SPECTRUM HEALTH
INTERACTIVE RESOURCE TOOL
PHASE 1: PERSONA PROFILES

springthrough

PERSONA DEVELOPMENT

PERSONAS ARE PROTOTYPICAL CHARACTERS DISTILLED FROM RESEARCH AND EXISTING KNOWLEDGE ABOUT KEY CURRENT USERS, TARGET USERS, AND PROSPECTIVE USERS.

PROJECT OVERVIEW

Spectrum Health is planning to build an interactive tool to help physicians and their office staff access and manage service line and physician referral information. This "Interactive Tool" has a broad spectrum of key users that will need to be considered in order for this tool to be successful. By using Human Centered Design Methodologies we will ensure that the mindsets, needs, preferences, goals and context of use are identified and considered for key users.

HUMAN CENTERED DESIGN (HCD)

As the name suggests, the focus of Human Centered Design is the user of a product rather than the product itself. This is the primary difference from other product design / development philosophies that focus on building a solution that requires the users to adapt their behavior to match the way the product functions. HCD is the practice of continuously optimizing a product for the way users can, want, or need to use it. The first step in our Human Centered Design process is understanding who the key users / user groups are. To accomplish this, we use a Persona Development Process that identifies key user groups and builds detailed personas to represent an average user for each group.

HUMAN CENTERED DESIGN IS NOT:

- A one-shot vaccine or an event

- A development process

- A new way of designing

HUMAN CENTERED DESIGN IS:

- A way of thinking and communicating

- Highly collaborative

- Being an advocate for the end users

BENEFITS OF HUMAN CENTERED DESIGN:

- Discover unvoiced needs of users

- Identify friction between users and the product

- Build a solution that matches the users way of thinking

- Products are easier to adopt

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PERSONA DEVELOPMENT

Personas are an informed summary of the mind-set, needs, and goals typically held by stakeholders. They are archetypes of users/user groups and serve as a starting point for producing meaningful products.

To develop valuable personas, we will work together to build detailed profiles that help define who the average users are, what their relationship is to the product, and what the context is in which they use the product. Each profile will be populated with various geographic, demographic, and psychographic factors, and humanized with a name and a profile picture.

Once complete, our Persona Development process will enable Spectrum Health to use personas in several ways:

- Filter outlier behaviors and assumptions in order to focus on a broader range of typical user behaviors, while still being able to relate to users as individuals.

- Identify typical backgrounds, core needs, pain points, benefits, barriers etc… for product stakeholders.

- Streamline communication by establishing a common vocabulary for user groups.

- Make better design decisions at the tactical level of how functionality, content, and sensory elements are structured and presented.

- Make informed design and development adjustments that are inevitable in any product's creation.

ADJUSTING TO HUMAN CENTERED DESIGN THINKING:

Building personas is a practice that puts the designers (all of us) in a position of being an advocate for the end users. In order to extract the most meaningful, and often overlooked details of the end users, we need to develop each persona from an attitude of:

- Humility

- Empathy

- Compassion

- Open-Mindedness

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PERSONA TYPES

It is critical to get team consensus on the relative priority of each persona we build. This prioritization helps us make more informed decisions in terms of the Information Architecture, System Architecture, User Experience, and User Interface. To accomplish this, we categorize each persona into one of the following Persona Types:

- **Primary** – Focal users of the product for whom the application will be optimized (At least one persona must be a focal persona).

- **Secondary** – Also use the product. We will satisfy them when we can.

- **Unimportant** – Low-priority users, including infrequent, unauthorized or unskilled users, as well as those who misuse the product.

- **Affected** – They don't use the product themselves, but are affected by it (e.g. someone who receives reports from a user of a product).

- **Exclusionary** – This user's needs are not considered in design. It's often useful to specify this to prevent non-users from creeping back into product development discussions.

Before we identify the key user groups as a team, take a moment to select two Focal User Groups, and up to four Secondary Users Groups. List user groups in order of importance (1 being the most important).

