Does This Leave Us?

Congressman Claude Pepper served in both the US House and Senate between 1936 and 1989 — five decades straddling the entire Medicare debate, from FDR's New Deal through Reagan's second term. Paul Starr, in his history of American medicine, recounts what he called "a conversation at the Pearly Gates" in which God allowed Pepper to ask any question he wished before entering heaven. Pepper asked whether the United States will ever get real healthcare reform.

Yes, God responsed. But not in my lifetime.

Pepper died in 1989. He had watched seventy years of attempts, failures, partial victories, and reversals. He remained convinced that reform was possible and that it would eventually come. But he understood that the forces arrayed against it were deeply entrenched, that the political system was structurally resistant to comprehensive change, and that healthcare reform requires patience measured in decades rather than election cycles.

For health insurance professionals — the brokers and agents reading this text — this history is not merely background. It is operational context. Your clients navigate a system whose complexity, gaps, and cost structure are the direct products of the political compromises described in this chapter. The reason Medicare doesn't cover dental care is Wilbur Mills's 1965 design decision. The reason Medigap premiums exist is that same design decision. The reason Medicare Advantage exists is the managed competition theory of the 1990s, grafted onto a program that was designed with entirely different assumptions. The reason Part D is complicated is that it was designed to fit a political deal rather than to serve beneficiaries efficiently.

Understanding this is not just intellectually satisfying. It helps you explain to clients why their Medicare experience is the way it is, why the gaps are where they are, and why the supplements and Advantage plans that fill those gaps exist in the forms they do. The Medicare your clients encounter is not a rationally designed healthcare system. It's the accumulated scar tissue of sixty years of political battles, each of which left a mark on the program's structure.

Our healthcare system, by any serious comparative measure, does not work well. We spend twice as much per capita as other wealthy countries. We live shorter lives. We leave significant portions of our population inadequately covered. We tolerate waste — somewhere between one-quarter and one-third of all spending by most credible estimates — that other systems have reduced or eliminated. We have had essentially the same political arguments about how to fix this since 1945, using essentially the same talking points, with essentially the same outcome: incremental progress at enormous political cost, followed by decades of attempts to reverse it.

I don't say this to depress you. I say it because I think the people who read continuing education materials for health insurance professionals deserve honest analysis, not cheerful propaganda about the genius of the American healthcare market. The market has delivered remarkable innovations, genuine medical advances, and world-class care for those who can afford it and navigate it successfully. It has also delivered the most expensive, most administratively complex, and least equitable healthcare system in the developed world for everyone else.

Wilbur Mills was a brilliant legislator who built a program that has now served 68 million Americans for sixty years. He also built a program that was structurally designed to resist cost control, that excluded benefits deliberately to protect private markets, and that created incentive structures that took decades of painful reform to begin to correct. Both things are true simultaneously. That's a reasonably accurate summary of American healthcare policy in general: remarkable achievements, extraordinary costs, and a political system that makes meaningful reform extraordinarily difficult.

Maybe Claude Pepper was right. Reform will come. And maybe God was also right….it won't come in our lifetimes.

Endnotes for Part 2: Medicare

[1] Centers for Medicare & Medicaid Services, *National Health Expenditure Accounts*, 2024; CMS, *Medicare Enrollment Dashboard*, 2025. The 68 million beneficiary figure includes both aged (65+) and disabled enrollees. The $1.118 trillion figure represents total Medicare outlays from all trust funds and general revenues.

[2] Centers for Disease Control and Prevention, National Center for Health Statistics, *National Vital Statistics Reports: United States Life Tables*, 2024 (reporting final 2022 data). Figures cited represent period life expectancy estimates, which differ from cohort life expectancy.

[3] OECD, *Health at a Glance 2023*; Peterson-KFF Health System Tracker, "How does health spending in the U.S. compare to other countries?" updated 2024. The comparator group consists of Australia, Austria, Belgium, Canada, France, Germany, Japan, the Netherlands, Sweden, Switzerland, and the United Kingdom — the same basket used throughout this text. Life expectancy at age 65 figures are from the most recent OECD final data year available.

[4] CMS, *2025 Medicare Parts A & B Premiums and Deductibles*, October 2024. The Part A deductible applies per benefit period, not per calendar year; a beneficiary hospitalized multiple times in a year may pay multiple deductibles. The Hospital Insurance Trust Fund solvency analysis is updated annually in the *Medicare Trustees Report*; the 2024 report projected insolvency of the HI Trust Fund by 2036 under current law.

[5] CMS, *2025 Medicare Parts A & B Premiums and Deductibles*, October 2024. Standard Part B premium is $185.00/month; IRMAA surcharges apply to beneficiaries with modified adjusted gross income above $106,000 (individual) or $212,000 (joint). The 75 percent general revenue subsidy is established by statute at 42 U.S.C. § 1395r.

[6] MedPAC (Medicare Payment Advisory Commission), *Report to the Congress: Medicare Payment Policy*, March 2024; MedPAC, *Data Book: Health Care Spending and the Medicare Program*, June 2024. MedPAC has reported overpayment estimates ranging from 6 to 22 percent depending on methodology and year. The 32.8 million Medicare Advantage enrollment figure is from CMS enrollment data, April 2024.

[7] CMS, *Medicare Part D Enrollment and Plan Characteristics*, 2025. The $2,000 annual out-of-pocket cap was established by the Inflation Reduction Act of 2022 (Pub. L. 117-169) and took effect January 1, 2025. The financing percentages (73% general revenues, 14% premiums, 12% state payments) are from the 2024 Medicare Trustees Report.

[8] Wilbur Cohen, quoted in Theodore Marmor, *The Politics of Medicare*, 2nd ed. (Aldine de Gruyter, 2000), p. 47. The Mills synthesis is also described in detail in Julian E. Zelizer, *Taxing America: Wilbur D. Mills, Congress, and the State, 1945–1975* (Cambridge University Press, 1998), and in the Chaudhary thesis cited at footnote 34 above.

[9] Lyndon B. Johnson, remarks at the signing of H.R. 6675 (Medicare and Medicaid), Independence, Missouri, July 30, 1965. Harry S. Truman Presidential Library & Museum, Public Papers.

[10] Paul Starr, *The Social Transformation of American Medicine* (Basic Books, 1982), pp. 374–378. The "customary, prevailing, and reasonable" standard is analyzed extensively in Starr and in Stuart Altman and David Shactman, *Power, Politics, and*

Universal Health Care (Prometheus Books, 2011). Robert Ball's acknowledgment of implementation naivety appears in Wilbur J. Cohen and Robert M. Ball, oral history interviews collected by the Social Security Administration History Archive.

[11] Ira Rutkow, *Seeking the Cure: A History of Medicine in America* (Scribner, 2010), p. 211. Paul Starr, *The Social Transformation of American Medicine*, p. 384. The fee-for-service volume incentive analysis draws on both sources.

[12] Richard Nixon, special message to Congress on health care, February 18, 1971; Nixon Administration Health Strategy documents, National Archives. Cost data from CMS National Health Expenditure Accounts historical tables. The Hill-Burton hospital construction statistics and healthcare workforce growth figures are from Starr, *The Social Transformation of American Medicine*, pp. 348–351, and from AHA Hospital Statistics, various years.

[13] Theodore Marmor, *The Politics of Medicare*, pp. 88–94; Zelizer, *Taxing America*, chapters 9–10; Chaudhary, "The Cost of the Benefit," pp. 34–42. Kennedy's 1974 self-assessment of the compromise failure appears in multiple sources; see Adam Clymer, *Edward M. Kennedy: A Biography* (William Morrow, 1999), pp. 218–222.

[14] Voting records: Final Senate vote on H.R. 6675, July 9, 1965 (68–21); Final House vote, July 27, 1965 (307–116). Congressional Record, 89th Congress, 1st Session. The bipartisan vote totals are from the Office of the Historian, U.S. House of Representatives.

[15] OpenSecrets.org, "Lobbying: Health Sector," 2019; Center for Responsive Politics, historical lobbying data. The 64 lobbyist figure for 1967 is widely cited and appears in Steven Brill, *Tailspin* (Knopf, 2018), p. 6. The 15,000 registered lobbyist figure for 2007 is from the Senate Office of Public Records and is consistent with multiple secondary sources. PhRMA lobbying expenditure data are from OpenSecrets.

[16] MedPAC, *Report to the Congress: Medicare and the Health Care Delivery System*, June 2024 (overpayment and risk selection analysis); MedPAC, *Report to the Congress: Medicare Payment Policy*, March 2024 (prior authorization and upcoding). The 80 percent Medigap/supplement enrollment figure is from KFF, "Medigap (Medicare Supplement Insurance): A Primer," November 2023.

[17] CMS, *Medicare Part D Drug Spending Dashboard*, 2024; CBO, *Prescription Drug Pricing and Spending*, 2023. Cancer drug cost figures are from Sulmasy et al., "The Ethics of Cancer Drug Pricing," *Journal of Clinical Oncology*, 2018, citing NCI pharmaceutical expenditure data. The Inflation Reduction Act drug pricing negotiation authority is at Pub. L. 117-169, Section 11001.

[18] Paul Starr, *Remedy and Reaction: The Peculiar American Struggle over Health Care Reform* (Yale University Press, 2011), p. 294. The "Pearly Gates" anecdote involving Claude Pepper appears in Starr's epilogue. Pepper's congressional service (1936–1941 as senator from Florida; 1963–1989 as congressman from Florida) spanned the entire Medicare legislative era.

Part 3: Medicaid

The Program Nobody Loves — And Almost Everyone Needs

Before we discuss how Medicaid works, let's establish where it sits in the landscape of American healthcare financing. The three major coverage systems — employer-sponsored insurance, Medicare, and Medicaid — are often discussed separately, as if they were competitors. They are not. They are successive layers of a single dysfunctional system, each designed to cover the people the previous layer left out. The numbers tell the story clearly.

The Three Major Coverage Systems at a Glance (FY 2024)

Program	Enrollees	Total Spending (FY2024)	Federal Cost Per Beneficiary/Year
Employer-Sponsored Insurance (ESI)	~165 million	~$1.4 trillion*	~$8,500 (employer + worker share)
Medicare	~67 million	~$1.0 trillion	~$15,000 (federal share ~$14,000)
Medicaid / CHIP	~70–80 million	~$970 billion	~$8,400 (federal share ~$6,000)

** ESI total spending includes both employer and employee premium contributions plus out-of-pocket costs. Per-beneficiary figures are approximate and reflect total program cost, not individual out-of-pocket exposure.*

Several things leap out from this comparison. First, Medicaid's per-beneficiary cost is substantially lower than Medicare's despite serving a population with significant health needs — a consequence of Medicaid's basement-level payment rates to providers, which we will examine in detail. Second, Medicaid's total spending rivals Medicare's, making it one of the largest public expenditure programs in American history, yet it receives a fraction of Medicare's political attention. Third, and most importantly for purposes of this chapter: Medicaid covers as many Americans as Medicare and does so at roughly 55 cents on the federal dollar compared to Medicare's spending per beneficiary.[3]

These are not the numbers that come to mind when most people think of 'welfare medicine.' And yet that stigma — welfare medicine, second-class care for second-class people — has governed Medicaid's political fortunes for sixty years. Understanding why requires understanding where the program came from.

The Third Layer of the Three-Layer Cake: Where Medicaid Came From

We've already discussed the moment in March 1965 when Wilbur Mills synthesized three competing healthcare proposals into a single bill: the Democrats' hospital coverage for the elderly became Part A of Medicare, the Republicans' voluntary physician coverage became Part B, and — here is the part that almost always gets lost in the retelling — the AMA's expansion of the Kerr-Mills program became Medicaid.

That parenthetical treatment in most histories tells you something important about how Medicaid has always been perceived. Medicare was the main event: the culmination of twenty years of political struggle, the program Truman had fought for, the one that provoked Ronald Reagan's famous recording about the death of American freedom. Medicaid was, in the minds of most of its creators and opponents, the consolation prize for the poor — a program to take care of people who didn't matter enough politically to get the program they deserved.

But to understand why Medicaid was structured as it was — and why it retains that structure today — we need to go back a bit further than 1965.

The political battles of the 1940s and 1950s that we described in the Medicare chapter had a specific consequence for the poor that is easy to miss in the larger narrative. When Truman's universal health insurance proposal died in the early 1950s, reformers narrowed their ambitions to covering the elderly. The strategic logic was defensible: the elderly were visibly suffering, had obviously paid their dues through a lifetime of work, and were least able to protect themselves through private markets. They were, in the political vocabulary of the era, the 'deserving poor.'

This left the non-elderly poor — working-age adults, children, single parents — in a healthcare financing limbo that persisted throughout the 1950s. The medical establishment had successfully blocked universal coverage. The employer-based system that was expanding rapidly after World War II left out the unemployed, the part-time employed, and the working poor. And the political coalition that would have pushed for coverage of these groups — labor unions, civil rights organizations, urban Democrats — was focused on the elderly fight and on other pressing legislative priorities.

The solution that emerged in the early 1960s was Kerr-Mills, the program that would become Medicaid's direct predecessor. Passed in 1960, it provided federal grants to states for 'medically indigent elderly' — not the poorest of the poor, but people who became impoverished as a result of medical expenses. It was conceived by Wilbur Mills and Senator Robert Kerr of Oklahoma as a political compromise designed to forestall the hospital coverage bill: give states something to help the medical poor, make it voluntary, let states set their own eligibility rules, and perhaps the pressure for federal hospital insurance would dissipate.

It was, by any honest assessment, a failure. More than 90 percent of Kerr-Mills funding flowed to just five Northern states, because Southern states imposed race-based eligibility restrictions that effectively excluded their Black elderly populations. The program was structured as a state option with federal matching funds — a design chosen specifically because it gave states the flexibility to discriminate without federal interference. Two-thirds of the elderly remained without meaningful protection. The political pressure for Medicare, far from dissipating, intensified.

When Wilbur Mills synthesized the three competing proposals in March 1965, the AMA's Eldercare proposal — an expansion of Kerr-Mills providing voluntary coverage for the poor — became the third layer of his cake. It was broadened, renamed Medicaid, and made somewhat more mandatory in its minimum requirements. But it retained Kerr-Mills's fundamental architecture: a federal-state partnership in which the federal government set minimum standards and provided matching funds, and states designed and administered their own programs within those parameters.

The consequence of that architectural choice is the single most important thing to understand about Medicaid: it is not one program. It is fifty-plus programs — one per state plus the District of Columbia and the territories — each with its own eligibility rules, benefit packages, payment rates, and administrative structures, all loosely bounded by federal law and subject to CMS approval. Whether you are eligible for Medicaid, what it covers for you, and whether you can actually find a doctor who will see you depends — to a degree that has no analogue in Medicare or Social Security — on which state you live in.

How Medicaid Is Financed: The Federal Match and the State Budget Trap

Medicaid is financed through a federal-state matching structure. The federal government pays a share of each state's Medicaid costs, and the state pays the remainder. That federal share — called the Federal Medical Assistance Percentage, or FMAP — varies by state according to per-capita income: poorer states receive a higher federal match, wealthier states a lower one.

The formula runs from 50 percent federal matching in wealthier states like Connecticut, Massachusetts, and New York — meaning the state and federal government each pay half — to roughly 78 percent in Mississippi and other lower-income states. For the population added by the ACA's Medicaid expansion, the federal match is 90 percent for all states regardless of wealth. Simple enough in principle; in practice, the term '50/50 split' is a shorthand that obscures considerable variation. What is consistent is the structure: this is emphatically a shared program, not a purely federal one.[4]

For states, this matters enormously. Medicaid is typically the largest or second-largest line item in state budgets, consuming roughly 25 percent of total state spending in most states — edging out or trading places with K-12 education depending on the year and the state. This is not an accident of program design. It is the predictable consequence of an entitlement program whose enrollment expands automatically in recessions (when people lose jobs and income) at exactly the moment state revenues are contracting. Medicaid is countercyclical by design: it costs states the most when they can least afford it.

Governors of both parties are acutely aware of this. Whatever their views on healthcare policy in the abstract, governors have a very concrete interest in the federal matching formula, because changes to it translate directly into multi-billion-dollar adjustments to their budgets. This fiscal interdependence is one of the principal reasons that proposals to convert Medicaid to a fixed block grant — which surfaces in Republican healthcare proposals roughly every decade — have consistently failed to attract governor support even from Republican governors. Block grants shift fiscal risk from the federal government to states. When a pandemic arrives or a recession deepens and Medicaid enrollment surges by 20 percent, a block-granted state is holding the bill alone. Governors understand this in their bones, regardless of what they say at partisan conferences.

The CMS approval requirement adds another dimension to the federal-state relationship. States have genuine flexibility to design their Medicaid programs — setting income eligibility thresholds within federal minimums, choosing which optional benefits to include, determining provider payment rates above federal floors, and structuring delivery systems — but significant changes require federal approval through a process that can be contentious, politically inflected, and slow. The practical result is a program that is neither purely federal nor purely state, neither uniform nor fully decentralized, but something awkward in between — which is, of course, exactly how it was designed.

Who Medicaid Covers: Eligibility, Income Limits, and Sixty Years of Political Drift

Medicare's eligibility rule is simple: 65 and paid into Social Security, you're in. Medicaid's eligibility rules are the opposite of simple. They are, in fact, a reasonably accurate map of sixty years of political compromises, ideological battles, and incremental expansions — each of which added a new category without quite rationalizing the underlying structure.

The original 1965 Medicaid structure covered 'categorically needy' populations — people who were both poor and fell into one of the categories Congress deemed deserving:

- Families receiving cash welfare assistance (Aid to Families with Dependent Children, or AFDC)
- Elderly people poor enough to qualify for means-tested old-age assistance
- Blind individuals
- Permanently and totally disabled individuals

Notice what this list excludes: non-elderly, non-disabled adults without dependent children. A healthy 35-year-old working part-time for $18,000 a year with no employer coverage wasn't eligible for Medicaid in 1965. He wasn't elderly, disabled, or a parent receiving cash assistance. He was just poor and uninsured — and in 1965, that was not sufficient. The 'deserving' vs. 'undeserving' distinction that has always defined welfare politics in America was built directly into Medicaid from the start.

The income limits that determine eligibility are expressed as percentages of the federal poverty level — a number that Congress periodically adjusts, though rarely as fast as actual costs rise. In 2024, the federal poverty level for a single adult is approximately $14,580 per year; for a family of four, about $30,000. Medicaid eligibility thresholds in non-expansion states for various categories hover near or below 100 percent of FPL. The ACA expansion, in the 40 states that adopted it, extends eligibility to 138 percent of FPL for adults regardless of family status.

These thresholds are not fixed in any principled sense. They move in response to political pressure, fiscal conditions, and the ideological composition of state legislatures and the federal government. The history of Medicaid income limits is largely a history of incremental expansion under Democratic administrations and pressure to tighten under Republican ones — with occasional cross-party surprises, as when Republican governors in expansion-reluctant states eventually accepted the ACA expansion because hospital systems in their states were absorbing unsustainable uncompensated care losses.[2]

The Affordable Care Act was designed to rationalize all of this by creating a single national Medicaid eligibility standard: 138 percent of the federal poverty level for all non-elderly adults. And then the Supreme Court intervened.

National Federation of Independent Business v. Sebelius, decided in June 2012, held that the federal government could not coerce states into accepting the Medicaid expansion by threatening to cut off all existing Medicaid funding. The expansion had to be voluntary. As of 2024, 40 states and D.C. have adopted it; 10 states — primarily in the South — have declined. Approximately 1.9 million Americans remain in the coverage gap: too poor for marketplace subsidies, which begin at 100 percent of FPL, but ineligible for Medicaid in their states. These people are not uncovered because no one thought of them. They are uncovered because their state governments made a deliberate choice to leave them uncovered when coverage was offered at 90 percent federal expense.[6]

Work Requirements: Political Philosophy Dressed as Public Policy

Among the most contested features of modern Medicaid policy is the work requirement — the condition that non-elderly, non-disabled adult beneficiaries must demonstrate employment, job training, or community service in order to maintain eligibility. Work requirements have been a recurring Republican policy priority since at least the 1990s, intermittently implemented through federal waiver authority, and consistently reversed or reinstated depending on which party controls the executive branch.

The policy rationale is straightforward as a statement of political philosophy: public benefits should be conditional on effort and self-sufficiency. If you are capable of working, you should work as a condition of receiving assistance. This is a coherent value position, and it has broad public appeal when stated at this level of abstraction.

The implementation reality is considerably messier. Work requirements in practice have never been simple binary conditions — are you working, yes or no? They have evolved into elaborate reporting and documentation systems that require beneficiaries to log hours, submit verification, meet deadlines, navigate websites, and satisfy bureaucratic requirements that would challenge middle-class people with reliable internet access and office experience, let alone people juggling multiple part-time jobs, unreliable transportation, and limited administrative capacity.

And the requirements ratchet. Each iteration of work requirement policy tends to be stricter than the last — more hours required, more categories of acceptable activity specified, more documentation demanded, tighter reporting deadlines. The practical effect of each ratchet is not primarily to identify people who are genuinely not meeting the work standard. It is to identify people who are meeting the standard but cannot navigate the paperwork to prove it. The Arkansas work requirement, implemented in 2018 and subsequently blocked by federal courts, resulted in approximately 18,000 people losing Medicaid coverage — the majority of whom, follow-up research found, were actually working or engaged in qualifying activities and simply failed to comply with the reporting requirements in time.

The most revealing test of what work requirements are actually for — as opposed to what they claim to be for — is their intersection with the nursing home population.

Medicaid is the primary payer for nursing home care in the United States, covering approximately 43 percent of all long-term care spending. The residents of nursing homes are, self-evidently, not capable of meeting a work requirement. They are elderly, severely disabled, or both. No one seriously proposes requiring nursing home residents to demonstrate employment as a condition of their Medicaid coverage.

But here is the thing: the same political movement that most enthusiastically advances work requirements as a condition of Medicaid eligibility is the same movement that most strenuously opposes any reduction in Medicaid's nursing home coverage. The program that is simultaneously welfare for the undeserving poor and the nursing home benefit for middle-class families that have spent down their assets is not well served by a political philosophy that applies its principles selectively — stringent conditions for the working poor, no conditions for the institutional elderly.

This inconsistency does not go unnoticed by policy analysts, though it rarely surfaces in political debates. What it reveals is that work requirements are not, at their core, a policy instrument designed to improve employment outcomes. They are a mechanism for reducing Medicaid enrollment — politically defensible because the people removed from the rolls are not sympathetic constituencies and rarely reappear in the political narrative. The families in nursing homes covered by Medicaid? Those families vote. Those families donate to political campaigns. Their coverage is sacred. The 35-year-old home health aide earning $22,000 a year who missed the reporting deadline? Her coverage is the target.

Children, Families, and CHIP: The Programs Most People Have Never Heard Of

When people think of Medicaid recipients, they tend to picture adults — either poor adults seeking basic medical care or elderly people in nursing homes. The actual enrollment data tell a different story. Children are the largest single eligibility group in Medicaid, representing approximately 40 percent of total enrollment, and the programs designed specifically for children and families represent some of the most effective healthcare interventions in the American system.

The Children's Health Insurance Program — CHIP — was created in 1997 as Title XXI of the Social Security Act, primarily through the efforts of Senator Edward Kennedy and Senator Orrin Hatch, in one of those genuinely bipartisan moments that become rarer with each passing decade. CHIP covers children in families with incomes too high for Medicaid but too low to afford private insurance — roughly 200 to 300 percent of the federal poverty level in most states, though states have flexibility here as well. As of 2024, CHIP covers approximately 7 million children.

The joint Medicaid/CHIP system for children is, collectively, the largest source of health coverage for children in the United States. Approximately 40 million children receive coverage through Medicaid or CHIP — more than through employer-sponsored insurance, more than through any other single source. These programs are the primary reason that the uninsured rate among children in the United States is substantially lower than among adults: roughly 5 percent of children are uninsured compared to roughly 10 percent of non-elderly adults.

The mandatory benefit for Medicaid-covered children is EPSDT — Early and Periodic Screening, Diagnostic, and Treatment. EPSDT requires that every child enrolled in Medicaid receive comprehensive periodic screenings: physical examinations, immunizations, vision and hearing tests, dental services, developmental and behavioral assessments. And here is the feature that makes EPSDT genuinely distinctive: if a screening identifies a condition requiring treatment, the state must cover that treatment regardless of whether it is otherwise included in the state's Medicaid benefit package.

Most health insurance benefits are defined by what they cover. EPSDT is defined by what children need. For the roughly 40 million children enrolled in Medicaid, this benefit represents a standard of care that most privately insured Americans simply don't have access to. A privately insured child whose behavioral assessment reveals a developmental disorder is covered for what the insurance plan covers. An EPSDT-covered child is covered for what the child needs.

For single parents, the Medicaid eligibility landscape is somewhat more complex. The original 1965 Medicaid structure was built around the Aid to Families with Dependent Children (AFDC) welfare program — families receiving AFDC cash assistance were automatically eligible for Medicaid. When Congress replaced AFDC with TANF (Temporary Assistance for Needy Families) in 1996 as part of welfare reform, the automatic Medicaid linkage was severed: families could no longer lose Medicaid when they left cash welfare, but they also no longer automatically gained it. Medicaid eligibility for single parents became a separate determination based on income, creating a coverage cliff that caught many families transitioning off welfare by surprise.

The ACA's expansion was particularly significant for single parents in expansion states, because many of them had fallen into eligibility gaps — their income was above the parent Medicaid threshold but below the poverty level, making them too poor for subsidies and ineligible for Medicaid. The expansion closed most of those gaps in the 40 states that adopted it. In non-expansion states, many single parents remain in exactly this trap.

Long-Term Care: The Hidden Giant and the Middle-Class Secret

Here is the statistic that surprises most people who encounter it for the first time: Medicaid pays for approximately 43 percent of all long-term care spending in the United States. Not Medicare, which covers skilled nursing facility care only for short post-acute recovery periods. Not private long-term care insurance, whose market has contracted severely. Medicaid — the welfare program — is the primary payer for nursing home care in America.

Understanding why requires understanding what Medicare doesn't cover. Medicare's skilled nursing facility benefit pays for short-term post-acute care — rehabilitation after a hospitalization, for example — for up to 100 days under specific conditions. It does not pay for custodial care: the ongoing supervision, personal assistance, and nursing services that people with advanced dementia, severe physical disability, or other chronic conditions require indefinitely. Private long-term care insurance would cover this, but the market has contracted sharply over two decades as insurers have found the products actuarially difficult to price, and most Americans never purchased it even when it was more readily available.

What happens to the middle-class couple when one of them develops Alzheimer's and requires nursing home care at $110,000 or more per year? The answer, for most of them, is a process called spend-down. As medical and long-term care expenses deplete their assets, they become eligible for Medicaid once their countable assets fall below the state's threshold — typically around $2,000 for the individual requiring care, with somewhat more protection for the community spouse who remains at home.

The spend-down process has implications that most families don't discover until they are in the middle of it. Medicaid's 'look-back' rules — typically covering the five years before application — examine any transfers of assets below fair market value and can render the applicant ineligible for periods proportional to the value transferred. Families who transfer assets to children to protect them frequently find themselves ineligible for the Medicaid coverage they expected. The estate recovery requirement adds another layer: states are required by federal law to seek recovery from the estates of deceased Medicaid beneficiaries for nursing facility care and certain other services received after age 55. In plain terms, Medicaid may pay for your parent's nursing home — and then reclaim reimbursement from your parent's estate after their death.[15]

This dynamic — that Medicaid's nursing home coverage functions as a de facto long-term care insurance program for the middle class — has important political consequences. The families whose parents are in Medicaid-funded nursing homes are not poor. They are solidly middle-class Americans who spent their parents' savings on home care before the nursing home admission, watched the spend-down process, and are now depending on Medicaid to finance a benefit their parents couldn't afford to purchase privately. These families vote. They donate. They are, in aggregate, a constituency that is far more politically potent than Medicaid's welfare medicine image suggests.

This is why the otherwise puzzling political arithmetic of Medicaid cuts begins to make sense. Federal and state budget-cutters are always looking at Medicaid as a target, because it is large and because its welfare medicine constituency is relatively weak. But every time they get close to nursing home funding, they run into a different constituency — the middle-class families whose parents depend on it — that is not weak at all. The result is that Medicaid cuts tend to fall on the politically less powerful populations: working-age adults, children in optional benefit categories, optional benefits like dental and vision. The nursing home funding is the third rail that budget-cutters approach gingerly and usually leave alone.

Medicaid Payment Rates: The Access Problem Nobody Fixes

Medicaid's payment rates to providers are, in most states, the lowest of any payer in the healthcare system. We touched on this in Part 1 when we discussed the price hierarchy. Medicaid rates to physicians run nationally at about 72 percent of Medicare rates on average — with enormous state variation, from below 50 percent in some Southern states to above 100 percent in Alaska. For hospitals, the American Hospital Association estimates that Medicaid pays roughly 87 cents for every dollar of care provided, generating a system-wide annual underpayment of approximately $26.8 billion.[12]

The consequence of low payment rates is predictable: Medicaid beneficiaries face access barriers that Medicare and commercially insured patients typically don't. Between 20 and 30 percent of primary care physicians don't accept Medicaid patients; specialist acceptance rates are often lower. This gap between having coverage on paper and being able to use it is one of Medicaid's most persistent and least politically actionable problems, because fixing it requires raising payment rates, which costs money, which requires political will that is consistently absent.

The ACA attempted to address this by temporarily raising primary care Medicaid rates to Medicare levels for 2013 and 2014. The intervention worked — appointment availability for Medicaid patients measurably improved. Congress allowed the rate increase to expire. Rates fell back. Access problems resumed. We identified the solution, implemented it, confirmed it worked, and declined to continue it. If you are looking for a case study in the gap between what we know about healthcare policy and what we do about it, this is a good one.

Managed Care: Where Medicaid Actually Operates Today

If you picture Medicaid as a program where low-income patients visit a doctor who bills the state directly, you are picturing a model that was largely replaced over the past thirty years. Approximately 70 percent of all Medicaid beneficiaries today receive their care through Medicaid managed care organizations — private insurance plans that contract with states to provide Medicaid benefits for a capitated monthly payment per beneficiary.[7]

The MCO model was adopted for reasons familiar from the Medicare Advantage discussion: the promise of cost control, care coordination, and better outcomes from giving a single entity financial responsibility for complete care. Whether it has delivered on those promises is contested. There is evidence of cost reduction, particularly for high-utilizing populations. There is also evidence from state audits and federal OIG investigations that some Medicaid MCOs have generated profit by denying necessary care rather than managing it efficiently.

For health insurance professionals, the Medicaid MCO landscape matters for a practical reason: the MCOs operating in the Medicaid market in expansion states are frequently the same companies — or affiliated entities — that offer commercial plans in the individual and small group markets. Anthem, Centene, Molina, UnitedHealth — these are not Medicaid-only operators. Understanding their Medicaid operations gives you context for how they operate across lines.

The Dual-Eligible Population: Where Medicare and Medicaid Collide

Approximately 12 million Americans are simultaneously enrolled in both Medicare and Medicaid — the 'dual eligibles.' They are, almost by definition, the sickest and poorest people in the American healthcare system: elderly individuals who exhausted their assets before or after qualifying for Medicare; non-elderly people with severe disabilities who are both poor enough for Medicaid and have been on Medicare's disability track long enough to qualify.

The dual-eligible population represents approximately 18 percent of Medicare enrollment but roughly 34 percent of Medicare spending, and approximately 15 percent of Medicaid enrollment but roughly 33 percent of Medicaid spending. The most expensive people in our healthcare system are being served by two programs that are, structurally, working at cross-purposes. Medicare pays for hospitalizations; Medicaid pays for the home care that prevents rehospitalization. Medicare has no financial incentive to invest in Medicaid-covered services; Medicaid has no financial incentive to improve Medicare-covered discharge planning. The misaligned incentives are not incidental — they are the direct product of two programs designed independently, for different populations, that happen to share a constituency.

Why the Federal Government Always Tries to Cut Medicaid

There is a Washington dynamic around Medicaid that is consistent enough to be called a rule: in every major budget negotiation, from the Reagan era through the current day, Medicaid is on the cutting table. Not Medicare. Not Social Security. Medicaid. The targets rotate — sometimes it's eligibility thresholds, sometimes optional benefits, sometimes the matching formula, sometimes a block grant conversion that would shift fiscal risk to states — but the program is always the target. Understanding why requires understanding the political economy of its constituency.

Medicare has 67 million beneficiaries who are old enough to vote, who have paid payroll taxes their entire working lives, and who are deeply convinced — correctly — that they earned the program. AARP has roughly 38 million members. Senior voter turnout consistently runs 10 to 15 percentage points higher than overall adult turnout. When Medicare is threatened, the political mobilization is immediate, visible, and effective. Medicare is the third rail of American politics: touch it and you die politically.

Medicaid's constituency is structured entirely differently. Children don't vote. People with severe mental illness often can't navigate the political process. Nursing home residents may vote but are not organizing. Poor adults vote at substantially lower rates than middle-class adults — a pattern that is not a coincidence but the predictable result of the same socioeconomic disadvantages that produce Medicaid eligibility in the first place: unstable housing, unreliable transportation, work schedules that don't accommodate weekday voting, and the accumulated experience of a political system that has never been particularly responsive to their priorities.

And then there is the campaign finance dimension. Medicare beneficiaries and their families contribute to political campaigns and PACs at rates that are representative of middle-class America. Medicaid recipients, by definition, do not have discretionary income for political contributions. The healthcare industry that profits from Medicare — hospitals, insurance companies, pharmaceutical manufacturers, device makers — is among the most prolific sources of campaign contributions in American politics. The Medicaid-dependent industries — safety net hospitals, nursing home chains, community health centers — have lobbying operations, but they are outgunned.

The result is a predictable asymmetry. Politicians who propose Medicare cuts face an organized, well-funded, high-turnout constituency that will hold them accountable at the ballot box. Politicians who propose Medicaid cuts face a constituency that is large in numbers but weak in political clout — and face relatively limited organized opposition from the healthcare interests that depend on Medicaid, because those interests are less financially powerful than the Medicare-dependent healthcare complex.

The proposals to reduce Medicaid spending take consistent forms. Block grants — replacing the open-ended federal match with a fixed annual payment — transfer fiscal risk to states and cap federal exposure regardless of enrollment or costs. Per-capita caps — similar in spirit, capping federal payments per beneficiary rather than in aggregate — do the same thing more surgically. Both approaches have been proposed seriously in Republican budgets in 1995, 2003, 2011, 2017, and subsequent years. None have passed — partly because of the governor opposition described above, and partly because each attempt eventually runs into the nursing home problem and the politically potent families behind it.

What does pass, or what gets implemented through executive action when legislation fails, are the more targeted erosions: work requirements that reduce enrollment without explicitly cutting benefits, redetermination requirements that remove people for procedural failures rather than ineligibility, optional benefit eliminations that affect populations without political champions, and reimbursement rate constraints that squeeze providers and reduce access without generating the politically visible headlines that explicit eligibility cuts would produce. These are the actual mechanisms of Medicaid reduction — not dramatic legislative battles but steady administrative attrition that doesn't make the news.

What Medicaid Actually Does: The Safety Net You Don't See

It is possible to read the preceding sections — the complex eligibility rules, the low payment rates, the political vulnerability, the administrative attrition — and come away with the impression that Medicaid is a poorly functioning program barely serving its population. That impression would be wrong. What Medicaid actually does is hold the American healthcare system together at its most stressed points. Remove it, and you do not simply reduce coverage for 70 to 80 million people. You eliminate the financial foundation on which the safety net provider system rests — the public hospitals, the federally qualified health centers, the community mental health centers, the rural health clinics that treat anyone who walks through the door. Medicaid reimbursement, however inadequate, is what keeps these institutions financially viable.[17]

The research evidence on what Medicaid coverage does for health outcomes has strengthened considerably in the past decade. The most rigorous studies — including Oregon's natural experiment that randomly assigned Medicaid coverage to a waitlisted population, and longitudinal studies of the ACA's expansion — consistently show that Medicaid coverage reduces mortality, reduces catastrophic financial burden, improves chronic disease management, and increases preventive care utilization. The mortality effect is substantial: Benjamin Sommers's landmark study of Massachusetts' 2006 healthcare reform found a 30 percent reduction in all-cause mortality among newly covered adults relative to comparable adults in non-expansion states.[18]

A 30 percent reduction in all-cause mortality. Not a marginal statistical effect. A large, robustly measured reduction in the probability of dying, associated with gaining health insurance coverage. When we debate whether to expand or contract Medicaid, that is the number we are debating.

Medicaid and Health Insurance Brokers: What You Need to Know

Most clients you work with are not currently Medicaid-eligible — if they were, they wouldn't be in the market for commercial coverage. But Medicaid intersects with your work in several practical ways.

The income continuum matters for clients navigating disruptions. The ACA created a seamless coverage continuum: Medicaid up to 138 percent of FPL in expansion states, marketplace subsidies from 100 percent upward, with enhanced subsidies under the American Rescue Plan and Inflation Reduction Act making coverage affordable through 400 percent of FPL. Job loss, divorce, reduced hours, or any income disruption can move a client across the Medicaid threshold in either direction. Understanding where the threshold is and how to navigate an enrollment or disenrollment quickly and correctly is a practical skill.

The post-pandemic unwinding created a specific opportunity for brokers. When states were prohibited from disenrolling beneficiaries during the COVID-19 public health emergency, Medicaid enrollment reached approximately 93 million. When the prohibition ended in April 2023, states began redeterminations. Millions of people lost coverage — some genuinely ineligible, many due to administrative failures: wrong addresses, missed notices, procedural errors. Brokers who understood this process, could explain it to clients, and could identify which former Medicaid beneficiaries qualified for marketplace subsidies were providing genuinely valuable service. This pattern will recur whenever Medicaid policy changes rapidly.

The long-term care intersection may be the most consequential for your practice. For clients approaching retirement — particularly those in the 60 to 75 age range thinking about long-term care planning — understanding Medicaid's role is essential. The questions come up: Can I protect my house? What about my spouse's assets? How long would my savings last before I qualify? What's the five-year look-back? These questions sit at the intersection of Medicare's post-acute coverage limits, private long-term care insurance gaps, and Medicaid's spend-down and estate recovery rules. You don't need to be a Medicaid specialist to serve these clients well. You need to know enough to ask the right questions and refer to someone who is.

Where Medicaid Goes From Here

The policy debates around Medicaid's future are the same debates that have defined it for decades, with different numbers and different political actors. Block grants and per-capita caps remain the Republican structural preference; the governor opposition remains the principal obstacle. Work requirements remain a Republican priority; the courts have been a restraining force, and the research evidence on employment outcomes is mixed at best. Non-expansion state reconsideration continues slowly, driven by hospital financial pressure and ballot initiatives that bypass resistant legislatures — North Carolina in 2024, Missouri, Oklahoma, and South Dakota earlier.

The most consequential near-term uncertainty is the political durability of the ACA's enhanced marketplace subsidies, which expire at the end of 2025 without congressional action. If they expire, several million people who moved from Medicaid to marketplace coverage during the unwinding will face premium increases that may make coverage unaffordable. Some will become uninsured. Some will return to Medicaid if their income falls. The boundary between Medicaid and marketplace coverage is not a stable line — it shifts with every major federal and state policy decision.

The underlying structural question — whether Medicaid should remain a separate, stigmatized, perpetually underfunded program or should be rationalized into a more coherent public coverage system — has no near-term political answer. What is clear is that Medicaid will not disappear. Too many Americans depend on it, too many healthcare institutions depend on its reimbursement, and the middle-class nursing home constituency is too politically potent for that. What will continue is the familiar dynamic: persistent pressure to reduce it, persistent resistance from the constituencies that depend on it, and incremental change at the margins while the fundamental structure remains intact.

An Honest Assessment

Medicaid is a program that does more than most people give it credit for, at a cost that is lower per beneficiary than most people assume, while serving a population that is politically unable to advocate for itself the way Medicare's beneficiaries can.

Its structural design — the federal-state partnership, the eligibility categories, the low payment rates, the benefit variability — reflects sixty years of political compromise rather than any coherent theory of how to finance healthcare for low-income Americans. Many of its most significant limitations are features, not bugs: built in deliberately to contain costs, preserve state autonomy, or protect competing interests. Its work requirements are more about enrollment management than employment outcomes. Its nursing home coverage is the hidden subsidy to the middle class that keeps the whole political coalition from collapsing.

The evidence that Medicaid coverage improves health and saves lives is strong and growing. The evidence that Medicaid's payment structure creates access barriers is equally strong. Both are true simultaneously, because the program is trying to do a very hard thing — finance comprehensive healthcare for 70 to 80 million low-income, disabled, and elderly Americans — at a price point that is politically acceptable, which means lower than what a rational system would pay.

For health insurance professionals: Medicaid is not someone else's program. It is the largest source of healthcare coverage in the country. It funds the safety net that catches your clients when their commercial coverage fails. It will become relevant to your clients' families as they age into the long-term care system. And it is, beneath all the bureaucratic complexity, a program asking a simple question: what does a society owe its most vulnerable members when they are sick? Different people answer that differently. The political battles described in this chapter are the expression of those different answers. The question is not going away. Neither is the program.

Notes

[1] Kaiser Family Foundation, "Medicaid Enrollment & Spending Growth: FY2024 & FY2025," October 2024. Total enrollment fluctuated between 70 and 94 million during 2022–2024 as states conducted post-pandemic redeterminations.

[2] Center on Budget and Policy Priorities, "Policy Basics: Introduction to Medicaid," updated January 2025. Income thresholds are expressed as percentages of the federal poverty level and change when Congress adjusts the FPL formula or when states receive CMS approval to modify their programs.

[3] OECD Health at a Glance 2024; KFF Health System Tracker; CMS National Health Expenditure Accounts, 2024. Per-beneficiary figures are approximate and include all sources of program spending, not individual out-of-pocket costs.

[4] The FMAP formula is set annually by CMS based on per-capita income data. The 90 percent match for ACA expansion populations was a deliberate inducement to state participation. See 42 U.S.C. § 1396d(y).

[5] Title XIX of the Social Security Act (42 U.S.C. § 1396 et seq.) establishes the federal framework. CMS approval is required for significant state plan amendments, though states have significant administrative discretion within approved parameters.

[6] National Federation of Independent Business v. Sebelius, 567 U.S. 519 (2012).

[7] KFF, "Medicaid Managed Care: Key Data," 2024. In California, nearly 80% of Medicaid beneficiaries receive care through MCOs. Centene, Molina, and UnitedHealth subsidiaries are among the largest Medicaid MCO operators nationally.

[8] Congressional Budget Office, "Federal Subsidies for Health Insurance: 2024–2034," May 2024. Federal Medicaid outlays were approximately $616 billion in FY2024; state contributions added roughly $350 billion.

[9] MACPAC, "MACStats: Medicaid and CHIP Data Book," December 2024. State Medicaid spending as a share of total state spending has risen from roughly 20% in 2000 to approximately 25–29% in most states by 2024, driven by enrollment growth and medical cost inflation.

[10] The Arkansas work requirement experience — implemented under Section 1115 waiver authority, blocked by federal courts, subsequently reinstated and re-litigated — is the most thoroughly studied example of work requirement implementation. See Benjamin D. Sommers et al., "Medicaid Work Requirements in Arkansas," New England Journal of Medicine, 2019.

[11] KFF, "Medicaid-to-Medicare Fee Index," updated 2024.

[12] American Hospital Association, "Medicaid Underpayment Report," 2024.

[13] MACPAC, "Medicaid's Role in Financing Long-Term Services and Supports," June 2023. Medicaid pays approximately 43% of all LTC spending; Medicare covers 21%; out-of-pocket 11%; private insurance 7%.

[14] KFF, "CHIP Program Enrollment," 2024. CHIP was created by the Balanced Budget Act of 1997 as Title XXI of the Social Security Act, with Kennedy and Hatch as primary sponsors — a genuinely bipartisan achievement in an era of intense partisan conflict over healthcare.

[15] 42 U.S.C. § 1396p(b). Estate recovery applies to services received after age 55. The spousal impoverishment protections at 42 U.S.C. § 1396r-5 provide some protection for the community spouse.

[16] Grogan and Patashnik, "Between Welfare Medicine and Mainstream Entitlement: Medicaid at the Political Crossroads," Journal of Health Politics, Policy and Law, 2003.

[17] The Medicaid DSH (Disproportionate Share Hospital) program was created in 1981 to compensate safety net hospitals for uncompensated care. It represents one of many supplemental payment mechanisms layered onto the base Medicaid rate.

[18] Benjamin D. Sommers et al., "Changes in Mortality After Massachusetts Health Care Reform," Annals of Internal Medicine, 2014.

Part 4: The Affordable Care Act

A Monument to the Art of the Possible — and Its Limits

The Affordable Care Act was signed into law on March 23, 2010, by President Barack Obama. It is the most significant piece of healthcare legislation since Medicare and Medicaid in 1965. It is also, fifteen years later, the most contested, most litigated, most politically durable, and most misunderstood piece of domestic legislation of the past half century. It has survived two Supreme Court challenges, more than fifty House repeal votes, a near-repeal in the Senate that failed by one vote, and a presidential administration that did everything short of outright repeal to hollow it out administratively. It has not been repealed. It has not been replaced. It has been modified, expanded, and partially contracted — and it remains the operating framework for approximately 45 million Americans who get their coverage through its mechanisms.

Understanding the ACA is not optional for health insurance professionals. The exchange clients you work with, the premium tax credit calculations you help clients navigate, the essential health benefits that define what plans must cover, the rules governing underwriting and pre-existing conditions — all of this flows directly from the ACA's architecture. To understand why the individual and small group markets work the way they do, why certain products are available and others are not, why your clients face the choices they face, you need to understand what the ACA was trying to do, what it succeeded in doing, and what it left unfinished.

What it was trying to do is deceptively simple to state: expand coverage, regulate insurance markets, and begin to bend the cost curve. What it actually did is considerably more complicated, because the ACA was not designed in a laboratory. It was designed in the United States Senate, which is a very different environment.

The Intellectual Origins: A Republican Idea That Republicans Spent a Decade Trying to Kill

The central mechanism of the Affordable Care Act — the individual mandate, paired with insurance market reforms and subsidized exchanges — was not a liberal idea. It was a conservative idea. This fact is worth dwelling on, because it explains much of the political dynamics that followed the law's passage.

In 1989, Stuart Butler of the Heritage Foundation published a paper titled "Assuring Affordable Health Care for All Americans." It proposed an individual mandate to purchase health insurance — a requirement that every American obtain coverage — paired with government subsidies for those who could not afford it. The logic was explicitly conservative: if you require insurance companies to cover everyone regardless of health status, you need healthy people in the pool to make that sustainable; if you are going to require healthy people to buy insurance, you need to make it affordable; if you are going to make it affordable for low-income people, you need subsidies. The mandate was the load-bearing wall of the structure. Without it, the insurance market reforms collapse.

The Heritage proposal was enthusiastically embraced by Republican senators in the early 1990s as the conservative alternative to the Clinton administration's managed competition plan. Senator John Chafee of Rhode Island introduced the Health Equity and Access Reform Today Act of 1993, co-sponsored by eighteen Republican senators, which included an individual mandate, insurance market reforms, and means-tested subsidies. The bill went nowhere — Clinton's plan failed, the Republicans won the 1994 midterms, and healthcare reform was shelved for a decade.

But the idea survived. In 2006, Republican Governor Mitt Romney of Massachusetts signed into law the Massachusetts Health Care Reform Act — Chapter 58 of the Acts of 2006 — which implemented exactly this structure at the state level: an individual mandate, insurance market reforms, subsidized ConnectorCare plans for low-income residents, and an exchange called the Massachusetts Health Connector where individuals could purchase coverage. The Massachusetts law passed the state legislature with overwhelming bipartisan support. Romney signed it. Then-Senator Barack Obama cited it favorably as a model worth examining nationally.

When the Obama administration began developing what would become the ACA in 2009, it drew heavily on the Massachusetts model — which was, in turn, the Heritage Foundation model of 1989. The individual mandate, the exchanges, the income-scaled subsidies, the insurance market reforms: all of it traced its intellectual lineage to conservative policy think tanks and a Republican governor's signature achievement.

This matters because when the ACA passed in 2010 without a single Republican vote, the stated Republican objection was not primarily about cost or coverage — it was about the individual mandate, which they characterized as an unconstitutional federal overreach and a socialist intrusion into personal liberty. The mandate they had championed as the responsible conservative alternative to single-payer in 1993 became, seventeen years later, the hallmark of tyranny. This was not a policy disagreement. It was a political calculation. When your former position becomes your opponent's law, you oppose the law. The merits of the underlying policy become irrelevant.

Paul Starr, whose history of the ACA "Remedy and Reaction" is the best account of this period, identified the dynamic precisely: the Republicans' strategic calculation, crystallized in a December 2009 memo from then-Senator Jim DeMint, was that if Democrats passed the ACA without Republican support, Republicans could nationalize the 2010 midterm elections around opposition to the law. If they helped pass it, they owned it politically. If they opposed it entirely, they could use it against Democrats indefinitely. The substantive merits of the policy were simply not the point.

How the ACA Was Built: The Legislative Architecture

The ACA's legislative path was one of the most tortured in recent congressional history. What eventually emerged was not what the Obama administration had initially proposed, nor what the House passed, nor what any single senator had designed. It was the product of months of compromise, deal-making, near-death experiences, and the kind of last-minute parliamentary maneuvering that only happens when the stakes are existential.

The administration began with a commitment not to repeat the Clinton administration's central mistake of 1993 to 1994: developing a bill in the White House and sending it to Congress. Obama would let Congress write the bill. This had the advantage of building congressional ownership and the disadvantage of producing a bill shaped by the most parochial interests of the most politically vulnerable members. What emerged from a Senate Finance Committee process led by Chairman Max Baucus — who spent months in ultimately futile pursuit of bipartisan agreement with Republican Senator Chuck Grassley — was a bill stripped of its most ambitious elements before a single Republican vote materialized.

The public option — a government-run insurance plan that would compete with private plans in the exchanges, giving consumers an alternative to commercial carriers — was the most consequential casualty of the Senate process. The House passed a bill with a public option. The Senate Finance Committee version never included one. The public option had majority support in the country and majority support among Democratic senators. It did not have 60 votes — the threshold needed to overcome a Republican filibuster — because several moderate Democrats from states with large insurance industry presences refused to support it. It died in the Senate. It has not been revived.

The bill that finally emerged from the Senate had been shaped by a series of deals that left permanent marks on its architecture. The deal with the pharmaceutical industry, negotiated directly by the White House and the Senate Finance Committee, guaranteed that the ACA would not allow Medicare to negotiate drug prices and would not permit drug importation from Canada. In exchange, PhRMA agreed not to run the kind of advertising campaign that had helped sink the Clinton plan in 1993 to 1994. The insurance industry got the individual mandate without the public option. The hospital industry accepted modest reductions in their Medicare payment updates in exchange for expanded coverage — more covered patients through the Medicaid expansion. These were not backroom deals in the pejorative sense. They were the operational mechanics of coalition building in a system where every significant interest group has enough political power to kill legislation it opposes.

Scott Brown's special election victory in Massachusetts in January 2010 — filling the Senate seat of Ted Kennedy, who had died in August — eliminated the Democrats' 60-vote supermajority and appeared, briefly, to doom the ACA entirely. The House bill and Senate bill had not yet been reconciled. The Democrats no longer had the votes to pass a new bill in the Senate. What ultimately saved the legislation was a parliamentary maneuver: the House agreed to pass the Senate bill exactly as written — a bill House Democrats found deeply flawed — with the understanding that a separate "reconciliation" bill, which requires only 51 Senate votes, would make targeted fixes. This is how the ACA became law: a parliamentary compromise that left the final product more politically fragile than a bill passed through normal order.

What the ACA Actually Does: The Five Pillars

The ACA is, in structure, five interlocking systems. Each depends on the others. Understanding why removing one part threatens the whole is essential to understanding both why the law's opponents have had difficulty replacing it and why it has produced the results it has.

The Insurance Market Reforms. The ACA fundamentally changed the rules governing what health insurance companies can do. The most consequential prohibitions: insurers cannot deny coverage based on pre-existing health conditions (guaranteed issue); they cannot charge different premiums based on health status (modified community rating); they cannot impose annual or lifetime limits on essential health benefits; they must allow adult children to remain on parents' plans until age 26; they must cover a defined set of essential health benefits in all individual and small group plans; and they must spend at least 80 to 85 percent of premium revenue on medical claims and quality improvement rather than administrative costs and profit (the medical loss ratio requirement). These reforms are wildly popular, including among people who oppose the ACA as a whole. The prohibition on pre-existing condition exclusions consistently polls above 70 percent approval. This creates the central political paradox of ACA repeal efforts: you cannot repeal the law while keeping the popular parts, because the popular parts are financially unsustainable without the unpopular parts.

The Individual Mandate. The requirement that most Americans obtain health insurance coverage or pay a penalty tax. The mandate was the mechanism designed to make the insurance market reforms financially sustainable: if you require insurers to cover everyone at community-rated premiums, you need healthy people in the risk pool. Without them, only sick people buy insurance, premiums rise, healthy people drop out, premiums rise further — the death spiral that has historically plagued unregulated individual insurance markets. The Tax Cuts and Jobs Act of 2017 zeroed out the penalty for not having insurance, effectively eliminating the mandate's enforcement mechanism while leaving the legal requirement on the books. The Congressional Budget Office estimated this would increase the number of uninsured by 13 million by 2027 and raise exchange premiums by 10 percent. The actual effects have been less severe than projected, but the elimination of the penalty has had measurable effects on market stability, particularly in rural areas with limited insurer competition.

