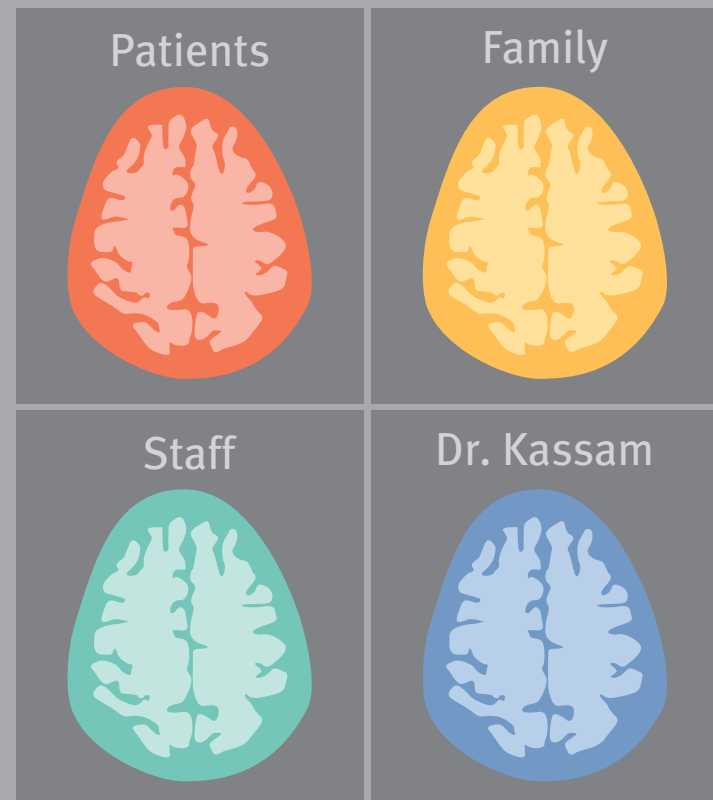


Designing for the Clinic Experience

Service Design for UPMC Presbyterian Neurosurgery Clinic

Carnegie Mellon School of Design
UPMC Center for Quality Improvement & Innovation
Service Design · Fall 2007

Melissa Cliver · Jamin Hegeman · Kip Lee
Leanne Libert · Kara Tennant



UPMC Center for Quality Improvement & Innovation

Our liaison with the clinic

Given Problems

Wayfinding

Wait time

Work flow

Research

Observation

Interviews with staff & patients

Surveys

Data collection



The Patient Experience

**“Has he been in to see the
patient in room seven yet?
She’s getting restless after
being in there for an hour.”**

– Nurse



Staff Experience

**“We all have our meltdowns.
It goes around the office.”**

– Nurse



A View of Dr. Kassam

Exam Room 5
Dr. Kassam - Mitz
Please keep this room clean and tidy.

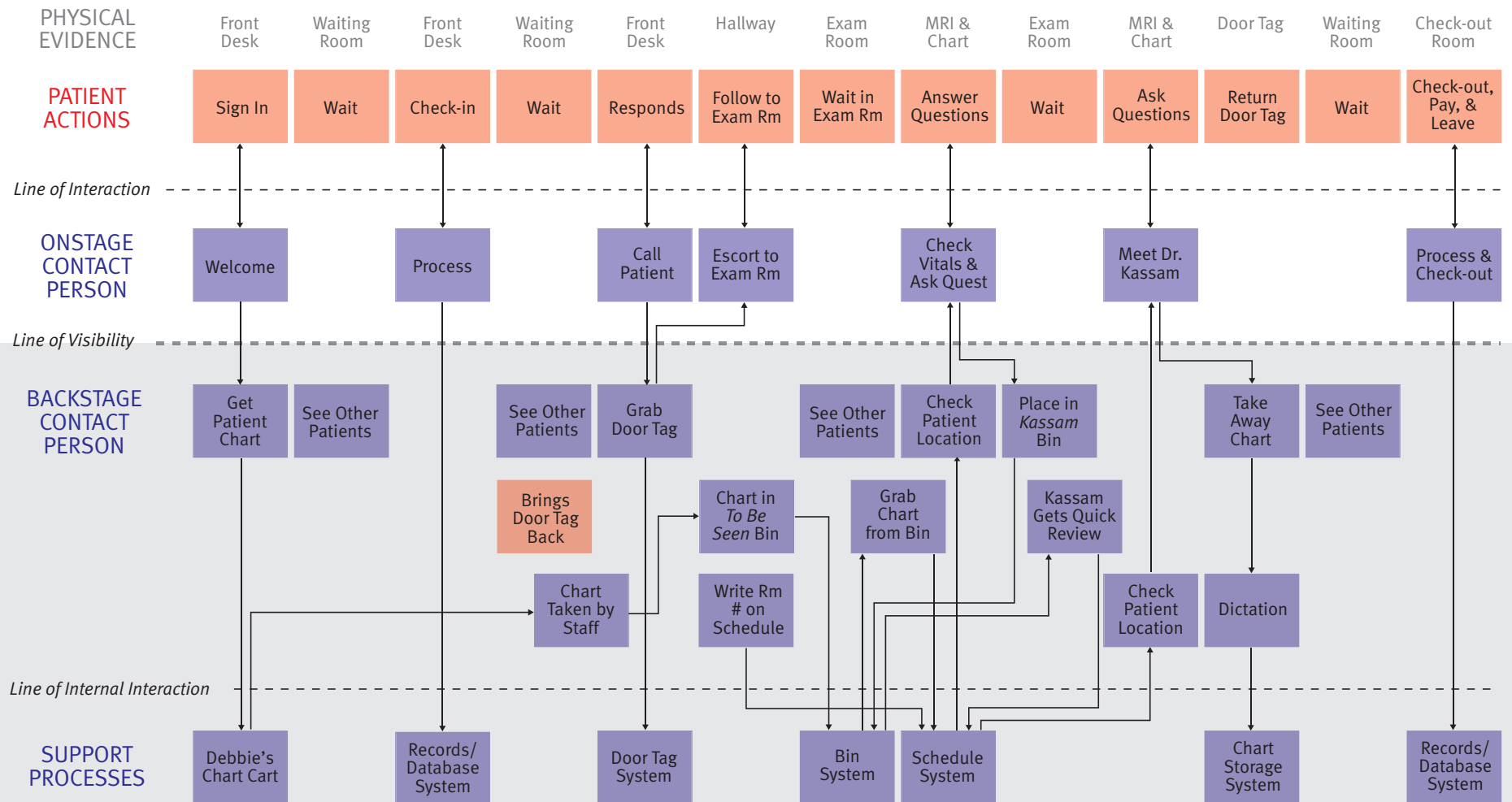
**“If they call me today,
they’ll get in. Kassam
has never said no.”**