PRIMARY USERS:

1. HOSPITAL BASED PHYSICIAN
   JOB TITLE

   TONYA
   NAME

2. NON HOSPITAL BASED PHYSICIAN
   JOB TITLE

   DAVID
   NAME

3. REFERRAL COORDINATOR
   JOB TITLE

   LINDSEY
   NAME

SECONDARY USERS:

1. CASE MANAGER
   JOB TITLE

   SUE
   NAME

2. INSURANCE
   JOB TITLE

   MARIA
   NAME

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NAME / JOB TITLE

THIS IS THE BASIC TEMPLATE THAT WE POPULATED FOR EACH OF OUR PRIMARY AND SECONDARY PERSONAS. THE RED FIELDS REPRESENT SECTIONS THAT WERE REMOVED FROM OUR TEMPLATE AND THE GREEN FIELDS REPRESENT FIELDS THAT WERE ADDED.

PERSONA TYPE:

AGE:

PLATFORMS USED:

EDUCATION:

TECHNOLOGY BACKGROUND:

FREQUENCY OF USE:

PROJECT INFLUENCE:

WORK ENVIRONMENT:

CONFLICTS WITH STAKEHOLDERS:

📖 JOB NARRATIVE:

👤 PERSONAL BACKGROUND:

🩹 PAIN POINTS:

👍 BENEFITS:

✋ BARRIERS:

☰★ WISH LIST:

⊘ COMMON MISTAKES:

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TONYA / PHYSICIAN (HOSPITAL BASED)

WORKING IN THE HOSPITAL I CARE FOR A WIDE VARIETY OF ACUTELY ILL MEDICAL PATIENTS.

PERSONA TYPE: PRIMARY

AGE: 40

PLATFORMS USED: Insite, Physician Finder, Google, Power Chart, Epic, Allscripts, Printed Documents.

EDUCATION:
BA Degree, Med School + Residency, Several of my coworkers are foreign medical graduates that speak multiple languages.

TECHNOLOGY BACKGROUND:
Uses a smart phone, laptop, and pager on a daily basis.

FREQUENCY OF USE:
Never uses the printed physician directory. Uses the digital physician finder and Insight (in Cerner) to access physician contact information, area of specialization, and availability around 10 times each day.

PROJECT INFLUENCE: High

WORK ENVIRONMENT:
Always traveling between multiple rooms, floors, and buildings. Doesn't experience any "down time" while on the clock. Is used to accomplishing required tasks despite a constant stream of interruptions. Between appointments she's making referrals at one of several workstations scattered across the hospital, answering questions from nurses, and communicating to a wide variety of hospital staff. In her position multi-tasking is an absolute necessity.

CONFLICTS WITH STAKEHOLDERS:
Tonya wants what most people want... a single source of truth that presents standardized, reliable information to inform the decisions she needs to make.

JOB NARRATIVE:
Tonya works in a fast paced hospital setting visiting a wide variety of acutely ill patients. She helps diagnose and treat all kinds of health related issues and serves as a source of information for nurses and other hospital staff.

PAIN POINTS:
When Tonya needs to make a referral, she is usually in a hurry. Any extra steps during the process are a source of frustration. The current directory takes several clicks to access and the necessary contact information she needs is not always accessible or accurate.

BENEFITS OF PHYSICIAN DIRECTORY:
Although she doesn't use the printed directory, the digital Physician Finder can be helpful when she's trying to find what doctors are currently available, what their listed specialties are, and how to get in touch with them.

BARRIERS:
When making referrals Tonya is usually at a shared workstation in a busy hospital hallway. Work stations can be congested and she frequently finds herself waiting on slow applications and servers. The most consistent barrier she deals with is the continuous stream of interruptions from patients, nurses, and other hospital staff.

WISH LIST:
Tonya wants to be able to access the system quickly from a button on the homepage. She would also love a multiple-variable search function that allows her to build a search query with any of the known variables: contact name, areas of specialization, current availability, accepted insurance, etc.

