PAST DUE

How medical debt is harming Americans and the solutions we need now



Acknowledgements

This work was supported by Arnold Ventures.

Working group members

Chuck Bell, Consumer Reports

Elisabeth R. Benjamin, Community Service Society of New York

Adam Fox, Colorado Consumer Health Initiative

Judith Garber, Lown Institute

Chris Goodman, University of South Carolina School of Medicine Columbia

Berneta Haynes, National Consumer Law Center

Patricia Kelmar, U.S. PIRG

Neale Mahoney, Stanford University

Quỳnh Chi Nguyễn, Community Catalyst

Eli Rushbanks, Dollar For

Vikas Saini, Lown Institute

Noelle Serino, Lown Institute

Marceline White, Economic Action Maryland Fund

Additional reviewers

Jessica Andersen, Rutgers University School of Public Health

Ge Bai, Johns Hopkins Bloomberg School of Public Health

Benedic Ippolito, American Enterprise Institute

Kody Kinsley, former Secretary of N.C. Department of Health and Human Services

Raymond Kluender, Harvard Business School

Maanasa Kona, Georgetown Center on Health Insurance Reform

Larry Levitt, KFF

Bethany Pray, Colorado Center on Law and Policy

Eva Stahl, Undue Medical Debt

Michelle Sternthal, Community Catalyst

Supporting organizations

Community Catalyst

Dollar For

Economic Action Maryland Fund

Colorado Consumer Health Initiative

Lown Institute staff

Judith Garber Senior Policy Analyst, project leader Noelle Serino Policy Analyst, project co-leader

Vikas Saini, MD President Carissa Fu Chief of Staff

Aaron Toleos VP of Communications

Executive Summary

Medical debt impacts tens of millions of Americans, contributing to financial harm and worse health. The epidemic of medical debt in the U.S. reflects systemic issues in healthcare, such as uneven coverage, high cost, and fragmentation. In a profit-driven healthcare system that pits payers and providers against each other, patients are often caught in the middle, exposing them to high out-of-pocket costs.

This report provides an overview of research on prevalence, impact, and drivers of medical debt, finishing with policy recommendations to address both the downstream problem of medical debt and the systemic issues behind the problem.

Medical debt is common and costly

At least 8% and as many as 41% of American adults are estimated to have medical debt, according to studies in recent years. The amount of medical debt owed is significant, with about half of Americans with debt owing \$2,000 or more. The total amount of medical debt in the U.S. was at least \$88 billion and as high as \$220 billion in 2021. While research shows a gradual downward trend in medical debt in recent years, rates of medical debt are still alarmingly high, undermining the financial security of tens of millions of Americans.

Most Americans with medical debt are white, employed, and have insurance

Given the demographic makeup of the U.S., survey data suggests that the "typical" American with medical debt is a middle-aged, white, working-class woman in the South who has health insurance.

However, certain groups of Americans make up a smaller proportion of the population but have a higher risk of medical debt. Studies show that Black, Hispanic, and Native Americans, uninsured Americans, and adults living with a disability have elevated rates of medical debt.

Medical debt is linked to financial insecurity and worse health

Medical debt is associated with a range of adverse financial and health outcomes, including food or housing insecurity, personal bankruptcy, increased credit card debt, delayed access to care, anxiety, and overall mortality. More research on whether or not these outcomes are caused by medical debt is needed.

Insurance coverage, high prices, and billing practices are key drivers of debt

Research on the causes of medical debt has identified numerous drivers, including:

- Inadequate insurance coverage with expensive cost sharing features such as high deductibles and copays;
- Lack of insurance coverage (particularly non-expansion of Medicaid)
- High prices for medical care, particularly for hospital care, emergency medical services, prescription drugs, and lab tests;
- Provider billing practices such as financial assistance availability and accessibility, financial assistance policy implementation, confusing bills, and difficult appeal processes; and
- Broader social and economic forces such as wage stagnation, income and wealth inequality, healthcare consolidation and financialization, and fraying of the social safety net.

Both targeted and system-wide solutions are needed to reduce the financial burden of healthcare

Policy experts, researchers, and community advocates have proposed a wide array of policies to mitigate the negative impacts of medical debt, including:

- Expanding health insurance coverage through single-payer or other universal coverage models, Medicaid expansion and protection of existing Medicaid coverage, a public insurance option, premium subsidies, and employer and individual mandates;
- Addressing systemic issues in healthcare that drive high out-of-pocket costs through policies such as price transparency, cost sharing limits, price controls, and payment models that incentivize value over volume.

- Hospital-focused regulations, such as financial assistance standards, requirements for patient screening for assistance, reporting requirements, and limits on collection actions;
- Insurance-focused regulations, such as restrictions on automatic claim denials, easier appeal processes, and minimum benefit requirements;
- Non-regulatory preventive solutions, such as industry best practices and consumer-focused information;
- Downstream solutions, such as medical debt relief and removing medical debt from credit reports.

Introduction

When Jeni Rae Peters, a single mother and mental health counselor in South Dakota, was diagnosed with breast cancer, she was relieved to be able to get the care she needed to save her life. But this care came at a high cost. Despite having health insurance, multiple surgeries, radiation, and chemotherapy left her with \$30,000 in debt and unending threats from debt collectors. She took on more back-to-back work shifts to pay down the bills and considered stopping after-school activities for her daughters. In 2022, she faced legal action from debt collectors. "My doctor saved my life, but my medical bills are stealing from my children's lives," said Peters.¹

Peters is one of the 100 million people in the U.S. whose lives are impacted by medical debt. Unlike other kinds of consumer debt, we don't choose to get sick, and seeking medical care is usually unavoidable. Yet families like Peters'—deep in medical debt through no fault of their own—face food and housing insecurity, poor credit, and worse mental and physical health. Even those with insurance coverage are vulnerable to medical debt due to cost sharing and out-of-network bills.

"My doctor saved my life, but my medical bills are stealing from my children's lives." — Jeni Rae Peters

Policymakers are increasingly recognizing the harm caused by medical debt and looking for ways to reduce this burden in the short term and prevent future debt in the long term. At the same time, an increased focus on healthcare waste at the federal government level may threaten access to healthcare coverage through public programs that currently protect people from debt.

The Lown Institute organized a group of researchers, policy experts, and patient advocates from ten organizations to develop a resource for policymakers and other stakeholders looking to reduce medical debt. The following report provides an overview of recent medical debt literature on the prevalence, risk factors, impact, drivers, and solutions related to medical debt. The report also contains insights gleaned from a convening on medical debt in May 2025 that brought together over 80 policymakers, industry leaders, and advocates in Washington, DC to discuss solutions for eliminating medical debt.²

¹ Levey at el., 2022

² Serino, 2025

The prevalence and impact of medical debt in the U.S.

How common is medical debt?

Studies have estimated that at least 8% of Americans owe medical debt, with some research showing as many as 41% of Americans have medical debt (see Table 1). The total amount of medical debt in the U.S. is estimated at \$88 billion to \$220 billion for 2021.³

How much do Americans owe in medical debt? The typical (median) amount of medical debt in 2021 was \$2,000, according to data from the U.S. Census Bureau's Survey of Income and Program Participation (SIPP).⁴ Polling data shows a similar result, with 44% of people owing \$2,500 or more.⁵ This is significant for the nearly 60% of Americans who cannot afford an emergency expense over \$1,000.⁶ Indeed, an expense of \$2,500 is more than one-third of the monthly household income for a typical American family.⁷

About one in eight of adults with medical debt owe more than \$10,000, a life-altering amount of debt for almost all American families. The 0.3% of Americans who owe this amount make up more than half of the country's total medical debt.⁸

Table 1: Research on medical debt prevalence

Source	Medical debt prevalence	Data source	Definition of medical debt	Year studied
Rakshit et al., 2024	8%	Survey of Income and Program Participation	Adults who reported owing over \$250 in unpaid medical bills	2021

³ According to 2021 SIPP data, \$220 billion (Rakshit et al., 2024a). According to 2021 credit reports, \$88 billion (Consumer Financial Protection Bureau, 2022).

⁴ Kendall & Murdock, 2024; Rakshit et al., 2024a

⁵ Lopes et al., 2022

⁶ Lee. 2025

⁷ Guzman & Kollar, 2024

⁸ Rakshit et al., 2024a; Lopes et al., 2022

Bernard et al., 2023	8.4%	Medical Expenditure Panel Survey	Non-elderly adults living in families with problematic medical debt	2018–19
Himmelstein et al., 2022	10.4%	Survey of Income and Program Participation	Adults over 15 reporting any money owed for medical bills not paid-in-full during the year	2019
Karpman et al., 2023	15.4%	Urban Institute's Health Reform Monitoring Survey (nationally representative sample)	Adults age 18-64 in families with past-due medical debt	2021
Kluender et al., 2021	17.8%	Credit reports for a nationally representative 10% panel of individuals	Credit tradelines with medical debt in collections	2020
Fronstin & Spiegel, 2022	22%	FINRA Foundation's National Financial Capability Study	Percent of respondents who reported having past-due medical bills	2021
Collins et al., 2023	32%	Commonwealt h Fund 2023 Health Care Affordability Survey (nationally representative sample of 7,873 adults)	Adults age 19–64 who had medical, dental, or other health care debt they were paying off over time	2023
Lopes et al., 2022	41%	Nationally representative	Adults reporting having past due bills, paying debt	2022

	survey of 2,375 adults	off over time, going into other debt (to bank, family member, etc) to pay medical bills, or putting bills on a credit card and paying off over time	
--	---------------------------	---	--

By some measures, the prevalence of medical debt has declined since 2013, corresponding to the passage of the Affordable Care Act, with evidence supporting a strong role of Medicaid expansion. When three national credit reporting agencies began excluding medical debts under \$500 in 2023, it caused the reported rates of medical debt on credit reports to decrease and the median amount of debt in collections to increase. However, this is an underestimate of the total amount of existing debt, most of which is not on credit reports. ¹⁰

Why do rates of medical debt vary across studies?

The prevalence of medical debt differs because of variation in data sources, years examined, and the way medical debt is defined. For example, studies may include only debt from medical services, or debt from dental care, long-term care, or other health services.

While credit reports have been a helpful source of national data, they underestimate medical debt because they only include debt in collections. Additionally, policy changes in several states and among three large credit rating agencies has significantly lessened the amount of medical debt on credit reports. Comparatively, some surveys have included medical debt that was paid through putting debt on a credit card, through a payment plan, or by borrowing from friends and family, to better understand patients' lived experience with medical debt.

In this section, we provide a range of estimates of medical debt prevalence, risk factors, and impact to account for these differences in measurement across studies.

⁹ Urban Institute, 2024a; Kluender et al., 2021; Kendall & Murdock, 2024

¹⁰ Urban Institute, 2024b

What are the consequences of medical debt?

Medical debt is associated with a range of adverse outcomes, including financial insecurity, stress, and poor health.

Medical debt and financial insecurity

Medical debt is associated with reduced ability to pay for necessities, such as food, utilities, and housing costs. Among adults with medical debt, 39–63% reported having to cut back spending on food, clothing, or basic household items to pay down debt. 11 According to Census data, 7.4 million additional Americans fall under the federal poverty level when taking into account medical expenses (a magnitude that outweighs the positive effects of SNAP and housing subsidies combined). 12 One study found that people who had newly acquired medical debt had a 70%–200% greater chance of becoming food insecure or housing insecure in the next two years compared to those who had not recently acquired debt. 13

Importantly, medical debt impacts certain demographic groups more than others. Among those with medical debt, lower and middle-income households and Black and Hispanic households report higher rates of cutting back spending on basic household items, using up savings, taking on an extra job, or skipping paying other bills in order to pay back medical debt, compared to wealthier and White Americans.¹⁴

Medical debt also contributes to personal bankruptcy and poor credit. Among a sample of people who filed for bankruptcy from 2013–2016, 59% reported that medical expenses contributed to their bankruptcy. Another survey found that 3% of respondents with medical debt had declared bankruptcy because of this debt. According to the Consumer Financial Protection Bureau (CFPB), there was a total of \$49 billion of medical debt on Americans' credit reports in January 2025, which makes it more difficult for these families to secure affordable mortgages and other benefits of credit access. ¹⁶

¹¹ Lopes et al., 2022; Collins et al., 2023

¹² Shrider, 2024

¹³ Himmelstein et al., 2022; Kluender et al., 2024

¹⁴ Lopes et al., 2022

¹⁵ Himmelstein et al., 2022

¹⁶ Consumer Financial Protection Bureau, 2025

Patient surveys have highlighted other ways medical debt can affect long-term financial health, such as leading people to use up their savings (37–48%), increasing credit card debt for non-medical purchases (41%), or delaying important investments like

homeownership or college education (18-28%).¹⁷ People with medical debt are more likely than those without medical debt to report indicators of financial distress such as not having a rainy day fund (nearly twice as likely), overdrawing their checking account (three times as likely), or using a payday loan (four times as likely).¹⁸ These additional barriers to upward mobility and asset-building can have a significant impact on generational wealth and hinder efforts to close racial wealth gaps.¹⁹

However, a randomized trial of medical debt relief found that relief of medical debt led to only a modest improvement in credit access and no effect on financial wellness. This may be because study participants with medical debt also had other debts which impacted financial health more.²⁰ More research on the potential

Challenges of measuring the consequences of medical debt

Medical debt is correlated with a range of adverse outcomes, but research showing causal effects of medical debt on these outcomes is limited. Medical debt can be a driver of these outcomes through financial burden and stress of collections; alternatively, people with low levels of savings and poor health are more likely to be impacted by medical debt.

Income is a compounding factor in this research, as income insecurity can cause medical debt as well as other adverse outcomes studied. Additionally, the negative financial impacts of medical debt specifically can be difficult to disaggregate, given that hospitalization can cause both medical debt and lost earnings. In this section, we focus primarily on associations between medical debt and outcomes.

causal effects of medical debt on these outcomes is needed.

Medical debt and health

Medical debt can lead people to avoid or delay medical care, which results in worse health outcomes. Data from the 2021 National Health Interview Survey found that adults with medical debt were more likely to delay a doctor's visit, test, treatment, or

¹⁷ Lopes et al., 2022; Collins et al., 2023

¹⁸ Winger et al., 2024

¹⁹ Haynes, 2022

²⁰ Kluender et al., 2024

prescription due to cost (59%) than those without debt (17%).²¹ Another survey found that 42% of Americans with current or past medical debt delayed medical care to avoid additional debt.²²

According to county health rankings, a higher share of the population with medical debt was associated with more days of poor health, more years of life lost, and higher mortality rates. Both the prevalence and median amount medical debt were associated with higher rates of leading causes of death, including cancer, heart disease, and suicide at the county level.²³ Financial hardship for cancer patients—also known as "financial toxicity"— is associated with negative effects on quality of life, pain levels, activity levels, and mental health.²⁴

Medical debt has been linked to worse mental health and anxiety, with one survey showing that one-third of adults with debt became more depressed and anxious because of this debt.²⁵ Adults who report having trouble paying medical bills also have more days of mental health symptoms.²⁶ However, the same randomized trial of medical debt relief found that removal of medical debt did not improve mental health.²⁷

Given the associations between medical debt and adverse outcomes, public health experts have proposed that medical debt be thought of as a social determinant of health, one that "reinforce[s] and perpetuate[s] inequities in health and inequities in economic promise and prosperity." ²⁸

Medical debt and the healthcare system

A trusting relationship between clinicians and patients is important for improving health equity and outcomes, but high healthcare costs and medical debt can erode this trust. Research from focus groups finds that the fear of debt can impact clinician-patient relationships in various ways: it forces clinicians to take on the role of financial counselor, takes up valuable time during visits to discuss costs, leads patients to avoid needed care, and leads to frustration on the part of both patients and clinicians.²⁹

²¹ Winger et al., 2024

²² American Cancer Society Cancer Action Network et al., 2023

²³ Han et al., 2024

²⁴ National Cancer Institute, 2024

²⁵ Silber-Marker, 2024; Lopes et al., 2022; Collins et al., 2023; American Cancer Society Cancer Action Network et al., 2023

²⁶ Wiltshire et al., 2020

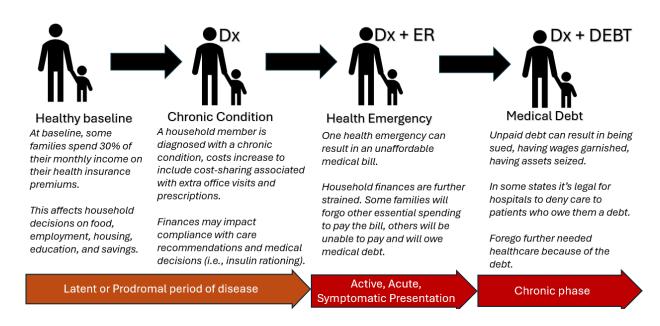
²⁷ Kluender et al., 2024

²⁸ Mendes de Leon & Griggs, 2021

²⁹ ABIM Foundation, 2024; Undue Medical Debt, 2025a

Medical debt also creates a tremendous amount of waste, as providers have to invest resources into pursuing payment from patients. While some health systems conduct thousands of lawsuits per year, the return on that effort usually represents a miniscule proportion of their revenue, making these aggressive collection efforts both cruel and wasteful.³⁰ Additionally, the impact of medical debt on avoidance of needed care creates inefficiencies, as delays of preventive or urgent care often lead to more costly emergency care down the line.

Figure 1: Case study of medical debt as a public health issue (Source: Jessica Andersen, Rutgers School of Public Health)



Who is at risk of medical debt?

The lack of universal comprehensive coverage and rising healthcare costs puts all Americans at potential risk of medical debt. While insurance coverage is important for reducing that risk, research shows that simply having insurance is not fully protective. One study found that patients with only part-year insurance had higher rates of medical debt compared to those without insurance the whole year. Taking into account the number of people in the U.S. with health insurance coverage, most Americans with medical debt (estimated 71%) are actually insured.

³⁰ Simmons-Duffin, 2019

³¹ Rakshit et al., 2024a

³² Lopes et al., 2022, ACS 5-year estimate., 2022

The "typical" American with medical debt is a middle-aged, white, working class woman who has health insurance.

Given the demographic makeup of the U.S., survey data suggests that the "typical" American with medical debt is a middle-aged, white, working-class woman in the South who has health insurance (age 30–49, household income \$40k, no college degree).

