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Saskatchewan Health Authority Web Renewal Summary & Recommendations

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Executive Summary

The Saskatchewan Health Authority (SHA) has a responsibility to provide, and continuously improve, health care for the people of Saskatchewan. It's in the midst of a massive organizational transformation, but is also at a crucial digital turning point. In establishing a provincial approach to health care, the SHA has an opportunity to not only unite its 40,000 employees in providing care to our province, but connect with over 1 million residents and become a leader in digital health. This will not happen from day one, but starting with the basics and laying the groundwork for success will ultimately lead to great things.

Creating a central website and intranet from 12 former region websites and 8 employee intranets cannot be done by a siloed group. As an entity that serves, quite frankly, every person in the province, the only way to succeed in this digital space is to start and end with the users. This includes SHA employees, partners, and the people who access health care in our province. Users need to be engaged with, understood, and prioritized over organizational, bureaucratic needs in order for a single health authority to work. To the public, health care is a single source, and the move to a single authority amplifies this belief.

Our team at zu has employed Design Thinking methods to generate a user-based vision for what a single website and intranet would be, how it would serve its users' needs, and what challenges might be faced in doing so. The final outcomes will ultimately be envisioned by the users, and will be leveraged on the talented, caring individuals working in health care who are providing expert health-care services.

This project evolved through two phases: Discovery and Outcomes & Recommendations.

Discovery

- Asset Analysis
- User Interviews
- Surveys
- Design Workshops

Outcomes & Recommendations

- Content & Information Architecture
- Sitemap
- Functional Requirements
- Wireframes
- Future Phases
- Challenges, Considerations, & Risk

Our team at zu has prepared this final report after months of hard work and collaboration with the SHA, its partners, and its users. It includes findings from our discovery analysis and details the outcomes, recommendations, as well as risks and challenges for moving forward into the build phase of this Web Renewal project.

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Discovery Background

Our team uses multiple methods drawn from Design Thinking, from day one of a project, to analyze the current state of an organization and its users. This involves a comprehensive dive into the existing digital assets, interviews with users and stakeholders, surveys, and workshops. The results from these methods create a 360 degree view of assets, viewpoints, considerations, and insights that can then be converted into user-based recommendations.

The Saskatchewan Health Authority is a large, complex organization that is currently changing the way it operates. Many of the facts that we learned at the beginning of the discovery phase evolved throughout the months of our research. We have worked with an array of stakeholders, from IT professionals, to front line cafeteria staff, to physicians, to patients in order to gather as much information and as many perspectives as possible to piece together the current state and understand the moving parts within the SHA.

The information gathered during the discovery phase represents the state of the organization at that time, and we recognize that information might have evolved and changed since. The discovery phase does not end, but continues to expand and change as the SHA settles into its new identity and as the project moves into the build phase.

Design Thinking Framework



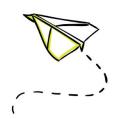
DO SOME RESEARCH



IDENTIFY INSIGHTS



COME UP WITH SOME IDEAS



TRY THEM OUT



GET SOME FEEDBACK

ASSET ANALYSIS

To begin to understand the scope and current state of the SHA web assets, our team examined all of the former health region websites, intranets, and affiliate sites. The team also reviewed previously conducted research, projects, and surveys in addition to 3,000+ web pages on public, externally accessible sites, and internally accessible intranets.

Unsurprisingly, there are significant discrepancies between the various region websites and intranets. Several of the regions did not have intranets at all. Due to the variety in services, size, and resources of the regions, the sites include vastly different levels of content and technical functionality, design execution, and unique content needs based on locations.

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Website Analysis



The greatest difference between all of the public websites is the breadth of programs and services offered within each region. Larger centres that offer many services have much longer lists of pages under their programs and services sections and often cross reference this information with facilities listings. Regions with smaller populations and locations tend to be more static with their programs and services content. Several of the smaller regions provide links to services in other regions that they do not offer themselves, but most did not.

Clear similarities were found in the way regions organize and structure large sections of their public websites. All of the websites, with the exception of the Athabasca Health Region, have sections for facilities in the region, services and/or programs offered, news and events, and information about the region.







There is a clear need for location-centric content on the new SHA website. While a large portion of information provided is consistent across the province, there is a significant amount of information that is very specific to the former health regions and to the people who live in those areas of the province.

All sites had their respective strengths and weaknesses, and many of the observations landed in both categories, due to the widespread differences in the sites. While some sites had clean, modern design, others were stronger in navigation, and vice versa.







FORMER HEALTH REGION SITE	BUILT WITH
Cypress Health Region	SharePoint
Five Hills Health Region	Static HTML
Athabasca Health Region	SharePoint
Sunrise Health Region	ASP.NET
Heartland Health Region	SharePoint
Keewatin Yatthé Health Region	Wordpress
Kelsey Trail Health Region	SharePoint
Mamawetan Churchill River Health Region	PHP Framework
Prairie North Health Region	ASP.NET
Prince Albert Parkland Health Region	DNN Software
Regina Qu'Appelle Health Region	Adobe Business Catalyst, Google Search Appliance
Saskatoon Health Region	SharePoint
Sun Country Health Region	Bootstrap

CONTENT

DESCRIPTION

CHALLENGE/OPPORTUNITY

About Us/The Region

This section was present on all regions in some fashion. It generally contained Mission, Vision, Values content, board information, family centred care content and sometimes Annual Reports and publications.

This type of content is important to the regions and internal stakeholders, but based on popular page information and general expectations of user motivations for visiting the health authority site, this would be low priority content for general users. Including this content in any site is fine, but deprioritizing it might be challenging for some stakeholders.

Facilities

Most former regions listed facilities alphabetically by the towns and cities within the region. From a user's mental model perspective, this makes sense if they are looking for the nearest location to them. This being the only mode of organizing the content is problematic because it is difficult for the user to find the types of facilities without looking through each town/city page.

Finding multiple ways of displaying and organizing the facilities information will be helpful. The Saskatoon Health Region and the Prince Albert Parkland Health Region had two different ways of doing this that both seem to work and could be starting places to look for an approach. With a single health authority, the challenge grows as the list is very long and these existing models may not scale.

Services

The services offered within a former region were always organized and sorted by health care-centric methods, generally department or unit types. This is problematic, as it requires patients, families, and partners to understand the internal structure and operation of the health authority to navigate to content that is relevant to their needs.

The Prince Albert Parkland Health Authority had a nice way of handling this. They still list services by department, but with user-friendly language. They also had a section called Info For Patients that had pages organized around the type of patient/user. From those pages, they link to various and relevant services to create quick and easy access to the

content you might need.

The Regina Qu'Appelle Region did something similar where Programs and Services organized around patient types and topics with resource links to other areas of the site.

News

Each former region had a news section. Currently they all link to the single SHA site as a news resource.

Most of the former regions handle news as a secondary navigation item, which is good. While there are some news types that are important and highly relevant to users, for the most part it would be thought of as a secondary content type, except in the case of media people or internal users.

Careers

Each former region had a section for careers. Most, but not all, link out to external sites HealthCareersinSask.ca and
SaskDocs.ca. Each former region did have benefits, incentives, bursary, and workforce information.

Understanding how these external sites fit into the communication and recruitment strategy for SHA will be important. The assumption is that these external sites will remain, but there will need to be career information on the SHA website.

Overall Strengths

- Robust, community-focused content
- Updated, clean design
- User-centric navigation
- Mobile friendly
- Interactive maps
- Videos

Overall Weaknesses

- Limited content on some sites
- Reading level varying from grade 9-23
- Structure is health region-centric and not user-centric
- Broken links and weak navigation
- Lack of link between services and facilities
- Many sites not mobile friendly or face issues when viewed on mobile
- Intermingling of internally and externally-focused content
- Outdated design
- Relies on a lot of PDF content

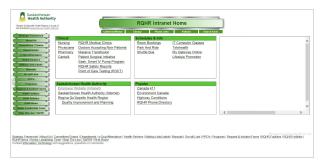




Intranet Analysis

Regional intranets have increased variance in terms of content, but have some similarities relating to human resources, learning, employment benefits and support, news, updates, and events. Based on comments in survey responses, it is clear that the intranets house more pages and content than our team was able to access. It is assumed that the level of access any individual has will dictate what content they are able to see, so it is possible that there are other significant commonalities or differences on the intranets that were not accessible during this review.





FORMER HEALTH REGION INTRANET	BUILT WITH
Kelsey Trail Health Region	SharePoint
Cypress Health Region	SharePoint
Five Hills Health Region	SharePoint
Heartland Health Region	SharePoint
Prairie North Health Region	Not available
Prince Albert Parkland Health Region	SharePoint
Regina Qu'Appelle Health Region	FrontPage
Saskatoon Health Region	SharePoint
Sunrise Health Region	Not available

CONTENT DESCRIPTION CHALLENGE/OPPORTUNITY

Human Resources These sections within the former health region employee intranets primarily focus on documentation and forms for employees as well as existing policies and procedures. In some cases, the forms, policies and procedures were contained in separate sections while in others they were together under a Human Resources navigation section.

Presumably with a unified health authority, the human resources documents, forms and policy will be brought together. It will be important to test how to structure this information given the variance of the current employee intranets' structures.

Learning

Called eLearning, Education, and Training, this area of the former region employee intranets are widely different and utilize a variety of applications both internally-developed (as far as the team can tell) and external training applications. Bringing all the existing training and education content and options together will be challenging. There is a wide variety of materials and it's all been created or set up in separate regions, so the access and permissions might be difficult to extend.

Overall Strengths

- Robust file system in most sites
- Some sites easy to navigate
- Clean, modern design
- Good content volume

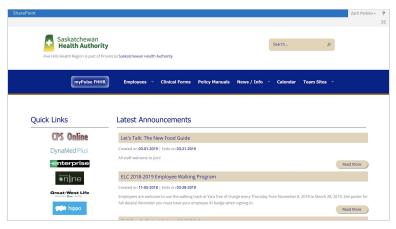
Overall Weaknesses

- Slow loading times
- Most sites difficult to navigate
- Empty content pages
- Outdated design
- Navigation is very corporate-centric
- Unclear if applications, links, and pages don't work or if due to user access restrictions
- Not mobile friendly
- Linking to the public website is disorientating for users

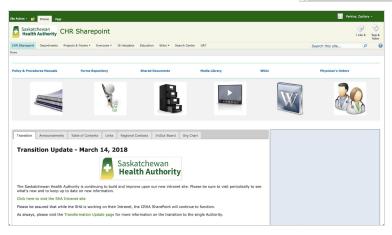


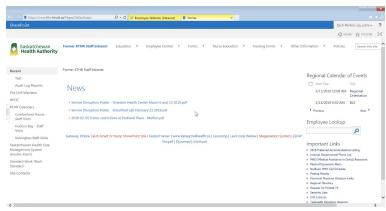












INTERVIEWS

Over the course of two weeks, we conducted 38 one-on-one and group interviews with stakeholders from across Saskatchewan who contribute to, manage, and/or use the public website and employee intranet(s). We asked about their role within the SHA or how they access health care, their involvement or use cases of the website and intranet, how a new site might help them in their role or might fill a gap that currently exists, and to provide all additional information that might be pertinent to a website and intranet rebuild.

- 63 Total interview participants
- 24 Health-care providers (doctors, nurses, paramedics, etc.)
- 35 partners of the SHA, IT, communications, administrative employees, etc.
- 4 Patients/Public website users

The interviews uncovered many common themes relating to employee users, current projects, and existing gaps in the intranets. Because it was a challenge to schedule public user and patient interviews, we knew that the survey would be the best method to gather information relating to the public website, however, we did begin to understand the challenges that the current SHA website presents, and the background and opinions on the former region sites.

Website Observations

In speaking with SHA employees and stakeholders, we found that, in general, they do not use the public website on a day-to-day basis, but did have observations around the content and what they wish to see from a public SHA website. Most interviewees recognized that the current website is designed from a corporate perspective and is not user-focused. There is a desire for multimedia resources such as photos, videos, and maps to help patients and users understand procedures and facilities, and an understanding that language and reading levels need to accommodate all users.



"Users don't care what departments or units are called, and patients don't understand it. It should be based on information needed, not based on complicated names or functions of departments."



"Having interactive media on the website, where people can learn about programs that they offer, something other than just text would be beneficial. I feel it's important to keep people's attention and to build a digital presence in an interactive way."

Front-line staff that are in contact with users had great insight into the volume of information and navigation challenges on the former region sites and the current SHA site. How information is labelled and organized is crucial and will alleviate a lot of questions that they receive from users. There is also a common theme that the information presented online is both inconsistent across regions and out of date. This has created trust issues both with public and internal users.



"It is a challenge to find things on the public site. There are so many things packed into one site. If you aren't comfortable with it, it can be difficult, and especially hard to walk someone through it."



"The website should be the one source of truth for the information and path that they need to follow for services."



"Patients are happy and prefer to self-navigate, but in many cases, they can't. They phone because they think they need a doctor's note, but there's nowhere on the website that tells them that."



"The lack of public information and the ability to raise awareness for the things that are going on are very challenging and frustrating."



"Things should be easy to find and accessible along with easily searchable and visually appealing. We want to see relevant and timely information while making sure there's enough information without being too cluttered or hard to find."

Although only four public/patient users came forward in the call for interviewees for the website, what we heard was consistent across all interviews and overlapped with results found through the survey. Patients are generally unaware of the Saskatchewan Health Authority and its role in provincial health care. The SHA website is not somewhere that people think of going when searching for information about a health issue or procedure, and there is a feeling of distrust with information that is presented. There is a craving for more useful, interactive online information, such as maps, to help people self-navigate.



"In the hospital, it was sign overload. Everything is just mishmashed together."

Patients are frustrated with the process of finding a doctor and do not understand that clinics are not a part of the SHA. At the end of the day, people want to find a doctor, and when prepping for a procedure, want one-on-one correspondence as well as up to date online information that they can trust is accurate.



"It feels like it can be a lot simpler to find information about doctors and clinics."



"I need trusted information online so I can research hospital information and my diagnosis on my own."



"I would like to get some kind of official information from health-care providers that I can trust."

Intranet Observations

In discussing the former region and SHA intranets, the general consensus was that while the intranet houses essential tools and resources for employees, the current functionality and content creates extra stress and work. Time is a valuable and scarce resource in health care, and employees who are accessing multiple forms, documents, and having to log into various external tools each day are finding that the intranet is more of a burden than a tool for success.

Although it should be, the intranet is not a trusted resource for employees. There are multiple versions of documents without clear indication of which is most up to date, plenty of outdated information, the search is extremely slow and inaccurate, and permission-based access causes many pages and links to appear as empty or broken. Users are turning to paper-based resources that they know are kept up to date by administrative staff. Employees also crave the ability to access the intranet and its linked-to tools from home, mobile devices, and remote work locations. This brings up security concerns that will be addressed below.

It's the perfect time to create a cohesive intranet, as all 40,000+ employees are now coming together under a single authority and need a way to connect with each other, access the same tools, training, and resources, and speak the same language across the province. Training, collaboration, and communication will be essential to the success of a new, single intranet.

66

"The Sharepoints take some skill to navigate through. I have received some training but it's not necessarily intuitive. The search function is hit and miss because of the mass amount of content."

66

"Most staff work in multiple sites, so having everyone accessing the same information from one single source is crucial. This in an opportunity to move to a single standard way to share information."

Content management within regions continues to be a challenge, and foreshadows a complicated system to get a single intranet managed and created to serve 40,000+ employees. Every department deems their information to be most relevant, and each user accesses the intranet for unique reasons. The site needs to be built and organized for the users, not be pushed from a corporate viewpoint.



