NIELSON HEURISTICS

1. Visibility of System Status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

Provide a breadcrumb trail on every page. This should be visible as a user navigates through the site. — *4*

In the dropdown menu for "Measurement Systems" increase contrast/visibility on the "NIH Toolbox" chevron. Follow that chevron and do the same for "What does NIH Toolbox measure?" — *4*

Home>>Score/Interpret>>Interpreting Scores>>the windowshade boxes do not work in either the PROMIS and Neuro-Qol or the NIH Toolbox sections. — *3*

Home>>Learn More>>the windowshade boxes do not work in the "Add HealthMeasures to a Grant Proposal" section. — *3*

Home>>Forum leads to an interface with a different feel. Maintain the menu structure established with main nav, breadcrumb trail, and a submenu on the side to match the mental model of previous pages. — *2*

2. Match between system and real world

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

Home>>LearnMore>>HowToChooseAHealthMeasure>>SearchForMeasures, alphabetize options within the "Instruments Search" dropdown menus unless otherwise noted. — *4*

Home>>LearnMore>>HowToChooseAHealthMeasure>>SearchForMeasures>>Domain, start the menuchoices with "All" then "Multiple Domains" followed by a horizontal line to separate these meta-choices from individual options. Use another horizontal line before the last choice of "Other (including Global)" as it is still a singular choice, just not represented in the list. — *4*

The text in the first two images of the carousel is ambiguous; it gives the images a sales pitch feeling that should be more action-oriented. The carousel is highly visible. The content within it should reflect clear, functional aspects of HealthMeasures.net so the primary information presented flows naturally. — *4*

How does someone learn about PROMIS efforts in the US? Home>>Measurement Systems>>PROMIS>>PROMIS International — *3*

Increase visibility of sub-menus labeled "Helpful Resources" by bringing them up into the main field. On some pages, these menus become hidden beneath the scroll line and are easy to miss. — *2*

Sideways arrows/chevrons imply dropdown menus. On the left-hand side of the sub pages, try plain, opaque circles that continue to turn into circles with an arrow to indicate an active state. — *1*

3. User control and freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo

No issues found. — *0*

4. Consistency and Standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

The pink "Search for Measures" button text disappears when hovering because the hover text is the same color as the button. — *4*

Use different styling for links and action buttons. Under Home>>Contact, the "Submit" button matches the button styling of the internal link for returning to the forum.Three external links to health systems have the same styling. My first thought on this page was that my contact form would be sent to the contact information for whichever green button I clicked. — *4*

From the main menu, Search>>Search for Measures leads to a page titled "Instruments Search." Maintain consistent labels between the menus and the content. — *4*

5. Error prevention

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

To increase readability, especially for those with low vision, increase color contrast between the pastel-colored text and the background on the main page, between the active heading and the background in the nav bar on all pages, the color/color boxes or cells (e.g., green/green "Tip" boxes throughout the site; cells in tables), and the return to top chevron button in the bottom corner of pages; the current color pairings fail the majority of the WebAIM color contrast tests. — *3*

If access to the site is intended to be restricted, then ask for a username and password from the homepage. If not, then add a login field in the top nav or trigger a pop-up login prompt when accessing Home>>Forum>>New Topic. The current error message tells a user that he/she is "Unauthorized" but also "Welcome." However it is handled, remove the login and registration sections from the Forum menu. — *4*

6.Recognition rather than recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

On the homepage, the green and purple buttons fail all four WebAIM color contrast tests when in hover state; increase color contrast to increase readability for people who have low vision. — *4*

Keep the pop-up submenus in the nav bar; very useful — *0*

Site is responsive and breaks cleanly; keep this functionality — *0*

7. Flexibility and efficiency of use

Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

No accelerators found. — *0*

8. Aesthetic and minimalist design

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

I suggest moving "Learn More" from the main nav to a sub menu of "Measurement Systems." The measures would be named, followed by a horizontal line, then "Learn More" would open to a sub menu of its existing content. The main nav is about what a user can do on the HealthMeasures site. "Learn More" is about what a user can do with the measurement tools. — *2*

The stock photos and light text in the carousel could be replaced with actionable images and content relating to primary functions of the site (e.g., an image that links to forums with an emphasis on communication/collaboration/community in the text; contexts of use that scroll to the three buttons below; logos of the measurement tools that link to the measurement systems main page; etc.). Active links in the carousel would further support the approachable, easy to use, one-stop shopping, and actionable goals of the brand. — *2*

9. Help users recognize, diagnose, and recover from errors	**Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.**	
	Home>>Forum>>Search did not give an error message when I searched for "Platypus." Instead, the system displayed the words "Advanced Search" with no additional visible buttons. Users will need a suggestion, such as a button for trying to search again.	*3*
	Error messages would be more visible as pop-up dialogue boxes or if the text were styled differently than the content hierarchy. As they are, they tend to blend into the site's content.	*2*
	Home>>Forum>>New Topic begins with "401 Unauthorized" because I am not logged in. Please remove this alert.	*4*
10. Help and documentation	**Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.**	
	Home>>Score/Interpret>>Interpreting Scores>>ASCQ-Me has no information. It has the text "Coming Soon."	*3*
	When viewed on a mobile device, the hamburger nav menu opens to the sitemap. This is too large for a mobile menu and needs to be reduced and restyled to lighten the cognitive load and increase readability.	*4*
HealthMeasures Heuristics based on info about users, product, and context(Finalize by 1/21/16?)	*To be used on an as-needed basis*	
1. Communicate brand messaging	**Is the state of the science available accross the experience? Do the tools appear precise & reliable? Is this approachable & easy to use? Does this appear to be evolving and frequently updated?**	
	The state of the science is available through the main nav, which is available across the site. The tools appear precise and reliable. The site is mostly evolving through the research forums.	*0*
2. Reflect contexts of use	**Is this content appropriate for educational, medical research, and clinical settings? Are the contexts addressed?**	
	While the content is appropriate, the contexts of use could benefit from redesign of the information architecture. The homepage offers three choices clinical practice, research, and "other" settings. The "other" settings listed are "medical, university and other educational environments, as well as ... consulting." Clinical settings, medical research and educational would be more direct contextual use headings. Another option might be Clinical Care, Educational Testing, and Medical Research. The Information Architecture would benefit from further study--such as card sorting--to see what categories work best for the users.	*3*
3. Support One-Stop Shopping	**Can the user complete their task without leaving the site? Are there things that prevent or slow the user from completing what they need to get done?**	
	There are external links, but a user could select an appropriate tool within the site based on the explanations given (new user) or prior experience (advanced user).	*0*
4.Support discoverability and learnability for new users	**Does the informaiton provide context and explanation for those who are new to the tools? Are demonstrations of each tool easily accessible for new users in all three contexts?**	
	Demonstrations were not given for each tool, but they are explained in detail with links provided for support.	*1*
5. Provide Effeciency for repeat users	**Are tools obscured or hidden for those who are familiar with them? Is it easy to find reference materials throughout the experience as needed?**	
	Advanced users would be able to find the tools and reference materials easily. Attention to the IA will help novice users to find what they need more quickly.	*3*