**How We Rate
Health Insurance Plan Tools and Public Price
Estimator Tools**

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__Disclosures__: Consumer Reports licenses its patient-experience data to Cigna but has no financial relationship with Cigna, and Cigna played no role in developing the ratings criteria. Consumer Reports publishes a free website for consumers in California that has regional cost data and provider-level quality data (CAHealthcareCompare). CAHealthcare Compare was included in the study of public tools and it was mentioned in the publication that accompanies this method.

Why we did this study and the methods used

Consumers currently face major changes in the way that they interact with the healthcare system, including bearing a greater burden of the costs. Cost estimator tools (public and private) were developed in part to address this. Given that actual use of these tools is low despite high consumer interest, we wanted to create a consumer-oriented snapshot of insurance carrier website tools and their cost estimator components -- assessing their strengths, weaknesses and future potential.

We used a combination of qualitative and quantitative methods to evaluate health plan websites and their associated cost estimator components, examining four main categories of performance: ease of use, functionality, content, and scope & reliability. We used a combination of subject-matter stakeholders, consumer advocacy groups, and consumers themselves to throughout our scoring approach.

Overview of the method

These are the steps that we used to evaluate health plan websites including their related cost estimator tools, as well as "stand-alone" publicly available tools. Additional details can be found in the narrative that follows the overview.

Define the plans to be reviewed, and the scoring rubric/method

1. We identified health plans to include in our review using the following criteria:
   - National plans with the largest market share for commercially insured patients
   - New York State plans with the largest market share for commercially insured patients, excluding plans that did not have a cost estimator tool
   - Public price transparency tools with the largest market share, in addition to "benchmark" state-based tools.
   - Public price transparency tools with individual physician-level pricing data
2. For the quantitative scoring process, we developed a scoring rubric and weights (Appendix A) for the website and cost estimator tools based on the following inputs:
   a. Existing evaluations of consumer tools including the Catalyst for Payment Reform and Health Care Incentive's Improvement Institute's criteria, along with expert (consumer) input into additional features
   b. Consumer input (weights) via a survey administered to consumers following usability testing of the public transparency tools
   c. Consumer input (validation) from one-on-one interviews and other published studies on what consumers find important in these tools.
3. For the qualitative study, we developed an interview guide based on the initial version of the scoring rubric.

Scoring private health plan websites and their associated cost estimator tools and qualitative research

1. We recruited a convenience sample of consumers (at least two for each plan) through email and Facebook ads.
2. Through video conferencing we had participants log into their health plan website and interviewed them as they used the site. At the same time, individuals with content area expertise watched the interview and collected data based on the scoring rubric.
3. Each site was scored by two separate, trained individuals. Scores from the individuals were compared and any disagreements in scorers were adjudicated.

4. Prior to publishing the results from this study, we re-contacted volunteers and re-gained access to the health plan tools and cost estimators in order to update and validate our data.

Scoring public price transparency websites

1. Through Usertesting.com we recruited 10 individuals to review and score each publically available health care price transparency site using a set of questions based on the scoring rubric and interview guide.
2. Separately, two trained individuals with content area expertise reviewed each site and scored them according to the same rubric that was used for the private health plan websites.
3. Prior to publishing the results from this study, we re-evaluated each of the public websites in order to update and validate our data.

Method narrative

Developing the scoring method
We developed an evaluation framework using inputs from other available evaluations of transparency tools as well as a review of available tools and the features present on them currently. We then convened a group of subject-area experts from Consumer Reports and other consumer stakeholders to provide input into the different attributes of health plan website and price transparency tools and the importance of each. We validated those inputs using feedback from the results of the qualitative part of our study (see below), and also adjusted weights using quantitative user feedback.

At the end of this process 115 features were selected to be used for scoring. These features were then grouped together in Categories and sub-categories. There are four equally weighted (25 points each) Categories shown below.

- Ease of Use
- Functionality
- Content
- Scope & Reliability

Within the four main Categories there are 26 sub-categories, each consisting of one or more features. For example, within the category "Functionality," there is a sub-category "Ability to Apply Filters to Search Results" with a feature "Filter by Distance." Sub-categories were given descriptive names to reflect their included features.

Once the sub-categories and features were finalized, weights were applied to each based on its relative importance from 0-100. Consumer experts and data from a survey of 80 consumers informed the weights (in the event of disagreement between the two sources, consumer survey data were used). These weights were then used to determine the number of points available (see Appendix A) for each sub-category and feature. The Overall Score represents the sum of the points in the four Categories (Ease of Use, Functionality, Content, Scope & Reliability).

