During 2010 and 2011, eight community-based organizations tested new or existing public reporting websites with potential users to understand better how to engage their target audiences in quality information. These organizations are part of a larger effort called Aligning Forces for Quality, which is funded by the Robert Wood Johnson Foundation. This document presents recommendations for improving a public reporting website based on the lessons learned from that testing. The recommendations focus on three sections of websites that are particularly important to engaging and supporting consumers successfully in their health care decision-making:

- Home page
- Comparative reports of quality
- Health information

Each section summarizes what problem arose in testing, why this was a challenge for consumers, and how to address the challenge, along with some examples. The examples come from the websites of the eight Alliances that conducted testing.

Using these recommendations—in combination with the application of effective strategies to display comparative quality information and contextual information that help consumers understand and use quality information—will assist your organization in more effectively garnering consumer interest in your website, increasing overall traffic and return visits. Furthermore, these recommendations are actionable steps that your organization can take to support consumers in using the information to make health care decisions. For additional guidance, please refer to the following documents:

- “How to Display Comparative Information That People Can Understand and Use”
- “How to Report Results of the CAHPS Clinician & Group Survey”
- “How to Describe Health and Community Context for Comparative Performance” Reports: Sample Language for Five Health Topics”

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 $300 million 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/.

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Home Page

1. **Communicate the site’s purpose quickly and in terms familiar to the users.**

   To use your website effectively, visitors need to know what the site is about, what information they can find, and what they can do as a result of visiting your site. When the purpose of a site is not apparent in the first few seconds, visitors will leave the site or struggle to make sense of the information there. Clear information about the source of the site (an independent collaboration of community organizations) also is important to help visitors trust the content (see below, #3).

*Findings from Testing*

Participants could not identify what information a website provided; for example, they did not realize they could compare doctors or hospitals.

*Recommendations*

There are several ways to convey the website’s purpose, what information is available, and guidance about what users can find and do on your site:

- Add a purpose statement to the home page, e.g., *Quality health care. Be informed. Be involved.* See the [Oregon](#) website.
- Use action words such as *compare, choose,* and *learn* to engage users. See the [Maine](#) website.
- Use labels that are clear and meaningful to website visitors—especially for comparative reports and quality scores—such as *View & Compare.* See the [Puget Sound](#) website.
- When describing the rationale for the site in the About Us section, group the information into manageable chunks with subheadings, such as *Why was this website created?* or *The purpose of this website.* See the [About Us](#) page on the Humboldt website.
- Provide access on the home page to information about the reports, including information on the data collection process, to reinforce the credibility and trustworthiness of the reports and the website. See [About Our Reports](#) on the Puget Sound website.

2. **Explain the concepts of “high-quality health care” concisely and clearly on the home page.**

   One of the main messages on the Alliance websites is *quality varies.* To explain how quality varies, the Alliance websites must first define high-quality health care—care that is effective, safe, tailored for patients’ needs, and delivered by professionals who are respectful, communicate clearly, and involve patients in decision-making (see the [Aligning Forces for Quality brochure](#)). The Alliance websites also strive to communicate the message that health care quality data can help consumers make decisions about their care.

*Findings from Testing*

Visitors were not familiar with the concepts of quality measurement and reporting and found it difficult to apply the quality data to their health care decision-making. Participants defined quality of care differently than how it was defined on the sites. For example, some defined high-quality as “good bedside manner” or “a doctor who is very knowledgeable” and did not connect their definitions to data available on the site, such as patient experience survey data. Participants also were unfamiliar with the terms used in data displays, such as *Quality Scores* and *Community Checkup.* In many cases, they did not relate the term “reports”—as in *About the Reports* and *View the Reports*—with the comparative data.

These lessons learned are based on testing of the following websites:

- Albuquerque Coalition for Health Care Quality
- The Health Improvement Collaborative of Greater Cincinnati
- Community Health Alliance of Humboldt-Del Norte, Inc.
- Kansas City Quality Improvement Consortium
- Maine Quality Counts
- Oregon Health Care Quality Corporation
- Puget Sound Health Alliance
- Wisconsin Collaborative for Healthcare Quality
Recommendations
Use an organizing framework to explain the concept of quality of care. For example, include:

- High-quality health care is timely, safe, based on the latest evidence, and delivered by providers who know what they are doing and who pay attention to patient needs. See the Albuquerque website.
- The Learn, Compare, Act framework is used in the Wisconsin website. The Learn section provides useful information to website visitors about health care quality to better orient them to—and engage them in—reports in the Compare section.

