The SelectMD 2.0 Provider Choice Experiment

Methodological Overview

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This document provides a detailed methodological overview of the SelectMD 2.0 provider choice experiment. This study uses an experimental design to test different methods of incorporating patient comments along with Consumer Assessment of Healthcare Providers and Services (CAHPS) survey results, Healthcare Effectiveness Data and Information Set (HEDIS)-like measures of effective clinical treatments, and indicators of patient safety in web-based physician quality reports. In addition, the study allowed for exploration of the role of patient navigators in affecting provider choice. The study aims to help the Agency for Healthcare Research and Quality (AHRQ) better understand how people choose a doctor as their regular source of medical care and advice. The SelectMD 2.0 provider choice experiment and the preparation of this report were supported by two cooperative agreements from AHRQ (2U18HS016980 and 1U18HS016978) to RAND and Yale University, respectively. This study was reviewed and approved by the RAND Human Subjects Protection Committee, RAND's Institutional Review Board (IRB) to review research involving human subjects.
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- Bennie Osafo-Darko at Westat for her support of our team’s research.
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHRQ</td>
<td>Agency for Healthcare Research and Quality</td>
</tr>
<tr>
<td>CAHPS</td>
<td>Consumer Assessment of Healthcare Providers and Services</td>
</tr>
<tr>
<td>CG-CAHPS</td>
<td>Clinician &amp; Group - Consumer Assessment of Healthcare Providers and Services Survey</td>
</tr>
<tr>
<td>CMS</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
</tr>
<tr>
<td>HEDIS</td>
<td>Healthcare Effectiveness Data and Information Set</td>
</tr>
<tr>
<td>IRB</td>
<td>Institutional Review Board</td>
</tr>
<tr>
<td>U.S.</td>
<td>United States</td>
</tr>
</tbody>
</table>
1. Overview of the SelectMD 2.0 Experiment

Study Goals

The SelectMD 2.0 study used an experimental design to test different methods of incorporating patient comments about providers along with CAHPS survey results, HEDIS-like measures of effective clinical treatments, and indicators of patient safety in web-based physician quality reports. In addition, the study allowed for exploration of the role of patient navigators in affecting provider choice. The SelectMD 2.0 experiment was designed to achieve the following goals, each elaborated in more detail below:

1. Provide further insight into how to incorporate patient comments into health care quality reporting sites.
2. Test the effects of the provision of roll-up measures on decisionmaking.
3. Test the effects of patient navigators on decisionmaking.

Provide further insight into how to incorporate patient comments into health care quality reporting sites

Performance reports on doctors have become increasingly available in recent years, but there is little evidence regarding how consumers understand and use different types of performance information to make choices. The few research studies that do exist on this topic suggest that most consumers pay little attention to standardized quality measures such as the Consumer Assessment of Healthcare Providers and Services (CAHPS) surveys of patient experience, clinical process indicators similar to the Healthcare Effectiveness Data and Information Set (HEDIS), or patient safety metrics (Sinaiko, Eastman and Rosenthal, 2012; National Survey on Consumers’ Experiences with Patient Safety and Quality Information, 2004; Tompson et al., 2014; Sick and Abraham, 2011).

There is growing evidence, however, that consumers are interested in anecdotal comments posted by patients online regarding their experiences with their doctors, and the number and use of websites with such patient comments has increased rapidly in recent years (Lansky, 2012; Lagu et al., 2010; Gao et al., 2012; Health Research Institute, 2012). Comments from patients often cover the same experiential domains as CAHPS surveys (such as access to care and information, how well clinicians communicate with patients, and the helpfulness and courtesy of office staff), but in ways that can be easier to understand, more engaging, and also more persuasive to those reading a report than are statistically summarized survey scores (Trigg, 2011; Cognetta-Rieke and Guney, 2014; Detz, Lopez and Sarkar, 2013; Findlay, 2016; Schlesinger et
However, the widespread availability of such anecdotal accounts may distract consumers' attention away from sites that offer less engaging but more reliable measures of quality (Kanouse et al., 2016). Moreover, if sponsors of health care report cards that include CAHPS and other performance measures also incorporate patient comments as a way of attracting users, consumers may have difficulty integrating patient comments with standardized metrics and thus ignore or misunderstand potentially useful information.

This study built on previous research conducted as part of the CAHPS program to explore new ways of integrating patient comments with other performance metrics in web-based quality reports for consumers to support their choice of physicians. Our previous consumer choice study, referred to here as SelectMD 1.0, revealed important risks and opportunities of using patient comments that required additional research to develop effective guidance for report sponsors (Kanouse et al., 2016; Schlesinger et al., 2014; Schlesinger et al., 2012). Sponsors of performance reports in both the public and private sectors, including Federal agencies such as the Centers for Medicare & Medicaid Services (CMS), have indicated strong interest in receiving such guidance on strategies for effectively incorporating patient comments to increase consumers’ use of public reports and to enhance their ability to interpret CAHPS and other performance measures (Bindman, 2016).

**Test the effects of roll-up measures on decisionmaking**

One major objective of public reports on health care is to improve consumers' ability to make well-informed choices about their health care. Public reports are often designed using strategies that are intended to ease the cognitive burden of the process of integrating health care quality data and using it to make decisions about providers. One such strategy is the provision of “roll-up” measures that combine indicators of multiple, often disparate, dimensions of care. These roll-ups can aggregate data at different levels. For example, a roll-up measure of patient experience with primary care could be created by aggregating composite measures focused on communication with providers, timeliness of care, and interactions with office staff. Another prominent example is the Centers for Medicare & Medicaid Services’ (CMS) Five-Star Quality Rating System, which assigns an overall rating of one to five stars to different providers and plans based on multiple dimensions of quality (Centers for Medicare and Medicaid Services, April 16, 2015).

The provision of roll-up measures is somewhat controversial. Though well-constructed roll-up measures can summarize multiple dimensions of care and, in many cases, have superior reliability (Zaslavsky et al., 2002), commonly expressed concerns are that roll-ups are subject to misinterpretation, may obscure important nuances of health care quality may not align with consumer preferences or information needs, and that the calculation of roll-ups scores can be
complex and rely on assumptions about the relative importance of each component measure (Romano, Hussey and Ritley, 2010; Martsof, Scanlon and Christianson, 2013; Boyce et al., 2010; Association of American Medical Colleges, n. d.; Orlowski, 2015; Thompson, September 14, 2015; Cerully et al., forthcoming). However, little research explores whether consumers actually find roll-ups to be easier to understand than the component measures from which they are constructed, how roll-up measures are interpreted, and how viewing roll-up measures affects consumers’ choices of plans and providers (Cerully et al., forthcoming).

**Test the effects of patient navigators on decisionmaking**

The impact of in-person assistance—labeled “navigators,” “decision coaches,” “decision navigators,” or “consumer assisters,”—has been studied with respect to choices among treatments and insurance plans. The benefits of navigators for improved decisions and decision-making have been consistently evident, particularly when paired with other decision aides (Hacking et al., 2013; Belkora et al., 2011; Weber et al., 2012; Donelan et al., 2011; Sommers et al., 2015). No comparable studies exist for choices among between clinicians, making this a potential important addition to the literature.

As they have evolved throughout the health care system, assister roles range from very passive (e.g., insurance navigators under the ACA are not allowed to recommend a preferred option, only to help consumers understand information about their options) to more directly active (e.g., cancer navigators are authorized to influence choices to increase the likelihood that patients will continue treatment). We tested a relatively passive model because this is the most common form of decision-assistance in the American health care system. Each participant in the navigator arm was introduced by phone to a personal assister, who (1) “accompanied them” (i.e., the assister could see what the participant was seeing on their own computer screen) as they found their way through the SelectMD website, (2) could answer any questions that the participant raised, and (3) asked participants if they had any questions at the beginning and end of their encounter with the SelectMD website.

**Overview of Experiment**

The study had several stages (see Figure 1.1). Respondents, recruited through GfK’s Knowledge Panel (a probability-based internet survey panel), received an email briefly describing the study with a link to the survey. Once they clicked on the link, they were directed to a pre-choice survey, which included questions about their health care experiences and how they go about choosing a doctor. After a week, respondents received an email indicating that it was time to return to the study. Once they clicked on the link in the email, they were logged onto the SelectMD 2.0 experimental website that had information about a fictitious set of 12 doctors
from which to choose. The presentation of doctor performance data (i.e., patient experience, clinical quality, and patient safety) varied depending on random assignment to one of the seven experimental arms (see Table 1.1 for a brief description of each experimental arm). Respondents were asked to use the information on the website to select a doctor who they thought would be the best for their health care needs. Respondents were told that, although they were not really selecting a doctor, they should consider the choice as carefully as if they were making it for themselves. After selecting a doctor, respondents completed a post-choice survey containing questions about how they made their choice of doctor, how useful they found the website, and how confident they were in the choice they made. Recruitment, introduction to the study, and pre- and post-choice surveys were conducted within GfK’s system. The choice experiment itself, however, was a stand-alone website designed separately from GfK.

We allowed a week to elapse between the pre- and post-choice surveys because these surveys replicated several questions (related to preferences, trade-offs, and consumer activation) so that we could test for within subject change following experimental exposure. To assess this change, it was important that participants, when completing post-survey questions (e.g., about what they look for and value in a doctor), did not feel a need to replicate what they told us on the pre-survey out of a desire to portray a consistent stance.
The seven experimental arms are described in Table 1.1. Arms 1 and 2 mirrored the primary conditions in the SelectMD 1.0 experiment. Both included drill-down scores (individual measures of CAHPS patient experience survey data, HEDIS-like clinical quality data, and patient safety data) and roll-up scores (aggregate summary variables that “roll-up” drill-down measures within each domain, as well as an overall performance score). Arm 2 also included patients’ comments about their experiences with the doctor. Arms 3 and 4 each included patient comments but eliminated drill-down or roll-up scores, respectively. Arms 6, 7, and 8 contained the same information as Arm 2 but introduced new innovations, including graphics depicting distributions of positive and negative comments, similar to those displayed on the Amazon website (Arm 6), comments tagged with keywords (Arm 7), and linking respondents by phone with a patient navigator (Arm 8).
Table 1.1 Brief Summary of the Seven Experimental Arms of the SelectMD 2.0 Experiment

<table>
<thead>
<tr>
<th>Arm</th>
<th>Drill-Down Scores</th>
<th>Roll-up Scores</th>
<th>Patient Comments</th>
<th>Special Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Standardized measures only (control group)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>2: Standardized measures with comments (experimental baseline group)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>None</td>
</tr>
<tr>
<td>3: Roll-up scores only, plus comments</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>None</td>
</tr>
<tr>
<td>4: Drill-down scores only, plus comments</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>6: Amazon model</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>When viewing patient comments, respondents could see how commenters rated the positive or negative nature of their own comments and the distribution of positive-to-negative comments (much like comments are displayed on the Amazon website).</td>
</tr>
<tr>
<td>7: Tagged comments</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>When viewing patient comments, respondents could use a list of keywords to view only comments that addressed specific topics.</td>
</tr>
<tr>
<td>8: Navigator</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>Content and display were the same as Arm 7 but respondents could talk to a patient navigator by phone while viewing the SelectMD site and deciding which doctor to choose.</td>
</tr>
</tbody>
</table>

*The initial study design included an additional condition (number 5), which was eventually excluded from the fielded experiment, hence the non-sequential numbering of conditions.

