



Yorkshire & Humber  
Care Record

# A Foundation for Quality Improvement Through Formal Clinical Process Analysis

A presentation by

Dr Jason Broch, YHCR Clinical Lead

Robert Hickingbotham, CEO and Founder Synanetics

@YHCareRecord

[www.yhcr.org](http://www.yhcr.org)

[www.synanetics.com](http://www.synanetics.com)

## Dr Jason Broch, YHCR Clinical Lead



*Jason is a GP at Oakwood Lane Medical Practice. Previously, he was Chair of NHS Leeds North CCG from 2013 until it merged into the current CCG in 2018. Jason is passionate about providing the best possible health outcomes for the people of Leeds and tackling health inequalities. He has keen interests in Quality improvement, Population Health Management and Healthcare innovation & technology. Previously acting as Chief Clinical Information Officer on behalf of the whole Leeds Health & Social Care economy, he developed successful projects such as the integrated Leeds Care Record and award winning integrated business analytics.*

***[jason.broch@nhs.net](mailto:jason.broch@nhs.net)***

## Robert Hickingbotham, CEO and Founder Synanetics



*Robert has over 30 years' experience of healthcare informatics in the UK, USA and South America through senior positions held at Accenture, InterSystems and now Synanetics where he heads up a team developing interoperability solutions for the NHS. He acted as lead architect for the Yorkshire and Humber Care Record Local Health and Care Record Exemplar programme and is currently engaged in the deployment of the care record across Yorkshire and Humber and other parts of the UK.*

***[robert@synanetics.com](mailto:robert@synanetics.com)***

- Silos of care / funding
- Increasing Demand
  - Demographic
  - Capability
- Misaligned incentives for providers
- *Sustainable???*

# The NHS Long term plan

## January 2019



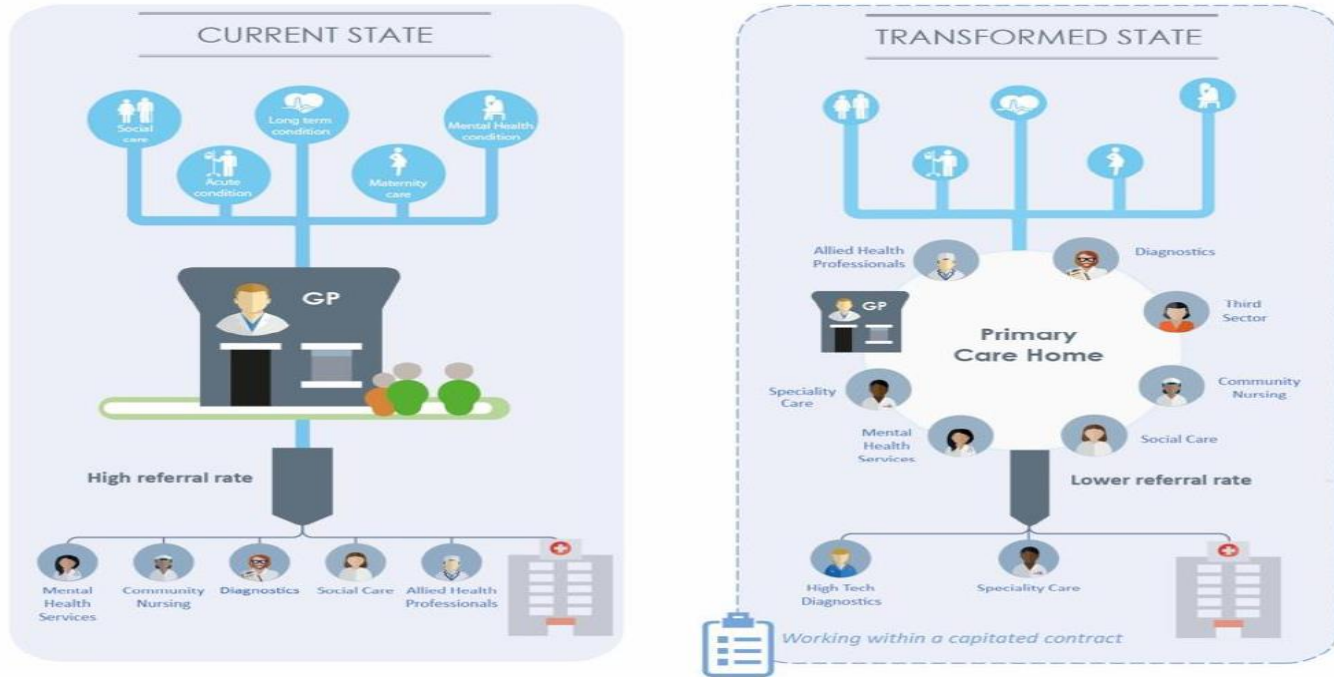
Make sure everyone gets the best start in life

