



Characterizing the Indiana Context: An Update to Understanding Costs of Care in the State

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Executive Summary

Rising health care costs in Indiana, coupled with relatively poor health outcomes, are of concern to Indiana leaders. Stakeholder groups across sectors recognize that failing to address the state's public health issues will impede business vitality and long-term economic growth.¹ However, different groups may have different incentives, constraints, and conceptions of the state's health care landscape. At the request of the Indiana Business Health Collaborative, the Indiana University Fairbanks School of Public Health in Indianapolis prepared this report to help the state's key stakeholders establish a shared knowledge base on factors that affect health care spending and costs.

The current report is an update to our previous document, "Addressing Factors that Affect Health Care Costs: Recommendations for Indiana Stakeholders," published in January 2020.² Our previous report was published at a time of enhanced dialogue regarding health care costs in the state. While much of the discussion at the time revolved around the relatively high prices that Indiana's self-insured employers paid for hospital care compared to other US states,^{3,4} our report showed that this was just one piece of the overall issue, albeit an important piece for self-insured employers. We highlighted other drivers of health care costs in the state, including rising costs of pharmaceuticals and relatively high disease burdens among Hoosiers. Our current report updates select aspects of our original report with more contemporary information regarding Indiana's health care business landscape.

Characterizing the Indiana Context

In this section, we present a wide range of publicly available data that summarizes levels of health spending and costs as well as potential drivers of spending, including health care market characteristics, mortality and health conditions, and public health investments. To promote transparency and reproducibility of our results, we use only publicly available, citable data from reputable, prominent federal agencies and thinktanks. Figure 1 compares key metrics for Indiana with the US overall and our four neighboring states (Illinois, Kentucky, Michigan, and Ohio). These comparisons help identify areas where Indiana differs from national and regional norms.

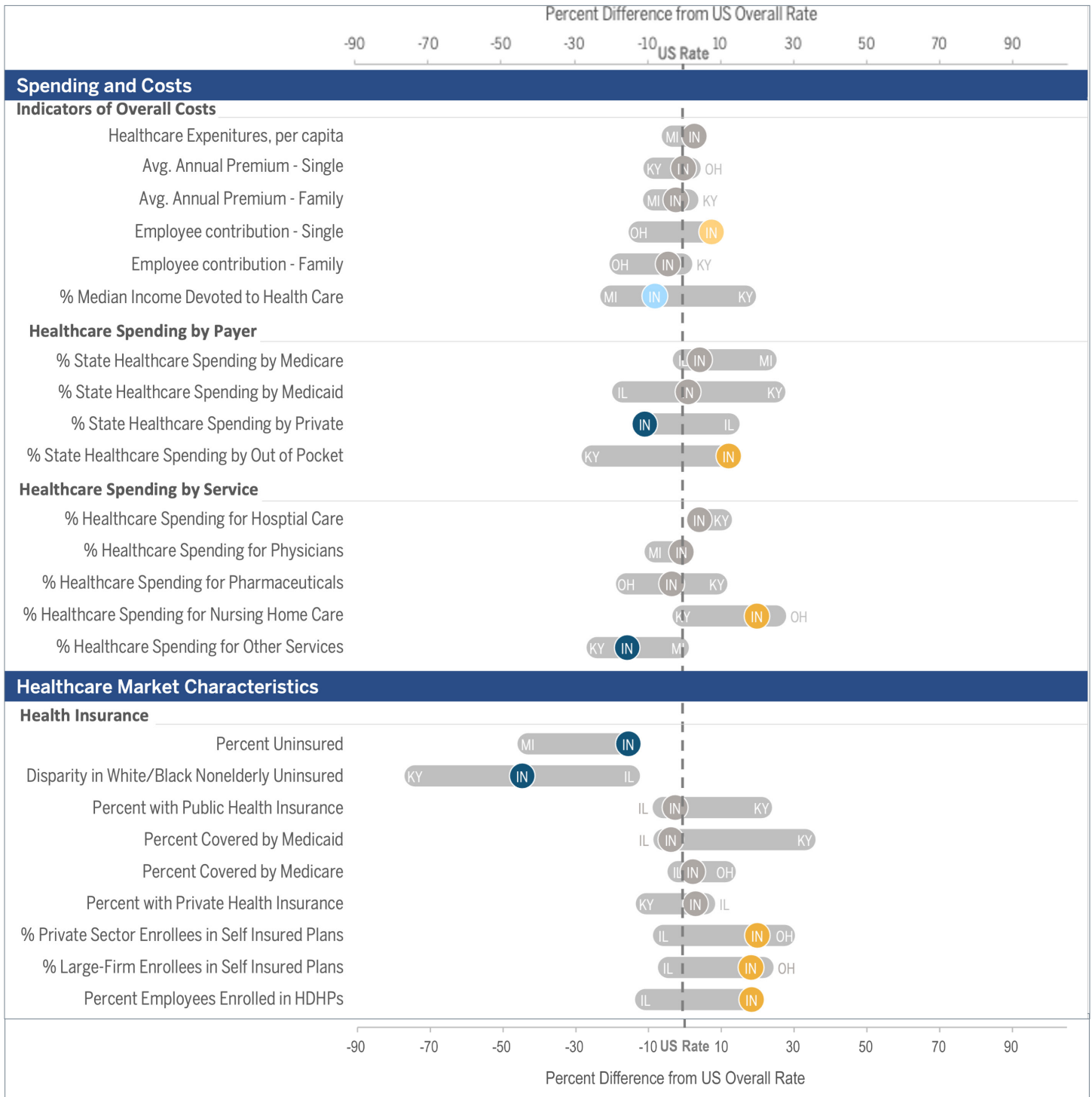
To aid in the interpretation of this data, Figure 1 shows Indiana's standing (depicted by a dot) relative to neighboring states (depicted by a gray band) as a percent difference from the US average (depicted by the dashed vertical line). A **gray dot** for Indiana indicates no substantial difference from the US. A **dark blue dot** indicates that Indiana is at least 10% lower than the US overall, a **light blue dot** indicates 5 to 10% lower, a **yellow dot** indicates 5-10% higher,

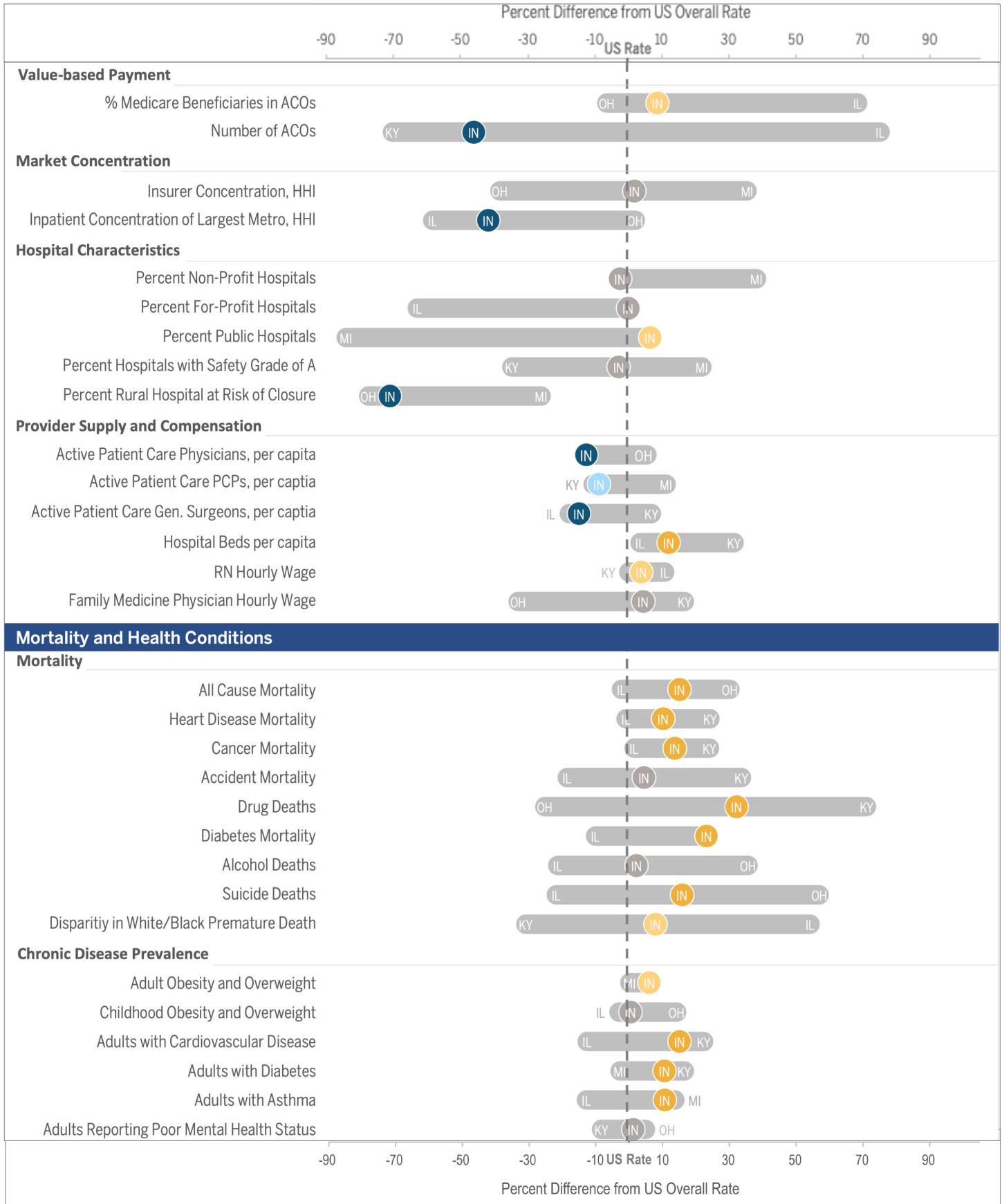
and a **gold dot** indicates at least 10% higher. The gray bands show which neighboring states have the highest and lowest levels. Data included in Figure 1 are presented in greater detail in the main report.

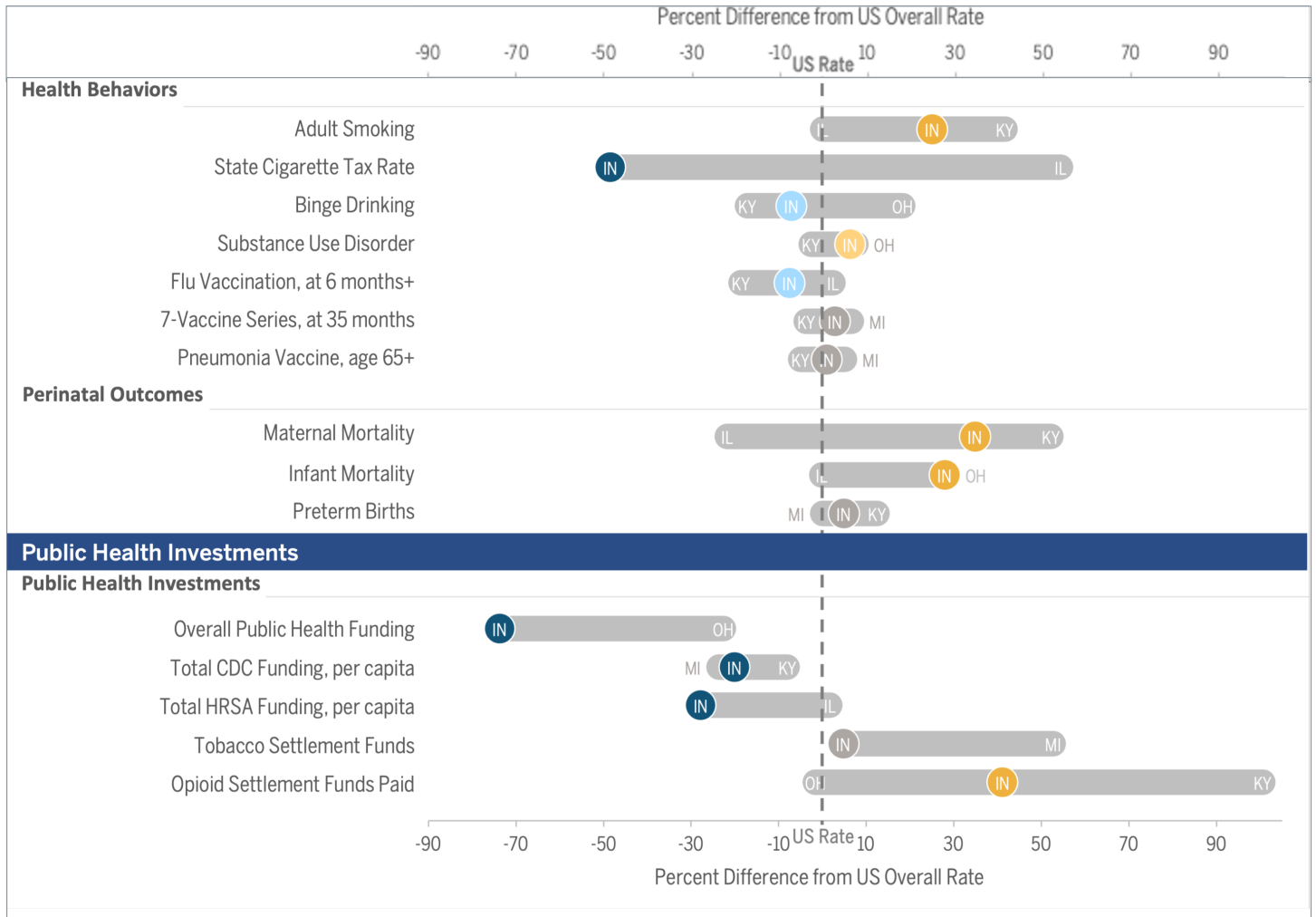
Our key takeaways from Figure 1 are:

- **Indiana's total per-capita health care spending is in line with neighboring states and nearly identical to the US average.** Indiana resembles other US states on several other measures, including insurance premiums, percent of health spending by Medicaid and Medicare, insurer market concentration, and hospital ownership.
- **One important area where Indiana's health care market differs is the high prevalence of self-insured health plans in our state.** Hoosiers employed in the private sector are 20% more likely than other Americans to be enrolled in self-insured health plans. Self-insured employers lack the market power to effectively negotiate prices with hospitals,⁵ so the dominance of self-insurance in Indiana may partially explain previous findings that hospital prices are higher in Indiana than other US states.³
- According to market concentration measures published by the Health Care Cost Institute and the American Medical Association, **Indiana's health care markets do not appear to have a unique monopoly problem.** Competition among the state's insurers is consistent with US norms, and Indianapolis's hospital market is slightly more competitive than the national average.
- **Indiana's number of physicians (both general practitioners and specialists) is lower than the nation overall,** which suggests physician shortages.
- Indiana's mortality rate is 16% higher than the nation's rate. Our state has higher rates of nearly all chronic diseases, including cardiovascular disease, diabetes, and obesity. Hoosiers are also more likely to engage in risky health behaviors, like smoking and substance misuse.

Figure 1. Summary of Health Care Measures in Indiana Relative to United States and Neighboring States, as Presented in the Main Report. A gray dot for Indiana indicates no substantial difference from the US. A dark blue dot indicates that Indiana is at least 10% lower than the US overall, a light blue dot indicates 5 to 10% lower, a yellow dot indicates 5-10% higher, and a gold dot indicates at least 10% higher. The gray bands show which neighboring states have the highest and lowest levels. Data included in Figure 1 are presented in greater detail in the main report.







Introduction

Rising health care costs are of concern to Indiana's employers, consumers, policymakers, health care providers, and other stakeholders. In 2017, the first of several RAND reports commissioned by Indiana employers found that the prices self-insured employers paid for inpatient and outpatient hospital services at Indiana health systems were higher than Medicare prices for similar services, especially relative to other states.^{3,4} Subsequent reports by various organizations pushed back against these findings and presented alternate arguments, often contradicting one another. The Indiana Hospital Association refuted several of the key conclusions and cited methodological shortcomings of the RAND reports.⁶ A Ball State University report argued that Indiana hospitals engage in monopolistic behaviors,⁷ while subsequent analysis by NERA Economic Consulting countered the Ball State report and argued that competition among Indiana hospitals is in line with US norms.⁸

Along the way, these findings catalyzed vigorous debate among stakeholders regarding contributing factors to these observed high prices, including assertions of insufficient competition among both providers and payers in Indiana and the poor overall health status of Hoosiers. In 2019, as the legislature considered action to address health care costs, we at Indiana University's Fairbanks School were asked by stakeholders to synthesize the health policy literature and recommend evidence-based approaches that could reduce overall health care costs in the state.

Our previous report was released in January 2020 and included several analyses comparing Indiana to the national average and each of our neighboring states on disease burden, health status, health care market, and demographic characteristics.² Our takeaways were that Indiana looked remarkably similar to the US overall on many measures, including per-capita total health care spending, insurance coverage, and hospital characteristics. However, Indiana performed worse than the nation in terms of mortality, chronic disease, and public health investments. Our 2020 report concluded that there was no simple "magic bullet" solution and that a comprehensive portfolio of activities with maximum collaboration among stakeholder groups was necessary to reduce costs and improve population health in Indiana.

Since our last report, there have been substantial changes to the public health landscape in the state, including the public health emergency in response to the COVID-19 pandemic, a brief economic recession and robust recovery, and unprecedented investments in public health at the state and local levels.¹ In 2024, stakeholders continue to disagree on both the degree to which health costs in Indiana are high (compared to US norms) and the best way to

address this issue that is affecting many. We were approached again, this time by the Indiana Business Health Collaborative, to update select aspects of our original report with more contemporary information regarding Indiana's health care business landscape.

The purpose of the current report is to (1) present a range of publicly available data on factors that may affect health spending and costs in the state, including health care market characteristics, mortality and health conditions, public health investments, and population demographics; (2) understand trends over time in each of these factors; and (3) help key stakeholders frame major issues and establish a shared knowledge base of the context of health care costs in the state.

We begin the report by discussing our methodology. Then we present data that characterizes our state's health care context. We compare Indiana to the national average and to each of our neighboring states in terms of spending and costs, health care market characteristics, mortality and health conditions, public health investments, and population demographics. Finally, the conclusion presents challenges and opportunities that lie ahead.

Methodology





This report presents detailed data on approximately 80 variables measuring health care spending and costs, health care market characteristics, mortality and health conditions, public health investments, and population demographics. In line with our goals of transparency and reproducibility, we did not create new datasets or use proprietary data for any analysis. Rather, we gathered publicly available data from the most reputable, prominent federal agencies and thinktanks. The Appendix provides the exact definitions and data sources (with hyperlinks) for each variable. Due to lags in the publicly available data, this report presents the most recently available data as of July 2024. We list the reference year for each variable in the tables.





For each of the variables included, we present current levels for the US, Indiana, and each of our four neighboring states. The tables in Sections 1 through 5 of the report use color shading to aid in the comparison of state-level outcomes with the national average. **Dark Blue** indicates that the level for a given state is at least 10% lower than the national average, **light blue** indicates at least 5% lower, **yellow** indicates 5% higher, and **gold** indicates at least 10% higher.

In addition to comparing Indiana's raw levels of each variable with national and neighboring states' levels, we are interested in understanding the extent to which these measures

improved (or worsened) over time and how Indiana's changes on these rates compared to those of the nation and neighboring states. For each of the included variables, we also present the percent change compared to the data disseminated in our original report published in 2020. Newly added variables that were not included in the 2020 report display "n/a" for not applicable in the column presenting changes from previous years. To aid in the visual interpretation of these trends, we include arrows to indicate whether the measure has increased or decreased over time. If the percent change was less than 5%, we considered it to be no change.

Key for All Tables

	Dark Blue indicates at least 10% lower than national level (or average of all states if national level was inapplicable or unavailable).
	Light Blue indicates 5-10% lower than national level (or average of all states if national level was inapplicable or unavailable).
	Yellow indicates 5-10% higher than the national level (or average of all states if national level was inapplicable or unavailable).
	Gold indicates at least 10% higher than national level (or average of all states if national level was inapplicable or unavailable).

	Up arrow indicates at least 10% higher than the previous level
	Diagonal upwards arrow indicates 5-10% higher than the previous level
	Diagonal downwards arrow indicates 5-10% lower than the previous level
	Down arrow indicates at least 10% lower than the previous level

Section 1: Spending and Costs

Table 1 presents macro-level measures of health spending and costs for the US, Indiana, and each of our four neighboring states. **For many measures, including total per-capita health care expenditures and insurance premiums, Indiana tracks closely with the US overall, both in terms of current level and growth rate over the past four years.** Employers pay the bulk of premiums for health insurance plans. Indiana's employee contribution for insurance coverage is slightly higher than US norms for single coverage but nearly the same as the US for family coverage. Historically, premiums have risen faster than inflation and wages, but over the past five years, cumulative increases have been similar, likely because of a decline in use of health services during the COVID-19 pandemic and the end of a prolonged period of very low inflation.⁹ On average, Indiana spends 10.7% of the median income on health care, which is lower than the national average.

Table 1. Macro Indicators of Overall Health Care Costs

Macro Indicators of Overall Healthcare Costs	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
	Healthcare Expenditures per Capita, 2020	\$10,191	↑ 26.7	\$10,517	↑ 26.7	\$10,190	↑ 23.3	\$10,257	↑ 28.1	\$9,897	↑ 22.9	\$10,478
Avg. Annual Premium- SINGLE Coverage, 2022	\$7,590	↑ 13.0	\$7,601	↑ 12.1	\$7,547	↔ 6.0	\$6,990	↓ 4.5	\$7,276	↑ 15.1	\$7,743	↑ 13.8
Avg. Annual Premium- FAMILY Coverage, 2022	\$21,931	↑ 12.1	\$21,502	↔ 10.0	\$20,943	↔ 2.6	\$22,225	↑ 15.3	\$20,175	↑ 10.6	\$21,760	↑ 10.8
Employee Contribution for SINGLE Coverage, 2022	21.6%	1.4	23.3%	↔ 9.4	23.1%	↑ 13.2	21.6%	↓ -11.5	21.8%	-4.0	19.0%	↓ -20.8
Employee Contribution for FAMILY Coverage, 2022	29.6%	↔ 6.5	28.4%	↑ 21.9	27.0%	↔ 2.3	29.5%	↔ 5.7	25.8%	↔ 9.8	24.5%	-3.9
% Median Income Devoted to Health Care, 2020	11.6%	-0.9	10.7%	↔ -7.0	10.3%	↔ 8.4	13.6%	↔ 5.4	9.3%	↔ 9.4	11.0%	↔ 3.8

[Definitions and sources](#)

Table 2 breaks down health care spending by payer. Of Indiana's total health spending, about 31% is paid by private insurers (less than the US average and each of our neighboring states) and 30% out-of-pocket by patients (more than the US). **Hoosiers' out-of-pocket financial burden is substantially higher than that of all four of our neighboring states, which may be driven by the higher prevalence of high-deductible health plans in our state.** On the public side, Medicare accounts for 23% of total spending and Medicaid for 17%, similar to national averages.

Table 2. Distribution of Costs by Payer

Distribution of Costs Percent of Total Healthcare Spending by Payer	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
	Medicare, 2019	22.0%	n/a	23%	n/a	22%	n/a	25%	n/a	27%	n/a	23%
Medicaid, 2019	16.8%	n/a	17%	n/a	14%	n/a	21%	n/a	16%	n/a	18%	n/a
Private, 2019	34.6%	n/a	31%	n/a	39%	n/a	34%	n/a	33%	n/a	32%	n/a
Out of Pocket, 2019	26.6%	n/a	30%	n/a	25%	n/a	20%	n/a	24%	n/a	27%	n/a

[Definitions and sources](#)



Table 3 presents components of spending by service. For most components, including hospital care, Indiana is similar to national averages. Nearly 40% of Hoosiers' health care dollars go toward hospital care, 28% toward physicians and other professional services, 13% for pharmaceuticals, 7% for nursing home care (more than the national average), and 13% for other services (less than the US).