– Clinical Secretary

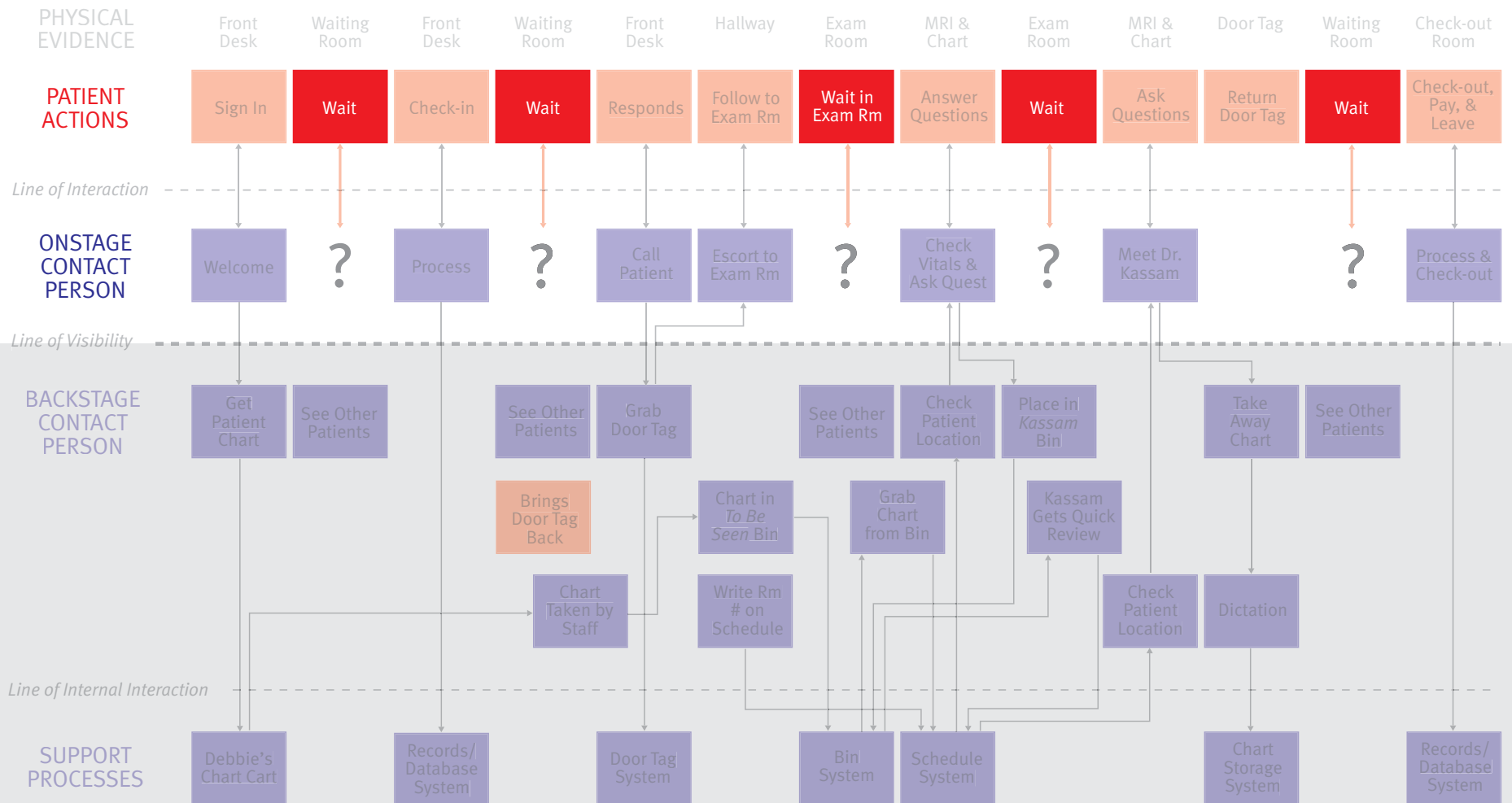
Synthesis



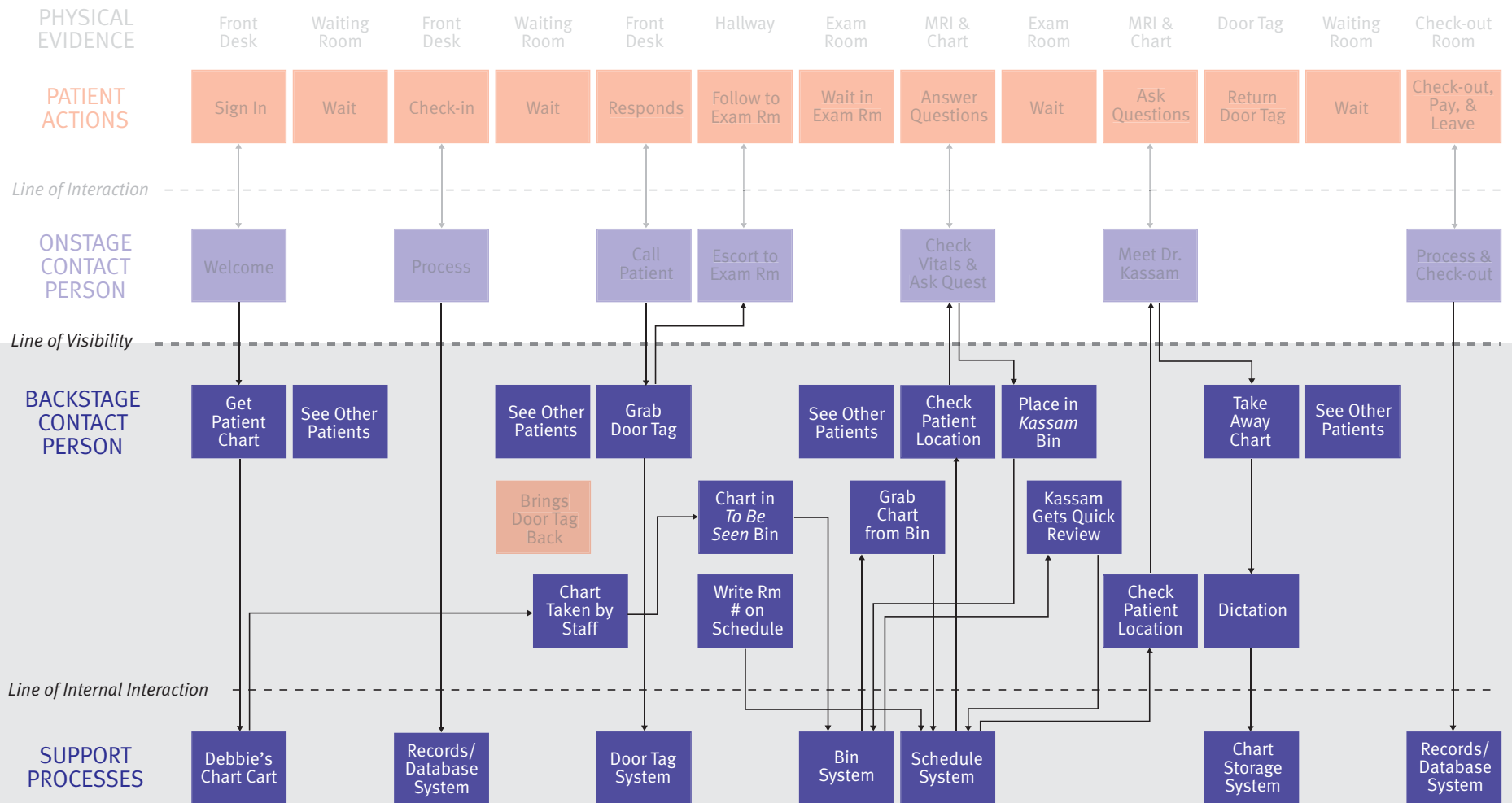
Service Blueprint of Presby Neuro Clinic



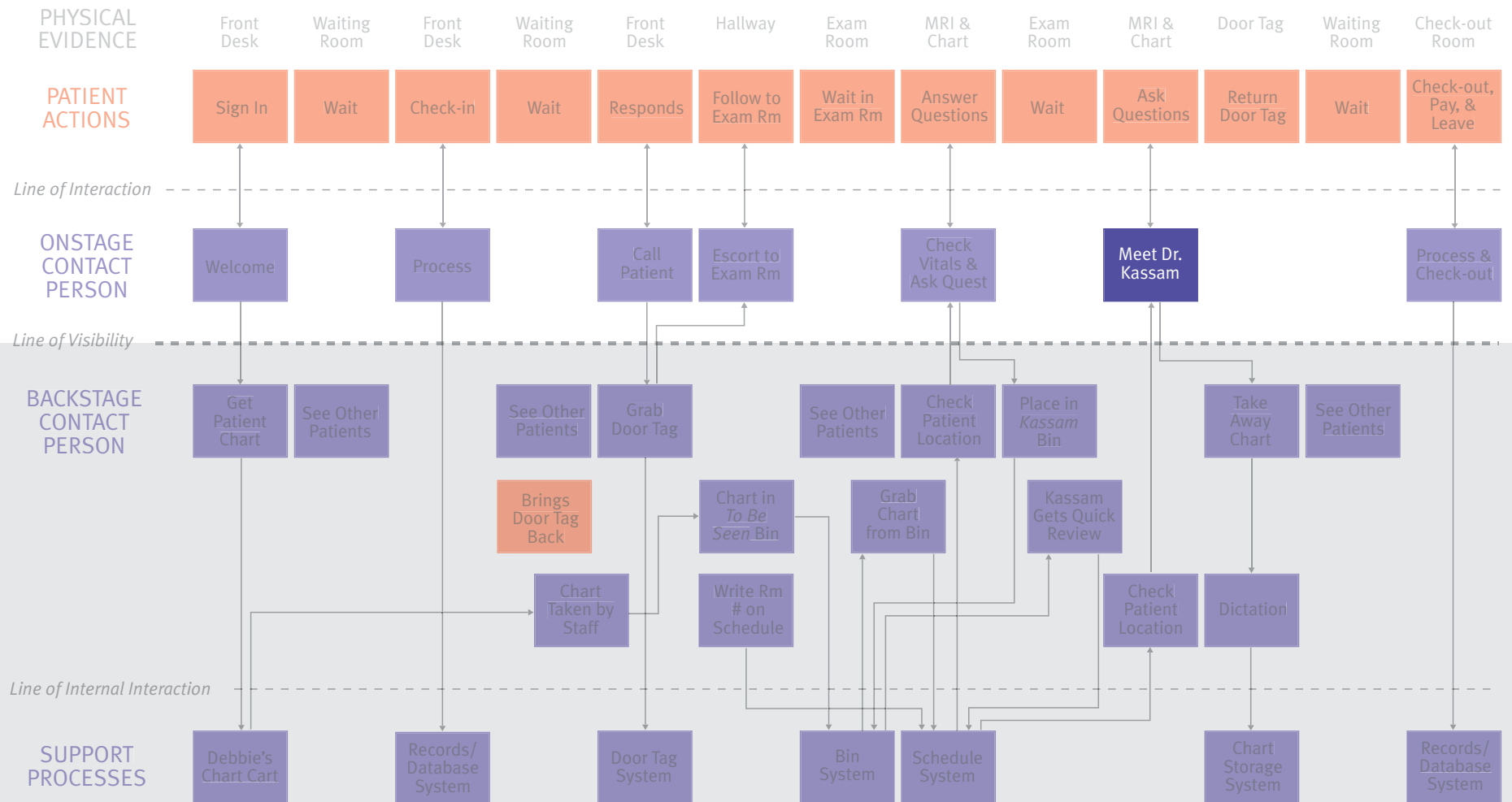
Lack of wait time interactions



Complex workflow



Flow dependent on Dr. Kassam



Needs

Patient

Feeling welcome

Actual wait time

Respect

Space and comfort

Distractions

Staff

Better workflow

Locating Dr. Kassam
and each other

Communication

Making a difference

Dr. Kassam

Spend quality
time with patients

See everyone

Support Staff

Time

It's more than wayfinding, wait time, and workflow.

The experience is the relationship between patients, staff, and Dr. Kassam within the given space.

Opportunities

Embrace Wait Time

Inform, engage, and comfort patients?

Improve Workflow

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.