The "Price Estimate" Rating (see Appendix A for details) is limited to features that address price information (excluding information such as provider demographics, quality, and availability), a small subset of data collected for the plan website ratings. Because of this, the original four Categories were collapsed into three equally weighted (33.333 points each) Categories: Ease of Use & Functionality, Content, and Scope & Reliability.

Please see **Appendix A** for all Ratings criteria and points available for each category, sub-category, and feature.

Identifying which plans and public tools to analyze
We started by developing a list of plans nationally and in New York State based on their market share among privately insured patients. We then determined, to the best of our extent, if the plan websites had an integrated cost estimator tool, and eliminated the tools without cost estimators. We included: national plans with the largest market share for commercially insured patients, New York State plans with the largest market share for commercially insured patients, excluding plans that did not have a cost estimator

tool; public price transparency tools with the largest market share, in addition to "benchmark" state-based tools; public price transparency tools with individual physician-level pricing data

Qualitative analysis
In-depth interviews were used to collect consumers' feedback to health insurance company online tools overall, including their cost estimator tools regarding the following:
- Prior use of health care tools, including Cost Estimators.
- Consumers' expectations and perceptions of the value of health care tools, including Cost Estimators.
- The user experience of their insurance company's online tool, include the Cost Estimator.
- The quality of information available on their tool
- The best features and aspects of their tool (according to the interviewee)
- Gaps and shortcomings of their tools

An interview guide based on the objective evaluation criteria (plan scoring rubric) was used in all interviews. A convenience sample of volunteers was recruited through the use of email and public Facebook postings in the areas that the plans operate. At least two volunteers were recruited for each plan/tool.

A total of 40 in-depth video-conference interviews were completed between November 6, 2015 and May 2, 2016. Each interview lasted 75 to 90 minutes. All interviewees had insurance and access to their insurer's online tools. Participants received a $100 honorarium as compensation. They knew in advance that they would be speaking to an independent researcher on behalf of Consumer Reports and would be using Consumer Reports' video-conferencing platform to view their screen.

Quantitative analysis and Ratings
Quantitative scoring of websites and tools was done simultaneously with the qualitative interviews. Website features were re-validated (and re-scored if necessary) prior to publication (September 2016- October 2016) to account for any updates made to the sites just prior to publication. Data were collected as described above, and scores were calculated based on the scoring rubric and weights detailed in Appendix A.

Public tools were analyzed quantitatively (by at least two trained testers with content area expertise) using the same scoring criteria and method developed for the private plans. Separately, user testing (through Usertesting.com) was run on all public sites. Ten subjects were recruited for each public tool. Subjects were asked to evaluate the tools on ease of use, functionality, and scope & reliability. The Useresting.com survey instrument results were also used in the determination of weights of criteria and features for the overall scoring of both the public and private tools.

Scoring
To score the websites, two trained individuals with content area expertise evaluated to what extent each tool met each criteria on a score from 0-5, "0", not meeting the criteria at all and "5", meeting the criteria fully. Scores were assigned during user interviews. Every attempt was made to increase the objectivity of the scoring, first, through standard in-person or web conference training for personnel scorers and second, detailing the sub-categories and features as much as possible into a checklist of present (receiving a score of 5) or not present (receiving a score of 0). Additionally, inter-rater reliability was maintained at 90% and any discrepancies were flagged and re-reviewed with all raters to resolve. In

some rare cases, tools received an intermediary score for a criterion that appears to be present / not present. For example, when evaluating whether the price estimate was specific to a patient's plan including deductible, in the event that tools estimated out-of-pocket expenses based on consumer-inputted coverage amounts (most commonly overall deductible and coinsurance), tools would receive an intermediary score (1-4) with a corresponding explanation.

After initial and validation scoring, each health plan tool was scored in total four times by trained personnel and by three (on average) users. Each publically available tool was scored four times by trained personnel and by 10 users.

During the scoring, routine searches to evaluate criteria included searches for "primary care" (if that did not provide results, "family medicine"), "diabetes" (if that did not provide results, "copd" or "hypertension" were used), "endocrinologist," "hospitals," "office visit," and "hip replacement." For drug pricing, "warfarin" and "Humira" were both searched.