"The main challenge will be around the content for both the intranet and the websites. It's so different across all former regions. There's an enormous content filtering and rewriting phase that's going to need some serious people power. I don't believe this is something that partner agencies can help with. So much will need to be done internally. There could be a political challenge around content competition."



"Cohesiveness, diversity and inclusiveness between all channels and sites. It needs to be able to quickly reach 40,000 employees - right now that is missing. It all has a bureaucratic feel. I want information organized in a way that does not reflect organizational structure. Information needs to be intuitive not based on structure."



"Everyone wants their information on the first page, we need a governance structure."

Because the SHA is going through a restructuring phase, we knew that there would be many moving parts to align with and consider. During the interviews, we learned about the SHA partners and projects such as 3S Health, AIMS, eHealth, etc. to keep in mind when making recommendations. These partners and projects were followed up with later in the project.

SURVEYS

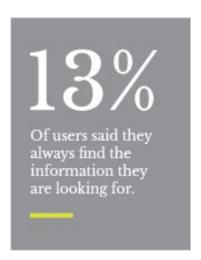
Where interviews gave us very specific insight about the website and intranet, we needed a 1000ft view of how SHA employees and the public view, use, and interpret the intranet and website. We sent a survey to the SHA to distribute through their internal communication channels and social media outlets and received 4,327 total responses.

Intranet

Of the 3,072 survey respondents who claim to work or volunteer in health care, 11% have never accessed the SHA or former region intranets. The 89% of respondents who use the SHA or former region intranets use it to find:

- Pay stub and vacation bank information
- Education and learning opportunities
- Policy information, both clinical and non-clinical
- Information about employee health benefits
- Organizational structure and contact information





When navigating and searching on the intranet(s), 13% of users said they always find the information they are looking for. It's likely that because of this low success rate, that 51% said their preferred method of receiving need-to-know information was through their work email address. This stat will be slightly skewed due to the fact that not all SHA employees have a corporate email address.

Many of the open-ended comments aligned closely with what we heard through the interview process. SHA employees get lost in the intranet, trying to find specific documents, and a lot of the time end up finding multiple versions of the same document, or very out-of-date information. Over and over again, we heard that the

search function was not usable, and that the naming system in the intranet was very corporate-based and not user-friendly.



"It's disorganized, hard to find pertinent information. Policies are out of date and sometimes nonexistent. That's dangerous and negligent health management."



"It's currently a very large, complex beast. Simplify it.

Condense it. Improve the search engine."



"Naming items what they are. Example, what is people and safety, why not call it human resources?"

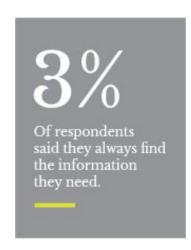


"...one log in and access to all the sites affiliated, right now I have a minimum of 10 different log in's"

Website

There were 1,255 survey respondents that claimed to not work in health care, and 85% of them rarely or never use the Saskatchewan Health Authority website. Only 3% of respondents said they always find the information they need, and are primarily looking for:

- Local programs and services
- Facility locations
- Contact information for providers
- Doctors accepting new patients
- Careers



When asked about knowledge of the Saskatchewan Health Authority, 35% of the public were uninformed or unaware of the creation of a single, province-wide health authority. This could explain the low usage rate of the website. 18% of respondents said it was 'Easy (16%) or 'Very Easy' (2%) to find health information online in Saskatchewan, and when asked how they search for health information online, respondents said they:

- Talk to a health-care professional 85%
- Search (Google) 63%
- Talk to friends 46%
- Reference Saskatchewan Health Authority or former region website 28%
- Read printed materials 27%



Our team and the stakeholders in the SHA were surprised to find that respondents rated 6.88/10 for trust and confidence in Saskatchewan's health care system to provide high-quality service. This leaves a great opportunity for improvement, and where a website will contribute to an increase in trust and confidence, it must be complimented by in-person interactions in order to see a notable increase.



"I am always skeptical about what is online except if it is a provincial or national government site."



"Seeing clear markings or indication of the organization on every page I visited. No spelling or grammatical errors in the content. Indication of a date the info was published, so I knew it was current."



"Recognized, reputable, concise website with everyday language."

WORKSHOPS

Visioning workshops bring together stakeholders with a variety of backgrounds, interests, priorities, and knowledge about the systems and project. They create an environment of discussion, collaboration, and ideation that generate topic themes and deliver tangible ideas from the users' perspectives. Our team hosted six workshops covering the public website (current SHA website and former region websites) and intranet (current SHA intranet and former region intranets) with individuals employed by, partnered with, and who access services from the Saskatchewan Health Authority.

Saskatoon

- o Intranet 39 participants
- Website 32 participants

• Regina

- o Intranet 38 participants
- Website 29 participants

Swift Current

- Website 18 participants
- Intranet 16 participants



Public Website Workshops

In the public website workshops, participants were to keep in mind both the current SHA website and their former region sites when working through the activities. Each website currently serves a different purpose to different people, which provides us with valuable insights into what a future state website should encompass.

Activities

Know, Don't Know, Assume

In this activity, we had participants write down what they know, don't know, and assume about the public websites. Each group came together to display their notes on the wall and discuss, then grouped the notes together into themes. The goal of this activity is to gain insight into the facts, questions, and assumptions being made about the website and to expose the vast differences in people's perceptions.



SPECIALIST TOUCHPHILIS THOUGHS EMOTIONS EMO

Experience Maps

Groups were given real-life scenarios that were drawn from user interviews. Working independently, they identified the phases of the scenario, then the Actions, Touchpoints, Thoughts, and Emotions that the subject might have during their experience. They shared these ideas with their teams, which helped to spark conversation and new ideas to add to the maps.

This activity puts onto paper the complexity of a single interaction with the SHA. It brings together multiple perspectives on situations

that might typically be viewed from only one angle, such as a patient visiting the ER, someone searching for a new doctor, or a rural nurse practitioner searching for a specialist's contact information.

Pain Points & Opportunities

Participants chose their top pain points and opportunities from the previous activity and turned them into How Might We (HMW) statements. These statements identify the user and the opportunity that we are aiming to reach or problem we are trying to solve, without being so specific to eliminate possibilities. We collected 50 HMW statements from 13 groups over the course of three days.

Top HMW themes:

- **How Might We** inform patients and families about arrival, check-in and wayfinding ahead of facility visits so that the pre-visit stress and worry is minimized?
- How Might We ensure that content is kept up-to-date and communicate that to users clearly and effectively?
- How Might We ensure patients and families know that they can provide feedback on their care and provide effective methods for collecting feedback?
- How Might We communicate wait times and alternative treatment options?
- How Might We assist people without a family doctor find one that suits their needs and manage conditions in the meantime?
- How Might We support patients and families when planning appointments or procedures outside their communities?
- How Might We provide patients with their personal health information and empower them to use that information to access better and more appropriate care?

Ideation

Each individual chose a single HMW statement to bring to life. To begin, they had eight minutes to draw eight versions of a solution. This got the creative juices flowing, and brought about anything from simple solutions to wild ideas on paper. They were then given a single sheet with 3 "screens" and space for descriptions, and were to draw and expand on their favourite vision for the solution to the HMW statement. Once into the wireframing phase, these ideas would influence the design team's visuals for specific areas of the website.



Common Themes

The website workshops uncovered seven common themes. These themes will carry through the rest of the project, and especially when testing information architecture, creating wireframes, content strategy, and recommending governance structure. During the next phase of building the website, these themes will be referenced as reminders of high-priority user needs.

Anticipate & Reduce Pain Points

- Provide people with practical information ahead of time and let them focus on their appointment, treatment, etc.
- Parking
- Wayfinding
- Contact information
- More information about doctors accepting patients

Explain It Like I'm 5

- Users don't know what they don't know
- Need to keep the reading level around grade 6-9 in order to speak to all types of users
- o Need plain language that matches user mental models and keep stress minimized
- Simplify, don't assume, anticipate needs

Holistic, Full-Service Care

- Medical journey begins before a patient or supporter enters a health care facility
- o Strong desire to support patients and family/caregivers through the whole journey
- o Individuals in health care want to help but the system fails to consider mental, emotional state of patients when interacting with them

Appropriate Self-Service

- Provide accurate, up-to-date, personalized information to people, giving them confidence and independence
- A lot of ideas to help users self-validate/confirm accurate information about facilities, health information, etc.
- o Self-assess the need for emergency visit vs. appointment vs. walk-in clinic
- Empowering users through transparency and access to their personal health information

It Takes a Village

- o The website is a living thing and must be nurtured by all who contribute to it
- o Big challenge/opportunity for internal staff to play a role in the success of the website
- o Departments want control and autonomy
 - Could benefit the frequency and accuracy of content
 - Could be a failure point without oversight and management
- Success won't happen at launch, but in the long tail afterwards when users see content updated, managed and maintained

Awareness & Access

- o If people don't know about the website, they can't use it
- First, make it work. Then, drive traffic.
- Make it accessible to all users.
- Give users a reason to come back.

Perceived Accuracy of Content

- There is a mental model in Saskatchewan that the SHA (or former regions) doesn't have the capacity or people to provide accurate, up-to-date information
- Create systems and visuals that support accuracy and timeliness of information
- o Staff doesn't even know if the information on the website is up to date

Employee Intranet Workshops

During the employee intranet workshops, participants were to think about any internal system, whether it be their SharePoint collaboration sites, their respective former region intranet, or the current SHA intranet. It was made clear that every region has a different term and use case for an "intranet", which we wanted to fully understand in order to be able to properly analyze the situation and make future recommendations.

Activities

Rose, Bud, Thorn

Internal stakeholders took the time to independently identify the positives (roses), negatives (thorns), and opportunities (buds) about the current SHA intranet and the former health region intranets. These insights were presented within each team and grouped together into themes. This helped our team to see what areas of the intranet are appreciated, what needs significant improvements, and what might be something that we can foster and help move forward.





Empathy Maps

Empathy mapping allows participants to put themselves in the shoes of a user and understand every aspect of their unique perspectives and situations. Each group received a persona and a situation, and they mapped out what that individual would say, think, feel, and do in that scenario. This activity uncovers the emotions, thoughts, actions, and even other stakeholders involved in different types of interactions with the SHA. It helps the participants and our team gain a well-rounded understanding of how the intranet might help or hinder someone's experience.

Lightning Decision Jam

In this activity, participants wrote down all of the opportunities and challenges with the current intranets and the future intranet. These thoughts were grouped together, then the top opportunities were selected and mapped on an axis of impact vs. effort. When an idea or opportunity has high impact with low effort, it is something that should be prioritized in the planning phase. If it has low impact and high effort, it should not be considered as a priority.

The ideas with high impact and low effort were taken by participants and turned into 75 HMW statements. We've collected these and turned them into top HMW themes:

- How Might We encourage employees' participation to promote change?
- **How Might We** create an intranet that is robust and provides users with what they need while being intuitive?
- **How Might We** create a standardized internal process for maintaining up-to-date information on department pages?
- How Might We collect data on what's useful to most people?
- How Might We provide employees home access to defined areas of the intranet?
- How Might We simplify and streamline access between platforms for employees?

Ideation

Each individual chose a single HMW statement to elaborate on through sketching. They had eight minutes to draw eight versions of the solution in order to get comfortable with sketching and find any offshoots of the idea. They were then given a single sheet of paper with three "screens" and space for descriptions, and were to draw and expand on their favourite vision for the solution to the HMW statement. Once into the wireframing phase, these ideas would influence the design team's visuals for specific areas of the intranet.

Common Themes

The intranet workshops uncovered seven common themes. These themes will carry through the rest of the project as a reminder of user needs and will influence decisions being made during the intranet building phase.

So Easy, it Doesn't Need Explaining

- Need intuitive language
- Spread awareness of the purpose of the intranet
- Improve the search function
- Implement training

Necessity that Compliments Other Projects

- There are several other projects in the works that relate to or address key challenges and user tasks
- Must take other projects into consideration when building the new intranet, and not duplicate work
- Challenge in prioritizing projects across the province
- Concerns around intranet project funding

Don't Reinvent the Wheel

- Maintain or leverage existing subject matter experts, tools, and content that can be used on the new intranet
- Model the governance structure after similar organizations

Team Effort

- Content governance structure and maintenance followthrough must be done by all branches of the SHA
- o Implement training and provide the appropriate tools to the right people

Foundation of Trust

- Intranet as a single source of truth
- o Create systems that instill trust that digital assets are up to date
- Need transparency and communication with policy changes and document updates

Access vs. Security

- Allow access to the intranet and its tools outside of SHA facilities
- Employees understand the need for security, but the lack of access hinders their performance

Personalized Views

- o Permissions-based access to documents and policies
- Want quick access to the things they use most
- o Different people have different views/access to the same tools

INTRANET DIGITAL ECOSYSTEM

Our team at zu worked with the SHA to identify all of the systems, internal and external of the organization, that an employee might come into contact with while using the intranet. This helps us understand what technology and projects are being maintained and controlled within the SHA, and which have limited to no flexibility in content or functionality. It also paints a picture of the number of systems that need to tie into or be linked from the intranet, with varying levels of user permissions.

Workshop notes in Appendix 1.



Outcomes and Recommendations

CONTENT

The former health regions and SHA are currently operating using 13 websites and 9 intranets. Between all of these sites, there are an estimated 35,000+ pages and 71,000+ files available to users of the sites. There are as many, if not more, approaches to writing, designing, and presenting these pages and files as there are former regions. While there is a plethora of content available today, a lot of what is out there was simply being produced 12 times over by former regions.

One of the great benefits of moving to a single health authority is to simplify processes and gain efficiencies. Doing a complete audit and inventory of content is a daunting task, but could be delegated to departments given a structured framework. That said, there could be more benefit from starting with a clean slate and building the content that is needed rather than spending a lot of time looking back at what exists, and is, for the most part, outdated.

Content strategy and governance were major topics throughout the research and discovery phases of this project. Currently, the former regions each have different processes for the creation, editing, and publishing of web content. In fact, most former regions have no standard content strategy or creation process and, as a result, there are multiple processes and gatekeepers within each region. The result is content that is inconsistent in voice, tone, reliability, and quality.

In the public website survey, participants were asked to rate their trust and confidence in the Saskatchewan Health Authority's ability to deliver safe, high-quality service to them and their family. The aggregate response to this question was 6.88/10 (10 being very confident) from participants working both inside and outside of health care. While the public website won't contribute to improving this rating as much as in-person service delivery will, one area where it can help is by delivering an online experience that meets or exceeds user expectations. Content and navigation were two major shortcomings identified by users as creating a less-than-positive experience. Navigation improvements (see *Information Architecture pg 49*) will help users locate the information they want, but having a strong content strategy will give the information more authority and reliability from the user's perspective.

CONTENT RECOMMENDATIONS

Create a content strategy

Content strategy guides the **planning**, **creation**, **delivery**, **and governance** of useful, usable content that meets user needs and business goals. It helps you figure out what you're publishing, where, and why.

- Content is what the user came to read, learn, see, or experience. From a business perspective, content is the information the platform was created to communicate.
- Strategy sets the direction for the future. Tactics help you get where you're going.

Why is a content strategy important?

POSITIVE USER EXPERIENCE

People come to your website for the content — not for the visual appeal or complex technical features. It's impossible to design a good user experience with bad content. Good content increases audience **trust and engagement** — including trusting that you won't waste their time.



"A user doesn't want endless options. He wants the content he needs, when and where he needs it."