**Sharing our research,
gaining their trust.**



**Engaging the staff
in the design process.**

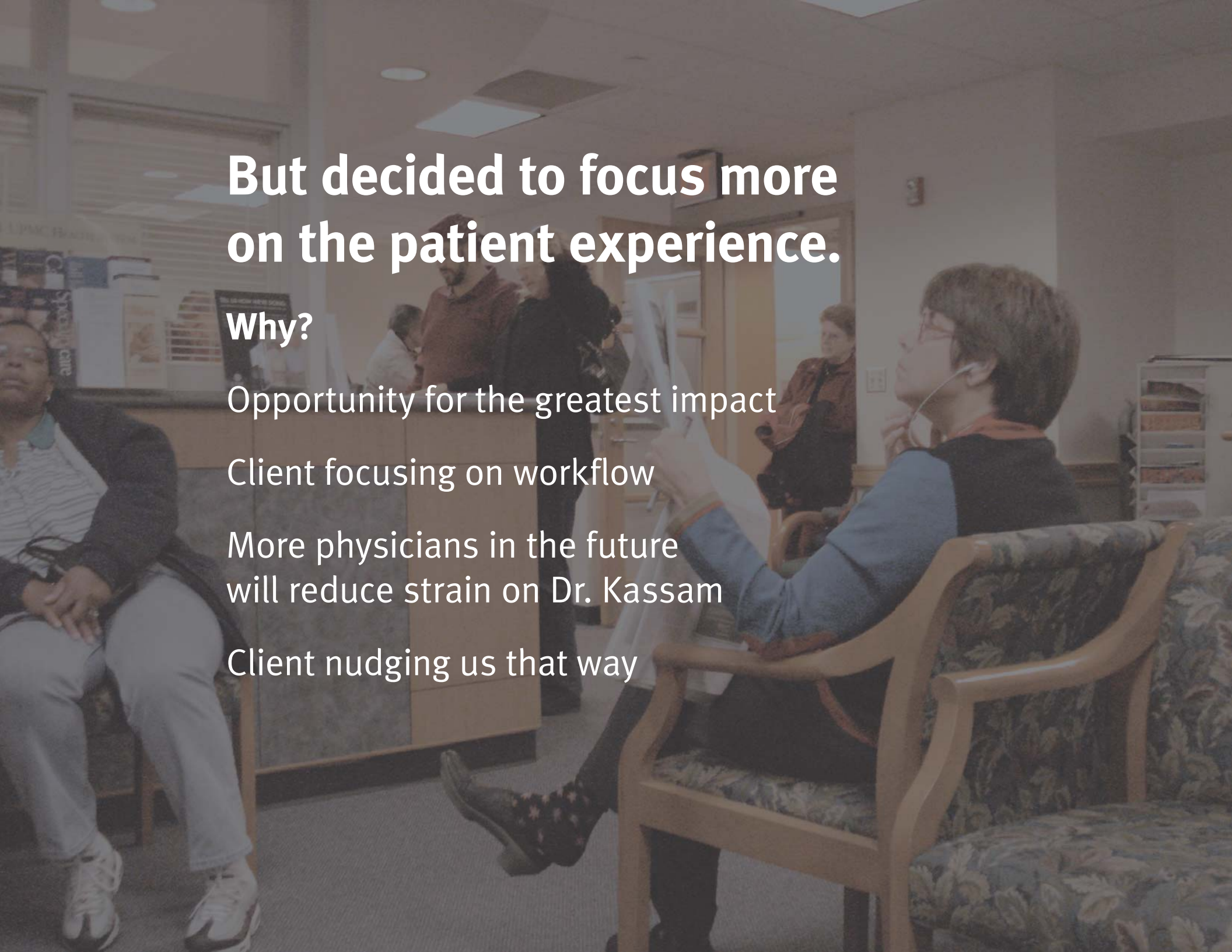


“Embrace wait time.”

Direction from Center for Quality Improvement & Innovation.



We explored concepts for all three opportunities...

A photograph of a waiting room with people sitting and standing, overlaid with text. The image is dimmed to make the text stand out. In the foreground, a man sits on the left and a woman on the right. In the background, several other people are visible near a reception desk.

**But decided to focus more
on the patient experience.**

Why?

Opportunity for the greatest impact

Client focusing on workflow

More physicians in the future
will reduce strain on Dr. Kassam

Client nudging us that way

**We moved and removed chairs
to affect the patient experience.**



Before



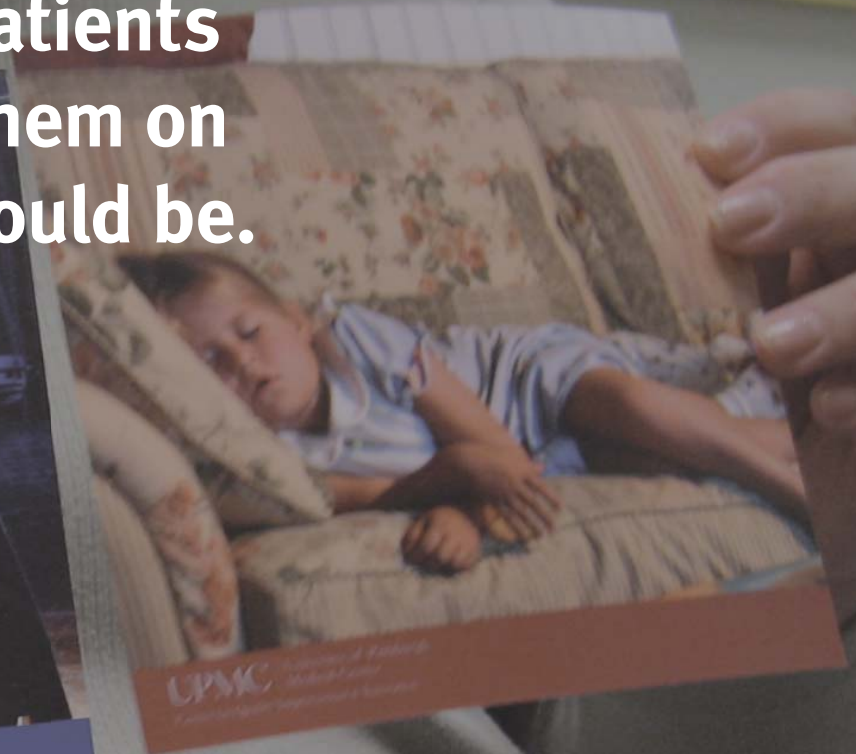
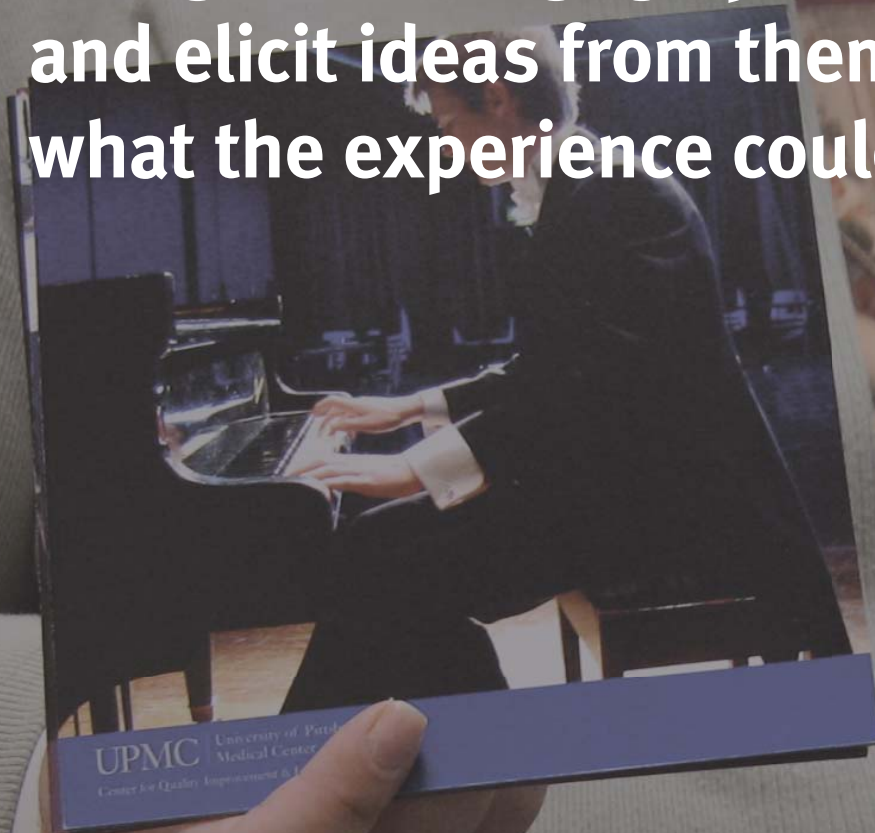
After

**Because we involved
the staff in our process,
they really helped us
gain access to patients.**



Experience Cards

Designed to engage patients and elicit ideas from them on what the experience could be.



A photograph of two people sitting in a waiting room. On the left, a person in a dark sweater and jeans sits on a black office chair, holding a clipboard. On the right, a person in a red and grey sweater and jeans sits on a black chair, also holding a clipboard. The background is a plain wall and floor.

