NHSXGSA

using wayfinding to create a reassuring presence

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NHS collaborative project
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discover

define

develop

deliver

brief

This project was the third collaboration between NHS and GSA. The subject for this year was Endoscopy. An endoscopy is a procedure where the inside of the body is examined using an instrument called an endoscope. As it is both a procedure and an experience and involves a wide range of interconnecting relationships, we aim to explore, gain insights and propose design opportunities concerning patient journeys involving before, during and after endoscopy procedures.

the team

The Royal Infirmary of Edinburgh

The University of Edinburgh
Consort Healthcare

NHS
Lothian

Consort
healthcare

WAY OUT

WAY IN

the hospital

field & desk research

We mapped all the information that we processed on the wall and presented it to the others. As the desk-research team, we noticed how it could be valuable for the field researchers to organise these two days of research prior going into the hospital. This way, a group of unorganised students making casual observations, could become a prepared research team, using different social research strategies.
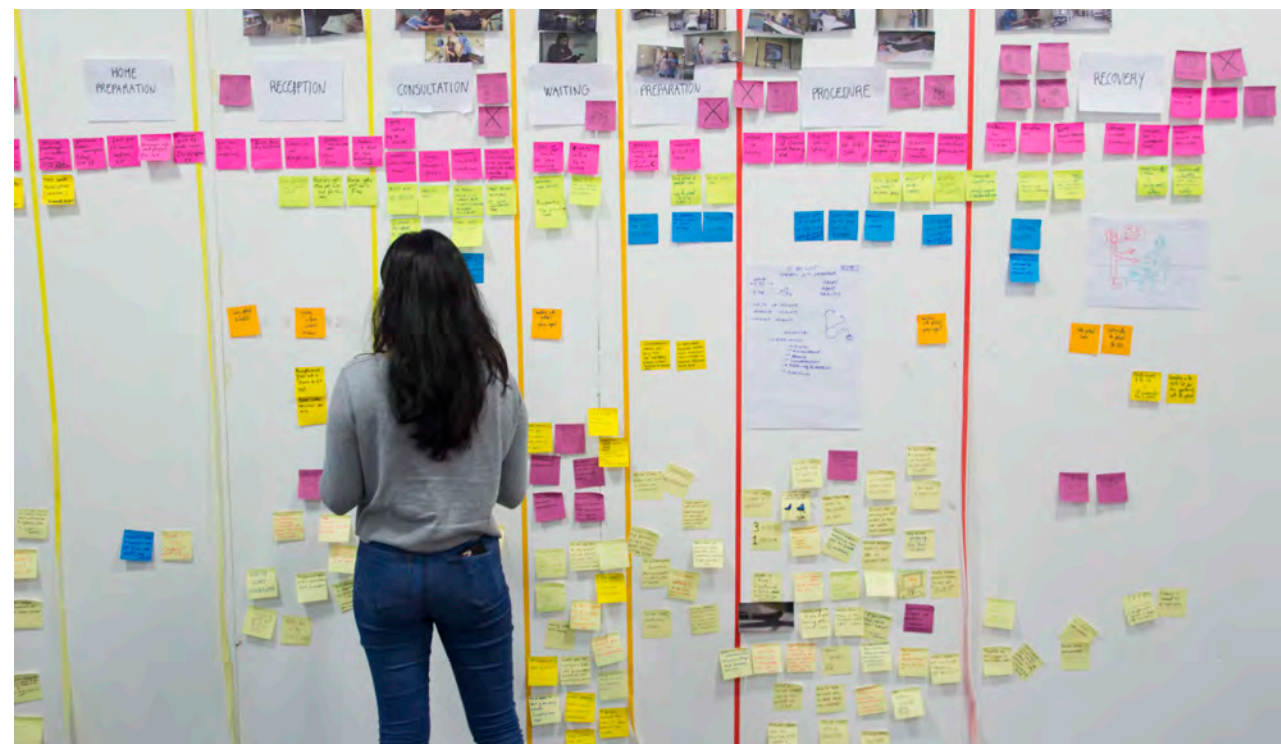
As one hospital dropped out towards the end, three people per group needed to stay in Glasgow to do desk research while the others headed to the hospital in Edinburgh to make their observations. I was part of the desk research team. We investigated different social research strategies, learnt about user journeys and browsed the internet for interesting studies concerning endoscopy.

data
organisation

Everyone came back with a ton of observations that they wanted to discuss. But how to organise the info? We started off by making mindmaps with the different rooms being main themes. We quickly noticed the static character of paper, turning to post-it notes to increase flexibility.
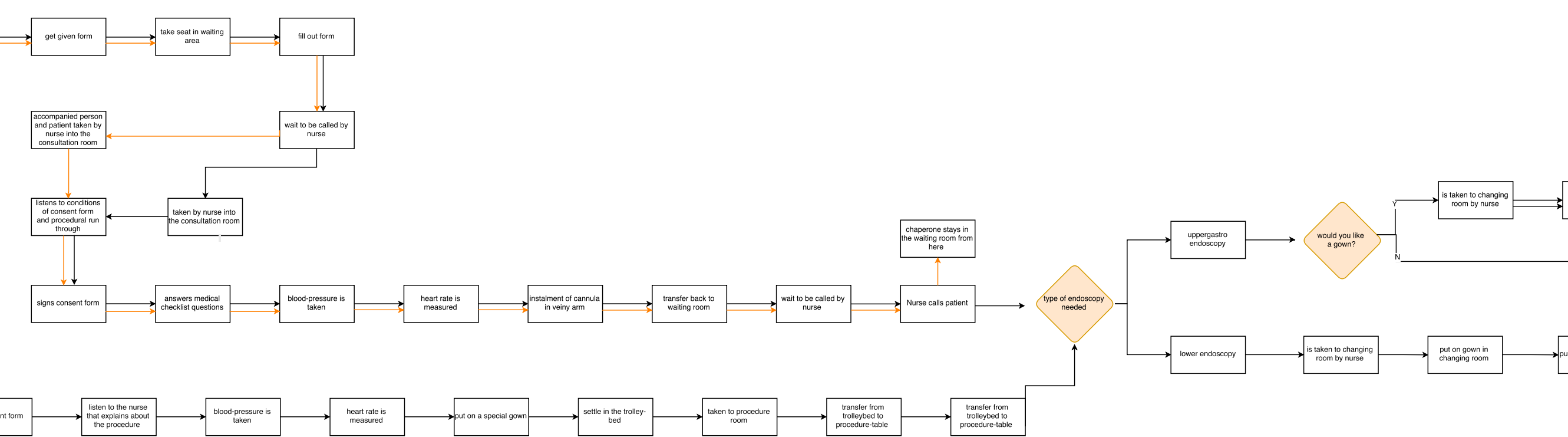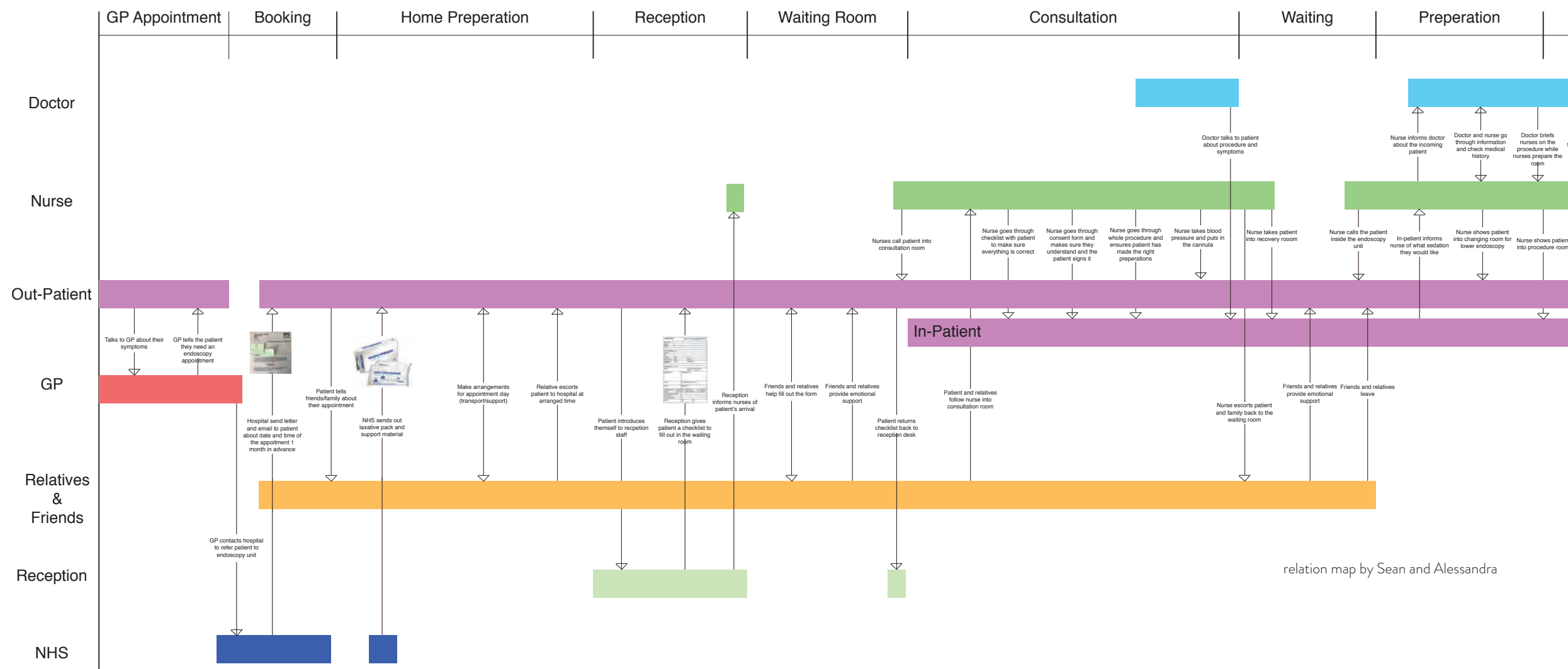
patient journey

