Accessibility Testing: Dashboard | Member Web | Usability | JUL 2020

Project Overview

Research Questions	• How usable is our new member website for members using screen readers to perform top tasks from the dashboard? • How might we make a more accessible experience for our members using screen readers?
Methods	Remote, moderated accesibility test
Tools	Lenovo laptop running Windows 10; Chrome + JAWS Microsoft Teams
Participant Summary	1 participant who is an accessibility expert from Skills Inc. Skills Inc. is a company that contracts professional usability testers who use assistive technologies to use the web.
Date	July 29 - October 15, 2020
Status	Complete

Highlights

This is the second in an ongoing series of accessibility evaluations of Premera.com. One participant who is visually impaired was recruited through Skills, Inc. The participant went through 10 tasks related to their experience in using member website. The participant used his own laptop, viewing the screen of a Premera laptop with JAWS installed over Teams to work on the tasks. Teams handled the transmission of audio to the participant. Keystrokes not supported by Teams remote control were spoken to the study moderator. Screen recordings with audio were made of every interaction. Clips were excerpted from those recordings to highlight major issues.

Major goals:

- Accessibility testing to set standards
- Educating designers, content strategists and engineers on a11y standards with Skills Inc sessions

Outside of scope for this study:

- We were asked to provide a VPAT certification for our Microsoft client. That was not a part of the services offered by Skills Inc, and there is no certification involved in this accessibility work.
- This is not a usability study, so data was only collected from one expert user of assistive technology, so specific issues reported regarding the usability of the site are not as significant as issues reported where the site is not conformant to accessibility guidelines.

Findings:

All findings and recommendations are listed on the analysis/notes sections. The accessibility issues were coded in different severity level according to Microsoft bug severity guideline. Please refer to **severity level** to help developers to prioritize the bug fixing process. Severity level 1 and 2 are the most critical accessibility issues that call to action. Please refer to all the details and **recommendations** when fixing accessibility bugs.

The following SWAY documents help communicate the top priority findings and recommendations
1. #1 Premera.com and Linked Sites Accessibility Testing Report 2020
2. #2 Premera.com and Linked Sites Accessibility Testing Report 2020
3. #3 Premera.com and Linked Sites Accessibility Testing Report 2020

Stakeholders
redacted

Project Subpages

Participant Notes

Corresponding Product Pages

Related Studies

2019-11-21 Accessibility Usertesting and Workshop

Accessibility Testing: Dashboard | Member Web | Usability | Oct 2019

Participant Details

#	Gender	Age	Income	Insurance Type	Notes
1	Male	N/A	N/A	N/A	N/A

Analysis/Notes

Our participant completed the following tasks using JAWS, a popular screen reader software, on the new member website dashboard and pages flowing from there. The participant commented to explain his experience as he completed the tasks. Observers were able to follow along thanks to a feature on JAWS that highlights the focused items as they are being read aloud. Using this method, the design and development could see how the screen reader behaves on our website and identify where it fails to support screen reader users.

Usability Study Table Example

Task Success Definition — Usability Studies

SUCCESS

PARTIAL

FAIL

Bug Severity Guidlines (from Microsoft):

Severity 1 (blocks core user tasks, no workarounds). Must be fixed immediately
Severity 2 (blocking core user tasks, but have workarounds). Remediation action needed ASAP or within 3 months post release with an approved exception form Microsoft.
Severity 3 (not- block core user tasks, but it is a violation). Remediation action required in the next major release. **Severity 4 (may or may not block core user tasks, negligible user impact, but not efficient or delightful)**

Task 1: Create account

Participant wanted to hear terms and conditions and got stranded there. Expected data formats not announced prior to entry, and invalid entries not announced after entry. Forward progress blocked by client validation rules which were silent.

FAIL

#	Location	Severity	Quotes	Observations	Recommendation	Priority	BUG #
siw2020 001	premera.com	4	"Press the Control key to stop it from reading. We call that the 'shut up' button."	• Participant used by Tab and E keys for navigating entry fields (E stands for edit box) • clip: "using H and B to navigate, seeking an agreement control on the terms and conditions"		12	
siw2020 002		1	*After hearing Phone number field label being*	• Required fields were not being announced as required by JAWs (except for Email field, which did	SecureAuth: Redesign form entry fields to make required or optional status audible (follow DCX)	1	161 92