Eleven Exam Room Interviews

**“We’ll talk about anything to anyone.
Entertain us.”**

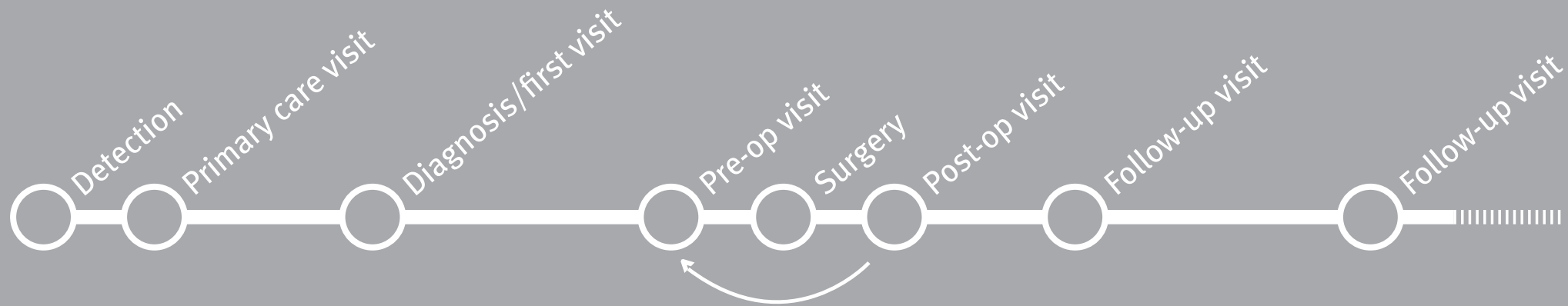
**“The first time I came, my mom and cousin
were in the waiting room for three hours.
My mom finished a book. That was really
hard for me.”**

“Our town has one traffic light.”

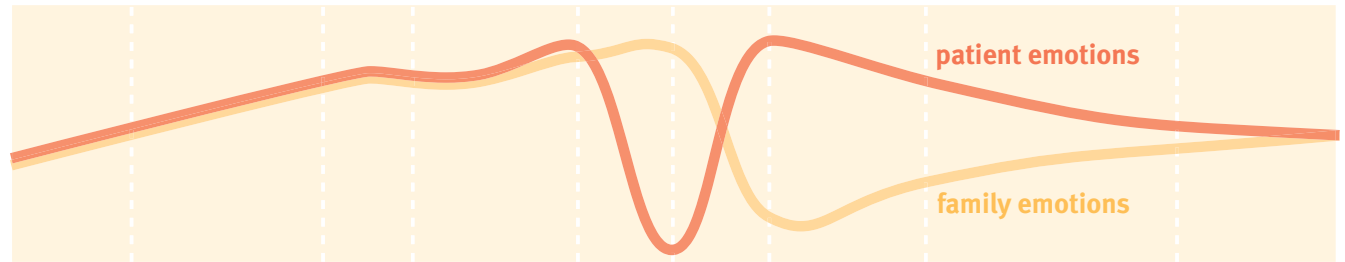
**“I come by myself now. I don’t bring
my family anymore. I’m my own woman.”**

**“I’m about to get brain surgery.
I don’t want to play checkers!”**

Patient Journey



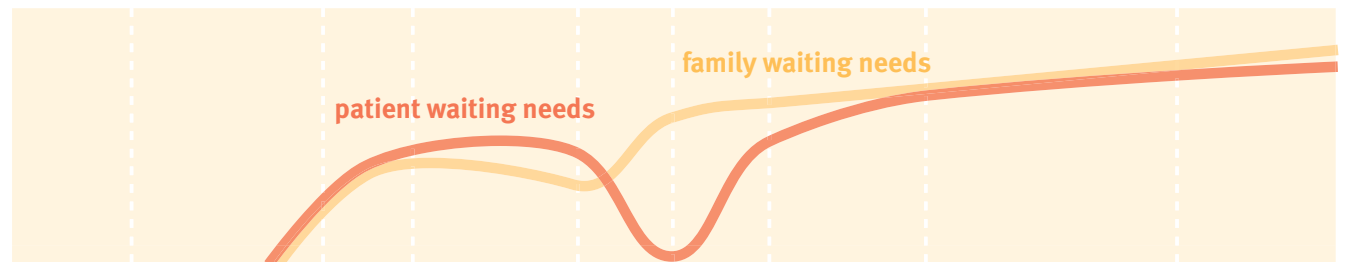
Emotions



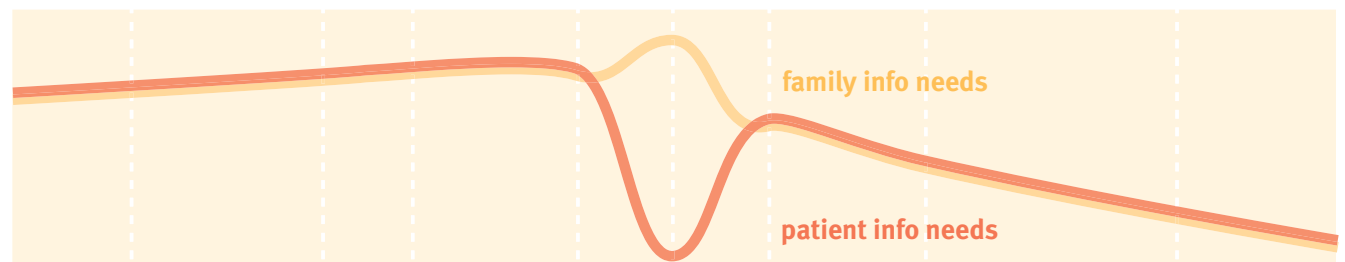
Support Needs



Waiting Needs



Information Needs



	New Patient	Pre-op Patient	Post-op Patient	Returning Patient
Emotions	Curious Hopeful Feels bad about family waiting Confusion	Can't think Overwhelmed Self-concerned Confusion	Dazed Feels bad about family waiting Mixed feelings: laughing crying Shock and relief	Thankful Understanding Bored Blessed
Support Needs	Emotional Support	Transportation Someone to collect info Someone to make arrangements	Transportation Someone to collect info Physical care	Transportation Physical care
Waiting Needs	Distractions	Special treatment	Distractions	More engaging distractions Interactions
Information Needs	Schedule Valet Place to stay Wait time Sign-in process	Testing info Surgery info/procedure Reality: good/bad Wait time Sign-in process	Possible symptoms Medical education Medical translation Schedule/other appt. Wait time	Wait time Schedule/other appt. Don't want to repeat personal info

New Concepts

Spending more time with patients
inspired new concepts.

Surgery Information Card

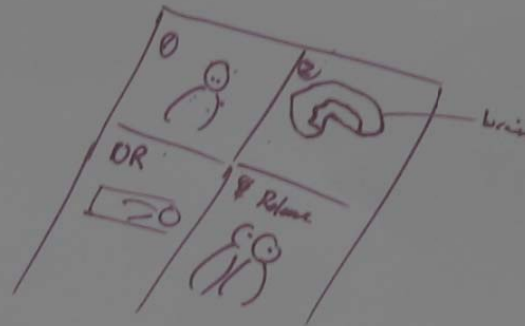
Your Surgery

- hours
- Date
- Release

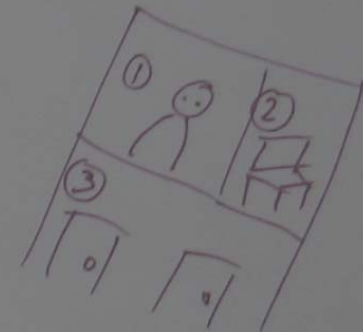
Impact

- can't lift
- how much

Info about "Nose Picking" procedure

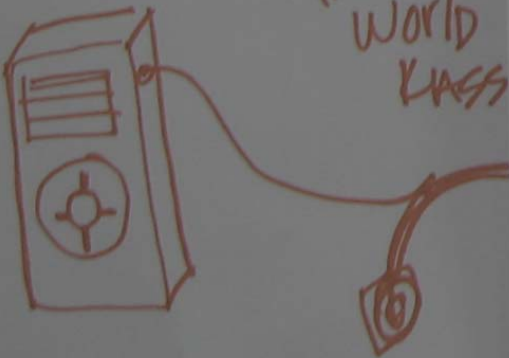


PROCESS CARD
PHOTOGRAPHIC

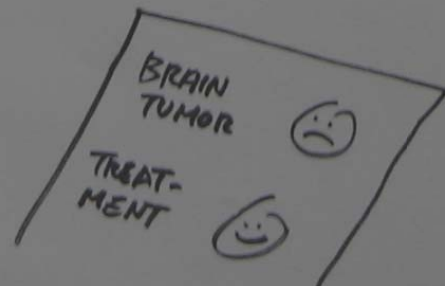


A+ +
Clinic

AUDIO TALK
OF "WORLD
CLASS

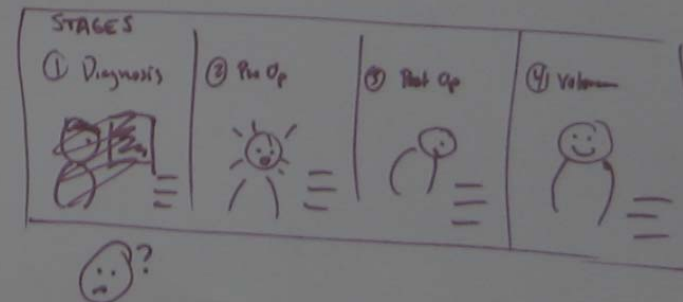


PROCESS CARD
REALITY OF BRAIN TUMOR ...
AND HOW TO BE TREATED .