The Health Insurance Exchanges. The ACA created regulated marketplaces — exchanges or "marketplaces" in current terminology — where individuals and small businesses can shop for and purchase health insurance. The exchanges are not insurance companies. They are structured markets that establish rules for plan participation, require standardized plan comparisons, and administer the premium tax credit subsidies. States can run their own exchanges, use the federal exchange at healthcare.gov, or operate a hybrid. As of 2025, 20 states and Washington D.C. operate their own exchanges; the remaining 30 states use the federal platform. Exchange plans are categorized into metal tiers — Bronze, Silver, Gold, and Platinum — based on actuarial value: the percentage of average healthcare costs the plan covers. Bronze plans cover 60 percent; Silver 70 percent; Gold 80 percent; Platinum 90 percent. A separate Catastrophic category is available to young adults and those with hardship exemptions.

The Premium Tax Credits. The ACA's exchange subsidies are refundable tax credits that reduce the cost of exchange coverage for people who cannot afford it at market rates. The subsidy scales with income: at 100 percent of FPL, your maximum required contribution for the benchmark Silver plan is about 2 percent of income; at higher incomes the required contribution rises proportionally. Above 400 percent, the original ACA provided no subsidy. The American Rescue Plan of 2021 eliminated the income cap — making subsidies available at all income levels for people who pay more than 8.5 percent of income for the benchmark plan — and increased subsidy generosity across the board. The Inflation Reduction Act of 2022 extended those enhanced subsidies through 2025. If Congress does not act to extend them again, the enhanced subsidy structure expires at the end of 2025, and several million people will face premium increases that could make coverage unaffordable.

The Medicaid Expansion. The ACA's original design extended Medicaid eligibility to all adults with incomes below 138 percent of the federal poverty level — closing the gap between adults who qualified for Medicaid under old rules and the exchange subsidies. As discussed in the Medicaid chapter, the Supreme Court's 2012 ruling made the expansion voluntary. As of 2024, 40 states and D.C. have adopted it; 10 states have not. Approximately 1.9 million Americans live in the resulting coverage gap — too poor for exchange subsidies, ineligible for Medicaid in their states.

The Politics of Passage: Why It Was Partisan and Why That Mattered

The Medicare chapter discussed the Bipartisanship Problem at length, and the ACA is its most vivid illustration. The final Senate vote was 60 to 39 — every Democrat and zero Republicans. The final House vote was 219 to 212. Not a single Republican vote in either chamber.

This was not inevitable. There were Republican senators who genuinely engaged with the process in the early months — Olympia Snowe of Maine and Susan Collins of Maine being the most prominent — and who said publicly that some version of healthcare reform was necessary. The administration made substantial concessions in pursuit of their votes. The public option was dropped. The employer mandate was weakened. The minimum actuarial value thresholds were adjusted. None of it was enough, because the Republican leadership's political calculation was that passing the ACA was worse for their electoral prospects than defeating it, regardless of what was in the bill.

Senator Jim DeMint's December 2009 statement made the calculation explicit: "If we are able to stop Obama on this, it will be his Waterloo. It will break him." This was not a statement about healthcare policy. It was a statement about political strategy. Healthcare reform had become, as it always does in American politics, a proxy for larger ideological and partisan battles.

The consequence of party-line passage was predictable and predicted: a law passed by Democrats, owned by Democrats, and subject to Republican attack on every possible front for as long as Republicans had the power to attack it. More than 50 House repeal votes between 2010 and 2016. A Supreme Court challenge in 2012 that came within one justice's vote of striking down the entire law. A second Supreme Court challenge in 2015 that, if accepted, would have destroyed the individual market in 36 states. A near-repeal in the Senate in 2017 that failed by one vote. Compare this to Medicare: passed 68 to 21 in the Senate, with both parties having ownership, surviving intact for sixty years. This is what partisan passage costs.

The Individual Market Before the ACA: What the Law Was Fixing

To understand the ACA's insurance market reforms, you need to understand what the individual market looked like before them, because the memory has faded and the reforms are often described without the context that makes them comprehensible.

The pre-ACA individual health insurance market was, in most states, a market where insurers could and routinely did: decline to cover applicants with pre-existing conditions; charge substantially higher premiums to people with health problems; exclude coverage for the specific body part or condition that prompted the application; rescind coverage after a claim was filed if any discrepancy in the original application could be found; impose annual and lifetime limits on coverage that left people without insurance precisely when their medical costs were highest; and offer benefit packages that were, by current standards, deeply inadequate.

A 2009 investigation by the House Energy and Commerce Committee found that the three largest for-profit insurers had systematically rescinded coverage for nearly 20,000 people over five years, specifically targeting claims for breast cancer, heart attack, and pregnancy. The rescission process worked as follows: when a large claim was filed, the insurer's claims department would conduct a post-issuance review of the original application for any inaccuracy. Any such finding could be used to rescind the policy retroactively, leaving the policyholder responsible for all medical bills already incurred under the assumption of coverage. The investigators found that rescissions correlated so strongly with high-cost claims that they appeared to be used as a cost-management tool rather than a response to genuine fraud. This was legal. It was industry practice. It was the individual market before the ACA.

The other structural problem was the death spiral. An unregulated individual market that allows medical underwriting tends toward an equilibrium where healthy people buy cheap, medically underwritten policies, and sick people can only afford expensive guaranteed-issue policies. As more sick people enter the guaranteed-issue pool, premiums rise. As premiums rise, healthier people drop out. As healthier people drop out, the remaining pool is sicker, premiums rise further. The spiral continues until the guaranteed-issue pool contains only people who have no choice but to pay whatever it costs. New York and New Jersey, which had implemented guaranteed issue and community rating without a mandate in the 1990s, had experienced exactly this dynamic. By 2009, New York's individual market was among the most expensive in the country precisely because it had the reforms without the mechanism to prevent the death spiral. The ACA's architects knew this history and designed accordingly.

The Essential Health Benefits: What Insurance Must Cover

The ACA requires all individual and small group plans to cover ten categories of essential health benefits. Before the ACA, individual market plans could and did exclude mental health coverage, substance use treatment, maternity care, prescription drugs, rehabilitative services, preventive care, and pediatric dental and vision care. The "insurance" many people were paying for was not insurance in any comprehensive sense — it was coverage with enormous benefit gaps that would have been apparent only when the excluded condition arose.

The ten essential health benefit categories: ambulatory patient services (outpatient care); emergency services; hospitalization; maternity and newborn care; mental health and substance use disorder services; prescription drugs; rehabilitative and habilitative services and devices; laboratory services; preventive and wellness services and chronic disease management; and pediatric services including oral and vision care for children.

The EHB requirement has generated opposition from two directions. From the right, the argument is that mandating specific benefits removes consumer choice and forces people to pay for coverage they do not want — healthy 30-year-old men paying for maternity coverage being the canonical example. This argument has surface intuitive appeal and deep actuarial problems: risk pooling works because healthy people subsidize sick people, and benefit mandates ensure that everyone who will eventually need care has coverage when they do. The 30-year-old man who is certain he will never need maternity coverage is not wrong about himself but wrong about the risk pool logic that makes his own coverage affordable.

From the left, the argument is that the EHBs are inadequate: they do not include dental care for adults, vision care for adults, hearing aids, or long-term care. This is also true. The EHBs represent the political compromise between the cost of mandating benefits and the political cost of restricting coverage. Like every other feature of the ACA, they reflect the art of the possible.

For health insurance brokers, the EHB framework is practical operational knowledge. When a client asks why their plan does not cover something, the answer often involves either the EHB floor or the plan's benefit design above the floor. Understanding the boundary between required and optional benefits helps you serve clients who are confused about why their coverage works the way it does.

The Exchange Architecture: How the Marketplaces Actually Work

The ACA's exchanges were designed as regulated marketplaces that would give individuals and small businesses a structured environment to compare and purchase coverage. The design drew on the Massachusetts Connector and the Federal Employees Health Benefits Program, which has provided coverage to federal workers through a competitive, standardized selection process since 1960.

The exchange is not an insurance company. It does not take on risk. It is an administrative platform that certifies plans for participation, standardizes plan information to enable meaningful comparison, processes subsidy eligibility determinations, and interfaces with Medicaid and CHIP for enrollment coordination.

The metal tier system — Bronze, Silver, Gold, Platinum — was designed to solve the comparison problem that had plagued the individual market. Before the ACA, comparing individual plans required actuarial expertise because plans varied on every dimension simultaneously: premium, deductible, copayments, coinsurance, out-of-pocket maximum, network, and benefit coverage. The metal tiers collapse this multi-dimensional comparison into a single actuarial value metric: Bronze plans cover 60 percent of average costs, Silver 70 percent, Gold 80 percent, Platinum 90 percent. Within each tier, plans still vary in structure, but the actuarial equivalence makes tiers roughly comparable at the cost-sharing level even when the specific plan design differs.

The subsidy structure interacts with the metal tier in a specific way that is essential knowledge for exchange brokers. Premium tax credits are calibrated to the cost of the second-lowest-cost Silver plan in the consumer's rating area — the benchmark plan. The consumer's required contribution, as a percentage of income, is defined relative to this benchmark. The subsidy is the difference between the benchmark plan cost and the required contribution. The consumer can then apply that subsidy dollar amount to any metal tier plan — a less expensive Bronze plan will have a lower net premium after subsidy, possibly zero; a Gold plan will have a higher net premium than the benchmark Silver. Subsidy values vary by geography in ways that can be counterintuitive: in markets where the benchmark Silver plan is expensive, subsidies are larger; in markets where it is cheap, subsidies are smaller.

The cost-sharing reduction subsidies add another layer. CSRs reduce out-of-pocket costs — deductibles, copayments, coinsurance — for Silver plan enrollees with incomes between 100 and 250 percent of FPL. The CSR benefit is available only in Silver plans, which creates the "Silver loading" dynamic: Silver plans are disproportionately valuable for lower-income consumers because the CSR reductions can bring a Silver plan's effective actuarial value up to 87 or 94 percent — more generous than Gold or Platinum — while the premium subsidy is calibrated to the full Silver premium.

In 2017, the Trump administration stopped making CSR reimbursement payments to insurers while leaving the CSR mandate in place. Insurers responded by loading the cost of the unfunded CSRs into Silver plan premiums, which had the paradoxical effect of increasing the benchmark Silver premium, increasing premium tax credits for everyone, and making Gold plans sometimes cheaper than Silver on a net-after-subsidy basis for some income levels. This was an unintended consequence of the administration's deliberate attempt to destabilize the exchanges. It partially backfired by making coverage more affordable for some consumers, though it cost the federal government substantially more in premium tax credits than the original CSR payments would have.

The network adequacy problem is one the exchange architecture has not resolved. Exchange plans, particularly in rural areas and in markets with limited insurer competition, have often featured narrow networks that limit access to providers. A Bronze plan with a $7,000 deductible and a network that does not include the nearest specialist may be technically compliant with ACA requirements while providing substantially less real-world access than its nominal coverage suggests. This is not unique to exchange plans — employer-sponsored plans have increasingly moved to narrower networks as cost-control tools — but it is particularly acute in the individual market.

The Employer Mandate: The Dog That Did Not Bite

The ACA includes the Employer Shared Responsibility Provision — a requirement that employers with 50 or more full-time equivalent employees offer affordable, minimum value health coverage or pay a penalty. In the political debate around the ACA, the employer mandate was frequently cited as a job-killing regulation that would force employers to cut workers' hours below the full-time threshold to avoid its requirements. The Congressional Budget Office projected some reduction in full-time employment.

The reality has been considerably more muted. The employer mandate was delayed twice and the penalties, while nominally significant ($2,970 per full-time employee above 30 in 2024), are substantially lower than the cost of actually providing coverage. Many mid-sized employers have found it cheaper to pay the penalty than to offer coverage, though the inability to offer health benefits affects recruiting and retention. Large employers have almost universally continued to offer coverage regardless, because their employee relations calculations make it necessary.

The full-time equivalent calculation — which defines full-time as 30 or more hours per week — did produce some employer adjustments to workforce scheduling, particularly in retail and food service. Whether this was primarily driven by the mandate or by the broader shift toward part-time employment already underway is genuinely contested by labor economists. The mandate likely contributed at the margins to a pre-existing trend rather than causing a structural shift.

For health insurance brokers working with small and mid-sized employers, the employer mandate threshold — 50 full-time equivalents — is an important number. Employers just below the threshold have very different legal obligations than those just above it, and growth through the threshold triggers new requirements. Understanding the penalty structure, the affordability and minimum value standards, and the reporting requirements under Forms 1094-C and 1095-C is operational knowledge for brokers serving this market.

The Medicaid Expansion: Half a Bridge

The ACA's Medicaid expansion was designed to be the floor of the coverage system — covering everyone below 138 percent of FPL so that no one would fall between Medicaid and exchange subsidies. The Supreme Court's 2012 ruling converted it from a national floor into a state option, and the resulting coverage map reflects a decade of state-by-state political decisions that have nothing to do with the healthcare needs of the affected populations.

The political economy of non-expansion has been discussed in the Medicaid chapter, but the economics in the ACA context are worth revisiting. The federal government offered to pay 100 percent of the costs of expansion for the first three years and at least 90 percent permanently thereafter. No state program in the history of American healthcare financing has ever been funded at anything close to 90 percent federal share. The states that refused were, in effect, declining federal money that would flow to their poorest residents. A study published in Health Affairs estimated that non-expansion states forfeited approximately $35 billion in federal Medicaid funding between 2014 and 2022 — money that would have paid for healthcare in those states.

The coverage gap that results — people too poor for exchange subsidies, which begin at 100 percent of FPL, and ineligible for Medicaid in their states — is not a design flaw in the ACA. It is a design flaw in American federalism: a system where decisions of state officials about whether to accept federal money determine whether their poorest residents have access to healthcare.

The long-term trend is toward expansion. Non-expansion states have been losing ground steadily, driven by hospital financial pressure, ballot initiatives that bypass resistant legislatures (Oklahoma, Missouri, South Dakota, North Carolina), and the gradual exhaustion of the political argument against taking 90 percent federal funding. The 10 remaining non-expansion states as of 2024 represent the hardest core of resistance — states whose political leadership has been most committed to treating the ACA's existence as a point of principle rather than a legal fact.

What the ACA Accomplished: An Honest Accounting

The ACA's coverage results have been unambiguous. Between 2010 and 2016, the uninsured rate fell from approximately 16 percent to 8.6 percent — the largest reduction in the uninsured rate in American history. The Medicaid expansion accounted for roughly half the coverage gain; exchange subsidies for most of the rest. By 2023, despite the pandemic, despite the elimination of the individual mandate penalty, despite the Trump administration's administrative efforts to undermine the exchanges, the uninsured rate stood at approximately 8 percent — still near the historic low. Exchange enrollment for plan year 2024 reached approximately 21 million — nearly double 2020 enrollment — driven by the enhanced subsidies that made coverage affordable for middle-income consumers previously excluded by the subsidy cliff.

The insurance market reforms have been as durable as the coverage gains. Guaranteed issue and community rating remain intact. Pre-existing condition exclusions are prohibited. Lifetime limits are prohibited. The 26-year dependent coverage extension has been embraced by employers and families and faces essentially zero political opposition. The medical loss ratio requirement has returned approximately $9 billion to consumers in premium rebates since its implementation. These reforms have been absorbed into the fabric of the insurance market to a degree that makes their repeal politically unworkable — even ACA opponents who would like to repeal the mandate would not dare propose reinstating pre-existing condition exclusions in the individual market.

The ACA also made structural changes to Medicare that are often overlooked in the political debate. It created the Center for Medicare and Medicaid Innovation, which has run dozens of payment and delivery reform experiments with mixed but real results. It accelerated the transition toward value-based payment in Medicare, establishing accountable care organizations and alternative payment models that have enrolled millions of beneficiaries. It established the Hospital Readmissions Reduction Program, which penalizes hospitals with excess 30-day readmissions for certain conditions and has measurably reduced readmission rates. None of these changes are as politically visible as the exchange subsidies or the individual mandate, but they represent the ACA's most serious attempt to address the cost side of the healthcare equation.

On cost control — the third leg of the ACA's original ambition — the results have been more modest. Healthcare spending growth did moderate after 2010, but economists dispute how much of that moderation was attributable to the ACA versus the lingering effects of the 2008 to 2009 recession and secular trends in utilization. The most honest assessment is that the ACA made a serious effort at delivery system reform that has produced real but incomplete results, and that comprehensive cost control was never politically achievable given the interests arrayed against it.

What the ACA Left Unfinished

The gaps in the ACA's coverage are not accidental. They are the accumulated residue of the political deals that made the law possible.

The absence of a public option — a government-run plan that would compete in the exchanges — was the most significant structural concession. The public option would have provided competition for private plans in markets with limited insurer participation, where the exchange in some counties had only one or two carriers. It would have given consumers a benchmark against which to evaluate private coverage. It would have given the government purchasing leverage analogous to Medicare's ability to set payment rates. It was dropped because the insurance industry would not accept it and because a handful of moderate Democratic senators could veto it. The consequence is a system in which exchange competition is entirely private and markets with limited competition offer limited consumer protection.

The absence of drug price negotiation authority — the deal with PhRMA — left the exchange drug market without the leverage that every other developed country's health system uses to control pharmaceutical costs. The Inflation Reduction Act of 2022 partially corrected this for Medicare Part D. The exchange market remains without such authority.

The coverage gap in non-expansion states is the most direct evidence of the ACA's incompleteness. These are people the ACA was designed to cover, who are not covered, because a Supreme Court decision converted a national coverage expansion into a state option and ten states declined.

The cost-sharing structure of ACA plans — particularly in the Bronze tier — leaves many nominally insured people functionally underinsured. A Bronze plan with a $7,000 deductible effectively provides catastrophic coverage, not comprehensive coverage, for people who cannot afford to pay the deductible. The ACA required coverage; it did not ensure that the coverage was meaningful for low-income people who chose Bronze plans because Silver was not affordable even with subsidies. The CSR subsidies address this for people below 250 percent of FPL on Silver plans, but the gap between nominal coverage and functional access remains significant.

The dental and vision gap reflects exactly the Mills dynamic from 1965: essential health benefits explicitly exclude adult dental and vision care, creating markets for private dental and vision insurance that exist precisely because the ACA declined to require them. The ACA's architects knew this was a gap. They omitted the requirements because including them raised the cost of the benchmark plan, which raised the cost of subsidies, which threatened votes. The excluded benefits became private market opportunities. The industries that now sell dental plans and vision plans have political incentives to keep them excluded from EHBs. Sound familiar?

The 2017 Near-Repeal: What Almost Happened

The Republican Congress's attempt to repeal and replace the ACA in 2017 was, in terms of policy substance, among the least serious legislative efforts of the modern era. In terms of political drama, it was extraordinary.

The House passed the American Health Care Act in May 2017, 217 to 213, with 20 Republicans voting against. The bill would have repealed the individual mandate, eliminated the Medicaid expansion, converted Medicaid to a per-capita cap, eliminated the ACA's premium tax credit structure and replaced it with smaller age-based tax credits, and allowed states to waive essential health benefits and community rating requirements. The Congressional Budget Office estimated it would leave 23 million more Americans uninsured by 2026.

The Senate could not pass it. The Senate could not pass anything. Three separate Senate versions failed: a full repeal-and-replace bill, a "skinny repeal" that eliminated only the individual and employer mandates, and a straight repeal with a two-year delay. The skinny repeal failed 51 to 49 at approximately 1:30 AM on July 28, 2017, when John McCain, Lisa Murkowski, and Susan Collins voted no.

McCain had returned to Washington for the vote having been diagnosed with glioblastoma — a brain cancer that would kill him thirteen months later. He had voted yes on the procedural motion to bring the bill to the floor, then gave a floor speech calling for a return to regular order and bipartisan process. Then he voted no. The thumbs-down gesture as he walked past the vote desk has become part of American political iconography. He was, among other things, sending the message that legislation affecting one-sixth of the American economy should not be passed in the middle of the night by a party-line vote after a process that excluded the minority entirely — which was, not coincidentally, the same complaint Republicans had made about the ACA's original passage.

What the 2017 episode demonstrated was something the ACA's opponents had spent seven years refusing to acknowledge: there is no viable alternative that covers as many people. The Republican Party had committed to repealing the ACA without having developed, in seven years of trying, a replacement that would cover comparable numbers at comparable cost without the mechanisms the ACA uses. The mechanisms the ACA uses — the mandate, the subsidies, the Medicaid expansion, the insurance market regulations — are the mechanisms available to cover people who cannot afford coverage in an unregulated market. Removing them and claiming to replace them with something better requires either finding different mechanisms that are functionally equivalent (which they did not find) or accepting that fewer people will be covered (which the CBO's 23-million projection made politically impossible to defend).

The 2017 episode also demonstrated the political power of the coverage constituency the ACA had created. By 2017, approximately 20 million people had gained coverage under the ACA. The Medicaid expansion had created a constituency of newly covered adults across 32 states — including Republican-governed states whose governors were telling Republican senators that repeal would devastate their state budgets and their hospitals. Once coverage is extended, removing it is politically much harder than preventing it was. The same asymmetry that makes cost-of-coverage reforms difficult — people fight harder to keep something they have than to gain something they do not — protects coverage programs from repeal once established. This is why Medicare has never been repealed. This is why the ACA's core coverage structure has survived seven years of sustained attack since 2017.

The Trump Administration Years: Administrative Erosion

Having failed legislatively, the Trump administration (in its first term) pursued administrative erosion — using executive authority to undermine the ACA without repealing it. The strategy was partially effective and permanently changed the landscape of ACA implementation.

The most consequential administrative actions: the zeroing out of the individual mandate penalty through the Tax Cuts and Jobs Act; the cessation of CSR reimbursement payments to insurers, producing Silver loading; the expansion of short-term, limited-duration health plans to up to 12 months with renewal for up to 36 months, reversing an Obama-era rule that had limited short-term plans to 90 days; the expansion of association health plans that offered coverage not subject to ACA requirements; and the reduction of open enrollment periods and outreach funding for healthcare.gov.

Short-term plans deserve particular attention because they represent the most direct attempt to create a parallel market outside ACA regulation. Short-term plans are not required to cover essential health benefits, can impose pre-existing condition exclusions and annual and lifetime limits, and can reject applicants based on health status. They are, in effect, the pre-ACA individual market offered as an alternative to ACA-compliant coverage. For healthy people, they can be substantially cheaper. For anyone with a pre-existing condition, they may be unavailable, or available at unaffordable premiums, or available with exclusions that make them worthless for the condition at issue.

The concern was adverse selection: short-term plans would attract healthy people away from the ACA-compliant risk pool, leaving the exchange pool sicker and driving premiums higher — the death spiral the individual mandate was designed to prevent. The Biden administration reversed the short-term plan expansion, returning to the 90-day rule. The second Trump administration has moved to re-expand them. The regulatory back-and-forth on short-term plans will continue as administrations alternate, because the underlying policy question — whether to allow an alternative market that is cheaper for healthy people and unavailable or dangerous for sick ones — reflects a genuine values difference about what health insurance markets are for.

The reduction in outreach and enrollment assistance funding had measurable effects on exchange enrollment, particularly among populations most in need of help navigating the marketplace. Navigator programs — ACA-funded entities that provide free enrollment assistance — had their federal funding cut by 90 percent in 2017 and 2018. Enrollment among difficult-to-reach populations declined measurably in states using the federal exchange during this period. The Biden administration restored navigator funding; the second Trump administration has cut it again. Enrollment assistance funding is a lever that directly affects coverage rates for vulnerable populations and receives almost no public attention.

The Biden Enhancements: The American Rescue Plan and the Inflation Reduction Act

The Biden administration used two major legislative vehicles to substantially strengthen the ACA, producing coverage gains that exceeded what the original law had achieved at its peak.

The American Rescue Plan of March 2021 — the COVID-19 relief bill — included two significant ACA modifications. First, it eliminated the income cap on premium tax credits for 2021 and 2022: anyone paying more than 8.5 percent of their income for the benchmark Silver plan qualified for a subsidy, regardless of income level. This extended subsidies to middle-income Americans who had previously faced a subsidy cliff at 400 percent of FPL — people who earned too much for subsidies while too little to afford full-price coverage. Second, it increased subsidy generosity across the income scale: at

150 percent of FPL, the benchmark Silver plan became free (zero premium after subsidy); at higher incomes, required contributions were reduced significantly.

The results were immediate and substantial. Exchange enrollment surged, reaching record levels in 2022, 2023, and 2024. The number of people enrolled in ACA exchange plans reached approximately 21 million for plan year 2024 — nearly double the enrollment of 2020. The subsidy cliff that had left middle-income people without affordable coverage options was eliminated, at least temporarily.

The Inflation Reduction Act of August 2022 extended the enhanced subsidies through 2025 and made the additional changes to Medicare drug pricing discussed in the Medicare chapter. The extended subsidies have been the primary driver of continued exchange enrollment growth. Their expiration at the end of 2025, absent congressional action, represents the most significant near-term threat to the ACA's coverage gains — not because the law would change, but because the subsidy structure would revert to the original less-generous design, pricing millions of people out of coverage they currently hold.

As of 2025, the fate of the enhanced subsidies is uncertain. A Republican-controlled Congress is unlikely to extend them voluntarily — they represent a significant federal expenditure associated with the Biden-era legislative agenda. Allowing them to expire would, by CBO estimates, reduce exchange enrollment by several million people and increase the uninsured rate. It would also impose premium increases on people who purchased coverage in reliance on the enhanced subsidies — a cost that would be visible, immediate, and politically attributable to the decision not to act. Whether that political accountability is sufficient to produce action remains to be seen.

The ACA in the Courts

The ACA has been in continuous litigation since before it was enacted. The legal challenges have evolved from constitutional challenges to the mandate to statutory challenges to subsidy administration to post-mandate challenges to the whole law, but the legal assault has never fully paused.

National Federation of Independent Business v. Sebelius (2012) was the first existential challenge. The constitutional question was whether Congress had authority under the Commerce Clause to require individuals to purchase health insurance. Five justices, including Chief Justice Roberts, concluded the Commerce Clause did not provide that authority. Roberts, joined by the four liberals, then concluded the mandate was valid as a tax: the penalty for not having insurance looked like a tax, functioned like a tax, and could be sustained as a tax regardless of what Congress called it. The law survived, but by a narrower margin than its supporters had hoped.

King v. Burwell (2015) challenged whether premium tax credits could be paid to people enrolled through the federal exchange at healthcare.gov rather than a state-based exchange. The ACA's subsidy provision referred to exchanges "established by the State" — language that challengers argued excluded the federal exchange by its plain text. If the Court had accepted this interpretation, subsidies would have been unavailable in 36 states, eliminating coverage for approximately 6 million people and likely causing exchange markets in those states to collapse. Roberts, again writing for a 6 to 3 majority, rejected the textualist reading in favor of a statutory interpretation that considered the ACA as a whole.

California v. Texas (2021) arose after Congress zeroed out the individual mandate penalty in 2017. A group of Republican-led states argued that the mandate was now unconstitutional — without its characterization as a tax, there was no taxing power justification — and that the mandate was inseverable from the rest of the ACA, requiring the whole law to fall. The Supreme Court dismissed the case 7 to 2 on standing grounds without reaching the severability question. The ACA survived again, though the underlying constitutional questions remain unresolved.

The pattern across these cases reflects the Roberts Court's apparent reluctance to use judicial power as the instrument of a political repeal that Congress has been unable to accomplish legislatively. Whether this reflects judicial statesmanship or political calculation depends on your priors. What it means practically is that the ACA is unlikely to be struck down by the courts in its current form.

What "Repeal and Replace" Actually Requires

Fifteen years of Republican promises to repeal and replace the ACA have produced, ultimately, no replacement. Understanding why is not a partisan exercise — it reflects genuine constraints that any replacement would face.

The ACA's coverage structure has three interdependent elements: it prohibits insurers from underwriting based on health status; it subsidizes coverage for people who cannot afford it; and it requires healthy people to participate in the risk pool. Any replacement that maintains the first element needs something functionally equivalent to the second and third. There is no other way to make insurance affordable for sick people in a market that must also cover healthy people without using either subsidies (which cost money) or a mandate (which is politically unpopular).

High-risk pools — the pre-ACA mechanism that Republican plans consistently proposed reviving — were the pre-existing-condition solution in many states before the ACA. They consistently became underfunded as costs exceeded projections, leading to waiting lists, benefit limitations, and coverage gaps for the sickest people they were designed to serve. The ACA replaced them with guaranteed issue specifically because high-risk pools had failed so consistently. Proposing to go back to them is proposing to revisit a mechanism with a documented failure record.

Age-based tax credits — a flat credit by age category regardless of income — are more generous for healthy young people and less generous for sick older people relative to the ACA's income-based structure. The AHCA's age-based credits would have provided a $4,000 credit to a 60-year-old earning $20,000 and the same $4,000 credit to a 60-year-old earning $200,000. The income-based structure of the ACA provides more to people who need it and less to people who do not. Age-based credits are less redistributive, which is ideologically appealing to their proponents, and less effective at expanding coverage to low-income people, which is the tradeoff.

The honest answer to what repeal and replace requires: if you want to cover as many people as the ACA covers, at comparable cost, you need roughly the same mechanisms. If you are willing to cover fewer people, you can use cheaper, simpler mechanisms. If you are willing to spend more money, you can use more comprehensive ones — a public option or a single-payer system. The "repeal and replace with something better" promise has remained unfulfilled because "better" on all three dimensions simultaneously — more coverage, lower cost, simpler structure — is not actuarially achievable without mechanisms that every replacement proposal eventually rediscovers and rejects.

The ACA and Health Insurance Brokers: What You Actually Encounter

The ACA's practical reality for health insurance brokers is different from its political reality. The political debate is about architecture and ideology. Your daily operational reality is about subsidy calculations, plan selection, special enrollment periods, metal tier tradeoffs, and helping clients navigate a system they find confusing.

The subsidy reconciliation problem is the most consistently challenging. The ACA's advance premium tax credit structure pays subsidies prospectively based on projected annual income — meaning a client whose income rises above their projection will owe the overpayment back at tax time, and a client whose income falls will be entitled to a larger credit than they received. Managing this reconciliation, explaining it to clients who did not realize they had a potential tax liability, and helping clients estimate income accurately enough to avoid large year-end surprises is a practical service that adds real value. The subsidy clawback can be substantial — up to the full amount of subsidies received — and clients who are surprised by it at tax time are not happy clients.

The special enrollment period rules are another area of practical expertise. The ACA's open enrollment period runs from November 1 to January 15 in most states. Outside open enrollment, coverage requires a qualifying life event: job loss, marriage, divorce, birth of a child, death of a dependent, loss of Medicaid eligibility, permanent move to a new coverage area. The list of qualifying events is specific and consequential — a client who experiences a qualifying event has 60 days to enroll. A client who misses open enrollment and does not experience a qualifying event may go without coverage for months. Understanding the rules and helping clients act within the windows is bread-and-butter broker knowledge that clients genuinely need.

The metal tier selection question comes up with every individual market client. The standard financial advice — Bronze if you are healthy and want low premiums, Gold if you are chronically ill and will hit the deductible, Silver if you are near 200 percent of FPL because CSRs make it the best deal at that income level — is directionally correct but oversimplified. The right answer depends on the specific plan options available in the client's county, the client's subsidy amount, expected utilization, ability to fund an HSA (available with Bronze High-Deductible Health Plans), and risk tolerance for catastrophic out-of-pocket costs. The calculation is different in a market where the benchmark Silver plan is expensive, producing larger subsidies that can make Gold affordable, versus one where it is cheap, producing smaller subsidies that may make Bronze the only real option. This is where broker expertise adds genuine value that a website cannot replicate.

The small group market implications of the ACA are often underappreciated by brokers focused primarily on the individual market. Small group plans are subject to ACA requirements: essential health benefits, modified community rating (which can vary premiums only by age, geography, tobacco use, and family tier, within defined bands), and guaranteed issue. The small group market has seen significant insurer exits and consolidation since the ACA, particularly in rural areas, and broker knowledge of what is actually available in specific markets has become increasingly valuable as the market has become less competitive.

The employer mandate threshold — 50 full-time equivalents — requires ongoing monitoring for employers near the line. Growth through the threshold triggers new requirements that affect benefit design, reporting obligations, and administrative burden. Helping employers understand when they are approaching the threshold and what it means operationally is a service many small business clients genuinely need but rarely seek out in advance.

The Section 105 Health Reimbursement Arrangement rules — particularly the Qualified Small Employer HRA (QSEHRA) available to employers with fewer than 50 employees and the Individual Coverage HRA (ICHRA) available to employers of any size — represent an alternative to traditional group coverage that has gained traction since the

ACA. Under these arrangements, employers reimburse employees for individual market premiums and qualified medical expenses rather than offering a group plan. ICHRAs interact with ACA subsidies in specific ways: an employee who is offered an ICHRA that the IRS considers "affordable" cannot claim exchange subsidies. Understanding these interactions is increasingly important as more employers consider HRA-based alternatives to traditional group coverage.

Where the ACA Goes From Here

The ACA has been law for fifteen years. Its political opponents have spent those fifteen years trying to repeal it, defund it, hollow it out administratively, and litigate it into oblivion. None of those strategies have succeeded in eliminating the law's core structure. The pre-existing condition protections are permanent features of the insurance market. The Medicaid expansion, where adopted, is too deeply embedded in state healthcare systems to be easily reversed. The exchange subsidies are the marginal political question — their generosity has expanded and contracted based on who controls Congress, and this will continue.

The most consequential near-term political questions are whether the enhanced ACA subsidies will be extended beyond 2025 and whether short-term plans will be re-expanded in ways that damage the exchange risk pool. Both questions were live and unresolved as of this writing in 2025. The answers will determine the shape of the individual market for the next several years.

The structural questions the ACA's design left open will not be resolved near-term: Is there a mechanism for cost control beyond what the Innovation Center has produced? Can exchange markets be made more competitive in rural areas with limited insurer participation? Can the coverage gap between nominal insurance and functional access be closed for people with high-deductible Bronze plans? Can adult dental and vision be incorporated into the essential health benefits? These are the policy questions that a well-designed successor to the ACA would address. There is no well-designed successor to the ACA visible on the political horizon.

What is certain is that the ACA is not going away. Too many Americans depend on it, too many healthcare institutions depend on its reimbursement flows, and the coverage constituency it has created is large enough and politically potent enough to prevent its elimination. What will continue is the familiar dynamic: persistent pressure to contract it from one direction, persistent pressure to expand it from the other, and incremental modification at the margins while the fundamental structure remains intact.

The ACA is not what its proponents originally hoped for. It is not what its opponents claimed it was. It is an imperfect, incomplete, politically contested, legally durable expansion of access to health insurance that has changed the lives of tens of millions of Americans — and that defines the operating environment of health insurance professionals for the foreseeable future. Understanding it is not just good CE credit. It is the context in which everything you do makes sense or does not.

An Honest Assessment

Fifteen years in, the ACA's record is not hard to summarize if you are willing to look at it directly rather than through partisan lenses.

On coverage: unambiguous success. The uninsured rate fell by nearly half in the law's first three years and has remained near historic lows despite sustained political efforts to undermine the coverage mechanisms. Tens of millions of people have health insurance they would not have had without the law. This is not a small thing. It is, by the measure of coverage, a large and durable achievement.

On market reform: success with caveats. The prohibition on pre-existing condition exclusions, the guaranteed issue requirement, the community rating rules, the essential health benefits mandate, the medical loss ratio requirement — these have fundamentally changed the individual market for the better, and they are unlikely to be reversed. The caveats are the narrow networks, the high deductibles, and the coverage gap in non-expansion states that limit the real-world meaning of the nominal coverage they guarantee.

On cost control: modest progress. The delivery system reforms — ACOs, value-based payment models, the Hospital Readmissions Reduction Program, the Innovation Center experiments — have produced real but incomplete results. The fundamental cost-control mechanisms the law needed — serious confrontation of the fee-for-service incentive structure, drug price negotiation authority, global budget constraints — were either designed away in the legislative process or have been incrementally approached through the IRA's drug price provisions. The cost curve has not been bent in any dramatic sense. Healthcare spending continues to consume an increasing share of GDP.

On political durability: remarkable resilience. A law passed by a party-line vote, with every structural incentive pointing toward its eventual repeal, has survived fifteen years of sustained attack and now covers a constituency large enough to make its elimination politically unworkable. The durability reflects both the law's genuine achievements and the political sociology of coverage: people fight to keep what they have.

The honest broker — and I use the word in its non-insurance sense — will acknowledge both what the ACA has accomplished and what it has not. It has extended coverage without achieving universal coverage. It has regulated the insurance market without controlling healthcare costs. It has created a functioning individual market without making that market work well for everyone in it. It has survived its opponents without satisfying its proponents.

That is, in fact, a reasonable description of what American healthcare legislation characteristically achieves: real progress at enormous political cost, leaving a system that works better than it did but not as well as it could. The ACA's supporters who believe it should have been more ambitious are right. Its opponents who believe it should not have existed at all are fighting a battle that the coverage constituency has already won.

For the 45 million Americans who get coverage through its mechanisms, the academic debate about whether the ACA is the right policy is substantially less interesting than the practical question of whether they will have affordable coverage next year. For the health insurance professionals who serve them, the answer to that question depends in large part on whether Congress extends the enhanced subsidies, whether the exchanges remain adequately funded and administered, and whether the coverage framework remains intact through the next cycle of political attack.

That is the environment. It is not going to simplify.

Notes

[1] The 45 million figure combines approximately 21 million exchange enrollees (plan year 2024), the dependent coverage extension (approximately 4 to 5 million young adults through age 26), and the approximately 24 million Medicaid expansion enrollees above the pre-ACA baseline. KFF, "Key Facts about the Uninsured Population," November 2024; CMS, "Health Insurance Marketplace 2024 Open Enrollment Period Report," 2024.

[2] Stuart M. Butler, "Assuring Affordable Health Care for All Americans," Heritage Foundation, October 1989. The proposal's central mechanism — an individual mandate paired with government subsidies and insurance market reforms — is substantively indistinguishable from the ACA's architecture.

[3] The Chafee bill — Health Equity and Access Reform Today Act of 1993, S. 1770 — was co-sponsored by 18 Republican senators. See also David Blumenthal and James Morone, The Heart of Power: Health and Politics in the Oval Office (University of California Press, 2009).

[4] Paul Starr, Remedy and Reaction: The Peculiar American Struggle over Health Care Reform (Yale University Press, 2011, revised edition 2013). The most analytically rigorous account of the ACA's passage available.

[5] House Energy and Commerce Committee, Subcommittee on Oversight and Investigations, "Supplemental Information Regarding the Individual Health Insurance Market," June 2009. The 19,776 rescission figure covers WellPoint, Assurant, and UnitedHealth over five years.

[6] National Federation of Independent Business v. Sebelius, 567 U.S. 519 (2012). King v. Burwell, 576 U.S. 473 (2015). California v. Texas, 593 U.S. 659 (2021).

[7] Congressional Budget Office, "American Health Care Act Cost Estimate," May 2017. The 23-million figure was projected as of 2026.

[8] American Rescue Plan Act of 2021, Pub. L. 117-2, Section 9661. Inflation Reduction Act of 2022, Pub. L. 117-169, Section 12001. Enhanced subsidies expire December 31, 2025 absent congressional extension.

[9] CMS, "2025 Marketplace Open Enrollment Period Public Use Files," January 2025.

[10] Short-term plan regulatory history: Obama administration limited to 90 days (81 Fed. Reg. 75316, October 2016); first Trump administration extended to 364 days renewable for 36 months (83 Fed. Reg. 38212, August 2018); Biden administration returned to 90-day limit (89 Fed. Reg. 23338, March 2024).

[11] The $35 billion non-expansion opportunity cost estimate is from Stacey McMorrow et al., Urban Institute, 2023. The coverage gap population estimate of 1.9 million is from KFF, "The Coverage Gap: Uninsured Poor Adults in States That Do Not Expand Medicaid," January 2024.

[12] The DeMint "Waterloo" quote was reported by The Weekly Standard on July 17, 2009. It is the most candid statement of the Republican legislative strategy during the 2009 to 2010 ACA debate.

Part 6: Medical Literacy

What Patients Need to Know That Their Doctors Don't Always Tell Them

This chapter is about a specific kind of knowledge — not medical knowledge in the sense of understanding anatomy or physiology, but medical literacy in the sense of understanding how to evaluate whether a medical treatment is likely to help you, hurt you, or make no difference at all. It is the difference between knowing how a drug works and knowing whether it works. Between understanding the mechanism and understanding the evidence. Between being an informed patient and being a cooperative one.

The distinction matters more than most people realize, and it matters in ways that are not well understood even by intelligent, educated people who are otherwise perfectly capable of evaluating evidence in other domains of their lives. We routinely make sophisticated probabilistic judgments about financial investments, about career decisions, about where to live and what to eat. We apply those same faculties to healthcare decisions rarely and poorly, largely because the healthcare system has not historically encouraged us to do so and because the statistical language in which evidence-based medicine communicates its findings is genuinely unfamiliar to most people.

This chapter builds the framework for medical literacy around four interconnected concepts, each of which has been the subject of serious research and each of which has profound practical implications for how patients — and the health insurance professionals who serve them — should think about medical treatment decisions:

- Treatment variation: the documented, persistent, and largely unexplained phenomenon of different physicians treating similar patients differently — and similarly trained physicians treating different patients similarly
- The social determinants of health: the Whitehall studies' finding that social status and autonomy predict health outcomes more powerfully than most clinical risk factors, and what this means for how we understand the limits of medical treatment
- The Number Needed to Treat and Number Needed to Harm: a statistical framework for translating population-level clinical trial results into individual-level decision tools
- The individualization problem: why population-level evidence requires adjustment to individual circumstances before it can guide individual decisions, and how to do that adjustment systematically

These four concepts together constitute what we mean by medical literacy. None of them requires a medical degree. All of them are accessible to any intelligent adult willing to engage seriously with the underlying logic. And all of them have immediate, practical implications for the healthcare decisions that every patient will face and that every health insurance professional will encounter in their work with clients.

The Problem This Chapter Is Trying to Solve

Start with a question. You have been diagnosed with mild hypertension — a systolic blood pressure of 142. Your physician recommends that you begin antihypertensive medication. You are 73 years old, male, with a BMI of 26.5, low cholesterol, no diabetes, normal blood sugar, and a robust exercise regimen — five miles a day on most days. You are self-employed, financially comfortable, professionally satisfied, and by any reasonable assessment of your life circumstances, experiencing low chronic stress.

Should you take the medication?

The medically standard answer — the answer that most physicians, following current guidelines, would give — is yes. Your blood pressure exceeds the 130/80 threshold in the 2025 AHA/ACC guidelines. Guidelines recommend medication. Therefore, medication.

But this answer is not a medical literacy answer. It is a compliance answer. It applies a population-level guideline to an individual patient without adjusting for that patient's specific risk profile, without quantifying the expected benefit in terms that allow a genuine cost-benefit analysis, and without presenting the expected harms in parallel terms that would allow genuine comparison. A medically literate patient — or a physician practicing the interpretive medicine that Atul Gawande described — would ask different questions. How likely is this medication to prevent a cardiovascular event in me specifically, given my specific risk profile? How likely is it to cause a side effect that reduces my quality of life? If the benefit and the harm are both expressed in the same units — probabilities over the same time horizon — how do they compare?

The answers to these questions, as we will show in detail later in this chapter, are not what most patients — or most physicians, frankly — expect. But to get to those answers, we first need to understand why the standard medical approach to treatment decisions systematically underweights them. And that requires starting in Hornsey, a borough of London, in 1933.

Study One: W. Alison Glover and the Hornsey Tonsillectomies

In 1933, a British physician and researcher named W. Alison Glover published a paper in the Proceedings of the Royal Society of Medicine documenting something that should not have been possible under any coherent theory of evidence-based medical practice:

the rate at which children in different English school districts were having their tonsils removed varied enormously, and the variation had nothing to do with the rate at which children had diseased tonsils.

Glover's data were, by the standards of 1933 epidemiology, meticulous. He had examined tonsillectomy rates across school districts throughout England and found variation that, in the most extreme cases, was greater than tenfold. In some districts, nearly every child was being referred for tonsillectomy; in others, almost none. These were not districts with different disease rates — the underlying prevalence of tonsillar disease was roughly similar across the populations. What differed was the physician examining the children.

The Hornsey finding was particularly striking. In the Hornsey school system, a single school doctor was responsible for providing all medical care to all the borough's school-age children. Between 1921 and 1928, this physician referred an average of 169 children per year for tonsillectomy. In 1929, that physician retired and a new one arrived. Between 1929 and 1933, the average annual tonsillectomy referral rate fell to 13. The population of children was the same. The water quality was the same. The socioeconomic demographics were the same. The disease hadn't changed. The doctor had.[1]

Glover drew the obvious conclusion: tonsillectomy rates were not determined by the incidence of tonsillar disease. They were determined by the treatment orientation of the examining physician. Different doctors had different thresholds for what constituted a tonsil requiring removal, and those thresholds were not derived from evidence — they were habits of practice, crystallized from training and experience and then applied consistently regardless of whether they were appropriate.

Glover's 1933 paper might have been a local curiosity — a British peculiarity, perhaps, or an artifact of a particular era of medicine — if subsequent research had not confirmed that what he observed in Hornsey was not an exception but a systemic feature of medical practice everywhere it has been studied. It has been studied extensively.

John Wennberg and the Vermont Findings: Variation Goes Systemic

In 1973, John Wennberg and Alan Gittelsohn published a landmark paper in Science documenting that what Glover had found in Hornsey in 1933 was not a historical relic of pre-scientific medicine. It was alive and well in the United States, in the early 1970s, in a region served by some of the best-trained physicians in the country. Wennberg and Gittelsohn had mapped hospital admission rates and surgical procedure rates across Vermont's small hospital service areas and found the same pattern Glover had documented forty years earlier: dramatic variation in procedure rates that bore no consistent relationship to the underlying disease rates in the population.[2]

The Vermont tonsillectomy rate — Glover's procedure of choice — varied threefold across the state. Children in some Vermont communities had a 70 percent chance of having their tonsils removed before adulthood; in neighboring communities with similar demographics, the rate was 20 percent. The same 70/20 pattern Glover had found in Hornsey. Forty years later. Different country. Same phenomenon.

But tonsillectomies were just the beginning. Wennberg and Gittelsohn documented similar variation for virtually every common surgical procedure they examined: hysterectomy, prostatectomy, appendectomy, cholecystectomy. The variation was not random — it was geographically clustered around the practice patterns of the physicians in each community, suggesting that what they were measuring was physician preference rather than patient need.

Wennberg's most celebrated demonstration of this principle came in the mid-1980s, in a meeting between Boston-area (Harvard Medical School-affiliated) physicians and New Haven-area (Yale Medical School-affiliated) physicians. Wennberg had data showing that Boston-area physicians hospitalized Medicare patients approximately 60 percent more frequently than their New Haven counterparts — a gap that could not be explained by differences in the health status of the two populations. He presented the data to the Yale physicians and asked them to explain the discrepancy.

The Yale physicians, naturally, attributed it to superior New Haven practice — they were providing efficient and appropriate care while their Boston counterparts were overtreating. Then Wennberg switched the slides. The Boston physicians, presented with the same data from the other side, offered the same explanation in reverse: their hospitalization rates reflected appropriate and thorough care while New Haven was undertreating. Both groups of physicians were absolutely convinced that their own practice patterns represented the correct standard of care. Neither group had the data or the analytical framework to evaluate their own practice objectively.

This is Wennberg's most important finding, more important even than the variation rates themselves: physicians are largely unaware of their own treatment biases. They develop practice tendencies through training and experience, those tendencies crystallize into what feels like clinical judgment, and they then apply that judgment consistently without recognizing it as a preference rather than an evidence-based determination. Getting a second opinion within the same practice may be worse than useless — physicians who trained together, practice together, and refer to each other develop shared treatment tendencies that reinforce rather than correct each other's biases. True second opinions require physicians from genuinely different practice environments.[3]

The Dartmouth Atlas and the Persistence of Variation

Wennberg's Vermont work evolved into the Dartmouth Atlas of Health Care — a systematic, ongoing documentation of geographic variation in healthcare utilization across the United States that has been published since the 1990s and remains the most comprehensive dataset of its kind. What the Dartmouth Atlas has demonstrated, year after year, is that the variation Glover documented in 1933 and Wennberg confirmed in 1973 has not diminished in the subsequent decades despite the proliferation of clinical practice guidelines, evidence-based medicine protocols, electronic health records, and quality improvement initiatives. It has, if anything, become more thoroughly documented without becoming smaller.

In a landmark 2013 synthesis in The Lancet, Birkmeyer and colleagues — with Wennberg as a co-author — summarized what the Dartmouth Atlas had found over its decades of data collection. Despite considerable advances in medical science, the relative degree of variation in population-based rates of ten common surgical procedures had been remarkably stable over the previous twenty years of US Medicare data. In 2008–2010, rates of hip replacement, coronary bypass surgery, prostatectomy, and many other major procedures continued to vary at least four- to five-fold across hospital referral regions. The paper's conclusion is worth quoting precisely: 'The persistence of geographical disparities, despite 80 years of research and growing professional awareness of this issue, suggests that natural history alone will be insufficient.' Eighty years from Glover to that writing. The needle has barely moved.[4]

The variation the Dartmouth Atlas documents is not limited to surgical procedures. Prescription rates, MRI utilization, C-section rates, knee replacement rates — essentially every medical intervention that has been studied shows the same pattern: dramatic geographic variation that cannot be explained by differences in underlying disease rates, patient demographics, or insurance coverage.

The Florida back surgery data illustrates this with particular clarity. Inpatient back surgery rates per thousand Medicare beneficiaries in Fort Myers — a relatively affluent retirement community on Florida's Gulf Coast — were, in Dartmouth Atlas data, dramatically higher than in Miami, less than two hours away. Same state. Same insurance. Same Medicare program. Same basic demographics. Dramatically different surgical rates. The most parsimonious explanation is not that Fort Myers residents have worse backs than Miami residents. It is that the physicians in Fort Myers have a different surgical threshold than those in Miami, and that threshold was set by forces — training, local culture, peer influence, financial incentives — that have nothing to do with the patients' clinical presentations.

A 2019 study in JAMA Surgery by Sheetz, Ibrahim, Dimick and colleagues extended the variation story into a domain that should be particularly sobering: even within the highest-rated hospital networks in the country — the institutions on US News and World Report's Honor Roll — outcomes varied widely across affiliated hospitals. Risk-adjusted failure-to-rescue rates varied by as much as 4.9-fold within single hospital networks. The variation that Glover found in one London school district in 1933 persists inside the best hospital systems in America in the twenty-first century.[5]

The lesson from Glover, Wennberg, and the Dartmouth Atlas is not that physicians are incompetent or malicious. Most of the physicians generating these variation statistics are skilled, well-intentioned practitioners doing their genuine best for their patients. The lesson is structural: medicine operates under enormous uncertainty, and when faced with uncertainty, physicians fall back on heuristics — treatment tendencies developed through experience and training — that they perceive as clinical judgment but that function more like habit. And habits vary. The practice setting, the training program, the local medical culture, the financial incentives of the reimbursement system — all of these shape physician treatment tendencies in ways that produce the variation we observe.

For patients, the practical implication is uncomfortable but important: the treatment you receive is not determined solely by your clinical condition. It is also determined by where you live, who your physician is, what hospital system you are in, and what that physician's practice tendencies happen to be. Medical literacy requires understanding this — not as a counsel of despair, but as a reason to engage actively with treatment decisions rather than deferring entirely to the physician's judgment.

Study Two: The Whitehall Studies and the Social Gradient of Health

If the first key concept for medical literacy is that physicians vary in how they treat similar patients, the second is more fundamental and more disturbing: much of what we attribute to medical treatment is actually determined by forces that medicine cannot address. The Whitehall studies — two longitudinal cohort studies of British civil servants conducted over several decades beginning in the late 1960s — provide the most rigorously documented evidence for this proposition.

The original Whitehall study, initiated in 1967 by Michael Marmot and colleagues, followed approximately 18,000 male British civil servants over ten years, examining the relationship between their occupational grade — their position in the civil service hierarchy — and their health outcomes. The findings were, by the standards of what researchers expected to find, extraordinary. Men in the lowest employment grades had mortality rates roughly three times higher than men in the highest grades. The gradient was not a simple division between the poor and the non-poor — it ran continuously through every level of the hierarchy, from the most senior administrators at the top to the clerical and manual workers at the bottom. At every step down the hierarchy, mortality was higher.[6]

This finding was not, in itself, entirely surprising. Poor health and lower income are associated in every population that has been studied. What made the Whitehall findings remarkable was what happened when the researchers tried to explain the gradient.

The obvious candidates — the clinical risk factors that medical practice treats as the primary drivers of cardiovascular disease — were measured and accounted for. Cholesterol levels, blood pressure, body mass index, smoking rates, and other biomarkers all showed gradients by employment grade. People lower in the hierarchy did have higher cholesterol, higher blood pressure, higher rates of smoking, and higher BMI, on average, than those above them. But when the researchers controlled for all of these risk factors — when they statistically removed the contribution of the measurable clinical variables — the mortality gradient did not disappear. It shrank somewhat, but the lower grades remained substantially more likely to die than the upper grades after controlling for everything medicine customarily measures.

