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Reducing healthcare costs in the United States: Does price transparency help?

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Abstract

Background: Price transparency in healthcare is gaining popularity as a strategy to reduce costs by fostering cost-conscious consumer behavior and enhancing competition among providers. Despite these intentions, the effectiveness of price transparency tools in reducing overall healthcare spending at the individual and system levels remains uncertain. This creates significant gaps. Moreso, there is limited recent evidence on how these tools affect different stakeholders, including patients, providers, and insurers, and the conditions under which transparency leads to impactful cost reductions.

Methods: We conducted a literature review to synthesize evidence on the impact of price transparency on healthcare costs, focusing on studies that assessed their effects on consumer, provider, and purchaser behaviors and outcomes.

Results: The findings revealed that the impact of price transparency on healthcare costs is mixed. Positive impacts were observed when patients used price information to select lower-cost services, resulting in savings for both consumers and insurers. Disclosure of negotiated prices often led to increased competition among providers and price reductions for shoppable services. However, other studies reported negative or negligible effects, with limited consumer uptake, minimal influence on provider pricing, and no significant reduction in overall healthcare spending due to persistent market factors such as limited competition and price adjustments by providers and less usage by consumers.

Implications for Policy and Practice: These findings suggest that price transparency alone may not be sufficient to achieve significant reductions in healthcare costs. For transparency strategies to be effective, policymakers must ensure that they provide actionable and easily interpretable cost and quality information, target engaged consumers and focus on services where price shopping is feasible. Future research should explore the contexts in which transparency is most effective, including which types of services and patient populations are most likely to benefit. There is also a need to assess long-term effects on provider pricing behavior, market dynamics, and the integration of quality metrics with price data to guide consumer decisions.

Conclusion: Price transparency tools have shown potential to influence consumer and provider behaviors, leading to individual cost savings. However, their impact on overall healthcare spending is limited and inconsistent. To maximize their effectiveness, price transparency initiatives should be part of a broader strategy that includes regulatory oversight and value-based care models. Without these complementary measures, the potential of transparency to curb healthcare costs may remain unrealized.

Keywords: Price Transparency; Transparency Tools; Healthcare Cost; Healthcare Spending

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1. Introduction

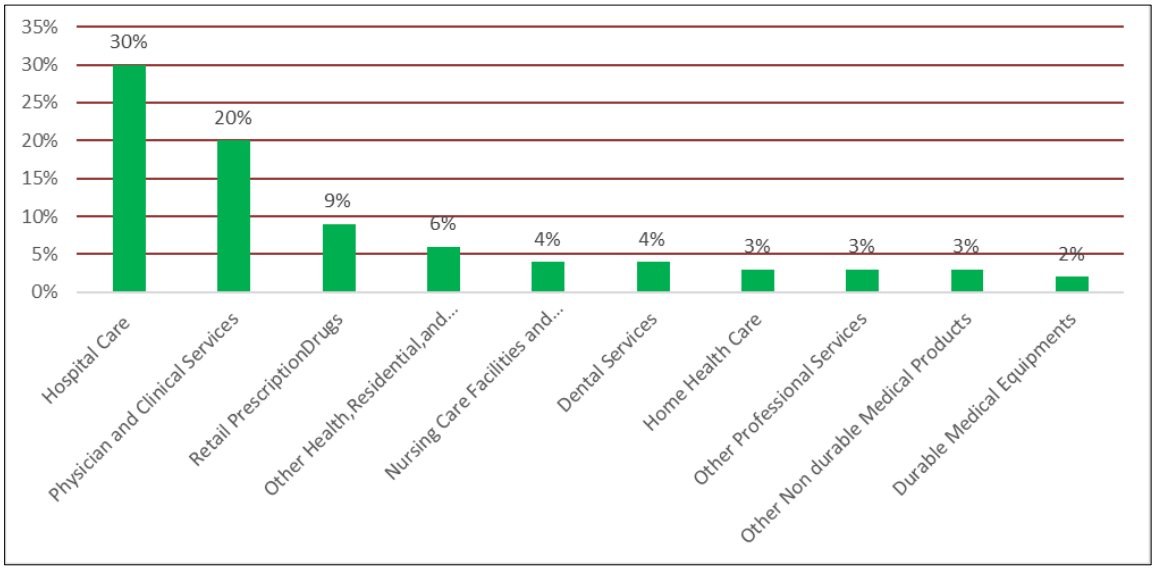
The cost of healthcare in the United State is a major concern for consumers, physicians, payers, and policy makers, as prices continue to increase at an unsustainable rate. This contributes to a lack of affordable health care, gaps in access to care, and health disparities.[1] The United States spends more per capita on healthcare than any other nation, and despite these higher costs of care, the U.S. still performs poorly in health coverage and health outcomes at the population level, justifying the need for healthcare reform.[1]