Before
Clinic

Long term Stage view



Cost/Value

low cost

● coat rack

● clinic graduation
certificate

● ambient music

● patient-use
phone

● wheelchair with
regular seating areas

● note-taking kit

● Wall of Hope

● Stages of Care
suite of cards

● Kassam fact sheet

● Neurosurgery
common terms
glossary

● food & drink cart

● partitioned
waiting area

high value

● no front desk

● video testimonials

● USB memory stick
for patient records

● waiting room TVs

● Kassam TV

● patient
transportation

● real-time
wait tracker

● patient information
for visually impaired

● computer kiosks

● patient advocate

● mentor

high cost

● rotating museum
artwork exhibits

● calming
water fountain

● closed-circuit TV
to watch surgery

● LCD screens
for dynamic art

● wait room
food servers

● wait room
librarian

low value

Cost/Value

low cost

● coat rack

● clinic graduation certificate

● **ambient music**

● patient-use phone

● wheelchair with regular seating areas

● note-taking kit

● **Wall of Hope**

● **Stages of Care suite of cards**

● Kassam fact sheet

● **Neurosurgery common terms glossary**

● **partitioned waiting area**

● food & drink cart

high value

low value

● rotating museum artwork exhibits

● calming water fountain

● **closed-circuit TV to watch surgery**

● LCD screens for dynamic art

● wait room food servers

● wait room librarian

● no front desk

● video testimonials

● **USB memory stick for patient records**

● waiting room TVs

● Kassam TV

● patient transportation

● **real-time wait tracker**

● patient information for visually impaired

● computer kiosks

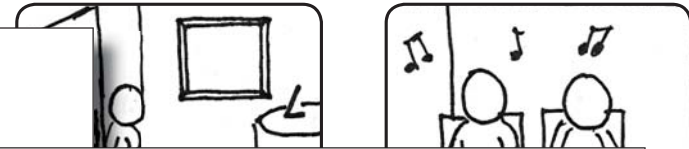
● patient advocate

● **mentor**

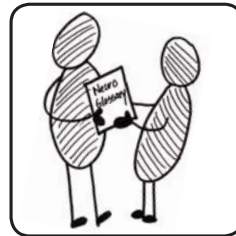
high cost

Concept Validation

Soothing Music



Glossary of Neurosurgery Terms

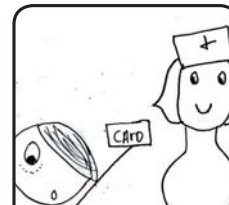


On Adam's first visit to the clinic, the check-in nurse gives him a glossary of common terms used in neurosurgery.



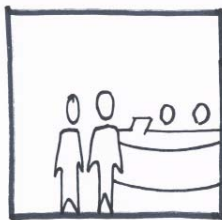
In the exam room, the doctor and nurse list off a number of procedures and medical terms that Adam does not know. He feels confused and overwhelmed.

Patient Information Card



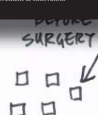
Her medical history and information prints out for her to verify. Debbie's glad she doesn't have to recite any information or fill out paperwork.

Wall of Hope



Bonnie and her husband arrive at the clinic for the first time, anxious and tired.

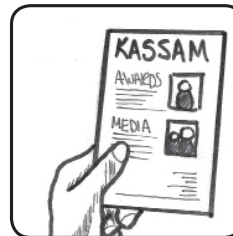
During the visit, Bonnie notices a wall with testimonials from previous patients.



Dr. Kassam Fact Sheet



Helen is concerned with her surgery.



She is given a sheet providing facts and information on Dr. Kassam.



Helen is reassured that she is in good hands. She is able to focus on other things.

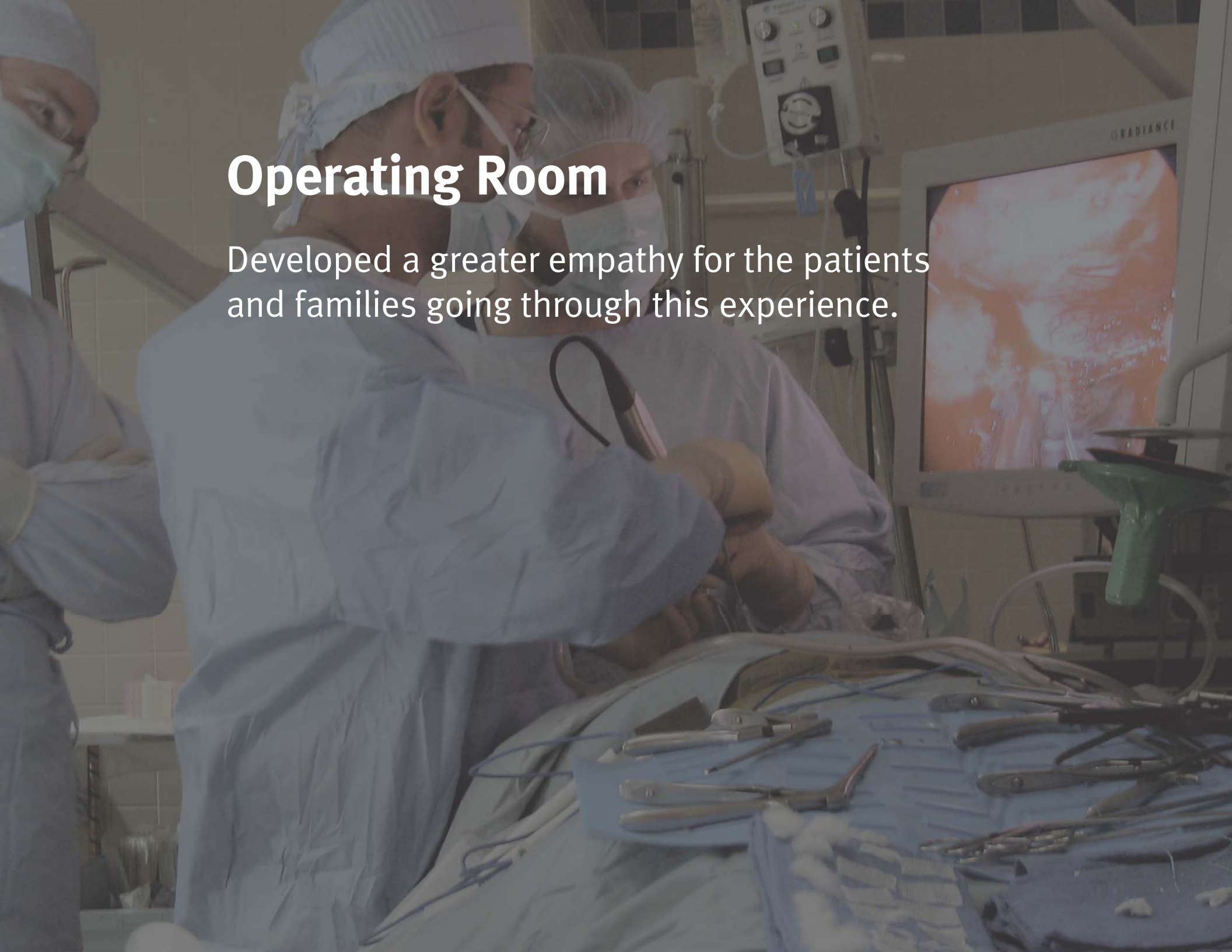


The image shows a person with red hair, wearing a beige cardigan over a dark top and olive green pants, sitting on a blue medical examination table. They are holding a white 'Patient Information Card' in front of them. The card has three diagrams: the first shows a person holding a card, the second shows a card being placed in a slot, and the third shows a person at a desk. A blue pen and a small notebook are resting on their lap. In the foreground, another person's hand is visible, holding a large, white, translucent sheet of paper that partially obscures the view. The background is a plain white wall with some medical equipment and a red trash bin visible on the right.

Validation with Patients

Operating Room

Developed a greater empathy for the patients and families going through this experience.



A photograph of a doctor, Dr. Kassam, sitting on a medical table with a patient. The doctor is wearing a white lab coat and glasses, and is looking towards the patient. The patient is a woman with blonde hair, wearing a beige cardigan over a black top, and is sitting on the table. The background shows a medical office setting with various equipment and a clock on the wall.

Design Implications

Provide patients with access to resources so they feel in control of their experience.

Embody the comfort Dr. Kassam provides.

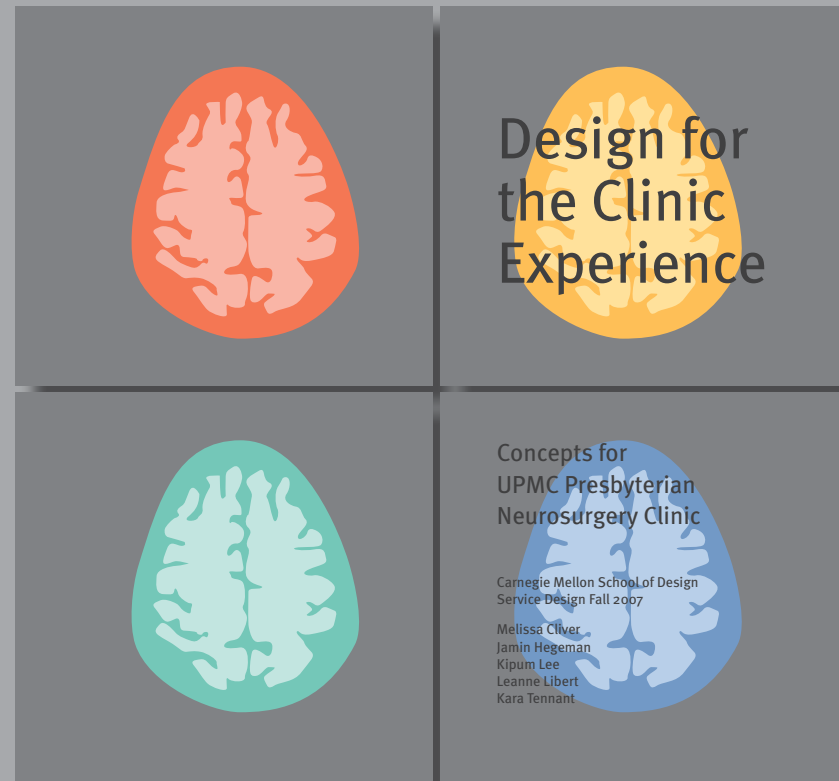
Increase interaction between patients and Dr. Kassam and his staff.

