

Design for the Clinic Experience



Concepts for UPMC Presbyterian Neurosurgery Clinic

Carnegie Mellon School of Design Service Design Fall 2007

Melissa Cliver Jamin Hegeman Kipum Lee Leanne Libert Kara Tennant

Thank you

We would like to thank all of the people who helped make this report and supporting research possible.

Patients of UPMC Presbyterian Neurosurgery Clinic

UPMC Presbyterian Neurosurgery Clinic Staff

Beverly Bowell, Lois Burkhart RN, Stephanie Henry RN, Amin Kassam MD, Ann Kostial, Julie Martin, Debbie McHugh, Kimberly Lee RN, Desiree Playso-Doyle, Daniel Prevedello MD, Peg Reidy MD, Cindy Watkins, Peggy Zaborowski

UPMC Center for Quality Improvement & Innovation

Sue Martin, Judy Shovel, Lucy Thompson

Carnegie Mellon alum, faculty and colleagues

Renna Alyassini, Maggie Breslin, Gabe Clapper, Alex Cheek, Natalie Ebenreuter, Shelley Evenson, Jason Howell, Bridget Lewis, Christina Payne, Catrina Pereira, Alankrita Prasad, Steve Selzer, Reina Takahashi, Laurie Weingart, Elliott Williams, Diana Yu, Shelley Zeng

What You'll Find in This Service Guide

Part One: Designing the Experience Together

A series of concepts aimed at providing a fulfilling clinic experience for patients, families, staff and physicians.

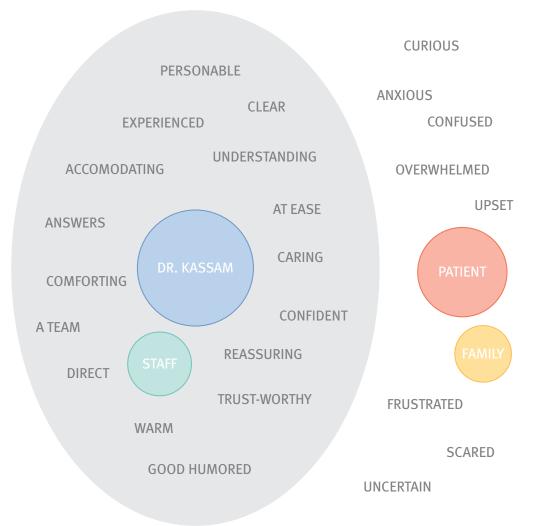
Part Two: Through the Eyes of Design

A collection of photos from our visits to the clinic and quotes from patients, staff and outside research, as well as, a report of research findings and the process by which it was gathered that led to the development of the concepts presented in part one.

Designing the Experience Together

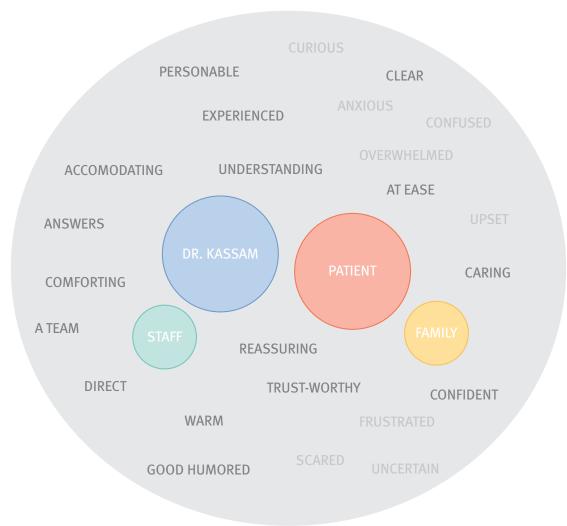
Current State

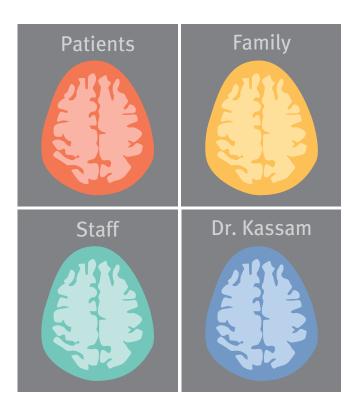
Lack of interaction at different points throughout the journey creates a barrier between patients and their families and the positive experience of being with Dr. Kassam and his staff.



