

Reducing Health Inequalities through Innovation and System Change

Paul Bollom, Interim Chief Officer, Health Partnerships



20 February 2017

Leeds Health and Wellbeing Board

The Scale of the Challenge

- There's lots of good news showing the progress we're making to deliver a Strong Prosperous Economy and Compassionate City and no shortage of awards illustrating our progress,
 - The best big city in England for standard of life according to MoneySuperMarket's 2015 quality of living index covering employment, wages, house price affordability and cost of living
 - Best student city
 - One of the Fastest Economic Growth Rates in the North
- But there's lots to do to ensure the benefits of change and economic growth are shared across our community



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The Patterns of Inequality

- **Quality of Life;** While the city is significantly better than the national (England) average in terms of statutory homelessness and violent crime, it is significantly worse in terms of deprivation, child poverty and long term unemployment, all major determinants of good health, and in levels of GCSE attainment, although the latter does show recent improvements.
- **Children and Younger People;** Children's health is significantly worse than the national position in respect of smoking status at time of delivery, breastfeeding initiation and under 18 conceptions.
- **Specific diseases;** the city is significantly worse than the national average in relation to hospital stays for alcohol related harm, drug misuse and sexually transmitted infections. While the percentage of recorded diabetes is significantly better than the national average, it does show a slight worsening trend.
- **Life expectancy** at birth of both males and females is also significantly worse than the national average, as are smoking related deaths, and the under 75 mortality rate for cardiovascular disease and cancer. Similarly differences in life expectancy between different areas are ranked amongst the highest in the UK with, for example, a 10 year difference between Harewood and Hunslet.



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An aligned response within the health and care sector

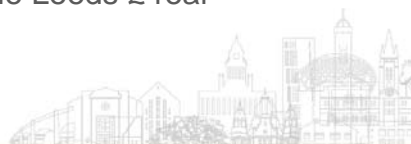
- The Spirit Level
- Fair Society, Healthy Lives; Marmot Review 2010
- Shaping healthy cities and economies: the role of clinical commissioning. NHS E Dec 2016



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A Whole City Approach

- **Maximising the local impact of anchor institutions:** a case study of Leeds City Region (JRF Jan 2017)
- There are major opportunities to achieve more inclusive economic growth.
- Realising these wider benefits requires innovation and new forms of collaboration between anchor institutions within and across sectors.
 - Agreeing priorities
 - Pooling Budgets – making the Leeds £ real
 - Place Base Approaches



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The Leeds Economy

*Colin Mawhinney, Head of Health Innovation,
Health Partnerships on behalf of Tom
Bridges, Chief Officer Economy and
Regeneration, Leeds City Council*



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THE LEEDS GROWTH STRATEGY 2011-2016

The Leeds seven core priorities are:

- health and medical
- financial and business services
- low carbon manufacturing
- creative, cultural and digital
- retail
- housing and construction
- social enterprise and the third sector

‘The concentration of expertise and jobs in health translate into wealth and well being. Putting the currently disparate pieces of this jigsaw together will reveal a picture of a literal ‘healthy economy’ that the city can exploit to power future growth and enhance quality of life. The health and medical sector in the city will be one of the fastest growing globally, a lynchpin of the city’s economy, and central to its quality of life.’