Concept and Process Book

Holistic view of the clinic

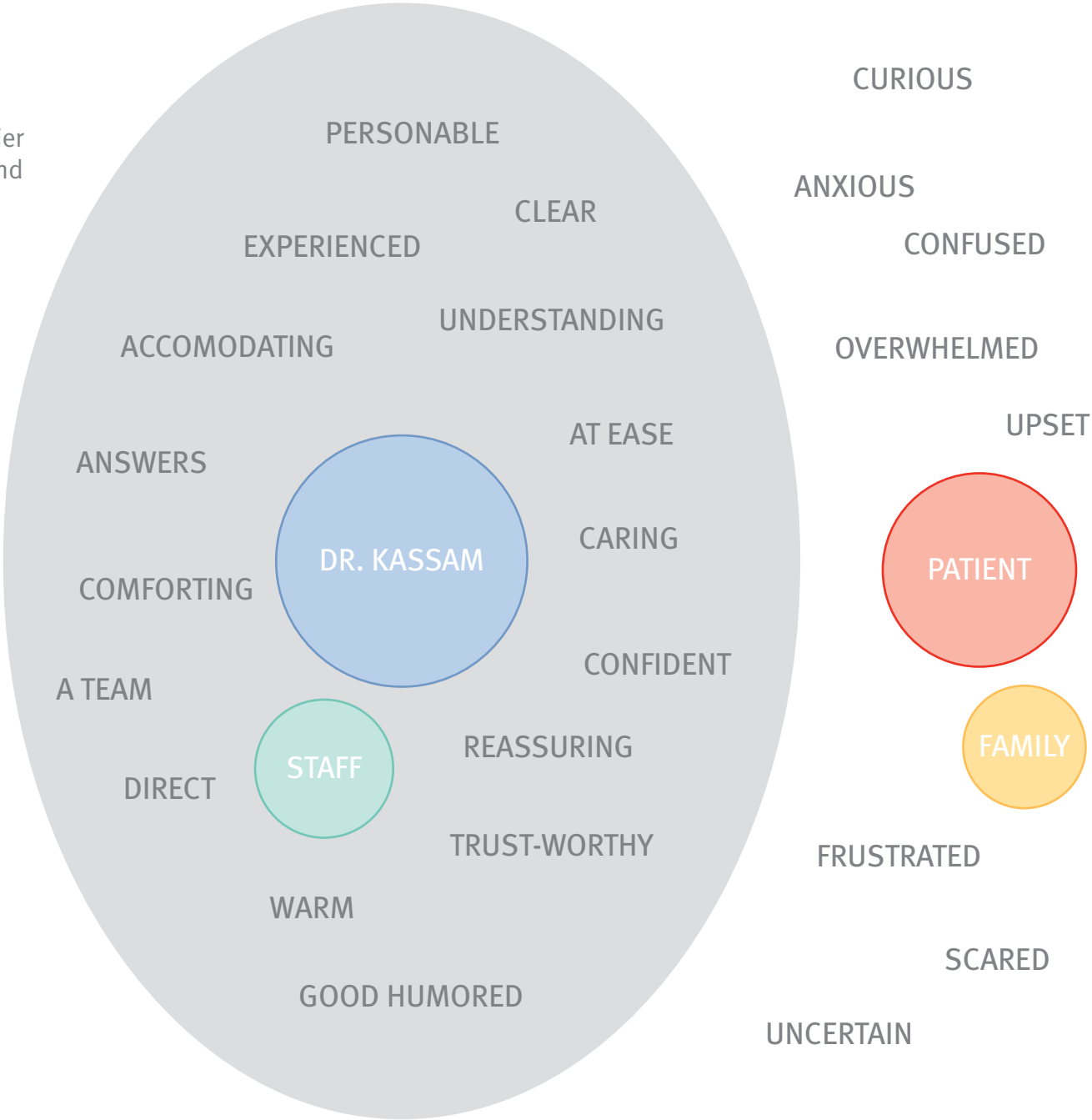
Sharing what we learned

Providing concept ideas
to further explore and
continue the work that
we started



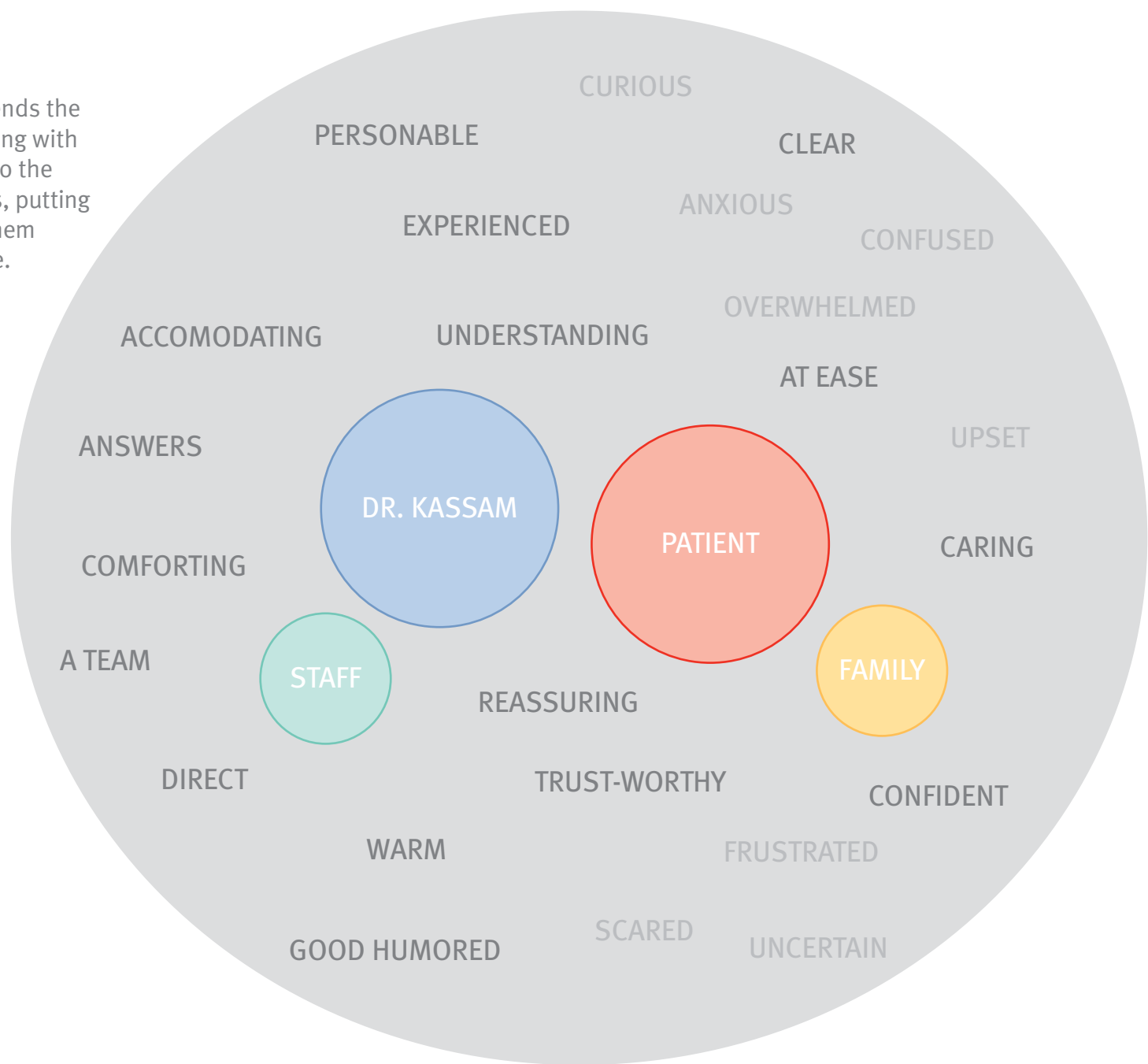
Current State

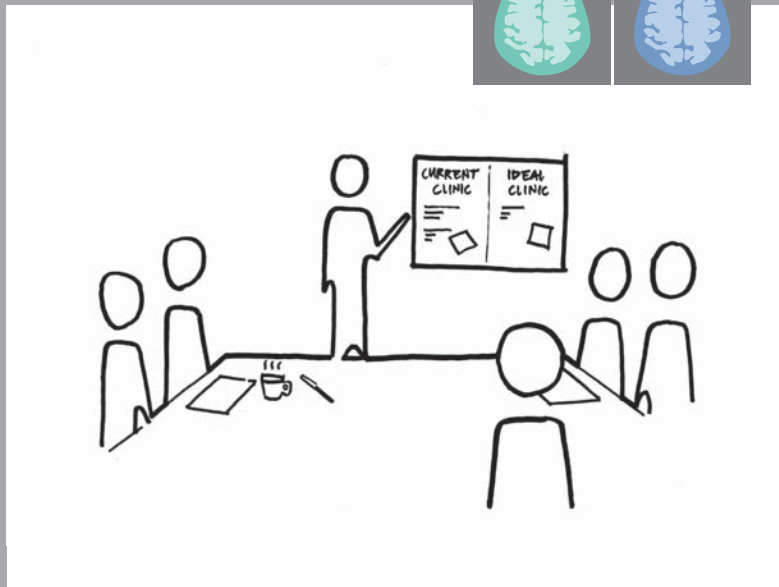
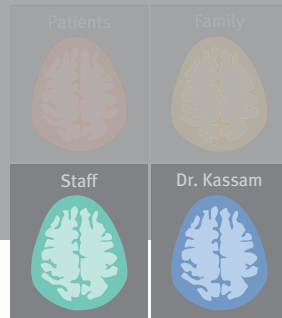
Lack of interaction at different points throughout the journey creates a barrier between patients and their families and the positive experience of being with Dr. Kassam and his staff.



