Expert Website Usability Assessments of the State-Based Marketplace Websites: Summary Results and Recommendations

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Expert Website Usability Assessments of the State-Based Marketplace Websites: Summary Results and Recommendations

Introduction

The Health Insurance Marketplaces (Marketplaces), authorized by the Affordable Care Act (ACA), have been helping individuals and small employers shop for, select, and enroll in high-quality, affordable qualified health plans (QHPs) since October 2013. During the inaugural 2014 open enrollment period, the Marketplaces successfully enrolled more than 8 million Americans.[1] The Marketplace websites are one of the primary ways that those consumers:

- Determine their eligibility for QHPs offered through the Marketplace and public and private subsidies,
- Compare and choose a QHP, and
- Enroll in a plan.

Although the websites were instrumental in this enrollment process, many challenges and lessons were learned from the first open enrollment period. To help states improve their websites for the next open enrollment period, the Centers for Medicare & Medicaid Services (CMS) contracted with American Institutes for Research® (AIR®) to conduct usability assessments of the State-based Marketplace (SBM) websites.[2] AIR employed experts in a variety of disciplines, including measure development, public reporting, plain language, consumer engagement, and website usability to conduct the assessments. The 17 SBM websites reviewed include Marketplace websites maintained by California, Colorado, Connecticut, the District of Columbia, Hawaii, Idaho, Kentucky, Maryland, Massachusetts, Minnesota, Nevada, New Mexico, New York, Oregon, Rhode Island, Vermont, and Washington.

Usability refers to:

- "… how quickly people can learn to use something, how efficient they are while using it, how memorable it is, how error-prone it is, and how much users like using it."[3]

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[1] Department of Health and Human Services. (May 1, 2014). Health Insurance Marketplace: Summary Enrollment Report for the Initial Annual Open Enrollment Period. For the period: October 1, 2013–March 31, 2014 (Including Additional Special Enrollment Period Activity Reported through 4-19-14). Retrieved from http://aspe.hhs.gov/health/reports/2014/MarketPlaceEnrollment/Apr2014/ib_2014Apr_enrollment.pdf.

[2] This work is part of CMS' contract with AIR to provide technical assistance (TA) to the Marketplaces to help them improve consumers' experiences with the services they offer. The contract with AIR also funds the development, testing, and implementation of two consumer experience surveys, which will provide standardized information on consumers' experiences with the Marketplaces and QHPs. For further information about the survey, see http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Health-Insurance-Marketplace-Quality-Initiatives.html.

[3] Nielsen, J., & Loranger, H. (2006). *Prioritizing Web Usability*. Berkeley, CA: Nielsen Norman Group.

The purpose of the usability assessments was to determine whether the websites adopted the principles for making a website usable for consumers and whether information about determining eligibility, comparing and choosing a health plan, and enrollment was readily accessible to the consumer. The usability principles adopted in this assessment were based on:

- Heuristics, originally developed by AARP;[4]
- Key elements of design, as detailed in the Aligning Forces for Quality (AF4Q) guide on displaying comparative data effectively;[5]
- A website usability approach by Informed Patient Institute;[6]
- Past heuristic reviews conducted by AIR for the AF4Q Alliances;[7]
- The Healthy People 2020 health care website usability measure (8.2);[8] and
- Recommendations from http://usability.gov.[9]

During the usability assessments, the reviewers did not seek to verify the accuracy of the information or whether consumers could use the website to determine eligibility, compare and choose plans, or enroll in a plan. Although adopting usability principles is an important first step toward developing a successful website, it does not necessarily indicate that the website was effective for its ultimate purpose of enrolling consumers. A number of other factors beyond the scope of this assessment had an impact on the effectiveness of the websites for online enrollment during the first open enrollment period.

This summary report identifies the strengths and weaknesses across the SBM websites and lists recommendations with examples of model practices to improve the consumer experience, especially in areas where most SBMs were suboptimal. These examples draw from a comparison of all SBMs to identify and showcase (using screenshots) some of the best practices from the Marketplaces. The screen shot examples are illustrative of good website usability standards, but as described previously, the examples do not imply the website was effective for helping consumers determine eligibility, compare plans, or enroll. The results and recommendations presented in this report are intended to help the Marketplaces revise and improve their websites prior to the next open enrollment period.

To augment the results from this report, future efforts during the 2015 open enrollment period will include a consumer usability assessment of SBM websites (where feedback will be sought

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[4] Chisnell, D., & Redish, J. (2005). Designing web sites for older adults: Expert review of usability for older adults at 50 web sites. AARP. Retrieved from http://assets.aarp.org/www.aarp.org_/articles/research/oww/AARP-50Sites.pdf

[5] American Institutes for Research. (2010). How to display comparative information that people can understand and use. Retrieved from http://www.rwjf.org/content/dam/web-assets/2010/07/how-to-display-comparative-information-that-people-can-understan

[6] Informed Patient Institute. (n.d.). How do we rate sites?. Retrieved from http://www.informedpatientinstitute.org/howwerate.php

[7] More information on the Alliances is available at http://www.forces4quality.org/welcome.

[8] Centers for Disease Control and Prevention. (n.d.). Healthy People 2020 Topics and Objectives, Health Communication and Health Information Technology. Retrieved from http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=18

[9] U.S. Dept. of Health and Human Services. (2006). The research-based Web design & usability guidelines, enlarged/expanded edition. Washington, DC: U.S. Government Printing Office. Retrieved from http://guidelines.usability.gov/

directly from consumers as they are guided through activities on the websites) for states that desire such an assessment.

Using This Report

This report is intended to be a companion to SBM-specific reports, which summarize the strengths and weaknesses of each Marketplace's website layout and features. Results from the 17 SBMs are presented with examples of how the SBMs can improve their websites, with a focus on areas where many SBM scores were suboptimal. Screenshots of SBM websites accompany each recommendation to provide an example of how SBMs could implement each of these usability functions to improve the consumer experience.

Some of the recommendations, such as small changes in web content, may be relatively easy to implement. Other recommendations may require more extensive resources and time, such as changes that require extensive programming or additional Marketplace infrastructure. Each Marketplace will want to prioritize the recommendations based on available resources and, in some cases, consider implementing the recommendations over more than a single year.

How AIR Assessed Website Usability

To assess the usability of the websites, AIR experts in measure development, public reporting, plain language, consumer engagement, and website usability developed a standardized assessment tool that examined a website's functionality and ease of use. Experts reviewed existing tools, heuristics, and usability recommendations to develop 93 measures, organized under 7 major topics, listed below.

1. **Comparing and choosing a health plan** assesses how a website helps consumers compare and choose QHPs based on characteristics such as metal level (i.e., plan categories with different cost-sharing structures), plan benefits and coverage, cost, and other measures. This helps consumers better understand their options and make more informed decisions when choosing a health plan.
2. **Determining eligibility** examines how a website helps consumers determine their eligibility for QHPs and public and private subsidies, which is one of the key functions of these websites.
3. **Information seeking and outreach** looks at how a website instructs consumers to access assistance via phone, the Web, or in-person, in their preferred language. Providing information via multiple modes can help consumers use the Marketplace better and help Marketplaces maximize enrollment.
4. **Information architecture** is the organization and structure of a website and how information is presented. This is important to ensure that consumers can locate the information they need.
5. **Ease-of-use and accessibility elements** examine a website's use of techniques to simplify the user experience. One of the key principles in creating an effective website and positive consumer experience is indicating clearly what a user can find and do on a web page and providing accessible multimedia. A user-friendly website will also encourage return or repeat visits by users.

6. **Content design** includes how website content is communicated to the consumer, such as using the active voice and avoiding jargon. This is critical to ensure that the consumer understands the content as intended.
7. **Disclosure elements** focus on whether a website identifies for the consumer the person or organization sponsoring the website, including providing contact information. This is important for establishing trust in a website.

Conceptually similar measures were grouped into domains within each topic, as shown in table 1. A total of 21 domains were covered in the usability assessment.

Table 1. Website Usability Topics, Domains, and Measures

Topic	Domains	Number of Measures
1. Comparing and choosing	• Comparative displays • Services supporting comparison and selection • Provider network information • Comparative health plan information	22
2. Determining eligibility	• Enrollment application accessibility • Determining eligibility • Eligibility appeals	14
3. Information seeking and outreach	• Access to help and assistance • Language services • User feedback	11
4. Information architecture	• Easy-to-read elements • Skimmable pages • Clear visual hierarchy • Search functionality	15
5. Ease-of-use and accessibility elements	• Conventional interaction elements • Simplified user experience • Site functionality and clear feedback signals • Accessible multimedia	18
6. Content design	• Focus on audience and purpose • Consumer-friendly language	9
7. Disclosure elements	• Disclosure elements	4

Scoring

Depending on what was being assessed, specific website features were rated against a usability standard in one of three ways: present or not (yes or no); 4-point scale for consistency (rarely or never, sometimes, most of the time, always); or quality of presentation of information (poor, fair, well, very well). Domain scores were calculated by counting how many measures scored at or near the top of their categorical scoring scale and dividing by the total number of measures

within the domain (appendix B). This domain score was converted into a percentage and then the average percentage across all domains was calculated to create the SBM average score.

The assessment tool can be found in appendix A: Health Insurance Marketplace Website Usability Assessment Tool. A detailed description of how the assessment tool was created, the assessment protocol, and the scoring approach can be found in appendix B: Methodology. Figures that show the de-identified SBM scores for each domain are found in appendix C: SBM Scores for Each Domain.

Organization of the Report

The report is organized into the following sections:

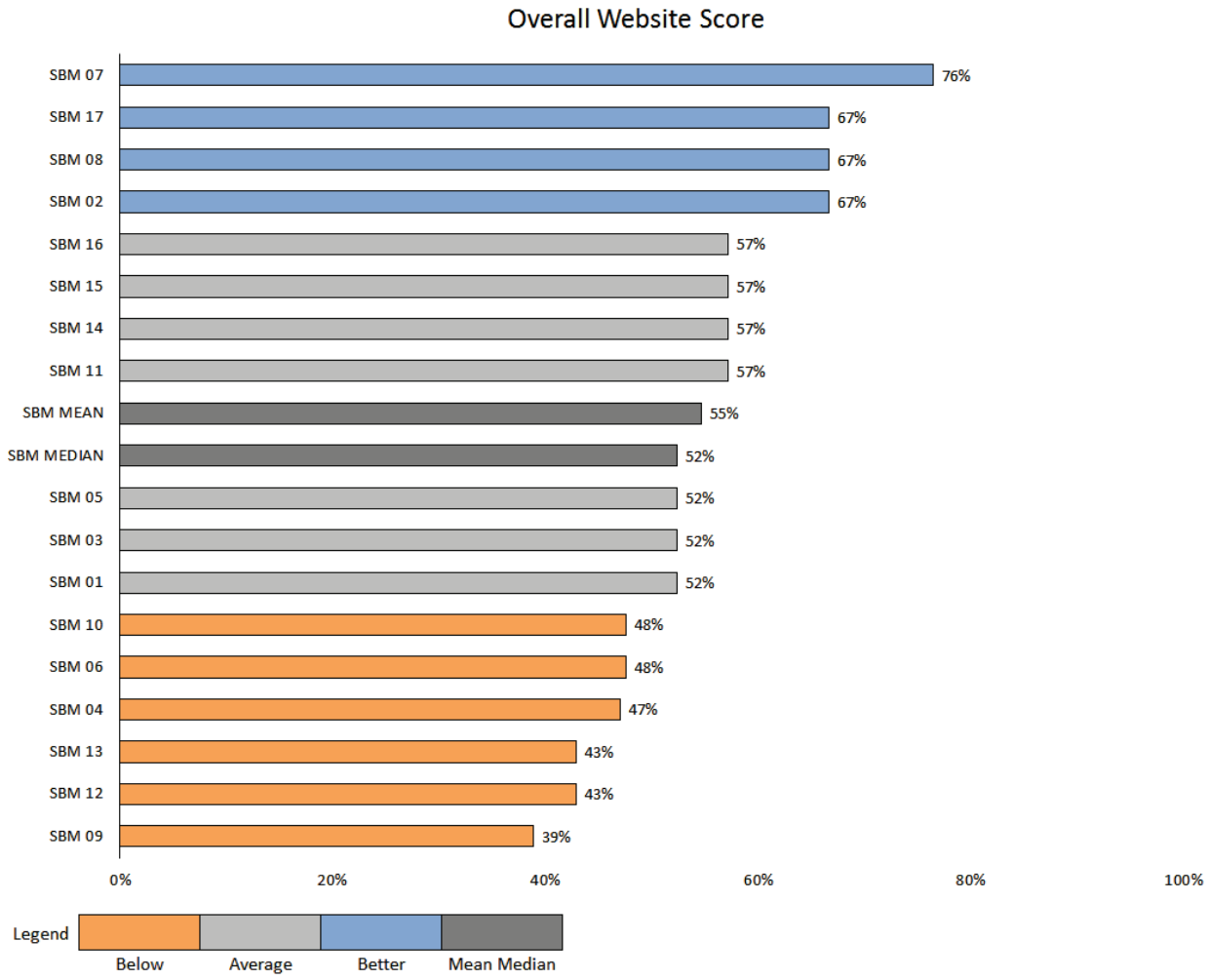
- **Overall Summary Scores**—Describes the overall scores across the 17 SBMs, including the average score and the average for each usability domain.
- **Summary Recommendations**—Organizes and presents all recommendations to improve the consumer website experience in a table format for each of the seven assessment topics.
- **Topic-Specific Results and Recommendations**—Presents the SBM average scores for each domain within the topic and then presents the recommendations, which are based on measures in which SBM scores were suboptimal. (Reminder: Conceptually similar measures are grouped into domains within each topic.) Below each recommendation, data are presented to support the recommendation (i.e., the measure's domain, the measure's SBM average score, and a description of the example screen shot).

Overall Summary Scores

The usability assessment scores represent the percentage of measures that were rated as being at the top of a categorical rating scale. Two types of summary scores were created from the state scores: an overall average (mean) score and an average (mean) for each usability domain (subcategory under a usability topic).

Overall Average Score. The mean score across all SBM websites and topics was 55 percent (range: 39–76%). This indicates that, on average, websites scored at or near the top of the scoring scale for approximately half of the domains. The low mean score demonstrates that there is significant room for improvement for most of the SBMs. In figure 1, the SBM mean and median usability scores are compared to each SBM's score, which shows the variation across the SBMs. Four websites scored better than the mean, seven sites scored within a close range of the mean, and six scored below the mean. Only a few SBMs had high overall scores, which confirm the need to implement website improvements to improve the consumer experience.

Figure 1. Average SBM Website Usability Score and Scores for Each SBM



Average Usability Domain Score

The average usability domain scores across SBMs are shown in figure 2. In 13 of the domains, the experts rated the websites as 61 percent or higher (blue bars). The domains where the SBMs scored the highest, on average (80% or above), were:

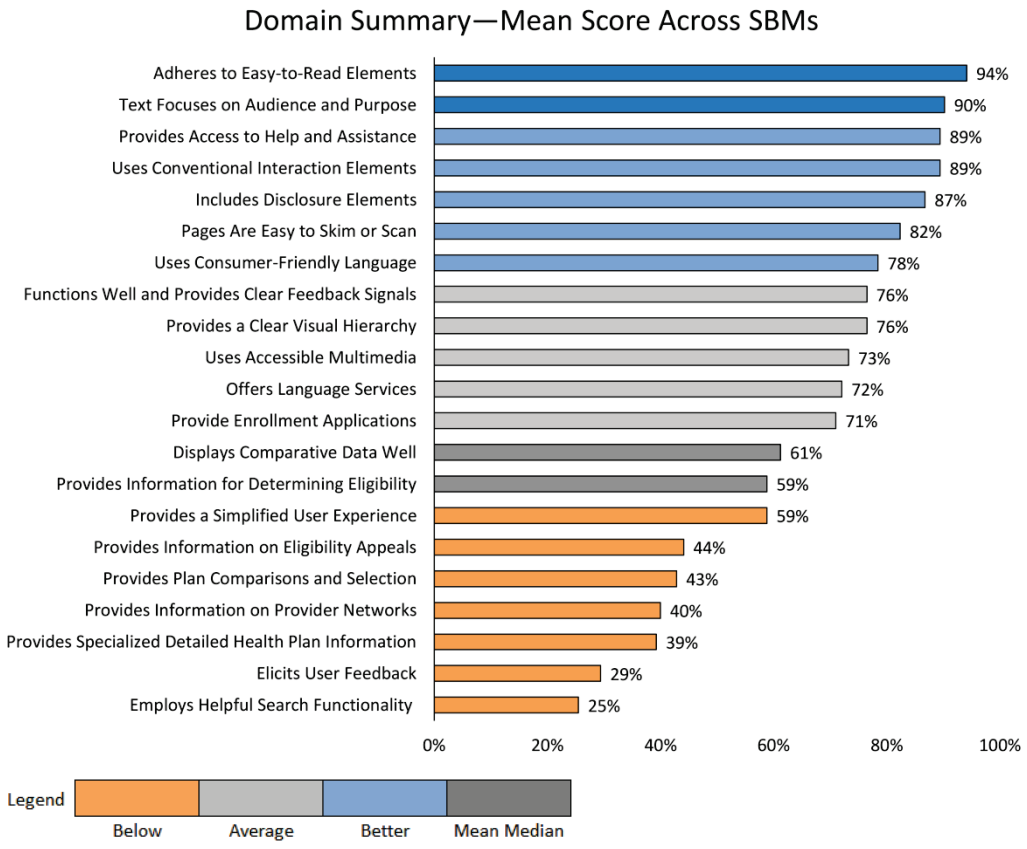
- Adheres to easy-to-read elements,
- Text focuses on audience and purpose,
- Provides access to help and assistance,
- Uses conventional interaction elements,
- Includes disclosure elements, and
- Pages are easy to skim or scan.

However, there remains room for substantial improvement in eight domains. The domains where the SBMs scored lowest (60% or below, shown in orange in figure 2) on average, and thus are most in need of improvement, were:

- Provides information for determining eligibility,
- Provides a simplified user experience,
- Provides information on eligibility appeals,
- Provides plan comparisons and selection,
- Provides information on provider networks,
- Provides specialized detailed health plan information,
- Elicits user feedback, and
- Employs helpful search functionality.

The domains in which the SBMs scored lowest were the domains that are central to the core mission of the websites: to help consumers determine their eligibility, compare and choose a health plan, and enroll in a plan. SBMs may want to consider implementing improvements in these areas to improve consumers' experiences with the websites.

Figure 2. SBM Mean Usability Domain Scores Across SBM Websites



Summary Recommendations

Table 2 summarizes recommendations to improve the consumer website experience for each assessment topic (the topics are presented in the order of their overall scores from lowest to highest). Comparing and choosing a health plan was the topic in which the most SBMs scored poorly and is in need of improvement.

Recommendations. A number of Marketplaces could improve the consumer experience with the websites by:

> **Expanding the information available to help consumers compare and choose a health plan** (e.g., provide side-by-side comparative health plan information, services to support comparisons, and information on provider networks).

Although SBMs provided information about the health plans on their websites, some of the websites did not allow consumers to compare health plan features across health plans or offered only a limited amount of comparative information. More specific details about how SBMs performed on average for each topic and examples of how states can improve their websites to improve the consumer experience are provided in the following sections.

Table 2. Overall SBM Website Recommendations and Rationale, by Topic

Topic	Recommendations	Rationale
1. Comparing and choosing	• Provide comparative health information on additional health plan features, such as requirements or prerequisites for obtaining care (e.g., referral to a specialist), an estimate of total costs for the consumer (accounting for premiums and costs from anticipated health care service use), and quality measures (e.g., patient experience).	• Helps consumers understand the features of each health plan and make a more informed decision when selecting a health plan that meets their needs.
	• Expand upon existing filters to help consumers compare and choose a health plan by including customizable filters that allow consumers to indicate their health plan preferences or needs (e.g., expected health care service use).	• Enables consumers to narrow down the list of health plan options more quickly based on their preferences (e.g., lower monthly costs) as well as their anticipated health care service needs.

Topic	Recommendations	Rationale
1. Comparing and choosing (continued)	• Provide a mechanism for consumers to search for plans by a specific doctor, a list of providers for each plan, and/or health plan results by location or services available in consumer's area. This can be done via the Marketplace website or a link on the Marketplace website to the insurer's site.	• Enables consumers to compare plans that offer services in their immediate area.
	• Help consumers compare and select a metal level by characteristics such as premium (e.g., provide a range or average of premiums for each metal level), cost sharing (e.g., provide a range or average of copays for each metal level), and access to out-of-network providers. Also, enable consumers to filter metal-level search results based on their preferences or needs.	• Helps consumers to better understand the differences between each metal level and make a more informed decision when selecting a metal level.
	• Provide the source of the measures (including how measures are obtained and who they are obtained from) when displaying comparative measures.	• Helps consumers understand and develop trust in the measures.
2. Determining eligibility	• Provide information about consumers' right to appeal an eligibility decision and how they can appeal an eligibility decision.	• Helps consumers understand their rights and options if they do not agree with an eligibility determination.
	• Provide information about how to obtain Medicaid, Children's Health Insurance Program (CHIP), and tax credit information through the mail.	• Benefits consumers who are unable or choose not to pursue this information online and will help them understand the eligibility and enrollment process.
	• Provide an estimate of how long it will take to complete the application.	• Increases the transparency of the application process.

Topic	Recommendations	Rationale
3. Information seeking and outreach	• Implement a way for users to submit feedback about the website, and describe to consumers how their input will be used to improve services or operations.	• Encourages and allows consumers to submit suggestions to help improve the user experience.
	• Make paper applications for determining eligibility and enrolling in a health plan in languages other than English available and easy-to-locate from the website, particularly if the state has a large percentage of the population that is non-English speaking.	• Allows non-English speakers a way to apply if they are uncomfortable or unable to provide information online or via phone.
4. Information architecture	• Provide a universally located text box for searching the site and make sure the site provides corrective options for misspelled search terms or suggestions and/or provides predictive text.	• Improves user access to relevant information, and also builds trust and credibility with users.
	• Use bullets and lists with suitable spacing as appropriate on the websites.	• Breaks up the text and makes it easier for the consumer to locate the information of interest.
5. Ease-of-use and accessibility elements	• Include print options or printer-friendly tools.	• Benefits consumers who find printed materials easier to read and reference.
	• Provide alternative text for links, images, video, and animation throughout all pages of the website.	• Improves accessibility to people with disabilities who use assistive technologies (e.g., screen reader programs). This is a federal requirement (Section 508 compliance); state requirements may vary.
	• Provide informative error messages when a consumer navigates to a Web page that does not exist or is currently not functioning.	• Assists users in navigating to the parts of the website they are seeking.

Topic	Recommendations	Rationale
6. Content design	• Define new or technical terms (e.g., pre-existing conditions, out-of-pocket costs, and provider networks) on the same page in which they are used.	• Helps consumers—especially consumers with low literacy or who lack experience with health insurance—better understand and use the information to make a more informed decision when applying for insurance, comparing and choosing health plans, and enrolling in a plan.
7. Disclosure elements	• Display the date content was created, reviewed, modified, updated, or copyrighted on each Web page.	• Informs consumers of how current the information is and when it was last updated.