The rest of this report proceeds in the following fashion. Chapter 2 provides a description of the respondent sample. Chapter 3 walks through the elements of the online physician-choice experimental website. Chapter 4 summarizes both pre- and post-choice surveys. The Appendix contains the surveys.
2. Sample Description

GfK Knowledge Panel and Sampling Frame

Respondents (N = 1247) for this experimental study were drawn from the GfK probability-based internet Knowledge Panel, which is designed to be representative of the United States population. This panel consists of over 50,000 adult panel members who are recruited by random-digit dialing (RDD) or by using address-based sampling (Knowledge Panel design summary, 2013). Arm 8 (the navigator arm) was fielded in summer 2014, and the remaining experimental arms were fielded later, in summer 2015.

Panel members who were non-institutionalized United States (U.S.) adults age 18 and over residing in the U.S. who also have high speed Internet access were sampled for this study. GfK generates samples for individual studies such that panel members receive no more than one survey invitation per week. Because arms 1-7 and arm 8 were conducted at different times, we report screening and completion rate\(^1\) information separately.

For arms 1-7, once sampled for this study, 3313 panel members received an invitation describing the study as being about how people choose a doctor as their regular source of medical care and advice. After reading the study description, panel members responded to a screening question asking whether they consented to participate or not. Of those sampled, 1716 panel members completed the screening item, resulting in a 52 percent completion rate. Of these, 1490 respondents consented to participate and received the pre-choice survey, resulting in an incidence rate\(^2\) of 87 percent. Of these 1490 respondents, 1456 (98 percent) completed the pre-choice survey and were invited to proceed to the second part of the study (i.e., using the SelectMD 2.0 site and completing the post-choice survey). 1233 participants took the post-choice survey. Upon reviewing data, we found that some participants had not returned for the study for the second portion or had returned and either did not complete all questions or had experienced an error (e.g., completed some component of the study more than once or saw a different version of the site than the one to which they were assigned). Data from these participants were removed, leaving us with an analysis sample of 1068 for arms 1-7.

For arm 8, once sampled for this study, 1967 panel members received the study invitation containing the study description. When administered the screening question, 1279 completed it (a 65 percent completion rate). Of these 1279, 787 consented to participate and received the pre-choice survey (an incidence rate of 61 percent). Because we did not need all 787 respondents to

\(^1\) Completion rate is defined as the proportion of invited panelists who completed the study.  
\(^2\) Incidence rate is defined as the proportion of individuals who consented to participate in the study out of the number who completed the screening question.
participate in the study, GfK sampled 267 of the 787 eligible respondents to invite to complete the study. Upon reviewing the data, we found that some participants had not returned for the study for the second portion, were unavailable at the time they had scheduled, experienced technical difficulties. Data from these participants were removed, leaving us with an analysis sample of 179 for arm 8.

GfK administers an incentive program in the form of a point system for its panel members. Points are awarded by GfK to respondents according to the amount of time they spend in completing a study. The points awarded for participation in this study were worth approximately $10 to $15 per person.

Sample Characteristics

1,247 respondents completed all parts of the study and were included in the analysis sample. Table 2.1 shows sample sizes for each of the seven experimental arms. Table 2.2 contains sample characteristics and a comparison to U.S. population characteristics.

<table>
<thead>
<tr>
<th>Arm</th>
<th>Brief Description</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Standardized measures only (control group)</td>
<td>175</td>
</tr>
<tr>
<td>2</td>
<td>Standardized measures with comments</td>
<td>176</td>
</tr>
<tr>
<td></td>
<td>(experimental baseline group)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Roll-up scores only, plus comments</td>
<td>184</td>
</tr>
<tr>
<td>4</td>
<td>Drill-down scores only, plus comments</td>
<td>190</td>
</tr>
<tr>
<td>6</td>
<td>Amazon model</td>
<td>164</td>
</tr>
<tr>
<td>7</td>
<td>Tagged comments</td>
<td>179</td>
</tr>
<tr>
<td>8</td>
<td>Navigator</td>
<td>179</td>
</tr>
</tbody>
</table>
Table 2.2. Sample Characteristics and Comparison to U.S. Population (N = 1247)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Sample Characteristics(^a)</th>
<th>Percent of the U.S. population (2015)(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent of the Sample</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–29</td>
<td>163</td>
<td>13.1%</td>
</tr>
<tr>
<td>30–44</td>
<td>284</td>
<td>22.8%</td>
</tr>
<tr>
<td>45–59</td>
<td>363</td>
<td>29.1%</td>
</tr>
<tr>
<td>60+</td>
<td>437</td>
<td>35.0%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>588</td>
<td>47.2%</td>
</tr>
<tr>
<td>Male</td>
<td>659</td>
<td>52.8%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White/Non-Hispanic</td>
<td>972</td>
<td>78.0%</td>
</tr>
<tr>
<td>Black/Non-Hispanic</td>
<td>92</td>
<td>7.4%</td>
</tr>
<tr>
<td>Other/Non-Hispanic</td>
<td>43</td>
<td>3.5%</td>
</tr>
<tr>
<td>2+ Races/Non-Hispanic</td>
<td>29</td>
<td>2.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>111</td>
<td>8.9%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than High School</td>
<td>68</td>
<td>5.5%</td>
</tr>
<tr>
<td>High School</td>
<td>344</td>
<td>27.6%</td>
</tr>
<tr>
<td>Some College</td>
<td>341</td>
<td>27.4%</td>
</tr>
<tr>
<td>Bachelor degree and beyond</td>
<td>494</td>
<td>39.5%</td>
</tr>
<tr>
<td>Household income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>under $10k</td>
<td>29</td>
<td>2.3%</td>
</tr>
<tr>
<td>$10K to &lt;$25k</td>
<td>111</td>
<td>8.9%</td>
</tr>
<tr>
<td>$25K to &lt;$50k</td>
<td>240</td>
<td>19.2%</td>
</tr>
<tr>
<td>$50K to &lt;$75k</td>
<td>246</td>
<td>19.7%</td>
</tr>
<tr>
<td>$75K to &lt;$100k</td>
<td>206</td>
<td>16.5%</td>
</tr>
<tr>
<td>$100K+</td>
<td>415</td>
<td>31.1%</td>
</tr>
</tbody>
</table>

\(^a\) All data in this table were supplied by GfK. There are no missing data because GfK collects socio-demographic information from all panelists.

\(^b\) Because most SelectMD 2.0 data were collected in 2015, we report American Community Survey 2015 one-year estimates (United States Census Bureau, 2016).
This chapter describes the SelectMD 2.0 experimental website. The experiment involved seven arms, where one was a control arm and the other six were experimental arms (see Table 1.1 in Chapter 1). Much of the website content and functionality was consistent across all arms. However, the arms differed in several important ways that are discussed below.

Consistent Content and Functionality

All of the arms displayed comparative scores for the following types of standardized quality information:

- **Use of Effective Treatments:** How closely this doctor’s treatment matches the care provided by the best doctors. This category presented fabricated scores for HEDIS-like measures.
- **Methods to Reduce Medical Errors:** The extent to which the doctor’s office has methods in place to prevent medical errors and keep patients safe. This category presented fabricated scores for measures of the use of specific patient safety systems and procedures.
- **Patient Survey Results:** How patients answer survey questions about their doctor and office staff. This category presented fabricated scores for CAHPS Clinician & Group Survey measures.

The control arm of the experiment (Arm 1) presented only these quantifiable dimensions of physician performance, where physicians were ranked on relative performance on a scale from one to five stars. Each of the experimental arms supplemented these quantifiable aspects of quality with narrative accounts from patients, described to respondents in the following manner:

- **What Patients Say:** Written comments from surveyed patients about their doctors. This category presented fictional narrative reviews of doctors by patients.

All arms also offered respondents the following functionality:

- Search for either an internist or a family doctor.
- Specify a zip code and a distance the respondent is willing to travel.
- Limit the list of doctors to a specific gender and/or a specific level of experience (more or less than 10 years).
- Sort the list of doctors by their performance in a given measure or category of measures.

How the Arms Differ

The experiment was designed in part to rigorously test innovative ways of incorporating patient comments into web-based physician quality reports. The baseline comparison contrasts the choices made by participants in the control group (Arm 1) with the experimental baseline group...
(Arm 2), which incorporates patient comments by simply listing comments offered by the patients of each doctor in the choice set. The baseline comparison extends the findings from our previous experiments by expanding the standardized metrics to include ratings related to patient safety; the addition of this information reflects emerging practices in contemporary websites that report physician performance. The baseline comparison serves as a touchstone and common comparator for the other experimental arms, each of which is designed to mirror the design of Arm 2.

The remaining experimental arms were designed to make it easier for participants to integrate the narrative comments with the standardized performance metrics. They did so in two ways:

- By reducing the cognitive burdens associated with making sense of the complex information embedded in comments.
- By making it easier to integrate the information that can be extracted from the comments with the dimensions of quality conveyed through the standardized metrics.

Each of the experimental arms applied these strategies by altering one or more of three aspects of the website:

1. Whether standardized performance metrics were presented individually (“drill down” scores), “rolled-up” into broader categories of measures, or both,
2. How patients’ comments were grouped and labeled, and
3. Whether respondents had access to live telephone assistance (i.e., a patient navigator) when making choices.

Table 1.1 summarizes the differences across the arms.

Arms 3 and 4 were designed to simplify respondents’ evaluation of the standardized metrics.

- **Arm 3** (Roll-up scores only, plus comments) presented only the rolled-up ratings, i.e., one score for each of the three categories of performance metrics, along with the patients’ comments.
- **Arm 4** (Drill-down scores only, plus comments) presented ratings for the 12 standardized measures of clinician performance, along with the patients’ comments.

Arms 6 and 7 approached the challenge of integrating comments from a different angle, by focusing on the comments themselves rather than the standardized measures. Both arms incorporated mechanisms that potentially made it easier for users to make sense of the information embedded in patients’ comments.