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.

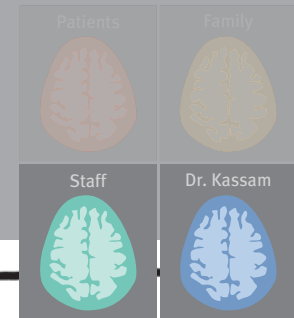




Clinic Staff Meetings

Needs met

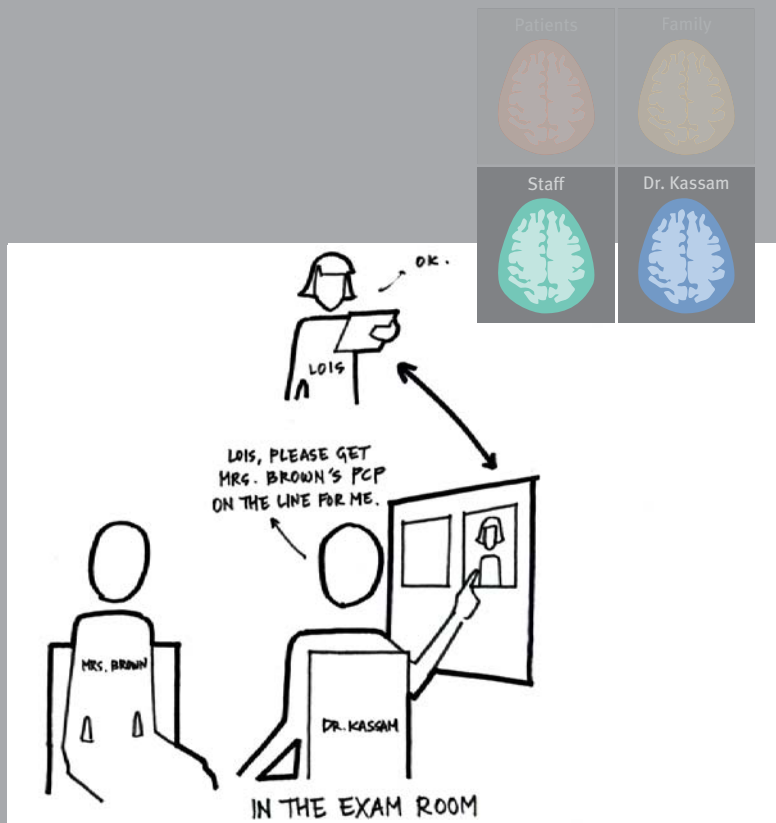
- Forum for discussion and reflecting
- Team-building



Clinic Staff Locator

Needs met

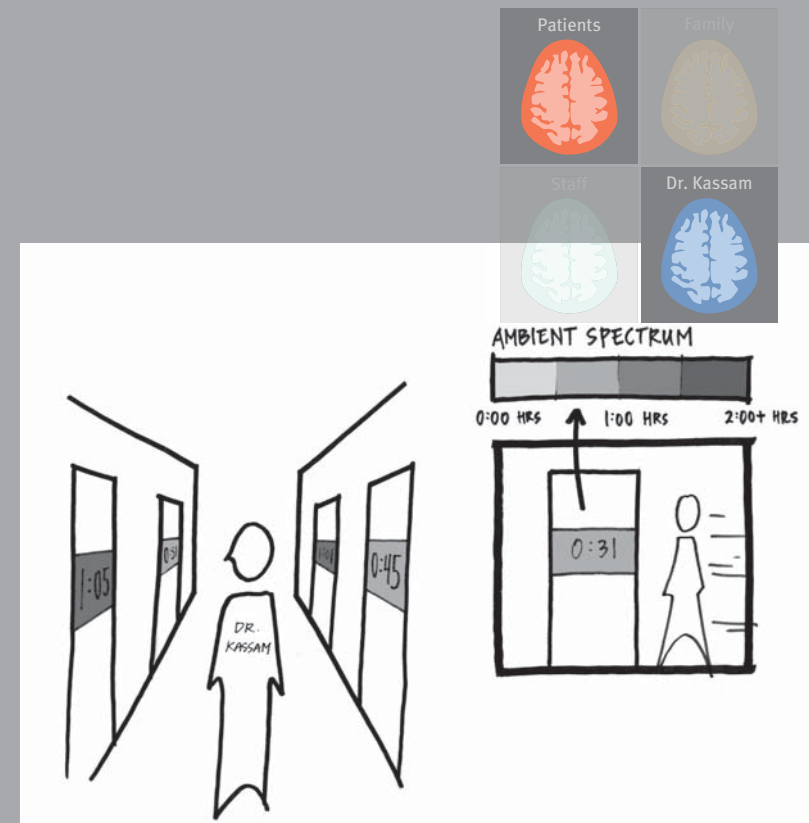
- Finding each other and Dr. Kassam
- Reduction in tasks



PCP Direct Link

Needs met

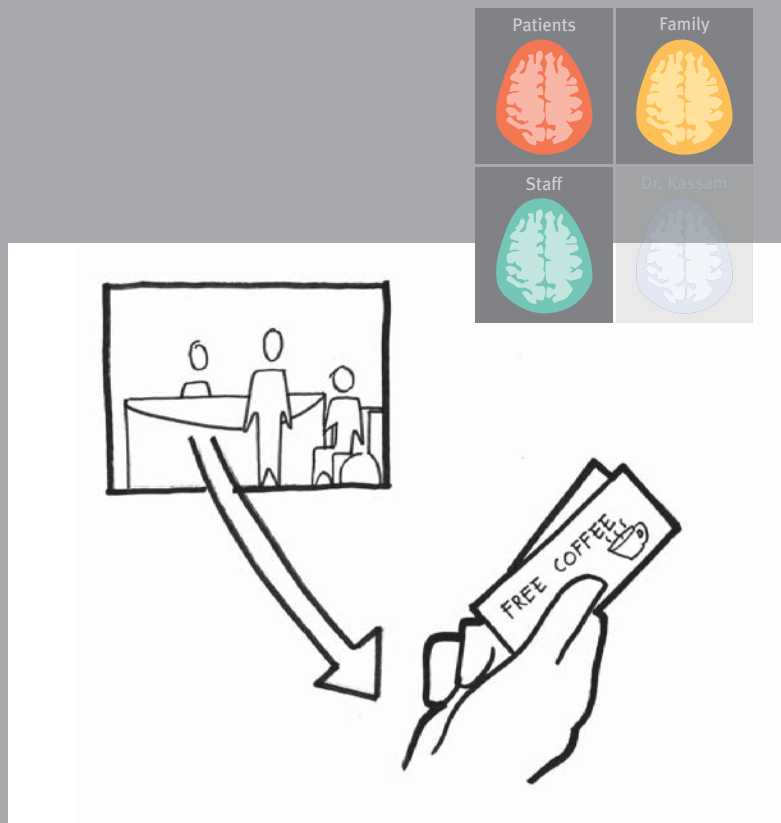
- Support his staff
- Time for himself



Wait-time Indicator

Needs met

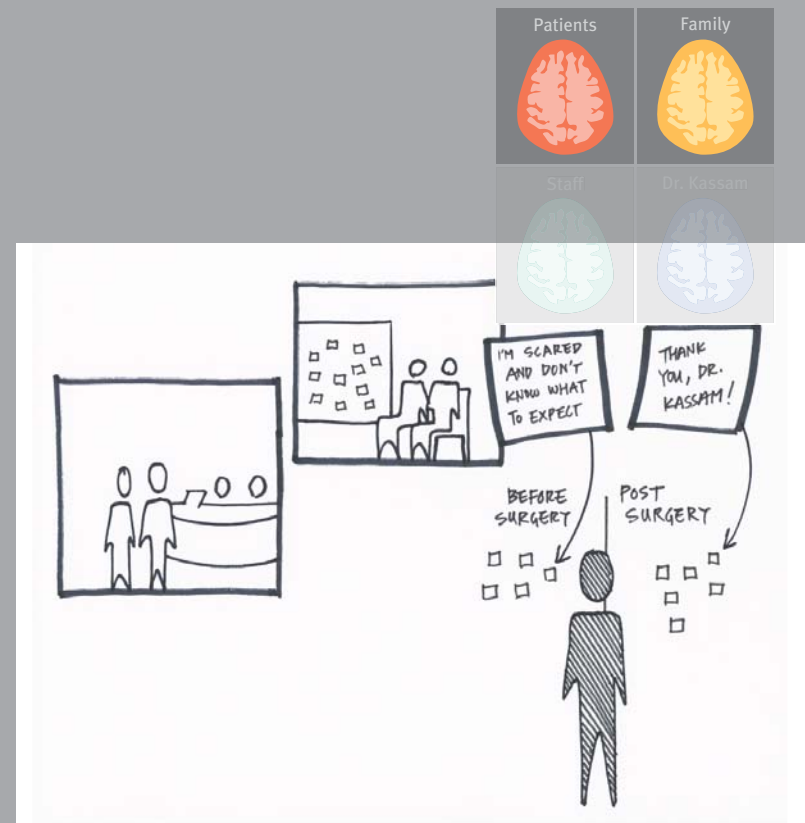
- Desire to see everyone
- Time for himself
- Better communication