Delivering world-class care for major health problems

Supporting people to age well

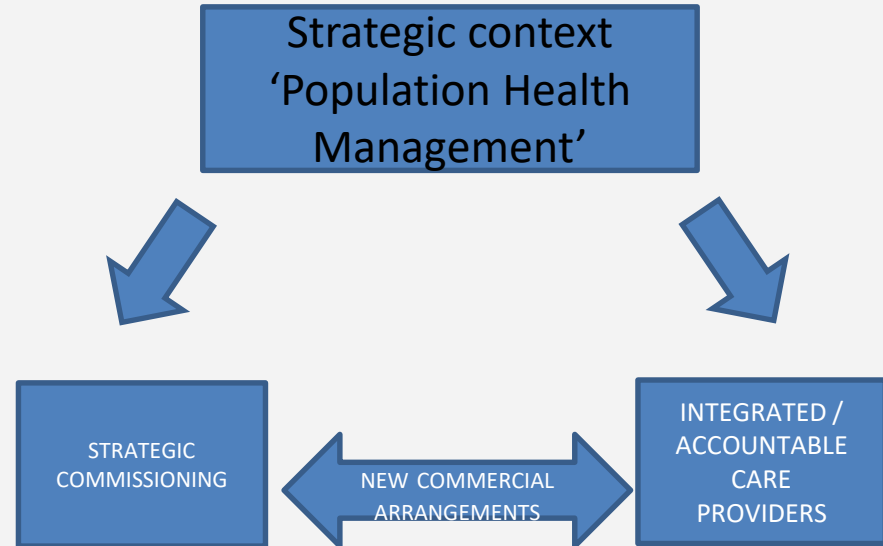
1. Doing things differently
2. Preventing illness and tackling health inequalities
3. Backing our workforce
- 4. Making better use of data and digital technology**
5. Getting the most out of taxpayers' investment in the NHS.

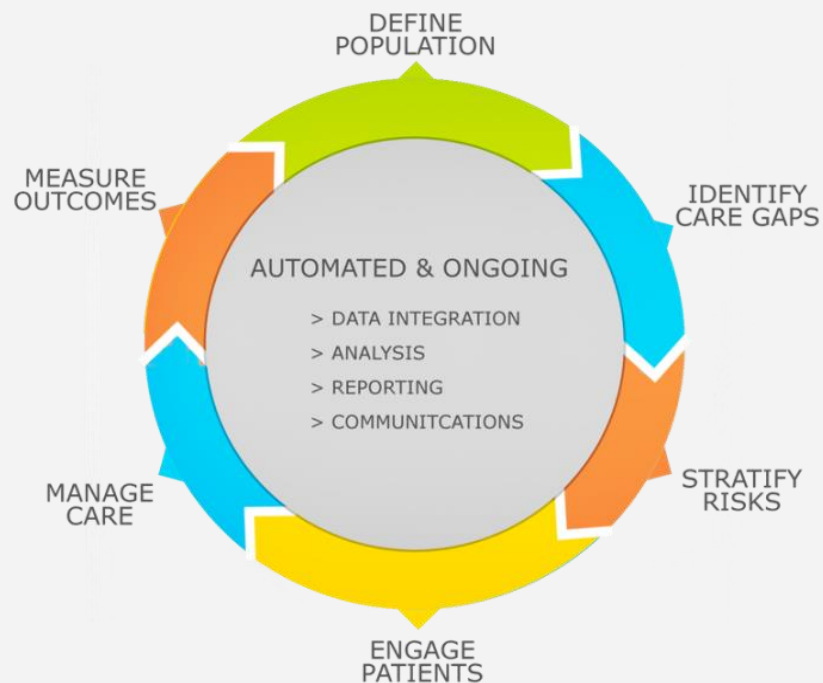
The NAPC describes four core characteristics of a Primary Care Home



**Definition** - “PHM means the proactive application of strategies and interventions to defined groups of individuals across the continuum of care in an effort to improve the health of the individuals within the group at the lowest necessary cost”

- design health and care provision around the **needs of patients** as opposed to disease components with greater emphasis on **prevention and self care**;
- connect better with **patients and citizens who are proactive** in the design, management and delivery of their own care
- take proactive steps to meet the funding gap in health and social care by **removing the duplication and investing in prevention**
- **fully utilising informatics solutions** to direct care interventions to where they are most needed, and better support professionals in joint working.

