Provider price transparency

Shyam Kolli, FSA, MAAA



The new administration under President Donald Trump has placed price transparency from providers¹ as one of the key items on its healthcare reform agenda. The rationale in doing so, presumably, is that this would reduce healthcare costs and help individuals be better consumers.

However, some studies suggest that increasing price transparency may actually have the opposite impact and raise prices.2 Price, although not the only factor in determining which provider individuals choose for their healthcare needs, is one of the primary factors in making those decisions along with quality.³ Efforts have been made in the past by health plans and other companies to improve transparency by developing web-based transparency tools, but they have not yet been very effective for various reasons. The economics and consumer behavior of buying healthcare services is significantly different from shopping online for a vacuum cleaner, obtaining quotes from different car mechanics to get a car repaired, or driving down the street to find the gas station with the lowest gas price. Variability in (1) the scope of services, (2) the actual treatments that can be employed for a given condition, (3) the reimbursement, and (4) the benefit structures are some of the key factors creating challenges for price transparency. Any actions from the health industry that would facilitate providing meaningful information around healthcare prices, the relative effectiveness of treatment choices for a given condition, and the quality of the care provided to consumers will help them make better choices and potentially help reduce overall healthcare costs in the United States. The key is not just improving price

transparency, but also improving the effectiveness of price transparency in reducing costs for consumers, payers, and sponsors of health insurance in the United States.

This white paper explores what price transparency means in the healthcare market, the forces driving the need for price transparency, challenges and uses of price transparency, and potential ways in which transparency can be improved for the benefit of consumers and also to be more effective in reducing overall healthcare costs. Comparative effectiveness⁴ and quality are topics closely related to price transparency and are discussed at a high level. A detailed analysis and discussion of these areas are outside the scope of this paper.

Meaning and use of provider price transparency

For the discussion in this paper, provider price transparency means making information available in an easy-to-use manner about services, procedures, and drugs that a consumer may need for treatment of a certain condition and what the total cost of care and consumer's out-of-pocket costs may be in advance of care, given the insurance status and plan design. This information will assist consumers in making meaningful comparisons across providers by understanding total costs of their care and the appropriateness of services for the price they are paying. Consumers can then use this price information, along with other factors such as access and quality, to make decisions regarding providers they select.

Healthcare versus other markets

The healthcare market in the United States is very different from other product markets, where buyers can easily compare prices and features of similar products. Healthcare in the United States is a complex market composed of many stakeholders and interrelationships. Providers (suppliers) and consumers (buyers) represent the core of healthcare delivery and economics. However, health plans, employers, and government all play a vital role as payers, regulators,

Provider price transparency MARCH 2017

Provider in the context of this paper refers to any healthcare provider, including primary care physician, specialist, hospital, or clinic.

² http://www.nejm.org/doi/full/10.1056/NEJMp1100540#t=article.

AHIP (August 2015). How Much Does it Cost? Health Plan Tools Empowering Consumers With Provider Price Information. Issue Brief. Retrieved March 2, 2017, from https://www.ahip.org/wp-content/uploads/2015/08/ConsumerTools_IssueBrief.8.24.15-2.pdf.

⁴ Comparative effectiveness research (CER) is the direct comparison of existing health care interventions to determine which work best for which patients and which pose the greatest benefits and harm.

and intermediaries negotiating costs and scope of healthcare services for consumers. Figure 1 provides a high level overview of the funding sources, intermediaries, and healthcare providers in the United States.

FIGURE 1: HEALTHCARE FUNDING SOURCES AND INTERMEDIARIES

SOURCE OF FUNDS	INTERMEDIARY	CARE PROVIDERS
Individuals • Premiums • Cost share Employers • Premiums	Private Insurers Medicare Medicaid Employers Self	Hospitals Doctors Pharmacy Other
Federal Government Medicaid share Medicare Other State Government		

Other

Medicaid share

Forces driving need for transparency

Rising healthcare costs are often cited as the primary reason to improve price transparency. Based on the National Health Expenditures (NHE) report released by the Centers for Medicare and Medicaid Services (CMS), the overall share of U.S. economy devoted to healthcare spending was 17.8% in 2015. Based on the same report, household spending accounted for 28% of the total healthcare spending.⁵ According to a Kaiser study, approximately 11.6% of the 28% (roughly 40%) is from out-of-pocket costs through deductibles, copays, and coinsurance.⁶