The striking result: standard clinical risk factors accounted for only about one-third of the mortality difference between employment grades. Two-thirds of the gradient remained unexplained by the variables that medicine treats as the primary determinants of cardiovascular health. Something else — something the clinical risk factor framework was not capturing — was doing most of the work.[7]

Whitehall II, a follow-up study initiated in 1985 that extended the research to women and tracked a wider range of health outcomes over a longer period, eventually identified what that something else was. The primary mediating factor for the employment grade — health gradient was not income per se, not education, and not the measurable biological risk factors. It was autonomy: the degree to which a person experienced control over their work and their life.

Marmot's 2004 book The Status Syndrome synthesized what Whitehall II had found: autonomy and social participation are so fundamental to human health that their lack leads to deterioration in physical health through mechanisms that are both psychological and biological. The lower in the hierarchy you are, the less control you have over your work and your time — and that lack of control produces measurable physiological consequences. Whitehall II researchers found that low job control was associated with lower heart rate variability — a marker of adverse autonomic nervous system function. Chronic subordination, experienced day after day over a working life, literally gets under the skin and changes the body's physiology. This is not metaphor. It is measured biology.[8]

The magnitude of the effect is the part that should give pause to anyone who assumes that medicine's job is primarily to manage clinical risk factors. The Whitehall data correspond to roughly a twofold difference in coronary mortality between the top and bottom employment grades — a gradient that persists through all levels of the hierarchy. A person at the favorable end of the Whitehall distribution — self-employed, perceived high control over their work, financially comfortable, professionally autonomous — has a coronary mortality risk that is approximately half that of a person at the unfavorable end, after controlling for the clinical risk factors that medicine routinely measures and treats.

The broader implications were captured in Marmot's revisit of the original findings, published in 2020. Ten years after his initial review of health inequalities in England, life expectancy had failed to increase for the first time in more than a century — and for the poorest women in England, it had actually declined. Health inequalities had widened. The time people spent in poor health had increased. Marmot's conclusion was pointed: government policies focusing on the healthcare system and individual behavior change are not hugely effective at reducing health inequalities. To improve health and reduce inequalities, action on the social determinants is required.

The Whitehall findings have been replicated across countries, populations, and outcomes with a consistency that Angus Deaton — the Nobel Prize-winning economist who has written extensively on health inequality — summarized as follows: the mortality gradient by income is found wherever and whenever it is sought. It is not an artifact of a particular population or a particular research methodology. It is a fundamental feature of the relationship between social position and health.[9]

And yet, as the PowerPoint lecture notes that form the foundation of this chapter observe, this finding is completely ignored in American medicine. Every risk estimator and disease treatment guideline in common use leaves out stress, emotion, autonomy, and income as risk factors. The Framingham Risk Score — the standard tool for estimating cardiovascular disease risk — includes age, sex, cholesterol, blood pressure, smoking, and diabetes. It does not include employment grade, perceived control, loneliness, or income. The guidelines that physicians follow when recommending treatment are calibrated to the clinical variables that medicine measures, not to the social variables that the Whitehall studies demonstrate are at least as important.

This is not a criticism of the physicians who use these tools. The tools are what they are. It is an argument for medical literacy: for patients who understand that the risk estimates their physicians are presenting to them are incomplete in a specific, well-documented way, and who are therefore capable of adjusting those estimates based on factors that the tools leave out.

The DC Subway and the Continuous Gradient

The Whitehall findings abstract easily into statistics but become more vivid when illustrated concretely. The Washington, D.C. Metro analogy is among the most striking such illustrations available.

Research on health outcomes across Washington D.C. neighborhoods has documented that for each mile traveled outward from the economically disadvantaged neighborhoods of Southeast Washington toward the affluent suburbs of Montgomery County, Maryland, average life expectancy rises by approximately one and a half years. The distance from the Anacostia neighborhood to Chevy Chase is about eight miles. The life expectancy difference is more than ten years. Same metropolitan area. Same air quality. The same Metro system connects them. Access to Johns Hopkins, Georgetown, George Washington, and other major medical centers is similarly available to both populations.

What differs is everything the Whitehall studies identified as health-protective: income, autonomy, perceived control, employment status, social connection, housing stability, and the accumulated physiological effects of chronic stress versus chronic security. The medical care available at the end of the Metro line can address the diseases that result from these differences. It cannot address the differences themselves.

This is the second key lesson for medical literacy: healthcare is not the same as health. The American healthcare system is extraordinarily capable of treating the diseases that the social gradient of health produces — the heart attacks, the strokes, the cancers, the diabetes complications. It is substantially less capable of addressing the conditions that produced those diseases, because those conditions are upstream of medicine. A health insurance broker who understands this is better equipped to help clients understand what insurance does and does not protect them against, and what the limits of medical intervention are in the context of the social conditions that powerfully shape health outcomes.

Combining Hornsey and Whitehall: The Framework

Glover, Wennberg, and Marmot together establish a framework that should inform every conversation about medical treatment. Let us state it plainly.

From Hornsey and the Dartmouth Atlas: different physicians treat similar patients differently. The treatment you receive is not determined solely by your clinical condition — it is substantially determined by the practice orientation of your physician, who is largely unaware of that orientation as a preference rather than a clinical determination. This means that passively accepting a physician's recommendation without understanding the evidence basis for it — without asking 'how likely is this to help me, how likely is this to harm me, and how do those probabilities compare?' — is not an exercise of informed consent. It is deference to a preference you don't know you are deferring to.

From Whitehall: similar physicians treat different patients similarly. The treatment your physician recommends is based on population-level risk factors and population-level evidence. But your individual health trajectory is shaped powerfully by factors that population-level medicine does not measure — your social position, your autonomy, your chronic stress levels, your social connections. A treatment recommendation based on a population average is not necessarily appropriate for an individual whose risk profile differs substantially from that average in ways the risk estimator doesn't capture.

Put these together and you get the central argument of this chapter: informed medical decision-making requires understanding both that physicians vary in their treatment preferences and that population-level evidence requires adjustment for individual circumstances. Neither piece of knowledge alone is sufficient. Together, they provide the foundation for what genuine medical literacy looks like.

The Number Needed to Treat: A Tool for Medical Literacy

The Number Needed to Treat — NNT — is the most important single statistical concept for understanding medical evidence from a patient's perspective. It answers the question that matters most to any individual patient: if I take this treatment, what is the probability that I personally will benefit from it?

The NNT is defined as the number of patients who need to receive a treatment in order for one patient to benefit. An NNT of 10 means that, on average, ten patients must be treated for one to benefit — nine receive the treatment and experience no benefit (though they may experience harms). An NNT of 100 means that one hundred patients must be treated for one to benefit. From an individual patient's perspective, an NNT of 100 means that if you take this treatment, you have a 1 percent chance of benefiting from it over the defined time period.

The NNT is the reciprocal of the absolute risk reduction: NNT = 1 / ARR. If a treatment reduces the five-year probability of a heart attack from 4 percent to 3 percent, the absolute risk reduction is 1 percent (0.01), and the NNT is 100 — you need to treat 100 patients for five years to prevent one heart attack. Medical literature more commonly reports the relative risk reduction in this scenario: the treatment reduced heart attack risk by 25 percent (from 4 to 3 percent). The relative risk reduction is mathematically correct but communicates very different information than the NNT. '25 percent risk reduction' sounds impressive. 'You need to treat 100 patients for five years to prevent one heart attack' sounds less so — and it is the more informative number for an individual patient making a treatment decision.[10]

This distinction — between relative risk reduction and absolute risk reduction — is the single most important source of innumeracy in medical communication. Treatments are routinely communicated to patients in terms of relative risk reduction because relative risk reduction is always a larger number than absolute risk reduction, and larger numbers suggest more impressive benefits. A treatment that reduces the risk of an event from 2 percent to 1 percent has a relative risk reduction of 50 percent and an absolute risk reduction of 1 percent — an NNT of 100. Describing it as providing '50 percent risk reduction' is not inaccurate. But it is the kind of accuracy that misleads.

> *The real question is not 'does it work?' in the sense of 'did it show a statistically significant benefit in a trial?' The real question is: 'does it work for me, in the sense of providing a benefit large enough to justify the costs and the harms?' That question requires the NNT — and it requires the NNT adjusted for the individual patient's baseline risk, not just the average population NNT from the trial.*

Vinay Prasad, one of the more intellectually honest voices in evidence-based oncology, put it well in a New York Times interview: 'Patients tend to gravitate to the nuts and bolts — what does it do, how does it work? But the real question is: does it work? You shouldn't ask how does it work, but whether it works at all.' The NNT is the framework for answering that question quantitatively.

The Number Needed to Harm: The Other Side of the Ledger

Every treatment that has a benefit also has potential harms. The Number Needed to Harm — NNH — is the parallel statistic: the number of patients who need to receive a treatment for one patient to experience a specified harm. A low NNH means the harm is common — an NNH of 10 means that one in ten patients receiving the treatment will experience the specified harm. A high NNH means the harm is rare.

The relationship between NNT and NNH is the core of any rational treatment decision. A treatment with an NNT of 50 and an NNH of 500 is one where you are ten times more likely to benefit than to be harmed — a favorable ratio. A treatment with an NNT of 50 and an NNH of 10 is one where you are five times more likely to be harmed than to benefit — an unfavorable ratio that most patients, if properly informed, would reject.

The antibiotics-for-sinus-infection example illustrates this starkly. Antibiotics cure some sinus infections. They also disrupt the gut microbiome, causing diarrhea in a meaningful share of recipients. The NNT to cure one sinus infection with antibiotics is approximately 15 to 19. The NNH for diarrhea from the antibiotic is approximately 8. You are roughly twice as likely to get diarrhea from the antibiotic as you are to have your sinus infection cured by it. This is not a favorable treatment ratio — and yet antibiotics are among the most commonly prescribed treatments for sinus infections, most of which would resolve on their own within 7 to 10 days without treatment.

The cholesterol-lowering drug class known as statins provides a more consequential example. A 2008 BusinessWeek investigation into statin clinical trials found that the NNT for primary prevention — preventing a first cardiovascular event in a patient who has not yet had a heart attack — was substantially higher than most patients or physicians assumed. For patients at moderate cardiovascular risk on primary prevention, the NNT for statins over five years to prevent one cardiovascular event is approximately 100 to 200. The NNH for drug discontinuation due to intolerable side effects — primarily muscle pain (myopathy) — is approximately 10. For every patient whose cardiovascular event is prevented over five years of statin therapy, ten patients will discontinue the drug due to side effects. That is a ratio that merits serious discussion, not automatic prescription.[11]

The Fatal Familial Insomnia example from the lecture materials illustrates the most extreme case of how relative risk reduction misleads. Fatal Familial Insomnia is a prion disease — genetic in origin, always fatal, currently incurable — that occurs in approximately 50 to 70 families worldwide. The incidence in the general population is roughly 1 in a billion. If a treatment were developed that produced a 36 percent relative risk reduction in FFI incidence, that treatment would reduce individual risk from approximately 1 in 1 billion to approximately 1 in 1.3 billion — a risk reduction so small as to be meaningless for any practical purpose. The relative reduction sounds impressive; the absolute reduction is negligible. The NNT would be in the billions.

This example is designed to illustrate the absurdity of relative risk reduction as a decision tool when baseline risk is very low. But the principle applies equally, if less dramatically, whenever a physician presents you with a percentage risk reduction without telling you the baseline risk from which that reduction is calculated. '36 percent of what?' is always the right question.

The Personal NNT: Adjusting Population Evidence to Individual Circumstances

The NNT and NNH as reported in clinical trials are population averages. They reflect the average benefit and the average harm across the trial population, which was selected according to specific enrollment criteria and which may or may not resemble any particular individual patient.

The critical step in applying population-level evidence to individual decisions is adjusting the population NNT for the individual's actual baseline risk. This adjustment is straightforward in principle and requires two pieces of information: the population NNT from the trial, and an estimate of how the individual's baseline risk compares to the trial population's average baseline risk.

The NNT calculation follows directly. NNT = 1 / ARR, and ARR = baseline risk × relative risk reduction. The relative risk reduction from a treatment is fairly consistent across risk levels — if a drug reduces cardiovascular event risk by 25 percent in a high-risk trial population, it probably reduces it by roughly 25 percent in a low-risk population as well. But the absolute risk reduction — and therefore the NNT — is entirely dependent on baseline risk. If your baseline risk is half the trial population's average, your personal NNT is approximately double the trial NNT. If your baseline risk is one-quarter the trial average, your personal NNT is approximately four times the trial NNT.[12]

This is the adjustment that the Whitehall studies make necessary and that population-level medical guidelines routinely fail to make. If your social profile — your autonomy, your income, your stress levels, your social connections — places you at substantially lower cardiovascular risk than the average person in the trial population, then the trial's NNT understates your personal NNT. The treatment is less likely to benefit you than the trial average suggests. And the NNH, which does not typically vary with baseline risk in the same way, remains unchanged.

The practical consequence is that the NNT/NNH ratio — the fundamental comparison that should guide treatment decisions — shifts in an unfavorable direction for lower-risk individuals. Treatments that appear to have favorable benefit-harm ratios for average-risk patients may have unfavorable ratios for lower-risk patients, because the benefit diminishes with lower baseline risk while the harm does not.

Case Study: Hypertension Treatment Decision at Age 73

The following case study applies the medical literacy framework developed in this chapter to a real treatment decision. It is presented in detail because abstract frameworks become genuinely useful only when applied to concrete circumstances — and because the decision itself illustrates, with unusual clarity, how the combination of Whitehall adjustment and NNT/NNH comparison can transform a seemingly straightforward treatment recommendation into a much more nuanced analysis.

The patient profile: male, 73, blood pressure approximately 142/85 (Stage 2 hypertension by current guidelines), BMI 26.5, low cholesterol, low blood sugar, no diabetes, vigorous exercise daily (5-mile walks on most days), self-employed knowledge worker, financially comfortable, professionally autonomous, low chronic stress, strong social connections. By standard clinical assessment, this patient's blood pressure exceeds the 130/80 guideline threshold and medication would be recommended.

By Whitehall assessment, this patient sits at the favorable end of essentially every dimension that the Whitehall studies identify as health-protective. Self-employed: high autonomy. Knowledge worker: high perceived control. Financially comfortable: low financial stress. Low chronic stress: favorable autonomic nervous system profile. Strong social connections: protective against the loneliness-associated mortality elevation documented in the Surgeon General's 2023 Loneliness Advisory (which found that loneliness and social isolation increase premature death risk by 26 and 29 percent respectively — a risk comparable to smoking 15 cigarettes per day).

The Whitehall gradient corresponds to roughly a twofold difference in coronary mortality between the top and bottom employment grades, with continuous gradations throughout. This patient's profile places him near the top of the protective end. Layered on top of the Whitehall adjustment: daily vigorous exercise (reducing CVD risk approximately 30 to 35 percent independently), healthy BMI, low cholesterol, no diabetes. A reasonable estimate is that this patient's true 10-year cardiovascular event risk is perhaps 40 to 60 percent lower than an age-matched male with average risk factors in the trial populations that generated the standard antihypertensive NNTs.

The Antihypertensive NNT and NNH in Detail

The 2025 AHA/ACC guidelines identify four first-line antihypertensive drug classes: ACE inhibitors (lisinopril, enalapril), angiotensin II receptor blockers or ARBs (losartan, valsartan), long-acting calcium channel blockers (amlodipine), and thiazide or thiazide-like diuretics (chlorthalidone, hydrochlorothiazide). Beta-blockers are no longer first-line for uncomplicated hypertension due to comparatively lower efficacy in stroke prevention and a less favorable side effect profile.

For moderate-to-severe hypertension (above 160/100 mmHg), a Cochrane review found that antihypertensive treatment reduces total cardiovascular events with a five-year absolute risk reduction of 4.3 percent — an NNT of 24. Total mortality was also reduced, with an NNT of 83 over five years. For mild-to-moderate hypertension more similar to this patient's profile (140 to 160 mmHg systolic), a separate Cochrane review found a five-year absolute risk reduction of 0.9 percent, yielding an NNT of 122 — with low quality of evidence noted. So the honest population NNT range for this blood pressure level is roughly 24 to 122, with the lower end applying to higher-risk patients and the upper end to lower-risk primary prevention patients — which is the more applicable range for this case.[13]

Applying the Whitehall adjustment: if this patient's baseline cardiovascular risk is approximately 40 to 60 percent lower than the average trial population, then his personal NNT ranges from approximately 200 to 250 for mild-to-moderate hypertension treatment. If his risk is at the lower end of the adjusted estimate, the NNT approaches 300.

Now the NNH. The four drug classes have meaningfully different harm profiles:

Antihypertensive Drug Classes: NNT and NNH Comparison

Drug Class	Population NNT (5 yr)	Adjusted NNT (Gary)	Key NNH	Notes
Thiazide diuretics (chlorthalidone)	~24–100	~48–250	NNH 12 (any AE); NNH 56 (hospitalization)	Best NNT in head-to-head trials; worst NNH in elderly. Hyponatremia risk serious at 73.
ACE inhibitors (lisinopril, enalapril)	~50–120	~100–300	Cough: 10–15%; angioedema rare; hyperkalemia ~4%	Cleanest metabolic profile. Cough is signal to switch, not a serious harm.
ARBs (losartan, valsartan)	~50–120	~100–300	Similar to ACE inhibitors; less cough	Best reserved for patients who can't tolerate ACE inhibitor cough.
Calcium channel blockers (amlodipine)	~80–120	~160–300	Ankle edema 10–20%	No mortality benefit clearly proven in trials. Edema not fluid overload; diuretics don't help.

The falls concern deserves special emphasis for a patient who walks five miles per day. Roughly 10 percent of patients discontinue an antihypertensive due to intolerability, giving an NNH of approximately 10 for drug discontinuation — a harm that occurs at a rate that would clear virtually anyone's harm threshold. For someone whose daily exercise is central to their health profile and quality of life, orthostatic hypotension and syncope risk from blood pressure lowering is not a trivial side effect category. A fall — particularly at 73 — poses a threat to functional quality of life that is not adequately captured in the clinical trial harm reporting, which typically focuses on serious adverse events requiring hospitalization rather than falls, reduced exercise capacity, and quality-of-life degradation.[14]

The summary comparison:

Summary: Individualized NNT/NNH Assessment

Treatment Decision	Population NNT	Gary's NNT (adjusted)	Verdict against personal threshold (NNT ≤ ~30)
Antihypertensives — moderate HTN (>160)	~24	~48–60	Fails threshold. Population NNT marginal; adjusted NNT well above threshold.
Antihypertensives — mild HTN (140–160)	~122	~200–250	Fails threshold decisively. Not close.
Statins — primary prevention, moderate risk	~100–200	~200–400	Fails threshold. NNH for drug discontinuation (~10) clears harm threshold before benefit clears benefit threshold.

The conclusion of the individualized analysis: antihypertensive medication does not clear this patient's personal decision threshold. The population NNT for mild-to-moderate hypertension (approximately 122) is already above any reasonable benefit threshold for a primary prevention decision. The Whitehall-adjusted personal NNT of approximately 200 to 250 is not in the conversation. Every drug class has an NNH for discontinuation-causing side effects of approximately 10 — meaning you are twenty to twenty-five times more likely to stop the drug due to intolerable side effects than you are to benefit from it in cardiovascular event prevention.

This is what the Otis Brawley framing — the former Chief Medical Officer of the American Cancer Society — means in practice: 'There isn't more conservative or more aggressive care. There are simply benefits and risks of intervening and benefits and risks of not intervening.' This patient's benefits of intervening are small and their risks are real. The benefits of not intervening — avoiding the side effect risk, continuing an exercise regimen that may already be capturing much of the available cardiovascular protection, avoiding the daily medication burden — are meaningful. The decision not to medicate, in this case, is not a failure of medical care. It is medical literacy in practice.

Medical Literacy and the Three Mulley Principles

Albert Mulley, a physician and researcher who has written extensively on patient preferences and shared decision-making, articulated three principles that synthesize much of what this chapter has been arguing. They are worth stating directly:[15]

> *The ideal modern doctor should be neither paternalistic nor merely informative but rather interpretive, helping patients determine their priorities and achieve them.*
>
> *Well-informed patients consume less medicine — and not just a little bit less, but much less.*
>
> *Healthcare may be the only industry in which giving customers what they really want would save money.*

The first principle describes the clinical relationship that medical literacy makes possible. A paternalistic physician tells the patient what to do. An informative physician tells the patient what the options are. An interpretive physician helps the patient understand what the evidence means for their specific circumstances, what their own priorities are, and how to align the treatment decision with those priorities. Medical literacy on the patient's side is what makes the interpretive relationship possible — a patient who understands NNT and NNH can have a genuine conversation about whether a treatment's benefit-harm ratio meets their personal threshold.

The second and third principles point to an economic implication that has profound relevance to health insurance. The evidence that better-informed patients consume less medicine is not merely an argument for patient empowerment — it is an argument that the information asymmetry between physicians and patients is itself a driver of healthcare overutilization and cost. Patients who do not understand that a treatment's NNT is 200 will take that treatment; patients who do understand it may not. The aggregate effect of medical illiteracy — of patients accepting treatments whose population NNT would make them hesitant if they understood it — is a substantial component of the trillion dollars in annual healthcare waste that researchers estimate flows to unnecessary or low-value care.

For health insurance professionals, the Mulley principles have a specific implication: the more your clients understand about how to evaluate medical evidence, the less healthcare they will consume, and the less that consumption will cost. Medical literacy is not merely a patient empowerment argument. It is a cost management argument. A commercially insured workforce whose members understand the NNT framework will make better-calibrated treatment decisions than one that doesn't — and that calibration will show up in claims data.

The Limits of Medical Literacy: What It Can and Cannot Do

Medical literacy is not a complete solution to the problems this chapter has identified. It is worth being clear about what it can and cannot accomplish.

Medical literacy can help individual patients make better-calibrated decisions about specific treatments — whether to accept a physician's recommendation, whether to seek a second opinion, whether the benefit-harm ratio of a proposed intervention clears their personal threshold. It can reduce overtreatment for individuals who understand how to apply NNT and NNH reasoning to their specific situations. It can make the physician-patient relationship more genuinely collaborative and less reflexively deferential.

Medical literacy cannot address the social determinants of health that the Whitehall studies identify as primary drivers of population health outcomes. Understanding that your employment grade predicts your cardiovascular mortality does not change your employment grade. The gradient is a structural feature of societies organized around hierarchies of status, autonomy, and income — and while that understanding might inform advocacy for policy changes, it does not protect any individual patient from the physiological consequences of their social position.

Medical literacy also cannot eliminate the geographic variation in physician practice that Glover, Wennberg, and the Dartmouth Atlas have documented. Knowing that your region's surgical rates are four times higher than a neighboring region's does not tell you whether your physician's recommendation is on the high side or the low side of appropriate practice. It tells you that the question is worth asking.

And medical literacy cannot replace the specialized knowledge and diagnostic capability that physicians provide. The framework this chapter has presented is a tool for evaluating treatment recommendations once a diagnosis has been made — not a substitute for diagnosis, not a framework for self-treatment, and not an argument that physician judgment is worthless. Physician judgment is indispensable. The argument is that physician judgment, like all human judgment, operates under the influence of heuristics and biases that patients have a legitimate interest in understanding — and that the NNT/NNH framework provides a way to engage with physician recommendations that is more analytically rigorous than simple deference.

Practical Medical Literacy for Health Insurance Professionals

The framework developed in this chapter has specific practical applications for health insurance professionals that extend beyond their roles as individuals managing their own health decisions.

Understanding treatment variation helps contextualize the geographic variation in healthcare utilization that appears in insurance claims data. When a particular region shows dramatically higher surgical rates than comparable regions — as Fort Myers showed for back surgery relative to Miami — that variation is not random noise. It is a signal about physician practice patterns, and it has direct implications for network design, utilization management, and where cost management interventions are likely to be effective. Brokers who understand the Dartmouth Atlas findings can speak more credibly to employer clients about why their employees' healthcare utilization varies depending on where they live.

Understanding the Whitehall gradient helps contextualize population health strategies in employer benefit design. An employer whose workforce is predominantly lower-income, lower-autonomy workers — whose social profiles place them at the unfavorable end of the Whitehall gradient — faces a population health challenge that cannot be fully addressed by clinical benefit design. Preventive care benefits, wellness programs, and chronic disease management initiatives will have limited effectiveness if the underlying social determinants of poor health in that workforce are not addressed. This is a difficult message to deliver, but it is the honest one.

Understanding NNT and NNH helps brokers explain to clients why high-value care — care that achieves the best outcomes per dollar spent — is not the same as maximum care. The instinct of many patients and many employers is that more care is better care. The NNT framework demonstrates that this is not true: care whose NNT is 200 provides almost no benefit on average while still carrying all of its harms. Understanding this helps frame conversations about plan design, cost sharing, and utilization management in terms of evidence rather than coverage restrictions.

Finally, understanding the gap between population-level evidence and individual-level application helps brokers explain why the same insurance benefit produces different outcomes for different people. The employee who takes a medication with an NNT of 200 and happens to be the one-in-two-hundred who benefits has had a genuinely positive outcome. The other 199 have been exposed to harms without benefit. Insurance finances this distribution without knowing in advance who is who — which is the fundamental nature of insurance — but understanding the distribution helps frame why cost-effectiveness considerations in benefit design are legitimate and not merely cost-cutting.

A Note on Shared Decision-Making and the Future of Patient-Physician Relations

The medical literacy framework this chapter has presented points toward a model of patient-physician interaction that is different from both the traditional paternalism of midtwentieth-century medicine and the purely informational model that some advocates of patient autonomy have promoted.

The traditional paternalism — 'I am the doctor, I know best, follow my instructions' — has been substantially eroded by cultural change, internet access to medical information, and the patient rights movement. But its erosion has not always been replaced by genuine shared decision-making. What has emerged in many clinical contexts is a kind of pseudo-informed consent: physicians present options and risks in technically accurate but practically opaque ways that satisfy legal requirements without genuinely enabling patient choice. The patient is told that a medication has 'a small risk of side effects' and 'may reduce your risk of a cardiovascular event' — true statements that communicate almost nothing about the probability or magnitude of either outcome.

Genuine shared decision-making — the interpretive model Mulley describes — requires that both parties bring something real to the conversation. The physician brings clinical knowledge, diagnostic skill, and familiarity with the evidence base. The patient brings their personal risk profile, their values, their priorities, and their threshold for treatment. The NNT/NNH framework is the common language that makes that conversation possible — the translation mechanism between the population-level evidence that medicine generates and the individual-level decisions that patients must make.

A patient who arrives at a clinical encounter understanding what NNT means, knowing that their personal NNT may differ substantially from the trial average, and having a rough sense of what their personal benefit threshold is — who can say, 'I understand this treatment has an NNT of 122 in the trial population, and I believe my personal risk is lower than the trial average for reasons X and Y, which means my personal NNT is likely higher — can you help me think through whether this clears my threshold?' — is a patient who can have a genuinely collaborative clinical conversation.

This is not a pipe dream. It is what the patients at Mulley's Decision Support Center learned to do. It is what the research on shared decision-making in surgical contexts shows reduces procedure rates without worsening outcomes. It is what this chapter is trying to equip its readers to do — not as physicians, but as patients and as health insurance professionals who help other patients navigate a system that, for all its extraordinary capability, works best when the people it is supposed to serve understand how to use it.

Summary: The Four Pillars of Medical Literacy

This chapter has developed a framework for medical literacy around four interconnected concepts. Let us state them one final time, plainly and in sequence.

First: different physicians treat similar patients differently. The treatment you receive is shaped by your physician's practice orientation as much as by your clinical condition. Medical literacy requires engaging with treatment recommendations rather than simply accepting them — asking for the evidence basis, understanding what the alternatives are, and recognizing that geographic variation in practice rates is a signal worth attending to.

Second: similar physicians treat different patients similarly. Population-level treatment guidelines are not calibrated to individual circumstances. The social determinants of health — autonomy, status, income, social connection — powerfully shape health outcomes in ways that standard clinical risk tools do not capture. Your personal risk profile may differ substantially from the trial population average in ways that change the benefit-harm calculation for specific treatments.

Third: the Number Needed to Treat is the most patient-relevant statistic in clinical medicine. It translates population-level evidence into individual-level probabilities. It converts relative risk reductions — always presented in ways that make benefits sound larger than they are — into absolute probabilities that enable genuine decision-making. No treatment decision is fully informed without it.

Fourth: the personal NNT requires individual adjustment. The trial NNT is a starting point, not a conclusion. Adjusting it for your individual baseline risk — using everything you know about your social profile, your exercise habits, your metabolic health, and your Whitehall position — is the final step that converts population evidence into individual guidance. It is the step that medicine, as currently practiced, most consistently fails to take.

Together these four concepts define what it means to be a medically literate patient — not a patient who knows the biological mechanism of every drug they take, but a patient who understands the probability that any given treatment will help them, the probability that it will harm them, and how those probabilities compare against each other and against their personal threshold for treatment. That knowledge does not require a medical degree. It requires numeracy, intellectual honesty, and the willingness to ask the questions that an unreflective medical culture has not historically encouraged patients to ask. This text has tried, throughout, to model that kind of inquiry. This chapter has tried to give it a systematic framework.[16]

Notes

[1] W. Alison Glover, 'The Incidence of Tonsillectomy in School Children,' Proceedings of the Royal Society of Medicine, 1938 (initially presented 1933). Glover's paper is the starting point for the entire literature on small area variation in medical practice. His observation that tonsillectomy rates reflected physician orientation rather than disease rates was not widely acted upon for four decades, until Wennberg and Gittelsohn confirmed the phenomenon systematically.

[2] John Wennberg and Alan Gittelsohn, 'Small Area Variations in Health Care Delivery,' Science, December 14, 1973. This paper launched the small area variation research program that Wennberg pursued for the remainder of his career through the Dartmouth Atlas of Health Care.

[3] The Harvard-Yale story and its implications for second opinions within practice groups are described in John Wennberg, Tracking Medicine: A Researcher's Quest to Understand Health Care (2010). Wennberg's account of his own career in variation research is the most accessible introduction to the field.

[4] J.D. Birkmeyer et al. (including John Wennberg), 'Surgical Decision Making and Outcomes Research,' The Lancet, 2013. The quotation about 'eighty years of research and growing professional awareness' is directly from this paper. PubMed Central.

[5] Kyle H. Sheetz, Amir A. Ibrahim, Justin B. Dimick et al., 'Variation in Surgical Outcomes Across Networks of the Highest-Ranked US Hospitals,' JAMA Surgery, 2019.

[6] Michael Marmot et al., 'Health Inequalities Among British Civil Servants: the Whitehall II Study,' The Lancet, 1991. The original Whitehall I findings were published in G. Rose and M.G. Marmot, 'Social Class and Coronary Heart Disease,' British Heart Journal, 1981.

[7] The 'one-third / two-thirds' finding — that clinical risk factors explain only about a third of the employment grade mortality gradient — is summarized in Marmot, The Status Syndrome (2004), and confirmed in multiple Whitehall II analyses. The precise proportion varies somewhat by outcome and follow-up period.

[8] Michael Marmot, The Status Syndrome: How Social Standing Affects Our Health and Longevity (2004). The heart rate variability finding — low job control associated with adverse autonomic balance — is from Brunner et al., 'Social Organization, Stress, and Health,' Chapter 2 in Marmot and Wilkinson (eds.), Social Determinants of Health, Oxford University Press, 2nd edition, 2006.

[9] Angus Deaton, The Great Escape: Health, Wealth, and the Origins of Inequality (2013). Deaton's formulation that 'the mortality gradient by income is found wherever and whenever it is sought' appears in various forms throughout this work and in his subsequent research on inequality and health.

[10] The NNT concept was introduced and popularized by Laupacis et al., 'An Assessment of Clinically Useful Measures of the Consequences of Treatment,' New England Journal of Medicine, 1988. TheNNT.com, founded by cardiologist David Newman, is the most accessible online compendium of NNT and NNH data for common treatments, reviewed by clinical experts.

[11] The BusinessWeek investigation was John Carey, 'Do Cholesterol Drugs Do Any Good?' BusinessWeek, January 16, 2008. The NNT data for statins in primary prevention have been extensively reviewed; the Cochrane Review on statins for primary prevention (Taylor et al., 2013) found NNTs in the range of 100 to 200 over five years for moderate-risk populations, with considerable uncertainty.

[12] The logic of personalizing the NNT is developed in detail in Newman, Hippocrates' Shadow (2008), and in various papers from the shared decision-making literature. The mathematical relationship — personal NNT = population NNT × (population baseline risk / individual baseline risk) — follows directly from the definition of NNT as the reciprocal of absolute risk reduction.

[13] The Cochrane reviews cited are: Musini et al., 'Pharmacotherapy for Hypertension in Adults 60 Years or Older,' Cochrane Database of Systematic Reviews, 2019 (moderate-to-severe hypertension, NNT approximately 24 for cardiovascular events); and Diao et al., 'Pharmacotherapy for Mild Hypertension,' Cochrane Database of Systematic Reviews, 2012 (mild-to-moderate, NNT approximately 122). The antihypertensive drug class NNH data are from Roush and Sica, American Journal of Hypertension, 2016, and AAFP clinical review summaries.

[14] The fall risk concern for antihypertensives in elderly patients is documented in Tinetti et al., 'Antihypertensive Medications and Serious Fall Injuries in a Nationally Representative Sample of Older Adults,' JAMA Internal Medicine, 2014. The NNH for thiazide-related adverse events in elderly patients is from Makam et al., 'Comparative Safety of Thiazide-Type Diuretics,' Annals of Internal Medicine, 2014.

[15] Albert Mulley, 'Patient Preferences Matter: Stop the Silent Misdiagnosis,' King's Fund, 2012. The three quotations are from this paper and a related editorial in the BMJ. Mulley directs the Dartmouth Center for Health Care Delivery Science's patient decision support research program.

[16] For a practitioner-oriented summary of the shared decision-making evidence, see Sepucha and Scholl, 'Measuring the Quality of Health Decisions,' Patient Education and Counseling, 2014, and Barry and Edgman-Levitan, 'Shared Decision Making — The Pinnacle of Patient-Centered Care,' New England Journal of Medicine, 2012.

Section 8: Some Current Healthcare Risks

Some disease and environmental risks

Patients today face two fundamentally different types of medical risks. First and most obviously, they face disease or environmental risks, things like cancer, hypertension, inflammation or organ degradation that can impair one's physiological, mental or physical condition. We'll discuss some of these risks in this text.

Second, patients face medical treatment risks. These include overtreatment, undertreatment or treatment variation where different physicians treat similar patients differently or similar physicians treat different patients similarly.

This section will consist of recent US Surgeon General Advisories or Reports on various medical risks. These Reports are 'comprehensive scientific review documents prepared by experts on behalf of the Surgeon General, often landmark publications that identify and shape the science and culture of our public health' according to the Surgeon General's website, typically fascinating and well worth broker's time to read and understand.

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As you read these Advisories and Reports, consider how the various risks discussed may affect your clients and your business. Can today's brokers focus entirely on healthcare financing or must brokers expand their offerings to include patient risk education also? Can brokers continue to focus exclusively on insurance plan designs and costs? How do insurance plan designs interact with the modern risks discussed in this text?

Hopefully you will find reading these Advisories and Reports an illuminating and enlightening, worth your time and useful for your business.

Loneliness

Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community

Introduction from Vivek H. Murthy, US Surgeon General, April 2023

When I first took office as Surgeon General in 2014, I didn't view loneliness as a public health concern. But that was before I embarked on a cross-country listening tour, where I heard stories from my fellow Americans that surprised me.

People began to tell me they felt isolated, invisible, and insignificant. Even when they couldn't put their finger on the word "lonely," time and time again, people of all ages and socioeconomic backgrounds, from every corner of the country, would tell me, "I have to shoulder all of life's burdens by myself," or "if I disappear tomorrow, no one will even notice."

In recent years, about one-in-two adults in America reported experiencing loneliness. And that was before the COVID-19 pandemic cut off so many of us from friends, loved ones, and support systems, exacerbating loneliness and isolation.

Loneliness is far more than just a bad feeling—it harms both individual and societal health. It is associated with a greater risk of cardiovascular disease, dementia, stroke, depression, anxiety, and premature death. The mortality impact of being socially disconnected is similar to that caused by smoking up to 15 cigarettes a day, and even greater than that associated with obesity and physical inactivity. And the harmful consequences of a society that lacks social connection can be felt in our schools, workplaces, and civic organizations, where performance, productivity, and engagement are diminished.

Given the profound consequences of loneliness and isolation, we have an opportunity, and an obligation, to make the same investments in addressing social connection that we have made in addressing tobacco use, obesity, and the addiction crisis. This Surgeon General's Advisory shows us how to build more connected lives and a more connected society.

If we fail to do so, we will pay an ever-increasing price in the form of our individual and collective health and well-being. And we will continue to splinter and divide until we can no longer stand as a community or a country. Instead of coming together to take on the great challenges before us, we will further retreat to our corners—angry, sick, and alone.

We are called to build a movement to mend the social fabric of our nation. It will take all of us—individuals and families, schools and workplaces, health care and public health systems, technology companies, governments, faith organizations, and communities—working together to destigmatize loneliness and change our cultural and policy response to it. It will require reimagining the structures, policies, and programs that shape a community to best support the development of healthy relationships.

Each of us can start now, in our own lives, by strengthening our connections and relationships. Our individual relationships are an untapped resource—a source of healing hiding in plain sight. They can help us live healthier, more productive, and more fulfilled lives. Answer that phone call from a friend. Make time to share a meal. Listen without the distraction of your phone. Perform an act of service. Express yourself authentically. The keys to human connection are simple, but extraordinarily powerful.

Each of us can start now, in our own lives, by strengthening our connections and relationships.

Loneliness and isolation represent profound threats to our health and well-being. But we have the power to respond. By taking small steps every day to strengthen our relationships, and by supporting community efforts to rebuild social connection, we can rise to meet this moment together. We can build lives and communities that are healthier and happier. And we can ensure our country and the world are better poised than ever to take on the challenges that lay ahead.

Our future depends on what we do today.

Vivek H. Murthy, M.D., M.B.A.
19th and 21st Surgeon General of the United States
Vice Admiral, United States Public Health Service

Office of the Surgeon General (OSG). Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community [Internet]. Washington (DC): US Department of Health and Human Services; 2023–. PMID: 37792968. This publication is in the public domain.

Introduction: Why Social Connection Matters

People may lack social connection in a variety of ways, though it is often illustrated in scientific research by measuring loneliness and social isolation. Social isolation and loneliness are related, but they are not the same. Social isolation is objectively having few social relationships, social roles, group memberships, and infrequent social interaction. On the other hand, loneliness is a subjective internal state. It's the distressing experience that results from perceived isolation or unmet need between an individual's preferred and actual experience.

The lack of social connection poses a significant risk for individual health and longevity. Loneliness and social isolation increase the risk for premature death by 26% and 29% respectively. More broadly, lacking social connection can increase the risk for premature death as much as smoking up to 15 cigarettes a day. In addition, poor or insufficient social connection is associated with increased risk of disease, including a 29% increased risk of heart disease and a 32% increased risk of stroke. Furthermore, it is associated with increased risk for anxiety, depression, and dementia. Additionally, the lack of social connection may increase susceptibility to viruses and respiratory illness and cost employers an estimated $154 billion annually. The impact of social connection not only affects individuals, but also the communities they live in. Social connection is an important social determinant of health, and more broadly, of community well-being, including (but not limited to) population health, community resilience when natural hazards strike, community safety, economic prosperity, and representative government.

What drives these profound health and well-being outcomes? Social connection is a fundamental human need, as essential to survival as food, water, and shelter. Throughout history, our ability to rely on one another has been crucial to survival. Now, even in modern times, we human beings are biologically wired for social connection. Our brains have adapted to expect proximity to others. Our distant ancestors relied on others to help them meet their basic needs. Living in isolation, or outside the group, means having to fulfill the many difficult demands of survival on one's own. This requires far more effort and reduces one's chances of survival. Despite current advancements that now allow us to live without engaging with others (e.g., food delivery, automation, remote entertainment), our biological need to connect remains.

The health and societal impacts of social isolation and loneliness are a critical public health concern in light of mounting evidence that millions of Americans lack adequate social connection in one or more ways. A 2022 study found that when people were asked how close they felt to others emotionally, only 39% of adults in the U.S. said that they felt very connected to others. An important indicator of this declining social connection is an increase in the proportion of Americans experiencing loneliness. Recent surveys have found that approximately half of U.S. adults report experiencing loneliness, with some of the highest rates among young adults. These estimates and multiple other studies indicate that loneliness and isolation are more widespread than many of the other major health issues of our day, including smoking (12.5% of U.S. adults), diabetes (14.7%), and obesity (41.9%), and with comparable levels of risk to health and premature death. Despite such high prevalence, less than 20% of individuals who often or always feel lonely or isolated recognize it as a major problem.

Together, this represents an urgent public health concern. Every level of increase in social connection corresponds with a risk reduction across many health conditions. Further, social connection can be a proactive approach to living a fulfilled and happy life, enhancing life satisfaction, educational attainment, and performance in the workplace, as well as contributing to more-connected communities that are healthier, safer, and more prosperous.

Unsurprisingly, social connection is generally not something we can do alone and not something that is accessible equitably. That is partially because we need others to connect with, but also because our society —including our schools, workplaces, neighborhoods, public policies, and digital environments—plays a role in either facilitating or hindering social connection. Moreover, it is critical to carefully consider equity in any approach to addressing social connection, as access and barriers to social opportunities are often not the same for everyone and often reinforce longstanding and historical inequities.

This advisory calls attention to the critical role that social connection plays in individual and societal health and well-being and offers a framework for how we can all contribute to advancing social connection.

What is Social Connection?

Social connection can encompass the interactions, relationships, roles, and sense of connection individuals, communities, or society may experience. An individual's level of social connection is not simply determined by the number of close relationships they have. There are many ways we can connect socially, and many ways we can lack social connection. These generally fall under one of three vital components of social connection: structure, function, and quality.

- **Structure**

The number of relationships, variety of relationships (e.g., co-worker, friend, family, neighbor), and the frequency of interactions with others.

- **Function**

The degree to which others can be relied upon for various needs.

- **Quality**

The degree to which relationships and interactions with others are positive, helpful, or satisfying (vs. negative, unhelpful, or unsatisfying).

These three vital components of social connection are each important for health, and may influence health in different ways.

It's also critical to understand other defining features of social connection.

First, it is a continuum. Too often, indicators of social connection or social disconnection are considered in dichotomous ways (e.g., someone is lonely or they're not), but the evidence points more to a gradient. Everyone falls somewhere on the continuum of social connection, with low social connection generally associated with poorer outcomes and higher social connection with better outcomes.

Second, social connection is dynamic. The amount and quality of social connection in our lives is not static. Social connectedness changes over time and can be improved or compromised for a myriad of reasons. Illness, moves, job transitions, and countless other life events, as well as changes in one's community and society, can all impact social connectedness in one direction or another. Further, how long we remain on one end of the continuum may matter. Transient feelings of loneliness may be less problematic, or even adaptive, because the distressing feeling motivates us to reconnect socially.[60] Similarly, temporary experiences of solitude may help us manage social demands.[61] However, chronic loneliness (even if someone is not isolated) and isolation (even if someone is not lonely) represent a significant health concern.

Third, much like the absence of disease does not equate to good health, the absence of social deficits (e.g., loneliness) does not necessarily equate to high levels of social connection. Although some measures of social connection represent the full continuum, others only focus on deficits, which do not capture the degree to which social assets may contribute to resilience, or even enable thriving. Consider two examples: first, an individual who is part of a large, highly-involved family, and second, an individual who has regular contact with colleagues through work but has little time for personal relationships outside of work. In each case, such an individual is not objectively isolated and may not feel subjectively lonely. However, in both cases key measures of isolation and loneliness may miss whether they are reaping the benefits of social connection in other ways, such as feeling adequately supported or having high-quality, close relationships.

Current Trends: Is Social Connection Declining?

Across many measures, Americans appear to be becoming less socially connected over time. This is not a new problem—certain declines have been occurring for decades. While precise estimates of the rates of social connection nationally can be challenging because studies vary based on which indicator is measured, when the same measure is used at multiple time points, we can identify trends.

Trends in Social Networks and Social Participation

Social networks are getting smaller, and levels of social participation are declining distinct from whether individuals report that they are lonely. For example, objective measures of social exposure obtained from 2003-2020 find that social isolation, measured by the average time spent alone, increased from 2003 (285-minutes/day, 142.5-hours/month) to 2019 (309-minutes/day, 154.5-hours/month) and continued to increase in 2020 (333-minutes/day, 166.5-hours/month). This represents an increase of 24 hours per month spent alone. At the same time, social participation across several types of relationships has steadily declined. For instance, the amount of time respondents engaged with friends socially in-person decreased from 2003 (60-minutes/day, 30-hours/month) to 2020 (20-minutes/day, 10-hours/month). This represents a decrease of 20 hours per month spent engaging with friends. This decline is starkest for young people ages 15 to 24. For this age group, time spent in-person with friends has reduced by nearly 70% over almost two decades, from roughly 150 minutes per day in 2003 to 40 minutes per day in 2020. The COVID-19 pandemic accelerated trends in declining social participation.

The number of close friendships has also declined over several decades. Among people not reporting loneliness or social isolation, nearly 90% have three or more confidants. Yet, almost half of Americans (49%) in 2021 reported having three or fewer close friends—only about a quarter (27%) reported the same in 1990. Social connection continued to decline during the COVID-19 pandemic, with one study finding a 16% decrease in network size from June 2019 to June 2020 among participants.

Demographic Trends

Societal trends, including demographic changes such as age, marital/partnership status, and household size, also provide clues to current trends. For example, family size and marriage rates have been in steady decline for decades. The percentage of Americans living alone has also increased decade-to-decade. In 1960, single-person households accounted for only 13% of all U.S. households. In 2022, that number more than doubled, to 29% of all households.

The reasons people choose to remain single or unmarried, have smaller families, and live alone over time are complex and encompass many factors. Yet at the same time, it is important to acknowledge the contribution these demographic changes have on social disconnection because of the significant health impacts identified in the scientific evidence. Moreover, awareness can help individuals consider these impacts and cultivate ways to foster sufficient social connection outside of chosen traditional means and structures.

The research in this section points to overall declines in some of the critical structural elements of social connection (e.g., marital status, household size), which helps to explain increases in reported loneliness and social isolation and contributes to the overall crisis of connection we are experiencing. Finally, this suggests we have fewer informal supports to draw upon in times of need—all while the number of older individuals and those living with chronic conditions continues to increase.

Trends in Community Involvement

Although the concept of community has evolved over time, many traditional indicators of community involvement, including with religious groups, clubs, and labor unions, show declining trends in the United States since at least the 1970s. In 2018, only 16% of Americans reported that they felt very attached to their local community.

Membership in organizations that have been important pillars of community connection have declined significantly in this time. Take faith organizations, for example. Research produced by Gallup, Pew Research Center, and the National Opinion Research Center's General Social Survey demonstrates that since the 1970s, religious preference, affiliation, and participation among U.S. adults have declined. In **2020, only 47%** of Americans said they belonged to a church, synagogue, or mosque. This is down from **70% in 1999** and represents a dip below 50% for the first time in the history of the survey question. Religious or faith-based groups can be a source for regular social contact, serve as a community of support, provide meaning and purpose, create a sense of belonging around shared values and beliefs, and are associated with reduced risk-taking behaviors. As a consequence of this decline in participation, individuals' health may be undermined in different ways.

What Leads Us to Be More or Less Socially Connected?

A wide variety of factors can influence an individual or community's level of social connection. One organizing tool that helps us better understand these factors is the social-ecological model. This model organizes the interrelated factors that affect health on the individual level, in our relationships, in our communities, and in society. Each of these levels—from the smallest to the broadest—contribute to social connection and its associated risks and protection for health.

Social connection is most often viewed as driven by the individual —one's genetics, health, socioeconomic status, race, gender, age, household living situation, and personality, among other factors. These can influence motivation, ability, or access to connect socially. As we've seen, the level of one's connection is also dependent on the structure, function, and quality of relationships. However, connectedness is influenced by more than simply personal or interpersonal factors. It is also shaped by the social infrastructure of the community (or communities) in which one is born, grows up, learns, plays, works, and ages.

Social infrastructure includes the physical assets of a community (such as libraries and parks), programs (such as volunteer organizations and member associations), and local policies (such as public transportation and housing) that support the development of social connection. **YMCA role**

The social infrastructure of these communities is in turn influenced by broader social policies, cultural norms, the technology environment, the political environment, and macroeconomic factors. Moreover, individuals are simultaneously influenced by societal-level conditions such as cooperation, discrimination, inequality, and the collective social connectedness or disconnectedness of the community. All of these shape the availability of opportunities for social connection.

In sum, social connection is more than a personal issue. The structural and social characteristics of the community produce the settings in which people build, maintain, and grow their social networks. Because many contributors to social connection go beyond an individual's control, in order to promote health, change is needed across the full scope of the social-ecological model. While every factor can be important contributors to social connection, it's important to look across these levels. That gives us clues to barriers to connection and the types of interventions which could successfully increase social connection. This broader view can also help identify what places groups at highest risk for social isolation and loneliness, as well as factors that reinforce cycles of risk or resilience.

Anyone of any age or background can experience loneliness and isolation, but some groups are at higher risk than others. Not all individuals or groups experience the factors that facilitate or become barriers to social connection equally. Some people or groups are exposed to greater barriers. It's critical to examine and highlight the disproportionate risk they face and to target interventions to address their needs.

Although risk may differ across indicators of social disconnection, currently, studies find the highest prevalence for loneliness and isolation among people with poor physical or mental health, disabilities, financial insecurity, those who live alone, single parents, as well as younger and older populations. For example, while the highest rates of social isolation are found among older adults, young adults are almost twice as likely to report feeling lonely than those over 65. The rate of loneliness among young adults increased every year between 1976 and 2019. In addition, lower-income adults are more likely to be lonely than those with higher incomes. **Sixty-three percent of adults who earn less than $50,000 per year are considered lonely, which is 10 percentage points higher than those who earn more than $50,000 per year**. These data do not suggest that individual or demographic factors inherently generate loneliness or isolation. Rather, the data enable us to understand the different socioeconomic, political, and cultural mechanisms that may indicate higher risk for certain groups and lead to loneliness and isolation.

Additional at-risk groups may include individuals from ethnic and racial minority groups, LGBTQ+ individuals, rural residents, victims of domestic violence, and those who experience discrimination or marginalization. Further research is needed to fully understand the disproportionate impacts of social disconnection.

Impacts of Technology on Social Connection

There is more and more evidence pointing to the importance of our environments for health, and the same is true for digital environments and our social health. A variety of technologies have quickly and dramatically changed how we live, work, communicate, and socialize. These technologies include social media, smartphones, virtual reality, remote work, artificial intelligence, and assistive technologies, to name just a few.

These technologies are pervasive in our lives. Nearly all teens and adults under 65 (96-99%), and 75% of adults 65 and over, say that they use the internet. Americans spend an average of six hours per day on digital media. One-in-three U.S. adults 18 and over report that they are online "almost constantly," and the percentage of teens ages 13 to 17 years who say they are online "almost constantly" has doubled since 2015. When looking at social media specifically, the percentage of U.S. adults 18 and over who reported using social media increased from 5% in 2005 to roughly 80% in 2019. Among teens ages 13 to 17 years, 95% report using social media as of 2022, with more than half reporting it would be hard to give up social media. Although tech adoption is relatively high among all groups, Americans with disabilities, adults with lower incomes, and Americans from rural areas[92] continue to experience a persistent, albeit shrinking, digital divide. They are relatively less likely to own a computer, smartphone, or tablet, or have broadband internet access.

Technology has evolved rapidly, and the evidence around its impact on our relationships has been complex. Each type of technology, the way in which it is used, and the characteristics of who is using it, needs to be considered when determining how it may contribute to greater or reduced risk for social disconnection. There are multiple meta-analyses and reviews examining this topic that identify both benefits and harms.

Several examples of benefits include technology that can foster connection by providing opportunities to stay in touch with friends and family, offering other routes for social participation for those with disabilities, and creating opportunities to find community, especially for those from marginalized groups. For example, online support groups allow individuals to share their personal experiences and to seek, receive, and provide social support—including information, advice, and emotional support.

Several examples of harms include technology that displaces in-person engagement, monopolizes our attention, reduces the quality of our interactions, and even diminishes our self-esteem. This can lead to greater loneliness, fear of missing out, conflict, and reduced social connection. For example, frequent phone use during face-to-face interactions between parents and children, and between family and friends, increased distraction, reduced conversation quality, and lowered self-reported enjoyment of time spent together in-person. In a U.S.-based study, participants who reported using social media for more than two hours a day had about double the odds of reporting increased perceptions of social isolation compared to those who used social media for less than 30 minutes per day. Additionally, targets of online harassment report feelings of increased loneliness, isolation, and relationship problems, as well as lower self-esteem and trust in others. Evidence shows that even perpetrators of cyberbullying experience weakened emotional bonds with social contacts and deficits in perceived belongingness.

Understanding how technology can enhance or detract from social connection is complicated by ever-changing social media algorithms, complex differences in individual technology use, and balancing concerns over obtaining private user data. Advancing research in this area is essential. With that said, the existing evidence illustrates that we have reason to be concerned about the impact of some kinds of technology use on our relationships, our degree of social connection, and our health.

