Cyclops Healthcare Network

(Closed loop control systems for optimisation of treatment)

EPSRC Network Plus

EPSRC Engineering and Physical Sciences Research Council

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

UNIVERSITY OF OXFORD

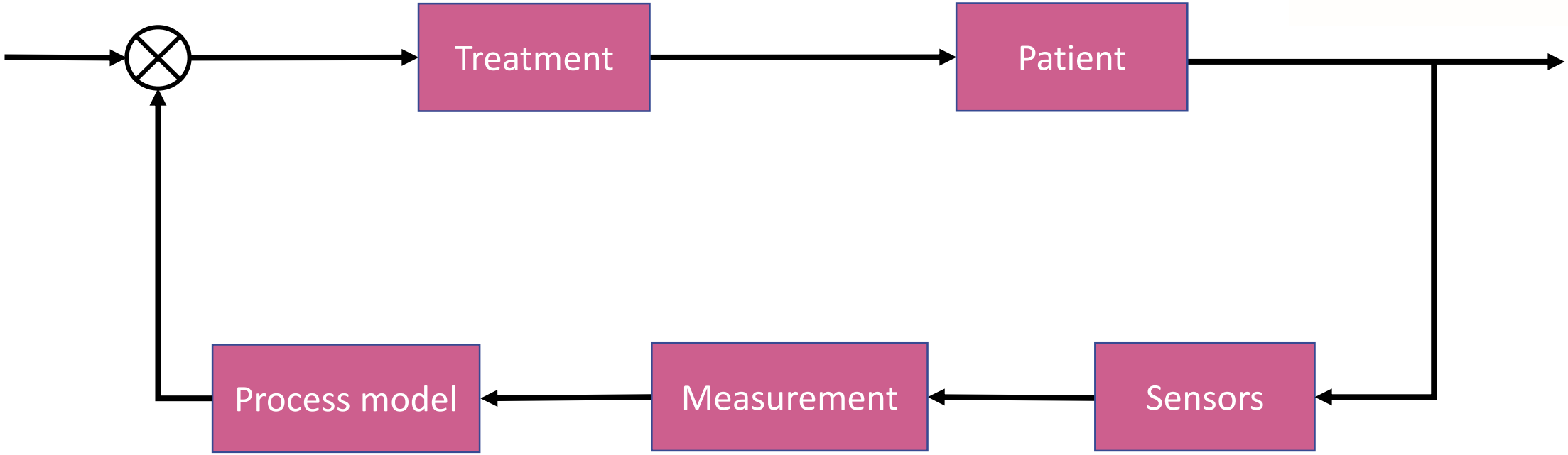
WARWICK
THE UNIVERSITY OF WARWICK

CHT Centre for Healthcare Technologies

Aim of the network

Treatment that is optimised and personalised to the individual patient to improve outcomes across a range of medical conditions.