www.leedsgrowthstrategy.co.uk

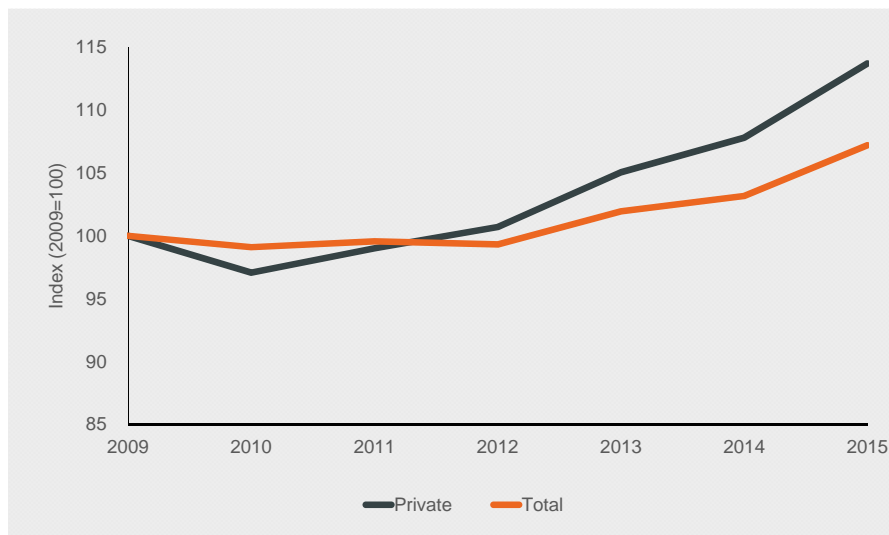
THE NEED FOR A REFRESH

- Rapid change in the political and economic environment
 - Brexit
 - Industrial Strategy
 - Northern Powerhouse
 - Five Year Forward View
 - Prosperous Economy and Compassionate City
- Building on the achievements of original strategy
 - One of the fastest growing economies in the north,
 - Most productive economy in the north