Risk and Resilience Can Be Reinforcing

The factors that facilitate, or become barriers to, social connection can also reinforce either a virtuous or vicious cycle. Economic status, health, and service are just a few illustrative examples—better social connection can lead to better health, whereas less social connection can lead to poorer health. However, each of these can be reinforcing. Being in poorer health can become a barrier to engaging socially, reducing social opportunities and support, and reinforcing a vicious cycle of poorer health and less connection. A similar kind of pattern could occur among those struggling financially. For example, financial insecurity may require someone to work multiple jobs, resulting in less leisure time and limiting opportunities for social participation and connection—which, in turn, could provide fewer resources and financial opportunities. While these cycles can be reinforcing, they are not always negative. There is, for instance, a virtuous cycle between social connection and volunteerism or service. Those who are more connected to their communities are more likely to engage in service, and those who are engaged in service are more likely to feel connected to their communities and the individuals in it. Interestingly, there is also evidence showing that the well-being benefits associated with volunteering are even greater for those with higher social connectedness than those with less. Because these cycles can be reinforcing, prioritizing social connection can not only disrupt vicious cycles but also reinforce virtuous ones.

Lessons from the COVID-19 Pandemic

While social connection had been declining for decades prior to the COVID-19 pandemic, the onset of the pandemic, with its lockdowns and stay-at-home orders, was a critical time during which the issue of connection came to the forefront of public consciousness, raising awareness about this critical and ongoing public health concern.

Many of us felt lonely or isolated in a way we had never experienced before. We postponed or canceled meaningful life moments and celebrations like birthdays, graduations, and marriages. Children's education shifted online—and they missed out on the many benefits of interacting with their friends. Many people lost jobs and homes. We were unable to visit our children, siblings, parents, or grandparents. Many lost loved ones. We experienced feelings of anxiety, stress, fear, sadness, grief, anger, and pain through the loss of these moments, rituals, celebrations, and relationships.

Although the COVID-19 pandemic was a collective experience, it impacted certain populations differently. Frontline workers had a different experience than those who could work from home. Parents managing their own work and their children's online school had a different experience than single young people unable to interact in-person with friends. And those at greater risk of severe COVID-19, including older individuals, those living in nursing homes, and people with underlying health conditions, faced unique challenges. Emerging data suggests that people with close and positive familial connections may have had a different experience than those without. A recent national survey showed that, by April 2021, 1 in 4 individuals reported feeling less close to family members compared to the beginning of the pandemic. Yet, at the same time, about 1 in 5 said they felt closer to family members,[122] perhaps indicating that the pandemic exacerbated existing family dynamics of connection or disconnection.

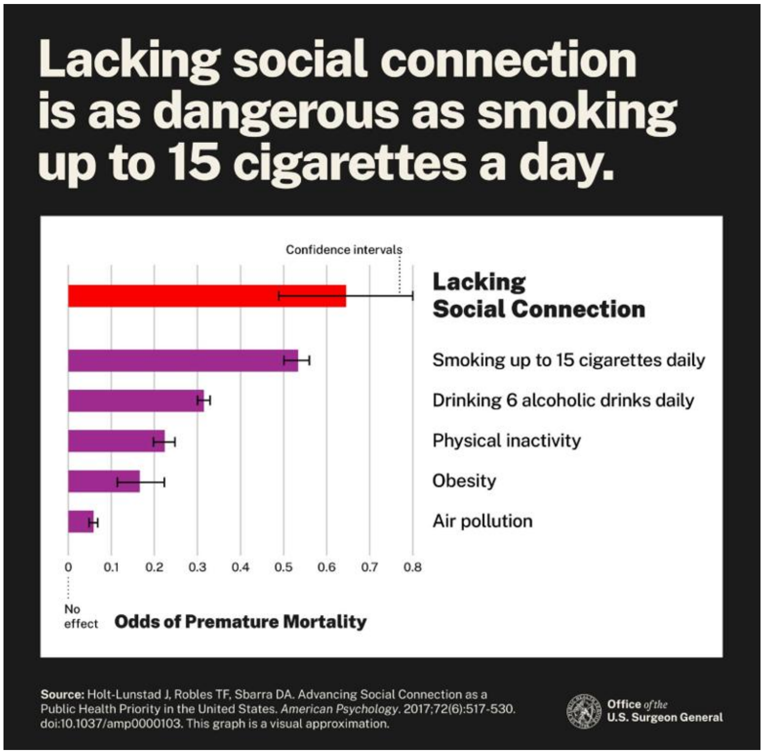
We also witnessed first responders, health care workers, community members, neighbors, and volunteers stepping up and offering their social support to one another. Service can be a powerful source of connection. From September 2020 to September 2021, the majority (51%) of U.S. individuals ages 16 and older reported informally helping others. This represents more than 120 million U.S. individuals helping informally, in addition to an estimated 60 million individuals formally volunteering through an organization during the same period. By engaging in service work, many were able to find and create pockets of connection for themselves and others during a public health crisis.

While profoundly disruptive in so many ways, the COVID-19 pandemic offers an opportunity to reflect more deeply on the state of social connection in our lives and in society. As we emerge from this era, rebuilding social connection and community offers us a promising and hopeful way forward.

Chapter 2: How Social Connection Impacts Individual Health and Well-Being

Extensive scientific findings from a variety of disciplines, including epidemiology, neuroscience, medicine, psychology, and sociology, converge on the same conclusion: social connection is a significant predictor of longevity and better physical, cognitive, and mental health, while social isolation and loneliness are significant predictors of premature death and poor health. In fact, the benefits of social connection extend beyond health-related outcomes. They influence an individual's educational attainment, workplace satisfaction, economic prosperity, and overall feelings of well-being and life fulfillment. This chapter summarizes the rapidly growing body of evidence on the relationship between various indicators of social connection and these outcomes for individuals.

Evidence across scientific disciplines converges on the conclusion that socially connected people live longer. Large population studies have documented that, among initially healthy people tracked over time, those who are more socially connected live longer, while those environmental factors (e.g., air pollution), and clinical interventions (e.g., flu vaccine, high blood pressure medication, rehabilitation).



Source: Holt-Lunstad J, Robles TF, Sbarra DA. Advancing Social Connection as a Public Health Priority in the United States. *American Psychology*. 2017;72(6):517-530. doi:10.1037/amp0000103. This graph is a visual approximation.

Over the years, the number of studies, the rigor of their methods, and the size of the samples have all increased substantially, providing stronger confidence in this evidence. These replicate the finding that social connection decreases the risk of premature death.

Taken together, this research establishes that the lack of social connection is an independent risk factor for deaths from all causes, including deaths caused by diseases.

The evidence linking social connection to physical health is strongest in heart disease and stroke outcomes. Dozens of studies have found that social isolation and loneliness significantly increase the risk of morbidities from these conditions. Among this evidence, a synthesis of data across 16 independent longitudinal studies shows poor social relationships (social isolation, poor social support, loneliness) were associated with a 29% increase in the risk of heart disease and a 32% increase in the risk of stroke. Interestingly, these effects can begin early in life and stretch over a lifetime. Research has also found that childhood social isolation is associated with increased cardiovascular risk factors such as obesity, high blood pressure, and blood glucose levels in adulthood. Further, in a 2022 statement, the American Heart Association concluded that "social isolation and loneliness are common, yet underrecognized, determinants of cardiovascular health and brain health."

Heart failure patients who reported high levels of loneliness had a 68% increased risk of hospitalization, a 57% higher risk of emergency department visits, and a 26% increased risk of outpatient visits, compared with patients reporting low levels of loneliness. Combining data from 13 studies on heart failure patients, researchers found that poor social connection is associated with a 55% greater risk of hospital readmission. This was consistent across both objective and perceived social isolation, including living alone, lack of social support, and poor social network. Furthermore, evidence suggests that people who are less socially connected, particularly those living alone, may be less likely to make it to the hospital, increasing their risk of dying from a cardiac event. Conversely, a heart attack is less likely to be fatal for people living with others or who have more social contacts, perhaps because of the immediate response and availability of help during the event.

Hypertension

High blood pressure (hypertension) is one of the leading causes of cardiovascular disease. Several studies demonstrate that the more social support one has, the greater the reduction in the possibility of developing high blood pressure, even in populations who are at higher risk for the condition, such as Black Americans. Greater social support in this group is associated with a 36% lower risk of high blood pressure in the long-term. Among older adults, the effect of social isolation on hypertension risk is even greater than that of other major clinical risk factors such as diabetes.

Since high blood pressure most often doesn’t have symptoms, it is possible for people to be unaware of even severe underlying cases. The disorder may remain undiagnosed for years, which can elevate the risk for a wide range of physiological complications. However, among older adults, people with higher perceived emotional support from family and friends, and with frequent exposure to health-related information within their social networks, are significantly less likely to have undiagnosed and uncontrolled hypertension.

The results of many research studies also reflect a strong correlation between social connection and high blood pressure control. Regular participation in two or more social or community-based groups; emotional and informational support from family, friends, professional contacts, community organizations, and peer groups; and frequent network interactions may improve hypertension management, including following treatment recommendations and long-term lifestyle adjustments. Findings from the National Social Life, Health, and Aging Project (NSHAP) suggest a “causal role of social connections in reducing hypertension,” particularly in adults over the age of 50.

Diabetes

Evidence gathered over the last 25 years has demonstrated that social context is important to the development and management of diabetes. Population-based studies show the impact of social connection on the development of type 2 diabetes and diabetic complications. For example, social disconnection (poor structural social support and living alone in men, low emotional support in women, and not having a current partner in women older than 70) has been linked to an increased risk for the development of type 2 diabetes. Furthermore, living alone increased the risk of developing type 2 diabetes among women with impaired glucose tolerance.

By contrast, social connection has been associated with better self-rated health and disease management among individuals with diabetes. The involvement and support of family members has also been repeatedly shown to improve disease management and the health of people with type 1 diabetes and type 2 diabetes. Whereas, smaller social network size has been associated with newly diagnosed type 2 diabetes and complications from diabetes. These associations between social connection and broader diabetic outcomes including diagnosed pre-diabetes and type 2 diabetes, macrovascular complications (e.g., heart attack, stroke) and microvascular complications (e.g., diabetic retinopathy, impaired sensitivity in the feet, and signs of kidney disease) were independent of blood sugar (glucose) control, quality of life, and other cardiac risk factors.

What explains this phenomenon? Diabetic outcomes may be better among people who are more socially connected due to better diabetic management behaviors and patient self-care such as medication adherence, physical activity, diet, and foot care. For example, in a meta-analysis of 28 studies, social support from family and friends was significantly associated with better self-care, particularly blood sugar monitoring. Finally, evidence from the National Health and Nutrition Examination Survey found that among older adults with diabetes, those with a large social support network size (at least six close friends) had a reduced risk of all-cause mortality.

Infectious Diseases

People who are less socially connected may have increased susceptibility and weaker immune responses when they are exposed to infectious diseases. In a series of studies examining factors that contribute to illness after exposure to viruses like the common cold and flu, loneliness and poor social support were found to significantly contribute to the development and severity of the illnesses. In one study where participants were exposed to a common cold virus, individuals with social ties to six or more diverse social roles (e.g., parent, spouse, friend, family, co-worker, group membership) had a four-fold lower risk of developing a cold when compared to people who had ties to fewer (1-3) diverse social roles. These effects cannot be explained by previous exposure, since those who are more socially connected have stronger immune responses independent of baseline antibody count—suggesting stronger immune responses even when exposed to new viruses. A study conducted on immune responses to the COVID-19 vaccine found that a lack of social connection with neighbors and resultant loneliness was associated with weaker antibody responses to the vaccine.

Cognitive Function

Substantial evidence also links social isolation and loneliness with accelerated cognitive decline and an increased risk of dementia in older adults,[1] including Alzheimer's disease. Chronic loneliness and social isolation can increase the risk of developing dementia by approximately 50% in older adults, even after controlling for demographics and health status. A study that followed older adults over 12 years found that cognitive abilities declined 20% faster among those who reported loneliness.

When taken together, this evidence consistently shows that wider social networks and more frequent social engagements with friends and family are associated with better cognitive function and may protect against the risk of dementia. This suggests that investments in social connection may be an important public health response to cognitive decline.

Depression and Anxiety

Depression and anxiety are often characterized by social withdrawal, which increases the risk for both social isolation and loneliness; however, social isolation and loneliness also predict increased risk for developing depression and anxiety and can worsen these conditions over time. A systematic review of multiple longitudinal studies found that the odds of developing depression in adults is more than double among people who report feeling lonely often, compared to those who rarely or never feel lonely. Furthermore, in older adults, both social isolation and loneliness have been shown to independently increase the likelihood of depression or anxiety. These findings are also consistent among younger people. A review of 63 studies concluded that loneliness and social isolation among children and adolescents increase the risk of depression and anxiety, and that this risk remained high even up to nine years later.

Importantly, social connection also seems to protect against depression even in people with a higher probability of developing the condition. For example, frequently confiding in others is associated with up to 15% reduced odds of developing depression among people who are already at higher risk due to their history of traumatic or otherwise adverse life experiences.

Suicidality and Self-Harm

While many factors may contribute to suicide, more than a century of research has demonstrated significant links between a lack of social connection and death by suicide. This research suggests that social connection may protect against suicide as a cause of death, especially for men.

One study found that among men, deaths due to suicide are associated with loneliness and more strongly with indicators of objective isolation such as living alone.[170] In this study of over 500,000 middle-aged adults, the probability of dying by suicide more than doubled among men who lived alone. The same study showed that for women loneliness was significantly associated with hospitalization for self-harm. Further, when examining suicidality among nursing home and other long-term care facility residents, cancer patients, older adults, and adolescents, systematic reviews of studies on loneliness, social isolation, and low social support were associated with suicidal ideation. These links may result from a low sense of belonging and perceiving oneself as a burden to others.

Loneliness and low social support are also associated with increased risk of self-harm. In a review of 40 studies of more than 60,000 older adults, an increase in loneliness was reported to be among the primary motivations for self-harm.

Given the totality of the evidence, social connection may be one of the strongest protective factors against self-harm and suicide among people with and without serious underlying mental health challenges.

Social Connection Influences Health Through Multiple Pathways

While the effects of social connection on health are clear, research also helps explain how our level of social connection ultimately results in better or worse health. A key part of the explanation involves understanding how social connection influences behavioral, biological, and psychological processes, which in turn influence health outcomes. A large body of evidence has identified several plausible pathways.

Social Connection Influences Biological Processes

The role of social connection on biology emerges early in life and continues across the life course, contributing to risk and protection from disease. Several reviews document that social connection can influence health through specific biological pathways, including cardiovascular and neuroendocrine dysregulation, immunity, and gut-microbiome interactions. Because regulation of these systems is critical for good health, the documented influence between social connection and these biological pathways likely explains the impact on the risk of the development of disease.

Biological systems often do not operate independently. This means that increases in blood pressure, circulating stress hormones, and inflammation may occur simultaneously, potentially compounding risk across several biological systems.

One biological pathway of great interest is inflammation, given that it has been implicated as a factor in many chronic illnesses. Evidence shows that being objectively isolated, or even the perception of isolation, can increase inflammation to the same degree as physical inactivity. Similarly, lower social support is associated with higher inflammation. Chronic inflammation throughout the body has been linked to various chronic illnesses across the lifespan, such as cardiovascular disease, cancer, diabetes, depression, and Alzheimer's disease, as well as a variety of mental, cognitive, and physical health outcomes that increase the risk of premature mortality. Thus, inflammation may be a common pathway that explains the many diverse health outcomes associated with isolation and loneliness.

The protective, or positive, effects of social connection may operate on biological systems in a similar way, meaning that social connection may reduce the risk of disease by reducing biological system dysregulation. For example, increased levels of social connection can improve various biomarkers of cardiovascular functioning, including blood pressure, cardiovascular reactivity, and oxidative stress. In addition, social support and social bonding are associated with better regulation of the neuroendocrine system, including the role of oxytocin in both early life and adult attachment.

Social Connection Influences Behaviors

Social connection is also significantly associated with a number of health-related behaviors, including lifestyle behaviors (e.g., diet, exercise, sleep), and treatment adherence (e.g., taking medication as directed, engaging in recommended prevention measures) which ultimately influence our health and longevity. Social influence can be direct—loved ones encouraging one to get more sleep or reminding one to take their medication—or subtle, through social norms that communicate approval or disapproval of certain behaviors (like vaccination, smoking, exercise). In fact, evidence shows people are far more likely to be physically active if their peers and friends also exercise,[213,214] and they are more likely to stop smoking themselves if their social contacts do so as well. However, they are also less likely to stop smoking if they are in close connection to others who smoke, or even at risk for relapse if they had successfully quit smoking previously. Thus, it is clear that it is not just the presence of social connection and social support but the nature of the behaviors and norms in one's social network that influence health-related behaviors.

Individual Educational and Economic Benefits

The benefits of social connection extend beyond the well-being of individuals' health to quality of life, education, employment, and economic outcomes. Just as with health, those who lack sufficient social connection, whether because they are isolated, lonely, or in poor-quality relationships, seem to be at higher risk for poorer outcomes in these aspects of life as well.

Educational Benefits

Research shows that children and adolescents who enjoy positive relationships with their peers, parents, and teachers experience improved academic outcomes. For example, a review of youth mentoring programs found a positive association between mentoring programs intended to promote positive youth outcomes and improved school attendance, grades, and academic achievement test scores. Further, school and family connectedness during adolescent years may predict subsequent positive outcomes in early adulthood, including a higher likelihood of graduating college and attaining a 4-year college degree.

In contrast, the lack of quality social connections inhibits student progression even in higher education settings. For example, among medical students, feeling socially isolated is associated with dropping out. The lack of social connection is cited as a prime reason for leaving a program.

Economic Benefits

Supportive and inclusive relationships at work are associated with employee job satisfaction, creativity, competence, and better job performance. Quality social support, social integration, and regular communication among co-workers of all levels are key in preventing chronic work stress and workplace burnout. These resources may even be linked to shorter recovery times and less missed work after work-related injuries or illnesses. Workplace connectedness is also associated with enhanced individual innovation, engagement, and quality of work, all of which can influence career advancements, income, and overall economic stability.

Social connection outside the workplace also plays an important role in an individual's economic situation. Diverse social networks that facilitate interaction and relationship-building among people of differing socioeconomic status (SES) may provide opportunities for individuals from lower SES backgrounds to gain stronger footing in the labor market and obtain higher-paying jobs. Such bridging, cross-class ties are among the most important predictors of upward economic mobility.

Additionally, activities that better connect individuals to one another, including immersion in local community-based activities or volunteering, can also equip individuals with desirable skills that make them more employable, and significantly increase the likelihood of unemployed individuals becoming employed.

Chapter 3: How Social Connection Impacts Communities

Decades of research across disciplines such as political science, economics, sociology, behavioral science, and public health, among others, have examined the relationship between group social connection and population health and well-being. Though variation exists across studies and methodologies, the cumulative evidence generally points to the same conclusion: higher levels of social connectedness suggest better community outcomes, ranging from population health to community safety, resilience, prosperity, and representative government; while lower levels of social connectedness suggest worse outcomes in each of these areas. These studies establish that social connection is vital not only to our individual physical, mental, and emotional health, but also to the health and well-being of our communities.

This chapter explores what it means to be a socially connected community and examines the evidence that more connected communities benefit from higher levels of well-being. The chapter also addresses the potential harms of negative social connection for community and societal well-being.

Socially Connected Communities

The scientific literature on social connection has defined “community” in many ways. Broadly, the term refers to a group of people with a characteristic in common. For the purpose of this advisory, however, the terms “community” and “communities” refer to a shared geographic location—neighborhoods, towns, cities. This chapter summarizes research that pertains to in-person social connection and the benefits that exist within place-based communities.

This does not diminish other types of communities (including those online) that can also provide support and other important elements of social connection. However, in-depth review of these types of communities is beyond the scope of this advisory and requires additional research.

Social capital is a key concept that researchers have identified as an important characteristic for understanding the social connectedness of communities. The definition and measurement of social capital varies by discipline, but broadly, social capital may be understood as “the resources to which individuals and groups have access through their social networks.” The term social capital is often used as an umbrella for both social support and social cohesion.

Social support refers to the perceived or actual availability of emotional, informational, or tangible resources from other individuals in one's social network. **Social cohesion** refers to the sense of solidarity within groups, marked by strong social connections and high levels of social participation, that generates trust, norms of reciprocity, and a sense of belonging.

Trust is a critical component of socially connected communities and a subjective indicator frequently used to measure social capital. Again, the scientific literature defines trust in many ways, but, broadly, it refers to an individual's expectation of positive intent and benevolence from the actions of others. Trust is an attitude that informs behavior towards unknown people (**generalized trust**), towards a known individual or group (**particularized trust**), or towards organizations and government (**institutional trust**).[29,234] It underlies communication and cooperation, both elements of social cohesion and social support. Higher levels of trust have been linked to improved population health, economic prosperity, and social functioning.

The **social infrastructure** of a community shapes its social capital. This refers to the programs (such as volunteer organizations, sports groups, religious groups, and member associations), policies (like public transportation, housing, and education), and physical elements of a community (such as libraries, parks, green spaces, and playgrounds) that facilitate bringing people together. Social infrastructure may help a community by providing opportunities to foster social connections among residents, local leaders, and community-serving organizations. As social networks grow in size, diversity, and strength, this produces greater levels of social support and social cohesion and builds social capital for a community.

Because belonging to a group is generally adaptive and improves survival, people have a natural tendency to build and maintain relationships with those who are most like themselves (e.g., those with similar educational backgrounds, incomes, professions, or family status). This type of social connection, defined as **bonding social capital**, is important and can provide the support and resources needed not only to prevent or reduce loneliness and social isolation but also to contribute to fulfillment and well-being.

Research suggests that diversifying social relationships to include connections with people who are outside of your group (**bridging social capital**), as well as connections between people of differing power status in the community (**linking social capital**) are also associated with improved community health and well-being. Examples of these types of relationships include cultivating intergenerational friendships (bridging) or developing programs like a mentorship exchange between youth and local employers (linking).

Larger and more diverse social networks, with a mixture of types of relationships, can provide access to more varied types of social support and generate greater levels of social capital. Furthermore, interacting with people from diverse backgrounds can help to stimulate creative thinking and encourage the consideration of different perspectives, leading to better problem-solving and decision-making. Finally, social interactions with neighbors and other community members —like small gestures such as smiling at a passerby or brief conversations at the bank, post office, grocery store, or local coffee shop—can foster a sense of interpersonal trust and create and maintain norms of reciprocity. This can also increase **empathy**, one of the best documented sources of altruism, by enhancing understanding with one another, supporting the development of shared identities and affiliations, and facilitating cooperation and beneficial interactions across individuals and groups. This helps to generate more social capital for the broader community.

These community interactions can be associated with a positive reinforcing cycle. As this chapter illustrates, individuals who immerse themselves in community-based activities are more likely to experience stronger feelings of social belonging and develop trusting relationships with fellow community members. This can lead people to more readily contribute their time and resources back to their communities. When community-based participation becomes the norm, social networks grow and produce high levels of trust among themselves, which facilitates the efficient exchange of information and sharing of resources within a community.

The Benefits of More Connected Communities

Population Health

Communities with higher levels of social connection typically enjoy significantly better health outcomes than communities that have lower levels. Studies find that community-level social capital is positively associated with a reduced burden of disease and risk for all-cause mortality. A meta-analysis of several studies looking at the cumulative effects across multiple indicators of social capital on all-cause mortality and general health found that on average, a one-unit increase in social capital increases the likelihood of survival by 17% and of self-reporting good health by 29%. In a separate study using data from 39 states, the authors found a dose-response relationship between the extent of social capital within a community and age-adjusted mortality. A 10% increase (one standard deviation) in the proportion of residents in each state who felt that other people could be trusted was associated with an 8% decline in overall mortality. Another study found that those with very strong perceptions of community belonging—an indicator of social cohesion—reported very good or excellent health at a rate 2.6 times higher than those with very low perceptions of belongingness. This was true even after adjusting for demographic variables, health and health behaviors, and the built environment. Finally, communities with higher levels of social capital are also more likely to see decreased hospital readmission rates.

The positive effects of social capital on health are not only evident when added up across individuals. Synergistic effects among various aspects of social capital also exist and impact community-wide health outcomes. Connected individuals who leverage available social capital resources to improve their health-related behaviors or collectively reform their community culture can generate downstream improvements in overall population-level health.

For example, personal biases and fears about highly stigmatized diseases such as HIV create barriers to health care and social inclusion for individuals living with HIV. A review of multiple studies shows that high levels of social capital in high-risk populations can buffer against those harmful social barriers and significantly increase the likelihood of HIV prevention behaviors. In turn, members of highly connected communities are more likely to participate in health-protective efforts and seek care when needed, thereby decreasing the disease burden and risk of disease transmission among the whole population. Similarly, more connected communities have higher utilization of immunization services, and are more likely to adopt recommended health-protective behaviors— all of which benefit the broader community.

Evidence also shows that stronger social bonds and social capital in communities increase the likelihood that local community groups and health care institutions will build population health-focused partnerships. These partnerships rely on the existing mutual trust and reciprocity within community settings to increase engagement opportunities within the population and improve access to health care in low-resource populations.

On the other hand, several reports have found that lower community social connection is linked to poorer health outcomes. This was made clear when examining the spread of the COVID-19 virus. One study in the United States compared changes in the county-level spread of COVID-19 against several measures of social capital. These included family structure and involvement, trust in community institutions, popularity of volunteerism, levels of participation in political discussions and voting efforts, and cohesion among community members. After controlling for potential alternative explanatory factors, the researchers found that lower levels of social capital were associated with a higher number of cases and deaths from COVID-19 infection. Further, counties with strong social ties experienced fewer deaths during the COVID-19 pandemic. Relatedly, an international study of COVID-19 infection and fatality rates across 177 countries also observed a statistically significant association between greater interpersonal and government trust and lower infection rates.

Natural Hazard Preparation and Resilience

A community's resilience to natural hazard events such as earthquakes, tsunamis, hurricanes, large-scale flooding, and fires depends upon the collective ability of individuals, households, and institutions to prepare for anticipated events, adapt to and withstand changing conditions, and recover rapidly following disruption.

Studies show that neighbors are often the first to respond in disaster situations, even before trained emergency professionals, because they are physically nearby. Growing evidence suggests that in neighborhoods and communities where people know one another and are connected to community institutions (like service organizations, religious groups, or community-based organizations) people prepare for, respond to, and recover more quickly from natural hazards than those with lower levels of social connection.

In such connected communities, it is more likely that people will share their knowledge and informal resources with neighbors, prepare for natural hazards, comply with emergency procedures including evacuation, and engage in coordination of emergency response efforts after natural hazard events.

Further, high levels of social connection reduce the exodus of people immediately following a natural hazard, preserve valuable social capital like social support and interpersonal trust, enable neighbors to provide aid to one another, and allow communities to overcome collective action problems such as coordinating recovery and rebuilding. Despite these benefits of connection within and for neighborhood communities, only 3 in 10 Americans report knowing all or most of their neighbors.

Community Safety

Not only do higher levels of social connection within a community correspond to better health and disaster outcomes, but they are also associated with lower levels of community violence.[271-274] One recent study on community violence showed that a one standard deviation increase in social connectedness was associated with a 21% reduction in murders and a 20% reduction in motor vehicle thefts. The Project on Human Development in Chicago Neighborhoods longitudinal study that began in the late 1990s found that neighborhoods with higher perceptions of social cohesion and where residents felt a "willingness to act" on behalf of community members (**collective efficacy**) were more likely to have reduced levels of crime and residents were more likely to feel safer. Many subsequent analyses have confirmed the association between social connection, greater perceived collective efficacy, and community safety. Recent studies have found that greater perceived collective efficacy, trust, and social norms on violence as unacceptable behavior can be protective factors against community violence. Fostering social connection is not a singular solution to community violence; however, it does play an instrumental role in prevention and response.

Economic Prosperity

Economic prosperity, including economic development, employment, the sharing of economic opportunities or information, and overall economic connectedness, is a key measure of the value that exists within a given society. Evidence illustrates that connected communities generally experience higher levels of economic prosperity. For example, an analysis of economic factors across the U.S. found that communities with higher social capital levels experienced greater resilience against unemployment between 2006 and 2010 and were able to weather the recession more successfully. In addition, a three-year study of 26 cities in the U.S. found that those with the highest levels of resident attachment experienced the greatest growth in GDP during the study period.

Further, members of these connected communities are more likely to recommend job and educational opportunities to one another, collaborate on ideas for innovation, build partnerships for local businesses, and directly advance economic progress in their communities. In addition, longitudinal evidence shows that civic engagement, another form of community participation, in adolescence and early adulthood positively predicts educational attainment and income potential in adulthood. In this way, local community participation may also influence socioeconomic mobility of individuals across their lifespan and also reduce large-scale socioeconomic disparities.

In contrast to the clear benefits of community connectedness, the consequences of disconnection on community prosperity can be detrimental. Long-standing systemic disinvestment, inequitable zoning laws, underdeveloped transportation systems, and residential segregation can perpetuate chronic poverty and isolate entire neighborhoods or towns from more prosperous local economies. On the other hand, cross-class exposure could have positive impacts on economic mobility across generations. For example, if children of low socioeconomic backgrounds had the share of high socioeconomic friends comparable to that of the average child with a high socioeconomic background, these children would increase their incomes in adulthood by an average of 20%. Pro-connection policies and practices can promote economic prosperity in communities harmed by structural barriers and eliminate such obstacles toward prosperity.

Civic Engagement and Representative Government

Higher levels of social connection are associated with increased levels of civic engagement (defined as “actions to address issues of public concern”) and more representative government. Emerging evidence has shown that civic engagement helps to develop “empathy, problem solving, [and] cooperation” among community members. One study showed that higher levels of family and community connection during adolescence predicted civic engagement outcomes in young adulthood including a greater likelihood of voting and involvement in social action and conversation groups. Further examples of civic engagement include registering to vote and voting, participating in advocacy groups or clubs, and connecting to information and current events. In addition, studies show that group membership and social networks strongly influence the decision to participate in the political process. Moreover, in a positive cycle, research suggests that greater civic engagement can lead to policies and programs that better reflect the will of a community’s residents, which in turn can promote continued and increased civic engagement.

The Potential Negative Side of Social Connection

Our fundamental human need for belonging is so strong that we may seek it out even in ways that may be unhealthy to ourselves or to our broader community. This can include participation in gangs and joining extremist or other harmful groups. Our natural tendency to associate with those most like us can be manipulated, with potentially negative consequences for individual and community well-being. When there are scarce resources, this can also lead to competition among various groups, leading to an “us” versus “them” mentality.

We tend to view our own group as more favorable and deserving than members of other groups.[290] This can result in distrust and rejection of outsiders.[291] In addition, among highly cohesive groups, there are also strong pressures to conform to the group norms[292]—often with high costs like rejection or ostracization if one doesn’t comply. While high cohesion and conformity to group norms can be healthy and productive in many cases, among some groups, these social pressures may justify, rationalize, or encourage unhealthy, unsafe, or unfair behaviors such as binge drinking, violence, and discrimination.

Societal Polarization

One consequence of the natural tendency for people to build and maintain relationships with those who are like themselves is the risk for exacerbating polarization in our discourse and in society—potentially leading to poorer outcomes for broader society.

“Core discussion networks,” are circles of people who have conversations on timely but difficult topics such as politics, finances, world events, religion, health, and more. The nature, size, and diversity of these discussion networks are important to how individuals form opinions, attitudes, and awareness of differing perspectives. They ultimately foster political tolerance. Generally, the size and diversity of core discussion networks have been shrinking substantially over the recent decades. One survey of 1,055 U.S. adults during the 2016 U.S. presidential election found that core discussion networks were smaller than in any other observed period and that the proportion of individuals with the same political preference within core discussion networks was higher than reported previously.

As discussion networks shrink and become more politically homogenous while society becomes more polarized, it is perhaps not surprising that almost 6 in 10 U.S. adults report that it is “stressful and frustrating” to talk about politics with people who hold different political opinions. A recent survey found that 64% of individuals believe that people are incapable of having constructive and civil debates about issues on which they disagree. Additionally, growing ideological divisions in the U.S. are fueling skepticism and even animosity between groups across the political divide —sentiments of enmity and disapproval between Democrats and Republicans more than doubled between 1994 and 2014. Polarization can lead to identity-based extremism and violence, pointing to the urgent need to foster social connection across group-based ideological differences through **bridging social capital**.

Chapter 4: A National Strategy to Advance Social Connection

The world is just beginning to recognize the vital importance of social connection. While the evidence of the severe consequences of social isolation, loneliness, and overall social disconnection has been building for decades, a global pandemic crystallized and accelerated the urgency for the United States to establish a National Strategy to Advance Social Connection. Such a strategy not only recognizes the critical importance of advancing social connection, but also serves as a commitment to invest in and take actions establishing that our connection with others is a core value of this nation.

As this advisory has shown, fulfilling connections are a critical and often underappreciated contributor to individual and population health and longevity, safety, prosperity, and well-being. On the other hand, social disconnection contributes to many poor health outcomes, and even to premature death. Sadly, around 50% of adults in the U.S. reported being lonely in recent years[1-3]— and that was even before COVID-19 separated so many of us from our friends, loved ones, and support systems. Our bonds with others and our community are also part of this equation. Research has shown that more connected communities enjoy higher levels of well-being. The converse is also true. How do we put this important information to practical use in our society? What actionable steps can we take to enhance social connection so that we can all enjoy its benefits?

A National Strategy to Advance Social Connection is the critical next step to catalyze action essential to our nation's health, safety, and prosperity. The strategy includes six foundational pillars and a series of key recommendations, organized according to stakeholder group, to support a whole-of-society approach to advancing social connection. Individuals and organizations can use this framework to propel the critical work of reversing these worrisome trends and strengthening social connection and community.

Doing so won't always be easy. Fostering greater connection requires widespread individual and institutional action. It demands our sustained investment, effort, and focus. But it will be worth it, because when we each take these critical steps, we are choosing better lives, and to create a better world for all.

Such a world, where we recognize that relationships are just as essential to our well-being as the air we breathe and the food we eat, is a world where everyone is healthier, physically and mentally. It is a world where we respect and value one another, where we look out for one another, and where we create opportunities to uplift one another. A world where our highs are higher because we celebrate them together; where our lows are more manageable because we respond to them together; and where our recovery is faster because we grieve and rebuild together.

It is a world where we are strong enough to hold our differences, where we are more comfortable and motivated to engage civically, and where our leaders and institutions are more representative of the people they serve. It is a world where we trust one another, where we feel safe to challenge one another and change our minds, and where prosperity and progress are not the privilege of the few but accessible to all.

We can choose, in short, to take the core values that make us strong—love, kindness, respect, service, and commitment to one another—and reflect them in the world we build for ourselves and our children. This strategy shows us how to create the connected lives and the connected world we need.

Benefits of a National Strategy to Advance Social Connection

- **Cultivating individual health and well-being** across physical and mental health and educational and economic outcomes. This enables individuals to be happier, more prosperous, and to contribute more fully to society.

- **Strengthening community health, safety, and prosperity** by cultivating social cohesion and social capital within and across communities. This enables communities to overcome adversity and thrive.
- **Building resilience for the next set of challenges** such as natural hazards, pandemics, and safety threats. This enables society to withstand unanticipated crises through stronger recovery and resilience.
- **Advancing civic engagement and representative government** by fostering a more engaged citizenry. This enables policies and programs to better reflect the will of a community and its individuals.

Many factors that influence social connection are environmental. Decisions about the layout of our cities, from the usability and reach of public transportation to the design of housing and green spaces, have a direct effect on social interaction in a community.[302,303] This is why strengthening social infrastructure that promotes social connection is critical to advancing key aspects of community health, resilience, safety, and prosperity. Social infrastructure refers to the programs (such as volunteer organizations, sports groups, religious groups, and member associations), policies (like public transportation, housing, and education), and physical elements of a community (such as libraries, parks, green spaces, and playgrounds) that support the development of social connection.

Investing in local communities and in social infrastructure will fall short if access to the benefits is limited to only some groups. Equitable access to social infrastructure for all groups, including those most at-risk for social disconnection, is foundational to building a connected national and global community, and is essential to this pillar's success.

Moreover, community programs, such as those that connect us to our neighbors, those that help students establish social skills in schools, and those that generate opportunities for high-risk populations to create community, also have a powerful role in building relationships. For example, volunteering is a demonstrated and powerful way to advance connection to one's community and create diverse ties among community members. Finally, institutions that gather individuals for work, study, or prayer, such as workplaces, schools, and faith organizations, can function as sources of positive connection and thereby bolster the community's trust in those institutions and in fellow members. Investing in community connection will be important to repairing divisions and rebuilding trust in each other and our institutions, and is vital to achieving common societal goals.

National, state, local, and tribal governments play a critical role in strengthening social connection and community across all sectors. These institutions recognize the importance of social connection to the health of their communities. Policymakers understand that while the effects of social connection may be most evident for health, the drivers of connection and disconnection can be found in all types of policies, from transportation and zoning to nutrition and labor. A “Connection-in-All-Policies” approach recognizes that every sector of society is relevant to social connection, and that policy within each sector may potentially hinder or facilitate connection. Conversely, government has a responsibility to use its authority to monitor and mitigate the public health harm caused by policies, products, and services that drive social disconnection.

Prioritizing social connection in policy agendas and leveraging a “Connectionin-All-Policies” approach requires establishing cross-departmental leadership to develop and oversee an overarching social connection strategy. Diversity, equity, inclusion, and accessibility are critical components of any such strategy. It must recognize that everyone is impacted by social connection, but that some groups may be more disproportionally impacted by some policies. Thus, policymakers must give focused attention to reducing disparities in risk and ensuring equal access to benefits.

Social connection is an independent protective factor, and social isolation and loneliness are independent risk factors for several major health conditions, including cardiovascular disease, dementia, depression, and premature mortality from all causes.[128] While all organizations have a role in addressing social connection, mobilizing the health sector—most notably health care delivery systems and the public health community—is a core pillar of the National Strategy.

It is critical that we invest in health care provider education on the physical and mental health benefits of social connection, as well as the risks associated with social disconnection. We must also create systems that enable and incentivize health care providers to educate patients as part of preventative care, assess for social disconnection, and respond to patients’ health-relevant social needs. This can be accomplished both within the medical system and by linking individuals to community-based organizations that can provide necessary support and resources specifically designed to increase social connection.[10,285,304,305] Public health organizations can help track the community prevalence of social disconnection, promote individual best practices, and advance community solutions. By integrating social connection into primary-, secondary-, and tertiary-level prevention and care efforts, we can strive to prevent forms of social disconnection in healthy individuals, mitigate forms of social disconnection early on before they become severe, and provide adequate support for those who are experiencing severe forms of social disconnection.

The exponential growth of technology crosses geographic borders, broadening communities and opening the world to those with limited access. It has had a tangible impact on how we live and work, from social connectivity, gaming, content sharing, and virality, to flexible work environments and communication.

But these benefits come at a cost. Technology can also distract us and occupy our mental bandwidth, make us feel worse about ourselves or our relationships, and diminish our ability to connect deeply with others. Some technology fans the flames of marginalization and discrimination, bullying, and other forms of severe social negativity.

We must decide how technology is designed and how we use it. There are many ways to minimize harms. We must learn more by requiring data transparency from technology companies. This will enable us to understand their current and long-term effects on social connection, and implement and enforce safety standards (such as age-related protections for young people) that ensure products do not worsen social disconnection. In a positive vein, we should support the development of pro-connection technology to promote healthy social connection, create safe environments for discourse, and safeguard the well-being of users. This should be coupled with the public's greater ability to avoid or limit their own uses.

Finally, we need to recognize the unique aspects of digital technology that may differ from other modes of connecting socially. The modality of delivery matters, and should be strategically and explicitly acknowledged and evaluated.

This Surgeon General's Advisory outlines a summary of the evidence about how social connection and disconnection impact individual and community health and overall well-being. The totality of this evidence illustrates that urgent action is needed, including additional research to further advance our understanding of the causes and consequences of social connection, trends, populations at risk, and the effectiveness of interventions and other efforts to advance connection.

As a next step, relevant stakeholders, including government, policymakers, practitioners, and researchers, should work together to establish a research agenda focused on addressing identified gaps in the evidence base, fund research at levels commensurate with the seriousness of the problem, and create a plan to increase research coordination. Deepening our knowledge of social connection and disconnection also requires us to further refine and expand our capacity to measure these states via agreed upon standardized metrics. As individuals, communities, institutions, and governments implement the pillars of the National Strategy, consistent measurement will be critical to better understanding the driving forces of connection and disconnection, and how we can be more effective and efficient in addressing these states.

Public understanding of the essential role of social connection in health and well-being is critical to this pillar. Social connection should be included as a key driver of health in formal health education, from elementary to professional school curricula. It is also imperative that we share this knowledge beyond health professionals. Public awareness and education of the drivers and solutions of connection and disconnection will be a critical foundation to support sustained policy and cultural change.

A culture of connection is vital to creating the changes needed in society. While formal programs and policies can be impactful, the informal practices of everyday life—the norms and culture of how we engage one another—significantly influence social connection. These shared beliefs and values drive our individual and collective behaviors that then shape programs and policies. We cannot be successful in the other pillars without this underlying culture of connection.

Such a culture of connection rests on core values of kindness, respect, service, and commitment to one another. Everyone contributes to the collective culture of social connection by regularly practicing these values. Advancing this culture requires individuals and leaders to seek opportunities to do so in public and private dialogue, schools, workplaces, and in the forces that shape our society like media and entertainment, among others. Behaviors are both learned from and reinforced by the groups we participate in and the communities we are a part of. Thus, the more we observe others practicing these values, the more they will be reinforced in us.

All types of leaders and influencers (national, local, political, cultural, corporate, etc.) can use their voices to underscore these core values and model healthy social connection and dialogue. Media and entertainment shape our beliefs through the depiction of stories. These narratives can help individuals see themselves in stories and help to reduce stigma, thus enabling more connection. Further, our institutions should invest time, attention, and resources in ways that demonstrate these values.

Firearm Violence
A Public Health Crisis in America

The U.S. Surgeon General's Advisory

Office of the Surgeon General (OSG).

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About This Advisory

A Surgeon General's Advisory is a public statement that calls the American people's attention to an urgent public health issue. Advisories are reserved for significant public health challenges that require the nation's immediate awareness and action.

This document is not an exhaustive review of the literature. Rather, the advisory was developed through a substantial review of the available scientific evidence, primarily found via electronic searches of research articles published in English and resources suggested by subject matter experts, with priority given to meta-analyses and systematic literature reviews. The morbidity and mortality data discussed account only for officially reported and documented incidents of firearm violence. Researchers have long acknowledged that reported firearm-related incidents represent an underestimate of the number of actual firearm-related incidents that occur.

Introduction

Firearm violence[a] in America is a public health crisis.

Since 2020, firearm-related injury has been the leading cause of death for U.S. children and adolescents (ages 1–19), surpassing motor vehicle crashes, cancer, and drug overdose and poisoning.

In 2022, **48,204** total people died from firearm-related injuries, including suicides, homicides, and unintentional deaths.[2] This is over **8,000** more lives lost than in 2019 and over **16,000** more lives lost than in 2010.[2]

A recent nationally representative survey (n=1,271) found that the majority of U.S. adults or their family members (54%) have experienced a firearm-related incident.[3] Among all respondents, 21% have personally been threatened with a firearm, 19% have a family member who was killed by a firearm (including by suicide), 17% have witnessed someone being shot, 4% have shot a firearm in self-defense, and 4% have been injured by a firearm. **Nearly 6 in 10 U.S. adults say that they worry “sometimes,” “almost every day,” or “every day,” about a loved one being a victim of firearm violence.**[3] Such high levels of exposure to firearm violence for both children and adults give rise to a cycle of trauma and fear within our communities, contributing to the nation’s mental health crisis.

Firearm violence is pervasive in the United States.

This Advisory describes the public health crisis of firearm violence in America and describes strategies for firearm injury and violence prevention, with a focus on the health and well-being of children, families, and communities.

Footnotes

a

In this Advisory, “firearm violence” includes firearm-related homicide, suicide, nonfatal firearm injuries, and unintentional injuries and deaths.

Chapter 1 Firearm Violence in the U.S.: Death and Injury

Firearm-Related Death

The rate of firearm-related deaths in our nation has been rising and reached a near three-decade high in 2021.[2] This crisis is being driven, in particular, by increases in firearm-related homicides over the last decade and firearm-related suicides over the last two decades.[2] Across all firearm-related deaths in 2022, more than half (56.1%) were from suicide, 40.8% were from homicide, and the remaining were from legal intervention,[b] unintentional injuries, and injuries of unknown intent.[2] The age-adjusted rate of firearm-related suicide increased by 20.1% from 2012 (6.3 per 100,000) to 2022 (7.6 per 100,000), with an absolute increase from 20,666 to 27,032 deaths over the same period.[2] The age-adjusted rate of firearm-related homicide increased by 62.5% from 2012 (3.8 per 100,000) to 2022 (6.2 per 100,000), with an absolute increase from 11,622 to 19,651 deaths over the same period.[2]

Despite these increases over time in firearm-related deaths, the number of firearm-related homicides decreased from 20,958 (6.7 per 100,000 [age-adjusted]) in 2021 to

19,651 (6.2 per 100,000 [age-adjusted]) in 2022.[2] Furthermore, the provisional firearm-related homicide rate for 2023 (part-year) is lower than the rate in 2022.[4] The provisional firearm-related suicide rate for 2023 (part-year) remains comparable to the rate in 2022.[5]

When measured over a decade (2012 to 2022), children and younger populations experienced a staggering increase in firearm-related suicide rates: 43% for 25–34-year-olds (6.5 per 100,000 [crude rate]) in 2012 to (9.3 per 100,000 [crude rate]) in 2022, 45% for 15–24-year-olds (5.0 per 100,000 [crude rate]) in 2012 to (7.3 per 100,000 [crude rate]) in 2022, and 68% for children aged 10–14 (0.50 per 100,000 [crude rate]) in 2012 to (0.84 per 100,000 [crude rate]) in 2022.

Rate of firearm-related suicide in the United States increased by 20% across the population, with the highest increases among younger people.

The rate of firearm-related deaths in our nation has been rising and reached a near three-decade high in 2021.[2]

Firearm-Related Death: International Comparison

Rates of firearm-related death in the U.S. are significantly higher than rates in other high-income countries. Data from the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) found that, in 2015, the overall firearm-related death rate was 11.4 times higher in the U.S. compared to 28 other high-income nations.[6] During the same year, 83.7% of all firearm-related deaths across the 29 countries studied occurred in the U.S. despite the U.S. only accounting for about 31% of the combined population.[6]

The discrepancy between the U.S. and peer nations is even more stark when it comes to firearm-related mortality among children and adolescents. Across the 29 countries referenced, in 2015, more than 9 in 10 children (ages 0–14) who died from firearm-related injuries lived in the U.S. (97% of children ages 0–4, and 92% of children ages 5–14).[6] More recently, data from the Institute for Health Metrics and Evaluation (IHME) showed that, in 2019, the rate of firearm mortality among children and adolescents (ages 1–19) in the U.S. (36.4 per one million) was more than 5 times the rate of firearm mortality among the same age group in Canada (6.2 per one million), about 18 times the rate of firearm mortality in Sweden (2.0 per one million), and more than 22 times the rate of firearm mortality in Australia (1.6 per one million).

Comparison of firearm mortality rates among children and adolescents in select OECD nations.

In 2015, the overall firearm-related death rate was 11.4 times higher in the U.S. compared to 28 other high-income nations.[6]

Firearm-Related Death: Disproportionate Impacts

Firearm homicides and suicides are not equally distributed, and disparities have been longstanding across population groups in the U.S. In 2022, Black persons endured the highest age-adjusted firearm homicide rates across all ages (27.0 per 100,000 (Black or African American) as compared to 6.2 per 100,000 (all races/ethnicities)[c]).[2] In 2022, White individuals ages 45 years and older had the highest rate of firearm suicide (14.8 per 100,000 vs. 11.1 per 100,000 all races/ethnicities ≥45 years); while the firearm suicide rate for people under age 45 years old was highest among American Indian or Alaska Native (AI/AN) persons (12.3 per 100,000 vs. 5.9 per 100,000 all races/ethnicities <45 years).[2] The firearm suicide rate was also significantly higher among Veterans in 2021: 62.4% higher for Veteran men than for non-Veteran men and 281.1% higher for Veteran women than for non-Veteran women.[8]

There are noteworthy disparities in firearm-related deaths by sex. In 2022, males were approximately six times as likely to die from firearm-related injury than females (41,302 firearm-related deaths among males and 6,902 firearm-related deaths among females).[2] Despite higher numbers of total firearm-related deaths among males, the intersection of intimate partner violence (IPV) and firearm violence disproportionately impacts females. Firearms are used in about 50% of all IPV-related homicides.[9, 10] In 2021, the proportion of homicides attributable to IPV was five times higher for female victims as compared to male victims.[11]

Among youth, disparities by sex and race are also evident. In 2022, male children and adolescents (ages 1–19) were more than five times as likely than their female counterparts to die from a firearm-related injury (3,926 firearm deaths for males and 677 firearm deaths for females).[2] When assessing types of firearm-related deaths in 2022 among White children and adolescents (ages 1–19), 29% were homicides (352 of 1,194) and 63% were suicides (757 of 1,194).[2] Among Black children and adolescents (ages 1–19), 86% of firearm-related deaths were homicides (1,961 of 2,279) and 10% were suicides (220 of 2,279).[2] Among Hispanic children and adolescents (all-races), 76% were homicides (688 of 909) and 18% were suicides (168 of 909); among Asian/Native Hawaiian/Pacific Islander children and adolescents, 39% were homicides (26 of 66) and 55% were suicides (36 of 66); and among American Indian or Alaska Native children and adolescents, 44% were homicides (29 of 66) and 48% were suicides (32 of 66).[2] CDC data for 2022 show that the firearm suicide rate among Black adolescents (age 10–19) surpassed the rate among White adolescents (age 10–19) for the first time on record.[2]

Overall, in 2022, Black children and adolescents accounted for about half of all firearm-related deaths among U.S. children and adolescents, despite making up only 14% of the U.S. child and adolescent population.[2, 12]

Firearm-Related Death: Mass Shootings

While mass shooting[d] deaths represent only about 1% of all firearm-related deaths in the U.S., the number of mass shooting incidents is increasing.[13, 14] According to data published by Gun Violence Archive, the U.S. experienced more than 600 mass shooting incidents each year between 2020 and 2023, compared to an average of less than 400 annual mass shooting incidents between 2015 and 2018.[15] An analysis of the National Violent Death Reporting System found that compared to single homicides (1 victim) and multiple homicides (2–3 victims), mass homicides[e] (4 or more victims, besides the perpetrator) had the highest proportion of female victims (52%), the highest proportion of White victims (56%), and the highest proportion of child victims (more than a quarter were younger than 18 years old).[16] Another analysis of mass shootings between 2014–2019 found that most incidents were associated with domestic violence (59%), which was defined as at least one victim being a dating partner or family member of the perpetrator, and that domestic violence-related mass shootings had higher average case fatality rates than those unrelated to domestic violence (84% vs 63%).[17]

Despite accounting for a relatively small number of firearm deaths, mass shooting incidents cause outsized collective trauma on society and have a strong negative effect on the public's perception of safety (see "Collective Toll" section on page 14). More than three-quarters of adults (79%) in the U.S. report experiencing stress from the possibility of a mass shooting, and one in three adults (33%) say fear prevents them from going to certain places or events.[18]

More than three-quarters of adults (79%) in the U.S. report experiencing stress from the possibility of a mass shooting, and one in three adults (33%) say fear prevents them from going to certain places or events.[18]

Mass shootings elicit significant fear and concern among the public and can lead to misconceptions about perpetrator characteristics. While findings suggest that perpetrators of mass homicides are more likely to experience mental health challenges than perpetrators of single homicides,[16] research also supports that one's mental health diagnosis or psychological profile alone is not a strong predictor of perpetrating violence of any type, including a mass shooting.[19, 20, 21] An FBI report that examined active shooter incidents in the U.S. between 2000–2013 could only verify that one quarter of perpetrators had been diagnosed with a mental illness of any kind prior to the offense[f].[19] Importantly, most people with serious mental illness are not violent against others.[22, 23] In fact, people with serious mental illnesses[g] are more likely to be victims of violence compared to the general population, even after controlling for demographic differences.[23, 24]

Other individual and interpersonal level factors, outside of mental health diagnoses, may also play a role in the risk of perpetrating a mass homicide.[19, 21, 25, 26] According to a 2023 Department of Homeland Security report on mass attacks in public spaces (the majority of which are perpetrated with firearms) from 2016–2020, about a quarter (24%) of perpetrators had a diagnosed mental health condition prior to or at the time of their attack[h], whereas nearly all attackers (93%) experienced at least one significant stressor within five years prior to the attack and 77% experienced such stressors within one year.[26] These acute and/or persistent life stressors involved romantic and family relationships (51%), such as death of a loved one or divorce; employment issues (32%), such as poor performance or termination; and negative social interactions (19%), such as being bullied in school or experiencing social exclusion, among others.[26]

Firearm-Related Injury

Physical and mental health impacts caused by nonfatal firearm injuries can be significant. Compared to those who lose their lives from firearm injuries each year, many more people are injured with a firearm and survive.[27] Although firearm-related injury rates are difficult to measure due to challenges with collecting national injury data, studies suggest that there are at least twice as many nonfatal firearm injuries as fatal firearm injuries.[27, 28] Abstractor coded data indicate that most nonfatal firearm injuries treated in emergency departments are deemed to be a result of assaults, followed by unintentional injuries.[28, 29]

From 2019 to 2022, the mean number of weekly emergency department visits for firearm injuries was consistently highest among young people (15–24 years old), compared to all other age groups.[30] The youngest age group (0–14 years old) saw the largest increases in the proportion of firearm-related injury emergency department visits during 2020–2022, compared with 2019.[30]

The impact of surviving a firearm injury includes short-term and long-term health consequences. Physical health consequences for individuals can include, but are not limited to, new limitations to physical functioning; physical disabilities from injury; and increased diagnoses of chronic pain.[31, 32, 33] Chronic behavioral health problems are also attributable to firearm injuries such as post-traumatic stress disorders, anxiety, depression, and substance use disorders.[33, 34, 35, 36] Examination of data from commercial health insurance claims from 2007–2021 suggests that children and adolescents (ages 0–19) who survived a firearm injury experienced long term negative health consequences.[35] Through one year after injury, compared to matched controls who did not experience a firearm injury, the survivors experienced a 117% increase in pain disorders (e.g. musculoskeletal pain, headache, and other pain syndromes), a 68% increase in psychiatric disorders (trauma- and stress-related disorders such as major depressive disorders, and other psychiatric disorders), and a 144% increase in substance use disorders (i.e., alcohol or drug use disorders).[35]

Further, in a cohort study of 183 adults who survived a firearm injury from 2008–2017, individuals (median time from injury, 5.9 years) self-reported worse physical and mental health compared with the general population.[32] Nearly 50% of these participants who survived a firearm injury were identified as having probable post-traumatic stress disorder, as compared to a 6.8% lifetime prevalence of post-traumatic stress disorder in the U.S. general population.[32] Rates of unemployment and substance use among the firearm-injury survivor group also increased by 14.3% and 13.2%, respectively, after injury.[32]

Go to:

Footnotes

b

The CDC defines legal intervention as, “firearm injuries inflicted by the police or other law enforcement agents acting in the line of duty.” The term *legal intervention* is a commonly used external cause of injury classification. It does not indicate the legality of the circumstances surrounding the death. (Centers for Disease Control and Prevention (2024, March). *About firearm injury and death*. U.S. Department of Health and Human Services. https://www.cdc.gov/firearm-violence/about/index.html).

c

Unless stated otherwise, the race categories Black, White, Asian/Native Hawaiian/Pacific Islander, and American Indian/Alaska Native should generally be taken to imply “non-Hispanic.” The Office of Management and Budget defines “Hispanic or Latino” as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. (United States Census Bureau. (n.d). *Why we ask questions about… Hispanic or Latino origin*. U.S. Department of Commerce. https://www.census.gov/acs/www/about/why-we-ask-each-question/ethnicity/)

d

The definition of mass shooting varies by source. The Congressional Research Service defines “mass shootings” as “a multiple homicide incident in which four or more victims are killed by firearms, within one event, and in one or more locations in proximity.”

