

VA Accessibility Uplift

Role: UX/UI Designer (In Collaboration) Status: In Progress, Started April 2023

TL;DR:

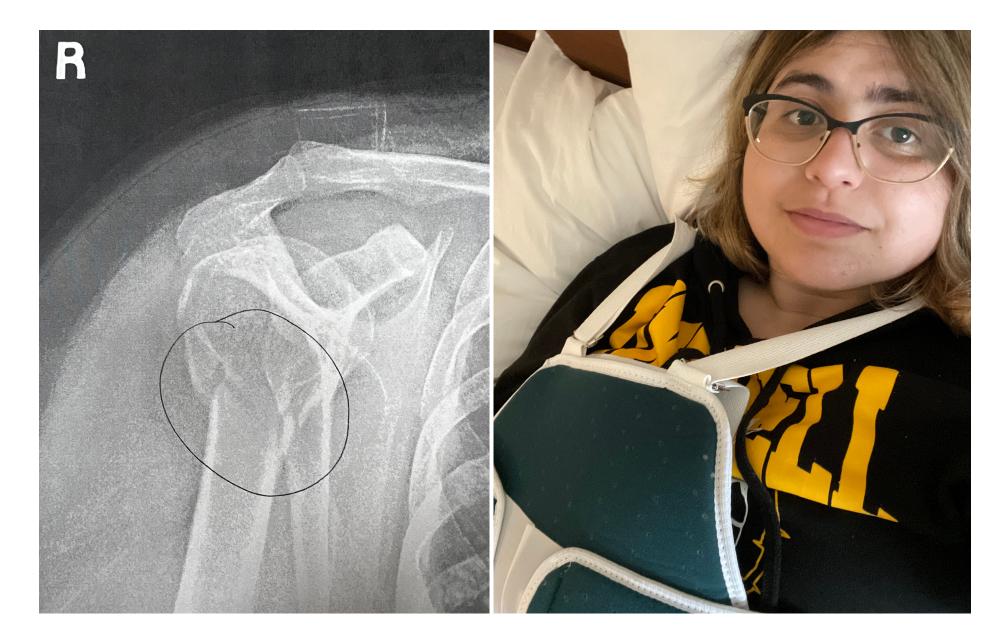
A government contract gives the team an opportunity to deep dive into accessibility and we become experts in the matter. Along the way we learn a lot about our own internalized ableism and learn to put our pride to the side.

Right: Documentation for mPage and Terra's Search within Component

Pattern M	Search within Component Status: In Progress
Overview	Current State Many of the MPages Search Fields contain placeholder text within the element that give context for the user who is performing the search.
	Search X Q
	Search
	Search Patient Q "While placeholder text provides valuable guidance for many users, placeholder text is not a replacement for labels. Assistive technologies, such as screen readers, do not treat placeholder text as labels. Moreover, at the time of writing this tutorial, placeholder text is not broadly supported across assistive technologies and not displayed in older web browsers." https://www.w3.org/WAI/tutorials/forms/instructions/#placeholder-text Success Criteria: • 1.3.1 Info and Relationships: Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text. (Level A) • 2.4.6 Headings and Labels: Headings and labels describe topic or purpose. (Level AA) • 3.3.2 Labels or Instructions: Labels or instructions are provided when content requires user input. (Level A) • 4.1.2 Name, Role, Value: For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the

Accessibility is one of those things you hear a lot of companies talk about but then not actually do. Or will attempt to do the bare minimum because they managed to get themselves in trouble with a group or the federal government.

I feel I've always had a stronger background in it than most, my alma matter has one of the largest deaf and hard of hearing populations at a university in the country. So understanding our own internal ableist dialogue and seeing how the world could be different was just a part of the RIT experience. I had the benefit of going through 2 different accessibility trainings at two different large organizations before landing at Cerner.