			announced by JAWs: "Ah, that one said optional, so I assume the rest are required?"	announced as required by JAWs) • clip: "Secure auth fields not announcing required or optional"			
siw2020 003		1		• The Identification radio option labels are not announced by screen reader; only hear option 1 or 2 • clip: "secure auth radio options poorly announced" • clip: "secure auth radio options poorly announced 2" • clip: "Secure auth audible labels reverse of visible labels"	SecureAuth: Improve how radio buttons are announced to screen readers. Radio buttons should announce the following: 1. how many radios are in the group of radios 2. for each option, if the option is selected or not 3. for each option, the meaning of selection of that option (usually the label of the option) https://www.w3.org/WAI/WCAG21/Techniques/html/H71.html	1	161 91
siw2020 004		2		• When entering member ID for identification value, the Suffix entry does not include any description of what that is or where to find it • clip: "Secure Auth suffix label insufficient to understand what's requested"	SecureAuth: Ensure all audible labels are sufficient to understand the context of information required a. consider labelling "suffix" "member number suffix" for screen readers	2	162 08
siw2020 005		2		• Birthdate field format instructions are not announced before user enters date value. User has to use down arrow key to hear the requirement format text • clip: "birthdate format instructions not announced"	SecureAuth: Ensure formatting hints on data input are audible prior to a user entering data (follow DCX)	2	161 93
siw2020 006		1		• Password requirements are not announced before user enters password. User has to use down arrow key to hear requirements • clip: "password restrictions only announced after passing password field"	SecureAuth: 1. Redesign form entry fields to properly announced input hints prior to entry (follow DCX) 2. Redesign form entry fields to properly announce validation errors (follow DCX)	1	161 94
siw2020 007		3		• The format of the password requirements text, in one giant block of text, is difficult to understand when it is read all at once. Participant had to use Control + right arrow key to listen to each word separately	SecureAuth: Rewrite password restrictions blob using a screen reader to see if we can get it clearer on first listen	3	161 96

				• clip: "password restrictions blob hard to understand"			
siw2020 008		1		• The mismatched password alert does not announce itself to JAWS • clip: "password mismatch alert not audible"	SecureAuth: Redesign form entry fields to properly announce validation errors (follow DCX)	1	161 94

siw2020 009		1		• the disabled create button does not indicate why it is disabled
				  • clip: "confusion why create account disabled 1"
				  • clip: "mismatch password error silent"
					SecureAuth: Implement disabled buttons in the same way DCX does, and announce why the button is disabled when form field validation has prohibited forward progress (follow DCX)	1	162 10

siw2020 010		2		• the page level error "no matching account" was beneath the H1. Participant expects progress-impeding alerts to be the first content in the body. This is an auditory issue and not necessarily a visual issue • clip: "give me errors at the top of the body content"	SecureAuth: Ensure all errors are announced to screen readers in a logical an actionable manner (follow DCX)	2	161 95

siw2020 011		4	"So there's no agree button or anything?"
			
			"Usually the terms and conditions is a checkbox, that's why I'm confused."
				• participant could not recover from viewing the terms and conditions page; no navigation back to creation, no accept affordance on the terms and conditions page
				  • clip: "seeking agreement"
				  • clip: "can't agree with these"
						12	

siw2020 012		4		• participant had no way of knowing that terms & conditions opened a new tab; attempted to use the back button to get back to the form, but it failed because terms & conditions was a new tab		12	
siw2020 013		1		• our time on terms and conditions exceeded the session on the account creation page, yet the closing of the session came without an auditory warning. Participant expects web sites to announce when they're about to be logged out. (why are we signing out any user in the account creation process? There's been no	Ensure that session timeouts are announced to screen readers. Bonus points for allowing screen readers to extend session duration.	2	160 88

#	Location	Severity	Quotes	Observations	Recommendation	Priority	BUG #
				sign in, so why are we signing them out and trashing all their data in the process?) • clip: "stayed on the agreement for so long, logged out" • clip: "it's supposed to tell you that" • clip: "timeout notification expectation"			

siw2020 014		4		• upon return to the logged out account creation page, participant had to start over from scratch - no user entered data was preserved.
				• participant noted that all the links on the account creation and terms & conditions pages are confusing. (it's picking up on the global footer) His expectation is that account creation would be dedicated entirely to account creation relevant links.
				  • clip: "navigating terms and conditions, the end is not"
				  • clip: "links to everywhere except to agree"
						12	

siw2020 015		4		• participant was puzzled with the coding for the Terms & Conditions link. JAWS thought it was an edit box; user expected an agree to terms and conditions checkbox • clip: "terms and conditions link coded as form field"		4	

Task 2: Sign in

Expectation on invoking "sign in" is to be read username and password edit boxes. Can't navigate with headings. Confused by extent of options. Eventually successful, but likely only because he was a paid participant in a test.

