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Swann, David

Co-designing a 21st century clinician's bag to enhance patient safety and to deliver a world-class patient experience in an inconsistent healthcare setting.

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NHS at Home:


East Riding of Yorkshire



Co-designing a 21st century clinician's bag to enhance patient safety and to deliver a world-class patient experience in an inconsistent healthcare setting.

David Swann, July 2010.

Royal College of Art Masters Vehicle Design Project

Shell Concept

Smart Pods

New vehicles to take healthcare to the community. A project involving designers from the Royal College of Art as well as academics from Loughborough University, the University of the West of England, University of Bath and University of Plymouth.

Rob Thompson, Royal College of Art



Designer

Rui Guo

Concept

Shell Concept

Year

2009

Dimensions

Length: 4.4 m (6.2 m when expanded)

Width: 1.7 m

Height: 1.9 m

Brief Description

In the future, urgent response vehicles will not be required to travel at high speeds. The look and feel of such vehicles will reflect a new type of service, which is geared to treating people at home, rather than taking them to hospital at speed.

The Shell Concept is a compact and efficient vehicle designed for the delivery of urgent medical capability. The removable 'shell' can be deployed to create an expanded treatment space, or left on-scene for extended periods of time. It is equipped with all the kit and consumables required.

To accommodate a range of uses the shell is interchangeable: multiple treatment units can be prepared at base ready for immediate deployment.

Timely & pioneering

DoH, 'From Good to Great' 2010

CBI, 'Better Health' 2010

QNI, '2020 vision 2010

REFORM, Fewer Hospitals 2010



A screenshot of the BBC News website from February 18, 2010. The page has a black header with the BBC logo, a search bar, and links for 'Low graphics' and 'Help'. Below the header is a red banner with the word 'NEWS' and a 'LIVE BBC NEWS CHANNEL' button. The main content area has a white background. On the left is a navigation menu with links to 'News Front Page', 'World', 'UK', 'England', 'Northern Ireland', 'Scotland', 'Wales', 'Business', 'Politics', 'Health', 'Education', 'Science & Environment', 'Technology', 'Entertainment', 'Also in the news', 'Video and Audio', 'Have Your Say', 'Magazine', and 'In Pictures'. The 'Politics' link is highlighted. The main headline is 'Burnham stresses need for more NHS care at home'. Below it is a sub-headline: 'There must be a "decisive shift" in the NHS to provide more care in people's homes, the health secretary has said.' To the right of the text is a photo of Andy Burnham. Below the photo is a caption: 'Mr Burnham said more treatments must be offered outside hospitals'. To the right of the main text is a 'SEE ALSO' section with links to 'NHS "cannot afford private role"', 'English NHS "the most efficient"', 'Why efficiency in the NHS matters', and 'Cameron focuses campaign on NHS'. Below that is a 'RELATED INTERNET LINKS' section with a link to 'Department of Health'. At the bottom right is a 'TOP POLITICS STORIES' section. The page footer states: 'Page last updated at 13:46 GMT, Thursday, 18 February 2010'. There are also links for 'E-mail this to a friend' and 'Printable version'.

Research methods

- 1) Service evaluations
- 2) Microbiology testing of kit bags
- 3) Lego Serious Play workshop
- 4) Analogous case studies
- 5) Co-design
- 6) Heuristic evaluations
- 7) Simulated treatments

Research methods

- 1) Service evaluations
- 2) Microbiology testing of kit bags
- 3) Lego Serious Play workshop
- 4) Analogous case studies
- 5) Co-design process
- 6) Heuristic evaluations
- 7) Simulated treatments

1) To study how planned treatments are delivered in the home *using service evaluations.*