Topic-Specific Scores and Recommendations

Topic 1. Comparing and Choosing a Health Plan

The reviewers examined comparing and choosing a health plan based on an assessment of 22 measures in 4 domains that assess whether the website:

1. Displays comparative performance measures or ratings (e.g., quality measures),
2. Provides services to support the comparison and selection process by displaying information side-by-side or on the same page (e.g., comparative information on the metal levels, such as platinum and bronze; asks consumers questions about needs or preferences to filter results),
3. Provides information on provider networks (e.g., a list of providers) on the Marketplace website or via a link to the insurer's site, and
4. Has comparative health plan information on several topics (e.g., benefits and coverage, out-of-pocket limits and other types of information that is displayed side-by-side or on the same page).

Results and Recommendations for Comparing and Choosing a Health Plan

Results. Of all the topics assessed, the SBMs scored lowest on comparing and choosing a health plan (table 3). The SBM average domain scores for this topic ranged from 39 to 61 percent; displays comparing information was the strongest domain and comparing health plan information the weakest.

See figures C–1 to C–4 in appendix C for graphs of the comparing and choosing a health plan domain scores that show the SBM average score in comparison to each SBM's de-identified score.

Some websites required personally identifiable information before allowing consumers to browse plans, which may negatively affect consumers who want to browse plans as part of their decisionmaking process without providing this information. SBMs should consider allowing

consumers to view at least some information about the health plans before requiring personally identifiable information.

Table 3. Comparing and Choosing a Health Plan Scores for the SBMs, by Domain

Domain	SBM Average Score
Comparative displays (see figure C–1)	61%
Services supporting comparison and selection (see figure C–2)	43%
Provider network information (see figure C–3)	40%
Comparative health plan information (see figure C–4)	39%

Recommendations. To improve comparing and choosing a health plan elements on the site:

Provide comparative health information on additional health plans features, such as requirements or prerequisites for obtaining care (e.g., referral to a specialist); an estimate of total costs for the consumer (accounting for premiums and costs from anticipated health care service use); and quality measures (e.g., patient experience). Quality measures should be accompanied by labels that clearly describe the measures to ensure that consumers understand them. This will help consumers understand the features of each health plan and make a more informed decision when selecting a health plan that meets their needs.

Domain: Comparative health plan information

Measure-specific scores for this recommendation:

For requirements or prerequisites for obtaining care, SBM average score—46%
For estimate of total costs, SBM average score—41%
For quality measures, SBM average score—25 to 79% depending on the measure

Example: In figure 3, the estimated total annual cost to the consumer was calculated after the consumer answered a series of questions about his or her typical health care use. In figure 4, a website displays stars to help consumers compare plans by their quality ratings.

Figure 3. Example of a Total Estimated Cost for Consumers

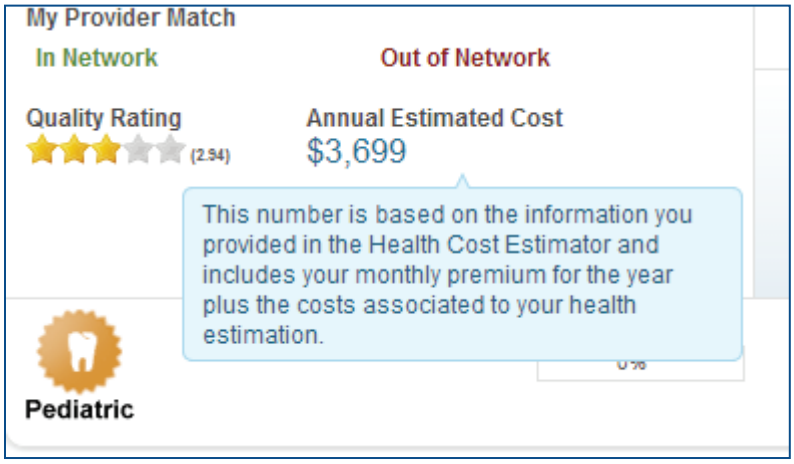


Figure 4. Example of a Quality Rating Comparison

Plan quality rating As rated by Maryland Health Connection annual survey	(2.94) For more information, click to read theMaryland Helth Connection Quality Report or for more detailed information on how quality is determined, click to read the Health Plan Benefit Performance Report .	(2.94) For more information, click to read theMaryland Helth Connection Quality Report or for more detailed information on how quality is determined, click to read the Health Plan Benefit Performance Report .	(2.94) For more information, click to read theMaryland Helth Connection Quality Report or for more detailed information on how quality is determined, click to read the Health Plan Benefit Performance Report .

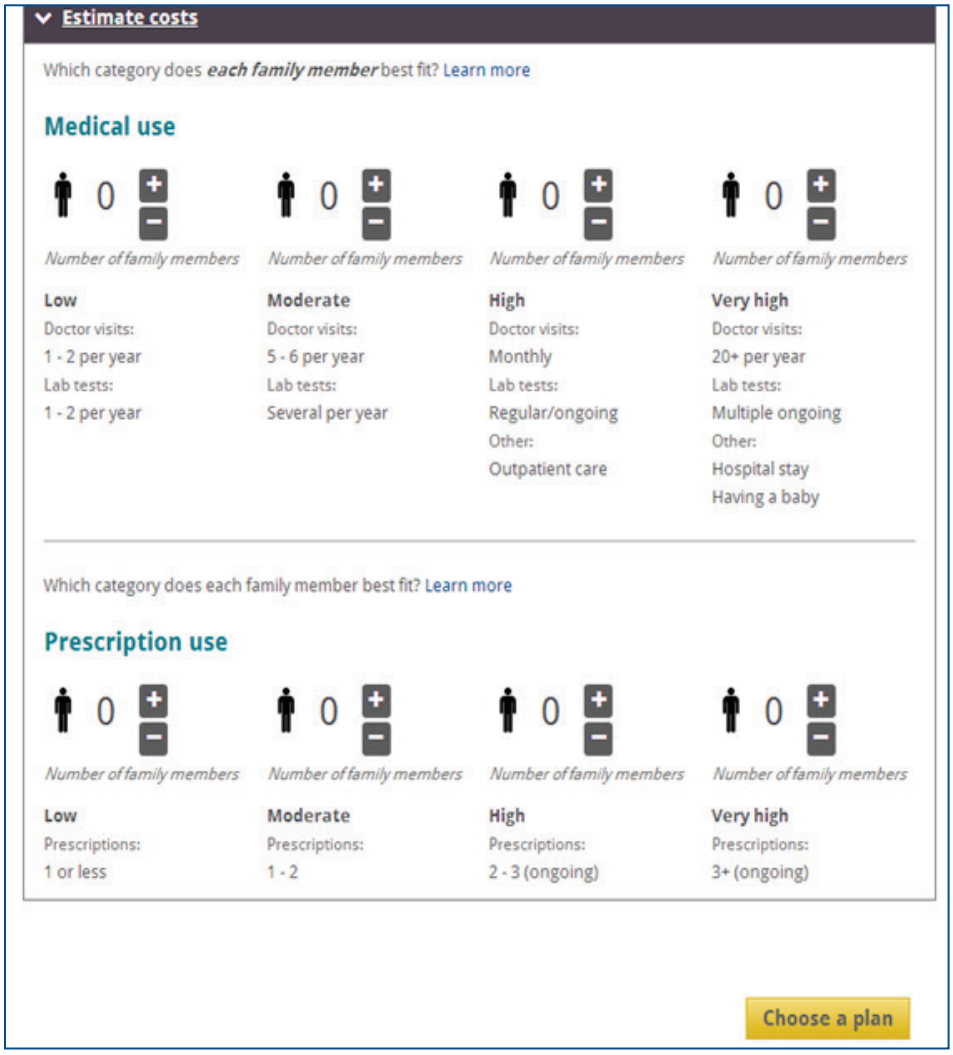
Expand on existing filters to help consumers compare and choose a health plan by including customizable filters that allow consumers to indicate their health plan preferences or needs (e.g., expected health care service use). These functions could help consumers quickly narrow down the list of health plan options, based on their preferences (e.g., lower monthly costs) as well as their anticipated health care service needs. If consumers do not have a way to narrow down the information, they can become overwhelmed and may not select a plan or may select a plan that does not best meet their needs.

Domain: Comparative health plan information

Measure-specific score for this recommendation:
SBM average score—85% (However, current filter options were very limited and leave room for improvement)

Example: In figure 5, a Web page helps consumers categorize their utilization as low, medium, high, or very high for each family member so they can be matched with a plan that is the best value for their family.

Figure 5. Example of Customizable Sort Function for Consumers That Sorts Health Plans by Expected Value to the Consumer



Provide a mechanism for consumers to search for plans by specific doctor, a list of providers for each plan, and/or health plan results by location or services available in the consumer's area. This can be done via the Marketplace website or a link to the insurer's site. This helps consumers compare plans that offer services in their immediate area.

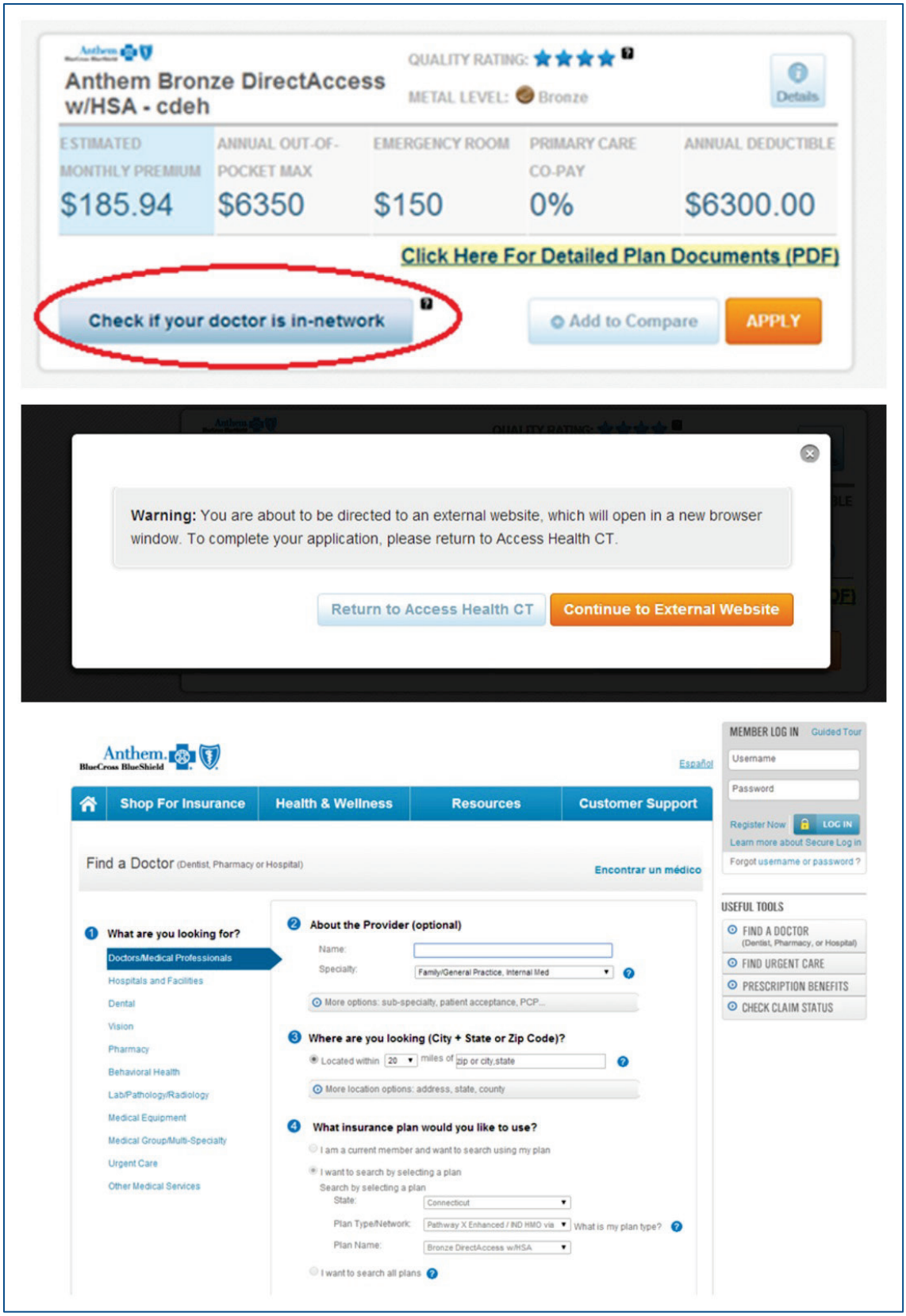
Domain: Provider network information

Measure-specific scores for this recommendation:

For providing a way to search for plans by a doctor,
SBM average score—60%
For providing a list of providers for each plan, SBM average score—65%
For providing search results by location, SBM average score—40%

Example: In figure 6, a Marketplace Web page links to a QHP's website where consumers can check whether their usual provider is in the plan's network. The Marketplace website notifies the consumer that he or she is going to a new website. The insurer's website also provides an option to search for providers by location.

Figure 6. Example of a Search for Plans by Specific Provider



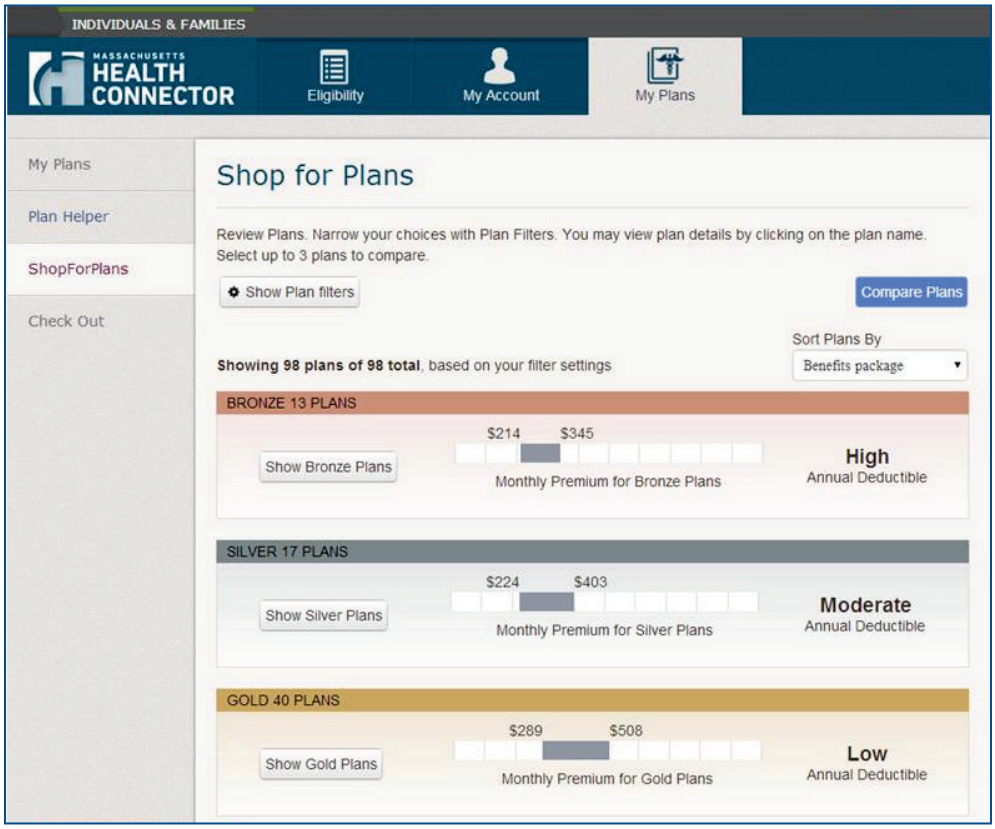
Help consumers compare and select a metal level by characteristics such as premium (e.g., provide a range or average of premiums for each metal level), cost sharing (e.g., provide a range or average of copays for each metal level), and access to out-of-network providers. Also, allow consumers to filter metal-level search results based on their preferences or needs. This will help consumers better understand the differences between each metal level and make an informed decision when selecting a metal level.

Domain: Services supporting comparison and selection

Measure-specific score for this recommendation:
SBM average score—25 to 30% (depending on the metal level characteristic)

Example: Figure 7 shows a bar chart with the range of monthly premiums in dollars for each metal level. Annual deductibles across the metal levels are compared by assigning a score of low, medium, or high.

Figure 7. Example of Comparison of Metal Levels



Provide the source of the measures (including how measures are obtained and who they are obtained from) when displaying comparative measures. This helps consumers establish trust in the measures.

Domain: Comparative displays

Measure-specific score for this recommendation:
SBM average score—41%

Example: In figure 4, shown above, the source for information on how the quality measures are calculated is identified with a link to the report for consumers who are interested in reading more detailed information about the ratings.

Topic 2. Determining Eligibility and Enrollment

Reviewers examined the websites' clarity in helping consumers determine their eligibility for insurance coverage and subsidies, as well as ease of enrolling in a plan based on an assessment of 14 measures in 3 domains, which include whether the website provides:

1. Access to enrollment applications,
2. Information on how to determine eligibility for health insurance and public and private subsidies, and
3. Information on how to appeal an eligibility decision.

Results and Recommendations for Determining Eligibility and Enrollment

Results. Overall, the SBMs ranged from 44 to 71 percent for determining eligibility and enrollment (table 4). The enrollment application domain was the strongest area of performance and eligibility and appeals the weakest.

See figures C–5 to C–7 in appendix C for graphs of the determining eligibility and enrollment domain scores that show the SBM average score in comparison to each SBM's de-identified score.

Some SBM websites required consumers to create an online account before determining their potential eligibility. Websites should allow consumers to browse the Marketplace website anonymously to determine potential eligibility without creating an online account. Requiring account information may negatively affect consumers who want to determine potential eligibility as part of their decisionmaking process without providing this information.

Table 4. Determining Eligibility and Enrollment Scores for the SBMs, by Domain

Domain	SBM Average Score
Enrollment application accessibility (see figure C–5)	71%
Determining eligibility (see figure C–6)	59%
Eligibility appeals (see figure C–7)	44%

Recommendations. To improve determining eligibility and enrollment elements on the site:

Provide information about consumers' right to appeal an eligibility decision and how they can appeal an eligibility decision. This helps consumers understand their rights and options if they do not agree with an eligibility determination.

Domain: Eligibility appeals

Measure-specific scores for this recommendation:

Information about right to appeal, SBM average score—56%
Information about how to appeal, SBM average score—60%

Example: In figure 8, a Web page lists the types of eligibility and subsidy decisions consumers could appeal. The page notes that the Marketplace does not handle appeals for decisions related to health care services. Consumers are redirected to a Web address and phone number where they can receive assistance from a state Medicaid office or a health plan if enrolled in Child Health Plus. The page (not shown) goes on to describe how to file an appeal and where to get help filing an appeal.

Figure 8. Example of Information on the Appeals Process

What can I appeal?

You can appeal determinations made by the Marketplace including:

- Your eligibility for Medicaid or Child Health Plus
- The amount of financial assistance you will receive toward your monthly health insurance premium
- The amount of financial assistance you will receive toward your out-of-pocket expenses when you use health care services
- A denial for a special enrollment period; and
- Whether we made a timely eligibility determination

Where do I go to appeal a decision about my health care services?

The Marketplace cannot accept appeals about health care services such as the types of health care benefits your plan offers, access to doctors or specialists, or a denial of prior authorization for services.

- If you have Medicaid, please contact the Office of Administrative Hearings at www.otda.ny.gov/oah/ or at 1-800-342-3334 to appeal coverage decisions.
- If you have Child Health Plus or are enrolled in a qualified health plan, please contact your health plan to appeal coverage decisions. Information on health insurance complaints and appeals can be found on the Department of Financial Services website at http://www.dfs.ny.gov/consumer/chealth.htm

Provide information about how to obtain Medicaid, CHIP, and tax credit information through the mail, which will benefit consumers who are unable or choose not to pursue this information online and will help them understand the eligibility and enrollment process.

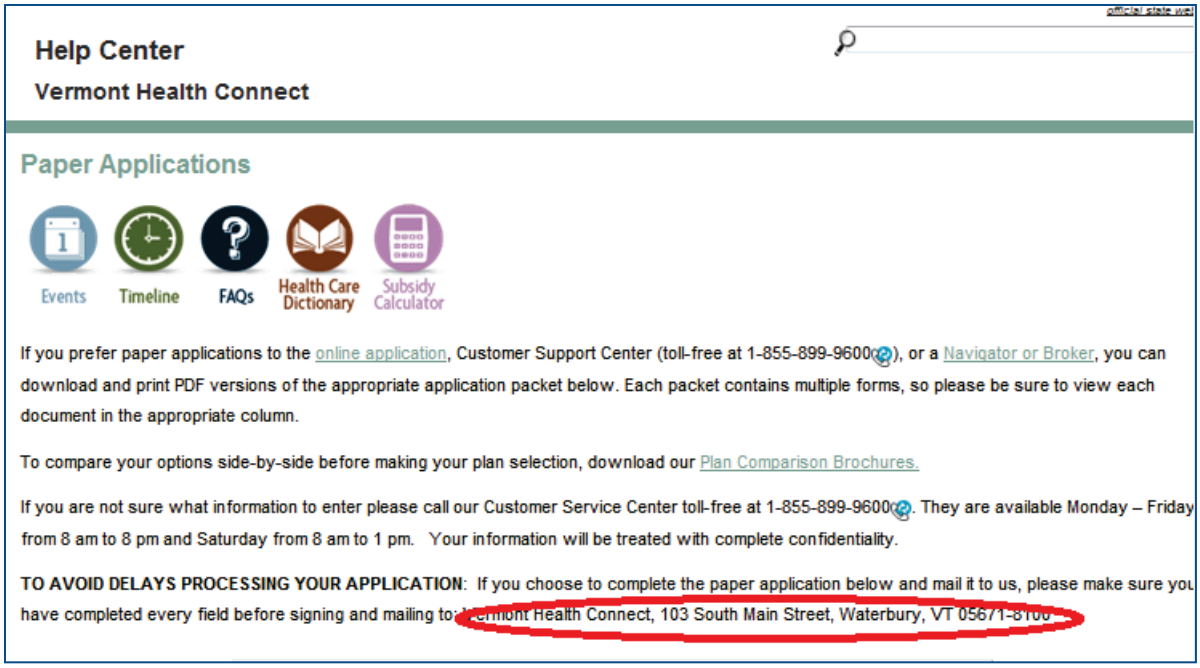
Domain: Determine eligibility

Measure-specific score for this recommendation:

SBM average score—38%

Example: In figure 9, a Web page identifies the mailing address for submitting paper public and private applications and provides a tip for preventing processing delays.

