Healthcare User Experience Design

Children's Minnesota Re-design Process Book

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Introduction

Children's Minnesota Pediatric Clinic

User Experience Project Proposal

Objective

Children's Minnesota is a pediatric clinic that has 9 clinics across the Twin Cities area that provides accessible care to families. Their website provides patients with a lot of helpful information retaining to locations, getting assistance as well as services. Their website doesn't feel welcoming and needs work on streamlining content in a manageable way. Their website provides users with, Spanish, Somali, and Hmong translations but isn't available on every page. The objective is to streamline and organize content for the various user groups to have the same access to information.

Target Audience

The main audience of any pediatric clinic are parents and their children. Due to the constraints of the project, the focus of the website redesign will focus on one language. By considering individual, regional and cultural experiences a unified design system can emerge that can be translated across the website and app interfaces.

Goal & Deliverables

The main goal of the Children's Minnesota website redesign is to make parents experience navigating and retrieving information enjoyable and easier. Using a clear and flexible grid system, information can be translated through various applications and languages. Playful pop-ups and easy to read graphics will enhance users experience of retrieving and scheduling appointment. There is an opportunity to create a new app that can streamline functions even more as well as provide patients with necessary information.

Content

While the website contains a plethora of helpful information it is important to streamline and prioritize the user's immediate needs verses what their wants. The interface will be clear and concise. To address the language barriers an initial pop-up asking users to select language. One tab labeled "I want" has the potential for a launching point for reorganizing content.

Solution

The solution to the overstimulating plethora of information is to streamline high-priority tasks while making navigation and retrieving information easier and enjoyable. By reorganizing content in a way that can be translated to various languages users from different backgrounds can successfully navigate and complete tasks that would otherwise be challenging to some.

Phase I

Research

Define 5 Problems

Define Audience

Personas

Defining 5 Problems

1. Health Literacy

The CDC defines personal health literacy as the “degree to which individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves” (Centers for Disease Control and Prevention, 2023). Health literacy isn’t limited to individuals who struggle with communication such as immigrants an non-native speakers. Individuals who are familiar with numbers and reading can face health literacy issues. Both groups are intimidated, scared, confused, which is a result of being faced with unfamiliar medical terms or lack of understanding of how their body works.
“An estimated 1 in 3 patients/ family members have a low health literacy” (Russell et al., 2020). Such discrepancies in health literacy can be attributed to people with limited English proficiency, but also with low socioeconomic status and minority groups. The limited education of one’s medical care results in misunderstandings and unsatisfied patient experiences as well as ED visits for nonemergent care. It is important to note that the CDC also defines Organizational health literacy as the “degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others” (Centers for Disease Control and Prevention, 2023).

Key Points

- Estimated 1 in 3 patients/family members have low health literacy.
- Limited education of medical terminology results in misunderstandings and unsatisfied experiences.
- Those who are proficient in reading and writing may struggle with health literacy.
- Groups feel intimidated, scared and confused.

Citations:

Centers for Disease Control and Prevention. (2023, July 11). What is health literacy? Centers for Disease Control and Prevention. https://www.cdc.gov/healthliteracy/learn/index.html

CDC. (2021, March 29). Understanding Health Literacy | Health Literacy | CDC. https://www.cdc.gov/healthliteracy/learn/Understanding.html#:~:text=Health%20literacy%20can%20help%20us,health%20problems%20when%20they%20arise.&text=They%20aren't%20familiar%20with,affect%20their%20health%20and%20safety.

Russell, E. A., Tsai, C., & Linton, J. M. (2020). Children in Immigrant Families: Advocacy Within and Beyond the Pediatric Emergency Department. Clinical pediatric emergency medicine, 21(2), 100779. https://doi.org/10.1016/j.cpem.2020.100779

Defining 5 Problems

2. Accessibility to Timely Care

Access to proper care is influenced as well as dependent on several factors, including time, financial position, necessary prerequisites (“language, documentation, insurance, money, and system navigation competencies” (Sobo et al., 2006)), access to reliable transportation as well as availability. For low-income families and especially immigrant families this can prove to be a greater challenge. In addition, scheduling and getting in contact with proper care can take hours if not equipped with proper insight into how the system works. For example, long phone calls and phone trees regarding question and specifically scheduling leaves parents frustrated and upset with the onboarding process. In addition, scheduling for multiple children with various provides can also prove to be challenging.

Key Points

- Necessary prerequisites for proper care: Language, documentation, insurance, money, and system navigation competencies, access to reliable transportation & availability.
- Phone trees and scheduling takes long and users get upset and frustrated.
- Schduling multiple children can prove to be a challenge.
- If not equipped with insight to navigate system reaching care can take hours.

Citations:

Sobo, E. J., Seid, M., & Gelhard, L. R. (2006). Parent-Identified Barriers to Pediatric Health Care: A Process-Oriented Model. Health Services Research, 41(1), 148–172. https://doi.org/10.1111/j.1475-6773.2005.00455.x

The Unique Nuances of Pediatric Care: Access Challenges. (n.d.). ECG Management Consultants. https://www.ecgmc.com/insights/blog/1645/the-unique-nuances-of-pediatric-care-access-challenges

Defining 5 Problems

3. Language & Cultural Barriers

A study found that “immigrants from Mexico have the lowest rates of English proficiency (34%), followed by those from Central America (35%), East and Southeast Asia (50%) and South America (56%)”(Budiman, 2020). It is important to note that over time the proficiency in English increase over time. with more than half (57%) of immigrants who have lived in the U.S. for over 20 years, or more are proficient English speakers” (Budiman, 2020). While around 47% of immigrants with 5 years or less are proficient. In this way the initial contact with the patient and parents is crucial in effectively communicating specific services, treatments and data. Failing to take consideration the culture of immigrants is important and poor consideration can lead to failure to recognize patients’ cultural humility and health providers leads to miss trust, misunderstandings, improper diagnosis, pain management, underutilization of medication as well as challenges with ordering consent.

Key Points

- Immigrants from Mexico have a the lowest (34%) English proficiency followed by Central America (35%).
- Proficiency increase overtime.
- Poor consideration leads to misunderstandings, improper diagnosis, under or over utilization of medication as well as challenges with ordering consent.

Citations:

Budiman, A. (2020, August 20). Key Findings about U.S. Immigrants. Pew Research Center. https://www.pewresearch.org/short-reads/2020/08/20/key-findings-about-u-s-immigrants/

Linton, J., & Green, A. (2019). POLICY STATEMENT Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children Providing Care for Children in Immigrant Families. https://doi.org/10.1542/peds.2019-2077

Russell, E. A., Tsai, C., & Linton, J. M. (2020). Children in Immigrant Families: Advocacy Within and Beyond the Pediatric Emergency Department. Clinical pediatric emergency medicine, 21(2), 100779. https://doi.org/10.1016/j.cpem.2020.100779

Defining 5 Problems

4. Poor Experiences with Clinics and Doctors

Several pain-points that parents had while traveling through the pediatric health care system resulted them feeling unsatisfied and unimpressed with the care that their child received. The lack of consistency with physicians who'd prescribing different medications and have contradicting treatments. Additionally, parents who have changed doctors with or without their knowledge describe the situation as problematic due to the "physician seemed to start from scratch" (Sobo et al., 2006). In some cases, parents experienced physicians who wouldn't explain what prescribed medicine was for and left. Such situations were handled differently and obtaining information from doctors was dependent on how assertive the parent was. Other cases of dissatisfactory experiences include inconsistent and system fragmentation with the management of documents, lab tests, referrals and paperwork. One such experience was that due to the consistent miss management of documents a four-year-old kept having to get multiple blood tests which the patient and parent hated. Another example was a child being sent off-site to a location for an X-ray only to find out that it was closed.

This issue can prove to be exacerbated when considering the language, health literacy and cultural barriers when immigrants communicate with physicians. Additionally, many immigrants eventually move from gateway cities to other areas of the country which makes the consistency with treatments and care harder on both communicating from both sides.

Key Points

- Lack of consistency with physicians perscribing different medication or contradicting treatments.
- Changed doctors without patients knowledge.
- New doctors having to "start from scrach" with each patient.
- Physicians wouldn't explain treatments, diagnosis or medication.
- Inconsistency & system fragmentation the management of lab tests, documents, referrals and paperwork.
- Immigrants moving from gateway cities increase chance of mismanagement of medical infor and documentation.

Citations:

Budiman, A. (2020, August 20). Key Findings about U.S. Immigrants. Pew Research Center. https://www.pewresearch.org/short-reads/2020/08/20/key-findings-about-u-s-immigrants/

Sobo, E. J., Seid, M., & Gelhard, L. R. (2006). Parent-Identified Barriers to Pediatric Health Care: A Process-Oriented Model. Health Services Research, 41(1), 148–172. https://doi.org/10.1111/j.1475-6773.2005.00455.x

Defining 5 Problems

5. Decrease in Pediatric Personnel

Causes

The decrease in pediatric nurse practitioners (PNP) can be contributed by an emphasis on adult-focused nurse practitioner (NP) programs and “subsequent reduction in undergraduate pediatric content, common practice of student advisement to choose family NP programs, decreased PNP student enrollment leading to nonurban pediatric program closures, an acute shortage of PNP preceptors, and invisibility of the PNP workforce in national workforce data and strategic planning” (Courtwright & Barr, 2023). Medical students also have opted to subspecialize when applying to resident programs. “In 2000, 32% of pediatric residents became subspecialists compered to 41% in 2015” (The Unique Nuances of Pediatric Care: Access Challenges, n.d.). The increase in chronic conditions in children have grown. In 2010, “more than 8% of children had a chronic condition” (The Unique Nuances of Pediatric Care: Access Challenges, n.d.). “Which is a 400% increase in the past 50 years”. This means that there is a demand for pediatric subspecialty care as well as coordination across subspecialists and pediatricians. Additionally, PNP’s require more schooling and training that is needed to develop skills necessary to handle specialized equipment, dosing medication for various stages of a child’s development, and “how to appropriately manage family member s who may be under a great deal of stress” (Pediatric Workforce Shortages Factsheets, n.d.).

