

Characterizing Health Plan Price Estimator Tools: Findings From a National Survey

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In an effort to slow the rising costs of healthcare, consumer groups, state governments, and health plans have called for greater price transparency in the healthcare market.¹⁻³ Policy makers and researchers have posited that increasing price transparency will afford consumers the opportunity to comparison-shop among providers, which could result in higher-cost providers lowering their prices to improve value.^{4,5} As enrollment in high-deductible health plans has grown, consumers in these plans have a greater financial incentive to compare prices across providers because they have higher out-of-pocket obligations.^{1,6} Even consumers not in high-deductible health plans may now participate in benefit designs offering incentives and opportunities to select higher quality and lower cost (ie, high-value) providers.⁷ Consumers want to understand their out-of-pocket expenses for specific services for a given provider, as well as the costs for a complete episode of care.^{8,9} To help meet consumer needs, health plans have implemented tools that allow consumers to compare and select providers based on providers' quality performance and prices for specific healthcare services. Using such tools can benefit consumers in terms of lowering their out-of-pocket costs and selecting higher-quality providers.

Recent evidence shows that availability of price information can impact consumer behavior and promote informed decision making. In a study of 1421 employees, researchers found that presenting easy-to-understand, high-quality information alongside pricing estimates increased the likelihood of an individual choosing a high-value provider.¹⁰ Increased likelihood of visiting a new provider, as well as lower payments for clinical care, have also been attributed to accessibility of price estimates.^{11,12} Much attention has been given to the topic of price transparency; however, studies to date have primarily focused on price information made available through state requirements for mandatory reporting.^{3,13-16} Meanwhile, in the private sector, health plans have begun to

ABSTRACT

Objectives: Policy makers have growing interest in price transparency and in the kinds of tools available to consumers. Health plans have implemented price estimator tools that make provider pricing information available to members; however, systematic data on prevalence and characteristics of such tools are limited. The purpose of this study was to describe the characteristics of price estimator tools offered by health plans to their members and to identify potential trends, challenges, and opportunities for advancing the utility of these tools.

Study Design: National Web-based survey.

Methods: Between 2014 and 2015, we conducted a national Web-based survey of health plans with commercial enrollment (100 plans, 43% response rate). Descriptive analyses were conducted using survey data.

Results: Health plan members have access to a variety of price estimator tool capabilities for commonly used procedures. These tools take into account member characteristics, including member zip code and benefit design. Despite outreach to members, however, challenges remain with respect to member uptake of such tools.

Conclusions: Our study found that health plans share price and provider performance data with their members.

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offer provider-level pricing information to their members using Web-based price estimator tools.^{1,8} Although some information is available, we are unaware of any studies that have systematically collected data on the characteristics of health plan price estimators.¹⁷ The purpose of this exploratory study was to describe the characteristics of price estimator tools offered by health plans to their members and to identify potential trends, challenges, and opportunities for advancing the utility of these tools.

METHODS

For the purposes of this study, “price estimator tools” refer to tools that allow consumers to obtain estimates of prices associated with specific healthcare services that could be either specific to a provider or based on geography.

Data for this study were collected using a Web-based survey instrument. To develop the survey instrument, we conducted a targeted literature review of health plan price estimator tools, reviewed health plan price estimator tools that were publicly available, and conducted preliminary interviews with representatives of 4 plans to get a broad understanding of these tools. We pilot-tested the survey with these same 4 health plans and conducted telephone interviews with these plans to get additional feedback on the survey.

Final survey questions focused on the following 7 aspects of health plan price estimator tools: 1) core capabilities and characteristics taken into account, 2) data used in price estimator tools, 3) display of price estimates, 4) services for which estimates may be obtained, 5) provider information, 6) member engagement, and 7) outcomes and challenges. The questions were a mixture of open-ended and binary yes or no responses. For open-ended questions, we asked plan representatives to elaborate on characteristics pertaining to their price estimator tool that were not included as a response option on binary yes or no questions. Twenty-two binary questions had corresponding open-ended questions to which the plan representatives could respond.