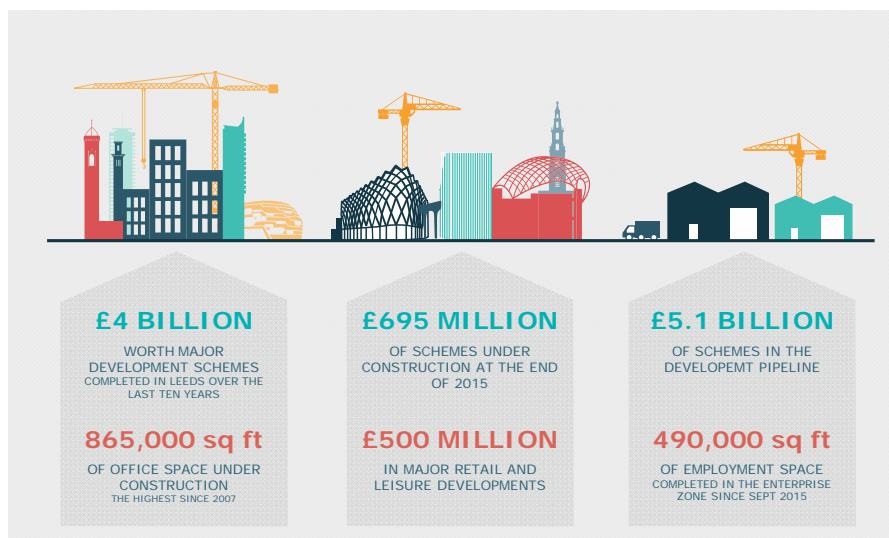


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STRONG JOBS GROWTH



DEVELOPMENT PROGRESS

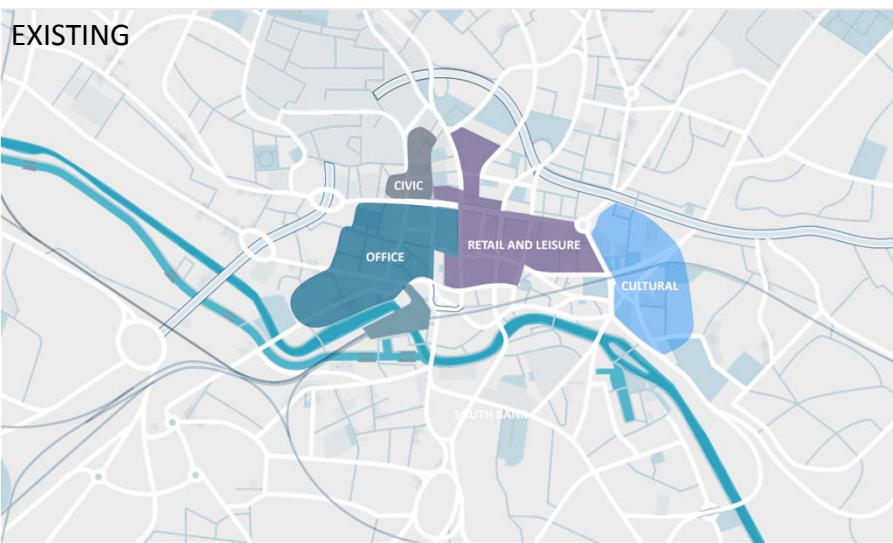


HOUSING GROWTH



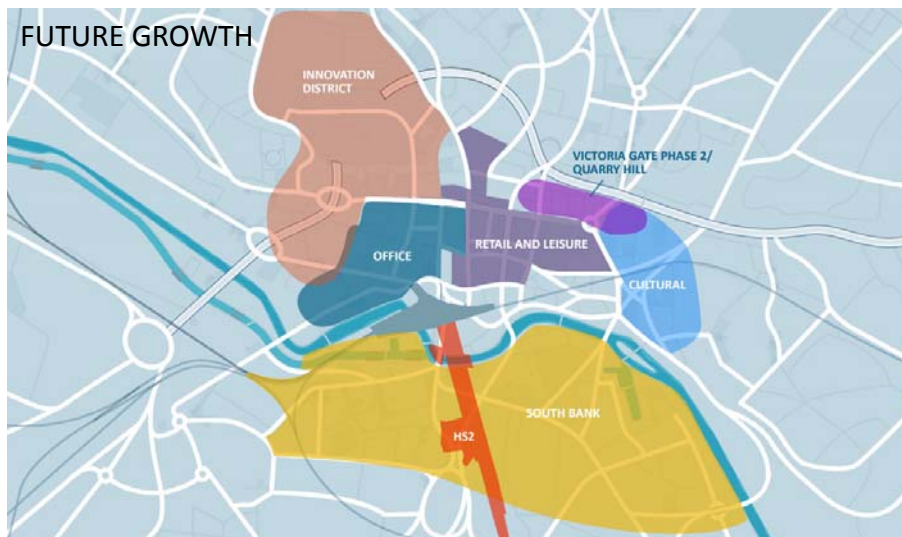
3,296 New homes completed in Leeds in 2015-16, highest amongst core cities (Manchester completed 1525)

