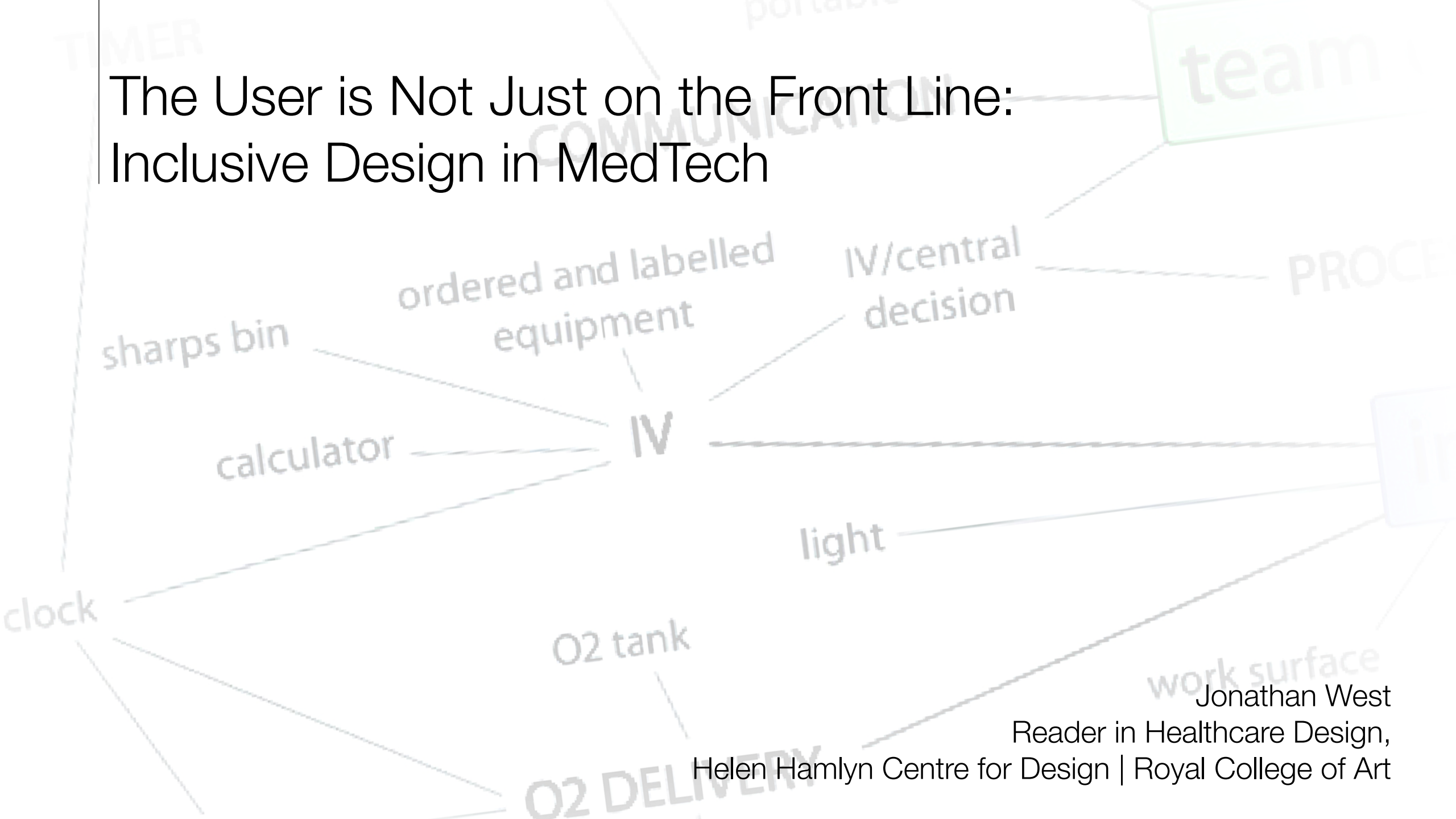


The User is Not Just on the Front Line: Inclusive Design in MedTech



Jonathan West
Reader in Healthcare Design,
Helen Hamlyn Centre for Design | Royal College of Art

Who we are

Inclusive Design methods

Case studies of Inclusive Design to improve economic value

Methods for application - conclusions

Who we are and what we do

Inclusive Design methods

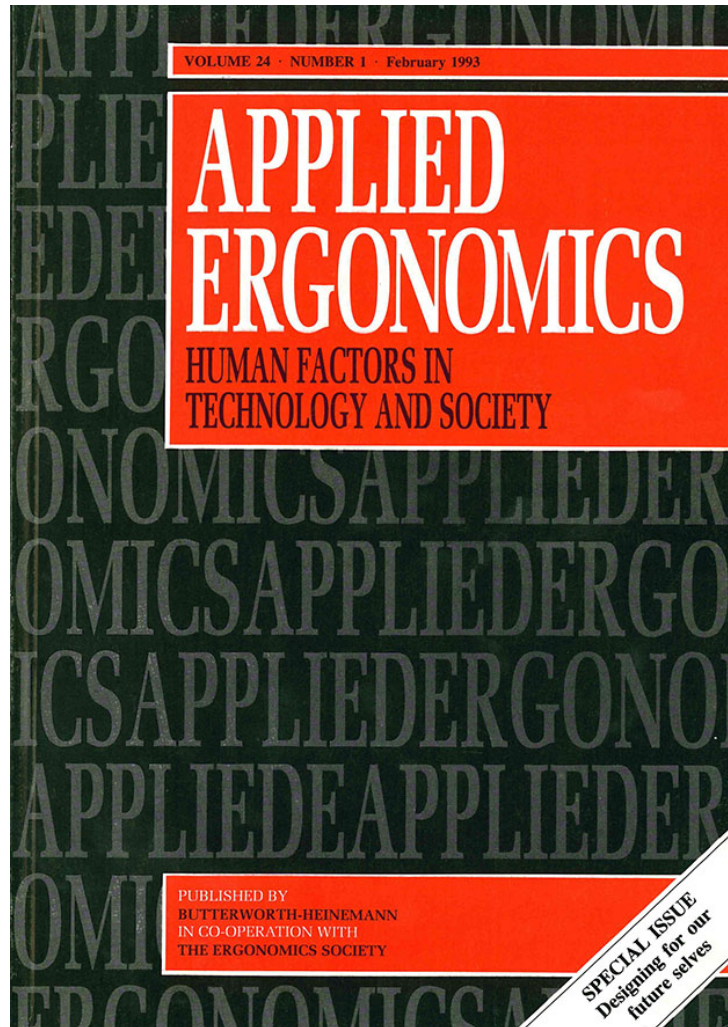
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The Helen Hamlyn Centre for Design



25-year History



designingwithpeople.org

This web-based resource has been created by the Helen Hamlyn Centre for Design at the Royal College of Art to share ways to design with people. Get started by meeting real people and exploring a range of activities of daily living. On this site you can review design methods, develop protocols for ethical practice and contribute your own ideas.

