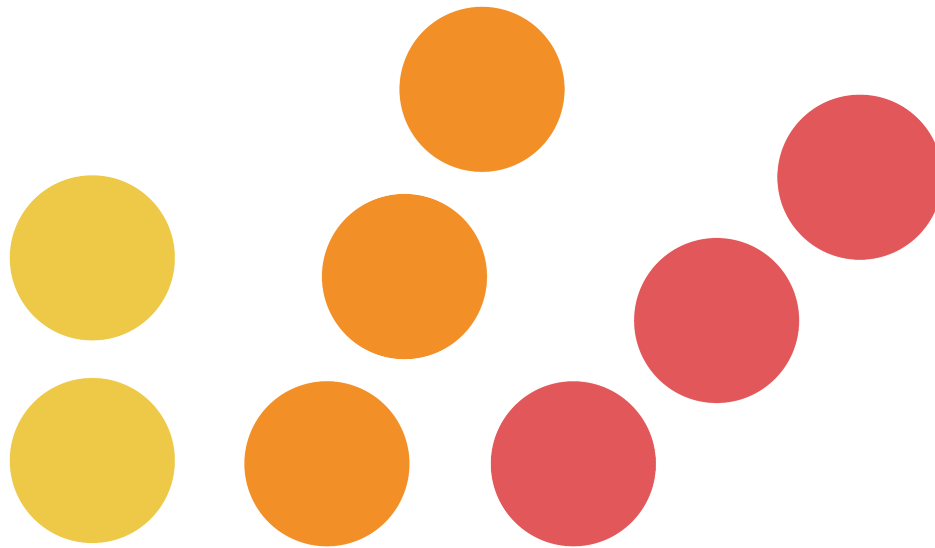




Why Do U.S. Health Care Costs Keep Rising?

A Revised Framework for U.S. Health Care Cost Growth

Camm Epstein

July 2026

ABSTRACT

U.S. health care costs continue to rise, yet the standard framework for explaining that trajectory still largely traces to Newhouse (1992) and Smith, Newhouse, and Freeland (2009). Drawing on more than fifteen years of subsequent research in spending decomposition, pricing, provider consolidation, administrative costs, and labor economics, this paper presents a revised eight-driver taxonomy of U.S. health care spending growth. The taxonomy assigns provider market consolidation a distinct role, introduces labor and workforce costs as a separate driver, and distinguishes between drivers of spending levels and drivers of spending acceleration, a difference with direct implications for policy design. Medical technology remains the leading long-run structural driver of spending growth, while provider consolidation and labor-market pressures have become increasingly important contributors to recent acceleration through price and service intensity. The paper also examines the CMS 2025–34 expenditure projections, which anticipate a legislated slowdown in spending growth through 2028, followed by a resumption of the long-run trajectory — a prospective test of the framework’s central distinction between enabling conditions and structural growth drivers.

I. Introduction

Why U.S. health care costs keep rising — often outpacing inflation, overall economic growth, and health spending in peer countries — has resisted a clear answer for decades. The U.S. spends more on health care than any comparable high-income country, yet consistently underperforms on key health outcomes.¹ What makes the spending trajectory particularly pressing is not its level but its persistence: despite periodic slowdowns, U.S. health care spending has generally consumed a growing share of gross domestic product (GDP) for more than six decades — and each time the upward trend reversed, it subsequently resumed.

In 2024, national health expenditures (NHE) reached \$5.3 trillion, representing 18.0 percent of GDP and growing 7.2 percent from 2023, the second consecutive year above seven percent.² Hospital spending grew 10.6 percent in 2023 and 8.9 percent in 2024.² In CMS’s 2025 projection, similarly elevated hospital-spending growth in 2023 and 2024 was described as the highest since 1991.³ CMS actuaries estimate that spending grew approximately 7.1 percent in 2025 — a third consecutive year above seven percent — and, in their 2025–34 projections, expect national health spending to approach \$9.0 trillion by 2034, equal to 20.6 percent of GDP, with average annual growth of 5.4 percent outpacing projected GDP growth of 4.1 percent.⁴

The dominant analytical framework for understanding U.S. health care spending growth traces to Newhouse’s foundational 1992 analysis⁵ and his 1993 Health Affairs essay,⁶ and was later updated by Smith, Newhouse, and Freeland in 2009.⁷ That framework identified medical technology as the primary long-run driver, with insurance generosity and rising incomes as enabling conditions — factors that make technology adoption financially accessible but do not independently drive costs upward. It was rigorous and important. It is also seventeen years old.

Since that update, the evidence base has expanded substantially, and the health care economy has changed structurally. Dieleman and colleagues produced the most granular quantitative decomposition published to that point and found that price and intensity of services — not aging, disease burden, or utilization volume — accounted for more than half of spending growth between 1996 and 2013.⁸

Hospitals play a central role in recent growth in health care spending. Between 2022 and 2024, hospital spending accounted for 40 percent of the increase in national health expenditures.⁹ A large body of research suggests that provider consolidation has contributed to higher hospital prices, helping explain why hospital care remains a major source of health care inflation.¹⁰ This paper undertakes two tasks. First, it surveys and synthesizes the prior literature on U.S. health care spending growth — drawing on both comprehensive analytical frameworks and foundational empirical studies — to establish what has been settled and where the evidentiary gaps remain. Second, it introduces an eight-driver taxonomy that integrates this evidence into a revised framework for understanding why U.S. health care costs keep rising.

II. Prior Evidence on U.S. Health Care Spending Growth: What Has Been Established and Where the Gaps Lie

Five comprehensive analytical frameworks have attempted to explain or decompose the overall drivers of U.S. health care spending growth over time. Together, they establish that medical technology is the primary long-run structural driver, that price and service intensity are the dominant proximate channels (the immediate mechanisms through which spending rises), and that aging and disease burden are secondary contributors. Table 1 summarizes each framework and its principal limitation.

Table 1. Major Frameworks for Explaining the U.S. Health Care Spending Growth

Framework	Year	Main emphasis	Principal limitations
Newhouse ^{5,6}	1992/1993	Technology ≥50%; income and insurance enabling; aging secondary	Technology as residual, not measured; predates consolidation era
CBO Tech Report ¹¹	2008	Technology ~50%; insurance expansion 10-13%; income and aging secondary	Same residual method; ends before ACA and consolidation decade
Smith, Newhouse & Freeland ⁷	2009	Technology (27-48%), income, insurance modeled as co-determinants	Predates ACA, consolidation decade, GLP-1 era
Moses et al. ¹²	2013	Price inflation — hospital charges, professional services, drugs and devices, plus administrative costs — accounts for ~91% of 2000-2011 increases; demand and demographics <10%	Descriptive; ends 2011; no structural causal mechanism
Dieleman et al. ⁸	2017	Price and intensity >50% of 1996-2013 growth, aging 11.6%; disease prevalence a negative contributor	Ends 2013; lacks framework explaining why price and intensity dominate

Additional comparative and mechanism-specific evidence

Comparative work helps clarify what the U.S. problem is, but not by itself why it exists. White showed that U.S. health care spending diverged from that of peer OECD countries in ways not fully explained by aging or income growth.¹³ Other comparative analyses point more specifically to higher prices and administrative complexity as major contributors to higher U.S. health care spending.^{14,15,16} Separately, the provider-market literature identifies consolidation and market concentration as important contributors to elevated hospital and physician prices in the United States.^{17,18}

III. A Revised Framework: Eight Drivers of U.S. Health Care Spending

The \$5.3 trillion in 2024 national health expenditures documented in Section I were not distributed evenly, and their growth was not driven equally by all eight factors below. Against that macro backdrop, the framework organizes the evidence into eight distinct driver categories. For each, we specify whether the driver operates primarily on the level of spending (explaining why the U.S. spends more at a given point in time), on the rate of spending growth (explaining why spending grows faster over time), or both. This distinction has substantial policy implications: level drivers are amenable to one-time reforms; growth drivers require ongoing intervention. In practice, most drivers operate on both dimensions, but with materially different weights.

