

Addressing Factors that Affect Health Care Costs: Recommendations for Indiana Stakeholders

IU RICHARD M. FAIRBANKS SCHOOL OF PUBLIC HEALTH AT IUPUI CENTER FOR HEALTH POLICY

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EXECUTIVE SUMMARY

Rising health care costs are of concern to Indiana consumers, employers, policymakers, health care providers, and other health care stakeholders, especially because of poor health outcomes in the state. Several recent analyses have elevated the discussion about the prices of hospital care in our state. However, many factors contribute to overall health care costs beyond price. Any policy interventions, based upon a limited understanding of the larger context, unnecessarily risks positioning stakeholders against each other without addressing the overall problem. This report is motivated by the need to move Indiana towards lower overall health care costs especially through concerted efforts that will improve the health of Hoosiers.

We believe that the work represented in this report is a preliminary step towards developing an Indiana strategic plan for health care. A necessary next step is to convene stakeholders for further discussion, contemplation, and activation based on consensus and known best practices. To facilitate this next step, the current report includes three main sections: (1) a characterization of the health care context in Indiana, (2) a literature synthesis of how 16 different factors could affect overall costs of care and/ or population health outcomes, and (3) recommendations for stakeholder action based upon conclusions from the literature syntheses and the Indiana context. The 16 factors were derived from consultation with experts, stakeholders, and public calls for policy changes.

Characterizing the Indiana Context

In the **Figure**, we present a wide range of publicly available variables that show how Indiana compares to the national average and to each of our neighboring states on disease burden, health status, health care market, and demographic characteristics. To aid in the interpretation of these variables, we show Indiana's standing (depicted by a dot) relative to the neighboring states (depicted by a gray band) as a percentage of change from the US rate (dashed vertical line) on each measure. A gray dot for Indiana indicates no difference from the US rate. A red dot indicates Indiana is at least 10% worse than the US rate, an orange dot indicates at least 5% worse, and a green dot indicates 10% better than the US rate. The gray bands show which neighboring state have the highest and lowest performance compared to Indiana. Key takeaways from this information include:

- Personal health care spending per capita in Indiana is in line with neighboring states and not more than 5% above national averages.
- Per capita state government spending on health care (mostly via Medicaid) is substantially lower (>10%) than the US average and lower than most neighboring states.
- In line with neighboring states, people in Indiana are more likely than other Americans to have private health insurance. Notably, the un-insurance rate in Indiana is more than 10% lower than the US overall.
- Hoosiers are more likely than Americans, and residents of neighboring states, to work for a private-sector firm that offers a self-insured health plan.
- Health insurance premiums in Indiana (single and family coverage), as well as the employee contribution to single coverage plans within the state is similar to US averages (and consistent or better than neighboring states).
- Employees in Indiana pay a smaller percentage of their total family coverage premiums than most Americans.
- The percent of income devoted to health care in Indiana is slightly below the national average and within the range of neighboring states.
- The average Hoosier is sicker and suffers from more health conditions than the average American, especially with respect to high smoking rates, mental health conditions, and cardiovascular disease. Diabetes in Indiana is also elevated relative to the national rate.
- People in Indiana have higher age-adjusted mortality from accidents, suicides, and drug overdoses.
- Infant mortality and maternal mortality are particularly high in Indiana.
- Public health investments in Indiana are consistently well below US averages and frequently below neighboring states.
- Indiana performs in the bottom tier with respect to public health preparedness.
- Indiana has comparatively very low taxes on cigarettes, and thus a lower price which motivates continued smoking.
- Indiana has particularly low vaccination rates for influenza, childhood vaccines, and adult and elderly vaccines.
- Given Indiana's low investments in public health, our state ranks below the bottom quartile in the US for