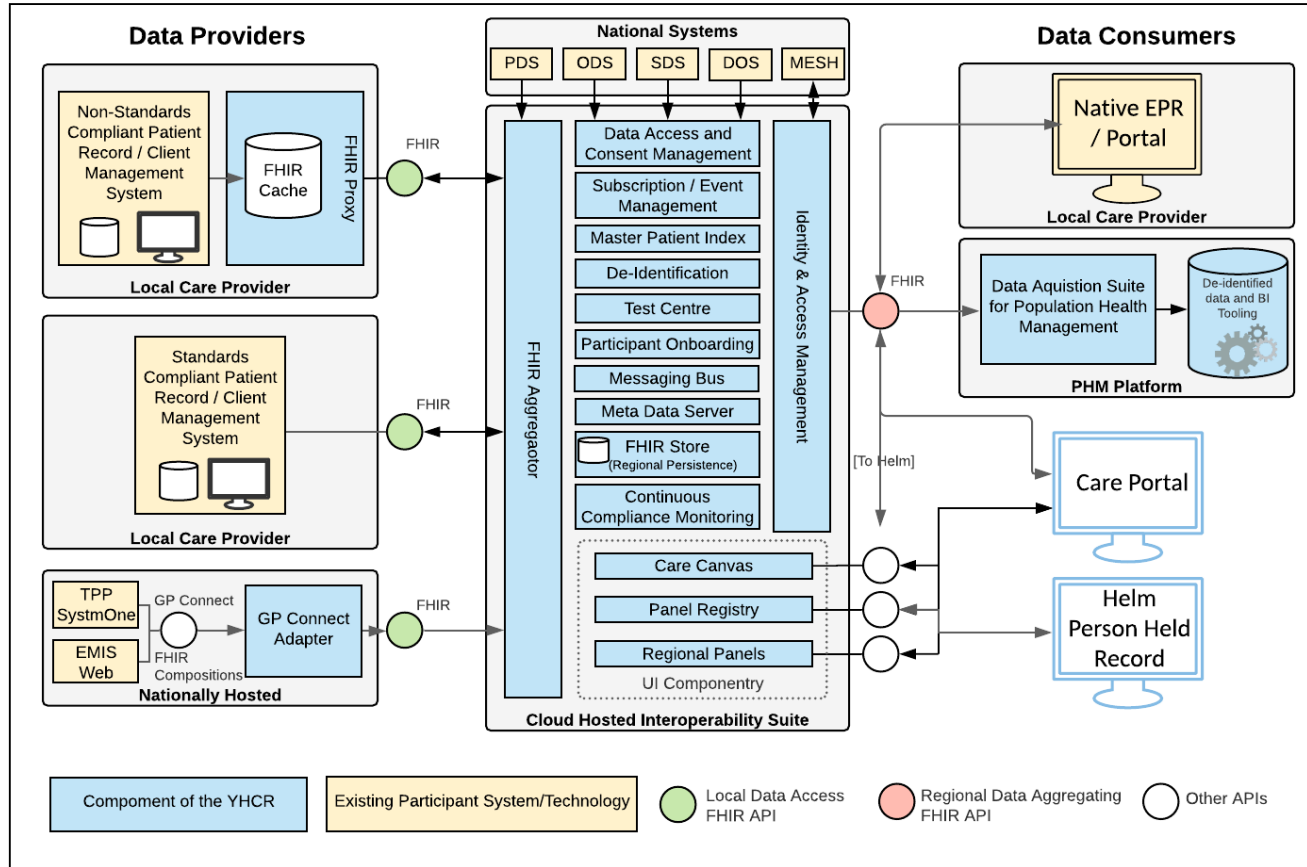




## BUSINESS CAPABILITIES

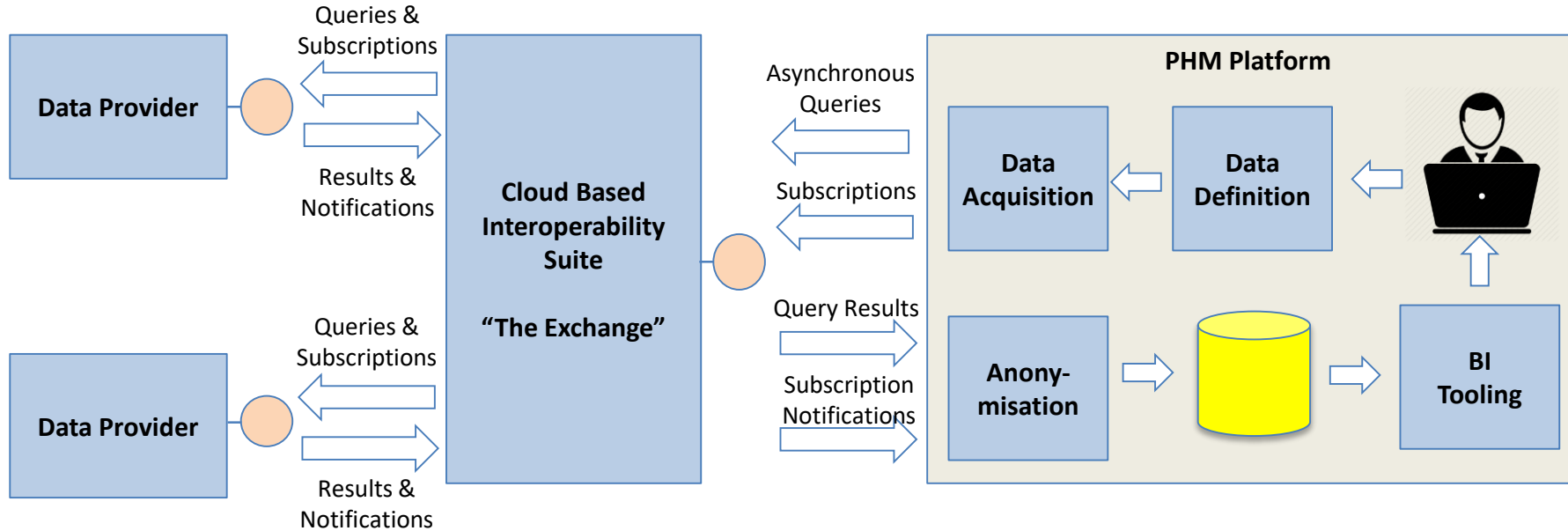
Understanding Population Need  
Actuarial skills  
Measuring Outcomes  
Commercial skillset  
Co-production  
Versatile workforce  
Integrated Informatics  
for Patients  
for Providers  
for Commissioners  
Estates  
Quality Improvement Methods

