



HOW TO

How to Report Cost Data to Promote High-Quality, Affordable Choices: Findings from Consumer Testing

February 2014

The *Aligning Forces for Quality* (AF4Q) Alliances, funded by the Robert Wood Johnson Foundation, are leading multiple initiatives to improve the quality of care while lowering costs in their communities. As part of this effort, some Alliances have launched programs to educate consumers about unnecessary variations in the cost and quality of care. The American Institutes for Research (AIR) partnered with two Alliances—AF4Q South Central Pennsylvania and Healthy Memphis Common Table—to conduct one-on-one interviews with consumers in their communities to learn how to display and describe cost and quality data. This report presents guidelines for public reporting of cost and quality information in an effective, relevant, and consumer-friendly manner that promotes high-quality, affordable choices.

The type of cost data available in a community depends on many factors. Cost may be displayed in terms of an average or an estimate, overall price of service or out-of-pocket cost to the consumer, and general or specific to an insurer and coverage level. As such, throughout this report, costs are referred to in a generic manner, and options are provided for reporting different types of costs in the most understandable way.

Key Findings and Recommendations

- Cost and quality information should be shown together. In the absence of quality information, consumers will use high cost as a proxy for high quality.
- Cost and quality data are most useful to consumers who are responsible for paying for some or all of a service's costs out-of-pocket.
- Phrases such as “high-quality care at a reasonable cost” or “high-quality care at an affordable cost” have more consistent and relevant meaning to consumers than “high-value care.”
- Present comparative information (e.g., quality, cost, location, office hours) on a single page so users can assess multiple attributes at the same time.

About Aligning Forces for Quality

Aligning Forces for Quality (AF4Q) is the Robert Wood Johnson Foundation's signature effort to lift the overall quality of health care in targeted communities, as well as reduce racial and ethnic disparities and provide real models for national reform. The Foundation's commitment to improve health care in 16 AF4Q communities is the largest effort of its kind ever undertaken by a U.S. philanthropy. AF4Q asks the people who get care, give care and pay for care to work together to improve the quality and value of care delivered locally. The Center for Health Care Quality in the Department of Health Policy at George Washington University School of Public Health and Health Services serves as the national program office. Learn more about AF4Q at www.forces4quality.org. Learn more about RWJF's efforts to improve quality and equality of care at www.rwjf.org/qualityequality/af4q/.

About the Author

American Institutes for Research (AIR) provides technical assistance for the Robert Wood Johnson Foundation's *Aligning Forces for Quality* initiative. AIR is working with Aligning Forces communities to support consumer engagement efforts to promote high-quality health care at a low cost.

This research was designed to address the following questions:

- (1) Which audiences are most interested in cost data?
- (2) What is the best way to describe the concept of value to consumers?
- (3) Which quality and cost measures do consumers find most meaningful?
- (4) How can cost and quality information be presented together in public reports?

For a detailed description of our methodology, please see Appendix A: Methods.

Why Is This Important?

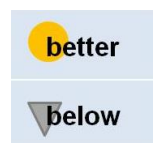
Many insured consumers have been shielded from the full costs of health care and therefore are not knowledgeable about health care costs. However, because health care costs continue to rise, consumers are increasingly being asked to bear more of the costs and responsibility for their care. Further, there is unexplained cost variation among providers. To learn about health care costs in order to make informed choices, consumers need adequate, easy-to-understand information on cost and quality. Consumers asked to make decisions based solely on cost information are not confident in their decision and less likely to choose a high-quality, low cost option.^{i,ii} Additionally, when consumers are provided with cost information without quality information, they could misinterpret the information. For example, some consumers will use cost as a proxy for quality (e.g., equate high cost with high quality) even though there is no evidence of a correlation between quality and cost.ⁱⁱⁱ

Evidence suggests that demand for personal, out-of-pocket cost information is growing among certain populations of consumers, including those with shoppable conditions (e.g., knee replacement), high out-of-pocket costs, and those in search of a new doctor.^{iv} The Alliances have the opportunity to educate and engage consumers in making high-quality, affordable choices by providing quality and cost information in a meaningful, compelling way.

Presenting Cost and Quality Information Together

Showing cost and quality information together helps consumers clearly see variation among providers in their area. Further, it helps consumers understand that high costs do not necessarily mean high quality—high-quality care is available without paying the highest price. Below we discuss six approaches for presenting comparative cost and quality information together in an effective, consumer-friendly manner and provide a sample display.