Figure 9. Example of Obtaining Application Information by Mail



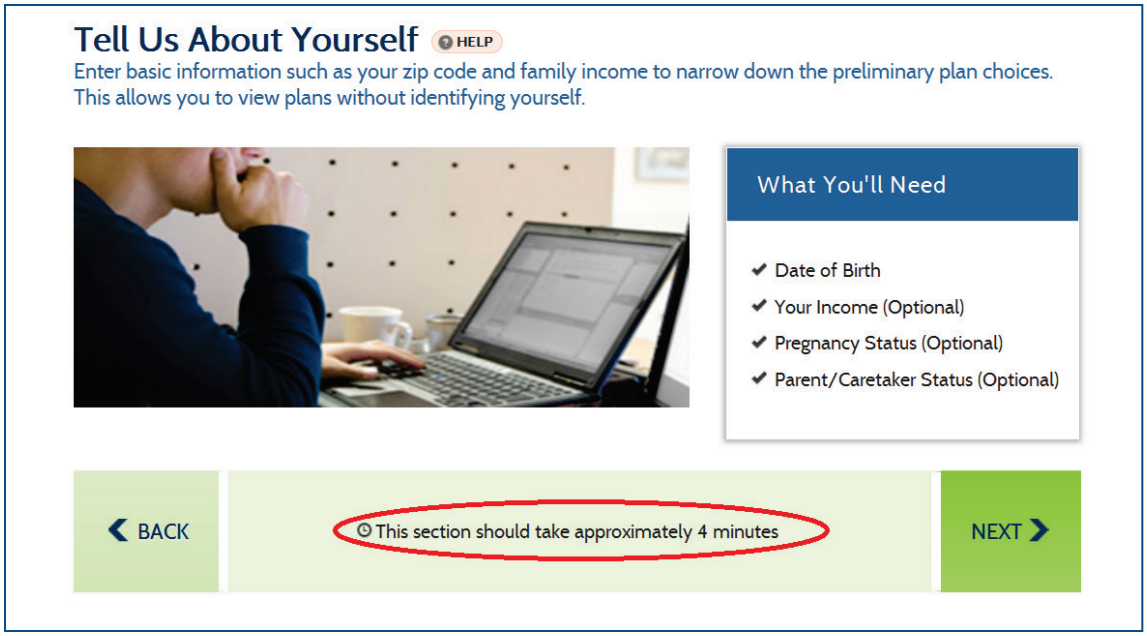
Provide an estimate of how long it will take to complete the application, which will help increase the transparency of the application process.

Domain: Enrollment application accessibility

Measure-specific score for this recommendation:
SBM average score—38%

Example: In figure 10, a website indicates the approximate number of minutes it will take to complete each section of the application. A callout box lists the information consumers need to complete the application so they are prepared before starting the application.

Figure 10. Example of Displaying Time To Complete Application Sections



Topic 3. Information Seeking and Outreach

Another goal of the Marketplaces is to provide consumers with information in a way that addresses their language, literacy, and related needs. The reviewers examined information seeking and outreach based on 11 measures in 3 domains that assess whether the website:

1. Provides access to assistance (e.g., information on how to get assistance via the Web, phone, or in-person),
2. Offers services or access to services in other languages, and
3. Elicits and implements user feedback.

Results and Recommendations for Information Seeking and Outreach

Results. Table 5 shows the average score across all SBMs for supporting information seeking and outreach. Overall, most SBM websites provided access to help and assistance as well as language services (domain scores were 89% and 72%, respectively); however, fewer websites provided the opportunity for users to rate the website user experience (domain score was 29%).

See figures C–8 to C–10 in appendix C for graphs of the information seeking and outreach domain scores that show the SBM average score in comparison to each SBM's de-identified score.

Table 5. Information Seeking and Outreach Scores for the SBMs, by Domain

Domain	SBM Average Score
Access to help and assistance (see figure C–8)	89%
Language services (see figure C–9)	72%
User feedback (see figure C–10)	29%

Recommendations. To improve information seeking and outreach:

Implement a way for users to submit feedback about the website, and describe to consumers how their input will be used to improve services or operations. This will encourage and allow consumers to submit suggestions to help improve the user experience.

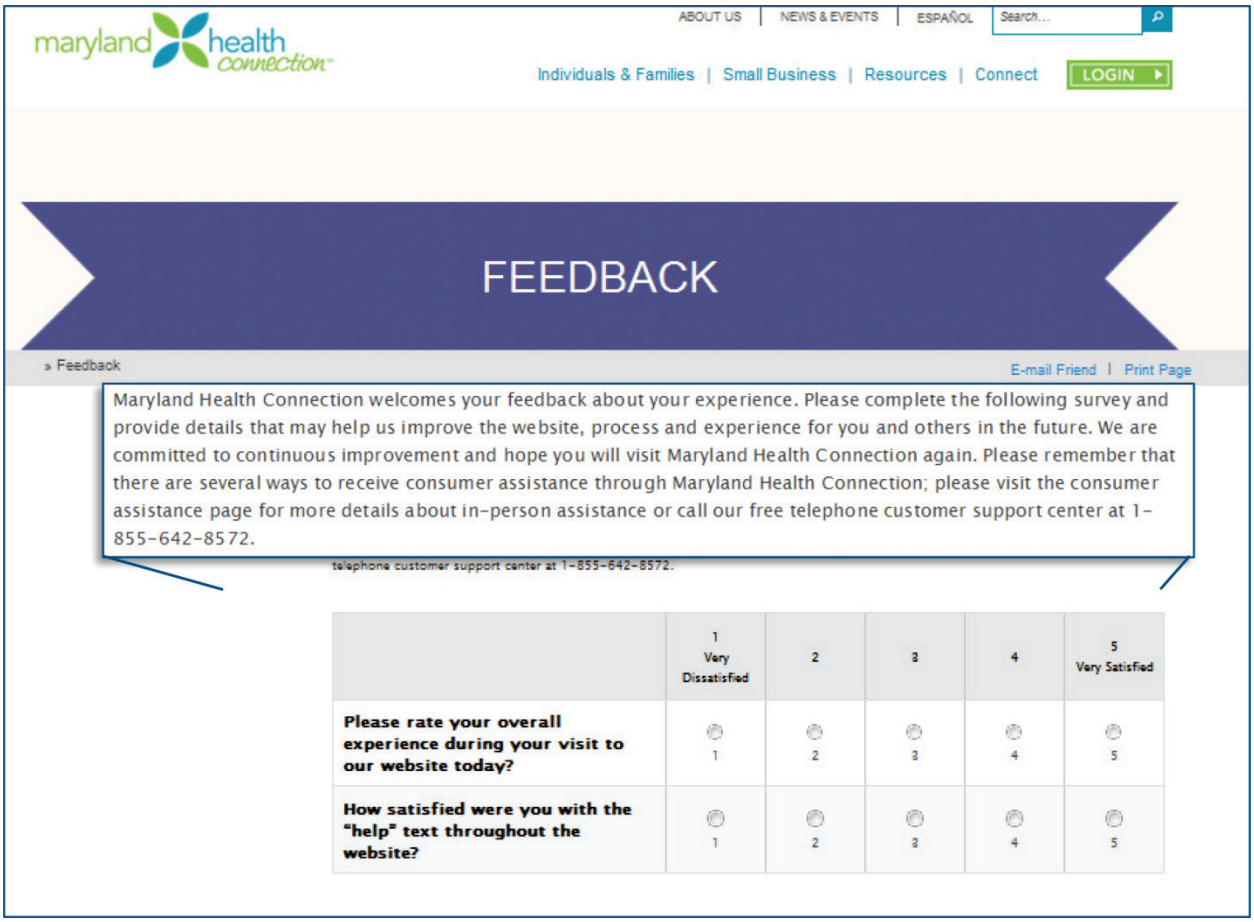
Domain: User feedback

Measure-specific scores for this recommendation:

For providing a mechanism for feedback about the site,
SBM average score—60%
For describing how information from users is used to improve services, SBM average score—34%

Example: In figure 11, a website solicits feedback from consumers by inviting them to complete a user experience survey.

Figure 11. Example of User Feedback



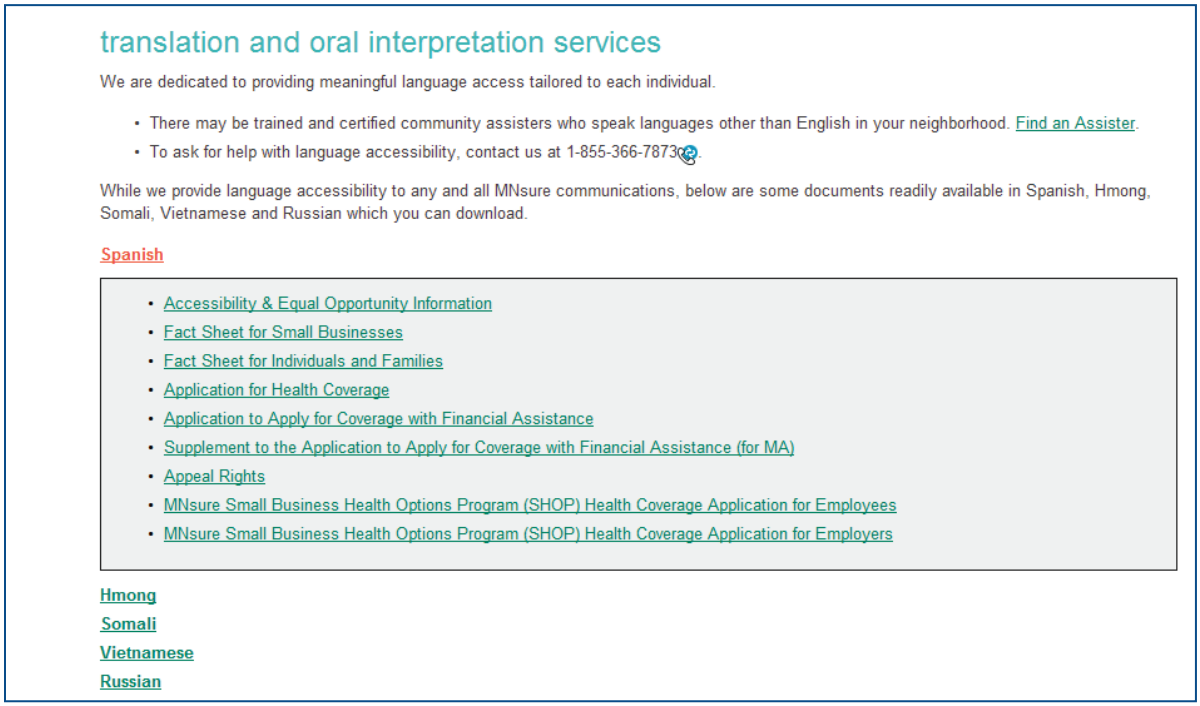
Make paper applications for determining eligibility and enrolling in a health plan in languages other than English available and easy-to-locate from the website, particularly if the state has a large percentage of the population that is non-English speaking. This would allow non-English speakers a way to apply if they are uncomfortable or unable to provide information over the Internet or phone.

Domain: Language services

Measure-specific score for this recommendation:
SBM average score—58%

Example: In figures 12 and 13, Marketplaces offer links to eligibility applications and informational documents that are translated into non-English languages.

Figure 12. Example of How a Marketplace Links to Applications and Other Documents in Languages Other Than English



translation and oral interpretation services

We are dedicated to providing meaningful language access tailored to each individual.

- There may be trained and certified community assisters who speak languages other than English in your neighborhood. Find an Assister.
- To ask for help with language accessibility, contact us at 1-855-366-7873.

While we provide language accessibility to any and all MNsure communications, below are some documents readily available in Spanish, Hmong, Somali, Vietnamese and Russian which you can download.

Spanish

- Accessibility & Equal Opportunity Information
- Fact Sheet for Small Businesses
- Fact Sheet for Individuals and Families
- Application for Health Coverage
- Application to Apply for Coverage with Financial Assistance
- Supplement to the Application to Apply for Coverage with Financial Assistance (for MA)
- Appeal Rights
- MNsure Small Business Health Options Program (SHOP) Health Coverage Application for Employees
- MNsure Small Business Health Options Program (SHOP) Health Coverage Application for Employers

Hmong
Somali
Vietnamese
Russian

Figure 13. Example of How a Marketplace Provides Its Website in Spanish and Offers Forms in Spanish

Si desea presentar la solicitud por correo o fax, hay 5 solicitudes en papel entre las que puede elegir:

- Si está presentando una solicitud para una persona solamente y quiere verificar la elegibilidad para Medicaid, KCHIP o ayuda con pagos, haga clic en Cobertura de salud y ayuda para pagar costos: Solicitud para una persona.
- Si está presentando la solicitud para una o más personas y no quiere ayuda financiera, haga clic en Cobertura de salud: Sin ayuda para pagar costos.
- Si está presentando una solicitud para más de una persona y quiere verificar la elegibilidad para Medicaid, KCHIP o ayuda con pagos, haga clic en Cobertura de salud y ayuda para pagar costos: Solicitud para más de una persona.
- Si usted es un empleador de una empresa pequeña y desea ofrecer seguro a sus empleados, haga clic en SHOP: Solicitud para empleadores.
- Si usted es un empleado de una empresa pequeña que está recibiendo cobertura a través de kynect, haga clic SHOP: Solicitud para empleados.

A veces, tendrá que completar y enviar por correo información adicional con su solicitud en papel. Por ejemplo:

- Apéndice A: Cobertura de salud de empleos se usa si una persona recibe una oferta de cobertura de un empleo.
- Apéndice B: Ayuda para completar una solicitud se usa si una persona tiene un representante autorizado o si otra persona, como un agente de seguros o kynector, está ayudando a una persona a completar la solicitud.

Topic 4. Information Architecture

The reviewers examined information architecture based on an assessment of 15 measures from four domains that examine:

1. Whether the text is easy to read visually (e.g., font size and text type),
2. Whether pages are easy to skim or scan,
3. How well the website presents information with a greater level of detail as the user navigates further into the site, and
4. Whether the site has good search functionality.

Results and Recommendations for Information Architecture

Results. The website's information architecture determines whether consumers can locate the information they need. Overall, the SBMs incorporated many—but not all—of the information architecture elements; SBM scores ranged from 25 to 94 percent for the four domains (table 6). Employing helpful search functionality was an area where many SBMs performed poorly, whereas adhering to easy-to-read elements was an area of strength.

See figures C–11 to C–14 in appendix C for graphs of the information architecture domain scores that show the SBM average score in comparison to each SBM's de-identified score.

Table 6. Information Architecture Scores for the SBMs, by Domain

Domain	SBM Average Score
Adheres to easy-to-read elements (see figure C–11)	94%
Pages are easy to skim or scan (see figure C–12)	82%
Provides clear visual hierarchy (see figure C–13)	76%
Employs helpful search functionality (see figure C–14)	25%

Recommendations. To improve information architecture elements on the site:

Provide a universally located text box for searching the site and make sure the site provides corrective options for misspelled search terms or suggestions and/or provides predictive text. In addition, consumers may benefit from the ability to select how search results are sorted (e.g., alpha, newest to oldest, relevancy).

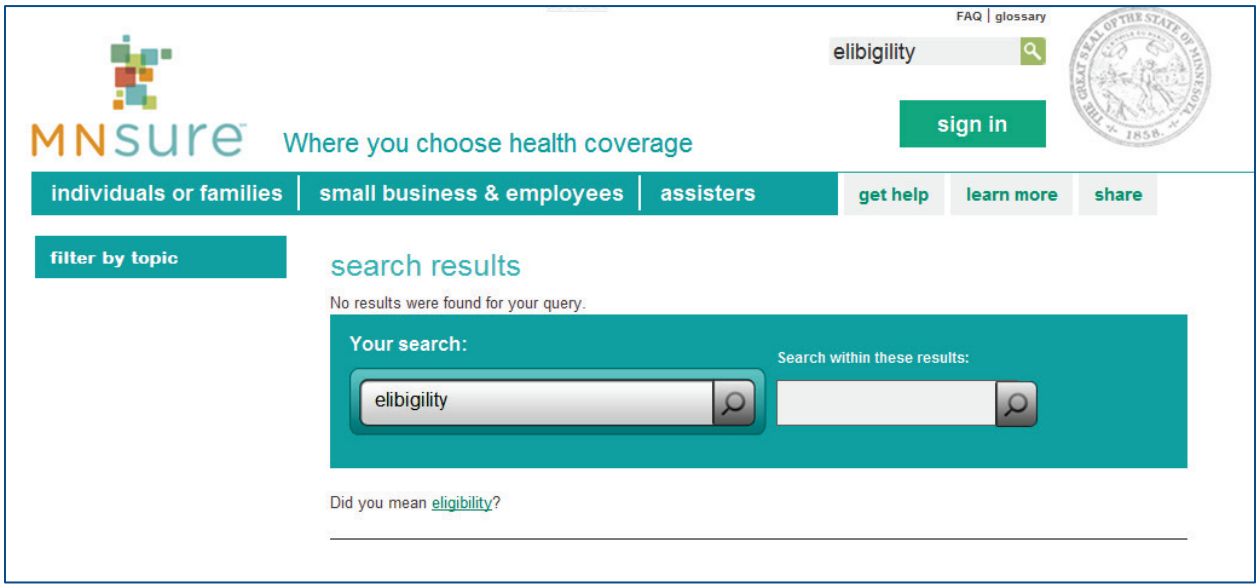
Domain: Employs helpful search functionality

Measure-specific scores for this recommendation:

For providing a universally located search option, SBM average score—60%
For search option provides corrective options, SBM average score—48%
For search option provides predictive text (a feature that suggests words based on the first letters typed), SBM average score—40%

Example: In figure 14, a universal search feature (a search feature that is in the same location on every Web page) is shown at the top of each SBM Web page. This search feature provides corrective options for misspelled words, enabling consumers who make a mistake or who do not know a correct spelling to find the information they are looking for.

Figure 14. Example of Universal Search Feature With Corrective Options



Use bullets and lists more on the websites to help break up the text and make it easier for consumers to locate information of interest.

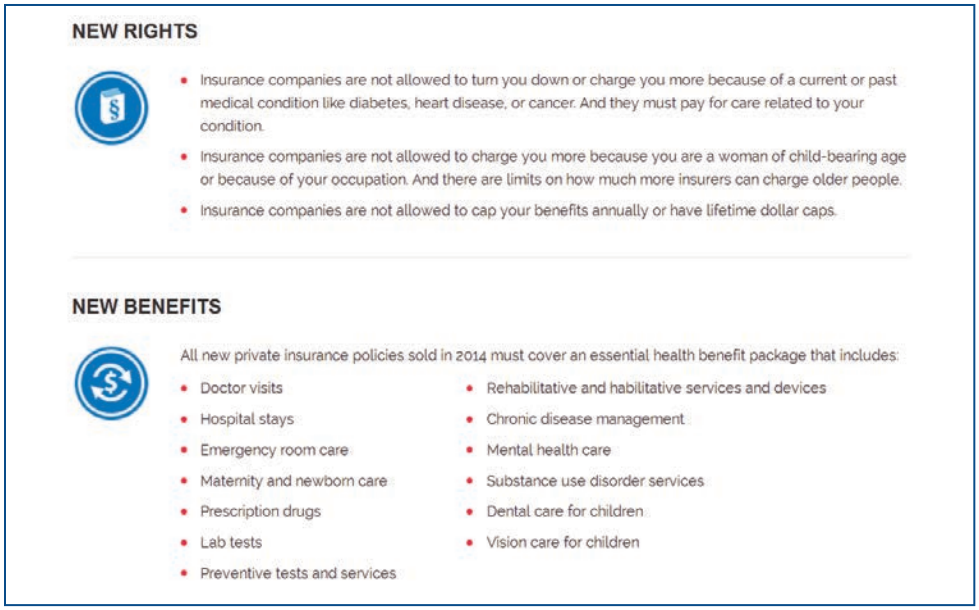
Domain: Pages are easy to skim or scan

Measure-specific score for this recommendation:

SBM average score—63%

Example: In figure 15, a Marketplace used bullets to concisely list the new consumer protections established through the ACA and the essential health benefits that private insurance policies are now required to provide.

Figure 15. Example of How To Use Bullets



NEW RIGHTS

- Insurance companies are not allowed to turn you down or charge you more because of a current or past medical condition like diabetes, heart disease, or cancer. And they must pay for care related to your condition.
- Insurance companies are not allowed to charge you more because you are a woman of child-bearing age or because of your occupation. And there are limits on how much more insurers can charge older people.
- Insurance companies are not allowed to cap your benefits annually or have lifetime dollar caps.

NEW BENEFITS

All new private insurance policies sold in 2014 must cover an essential health benefit package that includes:

- Doctor visits
- Hospital stays
- Emergency room care
- Maternity and newborn care
- Prescription drugs
- Lab tests
- Preventive tests and services
- Rehabilitative and habilitative services and devices
- Chronic disease management
- Mental health care
- Substance use disorder services
- Dental care for children
- Vision care for children

Topic 5. Ease-of-Use and Accessibility Elements

This topic focuses on website features that help simplify the user experience. Reviewers examined ease-of-use and accessibility elements based on an assessment of 18 measures that are part of 4 domains that indicate whether the site:

1. Uses conventional interaction elements (e.g., links are embedded in descriptive text rather than "click here" or something similar),
2. Functions well and provides clear feedback signals (e.g., home page enables easy access to navigational items and error messages are informative to the user),
3. Uses accessible multimedia (e.g., audio and visual tools for people with disabilities), and
4. Provides a simplified user experience (e.g., printer-friendly tools).

Results and Recommendations for Ease-of-Use and Accessibility Elements

Results. Overall, the SBMs incorporated many of the ease-of-use and accessibility elements; the average SBM score ranged from 59 to 89 percent for the four domains (table 7). The greatest strength was in using conventional interaction elements. Many states could make changes to simplify the user experience.

See figures C–15 to C–18 in appendix C for graphs of the ease-of-use and accessibility domain scores that show the SBM average score in comparison to each SBM's de-identified score.

Table 7. Ease-of-Use and Accessibility Elements Scores for the SBMs, by Domain

Domain	SBM Average Score
Uses conventional interaction elements (see figure C–15)	89%
Functions well and provides clear feedback signals (see figure C–16)	76%
Uses accessible multimedia (see figure C–17)	73%
Provides a simplified user experience (see figure C–18)	59%

Recommendations. To improve ease-of-use and accessibility elements on the site:

Include print options or printer-friendly tools, which will assist consumers who prefer to print materials to help them access the information in a format that is most useful to them.

Domain: Provides a simplified user experience

Measure-specific score for this recommendation:
SBM average score—46%

Example: One state clearly displayed a print page option in the upper right-hand corner of each page (figure 16).