In 2022, healthcare spending in the U.S. rose by 4.1%, reaching $4.4 trillion. This marks an increase from the 3.2% growth rate in 2021 but still lower than the sharp 10.3% spike observed in 2020, during the height of the COVID-19 pandemic. Notably, the 2022 growth rate aligns with the pre-pandemic level of 4.1% recorded in 2019.[2] Moreso, the health sector was significantly impacted by the pandemic in 2020.

However, as the public health emergency ended in 2023, projected trends shifted, as national health expenditures are projected to grow by 5.4% annually from 2022 to 2031, reaching about 20% of the economy by 2031, which is roughly $1 out of every $5 spent in the US.[3] The insured share of the population is expected to decline towards 90% as COVID-19 related insurance coverage requirements expire, leading to a 2.1% reduction in Medicaid expenditures. Therefore, future health spending will be more influenced by health-specific factors rather than federal supplemental payments.

Globally, the healthcare costs and spending across the Organization for Economic Cooperation and Development (OECD) countries increased over time but is far less of their GDP compared to the US. Similarly, these have increased across the Low- and Middle-Income Countries (LMICs), and this stimulates financial pressure on spenders by increasing out-of-pocket (OOP) expenditures.[4]

Retail prescription drug expenditures account for 11% of total personal health care services spending as a result of rising costs and the usage of a more expensive combination of branded and generic products in the United States in 2021.[5] Likewise, health administration represents $91 billion, or 14% of total spending above expected, largely as a result of the system's structure, internal inefficiencies, and redundancies. [4,5]



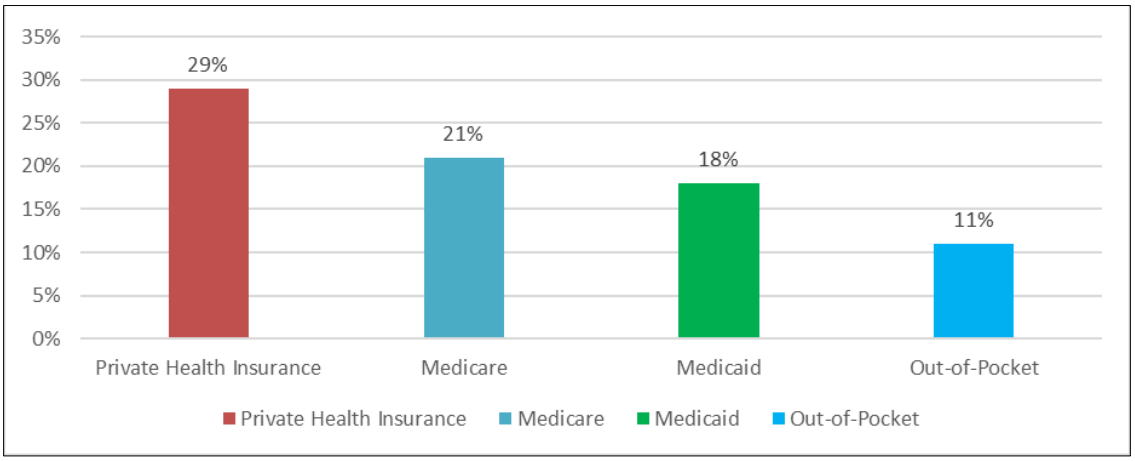
Source: National Health Expenditures 2022 Highlights

Figure 1 Health Spending by Type of Service or Product

The sources of health spending across the spectrum of health care delivery varies, and it includes, by type of service or product (Figure 1), by major sources of funds (Figure 2), and by type of sponsor, including the federal government and households, which accounted for the largest shares of health spending (34% and 27% respectively), followed by private (17%), State and Local governments (15%), and other private revenues (7%) in 2021. [2]

While cost of healthcare continued to increase, millions of Americans with private insurance, or those uninsured continue to suffer high insulin prices. The price of insulin is so expensive in the United States, where about 1.3 million patients with diabetes had problems with adherence, following reduction, delay, or compromise of insulin intake to save

money.[6] Insulin rationing was prevalent among black Americans at 23%, compared to White, and Hispanic Americans at 16% (Figure 3).[7,8] Insulin prices are more than five to ten times higher in the United States, than in 32 high-income comparison countries combined, using list prices.



