

Table 4

Heuristic Evaluation of MyHR Using Monkman Heuristics

Heuristic	Description	Information Website	Record
1. Immediately inform users of purpose and engage users; avoid registration.	Identify the purpose and audience on the home screen page. If unavoidable, make registration and logging in simple and obvious.	Y	N—registration not simple, multiple-step process involving MyGov.
2. Use complementary interaction methods.	Make use of alternative inputs (e.g., touch screen, barcode scanning, voice commands) and outputs (e.g., audio recordings, videos, text-to-speech engines).	N—no audio, video, touch screen, barcode scanning, etc.	N—no audio, video, touch screen, barcode scanning, etc.
3. Leverage interactivity.	Offer interactive tools (e.g., quizzes, questionnaires, glossaries, tutorials) to engage with the information and provide performance feedback. Allow users to share information (e.g., print, e-mail) with others.	N—no interactive content, no sharing of information.	N—the little interactivity available does not provide performance feedback.
4. Provide accurate, colloquial, comprehensive, succinct content.	Written information should be brief, relevant, and in user's vernacular.	N—not in user's vernacular, poor use of plain language (high average Flesch-Kincaid grade level).	Y

5. Provide tailored, flexible, layered content.	Prioritize information according to importance. If possible, personalize information. Provide succinct summaries, but allow users to access more detailed information. Offer content in multiple languages.	N—content not prioritized, content not personalized, little content provided in multiple languages.	N—content not provided in multiple languages.
6. Use visuals to complement text, but avoid tables.	Visuals (e.g., pictures, videos, animations) may enhance written information. If unavoidable, tables should be designed as independent, simplistic representations of information.	N—little use of visuals, image on home page doesn't represent the user.	N—too few visuals.
7. Simplistic, consistent navigation.	Keep users oriented, Use linear navigation to facilitate forward and backward movement. Use large buttons, clearly label links, and provide a search engine.	Y	N—links not clear (often same color/font/no underline as surrounding text, or headings serve as links).
8. Simplistic, consistent displays.	Avoid on-screen complexity. Avoid the need for scrolling by limiting information on a page/screen.	N—user often needs to scroll to access important information.	N—user often needs to scroll to access important information.
9. Clear and comprehensive communication of risks.	Describe risk terminology in a way users will understand. Use 100 as upper limit on bar graphs. Avoid logarithmic scales.	N—risks not clearly conveyed (e.g., privacy/security risks).	N—risks not clearly conveyed (e.g., privacy/security risks).

10. Clear depiction of monitoring data and/or test results.	Emphasize values outside acceptable ranges. Facilitate pattern recognition and rapid identification of influential factors.	Not applicable	N—dependent on quality of information uploaded by health professional/health service. No data within the system, or links to external information, to aid interpretation of results.
11. Considerations for mobile devices.	Allow users to adjust the display size using familiar input (e.g., pinch to zoom, turning to landscape orientation). Use appropriately sized interface elements. Limit the amount of information displayed.	Y	Y

Source: Monkman, H., J. Griffith, and A. W. Kushniruk. “Evidence-based Heuristics for Evaluating Demands on eHealth Literacy and Usability in a Mobile Consumer Health Application.” *Studies in Health Technology and Informatics* 216 (2015): 358–62.