Ideal State

Continual interaction extends the positive experience of being with Dr. Kassam and his staff to the patients and their families, putting them at ease and giving them control of their experience.



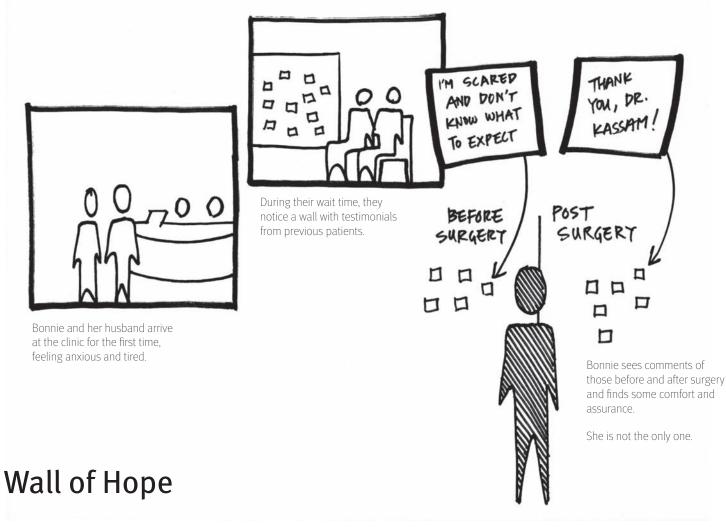


A Holistic Solution

The concepts presented in this book can be implemented individually, but are intended to be parts of a whole aimed at improving the clinic experience for patients, families, staff and physicians.

Since the clinic experience is co-produced by four core groups – patients, families, staff and physicians – the concepts were developed to engage all four groups in activities that affect the experience.

Overlooking one of these groups would fall short of creating a holistic solution.



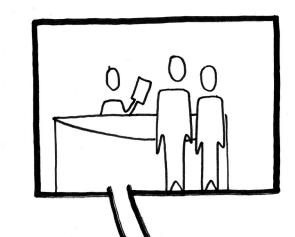
The Wall of Hope will be a collection of patients' handwritten testimonials about their surgery or recovery, Dr. Kassam, clinic staff, etc.

The collection will be prominently displayed in the waiting room and encourages patients to read testimonials and write their own while they wait to be seen by Dr. Kassam.

Needs met

- Reassurance
- Information
- Distraction

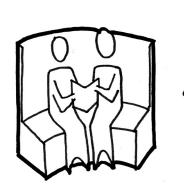




When they meet him in the exam room, they see that he is indeed personable, and funny, too, just like in the booklet.

Annette is a new patient.

After she and her husband check in, a front-desk staff member gives them a welcome booklet, indicating it's a message from Dr. Kassam.



In the waiting room, they read Dr. Kassam's welcome. They like that he seems personable and experienced, and are glad to find out a bit about him.

Welcome Booklet

The Welcome Booklet gives new patients an overview of the overall patient journey, one clinic visit, the staff and Dr. Kassam in Kassam's own words.

Since a staff member hands the booklet directly to the new patient, it also serves as a new line of interaction between the staff and patient where there was none before.