1. **Present comparative quality and cost information on a single page**, using five to seven specific measures or summary scores so users can assess multiple attributes at the same time.
 - The Institute of Medicine’s (IOM) six domains of quality—safe, effective, patient-centered, timely, efficient, and equitable—are one way to organize the information. Patients find effectiveness, safety, and patient-centeredness to be most meaningful.^v
 - Summary scores (e.g., patient survey results) combine multiple measures (e.g., how well doctors communicate and whether office staff is helpful and courteous) into a single score, reducing the amount of information and allowing consumers to quickly grasp how providers compare to one another.
2. **Use actual dollar amounts to display costs** instead of symbols (e.g., \$, \$\$, or \$\$\$). Using actual dollar amounts provides more concrete and meaningful information about costs for comparison.
3. **Use word icons to display quality information**. Word icons combine graphic symbols with words, leaving less room for users to misunderstand or misinterpret users. They also can make it easier for users to detect patterns in the display and identify the high and low performers.^{vi}
4. **Provide detailed definitions of each measure or summary score**. This may be in the form of a pop-up, hyperlink, or hover function.
5. **Sort the information by highest overall quality and lowest cost** and then allow users to sort by other individual scores. Ordering enables users to interpret the data more efficiently and detect patterns.



6. **Do not attempt to provide a high-value summary measure or designate high-value providers.** That is, do not provide a ribbon, checkmark, star, or other designation to differentiate high-value providers from others. Although summary measures of quality are helpful, a single measure that combines cost and quality is viewed as untrustworthy, as though something has been hidden or manipulated.

Sample display of comparative cost and quality information for doctors.

Doctor	Distance	Office Hours	Uses Treatments Proven to be Effective <small>What is this?</small>	Uses Methods to Prevent Medical Errors <small>What is this?</small>	Patient Survey Results <small>What is this?</small>	Average Cost of Office Visit <small>What is this?</small>
Dr. P. Casey	2.8 miles	8am-5pm, Mon.-Fri.	better	better	better	\$89
Dr. V. Hall	6.8 miles	8am-8pm, Mon.-Fri.	average	better	average	\$91
Dr. G. Abbot	4.3 miles	8am-5pm, Mon.-Sat.	average	below	average	\$161

Describing High Value, Cost, and Quality

This section presents recommendations for describing high value, cost, and quality to health care consumers. This information can be used generally or as part of displays for reporting as shown in the example above.

For more detailed findings of what was tested and results, see Appendix B: What Worked and What Didn't Work.

Describing High Value to Consumers

Instead of using the phrase “high-value care,” use **“high-quality care at an affordable cost”** or **“high-quality care at a reasonable cost.”**

Consumers view the term “value” in many different ways. Consumers described getting good “value” as:

- Adequate quality at a low cost
- High quality at a low cost
- High quality at a high cost

Moreover, consumers believed the term “value” is more applicable when describing products like cars or medications (e.g., generic prescriptions may have better value than name-brand prescriptions); however, consumers felt “value” was an inappropriate word to describe services like health care.

Describing Cost to Consumers

Costs can mean something different to each person. So consumers don't misinterpret the information, provide clear labels and definitions. Labels and definitions should explain **who this cost applies to, what is included in the**

“If I see high value, I’m going to be paying through the nose... Low value would not be good. ‘Good value’ is much better than high value. High value is (overpaying). High value is a Volvo. A good value is a Nissan Altima—don’t pay a lot, but it’s a high-performance car.”

—Consumer in York County, Pennsylvania

“When you talk about medical at lower cost, low value...car insurance, let me associate that...but medical, I just don’t look at the costs in that way.”

—Consumer in San Mateo, California

cost, and **the certainty of the cost**. The phrase you use to describe cost will depend on what data you are able to provide. For example, the following statement provides all three of these aspects in defining “Average Cost of Office Visit Paid by Patient and Insurance:”

“Based on an average of actual payments made by patients and their insurance companies, this information gives you an idea of how much the patient and insurer might pay.”

Ideally, consumers should see an estimate of their personal out-of-pocket costs. However, Alliances may be able to provide only an average cost, which may include both the out-of-pocket cost to consumers and the cost to insurers.

Describing Relevant Quality Measures to Consumers

When describing summary scores in a display, such as those that reflect safety, effectiveness, and patient centeredness, use the following tested consumer-friendly labels:

- Methods to prevent medical errors
- Treatments proven to be effective
- Patient survey results

The sample display on comparative cost and quality information includes these labels. Other labels tested can be found in Appendix B.