We invited 106 health plans that met the following criteria: a) listed as a member of America's Health Insurance Plans in 2014, and b) offered products in the commercial insurance market. Of the 106 plans, 4 plans were not eligible to participate because they no longer offered commercial products at the time of the survey, and 2 had recently been acquired by another health plan. Using a

Take-Away Points

We conducted a national survey of health plans to examine characteristics of provider price estimator tools available to the commercially insured population. Health plans offer these tools to their enrollees and take into account member characteristics such as zip code and benefit design.

- Price estimates are available for commonly used services, including outpatient surgery and radiology.
- Plans use various approaches, including digital and social marketing, to increase member use of tools.
- Early evidence shows the positive impact of such tools on cost savings. Additional research is needed to increase the use of these tools and broaden their impact.

key informant approach, we e-mailed invitations to the chief medical officers of the remaining 100 health plans, who then shared the survey with their teams, as appropriate. Data from this survey were collected in 2 phases between April 2014 and July 2015.

To be included in our analyses, plans had to have a price estimator tool available to their members. For the analyses, we characterized health plans by total size of enrollment (using quintiles), time since their price estimator tool became available (<1 year, 1-3 years, >3 years), and vendor type for their tool (health plan, third-party, or a combination of both). We examined the overall frequencies and Fisher's exact tests for each price estimator tool characteristic, stratified by health plan characteristics (not all results are reported). Following the calculation of frequencies, we compiled and summarized all open-ended responses. Any plans that did not provide a price estimator tool were excluded from analyses.

RESULTS

Sample and Health Plan Characteristics

A total of 43 plans responded to the survey, resulting in a 43% response rate. The characteristics of the responding plans can be found in the [eAppendix](#) (available at www.ajmc.com). Of the 43 plans that responded during both phases of data collection, 11 did not provide a price estimator tool to their members, although 4 of these 11 intended to provide a tool within 12 to 24 months. One plan of the 43 had made a tool available during our second phase of data collection in 2015, but did not provide updated responses to the survey. Our final analytic sample is thus composed of the remaining 31 plans that provided price estimator tools to their members.

The 31 plans included in the analyses account for 140.8 million commercial enrollees, corresponding to 75.9% of the total national commercial enrollment for 2014.¹⁸ Thirty-nine percent of these plans launched their price estimator tools more than 3 years ago, and just under half

■ **Table 1.** Capabilities of Health Plan Price Estimator Tools

Type of Capability	Number of Plans N = 31 (%)		
Provider comparison shopping	29 (94)		
Prescription drug estimates	18 (58)		
Dental service estimates	8 (26)		

Characteristics	Member Characteristics Taken Into Account by Capability		
	Provider Comparison Shopping N = 31 (%)	Prescription Drug Estimates N = 31 (%)	Dental Service Estimates N = 31 (%)
Product type ^a	24 (77)	9 (29)	3 (10)
Member benefit design ^b	24 (77)	9 (29)	4 (13)
Member risk factors ^c	1 (3)	0 (0)	0 (0)
Zip code	29 (94)	11 (35)	6 (19)

^aRefers to insurance products, such as health maintenance organization, preferred provider organization, etc.
^bFor example, deductibles, coinsurance, co-pays.
^cBehaviors and conditions specific to the member, such as tobacco use, chronic disease, etc.

of the 31 plans (45%) offered multiple tools to their members—both provided by the plan directly and through arrangements with third-party vendors.

Key Features of Price Estimator Tools

Capabilities of health plan price estimator tools. Our results indicated that health plan members have access to a variety of price estimator tool capabilities (Table 1). Ninety-four percent of plans allowed for provider comparison shopping and about 58% displayed estimates for prescription drug costs. In generating price estimates, plans account for various member characteristics depending on the type of service being estimated. For instance, a member's zip code (94%), product type (77%), and benefit design (77%) are commonly used characteristics for provider comparison shopping. In contrast, about one-third of plans account for member zip code (35%), product type (29%), and benefit design (29%) for cost estimates of prescription drugs (Table 1).