We welcome your participation, please contribute to this website here...

- Home
- People
- Activities
- Methods
- Ethics
- Contribute

Getting Started

- People**
Meet real people who represent a range of capability
- Activities**
Explore insights drawn from daily living activities
- Methods**
Choose the right research methods for your project
- Ethics**
Your guide to the moral maze of ethical practice

This website is one of the outputs of the i-design project.

helen hamlyn centre for design

i-design project partners:
Helen Hamlyn Centre for Design Royal College of Art
Engineering Design Centre University of Cambridge
The Well-being Institute University of Cambridge
Loughborough Design School University of Loughborough

Business Driven



Community Facing



Public Facing



INNOVATING WITH PEOPLE

THE BUSINESS OF INCLUSIVE DESIGN

Innovating with People

[Listen](#)

Are you searching for new competitive advantages? Is your company operating in a market undergoing change?

Turn the challenges connected to the rapidly changing contexts of demographics and environment into new opportunities to innovate, make profit and increase market shares.



Click to enable Adobe Flash Player

Engage with Inclusive Design strategy!

Inclusive Design is being written into legislation. Products and services will now have to meet these new criterias. This book shows how you can turn these challenge into opportunities for profitable innovation.

Adopt an Inclusive Design strategy and you will come closer to your customers by understanding their needs. Inclusive Design is also used here to describe Universal Design and Design for All.

Buy this practical step-by-step guide that explains how to involve people in your design process.

[Read more about what's in the book](#)

[GIVE OR VIEW FEEDBACK ON THE BOOK](#)

INNOVATING WITH PEOPLE
THE BUSINESS OF INCLUSIVE DESIGN

[BUY NOW](#)