`PARTIAL`

#	Location	Severity	Quotes	Observations	Recommendation	Priority	BUG #
siw2020 016	https://www.premera.com/sign-in	4		• the sign in button is not a button. JAWS doesn't detect any button. • clip: "there are no buttons on this page"		4	
siw2020 017		2		• the sign in button is a link, but it links to the page you're on • clip: "don't confuse links and buttons"	1. Review usage of links to ensure all links are used for navigation to new pages (with unique page titles); not for changes in page state or to reveal menus 2. Review usage of buttons and clarify distinction from links	2	content & DSM
siw2020 018		4		• participant expected the sign-in from the		4	

#	Location	Severity	Quotes	Observations	Recommendation	Priority	BUG #
				home page to link to a page with two input boxes and a button. • clip: "why is it not taking me there?"			
siw2020 019		4		• User's first solution is to invoke the links list and search for "Sign In"		12	

siw2020 020		1	"This (Sign In screen) is convoluted, it's not helpful at al. I should go to a page with edit boxes, with the focus on my user name. This is not standard practice at tall."
			
			"You got way too many extra steps to get to the actual sign in screen. You only have one item under employer, it should just go to the sign in screen."
				• observed that expandable lists with only one entry in them are wasting his time; would prefer we show the one entry
				  • clip: "that's not necessary"
				• Confused on the Sign In screen, as there are no Edit fields in which to enter credentials (keys E to move focus to Edit fields, no results)
				  • clip: "switchy page is weird"
				• Concludes he has to know his plan type to select a Sign In option, after much effort tabbing through clickable elements
				  • clip: "so that's broken"
					1. Update the switchy page to allow the listener to hear an entry point for username and password once they've clicked "sign in" from the anonymous experience. Render a username and password box and use back end APIs to get the member to the correct portal
					2. If 1 is too great a burden,
					  a. change the page title to "sign in options"
					  b. remove the "sign in" link/button from the switchy page
					  c. check coding on Sign In for properly tagged headings
						1	152 42

siw2020 021		2		• Keys H to move to Headings, but finds none on the page
				  • clip: "no focus or headings"
				  • clip: "headings make it easy"
					Review content organization for correct semantic use of headings	2	Content & DSM

siw2020 022		4		• Focus on Password narrates "bullet bullet" (*browser stored password?)		12	

Task 3: Pharmacy/Prescription

Participant was unsuccessful finding specific Amoxycillin due to several accessibility barriers related to heading structure, density of information, reading order of information, and behavior of select controls.

FAIL

#	Location	Severity	Quotes	Observations	Recommendation	Priority	BUG #
siw2020 023	https://www.premera.acpt /visitor/covered-drugs			• On Dashboard load, readers begins narrating all content, have to stop it with key CTRL (as expected)	Participant recommends looking at Community Transit web site for more accessible table handling		
siw2020 024		4		• Uses link list on Dashboard to look for Pharmacy and Drugs • clip: succeeded finding A		8	
siw2020 025		3		• Expresses confusion that there are multiple H2s (*follow up, are	eScripts: Review content organization for correct semantic use of headings	6	159 45

				single instances of hierarchical headings preferred?) • clip: and that's why it's very crucial to have the headings work		

siw2020 026		3		• Tables are not identified as such, with descriptions of their contents • clip: no table start	Ensure that tabular information is presented in tables and that JAWS knows they are in tables. https://www.freedomscientific.com/SurfsUp/Tables.htm	4	159 45
siw2020 027		3		• Links need to be understandable exclusive of their context (e.g., "click here" is not useful by itself) • clip: missing headings	eScripts: Review content organization for correct semantic use of headings	6	159 50
siw2020 028		2		• List of covered drug results are largely redundant, only vary by dosage, causing confusion at the repetition of drug name • clip: its not explaining to me what those are	eScripts: reconsider the presentation of drugs in the list to specify dosage as a second level choice after identifying the desired drug	4	
siw2020 029		2		• The links about specific drug /dosage do not include sufficient breaks/pauses between words or phrases to allow comprehension • clip: there's no pauses within that line • clip: needs spaces to break up complex strings	eScripts: reconsider the presentation of drugs in the list to make them easier to hear by screen reader users	4	
siw2020 030		1	"It shouldn't take an hour to find something."	• Covered Drugs dropdown: focus, arrow down, moves to next item in dropdown list but takes focus off the control (*check coding). • SELECT controls with collateral effects form a barrier to understanding • clip: you've got too many things going on at the same time • clip: selecting an item is pressing enter on that • clip: I can't see the list • clip: That's really bad	eScripts: Redesign select controls so that focus on an option and selection of that option are different keyboard actions	2	159 46 is the generalize d spike to recode select controls not limited to escripts
siw2020 031		3		• Covered Drugs list of results: "Tier" icon /alt text at start of each line is redundant and confusing ("what's a tier?") • clip: lead the string with the	eScripts: lead linked text with the most significant data	6	