However, rates of medical debt differ based on financial factors such as income; demographic factors such as race, age, gender; geographic factors such as region and rural location; and differences in health status and insurance coverage. These differences

Structural racism and debt

An analysis of medical debt on credit reports by county from the Urban Institute found that Knoxville, Tennessee had one of the largest gaps in medical debt by race. White communities in Knox County had a 17 percent rate of medical debt in collections, while 40 percent of residents in communities of color had medical debt in collections.

These racial disparities can be tracked to a history of discriminatory policies. The majority-Black Morningside neighborhood of Knoxville, which has the highest share of medical debt in collections in the county, was subject to **redlining and urban renewal policies** that reinforced racial segregation during the 1950s and 1960s. This racial segregation perpetuated **disparities in access to health care**, **health outcomes**, **income**, **and wealth**, which in turn lead to higher rates of medical debt.

For example, one majority-Black zip code has the **highest share of medical debt in collections** in Knox County, the lowest insurance coverage, the lowest median income, and high prevalence of chronic diseases. (Source: Urban Institute, 2022)

reflect how systemic inequalities of race, sex, or class, as well as other social determinants of health—one's neighborhood and income, for example—can have a substantial impact on healthcare access.

While medical debt plagues the entire country, rates of medical debt are quite different among demographic groups. Studies have found that the following demographic groups

have elevated rates of medical debt: Middle and low-income individuals; women; Black, Hispanic/Latinx, and Native Americans; people living in Southern states and rural areas; uninsured or underinsured people; young adults or middle age adults; and adults with poor health or living with a disability (see table). More research is needed on the risk factors associated with demographic groups, controlling for collinearities, and exploring intersections of identities.

The amount of medical debt is not distributed evenly; a very small number of families with the greatest amount of debt make up an outsized proportion of the country's total debt. However, little is known about the demographic breakdown of the Americans with the greatest amount of debt.

Table 2: Research on medical debt risk factors
Studies listed in order of most to least recent data source

	Medical debt rate	
Gender	48% of women compared to 43% of men reported current or past medical debt. ³³ (2023)	
	48% of women say they have debt due to medical or dental bills, compared to 34% of men. ³⁴ (2022)	
	Women are more likely to report having medical debt (9%) than men (7%), on average. ³⁵ (2021)	
	28% of women report having past-due medical bills compared to 23% of men. ³⁶ (2021)	
	Twenty percent of women who had given birth in the past year reported having difficulty with medical bills, compared to 15% of women who had not given birth in the past year. ³⁷ (2019-2020)	
	9.3% of non-elderly women reported living in families with problematic medical debt, compared to 7.6% of men. ³⁸ (2018–19)	

³³ American Cancer Society Cancer Action Network et al., 2023

³⁴ Lopes et al., 2022

³⁵ Rakshit et al., 2024a

³⁶ Fronstin & Spiegel, 2022

³⁷ Cahn et al., 2023

³⁸ Bernard et al., 2023

Age	Adults age 30–49 reported having trouble paying medical bills at the highest rates (52%), followed by 50–64 (44%), 18–29 (40%), and 65+ (22%). ³⁹ (2022)	
	Adults age 35-49 have the highest rates of medical debt (11%) followed by 50-64 (10%), 18-34 (8%), 65-79 (6%) and 85+ (3%). 40 (2021)	
	Adults age 25-34 had the highest rates of past-due medical bills (31%), followed by age 35-44 (28%) and age 45-54 (26%). ⁴¹ (2021)	
Race/ethnicity	54% of Native American adults report current or past medical defollowed by 48% of White adults, 44% of Hispanic/Latino adults 44% of Black adults, and 27% of Asian American and Pacific Islander (AAPI) adults. 42 (2023)	
	Non-Hispanic Black Americans had the highest rates of medical debt (13%) followed by "other" race (10%), Hispanic (8%), White (7%) and Asian (3%) ⁴³ Non-Hispanic Asian adults had lower rates of problematic medical debt (2.9%), compared to Hispanic (7.9%), White (8.7%) or Black (9.9%). ⁴⁴ (2023)	
	Adults who live in communities where the majority of the population are people of color are more likely to have medical debt in collections reported on their credit reports. ⁴⁵ (2022)	
	56% of Black and 50% of Hispanic adults say they have debt due to medical or dental bills, compared to 37% of White adults. 46 (2022)	
	Black working-age Americans reported highest rates of past-due medical bills (30%), followed by those of in the "other" race category (27%), and white (26%). ⁴⁷ (2021)	

³⁹ Lopes et al., 2022

⁴⁰ Rakshit et al., 2024a

⁴¹ Fronstin & Spiegel, 2022

⁴² American Cancer Society Cancer Action Network et al., 2023

⁴³ The aggregation of "Asian" into a single category masks disparities within that category. It is likely that there are high levels of medical debt among certain Asian subgroups with lower incomes, less health insurance coverage, or worse overall health status. See Usha Lee McFarling, "Invisible in the data: Broad 'Asian American' category obscures health disparities." StatNews, Nov. 21. 2023.

⁴⁴ Bernard et al., 2023

⁴⁵ Santillo et al., 2022

⁴⁶ Lopes et al., 2022

⁴⁷ Fronstin & Spiegel, 2022

Nationality/ Immigration status	In Colorado (CO), zip codes where noncitizens make up more than 15 percent of the population had a 19% rate of medical debt in collections, compared to 11 percent in other CO communities. ⁴⁸ (2022)	
Income	44% of adults making under 200% of the federal poverty level (FPL) are paying off medical or dental bills over time, compared to 35% of those making 200–399% FPL and 18% of those making 400% FPL. ⁴⁹ (2023)	
	57% of households making less than \$40k had medical debt compared to 41% of those making \$40k-\$89.9k and 26% of those making \$90k and over. ⁵⁰ (2022)	
	11% of low-income adults (under 200% FPL) had medical debt, compared to 10% of those making 200-399% FPL, 7% of those making 400-599% FPL, and 4% of those making 600% FPL and up. 51 (2021)	
	23.5% of middle-income Americans (between 200% and 400% FPL) had medical debt, compared to 22% of low-income Americans and 12.9% of higher-income Americans. ⁵² (2020)	
	4.6% of non-elderly adults making 400% FPL or more had problematic medical debt, compared to more than 11% for adults making under 400% FPL. ⁵³ (2018-19)	
Insurance status	41% of uninsured adults were paying off debt from medical or dental care, compared to 33% of adults with marketplace plans, individual-market plans, or Medicare; 30% of adults with employer coverage, and 21% of adults with Medicaid. ⁵⁴ (2023)	
	62% of uninsured adults 18-64 report currently having medical debt compared to 44% of insured adults. ⁵⁵ (2022)	
	The top 10 counties with the highest rates of medical debt in collections also have high shares of people without health	

⁴⁸ Blavin & Braga, 2024 ⁴⁹ Collins et al., 2023

 ⁵⁰ Lopes et al, 2022
 51 Rakshit et al., 2024a

Murdock et al., 2023
 Bernard et al., 2023

 ⁵⁴ Collins et al., 2023
 55 Lopes et al., 2022

insurance coverage, in some cases double the uninsurance rate.⁵⁶ (2021)

14% of adults who were uninsured for part of the year had medical debt, compared to 11% of those who were uninsured the whole year, and 8% of those who were insured the whole year.⁵⁷ (2021)

Working age adults without insurance were more likely to report having past-due medical bills (35%) compared to those with insurance (24%). 58 (2021)

Among middle-income families, 22.5% of those with health insurance had medical debt, compared to 31% of those without health insurance.⁵⁹ (2020)

Health status/ disability

54% of adults with cancer and 53% of adults with a chronic illness reported current or past medical debt compared to 46% of total survey respondents.⁶⁰ (2023)

Among the 100 counties with the highest rate of medical debt in collections, the rate of having six or more chronic conditions was higher than the national rate (20.5 percent versus 17.7 nationally).⁶¹ (2021)

The probability of having medical debt in collections is much higher for individuals with 7 or more chronic conditions (32%) compared to those with no conditions (8%). The rate of medical debt increased with each added chronic condition. Among individuals with medical debt in collections, the estimated amount increased with the number of chronic conditions (\$784 for individuals with 0 conditions vs \$1252 for individuals with at least 7 conditions). ⁶² (2021)

20% of adults in poor health have medical debt compared to 14% in fair health, 10% in good health, and 5% in very good health. 13% of those with a disability have medical debt compared to 6% without a disability. (2021)

⁵⁶ Blavin et al., 2022

⁵⁷ Rakshit et al., 2024a

⁵⁸ Fronstin & Spiegel, 2022

⁵⁹ Murdock et al., 2023

⁶⁰ American Cancer Society Cancer Action Network et al., 2023

⁶¹ Blavin et al., 2022

⁶² Becker et al., 2022

⁶³ Rakshit et al., 2024a

	14.3% of those with a family member with diabetes had problematic medical debt compared to 7.7% of those without diabetes. 64 (2018–19)		
	, ,		
Geographic region	48% of adults in the South reported medical debt, compared to 41% of those in the Midwest, and 35% of those in the Northeast and West. ⁶⁵ (2022)		
	10% of adults in the South reported medical debt, compared to 9% in the Midwest, and 6% in the Northeast or West. ⁶⁶ (2021)		
	Among the 100 counties with the highest rate of medical debt in collections, 99 are in the South. ⁶⁷ (2021)		
	Among middle-income Americans, 28.1% of those in the South have medical debt, compared to 24.6% in the Midwest, 18.8% in the Northeast, and 17.8% in the West. ⁶⁸ (2020)		
	18.8% of people in the South had medical debt in collections, compared to 13% in the Midwest and 7% in the Northeast and West. (2020)		
Rural location	56% of those in rural areas report current or past medical debt compared to 46% of all survey respondents. ⁶⁹ (2023)		
	Rural counties have a higher proportion of people with medical debt in collections than urban counties (15.7% vs 14.8%). ⁷⁰ (2022)		
	11% of adults in non-metro areas had medical debt compared to 8% of those in metro areas. ⁷¹ (2021)		
Employment status	Among those age 18-64, non-workers who are disabled had the highest rates of past-due medical bills (36%), followed by workers (25%) and other non-workers (24%).		

 ⁶⁴ Bernard et al., 2023
 ⁶⁵ Lopes et al., 2022
 ⁶⁶ Rakshit et al., 2024a
 ⁶⁷ Blavin et al., 2022

⁶⁸ Murdock et al., 2023 ⁶⁹ Murdock et al., 2023

⁷⁰ Swendener et al., 2024 ⁷¹ Rakshit et al., 2024a

Drivers of medical debt

Research on the causes of medical debt has identified numerous drivers, including: 1) lack of insurance coverage and cost sharing features of insurance plans, such as high deductibles and coinsurance; 2) high prices for medical care, particularly for hospital care, emergency medical services, and lab tests; 3) provider billing practices such as financial assistance availability and policy implementation, and 4) broader social and economic forces such as healthcare financialization and fraying of the social safety net. Medical debt is a crisis in of itself, but is also a symptom of deeper systemic failures.



Figure 2: Medical debt as the "tip of the iceberg" (Source: Lown Institute)

Insurance coverage and benefit design

Studies show a strong relationship between insurance coverage and rates of medical debt, indicating that health insurance is protective against debt. As mentioned in the previous section, Americans who are uninsured for all or part of the year are much more likely to have medical debt than Americans that have full-year coverage.⁷² This pattern also holds on a broader geographic level. Medical debt was significantly reduced in states

⁷² Rakshit et al., 2024a; Lopes et al., 2022; Murdock et al., 2023; Himmelstein et al., 2022

that expanded Medicaid as part of the Affordable Care Act (ACA).⁷³ In 2021, 80% of counties with the greatest amount of medical debt were in non-expansion states. ⁷⁴

Insurer cost sharing

However, simply having insurance does not protect everyone from medical debt; the type of insurance plan and benefit design both matter. Nearly one quarter of working-age adults in the U.S. are underinsured, meaning they have health insurance, but this coverage does not provide affordable access to healthcare.⁷⁵

High premiums, deductibles, copays, coinsurance, and other cost sharing makes patients vulnerable to medical debt. The average annual worker contribution for premiums increased from \$4,823 in 2014 to \$6,296 in 2024, which cuts into workers' take-home pay. About half of households do not have enough savings to afford a typical employer plan deductible, and almost two in three households do not have enough to cover the higher end of deductibles.

People with short-term, limited-duration coverage, which is not subject to federal individual market consumer protections and requirements for comprehensive coverage, may face additional out-of-pocket costs. 78 Other non-insurance organizations such as "health care sharing ministries" are not subject to ACA consumer protections and may not cover medical expenses, which can lead to significant out-of-pocket costs for patients who may assume they have insurance coverage. 79

Table 3: Types of cost sharing

	Definition	Average \$ amount for employer-sponsored plans, 2024 ⁸⁰
Premium	Amount of money a person or family pays to a health insurance company each month to maintain their coverage.	Premium worker contributions in 2024 were \$1,368 for single coverage and \$6,296 for family coverage.

⁷³ Caswell & Waidmann, 2017; Callison & Walker, 2021

⁷⁴ Blavin et al., 2022

⁷⁵ Collins & Gupta, 2024

⁷⁶ KFF, 2024; Hughes et al., 2022

⁷⁷ Young et al., 2022

⁷⁸ Centers for Medicare & Medicaid Services, 2024a

⁷⁹ Volk et al., 2018

⁸⁰ KFF, 2024

Deductible	An amount that must be paid by enrollees before most services are covered by their health plan.	The average deductible for a single person with employer-sponsored insurance was \$1,787.
Copay	A fixed amount a patient pays for a service, such as a doctor's visit or hospital admission.	For physician office visits, the average copayments were \$26 for a primary care visit and \$42 for a visit to a specialist. The average copayment for hospital admission was \$343 and for outpatient surgery was \$216.
Coinsurance	A percentage of the covered amount a patient pays for a service, such as a doctor's visit or hospital admission.	The average coinsurance rate was 20% for both primary care and specialist visits. The average coinsurance rate for a hospital admission was 21%. These rates are often much higher in the individual insurance market. ⁸¹

Research bears out this pattern of underinsured Americans facing relatively high rates of medical debt. According to SIPP data, Americans with high-deductible health plans have higher rates of medical debt than any other group of insured Americans. More than 40% of insured adults report incurring medical debt because of either gaps in coverage or enrollment in insurance with inadequate coverage, largely attributable to high deductibles and cost sharing. A majority of insured adults (58%) say they have experienced a problem using their health insurance in the past 12 months—such as denied claims, provider network problems, and pre-authorization problems.

The result of these challenges is that the majority of medical debt actually comes from those with insurance, as does the majority of hospital bad debt.⁸⁵

Network adequacy and claim denials

⁸¹ Marketplace plans can have higher co-insurance rates, with Bronze plans averaging 40% coinsurance and Silver plans averaging 30%. (Healthcare.gov)

⁸² Himmelstein et al., 2022

⁸³ Lopes et al., 2022

⁸⁴ Pollitz et al., 2023

⁸⁵ Karpman & Long, 2015; Crowe, 2022

High deductibles and cost sharing aren't the only issues with insurance benefit design that may lead to debt. Insurance plans typically restrict covered services to providers who are in their insurance network. However, if these networks are too small, patients will not be able to access care or may face large out-of-pocket costs from going out of network. Unfortunately, small networks are becoming the norm for marketplace plans, with 29% of

How medical debt happens: Insurance gaps

Danielle Laskey of Seattle, Washington, and her family faced bills totaling \$135,000 when an in-network clinic for maternity care admitted her to an out-of-network hospital for her high-risk pregnancy. Doctors at the clinic had ordered her to go to the hospital because her health and her child's health were at serious risk, but because she was not admitted through the emergency department, her insurance did not consider this "emergency" care, which would have been covered under the No Surprises Act. (Source: Meyer, 2023)

market place participants having only narrow networks available. The same is true for only 6% of employer–sponsored in surance plans. 86

Insurance claim denials are common and may contribute to medical debt. In a survey of adults under age 65, 17% said they were denied insurance coverage for care recommended by a doctor. Marketplace insurance plans denied 20% of claims in 2023 on average, although this rate ranged from 1% to 54% depending on the insurer and state. There is also evidence that claims denials for preventive care in ACA plans are more prevalent for low-income patients, patients with a high school degree or less, and patients from minoritized racial and ethnic groups. An upcoming analysis of post-service claim denials in New York State found that most denials were for administrative reasons, such as coverage timing or duplicative claims, or were reported without a specific rationale. Only 1% of denials were for purported lack of medical necessity or experimental nature of a service.

Among care denials for marketplace plans, fewer than 1% of all denied claims were appealed in 2024; appeals were successful in nearly half of these cases. ⁹⁰ Use of artificial intelligence tools to automatically deny claims is of particular concern for Medicare Advantage plans. ⁹¹ While claim denials are common and many cases show how denials

⁸⁶ Pollitz, 2022

⁸⁷ Gupta et al., 2024

⁸⁸ Hoagland et al., 2024

⁸⁹ Personal communication, Michael Gartner, Persius, 2025

⁹⁰ Lo et al., 2025

⁹¹ Mello & Rose, 2024

can lead to medical debt⁹², more research is required on the impact of claim denials on medical debt more broadly.

Cost of diagnostic tests, emergency care, and other health services

Which health care sectors contribute the most to medical debt in America? Research shows that diagnostic tests, emergency care, hospitalizations, doctor visits, and dental care are the most common contributors of debt.⁹³

Diagnostic tests (e.g., labs and imaging) are a leading cause of medical debt in patient surveys, contributing to medical debt for 23%–59% of people with debt. Heading to medical debt for 38%–50% of patients with debt. Hospital admission led to medical debt for 28%–35% of patients with debt, according to survey data. Data from the SIPP also finds that people who were newly hospitalized were about three times as likely to experience medical debt compared to those who were not. Doctor visits contributed to debt for 51%–56% of patients with medical debt (which may be driven in part by facility fees at hospitals-owned facilities) and dental care contributed for 19%– 49%.

Other types of healthcare such as prescription drug costs, outpatient surgery, mental health care, ambulance services, and childbirth also contribute to debt, with 12%–30% of patients citing these as contributors to medical debt.⁹⁸

Hospital costs and other market factors

The role of hospitals (especially large hospital systems) in medical debt is worth careful attention given their central role in healthcare delivery and spending. Nearly one-third of spending within the US healthcare system happens through hospitals.⁹⁹

⁹² Work, 2024

 $^{^{93}}$ For the purposes of this paper, we are looking only at acute services, not long-term care and home health, although these also contribute to debt.

⁹⁴ In patient surveys cited, patients could choose multiple contributors to medical debt, so totals add up to more than 100%.