3. Introduce your organization and emphasize its role in creating the website and delivering information.
Accessible information about the source (an independent collaboration of community organizations) and the purpose of the information provided is important to help visitors trust the content.

Findings from Testing
When participants had difficulty locating information about who created the website, they expressed concerns about possible bias and mistrust of the information. They sometimes thought the site was created by a health insurance company. When participants did find the source information and understood it, they were reassured by the collaborative nature of the Alliance and its participants. It made them feel the information was trustworthy and not biased. Visitors are more likely to dig deeper in—and return to—websites they find trustworthy and unbiased.

Recommendations
The collaborative nature of the Alliance and the website can be conveyed in several ways:

- List the participating entities, as shown on the Albuquerque site: Click here to see a list of our Leadership Group participants. Note that this example uses a PDF file, which is more burdensome to visitors than a link to another page. A better approach to conveying the information would be HTML text.
- Provide a list of collaborating entities, for example in About This Work (under About Us & Our Partners) on the Oregon website or in About Us (under Our Partners) on the Maine website.

4. When providing visual elements (photos, silhouettes, cartoon characters, videos, etc.), keep them simple, clear, and relevant to the core purpose of the site.
Visual elements can increase the appeal of the website, help visitors feel welcome, gain their trust, enhance site credibility, and capture and maintain their interest throughout their visit. However, if the audience does not find the images appealing, trustworthy, or relevant, they will either ignore the information or have a negative reaction to them and your site.

Findings from Testing
Participants often did not identify with the images (photos, graphic silhouettes, or cartoons). For example, participants often felt the site was geared for older people, for people who are not overweight, or for people otherwise not like them.

Web usability testing showed that participants would not click on video clips if, based on reading the description of the initial image, they thought the clips were not appealing, trustworthy, or interesting. Videos must be relevant and briefly described in a way that captures interest.

Regarding social media icons, including Facebook and Twitter, participants generally did not notice them unless they were avid users of one of them. Most expressed they would not share the site through the use of Facebook and Twitter.

Recommendations
Website visitors can be positively engaged through the use of appealing graphic elements, including images (photos, silhouettes, cartoon graphics) representing various genders, ages, weights, races/ethnicities, and even family
units (parents with children as opposed to portraying older individuals). See the images on the home page of the Cincinnati website.

- Engage website visitors through the use of images of people involved in healthy behaviors, such as walking a dog or riding a bicycle. See the Wisconsin website.
- Add descriptive text to the Facebook and Twitter icons and include a call to action such as Follow us or ‘Like’ us to stay up-to-date on health care news.
- Before adding new visual elements to your site, test them with your audience to ensure they are relevant and your audience can identify with them.

### Comparative Reports of Quality

#### 5. Provide quality data using a consistent framework.

The purpose of displaying comparative quality data is to help users apply the data to their health care decisions. A framework that is introduced on the home page and integrated throughout the entire website will clearly organize information so it is easier for participants to understand and use.

**Findings from Testing**

When the website does not have an obvious framework that is explained clearly and consistently and used throughout the website, visitors can become lost and frustrated. Findings from web usability testing showed participants could not identify what quality information about medical offices was available when the following categories were used: Prevention, Diabetes Care, Cost-Effective Care, Patient Experience (Adult), and Patient Experience (Pediatrics). Participants found it difficult to identify the types of hospital quality information available when the following categories were used: Performance Measures, Outcome of Care, and Medicare Procedure Costs. Although action words are useful for engaging consumers, participants found the Learn, Compare, Act framework difficult to interpret without additional language or context to distinguish the three words.

**Recommendations**

Reinforce the framework introduced on the home page by using the same categories throughout data displays. For example, Maine used the categories Safe, Effective, and Patient Experience in its comparative reports section. (Because not all users are able to define Patient Experience or Patient Satisfaction, it is important to test this terminology with local consumers and provide clear definitions within the quality scores.)