Figure 16. Example of Printer-Friendly Options

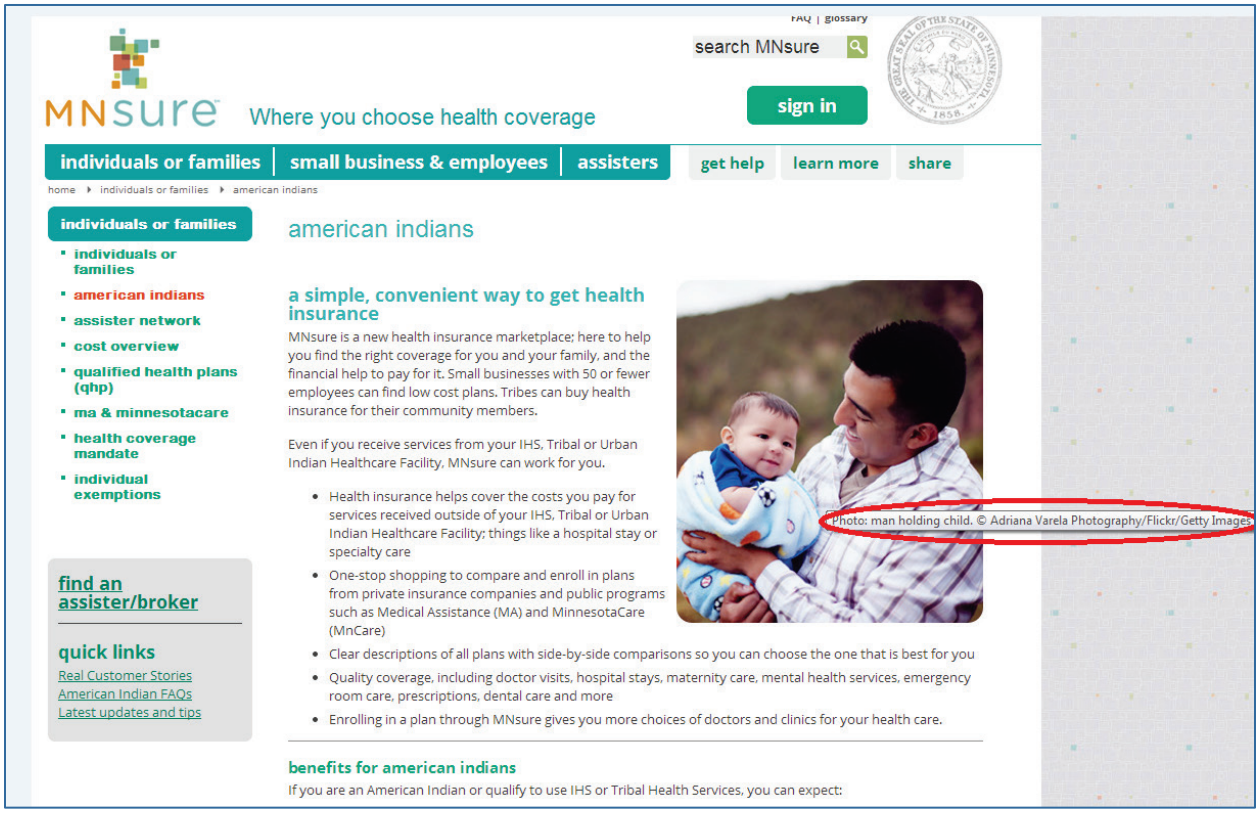
Provide alternative text for links, images, video, and animation throughout all pages of the website. This will make the entire website accessible to people with disabilities who use assistive technologies (e.g., screen reader programs).

Domain: Uses accessible multimedia

Measure-specific score for this recommendation:
SBM average score—56%

Example: To assist readers with visual disabilities, one SBM inserted an alternate text tag describing a picture (figure 17). Screen reader programs read the alternative text aloud, which enables individuals who use these programs to understand what was presented visually.

Figure 17. Example of Alternative Text for Images



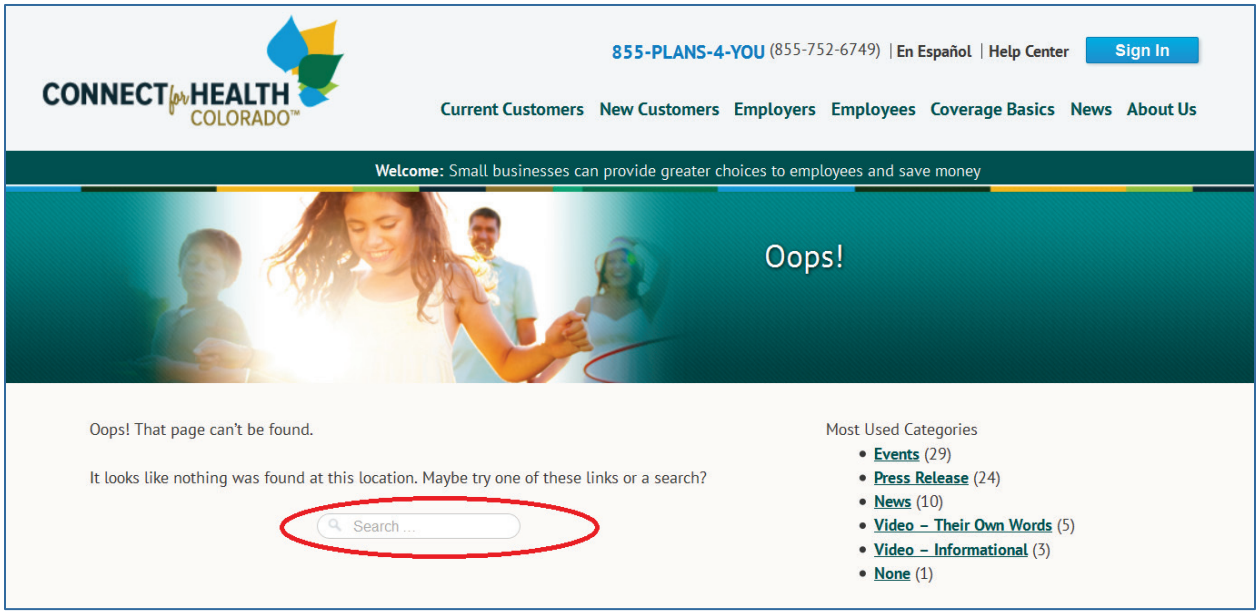
Provide informative error messages when a consumer navigates to a Web page that does not exist or is currently not functioning. Error messages should inform the consumer that the page does not exist or is currently not working and offer navigational options, a search box, or contact information for further assistance.

Domain: Functions well and provides clear feedback signals

Measure-specific score for this recommendation:
SBM average score—62%

Example: A Marketplace website error message, "Oops!" clearly indicates that the page could not be found. The website provides a search option to help consumers locate the information they are seeking (figure 18).

Figure 18. Example of an Informative Error Message



Topic 6. Content Design

The reviewers examined content design based on an assessment of nine measures from two domains:

1. How well the writing focuses on the audience and purpose (e.g., uses the active voice).
2. Whether the site uses consumer-friendly language and avoids jargon (e.g., site provides a list of frequently asked questions).

Content design is critical to ensure that the consumer understands the content as intended and can use it to make an informed decision.

Results and Recommendations for Content Design

Results. Table 8 shows the SBM average score for content design. Overall, the SBMs' website content was well written, as indicated by scores of 78 and 90 percent for the two domains.

See figures C–19 to C–20 in appendix C for graphs of the content design domain scores that show the SBM average score in comparison to each SBM's de-identified score.

Table 8. Content Design Scores for the SBMs, by Domain

Domain	SBM Average Score
Focuses on audience and purpose (see figure C–19)	90%
Uses consumer-friendly language (see figure C–20)	78%

Recommendations. To improve content design elements on the site:

Define new or technical terms on the same page in which they are used. Many websites use technical terms, such as pre-existing conditions, out-of-pocket costs, and provider networks, but these were rarely explained. Defining the terms helps consumers—especially consumers with low literacy or who lack experience with health insurance—better

understand and use the information to make an informed decision when applying for insurance, comparing and choosing health plans, and enrolling in a plan.

Domain: Uses consumer-friendly language

Measure-specific score for this recommendation:
SBM average score—53%

Example: One Marketplace highlighted the definitions of the three types of costs on the same page (figure 19).

Figure 19. Example of Helping Consumers Learn Technical Terms (Difference Between the Types of Costs)

Cost: Do you want a higher monthly premium and pay less when you need medical coverage? Or, do you want a lower monthly premium and pay more when you need medical coverage? Our health insurance plans are classified by coverage levels – bronze, silver, gold or platinum. These levels show, on average, how much of the cost of medical services is covered by the carrier and how much is paid for by the customer. These new coverage levels are one way to compare costs. Other cost considerations include:

- How much you pay for care before your insurance company starts to pay its share (a **deductible**)
- What you pay out-of-pocket for services after you pay the deductible or for services that can be used without paying toward your deductible (**coinsurance** or **copayments**)
- How much in total you might have to pay for medical services over the plan year (the **out-of-pocket maximum**)

Topic 7. Disclosure Elements

The reviewers examined disclosure elements based on an assessment of four measures within a single domain. These measures focus on whether the site:

- Identifies by name the person or organization sponsoring the website and provides its contact information; displays information on how current the website is; and describes the website's privacy policy.

Results and Recommendations for Disclosure Elements

Results. Overall, the SBMs incorporated most of the disclosure elements; the average score across the SBMs was 87 percent (table 9).

See figure C–21 in appendix C for a graph of the disclosure domain score that shows the SBM average score in comparison to each SBM's de-identified score.

Table 9. Disclosure Elements Scores for the SBMs, by Domain

Domain	SBM Average Score
Disclosure elements (see figure C–21)	87%

Recommendations. To improve disclosure elements on the site:

Display the date content was created, reviewed, modified, updated, or copyrighted on each Web page so consumers know when the information was last updated and whether it is

current. Ideally, the date showing when content was created or modified is displayed so consumers know specifically how current the information is (see figures 20 and 21).

Domain: Disclosure elements

Measure-specific score for this recommendation:
SBM average score—74%

Examples: In figure 20, the copyright with the year the Web page was created is displayed at the bottom of the page. In figure 21, a Web page lists documents that have been recently updated; the date that content was created or modified is shown. Each page should list the date that content was updated.

Figure 20. Example of Displaying the Year Content Was Copyrighted

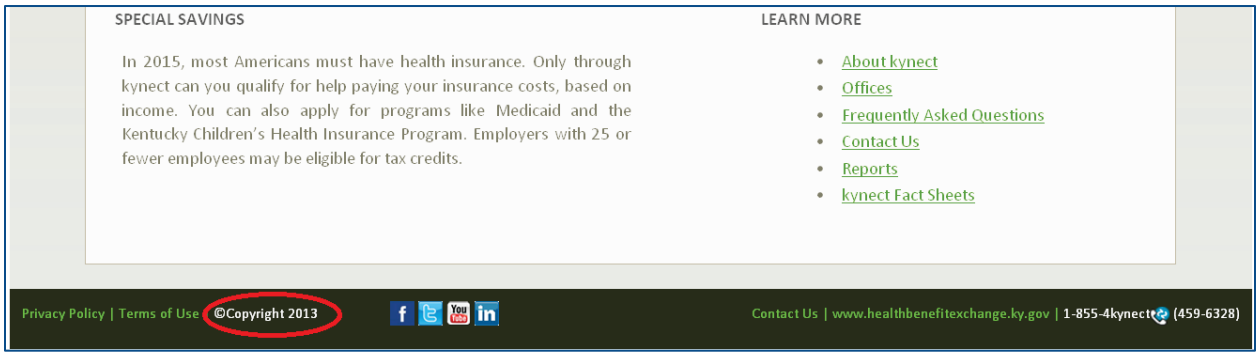


Figure 21. Example of Displaying the Date Content Was Added to the Website

Conclusion

The results and recommendations from the usability assessments described in this report determined whether the websites adopted the principles for making a website usable for consumers and whether information about determining eligibility, comparing and choosing a health plan, and enrollment was readily accessible to the consumer. Although adopting usability principles is an important first step toward developing an effective website, it does not necessarily indicate that the website was effective for its ultimate purpose of enrolling consumers. A number of other factors beyond the scope of this assessment had an impact on the effectiveness of the websites for online enrollment during the first open enrollment period.

In summary, the results of this website usability assessment demonstrate that many SBMs have already adopted some of the best practices for Web design to help make their websites more usable for consumers. Many of the websites:

- Contained easy-to-read elements with pages that could readily be skimmed,
- Included text that focused on the audience and the purposes of the website (determining eligibility, comparing and choosing plans, and enrolling in a health plans),
- Provided information about how consumers could receive help by phone or in person with information on how to do so,
- Used interactive elements such as linking to other pages that followed conventional design principles familiar to Web users, and
- Displayed who was responsible for the website.

However, there remains room for website improvements before the next open enrollment period. The greatest need for improvement was found in:

- Comparing and choosing a health plan.

Consumers need to be given the functionality that enables side-by-side comparison of the metal levels and a detailed comparison of plans on such features as requirements or prerequisites for obtaining care, provider networks, and an estimate of total costs.

Although some of the changes recommended may take longer to implement (e.g., those that require extensive programming or additional Marketplace infrastructure), others will be easier and can be implemented more readily before the next open enrollment period. Each Marketplace will want to prioritize these recommendations based on the resources available and, in some cases, consider implementing the recommendations over more than a single year. Implementing these changes will support a positive consumer experience and facilitate the selection of a plan that best meets individual and families' needs.

Questions

If you have any questions about the results and recommendations presented in this report, please contact Marketplace_Quality@cms.hhs.gov.

Appendix A: Health Insurance Marketplace Website Usability Assessment Tool

The topics and domains of the tool are presented in the order in which the usability assessment was conducted.

Ease-of-Use and Accessibility Elements

1. How often does the site use conventional interaction elements?

Ease-of-Use and Accessibility (4 domains, 18 measures)	Training Notes	Scoring
1.1 Links are clearly indicated in the same manner (such as in the same font, with underlined text)	Check at least 4 pages	1 Rarely, Never 2 Sometimes 3 Most of the time 4 Always NA
1.2 Links are embedded in descriptive text (rather than "click here", or something similar)	Check at least 4 pages	
1.3 Buttons are clearly identified, large enough to easily see, and easy to hit/click	Check at least 4 pages. This item could be Not Applicable if not buttons are used on the site	
1.4 Image links are used rather than text or button links	Button/text links preferred. Instead of clicking text or button, you click on a photo or graphic **[REVERSE ANALYSIS FOR CODING]**	
1.5 Back button is functional on the browser toolbar on every page	Check at least 4 pages. Functional = back button visible and leads you back to previous page.	

2. How often does the site provide a simplified user experience?

Ease-of-Use and Accessibility (4 domains, 18 measures)	Training Notes	Scoring
2.1 Site uses paging or minimal scrolling	Check at least 4 pages. Paging = having shorter pages that require the user to frequently move from page to page Scrolling = having longer pages that require scrolling down more than one page to see the end. No more than one scroll (two screens) required	1 Rarely, Never 2 Sometimes 3 Most of the time 4 Always NA

Ease-of-Use and Accessibility (4 domains, 18 measures)	Training Notes	Scoring
2.2 Site includes print options or printer-friendly tools	Check at least 4 pages. Broad/overview and detailed topic pages should be printer-friendly.	1 Rarely, Never 2 Sometimes 3 Most of the time 4 Always
2.3 It is easy to get back to the homepage from anywhere in the site with just one click	Check at least 4 pages	

3. How well does the site function and offer clear feedback signals?

Ease-of-Use and Accessibility (4 domains, 18 measures)	Training Notes	Scoring
3.1 Homepage is simple without too much detailed content	Simple = sufficient white space, minimal content, information is grouped (e.g., bullets, lists), appropriate use of graphics (e.g., minimal animation and photos/videos)	1 Poorly 2 Fair 3 Well 4 Very Well NA
3.2 Homepage states the purpose of the site or organization		
3.3 Homepage enables easy access to navigational items with all major options available on the homepage	Navigational items are headings or sections of a website (not hidden)	
3.4 Error messages are informative and provide solutions to the user	Attempt to go to a sub-page that doesn't exist (i.e., http://www.air.org/test)	
3.5 Homepage links and buttons clearly describe what people will find on the next page using different, distinct, and relevant key words	Consumer-friendly language accurately explains what's coming next	

4. Does the site incorporate accessible multimedia?

Ease-of-Use and Accessibility (4 domains, 18 measures)	Training Notes	Scoring
4.1 Site includes audio and visual features	Check at least 4 pages	4 Yes 1 No NA
4.2 Images and other multimedia reinforce the content of the website	Check at least 4 pages	
4.3 ALT text is provided for links, images, video, and animation	Possible NA. ALT text should pop up when a user hovers the mouse over the element in question	

Ease-of-Use and Accessibility (4 domains, 18 measures)	Training Notes	Scoring
4.4 Captioning provided for video and animation	Possible NA if no video or animation. Check closed-caption options on the site.	4 Yes 1 No NA
4.5 Captioning is easy to read (in terms of size and contrast)	Possible NA if no video or animation.	

Disclosure Elements

5. Does the site include the following disclosure elements?

Disclosure Elements (1 domain, 4 measures)	Training Notes	Scoring
5.1 Website identifies by name the person or organization responsible for the website on the homepage		4 Yes 1 No NA
5.2 Website provides the contact information—street or mailing address, telephone number, or email address—for the person or organization responsible for the website, within 2 clicks of the homepage		
5.3 Web pages display the date this content was created, reviewed, modified, updated, or copyrighted		
5.4 Website describes its privacy policy, within 2 clicks of the homepage		

Information Architecture

6. How well does the site present a clear visual hierarchy?

Information Architecture (4 domains, 15 measures)	Training Notes	Scoring
6.1 Current page and options for next navigational steps clearly displayed	Cues to indicate current page website is focusing on and next steps.	1 Poorly 2 Fair 3 Well 4 Very Well NA
6.2 Information is presented with a greater level of detail the further they navigate into the site (i.e., telescoping)		

7. How often are pages easy to skim or scan?

Information Architecture (7 domains, 15 measures)	Training Notes	Scoring
7.1 A design template has been applied consistently across the site (including icons, graphics, and layout)	Check at least 7 pages.	1 Rarely, Never 2 Sometimes 3 Most of the time 4 Always NA
7.2 Content is grouped or otherwise clustered to show what is related	Check at least 7 pages.	
7.3 White space is used to break up and clusters of content	Check at least 7 pages.	
7.4 Pages use bullets and lists	Check at least 7 pages.	

8. Does the site have the following search functionality features?

Information Architecture (4 domains, 18 measures)	Training Notes	Scoring
8.1 Universally-located simple option for searching the site		4 Yes 1 No NA
8.2 Search option provides corrective options (e.g., recommendations for misspelled search terms)		
8.3 Search option provides predictive text (auto-filling predicted search terms)		

9. Does the site adhere to the following easy-to-read elements?

Information Architecture (4 domains, 15 measures)	Training Notes	Scoring
9.1 Default type size at least 12-point	Simple = sufficient white space, minimal content, information is grouped (e.g., bullets, lists), appropriate use of graphics (e.g., minimal animation and photos/videos)	4 Yes 1 No NA
9.2 Headings noticeably larger than body content (between 14-point and 24-point)		
9.3 Text set in a type face that is easy to read	Navigational items are headings or sections of a website (not hidden)	
9.4 Headings set in a type face that is easy to read	Attempt to go to a sub-page that doesn't exist (i.e., http://www.air.org/test)	

Information Architecture (4 domains, 15 measures)	Training Notes	Scoring
9.5 Visual cues (such as icons, text boxes, and different colors) to direct users' attention to important items	Consumer-friendly language accurately explains what's coming next	4 Yes 1 No NA
9.6 Colors that are used together make information easy to see and find, and have enough contrast		

Content Design

10. How well does the writing focus on the audience and purpose?

Content Design (2 domains, 9 measures)	Training Notes	Scoring
10.1 Content is written in the active voice, directed to the reader (using "you" as though the page is "talking" to the reader)		1 Poorly 2 Fair 3 Well 4 Very Well NA
10.2 Short, straightforward sentences (20 words or fewer) used		
10.3 Paragraphs are short and scannable (covering only one subject, and under 12 lines)		

11. How well does the site use consumer-friendly language and avoid jargon?

Content Design (2 domains, 9 measures)	Training Notes	Scoring
11.1 Site uses mixed case prose (sentences with upper and lower case letters)		1 Poorly 2 Fair 3 Well 4 Very Well NA
11.2 Site helps users learn what the new or technical terms mean on the same page	By defining information within text without having to refer to a glossary or pop-up.	
11.3 Site defines acronyms before using them		
11.4 Labels and headings are descriptive enough to make it easy to accurately predict what the content will be under each topic category		
11.5 The first sentence of a paragraph includes the paragraph's primary theme or scope of what the paragraph will cover	Review at least 3 pages and 2 paragraphs on each page	

Content Design (2 domains, 9 measures)	Training Notes	Scoring
11.6 Site provides a list of frequently asked questions		4 Yes 1 No NA

Determining Eligibility and Enrollment

12. Does the website provide information on how to determine eligibility?

Determining Eligibility and Enrollment (3 domains, 14 measures)	Training Notes	Scoring
12.1 Information sheet or questionnaire to help determine eligibility for Medicaid, CHIP, and tax credit provided online.	These questions are to help determine eligibility, not actually determine. Could be referred to as application process.	4 Yes 1 No NA
12.2 Website provides tools or calculators to determine eligibility for Medicaid, CHIP, and a tax credit for purchasing a health plan (on the site, not a link to another site)	These questions are to help determine eligibility, not actually determine. Could be referred to as application process.	
12.3 Information on how to obtain Medicaid, CHIP, and tax credit eligibility information through the mail.		
12.4 Information on how to obtain Medicaid, CHIP, and tax credit eligibility information by telephone.		