Key Points

- Reduction in undergraduate pediatric content and emphsis on adult-focused nurse practitioners.
- Students opting to subspecialize when applying to resident programs.
- PNP requires more schooling and training.
- Increase in chronic conditions in children (8%) 400% increae over the past 50 years.

Citations:

Balonzo. (2022, September 28). Burnout Is an Occupational Hazard That We Can Fix…Together. SafeHaven Health. https://safehavenhealth.org/blog/2022/09/28/burnout-occupational-hazard/?gad_source=1&gclid=Cj0KCQjws560BhCuARIsAHMqE0GyiklooSfR4VmdvUCrcaXZDPS9j7DH6lZ-aTwN4Xm-OQ-pEhi_hQYaAhLrEALw_wcB

Burger, C. (2021, September 24). The Places with the Largest Nursing Shortages || RegisteredNursing.org. Www.registerednursing.org. https://www.registerednursing.org/articles/largest-nursing-shortages/

Courtwright, S. E., & Barr, E. A. (2023). Pediatric nurse practitioner workforce shortage threatens child health equity: Key contributors and recommendations. Journal of the American Association of Nurse Practitioners, 35(11), 661–665. https://doi.org/10.1097/JXX.0000000000000954

Kelbach, J., Kelbach, R.-O., RNC-OB, labor, has extensive experience as an R. in the, nurse, delivery setting A. becoming a breastfeeding resource, instructor, certified C., Ohio, J. became an assistant manager at a high acuity facility in, Postpartum, W. in, labor, In 2012, delivery educating new nurses, blogs, J. began writing on healthcare topics for various, writing, websites B., mom, J. enjoys being a, Family, S. T. with H., & Danes, their G. (n.d.). The Growing Need for Pediatric Nurse Practitioners || RegisteredNursing.org. Www.registerednursing.org. https://www.registerednursing.org/articles/growing-need-pediatric-nurse-practitioners/

Defining 5 Problems

5. Decrease in Pediatric Personnel

Effects

The decrease of pediatric positions is shown in the 1.8% increase of pediatric ponditions from 2016 to 2019 while there was a 4.6% increase in residency positions (The Unique Nuances of Pediatric Care: Access Challenges, n.d.). According to the American Association of Nurse Practitioners (AANP) only 3.7% of current nurse practitioners are certified in pediatrics (Kelbach et al., n.d.). Not only does the shortage effects the patients access to care it also impacts personnel working in the field. The COVID-19 pandemic caused the nurse-to-patient ratio, to shoot up and job-related reports from nurses feeling, burnout, anxiety, depression and fear due to the increased workload and risks caused by the pandemic (Burger, 2021). In addition, pediatric nurses can experience 12-hour shifts which can strain the nurses mental, and physical health as well as the relationship with patient (Pros and Cons of Being a Pediatric Nurse, 2023). The American Medical Association found that overall burnout rates among physicians is over 40% (balonzo, 2022) and has increased among nurses as well. Such burnout across the workplace has contributed to the increase in medical errors.

Key Points

- 3.7% current nurse practioners are certified in pediatrics.
- COVID-19 increased the patient to nurse ratio.
- Burnout, anxiety and depression due to increased shifts and long hours.
- Burnout has been attributed to negative patient and clinic experiences.

Citations:

Pediatric Workforce Shortages Factsheets. (n.d.). Www.childrenshospitals.org. https://www.childrenshospitals.org/content/public-policy/fact-sheet/pediatric-workforce-shortages-factsheet

Pros and Cons of Being a Pediatric Nurse. (2023, June 30). Indeed Career Guide. https://www.indeed.com/career-advice/finding-a-job/pros-cons-of-being-pediatric-nurse
(Pros and Cons of Being a Pediatric Nurse, 2023)

The Unique Nuances of Pediatric Care: Access Challenges. (n.d.). ECG Management Consultants. https://www.ecgmc.com/insights/blog/1645/the-unique-nuances-of-pediatric-care-access-challenges

Defining Audience

Patient

Based on research and limitations to project the target audience will be parents of young children ranging from 1-9 years old. It is important to address pain points that have been expressed by non-native speakers as well as native speakers. Such pain points include, confusion and difficulty navigating or understanding medical information, communicating with medical personnel about treatments and medication. Another pain point is the digestion, learning, and implementing (using) important medical information to make informative decisions regarding child's care. Additionally, finding time for appointments as well as the journey that users go through is less then desirable. Due to the long and complicated process and added stress involved with going to the clinic parents feel overwhelmed and stressed leading to not so favorable state of mind when receiving important and complicated information.

Pain Points

- Confusion & difficulty navigating medical system and interface.
- Misunderstandings when communicating with medical personnel about symptoms, treatments,medication questions and documentation.
- Learning, and implementing (using) medical information to make informative decisions regarding child's care.
- Journey's users go through is less then desirable (having to go through multiple loopholes and jump through multiple hoops to get to where they want to go).
- Lack of availability (scheduling appointments for one or more children).

Notes:

Based off the project requirements, it will be assumed that parents have already been introduced to pediatric clinics and have most of the medical prerequisites defined in the Accessibility to Timely Care (page 7). Such prerequisites that will be assumed includes having insurance, and documentation. While language (proficiency in English and health literacy), money (financial position), system navigation competencies, as well as access to reliable transportation vary from each persona.

Defining Audience

Doctors and Nurses

While patients are the main target audience it is important to consider the other side of the spectrum when defining effective solutions to pediatric care. There as specific pain points such as, burnout caused by workload, frustration due to burnout, various responsibilities and patients, communicating with various doctors that contribute to negative patient experiences. This is seen in both Pediatric Nurse Practitioner (nurses) and pediatricians (doctors).

Notes:

Creating a unified system that can be used and understood by parents and professionals is imperative. Due to the limitations of project accounting for specialized care is important and thus will only be referred to in the user journey.

Pediatrician (Doctor)

- Treatment focus
- Specialty is caring for children from birth to the age of 18.
- Diagnosis illnesses
- Preform physical exams & checkups
- Immunizations
- Tracking developmental milestones.
- Directs patient care
- *Perform surgery
- Prescribe medication
- Order tests
- Advice about a child's health, safety, nutrition, and activity.
- Refer patients to a pediatric subspecialist if questions are out of their expertise.

Pediatric Nurse Practitioner (Nurse)

- Daily management focus
- PNP's care for children from birth to the age of 18
- Treats common pediatric illnesses.
- Found in hospitals and specialty care clinics.
- Certain prescriptions can be prescribed but are regulated and restricted depending on the State.

Shared Pain Points

- Burnout caused by workload
- Frustration created from burnout
- Dealing with frustrated parents
- Various responsibilities and patients
- Communicating with various doctors, contribute to medical errors.

Health Literacy Level

Low Medium High

Technology Knowledge

Low Medium High

English Proficiency

Low Medium High

Spanish Proficiency

Low Medium High

Santiago Fernandez

Patient (Parent)

Bio

Male
29 Yrs
Landscaper

Santiago is a first-generation immigrant from Mexico who moved to the United States with his family seeking better opportunities. He works as a landscaper to support his family, and he values education and the well-being of his children immensely. Santiago speaks Spanish fluently and has been working on improving his English. Both Santiago and his wife, Isabella, work during the day and have busy work schedules but are able to find time to be involved with his daughters, Camila and Maya's important milestones.

Frustrations

Health Literacy: Not being able to understand medical terminology.
Navigating the Healthcare System: Finds it challenging and is frustrated with navigating phone trees when scheduling appointments.
Fear of the Unknown: Worries about his daughter's health and care.

Character Traits

- Hardworking
- Dedication
- Willingness to Learn

Needs

Convenience and Accessibility: Flexible appointment options
An intuitive interface for scheduling appointments that accommodate Santiago's and Isabella's busy work schedule.
Accessible Personalized Dashboard: A personalized dashboard with medical history, upcoming appointments, and important contact information.
Educational Resources: A website that is in both English and Spanish with various literacy levels, that is easily accessible and has answers to common childhood illnesses, developmental milestones and more.

Goals

- Scheduling Appointments
- Finding at home treatments
- Accessibile & understandable Patient Dashboard

Health Literacy Level

Low Medium High

Technology Knowledge

Low Medium High

English Proficiency

Low Medium High

Spanish Proficiency

Low Medium High

Santiago Fernandez

Patient

Bio

Female
10 Yrs
5th Grade Student

Lucía is a has finished 5 grade and is transitioning into middle school. She is a first-generation immigrant who has a chronic illness that requires consistent monitoring and treatments. She speaks English fluently but sometimes struggles with medical terminology and expressing herself clearly in stressful situations. Her parents are supportive but also find navigating the healthcare system challenging.

Frustrations

Health Literacy: Not being able to understand medical terminology.
Feeling Unheard: Feels upset when doctors don't take her seriously or dismiss her concerns because of her age or immigrant status.
Fear of the Unknown: She often feels scared about medical procedures or treatments that she doesn't understand fully, and wishes doctors would explain things in a way that makes sense to her.

Support System

Lucía's parents are actively involved in her healthcare and are learning English alongside her to better navigate medical appointments. They encourage Lucía to ask questions and advocate for herself.