#### 6. Use proven strategies for displaying quality data as well as clear labeling to help users interpret and apply the data to their personal situations.

For example, word icons, which combine symbols with a descriptive word (see examples in box), have been found to make it easier for users to identify and understand patterns in the scores.

**Findings from Testing**

Users often had trouble interpreting data in displays with numbers and bar charts. The labels on the displays, including those for the Score or Measure, were not always clear to the users.

While word icons were generally effective, some participants wanted to know in detail what the word icons meant and how they were created. In some cases, the words in the icons, such as Best and Average, were not clearly defined. Also, some participants looked for but could not find links to information explaining the word icons. As a re-
sult, some participants interpreted word icons to mean more than they did—for example, *Best* was perceived to mean that a provider exceeded all state and national averages in a certain measure.

**Recommendations**

Word icons helped visitors recognize patterns such as identifying top performers within and across measures. See word icons in data displays on the [Oregon](#) and [Puget Sound](#) sites. When using word icons, be sure to explain them on the page where they are presented to minimize the risk of misinterpretation.

It is also important to describe how the icons or text were derived. See an example of explanations on the [Oregon](#) site by clicking on *See details on data and scoring*.

7. **Provide strategies to help users limit the number of providers to reduce cognitive burden.**

   When faced with multiple providers and scores, people will look for ways to prevent “information overload.” Providing strategies that allow the user to select the type and amount of data to be compared (for example, by type of provider or geography) can help people process the information and make comparisons based on what is of interest to them.

   **Findings from Testing**

   Participants who saw data available for all providers/hospitals at once had trouble comparing them and selecting some to compare.

   **Recommendations**

   Provide strategies that allow the user to select the type and amount of data to be compared.

   - Maine and Cincinnati are two sites that allow visitors to select the type of—and limit the number of—providers for comparison.
   - The Oregon site allows visitors to select providers based on geography.

8. **Provide summary scores to show an overview of the performance of several providers at once.**

   Summary scores combine multiple measures into a single score, which reduces the amount of information a user has to process. They also allow quick comparisons across medical offices/providers and hospitals and potentially across conditions. Summary scores also can help users focus on topics of interest to them (e.g., patient safety) and then “drill down” to individual measures as desired.

   **Findings from Testing**

   Participants had difficulty understanding and interpreting multiple measures at the same time and found it difficult to apply information about multiple measures into decision-making.

   In addition, the participants wanted to see information for several hospitals at once as well as information about more than one condition at a time, noting that individuals or their families can have more than one condition.

   **Recommendations**

   When possible, provide one or more summary scores for the measures you are presenting. Since some people have trouble understanding what an “overall care score” represents, be sure to explain how those overall scores were developed and present information about the individual measures they contain.

   - The Cincinnati website allows individuals to view providers within a specific geographic area and shows the overall score (by condition) for each practice. The site explains the overall score, offers a point of reference using a bar that represents the Greater Cincinnati regional average, and provides the option to show scores for each goal.
   - Other Alliances that provide overall scores include Wisconsin and Oregon (overall score is available for hospitals only at this site).
9. **Provide information about the data sources that is clear, understandable, and easy to find.**

Sites do provide information regarding the source of data, but often they is not easy to find or understand.

**Findings from Testing**

Many people have little or no experience with comparative quality data. They are not familiar with the data sources or how the data become a “measure.” If the lack of familiarity is combined with an inability to identify a source, distrust can result—potentially causing visitors to leave the site and not return. Participants had difficulty identifying the data sources, even after reading text describing the source of data. Participants trusted the information less if they did not know the source of the data.

**Recommendations**

Information about the data sources can be presented so it is easy to understand and is available in various parts of the website. For example, the home page can include a brief sentence or two explaining where the information is from and why it’s credible; it also can note whether the information is audited or reviewed in any way. This information also should be available in the context of the data displays. Some sites provided good information about the data, but it often was overlooked by participants because it was buried within the data tables. Effective examples include:

- The Oregon website provides a good explanation of the data source in the link *About the scores* under *Compare Hospitals*.
- Wisconsin explains the measures in sections called *What is this?* and *Why is this important?*
- Cincinnati explains how data is collected and analyzed in *About the data*.