Source: National Health Expenditures 2022 Highlights

Figure 2 Health Spending by Major Sources of Funding

The average prices per vial across all types of insulin in the United States is $98.70, compared with $6.94 in Australia, $12.00 in Canada, $7.52 in the United Kingdom, and $8.81 across all non-US OECD countries combined. (Figure 4).[6 7] However, the Inflation Reduction Act (IRA) 2022, signed into law by President Biden capped the cost of insulin at $35 as cost-sharing for seniors on Medicare drug program. The IRA is expected to lower out-of-pocket spending for Medicare Part D enrollers, leading to significant savings for Medicare beneficiaries. [3](Keehan et al.,2023)

Healthcare costs are driven by increased prices for healthcare goods and services, including pharmaceuticals, supply chain intermediaries and middlemen, devices, and administrative costs. [4] . Also, lack of competition, limited negotiation power of government and Medicare, and lack of price transparency. However, governments across the world are committed to active measures in reducing the rising costs of health care, while ensuring improved access and quality of care.

Therefore, the escalating healthcare spending and significant price variations have prompted increased attention to price transparency tools, aimed at enabling consumers to make informed choices and reduce overall costs.[9] Patients have continually suffered from inadequate information and knowledge required to make informed decisions about their health and the value of medication, especially as there are biases against sicker and vulnerable patients. The goal of price transparency is to empower patients with information about the prices that providers charge, so they can consider prices and quality when making healthcare decisions. Value-based informed decision-making is expected to increase competition and smarter shopping in the health care system, creating incentives to lower prices or demonstrate value.[9]

Against this backdrop, price transparency is increasingly being proposed as an effective strategy and is generating interest across countries. While this innovation is gaining popularity, the effectiveness of this intervention remains under debate, as there is limited recent evidence on whether they improve healthcare pricing. This gap in evidence serves as a barrier to patients, policy makers in need of evidence to justify their decisions, and for researchers needing to draw lessons for the design and implementation of such.

Therefore, it is imperative to understand and investigate whether price transparency can be applied as a strategy to moderate pricing and reduce healthcare costs, as the United States has consistently faced unbearable healthcare cost over the years. Hence, this review proposes to fill this knowledge gap, by analyzing the findings from studies exploring the impact of price transparency tools on healthcare prices, patient choices, and spending patterns.

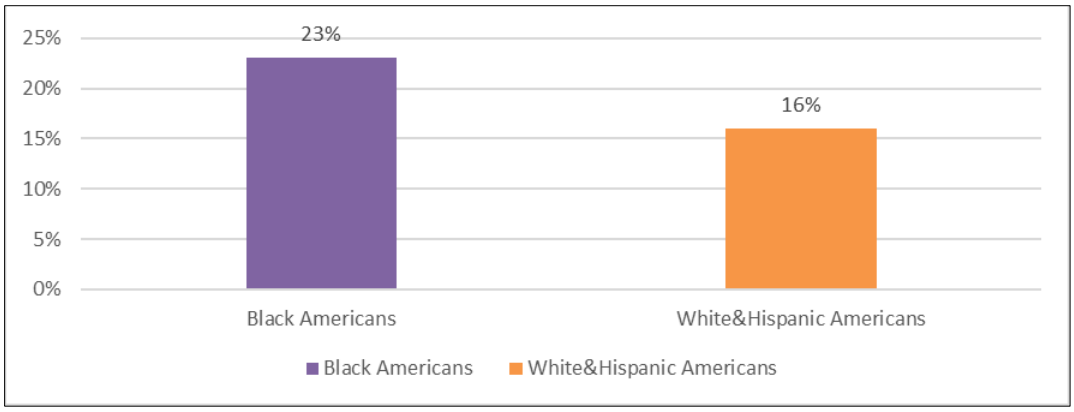
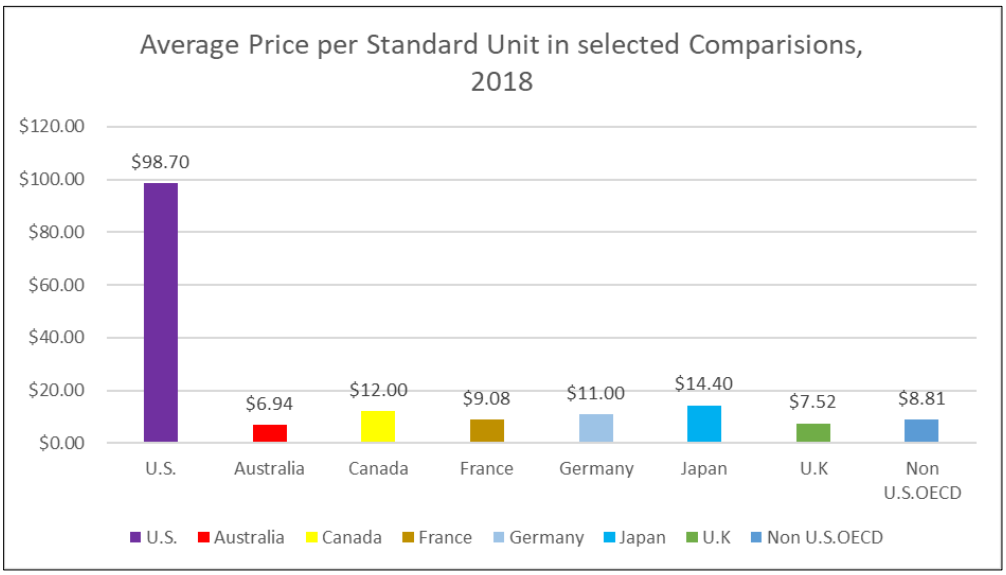