Who we are

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Discover

Define

Develop

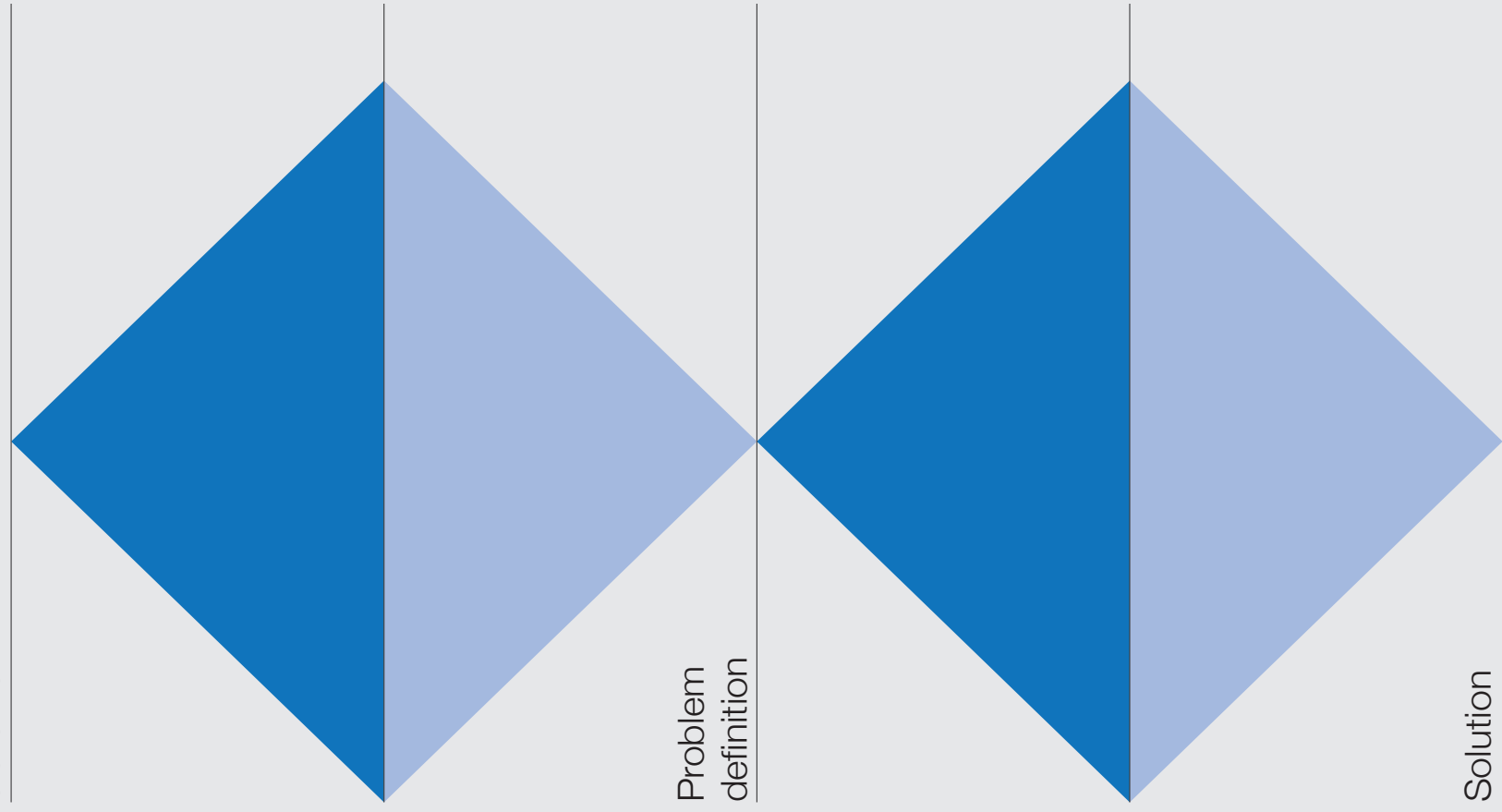
Deliver

Problem
statement

Problem
definition

Solution

Proposition



Discover

Define

Develop

Deliver

Problem
statement

Problem
definition

Solution

User
research

Evidence
base

Brief

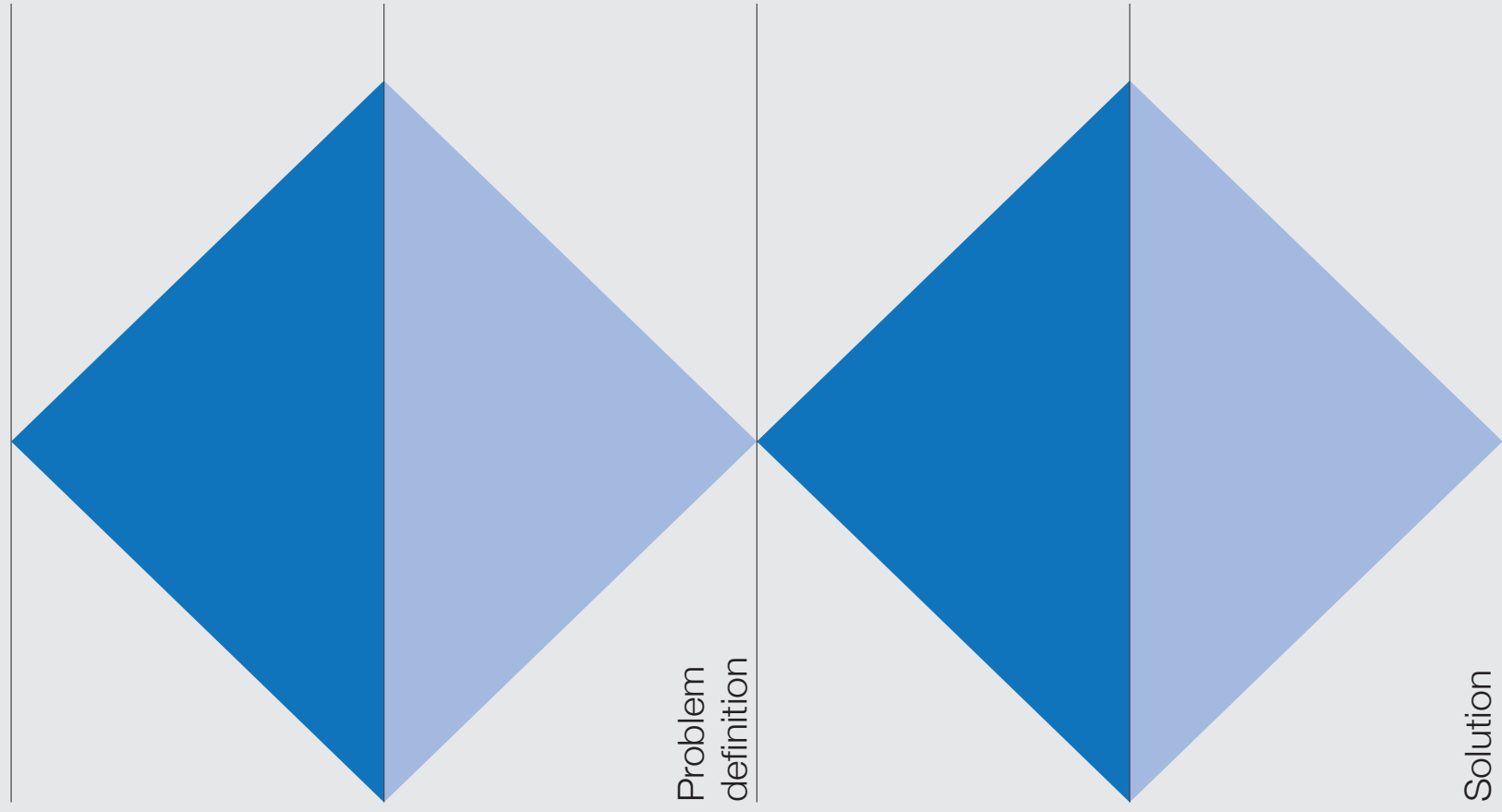
Co-design

Prototype

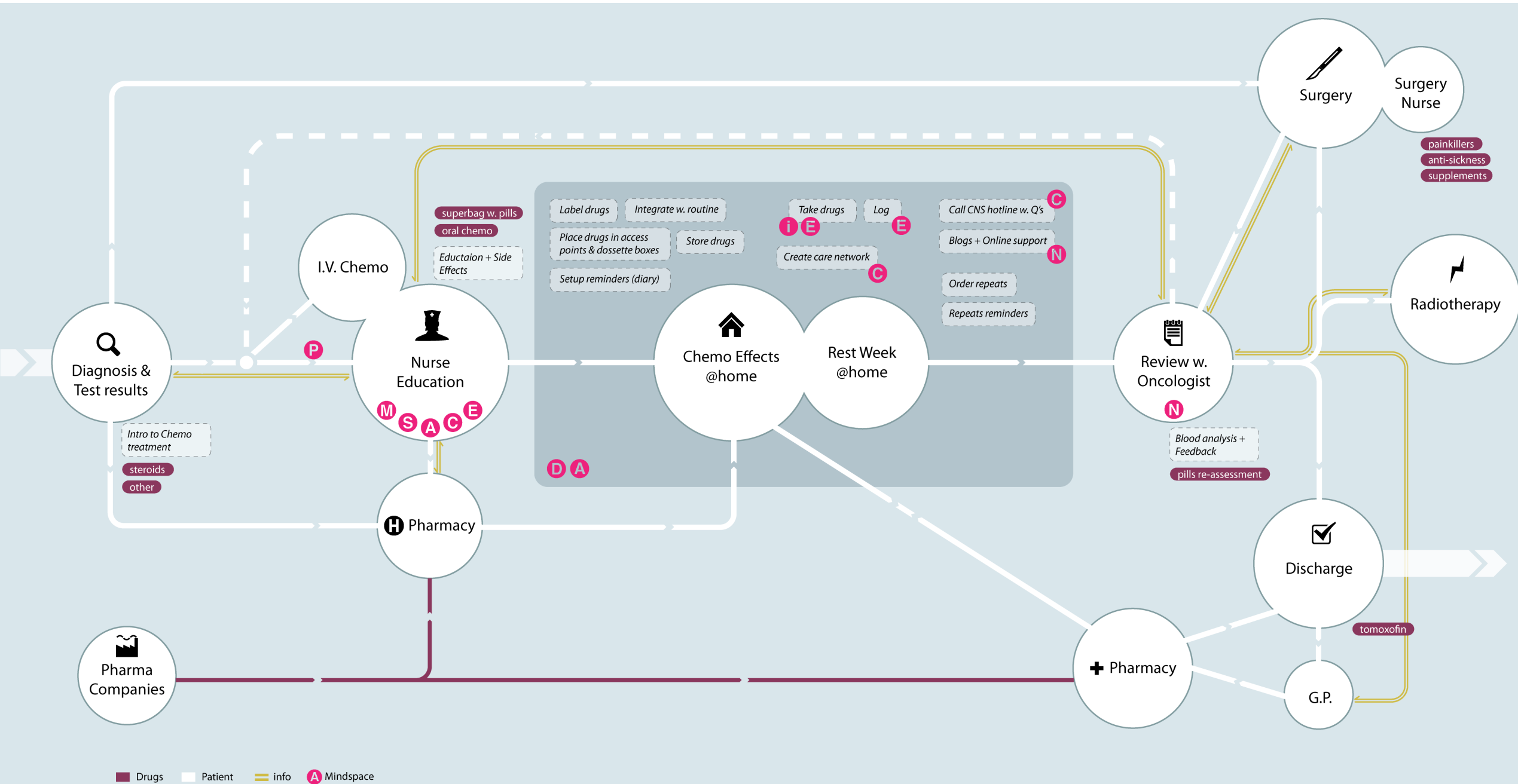
Co-evaluate

Proposition

Feedback



Stakeholder analysis - front line, economic, regulatory, commercial







Please write any extra comments or info I should know about on the folder. If you do please include it in the envelope.