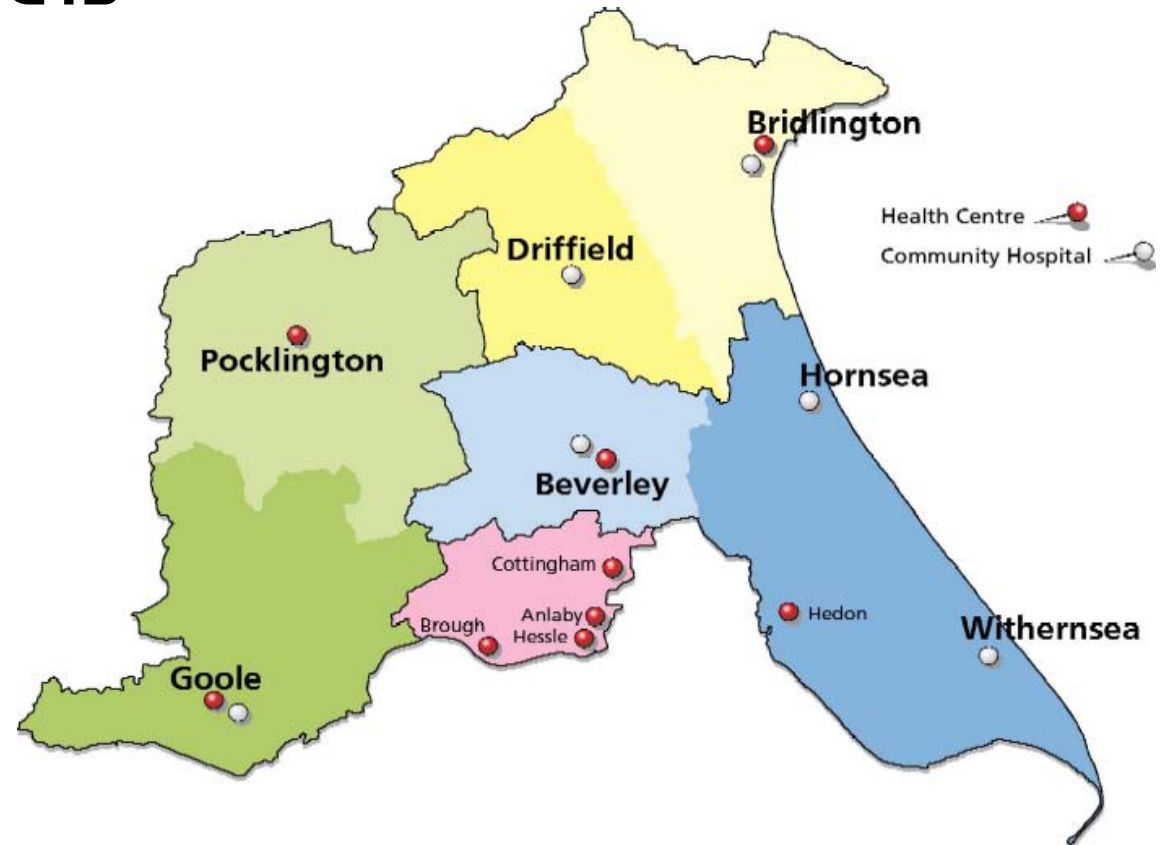
NHS East Riding's NCTs

New healthcare teams delivering:

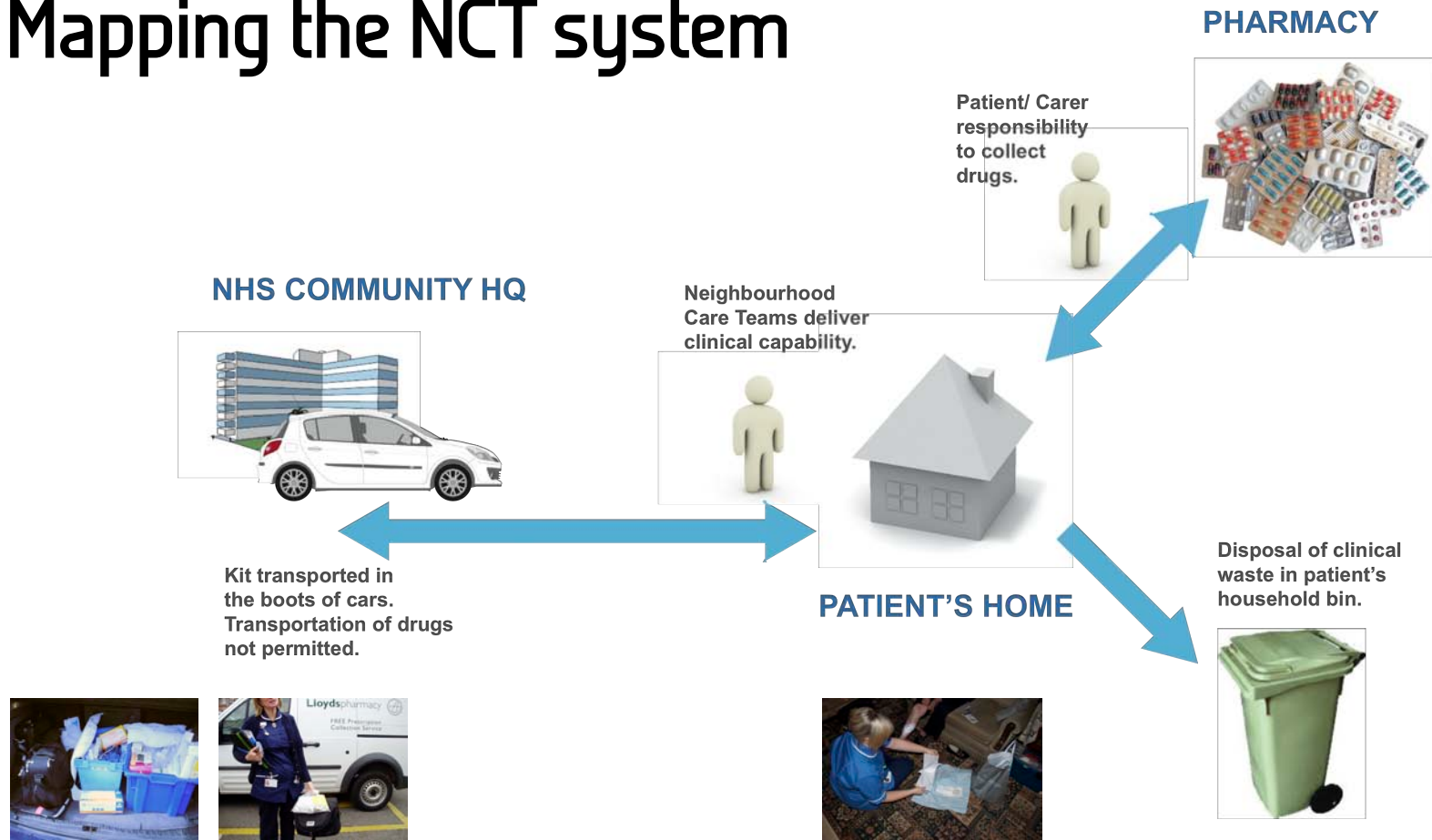
Urgent care (rapid response)

Intermediate care (rehabilitation)

Management of long-term & complex conditions



Mapping the NCT system



Service delivery challenges...



Healthcare invading the home & exiting via the patient's waste bin



'We only have a small bin. We went to the local council to get a bigger bin because of the waste stuff... They turned around and said no! They didn't know that [x] would produce 6 or 7 bags of rubbish per week!'



Inconsistency of kit bags



21st century professionals using 20th century kit



3) *Using Lego Serious Play* to capture professional challenges in greater detail and to envision a world-class NCT service







'With any environment we go in, I think we should be having an uniformed approach to give the patient a sense of quality and standards.'