Applying Penalties

An important component of this evaluation was to determine the extent to which consumers could determine the overall value of a provider and/or health care service. Therefore, in addition to evaluating whether or not quality, price, and other information were available on a tool, we evaluated whether or not this information was presented together in a single location. Insurers frequently provide multiple different tools presenting different pieces of information on each. For example, one tool will indicate whether a provider is in-network and accepting new patients, another will have price information, and yet another will have quality information. The more spread out this information is, the more difficult it is for consumers to puzzle the pieces back together to get an overall picture of their care options. Therefore, in addition to scoring whether information was included on an insurance carrier or publically available website, a penalty is applied to any features not presented together with the price information.

When scoring features under the Functionality, Content, and Scope & Reliability Categories, we applied a 25% penalty, meaning any score received by criteria not present with price information would only receive 75% of the points it would have if present with price information. To illustrate this scoring approach, imagine two websites - Site A and Site B. Both websites earn 5/5 for presenting quality information that's worth 10 points. Site A presents the feature together alongside price information, while Site B presents it elsewhere in a separate tool. In that case, Site A would earn all 10 points for this quality feature, but Site B would receive 7.5 points for having this feature but not presenting it together with price information.

In the event that quality information presented separate from the cost estimator earned a higher score that quality information presented with price, the overall score received would reflect the higher of the two.

Regarding pharmacy and medication pricing tools, the majority of plans provided a stand alone drug pricing tool (commonly provided by PilotRx, OptumRx, and Express Scripts) in addition to a separate cost estimator. Because drug pricing relates to the cost of healthcare, scores for drug pricing were in the cost estimator evaluation. Therefore, in some cases it may appear that the cost estimator tool shows pricing information for drugs when in fact a stand alone drug pricing tool, in addition to the general cost estimator, is provided by the insurance company. Prominent exceptions to this rule include Cigna, Oscar, and UnitedHealthcare.

Limitations

This study has several limitations:

1. Access to the tools was limited and thus evaluations, while comprehensive, could not be exhaustive.
2. A single health plan or tool may have multiple versions of what is available to consumers. For example, the same carrier may have a tool available to one set of members but not another depending on the plan type or region. When applying a score to a carrier, the highest score achieved was used.
3. Similarly, health plans may license certain aspects of a tool but not others, leading to multiple iterations of a tool included in this final report. When selecting a single version to represent the overall tool score, the version showcasing the most functionality was selected.
4. This study did not assess the accuracy of the price estimates. We know that this is a problem, however, as we and others have collected consumer stories that show that prices they obtained (either from the tools or from calling the insurer) did not match the price they were charged. CR will continue to collect individual stories of consumers to determine if we can identify a pattern of problems with any particular tool or insurer.
5. This represents a snapshot in time; all websites and tools will change over time, and each health plan and public tool developer cited examples of planned improvements and additions to their sites.

Appendix A

Category, sub-category and features	Website Ratings Points	Website Rating (% of major category)	Price Estimate Ratings Points	Price Estimate Rating (% of major category)
EASE OF USE	25.00	100%	33.33	100%
Provider, Service, and Measure Information Readily Understandable	12.55	50%	8.65	26%
User-Friendly Presentation of Price	3.12	12%	8.65	26%
User-Friendly Presentation of Quality	2.68	11%	0.00	0%
User-Friendly Presentation of Overall Value	2.50	10%	0.00	0%
User-Friendly Presentation of Patient Experience	2.25	9%	0.00	0%
User-Friendly Descriptions of Procedures, Services, Specialties, and Measures	2.00	8%	0.00	0%
User-Interface Design	12.45	50%	0.00	0%
User-Friendly Results Page	4.24	17%	0.00	0%
User-Friendly Search Function	3.68	15%	0.00	0%
User-Friendly Homepage	2.69	11%	0.00	0%
Ease of Logging In (i.e. Single Login)	0.99	4%	0.00	0%
User-Friendly Provider Details Page	0.85	3%	0.00	0%