13. Does the website provide eligibility appeal information?

Determining Eligibility and Enrollment (3 domains, 14 measures)	Training Notes	Scoring
13.1 Website includes information about an individual's right to appeal an eligibility decision		4 Yes 1 No NA
13.2 Website includes information on how to appeal an eligibility decision		

14. Does the website provide enrollment applications?

Determining Eligibility and Enrollment (3 domains, 14 measures)	Training Notes	Scoring
14.1 Website provides a list of steps for the health plan application process		4 Yes 1 No NA
14.2 Website provides a list of items users will need before beginning to shop for health plans	Examples may include SSN, date of birth, pay stubs	

Determining Eligibility and Enrollment (3 domains, 14 measures)	Training Notes	Scoring
14.3 Website provides a way to apply for Medicaid and/or CHIP (via a download, mail communication/paper application, telephone application, or online link to apply)		4 Yes 1 No NA
14.4 Website provides a link to download or obtain (e.g., via mail) a paper application to a qualified health plan		
14.5 Website provides a link to apply for a qualified health plan online		
14.6 Website provides information on how to apply to a qualified health plan via the telephone		
14.7 Website provides indication of where in the application process you are (e.g., progress bar)	Possible NA if there is no online application	
14.8 Website provides an estimate of how long it will take to complete the application		

Comparing and Choosing a Health Plan

15. Does the website provide enrollment applications?

Comparing and Choosing a Health Plan (4 domains, 22 measures)	Training Notes	Scoring
15.1 Can you compare metal levels by:	Metal levels = Bronze, silver, gold, platinum.	Average of items 15.1.1–15.1.2
15.1.1 Premium	Information should appear on one page.	4 Yes 1 No NA
15.1.2 Cost sharing measures (e.g., co-pay, coinsurance, deductible)	Information should appear on one page.	
15.1.3 Whether member has access to out of network providers	Information should appear on one page.	
15.1.4 What providers are included in the network	Information should appear on one page.	
15.2 Site asks questions about needs or preferences that filter a user's results		

16. Does the website provide enrollment applications?

Comparing and Choosing A Health Plan (4 domains, 22 measures)	Training Notes	Scoring
16.1 Benefits and coverage	Do not score at this level. All information should be comparative from the HIM site on one page.	Average of items 16.1.1–16.1.8

Comparing and Choosing A Health Plan (4 domains, 22 measures)	Training Notes	Scoring
16.1.1 Requirements or pre-requisites for obtaining care (e.g., referral to specialist)		4 Yes 1 No NA
16.1.2 Whether member has access to out of network providers	Cost better than yes/no for coverage, but either acceptable.	
16.1.3 Prescription coverage	Look for information on both in and out-of network coverages. Cost better than yes/no for coverage, but either acceptable.	
16.1.4 Preventive care inclusions	Look for information on both in and out-of network coverages	
16.1.5 Out-of-pocket limits	Look for information on both in and out-of network coverages. Cost better than yes/no for coverage, but either acceptable.	
16.1.6 Maternity care coverage	Look for information on both in and out-of network coverages. Cost better than yes/no for coverage, but either acceptable.	
16.1.7 Emergency care coverage	Look for information on both in and out-of network coverages. Cost better than yes/no for coverage, but either acceptable.	
16.1.8 Availability of specialized services (e.g., physical, occupation, or speech therapy; home health services)	Look for information on both in and out-of network coverages. Cost better than yes/no for coverage, but either acceptable.	
16.2 Information on the average monthly or yearly costs		
16.3 An individualized, complete measurement of cost (e.g., average monthly or yearly costs) by type of patient, level of care needs, or pre-screening questions.		
16.4 Premium cost		
16.5 Cost sharing measures (e.g., deductibles, copays, or coinsurance)	Look for information on both in and out-of network coverages	
16.6 Global quality measure		
16.7 Quality measures: health plan outcomes		

Comparing and Choosing A Health Plan (4 domains, 22 measures)	Training Notes	Scoring
16.8 Quality measures: by specific health conditions (mortality rates, readmission rates)		4 Yes 1 No NA
16.9 Quality measures: process measures (e.g., care delivered in a certain time frame, specific tests completed)		
16.10 Quality measures: patient experience or satisfaction		

17. Does the site provide information on provider networks?

Comparing and Choosing a Health Plan (4 domains, 22 measures)	Training Notes	Scoring
17.1 Site provides a way to search for plans by specific doctor	This information should appear on the HIM site	4 Yes 1 No NA
17.2 Site provides list of providers for each plan	This information should appear on the HIM site or via a link on the HIM site to the insurer's site	
17.3 Site provides results by location or services available in user's area	This information should appear on the HIM site or via a link on the HIM site to the insurer's site	

18. How well does the website display comparative data?

Comparing and Choosing a Health Plan (4 domains, 22 measures)	Training Notes	Scoring
18.1 Overview provides source of the measures (including how measures are obtained and who they are obtained from)	The goal is to provide trust in the measures	4 Yes 1 No NA
18.2 Website allows comparisons of 3–9 health plans		1 Poorly 2 Fair 3 Well 4 Very Well NA
18.3 Health plans can be compared by at least three elements (e.g., quality, cost, coverage, services included)		
18.4 Site compares health plans on 7 or fewer elements **at once** (e.g., quality, cost, services, distance)		
18.5 Default order is by cost or quality		
18.6 Website allows for customizable sorting or filtering	e.g., by deductible level, plan type, premium	

Comparing and Choosing a Health Plan (4 domains, 22 measures)	Training Notes	Scoring
18.7 Website provides comparative information using symbols (e.g., stars, bar graphs, word icons)		1 Poorly 2 Fair 3 Well 4 Very Well NA

Information Seeking and Outreach

19. Does the website provide enrollment applications?

Information Seeking and Outreach (3 domains, 11 measures)	Training Notes	Scoring
19.1 There is a link to show how an individual can get help on each page		4 Yes 1 No NA
19.2 Website provides information on how to get in-person assistance		
19.3 Website provides information on how to get assistance by telephone		
19.4 Website provides information on how to get assistance electronically (e.g., email, live chat)		
19.5 Website accessible via mobile application or website, including application		

20. Does the site offer access to services in other languages?

Information Seeking and Outreach (3 domains, 11 measures)	Training Notes	Scoring
20.1 The website is offered in a language other than English		4 Yes 1 No NA
20.2 Information is provided on how an individual can get help in their preferred language		
20.3 Paper applications for eligibility and enrollment available in a language(s) other than English		
20.4 Phone numbers are provided to receive support from call center representatives in language(s) other than English		

21. Does the site elicit and implement user feedback?

Information Seeking and Outreach (3 domains, 11 measures)	Training Notes	Scoring
21.1 Website provides a mechanism for feedback about the site—email address, feedback form, pop-up user survey, or other—within 2 clicks of the homepage	Explain other feedback mechanism in comments section	4 Yes 1 No NA
21.2 Website describes how it uses information from users to improve its services or operations within 2 clicks of the homepage		

Appendix B: Methodology

In this section, we describe the methods AIR used to:

- Develop the tool used to conduct the expert usability assessments,
- Conduct the assessments, and
- Analyze and report the results.

Tool Development

To develop the usability assessment tool, an experienced team with expertise in measure development, public reporting, and website usability reviewed:

- Heuristics, originally developed by AARP,[10] to identify whether websites follow usability principles;
- Key elements of design, as detailed in the Aligning Forces for Quality (AF4Q) guide on displaying comparative data effectively;[11]
- A website usability approach by Informed Patient Institute;[12]
- Past heuristic reviews conducted by AIR for the AF4Q Alliances, funded by The Robert Wood Johnson Foundation, to improve the quality of care in 16 communities across the United States,[13]
- CDC revisions for the development of a Healthy People 2020 health care website usability measure (8.2),[14] and
- Recommendations from http://usability.gov.[15]

Drawing on these sources, AIR developed an initial list of questions to assess the websites. These questions were reviewed by senior experts in the field, refined, and reviewed once more by senior experts. Next, a team of three analysts evaluated the Federally Facilitated Marketplace website (HealthCare.gov) to test the tool (e.g., were the measures clear, was it clear how to score each measure). Based on test results, the team revised the tool once more. The final tool is included in appendix A.

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[10] Chisnell, D., & Redish, J. (2005). Designing web sites for older adults: Expert review of usability for older adults at 50 web sites. AARP. Retrieved from http://assets.aarp.org/www.aarp.org_/articles/research/oww/AARP-50Sites.pdf

[11] American Institutes for Research. (2010). How to display comparative information that people can understand and use. Retrieved from http://www.rwjf.org/content/dam/web-assets/2010/07/how-to-display-comparative-information-that-people-can-understan

[12] Informed Patient Institute. (n.d.). How we rate sites. Retrieved from http://www.informedpatientinstitute.org/howwerate.php

[13] More information on the Alliances is available at http://forces4quality.org/af4q-alliances-overview.

[14] Centers for Disease Control and Prevention. (n.d.). Healthy People 2020 Topics and Objectives, Health Communication and Health Information Technology. Retrieved from http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=18

[15] U.S. Dept. of Health and Human Services. (2006). The research-based Web design & usability guidelines, enlarged/expanded edition. Washington, DC: U.S. Government Printing Office. Retrieved from http://guidelines.usability.gov/

There are a few important things to note regarding the scope of this assessment. Based on the scope of the tool, the reviewers examined:

- Whether the website adopted the principles for making a website usable for consumers and whether the website provided information to consumers pertaining to determining eligibility, comparing and choosing a health plan, enrollment, and information seeking. The reviewers did not seek to verify the accuracy of the information or whether consumers could use the website to determine eligibility, compare and choose plans, or enroll in a plan.
- Whether the websites provided accessible multimedia (e.g., including alternate text for links, images, video, and animation). This is one of the requirements to be Section 508 compliant, a requirement for federal agencies' electronic and information technology to be accessible to individuals with disabilities.[16] However, state requirements for websites may vary.
- How the content was written (e.g., whether it was written in the active voice and used short, clear sentences); however, it did not include a readability test.

Assessment

Rater Training

Before beginning the expert usability assessment, AIR held a training session for all raters who would be rating the websites. During this training, AIR presented the tool and discussed the intent of the items and protocol for assessment. This allowed all raters to have a common understanding of the tool and scoring criteria to help minimize potential inter-rater reliability issues.

Scoring Individual Items

Two raters independently reviewed each website and rated the site on all 93 measures. All items were scored on a scale of 1–4, with the potential for an item to be not applicable (see table B-1). Items that were not accessible or not relevant to the site were classified as not applicable. An item would be not applicable, for instance, if it inquired about the usability of an element that did not exist on the site (e.g., it is not applicable whether a video provides closed captioning if the site has no videos).

Table B–1. Scoring Scale

Score	How Often	How Well	Does: Yes/No	Task Completion
1	Rarely, never	Poorly	No	Task failure that prevents the user from going forward
2	Sometimes	Fair	—	Serious problem that may hinder user from going forward
3	Most of the time	Well	—	Minor hindrance that will probably not hinder user
4	Always	Very well	Yes	Minimal problems; satisfies the heuristic

Note: For items not accessible or not relevant to this site, reviewers gave a score of NA.

[16] For more information, visit http://www.section508.gov/about-us.

Once each rater completed his or her independent review, the two raters reviewing each website reviewed their scores for inter-rater reliability. Raters who achieved inter-rater reliability above 80 percent met, reviewed differences, and came to an agreement on the final rating. Any reliability below 80 percent was also reviewed by expert reviewers. The two raters and expert reviewers met and discussed the rating differences and came to an agreement on the final rating. The purpose of having two raters was to help ensure both a comprehensive and consistent application of the ratings. In addition, expert reviewers reviewed all of the scores across the teams to identify potential inter-rater issues across teams. After reviewing the scores, expert reviewers convened all raters to review and finalize the scoring for all sites.

Scoring and Ratings

Once each team identified the final scores for each SBM website, two separate analysts assessed the measure scores to decide on the best scoring methodology. Methods considered included:

- Average of all measures,
- Average of all domains (average of measures by domain),
- Top box scoring for all measures (count of highest scores only), and
- Top box scoring for all domains (count of highest measure scores by domain).

The top box scoring for all domains was the method adopted, which highlights websites that most often provide a good experience to users as reflected by measure ratings at or near the top of the rating scale. Further, scoring for each website weights each of the 21 domains equally rather than giving greater weight to specific topics and domains that contain more measures. This mirrors one of the methodologies for scoring recommended by the Consumer Assessment of Health Providers & Systems (CAHPS) Consortium.

Scores for each domain were calculated by counting how many measures scored at or near the top of their scoring scale (i.e., were equivalent to the numerical score of a 3 or 4 out of 4: always, most of the time, very well, well, or yes) and dividing by the total number of measures in the domain. This domain score was then converted into a percentage.

The overall score for a website was calculated by counting the number of domain score percentages that scored at or near the top of their scoring scale (i.e., 75% or greater, because this was the same as scoring a 3 on a 4-point scale). Ratings were assigned to each SBM using the same method as for domain ratings. First, a mean score was calculated for all SBMs. Next, SBMs were assigned a rating of “better” if the SBM scored above one-half standard deviation of the mean. SBMs scoring within one-half standard deviation of the mean were assigned an “average” rating. Finally, SBMs with a score less than one-half standard deviation of the mean got a “below” rating. The method for displaying the ratings is similar to that used by organizations such as the Maine Health Management Coalition Foundation.[17]

[17] For more information, visit http://www.getbettermaine.org.