Needs met

- Information
- Interaction with Kassam



Layout of the Booklet



You're in Good Hands Text #342	25 to Post	
Waiting Room Patient "Dr. Kassam, what are you doing back there?"	Join the Conversation	••••••
Waiting Room Patient U0:40 AM 09/25/2012 A Waiting Room Patient Says: "Yeah, things are pretty busy out here in the waiting room."	Clinic Chat	••••••
10:45 AM 09/25/2012 Dr. Kassam Says: "Our goal is to make you wait ;) Busy back here t Send me questions while you wait."		
10:48 AM 09/25/2012 Lois Burkhart, RN (Staff) Says: "Some rooms will be opening up soon." UPMC Natural View of Protocol	facial pain hang in there nurse Lois good hands good news so lucky thank you great team hello everyone	
Manual Insula and Neuronepy Gater Messages from patients, staff and Dr. Kassam appear on a large Clinic Chat display in the waiting room.	wait time endonasal surgery send me questions within two days	

UPMC University of Pittsburgh Medical Center

Common phrases from the Clinic Chat appear in a tag cloud on adjacent display to give viewers a general idea of what's been discussed.

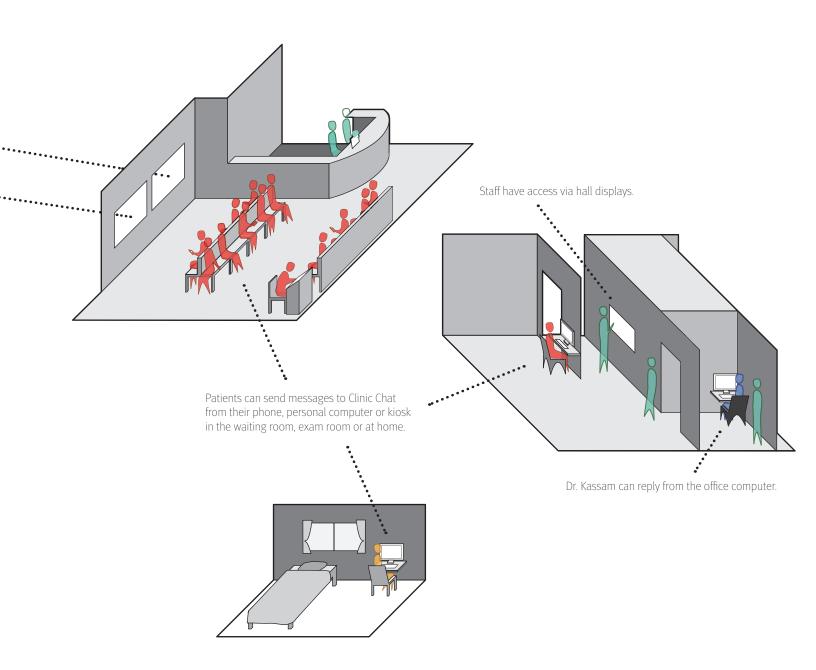
Clinic Chat

Patients, Dr. Kassam, and staff contribute to an organically formed system that provides information, distraction, and a connection with Dr. Kassam and his staff during periods when they cannot be physically present with the patient.

Needs met

- Front-stage/back-stage interaction
- Information
- Distraction
- Support





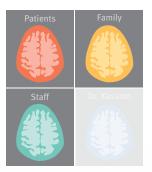
Gift from the Clinic

Even a small gift lets the patient know that you care about their experience. A gift could be as simple as a free cup of coffee at the cafe or a leather note pad or journal.

Gifts are not just about the gift itself, but also provide an opportunity for another positive interaction between patients and staff.

Needs met

- Comfort
- Feeling of good will from staff





When Mary checks out, Cindy hands her a gift certificate for free coffee at the café.

Mary appreciates the gesture, and Cindy feels good about giving something extra.