EXECUTIVE SUMMARY

Figure: Characterizing the Indiana Context

	-90	-70	-50	-30	⁻¹⁰ US Rate ¹⁰	30	50
pending	Norse						Bette
Per Capita Personal Healthcare Spending					OH IN KY		
Per Capita State Healthcare Spending				IN		K	
Health Insurance							
Percent with public health insurance				(IL (IN) MI		
Percent with Private Health Insurance					OH I (IN)IL		
Percent Uninsured					ОН	J MI	
Avg. Annual Premium - Single					IL (IN) MI		
Employee Contribution - Single					KY (II)IL		
Avg. Annual Premium - Family					(IL(IN) MI)		
Employee Contribution - Family					KT IN		
% of Employees Enrolled in HDHPs							
Percent of Income Devoted to Health Care					(KY (IN)	MI	
Health Conditions							
Adult Obesity and Overweight							
Adult Obesity and Overweight Adult Smoking			KY	IN			
Adults Reporting Poor Mental Health Status					IN OH		
Adults Reporting Poor Mental Health Status Adults with Diabetes				к			
Adults with Cardiovascular Disease			KY				
Preterm Births					KY (IN)		
Nortality							
All Cause Mortality				ОН	IN IL		
				On	KY (IN) IL		
Cancer Mortality Heart Disease Mortality							
			ОН)	
Accident Mortality			ОН	IN			
Infant Mortality							
Maternal Mortality		IN					
Alcohol Deaths							
Drug Deaths				677			
Suicide Deaths				КҮ			
Combined Alcohol, Drug & Suicide Death	S		Q	DH			
Public Health Investments							
Overall State Investment in Public Health		IN			KY		
Total CDC Funding per capita					KY)		
Total HRSA Funding per capita							
CDC Prevention Fund per capita		IN					
Flu Vaccination Rate for those aged 6+							
State Cigarette Tax Rate			I		MI)	
lospital Characteristics							
Percent Non-Profit Hospitals						L)
Percent For-Profit Hospitals			L				
Percent Public Hospitals		МІ			I (IN		
Percent Rural Hospital at Risk of Closure				М			ОН
Physician Supply							
Active Patient Care Physicians					IN OH		
Active Patient Care PCPs							
Active Patient Care General Surgeons					IL IN I KY		
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Figure: Characterizing the Indiana Context

overall health, mental health, infant mortality, overall mortality, obesity, and smoking. These health rankings are consistently worse than neighboring states.

- Compared to US trends, hospitals in Indiana are more likely to be for-profit or public especially compared to neighboring states.
- Rural hospitals in Indiana are at higher risk of closure due to financial issues than rural hospitals in the US overall.
- Indiana has fewer physicians, especially in primary care, than the US overall and most neighboring states.
- The average location in the US, and in the state of Indiana overall, has a health insurance market that is considered 'highly concentrated' (less competitive) based on definitions used by the Federal Trade Commission and the US Department of Justice for anti-trust enforcement. In contrast, inpatient hospital concentration categorizes Indianapolis, the largest metro area, as moderately concentrated. (See Table 7 on pages 18-19.)
- Demographically, Indiana reflects US averages more consistently than most neighboring states. However, Indiana has fewer adults with a bachelor degree than the US overall and most neighboring states. (See Table 8 on page 19.)

Literature Syntheses

We synthesize the literature regarding 16 factors that could influence both the overall costs of care and patient outcomes. Based upon the weight of evidence, as a function of the study designs used in individual articles, we describe the takeaway points from a given body of literature as: (1) convincing evidence on cause and effect, (2) promising evidence on cause and effect, and (3) correlational evidence where cause and effect should not be inferred.

Market and Local Activities

1. Provider (hospital and physician) and payer concentration

Convincing evidence suggests that provider and payer concentration each lead to higher costs. Provider and payer concentration each have mixed/inconclusive effects on quality of care and health outcomes.

- 2. Employer-provider direct price negotiations Overall, employer-provider direct price negotiations have been rare and not rigorously evaluated. Limited promising evidence suggests that employers could, individually or through an alliance with other employers, successfully negotiate lower prices and/or performance guarantees that may yield desired benefits. The longterm success of such negotiations is conditional on employers' ability to successfully maintain the alliance.
- **3. Use of narrow and tiered provider networks by payers** Convincing evidence suggests that the use of narrow provider networks can reduce costs with promising evidence suggesting no effects on quality. Some promising evidence suggests that tiered networks could also steer patients towards lower-cost providers.

4. Public health activities

Convincing evidence links investments in public health to a reduction in health care spending and improvements in population health. Moreover, community-based multisector partnerships can convincingly improve health outcomes.

