



Needfinding for Hospital Emergency Rooms

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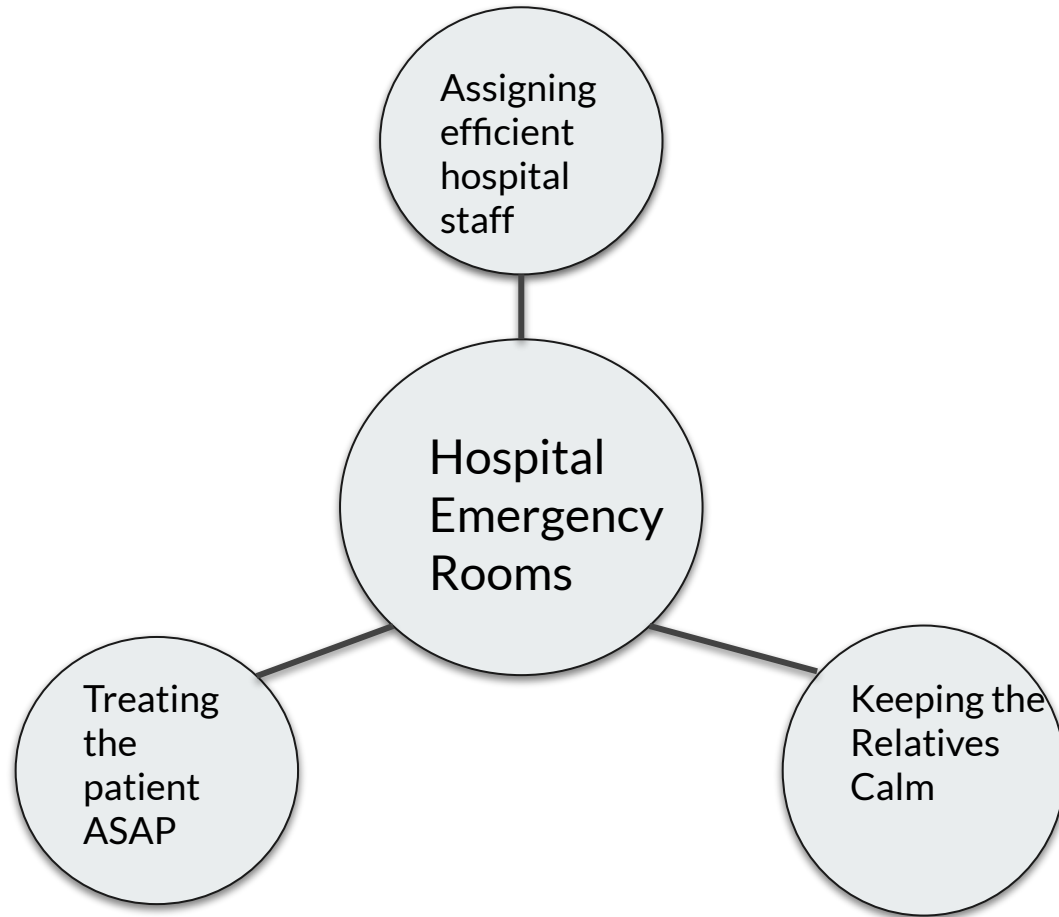
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Focus: Emergency Rooms in Hospitals





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Hospital Staff



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Patient



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Relatives



Survey

- Got general information about people's perspectives of Emergency rooms
- Got a positive response to the idea of an app to help reduce delay in ERs
- Got a better idea about what people needed help with
- Got a few suggestions as to what can be included in our app to make it more helpful



Our interviewees and how we found them

- 1) Local hospital staff (Visited the local hospital)
- 2) Patient who has been to an emergency room (Contacts)
- 3) Relative of the patient who went to the emergency room (Contacts)



Hospital Staff

What is the number of emergency / ICU cases per day?

What causes delay?

What can help reduce the delay?

Do they start treatment even if the form isn't filled?



Highlights

- Cannot order for tests that help conclude disease without forms being filled
- Usually get about 3-5 ICU/Emergency patients a day
- Treatment is usually delayed due to shortage of staff or due to delay in filling of forms
- Electronic forms could help
 - Problem: Not every patient is literate, some of the literate ones don't know English



Patient

How was experience/how they felt?

Was there a delay?

If so what caused it?

How could the experience be better?



Highlights

- Scared/Anxious/Nervous
- Minimal/No delay
- Slight confusion about treatment
- More information about procedure, presence of specialised doctors

Reason to visit ER:

Patient 1:

Teeth hit by a golf club

Patient 2:

Hit by an auto-rickshaw

Patient 3:

Heart attack



Relative

What could've been done to make them more calm and comfortable?

How was experience/how they felt?


Was there a delay?

If so what caused it?