FUNCTIONALITY	25.00	100%	[Combined with EASE OF USE]	
Facilitates Comparison of Providers	6.14	25%	9.20	28%
Search Results are Side-by-Side	2.07	8%	0.00	0%
Additional "Compare" Function to Allow Comparison of Provider Details	1.70	7%	0.00	0%
Results Automatically Ranked by Price, Quality, Satisfaction or a Combination	1.26	5%	4.89	15%
Allow Users to Input Importance of Different Criteria and Get Customized Results	1.11	4%	4.31	13%
Search Inputs	4.19	17%	6.29	19%
Search by Provider Name	1.56	6%	2.60	8%
Search by Procedures or Services	1.54	6%	2.55	8%
Search by Conditions	0.69	3%	1.14	3%
Search by Physician Specialty or Provider Type	0.41	2%	0.00	0%
Ability to Apply Filters to Search Results	3.17	13%	4.75	14%
Filter by Accepting New Patients	0.79	3.15%	0.00	0%
Filter for Price	0.47	1.89%	4.75	14%
Filter by Provider Language Spoken	0.39	1.58%	0.00	0%
Filter by Provider or Patient Gender	0.31	1.23%	0.00	0%
Filter by Board Certification	0.29	1.16%	0.00	0%
Filter for Distance	0.25	1.00%	0.00	0%
Filter for Quality	0.14	0.58%	0.00	0%
Filter for Patient Experience	0.11	0.42%	0.00	0%
Filter by Specialty OR Sub-Specialty OR Expertise	0.09	0.37%	0.00	0%
Filter by Hours Available (e.g. Weekend Hours OR Extended Hours)	0.07	0.26%	0.00	0%
Filter by Wheelchair Accessible	0.07	0.26%	0.00	0%
Filter by Hospital OR Medical Group Affiliation	0.07	0.26%	0.00	0%
Filter by Ages Treated	0.07	0.26%	0.00	0%
Filter by Specific Treatment Methods	0.07	0.26%	0.00	0%

Ability to Sort Search Results	2.97	12%	4.45	13%
Sort by Price	0.74	2.94%	4.45	13%
Sort by Value OR "Relevancy" OR "Best Match"	0.62	2.48%	0.00	0%
Sort by Quality	0.59	2.37%	0.00	0%
Sort by Patient Experience	0.48	1.91%	0.00	0%
Sort by Distance	0.30	1.19%	0.00	0%
Sort OR Filter by Volume OR Number of Members Treated	0.10	0.41%	0.00	0%
Sort or Filter by Years of Experience OR Provider Age	0.09	0.36%	0.00	0%
Sort by Name	0.05	0.21%	0.00	0%
Search Functionality	2.76	11%	0.00	0%
Keyword Free Text Input (Not Only Provider Name)	1.02	4%	0.00	0%
Recommended OR Common Searches	0.76	3%	0.00	0%
Drop-down OR Categories	0.46	2%	0.00	0%
A-Z Directory	0.37	1%	0.00	0%
Search on Map	0.15	1%	0.00	0%
Allows Users to Make an Appointment on the Site	2.15	9%	0.00	0%
Location Search	2.05	8%	0.00	0%
Auto-detect Location	1.27	5%	0.00	0%
Search by Address, City, or Zip	0.78	3%	0.00	0%
Allows Users to Review Providers on the Site	1.43	6%	0.00	0%
Printability and / or Exportability	0.14	1%	0.00	0%

CONTENT	25.00	100%	33.33	100%
Includes Price Information	7.11	28%	16.67	50%
Includes Out-of-Pocket Estimate	3.62	14.49%	8.50	25%
Includes Total Payment (Insurers / Employer + Patient)	1.70	6.78%	3.97	12%
Price Displayed as Total Episode of Care	1.36	5.42%	3.18	10%
Includes Insurer / Employer Payment	0.28	1.14%	0.67	2%
Breakdown of Total Episode Price (for example physician, hospital, pharmacy)	0.15	0.60%	0.35	1%
Price Estimate is Specific to Individual	7.11	28%	16.67	50%
Price Estimate is Specific to Insurance Carrier	2.23	8.94%	5.24	16%
Price Estimate is Specific to Patient's Plan including Remaining Deductible, Copay, Coinsurance, and Out-of-pocket Maximum	2.11	8.45%	4.95	15%
Price Estimate is Specific to Insurance Status (Uninsured or Insured)	1.67	6.66%	3.90	12%
Price Estimate Accounts for In & Out-of-Network Providers	1.10	4.39%	2.57	8%
Includes Quality Information	2.61	10%	0.00	0%
Shows outcomes measure	0.73	2.90%	0.00	0%
Distinction or Accreditation	0.72	2.88%	0.00	0%
Shows process measures	0.67	2.67%	0.00	0%
Volume of Services Provided / Number of Members Treated	0.49	1.98%	0.00	0%