How to read this framework: *The eight drivers should not be added together or summed to 100 percent. Some drivers operate through others. Consolidation raises prices and strengthens provider bargaining power. Innovation expands volume and intensity. Labor-cost pressures pass through into negotiated rates and premiums. Some drivers primarily affect spending levels, others primarily affect spending growth rates, and several operate on both dimensions. The estimates cited are drawn from studies with different time periods and methods and are provided for directional guidance, not arithmetic aggregation.*

Table 2. Eight-Driver Taxonomy of the U.S. Health Care Spending

Driver	Level vs. Growth	Estimated Contribution	Key Evidence
1. Technology & Innovation Diffusion (structural determinant)	Both	27–48% of long-run growth ^a	Smith, Newhouse & Freeland (2009); CBO (2008)
2. Income Growth & Insurance Coverage	Both (permissive)	10–15% insurance; income elastic demand	CBO (2008); Smith et al. (2009)
3. Price & Service Intensity (proximate channel, not an independent structural cause)	Growth-dominant	>50% of 1996–2013 growth ^b	Dieleman et al. (2017); Moses et al. (2013)
4. Provider Market Consolidation (structural price-setting driver)	Both, accelerating	No single national estimate; hospitals accounted for ~40% of 2022–2024 NHE growth, and consolidation is a major price-setting force in that sector ^c	KFF (2026); Fulton (2017); Cooper et al. (2019)
5. Population Health Burden	Level-dominant	77.6% of 1987–2011 growth (cost concentration in high-morbidity patients) ^d	Thorpe et al. (2015)
6. Aging of the Population	Growth (modest)	11.6% of 1996–2013 growth ^b	Dieleman et al. (2017); CMS (2026)
7. Administrative Costs	Level-dominant	~7.4% of NHE ^e	CMS National Health Expenditure Accounts; Himmelstein et al. (2020)
8. Labor / Workforce Costs (input-cost driver, emerging)	Growth (emerging)	No prior estimate; \$42.5B increase 2021–2023	AHA (2025); KC Fed (2024)

^a Contribution to spending growth since 1960 (Smith, Newhouse & Freeland, 2009; CBO, 2008).

^b Contribution to 1996–2013 spending increase (Dieleman et al., 2017).

^c Hospital spending's share of 2022–2024 NHE growth; not an estimate of consolidation's independent contribution (KFF, 2026).

^d Share of 1987–2011 growth in patients with 4+ chronic conditions (Thorpe et al., 2015).

^e Share of NHE for government administration plus non-medical insurance expenditures (CMS National Health Expenditure Accounts, 2025).

Driver 1: Medical Technology and Innovation Diffusion

Newhouse's foundational insight was that medical technology does not merely improve care quality — it expands what is treatable and thus what is treated, drawing additional resources into the health care economy with each new capability.⁵ Smith, Newhouse, and Freeland's 2009 update, incorporating insurance and income as co-determinants, narrowed the technology contribution estimate to 27 to 48 percent of spending growth since 1960.⁷ The CBO's 2008 report independently confirmed this range, attributing approximately half of long-run per-capita spending growth above GDP to technological change broadly defined.¹¹

The mechanism is well-established: a new therapeutic capability emerges; insurance financing makes it broadly accessible; demand expands as indications widen; clinical practice evolves; spending grows. The cycle repeats across every clinical domain. GLP-1 receptor agonists are its current and most vivid illustration: total U.S. GLP-1 spending grew from \$13.7 billion in 2018 to \$71.7 billion in 2023, a fivefold increase, in inflation-adjusted dollars, driven by rapidly expanding use and a shifting product mix.¹⁹ Originally approved for type 2 diabetes, GLP-1-based therapies now span obesity treatment and cardiovascular risk reduction, with some products also carrying obesity-related indications such as obstructive sleep apnea. Each additional indication expands the eligible population and the payer obligation — the Newhouse mechanism operating in real time at an extraordinary scale. GLP-1s serve as a cross-cutting case study throughout this paper: a single therapeutic class simultaneously engages the innovation diffusion mechanism (Driver 1), the disease burden and obesity feedback loop (Driver 5), and the price and intensity channels (Driver 3).

GLP-1s are not an anomaly. They are the current iteration of a pattern that has operated in oncology (checkpoint inhibitors), infectious disease (hepatitis C direct-acting antivirals), and cardiovascular medicine (PCSK9 inhibitors). The pipeline for gene therapies, Alzheimer's treatments, and next-generation obesity drugs suggests that technology-driven spending growth will likely remain dominant long-run drivers for the foreseeable future.

Driver 2: Income Growth and Insurance Coverage

Income and insurance also matter in their own right, because changes in coverage and purchasing power can produce real spending shifts. Medicare's enactment in 1965 extended coverage to the elderly through the first major federal entitlement-based coverage expansion, increasing access to care on a large scale.²⁰ More recently, the Affordable Care Act expanded Medicaid eligibility and created subsidized Marketplace coverage, again increasing the number of insured Americans and raising expected use of care.²¹

The reverse pattern also appears during periods of economic decline or coverage retrenchment. During the Great Recession, falling employment reduced private insurance coverage, illustrating how income shocks and labor-market weakness can suppress coverage and, with it, demand for care.²² More recently, Medicaid unwinding after the end of the continuous-coverage requirement led millions of people to lose coverage; by September 2024, KFF reported that more than 25 million people had lost Medicaid coverage during the unwinding.²³ So, administrative and policy reversals can also move spending in the opposite direction.

These episodes show why income and insurance still matter, but they do not make either a strong standalone explanation for persistent acceleration in health care spending growth. The CBO's technology report treated insurance expansion as a meaningful contributor over particular periods, but not as a continuously compounding engine of long-run growth.¹¹ Smith, Newhouse, and Freeland likewise retained income and insurance in their framework while continuing to treat technology as the primary driver of long-run spending growth.⁷

The CMS 2025–34 projections offer a real-time test of this distinction. Coverage is now contracting by legislation rather than expanding: the share of Americans with health insurance, which peaked at 92.5 percent in 2023, is projected to drop to 90.4 percent by 2028, driven by the expiration of enhanced Marketplace premium tax credits and by Medicaid provisions of the One Big Beautiful Bill Act (OBBBA)

that cap state-directed payments (supplemental Medicaid payments that states direct to particular providers), freeze and gradually reduce provider-tax financing, and condition eligibility for certain adults on community-engagement requirements beginning in 2027.⁴ The actuaries expect these changes to slow national health spending growth through 2028 — yet they still project the health share of GDP to keep climbing through 2034.⁴ A coverage contraction that slows spending growth for a few years without bending the decade-long trajectory is exactly what the framework expects of an enabling condition.

