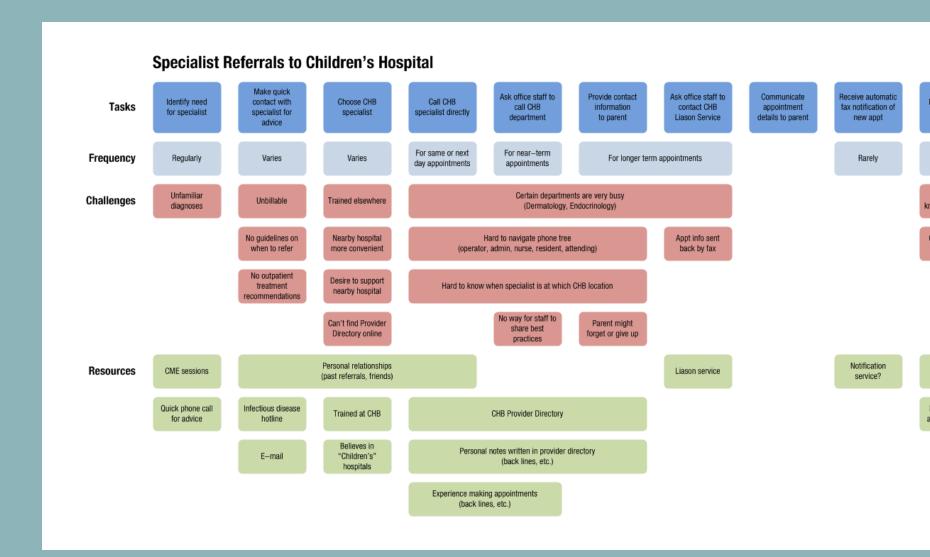
USER RESEARCH FINDINGS

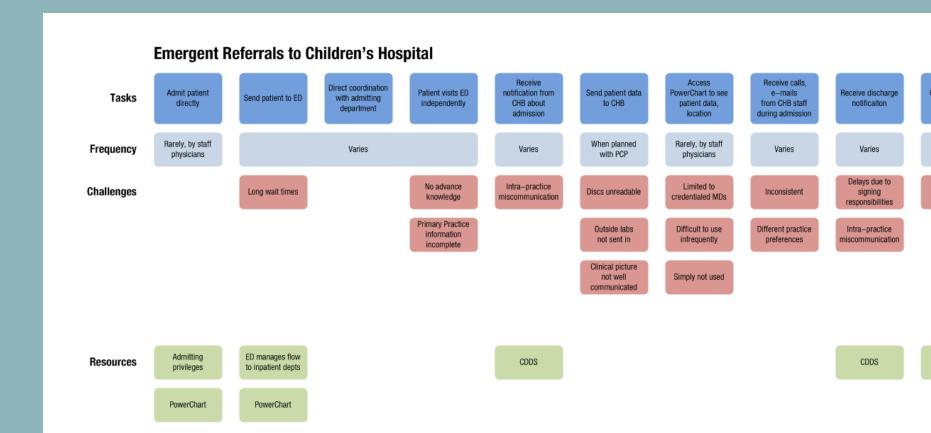
INTERVIEWS

- 7 stakeholder interviews
- 11 primary care interviews
 - Urban, suburban
 - Solo, small and large groups

Specialist referral workflow



Emergent referral workflow



KEY DESIGN CONSIDERATIONS

- Group practice dynamics
- Referral relationships, styles
- Scheduling communication
- Informational needs
- Closing the loop

GROUP PRACTICE DYNAMICS

"I have the VPN, but I don't really use it."

PRIMARY CARE DOCTOR SOLO PRACTICE SUBURBAN "My staff used to have access to patient data now they don't."

PRIMARY CARE DOCTOR GROUP PRACTICE SUBURBAN "It's pretty much a black hole until discharge. But then we get a great discharge summary."

PRIMARY CARE DOCTOR GROUP PRACTICE URBAN

FINDING: ADMIN PARTICIPATION

Who should have access?

