Innovating patient care: a human-centred design approach

Investigating the flow of patient care and organisational systems through the application of a human-centred design process.

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Transformation through Open Innovation event
Queen Elizabeth Hospital Campus, Glasgow
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human-centric
open organisation
open innovation
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Open innovation

‘... open exchange, collaborating participation, rapid prototyping, transparency, meritocracy and community engagement.’

Open innovation

‘… where contributors work together as a community, building on each other’s work, to arrive at the best solution to a complicated problem.’

Open organisations

‘... able to respond more quickly because they have access to a collective knowledge and the ability to make use of it.’

Our design approach
Research tools applied

OBSERVATIONS

INTERVIEWS

SHADOWING
Making sense of the research
Mapping user journeys
Returned to areas for deeper investigation

- A&E
- Discharge
- Communication
- Patient involvement
- Pharmacy
- Trust
Patient’s emotional journey

Entry | Diagnosis | Treatment | Recovery | Discharge

Stress

Happiness

Understanding

Waiting

Entry: Arrival, Reception, Triage Room, Doctor meeting
Diagnosis: Test, Treatment
Treatment: Ward, Test
Recovery: Consultation, Surgery, Second Ward, Monitoring, Discharge
Discharge: Medication, Transport, Homecare

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Patient involvement

Entry
- people are not aware of their health
- not well educated
- people that don’t need to go to the hospital

Diagnosis
- waste of doctors time (and resources)
- no activity
- unpleasant, noisy, busy, strange environment
- feeling uncomfortable cannot sleep, relax, worried, anxious
- no understanding of diagnosis
- confusion, panic, stress

Treatment
- information is not well fitted to patient
- no activity
- no time planning is communicated to patient
- longer and bad recovery
- doesn’t help the patient
- waste of doctors time
- relatives are worried, confused, stressed

Recovery
- no activity
- (unnecessary) waiting time
- bored, frustrated
- passive patients
- possible waste of time and beds
- relatives cannot help the patient

Discharge
- no additional info given to the family
- relatives are worried, confused, stressed
- waste of doctors time
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Bed Manager Report
- Predictions E-Whiteboard
- Symphony System
- PMS System
- E-Whiteboard System
- Huddle Information
- Discharge Coordinator

* Data from NHS Report Peak Information Transfer

Reliability

Information journey

12 am 3 am 6 am 9 am 12 pm 3 pm 6 pm 9 pm
Developed design outcomes through feedback
Design interventions

Triangle of Communication

Role:

KEY:
U: UNDERSTANDING
- How clearly was the information transmitted?

K: KNOWLEDGE
- How accurate was the information received?

T: TRUST
- How well did people rely on the information that was being passed?
Design interventions

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Design interventions

Framing the issue

State an issue you discovered during the roleplay:

That's because:

That's because of:

That's because of:

That's because of:

CHARACTERS

Patient, Agnes

18 years old

She lives with 2 cats

and her neighbour

John. She has an

university education.

Relatives:

Daughter: Sue

and Nephews.

They are worried about Agnes.
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Product Design Year 3

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Product Design Year 3