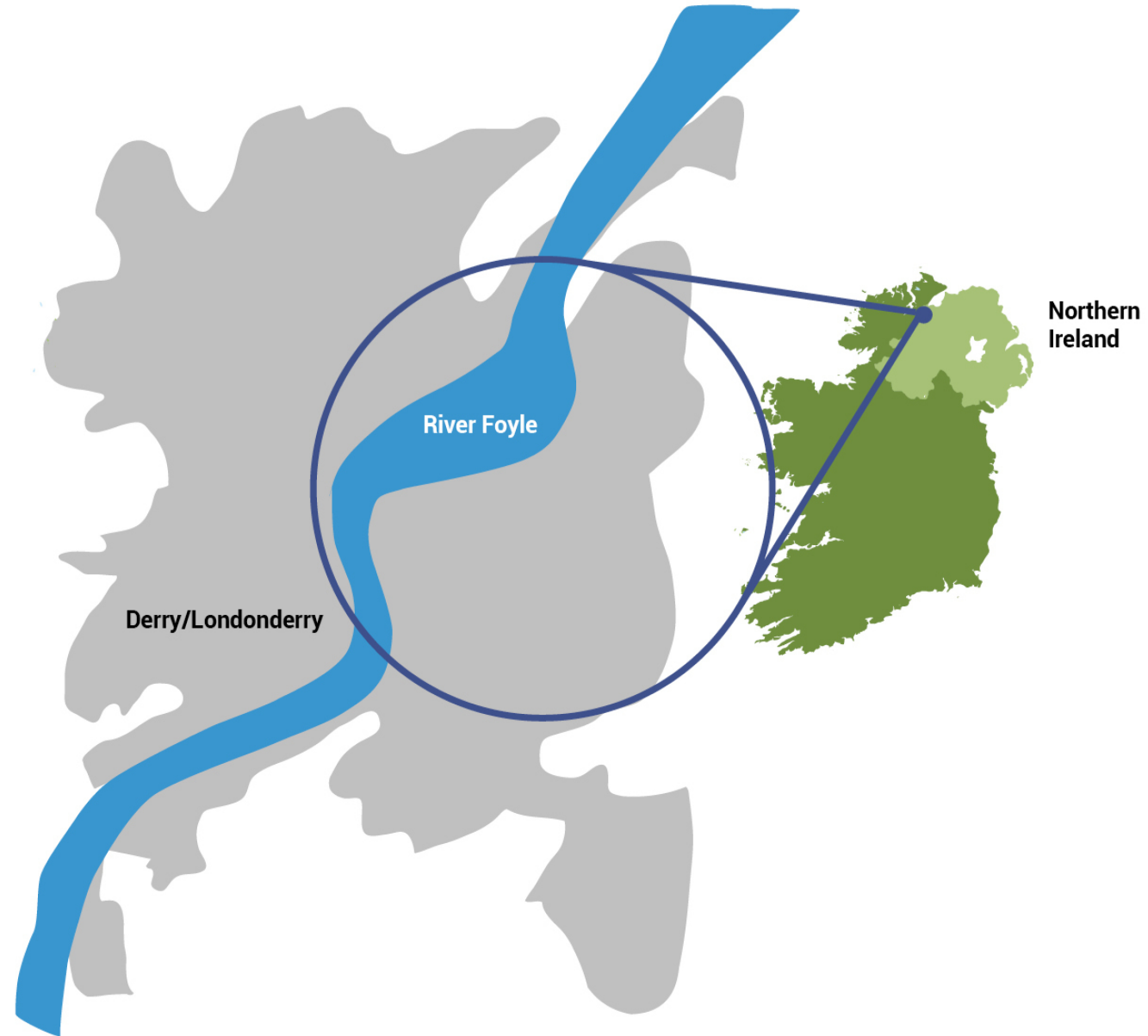
THE ALCOHOL STAR PACK

Inside these bottles there are a selection of tasks and questions. Feel free to add your contributions, add others and generally have your say. You can't do anything wrong and it is just great to get your thoughts into alcohol dependency in general and Portsmouth's Alcohol Services. Each sheet should take about a cup of tea to complete! please enjoy the bottles while you do so!

Thank you much for taking part,
Stacy May
Alcohol Support @ P.A.D.
Research Associate
Any questions please email:
stacy.may@portsmouth.gov.uk

THE ALCOHOL STAR PACK





River Foyle

Derry/Londonderry

Northern
Ireland







Dopey Dick Returns to the River

Dopey Dick has returned to this years clipper festival come inside and let him know your hopes and aspirations for the interflow and help us build Our Future Foyle.



Our Future Foyle is a research and design project aimed at empowering the local community to re-define the river and the surrounding banks and bridges. The aim is that through the community's vision of ownership of the river, the area will become associated with wellbeing, community events and public space.

The project is supported by Public Health Agency Northern Ireland, in collaboration with local community, voluntary, public and private sectors, with thanks to:



THE DICKY WALLE

There is a well known story and legend with a dicky, well known character, that is the Dicky character in a boat. The story is about a boy of 12, who had a dicky boat. One day the dicky boat was in the river and the boy was in the boat. The dicky boat was in the river and the boy was in the boat. The dicky boat was in the river and the boy was in the boat.

200 copies of the book have been sold. The book is available in paperback and hardcover. The book is available in paperback and hardcover. The book is available in paperback and hardcover. The book is available in paperback and hardcover.

By Jim McLaughlin
www.futurefoyle.org @ourfuturefoyle #ourfuturefoyle



Community Counselling

Calvin Richards Hair & Beauty

HOT DOGS BURGERS

UDE'S
HOT DOGS
BURGERS
COFFEE

Dope
Returns to

DOMPERIDONE xmg Tablets
 Take ONE tablet THREE TIMES a day for FIVE days.
 Swallow this medicine whole. Do not chew or crush.
 PHARMACY REF (123456789)
 01-Mar-2013
 Keep out of children's sight & reach.