Enabled through the Yorkshire and Humber  
Care Record





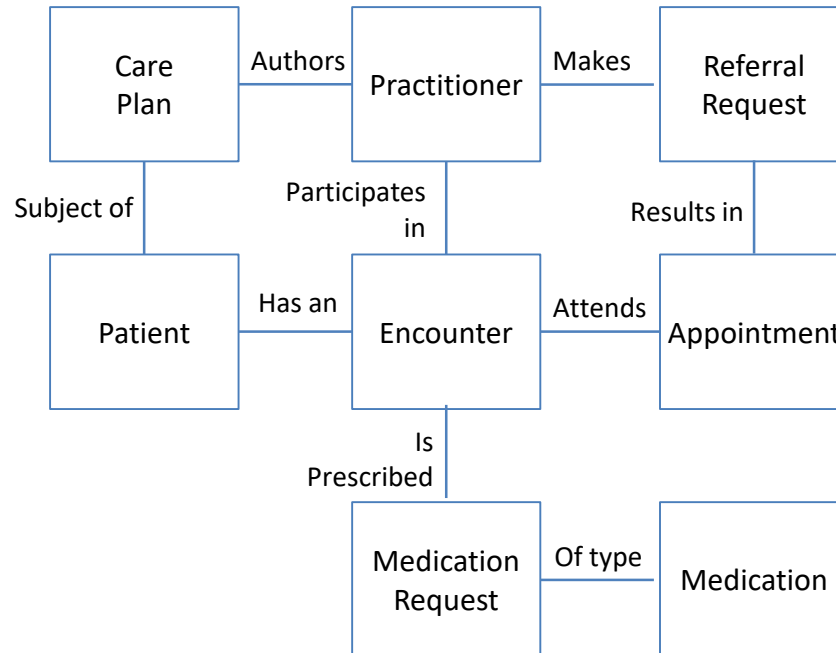
# The YHCR for Population Health Management



# How the YHCR Improves Care

- Opportunities with information layer as an enabler
  - Available information – emergency, complex care, plans
  - Workflow across organisations
- Personalisation of care
- Information available
  - How are people accessing services? Populations of need? Behaviours?
  - Gaps in care – Ribera-Salud.
  - Point of care information.
- Platform for new tools – interaction and manage not just professional workflow, but ‘patient workflow’
- Proactive care: eg carers. Hip # → care gap → new proactive teams.