Driver 3: Price and Service Intensity

Price and service intensity are two mechanisms, not one: Price is what is paid per unit of care, and intensity is the resource content of each unit. Price and intensity are retained as a standalone analytic category because they are the principal empirical channel through which multiple structural forces — including innovation diffusion, market power, and labor cost pass-through — appear in spending data. The analytical task is to trace from this observed outcome back to its structural causes. The most rigorous quantitative evidence on what actually drives U.S. spending growth points emphatically to price and the intensity of services delivered. Dieleman and colleagues' 2017 analysis — which attributed spending growth across five measurable factors: prices, service intensity, population growth, aging, and disease prevalence — found that price and service intensity accounted for more than 50 percent of the \$933.5 billion increase in spending between 1996 and 2013, a share larger than all other drivers combined.⁸ Moses et al.'s descriptive decomposition for the period 2000 to 2011 reached a sharper conclusion: price inflation in hospitals, professional services, drugs, and administration produced 91 percent of cost increases in that window, while demand growth and demographic change together accounted for less than 10 percent.¹² Innovation and price/intensity are not independent, parallel causes — innovation frequently enters spending through the price and intensity channel: new capabilities command new prices, expand the indication scope, and increase service volume. Whether a given price reflects the value of a new capability (Driver 1) or the market power of consolidated providers (Driver 4) is taken up under those drivers; Driver 3 captures both effects, which is why it appears large in quantitative studies and why distinguishing the structural cause from the proximate channel matters for targeting policy correctly.

Although the two studies are not directly comparable, both point to the same directional conclusion: price and service intensity are far more important drivers of spending acceleration than aging, disease prevalence, or utilization volume. Cross-national evidence adds a further dimension: Papanicolas, Cylus, and Lorenzoni's 2024 analysis found that the United States experienced the highest cumulative health price growth relative to general price growth among the five countries studied from 2000 to 2020, and that general price indices likely understate the contribution of health price growth to total expenditure increases.²⁴

Critically, the Dieleman decomposition found that changes in disease prevalence contributed negatively to spending growth (negative 2.4 percent), and that population aging contributed only 11.6 percent — directly contradicting the conventional wisdom that an aging, sicker population is the primary cost driver — at least for the 1996–2013 period using Dieleman's five-factor decomposition method. The dominant proximate mechanism is not more patients or sicker patients; it is higher prices and more intensive services delivered to each patient.

The 2024 NHE data are consistent with this picture. The CMS actuary estimated that 1.1 percentage points of the 7.2 percent NHE growth were due to population growth, 2.5 percentage points to prices, and 3.6 percentage points to nonprice factors such as the use and intensity of health care goods and services.² This reinforces the conclusion that prices and service intensity remain central drivers of spending growth.

The 2025–34 projections add a caution about the composition of this channel. CMS actuaries report that health care price growth has been moderate — running slightly below economywide inflation in 2025 and 2026 — and that utilization and intensity account for most of the recent surge.⁴ Price and intensity are combined here as a single proximate channel, but the two can move very differently over short periods, and the policy levers for each differ. The consolidation arguments in Driver 4 operate on prices; the recent acceleration has come mostly from use and intensity.

Driver 4: Provider Market Consolidation

If price and intensity are the dominant proximate mechanisms, the underlying question is: what determines prices? Here, a literature that developed largely parallel to the Newhouse tradition provides an increasingly clear answer: provider market power. The policy stakes are high: observed prices may reflect the production cost and clinical value of new capabilities, or they may reflect above-competitive prices extracted by providers with limited competitive discipline — what economists call market-power rents, profits that persist because competition is too weak to erode them. Driver 1 addresses the former; this driver addresses the structural conditions that enable the latter.

The U.S. hospital industry has undergone dramatic consolidation over three decades. Between 1998 and 2017, 1,573 hospital mergers occurred; an additional 428 followed between 2018 and 2023.¹⁰ The share of community hospitals belonging to a health system grew from 53 percent in 2005 to 68 percent in 2022.²⁵ By 2016, 90 percent of metropolitan statistical areas (the standard Census Bureau geographic unit for urban markets) had hospital markets that were highly concentrated — meaning one or two systems dominated each local market with little competitive pressure.¹⁷

Hospital prices are a major contributor to U.S. health care spending. In 2022, prices paid by private insurance for hospital care averaged 267 percent of Medicare rates.²⁶ Hospital care also accounted for about 31 percent of national health expenditures, and private insurance inpatient hospital prices rose 50 percent between June 2014 and December 2024, compared with 25 percent for Medicare and 19 percent for Medicaid.²⁶

That large base gives hospital price growth an outsized effect on total spending. The broader literature suggests that hospital consolidation has contributed to elevated commercial prices. Fulton documents rising concentration in hospital markets and summarizes evidence that concentrated markets are associated with higher prices without corresponding gains in quality.¹⁷

Driver 5: Population Health Burden

Driver 5 captures how underlying population health shapes the need for care and, in turn, health care spending. Chronic disease primarily helps explain where spending is concentrated, while obesity may also contribute to future spending growth by increasing both disease burden and demand for treatment. The point is not that every population-health factor drives spending in the same way, but that underlying health status remains an important part of the spending picture.

5A. Chronic Disease Burden

Thorpe and colleagues' 2015 analysis found that 77.6 percent of spending growth from 1987 to 2011 was attributable to patients with four or more chronic conditions²⁷ — underscoring the concentration of costs among the most medically complex.

However, the Dieleman decomposition complicates the chronic disease narrative. For 1996 to 2013 — the period covered by Dieleman and colleagues' five-factor decomposition — changes in disease prevalence were associated with a slight decrease in spending (negative 2.4 percent), suggesting that the prevalence of major conditions did not increase in ways that meaningfully drove spending growth during that particular period and method. This result should not be overgeneralized to other time periods or decomposition approaches.⁸ The two findings are compatible: Thorpe shows where spending is concentrated, while Dieleman shows how much prevalence change contributed to growth over a specific period.

Chronic disease is best understood as a driver of spending levels — explaining where health dollars concentrate — rather than as an accelerator. Two components of this category, however, do have growth-acceleration properties.

Obesity is a chronic disease with the clearest growth-acceleration properties. Thorpe and colleagues found that rising obesity prevalence, combined with higher per-capita spending among obese patients, accounted for 27 percent of real per-capita spending growth between 1987 and 2001 — the largest single-condition contribution identified in that decomposition.²⁸ In that account, obesity operates less as a standalone category than as a multiplier across multiple chronic-disease categories, including diabetes, cardiovascular disease, musculoskeletal conditions, and several cancers. But it also now interacts with a rapidly growing treatment channel. U.S. spending on GLP-1 receptor agonists increased more than 500 percent between 2018 and 2023, from \$13.7 billion to \$71.7 billion.¹⁹ That does not mean obesity alone explains aggregate spending growth, but it does make obesity a special case within this driver: a population-health condition that may also contribute to expenditure growth by increasing demand for high-cost treatment.