- **Arm 6** (Amazon model) included patients’ assessments of the negative or positive nature of their own comments about the doctor and provided a graphical representation of the distribution of positive-to-negative comments that was similar to the representation of comments provided on the Amazon website. Respondents could choose to read one or more subgroups of comments to help them make sense of what other patients viewed as the “best” or “worst” qualities in any given clinician. They could also have treated the comment ratings
as parallel to the star ratings in the other quality metrics, making it easier for them to integrate the two forms of information about clinician quality.

- **Arm 7** (Tagged comments) included a short list of keywords for the comments so that respondents could choose to read comments that addressed specific topics of interest. Because these keywords reflected some of the quality metrics presented in the star ratings, the keywords may have made it easier for users to “connect” these particular forms of quality ratings.

Arm 8 addressed the challenges of integrating a complex set of quality measures in yet a different manner – by providing users with a health care “patient navigator” with whom they had real-time phone access, allowing them to ask questions about the website and the information that it contained.

- **Arm 8** (Navigator) presented users with the same content and functionality as Arm 7 (Tagged comments). Users had access to both rolled-up and individual standardized measures and had access to patient comments that were tagged with key words. But as respondents accessed the SelectMD website on their own computer, they were on the phone with an assigned human patient navigator who was able to see the same images on his or her own computer, so that the navigator could follow along in real-time as respondents explored the website and could help respondents (if asked) make sense of the information and the choice with which they were presented.

Respondents in Arm 8 were required to select an appointment time so that they could be accompanied by a patient navigator while navigating the SelectMD 2.0 site. At their appointment time, they dialed in to a phone line where a navigator was already on the line.

Navigators were 6 (4 male, 2 female) graduate students studying health advocacy at the Center for Patient Partnerships at the University of Wisconsin, Madison. None had prior clinical experience. All received six hours of group training about the website and the measures it contained. They were also provided with a written manual on how to interact with respondents to ensure a consistent experience. Consistent with the role of navigators who provide assistance for consumers using Health Insurance Marketplaces, the navigators were instructed to not provide any guidance about appropriate choices, but rather assist with questions about information on and functionality of the site. Members of the team designated to implement the navigator arm met weekly with the navigators as a group to ensure consistent implementation.

Navigators opened by introducing themselves by saying “Hi, I’m [NAME], I’ll be assisting you today”. Then navigators explained that they would serve as navigators while respondents explored the SelectMD web site and that they were available to answer any questions. Navigators also noted that they would also be able to point out some details about the web site and the information available on it that might be helpful. After introductions, respondents gave navigators a code that allowed them to log in to a version of the Select MD 2.0 site that allowed the navigator to view the respondent’s screen while navigating the site. Navigators then asked respondents if they had any questions. Navigators answered any questions that arose throughout the calls. At the conclusion of the calls, navigators said: “Before you confirm your choice of Dr.
, do you have any other questions for me about the site or about your options?” When the respondents’ choices were final, navigators reminded them that they would be sent back to the GfK site to complete the post-choice survey and that they could hang up the phone.

**Experiment introduction and instructions**

**Home Page**

Figure 3.1 presents the home page common to all arms of the experiment. All respondents were first asked to choose a type of primary care doctor that they would like to consider; this was intended to get them thinking about selecting clinicians before they actually faced the challenges of doing so. They then entered a distance from a specific zip code that established how far they would be willing to travel to visit a primary care provider, and selected the “Next” button to move to the next page.

Having respondents make these choices allowed us to more closely approximate their experience when encountering real-world websites reporting on physician quality, which typically start with questions of this sort (e.g., the GetBetterMaine.org public reporting site asks site visitors to specify the type of provider they are looking for and the location for which they are willing to seek care [in terms of mileage from a specific zip code or town] before displaying practices that meet those criteria). Furthermore, it engaged respondents in the exercise facing them, because they began to play an active role rather than just passively reading about their options. However, their responses to these initial questions did not affect what they saw on other pages of the site.
Where Would You Like to Begin?

In all experimental arms (except for Arm 3: Roll-up only), respondents saw a page (Figure 3.2) that let them choose the kind of information they wanted to see first. The specific kinds of information available depended on the experimental arm to which respondents were assigned, but respondents were offered choices from the following three types of information:

- A **Performance Overview**, which presented summary (roll-up) scores for each of the three categories of comparative information and indicated the number of comments available. This was not shown to respondents in Arm 4 (drill-down [individual measures only]).
- One of three categories of comparative information, where the scores reflected **performance on specific composite measures of quality**.
- A page with patients’ comments for each doctor. This was not shown for respondents in Arm 1 (standardized measures only).

Regardless of where they started, all respondents were free to navigate to any of the other pages provided in their experimental arm.
Figure 3.2 Where Would You Like to Begin?
**Primer**

Once respondents indicated a starting point for viewing the quality information, a short three-page primer automatically walked them through the available pages to highlight key functional elements that were available to help them manage the list of doctors. Figure 3.3 illustrates the three pages in the primer. The purpose of this primer was to compensate for the fact that respondents visited this site only once and thus lacked the usual opportunity to learn about the site by visiting multiple times. In each step of the primer, respondents had the option of moving forward, moving back to reread a previous step, or leaving the primer to return to the main site.
Welcome to SelectMD

You're about to visit a website called SelectMD.

On this site, you'll find different kinds of information about primary care doctors. The names you will see are not actually doctors in your area. But the information presented here is similar to what you might find for doctors in your community.

What Can You Find Out About the Doctors?

- How closely each doctor's treatment matches the care provided by the best doctors.
- How well each doctor's office takes steps to avoid medical errors and keep patients safe.
- How patients rate their care and experiences with their doctor and his or her office staff.
What Can You Do?

- **Choose which information you want to consider first.**
  
  You may be most interested in how well doctors provide clinical care, or you may prefer to see what other patients think of the doctor and office staff. You can decide where to start.

- **Choose which doctors to learn about.**
  
  You can look at information for all of the doctors or focus on a smaller group of doctors that interest you.

- **Choose the order in which doctors are listed.**
  
  You can sort the list of doctors based on their names (alphabetical order) or how well they provide care to their patients.

---

What Can You Do? (Continued)

- **Pick the doctor who best meets your needs.**
  
  When you are done looking at the information about the doctors, click the green button on the right side of the screen to select the doctor who seems like the best choice for you.
Website navigation

*Pages Displaying Standardized Quality Metrics*

Once the respondents completed the tutorial, they were taken to the content they chose to see first. No matter which content the respondents selected as their starting point, they were able to move easily to the other content by using the tabs at the top of the page. Respondents could view the pages in any order and select a doctor from any page.

On the site, each page offered information for a scrollable list of 12 physicians who were initially presented in alphabetical order. Respondents had the option of sorting the list by one of the quality measures shown on the page. They could also choose to make the list smaller by specifying the gender of the doctors and/or the doctors’ level of experience and viewing only the subset of clinicians who matched their preferences for these attributes. All physician names were created with a random name generator and were designed to be neutral with respect to any racial/ethnic origins that names might otherwise imply.

The research team designed the choice set and the scores associated with each doctor to signal two kinds of variation:

- Variation in performance across physicians (i.e., overall, some doctors perform better than others).
- Variation in performance in the measures reported for an individual doctor (i.e., a doctor who performs well in one area does not necessarily perform well in other areas). Although comments for physicians who were higher rated in the patient experience measures tended to be more positive in tone, for every doctor there was some variation, with some comments being less positive than others.

**Performance Overview**

The Performance Overview provided a summary (roll-up) score for three areas of comparative information (Use of Effective Treatments, Methods to Reduce Medical Errors, Patient Survey Results) and showed the number of comments available for each doctor. On this page, respondents could choose to view detailed scores for individual doctors. In the prior SelectMD 1.0 experiment, the vast majority of respondents chose to start with the Performance Overview page.
Figure 3.4 presents the Performance Overview page with detailed (drill-down) scores revealed for one doctor.

Variations: As with the page on which users decide where to start, the performance overview page also varied across experimental arms, reflecting the different content that was available to users in that arm.

- **Arm 1: Standardized measures only.** The Performance Overview page in Arm 1 did not include a column for “What Patients Say.”

- **Arm 3: Roll-up only.** This page did not have tabs because respondents could not see the drill-down measures for each category. In this arm, respondents could view the comments by clicking on “Read comments” in the table. See Figure 3.5.

- **Arm 4: Drill-down** (individual measures only). This page did not exist for this arm. No “Overall” (roll-up) score was provided for the three performance categories.

- **Arm 6: Amazon model.** The “What Patients Say” column showed the distribution of positive-to-negative comments. See Figure 3.6.
Figure 3.4. Performance Overview

Figure 3.5. Performance Overview for Arm 3 Only
Use of Effective Treatments

The Use of Effective Treatments page displayed comparative scores for a summary (roll-up) measure and four composite measures that represented the clinical quality of care:

- Prevention and screening
- Diabetes care
- Asthma care
- Heart disease care

These composite measures were meant to resemble “all-or-nothing” measures derived from HEDIS data\(^3\). Figure 3.7 presents the Use of Effective Treatment page.

\(^3\) All-or-nothing measures are derived by determining whether each patient did or did not get care that met a certain quality standard. The percentage of a provider’s patients who met that quality standard can then be translated into a star rating.
Methods to Reduce Medical Errors

The Methods to Reduce Medical Errors page displayed comparative scores for a summary (roll-up) measure and four measures that represented the safety of care:

- Use of medication lists
- Use of computerized prescriptions
- Follow-up on test results
- Referrals to hospitals with good safety records

These measures were derived from safety measures developed by the National Patient Safety Foundation, the Leapfrog Group, and the Joint Commission. Figure 3.8 presents the Methods to Reduce Medical Errors page.
Patient Survey Results

The Patient Survey Results page presented comparative scores for a summary (roll-up) measure and four composite measures from the CAHPS Clinician & Group Survey (CG-CAHPS)

- How well doctors communicate with patients
- Getting timely appointments and information
- Helpful, courteous, and respectful office staff
- Attention to your mental or emotional health

Figure 3.9 presents the Patient Survey Results page.
Pages Displaying Patient Comments

As illustrated by Figure 3.10 below, when respondents clicked on the What Patients Say tab, they saw a page that displayed written comments from patients about their experiences with the doctor and the office staff. Respondents clicked on the name of a doctor to see all comments for that doctor. The comments were presented as patients’ written responses to open-ended questions on a CAHPS-like survey of patient experience. As with most current patient commentary websites, individual accounts were presented on the website in random order. In addition, comments were randomly assigned to doctors for each instance of the experiment (i.e., when each participant initiated the study). Given this randomization, neither variation in number of comments per doctor nor length of comments would likely result in any bias.