Figure 3 Insulin Rationing among Black Americans, White and Hispanic Americans



Source: www.rand.org

Figure 4 Average Prices per Standard Unit of Insulin in the U.S. compared to OECD

2. Methods

The review synthesized findings from literature and provides evidence of price transparency on healthcare costs. We employed a descriptive analysis to identify, explore, and review literature about price transparency and the impact on rising cost of healthcare. Relevant studies were sourced by conducting a comprehensive literature search using databases of PubMed, PLoSONE, Scopus, Google Scholar etc., with search terms including ''Price transparency AND Healthcare prices'', ''Price transparency AND Healthcare costs'', ''Price transparency AND Hospital prices'', ''Price transparency OR Transparency tool'', ''Price transparency tool AND Patient spending'' ''Price transparency and Healthcare Spending''. We applied the snowball method to search for additional studies through the reference lists of retrieved articles. Studies published in English Language with no year restriction were retrieved as relevant publications.

3. Results

3.1. Impact on Cost Savings and Patient Choices

The potential impact of price transparency with significant savings on prices by 2025 was investigated by applying a comprehensive set of data sources including two all- payer claim databases representing over 200 million insured lives.[9]

The study matches claims for 70 HHS-defined shoppable services with commercial allowed payments using Current Procedural Terminology (CPT) and Diagnosis Related Group (DRG) codes. Using a 40% cost reduction comparing negotiated and cash payment, the analysis estimated substantial potential savings. Findings revealed the National savings estimates vary significantly, with an upper bound of $80.7 billion, and a lower bound of $17.6 billion. Regionally, the Midwest is expected to have the most significant impact, with potential savings of $20 billion, and an 8% reduction in medical expenditure. In contrast, the South is projected to have the lowest impact, with only a 5.8% reduction.

Further evidence suggested that those with lower income levels will benefit the most, with reductions of 7.4% for individuals below 100% of the Federal Poverty Level, and 7.5% for those between 100% and 137% of the Federal Poverty Level. Overall, the privately insured population in the United States witnessed a 6.9% reduction in medical costs. These findings highlight that price transparency policies for shoppable services may lead to significant savings, incentivizing consumers to shop for medical services, especially with the increasing use of high-deductible health plans and health savings accounts. However, how these potential savings will be distributed among consumers, employers, and health plans remain uncertain.[9]

The impact of an employer-sponsored price transparency on medical claims payments for laboratory tests, advanced imaging services, and clinician office visits was investigated. Data from 502,949 insured patients between 2010 and 2013 were analyzed, researchers applied multivariable generalized linear model regressions with propensity score adjustments to control for demographic, geographic, and procedural differences.[10] Results showed that 5.9% of laboratory test claims, 6.9% of advanced imaging claims, and 26.8% of clinician office visit claims involved prior use of the price transparency platform.

However, before website access, users had higher claims payments than non-users for laboratory tests (4.11%; 95% CI, 1.87%-6.41%), and advanced imaging services (5.57%; 95% CI, 1.87%-9.44%), but no significant difference for clinician office visits (0.26%; 95% CI; 0.53%-0.53%-0.005%).[10]

Likewise, following access to the website, users had significantly lower relative claims of 13.93% (95% CI, 10.28% - 17. 43%) lower for laboratory tests, 13.15% (95% CI,9.49% - 16.66%) lower for advanced imaging, and 1.02% (95% CI, 0.57% -1.47%) lower for clinician office visits. The absolute savings were $3.45 (95% CI, $1.78-$5.12) for laboratory tests, $124.74 (95% CI, $83.06-$166.42) for advanced imaging, and $1.18 (95% CI, $0.66-$1.70) for clinician office visits.