5B. Behavioral Health Demand

Behavioral health is the second component with growth-acceleration properties. Behavioral health spending grew 94 percent from 2012 to 2022 — versus roughly 60 percent for national health spending overall — and available forecasts do not suggest an imminent reversal.^{29,30} Unlike most chronic-disease conditions, the binding constraint is the clinical workforce: federal projections indicate persistent shortages of behavioral health clinicians, a dynamic that can sustain wage pressure, access constraints, and pressure to expand treatment capacity as demand continues to grow.³¹

Driver 6: Aging of the Population

Per-person health care spending for adults 65 and older was \$22,356 in 2020 — more than five times the \$4,217 per child and more than twice the \$9,154 per working-age adult.³² In the same analysis, older adults, representing 17 percent of the population, accounted for 37 percent of all personal health care spending. Yet decomposition studies point to a much smaller role for aging in spending growth. Dieleman found that population aging accounted for 11.6 percent of the 1996-2013 growth, and the

CMS actuary assigned approximately one percentage point to population growth out of 7.2 percent total 2024 NHE growth.^{2,8}

The forward-looking picture is more significant. Baby Boomers — approximately 73 million Americans — are moving through Medicare eligibility, increasing pressure on age-related spending over time. The share of the U.S. population aged 65 and older is projected to grow from 17 percent in 2022 to 23 percent by 2050.³³ CMS projects that federal Medicare spending will grow substantially over the coming decade, with aging serving as a more prominent driver prospectively than it has been historically.³ In the 2025–34 projections, Medicare is the fastest-growing major payer, at 7.7 percent per year on average, reflecting continued baby-boom enrollment through 2029 and faster per-enrollee spending growth.⁴

Driver 7: Administrative Costs

Administrative costs are a distinctive feature of U.S. health care financing. Himmelstein, Campbell, and Woolhandler estimated that health care administration consumed 34.2 percent of total U.S. health expenditures in 2017, compared with 12.0 percent in Canada.¹⁶ Their estimate is broad, capturing administrative burden across hospitals, physician practices, insurers, and other parts of the system. For purposes of this framework, however, the most relevant measure is the National Health Expenditure Accounts treatment of administrative costs. In the NHE accounts, administrative costs are captured as government administration plus non-medical insurance expenditures.³⁴ Together, those categories account for roughly 7.4 percent of NHE and do not appear to be a primary driver of year-over-year spending acceleration.²⁹ This narrower NHE measure does not capture the full administrative burden reflected in broader studies such as Himmelstein's.¹⁶ Administrative costs are therefore best understood here primarily as a driver of spending levels rather than a major driver of spending growth.

One near-term projection complicates, without overturning, this classification. CMS actuaries project insurers' administrative and other non-medical expenditures to grow roughly 7.5 percent per year over the coming decade — faster than overall NHE — as insurers rebuild margins eroded by several years of rising medical loss ratios (the share of premium revenue paid out for care).^{4,35} That is margin recovery within a cycle, not a lasting expansion of administrative activity, and one projection does not establish a trend. Still, administrative costs can add to measured spending growth over multiyear windows even if they are not a durable engine of acceleration.

Driver 8: Labor and Workforce Costs

Health care is intensely labor-intensive. Labor costs have always been embedded in the sector's spending base, but prior frameworks generally treated them as part of broader categories such as prices, service intensity, or technology rather than as a distinct driver. The closest antecedent is Baumol's "cost disease" — the observation that labor-intensive service industries with slow productivity growth face persistently rising relative costs.³⁶ The COVID-19 pandemic did not create the sector's labor intensity, but it did expose how workforce shortages, wage shocks, and staffing-cost pass-through can operate as a separate source of spending pressure. A key reason labor belongs in a forward-looking framework — and not only as a retrospective pandemic account — is the lagged pass-through dynamic: provider wage and staffing-cost shocks feed into negotiated rates and broader health care price inflation with delay, making labor a prospectively persistent growth pressure even after the acute staffing crisis subsides.

Between 2021 and 2023, hospital labor costs increased by \$42.5 billion — a direct spending increase driven not by technology diffusion or market consolidation, but by an acute supply-and-demand imbalance in clinical labor markets.³⁷ Travel nurse costs surged to 200 to 300 percent of traditional staffing rates at the 2022 peak.³⁷ The American Hospital Association's 2025 analysis found that advertised registered nurse salaries grew 26.6 percent faster than general inflation over the preceding four years.³⁷

The Federal Reserve Bank of Kansas City's 2024 analysis noted that health care price inflation has historically tracked wage growth, given the sector's labor intensity.^{38,39} In that account, post-pandemic wage gains have not yet fully passed through to prices — a lagged dynamic suggesting continued upward pressure. More generally, in a sector where compensation is the largest cost category, sustained wage growth and staffing scarcity can raise spending levels even outside acute crises, especially when those costs are passed through into negotiated rates and premiums. Supply constraints also appear to be persistent. HRSA projects nursing shortages in many regional markets through 2038.⁴⁰ A related capacity constraint is educational: U.S. nursing schools turned away 65,766 qualified applicants from baccalaureate and graduate nursing programs in 2023 due to insufficient faculty, clinical sites, classroom space, clinical preceptors, and budget constraints.⁴¹

The pass-through lag — the delay between when providers absorb cost increases and when those costs appear in insurance premiums — is a particularly important feature of this driver. Commercial insurer contracts with hospitals and health systems are typically negotiated on multi-year cycles. Labor cost increases absorbed in 2022 and 2023 are only now beginning to appear in the commercial premium increases that employers and employees face. The observed \$42.5 billion increase in hospital labor costs from 2021 to 2023 may prove more persistent than a one-time post-pandemic spike, especially if labor costs continue to pass through into premiums and payment rates — a process still unfolding.

IV. From Newhouse to Currant: What Changed in Three Decades

The Newhouse framework identified four core drivers of health care spending growth: medical technology, income growth, insurance coverage, and population aging. Smith, Newhouse, and Freeland refined those estimates but did not fundamentally alter the structure. Later frameworks broadened the descriptive picture, bringing prices, administrative costs, and, in Moses, consolidation more clearly into view without yet integrating them into a unified taxonomy of distinct drivers. Table 3 shows how each of the eight drivers was treated across the five major prior frameworks and in the Currant taxonomy. The point is not to force earlier frameworks into the new structure, but to show which drivers were central, which were present but not distinct, and which are newly formalized here.