Character Traits

- Perseverance
- Empathetic
- Curious
- Resilience

Needs

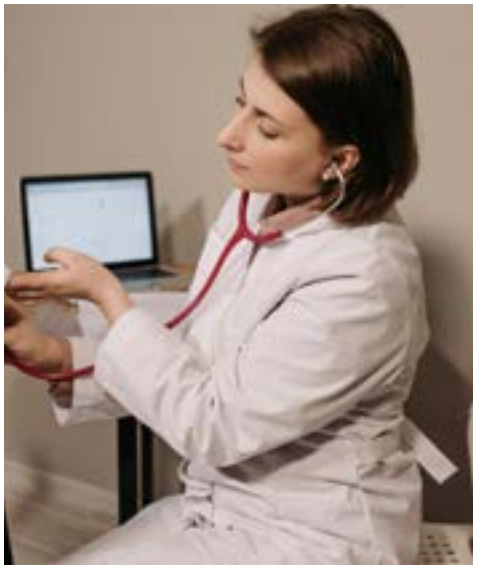
Clear Communication: She needs an effective way to communicate and understand challenging medical terminology.
Consistent Care: Needs consistent and reliable access to care to monitor and treat her chronic condition.

Medical History

Lucía has Type 1 Diabetes that requires regular monitoring and medication.

Goals

- Scheduling Appointments
- Finding at home treatments
- Accessibile & understandable Patient Dashboard



Health Literacy Level

Low Medium High

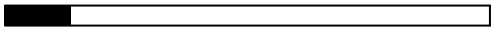
Technology Knowledge

Low Medium High

English Proficiency

Low Medium High

Spanish Proficiency



Low Medium High

Dr. Claire Smith

Pediatrician

Bio

Female

49

20 Years of Experience

Dr. Claire Smith is a dedicated pediatrician with over 20 years of experience, currently practicing in a diverse community that includes many immigrant families. She is passionate about providing compassionate care to children and supporting their families through the challenges of healthcare.

Frustrations

Workplace Burnout: Burnout caused from workload, long hours and emotional stress from witnessing her patients' health struggles.

Managing Multiple Patients: Documenting multiple patient treatments and conditions become overwhelming, especially with language barriers that complicate documentation process.

Patient Compliance and Follow-ups: Language barrier makes effective follow-up visits or patient following through with treatment difficult.

Character Traits

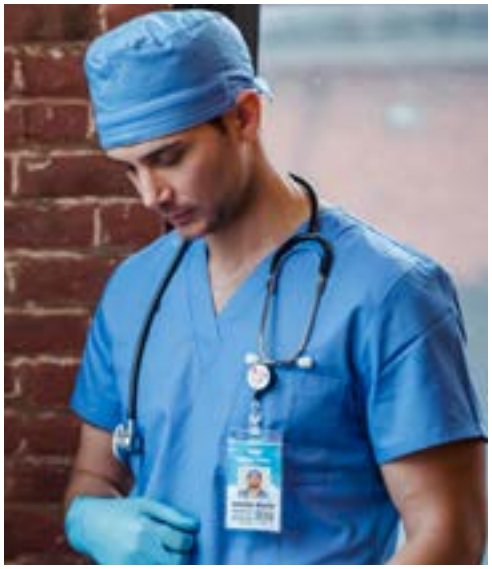
- Dedicated
- Compassionate
- Team Collaborator

Needs

Multilingual Support: A website/app that offers a multilingual support and educational resources that communicates important medical information.

Various Forms of Communication Methods: An easy-to-use interface that patients and caregivers can use to communicate symptoms.

Personalized Patient Portal/Documentation: A website/app that has easy access to patient feedback and preferred communication methods as well as provides personalized at home care options.



Health Literacy Level

Low Medium High

Technology Knowledge

Low Medium High

English Proficiency

Low Medium High

Spanish Proficiency

Low Medium High

Mike Patel

Nurse

Bio

Male
25
Entry Level Nurse

Mike Patel is a 25-year-old pediatric nurse who recently graduated and embarked on his nursing career with a passion for pediatric care. He is bilingual in Spanish and English, which allows him to connect deeply with Spanish-speaking families in his community.

Frustrations

Language Barriers: Communicating effectively with pediatricians and healthcare providers who have limited understanding of Spanish.
Workplace Burnout: experiences stress and burnout from the emotional demands of caring for young patients and their families, compounded by the challenges of language and cultural differences.
Time Constraints: Time constraints during patient interactions, limit his ability to fully explain medical conditions, treatment plans, and follow-up instructions, especially when translation is needed.

Character Traits

- Adaptability
- Leadership
- Flexibility
- Patience

Needs

Bilingual Communication Tools: A website/app that facilitate seamless communication between healthcare providers like Mike and pediatricians who have limited Spanish proficiency.
Appointment Coordination: A user-friendly interface for scheduling appointments that accommodates language preferences and offers reminders.
Telemedicine Capabilities: Integration of telemedicine capabilities for virtual consultations between Mike, patients caregivers, and the pediatrician.

Phase II

Defining Journey

Introduction

Content Map

User Flow

Wireframes

Introduction

5 Key Goals/Opportunities

1. Reduce Scheduling Time and Stress

To make an appointment users, still need to make phone call and go through phone trees to schedule virtual appointments. However, the website provides a scheduling online option but is hard to get as well as cumbersome to navigate.

Opportunities

- Implementing an online interactive form can reduce the time and increase satisfaction for the patient as well as expand language options.

Backstage Opportunities

- Results can be used by both nurses and pediatricians to better inform them about possible treatments and solutions to better come up with the best possible outcome before meeting.

2. Simplify at Home Care

While Children's Minnesota provides a symptom checker which is easy to navigating and reach treatments and solutions. However, the information architecture, language options and layout could be better organized.

Opportunities

- The ability to save and download summery for future
- Adding visuals
- Provide useful links that is clear for users who have a profile and those who don't with attainable information
- Expand language options

Backstage Opportunities

- Can be implemented as prescreening for doctors and nurses to making an appointment and come up with possible treatments and solutions.

3. Make Information Easier for Children and Caretakers to Understand

Opportunities

- Personalized interactive resources accessible on patient portal based on health literacy and language preferences.

Backstage Opportunities

- Interactive form patients/caretakers can take before/during appointments at the clinic to better inform nurses and doctors with language barrier.

4. Ease Navigating Through Medical System (Website) Easier

Opportunities

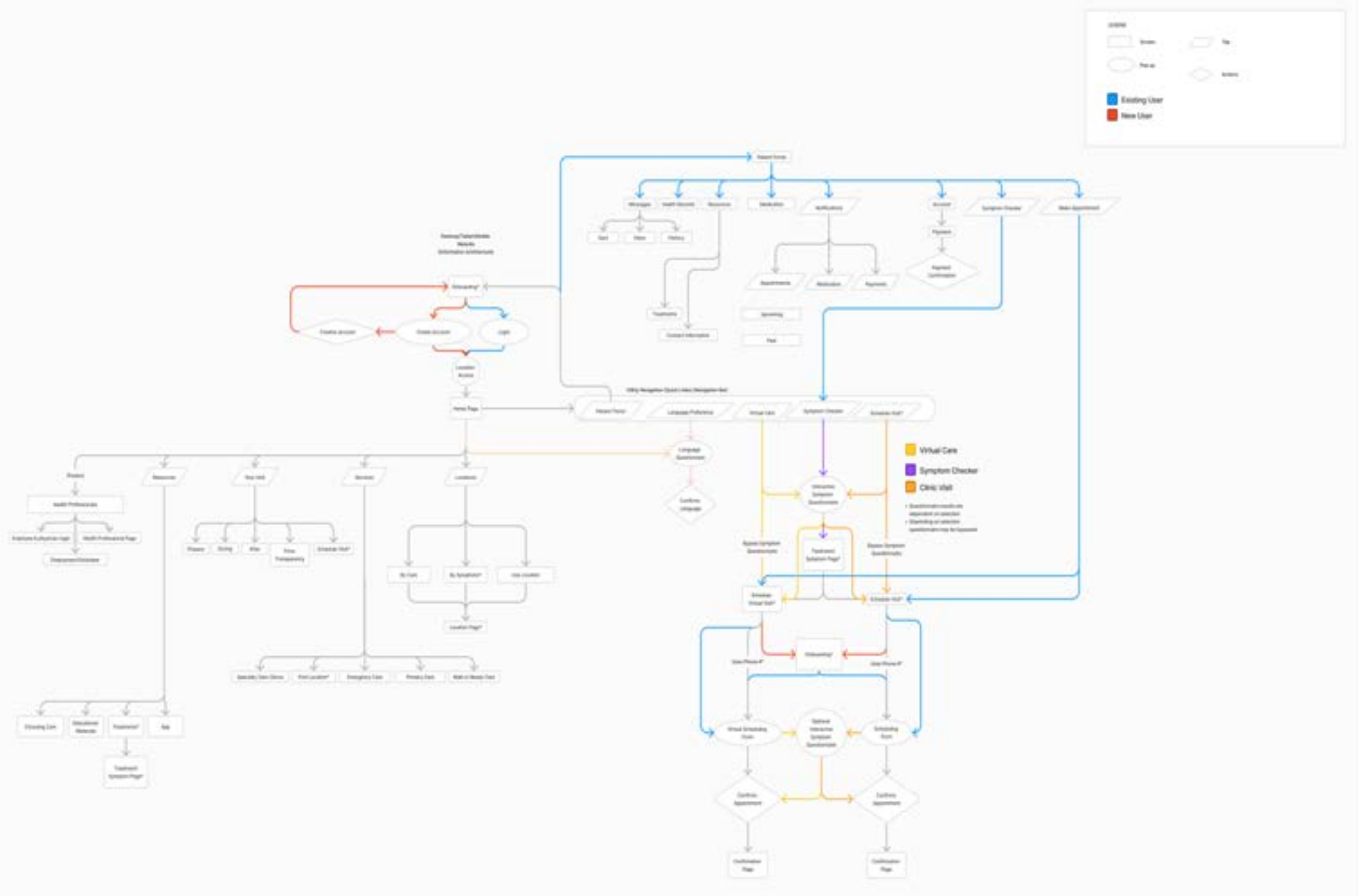
- Use NMT technology to assist in translating content dependent on users proficiency in Health Literacy and in English
- Interactive Experiences when learning, preparing and planning for appointment or visits to clinic.