Highlights

- Scared/Anxious/Nervous
- Minimal/No delay
- Slight confusion about treatment
- Help with instant first aid, more information about procedure, presence of specialised doctors



Two empathy maps: hospital staff; patient & relative



Hospital Staff

DOES

- 1) Administers the ER form filling
- 2) Checks for rooms vacancies
- 3) Provides First aid to the patient
- 4) Communicates about the patients health condition to the respective doctor
- 5) Administers anesthesia to the patient
- 6) Treats the patient according to the injury

SAYS

- 1) What is the type of injury?
- 2) What is the patient medical history?
- 3) Who are the relatives of the patient?
- 4) Asks the persons concerned to the patient to fill the ER form
- 5) What are the symptoms?
- 6) How is the accident caused?

EMPATHY MAP OF HOSPITAL STAFF

THINKS

- 1) About room vacancies
- 2) About availability of doctors
- 3) Safety of the patient
- 4) Various symptoms that could conclude a disease
- 5) Precautions to be taken before handling a patient

FEELS

- 1) Tired: long working hours
- 2) Sympathy: for the patient due to their condition
- 3) Frustrated: long procedures during admission
- 4) Confused: cannot conclude disease based on symptoms
- 5) Worried: he/she has to treat the patient according to the concluded disease or injury



Patient and relative

SAYS

- Is this a better hospital?
- How long I should wait for my turn?
- Is the nurse and the doctors are reliable?
- What if my problem got worsen in mean time?
- How much it will cost?
- How long should I stay?

THINKS

- Will this is considered as an emergency?
- Which hospital should I visit?
- Will I get a best attending physician?
- Should I have to admit to the hospital?
- Can I be cured or will it leave a scar?
- Will this be expensive?

**Patients and
relatives visiting an
emergency room of
a hospital**

DOES

- Search for a nearby reliable hospital
- Finding a good attending doctor
- Look for the procedures to be done
- Finding alternative way if wait time increases
- Looking for the better treatment to cure the problem
- Waiting for results
- Doing further procedures; discharge or admitting

FEELS

- Confused: Is it an emergency
- Fear: What will happen to me?
Can I able to make it for the expenses?
Will these needs to be admitted?
- Anxious: About waiting time
- Suspect: Of the ability of attending physician
- Happy: To get a experienced doctor
To be able to get discharged



Inferences

- Usually minimal delay
- Need reassurance and strength
- Need more information about condition
- Transparency in hospital procedures



Summary

- Need first aid help
- Need information about available hospitals
- Illiterate patients come to the hospital and can't fill electronic forms by themselves
- Providing detailed medical history of patient beforehand can ensure better treatment

User Persona: Young Adult

Kabir Thappar



"You only live once but if you do it right, once is enough"

Age: 22 years

Work: Student

Family: Single

Location: India

Character: Fun-loving, active, optimistic, tech-savvy

Goals

- Travel the world
- Grow in his career
- Live life to the fullest

Frustrations

- Not being able to travel to every location that he wants
- Wasting time filling forms after going to the ER
- Going to the ER only to find that there are no vacancies

Bio

Kabir is a senior in college with a passion for travel. He loves exploring different places and cultures across the globe. His main hurdle? Asthma. Kabir has been getting Asthma attacks since he was 8 years old. With this disease always by his side, it's not easy for him to travel to certain places. Nevertheless, he tries to keep his health in check and continues to travel wherever he can!

User Persona: Mom

Nalini Vishwakumar



"When life gives you a hundred reasons to cry, show life that you have a thousand reasons to smile!"

Age: 37 years

Work: Homemaker

Family: Married with 2 young kids

Location: India

Character: Loving, caring, active, efficient, tech-savvy

Goals

- Her family is her highest priority
- Take care of her two young kids to the best extent possible
- Wants things to be in her control, especially in panic / emergency situations

Frustrations

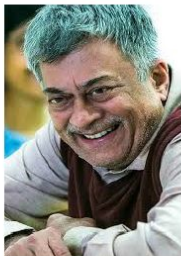
- Not having all the important information in one place during an emergency
- Not knowing which hospital is more available (to reduce delay in treatment)
- Not knowing what first aid to give her children in certain situations

Bio

Nalini is a homemaker and a mother of two extremely active, energetic and curious young children. She is constantly on her toes and tries to keep an eye on them most of the time if not all the time. Even then, they manage to get hurt or into some sort of trouble. This usually leads to Nalini rushing them to the hospital. She rushes to the hospital more often than she'd like to and some assistance during that time could really help her.

User Persona: Old Man

Venkob Rao



"The mind will not always remember what happened, but the heart will always remember the feeling"

Age: 75 years

Work: Retired

Family: Widower

Location: India

Character: Confused, quiet, keeps to himself, doesn't trust people easily

Goals

- Health is number one priority
- Take medicines on time
- Get through each day as smoothly as possible

Frustrations

- Rarely remembers anything about himself
- Has multiple attacks of hallucinations
- Experiences constant struggle with his surroundings

Bio

Venkob Rao is a 75 year old Alzheimer's patient, struggling to remember who he is. His daily challenge is just being able to get through the day as peacefully as possible. He gets frequent attacks and needs to be attended to immediately. His children live in different parts of the world and post the death of his wife, they checked him into an old-age home where he is now being tended to.