SAVES TIME AND MONEY

Content strategy is an investment, but "getting good processes in place simplifies everyone's lives, saves time and money, and is conducive to workplace sanity."²

¹ Content Strategy for the Web: Second Edition, by Kristina Halvorson and Melissa Rach

² Content Strategy for the Web: Second Edition, by Kristina Halvorson and Melissa Rach

Doing content right, the first time, saves significant dollars in the long run. A good content strategy usually leads to having less content, which is beneficial because:

- It's easier to manage
- It's easier for the user to find what they are looking for
- It's cheaper to create

What goes into a content strategy?

This is the Content Strategy Quad. A good content strategy doesn't have to follow this exact format, but should contain these components:



CORE STRATEGY

"Defines how an organization (or project) will use content to achieve its objectives and meet its user needs." Informs the substance, structure, workflow, and governance.

SUBSTANCE

What the content will be.

STRUCTURE

How the content will be prioritized, organized, formatted, and displayed.

³ Brain Traffic Lands the Quad!

⁴ Content Strategy for the Web: Second Edition, by Kristina Halvorson and Melissa Rach

WORKFLOW

Process, tools, and human resources needed to launch and maintain content.

GOVERNANCE

How key **decisions** are made and by whom. How, and by whom, **changes** are initiated and communicated (to who).

Create standard content governance and workflow

Workflow refers to how content goes from being written to being published. **Governance** refers to how decisions about content are made.

While it can be helpful to have dedicated content roles in an organization, it's not required to produce good content. At minimum, identify which individuals will be responsible to:

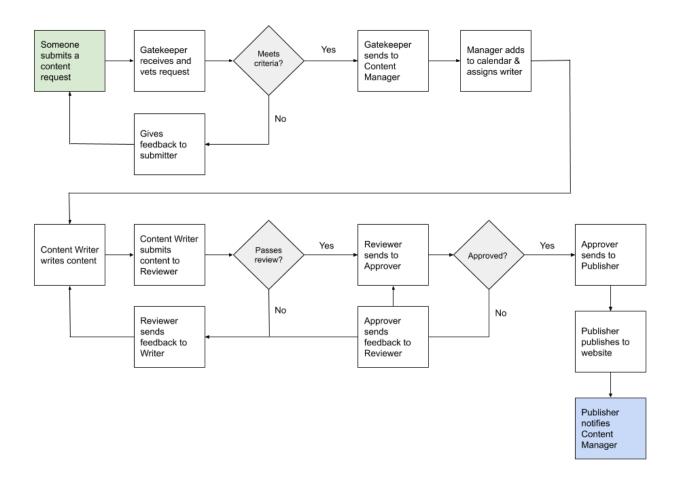
- Enforce policies, standards, and guidelines for web content
- Facilitate and oversee content **planning**
- Establish and own the **editorial calendar**
- Establish and own the maintenance calendar
- Field requests for content additions, deletions, or changes
- Act as subject matter experts
- Write content that conveys required messages to the target audience
- Review and / or edit content
- **Approve** content
- Publish content to the website

A typical content workflow often looks like this:

- 1. Someone **requests** a content change or addition.
- 2. A "Gatekeeper" vets the request against the Content Strategy or other criteria.
- 3. The Gatekeeper sends suitable content to a Content Manager (or Editor), who works it into their content **calendar** and assigns a **writer**.
- 4. The Content Writer writes the content. They may confer with a SME.
- 5. The Content Writer submits their work to relevant stakeholders for **review**. This may include **legal** review.
- 6. An authority gives final sign-off or **approval** to publish the content.
- 7. The Publisher adds the content to the **website** back-end and pushes it live.

Sample High-Level Workflow

This diagram depicts a typical content workflow. The workflow may vary for different types of content (e.g., visual or audio), or under special circumstances such as an "emergency" request.



Additional workflow parameters that should be established may include:

- How to submit content requests
- Expected turnaround times for vetting, reviews, approvals, etc.

Create a maintenance plan

Content needs to be reviewed periodically to ensure it does not become stale, outdated, or unuseful. The more often content is reviewed, the fresher and more relevant it will be to the user. Consider a rolling approach, where a certain number or percentage of hours per month are dedicated to content maintenance.

Keeping a Maintenance Calendar or Plan is an efficient way to facilitate regular content reviews. It can take many forms, but is often a spreadsheet that includes:

- Page title
- Short description of the content or topic
- URL (link to the page)
- Format (text, video, PDF, etc.)
- Source (so you know who to talk to if questions arise)
- Last update (when and who)
- Last review (when and who)
- Evaluation criteria
- Date of next scheduled review
- A place to record findings and recommendations

Choose evaluation methods

At minimum, regularly evaluate content against the:

- Core Strategy
- Voice and Tone
- Web Writing Principles

In addition, consider the following methods to assess content performance.

Set success criteria

Success will look different for different pieces of content. Sometimes success means the user stayed on a page for a long time. Sometimes it means they found what they needed quickly and then left. Setting success criteria and tracking it will help keep your content fresh and useful.

For example:

- X % increase in **visitors** compared to a previous time frame
- X % reduction in number of site **bounces**
- Reduction in number of **phone calls** inquiring about the page topic

Analytics

Review Analytics to identify which pages are performing well and which are performing poorly (based on success criteria).

- Look at how high-performing pages differ from low-performing pages. Are there differences in design? Subject matter? Quality of writing? Navigation?
- Consider removing, revising, or consolidating **poor-performing** pages.

Analytics tell you "what" but not "why." Use Google Analytics in combination with other methods to make confident decisions about content.

Internal stakeholder review

Use Google Analytics to identify pages that may require changes. Review those pages and proposed changes with internal stakeholders or subject matter experts to discuss the following:

- Is the content **current**?
- Does content you are considering removing need to stay because of **business logic**, including legal reasons?
- What are the negative or positive **implications** if the content is revised or removed?

User research

Taking a **user-centered approach** means putting the needs of real, human users at the forefront of decision-making. Evaluate how well your content meets your users' needs using some or all of the following methods:

Online surveys. Cast a wide net quickly. Find out why people visit your website. What are their goals? What information are they looking for? What do they like / dislike about your website? What is their vocabulary like?

1:1 interviews. Interview users about their experiences using your website. In a 1:1 conversation, you can dig deeper about users' motivations, needs, and behaviours, compared to a survey.

Usability testing. Observe users interacting with your website to see where they struggle and where they succeed. Usability testing can inform both content and design decisions.

Feedback from front line staff. Talk to the people who talk to your users. Why do they call or email? What questions are they asking? What are they having trouble finding?

FUNCTIONAL REQUIREMENTS

The existing public websites and intranets all had some functional features but, generally speaking, the functionality on the sites was fairly straightforward, with most sites focusing more heavily on content. Some of the larger former regions had built more robust tools for employees that were linked to from their intranet. For the most part, these tools have been created separate from the intranet, so the new intranet should not negatively impact them and they can continue to operate as they do today.

Developing the Functional Requirements

These functional requirements combine ideas developed by SHA stakeholders in visioning workshops that our team at our team lead in three cities in Saskatchewan, work done with the SHA project team, and collaboration between our strategy, UX, design, and development teams. They reflect common themes generated by workshop participants and are based on needs voiced in interviews and surveys about challenges users face when accessing health care services. These recommendations incorporate modern best practices in digital experience, design, and development.

Functional Recommendations

Public Website

During the design workshops, Saskatchewan Health Authority staff and stakeholders produced nearly 100 sketched ideas for adding functionality to the public website. As participants worked individually on these ideas, there were multiple ideas that fit together in similar themes or shared functionality.

Content Management System (CMS)

We recommend that the SHA move to an open source CMS, capable of delivering all content authoring, editing, publishing, and user management for both the public website and employee intranet on a single digital asset (one website). In this scenario, the public users and employees would visit the same website to access the information they need. Employees would log into a secure area, where they would be able to access additional menus, features and content.

The benefits to this include:

- Makes it easier to create and manage any shared content between the two sites. Example: News, Careers, About the Organization
- Integrates and unifies the authoring, editing, and publishing processes for users responsible for these activities on both

There are a few risks and considerations to keep in mind. These include:

- The possibility of information that should not be public becoming public, via routes such as an editor error or a permissions error. This can be mitigated through multi-confirm publishing processes and time delays, but remains a risk to some degree.
- Account creation must be carefully controlled. As an organization with significant turnover and movement of employees, this could become arduous, but this issue is present, if not duplicated, in a two-site approach as well.
- Employee login needs to be clear in intent to avoid confusion it is only for employees and not for the public.

Why open source?

Open source software provides several great benefits over closed source or proprietary software. These benefits include:

- Modular architecture makes the software flexible and adaptable while still being robust
- Plugins and modules extend the functionality of the CMS to support many common integration needs such as RSS feed importing, single sign on, and social media feeds
- Community support speeds up the reporting, diagnosing, and resolving of bugs
- Lower total cost of ownership. Rather than paying ongoing licensing fees, investment can be made in customization and implementation, yielding a better, more flexible product

CMS Publishing requirements:

- User permission for writers/creators
- Review by communications
- Can approve and publish or send back for revisions with notes
- Published by communications
- Versioning of pages and documents
- Author profiles (who wrote it, not who published it)
 - Provide location for storage of author information that can be maintained by authors or content editors
 - Authors must be linkable from content posts
 - Allow author profiles to persist on the site, even if the author's user account is not active
- Automated reminders to review content on specific timeline(s)
- Content expiration timelines

- What do we integrate well with?
 - CMS systems with module support will integrate with online services that have an available API for data access
 - In addition, many CMS systems have a large catalogue of modules that are created and maintained by the community. These modules provide support for many common integration needs such as RSS feed importing, single sign on, and social media feeds

Facility Search and Enhanced Location Pages

- Facility wayfinding and navigation
 - Mapping of facility layouts including amenities, rooms, common areas, admitting, departments, etc.
 - o Content for users on how to navigate facilities (video, files, text)

Parking

 When looking at amenities such as parking for a specific facility, users can see where parking is located, see areas that are for different departments, find cost, payment types, and duration of parking limits

Search

- Stand alone search software is recommended to allow for robust, facetted, and fast search queries
- Support for filters and combinations of filters
- The search engine needs to support the ability to text search any information that is added to pages
- Limited search to specific indexed pages in a section or subsection (allows for searching of Facilities or Staff Directory)
- Display of the terms that were matched in order to show the user how the result was found
- Search query autocomplete or suggestion functionality to offer users possible words as they are typing
- o Spell check to assist users would be an advanced, but desirable functionality

Content Author Attribution and Profiles

- Profiles could be associated with a user account on the website and maintained by the users themselves
- If required, an approval process should be applicable to user profiles
- Profiles should be capable of containing both public and private user information

• Profiles should have a mix of required and optional information, with guidance (or some form of enforcement) on how field content such as titles should be formatted for consistency throughout the site

Live Chat

- User can chat in-browser with a person to get personalized support/help
 - o Display online/offline status of support availability
 - Provide an option to receive email
- Chat starts with automated, programmable questions to assess the users needs
 - o Can be programmed to respond to common queries automatically
 - User can request to be connected to a live person if the response is insufficient or the have another query
- Considerations:
 - Chat is growing in popularity. Some research suggests that a poor chat that doesn't deliver appropriate content can be more detrimental than not having a chat
 - The option of live chat gives a sense of convenience, accessibility, and comfort to the user when calling or if going in-person isn't an option
 - Chat Bots may be a supplement to search, with some personality but should not seem overly human

Employee Intranet

Functionality on the existing employee intranets is limited with much of the more complex functionality located in standalone apps that are linked to from the intranets. As the SHA moves forward, continuing this approach is sensible and should allow most employees to maintain access to the tools they need in the same way they do now. As several of these tertiary systems also require additional security, it makes sense to maintain things as they are.

This approach means that what has been labeled an "intranet" becomes something more like an employee portal or hub, or a one-stop access point that employees use to get to the tools they need without always having to remember how to get to them directly. This means that the intranet, or portal, doesn't contain a lot of complex functionality, but it does need some key features.

Robust search with different content type filters

Locating content and documents was a challenge many employees and stakeholders identified. Creating a strong search tool that can be used to find information in different ways will be key for the intranet. Using standalone search software like Solr or Elastic search is recommended. This will give the SHA the most power and flexibility when it comes to search, whether it is site-wide or a subsection search for things like the staff directory or facilities and locations.

Staff directory

A staff directory would comprise of a single database with contact information for all employees that users can search to find the staff they need to contact. Search should use keywords to match names, locations, departments, and facilities. There should also be filter tools to narrow searches for users who have general inquiries, rather than looking for a specific individual.

Save or favourite content

A tool that allows users to save content that they need quick access to on a regular basis will allow users to be more efficient when navigating the site and creates a more personalized and custom experience. These saved pages should be displayed prominently on the landing page when users log in.

User dashboard

When a user logs in, they will see a tailored dashboard that provides them with content and information that is relevant to them based on location, role, and saved content. Using content tags, location, and user role groups, the site can serve up news, updates, recently added/edited pages that may be of interest to each user.

Functional Requirements in Appendix 6.

ADDITIONAL PHASES

A successful digital product requires a strong launch that meets user needs and expectations. The best digital projects go a step or two further and attempt to delight users in unexpected ways. As important as these launches are, it's never enough to have a strong launch and sit back and just maintain what you have. User needs and expectations change continuously, and at a rate much higher than most organizations realize. Throughout this project, ideas were developed that present strong user and organizational value, but either don't have the same priority as some other features, or are dependant on other features or third party involvement. These features are identified as **Phase 2** and **Phase 3**+ in the functional requirements appendix (*Appendix 6*).

Phase 2

These are ideas that can be started immediately upon the completion of Phase 1. They are ideas that generally are not dependant on a lot of other factors, but they will not be missed by users if they are not included in Phase 1. *See appendix* 6.

Phase 3+

These are ideas that are either dependent on the development of other features or require input or work from external partners. For example, apps or features that eHealth is currently developing or involved with are listed as Phase 3+. In some cases, the timeline of these features might be adjusted based on what partners do (if they complete a feature or app earlier it should go live), but the designation of these features of Phase 3+ acknowledges SHA's inability to drive or force these timelines alone. *See appendix* 6.

WIREFRAMES

The wireframes illustrate a series of future-state web and intranet interfaces based on the key user pain points, needs, and takeaways from the user interviews, workshops, and assessments that our team completed. They are intended to be low fidelity visualizations of the future functionality that focuses on page content, user workflows, and features, and are not all-encompassing of the full sites. Key feature wireframes for both desktop and mobile web are as follows:

Website

Content & Author Information

Users are more confident in reading medical information online that is backed by a professional that they trust. By publishing the author of online content, and including information about their career and education, the SHA can begin to build the reputation and credibility of its professionals. Readers can be linked to other articles or pieces written by the author and see that the information published is up to date and approved by a medical professional.

Find Facility or Location

To patients in Saskatchewan, SHA facilities include hospitals, walk-in clinics, medical laboratories, etc. Users will have the ability to search for specific names of facilities, but also facilities by location and filtering options. The interactive map will help users narrow their search and visualize where the facility is. Each facility has a details page including its hours of operation, contact information, and any other information important to know before calling or arriving.

Parking Lots, Capacity & Availability

Parking was a strong theme that came from user interviews and workshops. The stress of arriving at a medical facility is overwhelming, and the added confusion of parking and directions is something that the SHA can easily remove as a burden. The Parking feature allows users to view the closest parking lots to the facility, any updates around construction, directions to the parking lots, and the current capacity of the lot. Users can see the cost to park, and in a future state be able to pay for parking online or through their mobile device.