Tonya wants to eliminate the need for juggling multiple screens by having seamlessly integrated solutions. When viewing a contact, she would like to have a profile picture displayed so you can visually confirm that she is connecting with the person she intended.

COMMON MISTAKES:
When mistakes happen, it's usually a result of the system presenting out of date or inaccurate information, or, due to the technology and interruptions she is exposed to throughout the referral process.

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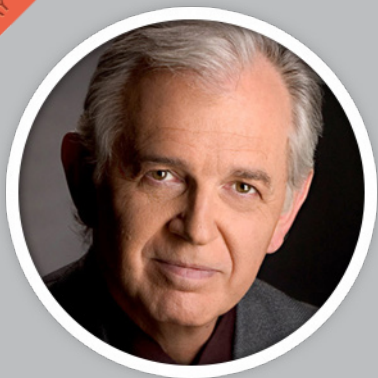
DAVID / PHYSICIAN (NON HOSPITAL BASED)

RUNNING MY OWN PRACTICE, I CARE FOR A WIDE VARIETY OF ACUTELY ILL MEDICAL PATIENTS.

PERSONA TYPE: PRIMARY

AGE: 50

PLATFORMS USED: Physician Finder, Google, Epic.

EDUCATION:
BA Degree, Med School + Residency, Worked as a Hospital Based Physician for over 15 years.

TECHNOLOGY BACKGROUND:
Uses a smart phone, laptop, and pager on a daily basis.

FREQUENCY OF USE:
Never uses the printed physician directory. Uses the digital physician finder and Insight (in Cerner) to access physician contact information, area of specialization, and availability around 10 times each day.

PROJECT INFLUENCE: Med - High

WORK ENVIRONMENT:
As the owner of his practice, David has a good size private office and a more flexible schedule than a hospital based physician. Between appointments he's making referrals, answering questions from nurses and his office staff, and communicating with patients and their families.

CONFLICTS WITH STAKEHOLDERS:
David wants what most people want... a single source of truth that presents standardized, reliable information to inform the decisions he needs to make..

JOB NARRATIVE:
David works in a busy ambulatory setting, seeing a wide variety of patient complaints each day; from rashes to fractures to patients with multiple chronic conditions that are controlled or uncontrolled. He serves as a source of information for medical assistants and other office staff.

PAIN POINTS:
When David needs to make a referral he relies on his office staff to connect the dots. Being offsite can make things more difficult when it comes to accessing patient information and providing his patients with seamless care. At times David can't access the desired provider in Epic.

BENEFITS OF PHYSICIAN DIRECTORY:
David doesn't use the printed directory or the digital Physician Finder, instead, he relies on search engines and personal contacts. If he can't find a physician using these methods he will use Insite.

BARRIERS:
When making referrals David's staff finds themselves jumping between multiple systems. They often have to conduct several search queries on Google or Insite, and then again in EMR.

WISH LIST:
David wants to be able to access the system quickly from Epic. He would also love a multiple-variable search function that allows him to build a search query with any of the known variables: contact name, areas of specialization, current availability, accepted insurance, etc.

David wants to eliminate the need for juggling multiple screens by having seamlessly integrated solutions. He would also like to be able to auto populate the referral by clicking on a provider.

COMMON MISTAKES:
When mistakes happen, it's usually a result of the system presenting out of date or inaccurate information, or, due to the technology and interruptions David is exposed to throughout the referral process.

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LINDSEY / REFERRAL COORDINATOR

BY COORDINATING INCOMING AND OUTGOING PATIENT REFERRALS, I HELP PATIENTS GET THE CARE THEY NEED AND DOCTORS GET THE APPROPRIATE BUSINESS FOR THEIR SERVICES.

PERSONA TYPE: PRIMARY

AGE: 30

PLATFORMS USED: Referral Queue, printed materials, Epic, Insight, MI Health Connect, eShare.

EDUCATION:
Associates Degree. Taking night classes.

TECHNOLOGY BACKGROUND:
Uses desktop, laptop, tablet, and smart phone regularly. Quick to adapt and a power user of business line applications.