5. Reduce mismanagement of medical documents

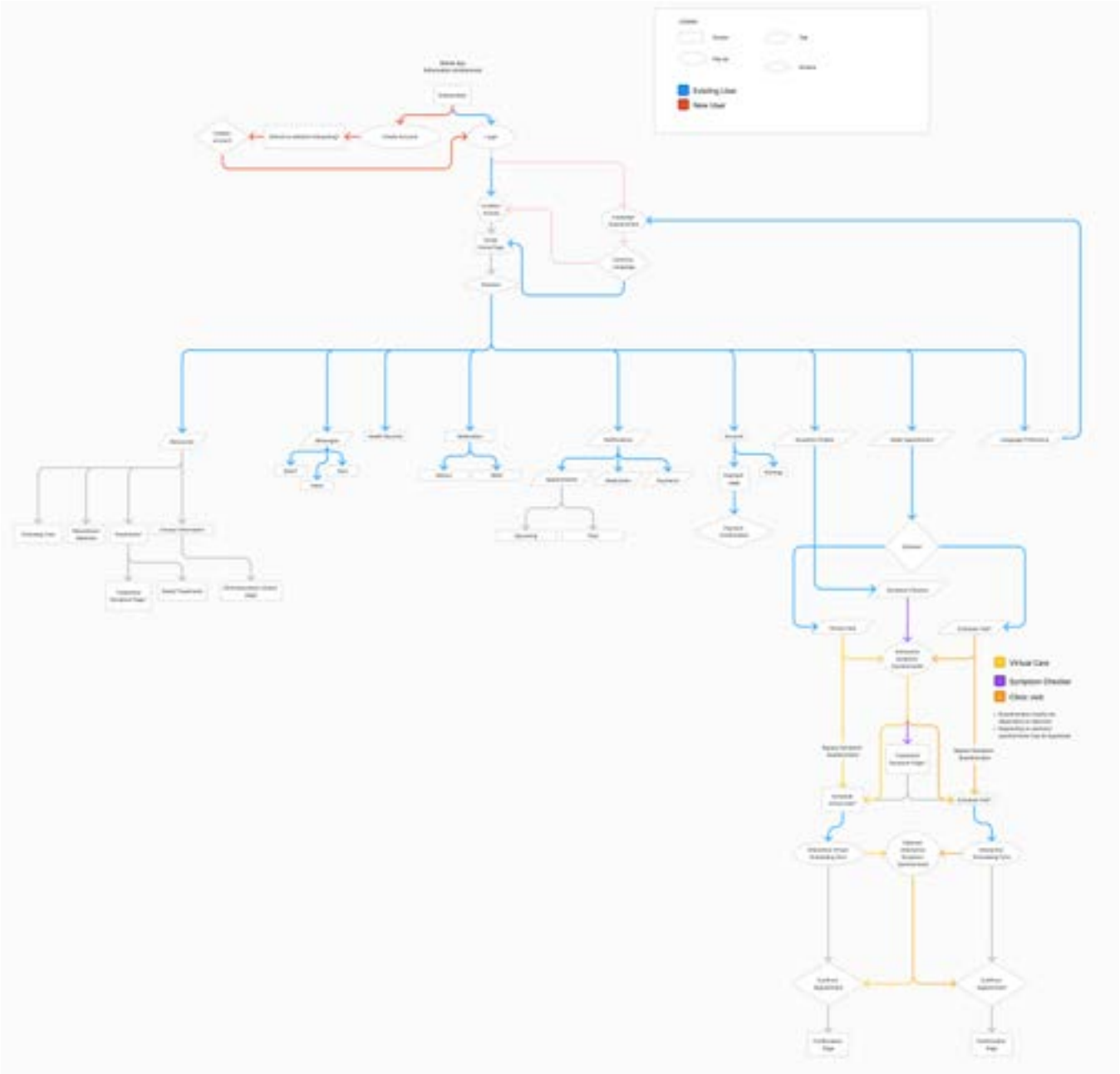
Opportunities

- Patient Portal that is connected to clinic base that allows nurses and doctors across Children's MN to documents, preferences, needs as well as share patient information.