				most significant data			
siw2020 032		3		• Tables not coded to include column information when narrating cell contents, helping explain content • clip: table navigation requires memory of column header	eScripts: review table code to ensure compliance with accessibility coding standards.	12	
siw2020 033		4		• Pharmacy Benefits Guide was announced and remarked on early, but participant deemed it unrelated to the task		12	

siw2020 034		2		• Icon indicating coverage tier is not defined on page
				  • clip: I don't know what tier 1 means
				  • clip: Tier 1, I don't know what that means
					eScripts: consider defining Tier 1 aloud on the the page instead of in a pop-up	6	

siw2020 035		3		• Icon indicating coverage tier is least significant information when seeking the drug name • clip: lead the string with the most significant data	eScripts: reconsider the order of data presented to ensure the unique elements are read first. Since the drug tier frequently repeats, place it further back in reading order	6	
siw2020 036		2		• Searching for amoxicillin returns dozens of formulations differentiated by dose and application medium; confusing to parse through all of those to find if the drug is covered • clip: needs spaces to break up complex strings	eScripts: redesign the drug list with more attention to the listener experience. Break up run-on sentences and acronyms.	4	
siw2020 037		4		• Content encouraging sign in to a signed in user is confusing • clip: there's no order to this	If a user is logged in, don't link to experiences that encourage them to log in to find more detailed information (Covered Drugs in footer of signed in experience takes user to a page that seems to be signed out without announcing the sign out)	8	
siw2020 038		2		• Expects new content to be read aloud • clip: expects all drugs beginning with a to be read aloud	eScripts: ensure all content is being read aloud in screenreaders	4	
siw2020 039		4		• Footer links complicate audio navigation • clip: footer links complicate audio navigation	Treat all footer links differently for the purposes of screen readers so the listener knows which links are unique to the current page versus links that are on every page.	8	

Task 4: Customer service phone number

Link list reveals both "Call Us" and "Contact Us", unclear which is desired. Participant was confused by the heading "employer-sponsored plan" and asked if the number was for his employer rather than Premera customer service. The phone number doesn't announce that it's the number for customer service

#	Location	Severity	Quotes	Observations	Recommendation		BUG #
siw2020 040	https://www.premera.acpt /visitor/contact-us	4	"The titles are either not giving enough information or trying to do too much."	• Link list reveals both "Call Us" and "Contact Us", unclear which is desired • clip: footer links mean ctrl+F is the best way to use the site	Treat all footer links differently for the purposes of screen readers so the listener knows which links are unique to the current page versus links that are on every page.	4	

siw2020 041		4		• the phone number doesn't announce that it's the number for customer service. Participant was confused by the heading "employer-sponsored plan" and asked if the number was for his employer rather than Premera customer service. Finds section with physical addresses of corporate offices, is frustrated that the phone number is no represented there
				
				  • clip: none of them look like information to premera
				  • clip: member sponsored prior to phone number confusing
				  • clip: not understanding the context of employer
				  • clip: no phone to directly call your main offices
				  • clip: context of information not clear
					Review content organization and code to ensure that labels and their values are read as a unit by screen readers	8	

siw2020 042		4		• Participant expects the name of his company to be present		12	

siw2020 043		2		• Going to Contact Us page via link doesn't load with the focus in useful place, but browser Foward and Back to that page does
				  • clip: link list navigation reads wrong page title
				  • clip: navigation preferences
				  • clip: loading sequence might confuse screen reader
				• Screen reader reads previous page when landing on Contact Us
					Ensure that usage of Links list in JAWS correctly reads the title and page content of the destination of the link	2	104 8317

siw2020 044		4		• Clicks "Get directions", Bing map loads in new	1. Announce the title of new tabs on load 2. Reconsider loading Bing maps as a mapping and directions provider	8	