Table 3. Distribution of Costs by Service

Distribution of Costs Percent of Healthcare Expenditure by Service	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
Hospital Care, 2020	37.8%	n/a	39.5%	n/a	39.5%	n/a	41.8%	n/a	39.7%	n/a	39.9%	n/a
Physicians and other Professional Services, 2020	27.6%	n/a	27.5%	n/a	27.5%	n/a	26.2%	n/a	25.5%	n/a	26.8%	n/a
Prescription Drugs and Medical Non-Durables, 2020	12.9%	n/a	12.5%	n/a	12.0%	n/a	14.1%	n/a	13.4%	n/a	10.9%	n/a
Nursing Home Care, 2020	5.9%	n/a	7.1%	n/a	7.2%	n/a	5.9%	n/a	5.9%	n/a	7.4%	n/a
Other Services, 2020	15.7%	n/a	13.3%	n/a	13.8%	n/a	12.0%	n/a	15.5%	n/a	15.0%	n/a

[Definitions and sources](#)

Section 2: Health Care Market Characteristics

Health Insurance and Types of Insurance Plans

Indiana differs considerably from the nation when it comes to insurance coverage and the prevalence of high-deductible and self-insured insurance plans. **Table 4 shows that our state's uninsured rate, at 6.8%, is lower than that of the nation.** Over the past four years, the uninsured rate dropped by 15% in Indiana versus only an 11% drop for the nation overall. Still, our uninsured rate is higher than that of our four neighboring states. White Hoosiers are more likely to have health insurance than Black Hoosiers, but this racial disparity in insurance coverage is smaller for Indiana than for the nation overall.

A key finding from Table 4 is the high prevalence of self-insured insurance plans in Indiana. Employers who offer health insurance coverage can decide whether to offer self-insured plans or fully-insured plans. For fully-insured plans, employers purchase insurance from a health insurance company, which assumes the financial risk. For self-insured plans, employers are financially responsible for enrollees' medical costs and therefore have an incentive for lower prices. In Indiana, 66% of private sector employees are enrolled in self-insured plans, which is 20% higher than the US average. (It should be noted that this data is only publicly available for private-sector employees. Some of Indiana's largest employers are self-insured, public organizations, so the number presented here is likely an underestimate of the presence of self-insurance in Indiana.) **Table 4 also shows that over the last four years, self-insurance has grown in Indiana, even while it has declined in the US and each of our neighboring states.** Self-insurance has become an increasingly attractive

option for even small- and medium-sized employers, as the costs of health care coverage have increased over the past decade. Self-insured plans are not subject to state insurance regulations such as coverage requirements, and employers generally view self-insurance as less expensive than fully-insured alternatives.¹⁰

However, self-insured employers lack the market power to effectively negotiate prices directly with large health care providers.¹¹ They often contract for administration of the plan – which includes negotiating prices with providers – to third party administrators (TPAs), which are typically insurance companies. Because TPAs do not bear the financial risk associated with the insurance plans, they have less incentive to negotiate lower prices on behalf of self-insured employers.⁵ Studies show that self-insured plans pay higher prices for the same services at the same hospital than fully-insured plans administered by the same payer, even after adjusting for differences in patient characteristics and geography.^{11,12}

High-deductible health plans (HDHPs) are also dominant in our state. Nearly 64% of Indiana’s employees are enrolled in HDHPs (higher than the US average) and this figure increased by 23% since our 2020 report. HDHPs have lower monthly premiums and higher deductibles compared to traditional plans. They require patients to pay more out-of-pocket for health care services before insurance coverage kicks in. Often, they are paired with Health Savings Accounts (HSAs) that allow enrollees to spend pre-tax dollars on medical expenses. The prevalence of HDHPs may partially explain patients’ higher out-of-pocket spending in Indiana, despite our **overall average ranking in health care spending and** lower uninsurance rates in the state.

Table 4. Health Insurance

Health Insurance Coverage	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
Percent Uninsured, 2022	8.0%	↓ -11.1	6.8%	↓ -15.0	6.6%	↔ -5.7	5.4%	↓ -10.0	4.6%	↔ -8.0	5.8%	-3.3
Diff. btwn White & Black % of Nonelderly Uninsured Rate, 2022	3.4	n/a	1.9	n/a	2.9	n/a	0.9	n/a	1.4	n/a	2.1	n/a
Percent with Public Health Insurance, 2022	37.1%	↑ 1.1	36.3%	-0.3	35.1%	↑ 16.2	45.1%	n/a	40.0%	-1.7	38.4%	↔ 9.1
Percent covered by Medicaid, 2022	21.2%	↑ 1.0	20.5%	↑ 13.9	20.1%	↑ 0.5	28.3%	4.8	23.3%	↔ 5.9	21.3%	↑ 1.4
Percent covered by Medicare, 2022	14.6%	↑ 4.3	15.0%	↔ 7.1	14.4%	↑ 10.8	15.6%	4.0	16.2%	↔ 8.0	16.3%	↔ 8.7
Percent with Private Health Insurance, 2022	55.0%	↓ -11.7	56.9%	↓ -16.0	58.3%	↓ -16.6	49.5%	n/a	55.4%	↓ -14.2	55.8%	↓ -13.5
Percent of Private Sector Enrollees in Self-Insured Plans, 2022	54.8%	↔ -6.64	66.0%	↔ 6.11	51.9%	↓ -11.6	59.1%	↓ -14	56.3%	↔ -6.0	70.1%	-2.64
Percent of Large-Firm Private Sector Enrollees in Self-Insured Plans, 2022	62.3%	↔ -6.46	73.9%	↔ 6.18	59.8%	↓ -10.3	65.6%	↓ -15	64.1%	-4.47	76.0%	-3.8
% of Employees Enrolled in HDHPs, 2022	53.6%	↔ 9.2	63.7%	↑ 22.7	48.1%	0.0	58.2%	↔ 9.4	51.8%	↑ 16.7	55.8%	↔ 3.3

[Definitions and sources](#)

Another area where Indiana differs from the rest of the nation and region is the **low penetration of value-based care payment models in our state**. Value-based payment models reward health care providers with incentive payments based on the quality of care they give to patients. In value-based care, physicians and other health care providers work together to give patients high-quality, coordinated health care and manage their overall health. These groups of providers, called Accountable Care Organizations (ACOs), coordinate care across practices and appointments to reduce care fragmentation and avoid unnecessary costs. ACOs were originally established as a payment model for Medicare, but many private sector health plans have adopted their own ACO networks, which are usually offered as insurance plan options to individuals and employers. **Table 5** shows that we have only 20 ACOs in our state, which is fewer than the national average as well as most of our neighboring states. **Table 5** shows that there is some participation in ACOs among Medicare beneficiaries. However, according to a 2019 study by Change Healthcare, Indiana is one of only four states that does not have a coordinated state-wide strategy to move toward value-based payment.¹³

Table 5. Value-Based Payment

Value-Based Payment	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
Percent of Medicare Beneficiaries in ACOs, 2021	15.8%	↔ -8.4	17.2%	↓ -26.1	26.7%	↔ -7.7	15.7%	↓ -11.2	15.7%	↓ -21.2	14.8%	↓ -21.9
Number of Accountable Care Organizations, 2024	37	n/a	20	n/a	65	n/a	11	n/a	51	n/a	59	n/a

[Definitions and sources](#)

Market Concentration in Insurance and Provider Markets

Table 6 presents measures of insurer market and hospital market concentration. While public insurers frequently set non-negotiable prices for hospital services, the prices that private insurers pay hospitals and other providers are based on the relative bargaining power of the parties. A robust evidence base shows that an increase in insurance market concentration leads to lower hospital prices, as large insurers with more market power are able to effectively negotiate lower prices (though it is unclear whether insurance companies pass these savings onto employers and patients in the form of lower premiums).¹⁴ Conversely, an increase in hospital market concentration empowers hospitals in price negotiations and leads to increases in the prices of hospital care,^{15,16} without necessarily improving patient outcomes.¹⁷ Recently, there has been a national rise in both traditional health system consolidation (such as hospital mergers) and new forms of consolidation, such as serial acquisitions by private equity investors, cross-market mergers (the merger of entities from different geographic markets), and vertical integration (which occurs when merging firms operate at different levels of the supply chain). Hospital consolidation has garnered national

policy attention recently, as the federal government released new draft Merger Guidelines in July 2023 which intend to use improved economic analyses that can better evaluate market competition and strengthen the oversight of consolidation in the health care sector.¹⁸

A notable finding from Table 6 is that Indiana does not appear to have a unique monopoly problem and that competition among the state’s insurers, as well as Indianapolis’s hospitals, is consistent with US norms.

A common measure of market concentration is the Herfindahl–Hirschman index (HHI) where higher values indicate less competition. The Federal Trade Commission considers an industry with HHI above 2,500 to be highly concentrated. In Indiana, the insurer HHI is 3,571 but is nearly identical to that of the US overall and lower than that of most of our neighboring states. The market share of Indiana’s largest insurer is lower than that of three of our neighboring states. There was no meaningful change in insurer HHI or market share of the largest insurer in Indiana over the past five years, which suggests that Indiana’s insurers have not become more (or less) concentrated recently.

Table 6 also presents the hospital inpatient HHI of the largest metro area in Indiana (i.e., Indianapolis-Carmel-Anderson), the US, and each of our neighboring states. Inpatient concentration for Indianapolis is 1,894, which is considered “moderately concentrated” and is substantially lower than the same measure for the US overall and the metro areas of most of our neighboring states.

Table 6. Insurer and Hospital Market Concentration

Market Concentration	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
Payer HHI, 2023	3496	-0.2	3571	2.6	4086	↔ 6.1	4652	↑ 12.9	4750	2.2	2162	2.4
Market Share of Largest Insurer, 2023	n/a	n/a	56%	1.8	61%	↔ 5.2	66%	↔ 8.2	67%	0.0	36%	↑ 12.5
Inpatient HHI of Largest Metro Area in State, 2021	3244	n/a	1894	-5.0	1356	1.3	3275	↓ -10.3	2129	↓ -13.2	3323	↑ 118.6
Category of Inpatient HHI for above variable, 2021	n/a	n/a	Moderate		Unconcentrated		High	↔	Moderate		High	

[Definitions and sources](#)

Hospital Characteristics and Provider Supply

Table 7 shows that for most measures of hospital characteristics, Indiana tracks closely with US norms. For example, nonprofit versus for-profit versus public hospital ownership rates are similar between Indiana and the nation overall, though Indiana has a larger presence of for-profit hospitals and public hospitals than all of our neighboring states. Over the past five years, Indiana has seen an increase in non-profit hospital ownership and a decrease in for-profit ownership. Indiana’s hospitals’ safety grades (according to the Leapfrog Group), which inform us how likely patients are to experience accidents, injuries, errors, or harm while in the

hospital, are similar to those of the nation overall. Only 9% of Indiana's rural hospitals are at risk of closure, considerably less than the national average.

Table 7. Hospital Characteristics

Hospital Characteristics	US		IN		IL		KY		MI		OH	
	Value	% change from 2020 report	Value	% change from 2020 report	Value	% change from 2020 report	Value	% change from 2020 report	Value	% change from 2020 report	Value	% change from 2020 report
	Percent Non-Profit Hospitals, 2022	58.2%	3.2	56.9%	5.8	79.0%	1.5	68.3%	-2.1	80.7%	4.6	73.3%
Percent For-Profit Hospitals, 2022	23.8%	-5.2	23.8%	-10.0	8.8%	-12.5	23.1%	14.2	16.4%	-8.2	19.3%	-7.0
Percent Public Hospitals, 2022	18.0%	-2.7	19.2%	-2.4	12.2%	-0.4	8.7%	-14.3	2.9%	-40.5	7.5%	-7.6
Percent of Hospitals with A Safety Grade, 2024	24.6%	-25.4	24.0%	44.0	21.6%	-49.2	16.1%	-38.0	30.1%	-26.6	19.7%	-50.2
Percent of Rural Hospital at Risk of Closure, 2024	31.0%	47.6	9.0%	-61.0	16.0%	-7.5	18.0%	-26.8	23.0%	-9.4	7.0%	-35.2

[Definitions and sources](#)

Physician and nurse supply constraints is a concern nationwide¹⁹ but particularly for Indiana. Table 8 shows that Indiana's number of physicians per capita is lower than US norms for both primary care providers (PCPs) as well as general surgeons. In contrast, the number of hospital beds per capita is higher in Indiana than the nation overall, suggesting that Indiana has higher-than-average hospital capacity but lower-than-average physician supply. Indiana's wages are slightly higher than the US average for registered nurses and family medicine physicians.