Table 3. Prior Framework Coverage of Eight Drivers: Newhouse (1992) Through Currant (2026)

Driver	Newhouse 1992/93	CBO 2008	Smith/NF 2009	Moses 2013	Dieleman 2017	Currant 2026
Driver 1: Medical Technology & Innovation	Primary (~50%+ residual)	Quantified (~50% residual)	Quantified (27–48%)	Named (implicit in price)	Implicit (in price/intensity)	Primary (retained, refined)
Driver 2: Income Growth & Insurance Coverage	Quantified (enabling conditions)	Quantified (coverage ~10–13%)	Quantified (enabling; low elasticity)	Named (coverage effects)	Named (population effects)	Retained & Reframed (enabling only)
Driver 3: Price & Service Intensity	Implicit (in tech residual)	Implicit (in tech residual)	Implicit (in tech residual)	Quantified (~91% of cost increase)	Primary (>50% of growth)	Primary (elevated to proximate mechanism)
Driver 4: Provider Market Consolidation	—	—	—	Named (mentioned)	—	Added (structural determinant)
Driver 5: Population Health Burden	Named (disease burden)	Named (modest contributor)	Named (modest contributor)	Named (prevalence modest)	Named (~2.4% prevalence effect)	Retained & Expanded (obesity/BH as growth drivers)
Driver 6: Population Aging	Named (secondary)	Quantified (secondary, ~11%)	Quantified (secondary)	Named (<10% with demand)	Quantified (11.6%)	Retained & Qualified (modest, not dominant)
Driver 7: Administrative Costs	—	—	—	Named (admin inflation)	—	Added (level driver)
Driver 8: Labor & Workforce Costs	—	—	—	—	—	Added (distinct growth driver)

Note: — (not identified); Implicit (subsumed in residual or another category); Named (identified but not quantified); Quantified (identified with an explicit empirical estimate); Primary (identified as a central or dominant finding). Cells reflect the highest level of treatment each driver received in that framework.

Three additions are notable. Provider market consolidation (Driver 4) is elevated from a passing mention to a distinct driver of price formation. Administrative costs (Driver 7) are separated from prices and classified as a driver of spending levels rather than of growth. Labor and workforce costs (Driver 8)

appear as a distinct driver for the first time in this line of frameworks, reflecting wage pressures that pass through into premiums and payment rates over multiyear contract cycles. Income and insurance are retained but reframed as enabling conditions rather than independent engines of growth.

The central observation is that the Newhouse framework was not wrong — it correctly identified technology as the primary long-run driver and insurance as its enabling condition. What has changed is not that consolidation was previously unknown, but that this framework gives it a distinct role in explaining how technology and market power translate into prices. When markets are competitive, technology-driven prices are moderated by competition. When most metropolitan hospital markets are highly concentrated, consolidated providers can command prices well above competitive-market levels — beyond what the cost of the technology alone would justify.

This update reflects both a changed health care economy and better measurement. Category-level price decompositions, provider price transparency data at scale, and post-pandemic labor dynamics all postdate the earlier frameworks.

V. The Critical Distinction: Level Drivers versus Growth Drivers

Spending levels and spending growth are distinct phenomena with different causes and remedies — yet the frameworks reviewed here rarely explicitly separate them. Level drivers explain why U.S. health care costs so much at any given point in time. Administrative complexity, chronic disease burden, and the absolute magnitude of the aging population are primarily level phenomena. Reducing them generates one-time savings: meaningful, but not self-sustaining. These level drivers help explain why U.S. health care spending is high at a given point in time, but they do not by themselves explain why spending accelerates year after year. Within the disease burden category, however, two components — the obesity epidemic and expanding behavioral health demand — have growth-acceleration properties, as discussed under Driver 5.

Growth drivers explain why spending accelerates over time. Provider market consolidation, labor cost dynamics, and technology diffusion are recurring growth forces that generate year-over-year increases that compound over time; price and intensity (Driver 3) is the channel through which those forces appear in the spending data. None of these can be durably contained through one-time reforms alone. Addressing them requires ongoing policy intervention targeting the mechanisms that produce the acceleration, not just its symptoms.

The policy implications are significant. Administrative simplification could generate hundreds of billions in one-time savings — but it would not reduce the rate of spending growth if the underlying price-setting mechanisms and technology diffusion dynamics remain unchanged. Conversely, structural interventions in provider market competition, reference-based hospital pricing (anchoring payment rates to a fixed benchmark such as Medicare rather than negotiated market prices), and clinical labor supply would generate comparatively modest immediate savings while producing a durable long-term impact on the growth trajectory.

Table 2 maps this distinction: Table 2 classifies each driver by its dominant mode — level or growth — as a guide to policy priority-setting, not a rigid categorical claim. Most drivers operate on both dimensions; the classification reflects where each driver's impact is most consequential for policy, with implications developed in Section VII.

VI. When the Curve Bent: Three Slowdowns and What They Reveal

The preceding sections argue that a small set of structural drivers — technology diffusion, market consolidation, and labor cost dynamics — is responsible for the persistent upward trajectory of U.S. health care spending as a share of GDP. A natural challenge to this claim is the historical record itself: spending growth has not been monotonic. Three periods since 1970 have produced meaningful decelerations. If the drivers identified in this framework are truly dominant, why did spending growth slow at all — and why did those slowdowns end? Examining each episode, one reading consistent with the evidence is that each slowdown may have been driven by demand-side, cyclical, or technology-pipeline forces that temporarily suppressed the proximate measurement channel (Driver 3, Price and Service Intensity) without altering the underlying determinants — and that when the transient force dissipated, the long-run trajectory reasserted itself. This interpretation cannot be definitively confirmed from the historical record alone, but it is consistent with the pattern across all three episodes.

The HMO Era (1993–1999)

The most significant deceleration in the modern NHE record coincided with the rapid expansion of HMOs. Between 1993 and 1999, NHE as a share of GDP remained relatively stable after rising nearly continuously from 5.0 percent in 1960.⁴² Plans negotiated discounted rates, used utilization and care management, and, in some cases, used capitation to constrain both prices and volume, producing the slowest spending growth in more than three decades.⁴³

The gains were achieved through contractual leverage rather than durable changes in market structure. When consumer and provider backlash produced a shift toward looser preferred provider organization (PPO) arrangements after 1999, the bargaining advantage reverted to providers. State restrictions on managed care practices were associated with a large and significant increase in hospital spending.⁴⁴

The Great Recession and Its Aftermath (2008–2013)

The second major deceleration followed the 2008 financial crisis and persisted through approximately 2013. Chandra, Holmes, and Skinner (2013) — an influential analysis of this period — identify three primary causes: the rise of high-deductible health plans, which shifted cost exposure to consumers and reduced utilization; state-level Medicaid rate pressure, with the Medicaid-to-Medicare physician fee ratio declining from 72 percent to 66 percent between 2008 and 2011; and a slowdown in the diffusion of new medical technologies, particularly in the Medicare population, including a pharmaceutical patent cliff that reduced branded drug spending.⁴⁵ In their account, the slowdown was not the product of any single mechanism but of several reinforcing pressures operating at the same time.

Importantly, Chandra and colleagues conclude that neither the recession nor the ACA deserves primary credit: growth in the depths of the recession was nearly identical to growth before it, and the ACA's coverage expansion in 2014 coincided with a rebound in spending growth. The deceleration was suppressed by demand-side pressure and a temporary technology-pipeline gap, without altering the structural drivers; when conditions normalized, spending growth resumed.⁴⁵

The Post-Pandemic Denominator Effect (2021–2022)

The third episode is categorically different from the first two and warrants careful interpretation. Between 2021 and 2022, health spending's share of GDP declined from 18.2 percent to 17.3 percent —

an apparent reversal of the long-run trend. NHE grew 4.1 percent in 2022, slower than nominal GDP growth of 9.1 percent.⁴⁶ But this was not a health policy achievement. It was a denominator effect: post-pandemic economic recovery combined with elevated economy-wide inflation produced exceptional nominal GDP growth, while health care prices — largely set in advance through annual contracts — did not accelerate commensurately. CMS actuaries themselves noted that the decline in the health share of GDP was “partly influenced by rapid economywide inflation.”⁴⁶ By 2023, health spending growth had reaccelerated to 7.5 percent — outpacing nominal GDP growth of 6.1 percent — and the GDP share climbed back to 17.6 percent.³²

A Prospective Fourth Episode: The Legislated Slowdown (2026–28)?