Services for which estimates may be obtained. Eighty percent of health plans choose which services to provide estimates for based on the most commonly used procedures and services. Of the most commonly used procedures, we found that nearly all of the plans provided estimates for elective outpatient surgery (97%), radiology services (eg, x-rays, computed tomography scans) (97%), and inpatient surgical services (97%) (Figure).

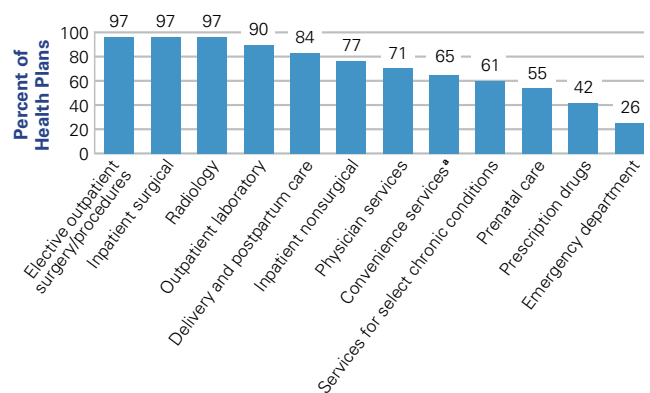
A majority of health plans also provided estimates for physician services (71%) and services associated with select chronic conditions (61%), such as glycated hemo-

globin testing for patients with diabetes. Open-ended responses revealed that many members might also obtain estimates for preventive services, including wellness visits, preventive screenings, and behavioral health services. Less common, are estimates for services at retail/convenience clinics (32%), services provided in the emergency department (26%), and telemedicine (6%).

Data taken into consideration. Data used to generate price estimates for the services primarily consisted of a health plan's historical paid claims for a specific geographic area (55%), the health plan's historical allowed rates (the maximum a health plan will pay an in-network provider for a service) for specific providers (52%), and a plan's current negotiated rates (ie, the price negotiated between the health plan and the provider for a service) for specific providers (45%). These data are generally updated quarterly or semiannually (65%).

Display of price estimates. Health plans price estimator tools display a number of specific elements primarily for in-network providers, and members have the ability to compare prices for specific healthcare services across individual providers (68%). Seventy-one percent of plans also included price estimates for treatments at the individual provider level. Potential out-of-pocket costs that a member may incur are displayed by 90% of plans; such potential out-of-pocket costs could include co-pays, coinsurance, and the deductible for which the member is responsible. Fewer plans display information on reference-based pricing

■ **Figure.** Availability of Price Estimates for Services



*Collapsed category created from telemedicine and services at retail clinics and urgent care centers.

for services (13%), health savings account (HSA) balances (29%), and links to an outside HSA administrator (10%).

Provider-specific information. Alongside price estimates, plans share other information on providers, such as geographic location, performance data, designation as a Center of Excellence, etc (Table 2). As shown in Table 2, the extent to which these additional pieces of provider information are fully integrated into the price estimator tool varies across plans.

Member engagement. The most common ways to direct members to use a price estimator tool are through messaging on a health plan portal (97%), outreach through employers (71%), digital communication—which includes e-mail, social media, and text messaging—(68%), and postal mail (58%) (Table 3). Open-ended responses yielded additional details on innovative methods that plans are using to engage members; such methods include technological platforms like e-mail and text messaging, in which plans use alerts to prompt members’ awareness of “ways to save” on healthcare. Also technologically based are gamified programs like “Healthcare University,” in which members receive information through interactive videos and quizzes. Person-to-person communication, including the work of schedulers and financial counselors, is another way in which health plans engage members. On a larger scale, plans cite the implementation of social marketing campaigns to connect with members on price transparency.