#	Location	Sever ity	Quotes	Observations	Recommendation		BUG #
				tab without notification; participant confirms it's a new tab by attempting browser Back, with no response • clip: bing maps is a dead end			
siw2020 045		4		• Expects only content described by inbound link at top of page • clip: I don't want anything else at the top of the page	On traversing a link, the ideal experience is the screen reader reads the title of the new page. Optimize audio to support this ideal.	4	
siw2020 046		2		• Expects to orient on content using headings • clip: expects headings to outline content	Review content organization for correct semantic use of headings	2	content and DSM

Task 5: HSA account

Participant used links list and headers to find the link to Health Savings accounts

SUCCESS

#	Location	Sever ity	Quotes	Observations	Recommendation		BUG #
siw2020 047				• participant used links list and headers to find the link to Health Savings accounts note: test account was not provisioned to sign into CYC and we may find issues within the vendor experience once we get credentials later	Provision test account credentials so we can evaluate HSA tasks		

Task 6: Find care

The select menus in Find Care for region and the filters on provider results list are not accessible to audio users.

FAIL

#	Location	Sever ity	Quotes	Observations	Recommendation	Priori ty	BUG #
siw2020 048	https://premera. sapphirecareselect.com/	2		• The interstitial SSO page is read aloud, confusing the user. The user expectation is that anything other than the destination he requested should not clutter the audio space. • SSO transient page content being read aloud	On traversing a link, the ideal experience is the screen reader reads the title of the new page. Optimize audio to support this ideal.	8	
siw2020 049		1		• The "choose a location" screen does not announce when the pattern matching modal dialog is presented. The user has no idea they need to pick from a list because they are never informed there's a list to pick from. Tab order never reaches the modal dialog • find care location	1. Sapphire: Redesign all fly-out menu controls so that the flyout and number of items in the flyout are announced to screen readers 2. Sapphire: On any control which allows the user to choose from a list of options, differentiate the focus action from the selection action, and don't assume the user has clicked anything	2	163 42

					choices not being read • no way to choose location • location box in search results still not announcing options • Continue is disabled until the user picks from the list (a list which the screen reading user has no idea is there) • Arrow works to get into the list - had to assist the tester just to gather more data, but this task is a fail • After specifying the location, the screen reader is simply told "Premera Blue Cross home"; there's no indication they are in fact on the find a doctor page.		
siw2020 050		1		• Participant expressed frustration that, when he traverses a link or invokes a search, he wants the next screen to focus on the results list, not the top of the page again. Frustrated that he has to go back through language selection and account and all the filters before getting to the results list • specialty search reads irrelevant page content • specialty search results don't convey funtion of selecting one • care results page not clearly stated for listeners	Sapphire: On selection of any control which renders a new results set, ensure the state change is announced to screen readers and the focus isn't set to the top of the page	2	163 45
siw2020 051		1		• The modal list which responds to the search for Names, Specialies, and Procedures is not announced, so the user has no idea it is there. Had to assist the user to procede, but this task is a fail. • change of location not announced • specialty search results silent	Sapphire: Redesign specialty search so as the user types options, the number of items in the filtered list of selected options is announced rather than main page content, ideally with instruction on how to interact with the filtered list	2	163 43
siw2020 052		3		• User is concerned that the arrow keys provide different information on selected controls than the tab key provides on the same control.	Sapphire: re-evalute audio support and element structure to bring arrow key and tab key focus into alignment	6	

#	Location	Severity	Quotes	Observations	Recommendation		BUG #
				Perhaps because arrow key is manipulating the screen reader but tab key is changing the focus? In any case, user prefers that both arrow and tab selection of a control provide the same information, and they're not, at least on the filters list • E reads data which tab does not			
siw2020 053		1		• Selecting a filter option leads to automatic refresh of page and change of focus. The options in any filter drop-down are not audible without selecting each one, tabbing through the page order to the list control again, then selecting another • results filter refreshes screen, loses focus • results filter refreshes screen, loses focus II	1. Sapphire: On selection of any control which renders a new results set, ensure the state change is announced to screen readers and the focus isn't set to the top of the page 2. Sapphire: On any control which allows the user to choose from a list of options, differentiate the focus action from the selection action, and don't assume the user has clicked anything	2	163 45 163 46
siw2020 054		4		• Expectations that any new tab reads the title of the new page, informing users they are on a new tab • how to inform users a new tab was opened	On traversing a link, the ideal experience is the screen reader reads the title of the new page. Optimize audio to support this ideal.	8	
siw2020 055		4		• User eventually found the phone number using Ctrl-F and querying for "phone", but I'm not sure he ever realized he was on the first result in a list of results.		12	

Task 7: Claims

Most recent three claims marginally accessible, though would prefer in a table. Claims filter will not work by ear due to form field audio issues.