⁹⁵ Lopes et al., 2022; Schulz, 2023; Sutton & Ben-Porath, 2024

⁹⁶ Himmelstein et al., 2022

⁹⁷ Lopes et al., 2022; Schulz, 2023; Sutton & Ben-Porath, 2024

⁹⁸ Lopes et al., 2022; Schulz, 2023

⁹⁹ Martin et al., 2024

High charges and prices

Hospitals and hospital systems provide many of the services that contribute to debt, such as emergency department care, diagnostic tests, and physician visits. As a result, about three-quarters of those with medical debt owe at least some to hospitals, and 28% owe all of their debt to hospitals. One study finds that debt owed to hospitals was much greater than medical debt owed to other providers; among Americans that owed medical debt to hospitals, nearly half owe more than \$2,500, compared to just 16% of Americans that have debt from non-hospital providers only. One study finds that debt owed to just 16% of Americans that have debt from non-hospital providers only.

The high cost of hospital care for patients is an important contributor to medical debt. What patients pay for healthcare depends on what hospitals initially charge to insurers (the "charge") and the eventual price agreed on by insurers and providers in their negotiations (the "price). On average, the amount that hospitals initially charge to insurers or uninsured patients is 3–4 times greater than what it costs hospitals to provide that care, with some hospitals charging over ten times their cost of care. At the higher end, KFF Health News' regular "Bill of the Month" column cites examples of outrageous hospital charges, such as a \$19,000 colonoscopy or a \$445 nasal swab. Uninsured patients (who have no insurer negotiating the price down) may face pressure to pay these wildly inflated amounts.

Prices negotiated with commercial insurers are also typically high, 2–3 times higher than Medicare, depending on the specialty.¹⁰⁴ In 2023, the growth in what patients and insurers pay for hospital care outpaced growth for other medical services as well as for consumer goods.¹⁰⁵

To make the situation even more complicated, patients rarely know what their out-of-pocket cost for a service will be before they receive care. Price transparency laws implemented in 2021 were designed to improve the "shoppability" of health care services; however, relatively low compliance and accuracy has impeded the success of this measure. In many cases, the estimated cost that hospitals provide to patients are inconsistent or inaccurate, leading to unexpected costs. While the No Surprises Act created a requirement for providers to offer a "good faith estimate" for patients not using

¹⁰⁰ Karpman, 2023

¹⁰¹ Karpman, 2023

¹⁰² Bai & Anderson, 2015; National Nurses United, 2020

¹⁰³ KFF Health News, 2025

¹⁰⁴ Meiselbach et al., 2023; McMorrow et al., 2021; Congressional Budget Office, 2022

¹⁰⁵ Rakshit et al., 2024b; Martin et al., 2024

¹⁰⁶ PatientRightsAdvocate.org, 2024

¹⁰⁷ Murphy, 2025; Thomas et al., 2023

insurance (and ensures the final cost is no more than \$400 above the estimate), no such requirements exist for patients with insurance. 108

High cost of care worsens medical debt indirectly as well, by suppressing wages that would allow workers to save more in case of medical emergencies. A 2020 RAND study found that hospital mergers lead to increased prices, higher spending among patients with private insurance, and reduced wages. Another 2024 study found that the average family lost \$125,000 in earnings over a 30-year time period due to premium growth, nearly 5% of total earnings.

Defining prices, charges, and costs (oh my!)

Cost: The amount paid for health services. For patients this refers to out-of-pocket costs. For providers this refers to the expense incurred to deliver healthcare.

Charge: The amount asked by a provider for a health good or service. Usually refers to before insurer negotiations with providers. Also called a "chargemaster price."

Price: The final amount paid for a service after negotiations with insurance companies. Also called "insurer-negotiated price" or "allowed amount."

Source: Arora, 2015

Additional fees

In addition to high overall charges, hospital bills may also be inflated through facility fees. Hospitals and hospital-owned outpatient facilities or doctors offices often tack on "facility fees" to the bill, which can be hundreds of dollars. ¹¹¹ A Colorado report found that facility fees at hospital-owned facilities for just 25 services added \$50 million more in charges per year compared to sites not owned by hospitals and a report from Connecticut found that facility fees generated over \$400 million in 2021 in the state. ¹¹²

Upcoding—when providers bill at a higher level of complexity or severity than appropriate—also contributes to higher costs. One study found that 41% more discharges were coded at the highest level of severity in 2019 compared to 2011, costing Medicare and Medicaid an extra \$6.4 billion.¹¹³

¹⁰⁸ Centers for Medicare & Medicaid Services, 2024b

¹⁰⁹ Arnold & Whaley, 2022

¹¹⁰ Hager et al., 2024

¹¹¹ Vollers, 2024; Weber, 2021

¹¹² Colorado Department of Health Care Policy & Financing, 2024b; Guarino, 2024

¹¹³ Crespin et al., 2024

Hospital consolidation

Market consolidation likely contributes to higher prices and medical debt. One study found an association between hospital consolidation from 2012-2022 and medical debt in collections on a county level. Another study of hospital closures from 2014-2018 found a 6%-8% rise in market concentration and subsequent increase in medical debt. Hospital consolidation is associated with greater market power and higher prices, indicating that higher prices through consolidation leads to more medical debt. There is little evidence to suggest that consolidation improves quality of care.

The chicken and the egg problem

Is medical debt a problem of low insurance coverage or high costs? If everyone in the U.S. had insurance coverage with no cost-sharing, no one would go into debt for medical care, no matter how much it cost. On the other hand, if medical care was affordable and prices were transparent, far fewer people would go into debt even with inadequate coverage (and cost-sharing in insurance plans would not increase so rapidly).

While comprehensive coverage is necessary, higher costs of care threaten the sustainability of these plans, as insurers will keep raising premiums and passing costs along to patients. Both of these are essential issues that need to be solved, but we should not allow the lack of action on one item preclude action on another.

However, other studies do not find higher rates of medical debt where hospitals are more profitable, as one might expect if higher prices caused more debt.¹¹⁸ This may be because hospitals are less profitable in areas with higher rates of uninsurance, which tend to have higher rates of medical debt.¹¹⁹ More research is needed on the relationship between hospital price markups and medical debt.

¹¹⁴ Johnson et al., 2024

¹¹⁵ Andre et al., 2023

¹¹⁶ Cooper et al., 2019

¹¹⁷ Beaulieu et al., 2020; Levins, 2023

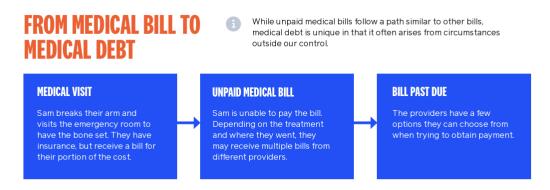
¹¹⁸ Gangopadhyaya et al., 2022

¹¹⁹ Bai & Anderson, 2015; Eliason et al., 2022

Hospital billing practices and financial assistance

Hospitals can impact medical debt not only by the prices they charge for care, but also how they bill patients and offer financial assistance. Hospitals generally establish a set of billing and collection practices to define the creation and collection of bills (known as "revenue cycle management").

Figure 3: From Medical Bill to Medical Debt (Undue Medical Debt, 2024) 120



PROVIDER'S STEPS



¹²⁰ Undue Medical Debt, 2024

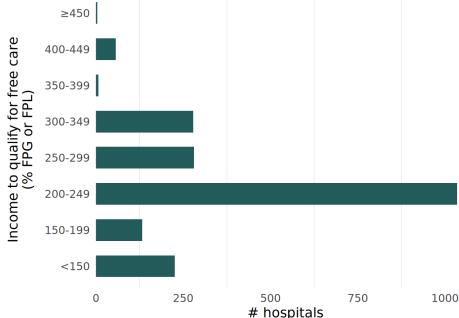
Variation in financial assistance policies

Most hospitals are nonprofit organizations, and these hospitals are required to develop and publicize a charity care policy, also known as a financial assistance policy (FAP). These FAPs generally include eligibility criteria for free and discounted care and a list of eligible services. While federal policy sets some ground rules for FAPs, there is no federal minimum hospitals must spend on these discounts, nor is there standardized eligibility criteria. Hospitals, unless required by state law, do not have to report how many patients applied for or received assistance.

The lack of national standards means that hospitals vary in their financial assistance eligibility rules and criteria. Financial assistance policy data from the Lown Institute shows that hospitals most frequently offer free care to patients making 200-249% of the federal poverty guidelines (FPG); however, many hospitals offer free care to those making double that amount, while hundreds of others restrict free care to those at or under the federal poverty level. In some cases, hospitals in the same cities have very different income eligibility levels for assistance.¹²¹



Figure 4: Breakdown of hospital free care thresholds (Lown Institute, 2025a)¹²²



¹²¹ Garber, 2024; Messac et al., 2024; Goodman et al., 2020

¹²² Lown Institute, 2025a

One study of a sample of large hospitals showed only minimal increases in eligibility thresholds over four years and no change in the median threshold. Additionally, hospitals appear to be adding complexity to their FAPs or taking out information on billing and collection practices from their policies, which may reduce transparency and make assistance harder for patients to access.¹²³

Many hospitals implement additional restrictions on eligibility for financial assistance, based on patients' assets, residency, or insurance status.¹²⁴ These can include restricting

assistance to patients living in a certain county or state, restrictions based on immigration status, restriction of assistance to those under a certain asset threshold or to only patients without insurance. Hospitals sometimes include idiosyncratic restrictions on care such as excluding self-harm or eating disorders from conditions eligible for assistance, excluding elective care entirely, or charging copays or fees for patients eligible for free care.¹²⁵

Hospitals often exclude certain doctors or lines of service from their FAPs, likely due to outside contracts with these clinicians. An analysis of hospital FAPs finds that physician services for emergency department, radiology, anesthesia, and pathology were commonly excluded from eligibility. 126

Financial Assistance: A Tale of Two Hospitals

The Lown Institute's analysis of hospital financial assistance policies shows that even similar types of hospitals in the same city may have very different policies around free care eligibility. For example, in Boston, one large academic medical center (AMC) offers free care for patients making up to 150% FPG (about \$40,000 for a family of three), while another large AMC about a ten minute walk away offers free care for patients making up to 400% FPG (\$106,600 for a family of three). Similar examples exist in New York City, Los Angeles, San Francisco, and many other cities. (Source: Lown Institute, 2025a)

Hospital FAPs can be a lifeline for low-income patients, but wide variation in hospital policies leads to inconsistent access to financial support and increases confusion for low-income patients trying to receive care.

Barriers to patients receiving financial assistance

¹²³ Goodman et al., 2020; Goodman & Chalmers, 2024

¹²⁴ Messac et al., 2024; Goodman et al., 2020

¹²⁵ Goodman et al., 2020; Lown Institute, 2025a

¹²⁶ Lown Institute, 2025a

Perhaps more important than hospitals' policies around financial assistance is their success in making assistance widely available in practice. It doesn't matter how many patients are eligible for assistance if none of them know about the policy and don't receive assistance. Despite Internal Revenue Service (IRS) regulations requiring hospitals to make their FAPs accessible in multiple formats, patients who would be eligible for assistance frequently fall through the cracks.

Recent studies have estimated that a large number of eligible patients do not receive financial assistance for hospital care. One study found that 38% of households under 200% FPL had at least one medical collection on their credit report in December 2018, although most of these patients would be eligible for financial assistance. A KFF analysis of 1,651 hospitals' tax filings found that hospitals sent \$2.7 billion to bad debt that could have gone to eligible patients. Nationwide, that amounts to \$14 billion for all hospitals, according to Dollar For. Dollar For.

"They were asking about assets. 'Do you have a 401(k) or retirement, and how much is in that?' I was sort of that feeling like, 'Do I really want to put all of that information into this form and give it to them?" — Respondent, Dollar For survey, 2024

A Maryland study found that approximately 60% of unpaid charges attributable to individuals with a household income under 200% FPG is reported by hospitals as bad debt, rather than free care. ¹²⁹ In Colorado, which has additional state law for hospital financial assistance requirements, a compliance review in which hospitals were called about financial aid options found that "only 11% resulted in a successful outcome in which the caller was able to get helpful and correct information about discounted care at the hospital." For Spanish speakers, the success rate was only 4.5%. ¹³⁰

Barriers to assistance such as awareness of the FAP, complexity of the application, and staff policies to push payment plans or medical credit cards over financial assistance may all play a role. A Dollar For survey of people facing an unaffordable medical bill found that 51% did not apply for financial assistance; among these respondents, 65% did not know that financial assistance existed. Nearly one-quarter of those who applied found the application somewhat or very hard to complete. Some did not complete the application because it asked for detailed and sensitive information on finances. Fourteen

¹²⁷ Carare et al., 2022

¹²⁸ Rau, 2019: Dollar For, 2024

¹²⁹ Maryland Health Services Cost Review Commission, 2021

¹³⁰ Colorado Consumer Health Initiative, 2024

¹³¹ Adams et al., 2022; Dollar For, 2024; Silver-Greenberg & Thomas, 2022a; Goodman et al., 2020

percent of people who applied for assistance never received a response from the hospital.¹³²

How medical debt happens: Barriers to financial assistance

Sierra Dale of Rochester, MN, was sued in 2021 by the hospital where she worked as a desk operations specialist for the outstanding bills she owed. She had given birth at the hospital, and although she was covered by hospital's employee insurance plan, she still owed \$11,875.

While her income qualified her for financial assistance, she did not hear back from the hospital after applying. Because Dale didn't go to court, her wages will be garnished until the debt is paid.

Source: Work, 2022

Misconceptions around hospital financial assistance and stigma for receiving "charity" are also barriers to access. Among patients who did not apply for financial assistance, 25% thought they would not qualify and 10% did not apply because they were ashamed.¹³³ Reframing financial assistance as a legal obligation for nonprofits rather than "charity" is an important and simple change that may improve access.

Some states have mandated that hospitals screen patients for financial assistance eligibility (typically uninsured patients or those owing a certain amount) based on their income or other characteristics (e.g., homelessness, eligibility for other means-tested government programs) and apply any discounts automatically, a process known as "presumptive eligibility." Many other hospitals have adopted presumptive eligibility processes

on their own, often using predictive analytics or artificial intelligence to screen patients.134

These tools have the potential to reduce medical debt by identifying eligible patients and reducing their costs automatically. However, many hospitals use these tools to instead assess patients' "propensity to pay" to collect more from patients rather than offer assistance.¹³⁵ This "black box" process of making patients eligible for assistance or vulnerable for collections reduces transparency and may make appeals more difficult.

Educational efforts from hospitals to inform eligible patients about financial assistance through conversations with staff and posting notices, can also increase the likelihood that patients will apply. 136

¹³² Dollar For, 2024

¹³³ Dollar For, 2024

¹³⁴ Goodman et al., 2020

¹³⁵ Goodman & Chalmers, 2024

¹³⁶ Dollar For, 2024

Hospital barriers to improving financial assistance

At the Lown Institute conference on Medical Debt in May 2025, hospital leaders pointed out regulatory and administrative barriers they face when trying to improve access to financial assistance. These include:

- Contracts with insurers that prohibit hospitals from covering patient copays or deductibles under financial assistance
- CMS requirements for hospitals to attempt to collect payment from Medicare patients in order to get reimbursed for bad debt
- Fear of legal action or government audit under anti-kickback statutes
- Administrative difficulties in assessing patient income

Source: Lown Institute, 2025c

Billing and collection practices

The way in which hospitals send bills to patients and collect payment can lead to medical debt. Here are a few examples of common billing and collection practices that may exacerbate medical debt:

- Collecting payment upfront. As many as 75% of hospitals demand upfront payment for scheduled services prior to billing insurance, according to a 2018 estimate by the Healthcare Financial Management Association. These upfront payment requirements may not accurately take into account whether patients are eligible for financial assistance or if they are subject to cost sharing given their insurance coverage, which could lead to unnecessary financial burden.
- Confusing or erroneous bills. In 2023, the CFPB responded to 7,400 consumer complaints about attempts to collect medical debt, generally because of mistaken bills or inadequate information. The CFPB noted many cases in which patients had been approved for financial assistance and their bill was written off as charity care, yet they were still pursued by collectors.
 - Another study found that one in five Americans were on the receiving end of medical bills that they felt were either erroneous or that they could not afford.¹³⁸ Some of the most common errors were charges for services that

¹³⁷ Rosato, 2018

¹³⁸ Duffy et al., 2024

were never provided and data entry mistakes like duplicate charges and date and length of stay errors.¹³⁹ Some of these errors are easily avoidable and could be resolved by making billing representatives available to patients as well as providing more formal education and training to those charged with billing and coding.¹⁴⁰

• Delayed billing and expedited escalation to collection. In some cases, patients have bills sent to collections before they have sufficient time to dispute the bill or apply for financial assistance. State law varies on how long a provider has to issue a bill for care, ranging from several months to several years. About 25% of hospitals sell patient debt to collectors¹⁴¹, with collector action on unpaid bills occurring anywhere from one to six months or more after a bill is sent to the patient.¹⁴² Short windows for resolving unpaid bills before collections can exacerbate the financial burden of medical debt.

Extraordinary collection actions

Hospitals vary in how aggressively they push patients to pay and how aggressively they seek to collect. Over time, hospitals have been increasingly aggressive with "extraordinary collection actions" (ECAs) such as wage garnishments, lawsuits, and placing liens on property, although states have begun to curtail these actions. Nonprofit hospitals are allowed to conduct ECAs, as long as they "make reasonable efforts to determine whether an individual is eligible for assistance" before engaging in these actions. ¹⁴³

Hospitals differ in which ECAs they allow and how clearly they make their policies known. Lown Institute data from hospital collections policies shows that most hospitals allow at least one ECA according to their policy, with legal actions and reporting debt to credit agencies as the most commonly allowed ECAs. However, more than one-third of hospitals did not have any information online about allowed ECAs. Only 4% of hospitals disallowed all ECAs in their online policy.