FREE COFF

Clinic Staff Locator

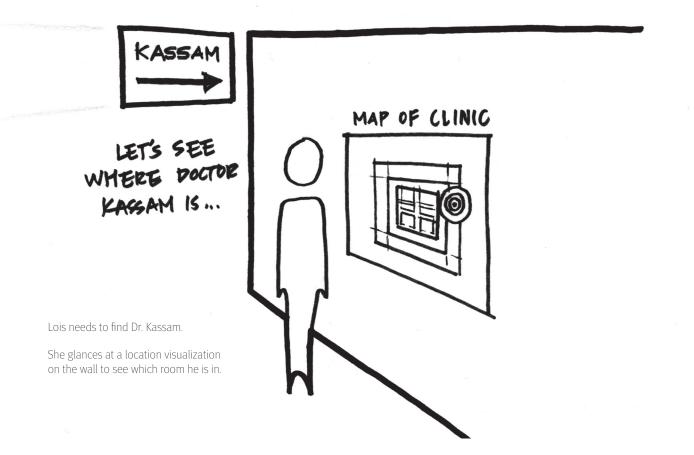
Methods that require clinic staff to manually operate a system to keep track of their location fail because they create more tasks in an already busy environment.

An automated system that uses RFID would reduce the need for staff to manually track their location and offer opportunities to connect the data to a visualization that is displayed in multiple locations.

Needs met

- Finding each other and Dr. Kassam
- Reduction in tasks





The neuro clinic staff attend their biweekly meeting. They discuss ways to make the clinic a better experience for patients and families.

> Staff enjoy these meetings because it gives them a chance to reflect on their work and ways to improve, as well as spend time together as a team.

111

Clinic Staff Meetings

Staff meetings would be held on a regular basis to provide a forum for team-building and professional development.

The agenda for staff meetings could include trainings on new technology or medical breakthroughs, or they could just serve as an allotted time for staff to stop and reflect on successes and failures in their work.

Needs met

CHRRENT

CLINIC

DEAL

CLINIC

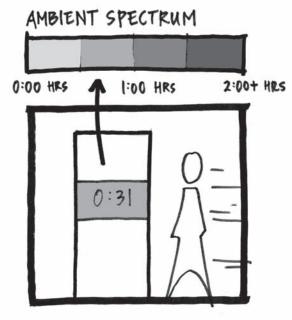
- Forum for discussion and reflecting
- Team-building





Wait-time Indicator

The ambient waiting time displays help Dr. Kassam and his staff provide the attention and care that patients need. The ambient colors allow a quick understanding of patient staff and help make decisions about whom to see next.



The displays allow him to ensure that he respects his patients' time and giving them the attention they need.

Needs met

- Desire to see everyone
- Time for himself
- Better communication



PCP Direct Link

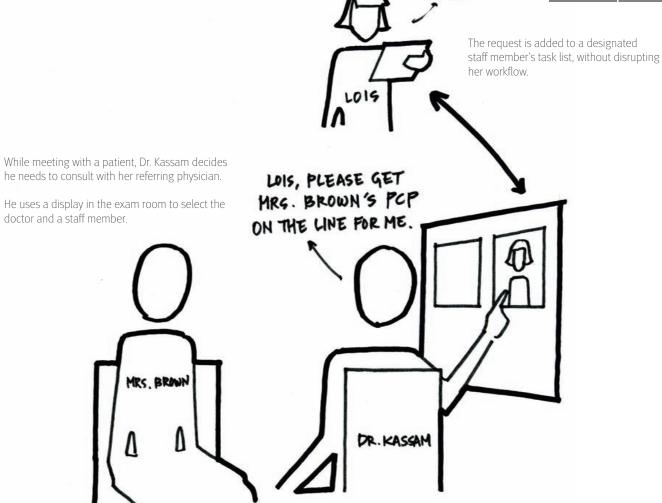
Dr. Kassam often needs to consult with other physicians. LCD screens in the exam room displaying patient information allows Dr. Kassam to identify physicians to contact and assign a staff member to contact them.

Needs met

- Support his staff
- Time for himself

OK .





Through the Eyes of Design



"Just for the record, I've only peed once." – Dr. Kassam, 11:48 a.m. "Sometimes I like to sit down, so I'm in the conference room." – Nurse



"We are his family." - Nurse

"If they call me today, they'll get in. Kassam has never said no."