The content for these comments was drawn from two sources. One source was actual patient comments. Roughly 60 percent of these were “mined” by searching physician rating web sites. The other 40 percent were derived from the narrative elicitation project that was the companion study to this experimental research (Grob et al., 2016). These real-world comments were modified and masked so that no real names or identifying information is revealed.
The other source of comments was a set of fabricated comments created by the researchers using words and phrases with known emotional valence. These fabricated comments were used to “fill out” categories in which the sample of real-world comments were inadequate in number. Each fabricated comment was pilot-tested with a sample of nine members of the public who also reviewed real-world comments. Any wording in the fabricated comments that felt unrealistic to these readers was modified accordingly.

All candidate comments were rated for valence (negative to positive) on a scale of 1-5 by two members of the research team. Discrepancies were discussed and resolved with input from the entire team. The resulting set of comments thus had known valence and were tagged as covering content in several categories that the research team felt were important components of patient experience (e.g., coordination of care, doctor-patient communication, office staff). These content categories were later used as the tags assigned to comments in Arm 7.

Variations on this page: The experiment included two arms that explore alternative ways to help respondents make sense of patient comments and connected the substance of the comments to the doctors’ scores for Patient Survey Results.

- **Arm 6: Amazon model.** The What Patients Say page included a bar chart distribution based on patients’ assessments of the negative or positive nature of their comments. Each comment was presented with one of five labels (very negative, negative, neutral, positive, very positive) that reflected the valence of that rating. See Figure 3.11 below.

- **Arm 7: Tagged comments.** The page included a short list of topics addressed by the comments. If the respondent chose one or more topics, the page refreshed to show only comments that were tagged with the selected keywords. See Figure 3.12 below.
Figure 3.10. What Patients Say

What surveyed patients say about their doctors. In their own words.

Show me: 
- Male and female doctors
- With any amount of experience

What surveyed patients said:
- "If you can get beyond the wait period and the stuffy office staff, Dr. Bekki is a nice, competent Dr."
- "Had trouble getting an appointment. Doctor kind of hard to understand or talk to. Breezy and detached, maybe a cultural thing."
- "Doesn't take most insurance. Not sure she's worth the paperwork. Bop factor when she started her office here because she came from the Mayo. But she's too detached, cold. Seemed fazed when I asked about allergy testing. Even ridiculed the idea."
Figure 3.11. What Patients Say in Arm 6

Website header has been left off this figure to allow for view of a set of comments for fictional Dr. Dorinda Bekke.
Provider choice

Respondents were able to select their preferred doctor from any place in the website, allowing them to (re)view the information they considered most relevant to their choice before making their selection. To ensure that this choice function was not triggered inadvertently and to give respondents a second chance for a more considered judgment, respondents were transferred to a choice confirmation screen once they made an initial choice (Figure 3.14) and asked to confirm that choice. Once respondents confirmed their choices, they were returned to the GfK system to fill out the post-choice questionnaire. A respondent who disconfirmed the initial choice was returned to the page they were on previously.

Respondents had to choose a doctor before they could go on to the post-choice questionnaire. However, they could choose a doctor at any point in their review of the website; they did not have to view all of the pages before selecting a doctor, nor read all (or any) of the patient comments presented for that or any other doctor.
Figure 3.14. Physician Choice Confirmation
4. Pre- and Post-experiment Surveys

This chapter contains descriptions of the pre- and post-provider choice surveys that respondents were asked to complete on the GfK site before and after their experiences with the SelectMD 2.0 site (see Figure 1.1 for flow diagram of experiment steps). The survey is included in the Appendix.

Pre-choice survey

The purpose of this survey was to measure the respondents’ previous exposure to information on health care provider performance and how they went about choosing a physician.

**History of provider choice.** Respondents were asked if they ever had to pick a health care provider for their own medical care. Response options were yes or no.

**Recall of comparative information.** Respondents were asked if they remembered seeing any information comparing different doctors, hospitals, or health plans. Response options were yes, no, or not sure.

Respondents were then asked if they remembered seeing any information comparing the quality among different doctors in the past 12 months, with response options of yes, no, or not sure. Respondents who indicated yes or not sure were asked whether they had ever visited an internet website specifically to learn about the quality of doctors in their area (yes, no, not sure) and which of the following specific information they had seen comparing quality among different doctors in the past 12 months:

- Scores from surveys about patients’ experiences with their doctor
- Ratings of how well doctors care for particular illnesses
- Ratings of how well doctors prevent medical errors
- Patients’ written comments about visits to their doctors
- Other information comparing doctors: ________________
- I have not seen any information about doctors

Respondents were asked if they saw any information comparing the quality among different hospitals and different health insurance plans in the past 12 months, with response options of yes, no, and not sure.

**Most important provider attributes.** Respondents were presented with a list of attributes that might be important when selecting a primary care doctor and asked to rate how important
each attribute would be. Response options for each attribute were: not matter much, matter some, matter a lot. The following list of attributes was presented in random order:

- Affiliated with Insurance Plan (covered without extra copayments)
- Bedside Manner (warmth, caring, good listener)
- Office Staff (friendly, courteous, helpful)
- Patient Complaints (few complaints or malpractice charges)
- Proximity (close to home or work)
- Reputation (recommended by others)
- Safety (avoiding medical errors)
- Technical Quality (gives patients best treatments and tests)
- Time Availability (not rushed during visits)
- Training (good medical school; board certification)
- Treatment Orientation (how aggressively treats illness)
- Trustworthy (choices on behalf of patient, not insurer)

Respondents were then asked to select the three attributes that mattered most.

**Perceptions of providers.** Provider perceptions were assessed using four semantic differential questions. Respondents rated the items on a five-point scale, with the midpoint labeled as “a bit of both”. The pairs of statements presented to respondents, which anchored the ends of each scale, are in Table 4.1.

<table>
<thead>
<tr>
<th>Characteristics assessed</th>
<th>First statement</th>
<th>Second statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical quality vs. patient experience</td>
<td>Doctors who know the technical aspects of treatment are usually not so good relating to their patients.</td>
<td>Doctors who know technical aspects of medical care are usually also good at relating to their patients.</td>
</tr>
<tr>
<td>Technical quality vs. patient safety</td>
<td>Doctors who select the best treatments usually are not so good at avoiding medical errors.</td>
<td>Doctors who can select the best treatments usually are also good at avoiding medical errors.</td>
</tr>
<tr>
<td>Primary care treatment</td>
<td>A primary care doctor will be equally good diagnosing and treating all patients, whatever their health problems.</td>
<td>Primary care doctors are often particularly good with some specific health problems, but not so much others.</td>
</tr>
<tr>
<td>Interpreting comments about primary care providers</td>
<td>When reading comments from patients treated by a primary care doctor, it doesn’t really matter which of them is writing about their care.</td>
<td>To really understand patients’ comments about primary care doctors, one has to know what these patients expected from medical care.</td>
</tr>
</tbody>
</table>

**Health status.** Respondents rated their general self-rated health by responding with excellent, very good, good, fair, or poor to the question, “in general, how would you rate your overall health”(Ware and Sherbourne, 1992). Respondents also reported whether they had been treated for a serious or life-threatening health condition and had some other long-term medical
condition that required regular medical monitoring or treatment, with response options of yes, no, and don’t know for each item. Respondents also reported the number of times during the past 12 months that they went to a doctor’s office or clinic to get health care for themselves (response options of none, 1, 2, 3, 4, 5-9, and 10 or more times).

**General approach to health care.** Respondents rated their level of agreement with the following statements, using a five-point response scale with labels of completely disagree, somewhat disagree, neither agree nor disagree, somewhat agree, and completely agree. These items were modified from an existing measure of patient activation (Hibbard et al., 2005).

- I take primary responsibility for managing my own health.
- I am confident that I know when I need health care.
- If I were taking several medications, I would always bring a complete list each time I went for health care.
- I know how to find information about quality of care for doctors and hospitals.
- I am confident that I can use the information available to me to choose a good health care provider.
- If something went wrong with my health care, I would make an effort to fix the problem.

**Use of comments.** Respondents in the navigator arm only\(^4\) indicated how frequently they went on-line to read customer comments before choosing different products and services, with response options of never, sometimes, often, and always. The products and services presented, in random order, were: a costly new item, such as a car or a major appliance; a repair person who will come into your home, such as a plumber, electrician, or handyman; health services not requiring a doctor, such as a dentist or optometrist; a company with which you will have an extended service contract, such as a phone company, TV cable service, or internet provider.

**Post-choice survey**

The purpose of the post-choice survey was to assess how respondents made their doctor selection, how useful the website version assigned to them was in helping to make their choice, and how confident they were in the choice they made. For analyses, all scales were coded such that higher numbers indicated more desirable outcomes. For example, a score of 1 would correspond with very difficult, very dissatisfied, etc., and a score of 5 would correspond with very easy, very satisfied, etc.

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\(^4\) Due to cost limitations, this item was cut from the pre-choice survey for all experimental arms other than the patient navigator arm (arm 8).
Ease of choice. Respondents were asked to rate how easy or difficult it was to select a doctor on a five-point scale with labels very easy, somewhat easy, neither easy nor difficult, somewhat difficult, and very difficult.

Satisfaction with choice. Respondents rated their satisfaction with the choice of doctors available on a five-point scale with labels very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, and very dissatisfied.

Recommendation of website. Respondents indicated whether they would recommend that their friends and family use a website like the experimental website when they make their own choices about a primary care doctor on a five-point scale with labels definitely recommend, probably recommend, not sure, probably not recommend, definitely not recommend.

Attributes influencing doctor choice. This section mirrored a section on the pre-choice survey. Respondents were asked to rate how much a variety of attributes mattered when selecting a doctor on the website. Response options for each attribute were: not matter much, matter some, matter a lot. The following list of attributes was presented in random order:

- Affiliated with Insurance Plan (covered without extra copayments)
- Bedside Manner (warmth, caring, good listener)
- Office Staff (friendly, courteous, helpful)
- Patient Complaints (few complaints or malpractice charges)
- Proximity (close to home or work)
- Reputation (recommended by others)
- Safety (avoiding medical errors)
- Technical Quality (gives patients best treatments and tests)
- Time Availability (not rushed during visits)
- Training (good medical school; board certification)
- Treatment Orientation (how aggressively treats illness)
- Trustworthy (choices on behalf of patient, not insurer)

Respondents were then asked to select the three attributes that mattered most.