Live Chat

While users crave information and autonomy, when it comes to medical questions and decisions, they want to talk to a human being. The online Live Chat feature gives them the ability to ask questions, confirm information, and be guided in the right direction. The chat bot is pre-loaded with responses to common questions, but is connected to a professional in the SHA that can take over the conversation if it requires more personalized questions and answers. Online chat features are extremely accessible for individuals who speak English as an additional language, as it allows the time to translate phrases and process answers.

Intranet

Opinion/Feedback

The integrity and accuracy of the information on the intranet is the responsibility of more than solely the communications or IT teams. It must be held accountable by all internal users due to the sheer volume of information and the direct link to the quality of care that it can affect. In the new intranet, users can provide feedback on articles, documents, policies, etc., helping the team responsible for the upkeep to track any changes or updates that need to be made.

User Profile

When serving 40,000 employees, all with very different reasons for accessing and using the intranet, having the flexibility to customize each user's view is beneficial. The User Profile will include the user's employment information and the functionality to display the most recently viewed documents and policies, personalized news and updates based on location or facility, and the ability to save favourite links, documents, policies, and content. This gives the user control over their view of the intranet, and the communications teams the ability to push relevant information to the right sets of eyes.

Single Staff Directory

It is more important than ever for the 40,000 employees of the SHA to be connected, and with many employees changing titles, roles, etc. across the province, they need a way to find the correct contact information for each other. The Single Staff Directory on the intranet gives users the ability to see their most recently viewed contacts, most popular (most searched for) contacts, and their saved contacts. The search parameters give users the flexibility to search by position, location, facility, name, etc. in order to find the appropriate contact.

Wireframes in *Appendix 7*.

INFORMATION ARCHITECTURE

Information architecture refers to the organizing and labeling of information in a way that allows people to find and understand it. While there is a great deal of discrepancy between the former region websites and intranets when it comes to technology, design, and volume of content, there were common information architecture themes. In general, the public websites had information about: programs and services, facilities, the regional organization, news, and careers. Many of these sites were direct in their categorization and labelling of this information, often reflecting the organizational language and structure in their presentation. This requires the public user to learn or understand the inner workings of the health organization to effectively navigate these sites.

One notable exception to this was the Prince Albert Parkland Health Region, which supplements the organizational-focused content structure with a series of landing pages that collects relevant health information for users based on life stage and topics. These pages link out to "Facilities" and "Services" sections, but are more user-friendly and accessible.

Card Sort

Card sorting is a method to understand how users naturally group and organize information. It tells us what topics they think are related to one another, which will help inform the information architecture for the website.

In an **Open** Card Sort, users are provided a list of topics or page titles and are asked to create their own categories and group the cards within them. This is completed online in order to access people at their convenience and to allow sufficient time to complete the test.

Public Website Card Sort Results:

- 67 total completed responses
 - o Only 19 were not employees or volunteers within health care
- Completion rate of 42%
- Median number of categories: 8

While the number of complete responses was not high in the card sort, there were enough to give strong indications of how users think about and categorize the information presented to them. When filtering out employees and volunteers in health care, one key finding was that no one used the terms "Patient", "Family" or "Caregiver" to describe information that was for them. This indicates that users don't identify themselves in this manner but preferred simple pronouns like me, my, us. Presenting information to them using internal language in navigation labels does not match the way they think about and seek out information.

Users tended to use descriptive terms in category names. Words like "Information", "Resources", "Services", and "Programs" were used regularly. Reflecting this in navigation labels will help users make initial decisions and find the information they are seeking quickly.

The third notable point from the card sort was that users used the term "Facilities" or a variance of it as a category name regularly, but the topics and content that was grouped under it varied. It would include facility locations, programs and services, wait times, and information about physicians. In the sitemap, facility and location information and programs and services information are in different sections. We recommend that there be cross-section linking to support the relationship between facilities that provide programs and services and the general information about said programs and services.

Employee Intranet Card Sort Results:

- 37 total completed responses
- 65% completion rate
- Median number of categories: 9

In the employee intranet card sort, users were asked to categorize and group 46 cards. Like the public website card sort, many users turned to descriptive terms like Information, Resources, and Services to describe different types of content. This group also segmented information by the user group it would ultimately benefit. For example, information for employees like payroll or policies often had a category name that contained words like Staff, Employees, and even specific job titles. Information that an employee might need access to that would be passed on to a patient or family member would often have terms like Patient, Client, or Family (a notable difference between internal and external language).

The other notable finding from this card sort was that almost no one who works or volunteers in health care used the terms Human Resources or HR when grouping information about their employment. Here again, users tended to use more descriptive and literal language like Benefits, Payroll, and Scheduling.

Card sorting data in appendix 3.

Treejack Testing

Treejack testing is a simple activity that test how usable a proposed navigational structure will work in its most basic form. The test is designed to see if users can locate information within the site's information architecture using only navigation labels. While this is not a realistic simulation of users navigating a site, it is helpful to see if users can find content without the help of on-page content or site search tools. A relatively high success rate (70%+) indicates that in most cases, labels and terms used in the site navigation and structure align with the way users think about the content. Matching users' mental models means that they should be successful on the site whether they use the site navigation, on-site search tools or public search engines.

Public Website Treejack Test #1

To test the SHA website information architecture, we developed two levels of navigation and selected 10 tasks for users to complete.

Activity Results:

- 292 Participants completed activity
- 261 Participants abandoned activity
- Average time spent was 5:28 minutes
- Overall success rate was 66%
 - 5 tasks scored between 65%-92% success
 - 5 other tasks scored between 27%-54% success

Task	Success Rate
Your family doctor is retiring. Where would you find doctors who are taking new patients?	64%
Where would you find the hospital emergency room closest to you?	92%

Imagine you recently moved to Saskatchewan. Where would you find out how to apply for a health card?	54%
You are going to the hospital for day surgery. Find out what you need to bring with you to the hospital.	28%
Suppose you had a negative experience with the health care system. A friend suggests you speak to a client representative to get support. Where would you go to find out how to connect with a client representative?	43%
Your aging parent is in need of more support at home. Where would you find out what services are available for in-home care?	68%
Your doctor has referred you for a CT scan and you are waiting to receive information about an appointment. Find the current CT scan wait time information.*	39%
Where would you go to find out what is on each floor of your local hospital?	86%
If you had an upcoming appointment with a specialist, where would you go to find parking information (availability, cost, duration, etc.)?	52%
Where would you find current job openings?	91%

^{*} This task scored low but was not tested in round 2, as it was considered low priority and was bumped in favour of including "Finding doctors accepting new patients" as this was the top priority for many users and scored relatively low.

The five tasks that scored highest had a few things in common. Generally, they contained a word or synonym that was present in a top level navigation label (ex: Careers) and/or they had more than one correct destination. This is possible due to the use of life stage or user type landing pages that collect relevant links together for quick access for users.

Some of the tasks that scored lower suffered from a lack of clarity about which top level navigation option was most relevant to the task (e.g.: what to bring for day surgery was located in Facilities & Locations, but is highly relevant to You & Your Health).

As a result of the mixed results, we decided to run a second test of the website tree test after making some adjustments.

Website Treejack Test #2

The second treejack test focused exclusively on the five lowest scoring tasks to see if the success rate could be improved. In this test, the structure of the information architecture was kept roughly the same, but the top level navigation labels were made more verbose to better indicate what content was contained in each section. The correct destination pages were increased on some tasks to reflect areas that might contain or link to additional information.

Overall, task success was greatly improved for all tasks, but users still struggled with finding where the "What to bring for day surgery" content would be found.

Activity Results:

- 147 participants completed activity
- 75 Participants abandoned activity
- Average time spent was 4:09 minutes
- Overall success rate was 70%
 - Overall success rate on the same tasks in round 1 was 44%

Task	Success Rate Round #1	Success Rate Round #2
Your family doctor is retiring. Where would you find doctors who are taking new patients?	64%	89%
Imagine you recently moved to Saskatchewan. Where would you find out how to apply for a health card?	54%	80%
You are going to the hospital for day surgery. Find out what you need to bring with you to the hospital.	28%	41%
Suppose you had a negative experience with the health care system. A friend suggests you speak to a client representative to get support. Where would you go to find out how to connect with a client representative?	43%	57%
If you had an upcoming appointment with a specialist, where would you go to find parking information (availability, cost, duration, etc.)?	52%	79%

Employee Intranet Treejack Test

To test the employee intranet information architecture, we developed two levels of navigation and selected 10 tasks for users to complete.

Activity Results:

- 80 Participants completed activity
- 9 Participants abandoned activity
- Average time spent was 5:11 minutes
- Overall success rate was 70%

Task	Success Rate
You are planning a vacation and need to find out how much time off you have available. Where would you go to find this information?	98%
Where would you look to see what training is available in the coming months?	99%
You are preparing to discharge a post-surgery patient. Where would you go to find discharge information?	49%
Where would you find information about your dental coverage?	99%
Where would you look to see current job openings?	80%
You experience an issue with your computer freezing and can't resolve it. Where would you go to contact someone to get computer support?	40%
Where would you find out how to submit expenses?	51%
You need to contact a department in a facility outside your former region. Where would you look to find a phone number?	39%`
Where would you find today's cafeteria menu?	49%
Where would you find the Saskatchewan Health Authority's policy on infection prevention and control?	99%

Tree testing data in appendix 4.

INFORMATION ARCHITECTURE RECOMMENDATIONS

Sitemaps

A sitemap is a hierarchical map of a websites pages and content. While not always the case, these sitemaps reflect the structural and navigational aspects of the SHA public website and employee intranet.

Based on all of the information gathered from the card sort activities and Treejack testing, sitemaps have been created for both the public website and employee intranet. These sitemaps reflect the groupings and categorization that users created in the card sort activities and have been tested through the Treejack exercises.

Because the sitemaps will become a navigational tool for users to find information on these sites, they were designed to communicate what content users will find in each top level section clearly and allow them to make an initial selection quickly and confidently.

Public Website Sitemap

Level 1

Each of the top level navigation options on the public website, aside from Contact, has two elements. The first is a succinct label, or the primary label, as well as a subtitle that describes the content that will be found there. In testing this seemed to improve the success rate significantly over just using primary labels.

Label	Notes
YOUR HEALTH Programs, Services, & Information	This section contains all information regarding health programs and services. This information should be thorough, robust, and province wide.
FACILITIES & LOCATIONS Information For Visitors	All facility and location information. Primarily for users that would need to find a facility or need to visit a facility for any reason. Content within Your Health will provide support to facility pages, so linking between this two section will be required.
OUR ORGANIZATION	All SHA organizational information.

About The Saskatchewan Health Authority	
NEWS & EVENTS Updates, Events, Alerts, & Disruptions	Section for time sensitive information.
CAREERS Work With Us	This section will house links to relevant career listing sites (www.healthcareersinsask.ca & www.saskdocs.ca), as well as position the SHA as a place to work and provide any scholarship or bursary information potential and future employees might be interested in.
CONTACT	General contact information section with pages for providing feedback, contacting patient reps, as well as directing users to the Facilities & Locations section for specific location information.

Level 2 - Your Health

The "Your Health" section houses what formerly was labeled on most sites as programs and services. It takes cues from the PAPHR site and has landing pages for life stages and topics relevant to users that will drive people to detailed information in the All Health Services section, which is a robust database of all available health programs and services in the province.

Label	Notes
Infant & Child Health	Landing page with links to relevant health services topics.
Teen Health	Landing page with links to relevant health services topics.
Men's Health	Landing page with links to relevant health services topics.
Women's Health	Landing page with links to relevant health services topics.
Senior's Health	Landing page with links to relevant health services topics.

End of Life Care	Landing page with links to relevant health services topics.
Seasonal Health	Landing page that links to time sensitive or changing health topics. Ex: Flu season, ticks, etc
All Health Services	Robust database of province-wide health programs and services.
Doctors Accepting Patients	Searchable database of physicians in the province accepting patients.
Indigenous Health	Page addressing unique indigenous health topics.

Level 2 - Facilities & Locations

This section will contain all information for facilities and locations, including contact information, parking, amenities, and wayfinding. Whether users are visiting a patient, having a procedure done, or have any other reason to visit a facility, they should find the information they need here. Note that this section has pages for facilities that the SHA operates, as well as ones that are run by partners and out-of-scope parties. While this presents some challenges for collecting information, we recommend that the SHA put in the additional effort to provide this information on the public website, as users have a strong need and expectation that this information is all related. While the system is complex, users don't understand or care a great deal about the minutiae of who owns, operates or funds these facilities. In their minds, they are all health care providers and should all be part of the same system.

Label	Notes
Hospitals & Emergency	Full list of hospitals and emergency departments in the province. Searchable by location and keyword. For each facility, there should be additional pages for: - Services (Departments). Would cross link to Health Services under Your Health for additional information - Parking & Directions - Facility Maps - Amenities (Food, Pharmacy, & Gift Shops)
Walk-in Clinics	Full list of walk-in clinics in the province. Searchable by location, keyword, and services. For each location, there should be additional (when available) pages for:

	- Services - Parking - Amenities
Long-term Care Homes	Full list of long-term care homes in the province. Searchable by location, keyword, and services. For each location there should be additional (when available) pages for: - Services - Parking - Amenities
Diagnostic Laboratories	Full list of diagnostic laboratories in the province. Searchable by location, keyword, and services. For each location there should be additional (when available) pages for: - Services - Parking - Amenities
Cancer Centres	Page for cancer centre locations with links to Saskatchewan Cancer Agency website for more information.
Remote/Distance Medicine	Page with content about remote medicine, what it is, and how to access it.

Level 2 - Our Organization

This section will contain all organizational information about the SHA: corporate information, board and governance, organizational charts, research, publications, etc. In many of the former regions, this section was one of the first links in the navigation. It is strategically moved lower and could even be a secondary link. This elevates the content and information users need over things about the organization.

Label	Notes
Our Organization	Sub-section housing general organizational information. Should include pages for: - Vision, Mission, Values - Leadership - Board & Leadership
Strategic Plan	Content page with an overview of the move to a single authority, strategic plan breakdown, overview of progress.
Get Involved	How to volunteer or work with the SHA. Link to careers section.
Research & Publications	Document database of SHA-produced and published items.

Level 2 - News & Events

This section will house the latest news, events, service disruptions and alerts from the SHA to the public.

Label	Notes
News	All SHA news ordered by date starting from the newest. News needs to be tagged with metadata for geographic relevance, facilities or locations, departments and services, or other topics that are relevant. Need the ability to filter listing based on metadata.
Events	All SHA events. Needs to include the ability to tag and filter listings.
Service Disruptions	All SHA service disruptions. Needs to include the ability to tag and filter listings. Disruptions should have a set date and time to expire that is optional.
Alerts	Other time sensitive alerts and updates from the SHA.

Employee Intranet Sitemap

Level 1

Each of the top level navigation options on the employee intranet has two elements. The first is a succinct label, or the primary label, as well as a subtitle that describes the content that will be found there. In testing, this seemed to improve the success rate significantly over solely using primary labels.

Notes
This will contain information that employees need about
their employment.

FOR PATIENTS & FAMILIES Information, Resources, & Services	This section will house information and resources from the SHA that employees can provide to patients, caregivers, and families.
STANDARDS & DOCUMENTS Policies, Procedures, Forms, & Instructions	Forms, documents and information that employees (and potentially volunteers, partners, etc.) need as part of their duties.
LEARNING Training & Education	Training and education opportunities for employees and volunteers. User permission controls could be used to provide only relevant opportunities to specific user types
OUR ORGANIZATION About the SHA	All SHA organizational information.
UPDATES News & Events	News and events feeds. This should incorporate public items as well as items that are exclusively for staff.
CAREERS Work With Us	This section will house links to relevant career listing sites (www.healthcareersinsask.ca & www.saskdocs.ca) as well as information about changing positions, career paths, and other careers information.