– Clinical Secretary



"Front desk people seem to be overwhelmed and not proactive about communicating." – Press Ganey

"I come by myself now. I don't bring my family anymore. I'm my own woman." – Veteran Patient



"Here, let me help you fill out all of that paperwork." – Family Member

"I was added to his crowded schedule and therefore he was rushing to see others. I was left with many questions but felt I didn't want to slow him down." – Pre-Op Patient



"When the waiting room fills up, we have to put folding chairs in the hallway so patients can sit." – Lucy Thompson

"I've been waiting here so long I should start charging Kassam."

– Family Member



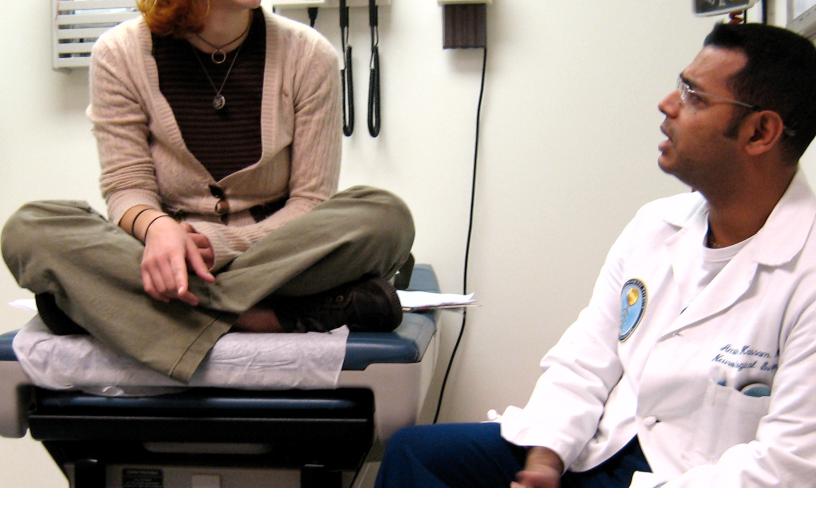
"Sometimes it gets so packed in here, there's no place for my mom's wheelchair." – Veteran Patient

"There is a lot going on here, and I would like to sit back and think." – Pre-Op Patient



"The first time I came, my mom and cousin were in the waiting room for three hours. My mom finished a book. That was really hard for me." – Veteran Patient

"TV helps. You don't have anything else to do." – Post-Op Patient



"If it weren't for Dr. Kassam, I'd be dead." – Post-Op Patient

"I'm leaving everything up to you, because I can't think." – Pre-Op Patient



"I just saw that chart. Now where is it?" – Nurse

"We all have our meltdowns. It goes around the office." – Nurse



"Has he been in to see the patient in room seven yet? She's getting restless after being in there for an hour." – Nurse

"Our scheduling just drives everybody crazy." – Clinical Secretary



"This looks real good. You take care of this one, while I go see the patient in room four." – Dr. Kassam

"Our biggest problem is keeping track of Kassam." – Nurse



"I sure hope Kassam is in there. I've been waiting out here almost half an hour." – Physician Assistant

"Oh my god, now we're an hour and a half-hour behind." – Nurse

Original Project Brief

Lucy Thompson of the UPMC Center for Quality Improvement and Innovation presented our group with three main issues she found to be obstacles to optimum flow at the UPMC Presbyterian Neurosurgery Clinic – wait time, way finding and workflow.

Wait time

- Dr. Kassam sees 60 to 80 patients in one clinic day.
- Waiting room gets crowded, so people sit in the hallway.
- Between the waiting room and exam room, patients wait between 30 minutes and five hours to be seen by Dr. Kassam.
- Patients wait so long in exam room they walk into the hallway to ask, "Have I been forgotten about?"

Work flow

- RN coordinators manage multiple tasks at the same time – organize testing and hospital admissions, make phone calls, accompany Kassam into the exam room, answer questions from multiple staff members.
- No process exists to room patients, see them in order or keep track of open/occupied exam rooms.