Includes Provider Demographic Information	2.25	9%	0.00	0%
Provider Name	0.21	0.83%	0.00	0%
Network Status / Insurances Accepted	0.21	0.82%	0.00	0%
Accepting New Patients	0.19	0.78%	0.00	0%
Provider Specialty OR Provider Type	0.18	0.72%	0.00	0%
Board Certification	0.18	0.71%	0.00	0%
Available Appointments	0.17	0.69%	0.00	0%
Distance to Provider	0.15	0.59%	0.00	0%
Provider Address	0.15	0.58%	0.00	0%
Languages Spoken	0.15	0.58%	0.00	0%
Affiliated Hospitals OR Affiliated Doctors OR Medical Group	0.14	0.57%	0.00	0%
Provider Telephone Number	0.14	0.57%	0.00	0%
Years in Practice OR Age of Provider	0.09	0.37%	0.00	0%
Provider Training (Medical School, Residency, Fellowship)	0.09	0.35%	0.00	0%
Ability to Serve as Primary Care Provider	0.06	0.25%	0.00	0%
Average Wait Time	0.05	0.18%	0.00	0%
Provider Hours	0.04	0.15%	0.00	0%
Provider Bio	0.03	0.11%	0.00	0%
Specialized in Certain Ages OR Treatments	0.02	0.07%	0.00	0%
Wheelchair Accessible	0.02	0.07%	0.00	0%
Includes Patient-Reported Experience Information	1.78	7%	0.00	0%
Includes Patients' Written Comments	0.72	2.88%	0.00	0%
Includes Overall Composite Patient Satisfaction Score (e.g. Star Rating)	0.72	2.87%	0.00	0%
Shows Results on Individual Questions of Survey	0.34	1.36%	0.00	0%
Includes Deficiencies / Disciplinary Action Information	1.54	6%	0.00	0%
Additional Information	1.42	6%	0.00	0%
Procedure, Service, Condition, Measure Information	1.26	5.03%	0.00	0%
Information About What the Price Means	0.17	0.66%	0.00	0%
Map Showing Results of Providers	1.18	5%	0.00	0%

SCOPE & RELIABILITY	25.00	100%	33.33	100%
Reliability of Price Data	6.99	28%	20.07	60%
Price Data is at the Provider Level and Service Level	2.93	12%	8.42	25%
Price Data is Based on Payment Data (e.g. allowed amounts, negotiated rates, or payments)	2.15	9%	6.17	19%
Reliable Source of Price Data	1.17	5%	3.37	10%
Methodology for Price Available for Review	0.44	2%	1.26	4%
Price data last update or update frequency shown with price information or within accessible FAQ / Methodology	0.29	1%	0.84	3%
Price Based on Usual, Customary, and Reasonable Rates Data (5/5 if Yes to Payment Data)	0.00	0%	0.00	0%
Price Based on Charge or Cash Rates (5/5 if Yes to UCR Rates)	0.00	0%	0.00	0%
Scope of Price Information	4.62	18%	13.27	40%
Price Information for Doctors (Actual Prices for Individual Doctors)	1.47	6%	4.23	13%
Price Information for Hospitals (Actual Prices for Individual Hospitals)	1.28	5%	3.67	11%
Price Information for Drugs (Any Drug Pricing)	0.86	3%	2.47	7%
Price Information for Lab and Imaging Centers (Actual Prices for Individual Labs or Imaging Centers)	0.74	3%	2.12	6%
Regional Cost Estimates	0.27	1%	0.78	2%
Reliability of Quality Data	4.27	17%	0.00	0%
Quality Data is at the Provider Level	1.14	5%	0.00	0%
Reliable Source of Quality Data	1.09	4%	0.00	0%
Quality data update or update frequency shown with quality information	1.05	4%	0.00	0%
Methodology for Quality Available for Review	0.99	4%	0.00	0%

Reliability of Patient Experience	3.67	15%	0.00	0%
Methodology for Patient Experience Available for Review	1.40	6%	0.00	0%
Reliable Source of Patient Experience Data	1.16	5%	0.00	0%
Patient Experience data update or update frequency shown with patient experience information	1.11	4%	0.00	0%
Scope of Quality Information	2.61	10%	0.00	0%
Quality Information for Doctors	1.86	7%	0.00	0%
Quality Information for Hospitals	0.74	3%	0.00	0%
Scope of Search & Results	2.01	8%	0.00	0%
Number of Searchable Conditions, Procedures, Services, Specialties	1.23	5%	0.00	0%
Number of Searchable Providers AND Care Settings	0.78	3%	0.00	0%
Scope of Patient Experience Information	0.83	3%	0.00	0%
Patient Experience Information for Doctors	0.42	2%	0.00	0%
Patient Experience Information for Drugs	0.24	1%	0.00	0%
Patient Experience Information for Hospitals	0.17	1%	0.00	0%
TOTAL OF MAJOR CATEGORIES	100.00	100%	100.00	100%