ACICLOVIR xmg Tablets
 Take ONE tablet TWICE a day until cold sores have gone.
 Swallow this medicine whole. Do not chew or crush.
 PHARMACY REF (123456789)
 01-Mar-2013
 Keep out of children's sight & reach.

DIOCTYL 100mg Tablets
 Take TWO tablets ONCE a day with FOOD.
 Swallow this medicine whole. Do not chew or crush.
 PHARMACY REF (123456789)
 01-Apr-2013
 Keep out of children's sight & reach.

Pharmacy Stamp
 Patient Name: Mrs K. ...
 Age: 68
 D.o.B: 21/02/1940
 Address: 1 Business Street, Widdrington, Northumberland, NE61 1AB
 NHS Number: ...

Please don't reuse over 2gr box
 Number of days' treatment
 N.S. Ensure dose is stated
 Endorsements

PREDNISOLONE xmg
 tablet(s).
 TAKE ONE TWICE A DAY FOR TWO DAYS

DOMPERIDONE xmg
 tablet(s).
 TAKE ONE 3 TIMES A DAY FOR 5 DAYS

METOLCLOPRAMIDE xmg
 tablet(s).
 TAKE ONE 3 TIMES A DAY FOR 5 DAYS

ACICLOVIR xmg
 tablet(s).
 TAKE ONE TWICE A DAY FOR 4 DAYS

DIOCTYL 100mg
 tablet(s).
 TAKE TWO ONCE A DAY FOR 5 DAYS
 with FOOD.

Date: 04/02/2009

Signature of Prescriber
B Notreal

Dr Brian Notreal
 Medical Centre
 101010
 NE61 2CD
 Tele: 0191
 252 2525
 EP10590608



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Violence & Aggression **in A&E**

clinical care

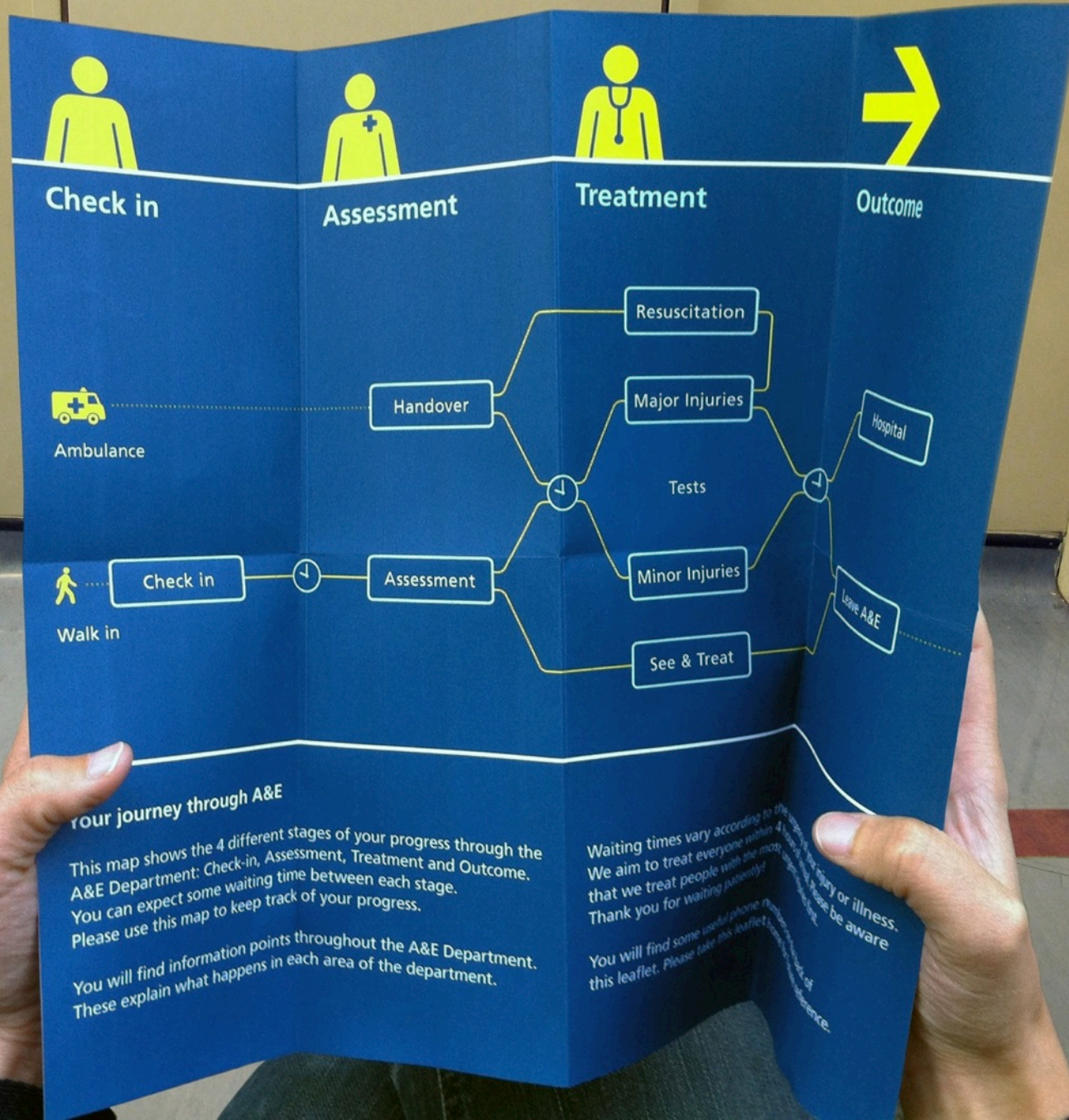


©ESRO/Andy Smith 2011

patient needs







Your journey through A&E

This map shows the 4 different stages of your progress through the A&E Department: Check-in, Assessment, Treatment and Outcome. You can expect some waiting time between each stage. Please use this map to keep track of your progress.

You will find information points throughout the A&E Department. These explain what happens in each area of the department.

Waiting times vary according to the number of people waiting. We aim to treat people with the most serious injury or illness. Thank you for waiting patiently. Please be aware that we treat people with the most serious injury or illness. Thank you for waiting patiently. Please be aware that we treat people with the most serious injury or illness.

You will find some useful phone numbers on this leaflet. Please take this leaflet with you for your reference.



88%
of patients felt the Guidance project clarified the A&E process.