Plans were also asked to identify features of their price estimator tool that members have found most useful. Estimates for out-of-pocket costs based on member benefits are recognized as one of the most useful features by the majority of plans (77%). Equally useful were the ability to compare prices for services across providers (77%) and having access to estimates for a wide range of services (68%) (Table 3).

Outcomes and challenges. Nearly half of the responding plans (45%) (Table 4) had yet to formally evaluate outcomes from member use of price estimator tools, but they intended to in the near future. Those that had evaluated their

■ **Table 2. Additional Information on Providers**

Provider Information Available N = 31 (% ^a)	Integrated in Tool	Not Integrated in Tool	Unavailable
Geographic location of provider	24 (77)	7 (23)	0 (0)
Board certification	14 (45)	15 (48)	2 (6)
Accepting new patients	11 (35)	17 (55)	3 (10)
Provider performance data	15 (48)	5 (16)	11 (35)
Patient experience reviews	6 (19)	7 (23)	18 (58)
Designation as Center of Excellence	14 (45)	9 (29)	8 (26)

^aPercentages may not add up to 100 due to rounding.

■ **Table 3. Member Engagement and Preferences**

Modes of Engagement	Frequency N = 31 (% ^a)
Digital outreach ^b	21 (68)
Phone outreach by customer service	11 (35)
Phone outreach by nurse care manager	5 (16)
Postal mail	18 (58)
TV/radio advertising	5 (16)
Messaging on health plan portal	30 (97)
Outreach through provider	5 (16)
Outreach through employer	22 (71)

Most Useful Features	Frequency N = 31 (% ^a)
Ability to compare prices for services across providers	24 (77)
Estimates for a wide range of services	21 (68)
Estimates for member-specific out-of-pocket costs based on benefits	24 (77)
Ability to concurrently compare providers on quality and price	9 (29)
Ability to access the price estimator tool by various means (eg, mobile app)	7 (23)
Real-time support and guidance for use of price estimator (eg, customer support, chat feature)	8 (26)

^aPercentages may not add up to 100 due to rounding.
^bCollapsed category created from e-mail (61%), social media (35%), and text messages (3%).

price estimator tool reported increased use of lower-cost providers (19%), member out-of-pocket savings (16%), and employer cost savings (16%) (Table 4). The most common challenges reported were limited member uptake (58%) and lack of member awareness about the tool (58%) (Table 4).

Potential Relationship Between Key Features and Time Since the Tool Became Available

As part of our analysis, we wanted to understand if there were differences in tool characteristics given a health plan’s enrollment size, how long their tool has been available, and the type of tool vendor. Our results indicated a possible relationship between the length of time a tool

■ **Table 4. Outcomes and Challenges**

Quantifiable Outcomes	Frequency N = 31 (% ^a)
Increased member use of in-network providers	3 (10)
Increased member use of lower-cost providers	6 (19)
Increased member use of providers that ranked high on safety or quality of care	2 (6)
Shifts in sites of care	2 (6)
Member out-of-pocket cost savings	5 (16)
Employer cost savings	5 (16)
No change observed	2 (6)
Unable to quantify	11 (35)
Evaluation not yet conducted but planning to assess impact in future	14 (45)

Challenges Encountered	Frequency N = 31 (% ^a)
Restrictions on data-sharing due to “gag clauses” in contracts with providers	10 (32)
Complying with regulatory requirements (federal or state)	3 (10)
Limited member uptake	18 (58)
Lack of reliable data or incomplete data	7 (23)
Lack of member awareness about the tool	18 (58)
Unrealistic member expectations regarding the precision of price estimates	13 (42)
Translating data into consumer-friendly information	11 (35)

^aPercentages may not add up to 100 due to rounding.

has been available and the presence of specific tool features and challenges. An examination of this relationship can help to identify areas for additional research with a focus on understanding the complex implementation process of price estimator tools. To further examine this potential relationship, we calculated Fisher’s exact tests for tool features and challenges by time since the tool became available. Due to the exploratory nature of our study, we reported tool features and challenges, yielding a Fisher’s exact test significant at $P \leq .25$.¹⁹