Way finding

Staff spend time walking around the clinic in circles looking for each other, patients, patient records and test results, empty/occupied rooms and available phones for dictation.



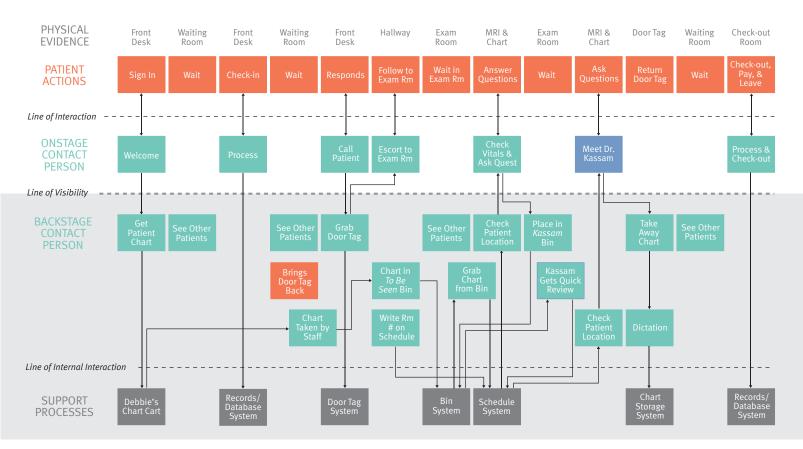
Seeing the Clinic with New Eyes

In the exploratory phase of our research, we visited the clinic to observe the experience for both patients and staff. We interviewed staff, patients and families, as well as collected surveys that asked what types of information patients would like to have when they visit the clinic.

As a group, we shared and synthesized this information to find direction for further research and to map a blueprint of the overall clinic process.

- Patients often wait a long time to see Dr. Kassam.
- Necessary information doesn't reach the patient about what to expect in their visit and overall journey.
- Staff are overwhelmed with the volume of work and patients.

Service Blueprint of Presby Neuro Clinic



Understanding the Big Picture

We mapped the entire clinic experience for patients and all of the supporting roles staff and Dr. Kassam play throughout.

Mapping the service blueprint allowed us to see the breakdowns in the clinic experience.

- The backstage processes are quite chaotic.
- The system depends solely on Dr. Kassam.
- No one actively engages with patients while they wait.



Learn More About the Staff

In a participatory design session held at the clinic, staff drew their work networks for clinic day, as well as the other days of the week.

They ranked the importance of the people in their work network by placing them either close to their own name at the center of their network or further away.

- Staff's work networks vary greatly between clinic day and the remainder of the week.
- Many staff forgot to include patients on their work network.



Reframe the Problem

We chose to reframe the problem originally presented to us. In our observations, we saw evidence that wait time, way finding and workflow. Yet, the problem was much larger than that, so we broadened the scope of our inquiry. At the outset of the generative phase of our process, we decided to focus on three over-arching concepts.

Embrace wait time.

What if we inform, engage and comfort patients?

Improve workflow.

What if the staff has fewer tasks, less distraction and better communication?

Balance Kassam.

Support his efforts to help patients, but also find time for himself and support his staff.

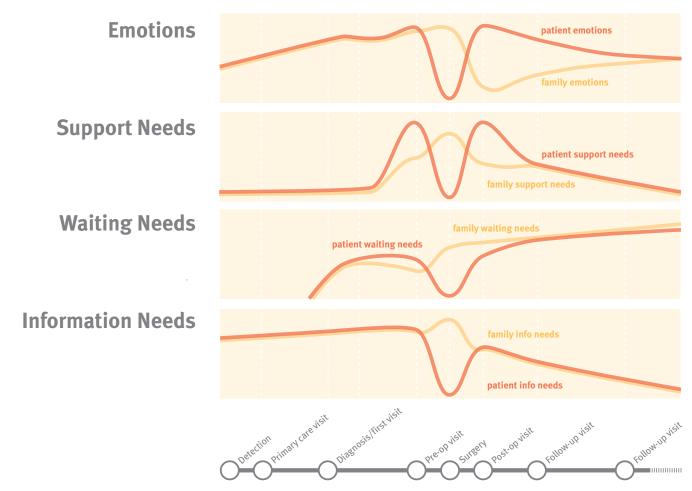


Learn More About the Patients

After creating our own set of concepts, we made a set of cards to find out what patients would want from their clinic experience.