Table 8. Provider Supply and Compensation

Provider Supply and Compensation	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
	Active Patient Care Physicians per 100K pop., 2022	245.3	1.3	215.3	1.6	251	4.4	219	2.1	259.6	4.0	257.4
Active Patient Care PCPs per 100K pop., 2022	73.1	-12.1	66.9	-10.1	76	-12.8	65.6	-10.0	81.6	-6.8	71.6	-14.5
Active Patient Care Gen. Surgeons per 100K pop., 2022	6.9	4.5	5.9	-3.3	5.7	-1.7	7.4	-2.6	6.4	-4.5	6.9	-2.8
Hospital Beds per 1k pop., 2022	2.35	-3.3	2.64	-2.6	2.44	-3.2	3.1	-3.4	2.45	-2.0	2.68	-5.6
RN Hourly Wage, 2023	\$41.71	n/a	\$43.45	n/a	\$46.41	n/a	\$41.91	n/a	\$44.71	n/a	\$43.18	n/a
Family Medicine Physician Hourly Wage, 2023	\$115.77	n/a	\$121.20	n/a	\$80.52	n/a	\$135.61	n/a	\$85.59	n/a	\$77.97	n/a

[Definitions and sources](#)

Section 3: Mortality and Health Conditions

Next, we examine mortality and health conditions, including chronic disease prevalence, as well as risky and protective health behaviors. **Overall, Indiana continues to perform worse than the US overall in terms of mortality, chronic conditions, and health behaviors.**

While some of the state's health outcomes have improved since the publication of our 2020 report (such as cancer mortality, maternal mortality, infant mortality, flu vaccination rates, and smoking rates), **many Indiana health outcomes have worsened over time (including all-cause mortality, accident mortality, drug overdose deaths, alcohol deaths, suicide deaths, obese/overweight rates, cardiovascular disease, asthma, diabetes, and substance use disorders.)**

Table 9 shows that the overall mortality rate is nearly 16% higher in Indiana than for the nation overall. Indiana’s mortality rates are higher than the US overall and most neighboring states (other than Kentucky) for several major causes of death, including cancer, drug overdoses, diabetes, and alcohol-related deaths. Racial disparities in health outcomes are also a concern for Indiana: the difference between the White and Black premature death rate is 8% higher than that of the nation overall.

Table 9. Mortality

Mortality	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
All-Cause Mortality per 100K pop. (Age Adjusted) 2022	798.8	↔ 9.1	923.4	↔ 8.8	784.9	↔ 5.8	1043.8	↑ 12.2	855.4	↔ 9.2	917.2	↔ 7.9
Heart Disease Mortality per 100K pop. (Age Adjusted) 2022	167.2	↓ -15.9	185	↑ 1.0	166.6	↔ 2.0	208.6	↔ 6.5	206.3	↔ 5.2	193.9	↔ 4.1
Cancer Mortality per 100K pop. (Age Adjusted) 2022	142.3	↓ -22.6	162.5	-4.4	145.1	↔ -8.1	177.3	-4.5	154.4	-4.3	155.5	↔ -9.2
Accident Mortality per 100K (Age Adjusted) 2022	68.2	↑ 38.1	71.6	↑ 22.0	55.9	↑ 25.9	91.5	↑ 25.5	59.2	↑ 11.7	78.5	↔ 4.5
Drug Deaths per 100K pop. 2021	32.4	↑ 55.8	43	↑ 81.4	29	↑ 51.0	55.6	↑ 61.6	31.5	↑ 15.8	24.4	↓ -36.6
Diabetes Mortality per 100K pop. (Age Adjusted), 2022	24.1	n/a	29.8	n/a	21.8	n/a	29.4	n/a	25.6	n/a	27.6	n/a
Alcohol deaths per 100K pop. 2021	14.4	↑ 33.3	14.8	↑ 38.3	11.4	↑ 31.0	13.2	↑ 16.8	15.2	↑ 46.2	19.6	↑ 98.0
Suicide Deaths per 100K pop. 2021	14.1	↔ 1.4	16.4	↔ 5.1	11.1	↔ 0.0	17.9	↔ 5.3	14.3	↔ 4.4	22.2	↑ 51.0
Diff. btwn White & Black Premature Death Rate, per 100K, 2021	214	n/a	232	n/a	331	n/a	149	n/a	314	n/a	231	n/a

[Definitions and sources](#)

Health Conditions and Health Behaviors

The next several tables take a deeper dive into health conditions, disease burdens, and health behaviors to understand potential drivers of relatively high mortality in Indiana. Generally, chronic illness is more prevalent in Indiana than in other US states. **Table 10** shows that Hoosiers suffer from cardiovascular disease, diabetes, asthma, poor mental health, and overweight/obesity at rates higher than the national average. Of particular concern is that Indiana’s childhood overweight/obese rate increased by 24% from what we reported in 2020, while the rate stayed the same or declined in most neighboring states. Problematically, most other measures of chronic illness presented in **Table 10** show increases in Indiana since our previous report was published.

Table 10. Chronic Disease Prevalence

Chronic Disease Prevalence	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
Adult Obesity and Overweight Rate (adult), 2022	68.1%	↔ 4.1	72.6%	↔ 6.8	69.3%	↔ 5.3	71.8%	↔ 5.9	68.6%	↔ 2.1	72.3%	↔ 6.3
Childhood Obesity and Overweight Rate (ages 10-17), 2022	31.8%	↔ 3.6	32.1%	↑ 23.9	31.0%	↔ -9.1	35.7%	↓ -11.2	33.1%	↔ 0.0	36.5%	↑ 15.5
Percent Adults with Cardiovascular Disease, 2022	8.3%	↑ 29.7	9.6%	↑ 29.7	7.3%	↑ 19.7	10.2%	↔ 3.0	8.8%	↔ 10.0	9.8%	↑ 28.9
Percent Adults with Diabetes, 2022	13.5%	↑ 25.0	15.0%	↑ 27.1	13.7%	↑ 24.5	15.8%	↑ 22.5	13.2%	↑ 20.0	14.9%	↑ 31.9
Percent Adults with Asthma, 2022	9.8%	↔ 7.7	10.9%	↔ 9.0	8.6%	↔ 4.9	10.8%	↔ 0.9	11.2%	↔ 3.7	11.0%	↑ 11.1
Percent of Adults Reporting Poor Mental Health Status, 2022	40.1%	↑ 12.6	40.8%	↔ 4.1	39.6%	↔ 4.2	37.0%	↔ -3.6	40.8%	↔ 4.6	42.3%	↑ 12.8

[Definitions and sources](#)



Reassuringly, Indiana's maternal mortality rate declined substantially over the past three years (**Table 11**). Our state made concerted efforts to improve maternal and infant health outcomes in recent years, including expanding postpartum Medicaid coverage, establishing the Indiana Pregnancy Promise Program to identify and provide care for pregnant women with opioid use disorder, and implementing patient safety bundles for women with high-risk pregnancies.²⁰ Still, there is room for improvement. Indiana's maternal mortality rate is still 35% higher and infant mortality rate is 28% higher than the nation overall.

Table 11. Perinatal Outcomes

Perinatal Outcomes	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
Maternal Mortality per 100K pop., 2018-2022	23	↓ -22.3	31	↓ -38.2	18	↓ -15.9	35	↔ 8.0	19	↓ -31.2	25	↑ 1.2
Infant Mortality Rate per 1K Live Births, 2022	5.6	-3.4	7.2	-1.9	5.6	↔ -8.4	5.8	↓ -11.2	6.4	↔ -5.6	7.2	0.0
Percent Preterm Births (>37 weeks), 2023	10.4%	4.0	10.9%	↔ 6.9	10.6%	-0.9	11.7%	3.5	10.4%	4.0	10.8%	4.9

[Definitions and sources](#)

Table 12 presents data on both risky and protective health behaviors. Indiana's rates of smoking, binge drinking, and substance misuse are higher than US norms but consistent with most of our neighboring states. Smoking rates in Indiana have decreased substantially over the past five years, but still 15% of Hoosiers smoke versus only 12% for the US overall. Despite high smoking rates in the state, Indiana has not raised its cigarette tax rate since 2007. The state's current cigarette tax rate of \$1 per pack is nearly half of the national average and lower than all the neighboring states. Hoosiers are more likely to be diagnosed with a substance use disorder and less likely to receive the flu vaccine than Americans overall, but both childhood vaccination rates and pneumonia vaccination among the elderly are higher in Indiana than the US average. It is also reassuring that flu vaccination rates in Indiana increased over the past five years.

Table 12. Health Behaviors

Health Behaviors	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
Adult Smoking Rate, 2022	12.0%	↓ -26.8	15.0%	↓ -31.2	12.0%	↓ -22.6	17.0%	↓ -30.9	14.0%	↓ -27.5	15.0%	↓ -28.9
State Cigarette Tax Rate, 2024	\$1.93	↑ 13.5	\$1.00	-0.5	\$2.98	↑ 50.5	\$1.10	0.0	\$2.00	0.0	\$1.60	0.0
Binge Drinking, 2022	16.9%	1.81	15.7%	↔ -8.72	18.4%	↓ -10.7	14.0%	↓ -13.0	18.8%	↔ -5.53	20.0%	↑ 17.0
Substance Use Disorder in past year, 2022	17.0%	n/a	18.1%	n/a	17.1%	n/a	16.6%	n/a	17.5%	n/a	18.3%	n/a
Flu Vaccination, age 6mos+, 2023	49.3%	↑ 18.2	45.6%	↑ 22.9	50.5%	↑ 26.6	40.1%	↔ -8.9	48.0%	↓ -21.5	50.3%	↑ 17.5
7-Vaccine Series Coverage at age 35mos, 2022	75.1%	n/a	77.2%	n/a	76.0%	n/a	72.3%	n/a	80.1%	n/a	73.4%	n/a
Pneumonia Vaccine Coverage, age 65+, 2022	71.3%	n/a	72.0%	n/a	68.1%	n/a	67.7%	n/a	74.9%	n/a	71.6%	n/a

[Definitions and sources](#)

Section 4: Public Health Investments

This section provides data representing public health investments. It should be noted that due to data lags, most variables are from 2022 or 2023. In 2023, the Indiana state legislature appropriated \$225 million in new biennium public health funding for fiscal years 2024 and 2025, marking a 1500% increase in public health investment in Indiana. The first year of funding is not until fiscal year 2024, so the data presented here do not capture this major investment and its consequences.

Historically, Indiana has invested less in public health than the US overall. **Table 13 shows that the overall state investment in public health was \$15 per capita, a rate 74% lower than that of the US and considerably lower than our neighboring states.** Federal public health investments are also lower for Indiana than other states.

Table 13. Public Health Investments

Public Health Investments	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
Overall Public Health Funding FY21-22	\$58.24	↑ 62.8	\$15.29	↑ 23.3	\$36.31	↑ 43.5	\$29.52	↓ -11.9	Reported		\$45.06	↑ 226.6
Total CDC Funding, per capita FY22	\$31.12	↑ 39.8	\$24.86	↑ 45.3	\$27.15	↑ 62.0	\$28.62	↑ 35.2	\$23.76	↑ 26.4	\$24.05	↑ 34.4
Total HRSA Funding, per capita FY22	\$36.38	↑ 34.6	\$26.26	↑ 41.5	\$36.99	↑ 37.4	\$34.53	↑ 38.5	\$29.55	↑ 29.3	\$29.47	↑ 35.0
State Public Health Preparedness, 2024	n/a	n/a	Low Tier		Middle Tier		Low Tier		Low Tier	↓	High Tier	↑
Tobacco Settlement Funds, per capita 2023	\$19.07	n/a	\$19.96	n/a	\$23.85	n/a	\$26.14	n/a	\$29.12	n/a	\$27.21	n/a
Opioid Settlement Funds Paid, per capita 2023	\$13.01	n/a	\$18.37	n/a	\$16.23	n/a	\$26.10	n/a	\$18.76	n/a	\$12.80	n/a

[Definitions and sources](#)

Section 5: Population Demographics

Table 14 presents population demographic characteristics that are typically associated with individuals' health outcomes.²¹ In terms of racial and ethnic breakdown, Indiana has a much larger proportion of White people compared to the nation overall. About 76% of Hoosiers are White versus just 58% of Americans overall. In contrast, Indiana has lower Black and Hispanic populations, though **our state's Hispanic population has increased by 8% since our 2020 report.**

Indiana's age profile is similar to that of the nation overall. Compared to our 2020 report, our state's birth rate fell 4.9 percentage points to 11.7%, reflecting a nationwide reduction in fertility. However, Indiana's birth rate fell by less than that of the US and our neighboring states.