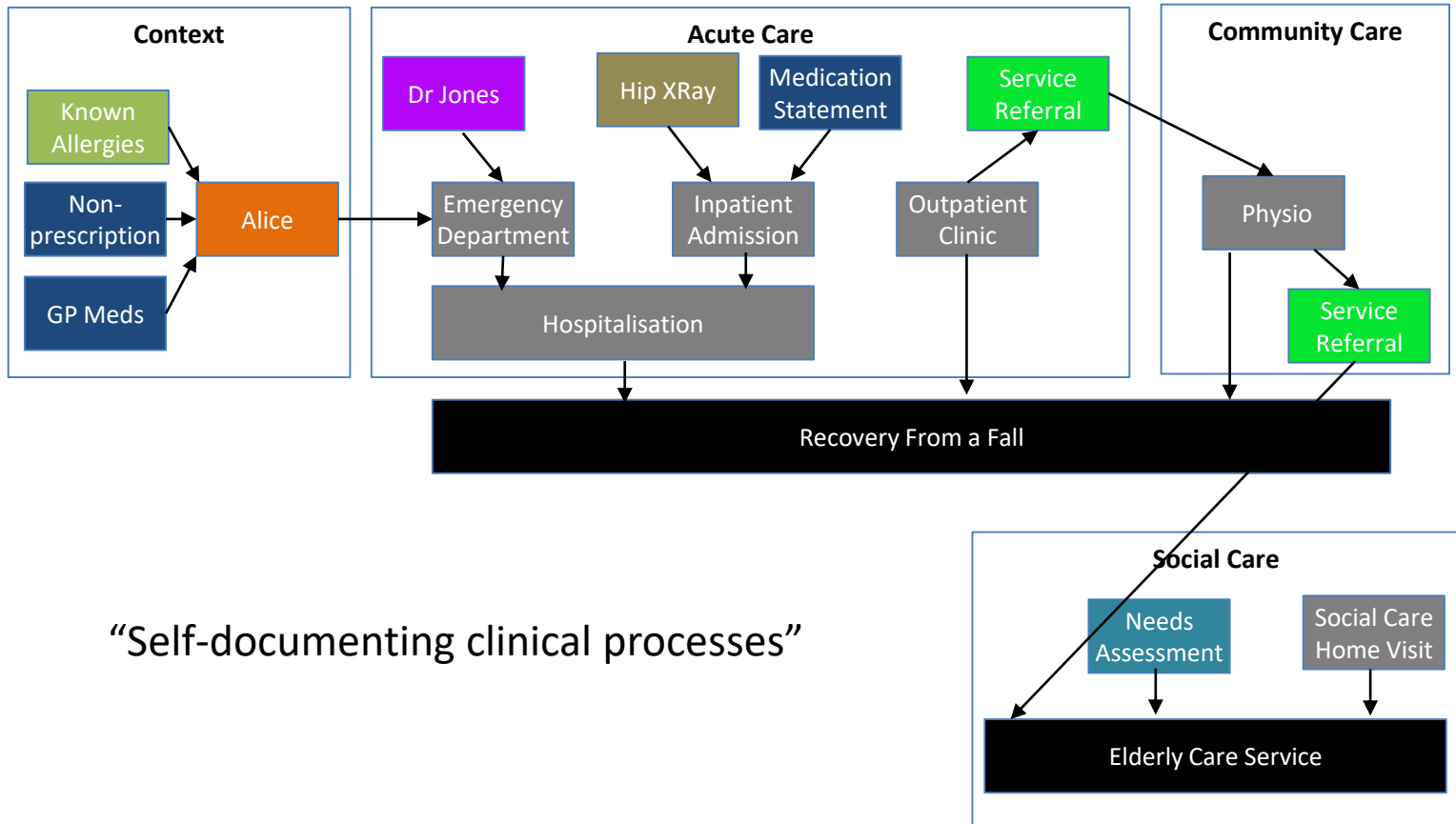
# Fast Healthcare Interoperability Resources (FHIR) – a data model for health and care



# A Patient Journey as Represented in the YHCR



- FHIR Resources**
- Patient
  - Allergy Intolerance
  - Medication Statement
  - Clinical Impression
  - Diagnostic Report
  - Referral Request
  - Encounter
  - Practitioner
  - Episode of Care