(Krouse, W.J & Richardson, D.J. (2015) *Mass murder with firearms: incidents and victims, 1999–2013*. Congressional Research Service. https://sgp.fas.org/crs/misc/R44126.pdf). This Advisory uses a broader definition based on the Gun Violence Archive definition of a mass shooting as four or more shot or killed, not including the shooter. (Gun Violence Archive. (2023). *General methodology*. https://www.gunviolencearchive.org/methodology)

e

All types of mass homicides, including mass shootings.

f

Per the report, "the number of documented, diagnosed mental illness may be the result of a number of factors, including those related to situational factors (access to health care) as well as those related to the study factors (access to mental health records)." The FBI could not determine if a diagnosis had been given in 37% of cases.

g

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), serious mental illness in adults is defined as, "someone over 18 having (within the past year) a diagnosable mental, behavior, or emotional disorder that causes serious functional impairment that substantially interferes with or limits one or more major life activities." (Substance Abuse and Mental Health Services Administration. (2023). *Mental health and substance use disorders*. https://www.samhsa.gov/find-help/disorders). Serious mental illness commonly refers to, "a diagnosis of psychotic disorders, bipolar disorder, and either major depression with psychotic symptoms or treatment-resistant depression." (Evans, T. S., Berkman, N., Brown, C., Gaynes, B., & Weber, R. P. (2016). *Disparities within serious mental illness*. (AHRQ Publication No. 16-EHC027-EF) U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality. https://www.ncbi.nlm.nih.gov/books/NBK368427/).

h

Formally diagnosed mental health conditions included depression, anxiety, post-traumatic stress disorder, intermittent explosive disorder, schizophrenia, and bipolar disorder. The percentage does not include perpetrators who had observable symptoms without a formal diagnosis.

Chapter 2The Collective Toll of Firearm Violence Exposure in the U.S.

Beyond the profound consequences of surviving a firearm-related injury, those who do not experience direct bodily harm often grapple with mental health consequences related to firearm violence exposure[i], including community members, children and adolescents, and families.

Go to:

Impact on Communities

There is increasing evidence that exposure to firearm violence can contribute to elevated stress levels and mental health challenges and threaten the sense of well-being for entire communities. One study examining emergency department admissions between 2014 and 2018 found that children and adolescents in west and southwest Philadelphia, who lived within two to three blocks of where a shooting occurred, had nearly 50% increased odds of using an emergency room for mental health reasons during the subsequent 30 days after the shooting than other children and adolescents.[37] The odds were highest among youth who were exposed to multiple shootings and among those who lived closest to a shooting's location.[37]

Health workers who regularly treat firearm-related injuries and are exposed to the consequences of firearm violence may experience secondary traumatic stress.[38] The same can be seen among community workers and law enforcement officers who directly interface with victims and survivors of firearm violence. For example, in a study population of Chicago community violence interventionists (trained civilians working to intervene in and de-escalate street and firearm violence), 94% of workers reported at least one secondary traumatic stress indicator in the prior seven days (e.g., feeling emotionally numb, having trouble concentrating or sleeping, reliving the trauma experienced by clients).[39]

Mass shootings, in particular, can contribute to widespread psychological distress, as these events often implicate whole communities, receive substantial media coverage, and embed themselves in the public consciousness.[40] Among U.S. adults, 79% report experiencing stress from the possibility of a mass shooting and 33% say fear prevents them from going to certain places or events.[18] For example, the Orlando shooting at Pulse nightclub in June 2016, a shooting that impacted the LGBTQ+ community, was associated with a 25.6 percentage point increase in severe psychological distress for sexual minority men nationwide compared to heterosexual men.[41]

Impact on Children and Adolescents

Fears and worries about firearm violence are highly prevalent among youth, especially regarding school shootings. A nationally representative survey found that half (51%) of

14 to 17-year-olds in the U.S. worry about school shootings and nearly six in ten report that they "have recently thought about what would happen if a person with a gun entered" their school or a school nearby.[42]

Further, students exposed to school shootings experience "declines in health and well-being, engage in more risky behaviors, and have worse education and labor market outcomes as young adults" according to a recent study using data on shootings compiled by the Center for Homeland Defense and Security.[43] Researchers have found that local exposure to fatal school shootings is associated with a 21.4% increase in youth antidepressant use in the following 2 years.[44] Evidence suggests an increased risk of suicide or accidental deaths among students affected by the Columbine High School shooting, particularly for boys.[45]

Additionally, exposure to shooting incidents in schools is associated with increased odds of adolescents avoiding school because of feeling unsafe. For example, high school students who are exposed to a school shooting have 20% greater odds of avoiding school because of feeling unsafe compared to those who have not been exposed.[46] After the tragedy at Columbine High School, the percentage of students around the country who reported missing school because of safety concerns more than doubled in the months following the shooting.[47]

Researchers have found that local exposure to fatal school shootings is associated with a 21.4% increase in youth antidepressant use in the following 2 years.[44]

When discussing the mental health impacts of violence exposure on children, there is a strong body of literature supporting the impact on childhood development. Specifically, childhood exposure to witnessing firearm-related incidents has been associated with higher odds of adolescent handgun carrying.[48] As children age, cumulative exposure to firearm violence and other traumatic experiences may impact development and contribute to mental and behavioral problems.[49] As reported in the 2030 Healthy People Report, "children and adolescents exposed to violence are at risk for poor long-term behavioral and mental health outcomes, such as depression, anxiety, and post-traumatic stress disorder, regardless of whether they are victims, direct witnesses, or hear about the crime."[50]

Certain groups experience disproportionate impacts from firearm violence exposure. For example, among youth living in large U.S. cities, Black and Hispanic/Latino youth were up to 7 times more likely to experience (firsthand and proximity to) a past-year firearm homicide than White youth, and on average experienced incidents closer to home.[51]

Impact on Families

Research demonstrates that siblings of children and adolescents who died from firearm injury exhibited a 2.3-fold increase in psychiatric disorders, mothers exhibited a 3.6-fold increase, and fathers exhibited a 5.3-fold increase, as compared to families who did not experience firearm fatalities.[35] Further, parents of children and adolescents who died from a firearm injury used more mental health services: 15.3-fold higher for mothers and 86.6-fold higher for fathers, compared to parents who did not lose a child to firearm violence.[35]

Family members of survivors of firearm violence also experience increased risk of mental health challenges. Specifically, there was a 12% increase in psychiatric disorders (including anxiety, mood disorders, psychosis, and other disorders) among family members (including spouses, children, parents, and other dependents) of individuals who survived a firearm injury compared to control participants who did not have a family member injured by firearm violence.[36] In another study, mothers of children and adolescents who survived a firearm injury experienced a 75% increase in mental health visits compared to non-affected mothers.[35] The same study found that parents of children and adolescents who survived a firearm-related injury experienced about a 30% increase in psychiatric disorders compared to control participants.[35]

Further, a separate study found that mothers who *witness* at least one shooting in their neighborhood or local community exhibit more symptoms of depression and are more likely to meet criteria for depression than mothers who do not witness a shooting.[52]

While far too many parents lose children to firearm violence, children are also losing parents. Between 1999 and 2020, a cross-sectional study estimated that 434,000 youth (<18 years old) experienced a firearm-related parental death.[53] Black youth in this study experienced a disproportionate impact of parental deaths, primarily due to firearm-related deaths among fathers.[53] Adverse childhood experiences, which may include the homicide or suicide of a parent, can be associated with lifelong negative effects on health (e.g., depression, heart disease, and cancer) and life opportunities, like education and job potential of children.[54] **As firearm-related injuries and deaths increase, the grief, trauma and risk of mental health challenges for children and family members of victims increases too.**

Between 1999 and 2020, a cross-sectional study estimated that 434,000 youth (<18 years old) experienced a firearm-related parental death.[53]Go to:

Footnotes

i

In the scientific literature, exposure to firearm violence may range from being directly injured or witnessing firearm violence to living in a community affected by such violence or encountering these incidents on the news or social media.

Chapter 3 Contributing Factors to Firearm Violence

The factors strongly associated with firearm-related deaths and injuries in the U.S. are complex.[55, 56, 57, 58]

The COVID-19 pandemic impacted several known contributing factors to firearm violence with a disproportionate impact on marginalized communities.[59, 60, 61] Furthermore, leading up to and during the COVID-19 pandemic, an estimated 5.4 million U.S. adults in a household without a firearm purchased a firearm for the first time.[62]

Developing an understanding of the social determinants of health[j], impacts of firearm violence exposure, and other factors that contribute to firearm violence in the U.S. is critical to addressing this public health crisis. While not an exhaustive list, the following section discusses important factors that may contribute to rates of firearm violence in the U.S.

Go to:

Socioeconomic, Geographic, and Racial Inequities

Socioeconomic, geographic, and racial inequities as well as the associations between these factors may contribute to firearm violence outcomes and exposure. Structural factors that significantly increase the risk of experiencing firearm violence include, “poverty, living in an area with low social mobility, or being in a historically marginalized group impacted by structural racism,” among others.[63]

A nationwide study found that social capital (levels of trust in institutions), social mobility, income inequality, and social service spending demonstrated significant associations with firearm homicide rates.[64] Specifically, a one standard deviation increase in upward social mobility was related to a 25% reduction in the firearm homicide rate, and increased institutional social capital was linked to a 17% decrease in the number of firearm homicide incidents.[64] Similarly, an increase in socioeconomic status by one standard deviation has been associated with a 31% reduction in firearm suicide risk among men.[65] Conversely, increases in the neighborhood percentages of residents living in poverty and of males living alone were associated with up to 27% and 12% higher firearm-related homicide rates, respectively.[64]

Regarding geographic factors, firearm homicide rates are generally higher in urban areas (metropolitan counties) and firearm suicide rates are often higher in rural areas (non-metropolitan counties). Data analyzed from the Big Cities Health Coalition reported a total of 67,000 firearm deaths (2010–2021) in 35 member cities, 66% of which were homicides and 32% were suicides.[66] Further, in a cross-sectional study from 2011 to 2020, the most rural counties had a 76% higher firearm-related suicide rate and a 46% lower firearm-related homicide rate compared to the most urban counties.[67]

Structural, institutional, and individual racism have also contributed to inequities in exposure to firearm violence in the U.S. For example, structural racism has contributed to inequities in economic, housing, and educational opportunities that are associated with risk for violence and other health conditions among racial and ethnic minority groups.[68, 69] Racial and ethnic minority population groups are more likely to live in neighborhoods with concentrated economic disadvantage due to imposed economic setbacks, historic divestment, and harmful discriminatory policies like redlining.[70] In 2020, counties with the highest levels of poverty experienced firearm homicide rates 4.5 times as high, and firearm suicide rates 1.3 times as high, as counties with the lowest poverty levels.[71]

Go to:

Lethality, Availability, and Access

In 2022, the majority of all homicides (79% [19,651 of 24,849]) and suicides (55% [27,032 of 49,476]) in the U.S. were carried out with a firearm.[2] When discussing the contributing factors to the firearm violence crisis in the U.S., the lethality, availability of, and access to firearms should be acknowledged. **The presence of a firearm in the home has been associated with higher risk of being a victim of homicide and suicide among all household members, and an unlocked firearm in the home is associated with higher risk of suicide and unintentional firearm injury among children and adolescents.**[72, 73]

Studies suggest that a fatal outcome is more likely when a firearm is used in a violent situation or in a suicide attempt rather than other methods.[28, 74] Nearly 90% of suicide attempts with a firearm end in death, a case fatality rate (CFR) that exceeds that of hanging/suffocation (CFR: 84.5%), drowning (CFR: 80.4%), gas poisoning (CFR: 56.6%), jumping (CFR: 46.7%), drug/liquid poisoning (CFR: 8.0%), and cutting (CFR: 4.0%).[75] Acts of violence and suicide attempts often involve a rapid transition from thought to action, and access to a firearm during a time of acute stress can lead to deadly outcomes. Some suicide attempt survivors report that they acted within minutes or hours of deciding to end their lives.[76, 77]

Suicide is one of the top leading causes of death in the United States for individuals ages 10–64.[78] While mental health is an important risk factor for suicide, many people who die by suicide (all means) do not have a known mental health condition.[79], [80] As such, people who die by suicide may not come to the attention of health workers when effective prevention interventions could be delivered. Research shows that negative life events, such as family relationship problems, job-related stress, physical health issues, and financial or legal problems, are common circumstances of suicide, including among those without a mental health diagnosis.[80] While the relationship between mental illness and suicide risk is complex, it is clear that access to a firearm can turn a moment of crisis into a fatal one. Attempting suicide by firearm is almost always an irreversible act that allows for little or no reconsideration by an individual.

While the relationship between mental illness and suicide risk is complex, it is clear that access to a firearm can turn a moment of crisis into a fatal one.

Firearm storage practices[k] vary widely among firearm owners. A 2022 survey found that among firearm owners, most of whom owned more than one firearm (65%), 71% used one type of storage or locking device on at least one firearm, but 65% reported at least one unlocked firearm.[81] Even among firearm owners with children, findings from a national survey (n=1363) in 2021 suggest that 36% have unlocked firearms.82 Unlocked firearms can be accessed by unauthorized users, including family members with dementia or suicidal thoughts, children and adolescents, or through theft. **According to a 2023 CDC analysis, 56% of unintentional firearm deaths among children and adolescents (ages 0–17) happened while they were in their own home, and approximately two-thirds (67%) of shooters were playing with or showing the firearm to others when it discharged.**[83] The firearms used in these unintentional deaths were often stored loaded (74%) and unlocked (76%) and were most commonly accessed from sleeping areas such as nightstands, under a mattress or pillow, or on a bed.

Footnotes

j

The U.S. Department of Health and Human Services (HHS) defines social determinants of health as, “the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” (Office of Disease Prevention and Health Promotion. (n.d.) *Social determinants of health*. Department of Health and Human Services, Office for the Assistant Secretary of Health. Retrieved March 15, 2024. https://health.gov/healthypeople/priority-areas/social-determinants-health) k

Safe storage and secure storage are complementary. Safe means unloaded, and secure means locked up. (Center for Gun Violence Solutions. (n.d.) *Safe and secure gun storage*. Johns Hopkins Bloomberg School of Public Health. Retrieved March 15, 2024. https://publichealth.jhu.edu/center-for-gun-violence-solutions/solutions/safe-and-secure-gun-storage).

Chapter 4 Public Health Approach to Firearm Injury and Violence Prevention

A public health approach is designed to prevent and reduce harm by changing the conditions and circumstances that contribute to risk of firearm violence as measured by deaths, injuries, as well as the reverberating mental health and emotional impacts detailed in this Advisory.

This cross-sector approach complements the work of clinical health care providers to treat those who are victims and survivors of violence and the work of law enforcement to hold perpetrators accountable. To be successful, this approach must include everyone, from firearm owners to health workers to community leaders.

The CDC has defined a public health approach to violence prevention, which can be used to address a range of public health crises, as a four-step process rooted in a systematic and scientific method.[84] First, the problem must be defined and monitored. Second, risk and protective factors must be identified. Third, prevention strategies must be developed and tested to determine their effectiveness in preventing injuries, and fourth, widespread adoption must be assured through implementation and dissemination strategies based on available evidence. Widespread adoption relies on and is supported by strong collaborations between state/federal leaders and community organizations/local leadership.

During an emergency, like that of firearm violence in the U.S., a public health approach requires combining the best available scientific evidence with scientific judgment and expertise to take life-saving action quickly. This involves simultaneously implementing promising prevention strategies and policies, continuing to gather more evidence, and iterating to improve interventions. This entire approach is continuous and iterative.

Past successful public health approaches have focused on prevention and addressed population level risk, taking a solution-oriented and evidence-informed approach. For example, this approach contributed to a more than 70% decline in the prevalence of cigarette smoking among U.S. adults, from 42% in 1964 to 11.5% in 2021.[85, 86] In another example, the enactment and enforcement of traffic safety laws, reinforced by public health education campaigns, led to sustained and improved motor vehicle safety. According to the National Safety Council, the mileage death rate in 1923 (21.65 deaths per 100 million miles driven) has decreased by more than 93% in 2021 (1.38 deaths per 100 million miles driven).[87] The public health approaches to cigarette smoking and motor vehicle crashes achieved success through changes to policies, systems, and environments such as evidence-informed laws (e.g. age-minimums for tobacco purchases, driver's licenses), evidence-driven changes in products themselves (e.g. air bags, seat belts), and evidence-driven public health education campaigns. Taking such an approach to firearm violence prevention has the potential to curb the alarming trends of firearm-related injury and death in America and the resulting health impacts.

The remainder of this section describes critical components of a public health approach to firearm violence prevention, building on the earlier sections of the Advisory which define the problem and identify risk and protective factors. It describes the need for critical research investments to accelerate the public health approach, provides an overview of prevention strategies, and discusses ways to address the mental health toll of firearm violence.

Taking a public health approach to firearm violence prevention has the potential to curb the alarming trends of firearm-related injury and death in America and the resulting health impacts.

Go to:

Critical Research Investments

Firearm violence prevention is dependent on a strong foundation of research.

Researchers, community leaders, government officials, and health workers widely acknowledge the critical need to increase research funding for the improvement of data collection and analysis to inform and evaluate firearm violence prevention strategies. Historical underfunding for firearm violence prevention research has created challenges for expanding the evidence-base and implementing life-saving policies.[88] The federal investment in firearm violence research is drastically less than the federal investment in research for causes of death with comparable mortality.[89] For example, in relation to mortality rates over a 10-year period (2004–2014), firearm violence killed about as many people as sepsis but funding for firearm violence research was less than 1% of that for sepsis.[89] Over the same period, research for firearm violence was funded at a similar level to research on drowning; yet the firearm-related mortality rate (age-adjusted) was nearly 7 times as high: 10.25 per 100,000 (350,139 firearm-related fatalities) compared to 1.47 per 100,000 (49,891 drowning-related fatalities).[2, 89] Among children and adolescents (ages 1–18), federal research dollars between 2008–2017 totaled $878 million for motor vehicle crashes, averaging $26,136 per youth death.[90] In contrast, during the same period, firearm injury prevention federal research dollars totaled $12 million, averaging $597 per youth death.[90] A significant increase of funding for firearm injury and mortality research is necessary to expand our understanding of the causes of and the strategies to reduce and prevent firearm violence in America.

These critical research investments include:

- **Improve data sources and data collection to inform prevention activities.** Accurate, timely, publicly accessible, detailed, and nationally comprehensive firearm injury data systems are needed. For example, there is no national data collection system that includes all nonfatal firearm injuries and, thus, many states and communities are unable to access or utilize data on nonfatal firearm injuries. Without proper data, the extent and severity of firearm violence outcomes as well as evaluations of prevention efforts and interventions will be limited. Prioritizing coordination across organizations that have access to firearm injury data (health systems, states, localities, public health agencies, non-profits, law enforcement, etc.) will allow for more complete analysis of firearm violence.
- **Expand research to examine short-term and long-term outcomes of firearm violence and evaluate specific prevention strategies.** Multiple research gaps related to firearm-related violence and injury prevention have been described, including but not limited to, community-based firearm violence, suicide prevention, shootings by law enforcement, mass shootings, domestic violence involving firearms, reducing risks to children and adolescents, the use of firearm-related technology, and the effects of existing policies and laws. Research should also evaluate health outcomes of individuals directly and indirectly exposed to firearm violence, including survivors, their families, and communities. Additionally, research should be expanded to evaluate the effectiveness of firearm violence prevention strategies in new settings or within sub-populations, and to support follow-up evaluations of the long-term outcomes associated with such strategies.
- **Conduct implementation science research to improve effectiveness of prevention strategies.** There are existing firearm violence prevention strategies that have evidence of effectiveness. However, expanding support and investment for implementation science research is necessary to improve the uptake of evidence-based strategies, policies, and practices in communities. Implementation science research can support the adoption, implementation, and

sustainment of evidence-based prevention strategies and also help ensure that such strategies are not having any unintended impact.

Community Risk Reduction and Education Prevention Strategies

While increased funding and growing the evidence base are vital to informing effective firearm violence prevention strategies, we can take action now to reduce firearm-related injuries and deaths.

Prevention strategies should include investments in community-based interventions and educational programs that have the potential to prevent firearm-related death and injury.

- **Implement community violence interventions to support populations with increased risk of firearm violence involvement.** Community violence interventions (CVI) use evidence-informed, multidisciplinary, and tailored strategies to disrupt cycles of violence and connect individuals at risk of violence involvement with services that address trauma and improve physical, social, and economic circumstances.[91] The CVI approach employs credible messengers and practitioners to resolve potential violent conflicts and deliver key intervention elements such as connecting individuals with healthcare, housing, employment services, and other resources.[92] Similarly, hospital-community partnerships can connect those who have experienced violence, or are at risk for violence, with appropriate services. Hospita-based violence intervention programs (HVIPs) typically combine a short intervention in the hospital with intense case management and services in the community upon release.[93], [94]
- **Incorporate organizational violence prevention and emergency preparedness elements into safety programs.** These programs may include systematic models for early intervention such as the establishment of behavioral threat assessment and management (BTAM) teams[l], as well as emergency action plans to address the threat from firearm violence. Communities can facilitate the development of traum-informed preparedness and response plans for schools and the implementation of student programs before, during, and after school to ensure safety. Organizations can implement workplace violence prevention programs and take steps to mitigate workplace violence through appropriate changes to the physical environment, administrative processes, and employee training.[95]
- **Encourage health systems to facilitate education on safe and secure firearm storage.** Health systems can support health workers in talking with patients during routine and preventive medical visits about safe storage of

firearms, as well as the temporary transfer of a firearm during a high-risk period. Unlocked firearms pose a safety risk and can be accessed by unauthorized users, including family members with dementia or suicidal thoughts, children and adolescents, or through theft. The American Medical Association, American Academy of Family Physicians, American Academy of Pediatrics, American Public Health Association, American College of Physicians, American College of Surgeons, and American Psychiatric Association all support counseling of patients on firearm injury prevention, among additional prevention strategies.[96], [97]

- **Address structural determinants that increase the risk of firearm violence.** All communities in the U.S. are affected by firearm violence, but higher rates of community firearm violence are concentrated in historically marginalized communities.[98] To decrease risk of firearm violence exposure, injury, and/or death, communities can, for example, promote and invest in safe and supportive physical environments and housing, equitable access to high-quality education and health care, and opportunities for employment and economic growth.

Firearm Risk Reduction Prevention Strategies

In addition to community-based prevention strategies, public health leaders and policymakers can use available scientific evidence combined with scientific judgment and expertise to consider prevention strategies that build distance in terms of time and space between firearms and people who are at risk of harming themselves or others.

- **Require safe and secure firearm storage, including child access prevention laws.** Safe and secure firearm storage means that firearms are stored unloaded and locked in a secure place, such as a firearm safe that is only accessible to authorized users, and that ammunition is stored separately from the firearm(s).[99] Various safe storage and child access prevention laws have been implemented at the state level to require safe storage of firearms and penalize those who put children at risk due to failures related to safe storage.
- **Implement universal background checks and expand purchaser licensing laws.** Universal background checks would expand on current federal law (which requires any person engaged in the business[m] of dealing firearms to obtain a license and conduct background checks) to include mandatory background checks for *all* firearm purchases, including private sales and transferring/gifting firearms. Firearm purchaser licensing, or permit-to-purchase

laws, vary by jurisdiction but may be further augmented by enhancing minimum age requirements for all firearm purchases and requiring additional steps to physically possess a firearm, such as safety training requirements and/or a built-in waiting period between the purchase and the possession of a firearm.[100]

- **Implement effective firearm removal policies.** Extreme Risk Protection Orders (ERPOs)[n] and Domestic Violence Protection Orders (DVPOs) are complementary civil court orders, each with defined due process protections and that share the common goal of preventing harm. DVPO and ERPO laws vary by jurisdiction and operate in different contexts. DVPOs, which have been implemented in some capacity in all 50 states[o], primarily focus on protecting victims of domestic violence. Federal law bans the purchase or possession of firearms by individuals convicted of a felony and/or misdemeanor crime of domestic violence and most people subject to a final DVPO[p].[101] ERPOs, which have been implemented in fewer states, are mechanisms that can temporarily prohibit individuals at risk of harming themselves or others from purchasing or possessing a firearm, and in such circumstances, they can also allow for the temporary removal of firearms already in a person's possession.[102]
- **Ban assault weapons and large-capacity magazines for civilian use.** Assault weapons may encompass automatic weapons[q] and some semiautomatic weapons that may include military-style features that make the firearm more lethal, such as detachable large-capacity magazines. A large-capacity magazine (also known as a high-capacity magazine) is commonly defined as a device that has the capacity to hold more than 10 rounds of ammunition.[103] Mass shootings that involve a firearm with a large-capacity magazine result in significantly more injuries and deaths than shootings that do not involve such magazines.[104]
- **Create safer conditions in public places related to firearm use and carry,** including through policies that govern who can carry a loaded firearm in public spaces, concealed or open, and through rules around using deadly force with a firearm in public situations where the individual(s) could have safely retreated without firing a weapon.
- **Treat firearms like other consumer products.** Unlike motor vehicles which have safety standards that are regulated by the National Highway Traffic Safety Administration (NHTSA), pesticides that are regulated by the Environmental Protection Agency (EPA), or prescription drugs that are regulated by the Food and Drug Administration (FDA), there are no federal standards or regulations regarding the safety of firearms produced in the U.S. Therefore, firearms manufactured and sold in the U.S. may not undergo safety testing or

include safety features like warning labels related to associated risk or authorized-use technology ("smart" firearm technology) for firearm access.[105] Treating firearms as a consumer product[r] could result in changes which may enhance safety.

Mental Health Access and Support

The mental health burden and trauma for those exposed to firearm violence warrants greater attention and action through increased mental health supports and trauma-informed resources.

- **Prioritize increased access to affordable, high-quality mental health care, substance use treatment, and other trauma-informed resources.** Health workers and community-based organizations can address the mental health consequences associated with firearm violence by providing a continuum of trauma-informed care for individuals who experience firearm violence, especially disproportionately impacted youth, families, and communities.[106, 107] Health systems and health workers can connect individuals at risk for suicide to timely mental health resources and care.[108] Policymakers can provide support to sustain mental health access and crisis support services.
- **Enhance safety measures and mental health resources in learning settings for children and adolescents.** This can include the expansion of a school-based mental health workforce to build a positive school climate and the capacity and resources needed to connect students to mental health services.[109] Most recently, the Bipartisan Safer Communities Act provided historic levels of funding to address youth mental health, including $2 billion for the U.S. Department of Education to create safe, inclusive learning environments for students and to hire and train more mental health professionals for schools—where students are most likely to receive these crucial services.[110]

Footnotes

l

BTAM offers a systematic and fact-based model for early intervention in potential cases of violence. BTAM teams are multidisciplinary groups comprised of providers from education, mental health, social services, law enforcement, faith community, and other community support stakeholders who assess threats and develop case management strategies, creating a non-punitive alternative to criminal justice interventions for individuals at risk of mobilizing to violence. (U.S. Department of Homeland Security. (n.d.) *Threat assessment and management teams*. Office for Targeted Violence and

Terrorism Prevention. https://www.dhs.gov/sites/default/files/publications/threat_assessment_and_management_team_v7.pdf)

m

A Federal rule was recently amended to broaden the definition of when a person is considered “engaged in the business” as a dealer in firearms and makes clear that any person engaged in the business of dealing firearms must get licensed and conduct background checks for all firearm sales. (U.S. Department of Justice. (2024). *Definition of “engaged in the business” as a dealer in firearms*. https://www.federalregister.gov/documents/2024/04/19/2024-07838/definition-of-engaged-inthe-business-as-a-dealer-in-firearms)

n

ERPOs may be referred to by other names, such as “red flag laws,” depending on the state.

o

The specific laws, procedures, and terminology regarding DVPOs may vary from state to state.

p

In 2022, the implementation of the Bipartisan Safer Communities Act narrowed the so-called “boyfriend loophole” by prohibiting dating partners convicted of domestic violence from purchasing or possessing firearms. (Congressional Research Service. (2022). *Firearms eligibility: Domestic violence and dating partners*. https://crsreports.congress.gov/product/pdf/IF/IF12210)

q

Civilian ownership of fully automatic firearms is heavily restricted or banned in most jurisdictions. In 1986, the Firearm Owners Protection Act banned the possession or transfer of machine guns (a common subset of automatic weapons) that were not registered before 1986, effectively prohibiting the manufacture of new machine guns for civilian ownership after that date. (Firearm Owners’ Protection Act, P.L. 99–308 (1986). https://www.govinfo.gov/content/pkg/PLAW-109publ92/html/PLAW-109publ92.htm).

r

Currently, the Protection of Lawful Commerce in Arms Act (PLCAA), which was signed into law in 2005, provides that manufacturers, distributors, dealers, and importers of firearms or ammunition products, in the U.S. cannot be held liable when crimes are committed with their products. (Protection of Lawful Commerce in Arms Act, P.L. 109–93 (2005). https://uscode.house.gov/view.xhtml?path=/prelim@title15/chapter105&edition=prelim).

Conclusion

This Advisory describes the health impact of firearm violence in the U.S. The increasing number of children and adolescents dying from firearm-related injuries and the reverberating mental health impacts on society make firearm violence an urgent public health crisis in America.

There are many experts and leaders who work tirelessly each day to protect families and communities from the trauma and suffering that have become all too common in our country. They include community leaders, health workers, and educators and school staff who emphasize healing and connection and lead violence-intervention initiatives in their neighborhoods. They also include researchers, medical associations, and community-based organizations whose actionable recommendations to mitigate firearm violence are advancing efforts to save lives.

But it will take more—the collective commitment of the nation—to turn the tide on the crisis of firearm violence in America. A public health approach can guide our strategy and actions, as it has done in the past with successful efforts to address tobacco-related disease and motor vehicle crashes. It is up to us to take on this generational challenge with the urgency and clarity the moment demands. The safety and well-being of our children and future generations are at stake.

National Strategy *for* Suicide Prevention

Washington (DC): US Department of Health and Human Services; 2024.

Preface from the Surgeon General

The 2024 *National Strategy for Suicide Prevention (National Strategy)* and its *Federal Action Plan (Action Plan)* come at a pivotal moment. This year, we mark 25 years since the release of Surgeon General Dr. David Satcher's *Call to Action to Prevent Suicide*, a landmark report that recognized suicide as a major public health concern in the United States and created the foundation for the first *National Strategy for Suicide Prevention* released in 2001. In 2012, the *National Strategy* was updated by Surgeon General Dr. Regina Benjamin and the National Action Alliance for Suicide Prevention (Action Alliance). A subsequent Call to Action was released in 2021 by Surgeon General Dr. Jerome Adams to fully implement the 2012 goals and objectives. Despite significant progress over the past two decades, much work remains to promote a coordinated and comprehensive approach to suicide prevention in communities across the country and at every level of government.

The Biden-Harris Administration has taken unprecedented steps to address the mental health crisis that has plagued our country for decades and was exacerbated by the COVID-19 pandemic. This new *National Strategy* and *Action Plan* are critical parts of those efforts. Together, they represent unparalleled support and investment from the federal government with strong collaboration from over 20 agencies and offices across the executive branch, support from the Suicide Prevention Resource Center (SPRC) and the Action Alliance, and an HHS-led project management team. I am particularly proud of the input and perspectives reflected in the Strategy from more than 2,000 field experts representing diverse geographic areas, races and ethnicities, settings, roles, and lived experiences in suicide prevention.

This new Strategy on suicide prevention is a critical component of our nation's work to improve mental health and overall well-being. Since beginning my current tenure as

U.S. Surgeon General in 2021, the Office of the Surgeon General has made mental health and well-being a top priority. In 2023, we released a Surgeon General's Advisory on *Our Epidemic of Loneliness and Isolation*, which describes the harms of loneliness and isolation on both individual and societal health, including its effect on the risk for depression, anxiety, suicide, and premature death. The Advisory highlights the need for continued attention and focus on social connection as a key protective factor for health and well-being, including protecting against suicide risk. Two other U.S. Surgeon General's Advisories provide important information and actionable recommendations to protect youth mental health. The first Advisory on *Protecting Youth Mental Health*, released in 2021, outlines the policy, institutional, and individual changes it will take to treat and prevent youth mental health challenges, including expanding and strengthening suicide prevention and mental health crisis services. The second Advisory on *Social Media and Youth Mental Health*, released in 2023, describes the potential benefits and harms of social media use, and calls for urgent action to create safer, healthier online environments to protect children.

Suicide remains a serious public health threat that touches the lives of many Americans. In 2022, nearly 50,000 lives were lost to suicide, 13.2 million people reported seriously considering suicide, 1.6 million reported a suicide attempt, and millions more supported someone close to them who was in distress. Disparities in suicide and suicide attempts still exist. Populations disproportionately impacted include Veterans, racial and ethnic minority groups, people with disabilities, LGBTQI+ populations, youth, middle-aged, and older adults, individuals with serious mental illness, and certain occupational groups, among others. For example, between 2018 and 2021, suicide rates rapidly increased among non-Hispanic Black or African American populations ages 10–24 (+36.6% increase) and 25–44 years (+22.9%), non-Hispanic American Indian and Alaska Native populations ages 25–44 (+33.7%), non-Hispanic multiracial populations ages 25–44 years (+20.6%), and Hispanic populations ages 25–44 years (+19.4%).

The stark reality is that despite significant advancements in the field, suicide rates in the United States continue to rise. Suicide rates increased by 12.7% from 2012 to 2022, with brief declines in 2019 and 2020. Existing gaps in social and economic risk factors (e.g., legal issues, exposure to violence, relationship challenges, poverty and financial strain), access to mental health resources and care persist, and there is a need for improved data, prevention, treatment, services, workforce, and research related to suicide, especially among populations disproportionately affected by suicide. Meanwhile, emerging issues such as the impact of social media on mental health, the intersection of suicide and substance use, and the unique challenges faced by groups that have been historically marginalized demand our immediate attention. This document stands as a testament to the urgency of confronting these challenges head-on as we seek to create a future where every individual feels valued and supported.

The loss of any life to suicide is heartbreaking, and the number of deaths remains far too high. Yet, there is also reason for hope. Since 2012, we have witnessed remarkable strides in understanding and addressing the complexities of suicide. Research has expanded our knowledge, interventions have evolved, and conversations about mental health have begun to resonate more deeply within our communities. The tireless efforts of advocates, health care professionals, and individuals with lived experiences have amplified the vital importance of comprehensive approaches to suicide prevention. I have been particularly encouraged by the advances in service delivery for individuals in crisis such as the transition to, and expansion of, the national 988 Suicide and Crisis Lifeline, as well as the expansion and implementation of effective prevention programs and interventions in states and communities, innovations in data and research efforts, and improvements in occupational health.

This new *National Strategy* acknowledges major advancements since 2012 and recognizes existing gaps and emerging issues in the field that demand our attention. At the heart of this strategy lies a call for a more coordinated and comprehensive public health approach to suicide prevention. This approach prioritizes collaboration between the public and private sectors as well as with people with lived experience and groups that have been disproportionately affected by suicide. It also includes an *Action Plan* to be initiated over the next three years that outlines formal commitments made by agencies across the federal government to advance suicide prevention in the United States.

As the nation's doctor and as a parent, I care deeply about this issue. I have lost family, friends, and patients to suicide. I have witnessed the anguish of those struggling with the loss of someone they love to suicide. But I have also been inspired by the resilience and courage of individuals who have sought help and persevered through their darkest moments. And, I have seen the power of effective prevention and intervention approaches, in and outside of the health care setting.

Suicide takes an insurmountable toll on families, friends, caregivers, and communities across our nation. We must do more to prevent these tragic deaths and build healthier, more connected communities. Progress is possible, and it cannot come soon enough. I urge leaders and communities to join this vital effort to prevent suicide. Together, we can create a future where support, hope, and well-being are within reach for everyone.

- **Vivek H. Murthy, MD, MBA**

Vice Admiral, U.S. Public Health Service
Surgeon General
U.S. Department of Health and Human Services

Executive Summary

Twenty-five years ago, Surgeon General Dr. David Satcher issued the ground-breaking *Call to Action to Prevent Suicide*. This call ultimately led to the first *National Strategy for Suicide Prevention* in the United States in 2001.

Since that time, through the next strategy in 2012, until today, suicide prevention efforts have expanded significantly, ranging from advances in timeliness of data, to the growth in the science of suicide prevention, the development of new treatments, and increased research. People across the country are now aware more than ever that suicide is a pressing public health problem that is preventable. However, much more work is necessary to match the challenge of rising suicide rates.

The new 2024 *National Strategy for Suicide Prevention (National Strategy)* is meant to address gaps in the field and to guide, motivate, and promote a more coordinated and comprehensive approach to suicide prevention in communities across the country. The comprehensive approach addresses the many factors associated with suicide, with the recognition that there is no single solution. It seeks to prevent suicide risk in the first place (upstream prevention), identify and support people with increased risk through treatment and crisis intervention (downstream prevention), prevent reattempts, promote long-term recovery, and support survivors of suicide loss.

Carrying out the comprehensive approach relies on collaboration with public and private sector partners, people with suicide-centered lived experience, and people in populations disproportionately affected by suicide and suicide attempts. The foundation of comprehensive prevention includes a strong suicide prevention infrastructure at all levels, a competent and well-trained workforce, the use of quality data to help drive decision-making, and a strong science base, as laid out in the new strategy.

For the first time, in 2024, the *National Strategy* takes a “whole of government” approach. It was developed in collaboration with a federal Interagency Work Group, consisting of over 20 agencies and offices in 10 departments across the federal government. Support came from the Suicide Prevention Resource Center (SPRC) and the National Action Alliance for Suicide Prevention (Action Alliance), guided by a project management team co-led by officials at the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Centers for Disease Control and Prevention (CDC), alongside the National Institute of Mental Health (NIMH) and the U.S. Department of Health and Human Services’ Office of the Assistant Secretary for Planning and Evaluation (ASPE/HHS). Input and feedback from outside of the federal government came from a national needs assessment reaching more than 2,000 respondents and multiple listening sessions with people with lived experience, populations disproportionately affected by suicide, community members, practitioners, and suicide prevention experts.

The 2024 *National Strategy* builds upon the previous 2012 *National Strategy*. It addresses gaps and incorporates advances in the field. It specifically addresses health equity, youth and social media, and the intersection of suicide and substance use. Other examples of new content include the 988 Suicide and Crisis Lifeline, expanded workplace suicide prevention, and an increased focus on social determinants of health. These topics are addressed within the *National Strategy's* four Strategic Directions—Community-Based Suicide Prevention; Treatment and Crisis Services; Surveillance, Quality Improvement, and Research; and Health Equity in Suicide Prevention—and related Goals.

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STRATEGIC DIRECTION 1 Community-Based Suicide Prevention

Strategic Direction 1 focuses on community-based comprehensive suicide prevention activities that can help prevent the onset of suicide risk, sometimes called *upstream, universal,* or *primary prevention*. This strategy is focused on preventing suicide risk in the first place, identifying and supporting people at increased risk through treatment and crisis intervention, preventing reattempts, promoting long-term recovery, and supporting survivors of suicide loss.

Such activities can increase protective factors and decrease suicide risk factors that may lead to suicide thoughts, attempts, crisis situations, and deaths. Upstream prevention may have lasting positive outcomes across the life span (Hawkins, et al., 2016).

Community is a critical context for suicide prevention that encompasses the spaces where people live, work, learn, play, and/or worship. Community may be defined by geography, shared interests, or other characteristics such as race, ethnicity, disability, sexual orientation, gender identity, or military background. Community-based prevention is rooted in the cultural, social, and economic conditions and traditions of the populations being served. Every community can benefit from a coordinated, comprehensive suicide prevention approach that weaves together the many strands of prevention, intervention, and postvention.

A comprehensive approach begins with multi-sectoral partnerships. No one agency, organization, or sector can prevent suicide on its own (see Goal 1). All community-based organizations in public and private sector settings can take an active role in preventing suicide and creating communities where people can thrive. These include schools, places of employment, social service agencies, local businesses, legal systems, and other organizations and settings.

Shared strengths, capacities, expertise, and resources of a collective partnership can amplify the preventive impact beyond that of any one organization alone. Comprehensive suicide prevention requires a range of voices, identities, and perspectives informed by lived experience. This ensures that acceptable, accessible, and effective approaches to suicide prevention are chosen and implemented.

The comprehensive approach calls for communities to select, implement, and evaluate a range of strategies to address the many factors associated with suicide at the individual, relationship, community, and societal levels (see Goals 2, 3, 4, and 5). These decisions should be driven by data (see Strategic Direction 3). The most effective selections will complement existing suicide prevention programs such as the following strategies from the Centers for Diseases Control and Prevention's (CDC) *Suicide Prevention Resource for Action* (CDC, 2022c):

- Strengthening economic supports
- Creating protective environments (e.g., lethal means safety and workplace prevention)
- Improving access and delivery of suicide care
- Promoting healthy connections
- Teaching coping and problem-solving skills
- Identifying and supporting people at risk
- Lessening harms and preventing future risk (e.g., postvention)

All levels of government and tribal nations need strong suicide prevention infrastructure to carry out the comprehensive approach (see Goal 6). Integration of effective policies, programs, and practices; dissemination across community settings; and access to culturally relevant information and resources to get help, are essential (see Goal 7).

Federal investments in comprehensive suicide prevention approaches have grown since the 2012 *National Strategy*. In 2023, the Secretary of Defense outlined five lines of effort to reduce suicide risk among service members and their families (see Goal 2). In 2022, the Department of Veteran's Affairs (VA) launched its Staff Sergeant Parker

Gordon Fox Suicide Prevention Grant Program to support Veterans and their families through a range of community services and resources across the country. In 2020, CDC launched its flagship Comprehensive Suicide Prevention program providing funding to states and communities to implement and evaluate a data-driven comprehensive approach with a focus on populations disproportionately impacted by suicide. In 2019, the VA announced Suicide Prevention 2.0, a population-based public health program combining community-based prevention strategies and evidence-based clinical strategies.

In ongoing commitments, the Substance Abuse and Mental Health Services Administration's (SAMHSA's) Garrett Lee Smith Youth Suicide Prevention Program (GLS) and the *National Strategy for Suicide Prevention* grant program for adults have provided millions of dollars to states, territories, and institutions of higher education to implement youth and adult suicide prevention efforts, respectively. These federal investments have supported the field in expanding its focus from suicide prevention efforts largely based on intervening after someone is already experiencing a suicide-related crisis to creating environments that reduce communities' overall suicide risk. Evaluations of programs have shown the value of these efforts as evidenced by SAMHSA's GLS grant program in which counties and communities implementing GLS-funded prevention strategies showed decreased suicide for youth. Other evaluations of GLS are currently underway.

Youth suicide mortality in counties implementing the Garrett Lee Smith Youth Suicide Prevention Program over time.

GOAL 1. Establish effective, broad-based, collaborative, and sustainable suicide prevention partnerships

Establish Partnerships

Suicide is a complex but preventable problem, often with many contributing causes. A combination of factors may increase suicide risk, such as job and financial problems, including housing and food insecurity; school problems; relationship problems, such as bullying, divorce, or breakups; adverse childhood experiences, such as physical abuse and neglect; chronic health conditions; mental illness; substance use; legal problems; easy access to lethal means among people at risk; historical trauma; and discrimination and racism, among others. Addressing these issues require a comprehensive approach to prevention that extends into communities. Not surprisingly, no single sector, agency, or organization can prevent suicide or carry out the comprehensive approach alone. Only by working together with diverse public and private sector partners and across community settings can we achieve measurable and sustained suicide prevention impacts at all levels.

Some Considerations

Integrating and coordinating suicide prevention into and across community settings and sectors can help reach people who may be at risk, wherever they live, work, learn, play, and/or worship, for the greatest impact. It is important to involve a wide range of partners, including, but not limited to, the following:

- People with suicide-centered lived experience and concerned community members
- Individuals from populations disproportionately affected by suicide and suicide attempts
- Nongovernmental and community-based organizations
- Federal, state, tribal, local, and territorial government agencies (e.g., those focused on public health, housing, economic security, justice, and education)
- Social services, substance use treatment and prevention services, health and behavioral health insurers and providers, health care systems, and first responders
- Private sector businesses
- News media, policymakers, and potential funders, such as foundations

Working together creates maximum impact. For example, the private sector may have flexibility in response to prevention opportunities as well as reach a variety of audiences with messaging, resources, and recommendations. Conversely, the public sector agencies may be able to influence long-term policy and decision-making for sustained impact. Working together creates a network of coordinated efforts that reflect the varied contexts in which community members interact and the underlying factors that contribute to suicide risk.

What Success Looks Like

Successful partnerships maximize diverse experiences and expertise and foster creativity, new ideas, and perspectives. People engaged in such partnerships at the national, state, tribal, local, and territorial levels can create a shared agenda with a mutual vision for suicide prevention that is tied to goals, objectives, and actions with measurable outcomes, and where everyone has a defined role. For example, some people may have expertise in data collection and analysis, or program planning and evaluation, while others are expert communicators. Some bring a local perspective and have the pulse of the community, which can inform partners' understanding of cultural beliefs and context key to effective prevention. Others bring their lived experience of recovery to inform improvements in systems and services. Ideally, coalitions can be formed to bring diverse partners together and provide its members with the training, funding, resources, and support necessary to carry out their respective roles. Likewise, organizational commitment through implementation of evidence-informed policies, programs, and practices for suicide prevention can ensure efforts are effective and sustainable across partners.

Examples

- The National Action Alliance for Suicide Prevention (Action Alliance) has served as the nation's public-private partnership for suicide prevention since 2010. The Action Alliance was launched by senior executives in the federal government and the private sector. They serve as the coordinating body overseeing and supporting implementation of the *National Strategy*. The Action Alliance aligns and strengthens national suicide prevention efforts and catalyzes new high-priority efforts. Through this innovative partnership model and infrastructure, the Action Alliance has 1) brought new industries and organizations to the table, since 2012, (e.g., construction, entertainment, public safety, news media, finance, health care, transportation, faith-based organizations, and social media) and 2) launched innovations to transform health systems to reduce suicide, transform communities, and change the conversation around suicide prevention. For more information on the Action Alliance, visit https://theactionalliance.org/.
- Michigan's Preventing Suicide in Michigan Men (PRiSMM) program, a five-year CDC-funded program, brings together key individuals, organizations, and stakeholders who work to prevent suicide in Michigan men, a population that is at disproportionate risk for suicide. PRiSMM includes organizations in the construction, automotive, farming, and television and media industries, as well as the faith community. PRiSMM shares data and information from the perspective of men, for men, across a wide network. It created a suicide prevention social media guide, a risk factors and warning signs guide, and data presentations to disseminate and inform the PRiSMM partnership about suicide trends and suicide prevention efforts. One of PRiSMM's partners oversees Michigan's largest construction company which plans to implement strategies to improve mental health and suicide prevention among its employees. This partner has also been able to provide insight on how PRiSMM's suicide prevention messaging can reach Michigan men who work in construction. For more information, visit https://www.cdc.gov/suicide/programs/csp/programprofiles.html.
- Native Connections is a SAMHSA grant program focused on youth outcomes within tribal communities. It utilizes a community approach grounded in the

traditional family structure of Indigenous people. This approach provides a unifying point to address many of the external challenges experienced by American Indian and Alaska Natives that contribute to suicide risk. These challenges and service gaps include poverty; accessing health services in an overburdened system; and a disproportionate impact of behavioral health issues, such as substance use disorder and suicide deaths in American Indian and Alaska Native communities. To learn more on Native Connections, visit https://www.samhsa.gov/native-connections.

- Founded in the values of community collaboration and engagement as well as the cultural heritage of the Pacific, Guam has developed a strategic prevention plan to create empowered youth, effective communication, strong leadership, grassroots engagement, and safe and healthy environments. To learn more, visit https://gbhwc.guam.gov/peace.

What We Should Do

Below are the objectives for Goal 1 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 1.1:** Create and sustain public-private partnerships and coalitions at the national, state, and local levels, representing diverse populations, perspectives, and broad suicide-centered lived experiences to extend reach and strengthen suicide prevention outcomes.
- **Objective 1.2:** Create and enhance connections between state agencies, tribal nations, and local communities to increase the reach of comprehensive suicide prevention activities and to strengthen outcomes.
- **Objective 1.3:** Strengthen and sustain collaborations across federal agencies to advance suicide prevention nationally by leveraging each agency's unique expertise, data, programs, and other resources.

Go to:

GOAL 2. Support upstream comprehensive community-based suicide prevention

Focus on Comprehensive Suicide Prevention

Suicide thoughts, attempts, and deaths can have lasting impacts on individuals, families, caregivers, relationships, and entire communities. Suicide risk may occur in response to mental disorders, relationship break-ups, adverse childhood experiences, stigma related to help-seeking, substance use, and lack of access to affordable care, among others. A comprehensive community-based approach can address these many risks and prevent the long-lasting effects of suicide. An upstream approach can foster well-being and promote safe, stable, nurturing relationships and environments while preventing suicide and related harms.

To learn more about the research and examples of effective policies, programs, and practices, see CDC's *Suicide Prevention Resource for Action*.

Some Considerations

Efforts to prevent someone from becoming suicidal are different from approaches taken once someone has thoughts about suicide or is in a crisis. Working upstream can prevent people from becoming suicidal in the first place and can have wide-ranging positive impacts across the life span. Effective upstream policies, programs, and practices as part of a comprehensive approach to prevention can address what are called *social determinants of health*. These determinants include social interactions such as social connectedness, economic stability, housing, education, and life skills. A range of social conditions can create disparities in social determinants of health. They include racism or discrimination; limited opportunities in support of positive health and well-being; and increased risk for suicide and related outcomes, such as drug overdose and adverse childhood experiences (Ayer et al., 2023; Education Development Center and National Association of County and City Health Officials, 2023; Hughes et al., 2017; Liu et al., 2023; Reider & Sims, 2016; SAMHSA, 2016).