Table 14. Population Demographics

Population Demographics	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
Percent Population White, 2022	57.7%	-4.0	76.1%	-3.2	58.5%	-3.9	82.5%	-2.4	72.9%	-2.7	76.3%	-2.9
Percent Population Black, 2022	11.7%	-4.1	9.1%	-1.1	13.0%	-4.4	7.4%	-7.5	12.9%	-3.7	11.8%	-3.3
Percent Population Hispanic, 2022	19.2%	3.8	7.8%	8.3	18.4%	4.5	4.1%	10.8	5.7%	7.5	4.4%	10.0
Percent Population Aged 0-18 Years, 2022	23.1%	-2.1	24.3%	-1.2	22.9%	-3.4	23.6%	-0.4	22.1%	-2.6	23.1%	0
Percent Population Aged 18-64 Years, 2022	59.5%	-0.7	58.9%	-0.7	60.0%	-0.5	58.9%	-0.7	59.2%	-0.7	58.6%	-1.5
Percent Population Aged 65 Years+, 2022	17.4%	5.5	16.8%	4.3	17.1%	6.9	17.5%	2.9	18.7%	5.6	18.3%	5.2
Birth Rate per 1,000 Women, aged 15-44, 2022	11.0	-6.8	11.7	-4.9	10.2	-12.8	11.6	-5.7	10.2	-8.9	10.9	-6.8

[Definitions and sources](#)

Table 15 shows that Indiana has lower unemployment but also lower educational attainment and median income than the US overall. Hoosiers' educational attainment has been improving but is still low relative to the US and neighboring states. Indiana has been successful in reducing the unemployment rate to only 2.2%, which is a substantial 37% decline over the last four years and significantly lower than that of the US. However, Hoosiers' median income is about 10% lower than the national average, suggesting that many of the jobs in Indiana are lower paying. Studies show that states with lower median income tend to have lower health care spending despite generally higher needs for health care.²¹ Meanwhile, the state's poverty rate has been increasing, reflecting a national upward trend in poverty, but is still in line with the nation overall and lower than that of most neighboring states.

Table 15. Educational Attainment and Economic Characteristics

Educational Attainment and Economic Characteristics	US		IN		IL		KY		MI		OH	
	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report	Value	% Change from 2020 report
No High School Degree, ages 25+ years, 2022	10.4%	-11.1	9.8%	-10.9	9.6%	-8.6	11.0%	-16.7	8.2%	-8.9	8.2%	-11.8
Bachelors Degree or Higher, ages 25+ years, 2022	35.7%	9.5	29.6%	9.2	37.7%	7.4	27.9%	12.5	32.1%	8.4	32.0%	10.3
Percent Under 100% Federal Poverty Level, 2022	12.6%	14.5	12.4%	12.7	12.0%	9.1	16.9%	12.7	13.3%	10.8	13.4%	21.8
Unemployment Rate, March 2022	3.6%	-2.7	2.2%	-37.1	4.7%	14.6	4.0%	-11.1	4.4%	10.0	4.1%	-10.9
Median Income, 2021	\$69,717	12.6	\$62,743	12.6	\$72,205	11.0	\$55,573	10.6	\$63,498	12.0	\$62,262	11.0

[Definitions and sources](#)

Conclusion

While Indiana benefits from a strong economy and a business-friendly environment, improving the health status of Hoosiers and lowering overall health care costs through concerted efforts from key stakeholders are essential for further economic prosperity. An important first step toward collaboration is for the state's key stakeholders to establish a shared knowledge base on factors that affect health care spending and costs. We at the Indiana University Fairbanks School of Public Health in Indianapolis prepared this report to achieve this goal. This report provides a comprehensive view of a wide range of factors underlying health care spending in Indiana. We compared approximately 80 measures of spending and costs, health care market characteristics, mortality and health conditions, public health investments, and population demographics for Indiana, the US, and four of our neighboring states. We also assessed trends over time in each of these factors since the publication of our older report in 2020.

Our overall conclusions are that Indiana resembles the nation on many measures of health care, including *total* per-capita health spending, insurance premiums, and insurer market concentration. Some key areas where Indiana differs from other states are the prevalence of self-insured and high-deductible health plans and higher rates of mortality and chronic disease. We conclude this report by presenting select challenges and opportunities that lie ahead concerning health care costs in Indiana:

- Indiana has a high prevalence of **self-insured health plans** compared to other US states. Self-insured employers lack the market power to effectively negotiate prices with hospitals, and payers do not necessarily have the financial incentive to negotiate lower prices on behalf of self-insured employers.⁵ Addressing this market dynamic may result in lower prices. Alternative approaches to contain spending for self-insured employers may include directing patients toward centers of excellence and in-network care, offering high deductible health plans in combination with health savings accounts, and encouraging generic drug use. In markets with consolidated hospital systems, self-insured employers can consider creating purchasing alliances and using combined large market share to negotiate with hospitals.
- Indiana has relatively **low adoption of value-based care** and alternative payment models. Moving toward greater use of value-based payment models, including bundled payments and accountable care in settings where the evidence supports them, may contribute to cost-effective and patient-centered health care.

- In self-insured settings, where TPAs administer the health insurance plans but do not bear the financial risk for health care costs, there is less incentive for insurers to pursue value-based care. Aligning the financial incentives of self-insured employers and TPAs and implementing value-based care models may help self-insured employers benefit from the reduced health care costs that come with value-based care.
- One of the challenges faced by Indiana's health care providers is the relative **shortage of physicians**, which is driving up salaries and facilities' operating costs. Addressing this workforce shortage and shifting some forms of care from hospitals to lower-intensity sites could reduce health care spending.²³

Appendix

Definitions of Variables

Below, we provide the exact definitions and sources for all of the variables presented in this report.

Table 1. Macro Indicators of Overall Health Care Costs

Healthcare Expenditures per Capita, 2020 - Includes spending for all privately and publicly funded personal health care services and products (hospital care, physician services, nursing home care, prescription drugs, etc.) by state of residence (aggregate spending divided by population). Hospital spending is included and reflects the total net revenue (gross charges less contractual adjustments, bad debts, and charity care). Costs such as insurance program administration, research, and construction expenses are not included in this total.

- [KFF's State Health Facts: Health Care Expenditures per Capita by State of Residence](#). Accessed July 2024. Data Source: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group. [National Health Expenditure Data: Health Expenditures by State of Residence](#), August 2022.

Average Annual Premium - SINGLE coverage, 2022 - Average annual premium for a private sector worker who gets health insurance through his or her employer for single coverage

- SHADAC analysis of Medical Expenditure Panel Survey - Insurance Component (MEPS-IC), Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access and Cost Trends (CFACT), State Health Compare, SHADAC, University of Minnesota, statehealthcompare.shadac.org, Accessed July 2024.

Average Annual Premium - FAMILY coverage, 2022 - Average annual premium for a private sector worker who gets health insurance through his or her employer for family coverage

- SHADAC analysis of Medical Expenditure Panel Survey - Insurance Component (MEPS-IC), Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access and Cost Trends (CFACT), State Health Compare, SHADAC, University of Minnesota, statehealthcompare.shadac.org, Accessed July 2024.

Employee contribution for SINGLE coverage, 2022 - Percent of annual premiums contributed by employees who get health insurance through their private sector employer for single coverage

- SHADAC analysis of Medical Expenditure Panel Survey - Insurance Component (MEPS-IC), Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access

and Cost Trends (CFACT), State Health Compare, SHADAC, University of Minnesota, statehealthcompare.shadac.org, Accessed July 2024.

Employee contribution for FAMILY coverage, 2022 - Percent of annual premiums contributed by employees who get health insurance through their private sector employer for family coverage

- SHADAC analysis of Medical Expenditure Panel Survey - Insurance Component (MEPS-IC), Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access and Cost Trends (CFACT), State Health Compare, SHADAC, University of Minnesota, statehealthcompare.shadac.org, Accessed July 2024.

Percent of Median Income Devoted to Healthcare, 2020 - Combined estimates of single and family premium contributions and deductibles are weighted for the distribution of single-person and family households in the state, as a percent of median household income

- Sara R. Collins, David C. Radley, and Jesse C. Baumgartner, State Trends in Employer Premiums and Deductibles, 2010–2020 (Commonwealth Fund, Jan. 2022). <https://doi.org/10.26099/m5dt-5f70>

Table 2. Distribution of Costs by Payer

This distribution was calculated by E.K. Johnson et al., methods for the models developed for this calculation are included on page 24 of the article's [appendix](#).

- Johnson EK, Wojtesta MA, Crosby SW, et al. Varied Health Spending Growth Across US States was Associated with Incomes, Price Levels, and Medicaid Expansion, 2000–19. *Health Affairs*. 2022;41(8):1088-1097. doi:[10.1377/hlthaff.2021.01834](https://doi.org/10.1377/hlthaff.2021.01834)

Table 3. Distribution of Costs by Service

Percent of Healthcare Expenditure for Hospital Care, 2020 - Hospital Care: Covers all services provided by hospitals to patients and that are billed by the hospital. These include room and board, ancillary charges, services of resident physicians, inpatient pharmacy, hospital-based nursing home and home health care, and any other services billed by hospitals in the United States. The value of hospital services is measured by total net revenue, which equals gross patient revenues (charges) less contractual adjustments, bad debts, and charity care. It also includes government tax appropriations as well as non-patient and non-operating revenues.

Percent of Healthcare Expenditure for Physicians and other Professional Services, 2020 - Physician and Other Professional Services: Covers services provided in establishments operated by Doctors of Medicine (M.D.) and Doctors of Osteopathy (D.O.), outpatient care

centers, plus the portion of medical laboratories services that are billed independently by the laboratories. This category also includes services rendered by a doctor of medicine (M.D.) or doctor of osteopathy (D.O.) in hospitals, if the physician bills independently for those services. Clinical services provided in freestanding outpatient clinics operated by the U.S. Department of Veterans' Affairs, the U.S. Coast Guard Academy, the U.S. Department of Defense, and the U.S. Indian Health Service are also included, as well as services provided in establishments operated by health practitioners other than physicians and dentists. These professional services include those provided by private-duty nurses, chiropractors, podiatrists, optometrists, and physical, occupational and speech therapists, among others.

Percent of Healthcare Expenditure for Prescription Drugs and Other Medical Non-durables, 2020 - Prescription Drugs and Other Non-Durable Medical Products: Covers retail sales of human-use dosage-form drugs, biological drugs, and diagnostic products that are available only by a prescription. Also includes sales of non-prescription drugs (products purchased over the counter such as analgesics and cough and allergy medications) and medical sundries (items such as surgical and medical instruments and surgical dressings, and diagnostic products such as needles and thermometers).

Percent of Healthcare Expenditure for Nursing Home Care, 2020 - Nursing Home Care: Covers nursing and rehabilitative services provided in freestanding nursing home facilities. These services are generally provided for an extended period of time by registered or licensed practical nurses and other staff. Care received in state and local government facilities and nursing facilities operated by the U.S. Department of Veterans Affairs are also included.

Percent of Healthcare Expenditure for Other Services, 2020 -

- **Dental Services:** Covers services provided in establishments operated by a Doctor of Dental Medicine (D.M.D.) or Doctor of Dental Surgery (D.D.S.) or a Doctor of Dental Science (D.D.Sc.).
- **Home Health Care:** Covers medical care provided in the home by freestanding home health agencies (HHAs). Medical equipment sales or rentals not billed through HHAs and non-medical types of home care (e.g., Meals on Wheels, chore-worker services, friendly visits, or other custodial services) are excluded.
- **Medical Durables:** Covers retail sales of items such as contact lenses, eyeglasses and other ophthalmic products, surgical and orthopedic products, hearing aids, wheelchairs, and medical equipment rentals
- **Other Health, Residential, and Personal Care:** This category includes spending for Medicaid home and community based waivers, care provided in residential care facilities, ambulance services, school health and worksite health care. Generally, these

programs provide payments for services in non-traditional settings such as community centers, senior citizens centers, schools, and military field stations. The residential establishments are classified as facilities for the intellectually disabled, and mental health and substance abuse facilities. The ambulance establishments are classified as Ambulance services.