DOUBLING THE SIZE OF LEEDS CITY CENTRE



IMPACT OF SOUTH BANK AND INNOVATION DISTRICT

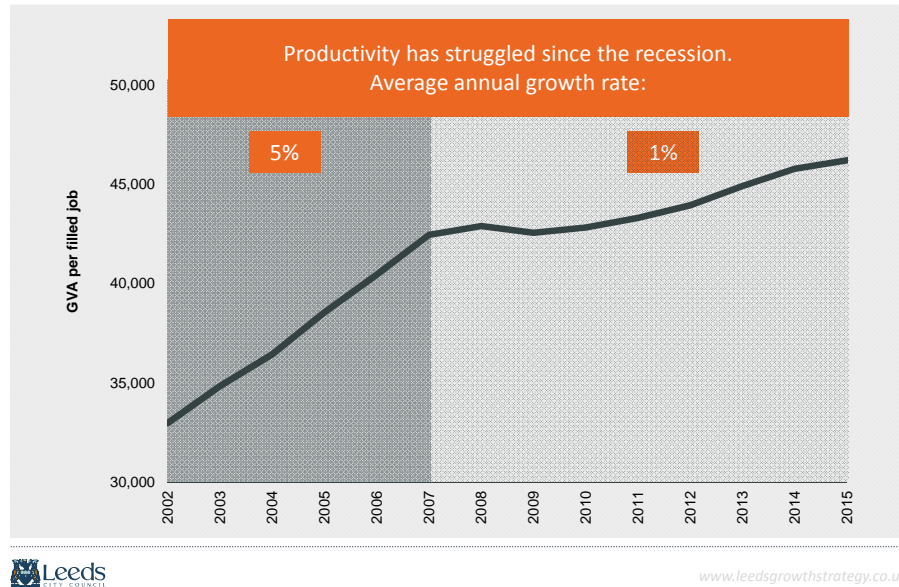
FUTURE GROWTH



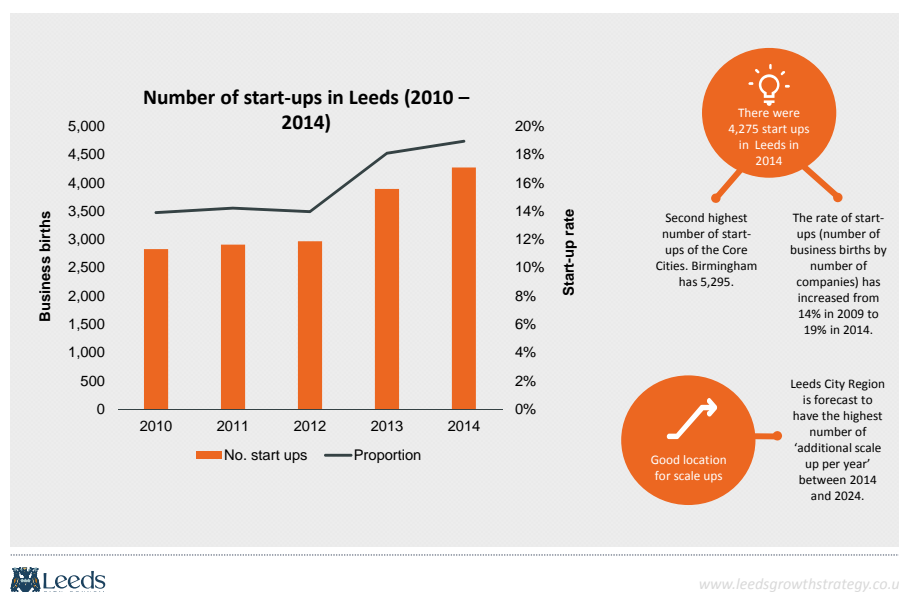
POSITIVE RECENT TRENDS AND FORECASTS



SLOW PRODUCTIVITY GROWTH



STRONG START-UP AND SCALE-UP PERFORMANCE



The opportunity for good growth

A conversation with health and innovators



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OPPORTUNITIES TO TACKLE POVERTY

150,000 people
in Leeds living within
10% most deprived
wards in England

Number of jobs in paying
less than Real Living Wage:



80,000 in Leeds

81,000 new jobs
forecast to be created
in LCR by 2020

600,000 job
opportunities forecast
in LCR by 2020 due to
people leaving the
workforce

Reducing Health Inequalities through Innovation and System Change


Dylan Roberts, Chief Digital and Information Officer

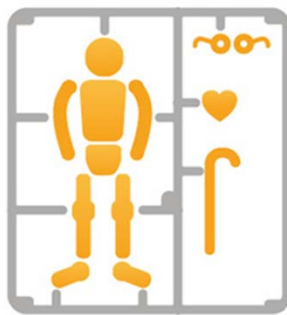
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Health and Wellbeing Outcomes vs Health and Care Services

Bob often feels that he's seen by public services as a collection of bits and illnesses