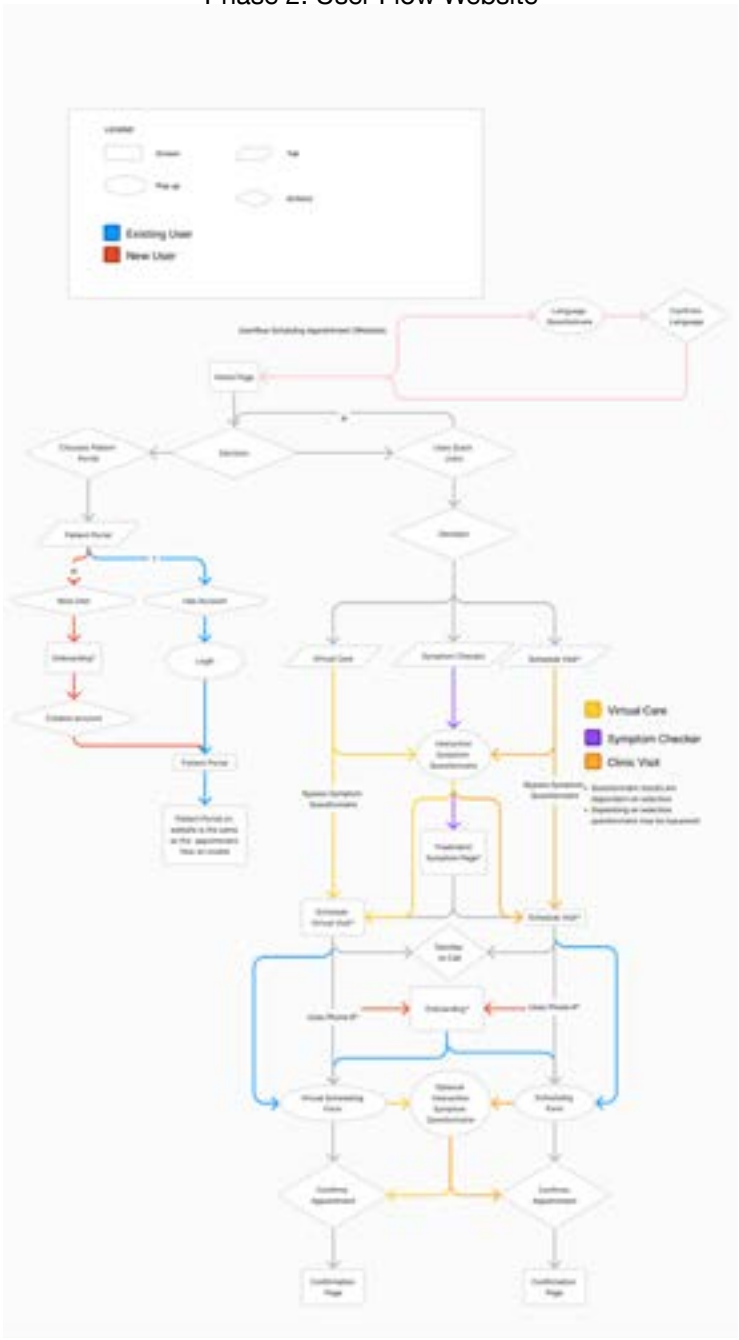
Phase 2: Content Map



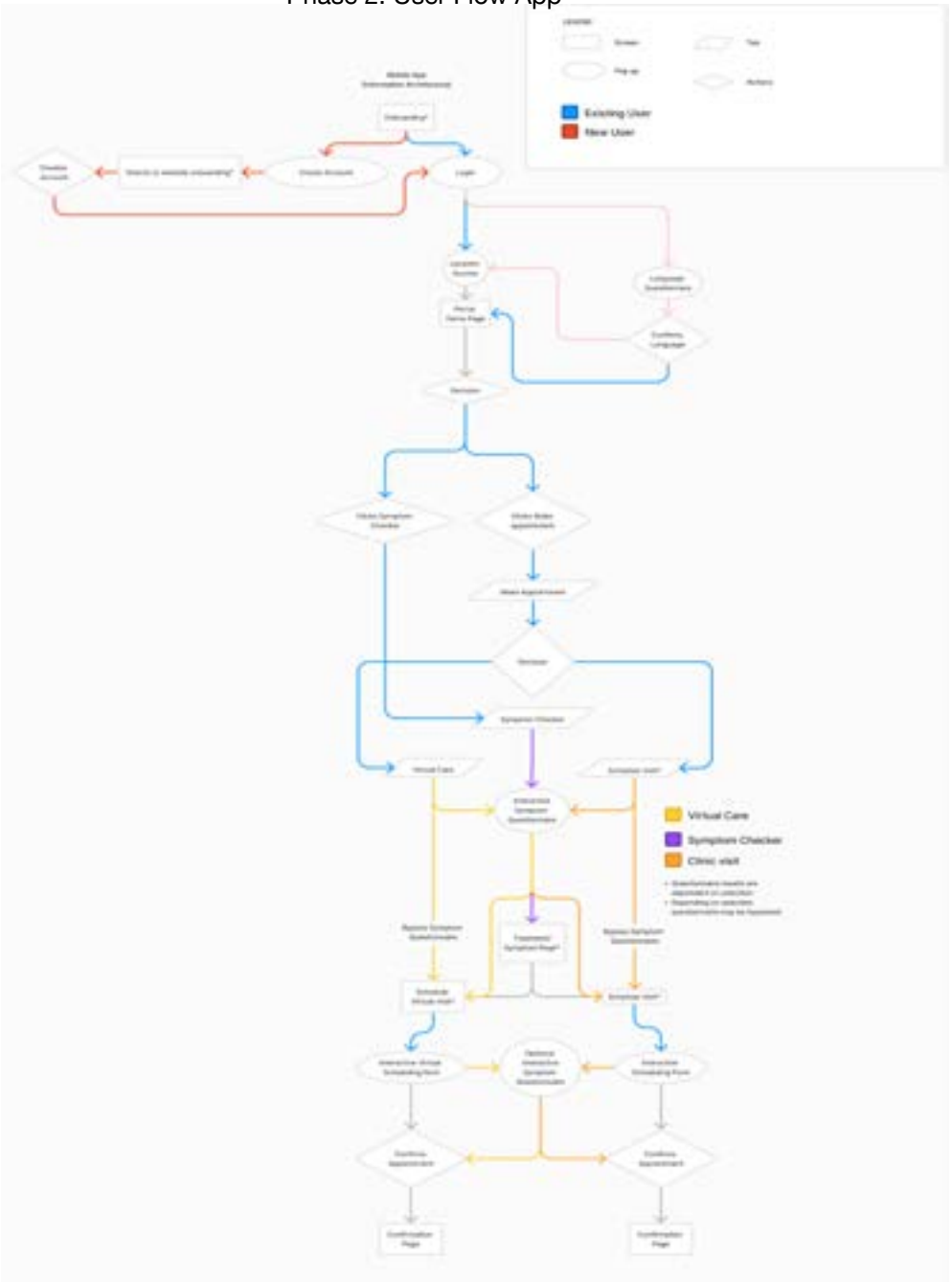
Phase 2: Content Map



Phase 2: User Flow Website

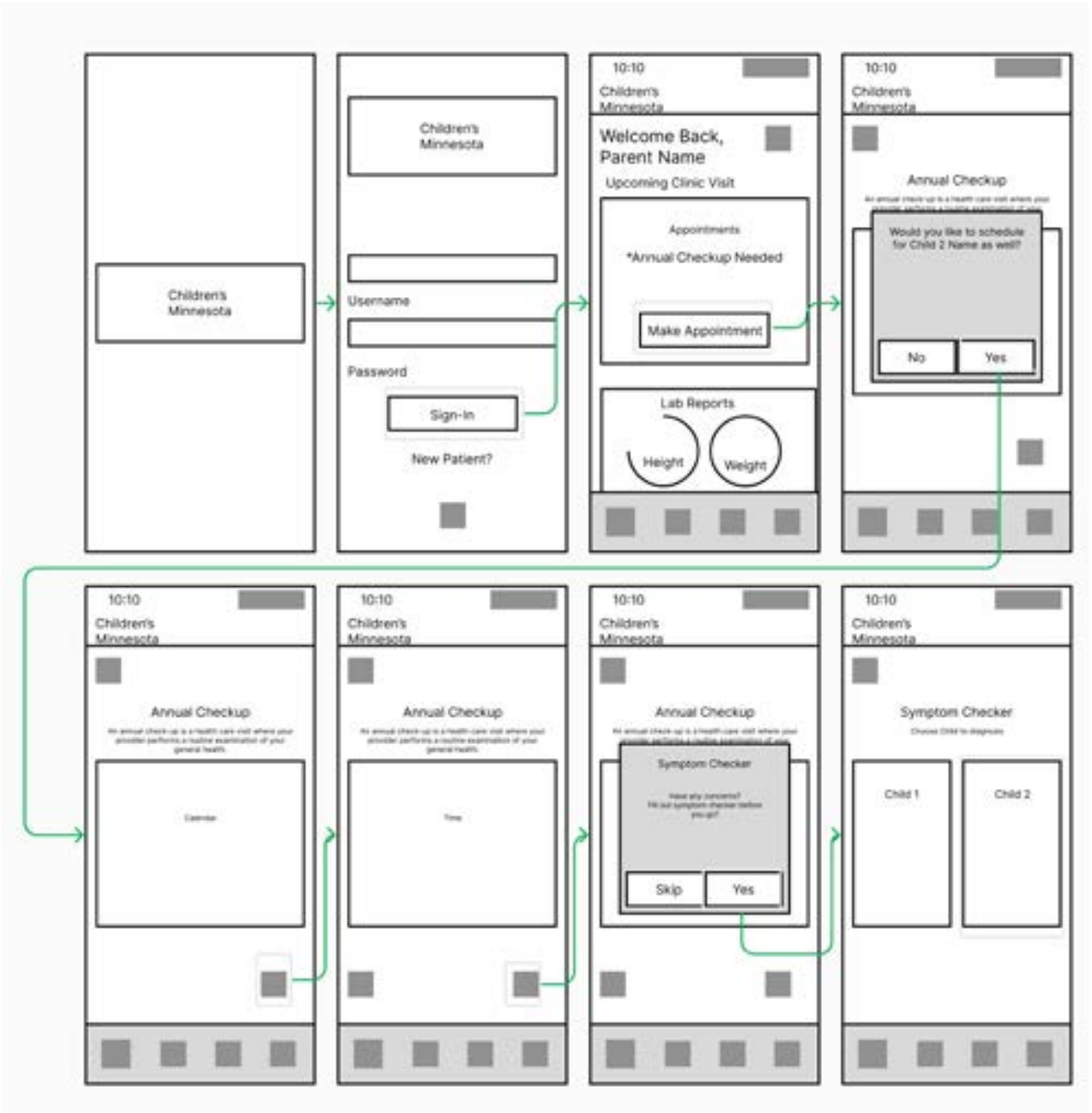


Phase 2: User Flow App



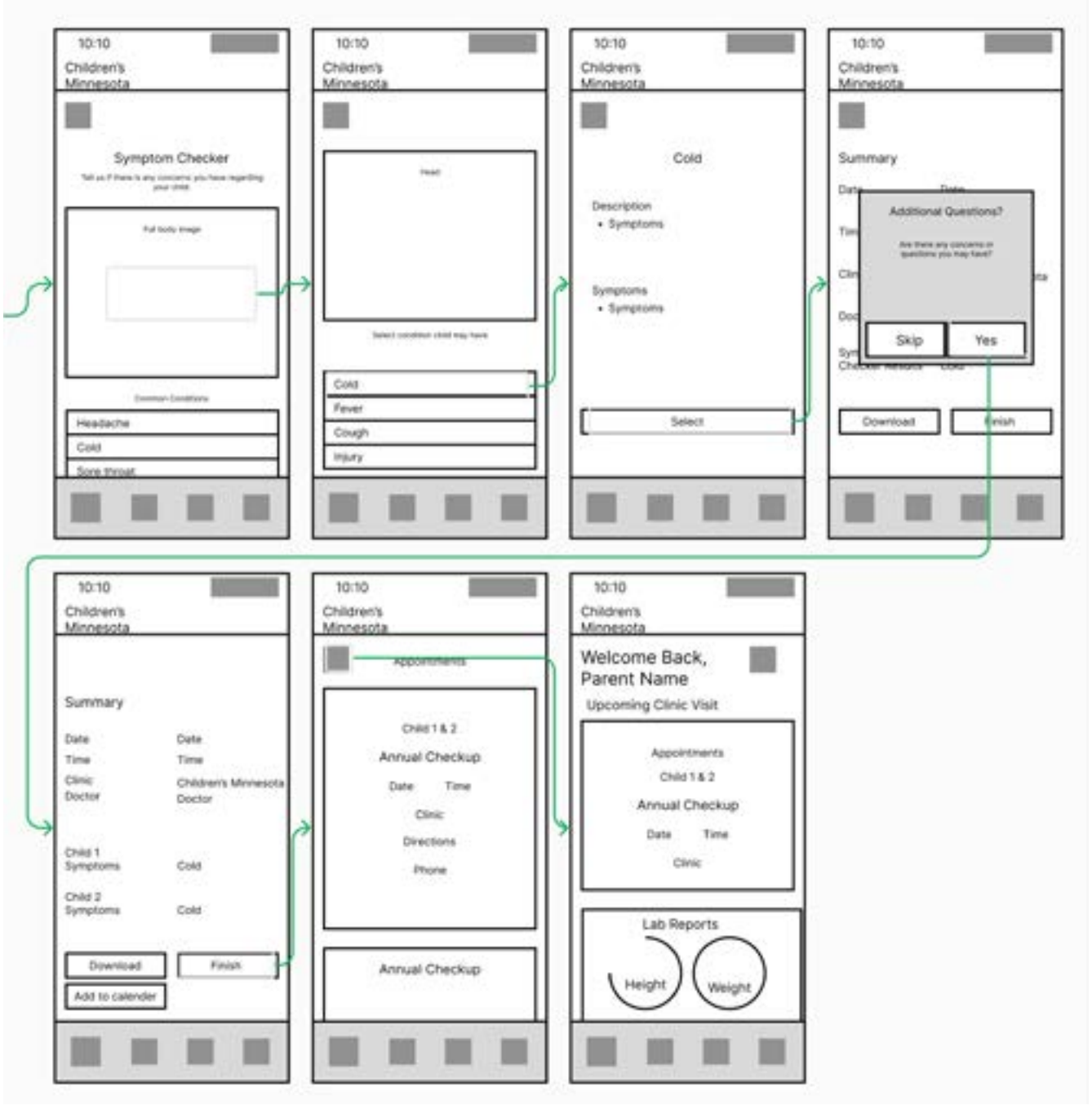
Mobile App Wireframe

Existing User Appointment



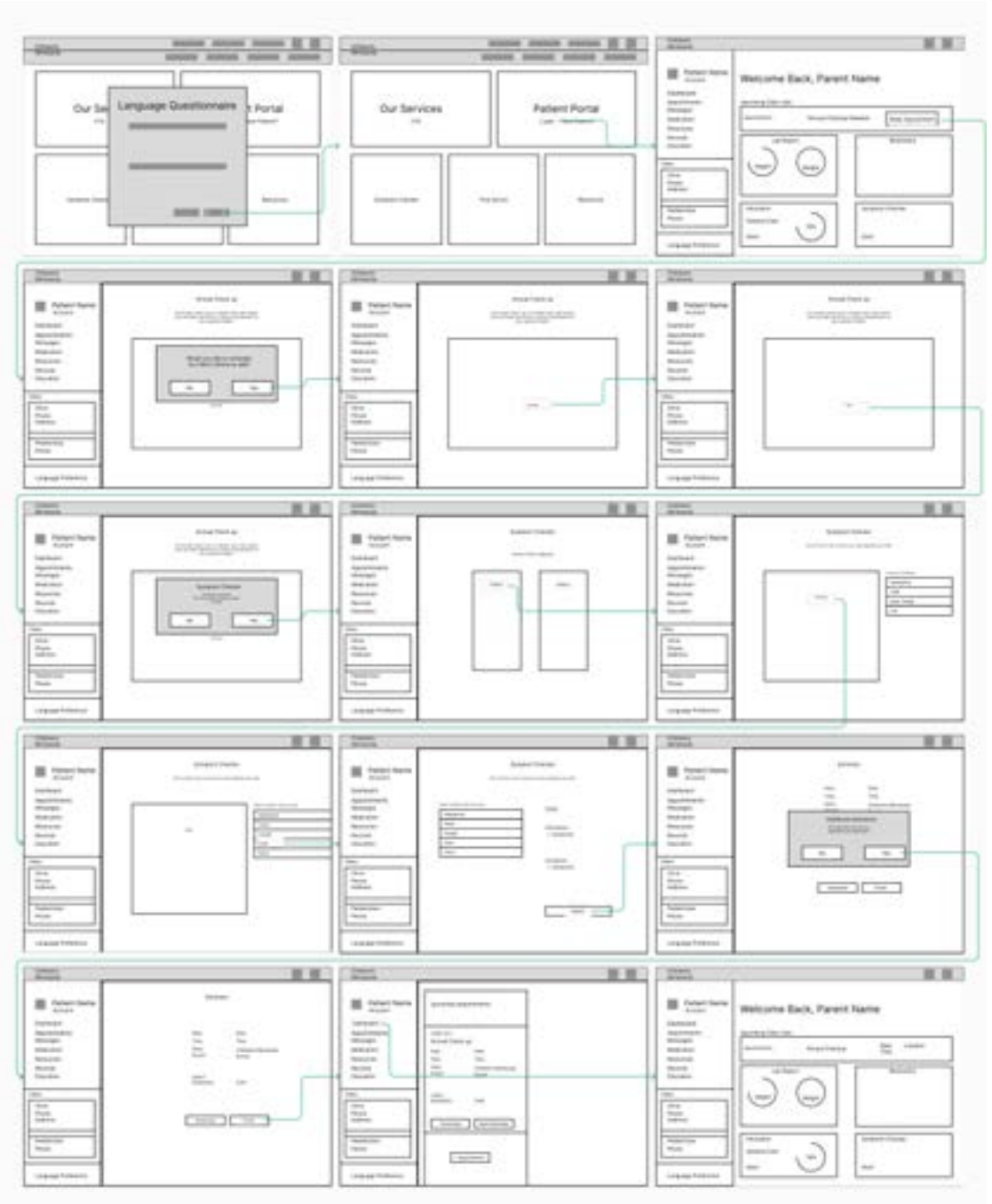
Mobile App Wireframe

Existing User Appointment



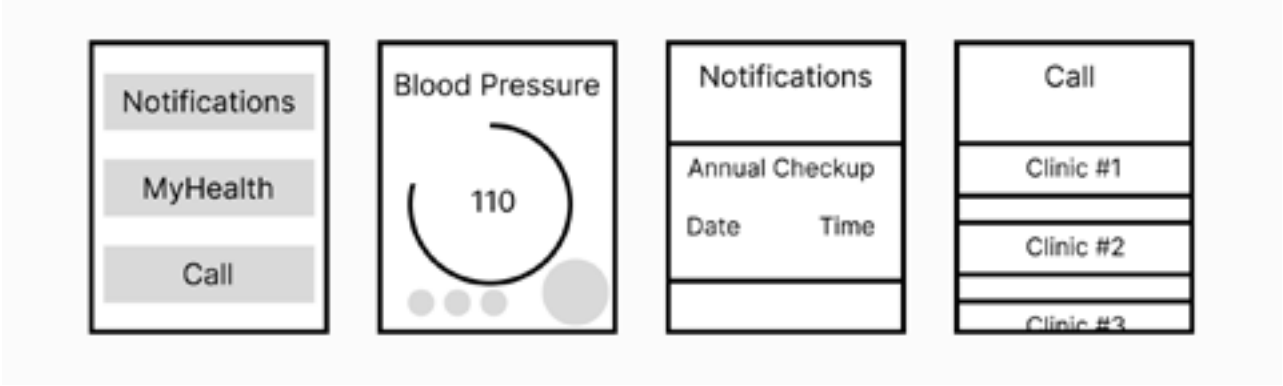
Desktop/Tablet/Mobile Wesbsite Wireframe

Existing User Appointment



Smartwatch

Existing User Appointment



Phase III

Visual Language

Logo & Color

Typography

Hierarchy

Design System

Applications

Children's
MINNESOTA

Branding Elements

Logo

Colors

Primary Colors

Dark Blue