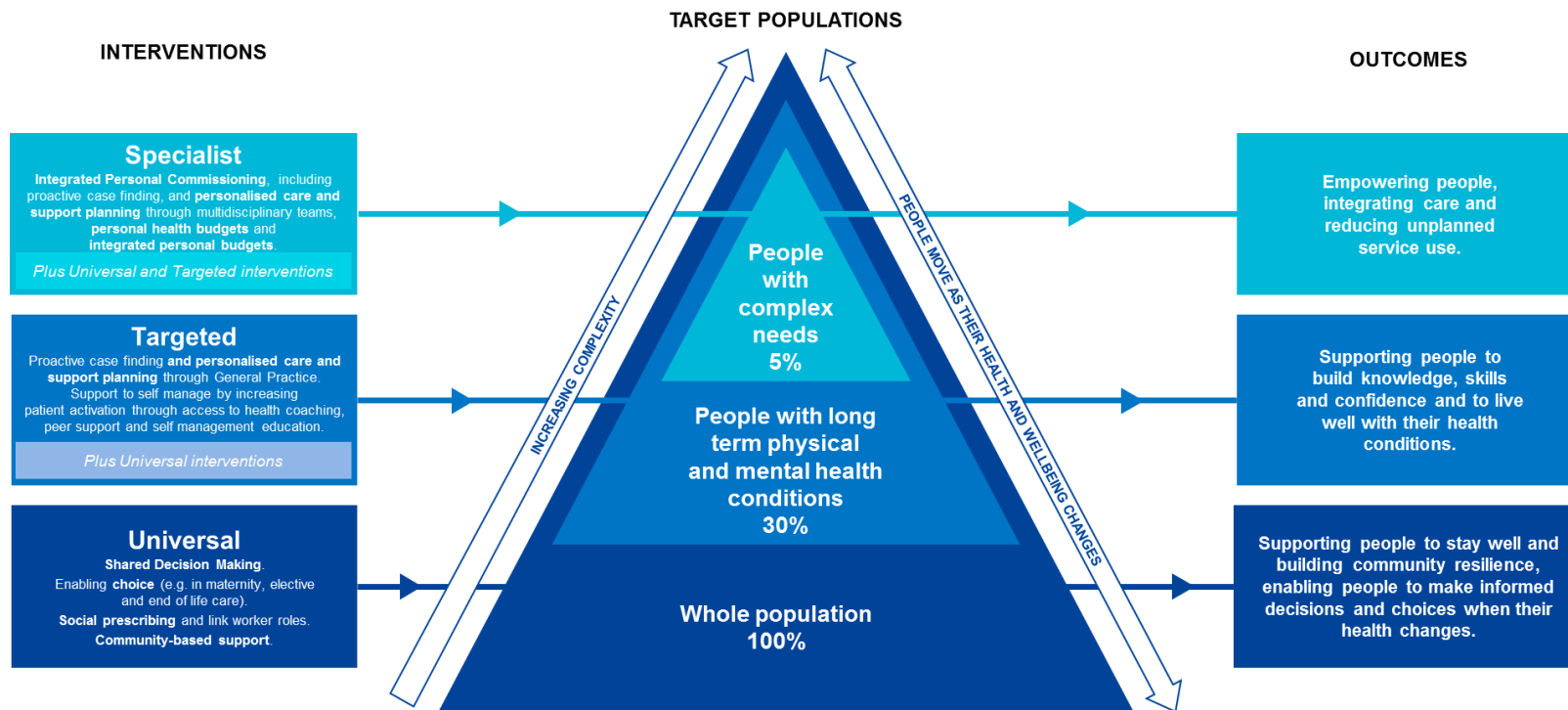


“Self-documenting clinical processes”

# Quality Improvement Through Process Standardisation



- What does care look like for populations overall?
- What is the variation?
- Quality improvement methodology – standard vs variation
- Outcomes vs outputs.
- Personas / use cases – clinical validation



# Business Process Modelling in the YHCR



- Managing Data Maturity and Quality Improvement
- Understanding Use Cases and Applying YHCR Functionality
- Standardising Business Processes
- Measuring Effectiveness of Care Pathways