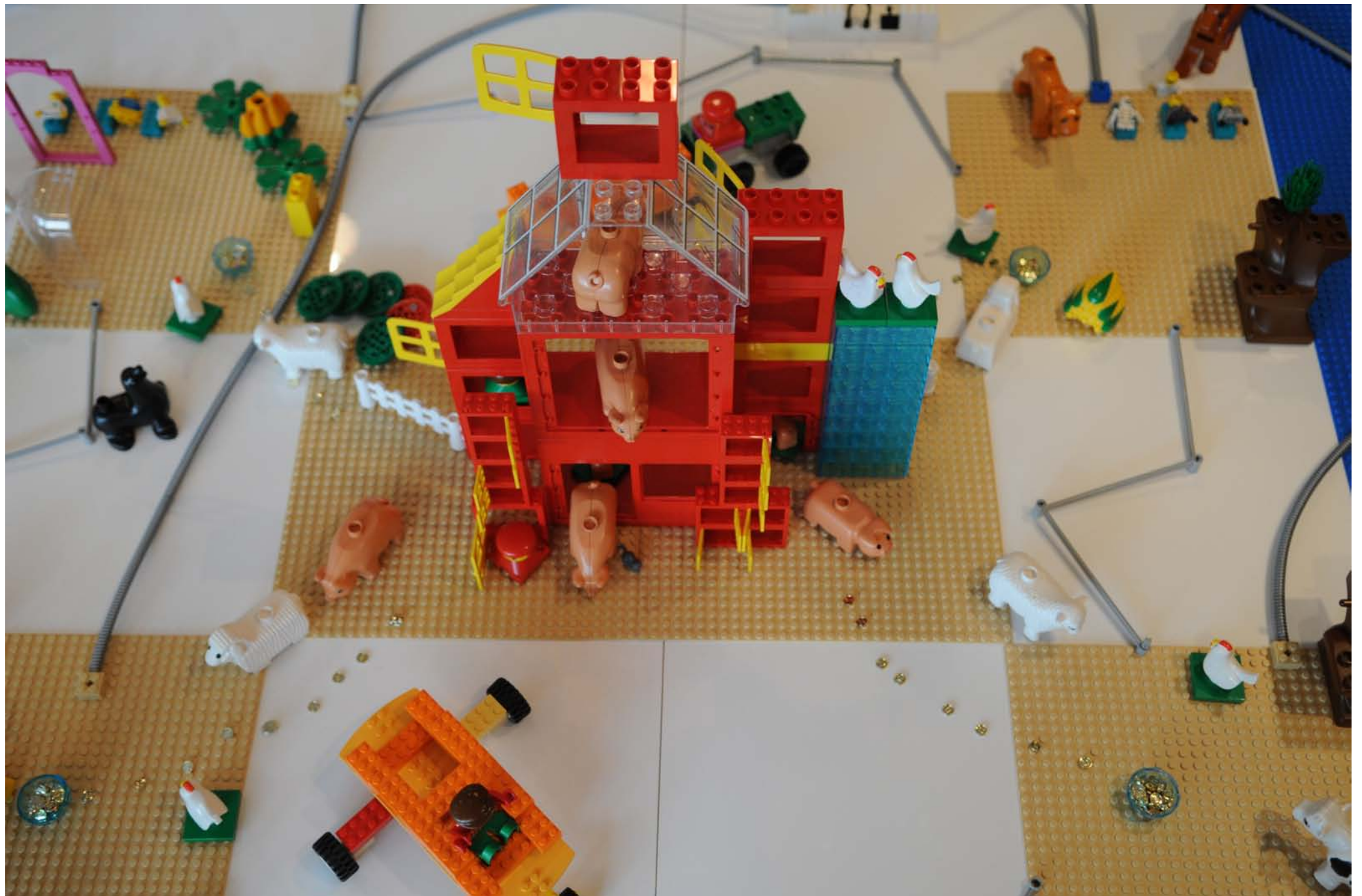
'We need a core set of tools...'