[KFF's State Health Facts: Distribution of Health Care Expenditures by Service by State of Residence \(in millions\)](#). Accessed July 2024. Data Source: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group. [National Health Expenditure Data: Health Expenditures by State of Residence](#), August 2022., August 2022.

Table 4. Health Insurance

Percent Uninsured, 2022 - The ACS asks respondents about their health insurance coverage throughout the previous calendar year. Respondents may report having more than one type of coverage. In the KFF analysis, individuals are sorted into only one category of insurance coverage using the hierarchy: Medicaid, Medicare, Employer, Military, Non-Group, Uninsured, N/A. This measure refers only to the Uninsured, which includes those without health insurance and those who have coverage under the Indian Health Service only.

- [KFF's State Health Facts: Health Insurance Coverage of the Total Population](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Difference between Black and White Percent of Nonelderly Uninsured Rate, 2022 - Uninsured: Includes those without health insurance and those who have coverage under the Indian Health Service only. This measure is the difference between white and black uninsured rates

- [KFF's State Health Facts: Uninsured Rates for the Nonelderly by Race/Ethnicity](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Percent with Public Health Insurance, 2022 - The ACS asks respondents about their health insurance coverage throughout the previous calendar year. Respondents may report having more than one type of coverage. In the KFF analysis, individuals are sorted into only one category of insurance coverage using the hierarchy: Medicaid, Medicare, Employer, Military, Non-Group, Uninsured, N/A. This measure combines Medicaid, Medicare, and Military Insurance recipients.

- [KFF's State Health Facts: Health Insurance Coverage of the Total Population](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community

Survey, 1-Year Estimates.

Percent covered by Medicaid, 2022 - The ACS asks respondents about their health insurance coverage at the time of the survey. Respondents may report having more than one type of coverage; however, individuals are sorted into only one category of insurance coverage. This measure includes those covered by Medicaid, Medical Assistance, Children's Health Insurance Plan (CHIP) or any kind of government-assistance plan for those with low incomes or a disability, as well as those who have both Medicaid and another type of coverage, such as dual eligibles who are also covered by Medicare.

- [KFF's State Health Facts: Health Insurance Coverage of the Total Population](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Percent covered by Medicare, 2022 - The American Community Survey asks respondents about their health insurance coverage at the time of the survey. Respondents may report having more than one type of coverage; however, individuals are sorted into only one category of insurance coverage. This measure includes those covered by Medicare, Medicare Advantage, and those who have Medicare and another type of non-Medicaid coverage where Medicare appears to be the primary payer. Excludes seniors who also report employer-sponsored coverage and full-time work, and those covered by Medicare and Medicaid (dual eligibles).

- [KFF's State Health Facts: Health Insurance Coverage of the Total Population](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Percent with Private Health Insurance, 2022 - The ACS asks respondents about their health insurance coverage throughout the previous calendar year. Respondents may report having more than one type of coverage. In the KFF analysis, individuals are sorted into only one category of insurance coverage using the hierarchy: Medicaid, Medicare, Employer, Military, Non-Group, Uninsured, N/A. This measure combines Employer and Non-Group recipients.

- [KFF's State Health Facts: Health Insurance Coverage of the Total Population](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Percent of Private Sector Enrollees in Self-Insured Plans, 2022 - Under self-insured plans, employers assume financial responsibility for providing health benefits to their employees by paying health claims directly instead of contracting with an insurance company to cover those costs. Employers that self insure may contract with an insurance company to serve as

a third party administrator for plan administration. This measure represents the total.

- [KFF's State Health Facts: Share of Private-Sector Enrollees Enrolled in Self-Insured Plans](#). Accessed July 2024. Data Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends. Medical Expenditure Panel Survey Insurance Component: [Data Tool](#).

Percent of Large-Firm Private Sector Enrollees in Self-Insured Plans, 2022 - Under self-insured plans, employers assume financial responsibility for providing health benefits to their employees by paying health claims directly instead of contracting with an insurance company to cover those costs. Employers that self insure may contract with an insurance company to serve as a third party administrator for plan administration. This measure represents the firms with 50 employees or more.

- [KFF's State Health Facts: Share of Private-Sector Enrollees Enrolled in Self-Insured Plans](#). Accessed July 2024. Data Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends. Medical Expenditure Panel Survey Insurance Component: [Data Tool](#).

Percent of Employees Enrolled in HDHPs, 2022 - Percent of private-sector employees enrolled in high-deductible health insurance plans by total. High-deductible health plans are defined as plans that meet the minimum deductible amount required for Health Savings Account (HSA) eligibility (e.g. \$1,400 for an individual and \$2,800 for a family in 2021).

- SHADAC analysis of Medical Expenditure Panel Survey - Insurance Component (MEPS-IC), Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access and Cost Trends (CFACT), State Health Compare, SHADAC, University of Minnesota, statehealthcompare.shadac.org, Accessed July 2024.

Table 5. Value-Based Payment

Percent of Medicare Beneficiaries in ACOs, 2021 - Number of Medicare Beneficiaries Assigned to ACOs divided by Total Medicare Enrollment (Part A and/or B). Medicare Beneficiaries Assigned to ACOs: These counts are based on certified Accountable Care Organization (ACO) Participant Lists and assignment methodology for each given performance year. Data are provided at the county level and aggregated to the state level. State ACO enrollment excludes ACO enrollment in counties where data was suppressed due to low enrollment counts (between 1 and 10 total assigned beneficiaries). Total Medicare Enrollment: The enrollment counts are determined using a person-year methodology. Persons enrolled because of End Stage Renal Disease-only are included in the disabled enrollee counts.

- [KFF's State Health Facts Medicare Beneficiaries Assigned to Accountable Care](#)

[Organizations](#). Accessed August 2024. Data Sources: Centers for Medicare & Medicaid Services, Medicare Shared Savings Program data and Office of Enterprise Data and Analytics, Chronic Conditions Data Warehouse.

Number of Accountable Care Organizations, 2024 - A count of how many accountable care organizations (ACOs) are in each state to date. It's important to note that not all states report how many ACOs they have and may use different terminology when referring to their ACO initiatives. An ACO is a healthcare delivery model that aims to improve the quality and coordination of care for patients while reducing costs. It is a network of healthcare providers, including doctors, hospitals, and other healthcare professionals, who voluntarily come together to provide coordinated care to a specific population of patients. The primary goal of an ACO is to promote collaboration and integration among different healthcare providers to deliver more effective and efficient care. By working together, ACO members strive to improve patient outcomes, enhance patient satisfaction, and achieve cost savings by avoiding unnecessary duplication of services or hospital admissions.

- Number of Accountable Care Organizations (ACOs) by State. Definitive Healthcare. May 6, 2024. Accessed August 2024. <https://www.definitivehc.com/resources/healthcare-insights/accountable-care-organizations-by-state>

Table 6. Market Concentration

Payer HHI, 2023 - The Herfindahl-Hirschman Indices (HHI) is a measure of market concentration, which is a useful indicator of market power and serves as a signal of the likely impact of a merger on competition. The HHI is the sum of the squared market shares of all firms in a market. Markets are classified into three types: Unconcentrated markets (HHI below 1,500), Moderately concentrated markets (HHI between 1,500 and 2,500), and Highly concentrated markets (HHI above 2,500).

- Guardado JR, Kane CK. Competition in Health Insurance: A Comprehensive Study of U.S. Markets. American Medical Association Division of Economic and Health Policy Research; 2023. <https://www.ama-assn.org/system/files/competition-health-insurance-us-markets.pdf>

Market Share of Largest Insurer, 2023 - market share is calculated in a geographic area by dividing an insurer's enrollment by the sum of all insurers' enrollment and multiplying the result by 100.

- Guardado JR, Kane CK. Competition in Health Insurance: A Comprehensive Study of U.S. Markets. American Medical Association Division of Economic and Health Policy Research; 2023. <https://www.ama-assn.org/system/files/competition-health->

[insurance-us-markets.pdf](#)

Inpatient HHI of Largest Metro Area in State 2021 - A higher HHI value signifies a more highly concentrated market - that is, within a market, a smaller number of hospital systems account for a larger share of hospital admissions. This measure ranges from 0 to 10,000, where 0 represents perfect competition and 10,000 represents a monopoly. Market in this study is defined as all the hospitals visited by residents of a metro area in that year, regardless of location of the hospital. Largest Metro areas are: Indianapolis-Carmel-Anderson, IN; Chicago-Naperville-Elgin, IL-IN-WI; Louisville-Jefferson County, KY-IN; Detroit-Warren Dearborn, MI; Cleveland-Elyria, OH

- Hospital Concentration Index: An analysis of U.S. Hospital Market Concentration. Health Care Cost Institute. June 2023. Accessed July 2024. <https://healthcostinstitute.org/hcci-originals/hmi-interactive>

Category of Inpatient HHI of Largest Metro Area in State, 2021 - This measure reflects the largest metro area in the state based on population. Inpatient HHIs were categorized into four levels of concentration: Unconcentrated (0-1,499), Moderate Concentration (1,500-2,499), High Concentration (2,500-4,999), and Very High Concentration (5,000-10,000)

- Hospital Concentration Index: An analysis of U.S. Hospital Market Concentration. Health Care Cost Institute. June 2023. Accessed July 2024. <https://healthcostinstitute.org/hcci-originals/hmi-interactive>

Table 7. Hospital Characteristics

Percent Non-Profit Hospitals, 2022 - percentage of non-profit community hospitals (All nonfederal, short-term general, and specialty hospitals whose facilities and services are available to the public).

- [KFF's State Health Facts: Hospitals by Ownership Type](#). Accessed July 2024. Data Source: 1999 - 2022 AHA Annual Survey, Copyright 2022 by Health Forum, LLC, an affiliate of the American Hospital Association. Special data request, 2023. Available at <https://www.ahadata.com/aha-annual-survey-database>.

Percent For-Profit Hospitals, 2022 - percentage of for-profit community hospitals (All nonfederal, short-term general, and specialty hospitals whose facilities and services are available to the public).

- [KFF's State Health Facts: Hospitals by Ownership Type](#). Accessed July 2024. Data Source: 1999 - 2022 AHA Annual Survey, Copyright 2022 by Health Forum, LLC, an affiliate of the American Hospital Association. Special data request, 2023. Available at

<https://www.ahadata.com/aha-annual-survey-database>.

Percent Public Hospitals, 2022 - percentage of state/local government owned community hospitals (All nonfederal, short-term general, and specialty hospitals whose facilities and services are available to the public).

- [KFF's State Health Facts: Hospitals by Ownership Type](https://www.ahadata.com/aha-annual-survey-database). Accessed July 2024. Data Source: 1999 - 2022 AHA Annual Survey, Copyright 2022 by Health Forum, LLC, an affiliate of the American Hospital Association. Special data request, 2023. Available at <https://www.ahadata.com/aha-annual-survey-database>.

Percent of Hospitals with A Safety Grade, 2024 - Using up to 22 evidence-based measures of patient safety, including CMS Medicare PSI 90 Patient Safety and Adverse Events composite which includes 10 component measures, The Leapfrog Group calculated a numerical score for all eligible hospitals in the U.S. The numerical score was then converted into one of five letter grades. "A" represents the best Leapfrog Hospital Safety Grade, followed in order by "B," "C," "D," and "F."

- How Safe is Your Hospital: State and Metropolitan Rankings. Leapfrog Hospital Safety Grade. Accessed August 2024. <https://www.hospitalsafetygrade.org/your-hospitals-safety-grade/state-rankings>

Percent of Rural Hospital at Risk of Closing, 2024 - Rural hospitals may be at risk of closing because of the serious financial problems they are experiencing: losses on patient services, insufficient revenues from other sources to offset losses, and low financial reserves.

- Rural Hospitals at Risk of Closing. Center for Healthcare Quality and Payment Reform; 2024. Accessed August 2024. https://chqpr.org/downloads/Rural_Hospitals_at_Risk_of_Closing.pdf

Table 8. Provider Supply and Compensation

Active Patient Care Physicians per 100K population, 2022 - Active patient care physicians: This group is a subset of active physicians. It comprises only those physicians whose self-reported practice is direct patient care.