¹³⁹ Medine, 2022

¹⁴⁰ Mathews & Makary, 2020; Burks et al., 2022

¹⁴¹ Levey, 2022

¹⁴² National Consumer Law Center, 2025

¹⁴³ Internal Revenue Service, 2024

Broader economic and social forces

Current trends in American economics and politics contribute to the prevalence of medical debt. As the cost of healthcare increased, the typical American household income and savings have not kept pace, making it difficult for families to weather these costs without going into debt. From 1979 to 2023, wages for the bottom 90% of workers grew 44%; healthcare spending per capita increased by 440% during that time.¹⁴⁴

Researchers have noted that these trends are connected; as healthcare costs increase, employers that offer healthcare benefits offer lower wages than they would have had healthcare costs remained stable. On average, workers are losing out on \$9,000 in additional annual wages due to rising healthcare costs and increased cost sharing in employer-based insurance.¹⁴⁵

Among working-age households in 2019, median liquid assets were about \$3,000 for one person and about \$6,700 for households with more than one person. That's far less than the maximum out-of-pocket limits in private plans (\$9,200 for one person and \$18,400 for families for 2025). More than one-quarter of Americans have savings below \$1,000, making them especially vulnerable to medical debt from unexpected healthcare costs. While CARES Act benefits and additional child tax credits helped keep many families solvent during the pandemic, the end of the public health emergency and reductions in other benefits like SNAP may reduce families' financial security and could increase medical debt. 148

Researchers have also noted the increasing financialization— the influence of financial markets, motives, institutions, and elites— in U.S. healthcare, which can greatly impact hospital behavior. Not only have many hospital systems created robust investment wings, some have even built their own private equity funds. Pressure from bond rating agencies to maintain high credit ratings contributes to nonprofit hospitals prioritizing revenue. 151

The shift toward finance is also reflected on hospital boards; the nation's most prestigious nonprofit hospitals have more board members with a finance background

¹⁴⁴ Gould & Kandra, 2024; McGough et al., 2024

¹⁴⁵ Miller, 2024

¹⁴⁶ Young et al., 2022; Healthcare.gov, 2025

¹⁴⁷ Adam & Benninger, 2024

¹⁴⁸ Center on Budget and Policy Priorities, 2024

¹⁴⁹ Bruch et al., 2024

¹⁵⁰ Zhang, 2021

¹⁵¹ Taylor et al., 2024

than medical.¹⁵² The prioritization of profits in the hospital industry may drive leadership decisions such as suing patients to collect debt, denying appointments to patients with debt, hounding patients for payment who are eligible for assistance, and hawking medical credit cards.¹⁵³

¹⁵² Gondi et al., 2023

¹⁵³ Silver-Greenberg & Thomas, 2022a; Levey, 2023a; Levey, 2023b; Kliff & Silver-Greenberg, 2023

| Policies for addressing medical debt

Policy experts, researchers, and community advocates point to a wide array of policies to mitigate the negative impacts of medical debt, including **hospital-focused** solutions, **payer-focused** solutions, **non-regulatory** solutions, **downstream solutions** (reducing the impact of existing debt), and **addressing the systemic issues** in healthcare that drive medical debt.

Below, we've included examples of proposed policies in these categories, as well as supporting evidence where these policies have been implemented.

Hospital regulations

The cost of hospital care and hospital billing practices are a major driver of medical debt. Policies to standardize financial assistance policies, implement reporting requirements, limit certain collection actions, improve take-up of financial assistance through patient screening, and increase enforcement of existing regulations have been implemented in several states. Below we refer to examples of these policies, evidence of support, and limitations. See the *Resources* section for a more extensive list of hospital regulations on a state level.

Financial assistance eligibility requirements

Nonprofit hospitals are required to have a financial assistance policy and make this policy widely available, both in person and online. Hospitals also must report the total amount of spending on financial assistance each year on their Form 990. However, there is no federally required eligibility standard for hospitals to adopt, nor is there a minimum amount or rate hospitals must spend on financial assistance. Hospitals are not required to report the number of applications received or denied, nor are they required to screen patients for assistance.

Many states have gone beyond federal regulations to implement their own financial assistance standards. In several states, including California, Maryland, New York, Oregon, and others, hospitals are required to offer financial assistance for patients at set income levels. Some states also specify the discount on a sliding scale that must be

offered to patients, limit the restrictions that hospitals can put on financial assistance (FA) eligibility (e.g., asset tests or citizenship tests), or limit the amount that can be charged to patients at certain income levels (e.g., as a percentage of Medicaid or Medicare reimbursement rate). Some states have also implemented a formal appeals process for patients who were unduly charged, or clarified that refunds are mandatory for improperly billed patients. Other states have a minimum spending threshold for financial assistance or community benefit more broadly.

Although evidence is limited, existing evaluations of financial assistance eligibility requirements have shown an association with improved access to care and lower rates of medical debt. One national study of hospital policies found a positive association between more generous FAPs and higher financial assistance spending. ¹⁵⁴ In Oregon, the increase in financial assistance from their requirement resulted in fewer Oregonians avoiding care due to cost and fewer people needing to make payments on medical bills. However, the amount owed in medical debt increased and racial disparities in medical debt burden remain. ¹⁵⁵ Another study of Oregon hospitals found that financial assistance regulations led to higher charity care spending compared to control hospitals. ¹⁵⁶ The evidence on the effect of Oregon's regulations on bad debt have been mixed. ¹⁵⁷

In Northern California, greater financial assistance increased the likelihood of inpatient, ambulatory, and emergency department encounters, though effects dissipated over time. Financial assistance was also found to increase the detection and management of treatment-sensitive conditions. Early evidence of financial assistance requirements implemented after 2020 in Colorado, Illinois, Maryland, and New Mexico found that hospitals reported changing their billing and collection practices and increasing financial assistance to patients. However, stakeholders identified several barriers to smooth implementation, including lack of awareness from patients, insufficient language assistance, and burdensome applications. ¹⁵⁹

Some states, such as Oregon, Illinois, Nevada, Texas, and Utah have requirements for community benefit spending more broadly, which includes financial assistance. Oregon hospitals' community benefit compliance has been high thus far, with almost all hospitals achieving their threshold. In the most recent year of data, statewide spending exceeded the floor by 40%. However, in recent years, financial assistance spending in

¹⁵⁴ Goodman et al., 2020

¹⁵⁵ Oregon Health Authority, 2022

¹⁵⁶ Santos et al., 2025

¹⁵⁷ Dollar For, 2023

¹⁵⁸ Adams et al., 2022

¹⁵⁹ Karpman et al., 2024

Oregon has declined relative to other categories of community benefit spending. ¹⁶⁰ State reports from Texas have also found high rates of compliance from nonprofit hospitals. ¹⁶¹ However, not all states provide reports on hospital compliance with these laws, making it difficult to understand how many hospitals are fulfilling these requirements. ¹⁶²

There may be some limitations to financial assistance eligibility requirements. Policymakers have expressed concern that creating a minimum requirement would encourage hospitals that go beyond that standard to make their standards less generous (i.e., the "floor" becomes the "ceiling"). So far there is no evidence that hospitals have responded in this way in states where eligibility requirements have been set. Another potential consequence of increased availability of financial assistance is a lower incentive for uninsured patients to get insurance, if they believe they will be fully covered under a hospital's FA program.

The success of financial assistance eligibility requirements depend on hospitals not creating additional restrictions such as mandatory fees, asset tests, and residency tests. In some cases, hospitals have skirted around requirements through poor implementation (e.g., not mentioning the availability of financial assistance and instead demanding payment from eligible patients) which makes enforcement of any requirements by state officials essential for success.¹⁶⁴

Leveraging nonprofit hospitals' tax-exempt status

More than 2,200 U.S. hospitals are tax-exempt nonprofits, a benefit worth an estimated \$36 billion per year. Nonprofit hospitals across the country honor their mission and commitment to communities by providing financial assistance, investing in essential low-margin services like mental health and trauma care, and offering grants and community health programs. Patient harm caused by private equity-owned hospital closures further show the importance of having nonprofit hospitals that are accountable to their communities. However, federal guidelines for nonprofit hospital status are vague and enforcement has been relatively lax. As a result, the amount hospitals actually spend varies widely, and while some hospitals spend far more than expected on their community, others fall millions short.¹⁶⁵

¹⁶⁰ Oregon Health Authority, 2025

¹⁶¹ Texas Department of State Health Services, 2023

¹⁶² Lown Institute, 2025b

¹⁶³ For example, all the major hospital systems in New York offer financial assistance above the 400 percent of federal poverty floor set in its state law.

¹⁶⁴ Silver-Greenberg & Thomas, 2022b

¹⁶⁵ Lown Institute, 2025b

To make sure that communities are getting back a return on their investment, experts have recommended improving guidance for hospitals on what services or programs count as a community benefit, setting a target amount of spending on programs to address the most urgent community health needs, and increasing enforcement of IRS regulations. States are already leveraging hospitals' tax-exempt status by adding reporting requirements, spending requirements, and in the case of Indiana, a requirement to lower prices to a set benchmark.¹⁶⁶

Reporting, screening, and other FA regulations

Some states require hospitals to report more information on community benefit spending and financial assistance than the IRS requires. For example, Illinois hospitals are required to report how many financial assistance applications were submitted, approved, and denied, with data stratified by race, ethnicity, sex, and language if possible. One study found that state–mandated reporting on charity care was associated with a small increase in spending. Yet, increased reporting only helps if these reports are publicly available, easy to compare, and use standardized metrics and format, which is not the case in all states.

Many states, including Maryland and New York, require hospitals to accept a standard FA application (similar to a "common app" for college applications). The goal of this requirement is to ensure that the application process is simple and not burdensome for patients.

Other states (such as North Carolina, Minnesota, Illinois, and Oregon) require hospitals to screen patients for financial assistance eligibility rather than wait for patients to submit an application. Automating patient discounts eliminates the "hassle factor" of applications and makes it more likely that patients will receive discounts for which they are eligible. States have taken different approaches to screening, with some using public benefit eligibility (e.g., SNAP, WIC, Medicaid), others using income information from third party tools, and some requiring hospitals to do both.

While patient screening has the potential to vastly increase access to financial assistance, the success of these policies depends on the reliability of tech tools to accurately assess patients' income. If these tools are not accurate, it could result in

¹⁶⁶ Lown 2025; Joseph, 2025

¹⁶⁷ Illinois Health and Hospital Association, 2021

¹⁶⁸ Zare et al., 2023

¹⁶⁹ Karpman & Blavin, 2024

eligible patients being automatically denied assistance without knowing why. Qualitative interviews with state officials uncovered additional administrative challenges to implementing patient screening, including: "reorganizing billing processes, hiring and training staff, and establishing mechanisms to share screening results with hospital-based providers who bill patients independently." 170

Despite the intention of screening programs to reduce the burden of applying for financial assistance, these programs may require additional awareness or enforcement to ensure that hospitals are adequately screening patients. In Colorado, about 41% of patients were not screened in the first year after screening requirements were implemented.¹⁷¹ Patient screening requirements should be accompanied by opportunities for patients to appeal these decisions. The federal government's Income Verification Express Service (IVES) could be used as an additional tool to speed up the screening process, along with other screening mechanisms. 172

Restrictions on collection actions

Nonprofit hospitals are allowed to conduct extraordinary collection activities (ECAs), defined by the IRS as selling medical debt to third parties, reporting medical debt to credit agencies, denying non-emergency care to patients with debt, or engaging in legal actions to collect debt such as lawsuits, wage garnishments, or property liens. 173

Before conducting ECAs, the IRS requires hospitals to "make reasonable efforts to determine whether an individual is eligible for assistance under the hospital organization's financial assistance policy" which includes a mandatory waiting period and notifying the patient about the FAP. However, the burden is still on patients to apply for assistance; hospitals are not required to screen patients to ensure that they are not eligible for FA before conducting an ECA.¹⁷⁴ As a result, journalists have documented numerous occasions of patients being sued or having other ECAs undertaken despite them being eligible for financial assistance.¹⁷⁵

Many states have taken further actions to protect patients from ECAs including additional time limits before sending debt to collections, limits on interest charged, limits on payment plan amounts, and required screening before undertaking ECAs.¹⁷⁶

¹⁷⁰ Karpman & Blavin, 2024

¹⁷¹ Colorado Department of Health Care Policy & Financing, 2024a

¹⁷² The IVES system must be supplemented with other screening, as IVES data is not available for all patients and may be inaccurate for people who are self-employed or seasonal workers.

¹⁷³ Internal Revenue Services, 2024

¹⁷⁴ Internal Revenue Services, 2024

¹⁷⁵ Work, 2022; Najmabadi, 2024

¹⁷⁶ Karpman et al., 2024

Other states have banned certain types of ECAs entirely; for example, New York state no longer permits hospitals to garnish a patient's wages or place liens on a patient's primary residence to collect medical debt. New York also bans hospitals from suing any patient whose income is below 400% FPL, requiring the suing hospital's Chief Financial Officer to provide an affidavit that a patient's income is above that threshold in a medical debt lawsuit.

Early evidence from consumer advocates in New Mexico noted fewer aggressive collections after protective measures were passed in 2021 that required patient screening before ECAs.¹⁷⁷ In Maryland, after protections were passed in 2021, hospitals have stopped suing patients to recover medical debt.¹⁷⁸

A potential limitation of these policies, as mentioned above, is the possibility that hospitals will demand more payment upfront, which would reduce access to care. This makes the timing of screening or financial assistance awareness more important, as patients may be eligible for assistance but feel pressured to pay upfront to receive care. Another study suggests that reducing collection actions for medical debt could result in creditors being less likely to lend overall, increasing the use of payday loans and other predatory lending sources.¹⁷⁹ These potential consequences show the importance of monitoring and enforcement to track trends in medical debt and access.

Insurer regulations

Research on the risk factors for medical debt show the importance of comprehensive insurance coverage. Increasing access to affordable health insurance and limiting cost-sharing within plans would go a long way toward preventing medical debt.

Reducing cost sharing

Many states have further improved access to health insurance through additional reforms such as subsidized insurance plans, employer and individual mandates, and minimum benefit requirements, with some states reaching near-universal coverage. States have also limited cost sharing for certain plans, specifically state exchange plans for middle- to low-income patients. For example, California recently lowered deductibles for their Silver state-based exchange plans for those making 250% FPL from \$5,400 to

¹⁷⁷ Karpman et al., 2024

¹⁷⁸ Cohn & Little, 2023

¹⁷⁹ Fonseca, 2023

¹⁸⁰ Radley et al., 2023; Moody & Silow-Carroll, 2009

\$0, and lowered the cost sharing limits for emergency department visits, doctor visits, and pharmaceuticals, which will impact 650,000 enrollees. ¹⁸¹ Colorado has also supplemented the cost sharing limits in ACA marketplace plans to lower out-of-pocket costs for low and moderate-income enrollees.

Improving the claim denial appeals process

Amid the growing use of insurance companies using AI tools to systematically deny claims for needed care, states are weighing legislation to regulate these tools. Realifornia's recent law mandates additional review of claim denials by qualified health providers and sets standards for use of AI in claim authorization processes. Realifornia, New York, Colorado, Maryland, and Pennsylvania are considering similar bills.

Assisting patients in navigating the insurance claim appeals process could also reduce medical debt. According to a 2024 study, ACA denials made after care was delivered were only appealed 1% of the time, and 44% of these appeals were successful. The rate of success is far higher for denials of prior authorization, although these were appealed only 10% of the time. Increasing the rate of appeals through navigation assistance and streamlining the appeals process would likely reduce out-of-pocket costs and medical debt. Is 187

Improving network adequacy

Narrow networks can lead to medical debt if patients are limited in their choices for providers and choose to go out of network. Federal and state policymakers can improve network adequacy by requiring all health plans to contract with sufficient numbers and types of physicians and other providers, mandatory reporting on network adequacy metrics, creating assessment tools that allow comparison of plan networks, and more accurate network directories.¹⁸⁸

¹⁸¹ Health Access California, 2023

¹⁸² Casey & Herman, 2023; Mello & Rose, 2024

¹⁸³ Office of Senator Josh Becker, 2024

¹⁸⁴ Reed, 2025

¹⁸⁵ Lo et al., 2025

¹⁸⁶ Henry, 2024

¹⁸⁷ Levitt. 2025

¹⁸⁸ American Medical Association, 2024

The 2022 No Surprises Act (NSA) prevents patients from surprise bills in common situations in which patients cannot know or have no control over whether their provider is out of network (e.g., emergency care, care from an out-of-network physician at an in-network hospital). However, the exclusion of ground ambulances from the NSA means that many patients are still vulnerable to high out-of-network bills in emergencies. So far, 19 states have implemented protections from surprise bills for ground ambulance services for state-regulated health plans. A 2024 CMS advisory committee on the topic strongly recommended that balance billing be prohibited and that patient cost sharing for ambulances be limited.

System-wide solutions

The prevalence and harm from medical debt reveal systemic flaws within our health system that must be addressed: gaps in insurance coverage, high prices for healthcare services, payment models that incentivize value over volume, and high rates of waste and overuse. Policies such as universal healthcare, value-based or capitated payment models, price regulations, and efforts to reduce low-value care are needed to reduce medical debt in the long term.

Closing coverage gaps

The high rate of medical debt is a uniquely American phenomenon. It is less common for residents of other countries to have high out-of-pocket costs or have trouble paying medical bills. According to the Commonwealth Fund's International Health Survey, the U.S. has a higher prevalence of cost-related access issues, insurance denials, and problems paying medical bills than nine other peer countries, and is second worst for high out-of-pocket expenses.

The lack of comprehensive universal health coverage in the U.S. is the major driver of these disparities. The U.S. currently has single-payer health plans for certain members of the population, but not all. For example, Medicare covers those age 65 and over, Medicaid covers some low-income residents, and the Veteran's Affairs health system covers veterans and their families.

There is strong evidence that these plans protect enrollees from medical debt. Despite older Americans using more health services, the amount of medical debt in collections decreases by 30% when Americans reach age 65, because of immediate access to broad

¹⁸⁹ Kelmar, 2025; Stovicek, 2025

¹⁹⁰ Ground Ambulance and Patient Billing Advisory Committee, 2024

and more affordable coverage under Medicare.¹⁹¹ Studies of medical debt rates before and after expansion show that Medicaid expansion reduced unpaid bills, out-of-pocket expenditures, and medical debt sent to collections.¹⁹² Among the states that had not expanded Medicaid by 2023, 73% have rates of medical debt in collections above the national average, compared to 15% of the states that have expanded Medicaid.¹⁹³ Veterans with VA or Tricare coverage were less likely to report problems paying medical bills or forgoing medical care compared to veterans with private insurance.¹⁹⁴

Figure 5: Comparing Performance in 10 Nations (Commonwealth Fund, 2024)¹⁹⁵

Mirror, Mirror 2024: A Portrait of the Failing U.S. Health System — Comparing Performance in 10 Nations APPENDIX 4. Access to Care												
							Raw	data				
Ind	licator	Source	AUS	CAN	FRA	GER	NETH	NZ	SWE	SWIZ	UK	US
Aff	fordability											
1	Had any cost-related access problem to medical care in the past year or skipped dental care or checkup because of cost in the past year	2023 CMWF Survey	48	38	26	17	18	48	27	38	31	50
2	Insurance denied payment for medical care or did not pay as much as expected	2023 CMWF Survey	21	18	17	14	8	6	-	17	3	32
3	Had serious problems paying or was unable to pay medical bills	2023 CMWF Survey	13	9	9	5	6	11	-	11	4	22
4	Out-of-pocket expenses for medical bills more than \$1,000 in the past year, US\$ equivalent	2023 CMWF Survey	32	22	10	20	11	21	-	48	8	41

These public plans work relatively well, but eligibility is limited to certain demographics, leaving many Americans either stuck in the coverage gap or burdened with private insurance plans that provide inadequate protection against medical debt. The U.S. could rise to the level of its peers in healthcare accessibility and affordability by expanding existing public options to all Americans. Countries such as Canada and the U.K., which provide universal public coverage with no out-of-pocket costs for primary care, specialists, or hospitalizations, are potential models to follow.