The pink post-it line represents every single step the patient undergoes during the complete endoscopy procedure, from the referral by the GP to back home. Other colours are other actors, like the nurses and doctors. Underneath the actions, we summarized our insights. Using post-its was great to start off but we rapidly decided we wanted one big data map where the patient is central, describing the different steps, mapping the relationships between different actors and adding an emotion line.
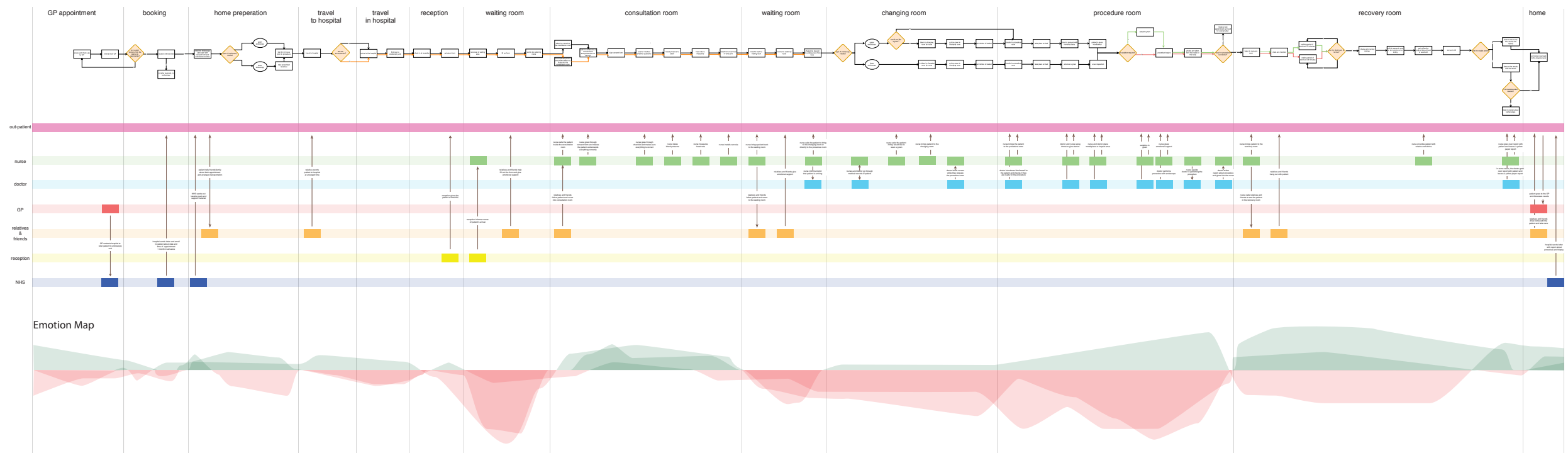
get given form → take seat in waiting area → fill out form

fill out form → wait to be called by nurse

wait to be called by nurse → accompanied person and patient taken by nurse into the consultation room

wait to be called by nurse → taken by nurse into the consultation room

accompanied person and patient taken by nurse into the consultation room → listens to conditions of consent form and procedural run through

taken by nurse into the consultation room → listens to conditions of consent form and procedural run through

listens to conditions of consent form and procedural run through → signs consent form

signs consent form → answers medical checklist questions → blood-pressure is taken → heart rate is measured → instalment of cannula in veiny arm → transfer back to waiting room → wait to be called by nurse → Nurse calls patient

chaperone stays in the waiting room from here

Nurse calls patient → type of endoscopy needed

type of endoscopy needed → uppergastro endoscopy → would you like a gown?

would you like a gown? — Y → is taken to changing room by nurse

would you like a gown? — N

type of endoscopy needed → lower endoscopy → is taken to changing room by nurse → put on gown in changing room → pu...

...nt form → listen to the nurse that explains about the procedure → blood-pressure is taken → heart rate is measured → put on a special gown → settle in the trolley-bed → taken to procedure room → transfer from trolleybed to procedure-table → transfer from trolleybed to procedure-table

In a collaborative effort, I mapped the different steps in a flowchart, a tool which is mostly used by programmers to keep an overview of the different actions. This way, we could incorporate every single step without losing the overview. Simultaneously, two others made a relationmap that emphasized the different interactions between the actors involved in the endoscopy procedure. I brought the two maps together and later, an emotion line was added.

relation map by Sean and Alessandra

Column headers (swimlane phases):
GP Appointment | Booking | Home Preperation | Reception | Waiting Room | Consultation | Waiting | Preperation

Row labels (actors):
Doctor | Nurse | Out-Patient | GP | Relatives & Friends | Reception | NHS

In-Patient

Annotations:
- Talks to GP about their symptoms
- GP tells the patient they need an endoscopy appointment
- Hospital send letter and email to patient about date and time of the appointment 1 month in advance
- Patient tells friends/family about their appointment
- NHS sends out laxative pack and support material
- Make arrangements for appointment day (transport/support)
- Relative escorts patient to hospital at arranged time
- Patient introduces themself to reception staff
- Reception gives patient a checklist to fill out in the waiting room
- Reception informs nurses of patient's arrival
- Friends and relatives help fill out the form
- Friends and relatives provide emotional support
- Patient returns checklist back to reception desk
- Nurses call patient into consultation room
- Patient and relatives follow nurse into consultation room
- Nurse goes through checklist with patient to make sure everything is correct
- Nurse goes through consent form and makes sure they understand and the patient signs it
- Nurse goes through whole procedure and ensures patient has made the right preparations
- Nurse takes blood pressure and puts in the cannula
- Doctor talks to patient about procedure and symptoms
- Nurse takes patient into recovery room
- Nurse escorts patient and family back to the waiting room
- Friends and relatives provide emotional support
- Friends and relatives leave
- Nurse informs doctor about the incoming patient
- Doctor and nurse go through information and check medical history
- Doctor briefs nurses on the procedure while nurses prepare the room
- Nurse calls the patient inside the endoscopy unit
- In-patient informs nurse of what sedation they would like
- Nurse shows patient into changing room for lower endoscopy
- Nurse shows patient into procedure room
- GP contacts hospital to refer patient to endoscopy unit

I thoroughly enjoyed the mapping experience as I had never mapped such a complicated environment. Although it is not perfect, nor was it used by many, it was the mapping itself which made me understand the procedure and its underlying relations. In our miniteam, we later used the map to define design opportunities.

defining
opportunities

Clustering insights and summarising them into concise and tangible cards, helped us defining a design direction. We managed to organise all of our insights in 12 themes. The benefit of the physical cards was the possibility to reorganise them. We analysed four umbrella themes which we divided among four groups.

1 — Appointment reminders
Reducing the risk of patient forgetting procedure or medication

2 — 1 patient - 1 nurse
Humanising the bond between patient and nurse

3 — TO A MORE HOMELY ENVIRONMENT
How can we make the different rooms feel more homely?

5 — VISUAL COMMUNICATION
Entertain/Inform ME

6 — WHAT'S IT LIKE ON SEDATIVE?
Harness the feeling of being on sedative to create a new experience

7 — A SIMPLE GUIDE TO MEDICAL JARGON
Can we remove the language barrier of medical terms between patients and doctors?

9 — APPOINTMENT CANCELLATION
Relatives affect the patient's journey

10 — good distractions.
'just try not to think about it.......'

11 — The Patient as the priority.
'Hellooo.....?'

At this point in week two, the mini-teams were born. Together with Alison and Tony, we decided to take on three opportunity cards and develop a mission statement from these. We realised we needed to constrain ourselves and define a very specific design challenge. But what do we want to spend the next four weeks on?

How might we place the patient at the heart of the process?