Payment Issues

5. Accountable Care payment models

Convincing evidence shows that Accountable Care models in both Medicare and commercial payers have

reduced costs and improved the health care quality. In Massachusetts, convincing evidence suggests that commercial programs reduced both prices and service utilization. Convincing evidence from Rhode Island further suggests that Accountable Care models can reduce per capita health care spending.

6. Bundled payment models

Convincing evidence links bundled payments to reduced overall costs without adversely affecting (and frequently improving) quality of care. There is also some evidence that bundled payments improve the coordination of care.

7. All-payer rate setting (caps on prices)

Convincing evidence from the 1970s and 1980s suggests that all-payer rate caps can reduce costs but also erode quality or worsen population health. More recent, promising evidence from Maryland suggests that while rate caps can reduce costs per admission, they inadvertently can increase inpatient volumes thus negating the impact on overall costs.

8. Cost-shifting (providers charge private payers more in response to shortfalls in public payments) Although cost-shifting was a historic act of practice, convincing contemporary evidence suggests that cost shifting is unlikely to play a large role in prices or quality; and that market forces such as provider and payer concentration appear to be more prominent determinants of prices. In addition, promising current evidence suggests that rather than cost shift, hospitals affected by reductions in governmental payments may delay technology purchases, prune unprofitable services, and/or reduce the quality of care provided.

9. Reference-based pricing (RBP)

RBP is a coverage design in which the employer or insurer pays a defined cost of a particular service charged by the provider, with the patient being required to pay the remainder. Convincing evidence has linked RBP to significant cost savings on non-emergency utilization in public, for-profit, and nonprofit employer settings. Although the evidence is limited, RBP does not appear to affect quality or population health. RBP requires that patients have access to price information and that a sufficient number of providers are available, especially below the reference price set for a given procedure, service, or product. Importantly, RBP in the US is conceptualized differently than in some other countries.

Regulatory Approaches

10. Regulations aimed at increasing competition in a market

Stricter enforcement of state and federal anti-trust laws have generally reduced provider and payer mergers but has not affected existing levels of concentration or stopped the competitive decline in most US markets. The extent to which even stricter enforcement of anti-trust laws would have an effect is unknown. Evidence suggests that Certificate of Need (CON) laws could reduce competition and at times adversely affect prices and/or quality of care. An alternative to CON laws, Certificate of Public Advantage (COPA) laws allow mergers to proceed conditional on resource intensive state regulatory oversight to assure societal benefits. The effectiveness of COPA laws in reducing costs and assuring expected benefits is unknown. Other regulations such as banning "most favored nation" or gag clauses in provider-payer contracts - which are designed to address anticompetitive behavior by payers - have an insufficient evidence base to draw conclusions.

11. Taxing the accrued profits of nonprofit hospitals to discourage price increases

Theoretically, such a tax has the potential to influence the market behavior of hospitals and other stakeholders including by affecting prices and/or quality. However, we found no empirical studies that can inform on the potential benefits or drawbacks associated with this approach.

Physician and Clinical Services

12. Physician-facing price transparency tools

Overall there is conflicting evidence on the impact of physician-facing price transparency tools on costs. However, convincing data from Indiana has shown a reduction in the number of tests ordered and lower associated costs. Such tools that target laboratory tests show promise in achieving desirable effects.

13. Increased use of end-of-life services

There is convincing evidence that the use of hospice and palliative care has benefits to patients; with promising evidence on cost reduction in some patient populations. Advanced directives and advanced care planning also show some benefits to patients; while the use of in-home services at the end of life is supported by convincing evidence regarding reduced costs.

14. Utilization of low-value and wasteful health care services

Low-value care is responsible for significant wasteful spending and is rooted in (1) a mindset that believed more care was better; and (2) a payment model that incentivized over utilization of services. Eliminating low-value care is widely embraced by many medical professional societies. Barriers to overcome include revamping the culture that believes "more is better," continuing to change payment models to reward providers for value, educating clinicians and patients, and facilitating consistency in how to define and identify low-value services.

Consumer Focused

15. Use of high-deductible health plans (HDHPs)

Convincing evidence shows that HDHPs can reduce costs by reducing the utilization of services. Problematically, there is convincing evidence that desirable preventive care decreases for patients on a HDHP—despite being exempt from out-of-pocket costs.