Level 2 - For Employees

This section houses information employees need access to and resources that help them do their work.

Label	Notes
Payroll & Scheduling	Page may contain some content but primarily links out to My Gateway
Staff Contact & On-Call Lists	Staff directory that is searchable by keyword, location, role, department.
Facility Information & Services	Employee-targeted information about facilities. This section would include things like: - Site Codes & Plans

	- Cafeteria Menus
Patient & Family Centred Care	Information about SHA's practices and approaches to delivering patient & family centred care.
Employee Family Assistance Program	Information about Employee Family Assistance Program.
New Employees	Information for new employees.

Level 2 - For Patients

This section houses information employees need that will support, inform or educate patients. Unlike the public website, the employee intranet navigation uses the word "patient" as this audience uses it extensively.

Label	Notes
Infant & Child Health	Landing page with links to relevant pages in All Health Information section. Page should use titles to organize types of information (e.g.: resources, supports, services).
Teen Health	Landing page with links to relevant pages in All Health Information section. Page should use titles to organize types of information (ex: resources, supports, services).
Men's Health	Landing page with links to relevant pages in All Health Information section. Page should use titles to organize types of information (ex: resources, supports, services).
Women's Health	Landing page with links to relevant pages in All Health Information section. Page should use titles to organize types of information (ex: resources, supports, services).
Senior's Health	Landing page with links to relevant pages in All Health Information section. Page should use titles to organize types of information (ex: resources, supports, services).
Chronic Illness	Landing page with links to relevant pages in All Health

	Information section. Page should use titles to organize types of information (ex: resources, supports, services).
End of Life Care	Landing page with links to relevant pages in All Health Information section. Page should use titles to organize types of information (ex: resources, supports, services).
Indigenous Health	Landing page with links to relevant pages in All Health Information section. Page should use titles to organize types of information (ex: resources, supports, services).
Seasonal Health	Landing page with links to relevant pages in All Health Information section. Page should use titles to organize types of information (ex: resources, supports, services).
All Health Information	Searchable database of all available resources, services and supports with filters for: location, facility, department.

Level 2 - Standards and Documents

This section contains content, links, and documents that employees need to be able to perform their daily duties. While this section and "For Employees" have distinct purposes, they are closely related as they are intended for the same audience and the content deals with their work. Testing featured links between the two sections is recommended.

Label	Notes
Policies	Content about policies, information about the transition to province-wide policies, and a link to the to-be-launched policy database search tool.
Forms	Complete collection of form files organized by department.
Orders	Complete collection of orders files organized by department.
Requests	Complete collection of requests files/forms organized by department.

Level 2 - Learning

This section has available learning, training, and education information for employees.

Label	Notes
Upcoming Training	Calendar of upcoming training opportunities for employees. Should be filterable based on tags.
Online Training	Collection of online training resource links.

Level 2 - Our Organization

If the public website and employee intranet remain two separate entities, this would be a duplicate of the Our Organization section on the public website, as it is today. If the SHA moves forward with the recommendation to create one website with an employee secure area, this section could be removed from the employee intranet sitemap.

Level 2 - Updates

Like "Our Organization", this section could be removed from the employee intranet sitemap if there is a single website for public and employees. In that case, any news or updates that are for employees only would only be visible to users who are logged in and have permission to view it.

Level 2 - Careers

Again, the Careers section would only be required here if there were two separate entities for public and employees. If there is a single website, then any career information or links that are only for employees could be restricted to users who are logged in and have permission to view it.

Evolving Navigation Based on Research and User Needs

Information architecture should not be considered a static, one-time decision that is made and left alone. Similar to content auditing, it should be tested and adjusted based on regularly collecting user feedback. With a site that will have regular updates and changes, it is important to be continuously testing navigation and making adjustments that help users find information quickly and effectively. While these recommended sitemaps are tested and reflect what users think about the content today, these ideas change and shift with new information and adjusting to those changes as quickly as possible is part of being a user centred organization.

Sitemaps in Appendix 5.

Challenges, Considerations, & Risks

While execution, or getting the work done, is a big part of the success of digital projects, there are a number of factors that can influence success that have little to nothing to do with being able to get things designed, written, or built. Throughout this project, our team has observed a few things that could present risks or challenges to the work the SHA is endeavouring to take on.

PROCESS

Given the former regional structure of the provincial health care system, there are many variations and ideas on how to do things. While creating a single, province-wide process for the website and intranet will be necessary, simply creating and launching it will likely not be enough to realize the benefits of this work. Properly communicating and managing the change to all parties will be important. Explaining to staff how this benefits them, as well as to patients, families and colleagues, will be key. Finding ways to incentivize employees to follow processes and provide constructive feedback should also play a critical role in this massive change management undertaking.

TEAM STRUCTURE

The public website, employee intranet, and any future mobile applications are the purview of the communications department's Online Strategy & Creative Services team. Unlike most modern, large scale organizations serving as many potential users as the SHA, there is not a fully-dedicated digital team that is co-located and works collaboratively across strategy, user experience, visual and content design, and programming. This seems to be a result of scaling up versions of what former regions were doing for digital and communications, rather than assessing the SHA's digital needs and tailoring a team to fit those needs. For this current team structure to work, we recommend that a few positions be created or evolved to better suit the needs of the SHA's digital presence, namely:

- **Web editor-in-chief** responsible for oversight of the web and intranet content, editorial calendars, and the maintainer of the content strategy.
- Web copywriter Writing for web is different than other formats and should be something that is the focus of at least one individual. While communications may not write the bulk of the content directly, having a web content writing expert will help the organization greatly by tailoring content for the channel appropriately.

• UX designer/researcher - This could be two roles, or one for the right individual. Like writing, designing for digital and for better user experience is different than designing for other mediums. Bringing on a design expert that can do design research and testing will benefit the SHA by reducing the risk of creating digital design that frustrates users as well as saving effort by avoiding investment in tools and functionality that users don't use.

EXPERIENCE DESIGN

In addition to the team structure and roles, there appears to be a lack of expertise within the SHA in the area of experience design, particularly in the digital realm. Unlike many other forms of design, experience design relies heavily on research and engagement with the users impacted by the design. By understanding the users' needs, motivations, and challenges, the designer can produce work that is empathetic to users and more likely to meet their needs.

Adopting a human centred design approach to experience design for the website, intranet and beyond will help the team overcome some of the existing issues identified by users throughout this project. This approach ensures that navigation and content uses language that matches user mental models, that page organization can be scanned and understood, and pushes for early prototyping so users can provide feedback. This helps deliver digital experiences that build trust and confidence and reduces the need for users to access more expensive supports like call centres, clinics, and emergency departments.

Creating an experience design role or team is the gold standard, but training staff who design, write and strategize for web is a valuable undertaking as well and can deliver some of the same value without creating entirely new teams or roles.

TRANSPARENCY

Today there seems to be a strong tendency within the SHA to be private and closed when it comes to information and processes. There's some movement toward more open and transparent work with the use of Lean internally, but from the public viewpoint, there is still a trend towards keeping things private or behind login areas.

When compared to other best-in-class examples from other Canadian and international jurisdictions, it appears that the SHA is not keeping pace with what others are doing. For example, BC health makes available many of their forms, documents, and policies on their public website for anyone interested to find. The National Health Service and the UK government go even further by publishing online their digital governance, policies and projects for anyone to see and provide feedback on. While the SHA might not be ready to move to an "Open by default" approach, we strongly recommend that they find ways to be more transparent and really question when something is not for public consumption.

SECURITY

Information privacy and security were topics that came up several times throughout the visioning workshops, interviews, and other project conversations. Based on information provided by eHealth's CSO, it is understood that there are two types of information security that are of concern to the SHA:

- Personally identifiable information (information that can be linked to an individual)
- Personal health information

In both cases, eHealth and the SHA are very careful about making information available to anyone outside of an SHA facility that could compromise a person's data. This is the primary reason many of the existing employee intranets are not available to staff from home, or on their personal devices. This is also why many systems require additional login credentials from staff even after they have logged into the intranet. Based on the conversation with the eHealth CSO, it doesn't seem likely that these restrictions will be loosened in the near future, so managing expectations of users will be important especially on the intranet. Communicating to users when and why they will be asked for additional logins will be helpful, and clearly identifying links that are not available to users not on SHA-provided internet connections could greatly decrease frustrations for employees.

PATIENT & FAMILY ADVISORS

Patient and family advisor volunteers are a primary "voice of the user" on projects that the SHA is undertaking. In many ways, this is a good practice and should continue to be used, and in some cases expanded, but there are risks and challenges with the practice.

One main challenge is that when a person is exposed to, or has significant knowledge about, how an organization operates or a system works (by being in the room as decisions are made for example) it makes it difficult for them to speak objectively about proposed initiatives. It also has an impact on their perspective and makes it very hard for them to identify with, or speak from the perspective of a user who doesn't have the same knowledge.

Another challenge is that it can give the organization a false sense that they have engaged users, when really they've collected feedback from stakeholders. The difference is that PFCC volunteers have to self-identify and choose to participate to be involved, rather than be sought out or selected because they align with or represent real user groups that a department, facility or service engages with. While leveraging PFCC advisors during the visioning and planning, the SHA should go further and engage real members of the public who represent typical users as well, and then should re-engage them to test and provide feedback through the process with prototypes, content, information architecture, and designs.

OTHER PROJECTS

The SHA is a large, complex organization, and as such, has several related projects all happening at the same time. Being able to adapt and accommodate changes to these other projects will be a mark of success for the new website and intranet. Two significant, in-progress projects that will impact the public website and intranet are:

• AIMS - Administrative Management System

AIMS will replace and/or sunset 82 existing operational health care systems. The technologies being used (iHRIS & Kronos) will integrate into the proposed software solutions for the website and intranet. iHRIS is PHP/MySQL/Apache. These are industry standard & open source technologies that can easily be integrated with should the need arise. Kronos offers a "Kronos D5 platform" that provides APIs which will allow the CMS to retrieve data from their various products.

• Policy Search Engine

The team responsible for policy organization and creation, in collaboration with the SHA libraries department, is creating a collection and search tool for all existing policies created by the former regions. The completion of this tool is dependant on first collecting all policies, which is a time consuming task due to security restrictions on former region intranets. It is conceivable that the new SHA website and intranet will launch before the completion of the policy search tool, which would mean that policies will need to be made available in some other way as they still govern employees work in those areas, most likely by maintaining that portion of the existing former region intranets until the search tool is complete.

Conclusion

The endeavour of bringing all former region sites and intranets into a single source for patients and employees is a tall order, but the Saskatchewan Health Authority has the tools it needs to succeed. The first step is to provide users with content and functionality that will meet their immediate needs with additions that will give them a reason to come back. Then, focus on the higher-effort functionality and content that will make the site(s) exceed expectations. You cannot have a successful, elaborate website without a stable foundation.

The SHA needs to rebuild its reputation as a digital source of trust and truth, meeting and supporting its professional employees who deliver top level service every day. When you provide the tools and support that employees need day-to-day, they will continue to improve services. When you provide patients with the information they crave, it will make their interaction with health-care professionals and facilities that much better. The connection between digital, employees, and patients is a symbiotic relationship that, when done right, will benefit everyone in Saskatchewan.

Appendices

Appendix 1: Workshop Notes

See file:

SHA Web Stakeholder Workshop Notes.xlsx

Appendix 2: Survey Results

See file:

Saskatchewan Health Authority Website Renewal Survey.csv

Appendix 3: Card Sort Results

See files:

 $SHA-WebRenewal-EmployeeIntranetOpenCardSort_raw_data.xlsx\\ SHAWebRenewalWebsiteOpenCardSort_raw_data.xlsx\\$

Appendix 4: Tree Test Results

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See files:

Appendices > Intranet 1 >

SaskatchewanHealthAuthorityIntranetNavigationStudy_results_2019-05-15
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Appendices > Website 1 >

SaskatchewanHealthAuthorityWebsiteNavigationTesting_results_2019-05-1
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Appendices > Website 2 >

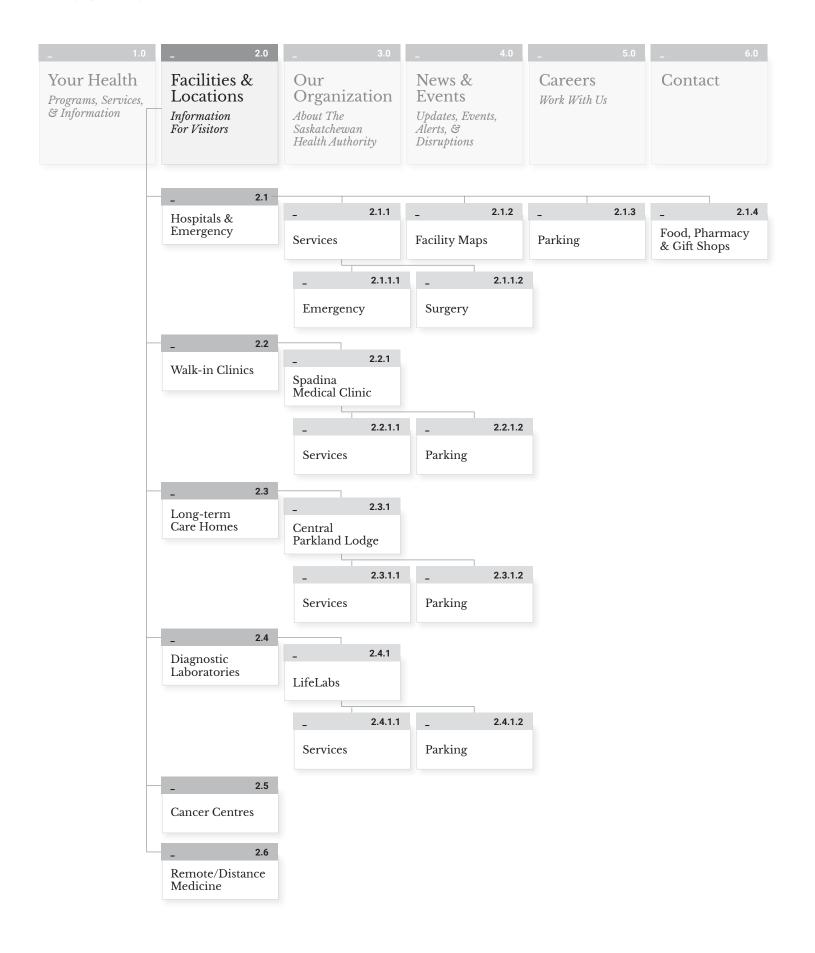
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Appendix 5: Sitemaps