Memory and ease of use of website information. Respondents were presented with different types of information presented on the website then asked whether they remembered seeing the information (response options: yes/no) and then how easy or difficult it was to use the information to tell which doctor was best (response options: very easy, somewhat easy, neither easy nor difficult, somewhat difficult, very difficult). The types of information presented were:

- Surveys of patient experience with their care, their doctors, and doctors’ office staff. These scores come from a survey of a scientific sample of each doctor’s patients.
• Information on how closely a doctor provides the most effective treatments and preventive care. This type of information comes from records of the care doctors have provided to patients with certain common medical conditions.
• Information on practices promoting patient safety. This type of information comes from the doctor’s practice.
• Patients’ descriptions of their experiences with a doctor. These are comments from patients written in their own words.

**Ease of making tradeoffs of quality measures.** To measure how easy or difficult it was for respondents to make tradeoffs among different quality measures, we asked respondents to rate how easy or difficult it was to make tradeoffs regarding two aspects of quality, with response options of very easy, somewhat easy, neither easy nor difficult, somewhat difficult, very difficult. Respondents were asked how easy or difficult it was to tell whether it was worth it to:

• Choose a doctor highly rated for reducing medical errors if that meant giving up a doctor who used the most effective treatments.
• Choose a doctor highly rated for reducing medical errors if that meant giving up a doctor highly rated on their patient surveys.
• Choose a doctor highly rated on patient surveys, if that meant giving up a doctor who used the most effective treatments.

**Use of patient comments.** To learn more about how respondents use patient comments about doctors, they were asked how much they performed the following actions while reading patient comments. Actions were presented in random order, and response options were not at all, a little bit, somewhat, a great deal.

• Checking to see if some patients had extraordinarily good or bad experiences
• Figuring out whether patients felt warmly toward their doctor
• Figuring out why a patient had a positive or negative experience
• Getting enough detail so that you can really tell what it is like to visit this doctor’s office
• Learning what other people do if they run into problems with their health care
• Looking for specific situations that went well or badly
• Looking for unexpected things about this doctor that you would not have thought to consider
• Trying to decide if the doctor seems like a warm and caring person
• Trying to learn what sort of patients liked this doctor
• Understanding how the doctor responds when patients are dissatisfied

For all instances where respondents selected a little bit, somewhat, or a great deal, they were asked how well they could judge this from the comments that they read on the website. Response options were had a good sense of this, had some sense of this, and could NOT judge this.

**Ability to judge doctor attributes.** Respondents were asked to rate how well they were able to tell which doctors were best on a variety of attributes. Response options for each attribute
were: had a good sense of this, had some sense of this, and could NOT judge this. The following list of attributes was presented in random order:

- Affiliated with Insurance Plan (covered without extra copayments)
- Bedside Manner (warmth, caring, good listener)
- Office Staff (friendly, courteous, helpful)
- Patient Complaints (few complaints or malpractice charges)
- Proximity (close to home or work)
- Reputation (recommended by others)
- Safety (avoiding medical errors)
- Technical Quality (gives patients best treatments and tests)
- Time Availability (not rushed during visits)
- Training (good medical school; board certification)
- Treatment Orientation (how aggressively treats illness)
- Trustworthy (choices on behalf of patient, not insurer)

**Novelty of website.** Respondents were asked whether any information on the website was surprising and whether anything on the website led them to think differently about how they should go about assessing or selecting a doctor. Response options were yes and no.

**Decision process.** Respondents were asked to describe, in their own words, the way in which they went about selecting the doctor they chose, imagining that they were describing this to a family member or friend so that they could learn from the experience. Respondents were able to type their open-ended response to this item.

Respondents were subsequently also presented with a list of specific decision strategies they might have used when making their decision and indicated yes or no for each one:

- I picked the doctor who seemed most likeable to me.
- I focused on the one quality rating that seemed most important to me.
- I searched for a doctor who was good enough, rather than trying to figure out who was the best.
- I tried to take all of the ratings into account.
- I figured out how much each quality rating mattered to me, then chose a doctor based on the ratings that seemed most important.
- None of the above: I went about choosing in a different way (text box provided to allow for a brief description).

**Influence of information sources on decision.** Respondents were presented with the following list of different sources of information (in random order) and asked to rate how much it mattered to their choice of doctor on the website. Response options were: only source that
mattered; one of several sources that were important; took into account, but not a major influence; was too difficult to use.

- Survey of patient experience
- Clinical records on treatment/screening
- Practices promoting patient safety
- Comments from patients (in their own words)

Respondent were then presented with the same list of sources and asked which of the sources they would look for on a website if they were to be faced with a choice of primary care clinician in real life and had a choice of websites reporting information about these doctors. Response options were absolutely essential; important, but not essential; useful, but not worth the effort; not useful.

Perceptions of providers. Provider perceptions were assessed using the same four semantic differentials items included on the pre-choice survey (see Table 4.1).

Willingness to make tradeoffs. To assess how willing respondents were to make tradeoffs when choosing a doctor, respondents rated their level of agreement with the following three statements, on a five-point scale with labels completely disagree, somewhat disagree, neither agree nor disagree, somewhat agree, completely agree.

- I would be willing to accept a higher rate of medical errors in a doctor who was warm and caring.
- I would be willing to accept a doctor who had less time to talk to me about my health care needs if that doctor had a good track record for avoiding medical errors.
- I would be willing to accept a doctor who was less warm and caring if that doctor had plenty of time to talk with me about my medical care.

General approach to health care. Respondents completed the six items assessing their general approach to health care that were administered on the pre-choice survey.

Decision anxiety. To assess anxiety around the decision making process, respondents were asked to rate how anxious they would feel (on a scale of a little anxious, somewhat anxious, very anxious, extremely anxious) if faced with three hypothetical decisions.

- Suppose you were choosing between two doctors, one of whom was in your health plan’s network of providers and could be seen at no cost to you. The second doctor was rated higher on quality-reporting websites, but would cost you $50 out-of-pocket for each visit to their office – and you expected to visit the doctor several times each year. How anxious would you feel about choosing the lower cost doctor if you knew that:
  - This lower-cost doctor was described by his current patients as having little time to talk with them about their health and treatment choices
• This lower-cost doctor had an above-average number of patients complaining about being treated impersonally
• This lower cost doctor had made an above-average number of medical errors
• If you were choosing among primary care doctors in real life, how anxious would you feel about making the best choice?
• If you were choosing among primary care doctors in real life for a family member who was seriously ill, how anxious would you feel about making the best choice?

**Decision styles.** To assess respondents’ decision styles, respondents indicated how much they agree or disagreed with items from several decision style inventories. All items were randomized, and response option were completely disagree, somewhat disagree, neither agree nor disagree, somewhat agree, and completely agree.

The following six items came from a regret scale (Schwartz et al., 2002).

1. Whenever I make a choice, I’m curious about what would have happened if I had chosen differently.
2. Whenever I make a choice, I try to get information about how the other alternatives turned out.
3. If I make a choice and it turns out well, I still feel like something of a failure if I find out that the other choice would have turned out better.
4. When I think about how I’m doing in life, I often assess opportunities I have passed up.
5. Once I make a decision, I don’t look back. (This item was reverse-coded.)

The following items were from short forms of the Schwartz et al. maximization scale and assessed alternative search preferences (items 1 and 2), decision difficulty (item 3), and high standards (items 4 and 5) (Nenkov et al., 2008; Schwartz et al., 2002; Weinhardt et al., 2012).

1. When I watch TV, I channel search, often scanning through the available options even while attempting to watch one program.
2. While I am in the car listening to the radio, I often check other stations to see if something better is playing, even if I’m relatively satisfied with what I’m listening to.
3. Renting movies is really difficult. I’m always struggling to pick the best one.
4. No matter what I do, I have the highest standards for myself.
5. I never settle for second best.

The following seven items assess avoidant (items 8 and 13), dependent (items 7, 10, and 14), intuitive (items 6 and 12), and rational (items 9 and 11) decision styles (Scott and Bruce, 1995).

6. When making decisions, I rely on my instincts.
7. I often need the assistance of other people when making important decisions.
8. I avoid making important decisions until the pressure is on.
9. I make decisions in a logical and systematic way.
10. I rarely make important decisions without consulting other people.
11. My decision-making requires careful thought.
12. When I make a decision, I trust my inner feelings and reactions.
13. I often procrastinate when it comes to making important decisions.
14. I use the advice of other people in making my important decisions.

**Application of decision rules.** To assess respondents’ ability to apply various decision rules, we presented them with a hypothetical DVD player choice task, adapted from the Adult Decision-Making Competence inventory (Bruine de Bruin, Parker and Fischhoff, 2007). Respondents saw the following task information: “We’d like to learn more about how you make decisions about consumer products. The information below represents a choice among DVD players. The ratings run from 1 = very low to 3 = average to 5 = very high, with a higher number signifying better product performance.” They were provided with the information in Table 4.2.

<table>
<thead>
<tr>
<th>DVD Brand</th>
<th>Picture Quality</th>
<th>Sound Quality</th>
<th>Programming Options</th>
<th>Reliability of Brand</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>$199</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>$199</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>$199</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>$199</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>$199</td>
</tr>
</tbody>
</table>

Respondents were then presented with the following choice questions, with each representing a different decision rule (indicated in parentheses). (For more on the different decision rules, see Payne, Bettman and Johnson, 1993).

- If one of your friends told you that he wanted to buy the most reliable DVD player of this bunch, which would you recommend that he select? (lexicographic)
- If another friend told you that she wanted to buy a DVD player with the very highest sound quality and, among those with the best sound, the one with the best programming options, which would you recommend that she select? (elimination by aspects)
- If a different friend told you that he cared about all these features equally and wanted to buy the DVD player that had the best scores overall, which would you suggest that he select? (equal weights)
- If one other friend told you that she wanted a DVD player that scored no worse than average on *every* feature, which would you advise her to select? (satisficing)
Additional Variables

Additional variables may be derived from the data set. For example, we may create scales by combining multiple items or code open-ended items. These variables are not described here as they will be described more fully in manuscripts utilizing those measures.
Appendix. Pre and Post-Experiment Surveys

This appendix contains the pre and post-experiment surveys.
Pre-Survey Screener Survey

[DISPLAY]
Thank you for agreeing to participate in this study. The purpose of the study is to learn how people choose a doctor as their regular source of medical care and advice. The study is being conducted by researchers at several major universities and research organizations including Yale, University of Wisconsin and RAND.

[SP; PROMPT ONCE]
What You Will Be Asked to Do:
The study has two stages. Upon the completion of both stages, you will receive 15,000 points. We’re going to first ask you some questions about your health care experiences and how you go about choosing a physician. That’s coming right up, after you finish this introduction.