Bob as seen by his friends and family



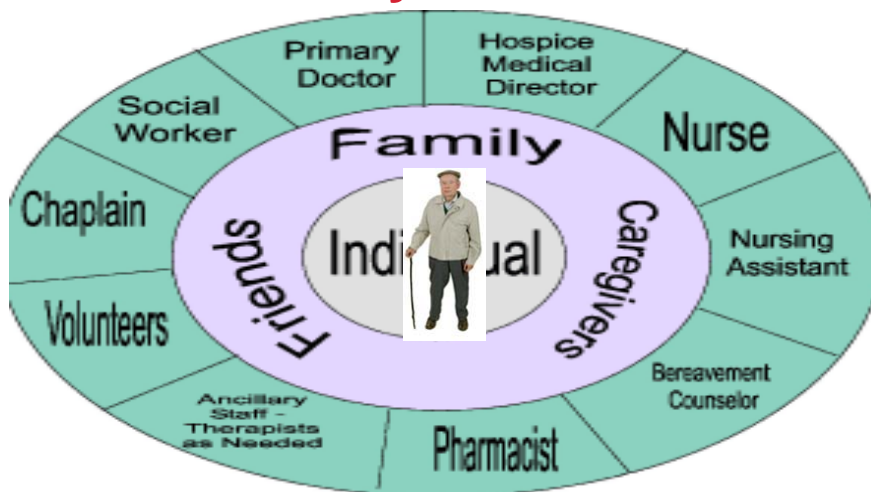
Bob as seen by the healthcare system

Whole System & Place Based Approach Relevant To Many Outcome Areas

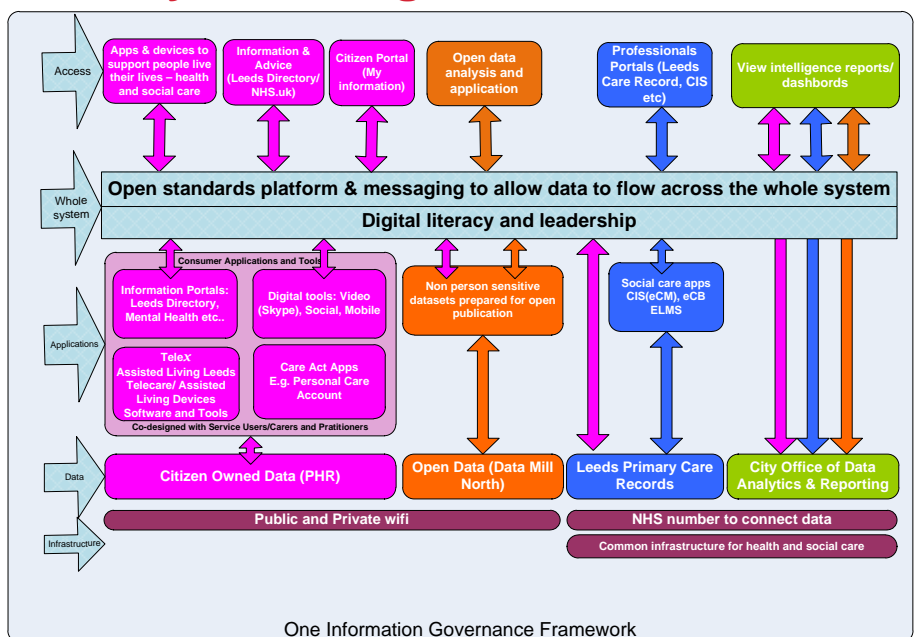


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Coordination of care as one system