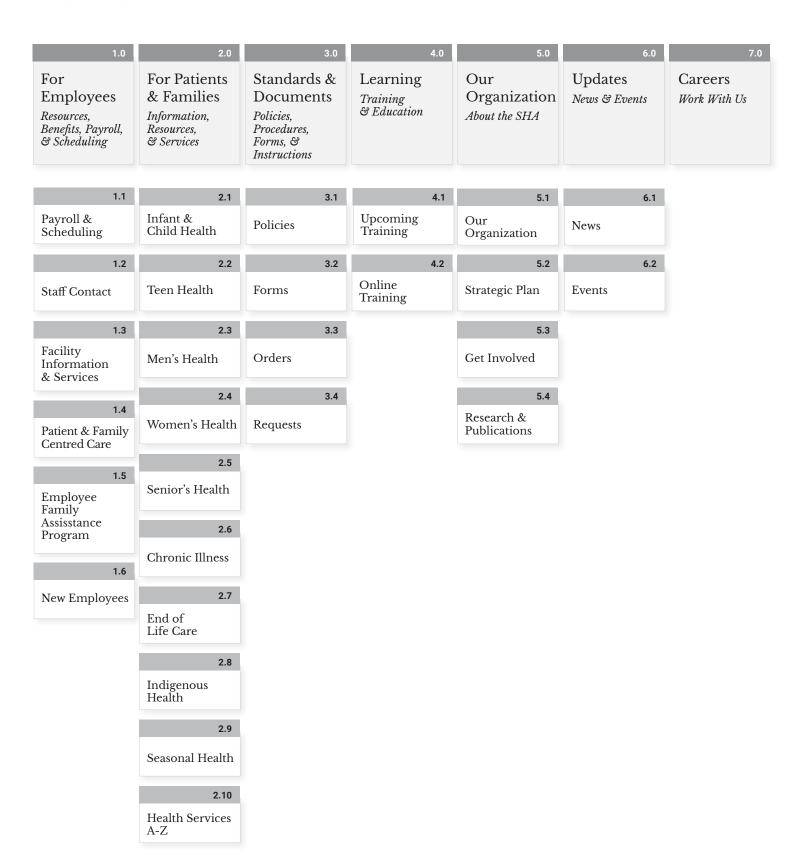
Website

1.0	2.0	3.0	4.0	5.0	6.0
Your Health Programs, Services, & Information	Facilities & Locations Information For Visitors	Our Organization About The Saskatchewan Health Authority	News & Events Updates, Events, Alerts, & Disruptions	Careers Work With Us	Contact
1.1	2.1	3.1	4.1		6.1
Infant & Child Health	Hospitals & Emergency	Our Organization	News		General Inquiries
1.2	2.2	3.2	4.2		6.2
Teen Health	Walk-in Clinics	Strategic Plan	Events		Provide Feedback
1.3	2.3	3.3	4.3		6.3
Men's Health	Long-term Care Homes	Get Involved	Service Disruptions		Patient Advocates
1.4	2.4	3.4	4.4		
Women's Health	Diagnostic Laboratories	Research & Publications	Alerts		
1.5	2.5				
End of Life Care	Cancer Centres				
1.6	2.6				
Seasonal Health	Remote/Distance Medicine				
1.7					
All Health Services					
1.8					
Doctors Accepting Patients					
1.9					
Indigenous Health					

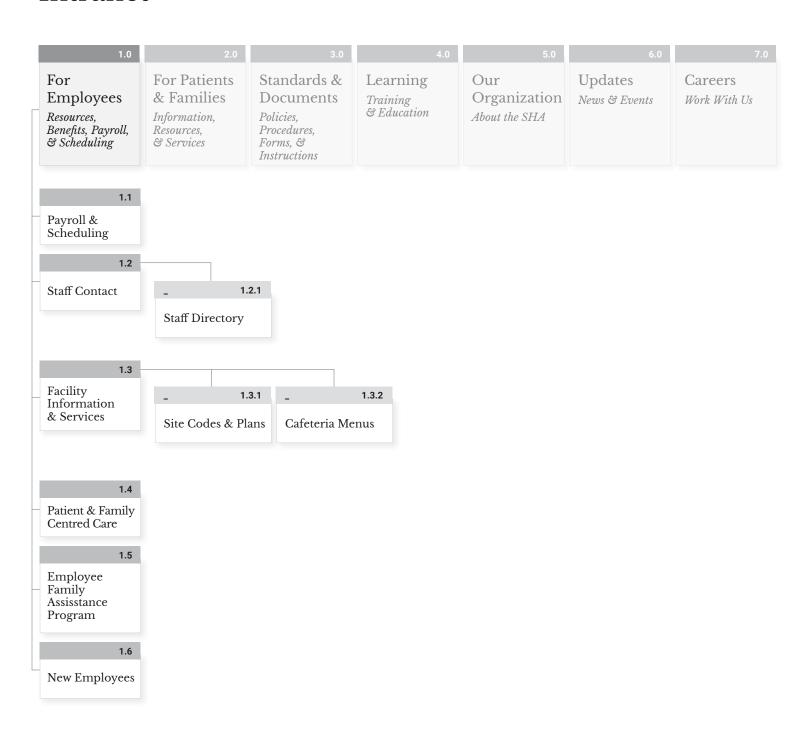
Website



Intranet



Intranet



Appendix 6: Functional Requirements

Technical Requirements - Public Website				
Theme	Feature	Functionality	Priority Category	Phase
It Takes a Village	Content Management System	Roles for authors, contributors, editors and publishers	Threshold	Phase 1
It Takes a Village	Content Management System	Predefined content types and page layouts	Threshold	Phase 1
T. (D. 1. 1771)		Word count, reading level tool, required fields, spell check,	mi 1 11	DI 1
It Takes a Village	Content Management System	grammar check on page editor	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - author view: create pages	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - author view: edit pages	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - author view: submit for approval	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - author view: review editor feedback	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - editor view: access submitted author changes	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - editor view: comment on submitted changes	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - editor view: accept submitted changes	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - editor view: reject submitted changes	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - editor view: edit navigation structure	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - editor view: queue for publishing	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - publisher view: review pending content for publishing	Threshold	Phase 1
It Takes a Village	Content Management System	Workflow - publisher view: accept and publish pending content	Threshold	Phase 1
It Talvas a Villama	Canton Managamant System	Workflow - publisher view: reject and comment on pending	Threshold	Dhasa 1
It Takes a Village	Content Management System	content		Phase 1
It Takes a Village	Content Management System	Map: add location by address or coordinates	Threshold	Phase 1
It Takes a Village	Content Management System	Map: edit location address	Threshold	Phase 1
It Takes a Village	Content Management System	Map: identify parking areas for existing location/facility	Threshold	Phase 1
It Takes a Village	Content Management System	Content: Track cross-linking to pages and alert editors/publishers when removing a page that has incoming links	Threshold	Phase 1
Explain It Like I'm 5	Search	Keyword search	Threshold	Phase 1
Explain It Like I'm 5	Search	Search filters based on taxonomy, content type, files	Threshold	Phase 1
Anticipate & Reduce Pain Points & Stress	Search	Search limited indexed pages (ex: facilities and locations)	Performance	Phase 1
Anticipate & Reduce Pain Points & Stress	Search	Type ahead search field (suggested auto-complete)	Performance	Phase 1
1		71 (00 1 /		
Explain It Like I'm 5	Maps	Open source mapping software	Threshold	Phase 1
Explain It Like I'm 6	Maps	Display location pins based on search filter selection	Threshold	Phase 1
Anticipate & Reduce Pain Points & Stress	Maps	Display location pins based on zoom level	Performance	Phase 1
Anticipate & Reduce Pain Points & Stress	Maps	Unique pins for different facility and location types	Threshold	Phase 1
Anticipate & Reduce Pain Points & Stress	Maps	Legend to identify location types	Threshold	Phase 1
Anticipate & Reduce Pain Points & Stress	Maps	Use location services when available to find users location	Excitement	Phase 2
Perceived Accuracy of Content	News/Disruptions/Alerts	News posts: tagged with location information	Threshold	Phase 1
Perceived Accuracy of Content	News/Disruptions/Alerts	Service disruptions: tagged with location, relevant facility	Threshold	Phase 1
Perceived Accuracy of Content	News/Disruptions/Alerts	Service disruptions: required start date and time	Threshold	Phase 1
Perceived Accuracy of Content	News/Disruptions/Alerts	Service disruptions: required end date and time	Threshold	Phase 1
Perceived Accuracy of Content	News/Disruptions/Alerts	Alerts: required start and end time	Threshold	Phase 1
Perceived Accuracy of Content	News/Disruptions/Alerts	Alerts: Pin to top of feed pages when they are active	Excitement	Phase 1

Anticipate & Reduce Pain Points & Stress	Facilities	On page map	Performance	Phase 1
Explain It Like I'm 5	Facilities	Links to health services content	Threshold	Phase 1
Anticipate & Reduce Pain Points & Stress	Facilities	Amenities information (Parking, menus, etc)	Threshold	Phase 1
	Facilities	Staff listings (by department)	Performance	Phase 1
Anticipate & Reduce Pain Points & Stress	Facilities	Facility navigation content (PDF maps, visitor walk throughs)	Performance	Phase 1
Antiningto 0 Daduca Daire Dairete 0 Studen	Facilities	Mapping of facility layouts including amenities, rooms, common	Excitement	Dhara 0
Anticipate & Reduce Pain Points & Stress	Facilities	areas, admiting, departments, etc.	Performance	Phase 2
Anticipate & Reduce Pain Points & Stress	Facilities	Link out to, or integrate with MediMap.ca Augmented reality navigation tool showing users where to go in	Performance	Phase 1
Appropriate Self-Service	Facilities	facilities in real time	Excitement	Phase 3+
Explain It Like I'm 5	Live Chat	Chat option present on every page	Excitement	Phase 2
	r: cl	Automated qualifying questions to determine user need and	P	DI O
Explain It Like I'm 5	Live Chat	location if applicable	Excitement	Phase 2
It Takes a Village	Live Chat	Connect user to live person if the user request can't be fulfilled through automated responses	Excitement	Phase 2
_		<u> </u>		
Appropriate Self-Service	Doctor Search	Database of family physicians for province	Threshold	Phase 1
		Search and filter by: name, location, accepting patients, gender,		
Appropriate Self-Service	Doctor Search	languages, areas of interest/speciality	Performance	Phase 1
Holistic, Full-Service Care	Real time information	Integration of MediMaps wait times (requires the development of an external API by MediMaps)	Excitement	Phase 2
22010010, 2 011 2 01 7100 01110	71007 01110 1110 1110 1110 11	Real-time ER dashboard with wait times along with other		111000 2
Holistic, Full-Service Care	Real time information	performance metrics	Excitement	Phase 2
Explain It Like I'm 5	Digital discharge plan	Pulls information from patient information systems to build discharge plan	Excitement	Phase 3+
Explain it Like I in 5	Digital discharge plan	Send patient a link via email to their personal portal area of the	Excitement	Thase of
Explain It Like I'm 5	Digital discharge plan	website	Excitement	Phase 3+
		Show user perscription information, treatment protocols, referrals,		
Explain It Like I'm 5	Digital discharge plan	potential complications, what to do if they have questions/concerns	Excitement	Phase 3+
	3.1	1		
		Integrate patient information systems to access perscription		
Holistic, Full-Service Care	Personal Patient Portal	Integrate patient information systems to access perscription history, diagnosite imaging, facility journeys, etc	Excitement	Phase 3+
Holistic, Full-Service Care	Personal Patient Portal	User can edit profile - Name, address, providers, etc	Threshold	Phase 3+
Anticipate & Reduce Pain Points & Stress	Personal Patient Portal	Provide relevant updates and messages based on location, providers, perscription history, etc	Performance	Phase 3+
Holistic, Full-Service Care	Personal Patient Portal	Integrate EMR when available	Excitement	Phase 3+
rionsac, i un service dare	1 ersonar i attent i oftal	integrate Linix when available	DACIGIICII	1 Hase of
		Patients confirm attendance at a facility or for a procedure before		
Appropriate Self-Service	Check-in feature	arriving	Performance	Phase 3+
Appropriate Self-Service	Check-in feature	System provides pre-visit requirements and arrival instructions	Excitement	Phase 3+
Appropriate Self-Service	Self Serve Tools	Self assessment tool that recommends appropriate care to seek	Performance	Phase 1
Appropriate Self-Service	Self Serve Tools	Health coverage checker. "Do you need additional insurance?"	Performance	Phase 3+

Appropriate Self-Service	Self Serve Tools	Physician admin login to update physician information in real-time	Performance	Phase 2
Holistic, Full-Service Care	Patient App	Electronic Health Records	Excitement	Phase 2
Holistic, Full-Service Care	Patient App	Appointment reminders	Excitement	Phase 3+
Holistic, Full-Service Care	Patient App	Medication reminders	Excitement	Phase 3+
Holistic, Full-Service Care	Patient App	Alerts about disruptions, health information, news	Excitement	Phase 3+
Holistic, Full-Service Care	Patient App	Discharge plans	Excitement	Phase 3+
Appropriate Self-Service	Patient App	Check-in feature	Excitement	Phase 3+
Appropriate Self-Service	Patient App	Appointment Booking	Excitement	Phase 3+
Perceived Accuracy of Content	Analytics	Analytic tracking on all pages and documents to see visits, time or	n p Threshold	Phase 1

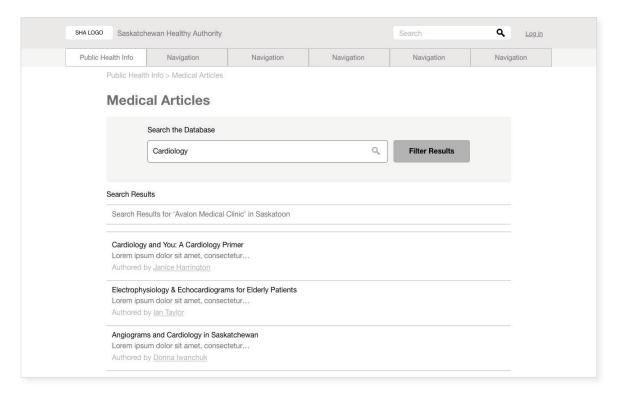
Technical Requirements - Employee Intranet	E 4	P 41 114 -	Dul - ult Out	DI
Theme	Feature	Functionality	Priority Category	Phase
Team Effort	Content Management System	Roles for authors, contributors, editors and publishers	Threshold	Phase 1
Team Effort	Content Management System	Predefined content types and page layouts	Threshold	Phase 1
Team Effort	Content Management System	Word count, reading level tool, required fields, spell check, grammar check on page editor	Threshold	Phase 1
Team Effort	Content Management System	Workflow - author view: create pages	Threshold	Phase 1
Team Effort	Content Management System	Workflow - author view: edit pages	Threshold	Phase 1
Team Effort	Content Management System	Workflow - author view: euit pages Workflow - author view: submit for approval	Threshold	Phase 1
Team Effort	9 ,	Workflow - author view: subinit for approval Workflow - author view: review editor feedback	Threshold	Phase 1
Team Effort	Content Management System		Threshold	
	Content Management System	Workflow - editor view: access submitted author changes		Phase 1
Team Effort	Content Management System	Workflow - editor view: comment on submitted changes	Threshold	Phase 1
Team Effort	Content Management System	Workflow - editor view: accept submitted changes	Threshold	Phase 1
Team Effort	Content Management System	Workflow - editor view: reject submitted changes	Threshold	Phase 1
Team Effort	Content Management System	Workflow - editor view: edit navigation structure	Threshold	Phase 1
Team Effort	Content Management System	Workflow - editor view: queue for publishing	Threshold	Phase 1
Team Effort	Content Management System	Workflow - publisher view: review pending content for publishing	Threshold	Phase 1
Team Effort	Content Management System	Workflow - publisher view: accept and publish pending content	Threshold	Phase 1
Team Effort	Content Management System	Workflow - publisher view: reject and comment on pending content	Threshold	Phase 1
Team Effort	9 ,		Threshold	Phase 1
	Content Management System	Map: add location by address or coordinates		
Team Effort	Content Management System	Map: edit location address	Threshold	Phase 1
Team Effort	Content Management System	Map: identify parking areas for existing location/facility	Threshold	Phase 1
Team Effort	Content Management System	Content: Track cross-linking to pages and alert editors/publishers when removing a page that has incoming links	Threshold	Phase 1
104111 211011	deliterit management system	when removing a page that has been him miss	Timesitora	T Huse I
Team Effort	Staff Directory	Searchable database of all SHA employees	Performance	Phase 1
Геаm Effort	Staff Directory	Search by name (keyword)	Performance	Phase 1
Team Effort	Staff Directory	Search by location (city, town, area)	Performance	Phase 1
Team Effort	Staff Directory	Search by department/specialty	Performance	Phase 1
Team Effort	Staff Directory	Organize staff by: location, facility, department, role	Performance	Phase 1
		, , , , , , , , , , , , , , , , , , ,		
Personalized Views	User Dashboard	Saved pages	Excitement	Phase 1
Personalized Views	User Dashboard	Recently visited pages	Excitement	Phase 1
		Relevant updates based on user information (location, facility,		
Personalized Views	User Dashboard	role)	Excitement	Phase 2
Personalized Views/Necessity that Compliments Other Projects	User Dashboard	Integrate AIMS data for user and display it on dashboard page (scheduling, vacation bank, health benefits)	Excitement	Phase 3
Team Effort	Live Chat	Chat option present on every page	Excitement	Phase 2
Team Effort	Live Chat	Automated qualifying questions to determine user need and location if applicable	Excitement	Phase 2
Team Effort	Live Chat	Connect user to live person if the user request can't be fulfilled	Excitement	Phase 2
So Easy, it Doesn't Need Explaining	Search	Keyword search	Threshold	Phase 1