The 2025–34 NHE projections describe what may become a fourth deceleration: national health spending growth is projected to slow to 6.3 percent in 2026 and remain subdued through 2028 as enhanced Marketplace subsidies expire and OBBBA’s Medicaid provisions phase in.⁴ Unlike the three historical episodes, this one is a legislated contraction of coverage. It operates on Driver 2 — an enabling condition — and on administered Medicaid prices, not on consolidation, technology diffusion, or labor supply. The framework, therefore, has a testable implication: the slowdown should prove transitory. The actuaries’ own numbers are consistent with that implication — they project the health share of GDP to resume its climb, reaching 19.1 percent by 2028 and 20.6 percent by 2034.⁴

What the Slowdowns Reveal

Taken together, the three episodes constitute a historical stress test of the framework. Each slowdown was driven by a different proximate mechanism — contractual payment reform, demand-side cost-sharing, and a macroeconomic denominator shift — yet each shared the same structural characteristic: it left the underlying determinants of spending growth intact. Market concentration continued to increase during all three periods. Technology diffusion resumed in each case once pipeline gaps closed. Administrative costs remained embedded in the spending base. Labor costs reflected ongoing demographic and training supply constraints that no managed care contract or recession could alter.

The historical record is at least consistent with the framework’s central claim: proximate interventions that do not engage structural drivers may be insufficient to permanently bend the cost curve. The managed care era demonstrated that contractual arrangements that directly engage provider pricing power can produce meaningful deceleration. The lesson is not that the curve cannot bend, but that bending it requires policies aimed at underlying causes: market structure, innovation incentives, and the workforce pipeline. Interventions that operate exclusively through demand-side pressure or exploit temporary macroeconomic conditions will produce slowdowns that the structural trajectory eventually absorbs.

VII. The Policy Alignment Gap: What Policymakers Are Focused On vs. What the Evidence Shows

A framework for understanding health care spending growth is only as useful as the policy actions it informs. This section maps the current federal policy agenda against the eight-driver taxonomy to identify where policy focus aligns with the evidence — and where it does not. The mapping suggests that

the drivers most important to sustained spending growth often receive less sustained policy attention than more visible but less consequential mechanisms.

The Alignment Gap: Where Policy Focus Meets the Evidence

Expert assessments agree that moderating spending growth requires engaging provider market competition, payment design, and administrative costs; the federal agenda is nonetheless organized primarily around drug prices, premium affordability, and pharmacy benefit manager (PBM) reform.^{47,48} Prescription drugs receive the most sustained political attention of any health care cost issue. Yet the NHE data are clear on sectoral accounting shares: retail prescription drugs account for approximately 8 percent of cumulative spending growth from 2005 to 2024, compared with hospitals' 32 percent.⁹ Within the drug category, 2024 price growth was just 1.4 percent, while prescription drug spending rose 7.9 percent overall.² The rapid expansion of GLP-1 receptor agonists appears to have contributed materially to that growth.¹⁹

Insurance affordability policy — premium tax credits, Medicaid eligibility, benefit design — operates primarily on Driver 2. Smith, Newhouse, and Freeland characterize coverage as an enabling condition rather than an independent growth engine.⁷ The CBO likewise assigns a modest share of long-run growth to insurance expansion.¹¹ Coverage policy remains critically important for access, equity, and household financial protection, but it is not the primary lever for bending the long-run spending curve.

Provider market consolidation receives far less sustained federal policy attention, even though the evidence links it directly to structural price-setting power.¹⁰ Site-neutral payment reform, which would equalize Medicare rates for identical services regardless of care setting, all-payer or reference-based hospital pricing frameworks, and stronger tools for addressing completed mergers map more directly to Driver 4 than the policy agenda currently does. No comprehensive federal framework for rate regulation or all-payer pricing — a system in which a single negotiated rate applies to all insurers for the same service — currently exists. The contrast with administered prices — rates set by regulation rather than negotiation — is telling: OBBA's caps on state-directed payments are projected to cut Medicaid hospital spending growth from 7.9 percent in 2025 to 3.1 percent in 2026⁴ — an illustrative example of how administered Medicaid payment rules can quickly shift hospital spending.

Administrative costs attract policy attention through transparency requirements and insurer accountability measures, but these are largely behavioral interventions at the margin of a level-dominant problem: economically significant and potentially reducible, yet not a primary engine of long-run acceleration. Labor and workforce costs receive almost no explicit policy attention at the federal level, despite becoming more salient in recent spending growth.^{47,48} The post-pandemic period made this driver especially visible.^{37,38} But the underlying workforce and wage-pass-through pressures are broader than the pandemic episode itself.^{40,41} The HRSA workforce projections indicate that nursing shortages are likely to persist in many regional markets for years.⁴⁰ Taken together, these indicators suggest a persistent capacity problem, but no major federal legislative response appears commensurate with its scale.

Illustrative Policy Implications

The framework does not imply that all drivers warrant equal attention. Policies aimed at long-run growth drivers deserve priority when the objective is to bend the curve durably; policies aimed at level-dominant drivers generate one-time savings or fiscal relief without changing the trajectory.

Driver 1 (technology and innovation diffusion) remains the most important long-run driver in the framework. The policy implication is not blunt spending suppression, because technology is a source of both health improvement and cost growth. The more relevant challenge is technology governance: payment and coverage policy should do a better job of distinguishing high-value adoption from lower-value or weakly targeted diffusion. GLP-1 therapies illustrate the tension between real clinical value and rapid, costly diffusion across large insured populations and expanding indications.

Drivers 4 (provider market consolidation) and 8 (labor and workforce costs) deserve particular attention because they are especially important to recent spending acceleration: they shape the prices and intensity that appear in the NHE accounts. Durable cost containment requires addressing provider market power and workforce bottlenecks at their source — through the payment and antitrust tools noted above, and through investment in clinical training capacity.

By contrast, not all drivers are plausible long-run levers for growth containment. Driver 3 (intensity) is the channel through which the growth drivers appear in the spending data; containing it for more than a short period requires acting on the consolidation, technology, and labor forces behind it. Driver 2 (coverage) acts as an enabling condition rather than an engine of growth. Driver 7 (administrative costs) and much of Drivers 5 (disease burden) and 6 (aging) operate primarily on the level of spending rather than as self-sustaining engines of acceleration. Reforms aimed at the level-dominant drivers may still matter greatly for affordability and budget pressure, but they are less likely, by themselves, to bend the curve durably.