75%
of patients said the improved signage reduced their frustration during waiting times.

↓ 50%
Threatening body language and aggressive behaviour fell by 50% post-implementation.

3:1
For every £1 spent on the design solutions, £3 was generated in benefits.

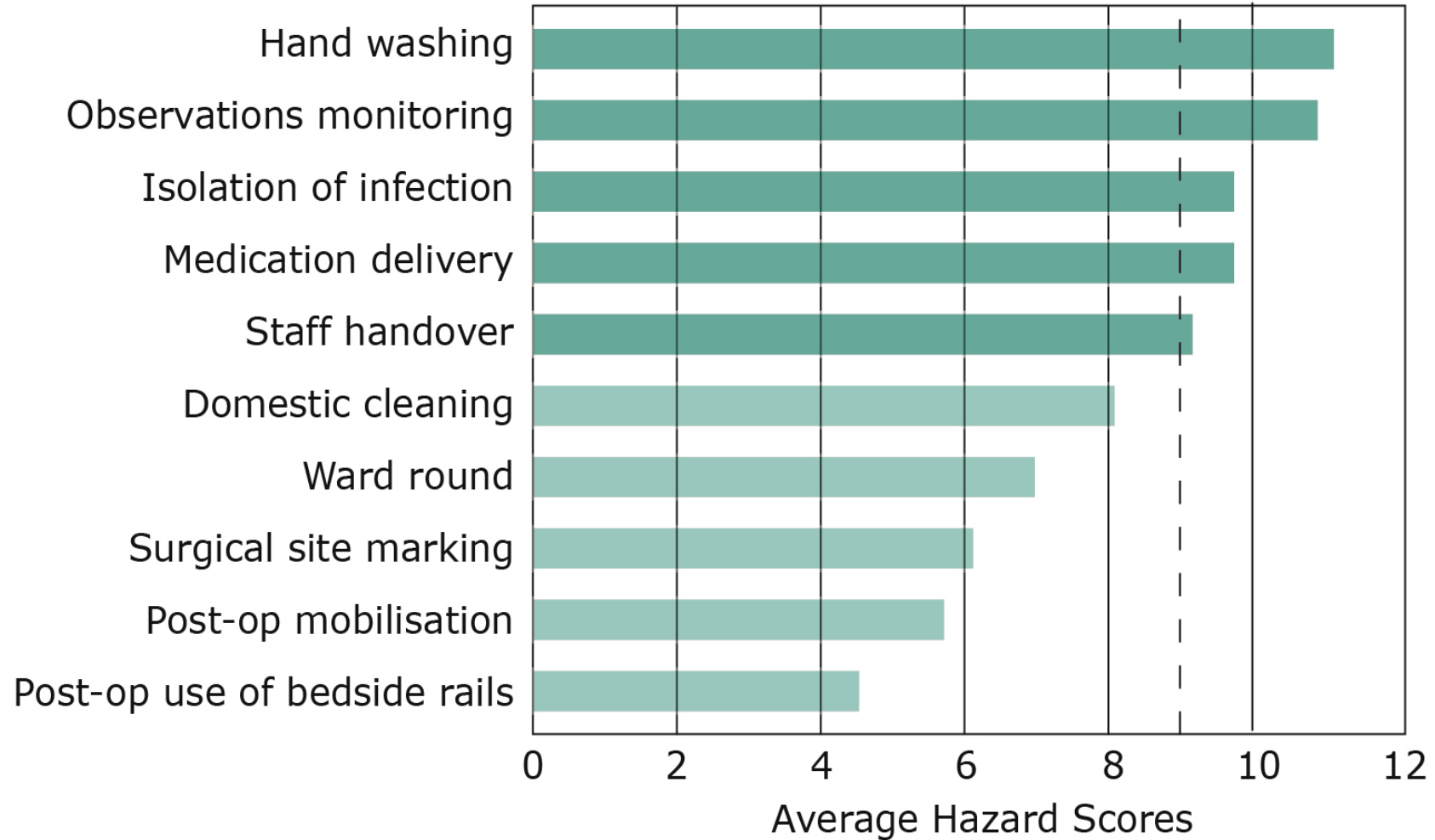


Patients' complaints relating to information and communication fell dramatically post-implementation.



Designing Out Medical Error

HAZARD SCORES





PHYSICIAN OFFICE

Day Case Unit

21



Clinical trial

Hand hygiene compliance increase **x3**

Correct use of gloves increase **x3**

Correct use of aprons was **67%** with the CareCentre and **0%** without

CareCentre implementation will help reduce healthcare associated infections.