Conclusion

Although very little meaningful cost information is currently available, there are several ways in which Alliances (and other public reporting organizations) currently providing or collecting new cost information can support informed decision-making and promote high-quality, affordable choices by consumers.

1. Be prepared to educate both consumers and employers on the availability of high-quality, affordable health care.
2. Target consumers who are responsible for paying for some portion (or all) of the costs of a service out of pocket.
3. Work with employers who are engaging in value-based purchasing and value-based insurance design to target consumers who may be most interested in this information.
4. Use these phrases when describing high-value care to consumers:
 - a. High-quality care at an affordable cost
 - b. High-quality care at a reasonable cost
5. Display quality, cost, and other comparative information (e.g., location, office hours) together on a single page.
6. Advocate for collecting and reporting more compelling and actionable measures for consumers. For example, lead or support initiatives to obtain consumer out-of-pocket costs, rather than the costs borne by purchasers and providers.

Appendix A: Methods

The American Institutes for Research (AIR) conducted 27 one-on-one, 90-minute interviews with health care consumers over three rounds of interviews in York County, PA; San Mateo, CA; and Memphis, TN. Across the three rounds of testing, AIR recruited consumers between 18 and 64 years old and a mix of gender, race/ethnicity, education, household income, chronic disease (existence and type), and health insurance type. Consumers showed a vested interest in health care costs (e.g., confirmed that they pay some or all of their health care costs out-of-pocket) and reported participating in activities that indicated they were seeking care (e.g., have looked online to compare doctors or hospitals or have changed physicians in the past year).

Interviewers followed a semi-structured protocol and presented materials to elicit reactions from participants. While creating the interview protocol and stimulus materials, AIR reviewed existing research, descriptions, and displays of cost data, including:

- A forthcoming publication by AIR and the California Health Care Foundation (CHCF) examining what consumers want from cost and quality information and factors affecting whether and how consumers use comparative quality and cost information in health care decision-making
- Research conducted by Judith Hibbard and Shoshanna Sofaer for the Chartered Value Exchanges on how to effectively present health care performance data to consumers
- Findings from consumer focus groups AIR conducted on consumer beliefs and use of information about health care
- Alliance and other websites displaying cost

Interviewers asked consumers about the types of costs they search for and consider, where they get that information, and how they view quality of care in terms of cost. Consumers were shown displays of quality and average costs of care for hospital procedures and displays of quality and costs of doctor office visits. When appropriate and available, the stimulus materials used actual content, providers, and data from the Alliances' websites.

Appendix B: What Worked and What Didn't Work

Describing High Value		
	<i>High Quality</i>	<i>Consumer Reaction(s)</i>
Best	High-Quality Care	<ul style="list-style-type: none"> • A majority of consumers understood this term and wanted to receive this type of care
	Higher-Quality Care	<ul style="list-style-type: none"> • A majority of consumers understood this term and wanted to receive this type of care • Several consumers questioned “higher than what?”
	Best Care	<ul style="list-style-type: none"> • Top-notch care • There is nothing better than the best
Ineffective	High-Value Care	<ul style="list-style-type: none"> • “Value” is interpreted to have both a quality and cost component • In terms of cost and quality, value was viewed inconsistently. Descriptions included: <ul style="list-style-type: none"> • Adequate quality at a low cost • High quality at a low cost • High quality at a high cost
	Good/Better Care	<ul style="list-style-type: none"> • Adequate care but not the best • Several consumers questioned, “Better than what?” • This care may be appropriate for the consumer but would not be good enough for their children or their parents
	Efficient Care	<ul style="list-style-type: none"> • Consumers considered efficient care to be negative overall • Described as the speed of the care, not the quality or how effective the care was
	Best/Proven Results	<ul style="list-style-type: none"> • Consumers stated that procedures can go wrong for a variety of reasons, so results cannot be guaranteed; thus, looking solely at results is not appropriate when determining quality of care