Many other countries incorporate private insurance companies into the structure of their health system, but still make coverage universal and put limits on cost sharing. 196

¹⁹¹ Goldsmith-Pinkham et al., 2023

¹⁹² Hu et al., 2018; Finkelstein et al., 2012

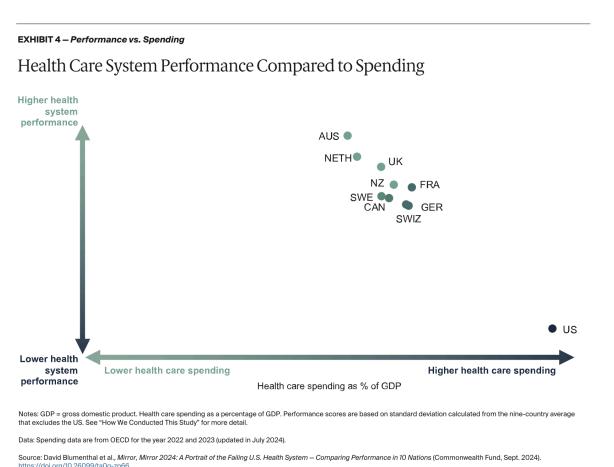
¹⁹³ Urban Institute, 2024b

¹⁹⁴ Cohen & Boersma, 2023

¹⁹⁵ Blumenthal et al., 2024

¹⁹⁶ Tikkanen et al., 2020a, Tikkanen et al., 2020b, Tikkanen et al., 2020c, Tikkanen et al., 2020d

Figure 6: System Performance Compared to Spending (Commonwealth Fund, 2024)¹⁹⁷



While international health care systems may differ in their funding, comprehensiveness, and administrative structure, they demonstrate how the U.S. could achieve higher levels of healthcare accessibility and better performance at a lower cost. 198

An intermediate step to universal coverage could be a public option—a publicly operated insurance plan that people can purchase on the individual market instead of a private plan. Some proposals for public options include a Medicaid buy-in option and privately-run plans that have benefits and reimbursement rates determined by the government. Four states currently have passed legislation to create public options, and many more are considering this type of legislation.

Public health insurance options have the potential to make care more affordable by setting reimbursement rates and cost sharing limits. However, in Colorado and Washington where these plans have been implemented, state policymakers have not

¹⁹⁷ Blumenthal et al., 2024

¹⁹⁸ Blumenthal et al., 2024

been willing to set reimbursement rates low enough to result in meaningfully lower premiums, and low clinician participation has also been a challenge.¹⁹⁹

Lowering the cost of care

The high cost of medical care, particularly at hospitals, drives medical debt both directly (through unaffordable medical bills) and indirectly (over time, high prices raise insurance premiums and deductibles, which further burdens patients and reduces real wage growth).

Researchers have proposed the following policies to reduce the cost of care; in some cases these have already been implemented in some states.

- **Facility fee protection**: As of July 2024, twenty states have taken actions to reduce the financial impact of facility fees, including bans and restrictions, patient notifications about potential facility fees, and reporting requirements.²⁰⁰
- **Site-neutral payments**: In addition to facility fees, hospital outpatient departments (HOPDs) enjoy higher reimbursement rates compared to physician offices or ambulatory surgery centers, even when the services provided are exactly the same. The Medicare Payment Advisory Commission (MedPAC) has identified services that are safely and commonly performed in physician offices or ASCs and has recommended aligning reimbursement rates for these services at the lower rate.²⁰¹
- **Price controls**: Hospital monopolies often lead to huge price increases, in the absence of countervailing forces. Researchers and policymakers have proposed regulating commercial prices for hospital care in areas with low competition. Some states have already implemented reference pricing for those enrolled in state health plans, which limit prices to a multiple of Medicare rates for certain services. A modeling study found that capping hospital prices for state employees at 200% of Medicare rates could save states \$150 million on average (total of \$7 billion nationwide) while having a minimal effect on commercial hospital operating margins. Another study estimates that setting prices for all

¹⁹⁹ Chen, 2024; Carlton et al., 2021

 $^{^{200}\,}Guarino,\,2024; Center\,on\,Health\,Insurance\,Reforms,\,2024a,\,Center\,on\,Health\,Insurance\,Reforms,\,2024b$

²⁰¹ MedPAC, 2022; Cassidy & Hassan, 2024

²⁰² Glied & Chandra, 2024; Health Affairs, 2023; Liu et al., 2021

²⁰³ Rakotoniaina, 2023

²⁰⁴ Murray et al., 2024

- commercial payers at 100 to 150% of Medicare rates could reduce hospital spending by \$62-\$237 billion.²⁰⁵
- **Drug price regulation**: Nine states are working to reduce the burden of high drug prices by creating an affordability board. The boards have different powers, including the ability to review the prices of prescription drugs, set upper payment limits, cap cost sharing for prescription drugs, create reference rates for drug price limits, and allow wholesale drug importation from other countries. States have also pursued limits on out-of-pocket spending for certain drugs deemed essential, such as insulin. ²⁰⁷
- Antitrust/merger regulation: Given the impact of unregulated consolidation on prices, federal and state regulators should increase oversight over hospital system mergers. States should also reconsider state Certificate of Public Advantage laws that allow hospital monopolies not otherwise allowed by the Federal Trade Commission.²⁰⁸

Payment model reform

The U.S. currently wastes an estimated 17%–53% of healthcare spending on administrative costs, poor coordination, low-value care, and other inefficiencies.²⁰⁹ To the extent that some of this waste translates to higher out-of-pocket costs for patients, reducing overuse can lower medical debt burden.

The way we pay for healthcare incentivizes waste and overuse. Despite increasing movement toward value-based payment models, more than half of healthcare payments are still based on fee-for-service. Health policy experts have identified alternative payment models such as accountable care organizations, population-based payments, and total cost of care models, which have been shown to modestly decrease healthcare costs. 11

²⁰⁵ Liu et al., 2021

²⁰⁶ National Academy for State Health Policy, 2024

²⁰⁷ Myerson, 2024

²⁰⁸ Liss, 2025

²⁰⁹ Shrank et al., 2019; Zuger, 2021

²¹⁰ Health Affairs, 2022

²¹¹ Health Affairs, 2022; Maryland Health Services Cost Review Commission, 2025; Atlas, 2024; Garber, 2023

Non-regulatory solutions

Hospital best practices

Hospital industry groups and surveys of revenue cycle leaders point to "best practices" for billing and collections—business policies adopted voluntarily to prevent medical debt for patients.²¹² Among these recommended practices include:

- Periodically reporting to the hospital board on the rate at which certain ECAs are used and their financial impact to the hospital;
- Maintaining written, board-approved policies regarding the disposition of remaining unresolved accounts;
- Screening patient accounts for accurate payer information, public program eligibility, and financial assistance eligibility before billing;
- Including conspicuous information on the availability of financial assistance on all billing statements;
- Making financial assistance policies available on the hospital website in fewer than 3 clicks and clearly advertised on the upper-fold of the home page;
- Simplifying financial assistance policies to include both uninsured and underinsured patients, and removing asset tests;
- Investing in counselors to help patients apply for insurance or financial assistance;
- Limiting outsourcing of hospital billing staff and providing person-centered training; and
- Waiting 120 days after the first billing statement before reporting debt to a credit agency.

Taking these actions to reduce medical debt can help hospitals avoid negative press, achieve their social mission, and build trust with both providers and patients.²¹³

Consumer information

Consumer advocacy organizations have compiled tips for patients having trouble understanding or paying their medical bills. For example, Community Catalyst and U.S. PIRG Education Fund created a guide to help patients avoid unnecessary billing charges,

²¹² Healthcare Financial Management Association, 2022; Undue Medical Debt & Neighborhood Trust Financial Partners, 2024

²¹³ Dunlap, 2025

tackle billing errors, and handle debt collectors.²¹⁴ Among their tips for consumers include:

- Ask providers if they are part of your insurance network
- Request language assistance if necessary
- Ask about financial assistance
- Avoid paying bills with credit cards or signing up for medical credit cards
- Keep notes of your conversations with insurance companies and billing offices

Patient inquiries are also effective at reducing medical costs and mistakes in medical bills. According to a 2023 survey, 62% of patients who received an unaffordable or mistaken medical bill reached out to the provider about it. About three-quarters of respondents reaching out about an unaffordable bill got financial assistance, 74% of those reaching out about a mistake received a corrected bill, and 62% of those who reached out to negotiate the cost of the bill saw the price go down.²¹⁵

Media attention

There is some empirical evidence that negative media attention and sustained public pressure can cause hospital systems to voluntarily adopt more patient-friendly billing and collection practices. A 2019 study that revealed the extent of medical debt lawsuits in Virginia filed by hospitals received major attention. It was covered by outlets such as The New York Times, The Wall Street Journal, Kaiser Health News, and National Public Radio. Lawyers, clinicians, and medical students advocated on behalf of patients on debt collection dockets, and a medical student released short videos on the effects of medical debt collection. The result was a 59% decrease in lawsuits filed, a 55% decrease in warrants in debt cases filed, a 66% decrease in wage garnishments filed, and a 64% reduction in the overall dollar amount pursued in lawsuits for hospital debt. In Maryland, negative publicity was also cited as a potential reason why the state's hospitals stopped suing patients in 2023.

²¹⁴ Kelmar & Nguyen, 2023

²¹⁵ Duffy et al., 2024

²¹⁶ Paturzo et al., 2021

²¹⁷ Paturzo et al., 2021

²¹⁸ Cohn & Little, 2023

Downstream solutions

Medical debt relief

Given the negative impacts of medical debt on physical, mental and financial health, ²¹⁹ the most straightforward way to reduce these negative effects is to purchase and abolish medical debt. More than a dozen states and localities have partnered with groups like Undue Medical Debt to buy bad debt from hospitals and abolish it.²²⁰

A few important benefits of medical debt relief: 1) No action is required on the part of patients, who simply receive a letter informing them that their debt has been relieved; 2) Debt is purchased for pennies on the dollar, creating a high return on investment; 3) In cases where hospitals have not already sold their debt to a third party collector, they can benefit from having their debt purchased when they otherwise may not have received anything. To the extent that patients who owe medical debt are often not financially positioned to do so, the existence of medical debt relief allows them to prioritize more important financial needs, such as rent, food, medications, etc.

However, the evidence on the effectiveness of this method is mixed. Studies on debt relief in general find positive benefits. For example, one study found that when student debt was abolished in a similar way it reduced indebtedness by 11%, the number of delinquent accounts by 24%, and ultimately improved geographic mobility, probability of changing jobs, and increased incomes.²²¹

The most comprehensive study on the impact of medical debt relief was a 2024 randomized trial that evaluated the effects of buying and abolishing relatively old medical debt that had gone through the entire billing process. All of the debt relieved was either about to be, or already had been, referred by a debt collection agency. The study found this type of debt relief resulted in a modest improvement to credit access, a slight reduction in payment of other medical bills, and no effect on mental and physical health, healthcare utilization, or financial wellness. 222 The authors note limitations to this study: using self-reported measures of mental health, a reduction in medical debt credit reporting for all Americans making debt relief less likely to capture changes, and lack of qualitative data measures to provide more context.²²³

²¹⁹ See "Scope, The impact of medical debt"

²²⁰ Undue Medical Debt, 2025b; Noguchi, 2024

²²¹ Di Maggio et al., 2020

²²² Kluender et al., 2024

²²³ Mahoney, 2024

However, this study does touch on moral hazard concerns; if patients believe their medical debt will be relieved, will they avoid paying medical bills even if they can afford to? If the rate of payments from patients declines due to moral hazard, hospitals may start demanding more payment upfront from patients, which could reduce access to care. Similarly, if hospitals believe their bad debt will be regularly purchased and abolished, this lessens the incentives for hospitals to make financial assistance more available or to lower their prices.

Another downside of medical debt relief is the short-term nature of the intervention. Given that people continue to be saddled with medical debt each day, debt relief would have to occur on a regular basis, or be paired with upstream solutions, to have a long-term impact. For example, North Carolina's medical debt relief package included numerous additional protections to extend the impact.

Ban on credit reporting

A person's credit report can influence the course of their life in many ways. Credit reports are not used just to determine access to credit, but they are used in decisions about housing, employment, and insurance.²²⁴ Even though medical debt is of little predictive value in terms of reliability for future lending, its inclusion in credit reports affects the ability of millions to access these vital segments of society.²²⁵

In 2023, the three largest national credit reporting agencies—Equifax, Experian, and TransUnion—all agreed to remove medical debt with a balance under \$500 from credit reports. 226 Further, they will not report medical debt on a consumer's credit unless it is at least one year past due. The average credit score for patients who had these tradelines removed from their credit reports increased from 585 to 615 points.²²⁷ This is significant because it moved the average patient from the subprime level to near prime.

Several states, including Colorado, Minnesota, New York, and most recently California and Maryland, have prohibited healthcare providers from reporting most medical debt to consumer reporting agencies. In New York, a 2023 ban on adding unpaid medical debt to residents' credit reports resulted in a substantial decline in medical debt in collections.

The Consumer Financial Protection Bureau (CFPB) has sought to build upon this precedent by prohibiting the inclusion of medical debt on credit reports nationwide,

²²⁴ Consumer Financial Protection Bureau, 2024

²²⁵ Consumer Financial Protection Bureau, 2023

²²⁶ Equifax. 2025

²²⁷ Blavin et al., 2023

according to a rule finalized in early 2025 by the Biden administration.²²⁸ While this change would not necessarily reduce the cumulative amount of medical debt, it would reduce some of the financial consequences of carrying medical debt. The CFPB estimated that this rule would increase the credit scores of people with medical debt by 20 points on average. However, with a Trump administration hostile to government oversight and a powerful collections industry, the rule is facing legal and political challenges that could hinder implementation.²²⁹

Removing medical debt from credit reports has potential tradeoffs. If the rate of payments from patients declines due to moral hazard, hospitals may start demanding more payment upfront from patients or increase their use of medical credit cards. Lenders may respond to the removal of medical debt from credit reports by "placing higher weights on non-medical collections or other delinquencies." A recent working paper found that the financial impact of removing medical debt from credit reports may be limited, showing no difference in default risk for those with debt that was removed, but also no difference in credit score, credit utilization, or use of payday lenders in the year after debt was removed. In fact, VantageScore, one of two major credit scoring models, stopped considering medical debt in its latest models, citing minimal effects on predictive performance.

Because credit bureaus are a common source of data on the prevalence of medical debt, policymakers should implement reporting requirements for hospitals on financial assistance, including the number of applications received, denied, approved and accounts sent to collections, to be able to assess state and national trends in medical debt.²³³

Other medical debt protections

Many states have implemented other policies to reduce the financial burden of medical care, such as regulated payment plans, capping interest on medical debt, and instituting rules around financial assistance appeals. For example, New York, California, Colorado, Massachusetts, Maryland, and other states require hospitals to offer installment plans to patients eligible for financial assistance; most cap the monthly payment amounts of

²²⁸ Consumer Financial Protection Bureau, 2025

²²⁹ Levey, 2025

²³⁰ Ippolito, 2025

²³¹ Duarte et al., 2025

²³² VantageScore, 2022

²³³ Karpman & Blavin, 2024

these plans at a percentage of patient income and limit interest rates.²³⁴ Maryland requires an installment payment plan capped at 5% of gross monthly wages for all hospital patients.

States also have implemented policies to allow for appeal of hospital financial assistance decisions, restrict collection actions while a case is under appeal, and require refunds to patients who were inappropriately billed when they should have received financial assistance.²³⁵

Filling gaps in the research

While there is a large body of research on medical debt in the U.S., there are still gaps in the literature. Our working group identified topics in need of additional research (not an exhaustive list).

Research gaps: Prevalence and impact of medical debt

- The prevalence of medical debt within subgroups of racial categories (e.g., disaggregating "Asian" and "Hispanic" categories);
- The prevalence of medical debt among immigrants (given high overlap between immigration status and uninsurance);
- Breaking down demographic trends and disparities among Americans with the largest amounts of medical debt;
- Measuring the causal impact of medical debt on financial well being and health using a broader set of methods.

Research gaps: Drivers of medical debt

- Understanding which specific health services are most likely to lead to medical debt;
- The relationship between hospital prices and medical debt rates;
- The frequency of insurance claim denials and other analyses of insurance claims;
- The prevalence of additional fees from providers billed directly to patients rather than through insurance (e.g., access fees);

²³⁴ Kona & Raimugia, 2023

²³⁵ Kona & Raimugia, 2023

• Understanding whether financialized ownership, such as private equity ownership or other for-profit ownership, of hospitals and other healthcare delivery organizations contributes to medical debt prevalence.

Research gaps: Policies for addressing medical debt

- The impact of more recent state medical debt protections and community benefit regulations on medical debt;
- The impact of increased financial assistance grants on overall hospital financial health (to assess the extent to which hospitals can offer more assistance).