feedback

The following day, we spent mapping all the different elements that lead to patient centred care. We looked at things such as "patient expectation" and "patient involvement", discussed hierarchy and the "tone of voice" of the communication towards the patient. And what about feedback? We believed that by stimulating a feedback culture, we can make the patient feel valued.
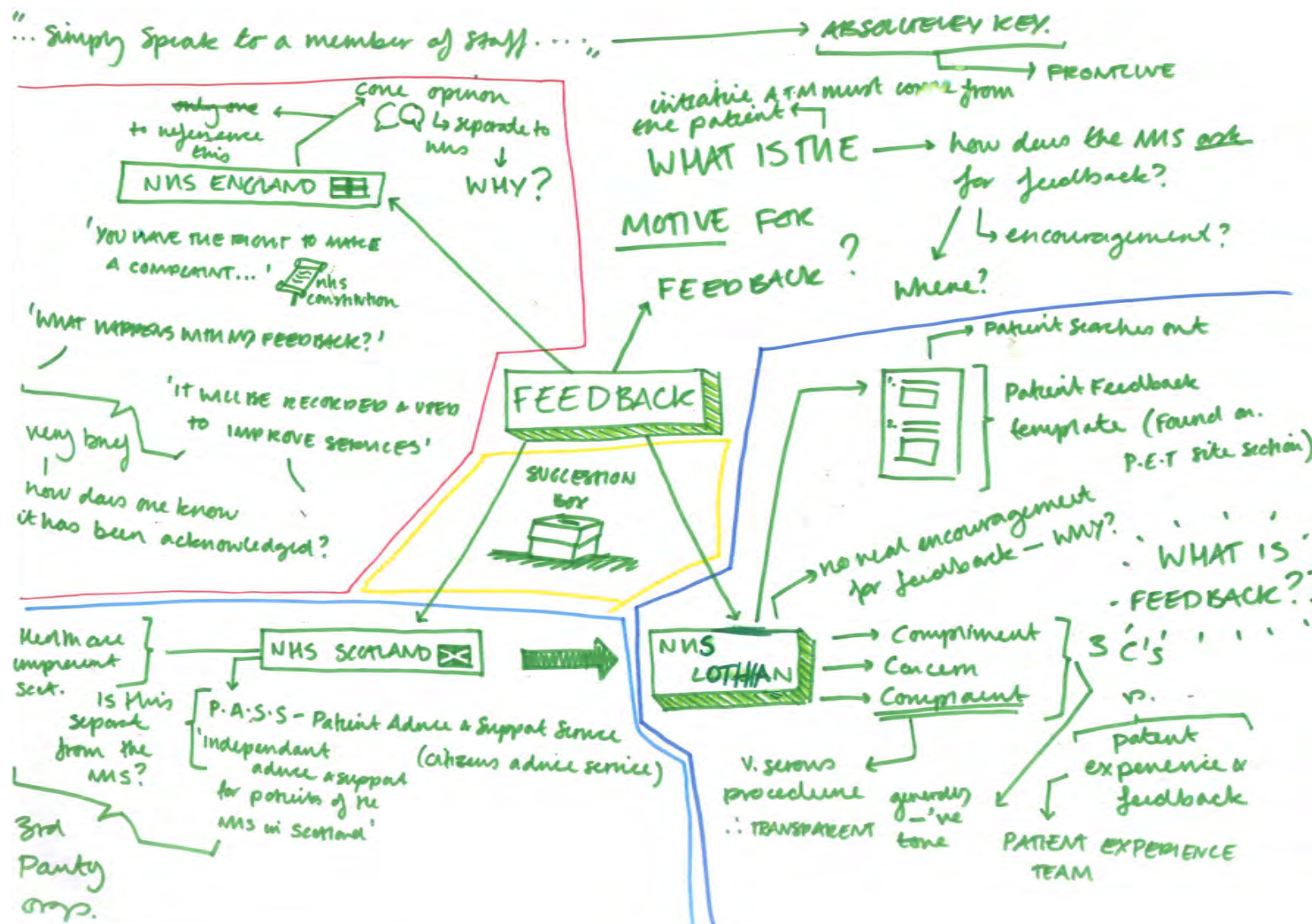
For one morning, we screened the web, trying to figure out how the NHS deals with feedback. Also this time, we ended up with a mindmap to summarise our research. We noticed that the NHS seems to pretend to care about feedback, because they have to as a major instution, but don't really know how to deal with it. First of all, they weren't getting any feedback. And if so, it was a compliment to the nurse or a general complaint. The suggestions box in our endoscopy unit made room for the christmas tree so the last trace to feedback was erased. We decided to do something about that and developed three concepts to stimulate patients to give valuable feedback and therefore feel listened to.

Feedback Lottery

sketch by Alison
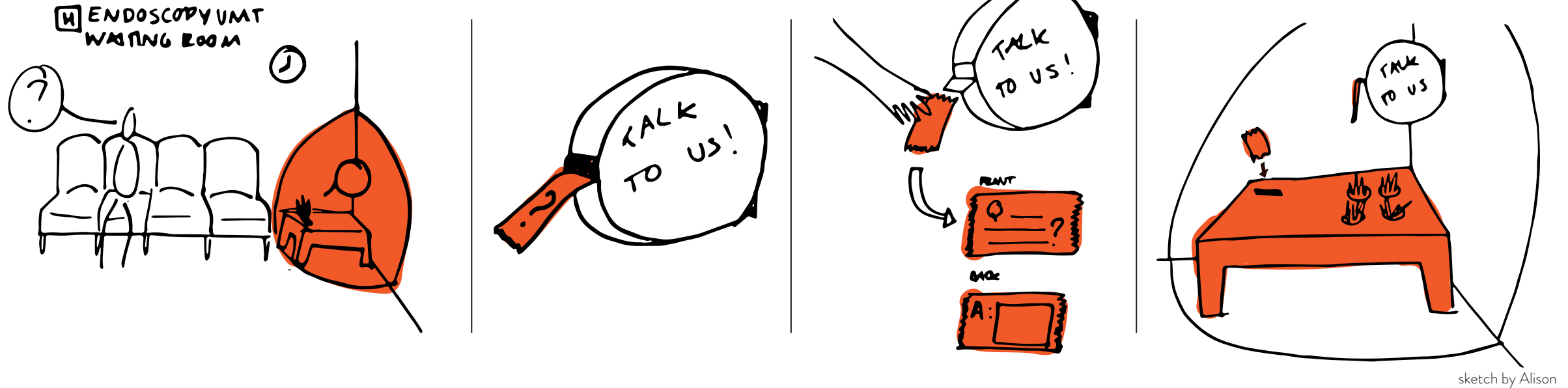
Giving feedback sounds boring from the start. The dry feedback forms with scary open questions don't really stimulate patients to tell the NHS how they feel. Therefore, we developed the feedback lottery, with questions formulated in bitesize bits on little tickets. The patient can rip a ticket from the roll, answer the question on the back and drop in the feedback station.The character of the questions gives the patient the opportunity to envision their own healthcare and simultaneously distracts anxious patients in the waiting room.

| What are the reasons, despite the very low risk, that endoscopy is a feared procedure? | If you were given a 1000 pounds to invest in the waiting room, what would you improve? | If you could choose your age forever, what age would you choose and why? | If you could change something about the hospital building, what would it be and why? | What is the nicest thing anyone of the hospital staff has done for you or said to you today? |
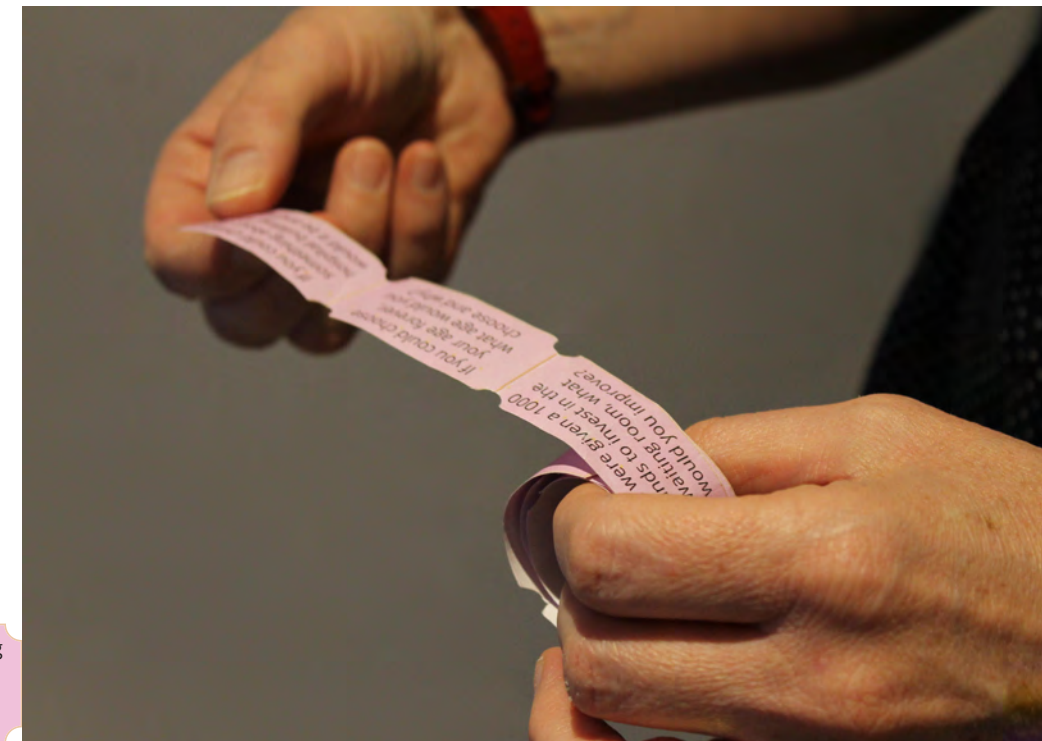
Forms of Feedback
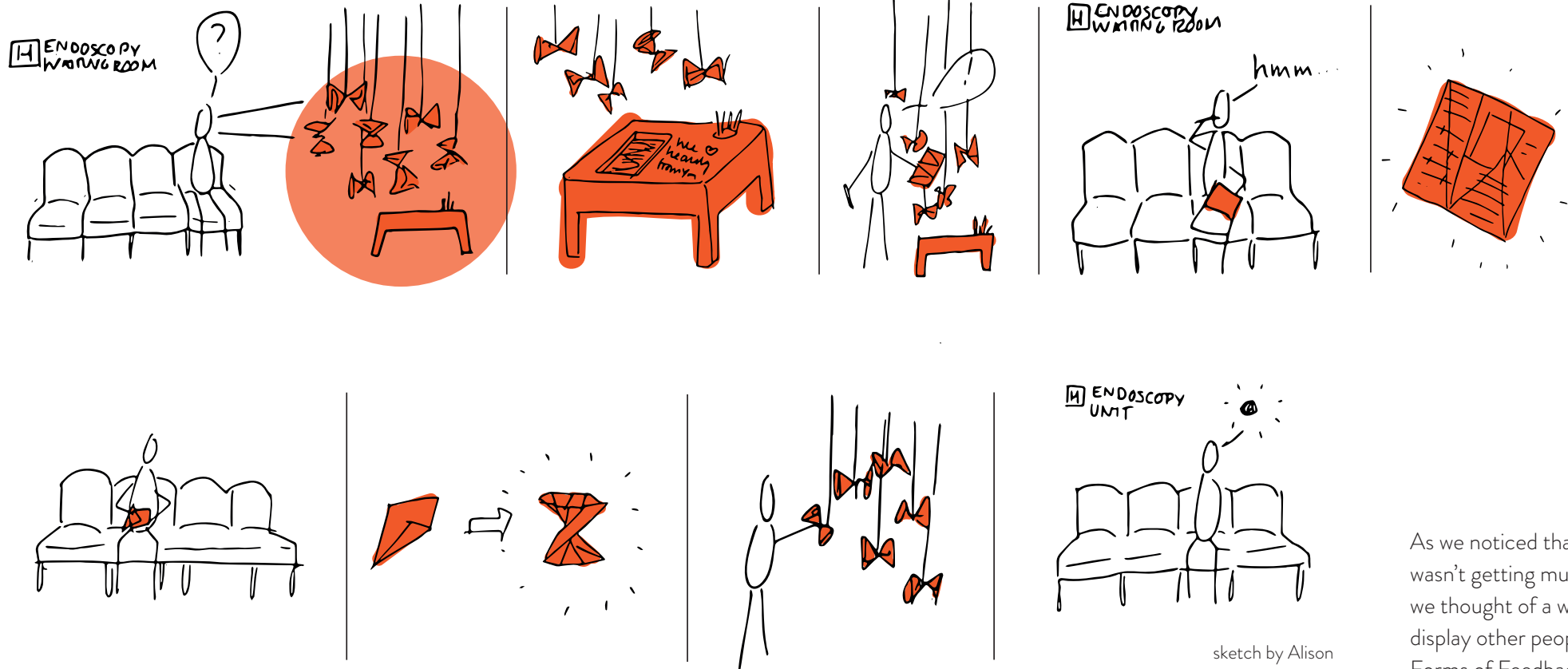
sketch by Alison