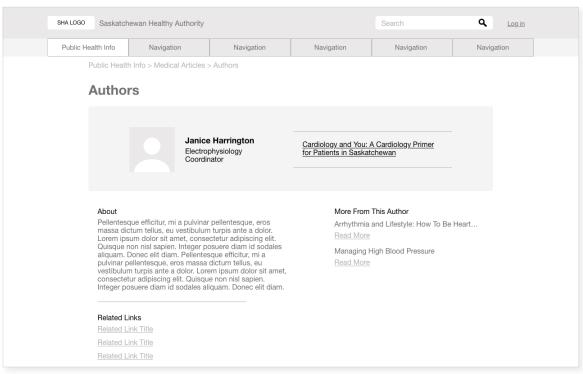
So Easy, it Doesn't Need Explaining	Search	Search filters based on taxonomy, content type, files	Threshold	Phase 1
So Easy, it Doesn't Need Explaining	Search	Search limited indexed pages (ex: facilities and locations)	Threshold	Phase 1
So Easy, it Doesn't Need Explaining	Search	Type ahead search field (suggested auto-complete)	Threshold	Phase 1
Foundation of Trust	Content Poll/Feedback	Content rating for pages (was this content accurate and helpful? Thumbs up/down or satisfaction rating)	Performance	Phase 1
Foundation of Trust	Content Poll/Feedback	Follow up ratings to collect more specific data	Performance	Phase 1
Foundation of Trust	Content Poll/Feedback	Optional text field to provide feedback/details	Performance	Phase 1
Team Effort	Analytics	Analytic tracking on all pages and documents to see visits, time or	n ŗ Threshold	Phase 1

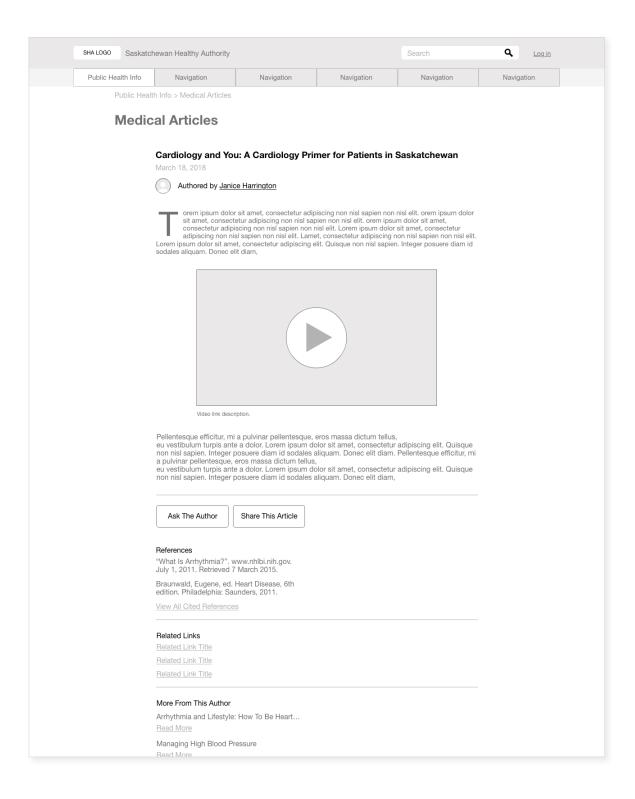
Appendix 7: Wireframes

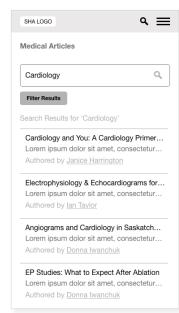
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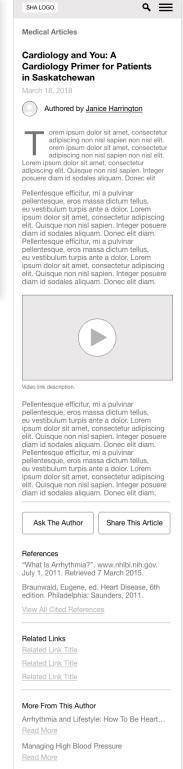
Content, Author Information & Feedback

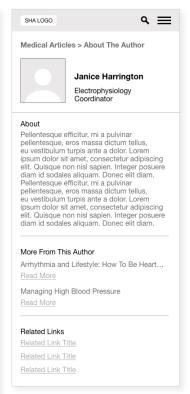






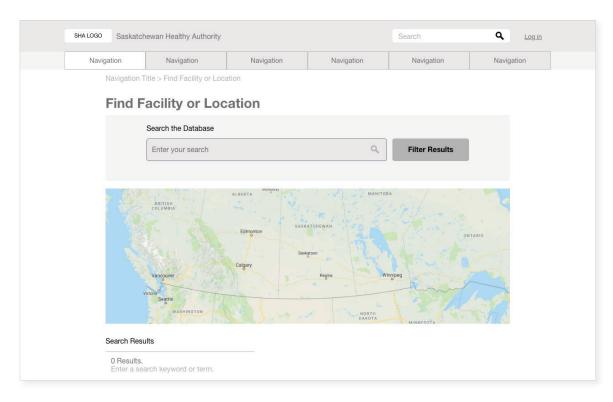


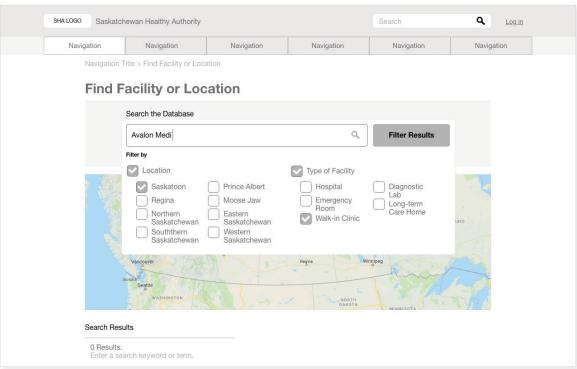


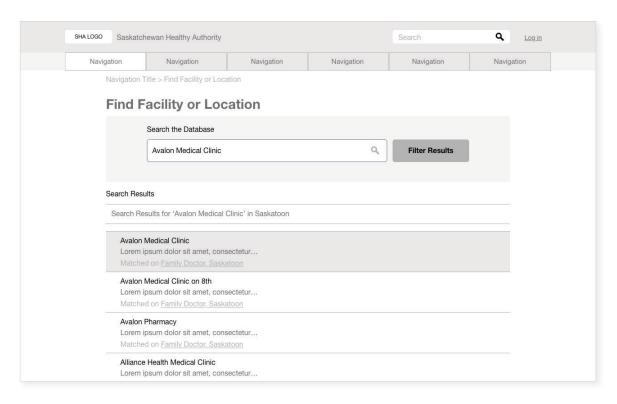


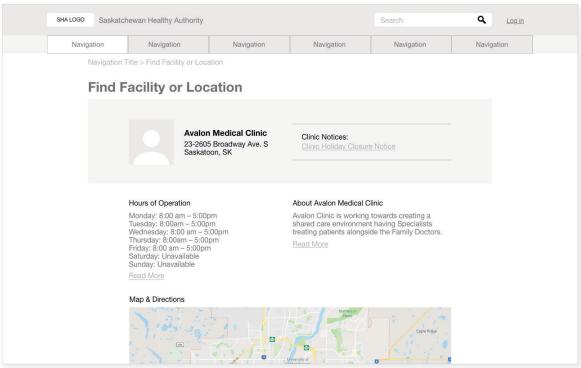
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Find Facility or Location

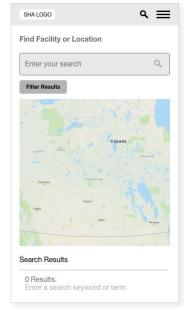


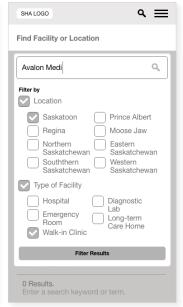


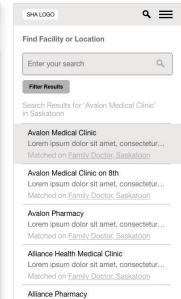


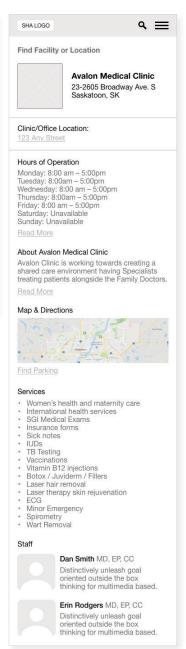


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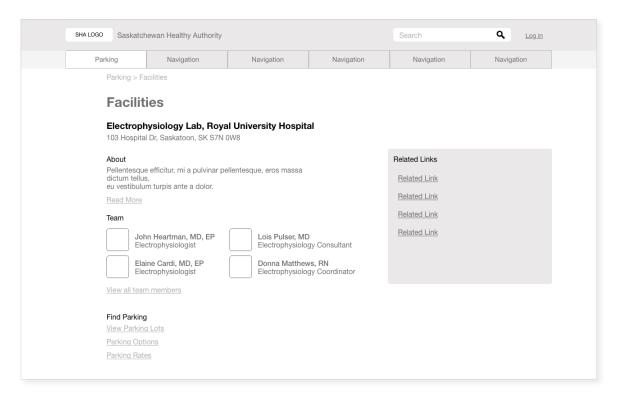


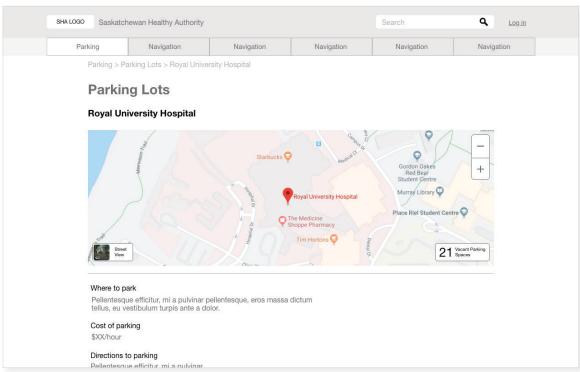


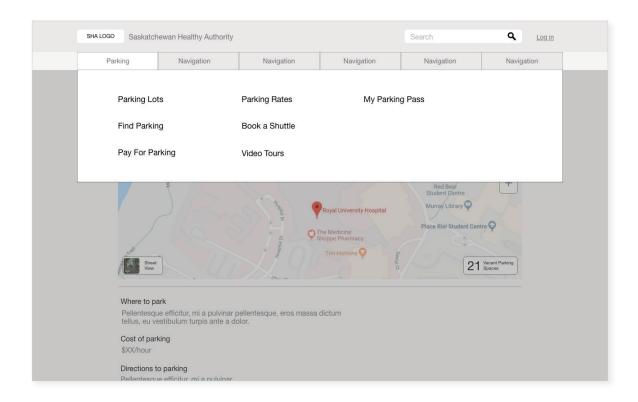


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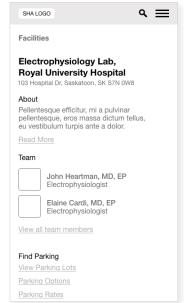
Parking Lots, Capacity & Availability

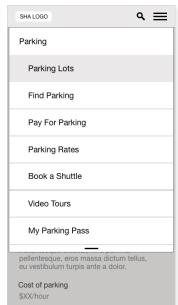


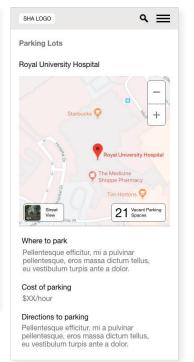




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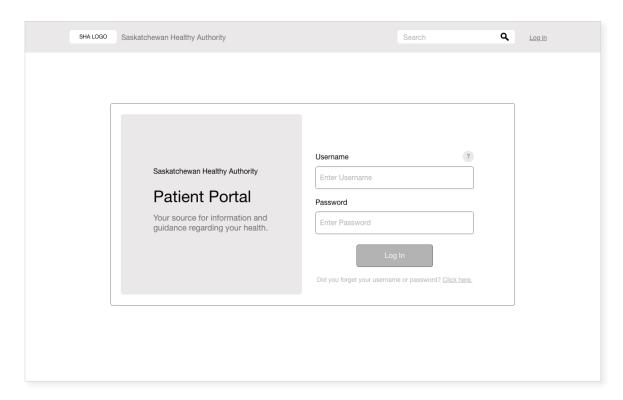


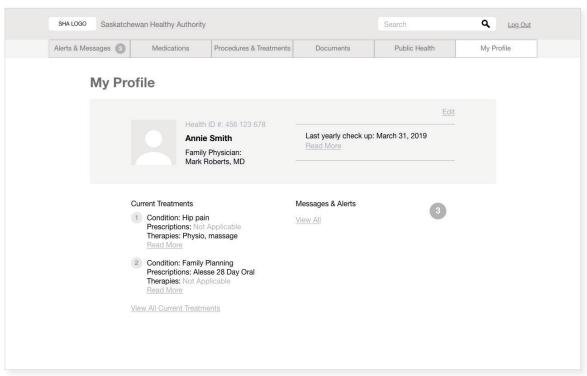


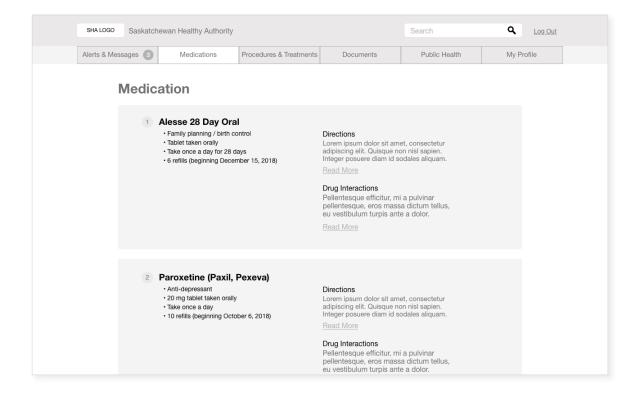


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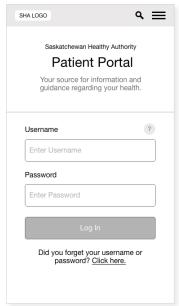
Patient Portal