# Regional Encounter Models

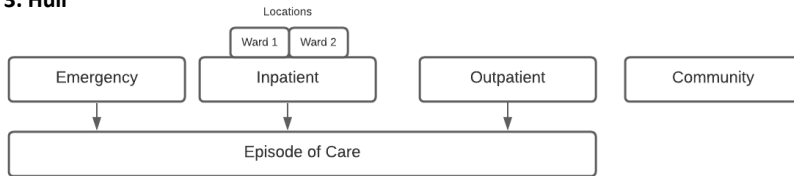
## 1. Theoretical Simple



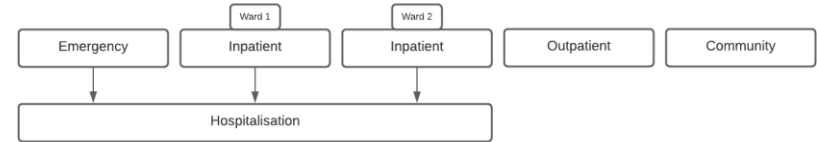
## 2. Doncaster



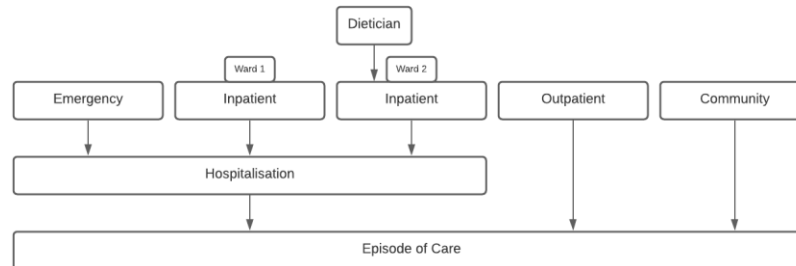
## 3. Hull



## 2. Harrogate

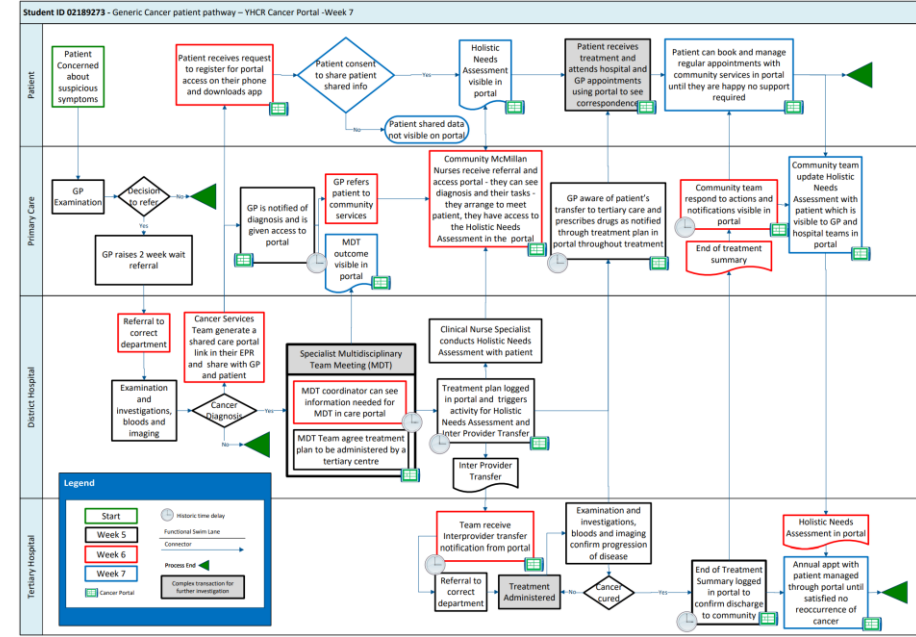
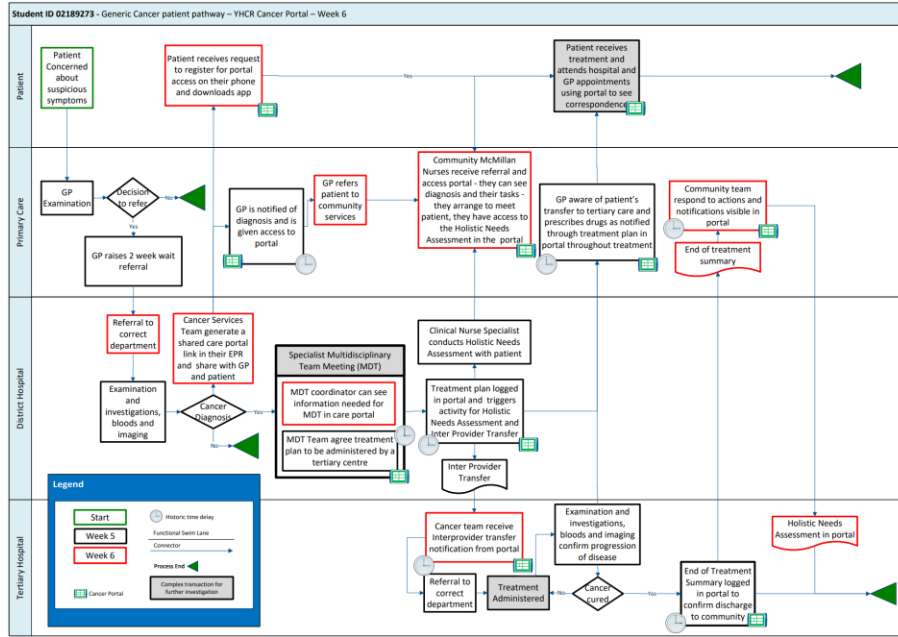


