EDITORIAL

Price Transparency
Not a Panacea for High Health Care Costs

Kevin G. Volpp, MD, PhD

It has become conventional wisdom that providing patients information about prices of services will allow health care markets to work more effectively by enabling patients as consumers to weigh the price of health services in deciding what services to choose. As a reflection of this belief, more than half of US states have passed legislation mandating health plans, hospitals, or physicians to provide some form of price transparency. In one study, use of an employer-sponsored private price transparency platform was associated with lower claims payments for common medical services, with 13% to 14% reductions observed for advanced imaging and common laboratory tests and a 1% reduction noted for routine office visits.[1]

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However, the study by Desai et al[2] in this issue of *JAMA* found that giving employees access to price transparency tools did not lead to the goal typically given by employers and health plans who deploy price transparency tools as a way of lowering health care spending. In fact, in the study by Desai et al,[2] offering price transparency tools to patients was associated with a slight relative increase in health spending relative to patient populations who were not offered these tools.[1]

To estimate the relationship between the availability of a price transparency tool and spending, the authors compared the rate of change in health care spending among employees (n = 148 655) of 2 employers who offered a price transparency tool with that of the employees (n = 295 983) of 2 employers who did not. After adjusting for demographic and health characteristics, access to the tool was associated with a mean $59 (95% CI, $25-$93) increase in outpatient spending and a mean $18 (95% CI, $12-$25) increase in out-of-pocket spending.

If there were significant findings in terms of reduced spending, it might be a concern that the employers who offered this (and the employees who worked there) were different than those who did not, as their decision to offer a price transparency tool might reflect greater awareness of health prices and a willingness to embrace cost control. However, because there was no evidence that health spending declined in the settings where transparency tools were offered, it is less concerning whether the employers who offered the tool differed in ways that were likely to make the tool appear more effective.

Why might transparency tools not be successful in reducing health spending? First, in the report by Desai et al, only a small percentage of employees (approximately 10%) who were offered the tool actually used it. Other studies have also found that low percentages of plan members or employees offered price transparency tools use them.[3] Clearly, if employees who have price transparency tools available do not use them, the tools will not have the intended effect on spending.

Second, in the absence of credible information presented simultaneously on quality, many patients may likely assume that higher price means higher quality. This may explain in part why a sensitivity analysis in the study by Desai et al that focused only on patients who used the tool demonstrated that out-of-pocket expenses actually increased. For the average patient as a consumer, in other realms of their lives such as buying cars, food, and houses, higher price uniformly signals higher quality. Information that a particular clinician or clinical setting has a lower cost may be perceived by a patient that the clinician or setting is lower quality, not as a clear signal of higher value. Moreover, rigorous risk-adjusted quality information does not exist for many of the services being compared on price, and the implied assumption that quality is comparable among clinicians, health care settings, or services of differing prices may or may not be warranted. Whether quality varies with price is on some level less important than whether patients perceive that it does, and given patients' experience as consumers in other realms, it seems more than likely that they would see price as strongly correlated with attributes they would value, such as higher technical quality, better service or amenities, or both.

Third, among the 10% of employees who used the price transparency tool, most searched for amounts higher than the highest deductible (53% >$1250 and 68% >$500). The likely effect of providing information on price for services priced higher than consumers' deductibles has been missed in much of the discussion around price transparency tools. If patients are comparing services based on price for which their share of the cost is $0, the use of a price transparency tool may lead directly to patients selecting the higher-cost options given their likely perception that higher price is a proxy for higher quality and the lack of an incentive to price shop.[4]

Fourth, it is not clear to what degree patients function as consumers in medical markets. That only 10% of employees engaged with the price transparency tool can be interpreted in various ways. One is that many patients do not actually want to assess the relative prices of medical treatment alternatives in consuming medical services; they use the recommendations of their physicians and receive care from the specialist, laboratory, or imaging center that their physicians recommend. The typical patient may feel that they have so little information about the quality of services relative to a physician

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that they cannot make these decisions on their own and they certainly would not override the recommendation of their physicians about where to receive additional care. A small percentage of patients may function as consumers who value cost information, but the low rates of engagement with price transparency tools would be consistent with the view that these patients are a minority.

Fifth, the effectiveness of such tools could vary considerably with how the tool is designed and how it presents prices. It would be difficult for a patient to interpret whether a particular price in isolation is a "good value." Unless the information is conveyed in a user-friendly format with relative prices for comparable services side by side in a way that convinces the patient that the clinicians, health care settings, or services being compared are equivalent options, the tool seems unlikely to drive behavior change. The order in which the alternatives are presented, the implicit reference price or default, and the framing (whether the alternatives are presented as lower cost or more costly) could all influence effectiveness.[5] Presenting people with too many choices can also be paralyzing, leading to choice overload. Without knowing the details of the interface and how choices are framed and presented, it is difficult to comment on the degree to which these issues contributed to the findings observed by Desai et al, but in general, how these issues are handled likely varies considerably among different price transparency tools in ways that could markedly influence effectiveness.

In summary, it is not surprising that price transparency tools that offer patients as consumers information on relative prices fail to lower the rate of spending, given that this information is often offered without accompanying data about quality and for services that would exceed the deductibles of patients. Perhaps by providing meaningful relative information on price and quality and focusing on services with prices lower than a patient's deductible, such tools could succeed in driving patients to choose higher-value services. However, that will only happen to the degree that patients value this information and want to use it, and it is as yet unknown whether the low engagement rates with these tools reflect true consumer disinterest or that these tools have not yet figured out how to engage consumers.

Price transparency tools are not likely the panacea that many have hoped for with respect to controlling health care costs. Health plans could create incentives to use price transparency tools as part of benefit design, but given the results reported by Desai et al and the related considerations, health plans might exercise caution because doing so may be unlikely to reduce health care spending.

ARTICLE INFORMATION

Author Affiliation: Philadelphia VA Medical Center, University of Pennsylvania Perelman School of Medicine, Wharton School of Medicine and Health Care Management, Philadelphia.

Corresponding Author: Kevin G. Volpp, MD, PhD, Philadelphia VA Medical Center, University of Pennsylvania Perelman School of Medicine, Wharton School of Medicine and Health Care Management, 423 Guardian Dr, 1120 Blockley Hall, Philadelphia, PA 19104-6021 (volpp70@exchange.upenn.edu).

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REFERENCES

1. Whaley C, Schneider Chafen J, Pinkard S, et al. Association between availability of health service prices and payments for these services. *JAMA*. 2014;312(16):1670-1676.

2. Desai S, Hatfield LA, Hicks AL, Chernew ME, Mehrotra A. Association between availability of a price transparency tool and outpatient spending. *JAMA*. doi:10.1001/jama.2016.4288.

3. Sinaiko AD, Rosenthal MB. Examining a health care price transparency tool: who uses it and how they shop for care. *Health Aff (Millwood)*. 2016;35(4):662-670.

4. Brot-Goldberg ZC, Chandra A, Handel BR, Kolstad JT. *What Does a Deductible Do? The Impact of Cost-Sharing on Health Care Prices, Quantities, and Spending Dynamics*. Cambridge, MA: National Bureau of Economic Research; 2015.

5. Loewenstein G, Asch DA, Volpp KG. Behavioral economics holds potential to deliver better results for patients, insurers, and employers. *Health Aff (Millwood)*. 2013;32(7):1244-1250.

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