PMS 2925
HEX #009cde
RGB 0/156/222
CMYK 85/21/0/0

Medium Blue
PMS 280
HEX #012169
RGB 1/33/105
CMYK 100/85/5/22

Secondary Colors

Branding Elements

Typography

Subjectivity

ABCabc

Subjectivity
Bold

ABCabc

Subjectivity
Medium

Web Versions*

Arrial Narrow Bold
Arial Narrow

Avenir

ABCabc

Avenir Roman

ABCabc

Avenir Heavy

Web Versions*

Arial Regular
Arial Bold

Branding Elements

Hierarchy

Left-Aligned Example

We care for more kids than any other health system in Minnesota

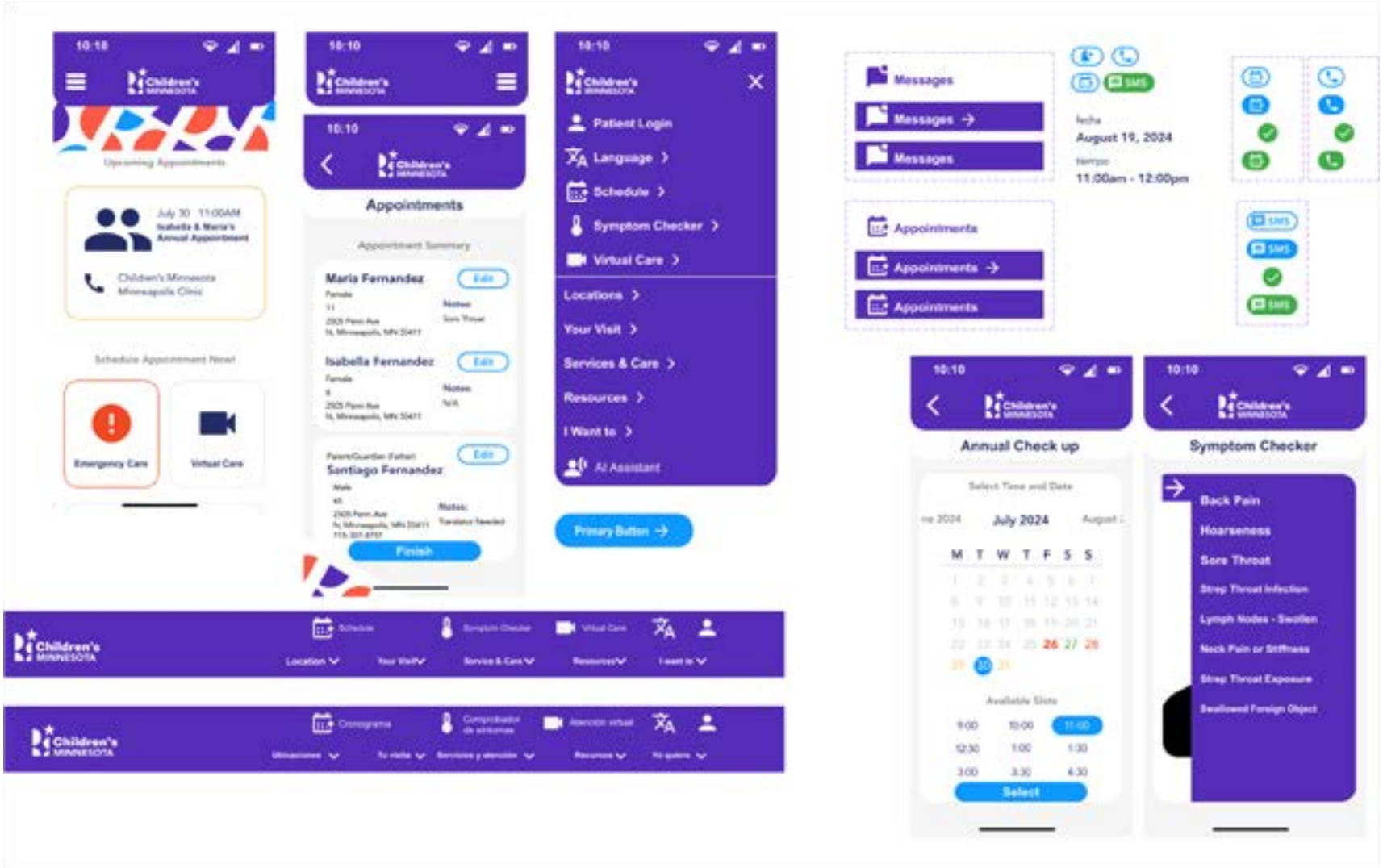
Children's Minnesota has locations throughout the Twin Cities area, to offer comprehensive, convenient care whether on our hospital campuses, specialty care clinics, rehabilitation sites or 12 primary care clinics.