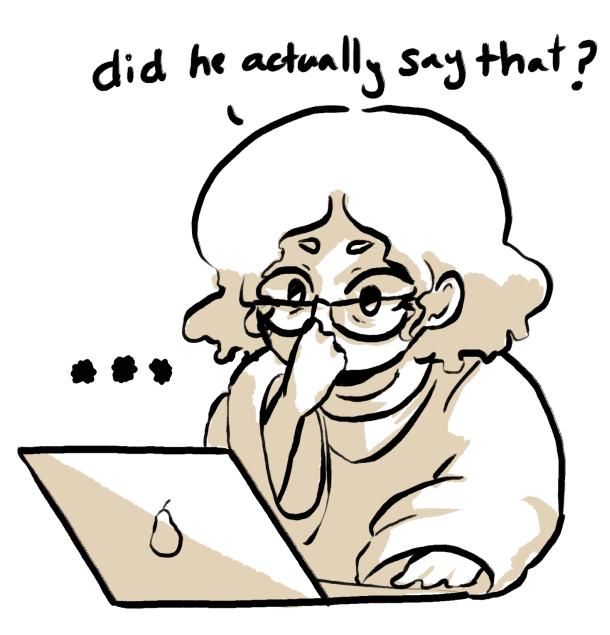
I experienced a temporary physical disability in the summer of 2022, after I broke my arm on a business trip. This experience really made me reevaluate how much is not designed with accessibility in mind.

While UX at Cerner was dying to make their software more accessible, we were at the mercy of the Development and Product teams. If they deemed it too much of a hassle, then it simply wasn't done. We'd go back and document it wasn't done, but it killed all of us on the inside. The mindset on those teams tended to not be conducive to the conversation either.

A prime example was when a Development Manager proclaimed in the middle of a conversation, in front of a decent sized group, how "they wouldn't want to be taken care of by a blind nurse" *

One thing was clear, we had an ableist mindset as an organization, even if we didn't maliciously mean to.

*This was a conversation and a half later, don't worry. We promptly talked about how this was not ok after our shock.

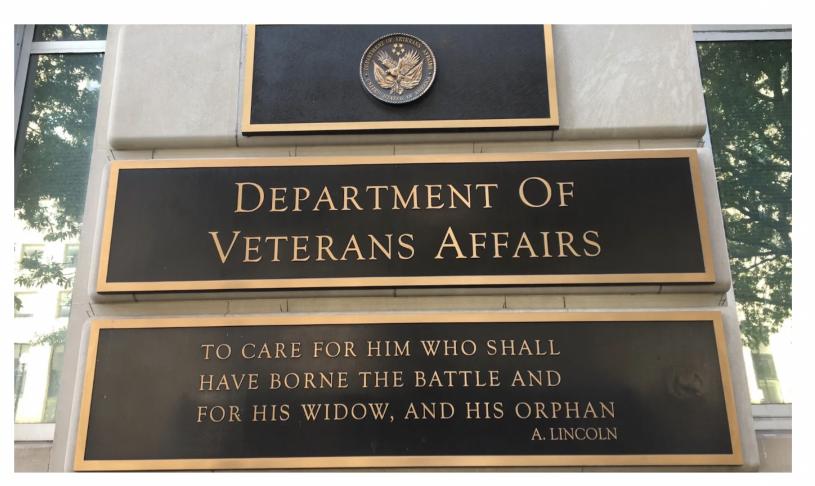


We finally received our opportunity to put our money where our mouth was, the VA Administration came down on Cerner hard. We had contracts with them pertaining to the software they utilize in their hospital system. Multiple nurses and physicians were unable to use our software, and them being a government entity, simply paying a fine was not going to cut it. It was either we fixed the software that instant or we lose that 16 billion contract more of you outside of healthcare know of. The entirety of UX was pulled from their projects and told all hands were to be on deck for accessibility training from Deque and for our new team assignments. The message was loud and clear: Your life was to live and breathe accessibility for at least the next 6 months.

VA data shows Oracle Cerner electronic health record system hit with nearly 500 major incidents

A dataset obtained by FedScoop through a Freedom of Information Act request shows that the Oracle-Cerner electronic health records system had a total of 498 major incidents between Sept. 8, 2020 and June 10, 2022.

BY NIHAL KRISHAN AND JOHN HEWITT JONES • AUGUST 19, 2022



The Department of Veterans Affairs. (Tajha Chappellet-Lanier)

To view this article, please click on the image above.

This project didn't come without its troubles. I learned very quickly that perhaps I had gotten too comfortable with my team and its dynamic. I had to relearn how to work with a new lead designer. And it was clear from the first interactions my lead and I were not in sync. He was rather aloof with me and sent mixed signals, while I expected him to take the role of the lead I am used to and let me know what he needed done and when. There was a lot of tension and unsuccessful discussions at first on how to get one another to work with each other. Silence, badly timed emails that included managers in them; It was like drowning in a toxic relationship.