<mark>PARTIAL</mark>

#	Location	Sever ity	Quotes	Observations	Recommendation		BUG #
siw2020 056		4		• suceeded finding status of most recent claim		12	
siw2020 057		3		• requested that the table announce when the user is on a new row (suggested a column that reads "1 of 3)". • clip: wants more context for tabular information	Review table code for semantic relevance, presence of correct structure for screen reader to recognize it's in the context of a table. https://www.freedomscientific.com /SurfsUp/Tables.htm	4	
siw2020 058		4		• The detail link appears in tab order, but its		12	

					position in the claims table is causing confusion.			
siw2020 059		3			• The detail link uses the claim id number to differentiate between the different claims, but that number is too long to be useful audibly • detail link uses claim number • participant failed to find the detail link without prompting	Reconsider leading the claim link text with the claim number because, although unique, it is too verbose	3	content or n/a
siw2020 060		3			• participant remarked that the table of claims didn't label the columns; perhaps because the "(for member)" is beneath the provider?	1. Ensure values and labels are read as a unit 2. Ensure that tabular information is presented in tables and that JAWS knows they are in tables. https://www.freedomscientific.com/SurfsUp/Tables.htm	3	159 45
siw2020 062		1			• participant was surprised that the Claim details weren't read on page load. • clip: claims details not read completely	Ensure all on screen content is read by screen reader	2	
siw2020 063		4			• The links list isn't helpful on our site due to the amount of redundancy.	Treat all footer links differently for the purposes of screen readers so the listener knows which links are unique to the current page versus links that are on every page. • clip: footer links mean ctrl+F is the best way to use the site	4	
siw2020 064		4			• after being guided to the details page, participant used H to navigate headings successfully		12	
siw2020 065		3			• wants labels to be read with their values	Ensure values and labels are read as a unit	3	159 45
siw2020 066		4			• In searching for "explanation of benefits" participant invoked Ctrl-F and typed "benefits", which landed on the site nav for Benefits & Coverage		12	
siw2020 067		4			• the participant was surprised that anything of value would be in a pdf, and so dismissed the Explanation of Benefits (.pdf) link for lacking salience		12	
siw2020 068		4			• Participant expressed disbelief that we're using PDFs instead of expressing this data to the web page. Stated even Microsoft Word is better than PDF.		12	
siw2020 069		2			• Upon being guided to the PDF, participant was	DocAdmin: work to be done on EOB navigation in screen readers.	2	163

#	Location	Severity	Quotes	Observations	Recommendation	Priority	BUG #
		3		confused by the way the arrow key did not arrow through name:value pairs, but seemed to randomly land on unrelated labels and values at different places in the document. • clip: EOB	1. ensure headings depict accurate information hierarchy 2. ensure the line by line navigation of a screen reader reads headings before body text 3. ensure the line by line navigation of a screen reader reads a label and its value in the proper order 4. ensure the entire EOB is accessible to the screen reader	1	47
siw2020 070		1		• arrow key up from claims list invokes filter panel but doesn't announce it	Redesign claims status filters so that they are announced correctly and consistently	1	160 83
siw2020 071		1		• validation error on date field not announced	Redesign form field validation so that validation errors are audible as soon as they are visible. Retain validation error audibility on edit.	1	161 83
siw2020 072		1		• claim status filter announces incorrectly	Redesign claims status filters so that they are announced correctly and consistently	1	16089
siw2020 073		1		• claim status filters provide inconsistent audio	Redesign claims status filters so that they are announced correctly and consistently	1	16089
siw2020 074		2		• escape doesn't cancel claims filter panel, but makes JAWS read page behind the filter	Review claims filter design and support the ESC key for dismissing the filter options	2	16089
siw2020 075		1		• claim filter form is broken	Redesign claims status filters so that they are announced correctly and consistently	1	16089
siw2020 076		1		• claim filter edit boxes not activated by E in JAWS	Redesign so that E in JAWS activates the edit boxes in the Claims Filter	1	159 50
siw2020 077		1		• no verbal guidance on date entry formats	Redesign form fields so that entry formatting tips are audible prior to entering the value	1	161 84
siw2020 078		4		• filter label on button doesn't make sense		4	
siw2020 079		4		• expects form buttons in Windows order (ok | cancel)		4	
siw2020 080		1		• claim filter validation error read aloud on edit	Retain validation error audibility on edit.	1	161 83
siw2020 081		2		• filtered claims list hard to focus on	1. Review claims filter design and support the ESC key for dismissing the filter options 2. Announce the claims filter panel to screen readers so that the controls within it have context	2	160 89
siw2020 082		2		• filtered claims list not read as per expecations	1. Review the screen reader behavior on closing the filter panel; does the listener know the list is filtered, or unfiltered?	2	160 89