App/Portal Left-Aligned Example

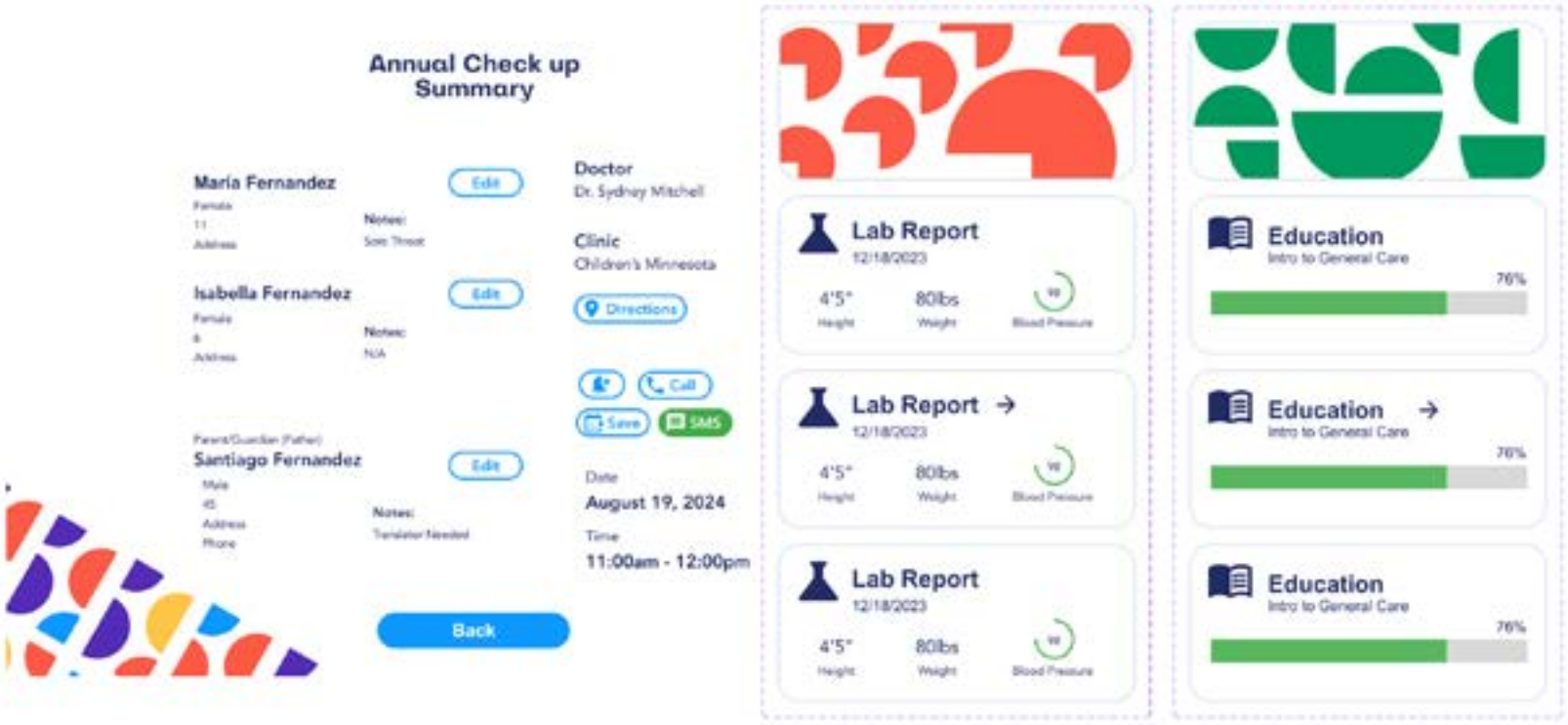
We care for more kids than any other health system in Minnesota

Children's Minnesota has locations throughout the Twin Cities area, to offer comprehensive, convenient care whether on our hospital campuses, specialty care clinics, rehabilitation sites or 12 primary care clinics.