FREQUENCY OF USE:
Spend the majority of her day connecting referrals and can do anywhere from 10 to 30 referrals each day.

PROJECT INFLUENCE:
High. Power user of the tool. Very interested in the potential that improvements will have on her practice.

WORK ENVIRONMENT:
I work in a reception style office with a small team of other referral coordinators and office personal. I have my own desk and I work from a queue of referrals that can be shared between the other referral coordinators and our manager.

CONFLICTS WITH STAKEHOLDERS:
None... We all want a single source of truth that can accurately inform our decision making process.

JOB NARRATIVE:
Lindsey works in a doctor's office with a small team of Referral Coordinators and office personal. Her primary tasks are securing treatment and health services for patients and securing business for physicians. She accomplishes both of these tasks by managing incoming and outgoing patient referrals.

PAIN POINTS:
There is no centralized tool to obtain the information needed to get insurance authorization. Many physician offices' are slow to respond to referral requests. Insurance information is not always updated correctly, cards are not accurately scanned (front and back) and insurance information is often outdated.

BENEFITS OF PHYSICIAN DIRECTORY:
Unfortunately, the Physician Directory does not provide the information needed to complete a referral so Lindsey has to supplement it with several other sources. Using this collection of sources, she is able to find the physicians that fit the needs of her patients so they can get the care they need.

BARRIERS:
Lindsey is always juggling multiple sources of information; brochures, directories, documents, and online systems. There is no standard for how a referral is sent or received so Lindsey has to check faxes, e-mails, Epic, voice mail, MI Health Connect, and E-Share on a regular basis. Physician notes are not always finished, and services are often requested before a patient has met pre-requisites (ordering an MRI before an x-ray).

WISH LIST:
Lindsey wants a comprehensive and searchable digital tool that provides accurate and up to date information on physician availability, accepted insurance, and areas of specialization. She would love to have a search that allows her to start her query with whatever variables she knows at the time and allows a search to be completed with any level of specificity. Lindsey would also like a solution that integrates the physician finder into Epic and her referral queue. Lastly, Lindsey wants the information provided in the physician finder to be standardized and consistent.

COMMON MISTAKES:
The most common mistakes are related to improper or inaccurate insurance authorizations. This happens when Lindsey receives misleading information from insurance companies or internal tools.

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SUE / CASE MANAGER

USING ORGANIZATION, COMMUNICATION AND PLANNING I HELP CONNECT PATIENTS TO THE INFORMATION, EDUCATION, AND RESOURCES THEY NEED TO MANAGE THEIR CARE.

PERSONA TYPE: PRIMARY

AGE: 35

PLATFORMS USED: All Scripts, Cerner, EMR's, Physician Finder, Google, paper lists.

EDUCATION:
Bachelors Degree with possible Masters. Solid clinical experience and case management certified.

TECHNOLOGY BACKGROUND:
Uses a smart phone, PC based laptop / desktop, and a tablet at home. Quick to learn any systems that makes her job easier.

FREQUENCY OF USE:
Uses the physician directory less than 5 times per week.

PROJECT INFLUENCE: Medium

WORK ENVIRONMENT:
Shared, mobile, or home offices. Usually working in the hospital close to the patients on her case load.

CONFLICTS WITH STAKEHOLDERS:
Sue wants what most people want... a single source of truth that presents standardized, reliable information to inform the decisions she needs to make.

📖 JOB NARRATIVE:
Sue works for patients on behalf of the hospital to help with Broad Health Assessments, Discharge Planning, Family Education, Insurance Coordination, and Home Care Referrals. She helps connect patients to the information and resources they need for continued care and management of their unique health situations.

🩹 PAIN POINTS:
Sue wants a single source of truth for referral information. She wants a reliable way to see real-time availability for the services and care her patients' need. She doesn't have a lot of time to work out complex referrals for patients that have a wide variety of demographic and geographic challenges.

👍 BENEFITS:
The Physician Finder is a good starting point for basic physician information.