## 5. Optimum Regionally Modelled Episode of Care



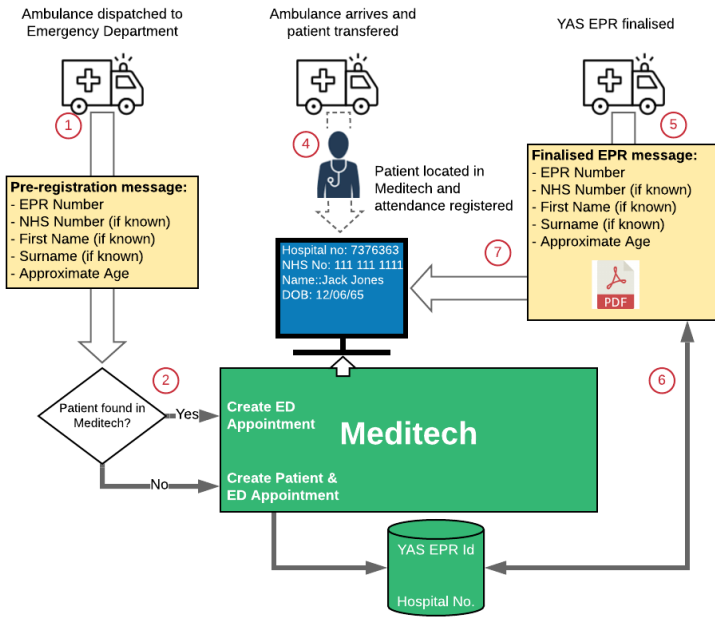


# Applying the Care Portal to Cancer Care

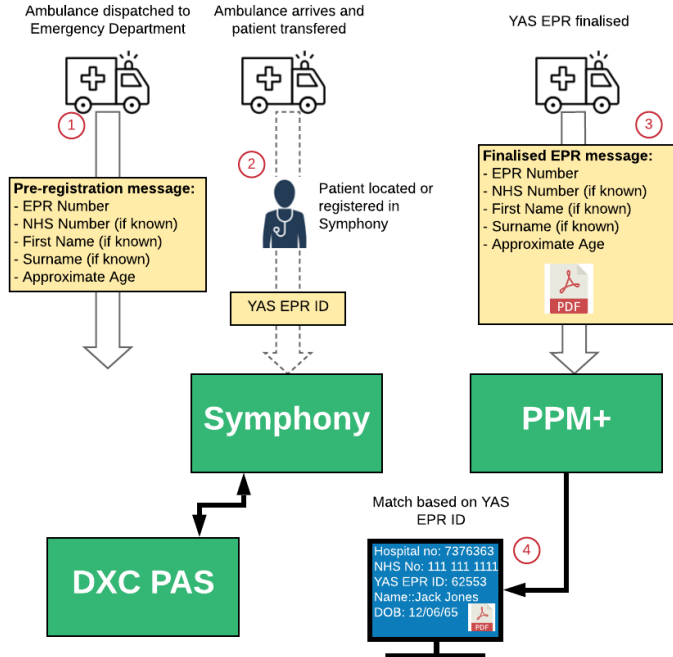


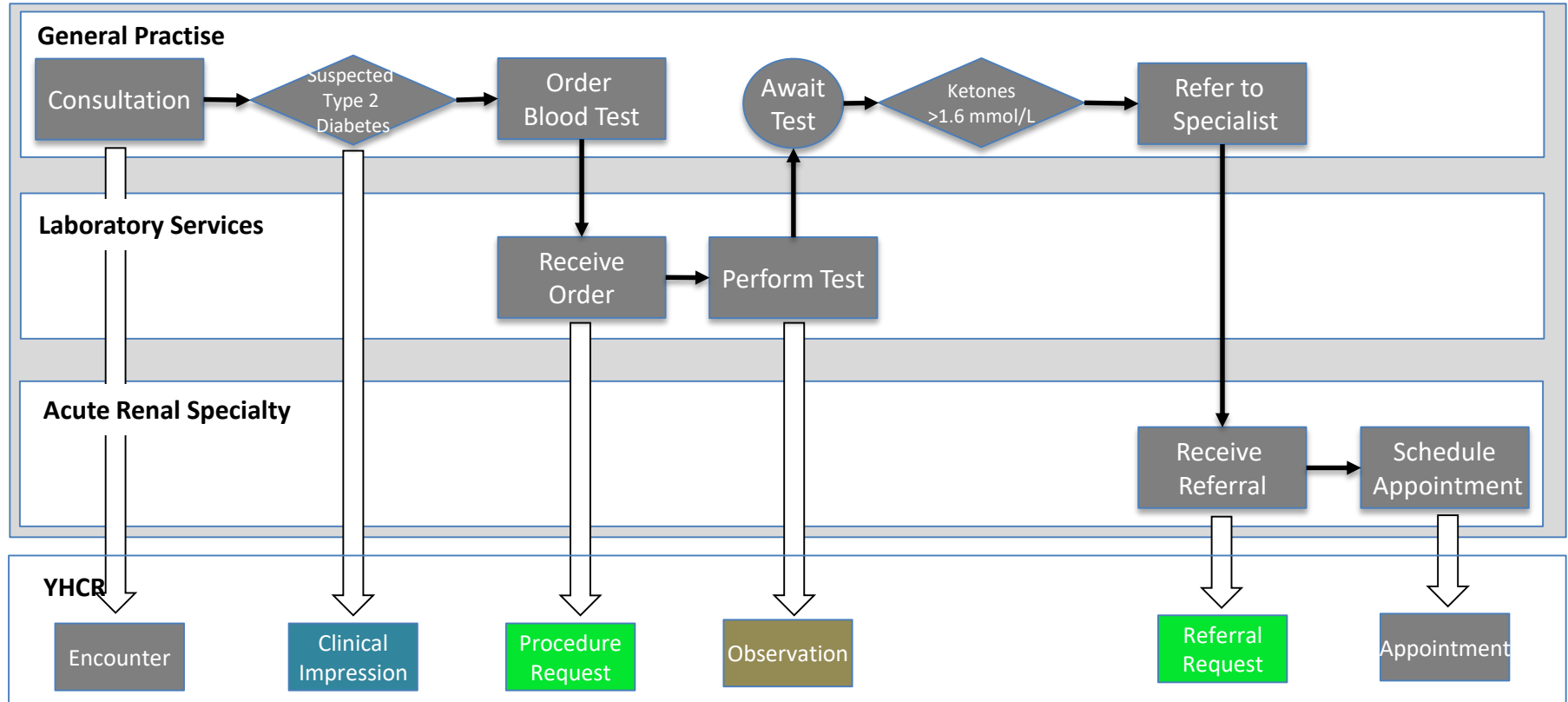
# Standardizing Transfer of Care from Ambulances to ED

## The Rotherham Hospital NHS Trust



## Leeds Teaching Hospitals NHS Trust





# Realising Ambitions for Formalising Process Led Care



## There are barriers

- Data immaturity and uniformity of coding standards
- Regionally recognised episodes of care
- Complexity and scope of clinical processes and practises
- Demonstrating value

## ...and there is light

- YHCR enforces data standardisation and spotlights immaturity
- Regional terminology services facilitate coding standardisation
- Shared care record catalyse joined up care pathways and formal documented processes
- Integrated Care Systems with teeth will mandate regional process management

# Questions