We observed the strongest relationships between time since the tool became available and estimation of physician services ($P < .03$), displaying patient-related costs ($P < .05$), and availability of delivery and postpartum service estimates ($P < .05$), which indicated a significant difference in the likelihood of these elements being present in a tool given how long the tool has been available. Closely following in significance were limited member uptake ($P < .09$), assistance provided by a nurse care manager ($P < .10$), and displaying episode-of-care costs ($P < .14$). Of the remaining features, we saw significance among availability of provider performance data ($P < .17$), displaying estimates

for prescription drugs ($P < .18$) and services of convenience ($P < .21$), phone outreach by nurse care managers ($P < .18$), availability of provider-level metrics ($P < .21$), and data-related challenges ($P < .22$).

DISCUSSION

As price estimator tools continue to evolve to meet the needs of consumers, the data that are displayed may affect the overall utility of these tools. Our results indicated that health plans are responding to consumer needs by providing price estimator tools that include information on out-of-pocket costs, with many of these price estimates taking into account individual benefit design.^{8,9} When price information is displayed without accompanying quality information, consumers potentially perceive higher price as being equivalent to higher quality. If consumers associate high price with high value, this does not lead to selection of high-value providers and may even deter consumers from seeking care altogether.^{10,20} Our study found that two-thirds of responding plans shared provider performance data with their members, with half of these plans integrating such data into their price estimator tool.

Despite providing price estimator tools that also include access to provider performance data, health plans in our study encountered challenges related to lack of member uptake. This finding coincides with the Catalyst for Payment Reform’s 2013 National Scorecard, which reported that 86% of plans provide cost information to members relative to co-pays and cost sharing, but only 2% of their members use these resources.¹⁷ Our results support the need for additional research on the appropriateness of outreach methods and how to better understand reasons for lack of engagement, including low health literacy and language barriers.^{4,21,22} A better understanding of these reasons can facilitate consumer uptake and help the evolution of these tools.

We also know from previous research that simply having access to a tool with such information does not increase the likelihood of using the tool, nor does it necessarily lead to lower costs.^{11,13,23} The way in which cost and quality data are visually displayed merits further exploration, as it impacts how well consumers are able to compre-

hend and use the information.^{4,9} Research suggests that quality data be presented with a clear format and descriptive labeling, and in minimal volume to not overwhelm consumers reviewing information.^{9,10,24,25}

Limitations

First, with a response rate of 43%, these findings may not be fully generalizable to all health plans. However, we are comfortable with our findings since the plans included in our analysis account for 75.9% of total national commercial enrollment and, therefore, capture tool availability to a large proportion of commercial enrollees.¹⁸ Secondly, this study was not designed to draw conclusions on how tool characteristics impact cost outcomes or consumer behavior, but rather to describe the current characteristics and capabilities of health plan price estimator tools. These limitations notwithstanding, we believe our study contributes several interesting findings on the characteristics and capabilities of health plan price estimator tools.

CONCLUSIONS

Our study found that health plans provide price and provider performance data to their members. Additional research is needed to inform further development of these tools so they can better engage consumers, who can then make more informed and cost-effective decisions regarding their healthcare.

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eAppendix. Characteristics of Responding Health Plans

Health Plans Characteristics	Number	% of All Respondents
Distribution by plan size (N = 42)^a		
<200,000 covered commercial lives	11	26%
200,000 to 1 million covered commercial lives	13	31%
>1 million covered commercial lives	18	43%
Distribution by plan's area of operation (N = 42)^b		
National and multi-regional plans ($\geq 50,000$ enrollees in at least 2 US Census regions)	11	26%
Midwest	7	17%
Northeast	9	21%
South	7	17%
West	8	19%

^aTotal health plan enrollment by state is based on data from *AIS's Directory of Health Plans: 2014* (Washington, DC: Atlantic Information Services, Inc; 2014).

^bOne survey participant did not have such data.