Select policy recommendations

Target	Policy	Impact	Context for impact rating	Example
Insurance coverage and benefit design	Universal insurance coverage with low or no cost sharing	High	Medical debt rates are lower for Americans with Medicare, Medicaid or VA coverage; residents of countries with universal coverage report much lower rates of difficulty paying medical bills.	Canada's health system is publicly funded and regionally administered, provides universal coverage for physician, diagnostic, and hospital services with no cost sharing.
Insurance coverage and benefit design	Medicaid expansion	High	Medicaid expansion is associated with lower rates of medical debt.	North Carolina was the latest state to expand Medicaid in 2024, receiving strong bipartisan support.
Insurance coverage and benefit design	Cost sharing limits for marketplace plans	Medium	While states can use standardized plan requirements to limit cost sharing for certain conditions, other forms of cost sharing remain prevalent.	Colorado's state standardized plan has no cost sharing for diabetes supplies or outpatient mental health visits.
Insurance coverage and benefit design	Public option	Medium	With publicly set reimbursement rates and lower cost sharing standards, a public option has the potential to be a more affordable plan and create more competition in the marketplace; however, results in states where this is implemented have not found significant premium reductions.	Washington State's Cascade Plans cap provider reimbursements at 160% of Medicare rates.
Insurance coverage and benefit design	Prohibiting automatic insurance denials using AI	Low	Preventing AI-driven insurance denials helps reduce unreasonable claim denials which patients then must appeal.	California now prohibits health insurance companies from making care denials based on medical necessity solely by AI tools.
Hospital financial assistance	Eligibility standards for financial assistance	Low	Standard eligibility criteria for financial assistance makes free and discounted hospital care more accessible and less	Washington requires hospitals to offer free or discounted care to those making up to 300% FPL.

			confusing; however, patients still may not be aware that assistance is available and still have to apply.	Some larger hospitals have higher eligibility thresholds.
Hospital financial assistance	Patient screening for financial assistance	Medium	Patient screening takes the burden off patients to apply for financial assistance and ensures that eligible patients are receiving the appropriate discount. Policymakers should be aware of implementation challenges that states have reported, including reliability of tech tools for screening. Policy is most effective if patient screening occurs before the first bill, as opposed to prior to debt being sent to collections.	Oregon requires hospitals to screen all patients for financial assistance if they are uninsured, covered by Medicaid, or owe over \$500 after insurance.
Hospital financial assistance	Reporting requirements	Low	Reporting requirements improve transparency, but are a small step to reducing medical debt. The benefits of reporting requirements can be boosted if states make them publicly available, easy to compare, and use standardized metrics and formatting.	Illinois requires hospitals to include the number of financial assistance applications approved and denied on their community benefits report.
Hospital financial assistance	Government guidance	Low	Guidance from the IRS and CMS would help remove legal hurdles to hospitals who want to offer financial assistance for patient cost sharing.	This has not yet been implemented.
Hospital financial assistance	Uniform financial assistance application	Low	Uniform applications for financial assistance makes free and discounted hospital care more accessible and less confusing; however, patients still may not be aware that assistance is available and still have to apply.	Maryland developed a common financial assistance form to be utilized by all hospitals.

Hospital financial assistance	Community benefit minimum spending thresholds	Medium	Community benefit thresholds help hold hospitals accountable for giving back to communities. However, not all types of community benefit spending are equally beneficial for preventing medical debt or improving community health, and the success of the program may depend on how it is enforced.	Oregon sets community benefit spending thresholds for hospitals based on their past spending, patient revenue, and operating margin.
Billing and Collections	Prohibit balance billing by out of network ground ambulances	Medium	These measures would protect patients from out-of-network billing for ground ambulance rides, which has an average patient cost of \$500-\$750.	Oklahoma prevents out-of-network balance billing for people in state regulated plans.
Billing and collections	Limits on extraordinary collection actions	High	Limiting extraordinary collection actions protects patients from some of the most harmful consequences of owing medical debt. Policymakers should be aware that hospitals may respond to such limits by requiring payment upfront.	North Carolina prohibits hospitals from placing liens on a primary residence, foreclosing on a patient's property, or garnishing wages to seek repayment of medical debt.
Billing and collections	Limits on interest rates for medical debt	Medium	Limiting interest rates protects patients from predatory loans and prevents financial harm from debt. However, this is a downstream intervention.	Illinois prohibits interest on medical bills over \$300 for uninsured patients eligible for financial assistance.
Billing and collections	Installment plan regulations	Low	Affordable installment plans help make medical debt more manageable and prevent financial harm from debt. However, this is a downstream intervention.	Maryland requires hospitals to offer installment payment plans to all patients with medical debt with monthly payments no more than 5% of gross monthly wages.
Billing and collections	Appeals process regulations	Low	Facilitating easier appeals for billing can help improve compliance with regulations, and give patients an option for reducing their bill if they were wrongly charged.	If a patient believes they were wrongly denied financial assistance or has another issue with hospital medical debt, they can contact the Maryland Attorney General for assistance

				with the appeal. They can also file a complaint with the Maryland Health Services Cost Review Commission (HSCRC). If a hospital violates the law, the hospital may be fined \$50,000 per violation.
Downstream solutions	Medical debt relief	Medium	Immediately reduces medical debt burden in the short term. However, research does not show a positive impact on patients' mental health or financial security. Relieving debt may result in future medical bills going unpaid and allows hospitals to avoid reforming their billing practices.	North Carolina paired \$4 billion in medical debt relief with financial assistance standards and upstream protections to prevent future debt.
Downstream solutions	Ban on credit reporting	Medium	Immediately reduces harm to credit from medical debt in the short term. Impact on financial outcomes may be limited, according to recent research.	Minnesota does not allow medical debt to be reported to credit agencies as of 2024.
Downstream solutions	Disallow/limits on use of medical credit cards	Medium	Limiting medical credit cards protects patients from predatory loans and prevents financial harm from debt. However, this is a downstream intervention.	No states have implemented bans on medical credit cards as of yet.
Cost of care	Facility fee/ site-neutral payments	Medium	Facility fees are one driver of high cost of care which can lead to medical debt, but the impact of this policy on medical debt is unknown.	Connecticut prohibits hospitals from collecting facility fees for certain outpatient services.
Cost of care	Price controls	High	Reducing the cost of care for patients is key for reducing medical debt in the long term.	Several states have limited hospital or other provider prices for state employees. In Montana, this policy saved nearly \$50M over three years. North Carolina's reference pricing for state employees was projected to save \$300M per year.

Cost of care	Regulations on hospital consolidation	Medium	Hospital mergers are a driver of higher costs and are associated with higher rates of medical debt. The impact of these regulations on medical debt is unknown.	Indiana requires health care entities to provide written notice of certain mergers or acquisitions with a value of at least \$10 million, at least 90 days prior to the date of the transaction, to the office of the attorney general.
--------------	---	--------	---	---

Resources

National

Hospital billing and collection practices, a national data set - Lown Institute, 2025

<u>Medical Bills: Everything you need to know about your rights</u> – U.S. PIRG & Community Catalyst, 2025

Did your insurance deny your health care claim? How to appeal. - U.S. PIRG, 2024

How to get a good faith estimate for medical and dental care - U.S. PIRG, 2023

State

<u>State Protections Against Medical Debt: A Look at Policies Across the U.S.</u> Commonwealth Fund, 2023

<u>A Compendium of State Policies to Curb Hospital Prices and Reduce Medical Debt</u> Community Catalyst, 2023

<u>2025 State Legislation to Lower Health System Costs</u> National Academy for State Health Policy (NASHP), 2025

<u>State Laws Passed to Address Health System Costs: 2020–2024</u> National Academy for State Health Policy (NASHP), 2024

Experts available for contact

Name	Affiliation	Contact Information	Area(s) of expertise	Contact me for (eg. community advocacy, policy advice, research)
Consumer Health ative.org Initiative		Hospital financial assistance, medical debt, site neutral payments/ facility fees, surprise/ balance billing, insurance plan design	Policy advice, state and community advocacy	
Michelle Sternthal	Community Catalyst	msternthal@com munitycatalyst.org	Hospital financial assistance policy and enforcement, aggressive billing and collection, hospital consolidation & private equity investments in healthcare, marketplace affordability, benefit designs and network adequacy	Federal and state policy and advocacy, narrative change, community engagement
Eli Rushbanks	Dollar For	eli@dollarfor.org	Hospital financial assistance	Policy advice, federal and state advocacy, research
Patricia Kelmar	U.S. PIRG	pkelmar@pirg.org	Health care cost containment, surprise billing, claim denials, medical credit cards, consumer/patient protections	Federal and state policy information and advice, patient stories, media interviews, public speaker, grassroots activation, coalitions, collaboration
Neale Mahoney	Stanford University	nmahoney@stanfo rd.edu	Medical debt, hospital financial assistance, health insurance reform, provider payments reform	Policy advice, research advice, media engagement
Berneta L. Haynes	National Consumer Law Center	bhaynes@nclc.org	Medical debt collection practices, hospital financial assistance, balance billing, racial impacts of medical debt	Federal and state policy information/research and advocacy, media interviews, public speaker or panel participation

	Economic Action Maryland Fund	marceline@econac tion.org	Medical debt, hospital financial assistant, excessive collection actions, state policy advocacy	Federal and state policy, policy advocacy at the state level, coalition building, research, public speaker, or panel participation
--	----------------------------------	------------------------------	---	---

References

ABIM Foundation. (2024). Addressing medical debt: Rebuilding trust in health care. https://abimfoundation.org/wp-content/uploads/2024/07/Medical-Debt-Convening_Summary-Paper.pdf

Adam, J., & Benninger, M. (2024, August 15). American savings by generation: How balances and goals vary by age. Forbes.

https://www.forbes.com/advisor/banking/savings/average-american-savings/

Adams, A., Kluender, R., Mahoney, N., Wang, J., Wong, F., & Yin, W. (2022). The Impact of financial assistance programs on health care utilization: Evidence from Kaiser Permanente. American Economic Review: Insights, 4(3), 389–407. https://doi.org/10.1257/aeri.20210515

American Cancer Society Cancer Action Network, The Leukemia and Lymphoma Society, & Undue Medical Debt. (2023). Impacts of medical debt: Findings from a national survey. https://www.fightcancer.org/sites/default/files/medical debt final survey results report_10-30-23.pdf

American Medical Association. (2024). Health plan network adequacy. https://www.ama-assn.org/system/files/issue-brief-health-plan-network-adequacy.pdf

Andre, J., Blavin, F., Braga, B., & Gangopadhyaya, A. (2023). The Impact of hospital closures on medical debt in collections: Analysis using consumer credit bureau data. IZA Discussion Paper, Article 16448. https://doi.org/10.2139/ssrn.4572656

Arnold, D. & Whaley, C.M. (2020). Who pays for health care costs? RAND. https://www.rand.org/pubs/working_papers/WRA621-2.html

Arora, V., Moriates, C., & Shah, N. (2015). The Challenge of understanding health care costs and charges. AMA Journal of Ethics, 17(11), 1046–1052. https://doi.org/10.1001/journalofethics.2015.17.11.stas1-1511

Atlas, B. (2024, June 12). Hospital global budgeting: Lessons from Maryland and selected nations. The Commonwealth Fund. https://doi.org/10.26099/p3nn-5f02

Bai, G., & Anderson, G. F. (2015). Extreme markup: The Fifty US hospitals with the highest charge-to-cost ratios. Health Affairs, 34(6), 922–928. https://doi.org/10.1377/hlthaff.2014.1414

Beaulieu, N. D., Dafny, L. S., Landon, B. E., Dalton, J. B., Kuye, I., & McWilliams, J. M. (2020). Changes in quality of care after hospital mergers and acquisitions. The New England Journal of Medicine, 382(1), 51–59. https://doi.org/10.1056/NEJMsa1901383

Becker, N.V., Scott, J.W., Moniz, M.H., Carlton, E.F., & Ayanian, J.Z. (2022). Association of chronic disease with patient financial outcomes among commercially insured adults. JAMA Internal Medicine, 82(10), 1044–1051.

https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2795322

Bernard, D. M., Selden, T. M., & Fang, Z. (2023). The Joint distribution of high out-of-pocket burdens, medical debt, and financial barriers to needed care. Health Affairs, 42(11), 1517–1526. https://doi.org/10.1377/hlthaff.2023.00604

Blavin, F. & Braga, B. (2024, April 3). How to address medical debt burdens in immigrant communities. Urban Institute.

https://www.urban.org/urban-wire/how-address-medical-debt-burdens-immigrant-communities

Blavin, F., Braga, B., & Karpman, M. (2023, November 2). Medical debt was erased from credit records for most consumers, potentially improving many Americans' lives. Urban Institute.

https://www.urban.org/urban-wire/medical-debt-was-erased-credit-records-most-consumers-potentially-improving-many

Blavin, F., Braga, B., & Gangopadhyaya, A. (2022). Which county characteristics predict medical debt? Urban Institute.

https://www.urban.org/sites/default/files/2022-06/Which%20County%20Characteristics%20Predict%20Medical%20Debt.pdf

Blumenthal, D., Gumas, E. D., Shah, A., Gunja, M. Z., & Williams II, R. D. (2024, September 19). Mirror, mirror 2024: A Portrait of the failing U.S. health system. The Commonwealth Fund. https://doi.org/10.26099/ta0g-zp66

Bruch, J. D., Roy, V., & Grogan, C. M. (2024). The Financialization of health in the United States. New England Journal of Medicine, 390(2), 178–182. https://doi.org/10.1056/NEJMms2308188

Burks, K., Shields, J., Evans, J., Plumley, J., Gerlach, J., & Flesher, S. (2022). A Systematic review of outpatient billing practices. SAGE Open Medicine, 10, 20503121221099021. https://doi.org/10.1177/20503121221099021

Cahn, J., Sundaram, A., Balachandar, R., Berg, A., Birnbaum, A., Hastings, S., Makansi, M., Romano, E., Majidi, A., McCormick, D., & Gaffney, A. (2023). The Association of childbirth with medical debt in the USA, 2019–2020. Journal of General Internal Medicine, 38(10), 2340–2346. https://doi.org/10.1007/s11606-023-08214-3

Callison, K., & Walker, B. (2021). Medicaid expansion and medical debt: Evidence from Louisiana, 2014–2019. American Journal of Public Health, 111(8), 1523–1529. https://doi.org/10.2105/AJPH.2021.306316

Carare, O., Singer, S., & Wilson, E. (2022, August 24). Exploring the connection between financial assistance for medical care and medical collections. Consumer Financial Protection Bureau.

https://www.consumerfinance.gov/about-us/blog/exploring-connection-between-financial-assistance-for-medical-care-and-medical-collections/

Carlton, S., Kahn, J., & Lee, M. (2021, August 30). Cascade select: Insights from Washington's public option. Health Affairs. https://doi.org/10.1377/forefront.20210819.347789

Casey, R., & Herman, B. (2023, March 13). Denied by AI: How Medicare Advantage plans use algorithms to cut off care for seniors in need. STAT.

https://www.statnews.com/2023/03/13/medicare-advantage-plans-denial-artificial-intelligence/

Cassidy, B., & Hassan, M. (2024). Lowering health costs for seniors framework. https://www.cassidy.senate.gov/wp-content/uploads/2024/10/Site-Neutral-Policy-Framework-Final.pdf

Caswell, K. J., & Waidmann, T. A. (2017). The Affordable Care Act Medicaid expansions and personal finance. Medical Care Research and Review, 76(5), 538–571. https://doi.org/10.1177/1077558717725164

Center on Budget and Policy Priorities. (2024, November 25). Chart book: SNAP helps struggling families put food on the table.

https://www.cbpp.org/research/food-assistance/snap-helps-struggling-families-put-food-on-the-table-0

Center on Health Insurance Reforms. (2024a, July 8). Overall picture of state outpatient facility fee billing reforms for the commercial health insurance market. https://facilityfeereform.chir.georgetown.edu/state-uptake-of-reforms/

Center on Health Insurance Reforms. (2024b, July 8). Prohibitions on outpatient facility fee billing in the commercial health insurance market. https://facilityfeereform.chir.georgetown.edu/facility-fee-prohibitions/

Centers for Medicare & Medicaid Services. (2024a, March 28). Short-term, limited-duration insurance and independent, noncoordinated excepted benefits coverage (CMS-9904-F) fact sheet.

https://www.cms.gov/newsroom/fact-sheets/short-term-limited-duration-insurance-and-independent-noncoordinated-excepted-benefits-coverage-cms

Centers for Medicare & Medicaid Services. (2024b, November 5). Know your rights when you aren't using health insurance.

https://www.cms.gov/medical-bill-rights/know-your-rights/no-insurance

Chen, L.J. (2024). Early lessons from state-based public option plans. JAMA Health Forum, 5(3), e240973.

https://jamanetwork.com/journals/jama-health-forum/fullarticle/2817158

Cohen, R. A., & Boersma, P. (2023). Financial burden of medical care among veterans aged 25–64, by health insurance coverage: United States, 2019–2021 (Report No. 182, National Health Statistics Report). https://www.cdc.gov/nchs/data/nhsr/nhsr182.pdf

Cohn, M., & Little, R. (2023, December 7). Maryland hospitals mysteriously stopped suing patients with unpaid bills. The Baltimore Banner.

https://www.thebaltimorebanner.com/community/public-health/maryland-hospital-lawsuits-5ITYIF4PA5GPPHYIFMLOC73440/

Collins, S. R., & Gupta, A. (2024, November 21). The State of health insurance coverage in the U.S. The Commonwealth Fund. https://doi.org/10.26099/byce-qc28

Collins, S. R., Roy, S., & Masitha, R. (2023, October 26). Paying for it: How health care costs and medical debt are making Americans sicker and poorer. The Commonwealth Fund. <a href="https://www.commonwealthfund.org/publications/surveys/2023/oct/paying-for-it-costs-debt-americans-sicker-poorer-2023-affordability-survey#:~:text=Insurance%20coverage%20didn't%20prevent,and%2033%20percent%20with%20Medicare.