Recent transparency initiatives at a national level and state level have resulted primarily in response to laws or legislation requiring organizations and entities to make price information available to consumers.⁷ With the enactment of the Patient Protection and Affordable Care Act (ACA), hospitals operating in the United States are required to make public a list of hospital standard charges for the items and services they provide. Half the states have enacted some form of price transparency legislation.⁸ Another significant factor in price transparency initiatives, especially within the private sector, is from health plans and employers to curb the healthcare cost trend for their

- 5 CMS. National Health Expenditures 2015 Highlights. Retrieved March 2, 2017, from https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/downloads/highlights.pdf.
- 6 Kaiser Family Foundation (May 1, 2012). Health Care Costs: A Primer. Retrieved March 2, 2017, from http://kff.org/report-section/health-care-costs-a-primer-2012-report/.
- 7 U.S. Department of Health and Human Services. Patient Protection and Affordable Care Act, codified at 42 U.S.C 300gg-18. Retrieved March 2, 2017, from https://www.hhs.gov/sites/default/files/i-quality-affordable-health-care.pdf.
- National Conference of State Legislatures. Transparency and Disclosure of Health Costs and Provider Payments: State Actions. Retrieved March 2, 2017, from http://www.ncsl.org/research/health/transparency-anddisclosure-health-costs.aspx.

employees or members and help them be better consumers of healthcare. In addition to employers and health plans, private companies, such as Healthcare Bluebook, Castlight Health, and PriceDoc, have emerged in recent years and are providing online tools and mobile apps to help consumers determine their out-of-pocket costs for thousands of medical procedures, diagnostic tests, medications, and other services.

The emergence of high-deductible health plans (HDHPs) has resulted in consumers paying a larger portion of the allowed costs for healthcare they consume. It also accelerated the need for price transparency because consumers are more sensitive to prices under these high-deductible plans than compared with plan designs that cover most of the allowed cost for members.

Challenges with provider price transparency

Several factors can make it difficult for an average consumer, regardless of insured status, to estimate the costs for healthcare services before receiving care. Some of the key challenges in making these estimates available to consumers before they receive care are outlined below:

LACK OF MEDICAL KNOWLEDGE AND DIFFICULTY IN PREDICTING SERVICES NEEDED IN ADVANCE

The medical field is complex and an average consumer lacks the medical knowledge of the right treatment plan for the condition. When an individual experiences symptoms that indicate the need for care, the advice from providers must be relied on to determine necessary services. Even after an initial diagnosis, it is difficult for providers to anticipate the full extent of services, such as length of stay at a hospital or required prescription drugs. Therefore, it is difficult to scope out exactly all the services that are needed in advance of receiving care and thereby to estimate a consumer's out-of-pocket costs for services.

MULTIPLE PROVIDERS MAY BE INVOLVED

More often than not, a patient will receive services for a particular condition from multiple providers. Unless there is a single copay for the episode of care, the patient receives separate bills from each provider, such as the primary care physician, lab facility, specialist, hospital, and surgeon.

To estimate the cost for an episode of care, the consumer needs to determine in advance:

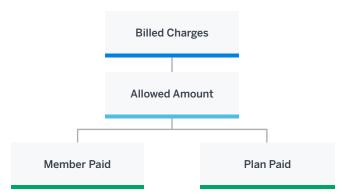
- Which providers will be providing what services
- What the proper procedure code for the service is, and request and obtain the amount the provider will bill for the service
- What the consumer's insurer has negotiated as the amount the insurer will allow
- What the portion is that the consumer's health plan will pay

Another complication for insured patients is determination of network providers that are in their network or considered out-of-network. Health benefit plan designs are structured so that members pay higher copays or coinsurance when they receive care from a provider outside a health plan's provider network. Even when a patient elects an in-network hospital, the services received may be from an anesthesiologist working at the hospital who is out-of-network, which can significantly increase a patient's costs.