Gift from the Clinic

Needs met

- Comfort
- Feeling of good will from staff



Wall of Hope

Needs met

- Reassurance
- Information
- Distraction

Welcome Booklet

Embodying Dr. Kassam and the clinic

Comfort

Confidence

Warmth

Humor

Bringing Dr. Kassam to the waiting room

Increasing staff service delivery role

Layout of the Book

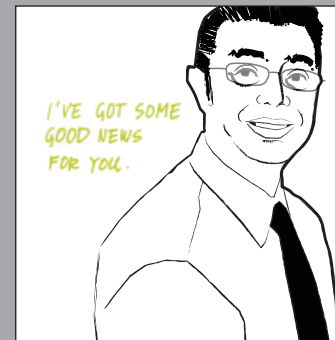
front cover



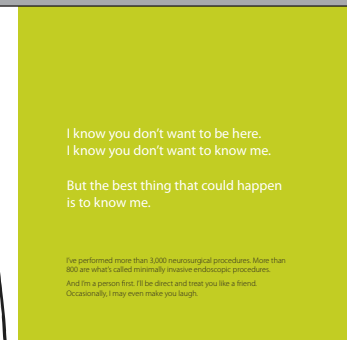
back cover



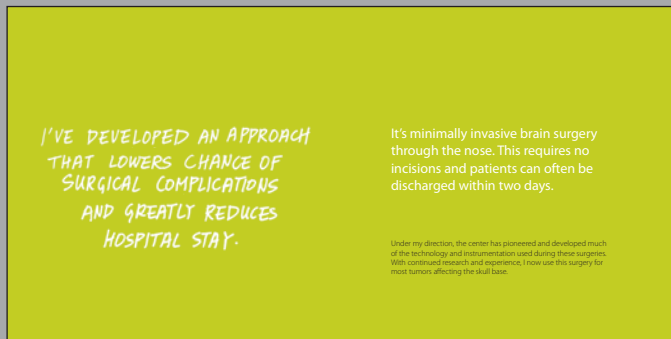
page 1



page 2

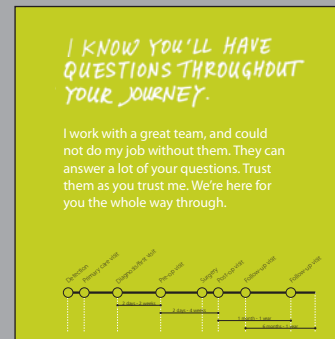


page 3

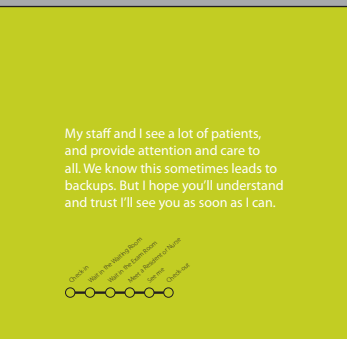


page 4

page 5



page 6





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.



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

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.

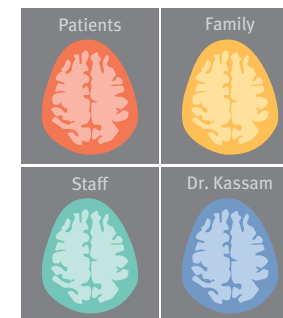
Welcome Booklet

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



Clinic Chat

A Vision for the UPMC Neurosurgery Clinic

Creating a system of interaction,
information, distraction, and support

Extending the comfort of Dr. Kassam and the clinic

You're in Good Hands Text #3425 to Post

 Clinic Chat

Waiting Room Patient 10:37 AM 09/25/2012 A Waiting Room Patient Says:
"Dr. Kassam, what are you doing back there?"

Waiting Room Patient 10:40 AM 09/25/2012 A Waiting Room Patient Says:
"Yeah, things are pretty busy out here in the waiting room."

 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 Burkhardt, RN (Staff) Says:
"Some rooms will be opening up soon."

UPMC | University of Pittsburgh Medical Center
Minimally Invasive endoNeurosurgery Center

Messages from patients, staff and Dr. Kassam appear on a large Clinic Chat display in the waiting room.

Join the Conversation

 Clinic Chat

Common Patient Phrases

brain surgery

Dr. Kassam

facial pain hang in there nurse Lois

so lucky **thank you**

wait time endonasal surgery

Common Dr. Kassam Phrases

clinic website

God bless

good hands good news

great team hello everyone

learn more no incisions

send me questions within two days

UPMC | University of Pittsburgh Medical Center
Minimally Invasive endoNeurosurgery Center

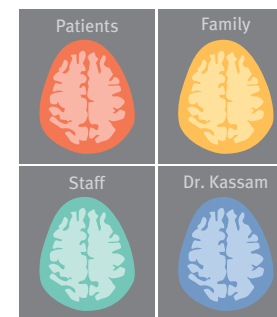
Common phrases from the Clinic Chat appear in a tag cloud on adjacent display to give viewers a general idea of what's been discussed.

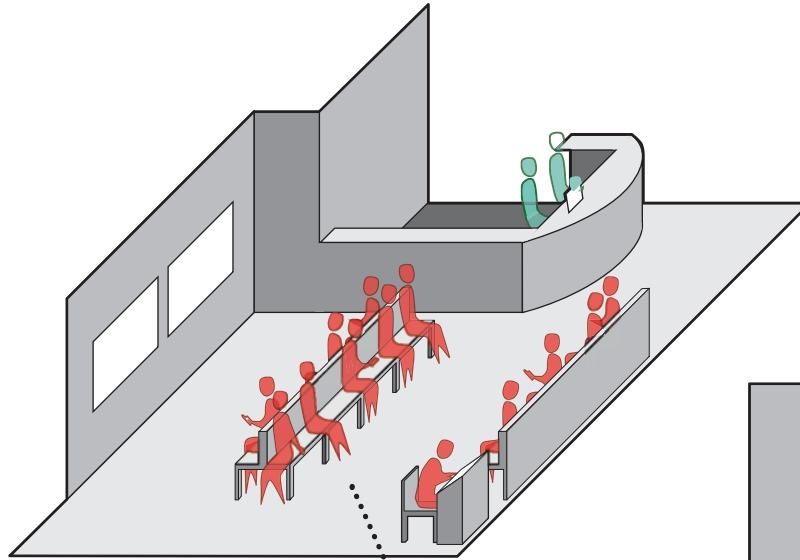
Clinic Chat

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.

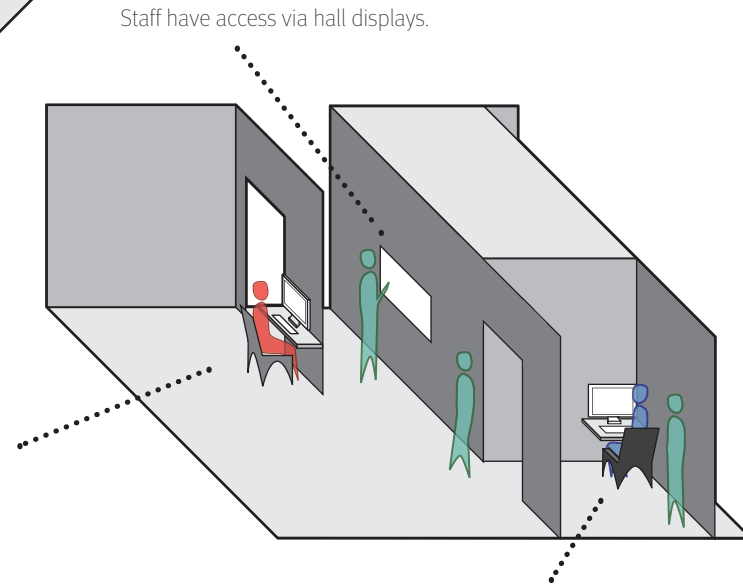
Needs met

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



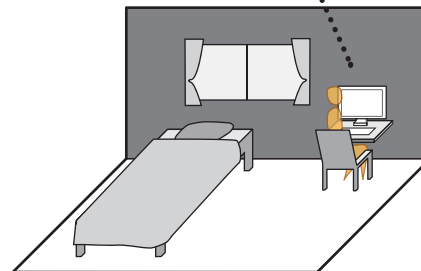


Patients can send messages to Clinic Chat from their phone, personal computer or kiosk in the waiting room, exam room or at home.



Staff have access via hall displays.

Dr. Kassam can reply from the office computer.



Part of a Larger Information System

Includes information about:

Dr. Kassam

Surgery and Side Effects

Clinic Staff

Prescriptions

Could something like Clinic Chat work elsewhere?

We think so.

Designing the Experience Together

Patients, staff, and Dr. Kassam contribute to designing the experience

Wait time is an opportunity to interact with other patients, staff, and Dr. Kassam

The service extends the comfort of Dr. Kassam and his clinic and provides information, distraction, and an experience that is created together with the patients, which increases patient control



Thank you!