- Kelly R. U.S. Physician Workforce Data Dashboard. Association of American Medical Colleges. 2023. Accessed August 16, 2024. <https://www.aamc.org/data-reports/report/us-physician-workforce-data-dashboard>

Active Patient Care PCPs per 100K population, 2022 - Active Patient Care Physicians reporting a specialty/area of practice in the following group: Family Medicine/General

Practice+Internal Medicine+Internal Medicine/Pediatrics

- Kelly R. U.S. Physician Workforce Data Dashboard. Association of American Medical Colleges. 2023. Accessed August 16, 2024. <https://www.aamc.org/data-reports/report/us-physician-workforce-data-dashboard>

Active Patient Care Gen. Surgeons per 100K population, 2022 - Active Patient Care Physicians reporting a specialty/area of practice of General Surgery

- Kelly R. U.S. Physician Workforce Data Dashboard. Association of American Medical Colleges. 2023. Accessed August 16, 2024. <https://www.aamc.org/data-reports/report/us-physician-workforce-data-dashboard>

Hospital Beds per 1k population 2022 - Data include staffed beds for community hospitals (All nonfederal, short-term general, and specialty hospitals whose facilities and services are available to the public), which represent 85% of all hospitals.

- KFF's State Health Facts. Accessed July 2024. Data Source: 2015 - 2022 AHA Annual Survey, Copyright 2022 by Health Forum, LLC, an affiliate of the American Hospital Association. Special data request, 2023. Available at <https://www.ahadata.com/aha-annual-survey-database>.

RN hourly wage, 2024 - Mean hourly wages for nurses, adjusted for cost of living. Becker's calculated these figures using May 2023 salary data from BLS and 2024 cost of living index data from the World Population Review

- Bean M. RN pay for all 50 states adjusted by cost of living | 2024. June 13, 2024. Accessed August 16, 2024. <https://www.beckershospitalreview.com/compensation-issues/rn-pay-for-all-50-states-adjusted-by-cost-of-living-2024.html>

Family Medicine Physician hourly wage, 2023 - hourly mean wage of family medicine physicians as of May 2023.

- Occupational Employment and Wage Statistics. Bureau of Labor Statistics. Accessed July 2024. <https://data.bls.gov/oes/#/occGeo/One%20occupation%20for%20multiple%20geographical%20areas>

Table 9. Mortality

All-Cause Mortality per 100K population, 2022 - Death rate per 100,000 population, age-adjusted to the total U.S. population in 2000. Causes of death include all ICD-10 codes.

- [KFF's State Health Facts: Total Deaths](#). Accessed July 2024. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying

Cause of Death 1999-2022 on CDC WONDER Online Database. Data are from the Multiple Cause of Death Files, 1999-2022, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on May 7, 2024.

Heart Disease Mortality per 100K population, 2022 - Heart disease deaths per 100,000 population

- Stats of the States - Heart Disease Mortality. February 25, 2022. Accessed July 2024. https://www.cdc.gov/nchs/pressroom/sosmap/heart_disease_mortality/heart_disease.htm

Cancer Mortality per 100K population, 2022 - Underlying cause of death is malignant neoplasms (ICD-10 codes: C00-C97). Age-adjusted rates per 100,000 U.S. standard population

- [KFF's State Health Facts: Total Cancer Deaths](#). Accessed July 2024. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2022 on CDC WONDER Online Database. Data are from the Multiple Cause of Death Files, 1999-2022, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on May 7, 2024.

Accident Mortality per 100K population, 2022 - ICD-10 Codes: V01-V99 (Transport accidents); W00-X59 (Other external causes of accidental injury); Y85.0 (Sequelae of motor-vehicle accident); Y85.9 (Sequelae of other and unspecified transport accidents); Y86 (Sequelae of other accidents). Standard population: 2000 US Std Population

- Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Mortality 2018-2022 on CDC WONDER Online Database, released in 2024. Data are from the Multiple Cause of Death Files, 2018-2022, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10-expanded.html>, July 2024

Drug Deaths per 100K population, 2022 - All drug overdose: X40–44, X60–64, X85, and Y10–14 “underlying causes of death” codes.

- Warren M, Reavis B. Pain in the Nation: The Epidemics of Alcohol, Drug, and Suicide Deaths - 2023. Trust for America's Health; 2023. <https://www.tfah.org/wp-content/uploads/2023/05/TFAH-2023-PainInTheNation-FINALr.pdf>

Diabetes Mortality per 100K population, 2022 - Underlying cause of death is diabetes mellitus (ICD-10 codes: E10-E14) age-adjusted to the total U.S. population in 2000.

- [KFF's State Health Facts: Total Diabetes Deaths](#). Accessed July 2024. Data Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2021 on CDC WONDER Online Database. Data are from the Multiple Cause of Death Files, 1999-2022, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on May 7, 2024

Alcohol deaths per 100K population, 2021 - For alcohol-induced deaths, TFAH used “alcohol induced” from CDC’s underlying cause-of-death category “Drug/Alcohol Induced Causes.”

- Warren M, Reavis B. Pain in the Nation: The Epidemics of Alcohol, Drug, and Suicide Deaths - 2023. Trust for America’s Health; 2023. <https://www.tfah.org/wp-content/uploads/2023/05/TFAH-2023-PainInTheNation-FINALr.pdf>

Suicide Deaths per 100K population, 2021 - For deaths by suicide, TFAH used “suicide” from CDC’s “underlying causes of death” category “Injury Intent and Mechanisms.”

- Warren M, Reavis B. Pain in the Nation: The Epidemics of Alcohol, Drug, and Suicide Deaths - 2023. Trust for America’s Health; 2023. <https://www.tfah.org/wp-content/uploads/2023/05/TFAH-2023-PainInTheNation-FINALr.pdf>

Difference between Black and White Premature Death Rate, per 100K population, 2021 -

Premature age-adjusted mortality data (number of deaths among residents under age 75 per 100,000 population (age-adjusted)) are calculated by the County Health Rankings site using data from the National Center for Health Statistics and the National Vital Statistics System. This measure is the difference between white and black mortality rates

- HDPulse: An Ecosystem of Minority Health and Health Disparities Resources. National Institute on Minority Health and Health Disparities. Accessed July 2024. Available from <https://hdpulse.nimhd.nih.gov>

Table 10. Chronic Disease Prevalence

Adult Obesity and Overweight Rate, 2022 - This measure adds together the Overweight, Obese, and Severely Obese categories (BMIs 25.0 or higher)

- [KFF's State Health Facts: Distribution of Body Mass Index Among Adults](#). Accessed July 2024. Data Source: Centers for Disease Control and Prevention (CDC)'s 2021-2022 [Behavioral Risk Factor Surveillance System \(BRFSS\)](#).

Childhood Obesity and Overweight Rate (ages 10-17) - This measure adds together the Overweight and Obese categories (85th percentile or greater). Indicator based on methodology developed by the [Data Resource Center for Child & Adolescent Health](#). The child's age in months is used to calculate BMI-for-age. However, since the NSCH reports age only in years, all children were assumed to be at the midpoint of their age-year for this calculation. BMI in the NSCH is based on parent recollection of child's height and weight and is not independently verified. A study found the parent estimates of children's height and weight are inaccurate for children younger than 10 years of age, so BMI for children under 10 is not reported in this measure.

- [KFF's State Health Facts: Weight Status of Children Ages 10-17](#). Accessed July 2024. Data Source: KFF analysis of 2022 National Survey of Children's Health.

Percent Adults with Cardiovascular Disease, 2022 - Data represent adults who report ever having or having been told by a doctor that they had a heart attack (myocardial infarction), angina or coronary heart disease. Percentages are weighted to reflect population characteristics.

- [KFF's State Health Facts: Adults Who Report Being Told by a Doctor that They Have Cardiovascular Disease by Race/Ethnicity](#). Accessed July 2024. Data Source: KFF analysis of the Centers for Disease Control and Prevention (CDC)'s 2013-2022 [Behavioral Risk Factor Surveillance System \(BRFSS\)](#).

Percent Adults with Diabetes, 2022 - Data represent adults who report ever being told by a doctor that they have diabetes. Percentages are weighted to reflect population characteristics. This measure excludes gestational diabetes and prediabetes or borderline diabetes.

- [KFF's State Health Facts: Adults Who Report Ever Being Told by a Doctor that They Have Diabetes](#). Accessed July 2024. Data Source: KFF analysis of the Centers for Disease Control and Prevention (CDC)'s 2013-2022 [Behavioral Risk Factor Surveillance System \(BRFSS\)](#).

Percent Adults with Asthma, 2022 - Data represent adults who reported that they currently have asthma and have been told by a doctor that they have asthma. Percentages are weighted to reflect population characteristics.

- [KFF's State Health Facts: Adults Who Report Currently Having Asthma by Sex](#). Accessed July 2024. Data Source: KFF analysis of the Centers for Disease Control and Prevention (CDC)'s 2013-2022 [Behavioral Risk Factor Surveillance System \(BRFSS\)](#).

Percent of Adults Reporting Poor Mental Health Status, 2022 - Number of poor mental health

days reported for the past 30 days.

- [KFF's State Health Facts: Adults Reporting Poor Mental Health by Number of Days per Month](#). Accessed July 2024. Data Source: KFF analysis of the Centers for Disease Control and Prevention (CDC)'s 2013-2022 [Behavioral Risk Factor Surveillance System \(BRFSS\)](#).

Table 11. Perinatal Outcomes

Maternal Mortality per 100K population., 2018-2022 - Maternal deaths: include deaths of women while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. It is likely that some of the variation in state rates is due to the marked differences in the quality of state maternal mortality data. Variation in the quality of reporting maternal deaths may be due to differences in electronic registration systems and differences in policies and programs designed to verify the pregnancy status of female decedents of reproductive age. These differences may result in underestimates of maternal deaths in some cases, and overestimates in others.

- [KFF's State Health Facts: Maternal Deaths and Mortality Rates per 100,000 Live Births](#). Accessed July 2024. Data Source: Centers for Disease Control and Prevention, [National Center for Health Statistics \(NCHS\)](#), National Vital Statistics System, "[Maternal deaths and mortality rates: Each state, the District of Columbia, United States, 2018-2022](#)"

Infant Mortality Rate per 1K Live Births, 2022 - The number of infant deaths per 1,000 live births.

- Stats of the States - Infant Mortality Rates by State, 2022. CDC National Center for Health Statistics. September 12, 2023. Accessed July 2024. https://www.cdc.gov/nchs/pressroom/sosmap/infant_mortality_rates/infant_mortality.htm

Percent Preterm Births, 2023 - Preterm birth is a birth with less than 37 weeks gestation based on the obstetric estimate of gestational age. Data used in this report card came from the National Center for Health Statistics (NCHS) natality files.

- 2023 March of Dimes Report Card. March of Dimes. Accessed August 19, 2024. <https://www.marchofdimes.org/report-card>

Table 12. Health Behaviors

Adult Smoking Rate, 2022 - Data represent adults who reported that they currently smoke every day or some days.

- [KFF's State Health Facts: Adults Who Report Smoking by Race/Ethnicity](#). Accessed July 2024. Data Source: KFF analysis of the Centers for Disease Control and Prevention (CDC)'s 2013-2022 [Behavioral Risk Factor Surveillance System \(BRFSS\)](#).

State Cigarette Tax Rate, 2024 - High taxes on tobacco products are a proven way to reduce tobacco use especially among youth. The current federal cigarette tax is \$1.01 per pack, and the current average state cigarette tax is \$1.93 per pack.

- American Lung Association. Current State Cigarette Tax Rates. Accessed August 19, 2024. <https://www.lung.org/policy-advocacy/tobacco/slati/current-state-taxes>

Binge Drinking, 2022 - Binge drinkers (males having five or more drinks on one occasion, females having four or more drinks on one occasion) (variable calculated from one or more BRFSS questions) (Age-adjusted Prevalence)

- Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2015. Accessed July 2024. <https://www.cdc.gov/brfss/brfssprevalence/>.

Substance Use Disorder in past year, 2022 - "Substance Use Disorder in Past Year (2021 onward) Among Individuals Aged 12 or Older, by State: 2021-2022. SUD estimates for drugs and alcohol in the 2022 NSDUH were based on the criteria in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5; American Psychiatric Association [APA], 2013). Respondents were asked SUD questions separately for any drugs or alcohol they used in the 12 months prior to the survey. Substances that are included in selected SUD measures in the 2022 NSDUH are as follows:

Any SUD in the past year includes data from past year users of alcohol, marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, and methamphetamine, and any past year users of prescription psychotherapeutic drugs.