Therefore, using price transparency information was associated with lower claims payments, particularly for advanced imaging services. These findings suggest that patient access to pricing information can reduce overall payments for clinical care.

The impact of reference pricing on laboratory pricing, patient selection, out-of-pocket (OOP) payment, and insurer spending was evaluated using a difference-in differences method. Data from a large national grocery firm (n=30,415 employees) were analyzed before and after the implementation of the reference pricing policy for laboratory services. This was compared with the data from policy holders of a large national insurer (n=181,831) that did not implement reference pricing.

The grocery firm set a maximum payment limit at the 60th percentile of prices for each laboratory test in each region. Patients were provided with price data through a mobile platform and were required to pay the full difference if they selected a laboratory charging more than the payment limit. A total of 2.13 million claims for 285 types of diagnostic tests between 2010 and 2013 were analyzed. [11]

Following the implementation of reference pricing, there was a significant reduction in the average price paid per test by 31.9% (95% CI, 20.6%-41.6%) by the third year of the program. Over the same period, total spending on laboratory tests decreased by $2.57 million (95% CI, $1.59-$3.35 million), out-of-pocket costs for patients decreased by $1.05 million (95% CI, $0.73-$1.37 million), and spending by the employer decreased by $1.70 million (95% CI, $0.92-$2.48 million).

The evidence reveals that reference pricing with access to price information, resulted in patient selection of fair-priced laboratories, and lower prices payments by employers and employees. [11]

3.2. Impact on Outpatient and Out-of-Pocket Spending

There are over 30 states considering implementing transparency legislation with the aim of publishing prices for medical services, encouraging cost-conscious consumer behavior and stimulating competition among providers.[14]

The growing emphasis on price transparency is a strategy to reduce costs and promote fiscal stability in the U.S. Yet, several challenges hinder the effectiveness of these efforts, including patients' reliance on insurance, difficulties in assessing care quality, the complexity of determining actual costs, and the risk of providers raising prices if consumer response is weak. Early evidence from a New Hampshire study showed no significant price reduction, partly due to limited competition among providers. [22]

Comparatively, the impact of price transparency policies on outpatient spending and out-of-pocket expenses among employees at two large companies in the United States were explored. The tool provided employees with information about out-of-pocket costs for services from providers. Applying a Matched difference-in-differences design, the results showed that mean outpatient spending for employees that were offered the tool increased from $2021 to $2233, while the control group's spending rose from $1985 to $2138. Following demographic and health characteristics adjustments, the tool was associated with a mean increase of $59 (95% CI, $25-$93) in outpatient spending. [12]

However, for out-of-pocket expenses, those offered the tool witnessed an increase from $507 to $555, whereas the control group spending experienced a rise from $490 to $520. Adjusted analysis results indicated an $18 (95% CI, $12-$25) increase in out-of-pocket spending associated with the tool. These findings highlight that using price transparency tool was not associated with lower health care spending among employees at the two large companies. Moreso, the tool witnessed limited use, resulting in modest increases in both overall outpatient spending and out-of-pocket costs.[13]

Similarly, evidence from a systematic review revealed that price transparency policies reduced prices for laboratory and imaging tests. However, it had no significant impact on the prices of office-visit services. The hospital's quality transparency slowed the growth rate of overall spending. On the contrary, while hospital price and quality transparency tools had some positive effects on reducing specific service costs and overall spending, it also increased the prices of services and consumer payments at higher-rated facilities, a phenomenon termed the "reputation premium." It further influenced private insurers to bond with higher-rated hospital networks, thereby increasing insurance premiums.[15] These mixed outcomes suggest that the anticipated benefits of transparency tools were not fully realized.