Appendix C: SBM Scores for Each Domain

Topic 1. Comparing and Choosing a Health Plan

Figure C–1. SBM Results for Displays Comparative Data Well Domain

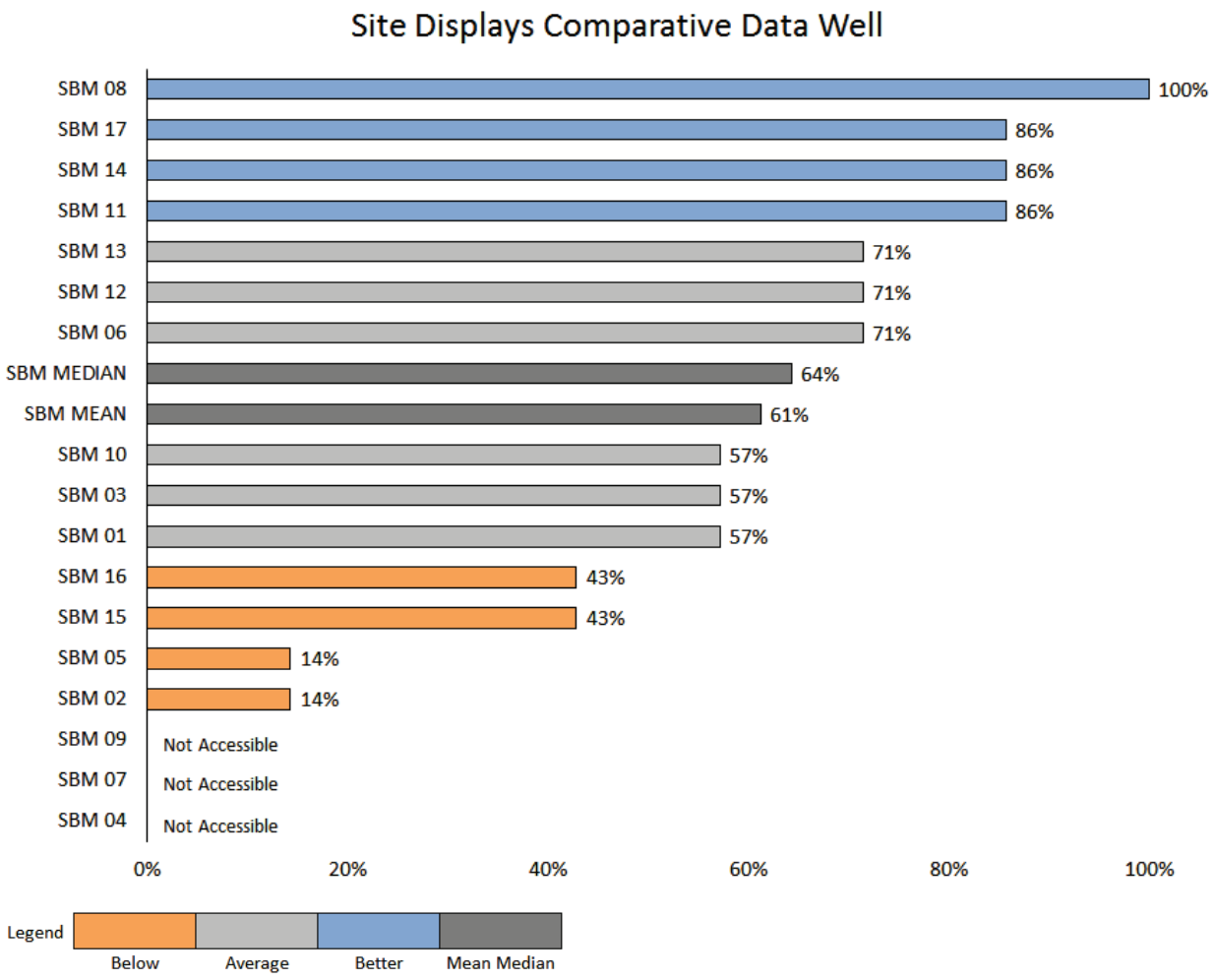


Figure C–2. SBM Results for Plan Comparisons and Selection Domain

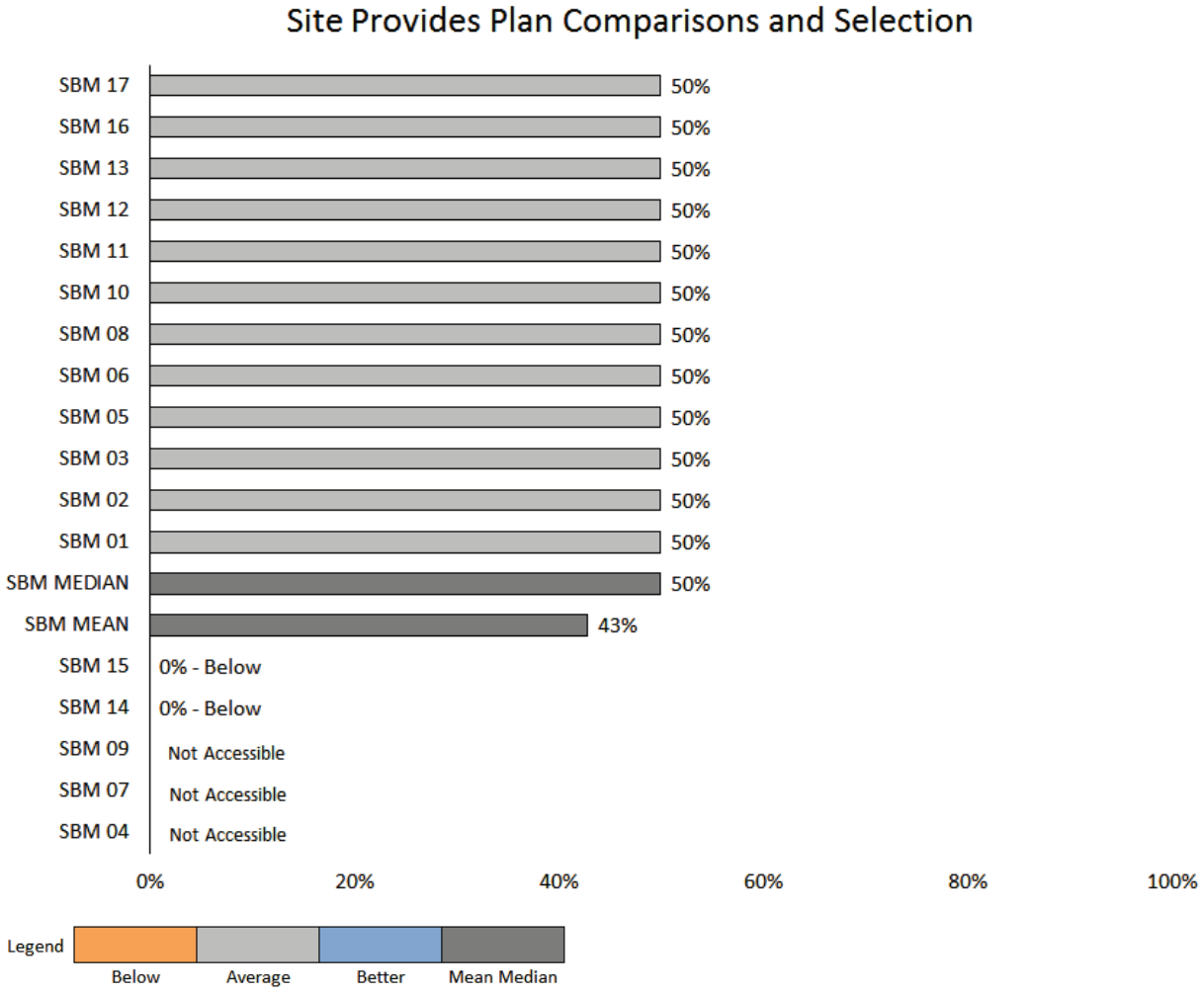


Figure C–3. SBM Results for Information on Provider Networks Domain

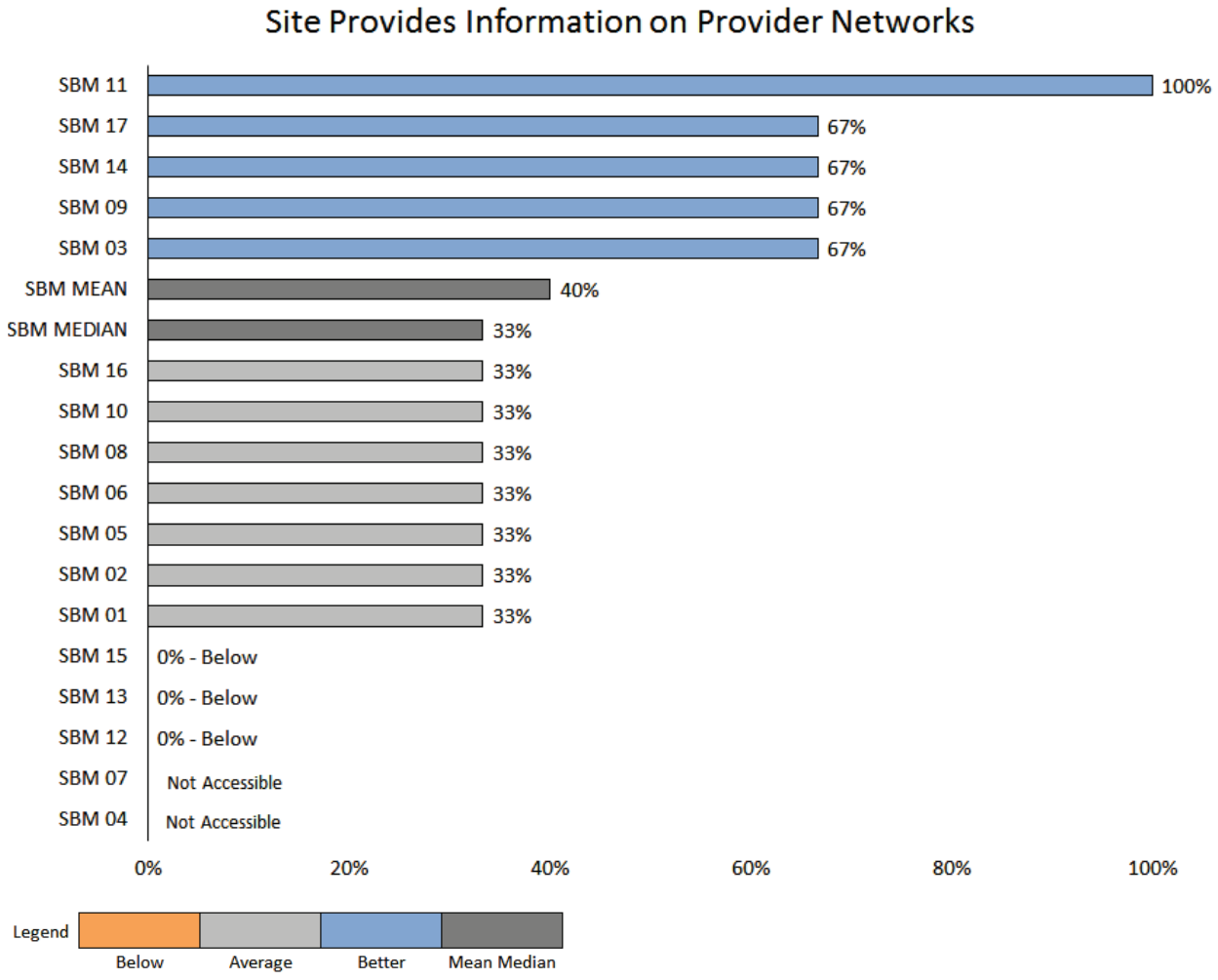
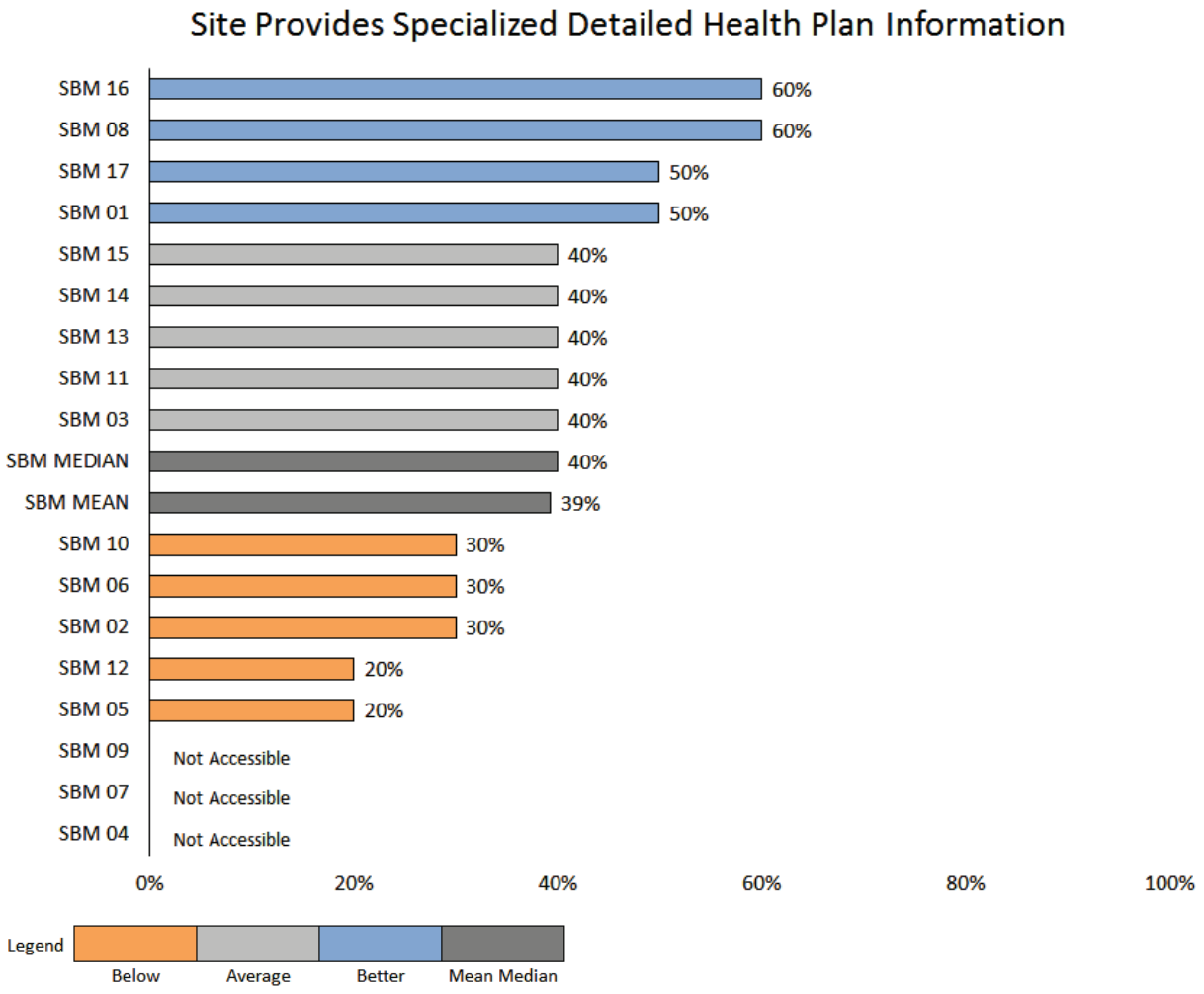


Figure C–4. SBM Results for Specialized Detailed Health Plan Information Domain



Topic 2. Determining Eligibility and Enrollment

Figure C–5. SBM Results for Enrollment Applications Domain

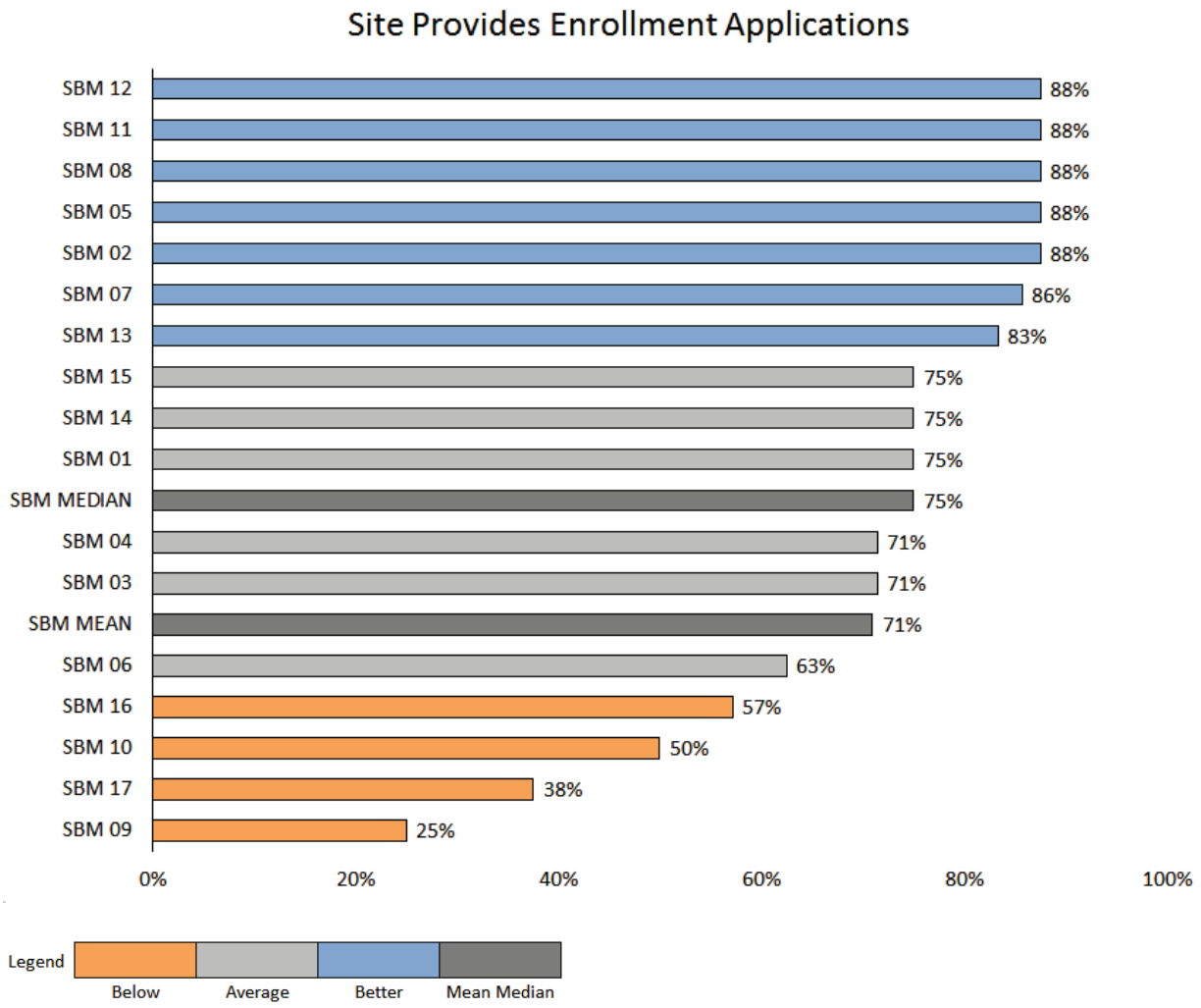


Figure C–6. SBM Results for Information for Determining Eligibility Domain

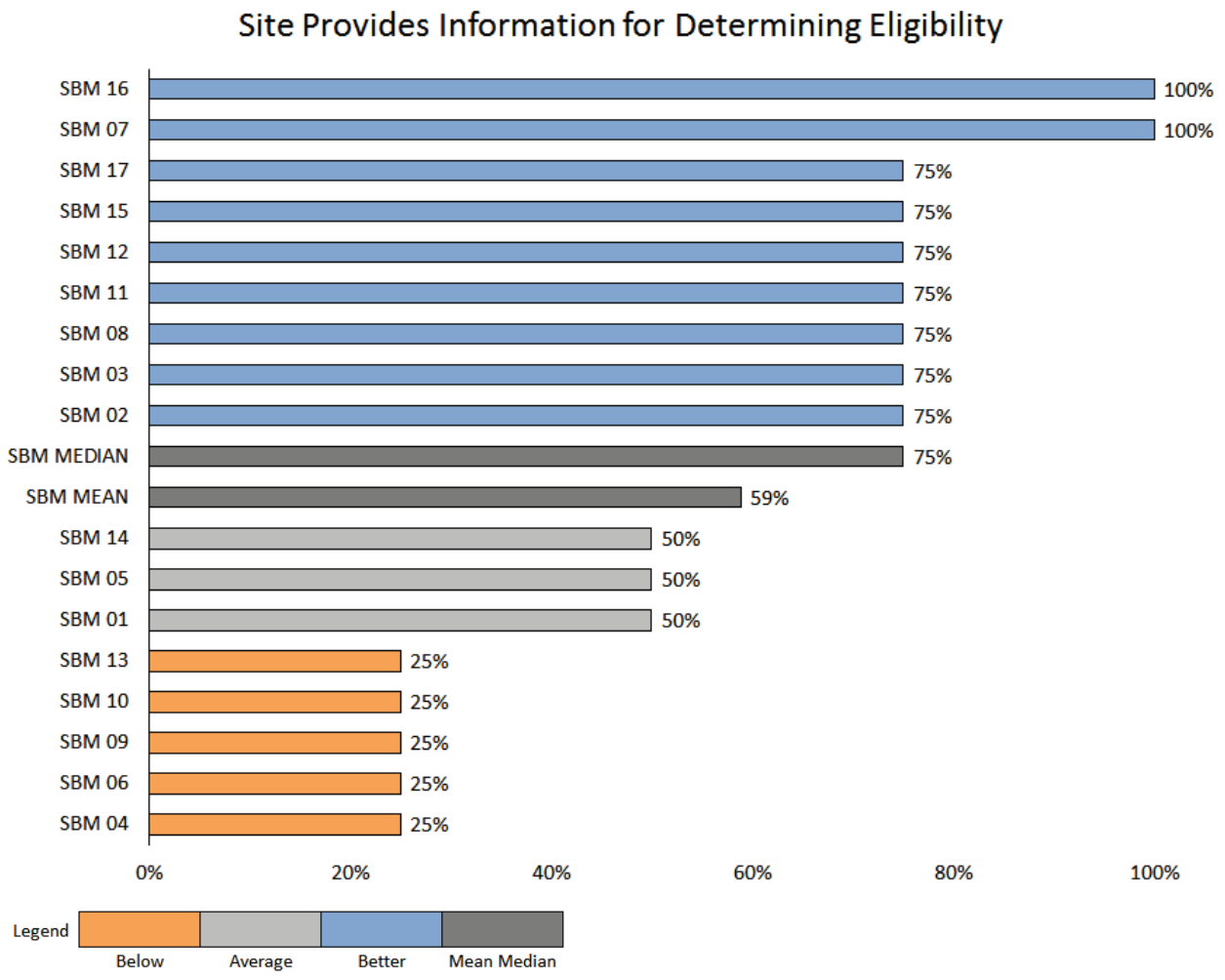
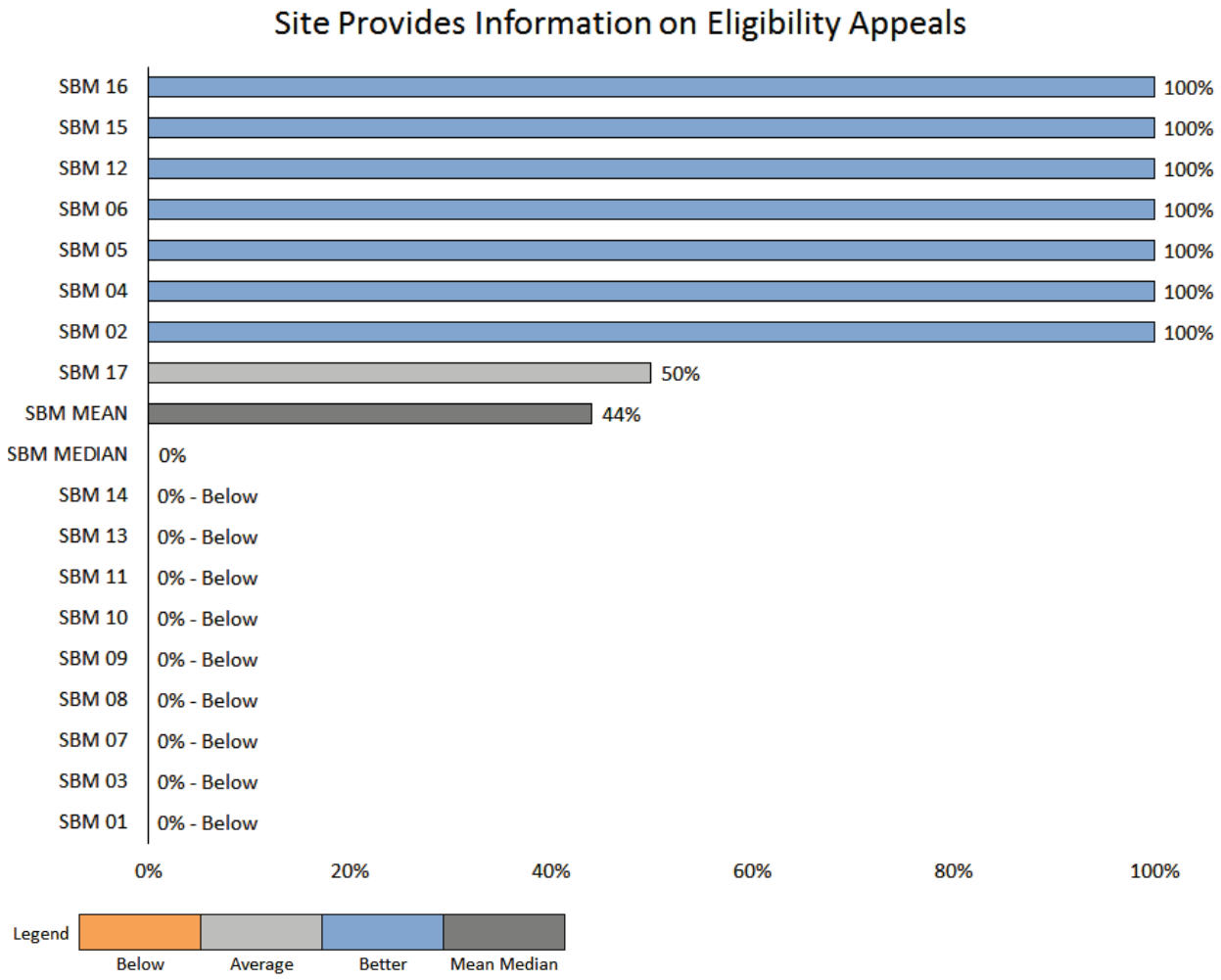