Alcohol use disorder includes only data from past year users of alcohol.

Drug use disorder includes data from past year users of marijuana, cocaine, heroin, hallucinogens, inhalants, and methamphetamine, and any past year users of prescription psychotherapeutic drugs.

Opioid use disorder includes data from past year users of heroin or prescription pain relievers. Respondents were not counted as having an opioid use disorder if they did

not meet the full SUD criteria for heroin or prescription pain relievers individually. The opioid use disorder estimates do not capture symptoms that arose solely from the use of IMF.

Tranquilizer or sedative use disorder includes data from past year users of prescription tranquilizers or sedatives. Respondents were not counted as having a tranquilizer or sedative use disorder if they did not meet the full SUD criteria for prescription tranquilizers or sedatives individually.

CNS stimulant use disorder includes data from past year users of cocaine, methamphetamine, or prescription stimulants. Respondents were not counted as having a CNS stimulant use disorder if they did not meet the full SUD criteria individually for cocaine, methamphetamine, or prescription stimulants."

- 2021-2022 NSDUH State Prevalence Estimates. SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2021 and 2022. Accessed July 2024. <https://www.samhsa.gov/data/report/2021-2022-nsduh-state-prevalence-estimates>

Flu Vaccination, age 6 months+, 2023 - Seasonal flu vaccination rates for people ages 6 months and older, 2022–2023

- Centers for Disease Control and Prevention. "End-of-Season Influenza Vaccination Coverage among persons \geq 6 Months." FluVaxView, May 28, 2021. <https://www.cdc.gov/flu/fluview/interactive-general-population.htm>

7-Vaccine Series Coverage at age 35 months, 2022 - Combined 7 series vaccination coverage by 2-year birth cohort by age 25 months, National Immunization Survey-Child. Birth Year Cohort: 2019-2020. the combined 7-vaccine series (4:3:1:3*:3:1:4) includes \geq 4 doses of DTaP, \geq 3 doses of poliovirus vaccine, \geq 1 dose of measles-containing vaccine, the full series of Hib (\geq 3 or \geq 4 doses, depending on product type), \geq 3 doses of HEpB, \geq 1 dose of VAR, and \geq 4 doses of PCV.

- Centers for Disease Control and Prevention. "Combined 7 Series Vaccination Coverage by 2-Year Birth Cohort by Age 35 Months, National Immunization Survey-Child" ChildVaxView, September 28, 2020. <https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/interactive-reports/index.html>

Pneumonia Vaccine Coverage, age 65 and over, 2022 - Data represent adults aged 65+ who report having ever had a pneumonia vaccine. Percentages are weighted to reflect population characteristics

- [KFF's State Health Facts: Adults Aged 65 and Over Who Report Ever Having A Pneumonia Vaccine by Sex](#). Accessed July 2024. Data Source: KFF analysis of the Centers for Disease Control and Prevention (CDC)'s 2013-2022 [Behavioral Risk Factor Surveillance System \(BRFSS\)](#).

Table 13. Public Health Investments

Overall Public Health Funding FY21-22 - "Funding Amount on Page 35 divided by 2022 state population Note: As a result of differences in organizational responsibilities and budgeting, funding data are not necessarily comparable state to state. See the "Appendix: Methodology" section of TFAH's 2019 Ready or Not report for a description of TFAH's data-collection process, including its definition of public health funding. While states received federal one-time COVID response funding, those funds are not included in these tallies, as all federal funds are excluded from this measure. However, in some cases, state funding for pandemic response may have been included in the data reported to TFAH. For some states, COVID-response funding may have resulted in an increase in the state's overall public health funding for the year. Other states may have reallocated money from one line to another with little impact on the overall funding level. Some states experienced sizable fluctuations in the state-supported funding of public health services due to a host of pandemic related funding actions. In some cases, a temporary infusion of state-supported funds might have been appropriated for a single year. In other cases, state funding might have been temporarily cut and replaced by pandemic related federal funding. Three states (Hawaii, Maryland, and Michigan) did not provide TFAH with public health funding data for FY 2022. Source: TFAH analysis of states' public health funding data."

- McKillop M, Alpert Lieberman D. The Impact of Chronic Underfunding on America's Public Health System: Trends Risks, and Recommendations - 2023. Trust for America's Health; 2023. Accessed July 15, 2024. <https://www.tfah.org/wp-content/uploads/2023/06/TFAH-2023-PublicHealthFundingFINALc.pdf>

Total CDC Funding per capita FY22 - Total state funding on page 27 divided by 2022 state population. Note: These figures do not include funding tied directly to the COVID-19 pandemic response. The U.S. total reflects grants and cooperative agreements to all 50 states and the District of Columbia, but it does not include territories, localities, or tribes for the purpose of comparability. Source: CDC Grant Funding Profiles

- McKillop M, Alpert Lieberman D. The Impact of Chronic Underfunding on America's Public Health System: Trends Risks, and Recommendations - 2023. Trust for America's Health; 2023. Accessed July 15, 2024. <https://www.tfah.org/wp-content/uploads/2023/06/TFAH-2023-PublicHealthFundingFINALc.pdf>

Total HRSA Funding per capita FY22 - Funding by State divided by 2022 state population. HRSA awards grants to assure access to essential health care for underserved populations and eliminate health disparities. Each year, HRSA makes over 6,000 grant awards. The HRSA grants data is extracted from the Electronic Handbooks (EHB) grants management and performance reporting system. Dashboard Updated 5/20/2024, Data as of 4/12/2024

State Public Health Preparedness, 2024 - State performance scoring tier, 2023. Pages 44-45. States could be ranked in the low, middle, or high tier. See “Appendix B: Methodology” for a description of TFAH’s data-collection process and scoring details.

- Grants Dashboard. Health Resources & Services Administration. May 20, 2024. Accessed July 2024. <https://data.hrsa.gov/topics/grants>

Tobacco Settlement Funds per capita, 2023 - Actual Tobacco Settlement Payments Received by the States (in millions) divided by 2023 state population. Data include Master Settlement Agreement (MSA) and individual state payments. Payments are for calendar years indicated but because of payment schedules the totals for most states are the same as their fiscal year totals.

- McKillop M, Farberman RK, Alpert Lieberman D. Ready or Not? Protecting the Public’s Health from Diseases, Disasters, and Bioterrorism - 2024. Trust for America’s Health; 2024. Accessed August 19, 2024. <https://www.tfah.org/wp-content/uploads/2024/03/2024-ReadyOrNot-FINAL.pdf>

Opioid Settlement Funds Paid, 2024 - Total Opioid Settlement Payout Received to date (as of March 4, 2024) divided by 2023 state population. Data from BrownGreer, the court-appointed firm administering the settlements, shows how much money jurisdictions have received through 2023

- [KFF's State Health Facts: Actual Tobacco Settlement Payments Received by the States \(in millions\)](#). Accessed July 2024. Data Source: Campaign for Tobacco Free Kids, [Actual Tobacco Settlement Payments Received by the States, 1998-2023](#), accessed January 30, 2024

Table 14. Population Demographics

Percent Population White, 2022 - Persons of Hispanic origin may be of any race; all other racial/ethnic groups are non-Hispanic. Population and demographic data on are based on analysis of the Census Bureau’s American Community Survey (ACS) and may differ from other population estimates published yearly by the Census Bureau. U.S. and state population data displayed on this site are restricted to the civilian, non-institutionalized population for

whom ACS collects and reports poverty information.

- [KFF's State Health Facts: Population Distribution by Race/Ethnicity](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Percent Population Black, 2022 - Persons of Hispanic origin may be of any race; all other racial/ethnic groups are non-Hispanic. Population and demographic data on are based on analysis of the Census Bureau's American Community Survey (ACS) and may differ from other population estimates published yearly by the Census Bureau. U.S. and state population data displayed on this site are restricted to the civilian, non-institutionalized population for whom ACS collects and reports poverty information.

- [KFF's State Health Facts: Population Distribution by Race/Ethnicity](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Percent Population Hispanic, 2022 - Persons of Hispanic origin may be of any race; all other racial/ethnic groups are non-Hispanic. Population and demographic data on are based on analysis of the Census Bureau's American Community Survey (ACS) and may differ from other population estimates published yearly by the Census Bureau. U.S. and state population data displayed on this site are restricted to the civilian, non-institutionalized population for whom ACS collects and reports poverty information.

- [KFF's State Health Facts: Population Distribution by Race/Ethnicity](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Percent Population Aged 0-18 Years, 2022 - Children 0-18. Population and demographic data on are based on analysis of the Census Bureau's American Community Survey (ACS) and may differ from other population estimates published yearly by the Census Bureau. U.S. and state population data displayed on this site are restricted to the civilian, non-institutionalized population for whom ACS collects and reports poverty information.

- [KFF's State Health Facts: Population Distribution by Age](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Percent Population Aged 18-64 Years, 2022 - Sum of Adults 19-25, Adults 26-34, Adults 35-54, and Adults 55-64. Population and demographic data on are based on analysis of the Census Bureau's American Community Survey (ACS) and may differ from other population estimates published yearly by the Census Bureau. U.S. and state population data displayed on this site

are restricted to the civilian, non-institutionalized population for whom ACS collects and reports poverty information.

- [KFF's State Health Facts: Population Distribution by Age](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Percent Population Aged 65 Years+, 2022 - 65+. Population and demographic data on are based on analysis of the Census Bureau's American Community Survey (ACS) and may differ from other population estimates published yearly by the Census Bureau. U.S. and state population data displayed on this site are restricted to the civilian, non-institutionalized population for whom ACS collects and reports poverty information.

- [KFF's State Health Facts: Population Distribution by Age](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American Community Survey, 1-Year Estimates.

Birth Rate per 1,000 Women, aged 15-44, 2022 - Table 8. Birth rates, by age of mother: United States, each state and territory, 2022. (By place of residence. Birth rates by age are births per 1,000 women in specified age group estimated in each area. Populations estimated as of July 1)

- Osterman MJK, Hamilton BE, Martin JA, Driscoll AK, Valenzuela CP. Births: Final Data for 2022. CDC National Center for Health Statistics; 2024. <https://www.cdc.gov/nchs/data/nvsr/nvsr73/nvsr73-02.pdf>

Table 15. Educational Achievement and Economic Characteristics

No High School Degree, ages 25+ years, 2022 - Percent of Population, 25+ with Less than 9th Grade, 9th to 12th, and No Diploma

- Education: States in Profile. Accessed July 2024. <https://www.statsamerica.org/sip/Education.aspx?page=edu1&ct=S18>

Bachelors Degree or Higher, ages 25+years, 2022 - Percent of population, 25+ who have competed a bachelors degree or more,

- Education: States in Profile. Accessed July 2024. <https://www.statsamerica.org/sip/Education.aspx?page=edu1&ct=S18>

Percent Under 100% Federal Poverty Level, 2022 - Under 100% FPL

- [KFF's State Health Facts: Distribution of Total Population by Federal Poverty Level](#). Accessed July 2024. Data Source: KFF estimates based on the 2008-2022 American

Community Survey, 1-Year Estimates.

Unemployment Rate, March 2022 - The unemployment rate measures unemployment within the civilian non-institutional population aged 16 years and older. Data refer to place of residence. March 2022 timeframe. Civilian labor force and unemployment by state and selected area, seasonally adjusted.

- [KFF's State Health Facts: Unemployment Rate \(Seasonally Adjusted\)](#). Accessed July 2024. Data Source: Bureau of Labor Statistics (BLS), [Regional and State Employment and Unemployment \(Monthly\)](#), Civilian labor force and unemployment by state and selected area, seasonally adjusted.

Median Income, 2021 - Median Annual Household Income. In 2021 inflation-adjusted dollars. Data are limited to the household population and exclude the population living in institutions, college dormitories, and other group quarters. For information on confidentiality protection, sampling error, non-sampling error, and definitions, see www.census.gov/programs-surveys/acs/.

- [KFF's State Health Facts: Median Annual Household Income](#). Accessed July 2024. Data Source: U.S. Census Bureau, 2021 American Community Survey, 1-Year Estimates; Table ID: B19013.

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