10. **Provide additional information people consider important when making decisions about health care.**

When making health decisions, people consider a variety of factors, such as whether providers are part of their health insurance plan, near to home and work, and accepting patients. Providing quality data with this additional information in one place makes it easier for users to make a decision.

**Findings from Testing**

Participants found it important to know what type of health insurance was accepted; whether a provider was accepting new clients; the provider’s specialty, certification, and education history; cost; distance from their home or work; office hours; and a link to the doctor’s website.

**Recommendations**

This information can be added by including a link to a page that contains this information.

- Cincinnati and Kansas City refer to this information as *Primary Care Practice Profile* and *Provider Profile*, respectively. For example, by clicking on a provider/practice name on the Cincinnati website, visitors see a page with information on that provider, including: office hours, whether new patients are being accepted, the types of insurance accepted, use of electronic medical records, languages spoken, and whether a certified diabetes educator is available, among other things.
- Another example is available on the Maine site by clicking on the name of each medical practice. A box pops up with additional information for each medical practice.

11. **Explain how people can apply the quality information available on the website.**

Many visitors have little awareness or experience with quality information and need help to apply the information provided to them through the Alliance websites.

**Findings from Testing**

It was not readily apparent to participants how they could use the quality information to make decisions about their health care. Individuals may need guidance in applying the information to their personal situations and within their
local environments. Such guidance could include cues about how to use the quality data to select a provider or a hospital or links to additional resources within the community.

Recommendations

- The Oregon website includes a series of tip sheets (in the Tips for You section) as well as a resource library. The tip sheets cover topics such as How you can get care that works, How to get the right amount of the right kind of care, and Getting quality care in the hospital.
- The Wisconsin website offers site visitors information on what to do with the information they have gained. Their section called Act (from Learn, Compare, Act) provides site visitors with three things they need to do: 1. Expect quality. 2. Develop partnerships with people on your health care team, and 3. Get organized. The site provides information on how to do each of these things through a series of tip sheets, such as Expect quality tip sheet and Quality scenario tip sheet, among others.

Health Information

12. Provide information on how to manage overall health and specific health conditions.

People are generally more familiar with making decisions about their health than with using quality data. They bring that experience when they visit a public reporting website and expect to see information on how to manage their overall health as well as their health condition, such as tips on how to manage their diabetes or asthma. This type of information will provide a larger context to help users understand the purpose and meaning of the quality scores and the scores’ relevance to their health and health care.

Findings from Testing

The connection between the health information, including how to manage overall health and specific health conditions, and the comparative reports of quality was not clear to many users. They also did not always make the connection between information about the condition, including contextual information such as who is at risk? and how does the condition affect our community? and the quality data.

Recommendations

Participants responded very favorably to the health information provided on the Alliance websites. It was not only what they expected to see, but the information provided on specific conditions was well understood and received. Participants noted it was important to provide clear, concise, and actionable tips for different conditions, (e.g., tips for living with diabetes, high blood pressure, or heart disease) and tips on how to keep healthy. Participants also noted it would be useful to provide links to community resources. They thought questions to ask their doctor (e.g., What blood tests should I get?) would make the information actionable. Providing this type of information will help users better understand that their behaviors can improve the quality of care they receive.

- Offer examples of what people can do to improve their health, such as getting screening and monitoring tests and making behavioral changes (for example, eating healthy foods and increasing physical activity). See the checklist at the Maine website and Tips for staying healthy on the Oregon website.
- Provide tips to manage health conditions on the same page as the quality scores. The Oregon website includes PDF documents, linked from the Quality Scores for each health condition or topic, with information about each health condition (or topic) and tips for getting quality care. For example, Asthma basics and getting quality care provides contextual information on asthma as well as information on the recommended care, including a checklist of what doctors should do at each stage of asthma. Finally, the document explicitly links the health condition information to the quality scores and encourages readers to take action: You can use Partner for Quality Care quality scores to compare how well Oregon doctors’ offices give recommended care at www.PartnerForQualityCare.org.
Include contextual information on the same page as the quality scores. The Kansas City website includes contextual information on the same page as the quality data. For each of the health topics with quality information, it explains:

- Who is at risk
- Why it is important
- What you and your doctor should do
- How it affects our community

See the Puget Sound website for another example of how to incorporate contextual information into reports.