The cards illustrated various forms of entertainment and relaxation such as a concert pianist and places to nap.

- Patients don't want to be waiting so long that they need entertainment or places to nap.
- Patient have varying information, emotional and support needs throughout their journey from initial visit to recovery.



Visualize the Data

After synthesizing all of the information we collected from patients and families throughout the process, we visualized their emotional state and needs – support, waiting and information.

We decided to focus our concept development on the patient experience.

- Staff had begun to address many workflow issues on their own.
- More physicians in the future would reduce the strain on Dr. Kassam.
- No one was focusing on directly improving the patient experience.

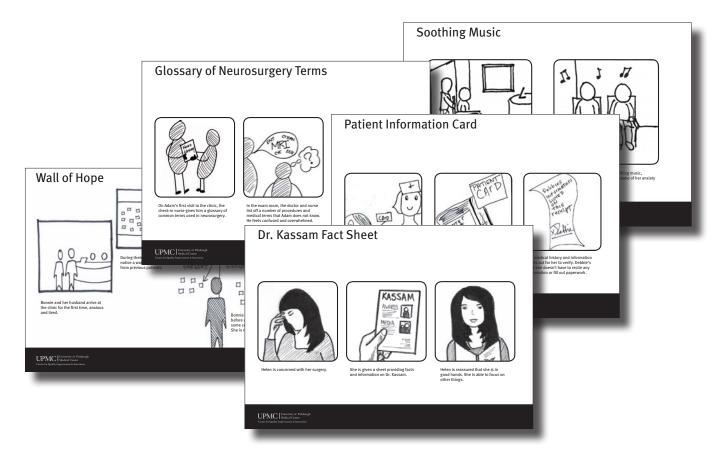


Create Immediate Change

Since we had observed patients – especially those in wheelchairs – having trouble moving through the waiting room, we wanted to see if removing chairs and reconfiguring the space would make a difference.

We removed 14 chairs and organized the chairs to leave wide open areas throughout the waiting room.

- People in wheelchairs weren't relegated to the hallway or near the check-in desk. There was enough room for them to sit with their families in any part of the waiting room.
- Even when the waiting room began to fill, people could move about without any trouble.



Focus the Concepts

Using feedback we received from discussions with patients about the experience cards, we sketched concepts that focused solely on needs they expressed.

From that group, we selected 10 of those concepts and created storyboards to use in validating our ideas with the patients.



Get Patient Feedback

We met with patients and families while they waited in the exam room to see Dr. Kassam.

The privacy of the room gave us the opportunity to talk indepth with patients and get their candid feedback on our 10 concepts, as well as their experience with Dr. Kassam and the staff.

- Families want to know more about their loved one's experience, especially during surgery and after.
- Patients want simplified processes, such as check-in.
- Everyone wants more information in lay terms.



Step into the Operating Room

Dr. Kassam invited us to observe one of his endonasal procedures. We donned bunny suits and watched four hours of the surgery.

The patient we observed was a 25-year-old male who had lost his vision due to a growing tumor between his eyes. He drove a truck for a living and had lost his job.

- While seemingly obvious, it was interesting to see the surgery and realize that patients are completely unconscious for the most important part of the journey
- We developed a greater empathy for the patients and families going through this experience.



Contact Us

Melissa Cliver melissacliver@gmail.com

Jamin Hegeman jamin@jaminhegeman.com

Kipum Lee kipumlee@gmail.com Leanne Libert lmlibert@gmail.com

Kara Tennant karatennant@gmail.com