As we noticed that the suggestions box wasn't getting much care in the hospital, we thought of a way to exhibit and display other people's feedback. Through Forms of Feedback, the given forms can be folded into an abstract shape that afterwards can be hung up. By displaying other patient's stories, one might be enticed to write a feedback themselves to be able to fold the form and hang it up. Folding has a meditative character, can calm down and distract the patients during their wait.

Forms of Feedback

Forms of Feedback
we value what you think

How likely are you to recommend
our service to a family member
or friend and why?

Did you find the information you
received concerning the endoscopy
procedure clear and valuable?

How does the hospital service
you experienced so far, compare
to your expectations?

If you were unhappy with us, what can
we do to regain you trust?

NHS
Lothian
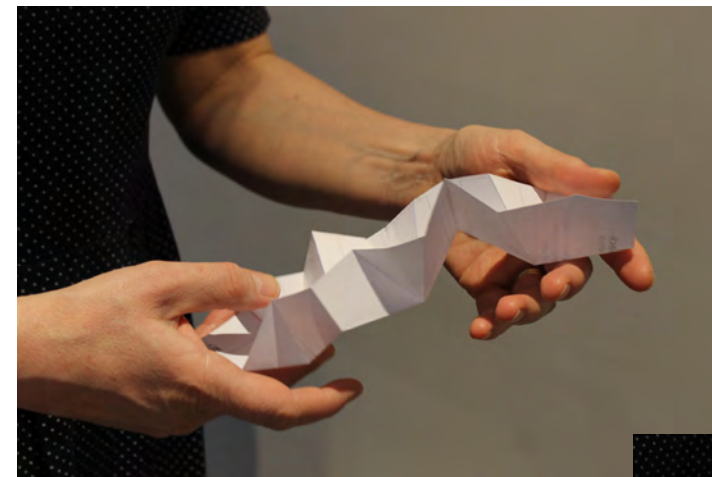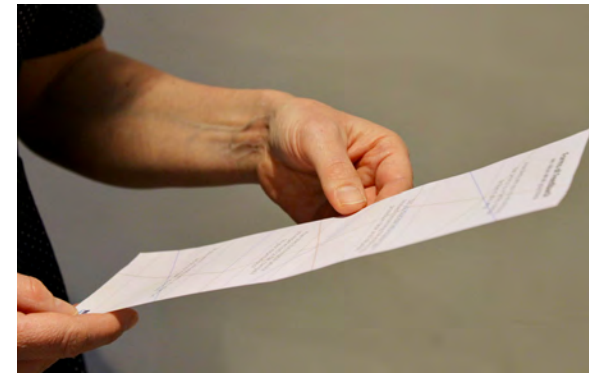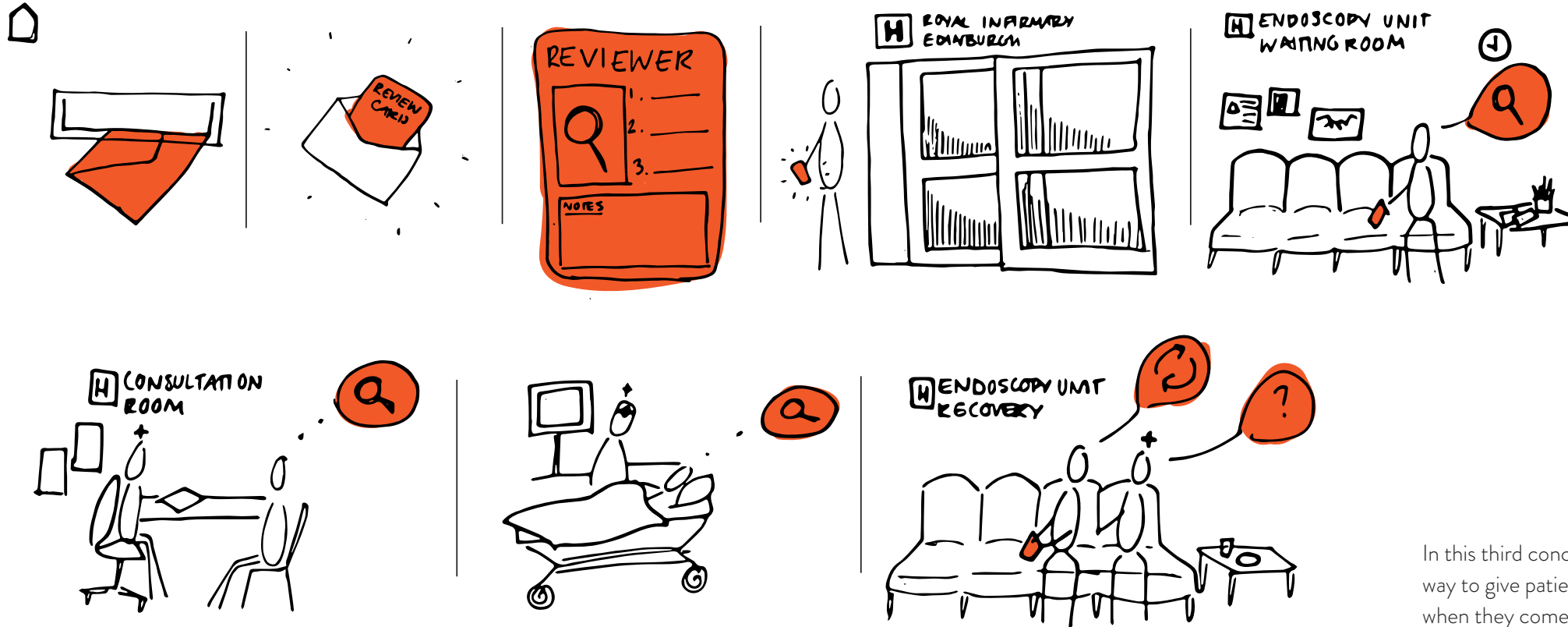
Patient = Reviewer

sketch by Alison

In this third concept, we thought about a way to give patients a "field of research" when they come to the hospital. Through the mail, the patient would receive a reviewer card with specific questions referring to a specific period of time or area during the procedure. After the procedure, one of the nurses sits down with the patient for a debrief, to listen to what the patient had discovered. This way, patients would feel involved and listened and it can serve as a good distraction from the procedure.

continuity is key

How can we create a reassuring sense of continuity through the endoscopy process, whilst also increasing focus and engagement?

But is this really about feedback? Our concepts were all about form, and had very few to do with the actual content. We noticed we were scratching the surface and couldn't reach out to the more complex structures that are behind processing the feedback. Through conversation, we realised how the NHS actually receives a lot of feedback but has a hard time dealing with it. We decided to make a turnaround and define a new design challenge. This time with the patient central.