Is High Spending Necessarily a Problem? The Pauly Provocation

Before concluding that the policy alignment gap is necessarily harmful, it is worth engaging a serious intellectual challenge to the premise. Pauly argues that increases in medical spending growth are not necessarily causes for alarm or reasons for strong policy action.⁴⁹ In the private sector, Pauly notes, employees who receive richer health benefits typically receive correspondingly smaller wage increases — a trade-off that reflects their preferences.⁴⁹ If workers and their employers willingly accept this trade, the resulting spending growth is not a market failure; it is a market outcome reflecting genuine valuations of health relative to other goods.⁴⁹

This is a serious argument that the health policy community often dismisses too quickly. The United States does offer access to leading-edge oncology, cardiac surgery, and pharmaceutical innovation that is unavailable or rationed in peer countries. Cutler, Rosen, and Vijan estimated that the cost per life-year gained from medical spending between 1960 and 2000 ranged from approximately \$31,600 (for younger cohorts) to \$84,700 (for those aged 65).⁵⁰ If Americans collectively prefer to devote a larger share of national income to health and a smaller share to other goods, then at least some spending growth may represent an efficient allocation rather than a policy failure.

The critical question, however, is the one Pauly's framework raises: when does observed spending growth reflect genuine societal preference, and when does it reflect market distortion? In Pauly's 1995 analysis, spending growth driven by real resource use (more care, better care) should be judged by the benefits it produces, whereas spending growth driven by input-price inflation is largely a distributional transfer that may not generate comparable health benefits.⁵¹ When hospitals in highly concentrated markets charge private insurers 267 percent of Medicare rates for hospital care, the excess represents a transfer rather than additional care or better care.²⁶ When hourly billing rates for contract travel nurses

run 213 percent above pre-pandemic levels — as they did at the January 2022 peak⁵² — the excess reflects a temporary labor-market imbalance rather than consumer valuation. These are not straightforward expressions of what Americans value; they are the outcomes of structural market failures.

Pauly's broader point remains valid, however: health care spending growth crowds out other forms of spending — military, education, housing, nutritional assistance, and Social Security — only if the resources being consumed generate less value than their alternative uses. When spending funds genuine medical breakthroughs that demonstrably reduce downstream costs, the investment is justified. When it reflects above-competitive prices extracted by consolidated hospital systems, it is not. The implication is that how spending grows matters as much as how much it grows. That is why a framework centered on spending drivers, rather than spending totals alone, is useful for policy.

VIII. Conclusion

U.S. health care spending is not accelerating primarily because Americans are getting older or sicker. It is accelerating because prices and service intensity are rising faster than the general economy, because provider market consolidation has weakened the competitive constraints that would otherwise moderate those prices, because a persistent shortage of clinical labor has elevated input costs in one of the most labor-intensive major industries in the economy, and because the mechanism Newhouse identified in 1992 — innovation financed by insurance, diffusing through expanding clinical indications — continues to operate at increasing scale.

The Newhouse framework was correct in its central claim. What the 2009 update could not have known was that the mechanism by which technology produces prices would be transformed by three decades of provider consolidation — or that a pandemic would expose the fragility of health care labor supply in ways that produce a distinct and durable growth driver. These are not refinements to the original framework; they are structural changes in the health care economy that any current framework must incorporate.

The revised picture is more complex than the Newhouse original, but it is also more actionable: provider market structure, payment policy, workforce supply, and technology governance are all within reach of deliberate policy choices. The cost of continued misalignment between the evidence and the policy agenda is not abstract — it is measured in the trillions of dollars that American households, employers, and governments will transfer to the health care system over the next decade under trajectories that evidence-informed policy could meaningfully alter. Understanding the drivers clearly is not an academic exercise. It is the prerequisite for making different choices.

References

1. Blumenthal D, Gumas ED, Shah A, Gunja MZ, Williams RD II. Mirror, Mirror 2024: A Portrait of the Failing U.S. Health System — Comparing Performance in 10 Nations. Commonwealth Fund. Published September 19, 2024. doi:10.26099/ta0g-zp66
2. Hartman M, Martin AB, Lassman D, Catlin A; National Health Expenditure Accounts Team. National health care spending increased 7.2 percent in 2024 as utilization remained elevated. Health Aff (Millwood). Published online January 14, 2026. doi:10.1377/hlthaff.2025.01683

3. Keehan SP, Madison AJ, Poisal JA, Cuckler GA, Smith SD, Sisko AM, et al. National health expenditure projections, 2024-33: despite insurance coverage declines, health to grow as share of GDP. *Health Aff (Millwood)*. 2025;44(7):776-787. doi:10.1377/hlthaff.2025.00545
4. Fiore JA, Sisko AM, Poisal JA, Smith SD, Cuckler GA, Madison AJ, et al.; National Health Expenditure Accounts Team. National health expenditure projections, 2025-34: strong utilization growth initially, legislative impacts later. *Health Aff (Millwood)*. 2026;45(7). doi:10.1377/hlthaff.2026.00642
5. Newhouse JP. Medical care costs: how much welfare loss? *J Econ Perspect*. 1992;6(3):3-21. doi:10.1257/jep.6.3.3
6. Newhouse JP. An iconoclastic view of health cost containment. *Health Aff (Millwood)*. 1993;12(suppl 1):152-171. doi:10.1377/hlthaff.12.suppl_1.152
7. Smith S, Newhouse JP, Freeland MS. Income, insurance, and technology: why does health spending outpace economic growth? *Health Aff (Millwood)*. 2009;28(5):1276-1284. doi:10.1377/hlthaff.28.5.1276
8. Dieleman JL, Squires E, Bui AL, et al. Factors associated with increases in US health care spending, 1996-2013. *JAMA*. 2017;318(17):1668-1678. doi:10.1001/jama.2017.15927
9. Godwin J, Levinson Z, Neuman T. Hospital spending accounted for 40% of the growth in national health spending between 2022 and 2024. KFF. Published February 11, 2026. Accessed April 10, 2026.
10. Levinson Z, Godwin J, Hulver S, Neuman T. Ten things to know about consolidation in health care provider markets. KFF. Published April 19, 2024. Accessed April 10, 2026.
<https://www.kff.org/health-costs/issue-brief/ten-things-to-know-about-consolidation-in-health-care-provider-markets/>
11. Congressional Budget Office. Technological Change and the Growth of Health Care Spending. CBO Publication No. 2764. January 2008.
12. Moses H III, Matheson DHM, Dorsey ER, George BP, Sadoff D, Yoshimura S. The anatomy of health care in the United States. *JAMA*. 2013;310(18):1947-1964. doi:10.1001/jama.2013.281425
13. White C. Health care spending growth: how different is the United States from the rest of the OECD? *Health Aff (Millwood)*. 2007;26(1):154-161. doi:10.1377/hlthaff.26.1.154
14. Anderson GF, Reinhardt UE, Hussey PS, Petrosyan V. It's the prices, stupid: why the United States is so different from other countries. *Health Aff (Millwood)*. 2003;22(3):89-105. doi:10.1377/hlthaff.22.3.89
15. Papanicolas I, Woskie LR, Jha AK. Health care spending in the United States and other high-income countries. *JAMA*. 2018;319(10):1024-1039. doi:10.1001/jama.2018.1150
16. Himmelstein DU, Campbell T, Woolhandler S. Health care administrative costs in the United States and Canada, 2017. *Ann Intern Med*. 2020;172(2):134-142. doi:10.7326/M19-2818
17. Fulton BD. Health care market concentration trends in the United States: evidence and policy responses. *Health Aff (Millwood)*. 2017;36(9):1530-1538. doi:10.1377/hlthaff.2017.0556
18. Cooper Z, Craig SV, Gaynor M, Van Reenen J. The price ain't right? Hospital prices and health spending on the privately insured. *Q J Econ*. 2019;134(1):51-107. doi:10.1093/qje/qjy020
19. Tsipas S, Khan T, Loustalot F, Myftari K, Wozniak G. Spending on glucagon-like peptide-1 receptor agonists among US adults. *JAMA Netw Open*. 2025;8(4):e252964. doi:10.1001/jamanetworkopen.2025.2964
20. Lubitz J, Greenberg LG, Gorina Y, Wartzman L, Gibson D. Three decades of health care use by the elderly, 1965-1998. *Health Aff (Millwood)*. 2001;20(2):19-32. doi:10.1377/hlthaff.20.2.19
21. Tolbert J, Bell C, Cox C, Ortaliza J, Rudowitz R. A look at ACA coverage through the Marketplaces and Medicaid expansion ahead of potential policy changes. KFF. Published January 15, 2025. Accessed April 10, 2026.