VARIATION IN CHARGES, NEGOTIATED RATES, AND BENEFIT STRUCTURES

Billed charges, allowed amounts, and plan-paid and member-paid amounts—these terms are commonly used when analyzing claims and estimating member liability and plan liability. Although most readers of this white paper will be familiar with these terms, an illustration in Figure 2 and a brief description is provided in the footnote below for completeness.⁹

FIGURE 2: CLAIMS VARIATIONS



Estimating the out-of-pocket cost for a member in the simple flowchart above becomes complicated for these reasons:

- There is wide variation in starting billed charges for different providers, even for the same services.
- Allowed amounts vary by payer and provider due to negotiations.
- Plan-covered amounts vary based on benefit plan provisions, which differ by plan and employer.

The effects of these variations, specifically the impact on member out-of-pocket cost, are illustrated below.

Figure 3 shows illustrative billed charges for a minor office surgery procedure, for which Providers A, B, and C vary their charges from \$200 to \$500. Carrier X has the same discount percentage off billed charges with the three providers. Member G has a 20% coinsurance for this procedure. Because of the

9 Billed charges = Starting costs for a service. Allowed amount = Total reimbursement to provider by plan based on contracted rates (Plan-paid + Member-paid) or negotiated discounts (Billed charges - discounts). Plan-paid = Employer or health plan share of total allowed amount. Member-paid = Member's share of total allowed amount.

variance in starting billed charges for this procedure, the allowed amount for this procedure varies between \$120 and \$300. This results in Member G out-of-pocket cost for the procedure from Provider C at 250% of the cost of Provider A (\$60 versus \$24).

FIGURE 3: MINOR OFFICE SURGERY

MINOR OFFICE SURGERY: MEMBER OOPC					
VARYING BILLED CHARGES, DISCOUNTS AND BENEFITS					
		PROVIDER A	PROVIDER B	PROVIDER C	
		\$200	\$400	\$500	
CARRIER X	DISCOUNT	40%	40%	40%	
	ALLOWED	\$120	\$240	\$300	
	MEMBER G (20% COST SHARING)	\$24	\$48	\$60	
	MEMBER S (\$30 COPAY)	\$30	\$30	\$30	
CARRIER Y	DISCOUNT	60%	20%	30%	
	ALLOWED	\$80	\$320	\$350	
	MEMBER G (20% COST SHARING)	\$16	\$64	\$70	
	MEMBER S (\$30 COPAY)	\$30	\$30	\$30	

Carrier Y's negotiated discounts with the three providers vary between 20% and 60%, unlike Carrier X, whose negotiated discounts with all providers are the same at 40% off billed charges. Because of the additional variation in reimbursement arrangements with Carrier Y layered on top of the variation in billed charges, allowed amounts vary between \$80 and \$350 and Member G out-of-pocket costs for Provider C are more than four times what would be paid to Provider A for the same service (\$70 versus \$16).

We also have another Member S, who has a copay of \$30 versus coinsurance which varies based on the allowed amount. The range of allowed amounts is pretty large, varying from \$80 to \$350 for Carrier Y; however, the cost sharing for Member S does not change because that person has a fixed copay. Any economic incentive for the member to shop around has been muted. This lack of incentive is a significant factor in price transparency: the less the patient is affected by the cost difference, the less he or she will care about shopping around.

Removing variability in billed charges and allowed amounts helps the industry come up with a better estimate of a member's out-of-pocket costs for a certain condition or procedure. There may, however, be legal and competitive concerns around providers and carriers sharing negotiated rates as they are considered proprietary. This is especially true with carriers or providers with significant market leverage.

Ways to improve price transparency

To recap the discussion in the earlier section on challenges to price transparency, we see variability at multiple levels in healthcare delivery and financing as one of the key challenges to price transparency. Below are some ways in which price transparency can be improved or actions taken to improve the effectiveness of transparency initiatives that are already underway in the private and public sector.