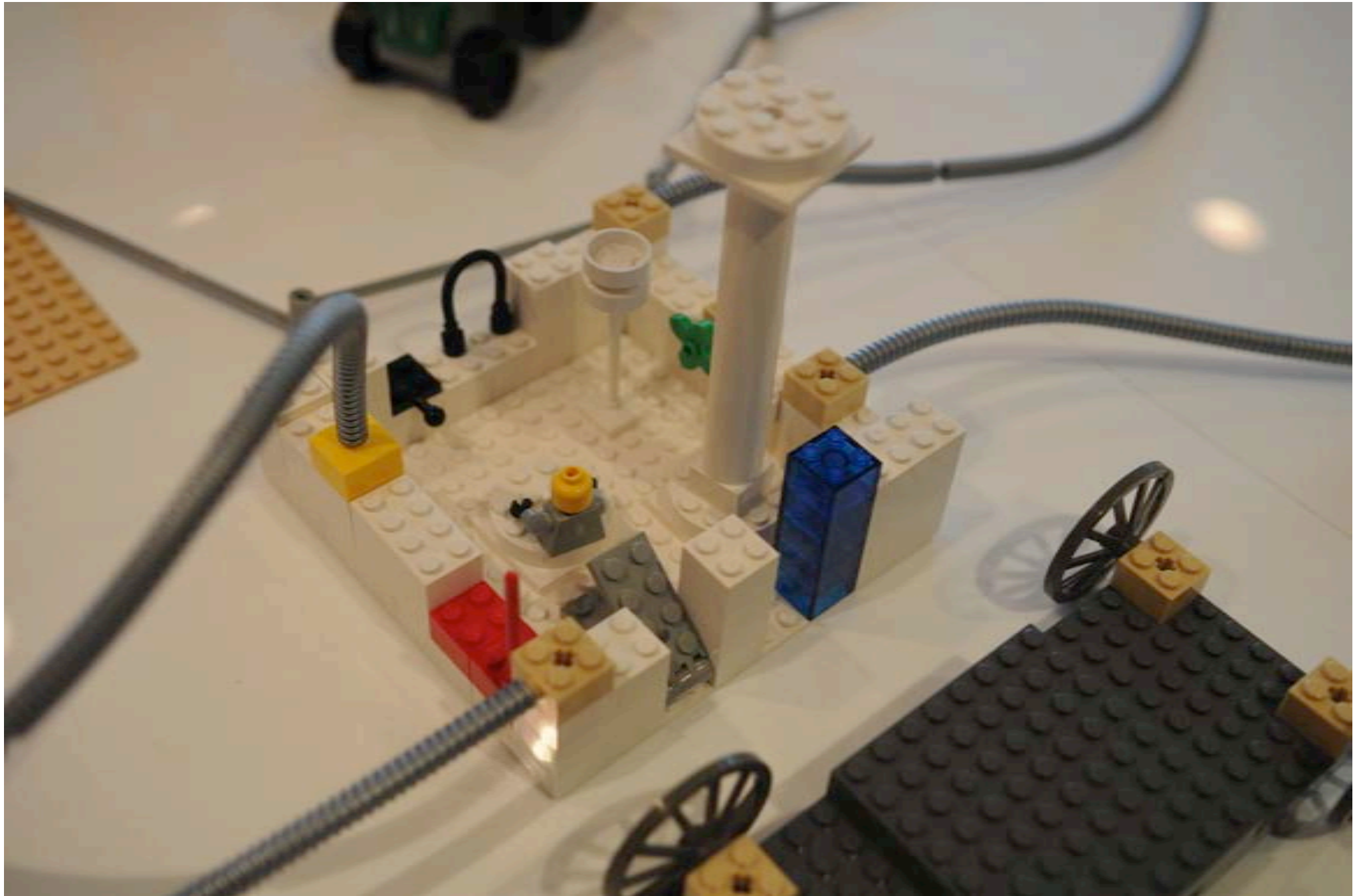
'We were set up with nothing. We have acquired things along the way and have we got the right things?'

'Then you look at the AA. When the AA turn up in a van, its all lined out, what you need, where it is. Where as ours its all chucked in the back seat. It isn't very professional is it!'









4) Design informed by *analogous case studies* of world-class services delivered in confined spaces and luxury travel products.