Right: Icon Documentation for mPage's Microbiology component

Result Type	Susceptibility	Growth/Result	Organism(s)	Source/Site
Wound Culture		POS		Bite
Blood Culture		POS		Blood
Sputum Culture		POS	-	Sputum
Group B Strep		Neg		
Group B Strep		Neg		
Group B Strep		Neg		
Group B Strep		Neg		
Group B Strep		Neg		
Group B Strep Screen		POS 1	-	Cerv
Group B Strep	1	nformative Icon	-	
Blood Culture		NEG		Blood
MRSA by PCR		Neg		
formative Icon		Positive		
mative Icon		Negative		

* Displaying up to 50 most recent reports for Last 3 years

	All Visits	Last 50 Reports	Last 3 years	Last 24 hours	Last 2 weeks	~	c,
Collected	~	Last Updated		Status			
SEP 13, 2023 09:07		SEP 13, 2023 09:	11	Completed			
JUN 20, 2023 13:42		JUN 26, 2023 08	:47	Preliminary			
JUN 15, 2023 09:18		JUN 15, 2023 09	:29	Completed			
FEB 02, 2022 14:46		FEB 02, 2022 14:	47	Completed			
SEP 27, 2021 08:45		SEP 27, 2021 08:	47	Completed			
SEP 21, 2021 16:30		SEP 21, 2021 16:	56	Completed			
SEP 03, 2021 13:57		SEP 03, 2021 14:	16	Completed			
SEP 03, 2021 13:57		SEP 03, 2021 14:	02	Completed			
AUG 26, 2021 15:21		AUG 26, 2021 16	:04	Completed			
AUG 26, 2021 15:21		AUG 26, 2021 16	:07	Completed			
MAR 30, 2021 15:11		MAR 30, 2021 15	:13	Completed			
MAR 01, 2021 11:50		MAR 01, 2021 11	:55	Completed			
FEB 08, 2021 04:00		FEB 10, 2021 15:	05	Completed			
FEB 08, 2021 04:00		FEB 10, 2021 15:	05	Completed			

I finally got to a point where I didn't want to have a useless battle. I just wanted to find a middle ground where we both got what we wanted and felt good about the work being put out there. We were falling behind, work not being done well and it just wasn't serving either of us. So if my lead designer was not going to start the conversation, I was. I brought him into a 1:1 where we could have a heart to heart, and just talk about what was going wrong. It didn't really matter whose role was whose at this point, we were both going to fail if we didn't change course quick. The conversation was hard, we had to discuss things that made us uncomfortable, but it was for the better. After that, our lines of communication in short just got better. We started not just hitting target deadlines, but exceeding them.

Right: Work in Progress Documentation for mPage and Terra's various icons and their meanings

•	Scales & Assessments	Indicates a high critical result for the clinician to pay attention to.	Critical
Ф	Scales & Assessments	Indicates a low critical result for the clinician to pay attention to.	Low
Ð	Microbiology	Indicates an abnormal result was found.	Abnormal
Δ	Microbiology	Indicates said result had been previously modified.	Modified
0	Home Medications	Indicates the medication has been cancelled and should no longer be given to the patient.	Cancel
4	Home Medications	Displays a medication that the patient has indicated they take but was not prescribed by a physician at the facility.	Documented
Ē.	Home Medications	Displays a medication that was prescribed internally at the facility.	Prescribed
<u>n</u>	Home Medications	Indicates the prescription can be renewed.	Renew
٥	Home Medications	Allows the clinician to stop refills of a short term prescription.	Complete
•	Health Plans		
•	Health Plans		

The other thing that was a trouble for me was my own internalized ableism. So while I am someone who is neurodivergent who needs accessibility tools for themselves, I also realized as we were going through the training with Deque just how many horrible thoughts I internalized about myself. And the thing is, we can't make a better product for anyone if we have an amount of self hatred for ourselves. Through this training, I had to work through my own debilitating thoughts about why wasn't I getting through the training faster, why did it take me a few passes to understand the material.