The process for identifying the upstream efforts that best suit a specific community starts by understanding local conditions. Being aware of the latest trends and changes in suicide, suicide attempts, risk and protective factors, and identifying populations disproportionately impacted, will help focus prevention efforts. Assessing community strengths and gaps also informs effective suicide prevention. For example, states or local communities can assess:

- Community-identified priorities for prevention
- Availability of effective suicide prevention programs and services
- Local drivers or contributors of suicide risk (called indicators)
- Organizations with capacity to address social determinants of health and other risk and protective factors

Resources for Assessing and Supporting Upstream Suicide Prevention Efforts

- The Suicide, Overdose, and Adverse Childhood Experiences Prevention Capacity Assessment Tool (SPACECAT), from the Association of State and Territorial Health Officials, helps public health officials assess their capacity to address the intersection of suicide, overdose, and adverse childhood experiences. To learn more about the tool, visit https://my.astho.org/spacecat/suicide-data-indicators.
- CDC's Adverse Childhood Experiences (ACEs) Prevention Resource for Action: A Compilation of the Best Available Evidence and Essentials for Childhood: Creating Safe, Stable, Nurturing Relationships and Environments for All Children provide concrete strategies to set communities up for success.

To learn more about one state's indicators and data sources used to measure progress across a range of risk and protective factors, visit the Colorado Shared Risk and Protective Factors Dashboard. The dashboard tracks indicators related to behavioral health, economic stability, connectedness, and positive social norms.

The following are examples of effective upstream strategies as part of a comprehensive suicide prevention approach from ***CDC's Suicide Prevention Resource for Action***:

- **Strengthen economic supports:** Dow and colleagues (2020) examined the effect of state-level minimum wage and earned income tax credit (EITC) increases among adults ages 18–64 in the years 1999–2017 on overdose, alcohol-related deaths, and suicide deaths. Results showed no effect on rates of alcohol-related or overdose deaths and no effect for men or women with a bachelor's degree or higher. However, rates of non-overdose suicide deaths decreased following implementation of state policies providing increases in minimum wage and EITC, particularly among adult females and individuals with a high school or less education. This study suggests that economic policies, such as raising income, may reduce suicide rates among females and people with the lowest levels of income.
- **Promote healthy connections:** According to the CDC, social connectedness is the degree to which people have and perceive a desired number, quality, and diversity of relationships that create a sense of belonging, and being cared for, valued, and supported. Social connections can counter known suicide risk factors, such as feelings of loneliness; social isolation; mental health conditions; and bias, harassment, or discrimination (CDC, 2023). Programs that can impact connectedness may be found in schools (e.g., Sources of Strength), in the military (e.g., Wingman Connect), and through community engagement activities (e.g., community greening initiatives).

- **Teach coping and problem-solving skills:** Social and emotional learning (SEL) programs have been shown to reduce recognized risk factors for suicide. These include reductions in student anxiety, hopelessness, substance use, and sexual abuse. Zuni/American Indian Life Skills program, the Good Behavior Game, and Youth Aware of Mental Health have shown direct reductions on suicide ideation (Posamentier et al., 2023). Parenting skills to improve family relationships also teach coping and problem-solving skills and have shown impact with young families (e.g., The Incredible Years, Family Check-Up, *Familias Unidas*) For more information on the relationship between SEL programs and suicide prevention, visit https://pubmed.ncbi.nlm.nih.gov/35139714/.
- **Create protective environments:** Creating environments that address risk and protective factors where people live, work, learn, play, and worship can reduce suicide risk. For example, LGBTQI+ school health policies and practices benefit lesbian, gay, bisexual, and heterosexual students across a range of outcomes (Mintz et al., 2021). Gay-Straight Alliances or Gender and Sexuality Alliances (GSA) offer an inclusive and supportive space for all students to connect and share their lived experiences with one another and build peer support. Being involved in a GSA, or even the presence of a GSA within a school, has been associated with a reduced risk for suicide-related behaviors (e.g., suicide attempts) and positive youth development, a protective factor for suicide (Kaczkowski et al., 2022; Kia et al., 2021; Saewyc et al., 2014). On one campus, a GSA reduced suicide attempts associated with gay-bias victimization (Davis et al., 2014). For more information on creating and supporting GSAs, visit the Gay-Straight/Genders and Sexualities Alliances.

For more information on these upstream strategies, see CDC's *Suicide Prevention Resource for Action*.

What Success Looks Like

Successful upstream comprehensive community-based suicide prevention involves assessing the following:

- Community strengths and gaps
- Unique and broad-based risk and protective factors
- Trends in suicide and suicide attempts
- Populations disproportionately affected by these and related outcomes.

Prevention professionals and partners would use this information to advance comprehensive suicide prevention. This includes selection of effective upstream policies, programs, and practices related to economic stability, healthy connections, coping skills, substance use prevention, and providing access to downstream treatment and crisis intervention. A broad range of community partners in prevention efforts would be involved (see Goal 1). These partners might include key community agencies, such as K–12 schools, faith institutions, housing authorities, employment services agencies, and substance use treatment providers. These partners would be knowledgeable in suicide prevention best practices and would link their work with risk and protective factors to ongoing prevention efforts. Federal partners would support these community efforts in suicide prevention through technical assistance and by providing financial and public support for addressing risk and protective factors prevention.

Examples

- Colorado's Office of Suicide Prevention funds local organizations to implement full-scale, community-based, and comprehensive prevention efforts. These efforts are rooted in six core pillars: Connectedness, Economic Stability, Education and Awareness, Improving Access to Safer Suicide Care, Lethal Means Safety, and Postvention—each adapted from the strategies of CDC's *Suicide Prevention Resource for Action*. Larimer County highlights this collaborative work in action (Colorado Department of Public Health and Environment, 2023). Examples of their recent activities being evaluated include the following:
    - Partnering with local food security, housing, and transportation organizations to address economic stability efforts in the community
    - Hosting and supporting several events for LGBTQI+ connection
    - Training over 2,500 community members per year in Question, Persuade, Refer (QPR), an evidence-based training program that teaches people about warning signs for suicide, how to respond, how to offer hope, and how to get help
    - Promoting the Colorado Gun Shop Project that focuses on lethal means safety
    -

Hosting peer support groups that focus on priority populations, including teens, working-aged men, and Veterans

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Promoting Zero Suicide (a framework for system-wide transformation of health care settings toward safer suicide care) learning collaboratives and Collaborative Assessment and Management of Suicidality (CAMS) trainings

- Although still needing evaluation, older adult residences, such as retirement communities and assisted-living communities, have begun taking steps to reduce and respond to older adult suicide risk. Older adult residential efforts include promoting positive environments. This includes providing events and activities that increase social connectedness across members, including volunteer days, regular game nights, and holiday parties. Other efforts include educating people and staff on strategies for maintaining positive mental health. Individual and staff training on the warning signs of suicide prepares the whole community to identify, connect, and refer individuals having thoughts of suicide to available mental health services. When these strategies are coupled with protocols and policies guiding when and how older adults receive mental health and crisis response services, the result is a comprehensive approach to suicide prevention that can reduce older adults' overall suicide risk. To learn more about older adult residential suicide prevention, see Promoting Emotional Health and Preventing Suicide: A Toolkit for Senior Centers and SPRC's The Role of Senior Living Community Professionals in Preventing Suicide.
- In response to an independent review process, the Secretary of Defense (U.S. Secretary of Defense, 2023) outlined five lines of efforts that the U.S. Department of Defense (DOD) is taking to reduce suicide risk among service members and their families. These include improving schedule predictability, expanding mental health training programs that specifically focus on the needs of service members, providing lethal means safety education to unit leaders, including reduced access to privately owned firearms in barracks and dormitories. Further, DOD plans to integrate suicide prevention and education on risk and protective factors into all its policies and procedures, including efforts to prevent sexual assault and sexual harassment. This will ensure a military culture that increases help-seeking behaviors and supportive environments, reduces stigmatizing language and barriers to mental and behavioral health care, and promotes lethal means safety to ultimately reduce suicide.

What We Should Do

Below are the objectives for Goal 2 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 2.1:** Assess community strengths and gaps to inform suicide prevention planning at the individual, relationship, community, and societal levels.
- **Objective 2.2:** Strengthen job and economic supports, especially among individuals, families, and communities disproportionately affected by suicide and overdose.
- **Objective 2.3:** Improve availability and access to culturally relevant suicide prevention information and community-helping resources, especially in underserved and historically marginalized communities.
- **Objective 2.4:** Implement and evaluate effective interventions that reduce the onset of suicide risk and promote connected individuals, families, and caregivers where they live, work, learn, play, and worship.
- **Objective 2.5:** Promote safe, stable, and nurturing relationships and environments to help prevent adverse childhood experiences and create positive childhood experiences.
- **Objective 2.6:** Implement and evaluate interventions addressing the intersection of suicide, substance use, and adverse childhood experiences, including those with a focus on improving social determinants of health across diverse populations.
- **Objective 2.7:** Implement and evaluate effective interventions reflecting a comprehensive public health approach to suicide prevention, especially in populations disproportionately impacted by suicide.
- **Objective 2.8:** Expand existing federal support to states and communities nationwide for comprehensive suicide prevention that incorporates both upstream and downstream prevention strategies across the life span.

Go to:

GOAL 3. Reduce access to lethal means among people at risk of suicide

Reduce Access to Lethal Means Among People at Risk

In 2022, suicides by firearm comprised more than half (55%) of all suicide deaths in the United States (CDC, 2024a). Further, nearly 90% of people who use a firearm in a suicide attempt will die from their injury, making firearms the most lethal method of suicide (Conner et al., 2019). Other means of suicide used in 2022 included suffocation (25%), poisoning (12%), and other (8%) (e.g., cutting; CDC, 2024a). While attempted suicide is a leading risk factor for later death by suicide, most people who attempt suicide and survive never go on to die by suicide (Botswick et al., 2016; Carroll et al., 2014). Upstream prevention can prevent suicide risk in the first place. However, if someone is seriously considering suicide, an important community-based approach is to put time and distance between the person and the lethal means of carrying out an attempt.

International efforts have repeatedly shown that lethal means safety interventions are some of the most successful strategies in suicide prevention. Reduced access to lethal means among people at risk is associated with reductions in suicides (Bandara et al., 2022; Gunnell et al., 2007; Lee et al., 2021; Pirkis et al., 2015; Sarchiapone et al., 2011; Ueda et al., 2015). Suicide rates decline when access to a common and highly lethal means of suicide is reduced. In recent years, both CDC and NIH received funding to conduct research to prevent firearm-related injuries and deaths, including suicide. For more information on these prevention efforts, visit https://www.cdc.gov/violenceprevention/firearms/index.html and https://www.nimh.nih.gov/news/science-news/2020/nimh-awards-funding-for-research-on-preventing-firearm-injury-and-mortality.

Some Considerations

Research indicates that among people who made serious suicide attempts, many thought about suicide for as little as 5 to 10 minutes before they acted (Simon et al., 2001; Deisenhammer et al., 2009). This suggests that suicide attempts can be impulsive, so safe and secure storage of lethal means can mean the difference between life and death among people at risk. Even if people have considered suicide in the past, the decision to act can take place in just minutes. Research suggests that when one means of suicide is unavailable or not accessible, people rarely substitute a different means of suicide (Hawton, 2007). In the case of firearms, if any other means are substituted, the likelihood of death from the alternative means will be reduced, since firearms are the most lethal method of suicide.

Effective and promising interventions related to reducing risk for firearm suicide include:

- Storing firearms unloaded, separate from ammunition, in a locked place or with a locking device (Harvard Injury Control Research Center, 2012).

- Counseling on access to lethal means by health care and mental health providers in emergency departments (Eds), within crisis services, and other settings (Johnson et al., 2011; Miller et al., 2020; Sale et al., 2018).
- Implementing laws intended to limit a child's access to firearms within the home as well as mandatory waiting periods when someone is purchasing a firearm (Azad et al., 2020; Hamilton et al., 2018; RAND Corporation, 2023). However, waiting periods may only be effective when the purchaser does not already own a firearm.
- Providing community information about out-of-home temporary storage of firearms and expanding the availability of this option (e.g., https://coloradofirearmsafetycoalition.org/gunstorage-map/).
- Implementing extreme risk protection orders (sometimes called *red flag laws*) that allow for the temporary removal of firearms from a person at risk during a crisis period (Dalafave, 2021).
- Engaging trusted messengers to encourage safe firearm storage practices can enhance the potential success of firearm-related interventions (Conner et al., 2019). Trusted messengers can include firearm retailers, ranges, manufacturers, and advocacy organizations.

Other effective interventions for reducing access to other lethal means include: xs

- Constructing barriers on bridges, buildings, railroads, and other infrastructure
- Implementing safeguards to remove potential ligature (tying off) points, such as in jails, prisons, and hospitals
- Implementing policies to limit access to lethal means in occupational settings, for example medications (also see Goal 5)
- Storing medications and household products safely

It is important for all community efforts to be led and informed by community leaders and people with lived experience to reduce health disparities and to help protect against unintended trauma.

The above interventions help to create safer environments to support people who may be at risk of suicide. Another way to create protective environments is by reducing or preventing risk behaviors associated with suicide, such as drug and alcohol use, at the individual and community levels. Research indicates that during the 24-hour period preceding a suicide attempt, acute use of alcohol in a given hour is associated with increased intensity of suicidal ideation in the next hour (Bagge et al., 2014). Acute use of alcohol is also associated with a rapid transition from a desire to die to a suicide attempt (Bryan et al., 2016). Data show that alcohol intoxication is most commonly present in suicide by a firearm among young adult and middle-aged men (Conner et al., 2014). One recent study showed that all types of substance use disorders were significantly associated with suicide death (Lynch et al., 2020).

Interventions that address the relationship between alcohol and suicide include policies such as alcohol taxes, zoning, or restrictions on alcohol availability that serve to decrease alcohol use and alcohol use disorder (AUD; SAMHSA, 2022). Clinical policy interventions include targeting AUD and addressing the importance of AUD screening and suicide prevention efforts during treatment of AUD (Arakelian et al., 2023; Glasner, et al., 2023; SAMHSA, 2016). Assessing the motivation for drinking and the amount consumed prior to an attempt can be used to develop a personalized distress safety plan. This plan can address high-risk periods and warning signs and includes strategies for avoiding alcohol.

To learn more about the role lethal means play in suicide and guidance for reducing access during times of risk, read Lethal Means and Suicide Prevention: A Guide for Community and Industry Leaders.

What Success Looks Like

Achieving Goal 3 would include engaging communities in the use of policies, programs, and practices that result in reducing access to lethal means among people at risk. This includes safe and secure storage of firearms, medications, and household products (e.g., poisons), especially among people at risk. Achieving Goal 3 would also include implementing workplace polices that support lethal means safety among occupational groups with increased rates of suicide and people who may have access to lethal means as part of their jobs. These would include law enforcement, military, veterinarians, and health care workers. It would also include institutional polices to keep people safe in health care and carceral settings such as prisons. Working with partners to limit access to lethal means in the physical environment and creating protective environments inclusive of substance use prevention also play important roles in a comprehensive approach to suicide prevention.

Examples

- The American Foundation for Suicide Prevention (AFSP) and the National Shooting Sports Foundation (NSSF) developed the *NSSF/AFSP Suicide Prevention Toolkit*. The toolkit helps firearms retailers, shooting range operators, and firearm owners understand the risk factors and warning signs of suicide; know what resources are available when someone is worried about a customer, a peer, or oneself; and engage in secure storage of firearms. The toolkit includes promotional materials and has been promoted nationwide. To learn more about this initiative, visit https://www.nssf.org/safety/suicide-prevention.

- Prevention professionals are partnering with firearm retailers, instructors, and ranges as part of Gun Shop projects across the country. These programs work together to promote suicide prevention information as a key component of responsible ownership. Including trusted messengers as part of the solution builds bridges to save lives. For more information, visit https://www.hsph.harvard.edu/means-matter/gun-shop-project.
- California is using its CDC Comprehensive Suicide Prevention funding to:
    - Train health and behavioral health providers and pharmacists in safe storage so they can then educate their patients
    - Provide Counseling on Access to Lethal Means (CALM) trainings to communities
    - Disseminate educational materials to law enforcement and first responders to promote help-seeking behavior, including education on safe and secure storage
    - Share educational materials and campaigns that educate partners and community members about existing state policies around safe and secure storage
- Rural and Alaska Native communities are disproportionately impacted by youth suicide and also have high rates of firearm ownership. NIH funded the University of Michigan (2020–2024) to develop and implement the Family Safety Net (FSN) intervention to reduce youth firearm suicides. FSN builds on Alaskan family values to strengthen household firearm safe and secure storage practices, focuses on collectivist culture and norms in all practices, and includes Alaska Native community members in assessing the feasibility, acceptability, and fidelity of safe firearm storage practices. To learn more about the research project, visit Family Safety Net— Keeping Our Loved Ones Safe (umich.edu).
- The VA provided 1 million cable gun locks to Veterans in Fiscal Year 2023. The Keep It Secure campaign and website also support secure storage of lethal means

including firearms and medications. To learn more, visit Firearm Suicide Prevention and Lethal Means Safety—REACH (va.gov).

- The Department of Justice (DOJ) supports efforts at reducing access to lethal means for people at risk and took the following actions:
    - Issued a new rule requiring gun retailers to certify that they have secure gun storage devices compatible with existing inventory available for sale
    - Made funding available for schools to engage in public awareness campaigns
    - Made funding available to implement and research extreme risk protection order laws
    - Funded the first national extreme risk protection order resource center
    - Released a comprehensive guide to secure storage
    - Made funding available for local law enforcement to acquire secure storage devices for distribution
- The Department of Education issued new resources for school administrators on the importance of safe firearm storage. The U.S. Secretary of Education released a letter encouraging principals to take action and increase awareness of the importance of safe storage due to the prevalence of guns in the home being use in youth suicide. The DOJ has made funding available for schools to engage in these public awareness campaigns.

What We Should Do

Below are the objectives for Goal 3 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 3.1:** Train community members and implement effective ways to reduce access to lethal means among people at risk, including safe and secure storage of firearms, medications and poisons, ligatures, and other means in homes, workplaces, communities, and the physical environment.
- **Objective 3.2:** Evaluate policies, programs, and practices that put time and space between a person at risk and a lethal means of suicide, including their impact in historically marginalized communities.
- **Objective 3.3:** Partner with firearm and other relevant organizations and communities to incorporate suicide awareness and prevention as basic tenets of firearm safety and responsible ownership.

- **Objective 3.4:** Implement effective substance use prevention and harm reduction programs, practices, and policies that can help reduce suicide risk at the individual and community levels.

Go to:

GOAL 4. Conduct postvention and support people with suicide-centered lived experience

Provide Postvention After Suicide Deaths and Support for People With Suicide-Centered Lived Experience

The period following a suicide loss, attempt, or crisis is crucial to the health and well-being of individuals and the surviving friends, family members, caregivers, students, co-workers, neighbors, and others impacted by the event. Postvention after a suicide loss and support for people with suicide-centered lived experience provides people with the care and resources they need to prevent an increase in their suicide risk. Messaging that encourages help-seeking and hope can be helpful during this time. When additional suicide attempts or deaths occur close in time and/or geography, which is called a *suspected suicide cluster*, these events may need further systematic assessment to confirm the cluster, possible investigation to better understand the factors associated with the cluster, and implementation of a community response to prevent further events (Trinh et al., 2024; Ivey-Stephenson et al., 2024).

Some Considerations

Postvention practices after a suicide death may include debriefing, counseling, and other outreach and support. Use of evidence-based or best practices for conveying information about a suicide loss should be shared safely along with culturally relevant supportive services and other resources.

Considerations following suicide attempts or deaths among those impacted may include:

- New or worsened mental health concerns, such as anxiety and depression
- Guilt
- Social isolation
- The surfacing of unresolved or new risk(s) for suicide
- Physical and/or emotional scars

- Stigmatizing or discriminatory reactions toward the person who died or attempted suicide or toward their family and friends
- Practical concerns resulting from the attempt or death such as financial worries
- Unsafe communication or media reporting about the event (see Goal 7)
- Additional suicides, including in rare instances, suicide or suicide attempt clusters.

People who are regularly exposed to suicide as part of their job have specific postvention needs that may differ from the general population. For example, some occupational groups are more likely to have many exposures to suicide over their career. Professionals who are repeatedly exposed to trauma can have a heightened risk for suicide and mental health challenges if needed supports are not available or accessible. First responders and other occupational groups with increased risk of suicide need suicide prevention and postvention programs and protocols.

Community members, employers, and school personnel; cultural, spiritual, and other leaders; and people with lived experience have a role to play in helping to inform, improve, expand, and carry out postvention and community response protocols and programs with the best available evidence. Support groups and other groups need evidence-based guidelines and protocols to carry out postvention and to support people with suicide-centered lived experience.

Individuals who have experienced suicide loss or the effects of their own or others' suicide thoughts and attempts can offer unique insights into what others go through after such an event. Many types of support—peer/social, emotional, tangible, and informational—can be helpful to survivors. For example, many practical, logistical, and real-world concerns can be navigated with guidance from people with lived experience. These may include cleanup after formal investigation efforts and making funeral arrangements, among other activities. Resources related to mental health treatment; community prevention resources (e.g., self-care, services, prevention programs); and crisis intervention can also be provided to impacted friends, family, and other community members who may be struggling after a suicide or a suicide attempt.

What Success Looks Like

How a community or organization responds after a suicide can impact, positively or negatively, the risk for future attempts and losses. In successfully achieving Goal 4, individuals, employees, students, families, and other groups will have evidence-based postvention and support options available and accessible. These can help reduce feelings of isolation and lessen the challenges people face after a suicide or suicide attempt. The ultimate result will be protection against future risk for suicide.

The Suicide Prevention Resource Center (SPRC) hosts several resources focused on postvention for a variety of settings, including schools, workplaces, and health care settings. See https://sprc.org/effective-prevention/a-comprehensive-approach-to-suicide-prevention/providefor-immediate-and-long-term-postvention/.

Examples

- Local Outreach of Suicide Survivor (LOSS) Teams provide a unique model for engaging suicide loss survivors and others with suicide-centered lived experience in peer support following a suicide death. The LOSS Teams train individuals who have suicide-centered lived experience in trauma-informed crisis response. These volunteer-based teams are called in to support families, schools, faith institutions, and other community organizations following a death by suicide in a community. LOSS Teams were first launched in 1998 at the Baton Rouge Crisis and Trauma Center. Since that time, LOSS Teams now operate in many communities. For more information, visit https://losscs.org/.
- The StandBy Support After Suicide program provides face-to-face outreach, telephone support, and referrals to community services through a professional crisis response team. Research found that clients of the program were significantly less likely to be at high risk for suicidal ideation and attempts compared to a group that did not receive the intervention (Visser et al., 2014).
- The American Foundation for Suicide Prevention created the Healing Conversations program, which provides personal support after a suicide loss through phone, virtual, and in-person conversations with trained volunteers who also survived a suicide loss. For more information, visit https://afsp.org/healing-conversations.
- Florida's First Responder Suicide Deterrence Task Force (Task Force), including members of the first responder community and the Florida Statewide Office for Suicide Prevention, released their *Annual Report* in 2021. In it, they made recommendations for reducing first responder suicide. The Task Force engaged in a variety of initiatives which include the following:
  - Creating the *First to Respond, First to Ask for Help* campaign

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Investing in culturally competent evidence-based counseling and peer support services

◦

Increasing worker compensation benefits for post-traumatic stress-induced mental health challenges

In 2022, the Task Force became an established member of the Florida Suicide Prevention Coordinating Council to sustain their important work. To learn more, visit https://www.myflfamilies.com/suicideprevention/first-responder-mental-health-and-suicide-deterrencesubcommittee.

- The National Consortium on Preventing Law Enforcement Suicide released the *Comprehensive Framework for Law Enforcement Suicide Prevention*, which outlines the full spectrum of needed efforts that include support after a suicide death or attempt. To learn more, visit https://www.theiacp.org/sites/default/files/2021-09/_NOSI_Framework_Final%20Copy%2001.pdf.

What We Should Do

Below are the objectives for Goal 4 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 4.1:** Provide community-based care and support options to individuals bereaved by suicide.
- **Objective 4.2:** Provide community-based care and support options to individuals who have survived a suicide attempt or who struggle with thoughts of suicide.
- **Objective 4.3:** Engage suicide attempt survivors in the development, implementation, and evaluation of guidelines and protocols for suicide survivor support groups, programs, and policies.
- **Objective 4.4:** Promote the adoption and evaluation of community-relevant guidance for the identification, assessment, and community-led response to potential suicide or suicide attempt clusters.
- **Objective 4.5:** Support suicide prevention and whole person health among health care workers and other occupational groups who experience traumatic exposure to suicide risk, such as first responders, health care providers, and crisis workers.

Go to:

GOAL 5. Integrate Suicide prevention into the culture of the workplace and into other community settings

Focus on Workplaces and Community Settings

The community settings where people spend significant amounts of time are prime spots for prevention, and these settings may vary over the life span. For example, children, teens, and young adults spend significant time in schools, after-school programs, youth organizations, colleges, and workplaces. These are important locations for upstream prevention (see Goal 2). Families may spend time together at places of worship. They may also interact with the following:

- Health and behavioral health care sector (see Strategic Direction 2)
- Social service organizations (e.g., protective services, foster care, senior centers, temporary financial assistance, food stamps, and housing)
- Juvenile justice system

Adults may also spend significant time at their workplaces; in formal or informal social organizations (e.g., sports activities, volunteer organizations); and in health settings. All people working in these settings have a role in preventing suicide among their clientele. Community settings can integrate effective suicide prevention policies, programs, and practices into their operations for worker safety and well-being. This combined effort provides critical support to people who may be at increased risk of suicide so that nobody falls through the cracks.

Some Considerations

Workplaces

Workplaces can integrate pro-social norms and behaviors as part of their culture and values through comprehensive suicide prevention planning efforts. This could include effective policies, programs, and practices that prioritize employee well-being, help-seeking, and connectedness. Efforts could also include collecting worker satisfaction and well-being data for continuous quality improvement. Enacting such cultural shifts takes strong leadership support and buy-in at all levels. In addition to employers, employee groups can be important groups with which to partner. These groups include unions, trade organizations, and employee resource groups (Health Action Alliance, 2022; Leigh & Chakalov, 2021; Mind Share Partners, 2023; SkillSignal, 2023).

Implementation of effective policies, programs, and practices impacting employee health and well-being may include:

- Enabling self-care through flexible scheduling, paid time off, family and medical leave, and gradual re-integration into the workplace after a hospitalization or other prolonged absence
- Implementing consistent work shifts and shared decision-making between supervisors and employees to avoid employee burnout and to improve relationships and morale
- Providing culturally relevant informational community resources in breakrooms and other communal areas (e.g., substance use disorder treatment, screening and assessment, financial resources)
- Offering ongoing opportunities for connectedness and peer support
- Establishing programs that promote conflict resolution, coping skills, and stress reduction
- Promoting the social norm that seeking help is a sign of strength
- Providing training for all employees to learn the signs of suicide risk and how to respond effectively
- Implementing effective suicide and violence prevention programs for workplace issues like bullying, sexual harassment, online harassment and abuse, and dating violence
- Reducing access to lethal means of suicide among people at risk while on the job such as firearms, lethal medications, and access to high structures
- Creating suicide prevention and crisis response plans before a crisis occurs

Workplaces can also offer supportive resources, such as:

- Opportunities for screening and referral
- Employee Assistance Programs (EAPs) or other short-term counseling options
- Postvention support after a suicide or suicide attempt
- Education about crisis services, such as the 988 Suicide and Crisis Lifeline
- Provision of health insurance policies that offer coverage for behavioral health treatment like substance use treatment, mental health care, and couples counseling

These initiatives can improve worker mental health, connectedness, and well-being. They also positively impact measures of occupational effectiveness, such as improved job satisfaction, job security, workplace safety, and decreased absenteeism and presenteeism.

Other Community Settings

Civic organizations, places of worship and other community settings have a large role to play in suicide prevention. Many items mentioned above also pertain to other community settings. These entities can do the following:

- Create suicide prevention and crisis response policies and plans before a crisis occurs
- Implement and evaluate effective suicide prevention programs, including upstream programs, in schools and other youth-serving organizations (see Goal 2)
- Provide culturally relevant information and connection to services
- Promote help-seeking as a strength
- Promote opportunities for connectedness
- Train all staff/individuals in identifying and effectively responding to someone who may be at risk of suicide through training
- Provide postvention support and safe messaging after a suicide

Online Community Settings

In recent years, online gaming, chat groups, and other online settings and platforms have grown in use. They attract a range of people, some of whom may be at increased risk of suicide.

Using digital platforms allows access to a broad array of information and social circles. These settings can potentially increase depression, anxiety, and suicide risk, especially among youth, related to the following:

- Experiencing cyberbullying
- Receiving unsafe and/or unwanted content in social media feeds
- Comparing oneself to others
- Missing opportunities for health behaviors and socializing in real life (Office of the Surgeon General, 2023b)

Further, according to the Surgeon General's Advisory on *Social Media and Youth Mental Health*, adolescent girls and transgender youth are disproportionately impacted by online harassment and abuse which are associated with negative emotional effects (Office of the Surgeon General, 2023b). However, these platforms also present opportunities for support, access to helping resources, and connections that transcend geographic boundaries (e.g., among LGBTQI+ populations). Collaborating with digital and technology companies to create a safer more protective online environment for youth may help prevent suicide. Interventions include educating parents, caregivers, guardians, educators, and youth in digital literacy. This would include learning more about risks and harms present in some digital environments and ways to interact more safely in that space.

What Success Looks Like

Achieving Goal 5 creates universal safety nets and extends support systems in communities where people live, work, learn, play, and worship. Whether at work, in the community, or online, people would interact with those who know how to identify individuals at risk and how to respond, have easy access to information and a range of helping resources, have opportunities for connectedness, and have the time and means for seeking out help and services. Over time, approaches to suicide prevention and improving mental health are finding their way into workplaces and popular media platforms and through a range of programs, campaigns, and other resources.

Examples

Programs

- Together for Life is a workplace program implemented to address suicide among police officers. It focused on interventions to foster an organizational culture promoting mutual support and solidarity among members. It included trainings and education campaigns to improve suicide risk identification, awareness of resources, and help-seeking. The program was highly regarded by the police force and resulted in a reduction of suicides (Mishara & Martin, 2012).
- Strong Schools Against Suicidality and Self-Injury is a German school-based organizational initiative designed to improve staff knowledge and confidence in recognizing and properly addressing student self-injury and suicidality. Staff who attended a two-day workshop demonstrated increases in knowledge and confidence immediately after the workshop and at six-month follow-up evaluations (Growschwitz et al, 2017).
- Comprehensive policies and practices that can reduce suicide among incarcerated populations include the following:

  - Routine suicide prevention training for all staff
  - Standardized intake screening and risk assessment
  - Safe physical environments
  - Emergency response protocols
  - Notification of suicidal behavior through the chain of command
  - Critical incident stress debriefing and death review
  - Quality improvement (Stijelja & Mishara, 2022)

- Question, Persuade, and Refer (QPR) is an hour-long training to reduce stigma and increase knowledge about suicide risk factors, warning signs, and available resources. QPR trainings also improve participants' abilities to ask individuals about their suicide thoughts or plans and persuade them to seek help. QPR has been found to improve skills such as asking about suicidal ideation and referring individuals to treatment (Litteken & Sale, 2018).

Campaigns

- The nonprofit Construction Industry Alliance for Suicide Prevention works with construction industry partners to reduce suicide through its STAND Up for Suicide Prevention campaign. It provides construction partners with tools and information to help them create safe cultures, provide training to identify and help those at risk of suicide, raise awareness about suicide prevention, and normalize conversations around suicide and mental health. To learn more, visit https://www.preventconstructionsuicide.com/pledge-to-stand-up.

- The National Football League's *NFL Total Wellness* initiative provides new, mid-career, transitioning, and retired players with resources, supports, and programs to support their overall health and well-being, including promoting positive mental health and suicide prevention (National Football League, 2024). To learn more, visit https://totalwellness.nfl.com/.
- CDC's Health Worker Mental Health Initiative seeks to support the mental health of the nation's diverse health workforce. The initiative includes a national campaign that seeks to do the following:
    - Educate about the cost of poor mental health in the workforce
    - Develop best practices, resources, and interventions for health care workers
    - Develop partnerships
    - Invest in development of data, screenings, trainings, resources, and policies
    - Conduct a social marketing campaign to normalize the conversation around mental health (Cunningham et al., 2022)

To learn more on the campaign, visit https://blogs.cdc.gov/niosh-science-blog/2022/05/24/mental-health-initiative/.

Resources

- **Suicide Prevention: Evidence-Informed Interventions for the Health Care Workforce:** This guide from the American Hospital Association (AHA) with support from CDC provides evidence-informed strategies and tactics for suicide prevention among health workers. To learn more, visit https://www.aha.org/system/files/media/file/2022/09/suicide-prevention_evidence-informed-interventions-for-the-health-care-workforce.pdf.
- **Understanding and Preventing Burnout among Public Health Workers:** To address the issue of burnout among public health workers, CDC

worked with academia to develop a 10-part training series for public health leaders and supervisors. This training provides managers with information about organizational-level approaches to burnout prevention. To learn more, visit https://www.cdc.gov/niosh/learning/publichealthburnoutprevention/default.html.

- **Comprehensive Blueprint for Workplace Suicide Prevention:** This website provides free online guidance for developing comprehensive approaches to suicide prevention in workplaces. To learn more, visit, https://theactionalliance.org/communities/workplace/blueprintforworkplacesuicideprevention .
- **Manager's Guide to Suicide Postvention in the Workplace:** This guide presents 10 action steps that organizational leaders can take to provide immediate and long-term support to their work community following a suicide death. To access these resources, visit https://theactionalliance.org/communities/workplace.

Recommendations

- The Surgeon General's Advisory on Social Media and Youth Mental Health, released in May 2023, describes the potential benefits and harms of social media use and calls for urgent action to create safer, healthier online environments to protect children.
- The American Psychological Association released a Health Advisory on Social Media Use in Adolescence in May 2023. The report provides 10 research-based recommendations for creating digital spaces for youth that are both safe and beneficial. The recommendations call for:
  - Investing in research on social media and youth
  - Providing youth education on positive social media use
  - Monitoring social media to ensure it is safe
  - Placing safeguards within social media structures minimizing harmful information

◦

Ensuring age-appropriate materials and functionality are tailored to youth (American Psychological Association, 2023).

What We Should Do

Below are the objectives for Goal 5 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 5.1:** Integrate suicide prevention into workplace values, policies, culture, and leadership at all levels.
- **Objective 5.2:** Create, implement, and evaluate organizational programs, practices, and policies to support worker well-being and suicide prevention.
- **Objective 5.3:** Implement and evaluate effective programs, practices, and policies in suicide prevention and crisis response in settings where people live, work, learn, play, and worship, and ensure ongoing staff training and development.
- **Objective 5.4:** Train community members, organizations, and civic groups to identify and respond to people who may be at risk of suicide.
- **Objective 5.5:** Work with the public and private sectors to implement and evaluate recommended practices and policies to support safer digital technology use, especially among youth and young adults.

Go to:

GOAL 6. Build and sustain suicide prevention infrastructure at the state, tribal, local, and territorial levels

Focus on Infrastructure

Suicide prevention infrastructure at the state, tribal, local, and territorial levels is important to ensure availability of the capacity and resources needed to implement effective and sustained comprehensive suicide prevention in communities. However, suicide prevention infrastructure in most states is limited, making it difficult to impact suicide rates.

A state suicide prevention infrastructure is a state’s concrete, practical foundation or framework that supports suicide prevention-related systems, organizations, and efforts. It includes the fundamental parts, and the organization of those parts, that are necessary for planning,

implementation, evaluation, and sustainability. To learn more, visit https://sprc.org/state-infrastructure/.

Some Considerations

Adequate state infrastructure includes six key elements: Authorize, Lead, Partner, Examine, Build, and Guide, according to the Suicide Prevention Resource Center (SPRC). While state infrastructure can help improve suicide prevention, territories, local communities, and tribes may apply or adjust the same principles presented here to fit their specific context.

Authorize

It is ideal to *Authorize* a lead agency or organization to coordinate suicide prevention activities across multiple agencies. The lead agency can do the following:

- Identify dedicated and sustainable resources required to carry out all six functions
- Maintain a state suicide prevention plan to support coordinated and comprehensive suicide prevention to be updated every 3 to 5 years (see Build)
- Evaluate the state plan, and provide an annual report to the legislature or governor to maintain accountability
- Share progress and emerging needs

Lead

The agency can *Lead* by maintaining a dedicated full-time suicide prevention director or suicide prevention coordinator and core staff positions. This agency can provide training and technology to carry out all six functions and develop staff capacity to respond to information requests from officials, community members, and the media. Core staff may include data managers, epidemiologists, behavioral health specialists, data analysts, program managers, program planners, trainers, evaluators, and communication professionals.

Staff training and the development of knowledge and skills related to comprehensive suicide prevention are essential and may include the following:

- Partnership development
- Use of high-quality data for decision-making
- Up-to-date knowledge of the evidence for suicide prevention, intervention, and postvention

- Implementation and evaluation of effective prevention strategies and approaches tailored to populations disproportionately affected by suicides and suicide attempts
- Community-informed safe messaging and communication strategies

The suicide prevention lead and/or core staff can bring their expertise to collaborative partnerships and strategic planning.

Partner

Components of the *Partner* function include the following:

- Forming a suicide prevention coalition with public and private sector representation
- Adopting a shared vision to support a comprehensive approach to suicide prevention across individual, relationship, community, and societal levels
- Developing a shared language

The benefits of partnering include potential access to a range of resources (e.g., personnel, data, and funding); increased capacity to reach populations most impacted; reduced duplication of efforts; and knowledge sharing. Written agreements should be developed to formalize partnerships and detail commitment and responsibilities. (see Goal 1).

Examine

The comprehensive public health approach to suicide prevention relies on data. Rapidly evolving technology gives greater opportunities to work with traditional and novel data sources and employ data science techniques to better inform decision-making. It also provides opportunity to implement effective suicide prevention policies, programs, and practices. Infrastructure that supports the delivery and use of integrated, real-time public health data is essential to the *Examine* function. This may require significant modernization of existing technology, upskilling of the workforce to manage and use systems, data, and advanced analytic tools; and updating data processes, standards, and policies to enable high-quality, timely data to be accessed and shared appropriately. This includes better connecting public health and health care sectors. Investments to date in data modernization are laying the groundwork for the infrastructure needed. Sustainability will be needed to fulfill the *Examine* function.

Additional considerations for the *Examine* function relate to the design and use of data collection tools and data collected. Examples include the following:

- Ensuring that populations disproportionately affected by suicide thoughts, attempts, or deaths are represented
- Working with tribes to establish agreements for data stewardship
- Employing methods to ensure proper confidentiality and privacy are maintained when distributing or displaying data
- Ensuring reporting or translation of data does not inadvertently convey biased information against groups most impacted

Using data within a strong infrastructure supports a comprehensive approach to suicide prevention based on the best available evidence, across the life span. It should also be tailored for the context and populations disproportionately affected by suicides or suicide attempts. Elements of a comprehensive approach include upstream and downstream strategies and approaches found in the CDC *Suicide Prevention Resource for Action* and throughout this *National Strategy*.

Build

Sustained funding and other resources to carry out and evaluate the comprehensive approach is essential. Diverse agencies, funding, resources, staff, and volunteers are needed who can bring together assets, expertise, experiences, and cultures to inform responsive prevention efforts. Ideally, any guiding suicide prevention plan will call for implementation of a comprehensive, life span approach to suicide prevention that reaches all facets of a state or community. Comprehensive plans will call for a variety of upstream and downstream prevention strategies with explicit roles for multiple partners. Implementation requires staff and resources dedicated to monitoring and evaluating prevention strategies over time.

Guide

Lead suicide prevention agencies are equipped to *Guide* and support suicide prevention efforts in the local community with adequate resources and other components of necessary infrastructure. Lead agencies can provide funding, consultation, and a range of training opportunities to local communities to engage in key tasks such as strategic suicide prevention planning and implementing evidence-informed and comprehensive approaches to suicide prevention.

What Success Looks Like

Achieving Goal 6 involves national, state, tribal, local, and territorial investments in suicide prevention infrastructure. Suicide prevention infrastructure in states and communities strengthens the ability to implement comprehensive suicide prevention approaches. Adequate infrastructure includes all six essential elements—Authorize, Lead, Partner, Examine, Build, and Guide— in place with continual analysis into ongoing resource, funding, and support needs.

State suicide prevention professionals can build upon these six essential elements and ensure that they are prepared to provide ongoing updates and reports to state legislatures on the cost benefit of investments in the suicide prevention infrastructure.

Local-level suicide prevention professionals will be most effective when they are familiar with the elements of the suicide prevention infrastructure and ensure their local efforts contribute to state or territorial suicide prevention capacity. States and territories with strong infrastructures can develop a common vision for suicide prevention with their state and local partners, guided by a state suicide prevention plan informed by diverse community members.

Examples

- Kansas recognized the need to strengthen their suicide prevention infrastructure in 2019 and completed an internal assessment of SPRC's Infrastructure Recommendations. They found that many of the essential elements were missing, so they brought together a State Suicide Prevention Plan Work Group. This group, which included state agencies, people with lived experience, local coalitions, and nonprofit organizations, identified key goals and objectives to include in a state comprehensive suicide prevention plan, which was updated in 2021. Kansas prioritized developing a state-level suicide prevention coalition representing their diverse communities, regions, and sectors to better coordinate existing suicide prevention efforts. Several state agencies partnered to inform budget requests to the state legislature, which approved a budget line item for suicide prevention in 2022. This collective focus enabled the state to fill key suicide prevention roles in the state's lead agency, fund the Kansas Suicide Prevention Coalition, provide mini-grants to local communities, and maintain active engagement from diverse organizations implementing the state suicide prevention plan.
- Over the past decade, Ohio invested in the county and regional suicide prevention coalitions by providing trainings, funding, and resources to communities. Trainings centered on strengthening local coalition structures, functioning, strategic planning, and membership. Funding was provided in mini-grants to local groups to invest in evidence-informed suicide prevention strategies and ensure they receive additional technical support. County and regional coalition representatives also sit on state-level advisory boards and inform the suicide prevention needs, funding decisions, and plans of the state. This direct

investment in local infrastructure supported the development of a strong collaboration toward achieving mutual suicide prevention goals in Ohio.

- SAMHSA’s Garrett Lee Smith State and Tribal Youth Suicide Prevention grant program is a dramatic example of the importance of sustained funding on suicide outcomes. First established by the Garrett Lee Smith Memorial Act in 2004, initial evaluation studies found the program reduced deaths by suicide and nonfatal suicide attempts in counties with grant-funded activities compared with counties not receiving grant funding. This finding was encouraging, but the impact faded after one year, on average. SAMHSA responded to this finding by making the grants larger and longer. When the program was reevaluated, the reduction in mortality was found to last two years on average. This saved an estimated 882 young lives between 2007 and 2015. Ultimately, this additional impact on youth mortality was associated with years of continued funding, pointing to the need for sustained resources within states and communities.

What We Should Do

Below are the objectives for Goal 6 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 6.1:** Create and maintain core staff positions in offices of suicide prevention across state, tribal, local, and territorial levels to build and sustain comprehensive suicide prevention programming, including hiring people with suicide-centered lived experience and people representing the diversity of communities being served.
- **Objective 6.2:** Train staff across state, tribal, local, and territorial levels about comprehensive suicide prevention, including building partnerships; use of data for decision-making; selection, implementation, and evaluation of effective prevention strategies; and communication activities.
- **Objective 6.3:** Modernize data systems and infrastructure and build staff capacity in surveillance, data analysis, and program and policy evaluation across state, tribal, local, and territorial levels.
- **Objective 6.4:** Establish and sustain public and private funding streams for implementation and evaluation of effective suicide prevention programming at the state, tribal, local, and territorial levels, with attention to populations disproportionately affected by suicide.

- **Objective 6.5:** Develop, implement, evaluate, and routinely update data-informed state, tribal, local, and territorial suicide prevention plans that reflect a comprehensive approach to suicide prevention.

Go to:

GOAL 7. Implement research-informed suicide prevention communication activities in diverse populations using best practices from communication science

Focus on Communication Efforts

How we talk and message about suicide and suicide prevention matters. The framing we use has the potential to open a door to dialogue, understanding, and support, or it may have unintended effects, such as increased perceived isolation, discrimination, and/or stigma. Evidence-based communication can increase awareness, provide information, shift attitudes and beliefs, and promote help-seeking behavior. Experts in communication science, social marketing, and media are key partners in this endeavor and can bring specialized skill sets to suicide prevention communication.

In a recent survey, 94% of respondents believed suicide can be prevented; three-quarters of those indicated an understanding that most people who die by suicide show some signs beforehand; and 96% reported they would take action to help prevent suicide if someone close to them was thinking about it (American Foundation for Suicide Prevention et al., 2022). Information needs to be accurate, understandable, practical, and action oriented because empowering communities with the knowledge about warning signs and what to do can be lifesaving.

Some Considerations

Safe messaging guidelines seek to protect audiences from messages that inadvertently increase suicide risk. Certain types of public messaging about suicide or lived experiences of suicide thoughts and attempts can increase risk, even if they are shared in a well-meaning way.

Decades of research show unsafe messaging can contribute to real-world increases in suicide attempts and deaths—a phenomenon known as the *Werther effect* (Domaradzki, 2021; Etzersdorfer et al., 2004; Niederkrotenthaler et al., 2010; Niederkrotenthaler and Till, 2019).

Examples of unsafe messaging practices include:

- Romanticizing suicide

- Describing suicide as an acceptable or inevitable result of life struggles
- Providing graphic descriptions of suicide
- Using disrespectful language, such as the phrase “committed suicide,” which can connote a sin or a crime

On the other hand, safe messaging guidelines also provide evidence-informed recommendations for ensuring communication on suicide is not only safe but beneficial (known as the *Papageno effect*). Safe messaging includes the following:

- Describing suicide as largely preventable
- Emphasizing that suicide is a complex issue with many contributing risk and protective factors that can be addressed
- Using respectful language such as the phrase “died by suicide”

Certain suicide prevention messaging practices have been shown to reduce individuals’ suicide risk. Research on the Papageno effect shows stories of individuals struggling with suicidal crisis and finding support to master the crisis directly influence listeners. For example, those with suicide thoughts show reduced levels of suicidality following exposure to these types of stories (Niederkrotenthaler, 2016; Till et al., 2018; Niederkrotenthaler & Till, 2020). Focusing on safe messaging avoids unintentional harm and promotes messages of hope and healing with real-world benefits.

Including individuals with suicide-centered lived experience adds valuable insights throughout the development and implementation of communication efforts. These individuals bring practical information about barriers to receiving care and support that can be incorporated into communication messages. Messages crafted and delivered by individuals with lived experience also convey authentic empathy. Perspectives grounded in experience help initiatives concentrate on the key elements that are likely to have the greatest impact on the local community.

Research found the use of social media can be associated with negative health outcomes, particularly for youth (e.g., Office of the Surgeon General, 2023b). However, social media also offers opportunities for beneficial communication about suicide prevention, as well as enhanced social support and connection. This is particularly true for LGBTQI+ youth, youth of color, rural youth, and other youth with historically marginalized identities (see Goal 5). Engaging young people directly represents a valuable opportunity for connection. Equipping young people with the knowledge and skills to make healthy digital choices enables a preventive effect across new technologies. Identifying youth with significant interest in prevention can provide early opportunities to develop future leaders, influencers, advocates, and champions. Digital and social media partners can also add value to communication efforts by delivering tailored messages from a broad matrix of potential stories and by monitoring and responding to harmful messages posted by users.

The actions of media, including news, entertainment, and social media, can have a range of effects—some positive and some negative. Media partners can be effective champions of suicide prevention by following guidelines for reporting on suicide, such as sharing stories of hope and recovery; providing local resources, including the 988 Suicide and Crisis Lifeline; and avoiding sensationalizing suicide thoughts, attempts, or deaths. Media organizations can provide information to their staff about current standards, guidelines, and ethics relevant to prevention efforts, and contribute their expertise in communications for suicide prevention campaigns. Behavioral health experts can also provide guidance about developing media material.

Communication about the 988 Suicide and Crisis Lifeline and other crisis support services will be most effective when they do the following:

- Clearly communicate that their services are for everyone
- Address questions or concerns about what happens if you reach out for help
- Encourage outreach

Messages about 988 can be adapted by local communities to ensure lifesaving possibilities are presented within the context of realistic expectations as crisis response service delivery currently varies greatly across the country. Communication efforts need to embrace principles of cultural humility and avoid unintentional harm. Positive outcomes from crisis helplines showcase appropriate ways that encourage individuals to seek help.

What Success Looks Like

Achieving Goal 7 needs to involve a variety of suicide prevention messengers including the following:

- Suicide prevention professionals, volunteers, and advocates
- News media, social media, and entertainment media
- Schools of journalism and mass communication

Each of these partners has a responsibility to understand best practices in safe suicide prevention messaging and to invest in trainings for professionals and volunteers about safe messaging. A shift in national, state, and local narratives from a focus on raising awareness of suicide to how to prevent suicide is imperative to reduce unsafe messaging practices and increase the promotion of stories that can positively impact the public.

Strong communication planning would be based on communication science best practices. This includes strategies such as audience research, message development and testing, and evaluation. Research into the impacts of social media on youth and young adult mental health must grow. The field needs better evidence on how to educate youth on safe social media practices, create spaces for diverse youth to develop healthy social connections, and put safeguards in place to minimize potential harms of social media use. All communication-based strategies should directly involve individuals with suicide-centered lived experience in their development, with the goal of providing safe and effective messaging focused on hope and healing.

Examples

- Following the release of Logic’s popular song “1–800-273–8255,” which included the 10-digit number for the National Suicide Prevention Lifeline, researchers saw an increase in calls and a decrease in suicides during the corresponding time period. To learn more, visit https://www.bmj.com/content/375/bmj-2021-067726.
- The *Framework for Successful Messaging* is a resource to help people develop messaging about suicide that is strategic, safe, positive, and makes use of relevant guidelines and best practices. The Positive Narrative component of the *Framework for Successful Messaging* is designed to increase how much public messaging is “promoting the positive” about suicide prevention, including the following:
    - Preventing suicide is actionable
    - Prevention works
    - Resilience and recovery are possible
    - Effective programs and services exist
    -

Help is available

To learn more, visit the *Framework for Successful Messaging* website: https://suicidepreventionmessaging.org/.

- National partners came together to create the *988 Messaging Framework* to ensure consistent and accurate information about the 988 Suicide and Crisis Lifeline used in conjunction with the *988 Partner Toolkit*. To learn more about the toolkit, visit https://www.samhsa.gov/find-help/988/partner-toolkit. To learn more about the *988 Messaging Framework*, visit https://suicidepreventionmessaging.org/988messaging/framework.
- The collaborative 988 Formative Research Project is designed to expand and improve 988 communication efforts through four central aims:
    1. Uncover knowledge, attitudes, beliefs, and perceptions about accessing crisis services among populations at higher risk for or disproportionately impacted by suicide
    2. Identify and explore barriers and motivators to accessing crisis services among these populations
    3. Inform culturally sensitive, responsive, and effective messaging development to help individuals access the 988 Suicide and Crisis Lifeline in times of crisis
    4. Identify trusted messengers that population groups turn to when facing difficult mental health challenges

Ongoing investments are essential in both communications and formative research to support the promotion of the 988 Suicide and Crisis Lifeline and other crisis or mental health resources using a shared messaging framework. To learn more about the project and to read the results, visit: https://suicidepreventionmessaging.org/988messaging/research.

What We Should Do

Below are the objectives for Goal 7 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 7.1:** Communicate the most recent suicide-related data and trends to a range of audiences in a safe, easy-to-understand way and to inform public health action.

- **Objective 7.2:** Increase public knowledge about suicide warning signs and that suicide is preventable, including the many factors that can increase or decrease suicide risk at the individual, relationship, community, and societal levels.
- **Objective 7.3:** In collaboration with people with suicide-centered lived experience, develop, implement, and evaluate effective and tailored communication activities that encourage help-seeking and provide instruction on how to support someone struggling or in a crisis.
- **Objective 7.4:** Communicate stories of help, hope, and healing using safe messaging strategies.
- **Objective 7.5:** In coordination with youth, develop, implement, and evaluate communication activities to foster healthy engagement among youth and young adults related to social media and other digital technology platforms.
- **Objective 7.6:** Engage news media, the entertainment industry, and schools of journalism and mass communication to encourage safe, accurate, and responsible reporting and depictions of suicide and positive mental health coping skills.
- **Objective 7.7:** Increase awareness of 988 and other crisis services with communications that are grounded in the principles of health equity and cultural sensitivity.

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STRATEGIC DIRECTION 2 Treatment and Crisis Services

The 2012 *National Strategy for Suicide Prevention* (*National Strategy*) called for implementation of a systematic approach to suicide care in health systems. In the following years, research across multiple health systems in the United States demonstrated health care service utilization has the potential to help decrease rates of suicide thoughts, attempts, and deaths (Ahmedani et al., 2019; Ahmedani & Vannoy, 2014; Goldman-Mellor et al., 2019).

Additionally, research helped health systems identify groups with increased risk for suicide thoughts, attempts, and deaths in health care settings and when that risk is most elevated. Specifically, data indicate the highest risk periods for patient suicide risk occur within three months of discharge from inpatient psychiatric services (Forte et al., 2019; National Action Alliance for Suicide Prevention, 2019). Research also shows elevated suicide risk for patients treated in emergency departments (ED) for suicidal thoughts and attempts in the year following their visit (Goldman et al., 2019; Olfson et al., 2021b).