Findings from a scoping review reported mixed results, as South African studies indicated no significant price reductions, while a Philippine study revealed price reduction due to government-mediated access prices. Barriers to effective price transparency included healthcare system fragmentation and undisclosed pharmaceutical discounts. Despite widespread implementation, the impact of drug price transparency on price control remains inconclusive due to limited evidence.[16]

Evidence from a similar scoping review revealed the impact of price transparency tools on consumer, provider, and purchaser behaviors and outcomes, with a focus on their effectiveness in reducing overall healthcare spending. Findings suggest that price transparency policies had a limited impact on consumers, mainly due to low utilization. Effects on providers were mixed. Patients that were aware and well-informed of prices often selected less expensive services, resulting in out-of-pocket savings and cost reductions for health insurers. [17]

Notably, the disclosure of negotiated prices fostered supply-side competition, driving down prices for shoppable services. While the disclosure of list prices had minimal effect, revealing negotiated prices led to price reductions through heightened competition among providers. Despite these positive effects on individual-level cost savings, they did not translate into a reduction in aggregate healthcare spending. [17]

Patients using price transparency often choose higher-priced care as it reflects high quality and expert-based care. This behavior influenced hospitals and insurers to increase their healthcare prices, when they realized they were charging well below the most expensive options in the market to match the rates. This highlighted the role of price transparency and quality-of-care data in helping patients make informed decisions [18]

However, in many healthcare markets, Price transparency has little effect and could stimulate an increase in prices due to tacit collusion among providers, especially in markets with few providers and entry barriers for new providers. This results in artificially inflated prices, as providers exploit the lack of competition to maximize profits, without fear of losing consumers. This exploitation can lead to higher healthcare prices for consumers. [19]

Therefore, for price transparency policies to be effective, they must provide realistic cost and quality information, engage consumers, and focus on less complex, elective procedures. Despite these hurdles, the appeal of transparency lies in its potential to curb spending without drastic changes to payment systems. However, if transparency alone proves inadequate, the ongoing urgency to control healthcare costs may prompt stricter regulatory measures.

4. Discussion and Conclusion

The review synthesized findings from the literature about price transparency and its implications on healthcare costs. The study highlights multiple evidence on implementation and usage of these tools across the United States and other countries. The evidence suggesting that price transparency lowers prices appears to be stronger, as multiple studies consistently revealed that providing consumers with information on healthcare prices leads to reduced prices for medical services.

However, to achieve an optimal market outcome, policy makers, and relevant stakeholders must design and shape policies that mandate price transparency across healthcare providers and that encourage competition among them. Additionally, efforts to educate consumers about their healthcare options and to facilitate informed decision-making could further enhance the effectiveness of price transparency initiatives in reducing healthcare costs, as most users are not aware of price information. [23]

Findings further revealed that prior to accessing the tool, users paid more, but following usage of the tool, there were substantial reductions in the payments for clinical services, laboratory tests, out-of-pocket costs, advanced imaging services, and significant savings on medical expenditures for employer and employees. This evidence suggests that providing price information empowers consumers to make cost-effective choices, leading to overall lower claims payments.

However, a significant bottleneck to price transparency tool is its limited utilization, [13] as some of the studies reported their employees rarely use price information on their website for purchasing health commodities, thereby its impact in reducing healthcare spending may be vague. Although this limited usage may be because of the distinct nature of healthcare as a commodity from other consumer goods and services.

On the contrary, further review of studies highlights that price transparency tools had little or no impact in reducing healthcare spending. [24] Instead, both overall outpatient spending and out-of-pocket costs increased for those offered the tool. One of the findings asserts that it increased reputation premium.

Overall, the evidence from this review suggests that price transparency alone may not be adequate to reduce healthcare costs. Simply providing price information is inadequate to drive down costs and might even lead to higher spending if not effectively integrated. While price transparency has the potential to significantly lower healthcare costs, it may not achieve this without collaborating with other relevant contextual factors including patients' behavior, decision-making processes, and healthcare choices. [25] The effectiveness of price transparency tools largely depends on their design, implementation, user engagement, management, and evaluation.

The evidence from this analysis has implications for policy, practice, and future research. Suffice to say that price transparency is not a standalone solution, but rather a component of a broader strategy to lower high healthcare costs in the U.S. and globally. Moreover, the use of price transparency tools may provide valuable data for developing future policies and effective strategies to control healthcare costs. Future research should investigate the broader implications of hospital quality transparency, particularly the reputation premium.

4.1. Policies to Address Cost of Healthcare

To achieve optimal market outcomes in healthcare, policymakers must address the complex and multifaceted drivers of high healthcare costs. This requires a comprehensive strategy that involves collaboration among government entities and key stakeholders. Critical players in shaping healthcare pricing include the Federal Government, Congress, the Centers for Medicare and Medicaid Services (CMS), the Food and Drug Administration (FDA), the U.S. Patent and Trademark Office, the Federal Trade Commission (FTC), policymakers, health economists, insurers, the Medicare Payment Advisory Commission (MedPAC), and healthcare organizations (HCOs). Through partnership and agreement, these stakeholders can develop effective policies and strategies to reduce healthcare costs and improve market efficiency.