Figure C–7. SBM Results for Information on Eligibility Appeals Domain



Topic 3. Information Seeking and Outreach

Figure C–8. SBM Results for Access to Help and Assistance Domain

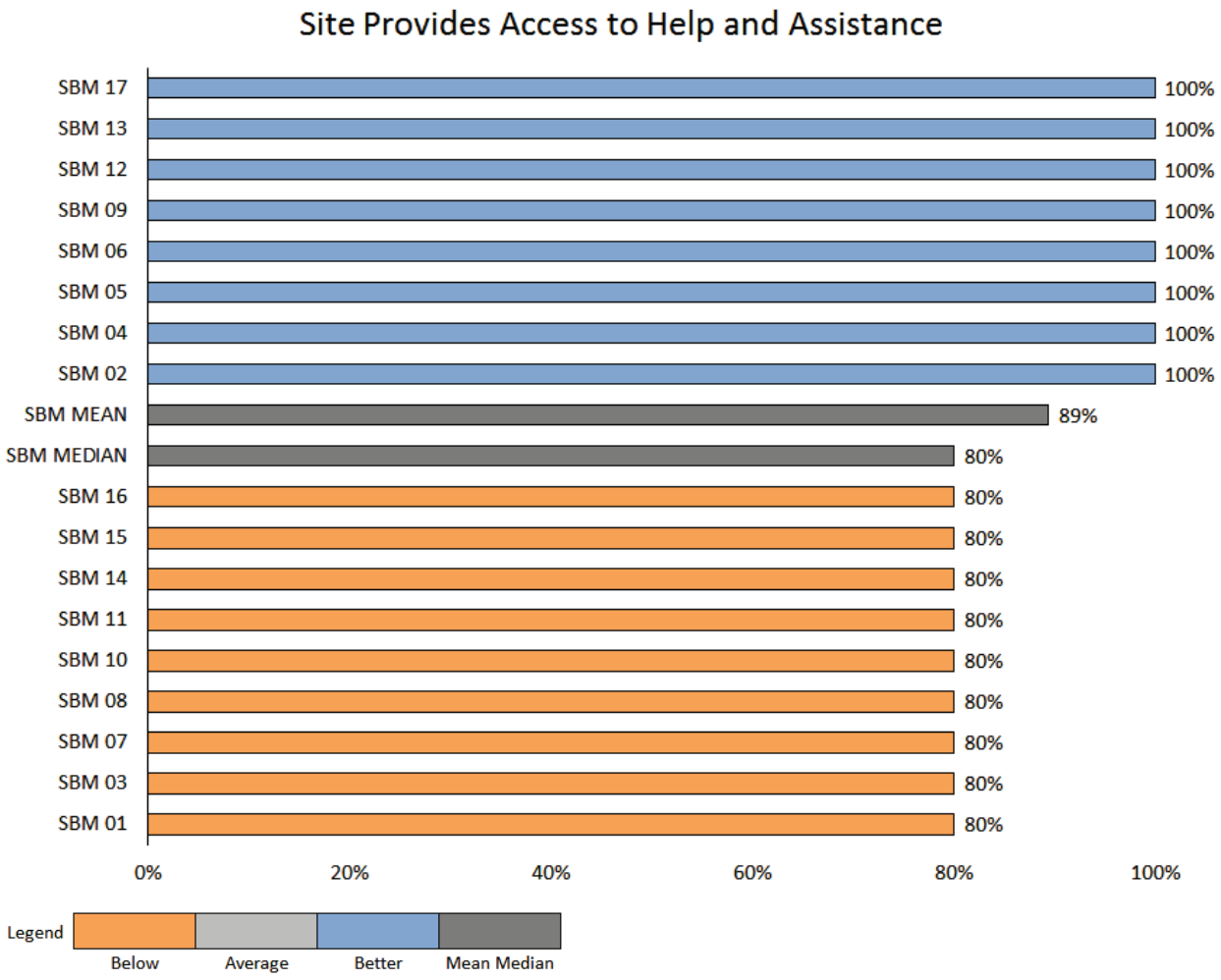


Figure C–9. SBM Results for Language Services Domain

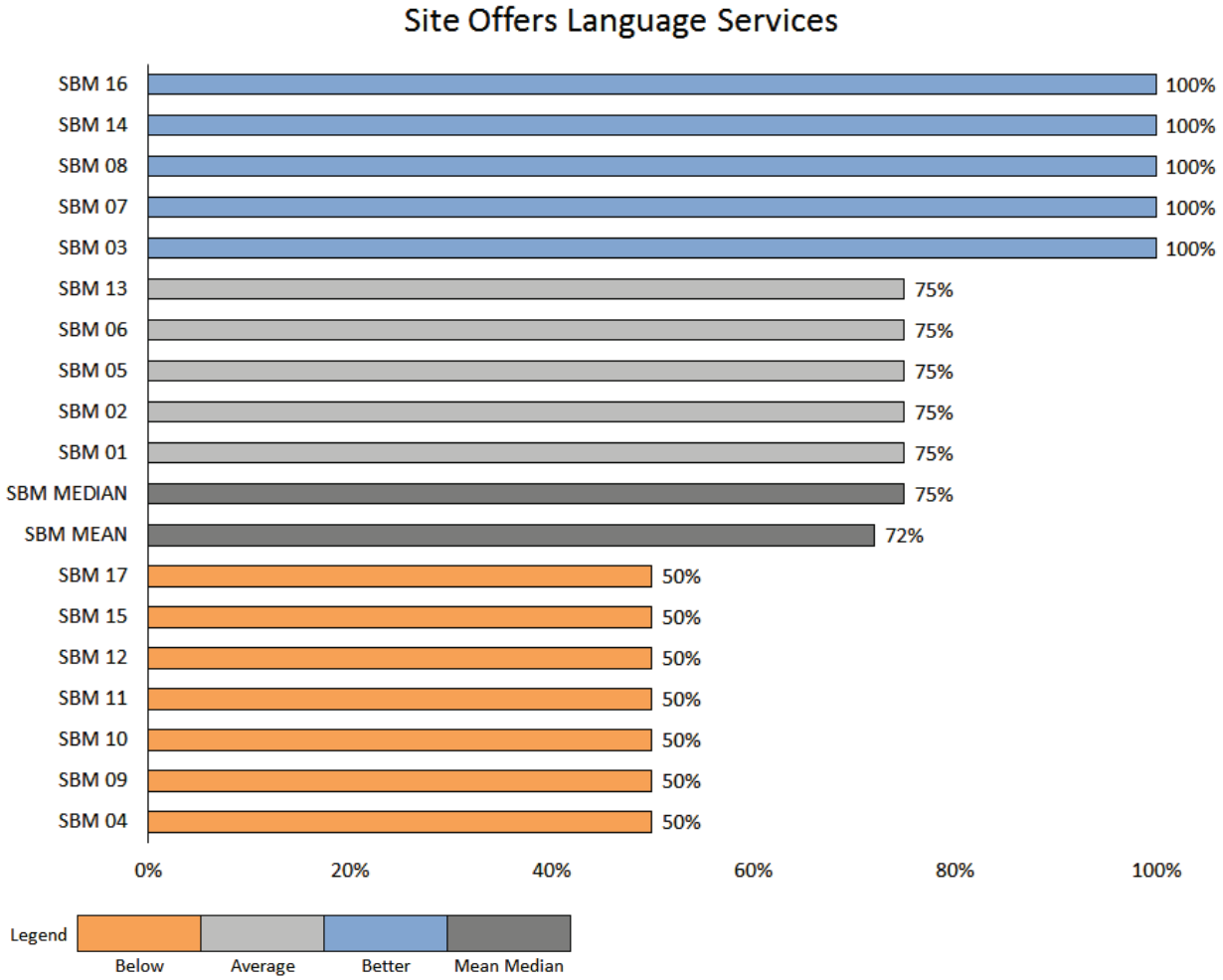
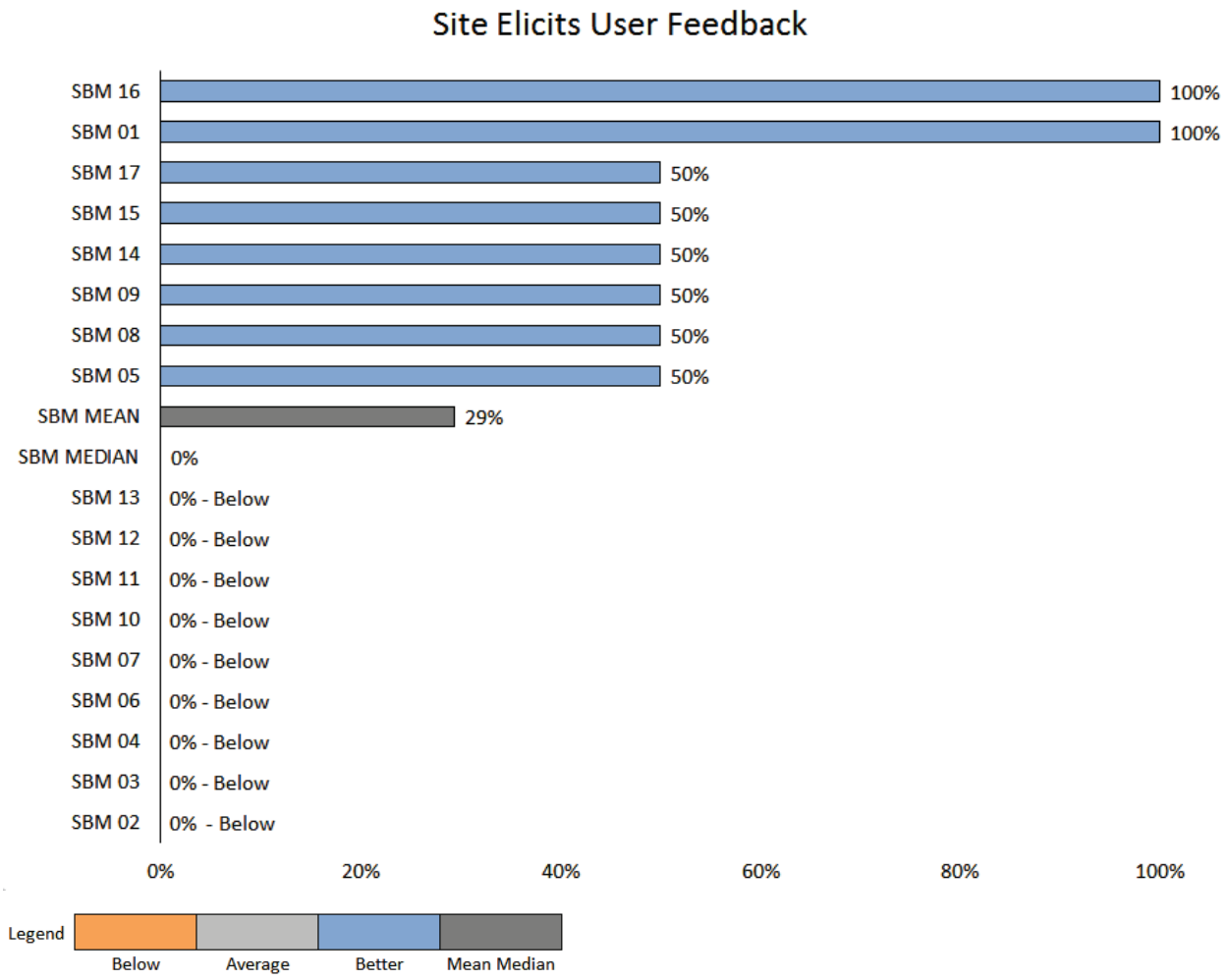


Figure C–10. SBM Results for User Feedback Domain



Topic 4. Information Architecture

Figure C–11. SBM Results for Adheres to Easy-to-Read Elements Domain

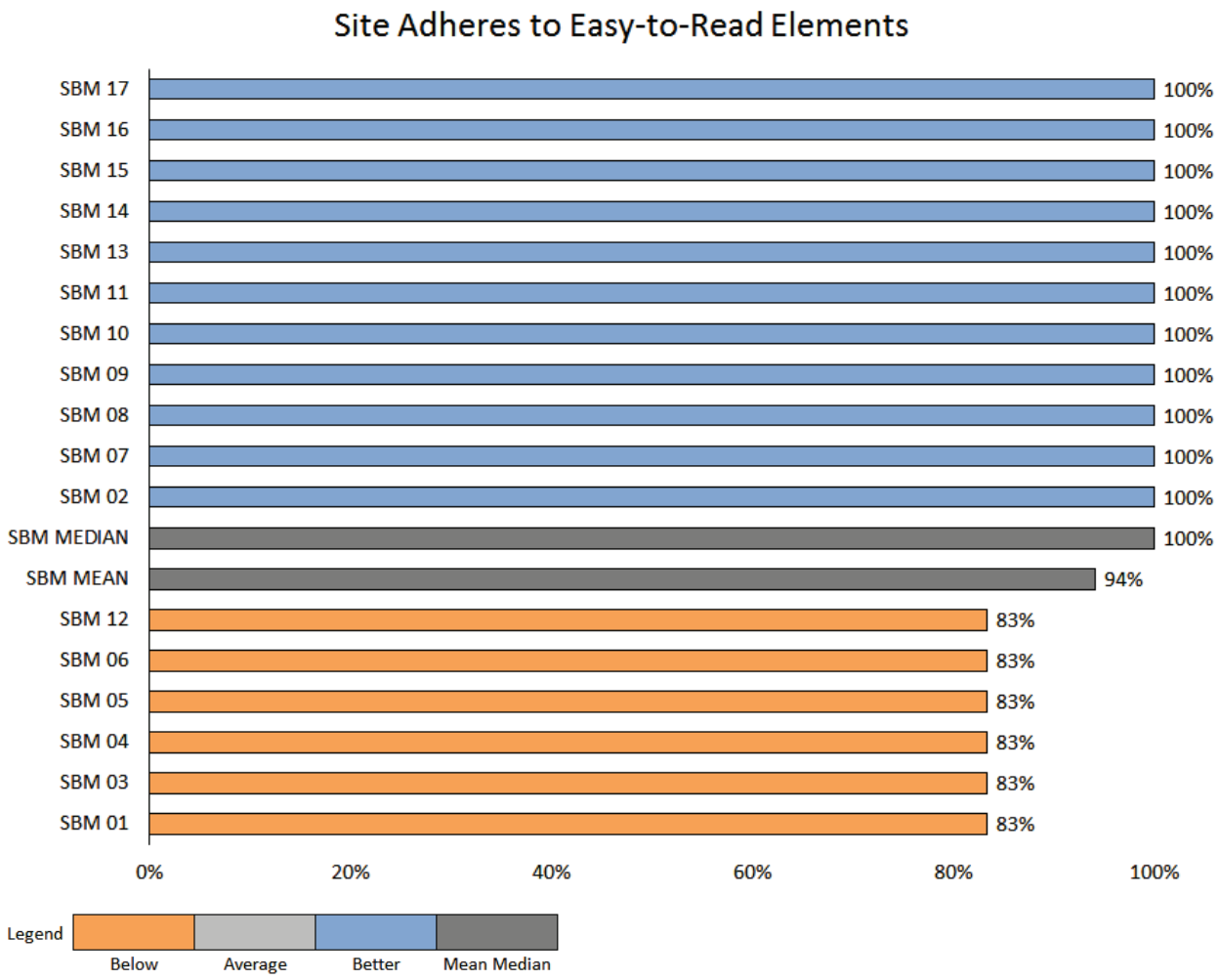


Figure C–12. SBM Results for Pages Are Easy To Skim or Scan Domain

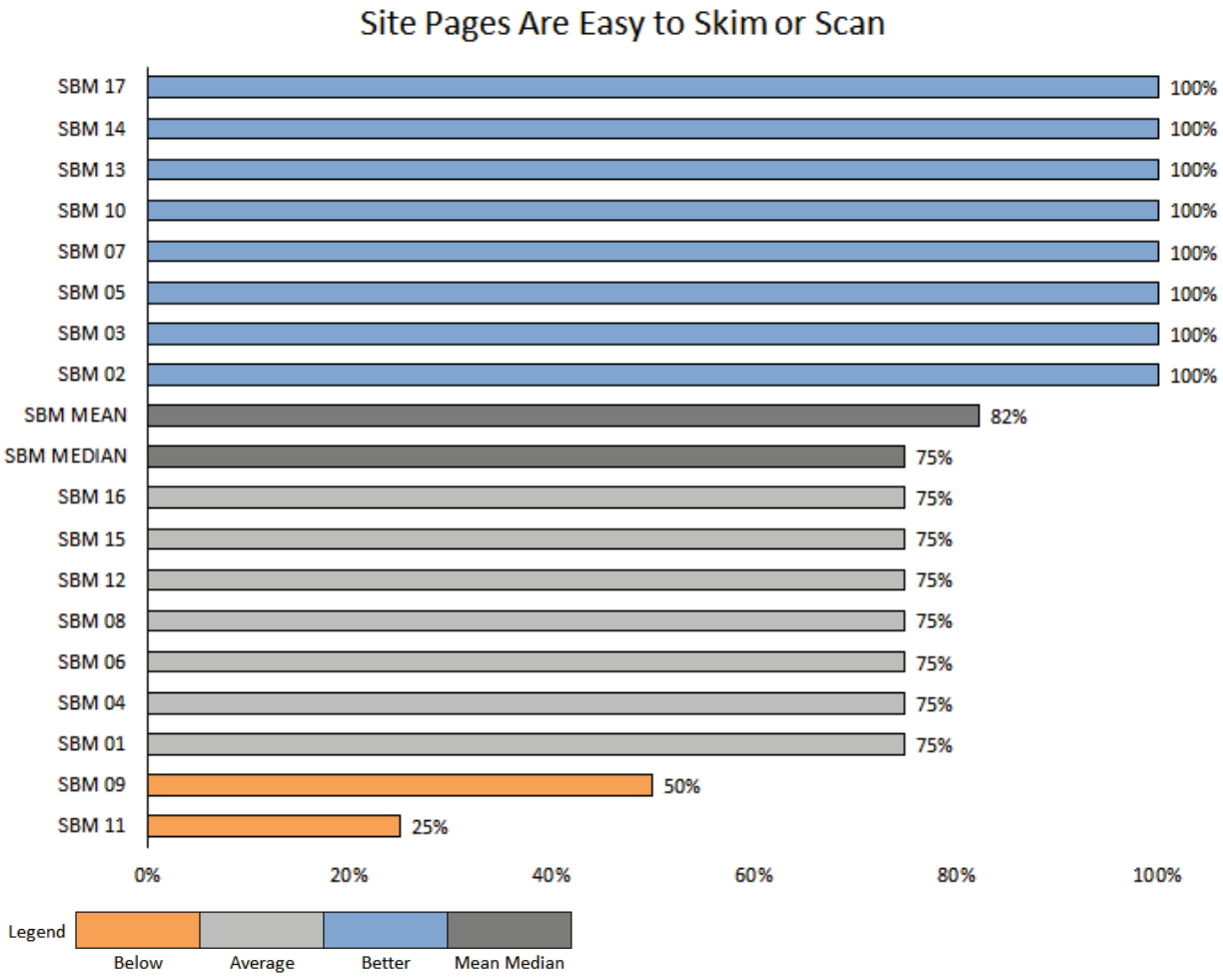


Figure C–13. SBM Results for Clear Visual Hierarchy Domain

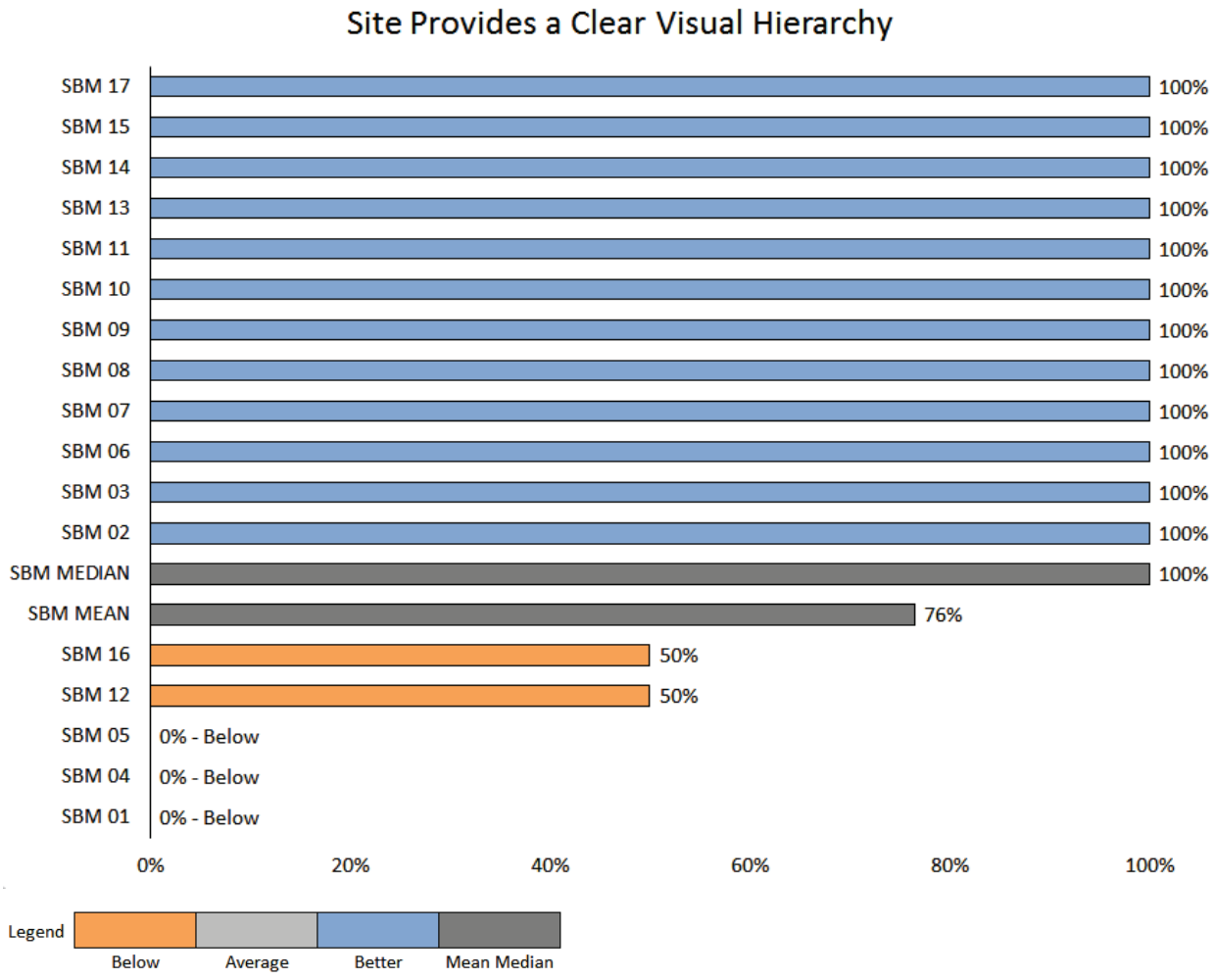
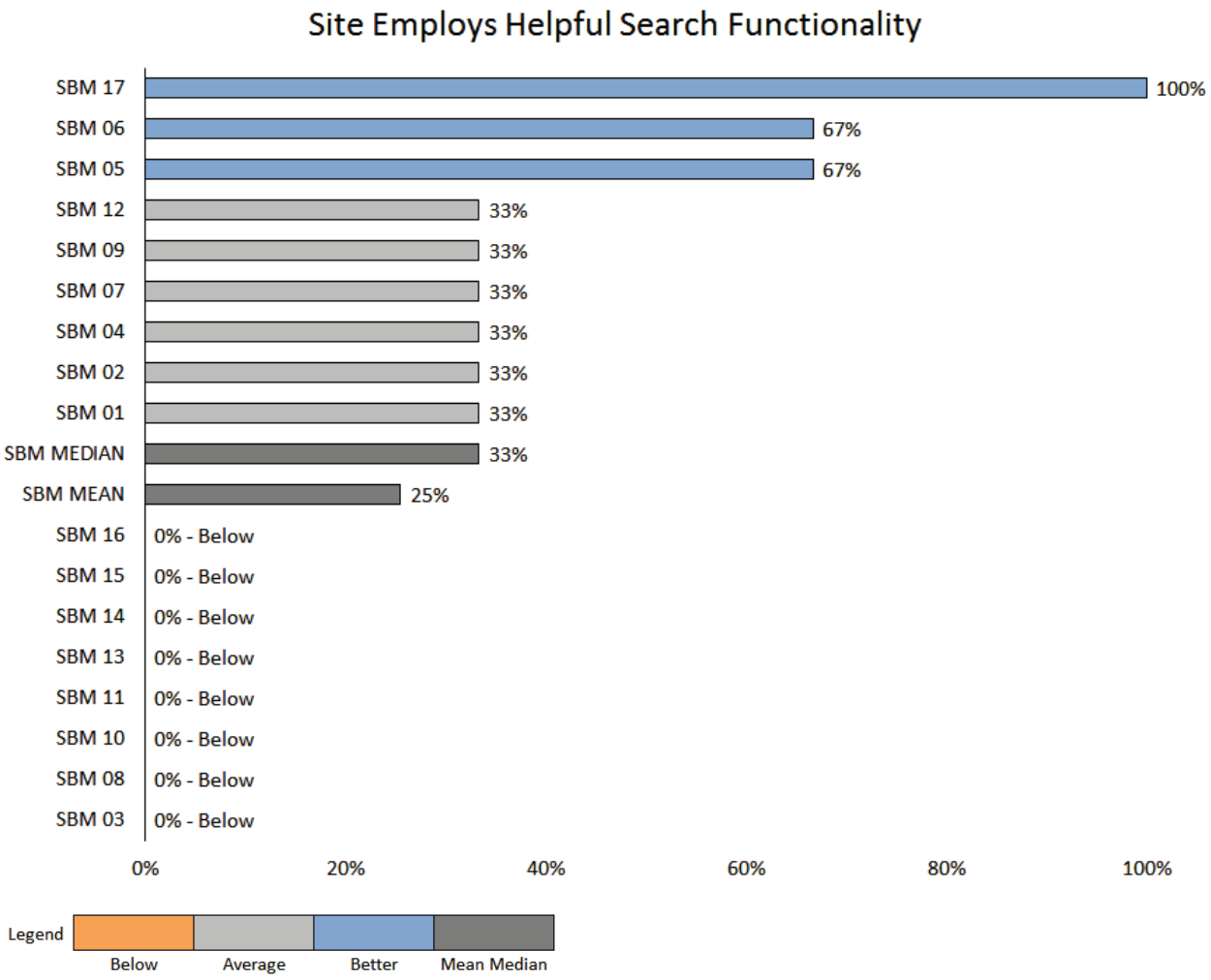


Figure C–14. SBM Results for Helpful Search Functionality Domain



Topic 5. Ease-of-Use and Accessibility Elements

Figure C–15. SBM Results for Conventional Interaction Elements Domain

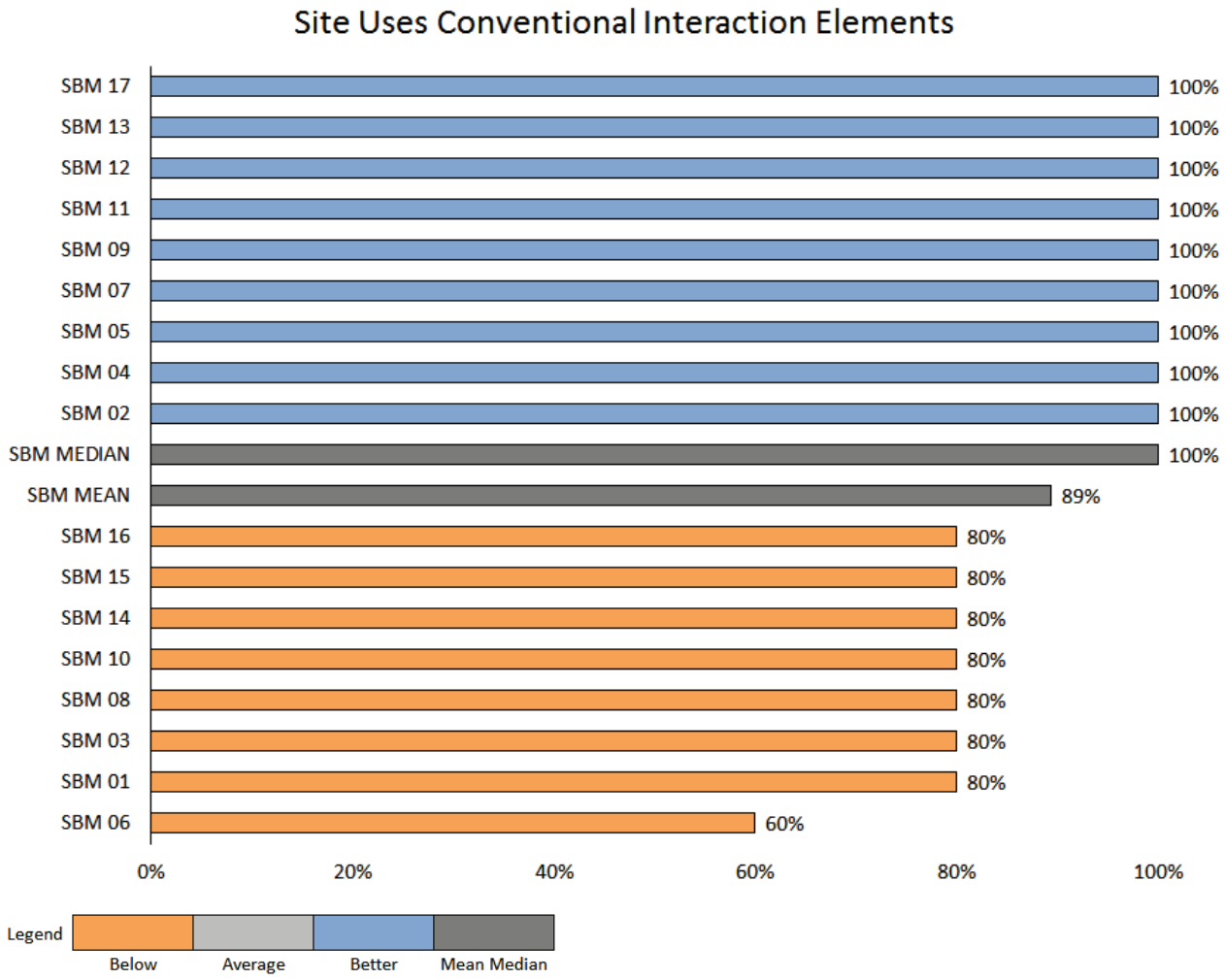


Figure C–16. SBM Results for Functions Well and Provides Clear Feedback Signals Domain