Suicide care in health systems has significantly improved over the last decade in identifying and treating suicide risk before and after a mental health crisis (Department of Health and Human Services, 2023; Hogan & Grumet, 2016). There has also been significant progress and initial investments in building a crisis continuum. This includes enabling access to suicide care through mobile crisis, crisis stabilization, EDs, and public safety answering points in states and communities. This ensures timely access to mental health services and transition supports during a mental health crisis (SAMHSA, 2020). Increased use of telehealth services expanded access to mental health care and crisis services to populations disproportionately affected by suicide. This was spurred on by the COVID-19 pandemic. Focused efforts also ensured 988 Suicide and Crisis Lifeline services are accessible for a variety of populations including individuals who are deaf or hard of hearing (Gajarawala & Pelkowski, 2021; SAMHSA, 2023). See Strategic Direction 4. Building crisis care systems in the community and improving identification and treatment of suicide thoughts and attempts in health care are critical components of reducing suicide nationally.

Goals 8 and 9 emphasize the critical importance of implementing a systematic approach to suicide care within health systems. These goals focus on the structural role of the health system in preventing suicide, rather than the responsibility resting solely in the hands of individual clinical providers. Systems need to be structured to facilitate standardized, caring, and evidence-based responses for everyone receiving care (see Figure 6). This ensures that individuals experiencing suicide risk are identified, supported, and provided with responsive and effective suicide-specific care and follow-up. Additionally, all staff need the tools, resources, time, and training relative to their roles. With their variety of services, health care systems function as both treatment providers and crisis referral sources. The systems that integrate suicide prevention as a core element throughout their services and across providers can achieve dramatic reductions in suicide thoughts, attempts, and deaths, as well as related health outcomes (Layman et al., 2021; Stapleberg et al., 2021). Agencies and organizations can create an effective continuum of crisis care through collaboration and coordination.

Systematic Approach for Health Care

In the comprehensive approach for suicide prevention, health care systems take responsibility for suicide and related health outcomes by integrating suicide prevention across health care services, programs, and policies. This can be done with an approach focused on continuous quality improvement (CQI). In this approach, data are used to monitor progress and identify areas where the system can implement, adapt, and improve best practices across service lines (see Strategic Direction 3). Specific practices include evidence-based and culturally informed screening, assessment, collaborative safety planning, lethal means counseling, and connection with evidence-based care options that directly address suicide. This includes Dialectical Behavior Therapy (Linehan et. al., 2006); Cognitive Behavior Therapy (Brown et al., 2005), and Collaborative Assessment and Management of Suicidality (Swift et al., 2021), among others.

Research demonstrates follow-up services ensuring consistent care delivery, and coordination across providers are critical aspects of a systematic approach to suicide prevention in health care. Research on the value of follow-up services for patients seen in the ED shows reductions in suicide attempts for those receiving post-discharge resources and telephone check-ins (Miller et al., 2017; Stanley et al., 2016). The widely implemented Zero Suicide framework (see Figure 7), generated successful examples of health care settings that adopted a systematic approach. Ongoing evaluation programs with a consistent set of progress indicators will further enhance the knowledge base in this area (Labouliere et al., 2018). For example, in a large study across New York State outpatient behavioral health clinics, systems' use of organizational best practices of the Zero Suicide model were associated with lower suicide thoughts, attempts, and deaths of people in their care (Layman et al., 2021). Likewise, an 11-year study tracked patient suicide outcomes within the Henry Ford Health System health maintenance organization (HMO) implementing Zero Suicide. The study found that while overall population suicide rates in the HMO's state significantly increased, the HMO membership suicide rates did not. Also, while suicide rates increased for non-mental health patients in the HMO, they decreased for patients receiving mental health services (Coffey et al., 2015).

A wide variation exists in how health systems implement the Zero Suicide framework, and tracking national progress toward fidelity to the model is difficult. A recent report prepared for the Office of the Assistant Secretary for Planning and Evaluation at the U.S. Department of Health and Human Services summarized a series of case studies with eight health systems engaged in Zero Suicide. The report found that while approaches varied, system-specific tailoring and policy development helped build sustainability (RTI International, 2023). Ensuring accessible and timely data on suicide thoughts, attempts, and deaths in a community can strengthen and direct investments and CQI (Stapelberg et al., 2021).

The U.S. Department of Veterans Affairs (VA) has been a leader in suicide prevention since 2007, with the establishment of the Veteran's Crisis Line and suicide prevention coordinators placed in every VA medical center across the country. In 2018, VA implemented a public health approach involving community-based prevention to reach all Veterans and their families and evidence-based clinical interventions. These interventions were based on the VA/DOD Clinical Practice Guidelines for Suicide Prevention (U.S. Department of Veteran Affairs, 2018). VA's integrated health care system, robust electronic health record, and advancements in data analytics, dashboard development, and implementation science, all support suicide prevention efforts across the enterprise and with their community partners.

VA's Suicide Prevention 2.0 expands community interventions via the Governor's Challenge and the building of community coalitions focused on activities to support Veterans and their families. VA's annual Now Plan focuses on enhancements to maximize interventions within a year's time. VA has expanded the intervention, Safety Planning in the Emergency Departments (SPED) across the Veteran's Health Administration (VHA) health care system and is working with HHS/SAMHSA to expand this evidence-based intervention within communities. Utilizing data and surveillance informs strategic planning and operational priorities to target Veteran subgroups most at risk and social determinants of health that impact crisis and distress. Additionally, VA has a robust research and program evaluation apparatus, including clinical trials, pilot demonstrations, large scale implementation and evaluation, and CQI. These activities inform a learning health care system optimizing efficiency and effectiveness in addressing Veteran suicide. With ongoing leadership commitment across all parts of VA, including robust training, evidenced-based interventions to identify and treat Veterans at risk, and quality control and improvement, VA's systematic approach is a model for the nation of what a health care system can do to impact suicide prevention.

Crisis Continuum of Care

Crisis intervention systems can provide a continuum of timely and effective support in the community (e.g., through mobile crisis, crisis stabilization, EDs, public safety answering points). These systems benefit from strong collaborations with behavioral health and emergency services. Crisis care will also benefit from trauma-informed practices and culturally responsive approaches such as mobile crisis outreach to limit coercive or invasive interventions. As with health care systems, a CQI approach links efforts with outcomes and supports crisis intervention systems in effectively responding to community needs.

Ideally, treatment and crisis services operate as cohesive, responsive, and effective systems of care. This integrated approach ensures individuals with an elevated risk for suicide receive responsive care in a timely manner and respects their dignity and individual autonomy. Enhancing crisis care and facilitating care transitions is one of five identified priorities for The White House strategy to prevent military and Veteran suicide. (The White House, 2021a). Several federal agencies are tasked with creating a Feasibility Analysis and Implementation Plan supporting broad adoption of evidence-based suicide risk assessment and safety planning within ED across the U.S. (The White House, 2021b).

In summary, Goals 8 and 9 address the need for effective clinical services in suicide prevention to be integrated into the health care system and coordinated with community-based crisis and emergency services. Taken together, the goals create a framework for enabling individuals to seek and receive effective and comprehensive support when and where they need it. Through timely access to effective care, Strategic Direction 2 aims to accelerate early intervention, thereby addressing suicide risk before it turns into a suicide attempt or death.

Go to:

GOAL 8. Implement effective suicide prevention services as a core component of health care

Integrate Suicide Prevention as a Core Component of Health Care

Health care systems have critical opportunities to identify risk early and to get people care that specifically addresses suicide thoughts and intent (Raue et al., 2014). Individuals who died by suicide often visited health care settings during the time leading up to their death (Ahmedani et al., 2019). Even ED patients presenting without self-harm or suicidal ideation were found to be two times more likely to die by suicide than matched demographic controls (Goldman-Mellor et al., 2019). Suicide thoughts and attempts often go undetected in health care settings because there is no standardized and routine screening and assessment. Health care settings can support people at risk by creating standard protocols for recognizing and addressing suicide risk. The Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau addresses this gap through its Bright Futures initiative that provides guidelines for clinicians to support the well-being of youth from birth to age 21. The Bright Futures Periodicity Schedule outlines preventive services clinicians can offer during every pediatric health care visit. A component of this schedule is regularly screening for developmental, social, behavioral, and mental health concerns. This includes depression and suicide risk screening and the conditions associated with increased suicide risk, in adolescence. For detailed information on the Periodicity Schedule and Bright Futures, visit https://mchb.hrsa.gov/programs-impact/bright-futures.

Studies show that immediate engagement with even brief suicide prevention interventions delivered in health care settings can help reduce subsequent suicide attempts (Doupnik et al., 2020; Hofstra et al., 2020; Hughes et al., 2023). For example, incorporating brief interventions delivered within routine emergency department (ED) care and paired with a telephone followup contact post-discharge can significantly reduce suicide thoughts, attempts, and deaths (Boudreaux et al., 2020).

Within the VHA, Safety Planning in the Emergency Department (SPED), an evidence-based intervention, is offered to some Veterans with suicide risk identified in a VHA Emergency Department or Urgent Care Center (ED/UCC). The SPED intervention has been shown to be associated with reduction in suicidal behavior in the six months following the ED visit (Stanley et al., 2018). All Veterans identified as having any risk receive information for the VA's crisis line, safety planning resources, and tailored follow-up contact after discharge. Additional care interventions, such as inpatient mental health services, are also offered based on identified risk level. Expansion of this model to community EDs across the country has the potential to save numerous lives and is called for by The White House in the 2021 *Reducing Military and Veteran Suicide: Advancing a Comprehensive, Cross-Sector, Evidence-Informed Approach* national strategy (The White House, 2021b).

Lethal means safety is incredibly important to prevent suicide among individuals at risk, as mentioned in Strategic Direction 1. Health care systems can promote safe and secure storage practices, such as for medications and firearms, through routine lethal means safety counseling. They can also help people identify risks for access to lethal means as individuals transition back into the community from inpatient or ED care.

Additional advances in suicide prevention can be achieved by improving our understanding of, and preventing known risk factors and conditions associated with, an increased risk for suicide. For example, the federal Interdepartmental Serious Mental Illness Coordinating Committee recommended providing incentives for public and commercial health systems and health plans to track and report patient outcomes. These are related to survival (or death) for individuals with behavioral health conditions that carry elevated suicide risk (SAMHSA, 2015). Reporting could occur in the context of an individual presenting at the ED for an overdose or when someone is discharged from inpatient mental health and substance use treatment.

No matter how someone enters a health care system, or where they are in the care pathway when risk is identified, they need to receive the most effective services. Integrating suicide prevention into public and private health care services through standardized policies, protocols, training, and CQI sets the standard of care across the community in a sustainable way.

Recommended Standard of Care for People with Suicide Risk: Making Health Care Suicide Safe

This report from the National Action Alliance for Suicide Prevention was produced by a task force composed of public and private sector partners and identifies gaps in health care that contribute to suicide deaths, summarizes the evidence-based solutions that health care systems can adopt, and provides information on resources that are available to make care both safer and more effective.

Some Considerations

Settings. All health systems have critical roles in supporting responsive suicide prevention care, though available resources and staffing may differ. For example, providers and resources will differ between a large urban health care system and a small rural clinic. Some settings, such as the ED, interact with individuals for a limited time and do not establish a continuing relationship. Other settings, such as carceral (prison) or residential treatment facilities, have special security and clearance requirements. Additionally, health and behavioral health services (i.e., mental health and substance use services) are often delivered independently. However, substance use amplifies the risk for suicide thoughts, attempts, and deaths, and vice versa. To address this, integration or cooperation of health and behavioral health providers who treat people using substances or who have co-occurring disorders can help reduce the risk of suicide by providing responsive care (Rizk et al., 2021; SAMHSA, 2015; Wakai et al., 2020).

Key Settings for Identifying and Responding to Risk

- Primary care offices
- Emergency departments (EDs) and hospitals
- Substance use treatment
- Inpatient facilities
- Outpatient mental health centers
- Assisted living facilities
- Tribal health systems
- School health services
- Home health services
- Specialty care clinics, such as pain management, obstetrics and gynecology, and substance use health services

Continuous Quality Improvement. Having defined policies and practices in place are important to ensure health care services identify, engage, treat, and follow up with individuals with suicide risk. Policies and practices for tracking the implementation of services as well as monitoring outcomes can help keep patients safe. For example, using electronic health records (EHRs) can vastly improve data collection and analysis of patient care and outcomes. They also provide health care systems with the information they need to adhere to accreditation standards and safety goals.

Centerstone of Tennessee is a nationally recognized behavioral health provider using the Zero Suicide model. They made two meaningful clinical changes based on ongoing quality review of suicide death data. One year's quality review of data showed a significant portion of the suicide deaths involved individuals receiving only Centerstone medication services. The psychiatric team developed a revised protocol which involved a more stringent assessment for appropriateness of this service. They also became more purposeful in scheduling these appointments on the same day as other services. In addition, a decade-long review of suicide death data revealed most individuals in the system who die by suicide were not in Centerstone's Clinical Pathway for Suicide Prevention at the time of their death. This Pathway is activated by screening and assessing for overt suicide plans and/or preparations. However, from 2015–2020, a review of 69 individuals who died by suicide found 65% of them reported no thoughts about suicide and/or being better off dead or self-harm within 30 days of their death. Centerstone used these data to develop a second Suicide Prevention Pathway that identifies individuals who might be at future risk. This new pathway provides education, intervention, and treatment to address factors that increase suicide ideation.

Health care systems should track suicide thoughts, attempts, and deaths and collect data on protective factors as part of their data-driven CQI. The Joint Commission recently expanded its guidance on sentinel events, such as suicide deaths, to require a root cause analysis of the context surrounding the event while in a health care setting or within seven days of discharge from inpatient services; an ED; or behavioral health care services, such as day treatment or partial hospitalization (Joint Commission, 2023). Additionally, Gould et al. (2018) recommend that more research and evaluation are needed on follow-up calls that focus on the patient's perspective. Tracking individual progress from when a person enters the health care system through their transition back into the community can address critical gaps.

Perspectives from Lived Experience. Individuals using the health care system can benefit most when services are delivered in a way that respects cultural and spiritual traditions. Further, individuals with suicide-centered lived experience can offer invaluable insight and leadership to improve suicide preventive care. Expanding resources offered to individuals who have elevated suicide risk is critical. Connecting them to effective community-based peer supports provides opportunities to supplement clinical interventions. Several states officially recognize certified peer specialists who serve in critical roles like this and can bridge the gap between systems of care. For detailed information on the national standards for peer support certification, visit https://www.samhsa.gov/about-us/who-we-are/offices-centers/or/model-standards.

Collaborative Person-Centered Care. Collaborative and person-centered support includes providers engaging people at risk for suicide to create personalized treatment and safety plans. This includes conversations about strategies to reduce access to lethal means, including safe and secure storage during periods of crisis, while respecting cultural values and beliefs. Providers may also consider engaging supportive families, friends, and caregivers in these conversations to help implement safety precautions. Providers can also recognize and make referrals when family and friends of someone with suicide risk need their own care and support.

Health and Crisis Care Workforce Suicide Prevention Skills. Health care systems can foster an environment that supports providers in offering effective, competent, and compassionate care. For example, sponsoring continuing education programs and providing paid and protected time for training can improve compassion care skills. At the policy level, licensing boards and accrediting bodies can add suicide prevention training as a requirement. Changes at the system level can help integrate suicide prevention into the health care culture. These types of supports can empower individual providers with the knowledge, skills, and confidence to identify and respond to suicide risk (also see Goal 5 related to suicide prevention for the workforce).

Follow-Up. Following up with someone after an inpatient hospital stay or ED visit for suicide thoughts or attempts has shown reductions in suicidal behaviors (Boudreaux et al., 2020; Stanley et al., 2018). Active clinical follow-up can take the form of outreach to help individuals stay connected to support, remain engaged in treatment, and reduce future attempts and deaths. Health care systems that rely on their practice and patient outcome data for quality improvement efforts should also include follow-up services as part of their suicide prevention care.

What Success Looks Like

Success for Goal 8 means individuals with increased risk for suicide who enter the health care system would receive high-quality care aligned with best practices in suicide prevention. No door would be the wrong door for getting help. Regardless of where an individual might connect with health care (e.g., primary care office, ED) they would receive services that matched their current situation. They would:

- Receive a full assessment to determine their suicide risk
- Collaborate on creating a safety plan
- Engage in conversations around lethal means safety
- Receive evidence-based care specific to suicide

Health care providers would work within systems using built-in tools and resources to quickly recognize warning signs of suicide risk and provide effective supports. Health systems would routinely implement best practices across the clinical pathway and track outcomes among individuals on a continuing basis to identify opportunities for further improvement. Individuals would receive follow-up when transitioning between care settings, such as from an ED or inpatient center to outpatient care.

A health care system offering these services would increase the use of early intervention services, decrease the use of intensive crisis interventions, and prevent suicide thoughts, attempts, and deaths.

Examples

- The Chickasaw Nation Department of Health and Family Services (DHFS) began implementing the Zero Suicide framework within its health care systems in September 2016. Their efforts included:
  - Screening for suicide risk
  - Assessing the level of suicide risk
  - Engaging in safety planning using the Stanley-Brown Safety Plan (or a similar evidence-based tool)
  - Scheduling follow-up care appointments
  - Conducting a phone check-in within 72 hours of hospital discharge for a person identified as being at risk of suicide (Bryan et al., 2018; Stanley & Brown, 2012)

As a result, DHFS was better able to identify and support patients with increased risk of suicide and divert an average of 200 patients per year from inpatient to outpatient treatment for suicidality. This ensured that patients received the least intensive level of care needed and effective suicide-specific supports. Cost saving estimates show that DHFS is saving over $200,000 per year by reducing unnecessary inpatient hospital stays. To read the full success story, visit https://zerosuicide.edc.org/evidence/outcome-story/chickasaw-nation-departments-health-and-family-services.https://zerosuicide.edc.org/evidence/outcome-story/chickasaw-nation-departments-health-and-family-services.

- The Children's Hospital of Philadelphia (CHOP) began applying the Zero Suicide framework within its health care system in 2019. CHOP's Zero Suicide implementation team released a standardized outpatient behavioral health care clinical care pathway for children and youth at risk of suicide. Using care pathways has been cited as an effective strategy for standardizing patient care and improving health care quality (Lavelle et al., 2015; Roberts & Pate, 2022). CHOP's pathway provides clear, standardized protocols for health care staff to follow when screening for suicide risk, providing assessment, and determining appropriate levels of suicide-specific care. The pathway is regularly maintained and easy to access for all clinical staff. To view the clinical care pathway, visit https://www.chop.edu/clinical-pathway/suicide-riskassessment-and-care-planning-clinical-pathway.
- Eight EDs across the United States conducted the Emergency Department Safety Assessment and Follow-up Evaluation 2 (ED-SAFE 2) in a clinical randomized trial from January 2014 to April 2018. ED staff received training on CQI, built CQI teams, and evaluated the effectiveness of suicide prevention protocols to identify areas for improvement. Each ED identified improvement efforts, with a specific focus on increasing universal suicide screening and collaborative safety planning for anyone at risk of suicide. Sites tracked suicide outcomes for each person screening positive for suicide risk for six months following individual discharge. Study results showed significant reductions in patients' post-discharge suicide-related ED visits, suicide attempts, and deaths following implementation and sustainment of the ED's suicide prevention protocols, screenings, and safety planning interventions. To read the full study, visit https://pubmed.ncbi.nlm.nih.gov/37195676.

What We Should Do

Below are the objectives for Goal 8 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 8.1:** Implement effective services to identify, engage, treat, and follow up with individuals with suicide risk as standard care in public and private health care delivery.
- **Objective 8.2:** Develop and implement effective standard protocols to identify, engage, treat, and follow up with individuals with elevated suicide risk in health care.
- **Objective 8.3:** Address practice and policy barriers in order to implement effective emergency department screening, safety planning, and rapid and sustained follow-up after discharge in all emergency departments.
- **Objective 8.4:** Promote effective continuity of engagement and care for patients with suicide risk when they transition between different health care settings and providers, especially crisis, emergency, and hospital settings, and between health care and the community.
- **Objective 8.5:** Ensure suicide prevention competency in initial and continuing education of health professionals to achieve and maintain quality and effectiveness of suicide prevention services.
- **Objective 8.6:** Incentivize and enable health care organizations to track suicide thoughts, attempts, and deaths in their patient and beneficiary populations to inform continuous quality improvement efforts.
- **Objective 8.7:** Increase and leverage the use of electronic health records to track and support implementation of best practices for suicide prevention.
- **Objective 8.8:** Implement effective health care practice strategies that encourage safe and secure storage of lethal means among people at increased risk of suicide.
- **Objective 8.9:** Ensure that suicide prevention services include the capability to identify and address co-occurring substance use issues and ensure that substance use treatment services include the capability to identify and address suicide risk.

Go to:

GOAL 9. Improve the quality and accessibility of crisis care services across all communities

Quality Crisis Care and Accessibility Is Important

An effective crisis system provides three core services: someone to talk to, someone to respond, and a safe place for help (SAMHSA, 2020). These core services and access to a full continuum of crisis services can be the life-saving difference during the limited time that a crisis is at its peak. Crisis care services provide essential support and facilitate help-seeking when it is most urgent. Research found that crisis services can contribute to decreased suicide attempts and suicide deaths (Hoffberg et al., 2020; National Confidential Inquiry into Suicide and Homicide by People with Mental Illness, 2013). Significant advancements in crisis services were made over the past several years as 988 became the new national suicide prevention hotline number.

The *National Guidelines for Behavioral Health Crisis Care* outlines the three core services noted above in this way:

1. Clinically staffed crisis call centers meeting the 988 Suicide and Crisis Lifeline standards provide real-time access to someone to talk to 24/7/365
2. Mobile crisis response teams for community-based responses meet someone where they are
3. Crisis receiving and stabilizing facilities within the community provide a place to go for mental health and substance use care (SAMHSA, 2020)

Someone to Talk To

Someone experiencing escalating suicide risk in the community needs immediate access to help. Crisis contact centers can often provide direct assistance to this person (SAMHSA, n.d.). Centers can also serve as the vital link to behavioral health crisis services, when necessary, including the health care systems. Local services are best prepared to offer support to individuals in their region, and having a centralized national resource also facilitates access to services.

Accredited local crisis centers started participating in a network known as the *National Suicide Prevention Lifeline* in 2005. This network provided access to hotline services through a single 10-digit toll-free number. Then, in 2022, this network of more than 200 state and local crisis centers transitioned to the three-digit code 988. Federal investment in the network rose from $7.2 million in fiscal year 2011 to $501.6 million in fiscal year 2023. This represents the single largest investment in suicide prevention. Nearly 20 states enacted legislation to support the network with additional state investment and infrastructure (National Alliance on Mental Illness, and Reimagine Crisis Response, n.d.). The 988 network offers a community mental health alternative to the public safety network access through 911 (SAMHSA, 2023). In many instances, crisis care services can immediately and directly support someone in an elevated risk state, including through the dispatch of mobile crisis services. This response can help prevent a potentially lethal outcome. For example, more than 98% of people who have calls, chats, or texts responded to by the 988 Lifeline receive the crisis support they need and do not require additional emergency services through accessing of 911 (SAMHSA, 2023a).

Someone to Respond

An individual experiencing a mental health crisis needs quick access to care. A mobile crisis team is trained to respond to behavioral health crises in the community. The team can respond to a mental health crisis instead of law enforcement. Their goal is to connect individuals with community-based resources and services and reduce the number of unnecessary ED or hospital visits. The team provides care that is the least restrictive and most effective in a person's normal environment.

The report *Assessing the Impact of Mobile Crisis Teams: A Review of Research* compiled research on the impact of mobile crisis teams. Preliminary results show that mobile crisis teams are effective in connecting individuals to services. The research also suggested these teams can reduce pressure on the health care systems and promote cost effectiveness (International Associations of Chiefs of Police, and UC Center for Police Research and Policy, n.d.). To learn more, visit https://www.theiacp.org/sites/default/files/IDD/Review%20of%20Mobile%20Crisis%20Team%20Evaluations.pdf.

Community crisis response services need additional resources and support to fulfill their critical mission. Federal investment in infrastructure such as 988 and Certified Community Behavioral Health Clinics (mentioned below) have improved the crisis safety net. Ensuring that individuals have access to an effective continuum of crisis services also requires community resources, support, and Continuous Quality Improvement (CQI; National Council for Mental Wellbeing, 2023). All people looking for help with suicide risk need timely access to quality crisis care services, including culturally responsive assessments, interventions, lethal means counseling, and followup care. While there have been advancements to support mobile crisis service expansion, such as the enhanced federal medical assistance percentage (FMAP) for qualifying mobile crisis services, grants from the Centers for Medicare and Medicaid Services (CMS), and funding from SAMHSA such as the Community Crisis Partnership grants and the block grant set asides, more work is needed to ensure that responsive mobile crisis is available in every community.

A Safe Place for Help

A person looking for help with suicide risk, mental health, or substance use needs access to evidence-based services regardless of their ability to pay, place of residence, or age.

Crisis stabilization centers provide services for individuals in need of safe, secure therapeutic environments. The goal of these centers is to stabilize the person to return to their community. In a recent analysis of data from the Arizona Crisis System, 63.3% of people using crisis stabilization services did not re-utilize any services within the next 30 days, and of those that did, 73% occurred in a crisis setting (mobile crisis or crisis facility) rather than an emergency department or inpatient hospital (Tomovic et al., 2024). Recently, states were required to use 5% of their Mental Health Block Grants to support evidence-based crisis systems including hotlines, mobile crisis, and crisis stabilization units (SAMHSA, n.d.). SAMHSA also launched implementation grant funding for Certified Community Behavioral Health Clinics (CCBHCs) to further build out community-based services spanning a range of supports. These include screening, assessment, treatment, care coordination, crisis response, and recovery supports for both mental health and substance use concerns (SAMHSA, 2023c).

Some Considerations

Perspectives from Lived Experience. Individuals with suicide-centered lived experience strengthen the quality and accessibility of crisis services by providing their authentic and personal perspectives. Evaluation and oversight initiatives that include this experiential knowledge ensure services meet individual and community needs and concerns.

People in crisis should be treated with dignity. Dignity includes respect for individual preferences, autonomy, confidentiality, and cultural norms while addressing issues of safety. Services can also engage and support the family and friends identified by the person in crisis. When someone has an elevated risk for suicide, people in their social circle can be key partners in providing support and can also benefit from attention to their own behavioral health needs.

In some communities, a history of traumatic events involving emergency response systems can escalate the potential for unintended harm. It may also create barriers to even accessing crisis care at all. Many communities have benefited from the use of trauma-informed care approaches and efforts to reduce police intervention in crisis situations. These include mobile crisis outreach teams and other options to 911. These programs offer compassionate alternatives to traditional crisis response protocols. Collaborative models, including co-location of services, have shown promise in facilitating timely access to behavioral health care in crisis situations (Reist et al., 2022).

Settings. Crisis care services are a critical bridge between the community and the health care system. Interventions may take place in the community (e.g., home, work, school); by way of health care services (e.g., mobile crisis outreach teams, emergency medical services); or via a technology-based connection (e.g., phone, text, or chat).

Sometimes the crisis care system needs to engage with and coordinate all three. This highlights the crucial role of 988 as a centralized point of contact. A critical point of collaboration is the intersection of emergency responses linked to 988 and 911 services. Strong partnerships between emergency response systems and behavioral health services ensure community resources are focused and efficient.

In 2022, the Veterans Crisis Line (VCL) implemented three-digit dialing to access crisis care with the launch of Dial 988 then Press 1. This increased awareness and access to 24/7/365 crisis services for Veterans, service members, and concerned parties. VCL also reaches Veterans through its caring letters project. The project uses a series of mailed letters to expresses care and concern and offers Veterans opportunities to reconnect with treatment options. Its Peer Support Outreach Center also connects Veterans with VA and community resources.

Improving Crisis Care Provider Skills. Supporting the needs of crisis care providers, including attention to their health and mental health, will support them in their vital roles working with people experiencing suicide risk. Support begins with the professional and paraprofessional training programs and continues with agencies and institutions that recruit potential counselors. Improving aspects of equity and diversity within the workforce starts with improving the pipeline for crisis counselors. Additionally, cross-training crisis counselors and professionals addressing suicide prevention and substance use will promote holistic care and will allow individuals to receive appropriate support regardless of their entry point into the system. At the agency or organization level, counselors need equitable compensation and ongoing training opportunities. Changes at the system level can create broad and lasting improvements to strengthen the crisis care workforce.

What Success Looks Like

Success for Goal 9 will ensure that anyone in crisis will know how to get help, including the number to call, and where to go for services. Every community across the country would have a seamless crisis care continuum in place that includes:

- Local crisis call center in the 988 network
- Mobile crisis teams that respond to behavioral health emergencies in the community
- Variety of crisis stabilization options

These three core elements will provide timely access to appropriate and effective care by addressing suicide risk before it escalates into a suicide attempt or death. With ongoing investment from multiple sources and the use of CQI, communities will be able to sustain the crisis service infrastructure needed to be effective and responsive to local needs.

Examples

- In 2018, Utah created a free 40-hour crisis certification training for all staff who work in mental health crisis lines and warmlines. State staff and crisis care expert volunteers jointly administer the certification program. This training strengthens Utah's crisis workforce and ensures consistent, effective crisis care across the state. Universities across the state are now incorporating the 40-hour certification into social work programs so graduates will have this certification when they enter the workforce, further bolstering the state's crisis infrastructure. To learn more about Utah's certification program, visit https://nashp.org/utahs-crisis-workercertification-successes-and-lessons-learned/.
- Beginning in July 2022, The Trevor Project partnered with the 988 Suicide and Crisis Lifeline to make responsive assistance available. Youth and young adults can now access customized LGBTQI+ crisis services by pressing "3" when calling 988 or through chat and text. A subnetwork that includes The Trevor Project provides this specialized support through its national network of crisis counselors trained in counseling skills specific to LGBTQI+ identity and issues. In December 2023, 988 served over 45,000 LGBTQI+ crisis contacts (SAMHSA, 2023b). To learn more about 988's LGBTQI+ specific resources, visit https://988lifeline.org/help-yourself/lgbtq/.
- In November 2022, Volunteers of America Western Washington (VOA) launched the Native and Strong Lifeline. This program serves Washington's American Indian and Alaska Native communities. Native and Strong crisis counselors are tribal members with ties directly to their local communities. They are trained in crisis intervention with special content on traditional healing practices that emphasize the lived experiences, traditions, and wisdom of Native people. This program is integrated into Washington's 988 Suicide and Crisis Lifeline network. To learn more about the Native and Strong Lifeline, visit https://www.samishtribe.nsn.us/departments/health/native-and-strong-lifeline.
- The Kansas Suicide Prevention Headquarters (KSPQH) and Douglas County Emergency Services and Crisis Line worked to develop a 911 Call Diversion Program. This program transfers mental health crisis calls that do not require a law enforcement or medical response from 911 to the local 988 Suicide and Crisis Lifeline provider. The Douglas County Crisis Line staff de-escalate the crisis via phone or by sending a mobile crisis unit to individuals in need of in-person

support. When needed, mobile crisis team members can also be dispatched with first responders. Anyone needing additional support is transported to an acute crisis facility. This ensures all individuals in the county receive responsive crisis services. To support the coordination across 911 and 988, Douglas County provides Public Safety Access Point training and has a memorandum of understanding between KSPQH and Douglas County Emergency Services. For more information on Kansas's crisis response services, visit https://www.ksphq.org/988-2/.

What We Should Do

Below are the objectives for Goal 9 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 9.1:** Develop and maintain a robust crisis care system through ongoing quality improvement to help people at risk of suicide.
- **Objective 9.2:** Increase local collaboration and coordination between 988 centers and 911 Public Safety Answering Points; police, fire, and emergency medical services; and behavioral health crisis services to improve quality of care for those in crisis.
- **Objective 9.3:** Through expansion of effective mobile crisis teams and diversion programs, reduce unnecessary police interventions with individuals who call 988 or 911 with suicidal thoughts.
- **Objective 9.4:** Increase timely access to assessment, intervention, lethal means safety counseling, and follow-up for people at risk of suicide along the crisis care continuum.
- **Objective 9.5:** Ensure that crisis services are integrated into health care delivery.
- **Objective 9.6:** Ensure that 988 crisis counselors and other components of crisis services provide effective suicide prevention services to all users, including those with substance use disorders.

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STRATEGIC DIRECTION 3 Surveillance, Quality Improvement, and Research

Strategic Direction 3 focuses on enhancing data on suicide thoughts, attempts, deaths, and risk and protective factors, as well as promoting rigorous research.

Surveillance of health outcomes and associated factors allows us to do the following:

- Track the impact of suicide and changes over time
- Identify suicide prevention needs among specific communities and groups
- Strengthen efforts to reduce suicide

Quality improvement in surveillance data is needed to better capture the diversity and needs of the population; enhance the completeness and consistency of data collection; and further accessibility, useability, and timeliness. Good quality data enable suicide prevention evaluation and are important for applying research advances to improve prevention practices, and ultimately, to reduce the impact of suicide. Implementing a prioritized and robust research agenda allows for building of the evidence base on what contributes to suicide risk and what can be done to prevent suicide.

The goals of Strategic Direction 3 provide guidance on continued enhancements and necessary innovations in these areas. Goal 10 emphasizes the importance of improving data relevant to suicide prevention for public health surveillance, research, evaluation, and quality improvement. The focus is on improving the quality, timeliness, scope, usefulness, and accessibility of data on suicide thoughts, attempts, and deaths. It also addresses the need for better data to understand the contributors to suicide and the context in which these suicide outcomes may occur. This includes using diverse data sources (containing health outcomes, known risk and protective factors, or other data) and applying emerging technologies and methods to extract information from these data. This goal promotes a comprehensive understanding of suicide thoughts and attempts and potential trajectories of risk, and it provides the metrics to assess the effectiveness of prevention strategies.

Goal 10 emphasizes the benefits of collaboration among public and private partners (e.g., health systems and academic centers). Collaborations are also an important component in establishing agreements for accessibility and stewardship of tribal-owned data. Tribal nations' inherent sovereign authority to administer the collection, ownership, and application of their own data is rooted in a tribal nation's right to govern their people. Effective collaborations with tribal nations around data sharing will be founded on the tribe's rights and through partnerships with tribal leadership. The core purpose of all data collected in tribes is to benefit their citizens.

Goal 11 focuses on promoting and supporting suicide prevention research. These research priorities will build upon what we know about the complexities of suicide and effective prevention strategies. A significant aspect of this goal is the inclusion of diverse settings such as tribal communities and populations (e.g., middle-aged males), in research. Inclusion of individuals receiving or delivering interventions (e.g., providers, individuals with lived experience, family members) in addressing factors that impede or enhance delivery of evidence-based suicide prevention programs and practices is important for implementation. This goal also explores the technology's role in mental health and suicide risk, particularly among youth.

Go to:

GOAL 10. Improve the quality, timeliness, scope, usefulness, and accessibility of data needed for suicide-related surveillance, research, evaluation, and quality improvement

Improve Data

Quality, timely, and actionable data about suicide thoughts, attempts, and deaths, and related risk and protective factors are essential to successful prevention efforts. Public health leaders rely on data collected and reported through multiple systems to help prioritize investment, track progress, build the evidence base, and guide quality improvement efforts. While there have been notable advances in the field related to the accessibility and timeliness of suicide-related data, more work is needed to improve timeliness without sacrificing data quality. Ongoing efforts to modernize data system infrastructure and better connect data systems and sources can do the following:

- Support efforts to ensure data are more readily available for use in understanding risk trajectories and comorbidities (e.g., adverse childhood experiences, substance use)
- Help drive quality improvements in clinical care

Improvements in analytic tools and methodology can help maximize the benefits of data extracted from various sources. Incorporating new methods and diverse data sources enhances capabilities for translating data for decision-making.

Data and Surveillance Task Force: Recommendations and Progress

The National Action Alliance for Suicide Prevention established the Data and Surveillance Task Force to help improve and expand the information available about suicidal thoughts, attempts, and deaths. The task force issued recommendations for improving national data systems for suicide surveillance, for enhancing or expanding existing systems, and for improving the quality, timeliness, usefulness, and accessibility of data on suicidal thoughts, attempts, and deaths. The 2014 publication reviewed 28 national data systems for feasibility of use in the surveillance of suicidal thoughts, attempts, and deaths. The review included data systems capturing the full continuum of suicide risk (e.g., thoughts, attempts, deaths); how the data are collected (e.g., census, sample, survey, administrative data files, self-report, reporting by care providers); and the strengths and limitations of the survey or data system. The task force also made the following recommendations to improve data and surveillance efforts in the United States:

1. Use standard definitions for suicide thoughts, attempts, and deaths.
2. Work toward common data elements across systems, as well as adding missing sociodemographic information, such as sexual orientation and gender identity to better identify groups at higher risk.
3. Improve the ability to monitor changes at the regional, state, or county level or among subpopulations.
4. Improve the timeliness and quality of information from death certificates.
5. Endorse the use of external cause coding (a data element needed to identify likely suicide attempts) on medical records as a requirement for reimbursement by insurance carriers.
6. Support inclusion of suicide-related items in data systems that capture real-time information on hospital ED visits to improve the monitoring of trends in suicidal behavior.
7. Encourage all states to include suicide attempts by youth aged 12–17 years as a health condition to be reported to the state health department.

Progress has been made on several of these recommendations:

- Inclusion of sexual orientation and gender identity has expanded in surveys (e.g., for example the Centers for Disease Control and Prevention's [CDC's] Youth Risk Behavior Surveillance System [YRBSS] and the Substance Abuse and Mental Health Service Administration's [SAMHSA] National Survey on Drug Use and Health [NSDUH]) and added to some state death certificates (e.g., California).
- Improving the quality of death investigations, such as the Collaborating Office for Medical Examiner and Coroners, including recognition that suicide deaths for individuals under age 10 years do occur and should be investigated and documented accordingly.

- CDC's National Syndromic Surveillance Program supports near real-time information on self-harm and suicide attempts reported from 78% of U.S. emergency care settings.
- CDC is exploring "Nowcasting" to offer real-time estimates of U.S. suicide mortality (Choi et al., 2020; https://pubmed.ncbi.nlm.nih.gov/33355678/).
- CDC provides quarterly estimates of suicide rates through the National Vital Statistics System Mortality Dashboard with only a six-month lag in reporting suicide deaths.

Some Considerations

Data on Suicide Deaths. Suicide mortality data in the United States are derived from death certificates and captured in CDC's National Vital Statistics System (NVSS). Suicides may be tracked over time to observe trends and changes in overall suicide rates or by sex, race, ethnicity, geography, age, and means of suicide, among other factors. In the past, suicide mortality data lagged by several years which created a barrier for suicide prevention planning. The lag time is now significantly reduced, and provisional mortality data are available within about six months. Final and provisional data are available at https://wonder.cdc.gov/, and https://www.cdc.gov/injury/wisqars/index.html . The CDC's National Center for Health Statistics provides access to provisional mortality tables, chart, and reports as part of its Vital Statistics Rapid Release program.

In addition to NVSS, CDC's National Violent Death Reporting System (NVDRS), a state-based surveillance system, captures information on suicide—including the who, when, where, and how—from death certificates, the coroner, the medical examiner, and law enforcement reports. Data from states are compiled into an anonymized database for analysis. Since the 2012 *National Strategy for Suicide Prevention*, the NVDRS expanded from 16 states to all 50 states, the District of Columbia, and Puerto Rico. For more information, visit https://www.cdc.gov/violenceprevention/datasources/nvdrs/ .

Despite positive changes, data challenges remain. Delays in reporting suicide mortality to the public continue. In part, this is due to the need to conduct death investigations to determine if a death was self-inflicted, and if it was, whether it was intentional (i.e., suicide) or unintentional. Suicide rates have long been underestimated (Snowdon & Choi, 2020) given the following reasons:

- Challenges in determining intent
- Variations in training and educational backgrounds among coroners

- Differing philosophies among medical examiners and others related to determining the manner of death (Stone et al., 2017)

These and other factors may lead to misclassification of suicide outcomes, and the impact has been found to vary across race, ethnicity, sex, and method of death (e.g., Ali et al., 2021; Huguet et al., 2012). Efforts are underway to improve practices and policies related to death scene investigations and manner of death determinations.
See https://www.cdc.gov/nchs/comec/index.htm .

Additional improvements are needed in suicide data collection to reduce racial and ethnic misclassification (Arias et al., 2016; Jim et al., 2014) and to capture information on sexual orientation, gender identity, and Veteran status to better quantify the impact in these groups. Fortunately, federal activities are currently underway to modernize standards for data collection on race and ethnicity. For more information, see Initial Proposals for Revising the Federal Race and Ethnicity Standards and recommendations for advancing the collection of sexual orientation and gender identity at time of death (see Haas et al., 2019).

Complete External Cause of Injury Coding is Urgently Needed

Incomplete External Cause of Injury Coding in Health Care Systems. Knowing if and when individuals attempt suicide is fundamental for suicide prevention efforts in health care settings. About half of U.S. states require documentation of "external cause" for emergency care and hospitalizations involving injury. External cause signifies whether the injury was intentional self-harm, unintentional, due to assault, legal intervention/war, or undetermined. Recent analyses using data from the Agency for Healthcare Research and Quality's (AHRQ's) Healthcare Cost and Utilization Project documented considerable variation in the rate of missing external cause codes among ED visits and hospitalizations involving injury. This is associated with documentation mandates (AHRQ, 2021a and 2021b). Documentation of external cause for all health care events involving injury is essential for appropriate patient care, clinical quality improvement, and public health surveillance.

What's Being Done? The 2021 Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention highlighted the need for complete external cause of injury. It is also mentioned in Priority 4 of the Action Alliance's An Action Plan to Strengthen Mental Health and the Prevention of Suicide in the Aftermath of COVID-19. The National Institute of Mental Health (NIMH) is committed to working with federal partners to explore and pursue any potentially viable path to complete documentation of external cause of injury in health care data.

Data on Suicide Thoughts, Behaviors, and Risk and Protective Factors. The landscape of data sources for suicidal thoughts, attempts, and associated risk and protective factors is wider ranging than for suicide deaths. These data come from population-based surveys, administrative databases, other contextual sources, and near real-time emergency department (ED) data.

Two major population surveys that provide annual or biennial information on suicide risk include SAMHSA's National Survey on Drug Use and Health (NSDUH) and CDC's Youth Risk Behavior Surveillance System (YRBSS).

- NSDUH is a nationally representative survey conducted annually among the civilian noninstitutionalized population ages 12 or older in the United States (https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health). It collects information on suicide thoughts, plans, attempts, mental health conditions, and treatment for substance use or mental disorders, among other risks.
- YRBSS is a set of surveys administered to high school students every other year at national, tribal government, state, territory, and local school district levels (https://www.cdc.gov/healthyyouth/data/yrbs/index.htm). YRBSS collects data on health risk-related behaviors and experiences affecting the lives of young people. These include mental health, substance use, and suicide thoughts, plans, and attempts, including a question as to whether a suicide attempt required medical attention. Data are also collected about some protective factors, such as school connectedness. Since 2012, YRBSS has added questions on new items impacting suicide risk, including dating violence, cyber bullying, and use of devices and social media.

Both NSDUH and YRBSS collect data at the national level. This provides a snapshot of what is happening across the country and a comparison for state or local data when available. State-level estimates are available for NSDUH, and YBRSS data are available for most states, some territories, some local school districts, and some tribal governments.

Another population-based survey is CDC's Behavioral Risk Factor Surveillance System (BRFSS). It collects data on adult U.S. residents in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and Palau. The BRFSS questionnaire includes a core component asked by all states, optional modules that states may choose to use, and state-added questions. Data are available at the national and state levels, while some data are available for geographic subdivisions within states (https://www.cdc.gov/brfss/). The BRFSS does not include a direct question about suicide risk, but it does include several items related to mental health,

health care access, substance use, and adverse childhood experiences (ACEs), as well as other related topics, as part of the core component or a module. The ACEs module includes a question that asks whether the respondent ever lived with someone "who was depressed, mentally ill, or suicidal."

Additional databases are available through [AHRQ's Healthcare Cost and Utilization Project (HCUP)](). Currently, the availability of nationwide databases may lag up to two years, while the majority of state databases are typically available within one year. AHRQ provides information from health care systems related to nonfatal suicidal behavior and treatment and in-hospital deaths.

- The Nationwide Emergency Department Sample (NEDS) is the largest all-payer ED database in the United States, yielding national estimates of ED visits, including those for suicide attempts and thoughts of suicide. It provides information on patient demographics (e.g., age, urban/rural residence, community-level income, and race and ethnicity); clinical diagnoses and procedures; nature of ED visits; discharge disposition; and ED charge and cost information. The NEDS is derived from the universe of ED visits in 42 states plus the District of Columbia from the HCUP State Inpatient Databases and State Emergency Department Databases.
- The National Inpatient Sample is the largest publicly available all-payer inpatient health care database and is designed to produce U.S. regional and national estimates of inpatient utilization, including hospital stays related to suicidal behavior. It also includes data on access, cost, quality, and outcomes.

One important advance since 2012, is the use of syndromic surveillance to track and monitor ED visits for instances of suicide thoughts and attempts in near real time (i.e., within 24 hours of patient visits). These data cover 78% of EDs across all 50 states, Washington, D.C., and Guam, and can detect, understand, and monitor unusual levels of suicide thoughts and attempts to determine if a response is needed. These data can also inform timely suicide prevention planning.

Data limitations include a lack of complete data on race and ethnicity and no information on sexual orientation, gender identity, or Veteran status. As of September 2023, 20 recipients of CDC's Comprehensive Suicide Prevention program were funded to analyze syndromic surveillance data for suicide prevention planning and evaluation. For more information on CDC's National Syndromic Surveillance Program, see https://www.cdc.gov/nssp/overview.html.

Information on risk and protective factors can also be gleaned from certain records that provide information on living contexts. These include sources of data on economic indicators such as livable wages, foreclosures, bankruptcy filings, and unemployment rates; data on gun ownership and attitudes and beliefs around storage during periods of crisis; and data on health service accessibility barriers (e.g., health professional shortage areas from the Health Resources and Services Administration [HRSA; https://data.hrsa.gov/tools/shortage-area]). Data on state and federal funding allocations supporting prevention, intervention, treatment, and postvention infrastructure, as well as data on training availability and utilization among professionals serving the community, can also be used by public health leaders and communities to consider available resources to reduce risk.

Local Data. Local communities and organizations can gather, maintain, and share data to inform suicide prevention efforts. Core community institutions can maintain data records pertaining to suicide, mental health, and known risk and protective factors for suicide, such as rates of substance use, ACEs, and social determinants of health. These institutions may include local departments of public health, K–12 schools, universities, social services agencies, juvenile justice institutions, and health and mental health providers. Exploring ways for partners to share data, as appropriate, and honoring tribal sovereignty and tribal data sovereignty can improve local suicide prevention efforts.

Community groups can also benefit from conducting their own needs assessment and listening sessions, hosting other community discussions, and collaborating with local or state public health officials to understand the following:

- Local perceptions, beliefs, needs, and context influencing suicide
- Impact of suicide and suicide attempts and changes in rates
- Prevention strategies that are most likely to be effective

Some community coalitions have formed data subcommittees. These subcommittees bring together partners with access to different types of data as well as those with suicide-centered lived experience to facilitate stronger data sharing and more equitable data analysis.

Some tools and other resources available to assist communities in their data collection efforts include:

- The National Fatality Review-Case Reporting System (NFR-CRS), funded by HRSA, is a web-based system that contains detailed information on factors contributing to a child's death, including suicides. These details come from Child Death Reviews (CDR). The CDR is a multidisciplinary community-based review process in which teams of professionals systematically identify potential causes and contributing factors to pediatric deaths, including suicide. These factors may be at the individual, systems, and community levels. The aim is to address identified factors to prevent future deaths. A researcher database is available from the NFR-CRS to examine pediatric suicide deaths (Trigylidas et al, 2016; Schnitzer et al., 2019; Schnitzer et al., 2023). For more information on the National Center for Fatality Review, visit https://ncfrp.org/.

- The *Community-Led Suicide Prevention Toolkit* provides core steps communities can take for suicide prevention planning, including strengthening their access to and use of data. For more information, visit https://communitysuicideprevention.org/element/data/.
- The Association of State and Territorial Health Officials (ASTHO) developed a Suicide Indicator Explorer, an interactive tool to assist communities in identifying suicide prevention data sources. For more information, visit https://my.astho.org/spacecat/suicide-data-indicators.

Ultimately, understanding local context is important in guiding communities' suicide prevention decision-making (also see Goals 1 and 2).

Advances in Data Science Methods and Use of Novel Data Sources. Since the 2012 *National Strategy*, major advances have occurred in analytic methods and novel data sources for tracking and monitoring suicide thoughts, attempts, deaths, and related risk and protective factors. The number of publications applying data science methods (e.g., data linkage, machine learning) to identify, predict, classify, or describe suicidal thoughts, nonfatal attempts, or deaths doubled between 2017 and 2020 (Wulz, et al., 2022). Data science methods are also being applied to reduce data processing time. Advances in the use of novel data sources, such as social media, Internet browser data, and other social networking and digital platforms are also now available. Using these data sources and data science methods, scientists estimated weekly suicide fatalities in the United States that closely correlated with actual mortality data (Choi et al., 2020). This important study establishes a novel real-time approach of tracking suicides and provides the potential for an effective public health response (Choi et al., 2020). Further work is needed to identify, validate, and apply novel data and methods for suicide surveillance, research, evaluation, and quality improvement to keep pace with current and emerging methods and technology.

Data Integration. Data integration involves combining data from multiple data sources to facilitate a more comprehensive understanding of health outcomes and associated risk and protective factors and to verify data quality. Achieving this goal requires collaboration and data sharing among groups that collect suicide-related data and those seeking to use data for program improvement. For example, a recent quality improvement study in California reviewed deaths in electronic health records (EHRs) from an academic health setting and compared them against the state's public health death file. The study found 19% of deceased patients were marked alive in the EHR (Wenger et al., 2023). Key groups seeking to improve the quality of data include state vital statistics offices, local coroners and medical examiners, death scene investigators, EDs, health care systems, and insurance companies.

For more information about prioritized data and surveillance for suicide prevention, see Prioritizing Improved Data and Surveillance for Suicide in the United States in Response to COVID-19.

Challenges to Accessing Linkable Death Data

Knowing whether suicide prevention efforts reduce the risk of suicide death is fundamental. The 2021 Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention, and the 2017 Interdepartmental Serious Mental Illness Coordinating Committee's (ISMICC) Report to Congress call for tracking and reporting survival/mortality as outcomes (ISMICC, 2017). Yet accessing death data in the U.S. is challenging, as these data are owned by 57 jurisdictions (50 states, the District of Columbia, New York City, and five territories). Each has their own policies on accessing and using the data for research, surveillance, and quality improvement. The 57 jurisdictions' policies collectively determine policies for using the two national systems for linkable death data: CDC's National Death Index and the Social Security Administration's full Death Master File. National access generally based on the most restrictive policy among the 57 jurisdictions.

What's Being Done? The Office of the Assistant Secretary for Planning and Evaluation's Office of Behavioral Health, Disability, and Aging and the National Institute of Mental Health are conducting a systematic inventory (https://aspe.hhs.gov/compendium-policies-use-linkable-mortality-data) of the formal policies on the use of linkable death data for patient-centered outcomes. Identifying which entities can use data, the scope of permitted uses, and requirements for use may also help identify approaches to increase the access and useability of death data systems. This in turn would increase opportunities to assess effectiveness and quality of suicide prevention efforts.

Workforce. Increased capacity is needed in states, tribes, localities, and territories to improve the accessibility and usefulness of data. These jurisdictions will need clear policies, protocols, and staff training related in data sharing, data quality standards, and data literacy at all levels. This ranges from basic data skills to advanced data science methods (see Goal 6). Improvements in these areas will impact and support best practices in areas such as collecting suicide-related morbidity and mortality data that includes information about race, ethnicity, sexual orientation, gender identity, Veteran status, and occupation. Expanding workforce training is a key component of ongoing efforts to modernize data and ensure our workforce is equipped to use these data. As the Council of State and Territorial Epidemiologists (CSTE) noted in their 2019 report *Driving Public Health in the Fast Lane: The Urgent Need for a 21st Century Data Superhighway*, “a capable workforce that uses data well ensures critical public health action to save lives.” For more information, visit https://cdn.ymaws.com/www.cste.org/resource/resmgr/pdfs/pdfs2/Driving_PH_Display.pdf .

The CSTE Injury Surveillance Workgroup with support from CDC published a core set of data science competencies and developed an on-the-job training program to promote data science training at the state, territory, local, and tribal levels. For more information, visit https://www.cste.org/page/dstt-webpage.

Perspectives from Lived Experience. Agencies and organizations engaged in data collection, analysis, and reporting can benefit from insights of persons with lived experience. They can help identify what information maybe be most useful for program and policy efforts in the community. Engaging individuals with lived experience and leaders from the community ensure that data are actionable and interpreted and communicated in a way that avoids unintentionally marginalizing communities disproportionately affected by suicide thoughts, attempts, or deaths (also see Goal 7).