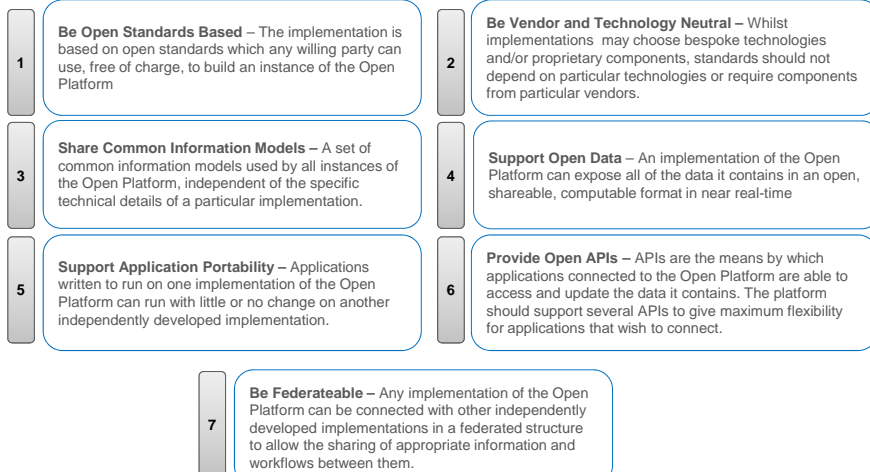


City First, Organisation Second

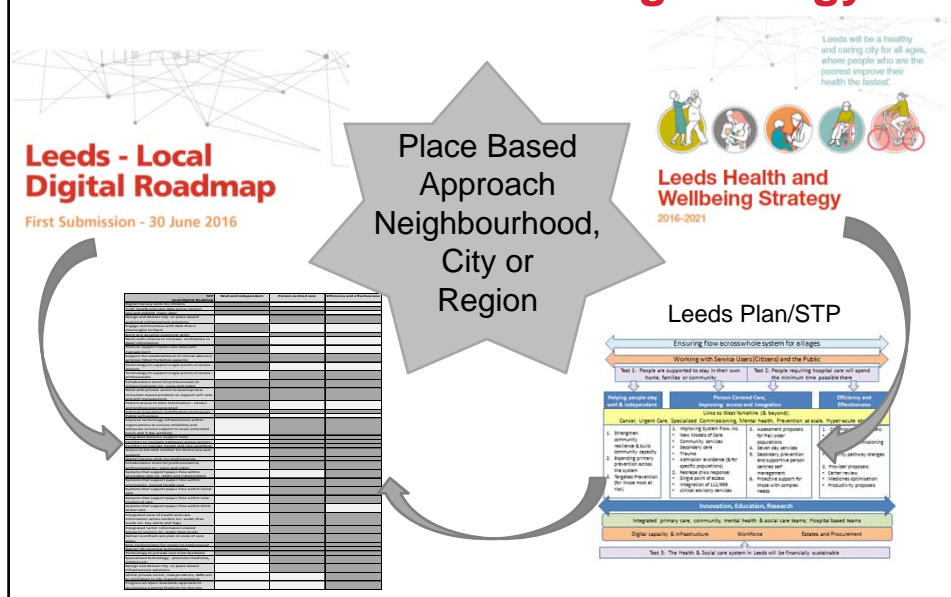


Agreed Core Design Principles

The Core Design Principles relating to this open platform approach are the key 'non-tangible' objectives that provide an overarching guide in the development and deployment of this new open platform. They are critical to conveying the purpose and goals. Once agreed with key stakeholders, these Core Design Principles will be translated into expected outcomes and design controls to be used to assess success going forward.



Mapping between the LDR ... STP ... the health and wellbeing strategy



City Digital Team – Joined up delivery

Sponsors: Jason Broch / Dylan Roberts
Portfolio Director: Alastair Cartwright
Leeds Informatics Board and
City CIO Group

City Digital Team (David Rowson)
Portfolio Management and Commissioning

Prevention
Colin
Mawhinney

Self Management
& Proactive Care
Julie Oxley

Efficient & Effective
Care – Janet Howden

Urgent Care /
Response
Julie Oxley

West Yorkshire
Victor Longfield
/ Andy Taylor

One City Infrastructure and IG
Dave Maidment / Ralph McNally

One City Intelligence
Tom Mason & tbc

Innovation
Colin Mawhinney

PAPERLESS 2020
NHS DIGITAL
Roarke Batten and Eve Roodhouse

Reducing Health Inequalities through Digital and Information

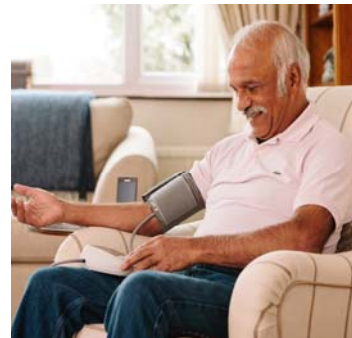
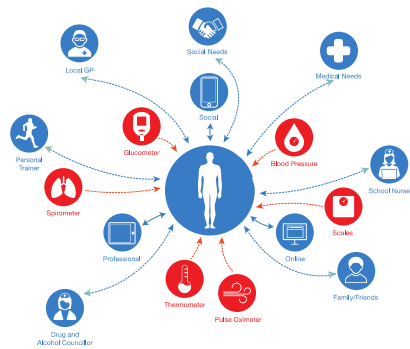
Why invest in Leeds - Differentiators Part 1