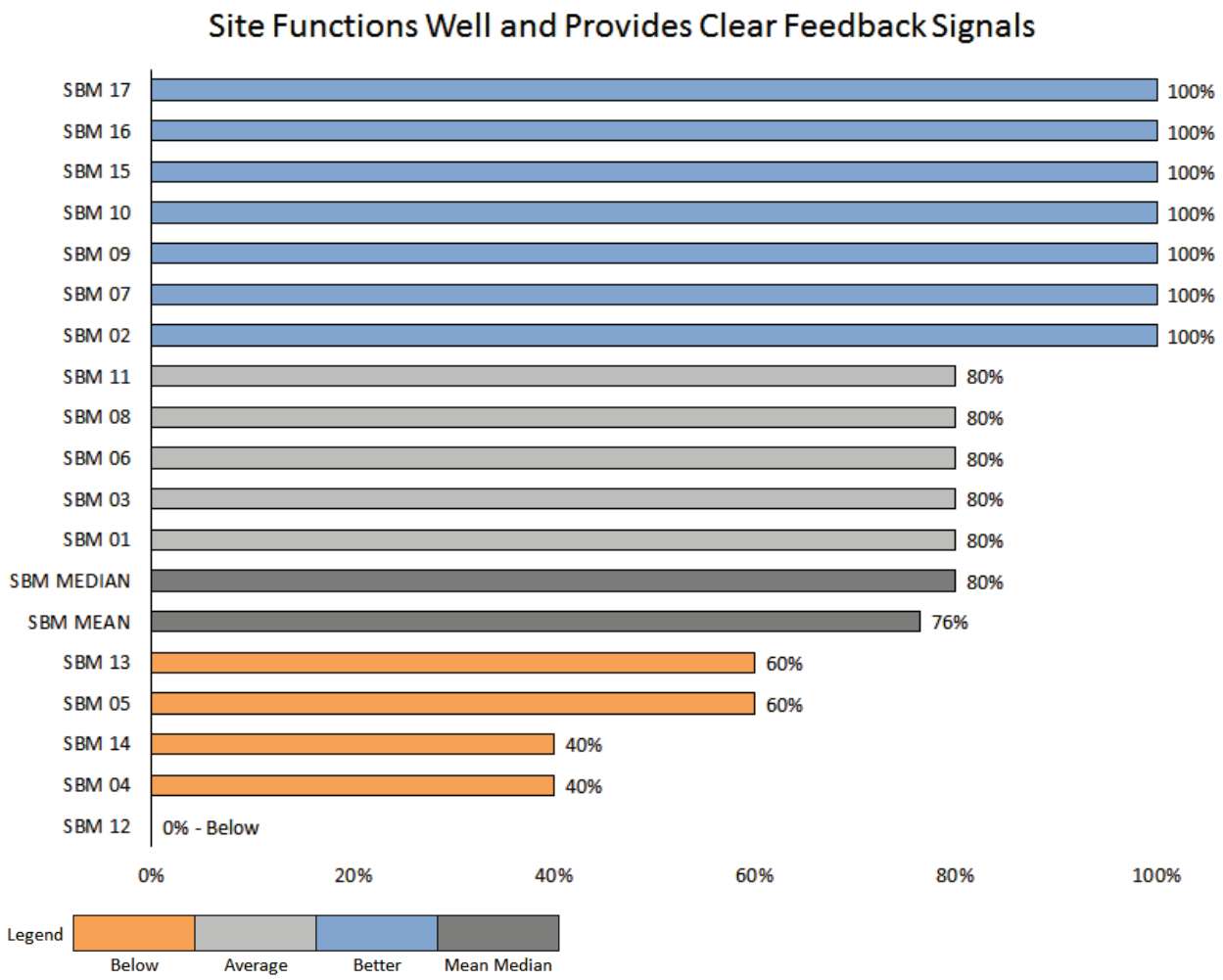


Figure C–17. SBM Results for Accessible Multimedia Domain

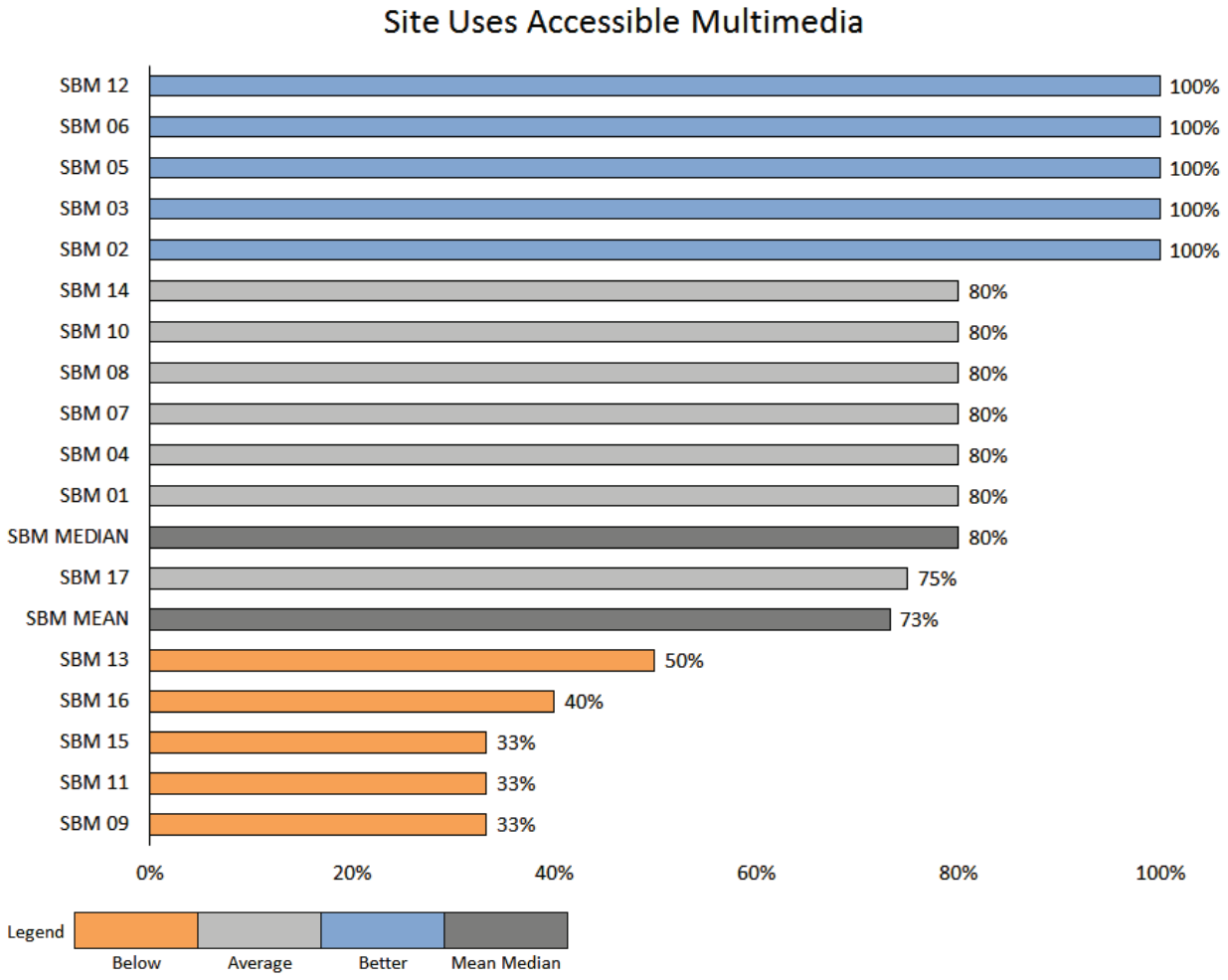
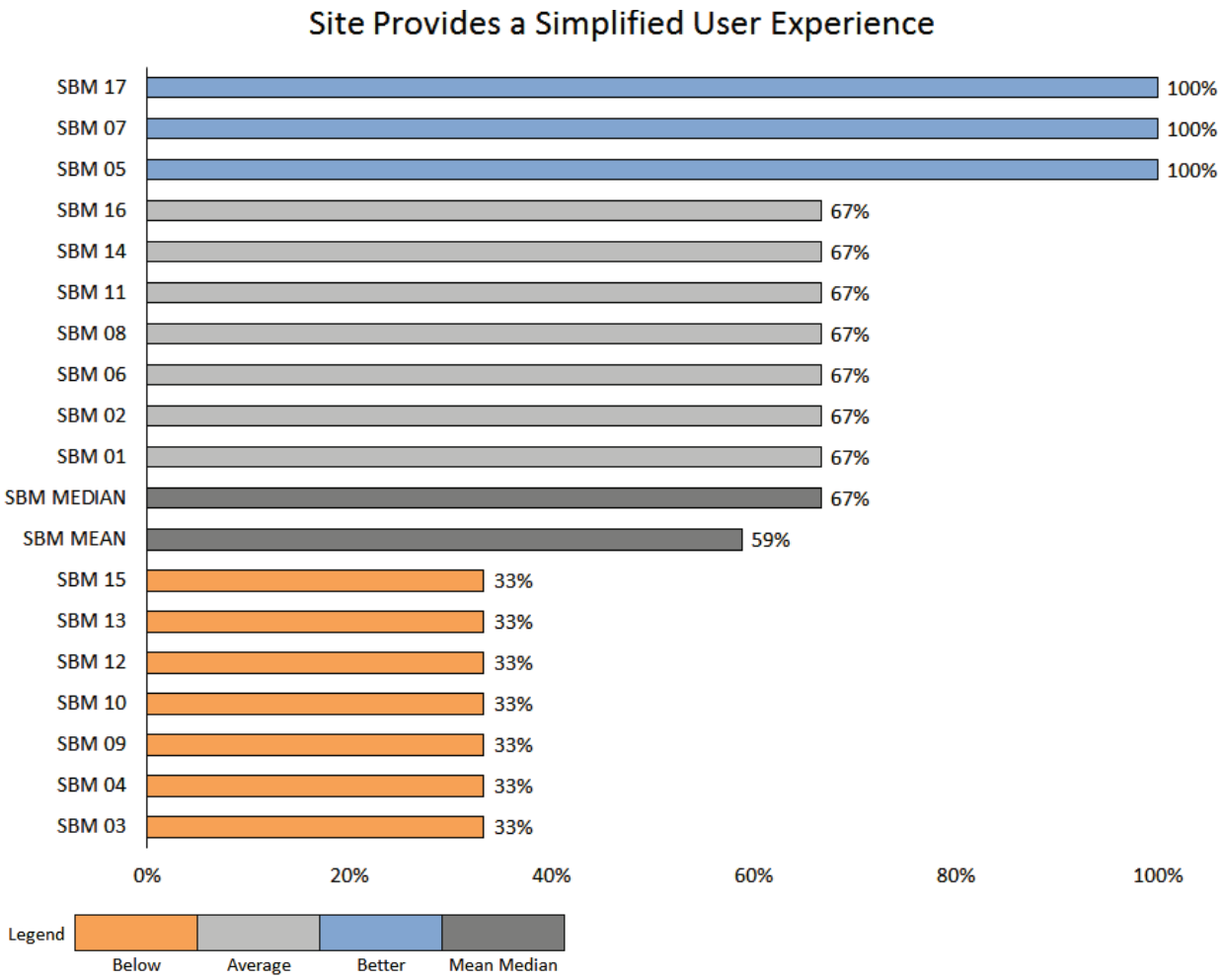


Figure C–18. SBM Results for Simplified User Experience Domain



Topic 6. Content Design

Figure C–19. SBM Results for Text Focuses on Audience and Purpose Domain

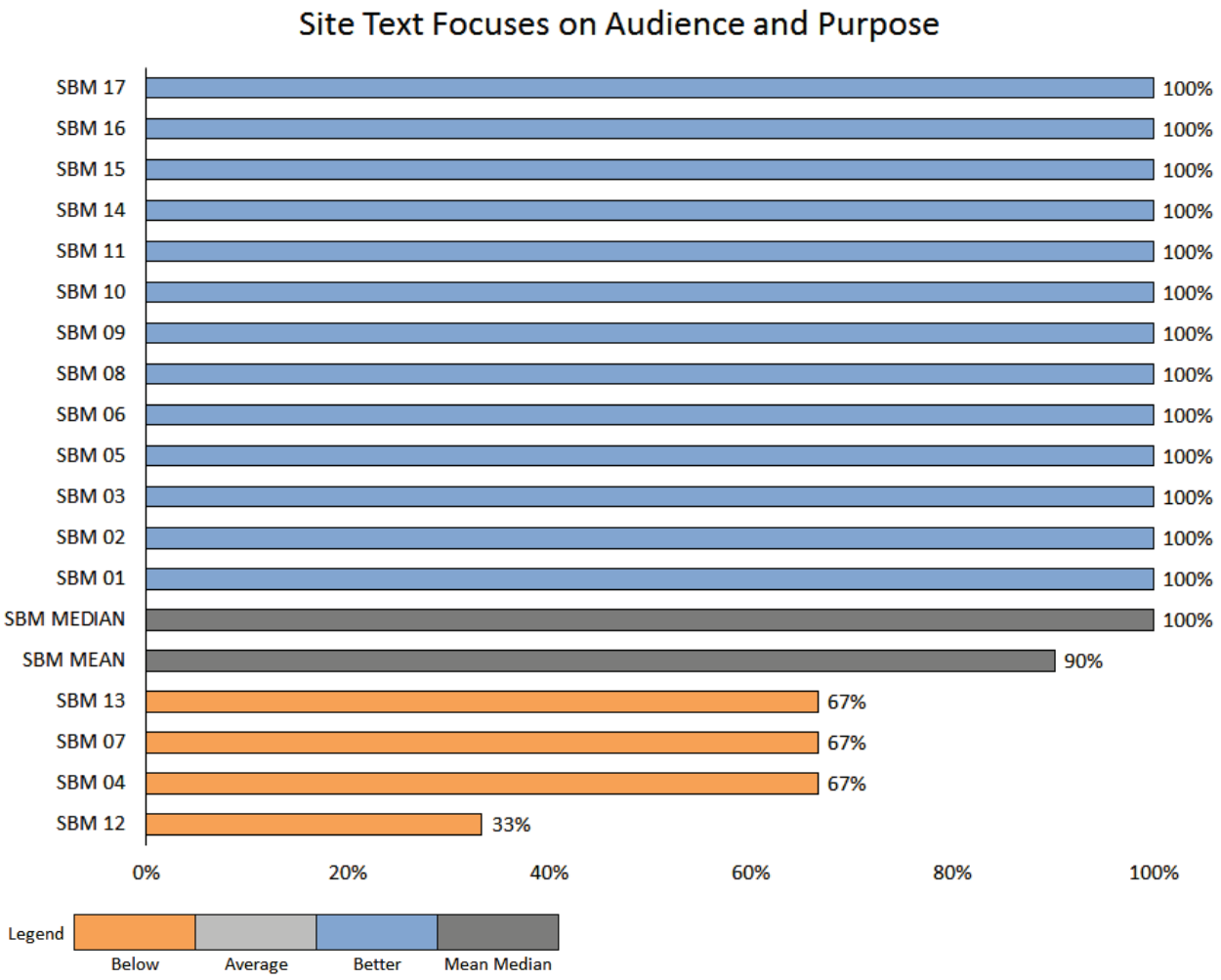
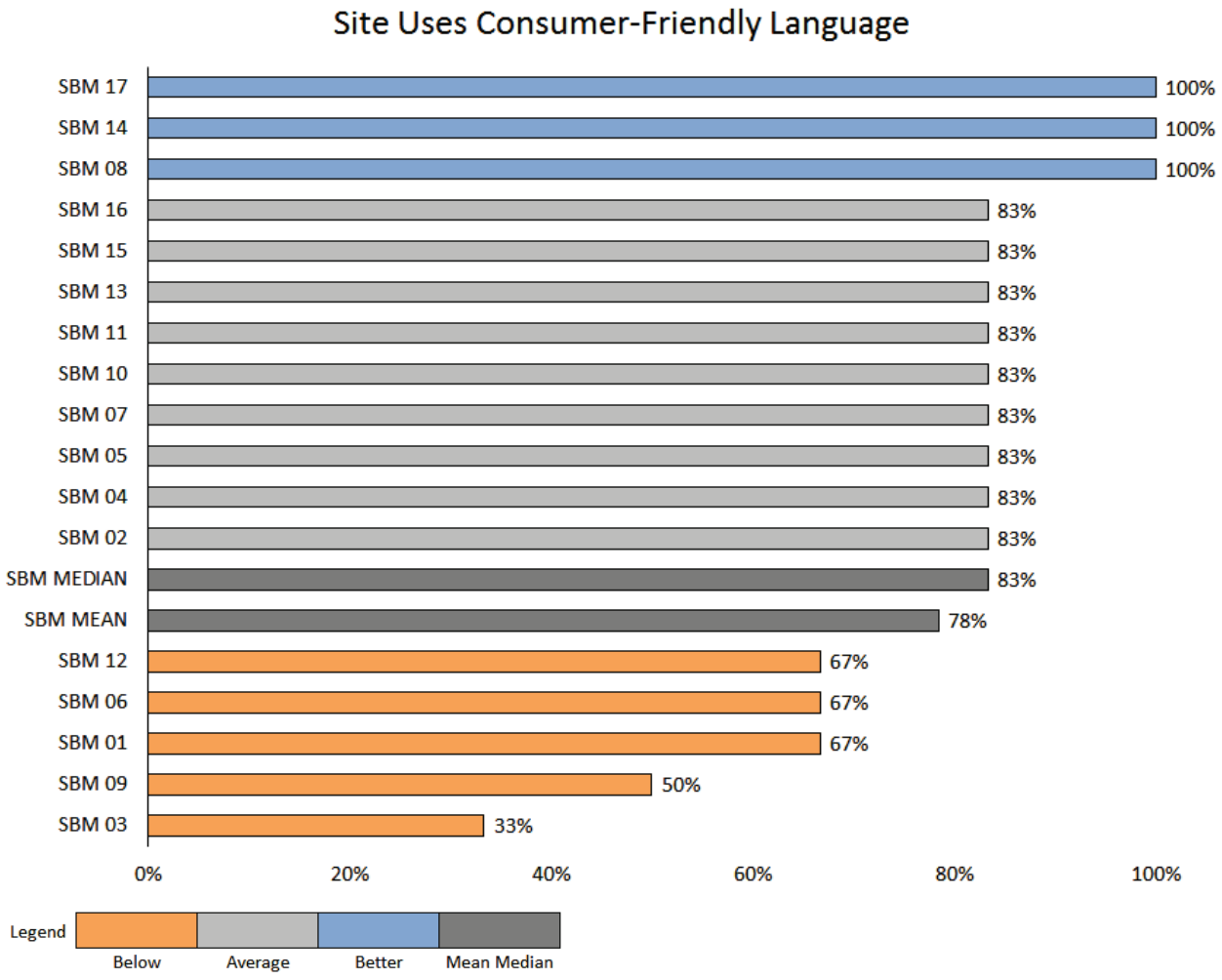


Figure C–20. SBM Results for Consumer-Friendly Language Domain



Topic 7. Disclosure Elements

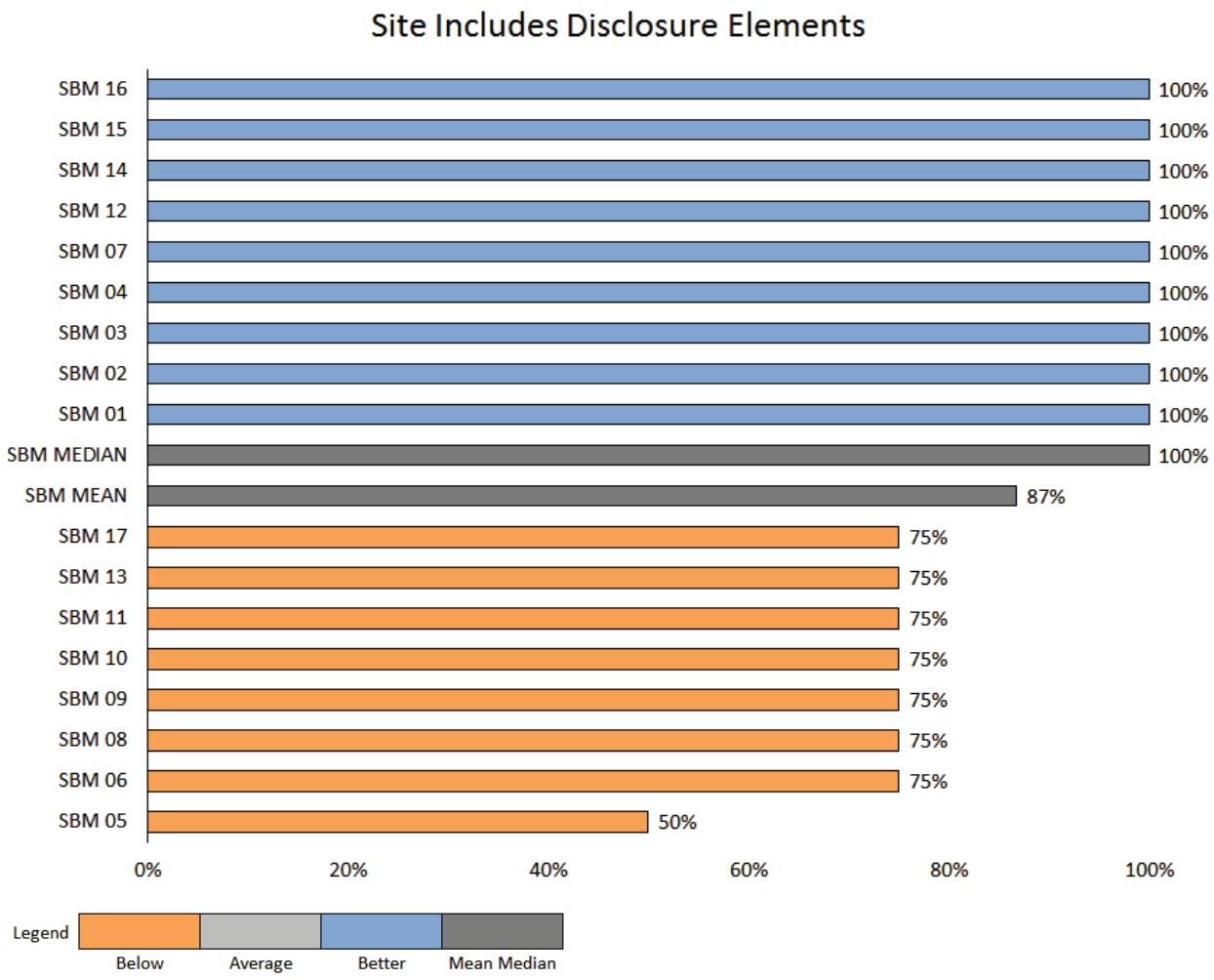



Figure C–21. SBM Results for Disclosure Elements Domain