- Primary care provider (MD, PA, NP)
- Other practice PCPs
- Practice administrators
- IPA case managers

REFERER RELATIONSHIPS

"I have a group of specialists that I've gotten to know over the last 20 years at Children's. I will continue to refer to them."

PRIMARY CARE DOCTOR SOLO PRACTICE SUBURBAN

"I don't have personal relationships with docs at Children's, but I believe in the idea of a dedicated children's hospital."

PRIMARY CARE DOCTOR SOLO PRACTICE SUBURBAN

"I can admit to our community hospital, so I have to balance my allegiance to Children's with families' convenience."

PRIMARY CARE DOCTOR
GROUP PRACTICE
SUBURBAN

"Sometimes I have a quick question that doesn't require a full referral."

PRIMARY CARE DOCTOR GROUP PRACTICE URBAN "Sometimes I don't know whether I should treat or refer the patient."

PRIMARY CARE DOCTOR SOLO PRACTICE SUBURBAN

FINDING: REFERRAL RELATIONSHIPS

$Type\ A\ \cdot Personal\ Network$

Has a cadre of trusted specialists

$Type\ B\ \cdot Brand\ Loyalty$

- "Everyone at CHB is great."
- Differences between specialists are viewed as negligible.

FINDING: THE CURBSIDE CONSULT

- No formal way to ask a question before referring
- PCPs leverage professional networks by phone or e-mail
- Prefer not to "burden" specialists

REFERRAL STYLES

"Either my administrator or I schedule referrals most of the time."

PRIMARY CARE DOCTOR SMALL GROUP PRACTICE SUBURBAN "I give the referral numbers to the family. They schedule and can explain the problem."

PRIMARY CARE DOCTOR SOLO PRACTICE URBAN "We use the liaison service. We put in a request and they handle the rest."

PRIMARY CARE DOCTOR SMALL GROUP PRACTICE SUBURBAN "I give my admin three options, and ask her to schedule the first available."

PRIMARY CARE DOCTOR LARGE GROUP PRACTICE SUBURBAN

FINDING: REFERRAL STYLES

The involved PCP

• PCP or practice admin schedules for patients

The delegating PCP

Gives contact info to patient

Liason service participants

SCHEDULING COMMUNICATION

"I really have no way of knowing whether or not my patients schedule or show up for appointments at Children's."

PRIMARY CARE DOCTOR SOLO PRACTICE SUBURBAN "My EMR has referral reminders set for 56 days. If I don't have a note by then, I follow up."

PRIMARY CARE DOCTOR SOLO PRACTICE, SUBURBAN EPIC EMR USER "The Liaison service faxes us an Excel sheet of scheduled appoinments."

PRIMARY CARE DOCTOR SMALL GROUP PRACTICE SUBURBAN

FINDING: FOLLOW-UP STYLES

- The note in the record
- EMR reminder
- Liason report
- No follow-up

FINDING: PCP NEEDS, DURING ADMISSION

- ED, admission notification
- Admission note
- Daily progress notes (meds, labs)
- Consult notes
- Operative notes
- Discharge plans, discharge summary
- Prognosis

Chronologically? **By Encounter?** By note type? Category?

PCP NEEDS, DURING REFERRALS

- Scheduling notification
- Specialist visit note

CHB NEEDS, DURING ADMISSION

- Primary care provider
- Practice information
 - Name, Address
 - Main phone, back line phone
 - Preferred communication method
 - Referral preferences
- Associated providers
 - Who's on call, responsible for hand-off

POST-DISCHARGE ISSUES

- The care plan
- Delegation of responsibility for outstanding and follow-up labs
- Delegation of follow-up appointment scheduling
- Granular delineation of parental responsibilities and instructions
- If/Then guidelines, by problem

CME

- Some satisfied, dissatisfied with content
- Some prefer in-person, on the web
- Interest in:
 - When, when not to refer for low incidence diseases
 - Nutrition, obesity