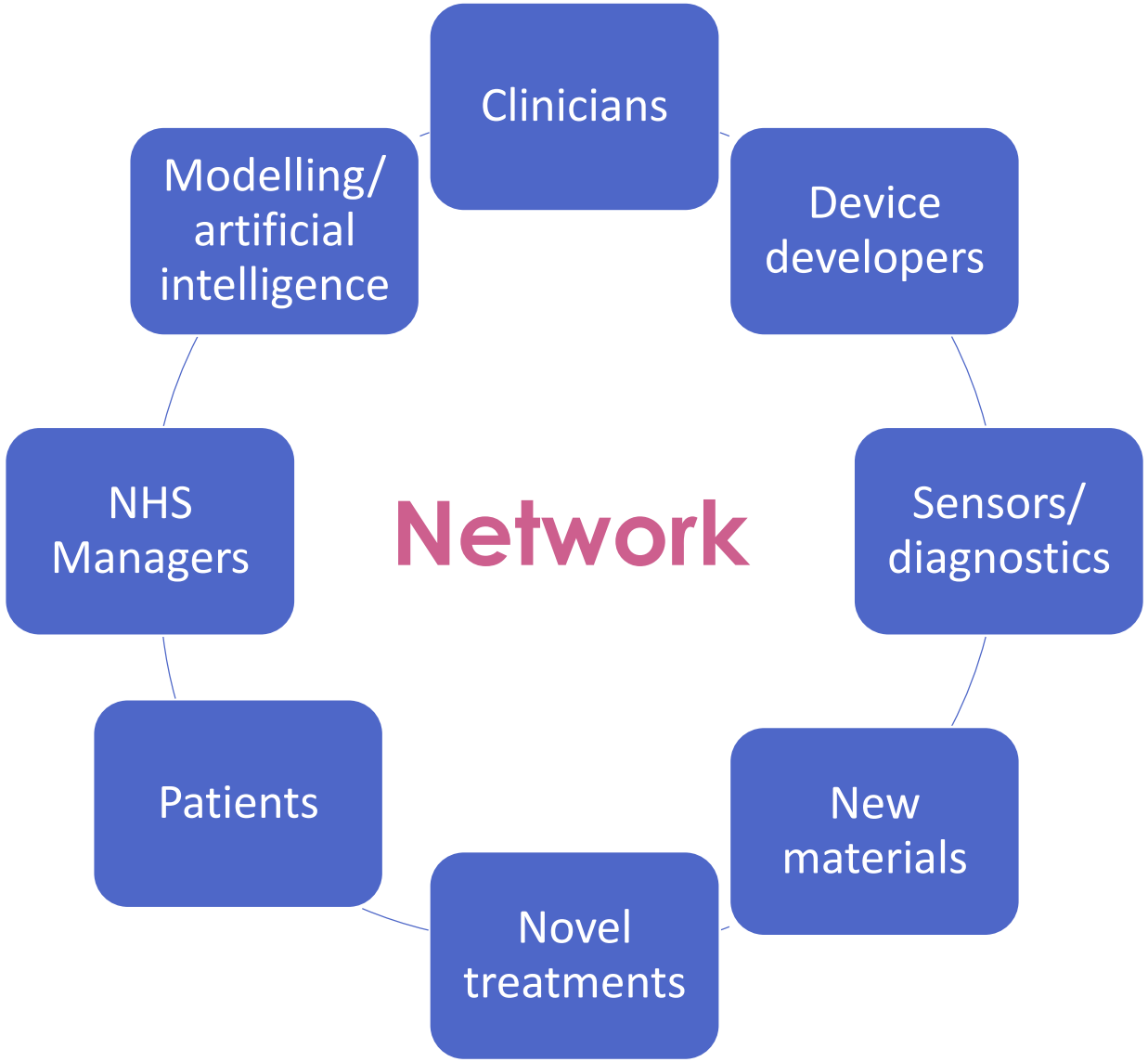
The closed loop approach



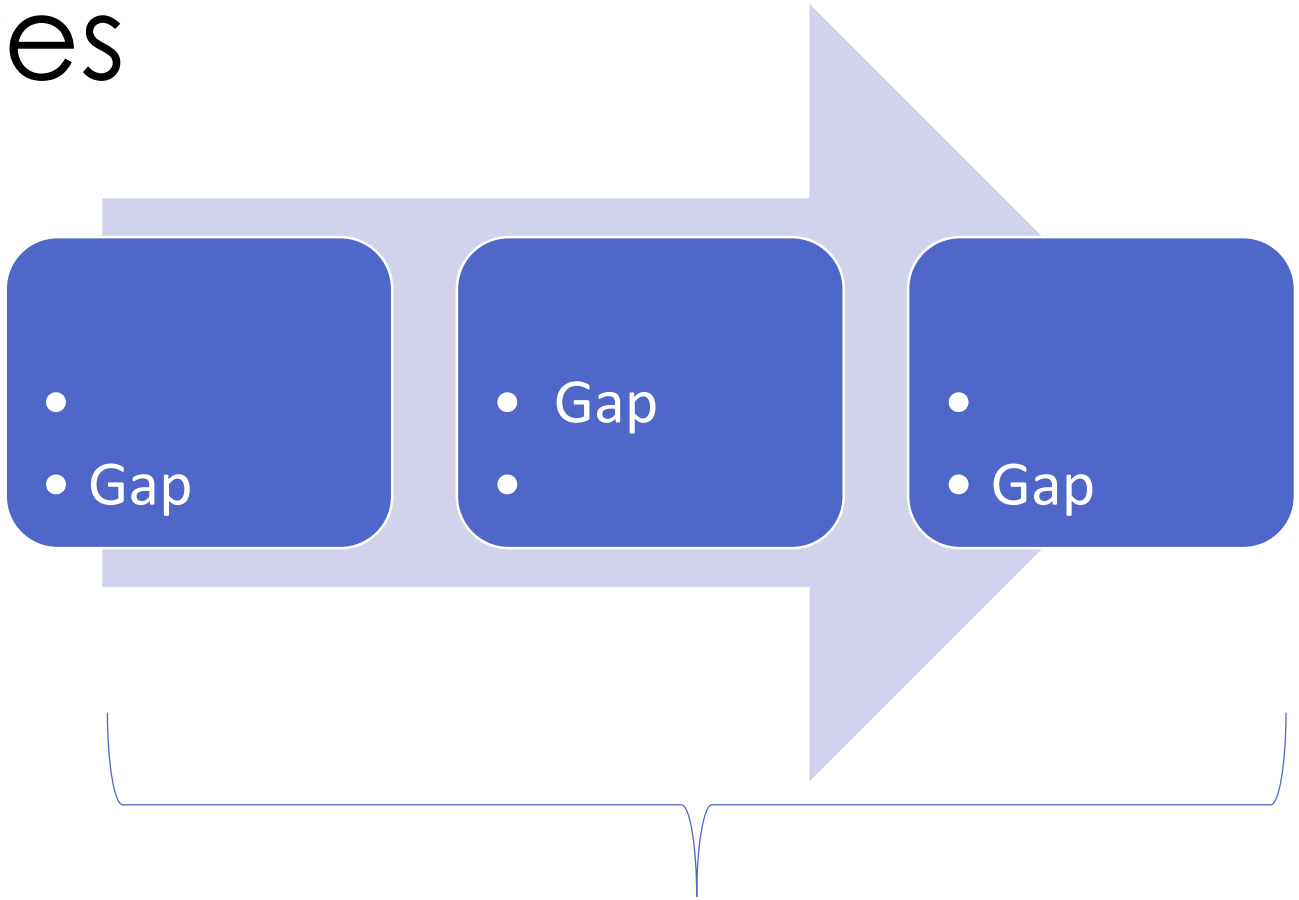
Clinical areas

i) critical care;
ii) chronic wounds;
iii) cancer treatment.

Objectives


Clinicians
Device developers
Sensors/ diagnostics
New materials
Novel treatments
Patients
NHS Managers
Modelling/ artificial intelligence
Network

Objectives



Feasibility studies/ secondments

Larger funding applications

Feasibility studies Worskhop1

- 6 proposals submitted (3 funded); achievements of funded proposals to be presented on **Day 2**.
- Proposals aimed to address gaps identified during Workshop 1.
- It was noticed that **automation** or vision on how proposed solutions can lead to automation in treatment wasn't fully addressed.
- **Workshop 2** and feasibility studies ideally focus on **automation** in treatment.

Attendees

- 11 clinicians/clinical academics – 4 NHS Trusts
- Representatives from 21 universities
- 7 patient representatives and healthcare translation services

Network has grown from 80 to 120 members including 2 international guests

Workshop: Day 1

- Emphasis on futuristic and realistic solutions: Keynote addresses the use artificial intelligent solutions to make differences in healthcare.

- Clinicians set the scene and put Cyclops clinical areas into context.

- **Breakout sessions**. Delegates spend 45 minutes exploring research challenges in creating futuristic and realistic clinical technologies to address cancer, chronic wounds and critical care.

- **Pitching to your table** - Delegates will each have the opportunity to talk about their ideas for closed loop approaches to treatment and offer expertise to network members.

Workshop: Day 2

- Updates from **Cyclops feasibility study grant** holders
- How **CHEATA** can support Cyclops proposals
- **Launching call for proposals for feasibility studies and proof-of-concept ideas.**
- **Project outlines –** Groups will be invited to present a brief outline of their concepts /proposals for closed loop approaches to treatment.