22. Cawley J, Moriya AS, Simon K. The impact of the macroeconomy on health insurance coverage: evidence from the Great Recession. NBER Working Paper No. 17600. National Bureau of Economic Research; November 2011. doi:10.3386/w17600
23. Tolbert J, Corallo B. An examination of Medicaid renewal outcomes and enrollment changes at the end of the unwinding. KFF. Published September 18, 2024. Accessed April 10, 2026.
24. Papanicolas I, Cylus J, Lorenzoni L. Cross-country comparisons in health price growth over time. *Health Serv Res.* 2024;59(6):e14295. doi:10.1111/1475-6773.14295
25. American Hospital Association. AHA Annual Survey Database, fiscal years 2005–2022. Accessed April 10, 2026.
26. Levinson Z, Hulver S, Godwin J, Neuman T. Key facts about hospitals. KFF. Published February 19, 2025. Accessed April 10, 2026.
27. Thorpe KE, Allen L, Joski P. The role of chronic disease, obesity, and improved treatment and detection in accounting for the rise in healthcare spending between 1987 and 2011. *Appl Health Econ Health Policy.* 2015;13(4):381-387. doi:10.1007/s40258-015-0164-7
28. Thorpe KE, Florence CS, Howard DH, Joski P. The impact of obesity on rising medical spending. *Health Aff (Millwood).* 2004;Suppl Web Exclusives:W4-480-W4-486. doi:10.1377/hlthaff.w4.480
29. Martin AB, Hartman M, Washington B, Catlin A; National Health Expenditure Accounts Team. National health expenditures in 2023: faster growth as insurance coverage and utilization increased. *Health Aff (Millwood).* 2025;44(1):12-22. doi:10.1377/hlthaff.2024.01375
30. OPEN MINDS. U.S. Behavioral Health Spending: A 2023 OPEN MINDS Market Intelligence Report. Published May 22, 2023. Accessed April 10, 2026.
31. Health Resources and Services Administration. State of the Behavioral Health Workforce, 2025. U.S. Department of Health and Human Services; December 2025. Accessed April 10, 2026.
32. Centers for Medicare & Medicaid Services. NHE Fact Sheet. Updated January 14, 2026. Accessed April 10, 2026.
33. Jones CH, Dolsten M. Healthcare on the brink: navigating the challenges of an aging society in the United States. *npj Aging.* 2024;10(1):22. doi:10.1038/s41514-024-00148-2
34. Centers for Medicare & Medicaid Services. National Health Expenditure Accounts (NHEA): Methodology Paper, 2024. January 2026.
35. Frank RG, Glied S. The NHE projections through 2034: growth assumptions, policy consequences. *Health Affairs Forefront.* Published June 24, 2026.
36. Baumol WJ. *The Cost Disease: Why Computers Get Cheaper and Health Care Doesn't.* New Haven (CT): Yale University Press; 2012.
37. American Hospital Association. America's Hospitals and Health Systems Continue to Face Escalating Operational Costs and Economic Pressures as They Care for Patients and Communities. *Costs of Caring series*; May 2024. Accessed April 10, 2026.
38. Matschke J, Pollard E. Labor shortages in the healthcare sector have eased, which may soften price pressures. *Economic Bulletin.* Federal Reserve Bank of Kansas City. August 16, 2024:1-4.
39. Bundick B, Smith AL, Van der Meer L. Rising labor costs in the healthcare sector are poised to buttress services inflation. *Charting the Economy.* Federal Reserve Bank of Kansas City. September 27, 2023. Accessed July 6, 2026.
40. Health Resources and Services Administration. State of the U.S. Health Care Workforce, 2025. U.S. Department of Health and Human Services; December 2025. Accessed April 10, 2026.

41. American Association of Colleges of Nursing. Nursing Shortage Fact Sheet. Updated May 2024. Accessed April 10, 2026.
42. Catlin AC, Cowan CA. History of Health Spending in the United States, 1960-2013. Centers for Medicare & Medicaid Services; November 19, 2015. Accessed April 10, 2026.
43. Levit KR, Lazenby HC, Sivarajan L. Health care spending in 1994: slowest in decades. *Health Aff (Millwood)*. 1996;15(2):130-144. doi:10.1377/hlthaff.15.2.130
44. Pinkovskiy ML. The impact of the managed care backlash on health care spending. *RAND J Econ*. 2020;51(1):59-108. doi:10.1111/1756-2171.12306
45. Chandra A, Holmes J, Skinner J. Is this time different? The slowdown in health care spending. *Brookings Pap Econ Act*. 2013;2013(2):261-323. doi:10.1353/eca.2013.0014
46. Hartman M, Martin AB, Espinosa N, Catlin A; National Health Expenditure Accounts Team. National health care spending in 2022: growth similar to prepandemic rates. *Health Aff (Millwood)*. 2024;43(1):6-17. doi:10.1377/hlthaff.2023.01360
47. Altman D. Health policy in 2026. *KFF Beyond the Data*. Published December 8, 2025. Accessed April 10, 2026.
48. Health Affairs Council on Health Care Spending and Value. A road map for action: recommendations of the Health Affairs Council on Health Care Spending and Value. *Health Affairs*. Published February 3, 2023. Accessed April 10, 2026.
49. Pauly MV. Should we be worried about high real medical spending growth in the United States? *Health Aff (Millwood)*. 2003;Suppl Web Exclusives:W3-15-W3-27. doi:10.1377/hlthaff.W3.15
50. Cutler DM, Rosen AB, Vijan S. The value of medical spending in the United States, 1960-2000. *N Engl J Med*. 2006;355(9):920-927. doi:10.1056/NEJMsa054744
51. Pauly MV. When does curbing health costs really help the economy? *Health Aff (Millwood)*. 1995;14(2):68-82. doi:10.1377/hlthaff.14.2.68
52. American Hospital Association. Massive Growth in Expenses and Rising Inflation Fuel Continued Financial Challenges for America's Hospitals and Health Systems. *Costs of Caring series*; April 2022. Accessed July 6, 2026.