Virgin Atlantic Airways Upper Class

Claridges In-Room Dining

Aspreys

Apple



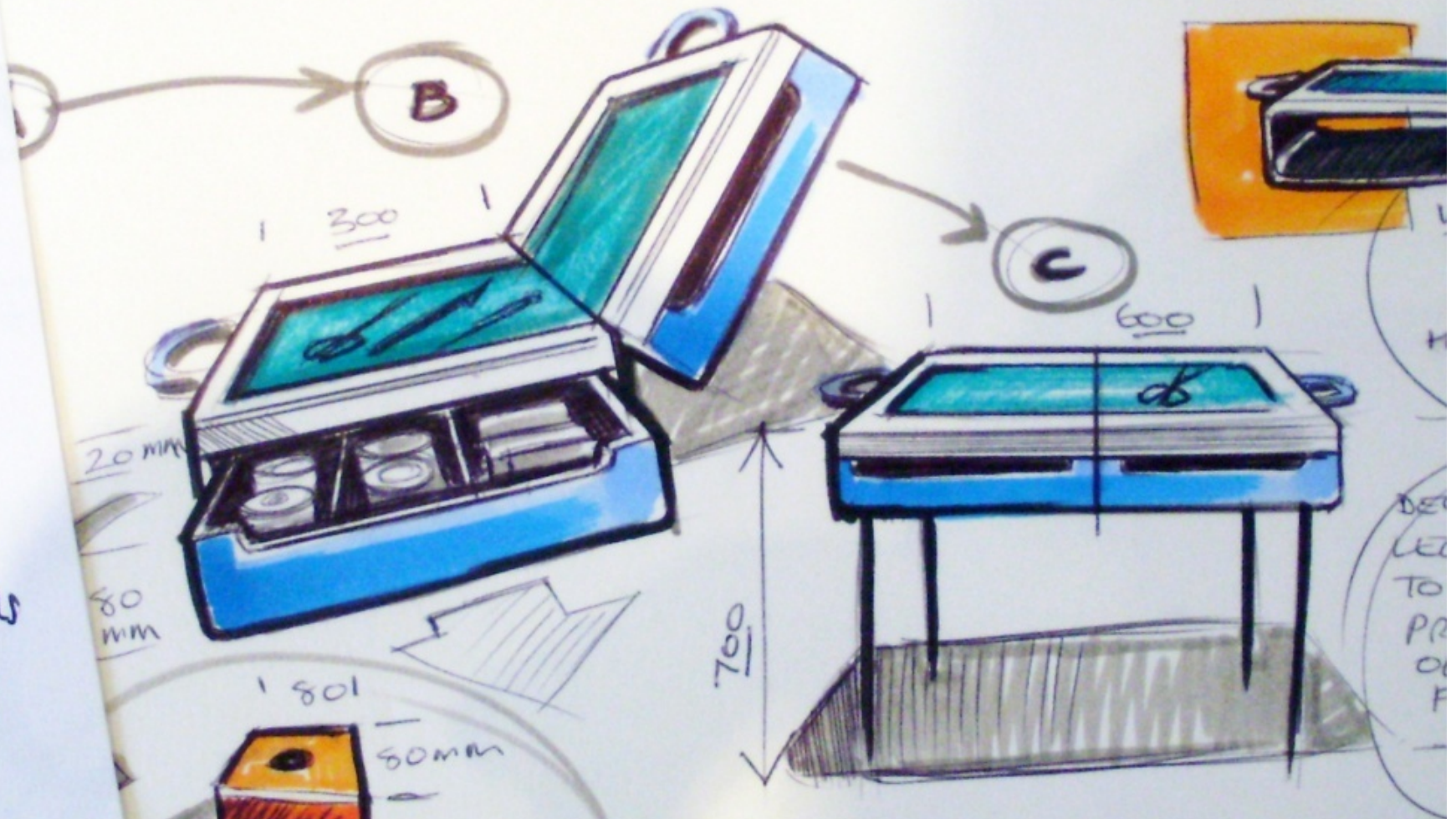