✋ BARRIERS:
Accurately communicating next steps can be very difficult when the systems she relies on for information are out of date or inaccurate. When the necessary information is available, it often takes too long to find.

Organizing complex solutions to unique challenges in the midst of financial and emotional barriers would be easier if she had access to reliable information. Sue feels like she is always aiming at a moving target.

WISH LIST:
Sue wants a comprehensive solution that allows her to search multiple variables including: availability, accepted insurance, services, locations, etc. In Sue's perfect world, the solution would be a national one.

ⓘ COMMON MISTAKES:
When Sue makes a mistake, it's usually the result of her finding or receiving invalid information or miss-information from a system, person, or company. She is regularly dealing with systems that provide out of date or incomplete information, and it can be very difficult to get clear answers for things like insurance authorizations.

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MARIA / INSURANCE

WORKING FOR A LARGE INSURANCE COMPANY, I HELP REFERRAL COORDINATORS, PHYSICIANS, CASE MANAGERS AND OTHER HOSPITAL AND HEALTH SERVICES STAFF GET INSURANCE APPROVALS AND FIND INSURANCE INFORMATION FOR PATIENT SERVICES.

PERSONA TYPE: **SECONDARY**

AGE: 40

PLATFORMS USED: Does Not Apply

EDUCATION:
High School, Associates Degree.

TECHNOLOGY BACKGROUND:
Uses a smart phone, PC based laptop / desktop, and a tablet at home. Quick to learn any systems that makes her job easier.

FREQUENCY OF USE:
Uses the physician directory less than 5 times per week.

PROJECT INFLUENCE: Medium

WORK ENVIRONMENT:
Shared, mobile, or home offices. Usually working in the hospital close to the patients on her case load.

CONFLICTS WITH STAKEHOLDERS:
Sue wants what most people want... a single source of truth that presents standardized, reliable information to inform the decisions she needs to make.

JOB NARRATIVE:
Maria works for an insurance company and distributes insurance approvals and information to a wide range of people. Maria uses several digital and analog tools to give people the most up to date information on their current insurance coverage.

PAIN POINTS:
Maria wants information requests to be submitted in a consistent way. She often receives outdated or incomplete information that affects the accuracy of her responses. Her biggest frustration is receiving last minute insurance authorization requests for patients that have procedures scheduled.

BENEFITS:
Benefits do not apply because Maria is only indirectly involved with the referral process and does not use any of the current referral tools.

BARRIERS:
Things change fast in the insurance industry. Sometimes coverage will change between the time she gives insurance approval and the time when the approved activity takes place.

WISH LIST:
Maria wants access to all the information she needs to handle approval requests, questions, and coverage disputes all in one place. Having a consistent way to receive referrals (rather than some via phone and some via fax/electronic) would save her a lot of time.

COMMON MISTAKES:
When Maria makes a mistake, it's usually the result of her not having access to the information she needs or because she can't foresee changes that impact previously approved coverage.

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COMMON WANTS

A SUMMARY OF THE COMMON "WANTS" COLLECTED FROM OUR FIRST THREE PERSONAS.
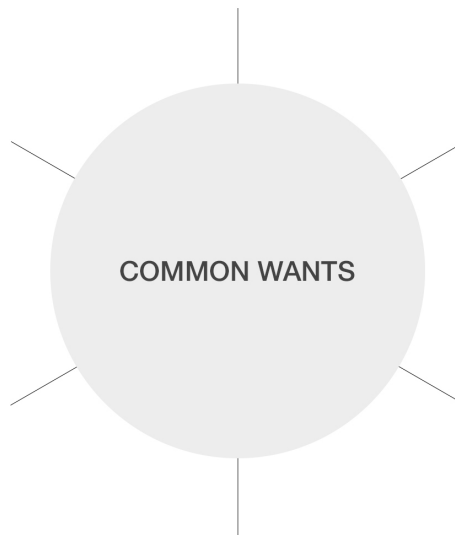
Single Source of Truth

Want a more powerful, multi-variable search.