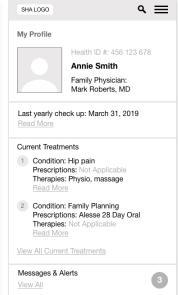


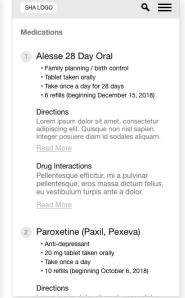




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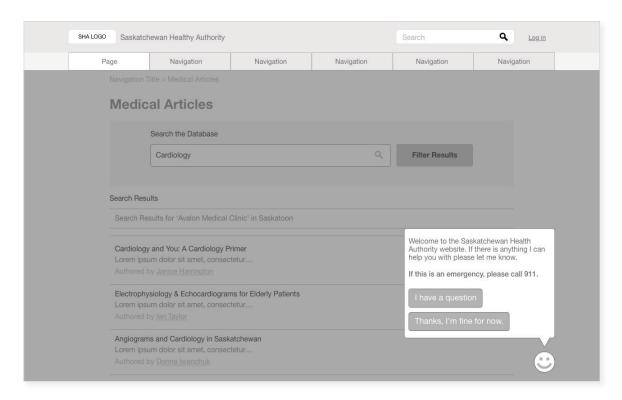


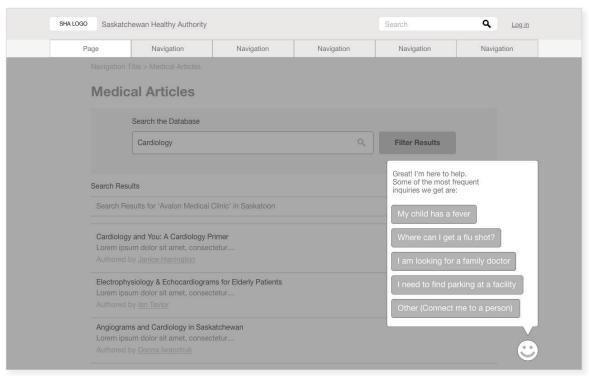


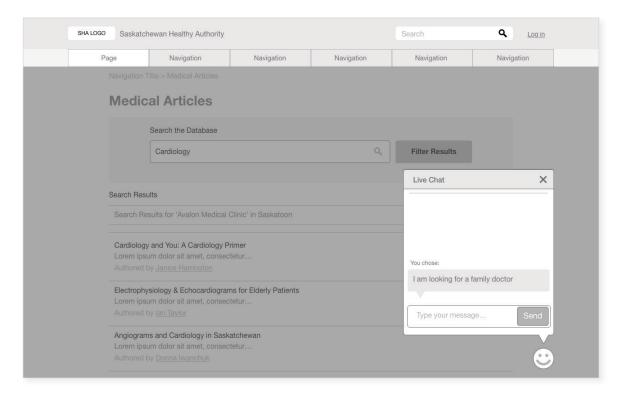


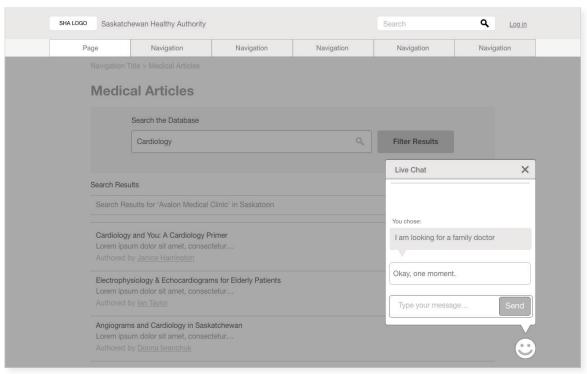
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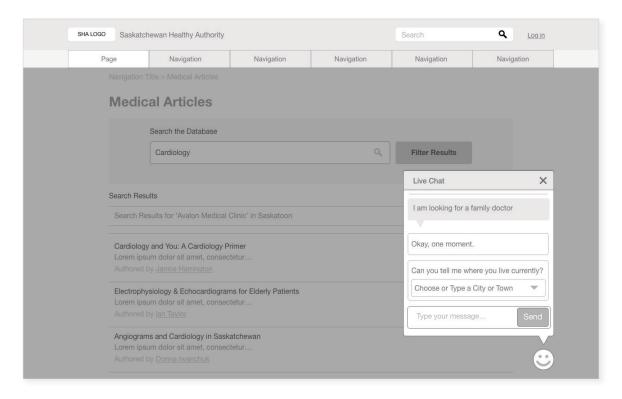
Live Chat

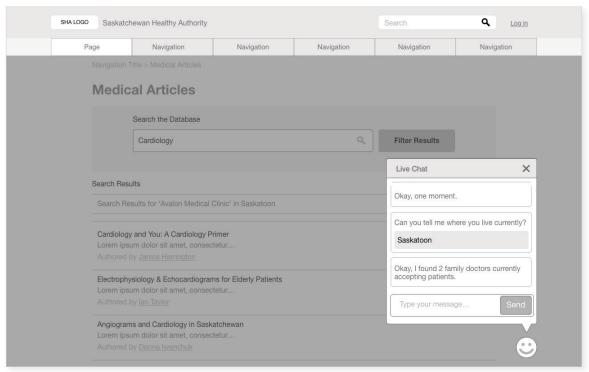


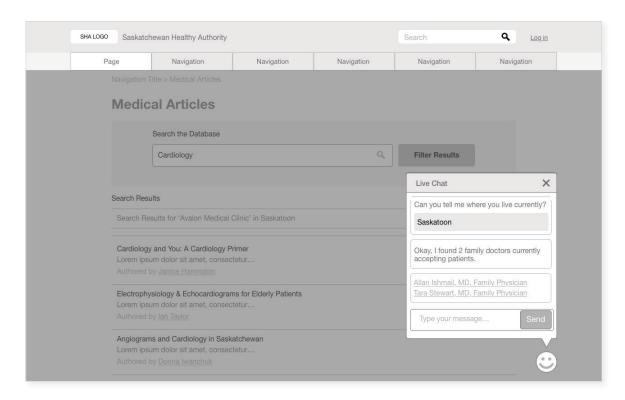


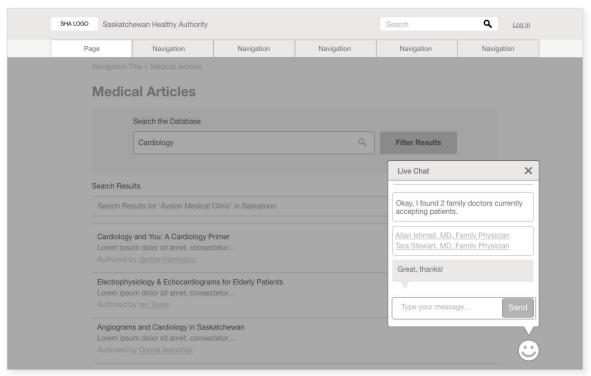


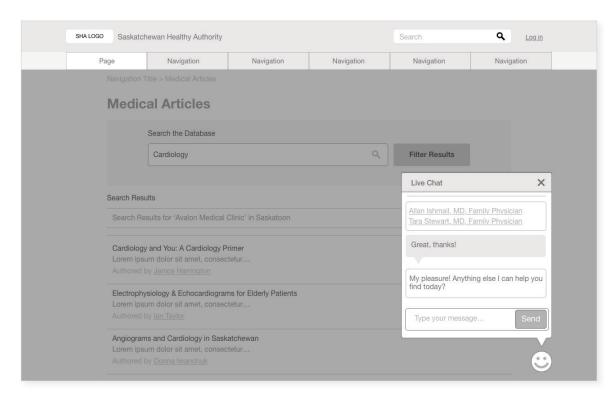


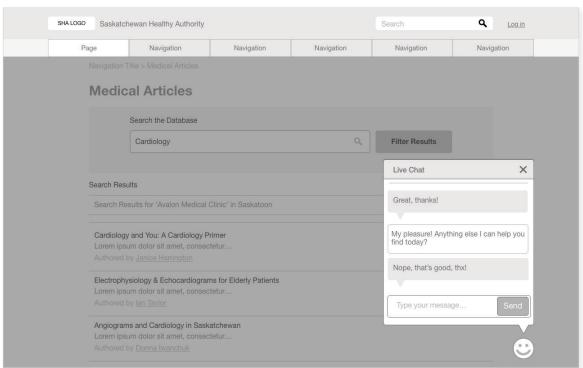


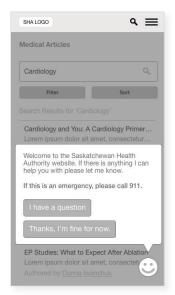


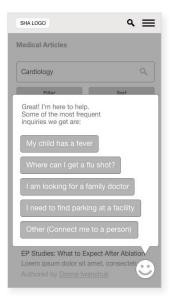






















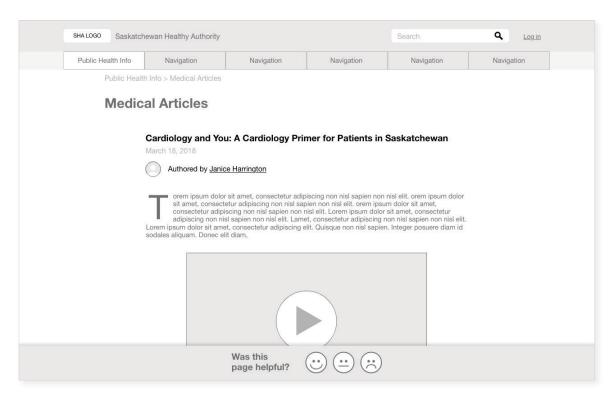


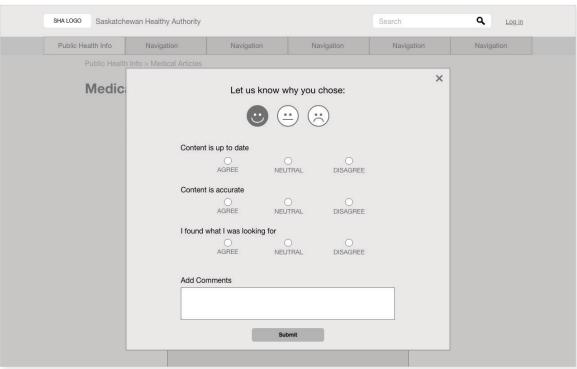


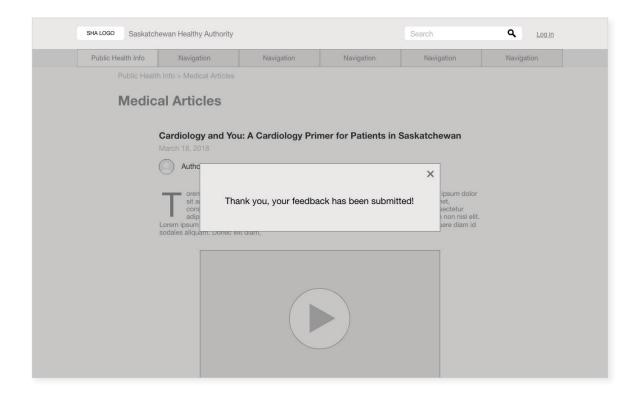


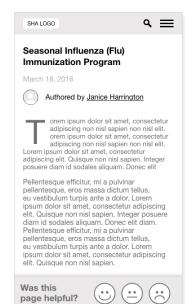
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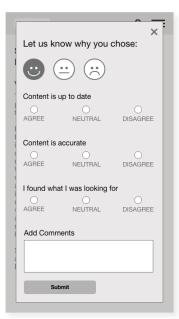
Opinion/Feedback

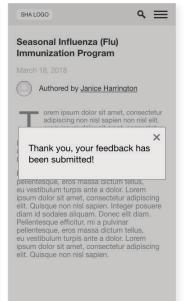






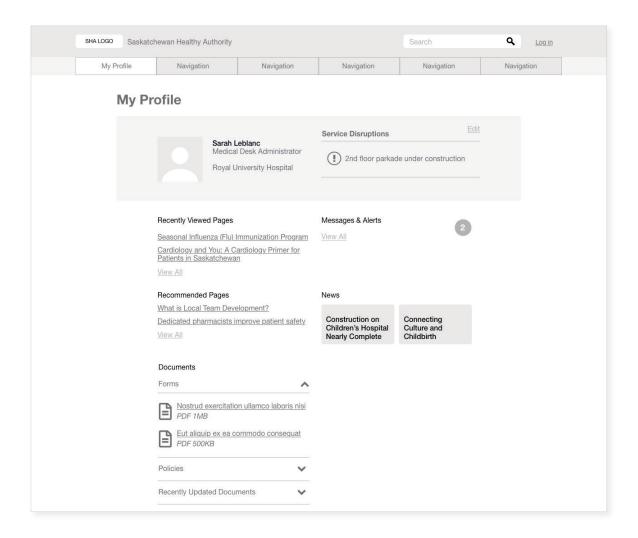


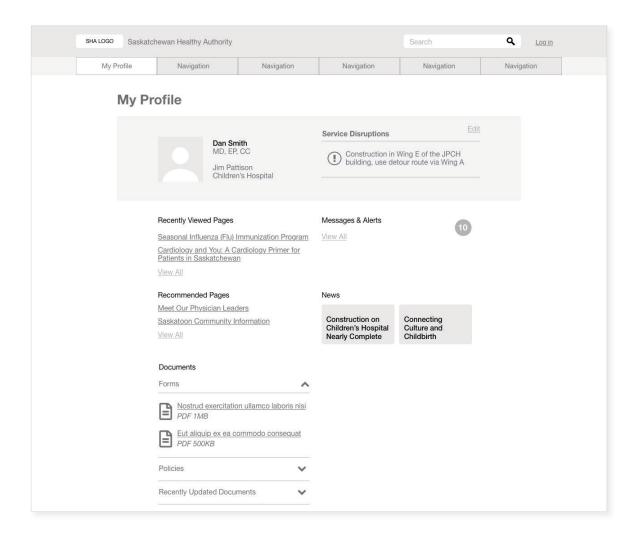


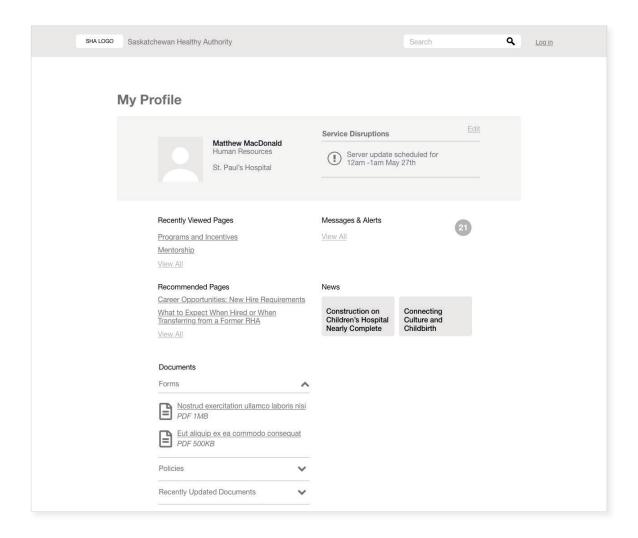


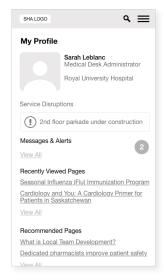
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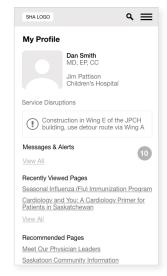
User Profile

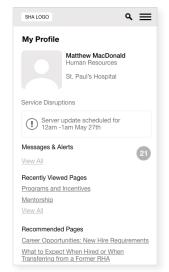












INTRANET

Single Staff Directory