The second stage is a little more involved. A week after you have completed this initial survey, you will receive an invitation from GfK to begin the second part of the study. You will log onto the GfK website, just as you have done now, just to verify who you are. You will then be automatically transferred to another website that has information about the doctors available to you. We’ll ask you to use that information to select one doctor who you think would be the best for you and your health needs. You can assume that you would pay the same amount for your medical care, regardless of which doctor you choose. Although you will not really be selecting a doctor, we’d like you to consider this choice as carefully as if you were making it for yourself. Since this is just an exercise; you will not be contacted by the doctor you “choose.”

After you have made your choice of doctor, you will then be automatically transferred back to the GfK website and will then be asked a set of questions about how you made your choice, the usefulness of the information available for that selection, and your confidence in the choice that you made. Please do not log-off after choosing your doctor; these follow-up questions are very important so that we can understand how you made your choice. And please do not begin this study until you have approximately 30 minutes you can spend, since it’s important that you answer questions about your choice right after picking a doctor.

In order to receive your 15,000 points for participating in this study, you will need to complete the stage one questions, and both parts of stage two that we just described.

Q1_Intro. Would you like to participate?

   Yes .......................... 1
   No ........................... 2

[PROGRAMMING NOTE: TERMINATE IF Q1_INTRO = 2 OR REFUSED]
Pre-Survey

Q1. A health care provider is a doctor, nurse practitioner, or physician’s assistant. Have you ever had to pick a health care provider for your own medical care?

Yes ....................................... 1
No ......................................... 2

Q2. Information comparing different doctors, hospitals, or health insurance plans is available in different places. For example, it might be given out at work, come to your home by mail, appear in a newspaper or magazine, or be found on an Internet web site.

In the past 12 months, do you remember seeing any information comparing different doctors, hospitals or health plans?

Yes ....................................... 1
No ......................................... 2
Not sure ................................. 3

Q3a. Did you see any information comparing the quality among different doctors in the past 12 months?

Yes ....................................... 1
No ......................................... 2
Not sure ................................. 3

Q3b. In the past 12 months, have you ever visited an internet website to learn specifically about the quality of doctors in your area?

Yes ....................................... 1
No ......................................... 2
Not sure ................................. 3

Q3C_1. Scores from surveys about patients’ experiences with their doctor
Q3C_2. Ratings of how well doctors care for particular illnesses
Q3C_3. Ratings of how well doctors prevent medical errors
Q3C_4. Patients' written comments about visits to their doctors
Q3C_5. Other information comparing doctors: [INSERT SMALL TEXTBOX]
Q3C_6. I have not seen any information about doctors [SP]

[SHOW IF Q2=1 ‘YES’ OR 3 ‘NOT SURE’ OR -1 ‘REFUSED’]

[SP]
Q4. Did you see any information comparing the quality among different hospitals in the past 12 months?
   Yes ....................................... 1
   No ......................................... 2
   Not sure ................................. 3

[SHOW IF Q2=1 ‘YES’ OR 3 ‘NOT SURE’ OR -1 ‘REFUSED’]

[SP]
Q5. Did you see any information comparing the quality among different health insurance plans in the past 12 months?
   Yes ....................................... 1
   No ......................................... 2
   Not sure ................................. 3

[PROGRAMMING NOTE: PLEASE RANDOMIZE AND RECORD GRID ITEMS]

[GRID; SP ACROSS]

Patients look for various things in their doctors and medical practices. Below is a list of factors that other patients have said were important to them when selecting a primary care doctor. Please read through this entire list, and then indicate which would matter to you.

<table>
<thead>
<tr>
<th>Attributes of Doctor</th>
<th>Not Matter Much</th>
<th>Matter Some</th>
<th>Matter A Lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q6_Training.</td>
<td>Training [good medical school; board certification]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6_Reputation.</td>
<td>Reputation [recommended by others]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6_BedsideManner.</td>
<td>Bedside Manner [warmth, caring, good listener]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6_TimeAvailability.</td>
<td>Time Availability [not rushed during visits]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6_PatientComplaints.</td>
<td>Patient Complaints [few complaints or malpractice charges]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6_TreatmentOrientation.</td>
<td>Treatment Orientation [how aggressively treats illness]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6_Trustworthy.</td>
<td>Trustworthy [choices on behalf of patient, not insurer]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6_Proximity.</td>
<td>Proximity [close to home or work]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6_Safety.</td>
<td>Safety [avoiding medical errors]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6_TechnicalQuality.</td>
<td>Technical Quality [gives patients best treatments and tests]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q6_OfficeStaff. Office Staff [friendly, courteous, helpful]
Q6_AffiliatedWithInsurancePlan. Affiliated with Insurance Plan [covered without extra copayments]

[SHOW IF MORE THAN 3 FACTORS RATED AS BEING 3 ‘MATTER A LOT’ ON THE Q6 SERIES]
[PROGRAMMING NOTE: ONLY SHOW FACTORS THAT ARE BEING 3 ‘MATTER’ IN THE Q6 SERIES; SHOW SELECTED FACTORS IN THE SAME ORDER AS Q6 SERIES]

Please select the three factors that mattered to you most.

Training [good medical school; board certification] …1
Reputation [recommended by others] …2
Bedside Manner [warmth, caring, good listener] …3
Time Availability [not rushed during visits] …4
Patient Complaints [few complaints or malpractice charges] …5
Treatment Orientation [how aggressively treats illness] …6
Trustworthy [choices on behalf of patient, not insurer] …7
Proximity [close to home or work] …8
Safety [avoiding medical errors] …9
Technical Quality [gives patients best treatments and tests] …10
Office Staff [friendly, courteous, helpful] …11
Affiliated with Insurance Plan [covered without extra copayments] …12

[GRID; SP ACROSS]

[PROGRAMMING NOTE: DISPLAY Q7A AND Q7B ON THE SAME PAGE]

Good health care requires that doctors have a variety of skills, including technical knowledge about treatments, ability to relate to their patients, helping patients select the best treatments and avoiding errors. Based on what you have heard, read or experienced yourself, do you think that doctors who are good at any one of these skills will also be good at the others? Or do some doctors have certain skills, but not so much the others? If you were choosing between the following pairs of statements, with which do you agree?

Q7A.

<table>
<thead>
<tr>
<th></th>
<th>A Bit of Both</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
</tr>
</tbody>
</table>

Doctors who know the technical aspects of treatment are usually not so good relating to their patients

Doctors who know technical aspects of medical care are usually also good at relating to their patients

Q7B.

<table>
<thead>
<tr>
<th></th>
<th>A Bit of Both</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The following questions are about your health. We will not report your individual responses, only summaries of responses of the people participating in this survey.

Q9. In general, how would you rate your overall health?

- Excellent .................. 1
- Very good ................. 2
- Good ...................... 3
- Fair .......................... 4
- Poor ........................ 5

Q10A. Have you been treated for a serious or life-threatening health condition?

Q10B. Have you had some other long-term medical condition that required medical monitoring or treatment?

Q11. How many times during the past 12 months did you go to a doctor’s office or clinic to get health care for yourself?

- None ......................... 1
- 1 .......................... 2
- 2 .......................... 3
- 3 .......................... 4
- 4 .......................... 5
- 5 to 9 ......................... 6
- 10 or more ............... 7
We’d like to ask you some questions about how you approach your health care. Please indicate how much you agree or disagree with each of the following statements.

<table>
<thead>
<tr>
<th>Completely disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Q12A_A.    I take primary responsibility for managing my own health.
Q12A_B.    I am confident that I know when I need health care.
Q12A_C.    If I were taking several medications, I would always bring a complete list each time I went for health care.
Q12A_D.    I know how to find information about quality of care for doctors and hospitals.
Q12A_E.    I am confident that I can use the information available to me to choose a good health care provider.
Q12A_F.    If something went wrong with my health care, I would make an effort to fix the problem.

[DISPLAY]
Thank you for completing the first stage of this study. You will be contacted in a week by GfK, letting you know that the second stage of the study is open for your participation.

[INSERT STANDARD CLOSE]
Post-Survey

You’re now ready to move on to a website called SelectMD that’s designed to help you choose a doctor. The first several screens will ask you some questions about what you prefer in a medical practice and introduce you to the features of the website. You’ll then be free to roam about the website, examine whatever information looks interesting to you, and select whichever doctor seems the best.

Please be assured that even though you will be connected with a partner survey, your answers will be kept completely confidential as they are in all GfK surveys. Your privacy continues to be our top priority and, as always, you can contact us at 1-800-782-6899 or support@knowledgepanel.com

We’ll ask you to use that information in SelectMD to select one doctor who you think would be the best for you and your health needs. You can assume that you would pay the same amount for your medical care, regardless of which doctor you choose. Although you will not really be selecting a doctor, we’d like you to consider this choice as carefully as if you were making it for yourself. Since this is just an exercise; you will not be contacted by the doctor you “choose”.

After you have made your choice of doctor, you will then be automatically transferred back to the GfK website and will then be asked a set of questions about how you made your choice, the usefulness of the information available for that selection, and your confidence in the choice that you made. Please do not log-off after choosing your doctor; these follow-up questions are very important so that we can understand how you made your choice. And please do not begin this study until you have approximately 30 minutes you can spend, since it’s important that you answer questions about your choice right after picking a doctor.

[Programming Note: Please redirect respondents to external Wowza website at this point. Once respondents have completed their review of the external website, they will return to the survey starting at Q13 below]

Q13. How easy or difficult was it for you to select a doctor?

<table>
<thead>
<tr>
<th>Very easy</th>
<th>Somewhat easy</th>
<th>Neither easy nor difficult</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Q14. How satisfied were you with the choice of doctors available to you?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Somewhat satisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Somewhat dissatisfied</th>
<th>Very dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Q15. Would you recommend that your friends and family use a website like this one when they make their own choices about a primary care doctor?

<table>
<thead>
<tr>
<th>Definitely recommend</th>
<th>Probably recommend</th>
<th>Not sure</th>
<th>Probably not recommend</th>
<th>Definitely not recommend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[PROGRAMMING NOTE: PLEASE RANDOMIZE AND RECORD GRID ITEMS]

GRID; SP ACROSS; CUSTOM PROMPT IF GRID ITEM IS SKIPPED: Your answers to this question would play an important role in this study; please complete them if you are able.

When you selected a doctor on the website, how much did each of these factors matter to you?