An easier way to accurately find physician areas of specialization.

COMMON WANTS

Quicker access to the systems / tools they need.

An easier way to find physician availability.

An easier way to find / get insurance information and authorization.

COMMON PAIN POINTS

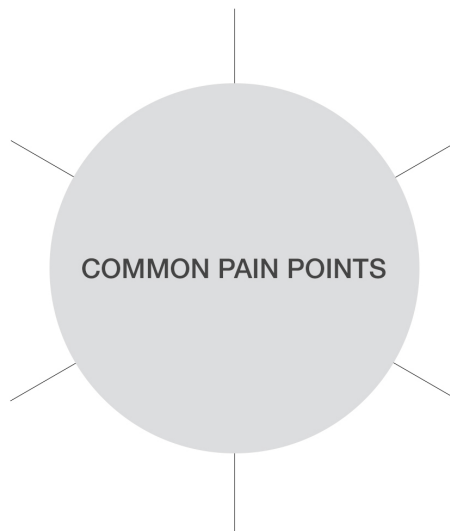A SUMMARY OF THE COMMON "PAIN POINTS" COLLECTED FROM OUR FIRST THREE PERSONAS.

Don't have access to the information we need to make informed decisions.

Lack of standardization and consistency of content.

Unreliable / Slow servers and software.

COMMON PAIN POINTS

Tools provide outdated / inaccurate information.

An easier way to find physician availability.

Too many systems / tools to juggle.

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TOOLS / TERMS OVERVIEW

THROUGHOUT THE INTERVIEWS WE LEARNED ABOUT SEVERAL TOOLS THAT ARE CURRENTLY IN USE OR WILL BE IN USE IN THE NEAR FUTURE.

CERNER: Cerner® solutions enable physicians, nurses and other authorized users to share data and streamline processes across an entire organization. An online "digital chart" displays up-to-date patient information in real time, complete with decision-support tools for physicians and nurses. Simple prompts allow swift and accurate ordering, documentation, and billing.

PERFECT SERVE: PerfectServe is a single, unified communications platform that connects clinicians in any care setting, across the care continuum, inside or outside of your organization. Importantly, PerfectServe solutions can help drive meaningful improvement in the care delivery processes.

ELECTRONIC MEDICAL RECORD: An electronic medical record (EMR) is a digital version of a paper chart that contains all of a patient's medical history from one practice. An EMR is mostly used by providers for diagnosis and treatment.

MICHIGAN HEALTH CONNECT: Michigan Health Connect is the state's largest, most trusted provider of Health Information Exchange (HIE). Founded in 2009 as a nonprofit corporation by leading health systems in Michigan, Michigan Health Connect set out to advance the delivery and coordination of high-quality, efficient patient-focused health care across the state. Combining expertise in information technology and clinical data exchange, Michigan Health Connect has built the largest, most trusted HIE network in Michigan.

PHYSICIAN FINDER: A tool that can be accessed by mobile application and from the website. It doesn't connect to any other tool. It's not comprehensive. It is a customer facing tool (this is an opt-out tool which is why it is not comprehensive and it's only used in Grand Rapids).

LINK: Provides the information found in the printed materials electronically (roster and contact information, forms, FAQs and requirements). This tool is used to make a referral to a specialist.

EPIC: Epic makes software for mid-size and large medical groups, hospitals and integrated healthcare organizations – working with customers that include community hospitals, academic facilities, children's organizations, safety net providers and multi-hospital systems. This integrated software spans clinical, access and revenue functions and extends into the home.

ESHARE: eSHare Integration is a software program that enables a practice to collaborate with Spectrum Health and other practices over a secure grid. This solution works over the Internet, adapts to various practice-based workflows and is compatible with over 30 EMR vendor products.

QUEUE: A term used for the system that Referral Coordinators use to manage their caseload.

ALLSCRIPTS: A tool to make referrals that sends notifications via email or paging. (Not used to make physician referrals).

INSIGHT: This is a tool inside of cerner used to show who is on call within the network.

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