Some of the policies include Negotiation of Drug Prices (Implementation of Inflation Reduction Act (IRA), 2022), Enabling Marketplace Competition, and Provision of Guidance and Information to Physicians and Consumers on decision-making involving medication and Pricing.

4.1.1. Drug Prices Negotiation

Stakeholders should establish a benchmark for prices of drug for the marketplace as implemented in countries such as Sweden. They should engage in international reference pricing and set prices at levels comparable to those of other countries. With the Inflation Reduction Act (IRA), 2022, congress has authorized Medicare to negotiate prescription costs paid for by Medicare Part D plans as it does for all other goods and services. Similarly, the government should take steps to control excessive drug price increases by reevaluating several unusual and overly permissive policies. [20]

Another approach the government could apply in lowering healthcare costs is by reducing prescription drug costs through supporting the generation and dissemination of improved data gathering about the comparative clinical, and economic value of drugs as demonstrated in the U.K., Canada, Australia, and Germany health systems. This information can be used to set prices and make informed decisions on medication rules, exclusions, and to educate physicians and patients about the value of pharmaceutical choices as done by NGOs such as the Institute for Clinical and Economic Review (ICER) and Coalition for Health Advances and Research in Massachusetts (CHARM).[21]

4.1.2. Marketplace Competition

Implementing stringent controls on the methods employed by manufacturers to extend market exclusivity is another valuable strategy to lower healthcare costs. For instance, reviewing the criteria used by the US Patent and Trademark Office for interpreting originality and non-obviousness when granting patents could prevent the issuance of new secondary patents based on clinically insignificant modifications to existing drug products.[21] Enforcement of existing laws and regulations could help reduce drug costs. The Supreme Court sometimes ruled that alleged pay-for-delay agreements with generic manufacturers might constitute antitrust violations. Therefore, stronger government regulation of antitrust laws and unethical business practices designed to suppress competition could be effective in addressing this issue.

4.1.3. Physician and Patient Intervention

The high costs of healthcare involve the actions of both physicians and patients. Many doctors are unaware of the costs of the medications they recommend and rarely discuss drug costs with their patients. Integrating more information about drug costs and value-based prescribing through point-of-care reminders in electronic medical records could address this issue. Health care delivery models such as accountable care organizations (ACOs) present an opportunity to link drug and medical service prices, thus enabling physicians to recommend medications appropriately.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict-of-interest to be disclosed.

Statement of ethical approval

No Ethical approval and Consent were obtained as there was no need for one.

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Authors contributions-Conceptualization

TK. Original draft preparation: TK, MS and RR. Methodology, analysis, and writing: All authors. Review and editing: All authors. Final Review and editing of the manuscript: All authors. Supervision: All authors reviewed and approved the submitted manuscript.

References

[1] Kesselheim AS, Avorn J, Sarpatwari A. The high cost of prescription drugs in the United States origins and prospects for reform. JAMA - Journal of the American Medical Association. 2016;316(8):858-871. doi:10.1001/jama.2016.11237

[2] Centers for Medicare and Medicaid Services. National Health Expenditures 2022 Highlights.; 2022. Accessed September 25, 2024. https://www/cms.gov/files/documents/highlights.pdf

[3] Keehan SP, Fiore JA, Poisal JA, et al. National Health Expenditure Projections, 2022-31: Growth to Stabilize Once The COVID-19 Public Health Emergency Ends. Health Aff. 2023;42(7):886-898. doi:10.1377/hlthaff.2023.00403

[4] Papanicolas I, Woskie LR, Jha AK. Health care spending in the United States and other high-income countries. JAMA - Journal of the American Medical Association. 2018;319(10):1024-1039. doi:10.1001/jama.2018.1150

[5] U.S. Government Accountability Office. Prescription Drug Spending. doi: www.gao.gov/prescription-drug-spending

[6] Mulcahy AW, Whaley C, Tebeka MG, Schwam D, Edenfield N, Becerra-Ornelas AU. International Prescription Drug Price Comparisons: Current Empirical Estimates and Comparisons with Previous Studies.; 2021. www.rand.org

[7] Baylee FBSBKJL. Catastrophic Spending on Insulin in the United States,2017-18. Health Affairs (Project Hope). 2022;41(7):1053-1060.