16. Consumer-facing price and quality transparency tools

There is inconclusive evidence on the effects of consumer-facing price transparency tools on costs especially because patients rarely use such tools resulting in a lack of impact on overall consumer behavior. However, there is some convincing evidence that publicly available quality information can improve quality of care (but not health status or population health).

Recommendations for Stakeholder Action

Based the literature synthesis and the Indiana context, we conclude the following:

- There is no simple 'magic bullet' to reduce costs and improve population health in the US overall or within any given state. Thus, it is unlikely that any one solution will achieve the desired results for Indiana.
- Achieving the desired outcomes in Indiana can be facilitated with a comprehensive portfolio of activities each of which encourages maximum collaboration among stakeholder groups. Thus, state policymakers should actively encourage, and incentivize, stakeholder cooperation.

• Although the context in Indiana has unique challenges, opportunities exist to improve health and implement change by tapping into the expertise, assets, and motivation of stakeholder coalitions who can assure the continued economic vitality of the Hoosier State.

We provide the following recommendations to facilitate collaborative input from Indiana stakeholder groups who have the capacity and knowledge to assess the feasibility (including downsides) of successfully implementing any proposed solutions to the current situation. By working together, we believe that stakeholders can craft the optimal set of solutions to pursue within a portfolio of activities that will be needed. Full justification for all of these recommendations are available in the full report in this document.

With respect to **Market and Local Activities**, stakeholders in Indiana should:

- Implement an all-payer claims database, including self-insured employers, to enable insurers, employers, providers, policymakers, and researchers to have improved transparency.
- To mitigate the effects of a relative shortage of physicians, Indiana should examine the scope of practice laws that govern mid-level providers and determine whether policy changes could facilitate a safe increase in primary care practitioners.
- Leverage technology like telemedicine to increase competition among providers, especially in markets with a scarcity of physicians.
- Employers should explore ways to negotiate directly with providers and implement pilot projects to determine if doing so is beneficial and scalable.
- To the extent feasible, the use of narrow or tiered provider networks should be encouraged.
- Increase investments in public health services and encourage the use of community-based multisector partnerships that address, mitigate, or otherwise focus upon socioeconomic conditions that drive preventable health care utilization and exacerbate disease.

With respect to **Payment Issues**, stakeholders in Indiana should:

• Move towards greater use of value-based payment models among commercial payers, including bundled

payments and eventually accountable care with upside and downside risks recognizing that challenges exist when accountable care and bundled payments are implemented simultaneously.

 Self-insured employers and traditional insurers should experiment with reference-based pricing approaches that target cost reductions in non-emergency services and products that have wide price variation with little or no quality variation.

With respect to **Regulatory Approaches**, stakeholders in Indiana should:

• Examine ways to effectively increase competition in Indiana for payers and providers through more research. Insufficient evidence exists on policies that can increase competition.

With respect to **Physician and Clinical Services**, stakeholders in Indiana should:

- Partner to pursue rigorous research to determine if physician-facing price transparency tools, particularly focused on laboratory tests, could reduce costs of care.
- Increase the use of end-of-life services, including hospice and palliative care as well as advanced directives and in-home services.
- Launch a concerted effort to reduce low-value care by raising awareness among physicians, patients, and others; and implementing payer-initiated incentives that target a reduction of low-value services.

With respect to **Consumer-Focused Activities**, stakeholders in Indiana should:

• Work to swiftly address the issue of less preventive service utilization for patients with high-deductible health plans.

Lastly, based upon our literature syntheses and the Indiana context, the following items are **not recommended** (as justified in the full report):

- Implementing price caps and/or an all-payer rate setting approach is not recommended.
- Taxing accrued profits of nonprofit hospitals to discourage price increases is not recommended.

- No further action regarding cost-shifting is recommended. However, if stakeholders are concerned that trends in cost-shifting in Indiana might be occurring despite national evidence to the contrary, we recommend an Indiana-specific analysis of this issue to more accurately qualify this issue locally. An all-payer claims database (as recommend previously) can facilitate such an analysis.
- Expanding the use of consumer-facing price transparency tools is not recommended. However, the use of consumer-facing quality transparency tools should not be ruled out.