sketches by Alison

ENDOSCOPY UNIT RECEPTION

ENDOSCOPY UNIT WAITING ROOM

ENDOSCOPY UNIT CONSULTATION ROOM

CONSENT FORM

120 / 90

ENDOSCOPY UNIT WAITING ROOM

PROCEDURE ROOM

RECOVERY ROOM

ENDOSCOPY UNIT RECOVERY ROOM

zzz

100 / 70

ENDOSCOPY UNIT
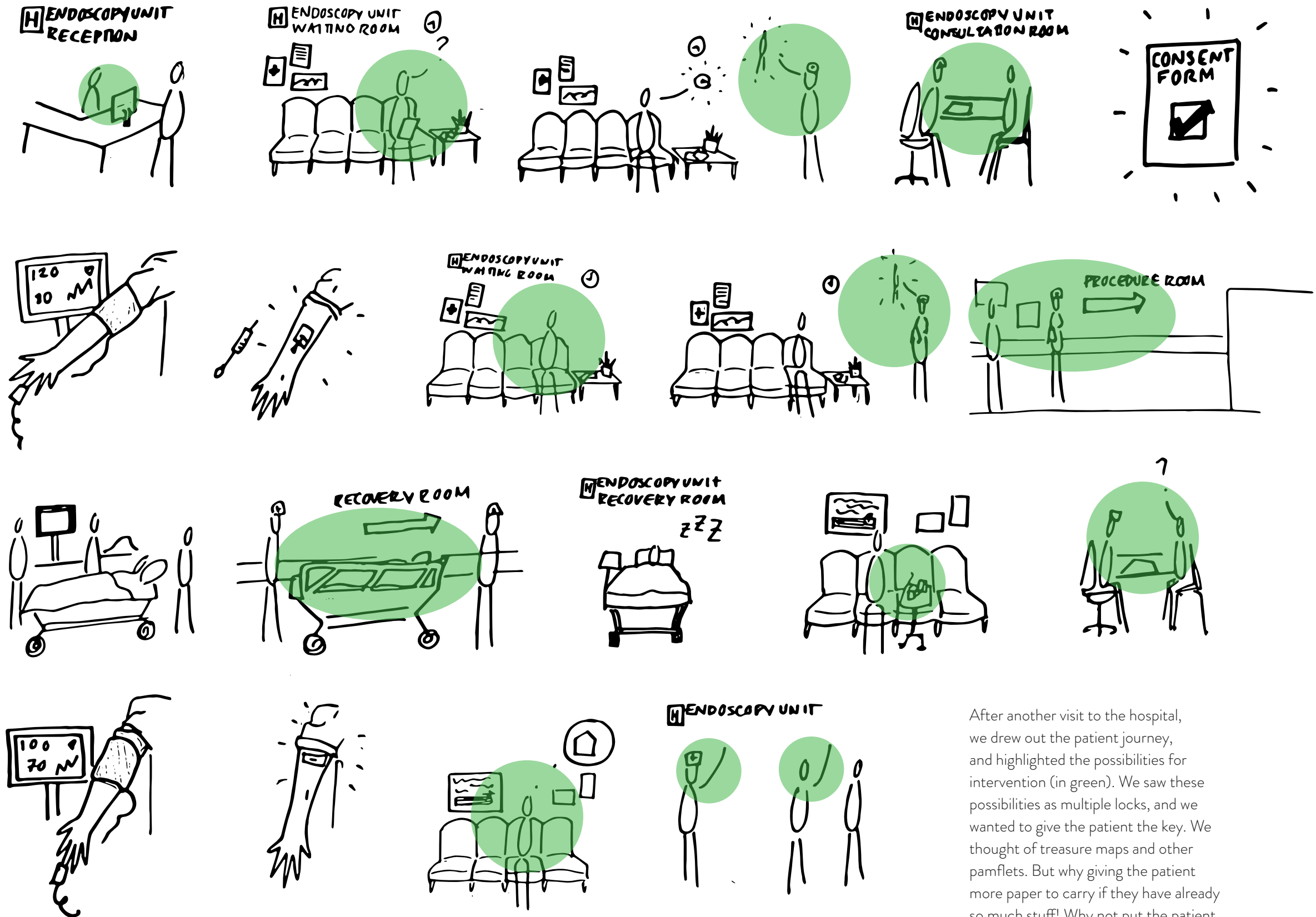
After another visit to the hospital, we drew out the patient journey, and highlighted the possibilities for intervention (in green). We saw these possibilities as multiple locks, and we wanted to give the patient the key. We thought of treasure maps and other pamflets. But why giving the patient more paper to carry if they have already so much stuff! Why not put the patient

wayfinding is secondary

moodboard by Alison

A bright idea of Alison gave us a starting point. Wayfinding. As the patient is the only one which is continuous through the whole journey, we thought of giving that patient a compagnon. Wayfinding is used to facilitate navigation but also to give people a reassuring sense of continuity, as there is only one path the patient can follow, the actual wayfinding is in our case secondary. We looked at wayfinding in different situations. From the London Underground to the Design Musuem and other map systems.

concept development

sketch by Alison

By drawing out the mental imagery that came up with wayfinding in the hospital and trying that out with tape in the studio, helped us to envision the new concept. At this moment, we started believing in the project. With only a few days left, we had to speed up the decision making process and think about ways to propose our design solution.
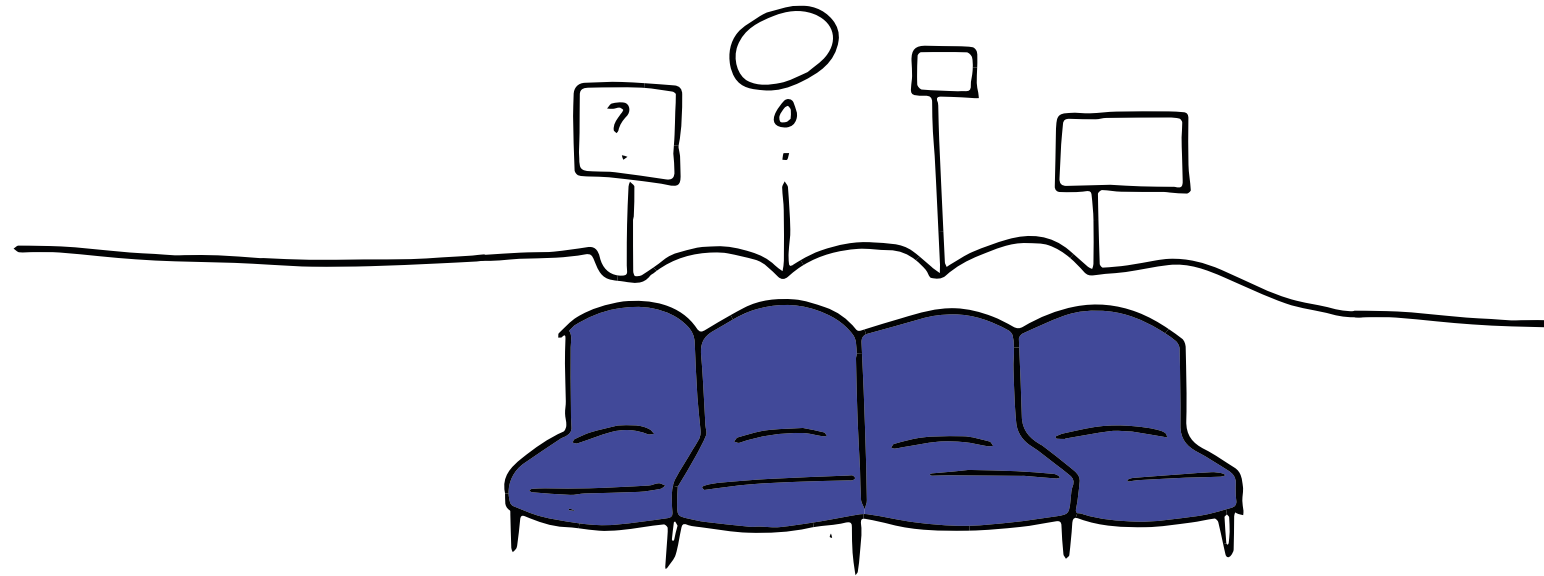
We agreed on using only a single colour and defined 3 possibilities. First one is blue, a safe choice, within the corporate identity of the NHS. Second one is magenta, a bold choice that would truely stand out on the cream walls. And the third choice is orange, a colour that would blend in nicely with the walls. We went for the magenta, the bolder the better. As a font, we chose Brandon Grotesque, a friendly font that would fit the rounded corners of the speech bubbles.