Task 8: Deductible and accumulator

Participant was able to determine the total deductible, but not clear on how much he has already paid

PARTIAL

#	Location	Severity	Quotes	Observations	Recommendation	Priority	BUG #
siw2020 083		3		• arrow and tab are not reading controls in the same way, no context for control value on arrow	Research how JAWS implements arrow key navigation and ensure that arrow and tab reveal the same information about the control in focus	3	159 45
siw2020		3			Ensure values and labels are read as a unit	3	

#	Location	Severity	Quotes	Observations	Recommendation		BUG #
084				• values and labels best read together • values and labels best read together 2 • values and labels best read together 3			159 45
siw2020 085		2		• dashboard select control changing dashboard on selection	Re-code all select controls such that focus is not conflated with selection	2	159 46 16090

Task 9: Benefit

Found what he needed but didn't know it. A false negative is still a fail

FAIL

#	Location	Severity	Quotes	Observations	Recommendation		BUG #
siw2020 086		3		• participant confused by the word "visit" prior to links. It's redundant to the link construct and confuses him with "visited" link status • clip: visit before links doesn't help	1. Remove redundancy from link text so that each link is audibly unique 2. Hyperlink titles for screenreaders don't need the word "visit" as a redundant prefix	3	content

siw2020 087		3		• labels and control names seem redundant or confusing
				  • clip: labels and control name seem redundant
				  • clip: label and control name seem more confusing
					research why both label and control name are being read. The label is for the control, so it's curious that both would be read. https://freedomscientific.github.io/VFO-standards-support/aria.html, https://www.freedomscientific.com/SurfsUp/Custom_Labels.htm	6	

siw2020 088		2		• benefits - inductive UI hides information the listener needs		4	
siw2020 089		2		• accordion headings not coded as headings, hinders orientation and findability		4	
siw2020 090		4		• "copay" better camel cased or hyphenated		8	
siw2020 091				• found what he needed but didn't know it. A false negative is still a fail			

Task 10: Log out

Our menus don't announce when they are expanded, or how many items are in the expanded menu, so user will not know the sign out option exists. Expects a sign out button.

FAIL

#	Location	Severity	Quotes	Observations	Recommendation		BUG #
siw2020 091		1		• my account menu appearance is silent	Make the Premera.com menu system audibly usable. Figure out a way to announce to the listener that the top level menu items are menu items	1	159 45
siw2020 092		1		• my account menu link seems broken	Figure out a way for the flyout panels to be announced along with a number of items in the fly out panel.	1	159 45
siw2020 093		1		• menus don't seem like menus	Research if there's a better semantic code or aria support for menus	1	15945

siw2020 094		2		• can't use Find to reveal L2 menu targets	Consider methods for all L2 menu links to be searchable and actionable when they're not yet rendered by the flyout menu from L1	2	104 8317
siw2020 095		2		• there should be a button that says sign out	redesign the sign-out experience in consideration of audio users who will likely be expecting a button	2	159 47
siw2020 096		2		• not certain he was actually signed out	redesign the signed out experience to give the audio user confirmation	2	15947
siw2020 097		1		• links should not open menus	Make the Premera.com menu system audibly usable. Figure out a way to announce to the listener that the top level menu items are menu items, and figure out a way for the flyout panels to be announced along with a number of items in the fly out panel.	1	15947
					Spikes to explore better general rendering for JAWS	2	159 48 / 159 49 / 161 05

Accessibility Severity standards: (from Microsoft)

Severity 1 (blocks core user tasks, no workarounds)
Not WCAG compliant and blocks core user tasks. There are no known workarounds. Must be fixed immediately.

• User story: The end user is not able to access entire product or not able to complete core user tasks or activities.

Severity 2 (blocking core user tasks, but have workarounds)
Not WCAG compliant and is either non-blocking for core user tasks or blocking for non-core user tasks. Remediation action needed ASAP or within three months post release with an approved Exception from Microsoft.

• User story: Workarounds are available and discoverable for the end user to complete core user tasks, or the end user is blocked from completing non-core user tasks.

Severity 3 (not- block core user tasks, but it is a violation)
Not WCAG compliant, but low user impact. Remediation action generally required in the next major release or the next time the site is updated, whichever occurs first.