Design System

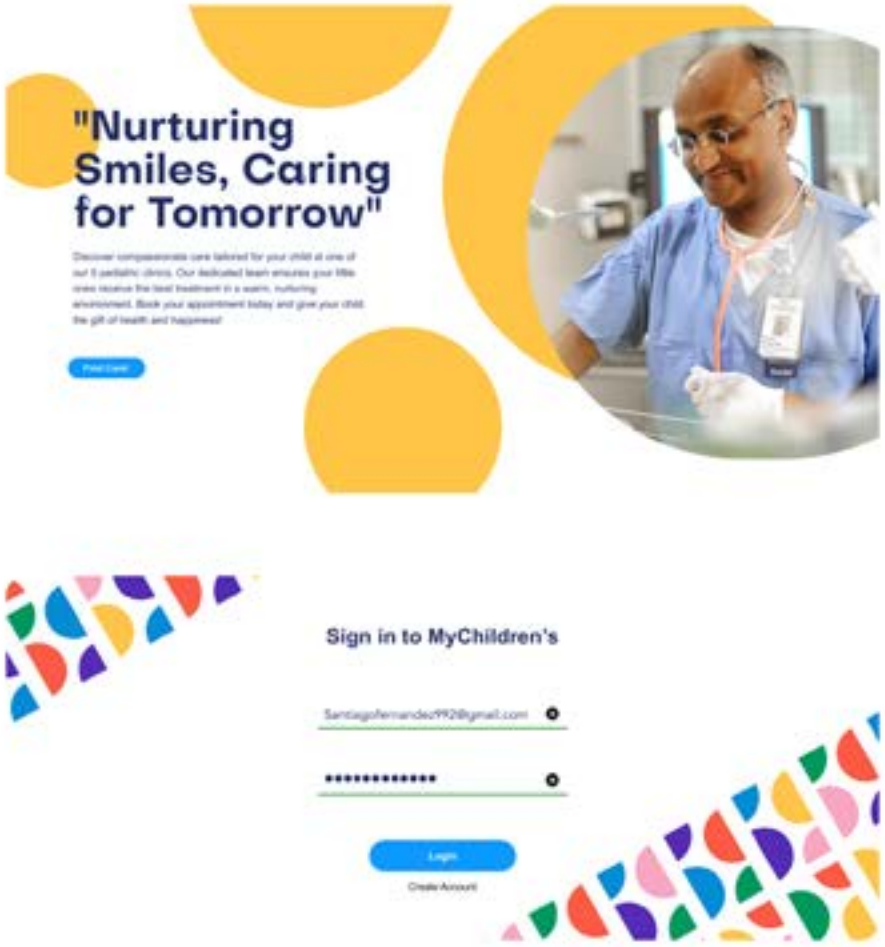


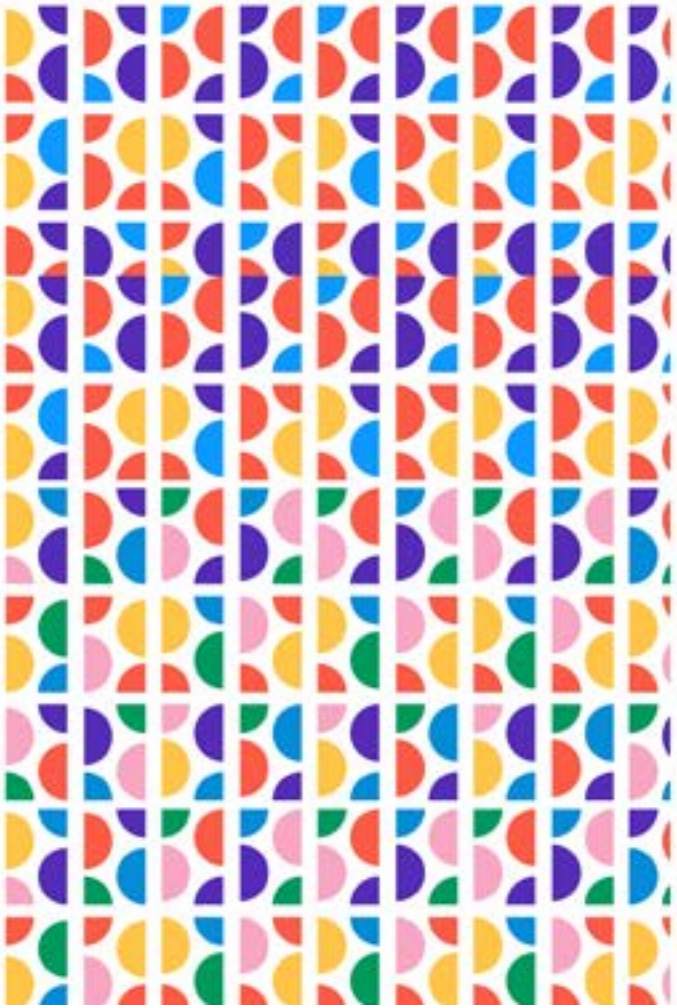
Design System



Design System

Design System





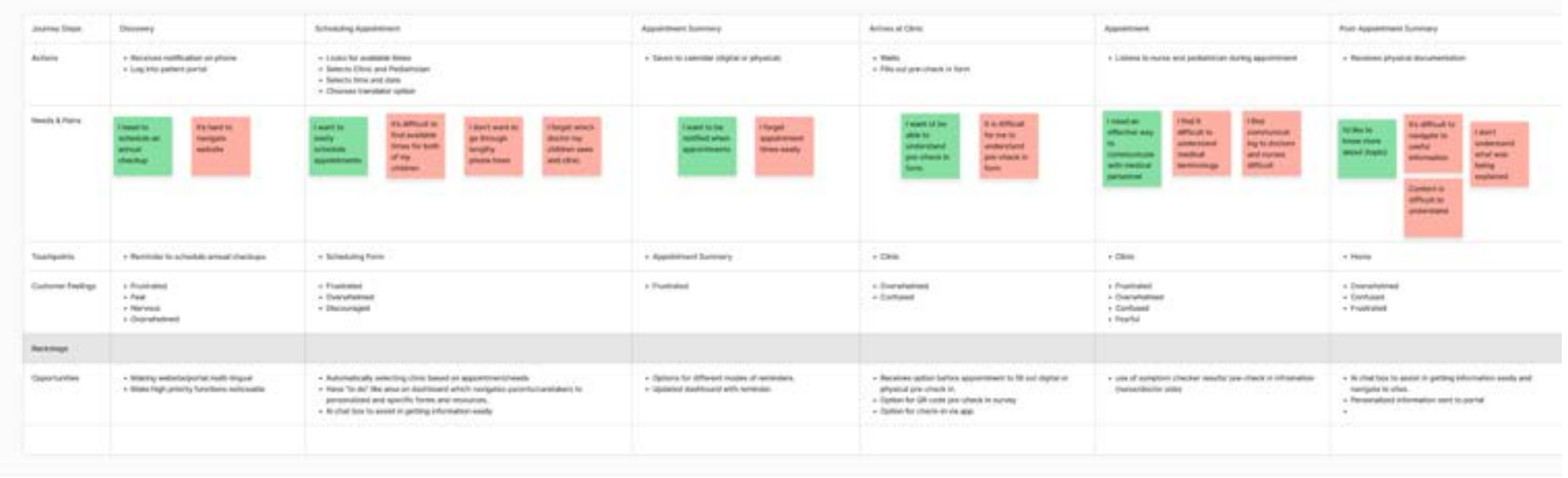
Phase IV

Prototyping

User Journey

Final Prototype

User Journey



Prototype Links

Spanish

Desktop

https://www.figma.com/proto/hs2ITjNH4zC0ZbZWAFGGSX/Health-Care-UX?page-id=0%3A1&node-id=48-75353&viewport=1489%2C-1838%2C0.1&t=5GgWHIzDBtKXkEYl-1&scaling=contain&content-scaling=fixed&starting-point-node-id=48%3A75353&show-proto-sidebar=1Links to an external site.

Tablet

https://www.figma.com/proto/hs2ITjNH4zC0ZbZWAFGGSX/Health-Care-UX?page-id=0%3A1&node-id=146-87964&viewport=1489%2C-1838%2C0.1&t=5GgWHIzDBtKXkEYl-1&scaling=contain&content-scaling=fixed&starting-point-node-id=146%3A87964&show-proto-sidebar=1Links to an external site.

Phone

https://www.figma.com/proto/hs2ITjNH4zC0ZbZWAFGGSX/Health-Care-UX?page-id=0%3A1&node-id=48-80836&viewport=1489%2C-1838%2C0.1&t=5GgWHIzDBtKXkEYl-1&scaling=contain&content-scaling=fixed&starting-point-node-id=48%3A80836&show-proto-sidebar=1Links to an external site.

Smart Watch

https://www.figma.com/proto/hs2ITjNH4zC0ZbZWAFGGSX/Health-Care-UX?page-id=0%3A1&node-id=146-233479&viewport=1489%2C-1838%2C0.1&t=5GgWHIzDBtKXkEYl-1&scaling=contain&content-scaling=fixed&starting-point-node-id=146%3A232394&show-proto-sidebar=1

Prototype Links

English

Desktop

https://www.figma.com/proto/hs2ITjNH4zC0ZbZWAFGGSX/Health-Care-UX?page-id=0%3A1&node-id=48-74549&viewport=1489%2C-1838%2C0.1&t=5GgWHIzDBtKXkEYl-1&scaling=contain&content-scaling=fixed&starting-point-node-id=48%3A74549&show-proto-sidebar=1Links to an external site.

Tablet

https://www.figma.com/proto/hs2ITjNH4zC0ZbZWAFGGSX/Health-Care-UX?page-id=0%3A1&node-id=146-86924&viewport=1489%2C-1838%2C0.1&t=5GgWHIzDBtKXkEYl-1&scaling=contain&content-scaling=fixed&starting-point-node-id=146%3A86924&show-proto-sidebar=1Links to an external site.

Phone

https://www.figma.com/proto/hs2ITjNH4zC0ZbZWAFGGSX/Health-Care-UX?page-id=0%3A1&node-id=48-80096&viewport=1489%2C-1838%2C0.1&t=5GgWHIzDBtKXkEYl-1&scaling=contain&content-scaling=fixed&starting-point-node-id=48%3A80096&show-proto-sidebar=1Links to an external site.

Smart Watch

https://www.figma.com/proto/hs2ITjNH4zC0ZbZWAFGGSX/Health-Care-UX?page-id=0%3A1&node-id=146-170371&viewport=1489%2C-1838%2C0.1&t=5GgWHIzDBtKXkEYl-1&scaling=contain&content-scaling=fixed&starting-point-node-id=146%3A172074&show-proto-sidebar=1Links to an external site.

Phase V

User Testing

Defining Tasks

Feedback

Defining Tasks

Anonymous survey sent to 15 various individuals to complete one of three tasks. Tasks where chosen based off the chosen user journey as well as tasks that where met with obstacles.

Notes:

Some idividuals didn't have experience with design or user testing which provided needed insight to making the solutions more user friendly. In addition the eaiser tasks scored higher then the more difficult ones.

Questions:

Choose a Task

- Schedule appointment in English and Spanish
- Change language to Spanish & health literacy
- View medication refill date and steps.

Did you find what you where looking for?

How difficult was it to achieve task?

What changes or critiques do you have with the site or portal?

What was your favorite part of the site?

Where you satisfied with the useablility of the site?

Feedback

Schedule appointment in English and Spanish

Change language to Spanish & health literacy

View medication refill date & steps

Achived Goal

Unable to Complete — With Ease

Found what they need for task

No — Yes

Sadisfaction

Not Sadisfied — Sadisfied

Conclusion

Based on the results from the survey the each user was able to achieve theri goals with minimal difficultly. Inheretly the watch's task was easier then scheduling for an appointment in Spanish and in English.

Sadisfaction also followed the trend too. Where the scheduling task was recieving a lower sadisfaction sorce then both watch and changing language and health literacy preference tasks.

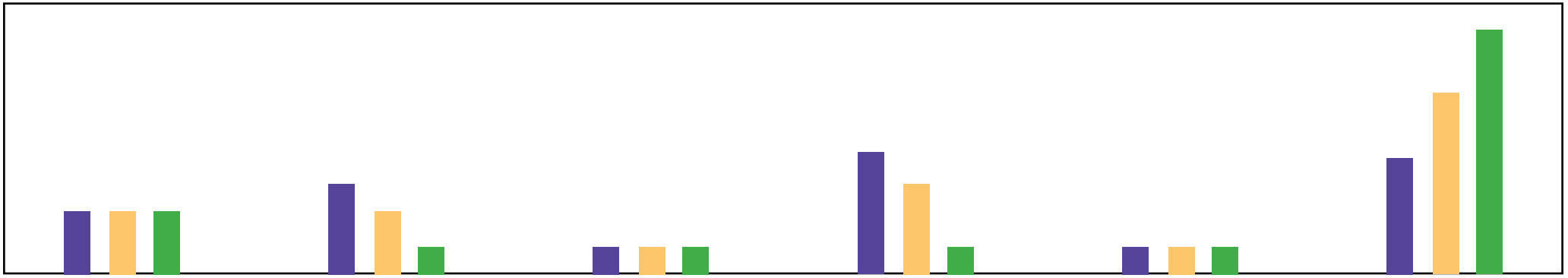
Feedback

- Schedule appointment in English and Spanish
- Change language to Spanish & health literacy
- View medication refill date & steps

Conclusion

Again the same trend is seen with the difficulty of achieving task with most testers of the smart watch having no difficulties navigating and achieving task while the more difficult tasks had higher scores. Insight into the reasons are explained in the testers critiques and changes.

Difficulties with achieving task



- Unfamilier with program
- Got lost or didn't know where to look
- Technical difficulties (Unable to access link prototype links didn't work, etc)
- Not user-friendly (text was too small, graphics in the way, etc.)
- Other
- No issues

Feedback

Changes or Critiques

Make Clickible Elements Defined

- Clickable elemnets that didn't lead to anything in the prototype casued confusion.

Functional on Older Devices

- There was a concern that the sites interactive elements wouldn't work on older devices.

Consistency with Visual Element

- Some elements such as the health literacy button and logo in the website navigation wheren't positioned the same and is a viusal aspect to consider when making final prototypes.

Favorite Part of Site

Symptom Chekcer

- Users found the symptom checker very helpful and liked how it was integrated into to the appointment form.

Transitions and Brand Identity

- Testers liked the rebrand as well as the interactive elements.