Bristol Maid 
Hospital Metalcraft Limited

Flomark™
THE DRIP REDESIGNED





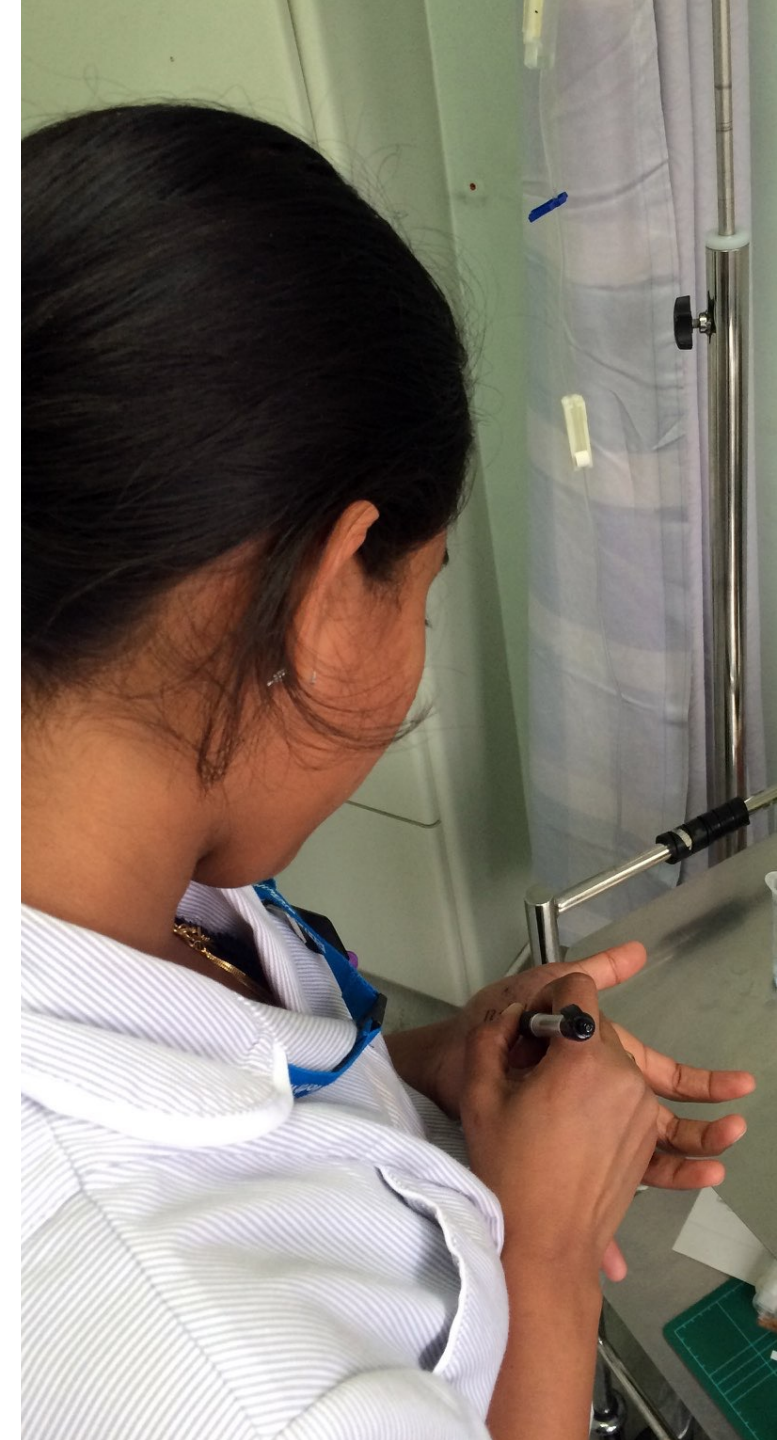


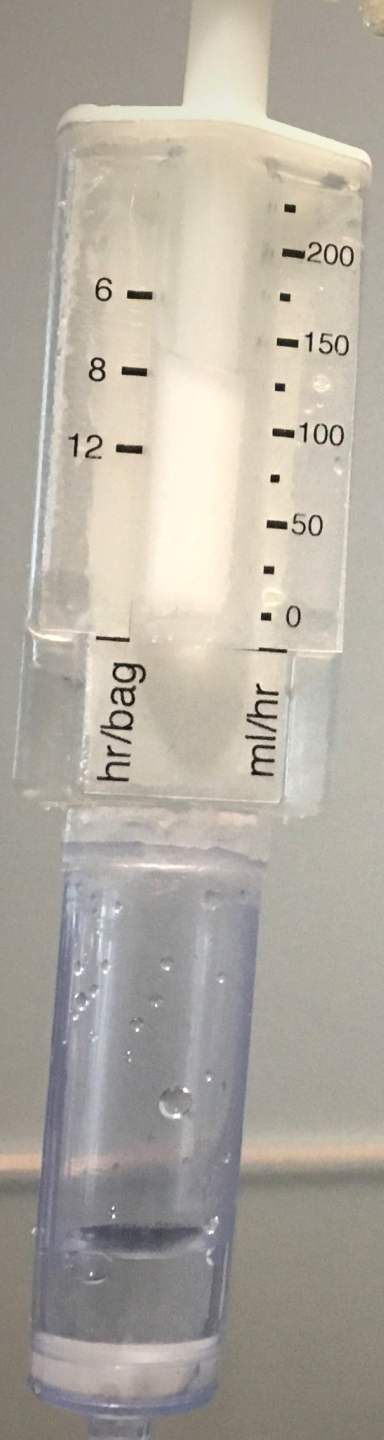
Approximately wastage of US\$ 3.98 per patient per 24-hours infused.¹

Staff time wasted on calculations & inefficiencies

Extended patient stay

1. http://www.varori.co.za/infusion_problem.htm





6

8

12

200

150

100

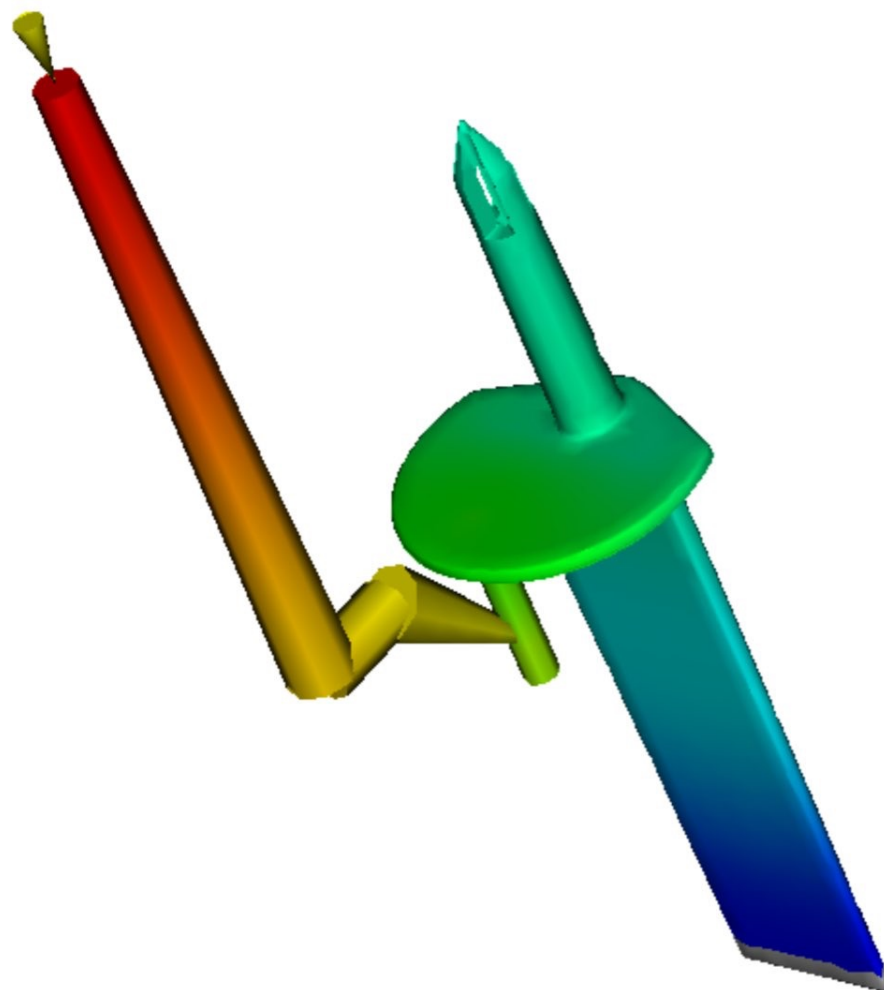
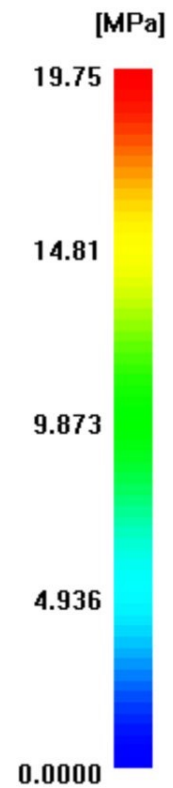
50