<i>Cost</i>		<i>Consumer Reaction(s)</i>
Best	Affordable Cost	<ul style="list-style-type: none"> • Consumers had a positive reaction • Consumers described this amount as in line with the financial situation of the consumer in question
	Reasonable Cost	<ul style="list-style-type: none"> • Consumers had a positive reaction • Consumers described this amount as in line with the financial situation of the consumer in question
	Lower Cost	<ul style="list-style-type: none"> • Consumers were comfortable with paying a lower cost • “Lower” was preferred to “low,” as a lower cost does not necessarily mean the quality was affected
Ineffective	Low Cost	<ul style="list-style-type: none"> • Consumers associated low cost with low quality • Some consumers equated this term to government programs like Medicaid
	Good/High Value	<ul style="list-style-type: none"> • “Value” is interpreted to have both a quality and cost component • In terms of cost and quality, value was viewed inconsistently. Descriptions included: <ul style="list-style-type: none"> • Adequate quality at a low cost • High quality at a low cost • High quality at a high cost
	Fair Price	<ul style="list-style-type: none"> • “Fair” has a different meaning to different consumers • Some consumers defined this as the middle price of what consumers pay • Some consumers defined this as a negotiated price

Describing Cost		
<i>Cost</i>		<i>Consumer Reaction(s)</i>
Best	Average Cost/Price	<ul style="list-style-type: none"> • Generally described as the amount paid by both the patient and his or her insurance company • This amount is the middle of the range of prices one might pay • Consumers understood the final amount may be more or less than this amount
	Estimated Total Cost	<ul style="list-style-type: none"> • Consumers liked this terminology, but that information is difficult for Alliances to provide
Ineffective	Total Cost/Price	<ul style="list-style-type: none"> • Generally described as the amount the patient pays out of pocket • Consumers described this as the cost of all work completed by the doctor or hospital
	Total Charge	<ul style="list-style-type: none"> • Consumers varied in opinion on who pays this amount—the patient, the insurance company, or both • Consumers said this amount includes the cost of all work completed by the doctor or hospital
	Retail Cost	<ul style="list-style-type: none"> • Consumers noted this term is not appropriate to describe health care costs • One consumer equated retail cost to “wholesale”

Describing Quality Measures		
Summary Quality Scores		Consumer Reaction(s)
Best	Uses Treatments Proven to be Effective	<ul style="list-style-type: none"> • Consumers like that effective results have been proven
	Uses Methods to Prevent Medical Errors	<ul style="list-style-type: none"> • This idea was concrete and measurable • Consumers enjoyed, appreciated, and understood the definition provided: “The doctor has systems to prevent medical errors such as surgery on the wrong body part or medication errors”
	Patient Survey Results	<ul style="list-style-type: none"> • Consumers were very interested in how others rated the doctor or facility
Ineffective	Gives Treatments that Experts Recommend	<ul style="list-style-type: none"> • Consumers asked, “Who are the experts?” This would determine how to use this information • Consumers stated this standard may prevent them from getting individualized care
	Methods Proven to Make Care Safer	<ul style="list-style-type: none"> • Consumers did not understand what these methods were and how they would be turned into ratings; they also stated that “make care safer” is too vague • Examples of methods provided by participants included sanitation, state-of-the-art methods to prevent infection, special equipment, and techniques that are new but tested.

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- ⁱ Hibbard JH, Greene J, Sofaer S, et al. "An Experiment Shows that a Well-Designed Report on Costs and Quality Can Help Consumers Choose High-Value Care." *Health Affairs*, 31(7): 560-568, 2012.
- ⁱⁱ *Consumer Beliefs and Use of Information about Health Care Cost, Resource Use, and Value*. Washington, DC: American Institutes for Research, October 2012, http://www.rwif.org/content/dam/farm/reports/issue_briefs/2012/rwif402126 (accessed August 2013).
- ⁱⁱⁱ Carman KL, Maurer M, Yegian JM, et al. "Evidence That Consumers Are Skeptical About Evidence-Based Health Care." *Health Affairs*, 29(7): 1400-1406, 2010.
- ^{iv} Yegian J, Dardess P, Doyle B, et al. *Consumer Use of Cost and Quality Information: Outline of Environmental Scan Findings*. Prepared for the California HealthCare Foundation, July 2012.
- ^v Hibbard JH, Greene J, Daniel D. "What Is Quality Anyway? Performance Reports That Clearly Communicate to Consumers the Meaning of Quality Care." *Med Care Res Rev*, 67(3): 275-293, 2010.
- ^{vi} *How to Display Comparative Information That People Can Understand and Use*. Washington, DC: American Institutes for Research, June 2010, <http://www.rwif.org/content/rwif/en/research-publications/find-rwif-research/2010/06/latest-from-aligning-forces-for-quality-communities/how-to-display-comparative-information-that-people-can-understan.html> (accessed August 2013).

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