C 0
M 50
Y 100
K 0

C 0
M 100
Y 0
K 0

C 85
M 50
Y 0
K 0

160 mm

65 mm

welcome

Take a seat!
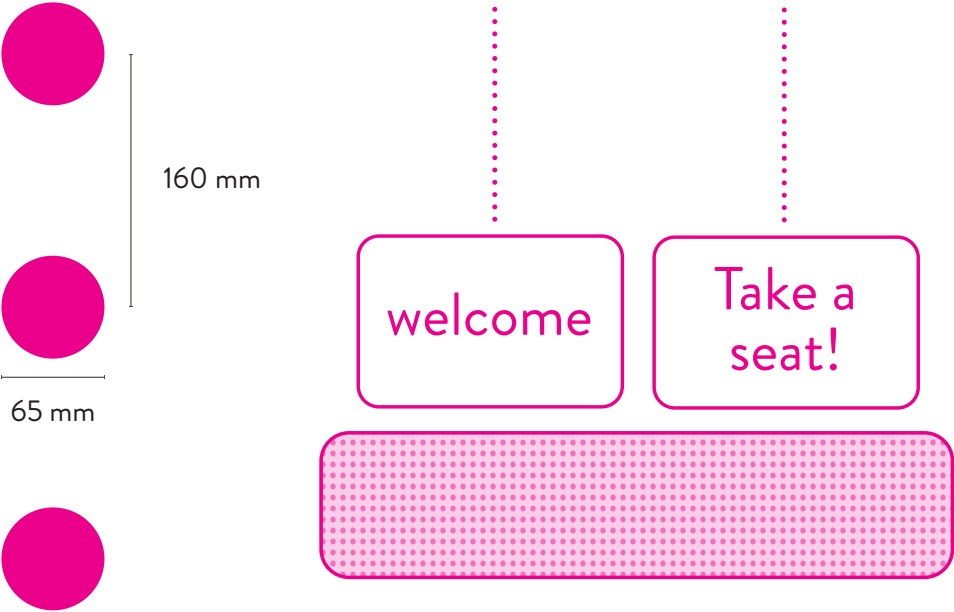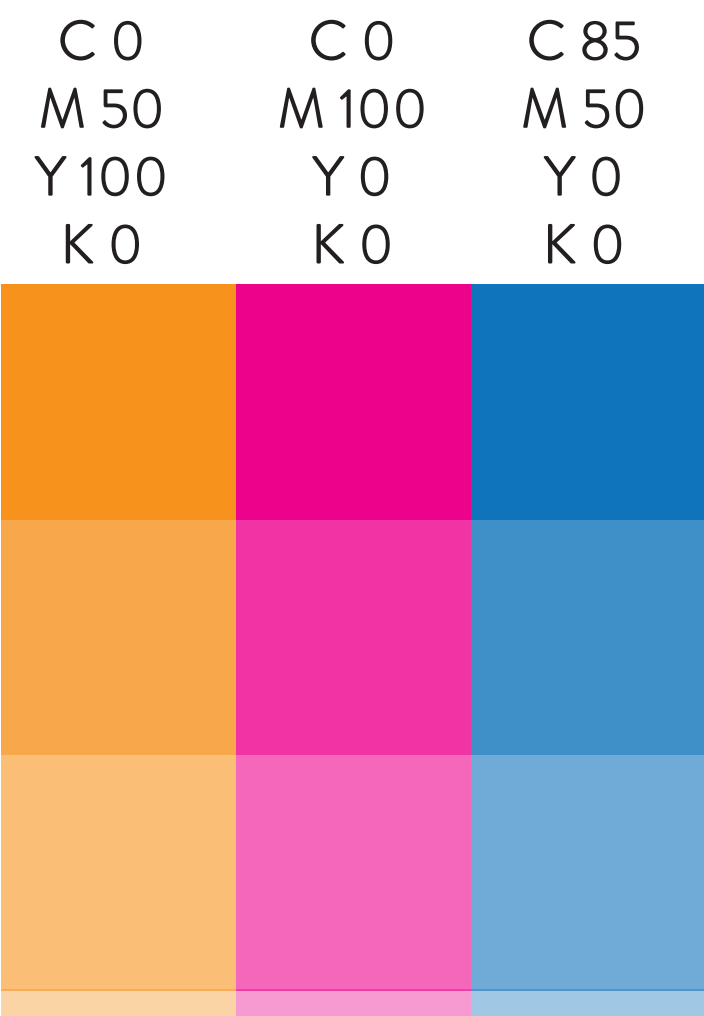
Brandon Grotesque Regular
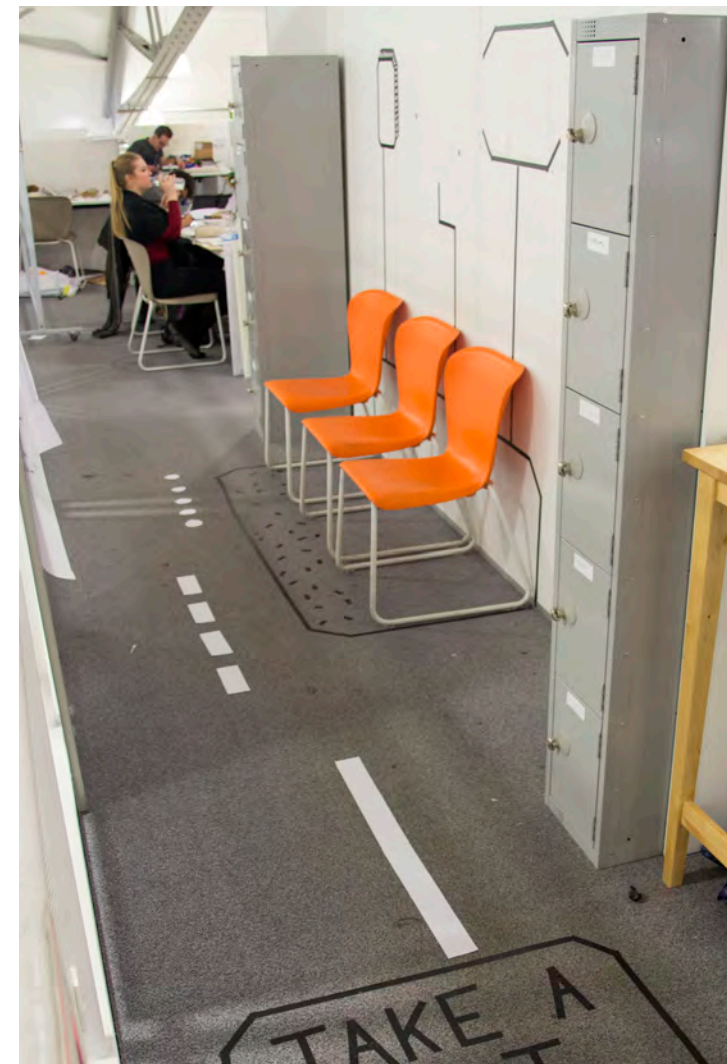
Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Thinking about Hans und Gretel, we decided to choose for a dotted line instead of dashed or straight line, as it pushes you forward. Inspired by the busker zones in London, we created a similar zone to emphasize the passive stations patients are in. Thinking about the doormat, we created a welcome sign. But what is going on the walls?

prototyping

One of the tools we used to understand our own project, was making a model on a scale of 1/50. This forced us to keep the overview on the journey and to decide where, when and how we wanted to intervene. In order to clearly communicate the concept, we decided to cut a lifesize model out of orange vynil and stick it onto white wooden boards. This would facilitate a conversation about implementation and cost.
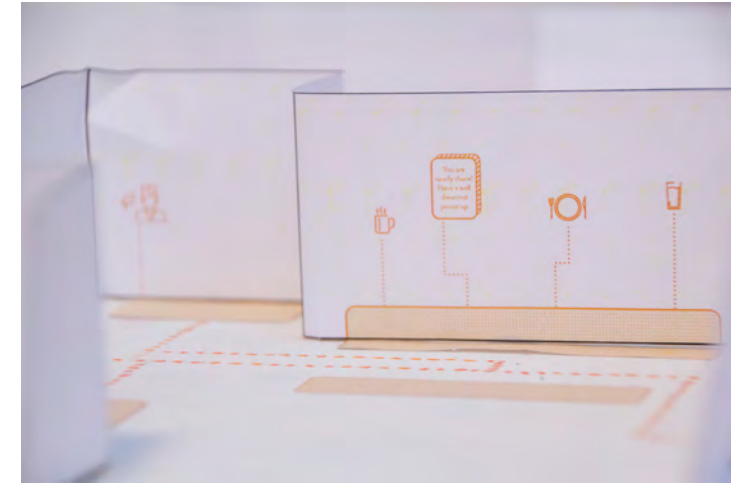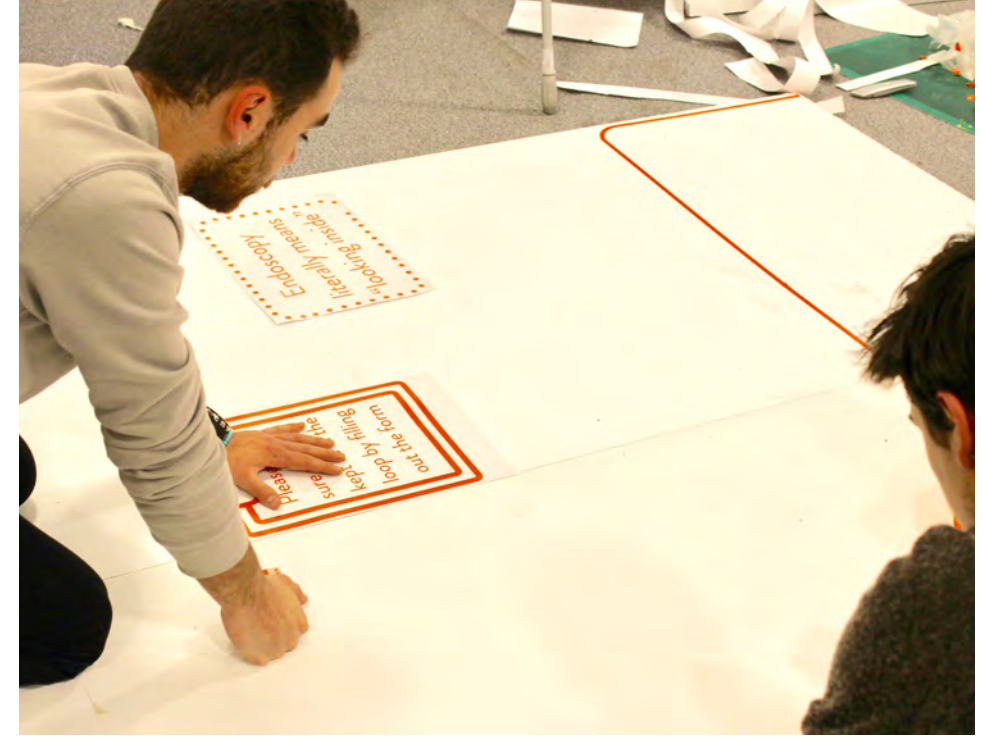
The first
self-illuminated
endoscope was
developed in 1894
in Scotland

Please make
sure you have
kept us in the
loop by filling
out the form

Endoscopy
literally means
"looking inside"

tone of voice

An important part of our project is the tone of voice in which information is shared. Out of our research, we noticed that reassuring interactions between patients and staff can be very meaningful but the message only arrives when the tone of voice is right. When a patient is anxious, some don't want to be told "You're alright..", when they are not. The style we chose for is what we call "empathetic firmness". Acknowledging the fact that it is a difficult procedure and that patients can be anxious, but empowering them to do it.

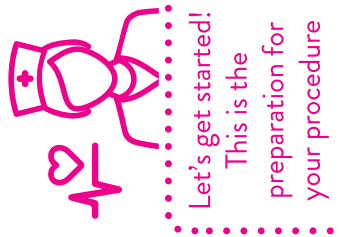To choose this tone of voice is something that a team of staffmembers of the unit need to agree on. We did the exercise for ourselves but realised that it could be different for each unit.

Let's get started! This is the preparation for your procedure

So that was your endoscopy!