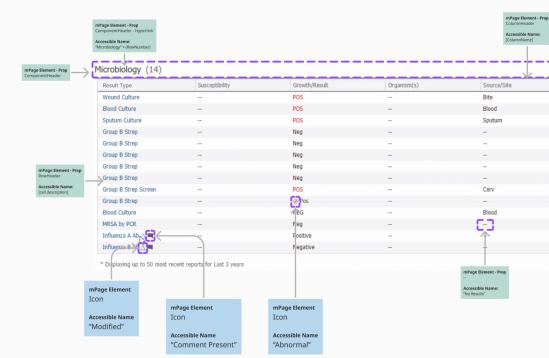
My issue here was that while I could find understanding for others, I could not find kindness for own struggles. I felt I should be "better than this" because I've been in the industry so long, but this isn't really a healthy way to get to a solution.

Right: Official Certificate of Completion from Deque



When I began to find kindness in myself, I could begin to find kindness in the material. This training wasn't supposed to make me feel bad. It was supposed to enlighten me. And once this came through my mind, I was finally able to grasp the new material infant of me. You may ask, what does that have to do with design? Well, the number one thing I need to be able to do to do my job well is empathize with my user. Understand what they might be feeling because of a design choice and strategy I made in their honor, and the first way to do that was by finding kindness for myself.

Right: Documentation for mPage's Microbiology component; this was made to aid developers in which items to reference when coding



 		\checkmark			mPage Element - Prop Component/Header - showR Accessible Name: "Refresh Microbiology"				vRefreshButton		
		\checkmark				\downarrow					
	All Visits	Last 50 Reports	Last 3 years	Last 24 hours	Last 2 w	eeks 💊	19				
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SEP 13, 2023 09:07		SEP 13, 2023 09:	11	Completed							
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FEB 02, 2022 14:46		FEB 02, 2022 14:4	47	Completed							
SEP 27, 2021 08:45		SEP 27, 2021 08:4	47	Completed							
SEP 21, 2021 16:30		SEP 21, 2021 16:	56	Completed					mPage Element: Standard Table		
SEP 03, 2021 13:57		SEP 03, 2021 14:	16	Completed				\leftarrow	Accessible Name:		
SEP 03, 2021 13:57		SEP 03, 2021 14:	02	Completed					Microbiology List		
AUG 26, 2021 15:21		AUG 26, 2021 16:	04	Completed							
AUG 26, 2021 15:21		AUG 26, 2021 16:	07	Completed							
MAR 30, 2021 15:11		MAR 30, 2021 15	:13	Completed							
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FEB 08, 2021 04:00		FEB 10, 2021 15:	05	Completed							
FEB 08, 2021 04:00		FEB 10, 2021 15:	05	Completed							

So once we got through these troubles both inside and out, what did we achieve? Well, a lot. I produced about 10 different documentation sheets for 10 different components within Millennium. I became knowledgeable and adept at creating accessibility documentation with little oversight once I understood exactly what was being asked of me and what was expected.

Though like many case studies, you might be wondering, well, what about the output and reaction from what you and your team did? Well, because of the aggressive turn around of materials, the VA's opinion of the software became a little more positive. Not by much, but it was a start. The Cleveland initiative was successfully wrapped up in August 2023

Veterans Affairs CIO 'cautiously optimistic' Oracle Cerner can turn around EHR modernization under new contract

After renegotiating the contract at the center of the VA's EHR modernization, CIO Kurt DelBene believes things are headed in a good direction.

BY BILLY MITCHELL • AUGUST 25, 2023



Kurt DelBene speaks at a public meeting of the Defense Innovation Board in Austin, Texas March 5, 2020. (DoD photo by EJ Hersom)

To view this article, please click on the image above.

However, the project was placed on pause in mid September 2023 as the roll out had quite a few problems going for it. It is expected to continue development in the summer of 2024.

Outside of this new found skills, what I really learned was that the only person who could make me feel better or worse about a task, my job or anything else, was me. No training or lead designer or anything else was going to be able to truly validate my work and worth as a designer except for myself. This was a rather pleasant thing to come to terms with in a project that started because a company had to get its stuff together.

VA, Oracle Cerner expect problem-ridden EHR rollout to resume by summer 2024

The VA has faced multiple delays to the \$16B Oracle Cerner EHR rollout due to major patient safety risks.

BY NIHAL KRISHAN • SEPTEMBER 13, 2023



The exterior of the Veterans Affairs Hospital is seen November 10, 2003 in New York City. (Photo by Spencer Platt/Getty Images)