Colorado Consumer Health Initiative. (2024). Hospital discounted care report. https://cohealthinitiative.org/wp-content/uploads/2024/11/2024-HDC-Report-1.pdf

Colorado Department of Health Care Policy & Financing. (2024a). HB21-1198: Hospital discounted care data reporting.

https://leg.colorado.gov/sites/default/files/images/hospital discounted care smart act handout presentation extension.pdf

Colorado Department of Health Care Policy & Financing. (2024b). Hospital facility fee report.

https://hcpf.colorado.gov/sites/hcpf/files/Hospital%20Facility%20Fee%20Report.pdf

Congressional Budget Office. (2022, January 20). The Prices that commercial health insurers and Medicare pay for hospitals' and physicians' services. https://www.cbo.gov/system/files/2022-01/57422-medical-prices.pdf

Consumer Financial Protection Bureau. (2022, March 1). CFPB estimates \$88 billion in medical bills on credit reports.

https://www.consumerfinance.gov/about-us/newsroom/cfpb-estimates-88-billion-in-medical-bills-on-credit-reports/

Consumer Financial Protection Bureau. (2023, February 14). Market snapshot: Trends in third-party debt collections tradelines reporting.

https://www.consumerfinance.gov/data-research/research-reports/market-snapshot-trends-in-third-party-debt-collections-tradelines-reporting/

Consumer Financial Protection Bureau. (2024). Fair Debt Collection Practices Act: CFPB annual report 2024.

https://files.consumerfinance.gov/f/documents/cfpb fdcpa-2024-annual-report 2024-09.pdf

Consumer Financial Protection Bureau. (2025, January 7). CFPB finalizes rule to remove medical bills from credit reports.

https://www.consumerfinance.gov/about-us/newsroom/cfpb-finalizes-rule-to-remove-medical-bills-from-credit-reports/

Cooper, Z., Craig, S. V., Gaynor, M., & Van Reenen, J. (2019). The Price ain't right? Hospital prices and health spending on the privately insured. The Quarterly Journal of Economics, 134(1), 51–107. https://doi.org/10.1093/qje/qjy020

Crespin, D., Dworsky, M., Levin, J., Ruder, T., & Whaley, C. M. (2024). Upcoding linked to up to two-thirds of growth in highest-intensity hospital discharges in 5 states, 2011–19. Health Affairs, 43(12), 1619–1627. https://doi.org/10.1377/hlthaff.2024.00596

Crowe. (2022). Hospital collection rates for self-pay patient accounts. https://www.crowe.com/-/media/crowe/llp/widen-media-files-folder/h/hospital-collection-rates-for-self-pay-patient-accounts-report-chc2305-001a.pdf

Di Maggio, M., Kalda, A., & Yao, V. (2020). Second chance: Life without student debt (Working Paper 25810). National Bureau of Economic Research. https://www.nber.org/system/files/working_papers/w25810/w25810.pdf

Dobkin, C., Finkelstein, A., Kluender, R., & Notowidigdo, M. J. (2018). The Economic consequences of hospital admissions. American Economic Review, 108(2), 308–352. https://doi.org/10.1257/aer.20161038

Dollar For. (2023). Pointless debt: How Oregon hospitals skirt financial assistance laws to charge patients — without increasing revenue. https://dollarfor.org/pointless-debt-oregon/

Dollar For. (2024). The Path to charity care: Exploring the journey & roadblocks to financial assistance for medical bills. https://dollarfor.org/the-path-to-charity-care/

Duarte, V., Fonseca, J., Kohli, D., & Reif, J. (2025). The Effects of deleting medical debt from consumer credit reports (Working Paper 33644). National Bureau of Economic Research. https://doi.org/10.3386/w33644

Duffy, E. L., Frasco, M. A., & Trish, E. (2024). Disparate patient advocacy when facing unaffordable and problematic medical bills. JAMA Health Forum, 5(8), e242744. https://doi.org/10.1001/jamahealthforum.2024.2744

Dunlap, T. (2025, January 2). AcademyHealth launches new phase of work on medical debt and trust with the ABIM Foundation. AcademyHealth. https://academyhealth.org/blog/2025-01/academyhealth-launches-new-phase-work-medical-debt-and-trust-abim-foundation

Eliason, E. L., MacDougall, H., & Peterson, L. (2022). Understanding the aggressive practices of nonprofit hospitals in pursuit of patient debt. Health & Social Work, 47(1), 36–44. https://doi.org/10.1093/hsw/hlab034

Equifax. (2025). Can medical debt impact credit scores? https://www.equifax.com/personal/education/credit/score/articles/-/learn/can-medical-debt-impact-credit-scores/

Finkelstein, A., Taubman, S., Wright, B., Bernstein, M., Gruber, J., Newhouse, J. P., Allen, H., Baicker, K., & Oregon Health Study Group. (2012). The Oregon health insurance experiment: Evidence from the first year. The Quarterly Journal of Economics, 127(3), 1057–1106. https://doi.org/10.1093/qie/qjs020

Fonseca, J. (2023). Less mainstream credit, more payday borrowing? Evidence from debt collection restrictions. The Journal of Finance, 78(1), 63–103. https://doi.org/10.1111/jofi.13189

Fronstein, P. & Spiegel, J. (2022). Bitter pill: A Demographic analysis of unpaid medical bills (Issue Brief No. 568). Employee Benefit Research Institute. https://www.ebri.org/docs/default-source/pbriefs/ebri ib 568 bitterpill-1sept22.pdf?sfvrs n=54bc382f 6

Gangopadhyaya, A., Blavin, F., Braga, B., & Andre, J. (2022, September 27). Which hospital financial characteristics are associated with medical debt?: Hospital profitability, the provision of charity care, and medical debt in hospital markets. Urban Institute. https://www.urban.org/research/publication/which-hospital-financial-characteristics-are-associated-medical-debt

Garber, J. (2023, September 15). Looking AHEAD: CMS' new global budget model for states. Lown Institute.

https://lowninstitute.org/looking-ahead-cms-new-global-budget-model-for-states/

Garber, J. (2024, June 4). Free care: Neighboring hospitals may have wildly different policies. Lown Institute.

https://lowninstitute.org/free-care-neighboring-hospitals-may-have-wildly-different-policies/

Glied, S., & Chandra, A. (2024). It is time to consider more price regulation in health care. JAMA Health Forum, 5(6), e242342. https://doi.org/10.1001/jamahealthforum.2024.2342

Goldsmith-Pinkham, P., Pinkovskiy, M., & Wallace, J. (2023). The Great equalizer: Medicare and the geography of consumer financial strain (Working Paper 31223). National Bureau of Economic Research.

https://www.nber.org/system/files/working_papers/w31223/w31223.pdf

Gondi, S., Kishore, S., & McWilliams, J. M. (2023). Professional backgrounds of board members at top-ranked US hospitals. Journal of General Internal Medicine, 38(10), 2428–2430. https://doi.org/10.1007/s11606-023-08056-z

Goodman, C. W., & Chalmers, K. (2024). Predictive tools in charity care—Revenue vs access. JAMA Internal Medicine, 184(10), 1149–1151. https://doi.org/10.1001/jamainternmed.2024.3564 Goodman, C. W., Flanigan, A., Probst, J. C., & Brett, A. S. (2020). Charity care characteristics and expenditures among US tax-exempt hospitals in 2016. American Journal of Public Health, 110(4), 492–498. https://doi.org/10.2105/AJPH.2019.305522

Gould, E., & Kandra, J. (2024, December 11). Wage inequality fell in 2023 amid a strong labor market, bucking long-term trends. Economic Policy Institute.

https://www.epi.org/blog/wage-inequality-fell-in-2023-amid-a-strong-labor-market-bucking-long-term-trends-but-top-1-wages-have-skyrocketed-182-since-1979-while-bottom-90-wages-have-seen-just-44-growth/

Ground Ambulance and Patient Billing Advisory Committee. (2024). Report on prevention of out-of-network ground ambulance emergency service balance billing. Centers for Medicare & Medicaid Services.

https://www.cms.gov/files/document/report-advisory-committee-ground-ambulance-and-patient-billing.pdf

Guarino, M. (2024, December 5). Outpatient outrage: Hospitals charge facility fees for care at the doctor's office. U.S. PIRG.

https://pirg.org/edfund/resources/outpatient-outrage-hospitals-charge-fees-for-care-at-the-doctors-office/

Gupta, A., Collins, S. R., Roy, S., & Masitha, R. (2024, August 1). Unforeseen health care bills and coverage denials by health insurers in the U.S. The Commonwealth Fund. https://doi.org/10.26099/jqpw-jz55

Guzman, G. & Kollar, M. (2024, September 10). Income in the United States: 2023. U.S. Census Bureau. https://www.census.gov/library/publications/2024/demo/p60-282.html

Hager, K., Emanuel, E., & Mozaffarian, D. (2024). Employer–sponsored health insurance premium cost growth and its association with earnings inequality among US families. JAMA Network Open, 7(1), e2351644.

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2813927

Han, X., Hu, X., Zheng, Z., Shi, K. S., & Yabroff, K. R. (2024). Associations of medical debt with health status, premature death, and mortality in the US. JAMA Network Open, 7(3), e2354766. https://doi.org/10.1001/jamanetworkopen.2023.54766

Haynes, B. (2022). The Racial and wealth gap: Impact of medical debt on Black families. National Consumer Law Center.

https://www.nclc.org/wp-content/uploads/2022/09/RacialHealth-Rpt-2022.pdf

Health Access California. (2023, November 1). Premiums remain low and new reductions in deductibles and co-pays.

https://health-access.org/most-affordable-covered-california-plans-ever-available-starting-now/

Health Affairs. (2022). Value-based payment as a tool to address excess US health spending. https://www.healthaffairs.org/do/10.1377/hpb20221014.526546/full/

Health Affairs. (2023). A Road map for action: Recommendations of the Health Affairs Council on Health Care Spending and Value.

https://www.healthaffairs.org/pb-assets/documents/CHS Report/CHS Report 2022 R5-1 675432678.pdf

Healthcare Financial Management Association. (2022). Best practices for resolution of medical accounts.

https://www.hfma.org/wp-content/uploads/2022/10/best-practices-medical-resolution-medical-accounts.pdf

Healthcare.gov. (2025). Out-of-pocket maximum/limit. https://www.healthcare.gov/glossary/out-of-pocket-maximum-limit

Henry, T. A. (2024, October 3). Over 80% of prior auth appeals succeed. Why aren't there more? American Medical Association.

https://www.ama-assn.org/practice-management/prior-authorization/over-80-prior-authori

Himmelstein, D. U., Dickman, S. L., McCormick, D., Bor, D. H., Gaffney, A., & Woolhandler, S. (2022). Prevalence and risk factors for medical debt and subsequent changes in social determinants of health in the US. JAMA Network Open, 5(9), e2231898. https://doi.org/10.1001/jamanetworkopen.2022.31898

Hoagland, A., Yu, O., & Horný, M. (2024). Social determinants of health and insurance claim denials for preventive care. JAMA Network Open, 7(9), e2433316. https://doi.org/10.1001/jamanetworkopen.2024.33316

Hu, L., Kaestner, R., Mazumder, B., Miller, S., & Wong, A. (2018). The Effect of the Affordable Care Act Medicaid expansions on financial wellbeing. Journal of Public Economics, 163, 99–112. https://doi.org/10.1016/j.jpubeco.2018.04.009

Hughes, S., Gee, E., & Rapfogel, N. (2022). Health insurance costs are squeezing workers and employers. The Center for American Progress.

https://www.americanprogress.org/article/health-insurance-costs-are-squeezing-workers-and-employers/

Illinois Health and Hospital Association. (2021). Illinois Health and Hospital Association memorandum.

https://www.team-iha.org/getmedia/425e7d45-6110-4afe-84d5-4d46e47dc9be/sb-1840-member-memo-6-8-21.pdf

Internal Revenue Service. (2024, August 20). Billing and collections—Section 501(r)(6). U.S. Department of Treasury.

https://www.irs.gov/charities-non-profits/billing-and-collections-section-501r6

Ippolito, B. (2025, January 7). How removing medical debts from credit reports could affect health care and lending practices. American Enterprise Institute. https://www.aei.org/health-care/how-removing-medical-debts-from-credit-reports-could-affect-health-care-and-lending-practices/

Johnson, N., Wekulom, A., Blavin, F., & Braga, B. (2024, October 16). Is Hospital market concentration related to medical debt? Urban Institute.

https://www.urban.org/urban-wire/hospital-market-concentration-related-medical-deb

Joseph, G. (2025, May 9). Indiana passes law threatening non-profit status of expensive hospitals. The Guardian.

https://www.theguardian.com/us-news/2025/may/09/indiana-hosptial-law-non-profit

Karpman, M. (2023). Most adults with past-due medical debt owe money to hospitals. Urban Institute.

https://www.urban.org/sites/default/files/2023-03/Most%20Adults%20with%20Past-Due%20Medical%20Debt%20Owe%20Money%20to%20Hospitals.pdf

Karpman, M., & Blavin, F. (2024, October 30). Early experiences implementing medical debt protection laws in Colorado, Illinois, Maryland, and New Mexico. The Commonwealth Fund. https://doi.org/10.26099/KP6N-9627

Karpman, M., & Long, S. K. (2015). Most adults with medical debt had health insurance at the time the debt was incurred. Urban Institute.

https://www.urban.org/sites/default/files/publication/105159/most-adults-with-medical-debt-had-health-insurance-at-the-time-the-debt-was-incurred.pdf

Karpman, M., Wengle, E., Blavin, F., & Morriss, S. (2024). Early experiences with state medical debt protection laws. Urban Institute.

https://www.urban.org/sites/default/files/2024-10/Early-Experiences-with-State-Medical-Debt-Protection-Laws.pdf

Kelmar, P. (2025, April 1). It's time to end ambulance surprise billing. U.S. PIRG. https://pirg.org/edfund/articles/its-time-to-end-ambulance-surprise-billing/

Kelmar, P., & Nguyen, Q. C. (2023, July 20). Medical bills: Everything you need to know about your rights. Community Catalyst.

https://communitycatalyst.org/resource/medical-bills-everything-you-need-to-know-about-your-rights/

Kendall, D., & Murdock, K. (2024, March 19). Medical debt continues to hammer the middle class. Third Way.

 $\underline{https://www.thirdway.org/memo/medical-debt-continues-to-hammer-the-middle-class}$

KFF. (2024, October 9). 2024 Employer health benefits survey. https://www.kff.org/report-section/ehbs-2024-summary-of-findings/

KFF Health News. (2025, April 3). Bill of the month. https://kffhealthnews.org/news/tag/bill-of-the-month/

Kliff, S., & Silver-Greenberg, J. (2023, August 24). Nonprofit health system ends practice of denying care to patients in debt. The New York Times. https://www.nytimes.com/2023/08/24/health/allina-health-medical-debt.html

Kluender, R., Mahoney, N., Wong, F., & Yin, W. (2021). Medical debt in the US, 2009–2020. JAMA, 326(3), 250–256. https://doi.org/10.1001/jama.2021.8694

Kluender, R., Mahoney, N., Wong, F., & Yin, W. (2024). The Effects of medical debt relief: Evidence from two randomized experiments (Working Paper 32315). National Bureau of Economic Research. https://doi.org/10.3386/w32315

Kona, M., & Raimugia, V. (2023, August 25). State protections against medical debt. The Commonwealth Fund.

https://www.commonwealthfund.org/publications/maps-and-interactives/state-protections-against-medical-debt

Lee, A. M. (2025, January 23). Most Americans can't afford a \$1,000 emergency expense, report finds. CBS News.

https://www.cbsnews.com/news/saving-money-emergency-expenses-2025/

Levey, N. N. (2022, December 21). Hundreds of hospitals sue patients or threaten their credit, a KHN investigation finds. Does yours? KFF Health News.

https://kffhealthnews.org/news/article/medical-debt-hospitals-sue-patients-threaten-credit-khn-investigation/

Levey, N. N. (2023a, May 4). Biden administration issues new warning about medical credit cards. KFF Health News.

https://kffhealthnews.org/news/article/medical-debt-credit-cards-biden-administration -warning-high-interest-rates/

Levey, N. N. (2023b, September 11). A Father dreamed of a home for his family. Medical debt nearly pushed them onto the streets. KFF Health News.

https://kffhealthnews.org/news/article/a-father-dreamed-of-a-home-for-his-family-medical-debt-nearly-pushed-them-onto-the-streets/

Levey, N. N. (2025, January 7). Biden administration bars medical debt from credit scores. KFF Health News.

https://kffhealthnews.org/news/article/biden-administration-cfpb-medical-debt-credit-scores-final-rule/

Levey, N. N., Pattani, A., Noguchi, Y., NPR News, & Sable-Smith, B. (2022, December 21). Upended: How medical debt changed their lives. KFF Health News.

https://kffhealthnews.org/news/article/diagnosis-debt-investigation-faces-of-medical-debt/

Levins, H. (2023, January 19). Hospital consolidation continues to boost costs, narrow access, and impact care quality. Penn LDI.