6) Quality of design assessed through heuristic evaluations

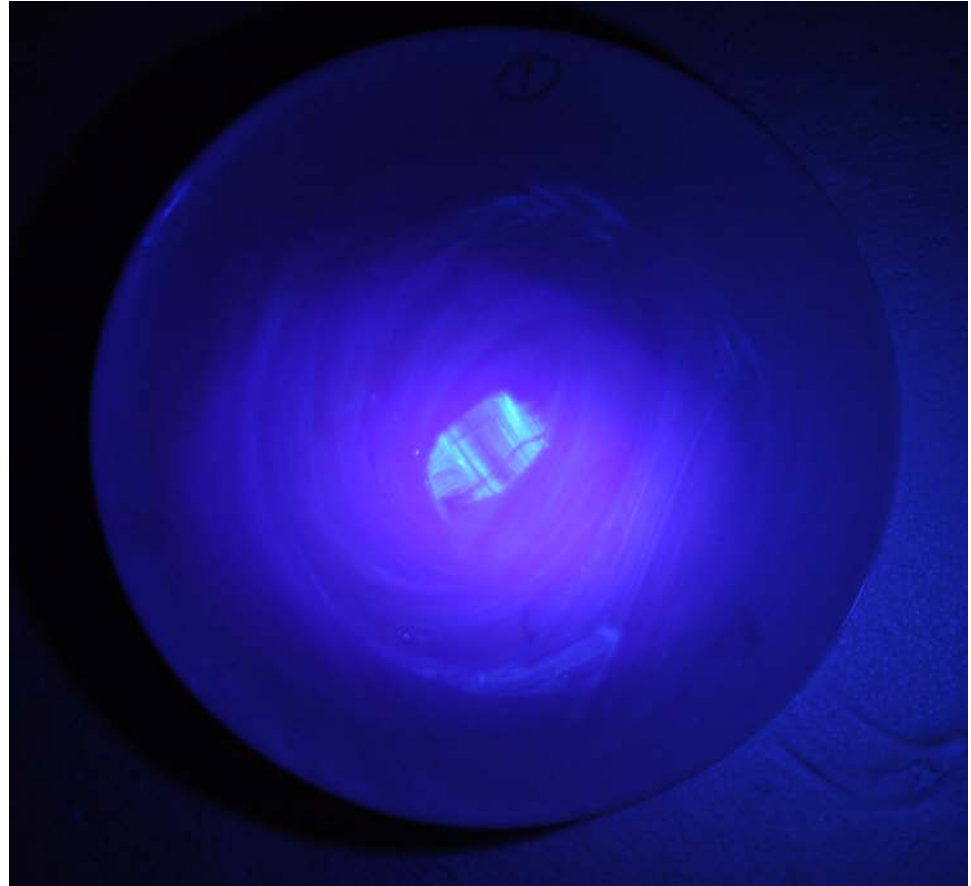
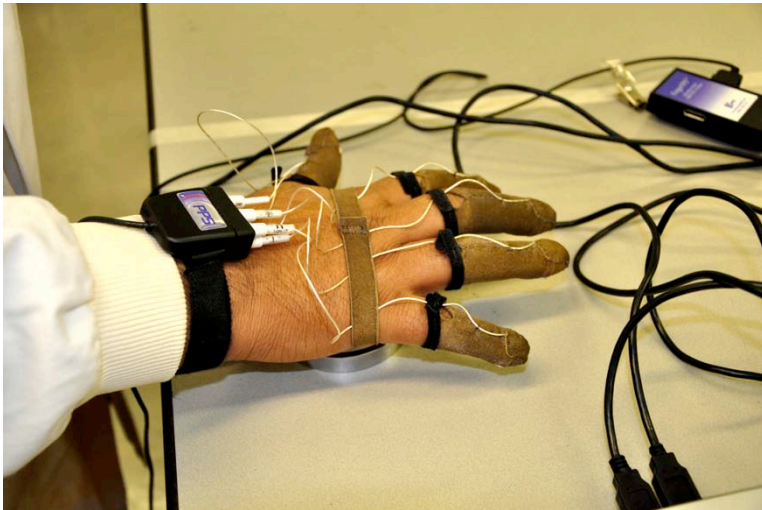
MADE TO ORDER: HARD SIDED