[8] Gaffney A, HDU, and WS. Prevalence and Correlates of Patient Rationing of Insulin in the United States:A National Survey. Ann Intern Med. 2022;175(11):1623-1626.

[9] Parente ST. Estimating the Impact of New Health Price Transparency Policies. Inquiry (United States). 2023;60. doi:10.1177/00469580231155988

[10] Whaley C, Chafen JS, Pinkard S, et al. Association between availability of health service prices and payments for these services. JAMA - Journal of the American Medical Association. 2014;312(16):1670-1676. doi:10.1001/jama.2014.13373

[11] Robinson JC, Whaley C, Brown TT. Association of reference pricing for diagnostic laboratory testing with changes in patient choices, prices, and total spending for diagnostic tests. JAMA Intern Med. 2016;176(9):1353-1359. doi:10.1001/jamainternmed.2016.2492

[12] Desai S, Hatfield LA, Hicks AL, Chernew ME, Mehrotra A. Association between availability of a price transparency tool and outpatient spending. JAMA - Journal of the American Medical Association. 2016;315(17):1874-1881. doi:10.1001/jama.2016.4288

[13] Desai S, Hatfield LA, Hicks AL, Chernew ME, Mehrotra A. Association between availability of a price transparency tool and outpatient spending. JAMA - Journal of the American Medical Association. 2016;315(17):1874-1881. doi:10.1001/jama.2016.4288

[14] Sinaiko Anna D, Rosenthal M. Increased Price Transparency in Health Care- Challenges and Potential Effects. N Engl J Med. 2011;364(10):891-894. doi:10.1056/NEJMp1010907

[15] Chen J, Miraldo M. The impact of hospital price and quality transparency tools on healthcare spending: a systematic review. Health Econ Rev. 2022;12(1). doi:10.1186/s13561-022-00409-4

[16] Ahmad, N. S., Makmor-Bakry, M., and Hatah, E. (2020). Drug price transparency initiative: A scoping review. Research in social and administrative pharmacy: RSAP, 16(10), 1359–1369. https://doi.org/10.1016/j.sapharm.2020.01.002

[17] Zhang, A., Prang, K. H., Devlin, N., Scott, A., & Kelaher, M. (2020). The impact of price transparency on consumers and providers: A scoping review. *Health policy (Amsterdam, Netherlands)*, *124*(8), 819–825. https://doi.org/10.1016/j.healthpol.2020.06.001

[18] Bernstein DN, Crowe JR. Price Transparency in United States' Health Care: A Narrative Policy Review of the Current State and Way Forward. Inquiry (United States). 2024;61. doi:10.1177/00469580241255823

[19] Graboyes RF, Mcbirney J. Price Transparency in Healthcare: Apply with Caution.; 2020. https://www.mercatus.org/publications

[20] Rome BN, Nagar S, Egilman AC, Wang J, Feldman WB, Kesselheim AS. Simulated Medicare Drug Price Negotiation under the Inflation Reduction Act of 2022. JAMA Health Forum. 2023;4(1): E225218. doi:10.1001/jamahealthforum.2022.5218

[21] Bush L, Sommers BD. Improving Prescription Drug Affordability Through Regulatory Action. JAMA Health Forum. 2022;3(8): E223180. doi:10.1001/jamahealthforum.2022.3180

[22] Tu, H. T., and Lauer, J. R. (2009). Impact of health care price transparency on price variation: the New Hampshire experience. Issue brief (Center for Studying Health System Change), (128), 1–4.

[23] Bernstein, D. N., and Crowe, J. R. (2024). Price Transparency in United States' Health Care: A Narrative Policy Review of the Current State and Way Forward. Inquiry: a journal of medical care organization, provision and financing, 61, 469580241255823. https://doi.org/10.1177/00469580241255823

[24] Desai, S., Hatfield, L. A., Hicks, A. L., Sinaiko, A. D., Chernew, M. E., Cowling, D., Gautam, S., Wu, S. J., and Mehrotra, A. (2017). Offering A Price Transparency Tool Did Not Reduce Overall Spending Among California Public Employees and Retirees. Health affairs (Project Hope), 36(8), 1401–1407. https://doi.org/10.1377/hlthaff.2016.1636

[25] Miller, B. J., Mandelberg, M. C., Griffith, N. C., and Ehrenfeld, J. M. (2020). Price Transparency: Empowering Patient Choice and Promoting Provider Competition. Journal of medical systems, 44(4), 80. https://doi.org/10.1007/s10916-020-01553-2