You are nearly there! Have a well deserved power up

Zzz

consent form

1 doctor and 3 nurses will take care of you

concept presentation

Besides the life-scale models, we thought of a way to take our viewers through the whole journey. Therefore, we created scenarios in which we reenacted a setting in the hospital and added illustrations of our wayfinding concept. Besides that, an illustration of the floorplan from above was made, to give people a feel for the complete journey.
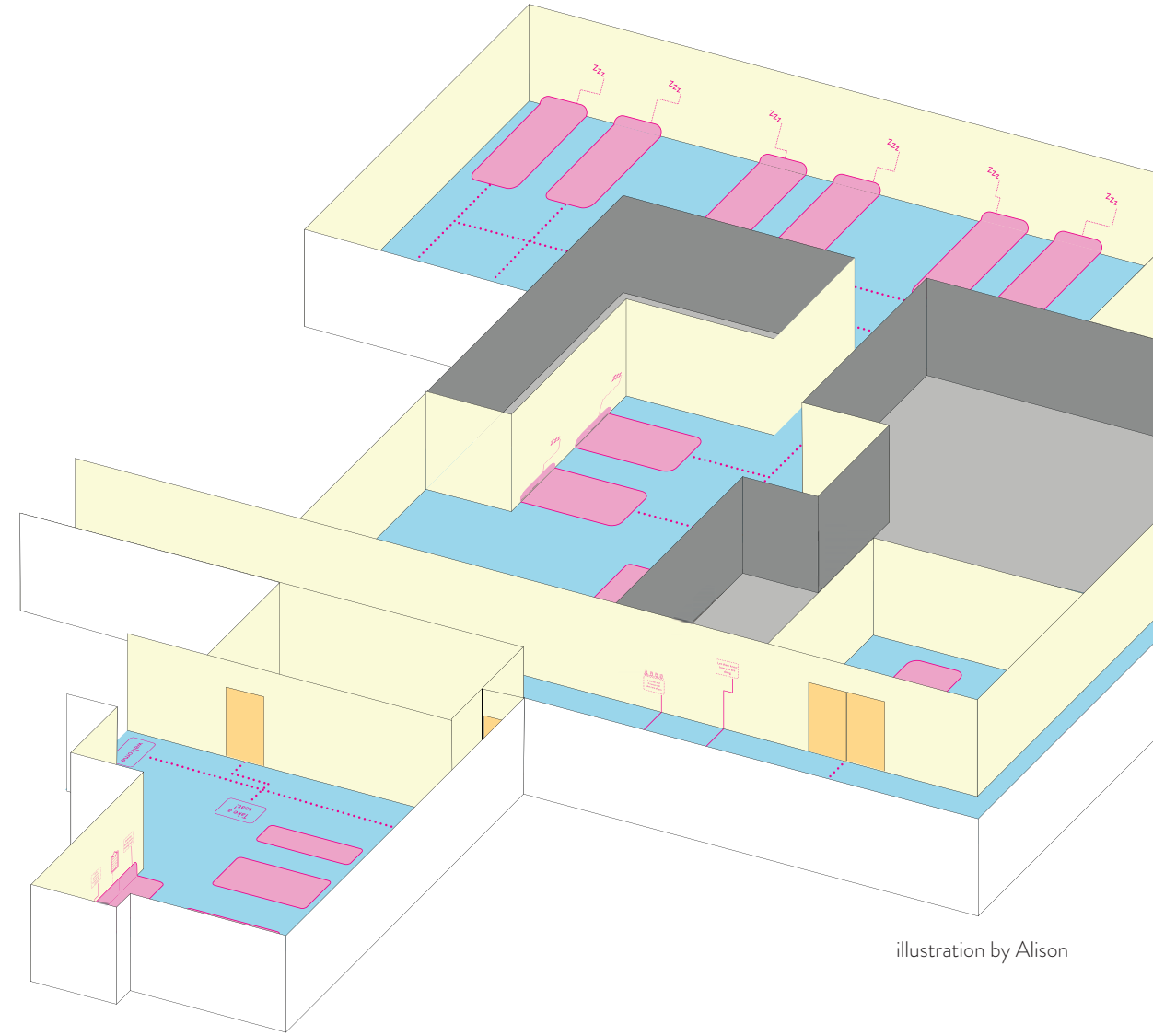
illustration by Alison
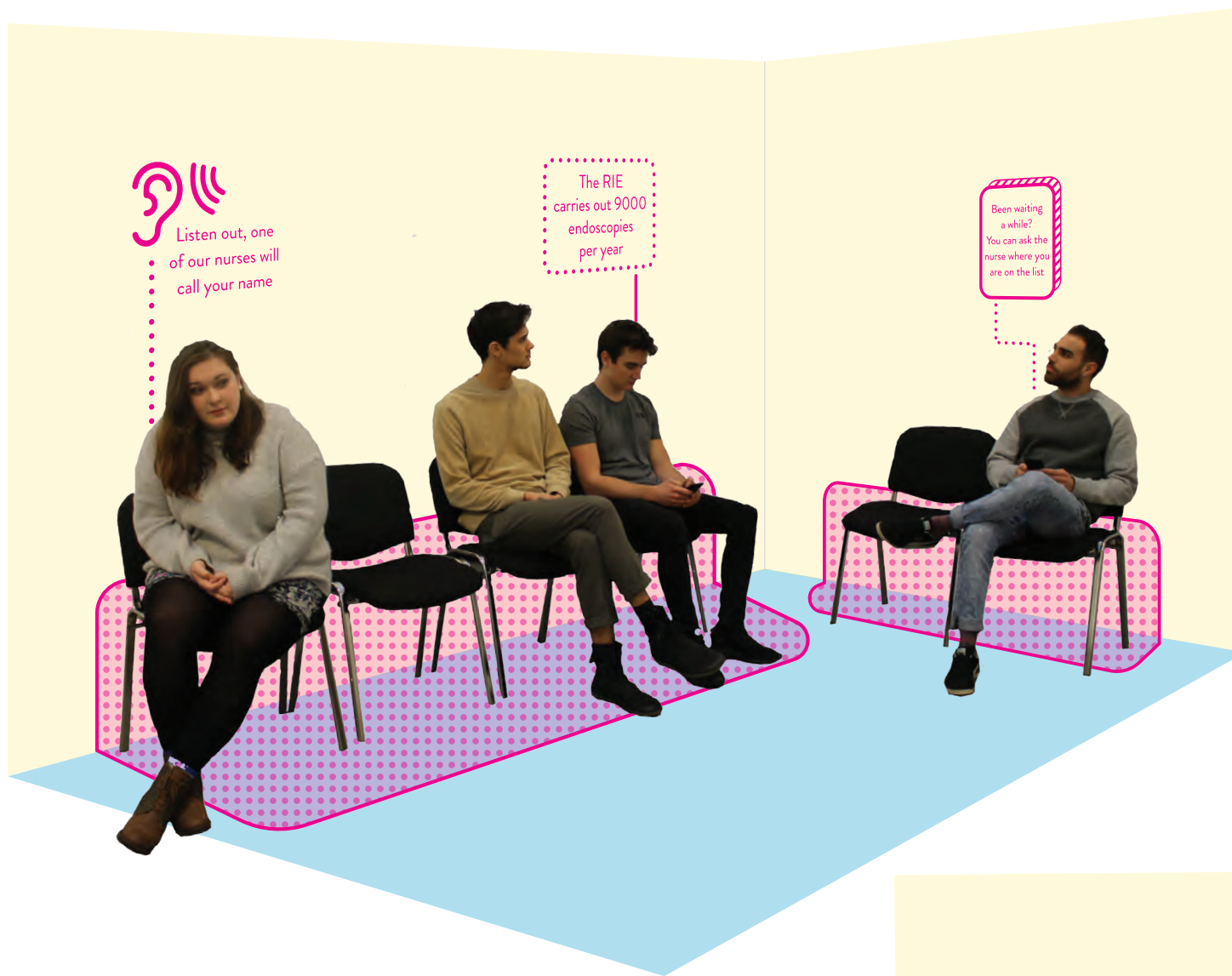
This image is portraying the waiting room. We chose for two different kinds of information to share on the walls. First, we created reassuring information about the endoscopy journey, and second, carefully selected facts about the local unit to inform and distract the patient.

Here we are on the way to the procedure room where in the hallway, we come across reassuring information about the procedure and remind the patient that they can let the doctor and nurses know how they are doing.
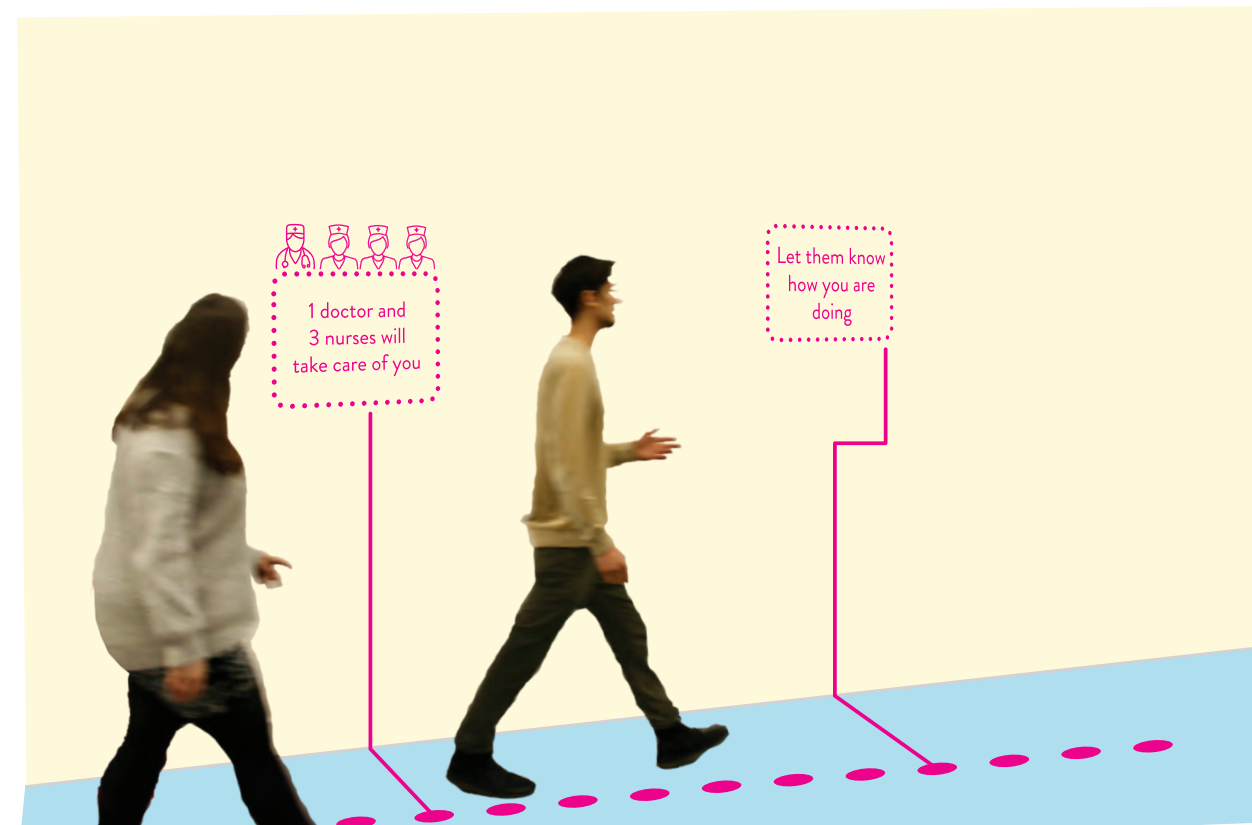
In this scenario, the patient is in the bed in the procedure room. The coloured zone highlights the passive station and reassures the patient that they can have a rest here.