Simulated treatments: leg ulcer dressing & catheterization



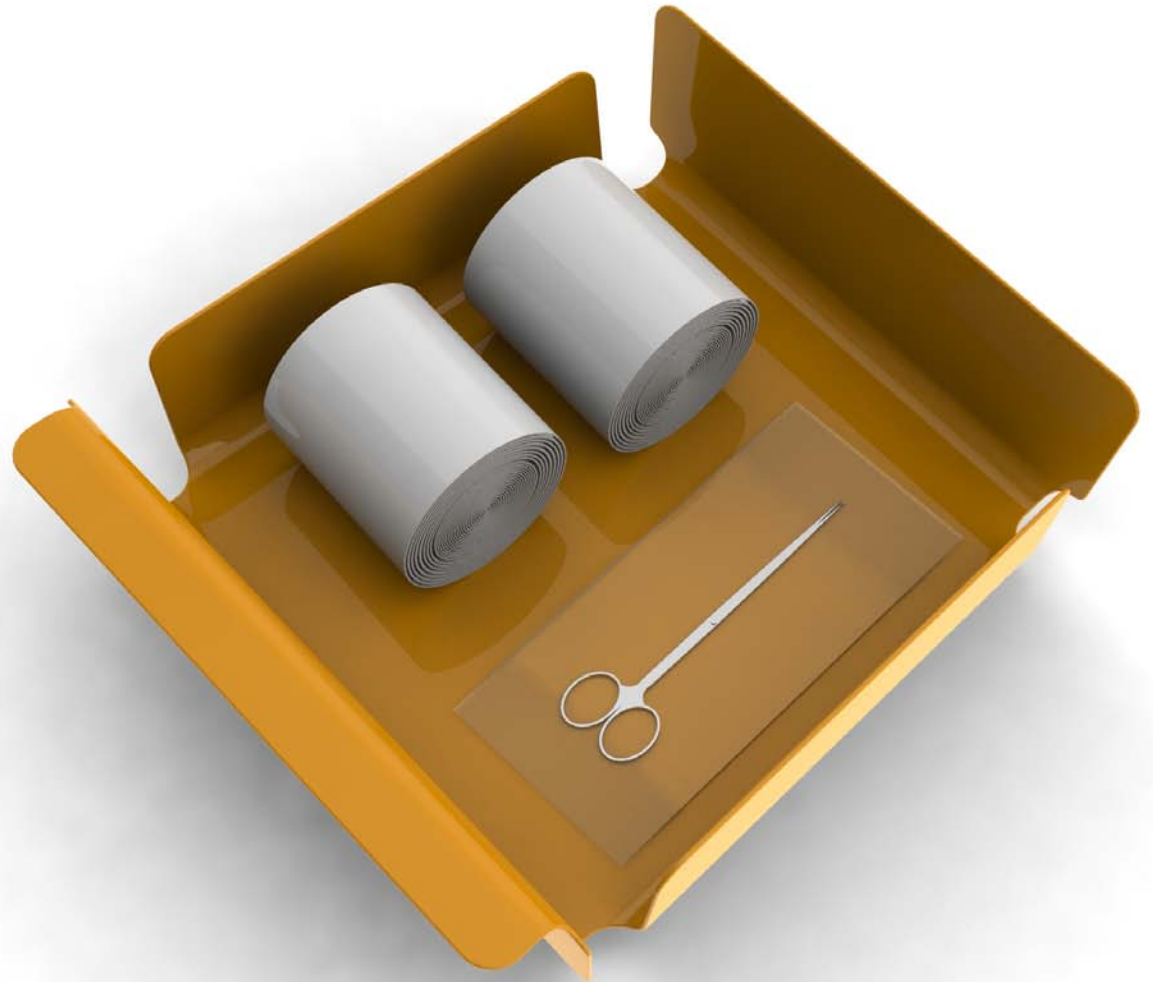
Design enhancing effective cleaning



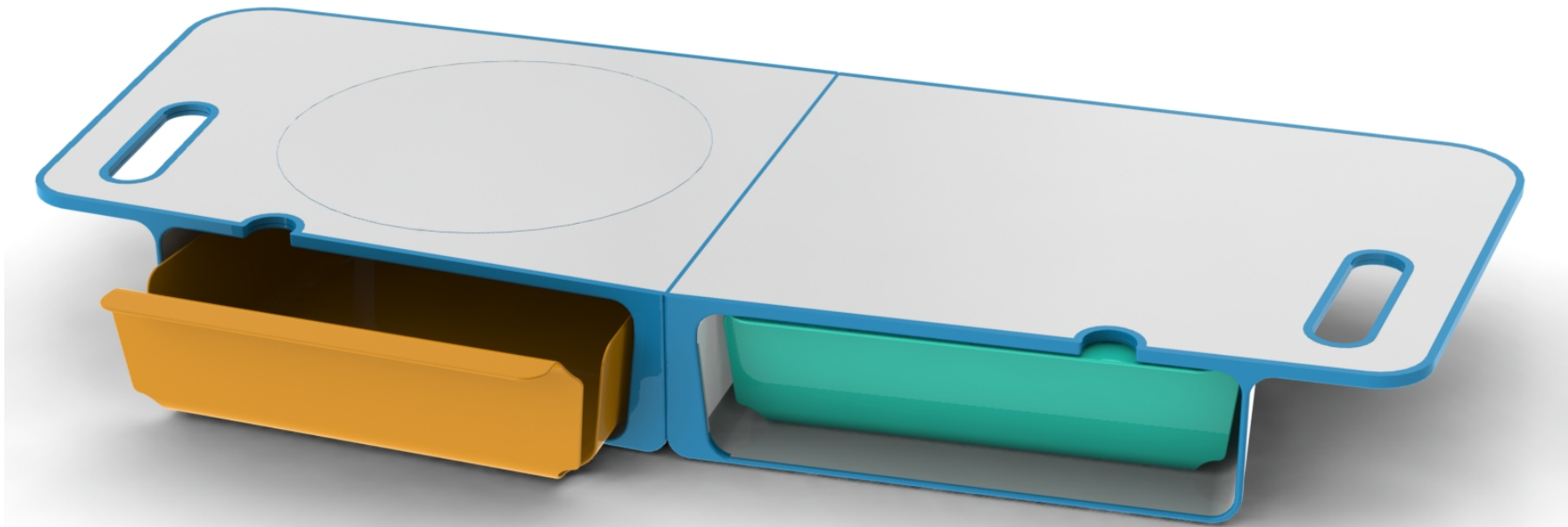
Dedicated bag



Patient Drawer



Treatment space



Like products, services *are* designed

**NHS at Home: bridging the gap between strategy
& reality through world class design**