Q16_Reputation. Reputation [recommended by others]
Q16_BedsideManner. Bedside Manner [warmth, caring, good listener]
Q16_TimeAvailability. Time Availability [not rushed during visits]
Q16_PatientComplaints. Patient Complaints [few complaints or malpractice charges]
Q16_TreatmentOrientation. Treatment Orientation [how aggressively treats illness]
Q16_Trustworthy. Trustworthy [choices on behalf of patient, not insurer]
Q16_Proximity. Proximity [close to home or work]
Q16_Safety. Safety [avoiding medical errors]
Q16_TechnicalQuality. Technical Quality [gives patients best treatments and tests]
Q16_OfficeStaff. Office Staff [friendly, courteous, helpful]

[SHOW IF MORE THAN 3 FACTORS RATED AS BEING 3 ‘MATTER A LOT’ ON THE Q16 SERIES]

[PROGRAMMING NOTE: ONLY SHOW FACTORS THAT ARE BEING 3 ‘MATTER’ IN THE Q6 SERIES; SHOW SELECTED FACTORS IN THE SAME ORDER AS Q6 SERIES]

[PROGRAMMING NOTE: PROMPT IF MORE THAN 3 FACTORS SELECTED]

[CUSTOM PROMPT IF NO RESPONSES ARE GIVEN: Your answers to this question would play an important role in this study; please complete them if you are able]

[MP]

Q16A. Please select the three factors that mattered to you most.

<table>
<thead>
<tr>
<th>Attributes of Doctor</th>
<th>Three That Mattered Most</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation [recommended by others]</td>
<td>1</td>
</tr>
<tr>
<td>Bedside Manner [warmth, caring, good listener]</td>
<td>2</td>
</tr>
<tr>
<td>Time Availability [not rushed during visits]</td>
<td>3</td>
</tr>
<tr>
<td>Patient Complaints [few complaints or malpractice charges]</td>
<td>4</td>
</tr>
<tr>
<td>Treatment Orientation [how aggressively treats illness]</td>
<td>5</td>
</tr>
<tr>
<td>Trustworthy [choices on behalf of patient, not insurer]</td>
<td>6</td>
</tr>
<tr>
<td>Proximity [close to home or work]</td>
<td>7</td>
</tr>
<tr>
<td>Safety [avoiding medical errors]</td>
<td>8</td>
</tr>
<tr>
<td>Technical Quality [gives patients best treatments and tests]</td>
<td>9</td>
</tr>
<tr>
<td>Office Staff [friendly, courteous, helpful]</td>
<td>10</td>
</tr>
</tbody>
</table>
We’re now interested in knowing what you remember about the website and how useful the information was for you in choosing a doctor. We understand that you may not have looked at everything on the web site; please feel free to tell us if you didn’t see some types of information.

[PROGRAMMING NOTE: PLEASE RANDOMIZE AND RECORD THE ORDER OF THE FOLLOWING QUESTION SETS:

Q17 & Q18
Q19 & Q20
Q21 & Q22

PLEASE NOTE: Q22A DOES NOT MOVE WITH Q22; THIS IS A STAND ALONE QUESTION THAT ALWAYS COME AT THE END OF THE RANDOMIZATION SEQUENCE]

[PROGRAMMING NOTE: PLEASE HAVE Q23 & Q24 FOLLOW Q22A AT THE END OF THE RANDOMIZATION SEQUENCE]

[GRID; SP ACROSS]
Q17. This question is about surveys of patient experience with their care, their doctors, and doctors’ office staff. These scores come from a survey of a scientific sample of each doctor’s patients.

Do you remember seeing this information?

Yes | No
---|---
1 | 2

[PROGRAMMING NOTE: DISPLAY IN BOX AS HEADER ON SCREEN FOR Q18]
Surveys of patient experience with doctors and staff.

[SHOW IF Q17=1 ‘YES’]
[GRID; SP ACROSS]
Q18. How easy or difficult was it to tell which doctors were best using this information?

<table>
<thead>
<tr>
<th>Very easy</th>
<th>Somewhat easy</th>
<th>Neither easy nor difficult</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[GRID; SP ACROSS]
Q19. This question is about information on how closely a doctor’s provides the most effective treatments and preventive care. This type of information comes from records of the care doctors have provided to patients with certain common medical conditions.
Do you remember seeing this information?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

[PROGRAMMING NOTE: DISPLAY IN BOX AS HEADER ON SCREEN FOR Q20]
How often the doctor provides the most effective treatment and preventive care.

[SHOW IF Q19=1 'YES']
[GRID; SP ACROSS]
Q20. How easy or difficult was it to tell which doctors were best using this information?

<table>
<thead>
<tr>
<th>Very easy</th>
<th>Somewhat easy</th>
<th>Neither easy nor difficult</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[GRID; SP ACROSS]
Q21. This question is about **information on how successful a doctor is in reducing medical errors.** This type of information comes from the doctor's practice.

Do you remember seeing this information?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

[PROGRAMMING NOTE: DISPLAY IN BOX AS HEADER ON SCREEN FOR Q22]
How successful a doctor is in reducing medical errors.

[SHOW IF Q19=1 'YES']
[GRID; SP ACROSS]
Q22. How easy or difficult was it to tell which doctors were best using this information?

<table>
<thead>
<tr>
<th>Very easy</th>
<th>Somewhat easy</th>
<th>Neither easy nor difficult</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[GRID; SP ACROSS]
It can be difficult to choose among doctors who are highly rated on some measures of quality, but not others. How easy or difficult was it for you to tell whether it was worth it to:

<table>
<thead>
<tr>
<th>Very easy</th>
<th>Somewhat easy</th>
<th>Neither easy nor difficult</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Q22A_i. Choose a doctor highly rated for reducing medical errors if that meant giving up a doctor who used the most effective treatments?
Q22A_ii. Choose a doctor highly rated for reducing medical errors if that meant giving up a doctor highly rated on their patient surveys?
Q22A_iii. Choose a doctor highly rated on patient surveys, if that meant giving up a doctor who used the most effective treatments?

[GRID; SP ACROSS]
Q23. This question is about reviews from patients about their experiences with a doctor. These are comments from patients written in their own words.

Do you remember seeing this information?

Yes  No
1  2

[PROGRAMMING NOTE: DISPLAY IN BOX AS HEADER ON SCREEN FOR Q24]
Comments from individual patients about this doctor, in their own words.

[SHOW IF Q23=1 ‘YES’]
[GRID; SP ACROSS]
Q24A. How easy or difficult was it to tell which doctors were best using this information?

<table>
<thead>
<tr>
<th>Very easy</th>
<th>Somewhat easy</th>
<th>Neither easy nor difficult</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[PROGRAMMING NOTE: RANDOMIZE AND RECORD THE ORDER OF GRID ITEMS]
[SHOW IF Q23=1 ‘YES’]
[GRID; SP ACROSS]
When you read patient comments about their doctor, how much were you:

<table>
<thead>
<tr>
<th>Not At All</th>
<th>A Little Bit</th>
<th>Somewhat</th>
<th>A Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Q24B_a. Trying to learn what sort of patients liked this doctor
Q24B_b. Looking for specific situations that went well or badly
Q24B_c. Figuring out whether patients felt warmly toward their doctor
Q24B_d. Understanding how the doctor responds when patients are dissatisfied
Q24B_e. Getting enough detail so that you can really tell what it is like to visit this doctor’s office
Q24B_f. Learning what other people do if they run into problems with their health care
Q24B_g. Checking to see if some patients had extraordinarily good or bad experiences
Q24B_h. Trying to decide if the doctor seems like a warm and caring person
Q24B_i. Figuring out why a patient had a positive or negative experience
Q24B_j. Looking for unexpected things about this doctor that you would not have thought to consider
How well could you judge this from the comments that you read on this website?

<table>
<thead>
<tr>
<th>Had a Good Sense of This</th>
<th>Had Some Sense of This</th>
<th>Could NOT Judge This</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Q24C_a. Trying to learn what sort of patients liked this doctor
Q24C_b. Looking for specific situations that went well or badly
Q24C_c. Figuring out whether patients felt warmly toward their doctor
Q24C_d. Understanding how the doctor responds when patients are dissatisfied
Q24C_e. Getting enough detail so that you can really tell what it is like to visit this doctor’s office
Q24C_f. Learning what other people do if they run into problems with their health care
Q24C_g. Checking to see if some patients had extraordinarily good or bad experiences
Q24C_h. Trying to decide if the doctor seems like a warm and caring person
Q24C_i. Figuring out why a patient had a positive or negative experience
Q24C_j. Looking for unexpected things about this doctor that you would not have thought to consider

[PROGRAMMING NOTE: PLEASE RANDOMIZE AND RECORD GRID ITEMS]

Based on the website that you just visited, how well were you able to tell which doctors were best in the following ways?

<table>
<thead>
<tr>
<th>Attributes of Doctor</th>
<th>Had A Good Sense of This</th>
<th>Had Some Sense of This</th>
<th>Could NOT Judge This</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q25_Training.</td>
<td>Training [good medical school; board certification]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_Reputation.</td>
<td>Reputation [recommended by others]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_BedsideManner.</td>
<td>Bedside Manner [warmth, caring, good listener]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_TimeAvailability.</td>
<td>Time Availability [not rushed during visits]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_PatientComplaints.</td>
<td>Patient Complaints [few complaints or malpractice charges]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_TreatmentOrientation.</td>
<td>Treatment Orientation [how aggressively treats illness]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_Trustworthy.</td>
<td>Trustworthy [choices on behalf of patient, not insurer]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_Safety.</td>
<td>Safety [avoiding medical errors]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_Proximity.</td>
<td>Proximity [close to home or work]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_TechnicalQuality.</td>
<td>Technical Quality [gives patients best treatments and tests]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25.OfficeStaff.</td>
<td>Office Staff [friendly, courteous, helpful]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25_AffiliatedWithInsurancePlan.</td>
<td>Affiliated with Insurance Plan [covered without extra copayments]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q26. Was there any information on the website that you found surprising?

No................................. 1
Yes................................. 2

Q26a. Please describe what was surprising.

Q27. Was there anything on the website that led you to think differently about how you should go about assessing or selecting a doctor?

No................................. 1
Yes................................. 2

Q27a. Please describe what you learned, as if you were describing it to your family or friends so that they could learn from your experiences

Q28. Please describe the way in which you went about selecting the doctor whom you chose?

First, we’d like to understand your decision in your own words. Imagine that you were describing this to a family member or friend, so that they could learn from your experience.

Q29_a. I picked the doctor who seemed most likeable to me
Q29_b. I focused on the one quality rating that seemed most important to me
Q29_c. I searched for a doctor who was good enough, rather than trying to figure out who was the best
Q29_d. I tried to take all of the ratings into account
Q29_e. I figured out how much each quality rating mattered to me, then chose a doctor based on the ratings that seemed most important
Q29_f. None of the above: I went about choosing in a different way [SP]

[PROGRAMMING NOTE: PLEASE SHOW Q29_F ‘NONE OF THE ABOVE’ IS SELECTED]

[MEDIUM TEXTBOX]
Q29a. Please describe:

[INSERT MEDIUM TEXTBOX]

[PROGRAMMING NOTE: RANDOMIZE AND RECORD THE ORDER OF GRID ITEMS]

GRID; SP ACROSS

Sometimes making sense of reports on quality can just feel too difficult to be worth the effort. Based on the website that you just visited, how much did each of these sources of information matter in selecting the doctor whom you chose?