• User story: The WCAG violation is present in areas not frequently visited by end users and/or has low impact on overall accessibility and usability.

Severity 4 (not-block core user tasks, negligible user impact) a.
Technically a WCAG violation, but negligible user impact.
b. Usability Issue: Not a WCAG compliance issue. However, the end-user experience is not efficient and delightful.

• User story: Although accessible and usable, the end-user experience could be significantly improved through implementation of best practices.

Study Materials

We designed some freeway scenarios (most frequently use and critical to business) to test with our participants.

https://member-acpt.premera.com/

#	Importance	Scenarios	Task	Notes	Happy path Issues
1	Priority 1	Create account	Please use your given information: Jacob Struiksma,*member ID:	walk through, show "error"	none

			123456789, *DOB, *Zip Code, *User ID, *password, *email to create an account in Premera.com.		
2	Priority 1	Sign in	You have already created an account in premera.com. Please use the following information to sign in your account: *user ID, *password.	pre-test account: account: m-peppers.red.a password: !PremeraCar3$	none
3	Priority 1	Pharmacy/Prescription	You got a prescription, Amoxicillin from your primacy doctor. You want to check if the prescription is covered by your insurance.		The "manage prescriptions" in our website is handled by the express script, and the SSO login will fail. Do we want to test express script or do we end the task here?
4	Priority1	Customer service phone number	You have question about your claims and you can't find info you need through the website. You want to contact customer service. Please find the customer service's phone number.	Through "contact us"?	none
5	Priority 1	HSA account (possibly skip this on Jul 29 due to absence of test data)	Look at your HSA balance. You want to know how much you have left on your health saving account.		SSO to connectyourcare.com will fail.
6	Priority 2	Find care	You have back pain and you would like to visit a doctor. After sign in, please use the premera website to find a doctor you want to see and get his/her office phone number.	after sign in. (Follow up questions: how do you choose the doctor, PCP?new doctor? specialty?)	SSO to sapphhirecareselect.com will fail.
7	Priority 2	Claims	Please find the most recent *claim* of yours and find its status. (If it is in progress, what is the next step?) Please get the details of the *claim. a nd get the EOB.pdf (Explanation of benefits) for that claim. Please find a past claim regarding *disease* in *month, year.	1. status 2. details 3. Get a EOB.pdf accessible? 4. Claim search, filter.	none
8	Priority 2	Deductible and accumulator	How much you have paid towards your deductible and how much you have left to reach to your deductible? For Extended Network and Out of Network		none, though the test account has only spent $15 on all family care this year (YELLOW) so most accumulators show 0
9	Priority 2	Benefit	You have back pain and want to see chiropractor. Before you go to the doctor, use the website to find if your insurance cover the visits. What's the copay of this visits? How many remaining covered visits I have left?	go to benefit detail page. 1. less common, sign up plan, browser around to see what benefit 2. tab through the list. accordance. card. has a visit limit.	none
10	Priority 2	Log out	Please sign out from your account.	test drop-down list from my account	none

Overall observation

- clip: just putting that out there
- clip: I've brought it up every time

Data Files

WCAG 2.1 guidelines [Web Content Accessibility Guidelines (WCAG) 2.1](#)

[How visually impaired people navigate the web](#)

Using screen-readers

- Navigation is done using the keyboard
- They 'Scan' Web Contents
- Image description can be a pain

Screen reader commands:

- Element list: insert + F7
- Navigate by heading: H
- Navigate by edit box: E
- Learn the title: insert + T
- Navigate by focusing area (button or links): Tab (+Shift)
- Move by line: up down arrow
- Move by character: CTRL + left right arrow Jump to form: F (+shift)
- [https://www.freedomscientific.com/SurfsUp/Quick_Keys.htm](#) [https://dequeuniversity.com/screenreaders/jaws-keyboard-](#)
- [shortcuts](#) [https://doccenter.freedomscientific.com/doccenter/doccenter/rs25c51746a0cc/2011-10-](#)
- [04_jawsandmagicreadingcommands](#) [/JAWSKeystrokes.htm](#)

Coding for screen readers [https://support.freedomscientific.com/Content/Documents/Other/JAWS-ARIA-Support.doc](#)

[https://www.deque.com/blog/angular-and-accessibility-issues-and-strategies/](#)

Raw recordings

[smb://mltpcfs21/shared/premeraux/web/Usability testing/](#) (for Mac users)

[s:\premeraux\web\usability testing\](#)(for Windows users)

Next Step:

☒ Get account with HSA access