LEVERAGING DATA AND MACHINE LEARNING TO ENHANCE EVIDENCE-BASED GUIDELINES AND STANDARDIZE TREATMENT BY PROVIDERS

A key starting roadblock to making price information available to consumers before nonemergency care is the difficulty of anticipating specific treatment procedures, lengths of stay, and providers involved. With the advances in technology, data science, and machine learning over the last 10 years, medical practitioners can collaborate with professionals from other areas, such as statisticians, computer scientists, or actuaries, to enhance evidence-based guidelines that help standardize treatment. They can also lay out an easy-to-use treatment plan with the providers involved and determine how unique characteristics of patients may affect the scope of services. However, variability cannot be completely eliminated because each patient has unique characteristics, such as comorbidities or interactions with medications.

HEALTH PLANS AND PAYERS DEVELOPING AND ENHANCING TOOLS AND CALCULATORS TO LAY OUT TOTAL COSTS OF CARE AND ESTIMATE OUT-OF-POCKET COSTS FOR THEIR MEMBERS

For a given insured member, the carrier is well positioned to provide information on billed charges and allowed information (or total cost of care) for a specific area where the member resides, at least for each plan's own members because they know their provider contracts. To reduce some of the concerns around releasing confidential information, allowed information can be provided at an aggregate level for all services involved in treatment instead of providing allowed amounts at a procedure level. Carriers also have all the information necessary to provide a calculator that estimates member out-of-pocket costs by applying member-specific plan parameter information (deductible, copay, coinsurance, and out-of-pocket maximum) to the allowed costs.

All these processes already happen at or after care delivery during the billing process. This same type of information could be made available to the user before the services are rendered, other health plans have already taken steps toward providing these types of calculators.¹²

Regardless of advances in standardizing treatment patterns

based on the expected services.11 The University of Utah and

Regardless of advances in standardizing treatment patterns through clinical guidelines, some variation in scope of services always exists because each individual is unique and may respond differently to the same treatment. Tools that show variation in expected costs by providing the 25th percentile, mean, median, and 75th percentile will help consumers understand the potential variation in their out-of-pocket costs due to the scope of treatment.

For uninsured patients, state and national agencies could take on the responsibility (and several of these efforts are underway) to provide this population with tools similar to what carriers can provide to their insured members.

Summary

Provider price transparency will allow consumers (patients) to be more confident and prudent in making healthcare decisions with regard to the providers and services selected. Variation in scope of services, billed charges, negotiated reimbursements, and benefit structures make it difficult to estimate and provide standardized member out-of-pocket cost estimates. Carriers, providers, and state and national agencies can take steps to reduce this variation and assist consumers with providing their expected out-of-pocket costs before care delivery. Alternative payment models like the accountable care organizations (ACOs) and bundled payments may also offer much greater clarity for consumers around scope of services and the total price for those services.

The author would like to acknowledge the peer review by Bill Thompson and Liz Myers. Bill is a principal and consulting actuary in the Hartford office of Milliman. Liz is a principal and consulting actuary in the Atlanta office of Milliman.

- Fox, William J. Transparent Cost Network: A Practical Consumer-Driven Healthcare Solution. Milliman. October 17, 2011. Retrieved March 2, 2017 from http://www.milliman.com/insight/health/Transparent-cost-network-A-practical-consumer-driven-healthcare-solution/.
- 12 University of Utah Health Care. Price Estimate Guide. Retrieved March 2, 2017, from http://healthcare.utah.edu/pricing/.

CONTACT

Shyam Kolli

shyam.kolli@milliman.com

FOR MORE ON MILLIMAN'S HEALTHCARE REFORM PERSPECTIVE:

Visit our reform library at milliman.com/hcr Visit our blog at healthcaretownhall.com Follow us at twitter.com/millimanhealth

Haughorn, John, M.D. 5 Reasons the Practice of Evidence-based Medicine is a Hot Topic. Health Catalyst. Retrieved March 2, 2017 from https://www.healthcatalyst.com/5-reasons-practice-evidence-based-medicine-is-hot-topic.

©2017 Milliman, Inc. All Rights Reserved. The materials in this document represent the opinion of the authors and are not representative of the views of Milliman, Inc. Milliman does not certify the information, nor does it guarantee the accuracy and completeness of such information. Use of such information is voluntary and should not be relied upon unless an independent review of its accuracy and completeness has been performed. Materials may not be reproduced without the express consent of Milliman.

Provider price transparency milliman.com