<table>
<thead>
<tr>
<th>Only Source That Mattered</th>
<th>One of Several Sources That Were Important</th>
<th>Took Into Account, But Not A Major Influence</th>
<th>Was Too Difficult to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Q30_a. Survey of Patient Experience
Q30_b. Clinical Records on Treatment/Screening
Q30_c. Practices Promoting Patient Safety
Q30_d. Comments from Patients (in their own words)

[PROGRAMMING NOTE: RANDOMIZE AND RECORD THE ORDER OF GRID ITEMS]

GRID; SP ACROSS

Q31. If you were to be faced with a choice of primary care clinician in real life and had a choice of websites reporting information about these doctors, which of the following types of information would you look for on a website?

<table>
<thead>
<tr>
<th>Absolutely Essential</th>
<th>Important, But Not Essential</th>
<th>Useful, But Not Worth the Effort</th>
<th>Not Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Q31_a. Survey of Patient Experience
Q31_b. Clinical Records on Treatment/Screening
Q31_c. Practices Promoting Patient Safety
Q31_d. Comments from Patients (in their own words)

[GRID; SP ACROSS]

[PROGRAMMING NOTE: DISPLAY Q32A AND Q32B ON THE SAME PAGE]

Good medical care requires that doctors have a variety of skills, including technical knowledge about treatments, ability to relate to their patients, helping patients select the best treatments
and avoiding errors. Based on what you have heard, read or experienced yourself, do you think that doctors who are good at any one of these skills will also be good at the others? Or do some doctors have certain skills, but not so much the others? If you were choosing between the following pairs of statements, with which do you agree?

Q32A.

<table>
<thead>
<tr>
<th>A Bit of Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

Doctors who know the technical aspects of treatment are usually not so good relating to their patients

Doctors who know technical aspects of medical care are usually also good at relating to their patients

Q32B.

<table>
<thead>
<tr>
<th>A Bit of Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

Doctors who select the best treatments usually are not so good at avoiding medical errors

Doctors who can select the best treatments usually are also good at avoiding medical errors

[GRID; SP ACROSS]
[PROGRAMMING NOTE: DISPLAY Q33A AND Q33B ON THE SAME PAGE]

Based on what you have heard, read or experienced yourself, do you think that doctors who provide primary care (check-ups, screening for illnesses, referrals to specialists) are equally good treating all patients, or are some doctors particularly helpful for patients with particular needs or preferences about their medical care? If you were choosing between the following pairs of statements, with which do you agree?

Q33A.

<table>
<thead>
<tr>
<th>A Bit of Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

A primary care doctor will be equally good diagnosing and treating all patients, whatever their health problems

Primary care doctors are often particularly good with some specific health problems, but not so much others
When reading comments from patients treated by a primary care doctor, it doesn't really matter which of them is writing about their care.

To really understand patients' comments about primary care doctors, one has to know what these patients expected from medical care.

---

**[PROGRAMMING NOTE: RANDOMIZE AND RECORD THE ORDER OF GRID ITEMS]**  
**[GRID; SP ACROSS]**

How much do you agree or disagree with the following statements about choosing a doctor?

<table>
<thead>
<tr>
<th>Completely disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Q34_A.** I would be willing to accept a higher rate of medical errors in a doctor who was warm and caring.

**Q34_B.** I would be willing to accept a doctor who had less time to talk to me about my health care needs if that doctor had a good track record for avoiding medical errors.

**Q34_C.** I would be willing to accept a doctor who was less warm and caring if that doctor had plenty of time to talk with me about my medical care.

---

**[PROGRAMMING NOTE: RANDOMIZE AND RECORD THE ORDER OF GRID ITEMS]**  
**[GRID; SP ACROSS]**

[PROGRAMMING NOTE: CUSTOM PROMPT "Your answers to this question would play an important role in this study; please complete them if you are able"]

We'd like to ask you some questions about how you approach your health care. Please indicate how much you agree or disagree with each of the following statements.

<table>
<thead>
<tr>
<th>Completely disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Q35_a.** I take primary responsibility for managing my own health.

**Q35_b.** I am confident that I know when I need health care.

**Q35_c.** If I were taking several medications, I would always bring a complete list each time I went for health care.

**Q35_d.** I know how to find information about quality of care for doctors and hospitals.
Q35_e. I am confident that I can use the information available to me to choose a good health care provider.
Q35_f. If something went wrong with my health care, I would make an effort to fix the problem.

[PROGRAMMING NOTE: RANDOMIZE AND RECORD THE ORDER OF GRID ITEMS]
[GRID; SP ACROSS]
Suppose you were choosing between two doctors, one of whom was in your health plan’s network of providers and could be seen at no cost to you. The second doctor was rated higher on quality-reporting websites, but would cost you $50 out-of-pocket for each visit to their office – and you expected to visit the doctor several times each year. How anxious would you feel about choosing the lower cost doctor if you knew that:

<table>
<thead>
<tr>
<th>Not At All Anxious</th>
<th>A Little Anxious</th>
<th>Somewhat Anxious</th>
<th>Very Anxious</th>
<th>Extremely Anxious</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Q36_A. This lower-cost doctor was described by his current patients as having little time to talk with them about their health and treatment choices
Q36_B. This lower-cost doctor had an above-average number of patients complaining about being treated impersonally
Q36_C. This lower cost doctor had made an above-average number of medical errors

[GRID; SP ACROSS]
Q37A. If you were choosing among primary care doctors in real life, how anxious would you feel about making the best choice?

<table>
<thead>
<tr>
<th>Not At All Anxious</th>
<th>A Little Anxious</th>
<th>Somewhat Anxious</th>
<th>Very Anxious</th>
<th>Extremely Anxious</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[GRID; SP ACROSS]
Q37B. If you were choosing among primary care doctors in real life for a family member who was seriously ill, how anxious would you feel about making the best choice?

<table>
<thead>
<tr>
<th>Not At All Anxious</th>
<th>A Little Anxious</th>
<th>Somewhat Anxious</th>
<th>Very Anxious</th>
<th>Extremely Anxious</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[PROGRAMMING NOTE: RANDOMIZE AND RECORD THE ORDER OF GRID ITEMS]
[GRID; SP ACROSS]
We’d like to ask you some questions about how you usually make decisions in your life. Please indicate how much you agree or disagree with each of the following statements:

<table>
<thead>
<tr>
<th>Completely disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor</th>
<th>Somewhat agree</th>
<th>Completely agree</th>
</tr>
</thead>
</table>
Q38_a. Whenever I make a choice, I’m curious about what would have happened if I had chosen differently.
Q38_b. Whenever I make a choice, I try to get information about how the other alternatives turned out.
Q38_c. If I make a choice and it turns out well, I still feel like something of a failure if I find out that the other choice would have turned out better.
Q38_d. When I think about how I’m doing in life, I often assess opportunities I have passed up.
Q38_e. Once I make a decision, I don’t look back.
Q38_f. When I watch TV, I channel search, often scanning through the available options even while attempting to watch one program.
Q38_g. While I am in the car listening to the radio, I often check other stations to see if something better is playing, even if I’m relatively satisfied with what I’m listening to.
Q38_h. Renting movies is really difficult. I’m always struggling to pick the best one.
Q38_i. No matter what I do, I have the highest standards for myself.
Q38_j. I never settle for second best.
Q38_k. When making decisions, I rely on my instincts.
Q38_l. I often need the assistance of other people when making important decisions.
Q38_m. I avoid making important decisions until the pressure is on.
Q38_n. I make decisions in a logical and systematic way.
Q38_o. I rarely make important decisions without consulting other people.
Q38_p. My decision-making requires careful thought.
Q38_q. When I make a decision, I trust my inner feelings and reactions.
Q38_r. I often procrastinate when it comes to making important decisions.
Q38_s. I use the advice of other people in making my important decisions.

[SP]
Q39a. Finally, we’d like to learn more about how you make decisions about consumer products. The information below represents a choice among DVD players. The ratings run from 1=Very Low to 3= Average to 5=Very High, with a higher number signifying better product performance.
If one of your friends told you that he wanted to buy the most reliable DVD player of this bunch, which would you recommend that he select?

Brand A ....... 1  
Brand B ....... 2  
Brand C ....... 3  
Brand D ....... 4  
Brand E ....... 5  

Q39b. If another friend told you that she wanted to buy a DVD player with the very highest sound quality and, among those with the best sound, the one with the best programming options, which would you recommend that she select?

Brand A ....... 1  
Brand B ....... 2  
Brand C ....... 3  
Brand D ....... 4  
Brand E ....... 5  

<table>
<thead>
<tr>
<th>DVD Brand</th>
<th>Picture Quality</th>
<th>Sound Quality</th>
<th>Programming Options</th>
<th>Reliability of Brand</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>$199</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>$199</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>$199</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>$199</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>$199</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DVD Brand</th>
<th>Picture Quality</th>
<th>Sound Quality</th>
<th>Programming Options</th>
<th>Reliability of Brand</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>$199</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>$199</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>$199</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>$199</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>$199</td>
</tr>
</tbody>
</table>
Q39c. If a different friend told you that he cared about all these features equally and wanted to buy the DVD player that had the best scores overall, which would you suggest that he select?

Brand A ........ 1  
Brand B ........ 2  
Brand C ........ 3  
Brand D ........ 4  
Brand E ........ 5

<table>
<thead>
<tr>
<th>DVD Brand</th>
<th>Picture Quality</th>
<th>Sound Quality</th>
<th>Programming Options</th>
<th>Reliability of Brand</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>$199</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>$199</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>$199</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>$199</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>$199</td>
</tr>
</tbody>
</table>

Q39d. If one other friend told you that she wanted a DVD player that scored no worse than average on every feature, which would you advise her to select?

Brand A ........ 1  
Brand B ........ 2  
Brand C ........ 3  
Brand D ........ 4  
Brand E ........ 5

[INSERT STANDARD CLOSE]
References


Findlay, S. D., "Consumers' Interest In Provider Ratings Grows, And Improved Report Cards And Other Steps Could Accelerate Their Use," Health Aff (Millwood), Vol. 35, No. 4, Apr 1, 2016, pp. 688-696.


Health Research Institute, Scoring healthcare: Navigating customer experience ratings, Delaware: Pricewaterhouse Coopers, 2012.


