USER RESEARCH FINDINGS

INTERVIEWS

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

Specialist referral workflow

Specialist Referrals to Children's Hospital

Tasks	Identify need for specialist	Make quick contact with specialist for advice	Choose CHB specialist	Call CHB specialist directly	Ask office staff to call CHB department	Provide contact information to parent	Ask office staff to contact CHB Liason Service	Communicate appointment details to parent	Receive automatic fax notification of new appt
Frequency	Regularly	Varies	Varies	For same or next day appointments	For near–term appointments	For longer term appointments			Rarely
Challenges	Unfamiliar diagnoses	Unbillable	Trained elsewhere	Certain departments are very busy (Dermatology, Endocrinology)					
		No guidelines on when to refer	Nearby hospital more convenient	Hard to navigate phone tree (operator, admin, nurse, resident, attending)			Appt info sent back by fax		
		No outpatient treatment recommendations	Desire to support nearby hospital	Hard to know when specialist is at which CHB location					
			Can't find Provider Directory online		No way for staff to share best practices	Parent might forget or give up			
Resources	CME sessions	Personal relationships (past referrals, friends)					Liason service		Notification service?
	Quick phone call for advice	Infectious disease hotline	Trained at CHB	CHB Provider Directory					
		E–mail	Believes in "Children's" hospitals	Personal notes written in provider directory (back lines, etc.)					
				Experience making appointments (back lines, etc.)					

Emergent referral workflow

Emergent Referrals to Children's Hospital

Tasks	Admit patient directly	Send patient to ED	Direct coordination with admitting department	Patient visits ED independently	Receive notification from CHB about admission	Send patient data to CHB	Access PowerChart to see patient data, location	Receive calls, e–mails from CHB staff during admission	Receive discharge notificaiton
Frequency	Rarely, by staff physicians	Varies			Varies	When planned with PCP	Rarely, by staff physicians	Varies	Varies
Challenges		Long wait times		No advance knowledge	Intra–practice miscommunication	Discs unreadable	Limited to credentialed MDs	Inconsistent	Delays due to signing responsibilities
				Primary Practice information incomplete		Outside labs not sent in	Difficult to use infrequently	Different practice preferences	Intra–practice miscommunication
						Clinical picture not well communicated	Simply not used		
Resources	Admitting privileges	ED manages flow to inpatient depts			CDDS				CDDS
	PowerChart	PowerChart							

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 · Personal Network

- Has a cadre of trusted specialists

Type B · 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