Evaluating the *National Strategy* and the *Federal Action Plan*. An effective *National Strategy* guides and generates activities across the public and private sectors that can ultimately play a role in reducing suicidal thoughts, attempts, and deaths. The 2024 *National Strategy for Suicide Prevention* is the first to include an action plan. The *Federal Action Plan (Action Plan)* is strategically aligned to advance *National Strategy* goals and objectives. Many of these actions directly impact states and communities. For example, expanding funding to states for comprehensive suicide prevention, training educators in suicide prevention, and expanding mobile crisis services. Additionally, states, tribes, local communities, and territories can use the *National Strategy* and *Action Plan* to create their own actions.

A forthcoming federal monitoring and evaluation plan will:

- Monitor the implementation of federal actions
- Identify relevant core indicators of *National Strategy* implementation and suicide risk reduction
- Develop an approach to evaluate progress of the *National Strategy* over the next 10 years

Effective monitoring and evaluation will help update and improve the *National Strategy*, inform policy and programmatic decision-making, and enhance future suicide prevention efforts.

What Success Looks Like

Success for Goal 10 means agencies and organizations that collect and store data related to suicide will have up-to-date, high-quality, actionable data and information that can be appropriately shared with community partners. Communities can use these data and information to strengthen suicide prevention efforts through program implementation, policymaking, and research. Clear evidence of positive impact can create momentum and lead to increased resources and support. This will benefit ongoing quality improvement in community-based suicide prevention and accelerate positive health outcomes. Additionally, a robust national effort to track implementation of the 2024 *National Strategy* will help identify areas of progress for the field as well as areas that need further investment and focus.

Examples

- Alaska uses their Violent Death Reporting System (VDRS) to bring together death certificate, medical examiner, and law enforcement data. This provides a more comprehensive pictures of violent deaths, including suicide. Alaska strengthened identification of suicide deaths within its systems and expand understanding of what circumstances preceded suicides. Alaska's VDRS data are shared with state, local, and Veteran suicide prevention partners so they can directly inform state suicide prevention planning and selection of prevention strategies for different populations across the state. For more information on how states are using VDRS to inform suicide prevention efforts, visit https://www.safestates.org/page/NVDRSStories.
- Vermont initiated the Suicide Data Linkage Project which brings together 12 data partners in the state through signed memoranda of understanding. Partners range from the Vermont Judiciary to the Vermont Department on Aging to the Vermont Violent Death Reporting System. Vermont linked cases across data sources. This allowed them to examine different public systems that people interacted with prior to their deaths. Additionally, they identified incidents, circumstances, and risk factors associated with suicide deaths. This information is being used to improve suicide prevention strategies. View Vermont's Data Linkage Project Report here https://legislature.vermont.gov/assets/Legislative-Reports/HSI-Suicide-Data-Linkage-Project-9.12.23.pdf.

- The Ohio Public Health Information Warehouse is a self-service online tool anyone can use to obtain the most recent public health data available in Ohio. The application allows users to create custom reports, charts, and maps from a variety of data sources. Users can view cause of death data and directly compare rates, numbers, demographics, and time and location of suicides and other related deaths, such as accidental overdoses or homicides. To access the Ohio Public Health Information Warehouse, visit https://publicapps.odh.ohio.gov/EDW/DataCatalog.
- The State of Washington created a syndromic surveillance program named the Rapid Health Information Network (RHINO). RHINO collects ED data on suicide thoughts and attempts from across the state into one platform that is monitored daily. Washington uses this platform to identify zip codes with case counts above what would normally be expected in a given time period. Health officers across the state get automatic alerts about increases in cases displaying unusual demographic patterns. This information is then shared with partners in the areas flagged so they can use the information to inform their local suicide prevention and postvention efforts. To learn more, visit https://www.cdc.gov/suicide/programs/ed-snsro/index.html.

What We Should Do

Below are the objectives for Goal 10 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 10.1:** Improve the quality, timeliness, scope, usefulness, and accessibility of suicide death data.
- **Objective 10.2:** Improve the quality, timeliness, scope, usefulness, and accessibility of data on suicide thoughts and behaviors and associated risk and protective factors.
- **Objective 10.3:** Identify and validate novel data and methods for suicide-related surveillance, research, evaluation, and quality improvement.
- **Objective 10.4:** Integrate data on adverse outcomes such as unintentional overdoses and other unintentional injuries with data on suicide thoughts, attempts, and deaths.
- **Objective 10.5:** Evaluate the impact of the *National Strategy for Suicide Prevention* on core indicators of *Strategy* progress and the effects on suicide thoughts, attempts, and deaths.

GOAL 11. Promote and support research on suicide prevention

Promote Research

Efficient and effective suicide prevention is guided by understanding the contributors to and the progression of suicidal thinking and attempts, along with related risk and protective factors. Pursuing a prioritized research agenda helps to focus efforts on the information that will have the most significant impact on addressing suicide risk.

An Action Alliance Task Force developed the *Prioritized Research Agenda for Suicide Prevention* in 2014. This agenda focused support on the research most likely to reduce suicide rates (National Action Alliance for Suicide Prevention, 2014). This allowed public and private funders to consider a common strategy to reduce suicide thoughts and attempts more efficiently. Some examples of scientific advancements over the past decade include the following:

- Developing and applying risk algorithms in health care (e.g., Shaw et al., 2022)
- Implementing Zero Suicide approaches in health care systems (e.g., RTI International, 2023)
- Testing of brief interventions (Doupnik et al., 2020)
- Informing rapid-action treatments based on safety and dosing research (e.g., Domany & McCullumsmith, 2022)

Many programs and practices now recommended in other Strategic Directions benefited from the evidence of effectiveness driven by this prioritized research. Continuing to focus on research that can have the greatest potential impact, can further contribute to the success of *National Strategy* efforts.

Some Considerations

The 2014 *Prioritized Research Agenda for Suicide Prevention* considered high-risk populations, suicide methods used, and settings where at-risk individuals may be found (e.g., EDs, criminal justice system) to focus on opportunities to save lives most quickly. These opportunities were built on available surveillance data, highlighting the importance of accessible quality surveillance investments. Although a number of intervention approaches have been found to be effective, their implementation and sustainability are important for achieving reductions in suicide prevention.

Substance use is a risk factor for suicide. New research addresses interventions for both substance use and suicide risk (see Ries et al., 2022, and Voss et al., 2013). This research resulted from improved specialty care options addressing mental disorders and addictions (e.g., Certified Community Behavioral Health Centers) and interest among primary care providers to address both issues. Moreover, growing evidence indicates that youth exposed to upstream substance use prevention programs have reduced risk for suicide thoughts and attempts in their later teens and early adulthood. This may be due to building protective factors and reducing risk factors that are common to both substance use and suicide (e.g., Posamentier et al., 2023). Leveraging public-private partnerships recommended under Strategic Direction 1 can spur other collaborative research, for example studies engaging workers from industries with increased risk of substance use and suicide (e.g., construction industry workers).

Technology-based communications present new opportunities for outreach, support, and treatment for underserved groups. Social media and digital technology are rapidly evolving and often exert dynamic influence over the thoughts and behaviors of users, particularly young people. Digital monitoring and assessment are important tools for evaluating fluctuating suicide risk. An ongoing need exists to produce high-quality and up-to-date research that can provide guidance on how best to use digital technology to support protective factors and safety during use to reduce potential harms.

Research to Practice. Implementing evidence-based and promising practices is critical for advancing suicide prevention. However, translating research findings into actionable practice, remains a challenge. Research is needed that supports expansion and reach of effective programs and initiatives in communities. Resources are needed for program evaluation (e.g., pre-, and post-surveys, training in data literacy) to establish baseline risk and potential program benefits. Adoption, implementation, and sustainment of proven interventions will also be needed. For example, a study of implementation of the effective ED-SAFE suicide prevention program in emergency care found that the reduced patient suicide risk outcomes were more pronounced over the stages of implementation. This reflects the iterative improvements that need to take place as part of continuous quality improvement (Boudreaux et al., 2023). The researchers noted that implementation of interventions in health care settings face challenges over time. These challenges include staff turnover, fatigue, and reduced adherence to the delivery of suicide preventive practices that can contribute to waning effectiveness.

Perspectives from Lived Experience. Individuals with lived experience can offer valuable perspectives from the identification of research priorities through the interpretation and communication of research results. Multiple benefits result from experiences in what’s called Community-Based Participatory Research (CBPR). Some of the benefits include increased relevance and usefulness of research results, improved community trust, enhanced cultural responsiveness, and increased participation rates in research. For more information on CBPR, see https://pubmed.ncbi.nlm.nih.gov/29355352/.

Experiential knowledge of community members provides essential context for research design and results. Lived experience offers insights into real-world factors that impact the effectiveness of interventions. Individual and group experiences grounded in the local community context can help ensure equity and cultural relevance in research approaches. Clinical research that systematically develops, adapts, and validates interventions with different populations will prove the most effective for broad implementation and benefits.

Individuals with lived experience note that there is a need for more research on peer support programs identified as promising practices (Schlichthorst et al., 2020). A wide range of potential interventions are catalogued under "peer support services," however more research is needed to enhance the many ways in which peers can safely and effectively provide support.

What Success Looks Like

Achieving Goal 11 would result in focused and prioritized research studies that are valued and informed by the field and end users. These include people with lived experience, concerned family members, peers, and suicide loss survivors, among others. People who provide intervention and support to individuals struggling with suicidal thoughts or who are impacted by suicide, can use research findings to inform their organizational, community, and policy efforts and decisions. Communication about research progress tailored to people invested in suicide prevention can instill hope. Input from the users of research remains critical to further improve and expand available evidence-based prevention efforts. Public opinion surveys increasingly indicate that people view suicide as preventable (National Action Alliance for Suicide Prevention, 2022). Knowing how to advance and sustain effective prevention strategies can ensure time and money are well-invested.

Examples

- NIMH funded multiple research efforts since 2012 to advance the evidence base for Zero Suicide's goal of preventing suicide among people treated in health care systems. This research linked medical record data to patient suicide risk and also evaluated quality improvement efforts in suicide care. Several studies developed valid suicide risk identification approaches using medical records to inform further risk assessment and intervention approaches (e.g., Simon et al., 2018; Su et al., 2020). Other research documented the degree to which outpatient mental health clinics enacted best practices for safer care. They found better adherence to Zero Suicide organizational best practices was associated with lower rates of patient suicide attempts and deaths (Layman et al., 2021).

- The Collaborative Assessment and Management of Suicidality (CAMS) intervention is a therapeutic suicide-specific risk assessment and treatment planning model. It aims to support mental health providers in shared decision-making with clients to effectively manage client suicidal thoughts and/or attempts. Multiple trials of CAMS with diverse populations found significant reductions in suicidal thoughts, symptom distress, depression, and hopelessness for individuals receiving CAMS compared to other treatment modalities (Comtois et al., 2011; Pisterello et al., 2021; Andreasson et al., 2016; Ryberg et al., 2019; Jobes et al., 2017).

- Researchers are beginning to harness digital supports in suicide prevention efforts. Youth involved in the justice system have very high rates of suicidal thoughts and behaviors. NIMH funded researchers to better connect youth at increased risk of suicide in the justice system to behavioral health services. Researchers developed e-Connect, a digital clinical decision support system (Elkington et al 2023). The support technology assisted probation officers in identifying suicide risk and helped to refer youth to appropriate services. Levels of suicide risk fell into three clinical need classifications (crisis/imminent risk, crisis/non-imminent risk, non-crisis). Compared to care as usual, probation officers using e-Connect were five times more likely to identify at-risk youth; 11 times more likely to make referrals; and youth were 17 times more likely to initiate treatment (Elkington et al., 2023).

- NIMH, as part of the National Institutes of Health (NIH) Helping to End Addiction Long-Term (HEAL) Initiative, supported multiple primary care studies to identify and test collaborative care models to better address co-occurring opioid use disorder, mental disorders, and suicide risk. Health care organizations combined medicated-assisted treatment for opiate use disorder with evidence-based treatments for co-occurring mental disorders. They brought together a primary care provider, a care manager, and a behavioral health specialty consultant for each patient. These studies track the impacts of collaborative care models on opiate use recovery; mental disorders and treatment patterns; daily functioning; and risk for premature death, including suicide.

- Peer support services in suicide prevention are thought to improve social connectedness, hopelessness, and recovery as well as engagement in services at a lower cost. The numbers of crisis services hiring peer support staff to assist in initial contacts, mobile outreach, and follow-up efforts are increasing. However, peer support services for suicide prevention would benefit from a stronger evidence base. Approaches need to support individuals being served and ensure the well-being of peers. NIMH supports research on safe and effective models of adult peer support in suicide prevention. The PREVAIL study (Lapidos, 2019) is examining how peers can enhance hope and belongingness and support acute risk management and safety planning of recently discharged psychiatric inpatients with heightened risk of suicide. The study also examines peer-developed strategies on how to safely share self-disclosures in a way that provides support to the individual being assisted and supports the peers' well-being while preventing burnout.

What We Should Do

Below are the objectives for Goal 11 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 11.1:** Identify and pursue potential high-value research opportunities informed by the 2014 resource *A Prioritized Research Agenda for Suicide Prevention*, relevant findings from subsequent research, new data and methods, and changes in the epidemiology of suicide in the United States.
- **Objective 11.2:** Expand research related to populations disproportionately affected by suicide, their prevention and treatment opportunities, and health care and other public health policies, to reduce risk.
- **Objective 11.3:** Conduct research to expand understanding of the effects of social media use and digital technology on mental health, especially among youth, and identify opportunities to expand benefits and reduce potential harms.
- **Objective 11.4:** Expand understanding of overlapping pathways of substance use and suicide risk to inform opportunities for prevention and treatment of these co-occurring conditions.
- **Objective 11.5:** Conduct research to identify suicide prevention peer support services that are effective for enhancing client self-efficacy, personal recovery, treatment engagement, and clinical outcomes.
- **Objective 11.6:** Where research has identified better practices, develop and test approaches to enable widespread implementation of such practices as standard and effective care.

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STRATEGIC DIRECTION 4 Health Equity in Suicide Prevention

Every community across the United States includes individuals who have experienced suicidal thoughts, attempts, and deaths. However, some populations are disproportionately impacted (Stone et al., 2021).

Ensuring equity in a public health approach to suicide prevention requires active collaboration to assess and meet the needs of all individuals and communities. These include those with:

- Disparate impacts
- Poor access to effective suicide prevention programs and services
- Current and past societal disadvantage or limited autonomy, such as incarcerated persons and children; Centers for Disease Control and Prevention [CDC], 2020; Honchhauser et al., 2020)

Health equity requires a commitment to recognize conditions in individuals' environments that influence their long-term health outcomes, such as suicide, and to address social determinants of health within prevention efforts (Liburd et al., 2016; U.S. Department of Health and Human Services, 2020).

Populations in the United States disproportionately impacted by suicide include non-Hispanic American Indian and Alaska Native (AI/AN) youth, middle-aged and older adults, non-Hispanic White males, rural populations, and Veterans, among others (CDC, 2023a). Suicide thoughts and attempts remain high among lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQI+) high school students (The Trevor Project, 2023). LGBTQI+ adults also experience higher rates of suicide thoughts and attempts than non-LGBTQI+ identifying adults (James et al., 2016).

In recent years (2018–2021), suicide increased significantly among females and non-Hispanic Black youth ages 10–24. Rates also increased among non-Hispanic Black persons, non-Hispanic multiracial persons, and Hispanic young adults ages 25–44 years (Stone et al., 2021).

Suicide attempts disproportionately impact youth ages 15–19, especially females (CDC, 2024b) and LGBQ+ young people (CDC, 2023g). Attempt rates have increased among children and youth (CDC,2024b), including non-Hispanic Black youth (CDC, 2023g).

Limited data are available on suicide among people with disabilities. However, according to a recent CDC report (Czeisler et al., 2021), during the COVID-19 pandemic, adults with disabilities were more likely to report serious suicide ideation, new or increased substance use to cope, and symptoms of anxiety and depression in the past month, compared with adults without disabilities. A study examining data from the 2015–2019 National Surveys of Drug Use and Health found that adults with a disability were over two times more likely than adults without a disability to report suicidal ideation, planning, and attempts; and adults with more limitations had progressively increased risk (Marlow et al., 2021).

While there are multiple contributors to suicide, many of these groups experiencing rapidly increasing suicide trends represent groups that have been historically marginalized (see Table 5; National Academies of Sciences, Engineering, and Medicine et al., 2017a; Saunders & Panchal, 2023). When considering these groups, it is critical to know that being of a certain age, race, ethnicity, and/or sexual or gender minority identity does not put an individual at risk. Rather, there are life experiences and circumstances that impact the lives of those individuals that increase risk (Ndugga & Artiga, 2023; The Trevor Project, 2023).

Also see Table 4 in the introduction for factors that may increase or decrease risk of suicide.

Since the release of the 2012 *National Strategy for Suicide Prevention,* promising work to address health disparity groups in suicide prevention was completed. Examples include the following:

- In 2014, the National Action Alliance for Suicide Prevention (Action Alliance) released *The Way Forward: Pathways to Hope, Recovery, and Wellness with Insights from Lived Experience*. This guide describes how to create sustainable suicide prevention programing, practices, and policies that are informed and driven by individuals with suicide-centered lived experience.
- In 2019, the U.S. Department of Veterans Affairs (VA) and the Substance Abuse and Mental Health Services Administration (SAMHSA) launched the Governor's Challenge. This convening brings state policymakers and leaders together to develop and implement a comprehensive suicide prevention plan to prevent suicide among service members, Veterans, and their families (SMVF). In the same year, VA approved Suicide Prevention 2.0 (SP 2.0), a population-based public health model to reach Veterans both inside and outside VA care. SP 2.0 moves suicide prevention beyond a one-size-fits-all model to a blended model combining community-based prevention strategies and evidence-based clinical strategies. It empowers action at the national, regional, and local levels. The program aligns state Governor's Challenge initiatives and the Together With Veterans rural peer-to-peer initiative, and brings VHA Community Engagement and Partnership coordinators to help communities adapt an evidence-informed public health model to local needs and resources.

- In 2020, CDC launched its Comprehensive Suicide Prevention program to address suicide in populations disproportionately affected by suicide and suicide attempts. As of September 2023, CDC funded activities in 23 states and one territory.
- In 2021, in response to the COVID-19 pandemic, the American Rescue Plan Act funded CDC's National Institute for Occupational Safety and Health to develop and launch its Health Worker Mental Health Initiative. https://www.aha.org/suicideprevention/health-care-workforce/suicide-prevention-guide
- In 2021, the Suicide Prevention Resource Center (SPRC) established the Lived Experience Advisory Committee to help guide messaging and programming for SPRC.
- In 2022, the National Academies of Sciences, Engineering, and Medicine held a three-part virtual public workshop series focused on suicide prevention in Indigenous communities. See https://nap.nationalacademies.org/read/26745/chapter/2.
- In July 2023, SAMHSA hosted a three-day Black Youth Suicide Prevention Initiative Policy Academy. It featured and connected resources and strategies from the public and private sectors to enhance Black youth suicide prevention. The goal of the ongoing Center for Mental Health Services Black Youth Suicide Prevention Initiative is to reduce the suicidal thoughts, attempts, and deaths of Black youth and young adults between the ages of 5 and 24 in the country. The policy academy supported eight state teams in developing action plans to reduce suicidal thoughts, attempts, and deaths among Black youth in their state. They identified important data sources, risk and protective factors, opportunities for strategic partnerships, avenues for community and youth leadership, and communication and evaluation strategies. Each state received support from an external subject matter expert in Black youth suicide to support their action plan development. This model will be used for a policy academy on older adult suicide headed by the SAMHSA Evidence Based Practices Resource Center. Multi-disciplinary state teams will gather to develop action plans to address older adult suicide in their respective states.

Much more work is needed to address populations disproportionately impacted by suicide to reduce and eliminate health disparities. Strategic Direction 4 includes ways that various sectors and communities can engage in this important work.

Goal 12 emphasizes including voices of suicide-centered lived experience and populations disproportionately affected by suicide in all suicide prevention planning, practice, and partnerships in the public and private sectors. This goal focuses on upstream suicide prevention that addresses social determinants of health and emphasizes effective youth-, peer-, and community-run interventions.

Goal 13 outlines the need for comprehensive suicide prevention strategies specifically developed for a range of populations disproportionately impacted by suicide and historically marginalized populations at risk. Specific populations need effective interventions that consider their unique strengths, community barriers, and resources.

Tribal Population Considerations

Multigenerational trauma can be experienced by people from a particular cultural, racial, or ethnic group. American Indian and Alaska Native (AI/AN) people are one such group. Clinician and researcher Maria Yellow Horse Brave Heart describes such trauma as historical trauma and defines it as "cumulative emotional and psychological wounding over the life span and across generations, emanating from massive group trauma experience" (Brave Heart, 2003). The impacts on communities experiencing historical trauma are profound.

For Indigenous people, specifically, the historical trauma of colonization, intergenerational grief, forced removal from ancestral lands, violence, boarding schools, and cultural assimilation, combined with poverty, institutional racism, and discrimination negatively impact overall physical and mental health and may increase risk for suicide and suicide attempts (Big Foot, 2021; Ehlers et al., 2022).

Tribes and tribal organizations are addressing prior and present harm by establishing and offering culturally-based services. Tribal organizations have long provided the necessary Indigenous knowledge and findings, and critical cultural-based approaches that are effective in Indian country to prevent and reduce suicide (Cwik et al.,2016). Casey Family Programs and the Johns Hopkins Center for Indigenous Health conducted a two-year study that found, "The well-being of the individual is inseparable from the well-being of the community. Individual healing and the healing of the entire community must go hand in hand," (Johns Hopkins Bloomberg School of Public Health, n.d.) https://cih.jhu.edu/programs/cultureforward/ .

Multiple federal agencies (e.g., SAMHSA, NIH, CDC) support studies in which tribes are strengthening culturally relevant practices in order to reduce suicidal thoughts and attempts, as well as substance use, in their communities. Some of these activities include traditional drumming and dance, sweat lodges (Schiff & Moore, 2006), use of Native languages (Hilf, 2017), beading, and traditional hunting, fishing and planting practices to improve food sovereignty (U.S. Department of Agriculture, n.d.).

Federal agencies are committed to recognizing the systemic inequities experienced by Indigenous communities. Examples include the Administration for Children and Families resources on historical trauma (https://www.acf.hhs.gov/trauma-toolkit/trauma-concept) and SAMHSA's tribal-specific focus on suicide and substance use prevention as part of Native Connections and many other grant-funded programs. See https://www.samhsa.gov/native-connections for more information.

Goal 14 seeks to increase and enhance diversity in the suicide prevention workforce. Cultivating an inclusive pool of professionals trained in health equity and suicide prevention best practices who provide a range of perspectives will facilitate the success of prevention, intervention, and postvention efforts described here and throughout the strategy.

Finally, Goal 15 highlights ways to improve surveillance and suicide prevention practices to better meet the needs of the diversity of populations disproportionately affected by suicide. As mentioned in Strategic Direction 3, suicide-specific data that accounts for factors such as race, ethnicity, geographical location, disability, occupation, Veteran status, sexual orientation, and gender identity can signal to prevention staff where efforts would be most effective in reducing suicidal thoughts, attempts, and deaths.

There remains a need to conduct research dedicated to developing culturally-specific and effective interventions, including among groups largely left out of suicide prevention research and engagement. These populations include individuals with disabilities, such as the deaf and hard of hearing communities; people with neurodiverse conditions; and certain industries and occupational groups, such as construction and mining, health care workers, and first responders. As the demographics of our country continue to change, the need for a wide array of culturally responsive and tailored approaches in suicide prevention is increasing.

Go to:

GOAL 12. Embed health equity into all comprehensive suicide prevention activities

Embed Health Equity

Social determinants of health can impact multiple health outcomes including suicidal thoughts, attempts, and deaths. Differences in the distribution of formal policies, programs, institutional practices, and access to resources resulted in suicide health disparities (National Academies of Sciences, Engineering, and Medicine et al., 2017b). Groups experiencing disparities can be identified by characteristics such as age, race, ethnicity, sexual orientation, gender identity, disability, chronic conditions, and geographical location, among others. Engaging people in communities where they live, work, learn, play, and/or worship and addressing health equity throughout the planning, implementation, and evaluation of comprehensive suicide prevention helps reinforce protective factors and break down prevention barriers, thereby paving the way for improved success (CDC, 2023b; Office of the Surgeon General, 2021).

Some Considerations

Social determinants of health: A comprehensive approach to suicide prevention considering changes over the life span help embed health equity into prevention efforts. As people age, they interact in different settings and may face additional or new risk and protective factors leading to changes in prevention needs. For example, risk and protective factors for suicide will likely differ between youth and adults or between middle-aged and older adults. These changes may differ further still among people with serious mental or physical illness. As mentioned in Strategic Direction 1, the impact of social determinants of health as risk and protective factors can be compounded over time and affect people different over the course of their lives. When developing prevention strategies, consider developmental and/or transitional periods when unique risk and protective factors are present.

Suicide prevention planning: Many states, tribes, local communities, and territories develop suicide prevention plans outlining goals and strategies to reduce suicidal thoughts, attempts, and deaths within the jurisdictions and populations they serve. Goals and objectives related to effective policies, programs, and practices for populations disproportionately impacted by suicide thoughts, attempts, and deaths can increase the likelihood of preventing suicide. This also ensures health equity remains a priority (Perry et al., 2022). Research suggests that addressing the role that discrimination and racism play in increasing suicide risk can increase help-seeking behaviors and reduce the risk of suicide thoughts and behaviors for disproportionately underrepresented groups (Saewyc, 2014; Child Trends, 2022).

Community and youth engagement: When focusing on specific populations, include community leaders and individuals with lived experience from those populations. Doing so can help improve intervention success by identifying and addressing barriers in prevention implementation that might not be currently known or visible. It can increase the credibility of prevention messages and programs. For example, firearm owners can provide insight on how to talk about safe and secure storage in a culturally sensitive and inclusive way. People with lived experience can offer culturally specific perspectives about the social and structural factors that contribute to suicide risk and protection.

Similarly, suicide prevention efforts that engage and empower public and private sector community partners can improve the likelihood of success, especially for historically marginalized and disproportionately affected populations. For example, connecting with partners who can address social determinants of health, such as unemployment and housing or food insecurity, can be instrumental in addressing upstream challenges that may increase suicide risk.

What Success Looks Like

Success for this goal will look like comprehensive suicide prevention efforts that include attention to health equity from initial planning through implementation and evaluation. This includes collaborating with partners to address social determinants of health and engaging populations disproportionately affected by suicide. Programs and resources will be focused on community-defined needs, decreasing health disparities and improving prevention outcomes.

Examples

- Data showing that Black youth suicide rates had significantly increased over the past decade prompted the Congressional Black Caucus (CBC) to establish the Emergency Taskforce on Black Youth Suicide and Mental Health (Taskforce) in April 2019. This group included the country's leading Black academic, research, and practice experts. The Taskforce gathered feedback directly from Black youth on suicide and mental health so their perspectives and experiences could guide Taskforce efforts. The 2020 Taskforce report outlined recommended policies and actions for diverse community sectors and partners in addressing Black youth suicide. It ranged from increasing research and funding to investing in the development of evidence-based interventions for preventing Black youth suicide (Congressional Black Caucus on Black Youth Suicide and Mental Health, 2020). To read the full report, visit https://theactionalliance.org/resource/ring-alarm-crisis-black-youth-suicide-america.
- SAMHSA's Service Members, Veterans, and their Families (SMVF) Technical Assistance Center provides support to states and territories to develop committees that promote mental health and reduce suicide in the military and Veteran community. These committees include active-duty military service members, Veterans, and community mental health and suicide prevention professionals. In 2019, SMVF launched the Interagency Leadership Initiative. This initiative brought together 23 state and territorial SMVF teams to strengthen state leadership support for and collaboration in military-specific mental health and suicide prevention strategic plans. The SMVF teams focused on strengthening implementation of their strategic plans with diverse initiatives.

These ranged from ensuring access to mental health care to expanding peer support and military culture training in community service providers. Their goal was to reduce risk factors for suicide such as substance use, homelessness, military sexual trauma, and incarceration. To learn more about the SMVF TA center, visit https://www.samhsa.gov/smvf-ta-center/about.

- The White Mountain Apache Tribe used tribal data to gather and track information on suicide thoughts, attempts, and deaths on their reservation. These data allowed them to focus prevention and intervention efforts where they were needed most. Their efforts helped reduce the suicide rate over time for the reservation, despite general population increases during the same time period (Cwik et al, 2016). To read more about this success story, visit https://sprc.org/news/white-mountain-apache-tribe-decreases-suicide-deaths-and-attempts/.
- Prevent Suicide Wisconsin created a free webpage featuring resources, statistics, and information on suicide risk and suicide behavior among individuals with disabilities. Resources and information are specifically for individuals living with autism, epilepsy, and Tourette's syndrome, and for those who are deaf or hard of hearing. The webpage describes the importance of organizations committed to suicide prevention also being committed to understanding disabilities and recognizing the dignity and worth of all people. To learn more, visit https://www.preventsuicidewi.org/people-with-disabilities.
- In 2021, SPRC launched the Lived Experience Advisory Committee (LEAC) which brings together external advisors who have various forms of suicide-centered lived experience. The LEAC has provided guidance for a variety of resources for the field. Insight from LEAC member contribute to positive messaging, enhanced safety, and a stronger awareness of the unique needs of the lived experience community and opportunities for addressing those needs. LEAC members also help SPRC to identify new and unique ways to promote the involvement of lived experience in suicide prevention efforts. These include publishing lists of recommended actions that states and territories can take to engage those with lived experience in collection of suicide prevention needs assessment data. To learn more about the SPRC LEAC, visit https://sprc.org/lived-experience-advisory-committee/.

What We Should Do

Below are the objectives for Goal 12 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 12.1:** Improve community-based suicide prevention by incorporating perspectives and recommendations from populations disproportionately affected by suicide and from people with diverse suicide-centered lived experience.
- **Objective 12.2:** Address social determinants of health and systemic issues impacting suicide risk among those disproportionately affected by suicide across the life span.
- **Objective 12.3:** Incorporate suicide prevention activities with consideration to age, race, ethnicity, sexual orientation, gender identity, disability, chronic conditions, and geographical location into all prevention efforts, as applicable.
- **Objective 12.4:** Promote upstream protective factors among populations disproportionately affected by suicide across state, tribal, local, and territorial suicide prevention efforts.
- **Objective 12.5:** Fund and increase effective community, peer, and youth-led suicide prevention activities and initiatives.
- **Objective 12.6:** Engage and incorporate public and private sector partners with experience working with populations disproportionately affected by suicide into suicide prevention activities.

GOAL 13. Implement comprehensive suicide prevention strategies for populations disproportionately affected by suicide, with a focus on historically marginalized communities, persons with suicide-centered lived experience, and youth

Focus on Special Populations

Preventing suicide requires focusing on populations disproportionately affected or where suicide rates are increasing. Effective prevention efforts require considering unique strengths, challenges, barriers, and resources. The Cultural Theory and Model of Suicide includes three considerations for understanding how culture impacts suicide, as follows:

- Culture affects the types of stressors associated with suicide
- Cultural meanings associated with stressors and suicide affect the development of suicidal thoughts, one's threshold of tolerance for psychological pain, and subsequent suicidal acts
- Culture affects how suicidal thoughts, intent, plans, and attempts are expressed (Chu et al., 2010)

The model was developed by analyzing suicide research among African American, Asian American, American Indian and Alaska Natives, and LGBTQ+ adults, but culture expands beyond race and ethnicity, sexual orientation, and gender identity. Other groups may also fit the model based on the above characteristics, including people with disabilities (Marlow et al., 2021), rural populations, and Veterans, among others. Collaborating with people who are part of these groups can help address suicide risk factors, develop focused interventions, improve risk assessment tools, and improve communication regarding suicide prevention activities.

Some Considerations

Developing focused prevention and intervention strategies: It is important to consider current and historical events impacting broad population risk like the COVID-19 pandemic or culturally specific risk such as historical trauma experienced by racial/ethnic groups. These events not only can impact people now, they can also impact future generations. CDC's 2022 data indicate that older adults above the age of 75 had the highest suicide rates among all age groups (CDC, 2024a). Developing suicide prevention protocols for older adults where they live and receive care could decrease their risk.

Rural communities continue to see increases in suicide rates (CDC, 2023e). Suicides in non-urban environments increased 46% between 2000 and 2020 (CDC, 2023e). Non-Hispanic White males and American Indian and Alaska Native people are disproportionately represented in rural suicides (CDC, 2023e). Improving systems to address the needs of rural communities remains a key priority in suicide prevention plans and efforts. Evaluation of SAMHSA's Garrett Lee Smith State and Tribal Youth Suicide Prevention grants found reductions in youth suicide in counties implementing grant-funded activities were greater in rural counties than in urban counties, although sparsely populated rural counties with less than 2,000 youth were excluded from the analyses (Walrath, 2015).

Those experiencing barriers to care and support may use social media sites to connect, especially youth and young adults. These networks present opportunities to provide support and resources. For example, online settings can offer safe spaces for LGBTQI+ persons to access effective care services.

Perspectives from lived experience: Recognizing the strengths and challenges associated with specific populations reflects cultural humility and respect. Including people from historically marginalized groups in program development and delivery supports the dignity of individuals by countering negative stereotypes and perceived limitations. Individuals who have been impacted by suicide have key roles to play in informing suicide prevention efforts. These include persons with lived experience, persons in groups disproportionately impacted by suicide, associated family members/caregivers and peers, those overseeing and providing programs and health care.

What Success Looks Like

Suicide prevention initiatives will reflect the characteristics and circumstances of specific populations, build on their strengths, and address their unique barriers and challenges. The result will be tailored interventions that directly address community needs and decrease suicide risk.

Examples

- The Farm State of Mind American Farm Bureau Association hosts a resource directory of materials for addressing and understanding stress, mental health concerns, and suicide risk for farmers and farm families. It includes key research, trainings on rural resilience, and information on opioid use. To learn more about the initiative, visit https://www.fb.org/initiative/farm-state-of-mind.
- Native Americans for Community Action (NACA) identified an ongoing disparity in Arizona. Most of the youth in their community juvenile justice detention center were from two towns on a local Native American reservation. NACA chose an evidence-based program called Coping and Support Training (CAST) to implement with the schools in these towns. The goal was to help 13–17-year-old youth manage emotions in healthy ways, make healthy decisions, reduce substance use, and improve grades. Six schools participated in the program. Teachers led curriculum implementation and received direct feedback and support from NACA throughout the process. Pre- and post-test results each have shown improvements in students' self-reported sense of self-worth, coping ability, and school connectedness. This has helped minimize youth risk for entry into the justice system and served as protective factors against long-term suicide risk. To read the full success story, visit https://sprc.org/news/building-lifeskills-connectedness-and-resilience-in-youth/.
- The Trevor Project developed and released two social media guides for LGBTQ+ youth providing recommendations for creating online spaces to promote youth well-being and minimizing exposure to unsafe and harmful content. Online Safety for LGBTQ Young People was the first guide released in 2023. It provides strategies that apply to many different social media platforms. Protect Your Space and Well-Being on Instagram was the second guide. It provides strategies to control one's Instagram feed with unique "how to" information for each recommendation. Recommendations in both guides center on managing the

types of posts and comments in newsfeeds, considering who to interact with on social media and how to increase positive social connections. It also recommends steps to take to get help if someone is worried about themself or someone else on social media.

- The Center for Elderly Suicide Prevention at the Institute on Aging (The Center) provides counseling, referrals to community services, grief support programs, and wellness checks for older and disabled adults in California. The Center developed the Friendship Line California to serve both a crisis intervention hotline and a non-emergency emotional support warmline. The Friendship Line supports older adults and individuals with disabilities by encouraging phone calls focused on any broad-based needs or concerns. The Friendship Line was developed in response to local data showing that older adults were not calling regular crisis lines because they didn't see themselves as in crisis, but they were struggling with loneliness and depression. To learn more visit https://www.ioaging.org/services/all-inclusive-health-care/psychological-services/center-for-elderly-suicide-prevention/.

What We Should Do

Below are the objectives for Goal 13 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 13.1:** Implement and evaluate focused suicide prevention activities across the life span that address the increasing rate of suicide thoughts, attempts, and deaths within racial, ethnic, and historically marginalized groups.
- **Objective 13.2:** Increase awareness and understanding of the unique barriers and challenges of rural communities to better inform and improve suicide prevention activities.
- **Objective 13.3:** Increase awareness and understanding of the unique barriers and challenges of military and Veteran status to improve suicide prevention among service members, Veterans, and their families.
- **Objective 13.4:** Increase suicide prevention programs, practices, and policies in support of and in collaboration with LGBTQI+ individuals.
- **Objective 13.5:** Improve and expand suicide prevention programs, practices, policies, and crisis response in child welfare, criminal and juvenile justice, behavioral health, and other systems serving populations disproportionately affected by suicide and ensure ongoing staff training and development.

- **Objective 13.6:** Leverage social media use for youth and young adults to support suicide prevention efforts.
- **Objective 13.7:** Develop research priorities and implement prevention strategies to address the high rate of suicides among older adults.

GOAL 14. Create an equitable and diverse suicide prevention workforce that is equipped and supported to address the needs of the communities they serve

Focus on Workforce Equity

Diversifying the behavioral health workforce, expanding multilingual services, and improving inclusivity in health care workplaces can help provide support for individuals of various cultures to receive the best standard of care. Approaches that emphasize cultural humility and inclusivity can help break through the structural aspects of social determinants of health. Formal training and organizational leadership support can help professionals embrace principles of cultural respect and responsiveness. Mental health treatment research shows people of color who match their providers' racial identity are more satisfied with their care and perceive better quality of care (Meyer & Zane, 2013). However, many racial and ethnic groups are underrepresented among mental health professionals, especially psychiatrists (Wyse, et al., 2020). The suicide prevention workforce will benefit from tools and resources that help them more effectively serve communities.

Improving workforce training in settings where people are disproportionately impacted by suicide can also be an effective suicide prevention strategy. For example, youth who are involved with the child welfare system are 3–5 times more likely to die by suicide compared to youth in the general population (Katz, et al., 2011; Segal, et al., 2021). Risk factors may include the experience of interpersonal violence; abuse or neglect; housing, economic, and caregiving instability; and low levels of connectedness (Castellví, et al., 2017). Child welfare leadership and staff are natural partners for suicide prevention due to their unique access to this grouped disproportionately impacted by suicide.

Some Considerations

Addressing bias: Many historically marginalized groups experience bias and discrimination in mental health care settings (Mays, et al., 2017). These encounters can create a lack of trust and impact future help-seeking practices. In one study, reported LGBTQ+ individuals who reported a lack of trust with their mental health providers were less likely to be satisfied with their care and less likely to seek further mental health treatment (Schuller & Crawford, 2022). These experiences show the need for change in cultural responsiveness because health care services play a vital role in suicide prevention as described in Strategic Direction 2. Cultural responsivity requires examining institutional policies and practices to identify barriers to health equity. Increasing training around cultural humility and anti-bias work to reduce the likelihood of adverse experiences for people receiving mental health care. Including cultural responsiveness in professional standards will convey the importance of education about health equity. Training and technical assistance can further enhance the knowledge and skills of professional education.

Perspectives from lived experience: People from historically marginalized groups can contribute important information to education and training for other professionals. As partners or independent training providers, individuals from racial, ethnic, and historically marginalized groups can contribute to the cultural education of suicide prevention professionals. Topics could include insights about culture-specific lived experience and appropriate supports for social connections. It is essential this work is mutually beneficial for both the suicide prevention field and historically marginalized groups, rather than the latter individuals only offering their expertise.

What Success Looks Like

Success for Goal 14 will mean an increasingly knowledgeable and diverse workforce in suicide prevention. Initiatives will have enhanced capability for serving racial, ethnic, and historically marginalized communities. As a result, program outcomes will match the unique needs and challenges that contribute to suicide risk in populations disproportionately impacted by suicide.

Examples

- The U.S. Department of Health and Human Services houses the National Culturally and Linguistically Appropriate Services (CLAS) Standards that provide a blueprint for health care organizations to advance health equity, improve health care quality, and eliminate health care disparities. The Office of Minority Health used the CLAS standards to develop the Think Cultural Health website. This site provides free accredited online educational programs for a variety of health care professions. These include physicians, nurses, behavioral health providers, and disaster and emergency management personnel. Each program provides focused information for the given professions to build their knowledge, skills, and awareness of cultural and linguistic competency. To learn more about the CLAS standards and associated programs and resources, visit https://thinkculturalhealth.hhs.gov/clas/standards and https://minorityhealth.hhs.gov/cultural-and-linguistic-competency.

- The Massachusetts Coalition for Suicide Prevention Alliance for Equity released the *Widening the Lens: Exploring the Role of Social Justice in Suicide Prevention—A Racial Equity Toolkit* in 2021. This toolkit was developed through the coalition's efforts to center social justice within their suicide prevention efforts. It provides a series of actions and processes that local organizations and community groups can use to have conversations and institute practices. These actions acknowledge and address suicide prevention and racial equity, cultural humility, intersectionality, and more. The toolkit includes case studies, exercises, and handouts that can used to guide them through system and culture change necessary to address social justice and racial equity. To access the toolkit, visit https://www.mcspnow.com/_files/ugd/6ba405_6e9b04a98de444978b4c502e64a6af6d.pdf .
- The Star Behavioral Health Provider (SBHP) training was created and launched in 2011. It was designed through a partnership between the Military Family Research Institute at Purdue University, the Center for Deployment Psychology, the Indiana National Guard, and the Indiana Family and Social Services Administration. Since that time, the training expanded to 32 states and is available through universities, military branches, and state agencies. SBHP training provides community mental health providers with education on military culture, context, and resources to increase their effectiveness supporting service members. The SBHP training maintains an updated and searchable list of mental health providers who participated in culturally competent military and Veteran trainings to increase military access to providers better able to support them. To learn more about the SBHP program, visit https://starproviders.org/.
- Michigan's Department of Health and Human Services collaborated with members of the University of Michigan's Youth Depression and Suicide Prevention Research Program and the state's Child Welfare Administration to implement the state's Garrett Lee Smith (GLS) Youth Suicide Prevention program. Michigan's GLS project incorporated workforce training, screening, and protocol development within the child welfare system. Training and support focused on reaching staff at pre-service, as a new hire, and at continuing education time points with evidence-informed programs and strategies. These efforts included hosting LivingWork's safeTALK trainings for foster care agencies (Kahsay, et al., 2020), providing in-person and virtual conferences, and developing free publicly available suicide prevention learning modules for Michigan higher education child welfare courses. The GLS team developed best-practice protocol recommendations that support child welfare staff in responding to youth with an elevated risk for suicide. The GLS team also participated in developing learning resources and protocols focused on safe household firearm

storage (Magness, et al., 2023). To learn more, visit https://firearminjury.umich.edu/education-training/childwelfare/.

What We Should Do

Below are the objectives for Goal 14 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 14.1:** Increase access to training and technical support for professionals and graduate students to improve cultural humility and responsiveness toward historically marginalized groups and individuals with suicide-centered lived experiences.
- **Objective 14.2:** Focus equity education and awareness on health care professionals and settings to address existing barriers and reduce stigma.
- **Objective 14.3:** Increase the number of professionals in suicide prevention from historically marginalized communities, people with suicide-centered lived experience, and other populations disproportionately affected by suicide.
- **Objective 14.4:** Create professional standards around suicide prevention, intervention, and postvention with a dedicated competency focused on working with populations disproportionately affected by suicide.
- **Objective 14.5:** Ensure historically marginalized groups are provided crisis support and response strategies grounded in cultural humility and inclusivity.

GOAL 15. Improve and expand effective suicide prevention programs for populations disproportionately impacted by suicide across the life span through improved data, research, and evaluation

Improve Data, Research, and Evaluation

Quality data form the foundation for effective initiatives. These data can help identify problems and track changes over time. In some cases, increasing access to existing data sources is needed, while in other instances, the data have yet to be collected (e.g., improving equity in recruitment in clinical trials) (Buffenstein et al., 2023). Accurate assessment of health disparities can focus efforts for improving research and evaluation with populations disproportionately affected by suicide. Improving suicide prevention initiatives will depend on awareness and dissemination of evidence-informed best practices.

Some Considerations

Collaboration: Intervention trials and community surveys contribute to better understanding of populations disproportionately impacted by suicide. They improve recruitment and collection of demographic data of understudied groups. Changes in organizational policy or infrastructure and resources may be necessary to optimize the benefits of enhanced data collection. Partnerships between agencies that collect suicide-related surveillance data and community organizations that include people disproportionately affected by suicide can improve available data. As previously mentioned, collaboration with tribal nations' must consider the authority of tribes to administer the collection, ownership, and application of their own data.

Universities and other higher education institutions play a major role in developing research projects throughout the country. More data are needed to better understand risk and protective factors, unique warning signs, and effective interventions for populations disproportionately impacted by suicide. Also, more research is needed regarding the impact of structural issues such as racism and discrimination on suicide risk among various racial and ethnic groups and LGBTQI+ individuals to inform mental health-interventions and policies. To support this work, research teams may consider including co-leads and/or advisory groups from disproportionately affected populations in planning and implementation as part of community-based participatory research approaches.

Informing clinical care: Health care systems play a crucial role in multiple areas of suicide prevention, as noted in Strategic Direction 2 and Goal 14. Existing practices and requirements tracking health indicators and maintaining documentation creates possibilities for collecting and utilizing data related to health equity. In many cases though, screening and assessment tools being used were not tested or validated among people of different race, ethnicity, age, or groups of disproportionately affected people. Suicide prevention work can be improved with data collection and clinical practice that use culturally appropriate screening and assessment tools.

Perspectives from lived experience: Incorporating perspectives from individuals within the community provides insights into the research and evaluation priorities most relevant for populations disproportionately affected by suicide. Lived experience can also help identify new possibilities for disseminating and implementing culturally appropriate evidence-based programs. These types of collaborative partnerships can generate increased funding and resources for suicide prevention.

What Success Looks Like

Success of Goal 15 means that more complete demographic characteristics would be included in all major surveillance, research, and evaluation projects related to suicide. Health care settings would employ culturally appropriate screening and assessment tools and people with lived experience would contribute to research development, implementation, and evaluation. As a result, suicide prevention would experience more rapid progress in understanding and addressing the needs of populations that are disproportionately affected by suicide.

Examples

- Both SAMHSA and CDC have provided historic levels of investment in suicide prevention research, programming, evaluation, and data collection over the past decade. SAMHSA's grant programs enable universities and agencies across states, communities, and tribes to develop and test effective interventions for youth suicide prevention. These include the Garrett Lee Smith Campus Suicide Prevention and State and Tribal grants. Grants to Implement Zero Suicide in Health Systems contribute to a growing body of research and best practices on how to prevent suicide in health care. CDC funding to expand Violent Death Reporting Systems to all 50 states, the District of Columbia, and Puerto Rico provides significantly more data available to inform suicide prevention programming. CDC's recent launch of its Comprehensive Suicide Prevention program funds recipients to use data-driven decision-making to implement and evaluate the best available evidence for suicide prevention in populations disproportionately impacted by suicide.
- The Cultural Assessment of Risk for Suicide (CARS) created a screening assessment tool that addresses cultural variations in the presentation of suicide risk. CARS was informed by the Cultural Theory and Model of Suicide (described in Goal 13). This model characterizes the many cultural variations in suicide risk among ethnic and sexual minority groups. The tool was tested with 950 adults from the general population. Minority participants reported experiencing the cultural risk factors identified in the tool to a greater extent than non-minority participants. Results also showed reliability in identifying cultural suicide risk factors not available in other assessment tools. Ultimately, CARS can help behavioral health providers measure cross-cultural variations in suicide-related distress, meaning, risk and protective factors, intention, and plans. To learn more about CARS, visit https://www.researchgate.net/publication/235378188_A_Tool_for_the_Culturally_Competent_Assessment_of_Suicide_The_Cultural_Assessment_of_Risk_for_Suicide_CARS_Measure.
- The Columbia-Suicide Severity Rating Scale (C-SSRS) is a suicide risk screening and assessment tool developed in 2007. Since that time, the C-SSRS has been used extensively and further evaluated, receiving gold standard status from the

U.S. Food and Drug Administration making it a preferred evidence-based instrument for measuring suicidal ideation (Giddens et al., 2014). Over the past decade, the Columbia Lighthouse Project evaluated the C-SSRS within different settings and in different populations. These included with first responders, and in health care, military, school, and carceral settings. The Columbia Lighthouse Project adapted the C-SSRS screening for different groups by creating C-SSRS "cards" that include key C-SSRS questions and focused content for participant groups. To learn more about the C-SSRS, visit https://cssrs.columbia.edu/.

- The AAKOMA Project's 2022 State of Mental Health of Youth of Color surveyed 2,905 youth of color to better understand their experiences of mental health challenges, suicide thoughts and attempts. The sample was composed of Black (20%), Latino (32%), Asian American/ Pacific Islander (19%), Native American (15%) and multicultural (20%) youth ages 13–17. Youth reported moderate to severe symptoms of anxiety (50.1%) and depression (53%) in the past seven days. More than 25% of youth reported serious thoughts of suicide and 18% reported at least one suicide attempt in the past year (Breland-Noble, 2023). To learn more, visit https://aakomaproject.org/somhyoc2022/.
- The Rural Health Information Hub houses the Rural Data Explorer. The Rural Data Explorer is a useful tool for anyone seeking to understand disparities among different demographic groups within metro and non-metro regions of the United States. The Explore provides a variety of data sources in one central public-facing platform that is easy to use and navigate. Examples of data sources include the U.S. Census Bureau, the National Center for Health Statistics, and the Health Resources and Services Administration (HRSA) Area Health Resources Files. Users can explore state and county level data and organize it according to metro vs. non-metro status. Data can also be organized by age, race, ethnicity, tribal, and Veteran status demographics. Social determinants of health, from poverty rates, to education, to health care access can be explored. To access the tool, visit https://www.ruralhealthinfo.org/data-explorer.
- In 2023, SPRC re-launched a new Best Practice Registry (BPR). The registry includes suicide prevention programs, policies, and practices with evidence of effectiveness in preventing suicide or addressing suicide risk and protective factors. The BPR centered the goal of increasing health equity within best-practice programs. SPRC encourages submission of programs into the registry that are guided by the following:
  - Varied frameworks

◦

Known best practices in the field of suicide prevention or related fields such as substance use or violence prevention

◦

Culturally relevant approaches and local knowledge

The BPR allows users to search listed programs by those that have been tested with different populations and in different places and settings. This enables users to choose programs that better align with their local cultures, populations, and contexts. To visit the SPRC BPR, visit https://bpr.sprc.org/.

- The National Institute of Mental Health (NIMH) is providing two rounds of funding in fiscal years 2023 and 2024 supporting research projects that examine risk and protective factors for suicide unique to African American or Black youth under the age of 25. This funding encourages researchers to do the following:
    - Examine the role of social determinants of health within Black youth risk and protective factors
    - Develop new or adapted methods for assessing suicide risk among African American or Black youth through culturally appropriate mechanisms
    - Develop an understanding of Black youth suicide that can contribute to more effective prevention and intervention efforts

NIMH encourages applicants to identify strategies for facilitating research participation among Black youth and their families and strategies to engage diverse research professionals representing the fields of minority mental health, health disparities research, and suicide research, among others. To view the funding announcement, visit https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-22–141.html.

- The U.S. Department of Veteran Affairs (VA) releases the *National Veteran Suicide Prevention Annual Report* every year. It brings together data from military, Veteran, and public health sources, such as the Veterans Health Administration records and CDC's National Death Index. Data are linked with death certificate data which allows VA to better understand the demographics, circumstances, and risk and protective factors related to military Service Member and Veteran suicide deaths. The VA can use demographic and circumstantial data to identify the following:
    - Subgroups of Veterans disproportionately impacted by suicide

  - What means of suicide are being used
  - What services Veterans interact with prior to their deaths

The report also includes data-informed calls to action that both the military and broader community agencies can take up to help prevent suicide. To read the most current *National Veteran Suicide Prevention Annual Report*, visit https://www.mentalhealth.va.gov/suicide_ prevention/data.asp.

What We Should Do

Below are the objectives for Goal 15 that will help advance the *National Strategy* to improve suicide outcomes in the country.

- **Objective 15.1:** Increase funding for academic and community-led research on, and evaluation of, effective suicide prevention activities in populations disproportionately impacted by suicide.
- **Objective 15.2:** Develop, disseminate, and evaluate specific and culturally informed screening tools to address suicide among populations disproportionately affected by suicide.
- **Objective 15.3:** Ensure that suicide-related data used for surveillance, research, evaluation of prevention and treatment, and quality improvement enable assessment of disparities, especially for populations disproportionately affected by suicide.
- **Objective 15.4:** Improve the awareness and dissemination of culturally relevant suicide prevention best practices among populations disproportionately affected by suicide.
- **Objective 15.5:** Support the development of promising practices and practice-based evidence to inform suicide prevention in historically marginalized and excluded groups through funding, resource provision, and prioritization practices.
- **Objective 15.6:** Enhance data sharing, data linkage, and translation of data to action across community groups to improve suicide prevention in historically marginalized groups and groups disproportionately impacted by suicide.

From Strategy to Action

The *National Strategy* provides a framework and foundation to organize action on suicide prevention across the United States. It allows people to work together in large organizations and small to identify what actions have the greatest potential to reduce the impact of suicide for Americans. The associated *Federal Action Plan* represents the federal government's first three years of actions to implement the strategy. It also represents a starting point for other organizations and communities to develop their own plans—a way for the whole nation to work together to reduce the toll of suicide.