Zzz

Zzz

You are nearly there! Have a well deserved power up
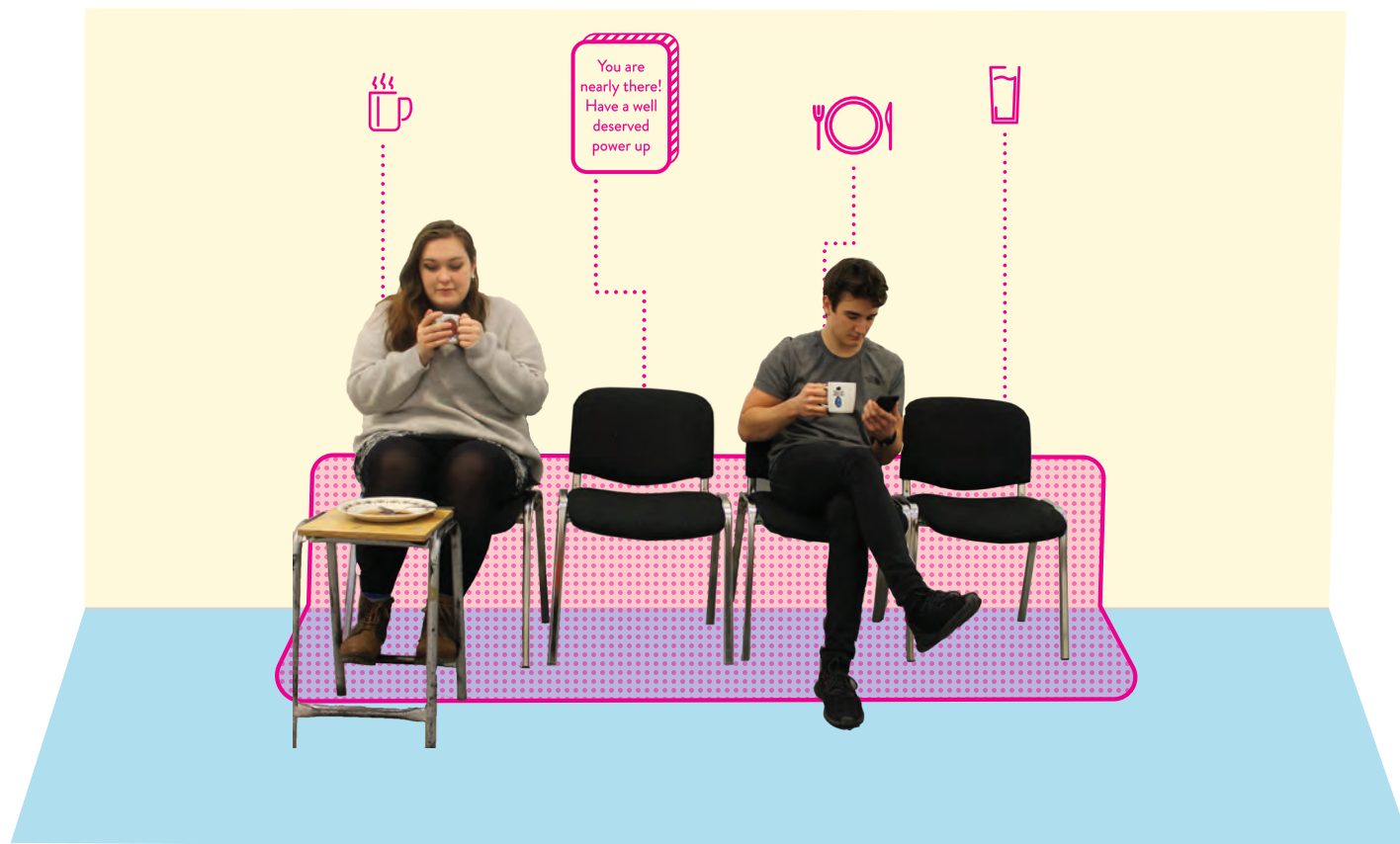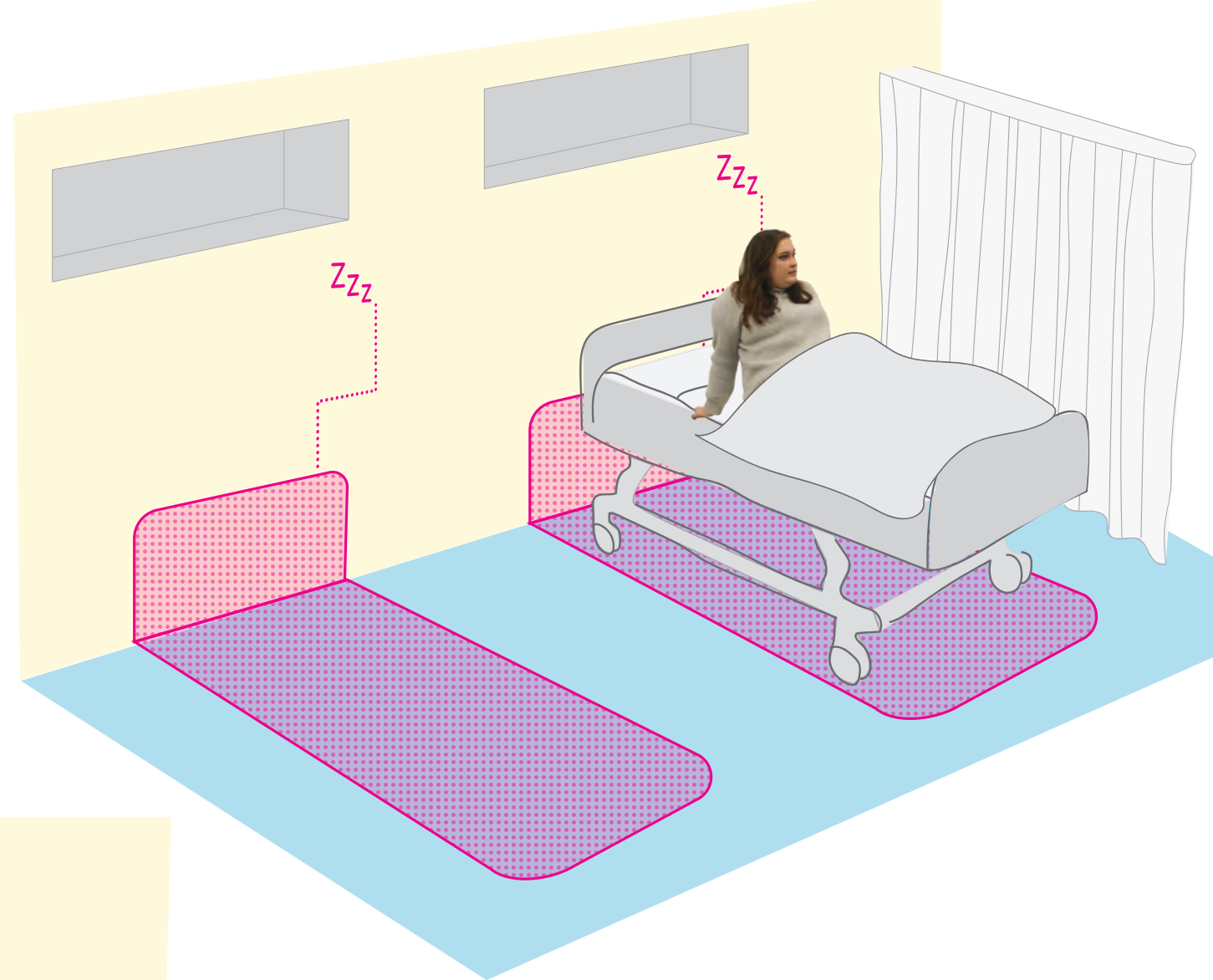
We are still in the recovery room but after the rest, when the patients eat for the first time in the day. Again, the icons and sign highlight that they should sit back, relax and enjoy their well deserved meal.

reflection

I have learned a lot during this project. It was nice to work in a real-life setting with real people from a real hospital. It made me realise there is work for designers in the public sector and even convinced me that this might be a direction I want to take in the future.

It was a true pleasure to work with Alison. With her great commitment, she would sense if something is within my comfort-zone and push me (and herself) beyond that point. Leading to a project I feel proud of.

Although it is said to be a collaborative project, it didn't really feel like that. NHS was the client and we were the designers. I think there is opportunity to organise co-creation workshops instead of presentations, causing dialogue instead of a monologue coming from our side. In an ideal world, I wished that it was a more interdisciplenary project, involving people with different professional backgrounds.

After we split up in mini-teams, I often organised get-togethers to maintain the communication within the bigger group. As competition vibes can get strong in GSA, I saw it as important to listen to other teams. In the fourth week, Lisa and I pursued the group to do an exhibition instead of a classic presentation in the cinema room. It was a really last minute turnaround but eventually, people were happy with the change. During that moment, I realised that this is something I learned in KISD, to take initiative. As the project was so densily organised, we produced a lot material.

This project polished my curiosity towards more complex systems within such big organisations. How would it be to redesign the waiting times in hospitals?

Have a safe journey home!