 $\frac{https://ldi.upenn.edu/our-work/research-updates/hospital-consolidation-continues-to-b}{oost-costs-narrow-access-and-impact-care-quality/}$

Levitt, L. (2025). A Backlash against health insurers, redux. JAMA Health Forum, 6(3), e250954. https://doi.org/10.1001/jamahealthforum.2025.0954

Liss, S. (2025, March 19). Indiana lawmakers seek to forbid hospital monopolies, but one merger fight remains. KFF Health News.

https://kffhealthnews.org/news/article/indiana-copa-hospital-merger-union-health-ftc-monopoly-mike-braun/

Liu, J.L., Levinson, Z.M., Qureshi, N., & Whaley, C.M. (2021). Impact of policy options for reducing hospital prices paid by private health plans. RAND. https://www.rand.org/pubs/research_reports/RRA805-1.html

Lo, J., Long, M., Wallace, R., Salaga, M., & Pestaina, K. (2025, January 27). Claims denials and appeals in ACA Marketplace plans in 2023. KFF.

https://www.kff.org/private-insurance/issue-brief/claims-denials-and-appeals-in-aca-marketplace-plans-in-2023/

Lopes, L., Kearney, A., Montero, A., Hamel, L., & Brodie, M. (2022, June 16). Health care debt in the U.S.: The Broad consequences of medical and dental bills. KFF. https://www.kff.org/report-section/kff-health-care-debt-survey-main-findings/

Lown Institute. (2025a). Hospital financial assistance and debt collection policies: A National data set.

https://lownhospitalsindex.org/report-hospital-financial-assistance-and-debt-collection-policies/

Lown Institute. (2025b). Making hospital tax breaks work for communities. https://lownhospitalsindex.org/report-making-hospital-tax-breaks-work-for-communities/

Lown Institute. (2025c). Tackline medical debt in America: Insights from experts and advocates.

https://lowninstitute.org/tackling-medical-debt-in-america-insights-from-experts-and-advocates/

Mahoney, N. (2024, November 25). Clarifying the interpretation and implications of our medical debt study. Medium.

https://medium.com/@neale.mahoney/clarifying-the-interpretation-and-implications-of-our-medical-debt-study-e4a1ba9dcc90

Martin, A. B., Hartman, M., Washington, B., & Catlin, A. (2024). National health expenditures in 2023: Faster growth as insurance coverage and utilization increased. Health Affairs, 44(1), 12–22. https://doi.org/10.1377/hlthaff.2024.01375

Maryland Health Services Cost Review Commission. (2021). Analysis of hospital provision of reduced-cost care and collection procedures.

https://dlslibrary.state.md.us/publications/Exec/MDH/HSCRC/SB514Ch769HB565Ch770(3) (2021) 2021.pdf

Maryland Health Services Cost Review Commission. (2025). Global budgets. https://hscrc.maryland.gov/Pages/default.aspx

Mathews, S. C., & Makary, M. A. (2020). Billing quality is medical quality. JAMA, 323(5), 409–410. https://doi.org/10.1001/jama.2019.19648

McGough, M., Wager, E., Winger, A., Panchal, N., & Cotter, L. (2024, December 20). How has U.S. spending on healthcare changed over time? Peterson-KFF. https://www.healthsystemtracker.org/chart-collection/u-s-spending-healthcare-changed-time/

McMorrow, S., Berenson, R. A., & Holahan, J. (2021). Commercial health insurance markups over Medicare prices for physician services vary widely by specialty. Urban Institute.

https://www.urban.org/sites/default/files/publication/104945/commercial-health-insurance-markups-over-medicare-prices-for-physician-services-vary-widely-by-specialty.pdf

Medine, T. (2022, March 2). 6 Common medical bill errors. Experian. https://www.experian.com/blogs/ask-experian/common-medical-bill-errors/

MedPAC. (2022, June 15). June 2022 report to the Congress: Medicare and the health care delivery system.

https://www.medpac.gov/document/june-2022-report-to-the-congress-medicare-and-the-health-care-delivery-system/

Meiselbach, M. K., Wang, Y., Xu, J., Bai, G., & Anderson, G. F. (2023). Hospital prices for commercial plans are twice those for Medicare Advantage plans when negotiated by the same insurer. Health Affairs, 42(8), 1110–1118. https://doi.org/10.1377/hlthaff.2023.00039

Mello, M. M., & Rose, S. (2024). Denial — Artificial intelligence tools and health insurance coverage decisions. JAMA Health Forum, 5(3), e240622. https://doi.org/10.1001/jamahealthforum.2024.0622

Mendes de Leon, C. F., & Griggs, J. J. (2021). Medical debt as a social determinant of health. JAMA, 326(3), 228–229. https://doi.org/10.1001/jama.2021.9011

Messac, L., Janke, A. T., Rogers, L. H., Fonfield, I., Walker, J., Rushbanks, E., Becker, N. V., & Bai, G. (2024). US nonprofit hospitals have widely varying criteria to decide who qualifies for free and discounted charity care. Health Affairs, 43(11), 1569–1577. https://doi.org/10.1377/hlthaff.2023.01615

Meyer, H. (2023, February 28). Surprise-billing law loophole: When 'out of network' doesn't quite mean out of network. KFF Health News.

https://kffhealthnews.org/news/article/out-of-network-surprise-bill-loophole-bill-of-the-month/

Miller, J. A. (2024, January 16). Cost of employer-sponsored health insurance is flattening worker wages, contributing to income inequality. Tufts Now.

https://now.tufts.edu/2024/01/16/cost-employer-sponsored-health-insurance-flattening-worker-wages-contributing-income

Moody, G., & Silow-Carroll, S. (2009). Aiming higher for health system performance: A Profile of seven states that perform well on the Commonwealth Fund's 2009 state scorecard: Hawaii. The Commonwealth Fund.

https://www.commonwealthfund.org/sites/default/files/documents/ media files publications fund report 2009 oct profile of seven states 1329 aiming higher state profiles hawaii_final.pdf

Murdock, K., Kendall, J., & Kendall, D. (2023, August 21). Medical debt hits the heart of the middle class. Third Way.

https://www.thirdway.org/report/medical-debt-hits-the-heart-of-the-middle-class

Murphy, S. P. (2025, March 11). He got dental surgery at Mass General Hospital, but the full \$27,000 cost wasn't disclosed to him until afterward. Boston Globe. https://www.bostonglobe.com/2025/03/11/business/mass-general-hospital-dental-surgery-bill-mgh/

Murray, R. C., Whaley, C. M., Fuse Brown, E. C., & Ryan, A. M. (2024). Hospital payment caps could save state employee health plans millions while keeping hospital operating margins healthy. Health Affairs, 43(12), 1680–1688. https://doi.org/10.1377/hlthaff.2024.00691

Myerson, R. (2024). State-level insulin copayment caps—Who benefits, and what is next? JAMA Network Open, 7(8), e2425234.

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2822225

Najmabadi, S. (2024, May 26). In this Kansas courtroom, the hospital dominates the docket. Wall Street Journal.

https://www.wsj.com/health/healthcare/in-this-kansas-courtroom-the-hospital-dominates-the-docket-d129bbed

National Academy for State Health Policy. (2024, January 4). Comparison of state prescription drug affordability review initiatives.

https://nashp.org/comparison-of-state-prescription-drug-affordability-review-initiatives/

National Cancer Institute. (2024, June 6). Financial toxicity (financial distress) and cancer treatment (PDQ^{\otimes}) – Patient version. National Institutes of Health.

https://www.cancer.gov/about-cancer/managing-care/track-care-costs/financial-toxicity-pdq

National Consumer Law Center. (2025). Surviving debt (16th ed.). https://library.nclc.org/book/surviving-debt/debt-collectors-and-medical-debt

National Nurses United. (2020, November 16). New study – Hospitals hike charges by up to 18 times cost [Press release].

https://www.nationalnursesunited.org/press/new-study-hospitals-hike-charges-18-times-cost

Noguchi, Y. (2024, January 23). A Growing wave of local governments are erasing billions in medical debts. NPR.

https://www.npr.org/sections/health-shots/2024/01/23/1225014618/nyc-joins-a-growing-wave-of-local-governments-erasing-residents-medical-debt

Office of Senator Josh Becker. (2024, December 9). Landmark law prohibits health insurance companies from using AI to deny healthcare coverage [Press release]. https://sd13.senate.ca.gov/news/press-release/december-9-2024/landmark-law-prohibits-health-insurance-companies-using-ai-to

Oregon Health Authority. (2022). HB 3076 implementation report. https://www.oregon.gov/oha/HPA/ANALYTICS/HospitalReporting/HB-3076-Comm-Benefit-Leg-Report.pdf

Oregon Health Authority. (2025). Oregon hospital community benefit report FY 2023. https://www.oregon.gov/oha/HPA/ANALYTICS/HospitalReporting/FY2023%20Community%20Benefit%20Data%20Brief.pdf

PatientRightsAdvocate.org. (2024). Seventh semi-annual hospital price transparency report.

https://www.patientrightsadvocate.org/seventh-semi-annual-hospital-price-transparency-report-november-2024

Paturzo, J. G. R., Hashim, F., Dun, C., Boctor, M. J., Bruhn, W. E., Walsh, C., Bai, G., & Makary, M. A. (2021). Trends in hospital lawsuits filed against patients for unpaid bills following published research about this activity. JAMA Network Open, 4(8), e2121926. https://doi.org/10.1001/jamanetworkopen.2021.21926

Pollitz, K. (2022, February 4). Network adequacy standards and enforcement. KFF. https://www.kff.org/affordable-care-act/issue-brief/network-adequacy-standards-and-enforcement/

Pollitz, K., Pestaina, K., Montero, A., Lopes, L., Valdes, I., Kirzinger, A., & Brodie, M. (2023, June 15). KFF survey of consumer experiences with health insurance. KFF. https://www.kff.org/private-insurance/poll-finding/kff-survey-of-consumer-experiences-with-health-insurance/

Radley, D. C., Baumgartner, J. C., Collins, S. R., & Zephyrin, L. C. (2023, June 22). 2023 Scorecard on state health system performance. The Commonwealth Fund. https://doi.org/10.26099/fcas-cd24

Rakotoniaina, A. (2023, February 7). Overview of states' hospital reference-based pricing to Medicare initiatives. National Academy for State Health Policy. https://nashp.org/state-tracker/overview-of-states-hospital-reference-based-pricing-to-medicare-initiatives/

Rakshit, S., Rae, M., Claxton, G., Amin, K., & Cox, C. (2024a, February 12). The Burden of medical debt in the United States. Peterson-KFF.

https://www.healthsystemtracker.org/brief/the-burden-of-medical-debt-in-the-united-

states/#Share%20of%20adults%20who%20have%20medical%20debt,%20by%20demographics,%202021

Rakshit, S., Wager, E., Hughes-Cromwick, P., Cox, C., & Amin, K. (2024b, August 2). How does medical inflation compare to inflation in the rest of the economy? Peterson-KFF. https://www.healthsystemtracker.org/brief/how-does-medical-inflation-compare-to-inflation-in-the-rest-of-the-economy/

Rau, J. (2019, October 14). Patients eligible for charity care instead get big bills. KFF Health News.

https://kffhealthnews.org/news/patients-eligible-for-charity-care-instead-get-big-bills/

Reed, T. (2025, January 6). More states crank up oversight of health insurers. Axios. https://www.axios.com/2025/01/06/health-insurer-oversight-state-legislature-bills

Rosato, D. (2018, April 12). Should you ever prepay a hospital bill? Consumer Reports. https://www.consumerreports.org/healthcare-costs/prepay-hospital-bill/

Santillo, M., Braga, B., Blavin, F., & Gangopadhyaya, A. (2022, October 14). Communities of color disproportionally suffer from medical debt. Urban Institute. https://www.urban.org/urban-wire/communities-color-disproportionally-suffer-medical-debt

Santos, T., Lindrooth, R. C., Lee, S.-Y. D., Owsley, K., & Young, G. J. (2025). Oregon community benefit reform influenced not-for-profit hospitals' charity care and medical debt write-off. Health Affairs, 44(2), 196–205. https://doi.org/10.1377/hlthaff.2024.00760

Schulz, M. (2023, June 12). Survey: Americans burdened with medical debt. LendingTree. https://www.lendingtree.com/debt-consolidation/medical-debt-bills-survey/

Serino, N. (2025, May 20). Tackling medical debt in America: Insights from experts and advocates. Lown Institute.

https://lowninstitute.org/tackling-medical-debt-in-america-insights-from-experts-and-advocates/

Shrank, W. H., Rogstad, T. L., & Parekh, N. (2019). Waste in the US health care system: Estimated costs and potential for savings. JAMA, 322(15), 1501–1509. https://doi.org/10.1001/jama.2019.13978

Shrider, E. A. (2024). Poverty in the United States: 2023. U.S. Census Bureau. U.S. Department of Commerce.

https://www2.census.gov/library/publications/2024/demo/p60-283.pdf

Silber-Marker, R. (2024). Medical debt in their own words: Qualitative interview results. Neighborhood Trust Financial Partners.

https://neighborhoodtrust.org/wp-content/uploads/2024/01/NTFP_RIPMedicalDebt_Brief 3 F-1.pdf

Silver-Greenberg, J., & Thomas, K. (2022a, December 15). They were entitled to free care. Hospitals hounded them to pay. The New York Times.

https://www.nytimes.com/2022/09/24/business/nonprofit-hospitals-poor-patients.html

Silver-Greenberg, J., & Thomas, K. (2022b, October 4). Hospital system to refund poor patients who were entitled to free care. The New York Times.

https://www.nytimes.com/2022/10/04/business/providence-hospital-poor-patients.html

Simmons–Duffin, S. (2019, June 25). When hospitals sue for unpaid bills, it can be 'ruinous' for patients. NPR.

https://www.npr.org/sections/health-shots/2019/06/25/735385283/hospitals-earn-little-from-suing-for-unpaid-bills-for-patients-it-can-be-ruinous

Stovicek, N. (2025, March 17). Expanding the No Surprises Act to protect consumers from surprise ambulance bills: Map of state laws. The Commonwealth Fund.

https://www.commonwealthfund.org/publications/maps-and-interactives/expanding-no-surprises-act-protect-consumers-surprise-ambulance

Sutton, J., & Ben-Porath, E. (2024). Medical debt in Missouri. Missouri Foundation for Health.

https://mffh.org/wp-content/uploads/2024/09/MFH-Medical-Debt-Survey-Final-Report.pdf

Swendener, A., MacDougall, H., Jacobson, I., Schroeder, J., & Henning-Smith, C. (2024). Medical debt in collections among counties by rural-urban location and racial-ethnic composition. University of Minnesota Rural Health Research Center.

https://rhrc.umn.edu/wp-content/uploads/2024/11/Medical-Debt-in-Collections 10.31.24.pdf

Taylor, L. A., Doernberg, S., Pomory, S., Casalino, E., & Calabrese, T. (2024). An Overlooked hospital performance metric: Bond Ratings. Health Affairs. https://doi.org/10.1377/forefront.20240208.179150

Texas Department of State Health Services. (2023). Report on charity care costs, government-sponsored indigent health (GSIH) care and community benefits provided by nonprofit hospitals in Texas – 2023.

 $\frac{https://www.dshs.texas.gov/sites/default/files/legislative/2025-Reports/2023\%20Nonprofit%20Hospital%20Hospital%20System%20Charity%20Care%20and%20Community%20Benefits%20Report.pdf$

Thomas, M., Flaherty, J., Wang, J., Henderson, M., Ho, V., Cuban, M., & Cram, P. (2023). Comparison of hospital online price and telephone price for shoppable services. JAMA Internal Medicine, 183(11), 1214–1220. https://doi.org/10.1001/jamainternmed.2023.4753

Tikkanen, R., Osborn, R., Mossialos, E., Djordjevic, A., & Wharton, G. A. (2020a, June 5). International health care system profiles: Canada. The Commonwealth Fund. https://www.commonwealthfund.org/international-health-policy-center/countries/canada#universal-coverage

Tikkanen, R., Osborn, R., Mossialos, E., Djordjevic, A., & Wharton, G. A. (2020b, June 5). International health care system profiles: England. The Commonwealth Fund. https://www.commonwealthfund.org/international-health-policy-center/countries/england#universal-coverage

Tikkanen, R., Osborn, R., Mossialos, E., Djordjevic, A., & Wharton, G. A. (2020c, June 5). International health care system profiles: Germany. The Commonwealth Fund. https://www.commonwealthfund.org/international-health-policy-center/countries/germany

Tikkanen, R., Osborn, R., Mossialos, E., Djordjevic, A., & Wharton, G. A. (2020d, June 5). International health care system profiles: Netherlands. The Commonwealth Fund. https://www.commonwealthfund.org/international-health-policy-center/countries/netherlands#universal-coverage

Undue Medical Debt. (2024). From medical bill to medical debt. https://unduemedicaldebt.org/wp-content/uploads/2024/12/FROM MEDICAL BILL TO MEDICAL DEBT.pdf?v=6

Undue Medical Debt. (2025a). First do no harm: How clinicians can champion the end of medical debt.

https://unduemedicaldebt.org/first-do-no-harm-a-guide-for-clinicians-to-champion-the-e-end-of-medical-debt/

Undue Medical Debt. (2025b). Government partnerships in action. https://unduemedicaldebt.org/government-partnerships/

Undue Medical Debt & Neighborhood Trust Financial Partners. (2024). Navigating the maze of health care finances: A Revenue cycle perspective. https://unduemedicaldebt.org/navigating-the-maze-of-health-care-finances-a-revenue-cycle-perspective/

Urban Institute. (2024a, July 10). The Changing medical debt landscape in the United States. https://apps.urban.org/features/medical-debt-over-time/

Urban Institute. (2024b, September). Debt in America: An Interactive map. http://urbn.is/2AnVzHa

VantageScore. (2022, August 10). MAJOR CREDIT SCORE NEWS: VantageScore removes medical debt collection records from latest scoring models [update]. https://vantagescore.com/resources/knowledge-center/major-credit-score-news-vantagescore-removes-medical-debt-collection-records-from-latest-scoring-models/

Volk, J., Curran, E., & Giovannelli, J. (2018). Health care sharing ministries: What are the risks to consumers and insurance markets? The Commonwealth Fund. https://www.commonwealthfund.org/sites/default/files/2018-08/Volk hlt care sharing ministries.pdf

Vollers, A. C. (2024, April 25). You've covered your copayment; now brace yourself for the 'facility fee'. Stateline.

https://stateline.org/2024/04/25/youve-covered-your-copayment-now-brace-yourself-for-the-facility-fee/

Walker, B., Wallace, J., Callison, K., Anderson, A., Siebert, A., & Ndumele, C.D. (2024, February 21). How Medicaid protects beneficiaries from financial stress — and how it could do more. The Commonwealth Fund.

https://www.commonwealthfund.org/blog/2024/how-medicaid-protects-beneficiaries-financial-stress-and-how-it-could-do-more#:~:text=Findings%20from%20the%20Commonwealth%20Fund,are%20paying%20off%20over%20time

Weber, L. (2021, March 26). Her doctor's office moved one floor up. Her bill was 10 times higher. KFF Health News.

https://kffhealthnews.org/news/article/bill-of-the-month-hospital-facility-fee-outpatient-arthritis-injections/

Wiltshire, J. C., Enard, K. R., Colato, E. G., & Orban, B. L. (2020). Problems paying medical bills and mental health symptoms post-Affordable Care Act. AIMS Public Health, 7(2), 274–286. https://doi.org/10.3934/publichealth.2020023

Winger, A., Claxton, G., Rae, M., Damico, A., & Rakshit, S. (2024, February 12). How financially vulnerable are people with medical debt? Peterson-KFF. https://www.healthsystemtracker.org/brief/how-financially-vulnerable-are-people-with-medical-debt/

Work, M. C. (2022, November 22). They could have qualified for charity care. But Mayo Clinic sued them. Post Bulletin.

https://www.postbulletin.com/newsmd/they-could-have-qualified-for-charity-care-but-mayo-clinic-sued-them

Work, M. C. (2024, March 25). A Mom's \$97,000 question: How was her baby's air-ambulance ride not medically necessary? KFF Health News. https://kffhealthnews.org/news/article/medical-necessity-rsv-infant-air-ambulance-surprise-bill/

Young, G., Rae, M., Claxton, G., Wager, E., & Amin, K. (2022, March 10). How many people have enough money to afford private insurance cost sharing? Peterson-KFF. https://www.healthsystemtracker.org/brief/many-households-do-not-have-enough-money-to-pay-cost-sharing-in-typical-private-health-plans/

Zare, H., Logan, C., & Anderson, G. F. (2023). When states mandate hospital community benefit reports, provision increases. Journal of Healthcare Management, 68(2), 83–105. https://doi.org/10.1097/JHM-D-22-00156

Zhang, R. C. (2021, November 16). The Catholic hospital system Ascension is running a Wall Street-style private equity fund. STAT.

https://www.statnews.com/2021/11/16/ascension-running-wall-street-style-private-equity-fund/

Zuger, A. (2021). Tallying the waste in American healthcare. New England Journal of Medicine Journal Watch.

https://www.jwatch.org/na52991/2021/01/05/tallying-waste-american-healthcare