0

hr/bag

ml/hr

速度/压力切换时的压力
= 19.75[MPa]



缩放 (50 mm)

Design for manufacture

Trials

Regulatory

Licensing

Links with procurement

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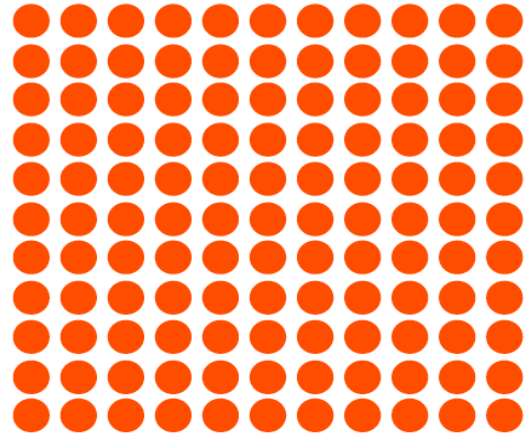
Methods for application - conclusions

Subjects

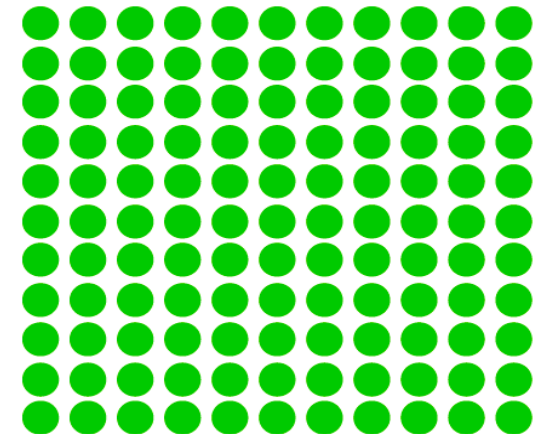
Truth

Inspiration

Traditional
Market
Research



Empathic
Research



Derived from presentaton by Martin Bontoft (IDEO)

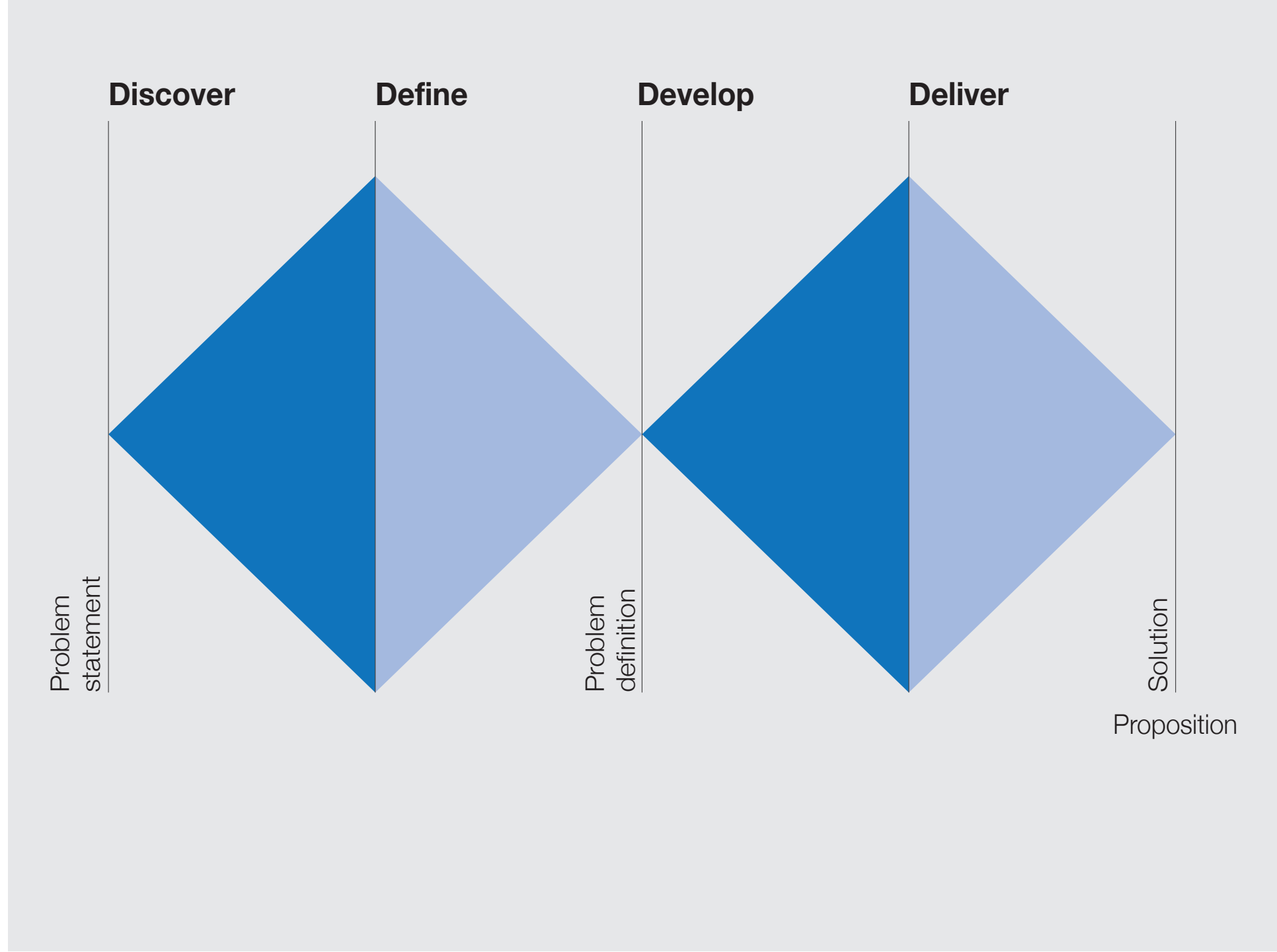
Conclusions

Double diamond approach

Map out stakeholders

Bespoke research tools

Demonstrate economic and clinical value



Thank you



Jonathan West

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Royal College of Art

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hhcd.rca.ac.uk
@HHCDesign