- Joined up system and decision making
- Clear future direction
- Clear design principles
- Whole system approach
- Setting the template for delivering Paperless 2020 with NHS Digital
- A direction that could significantly disrupt the market. (Advantage as well as disadvantage)

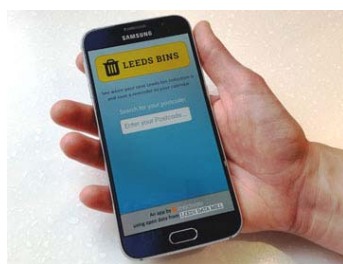


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Self Care and Prevention



Award Winning Sustainable Innovation Labs



Helping you find that perfect place to live
Answer some simple questions to find your perfect neighbourhood



www.SustainableDevelopmentLab.com



HORIZON 2020
The EU Framework Programme for Research and Innovation

European Commission > Horizon 2020

HORIZON 2020 – Call ‘Information Communication Technologies’
Topic: IoT-01-2016 Large Scale Pilots – Innovation Action

ACTIVAGE

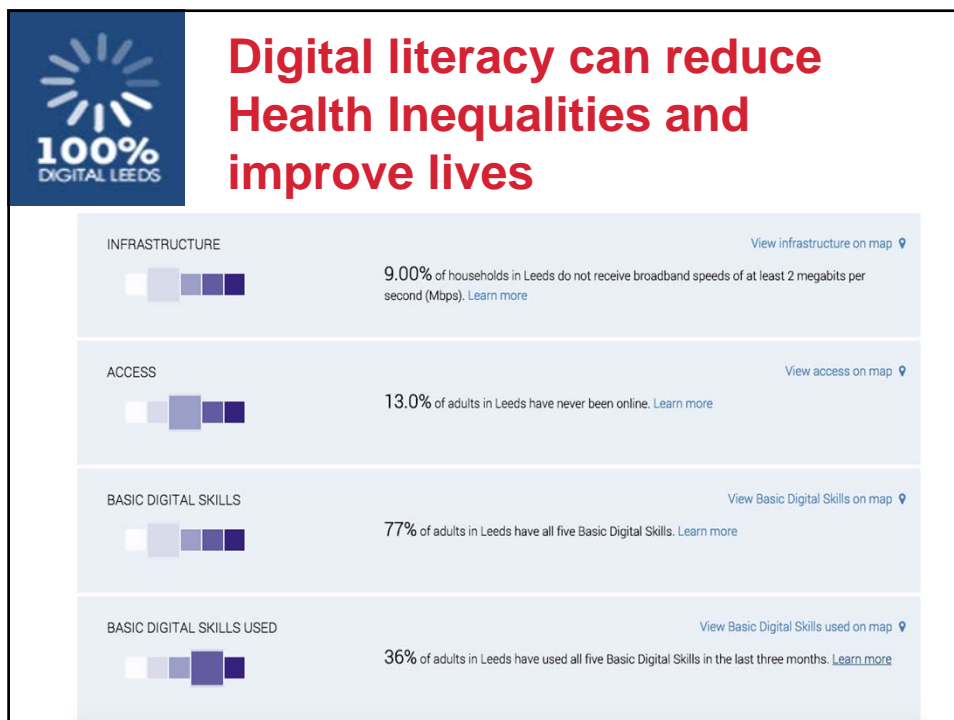
ACTivating InnoVative IoT smart living environments for AGEing well





- **ACTIVAGE** aims to prolong and support the independent living of older adults in their living environments.
- **ACTIVAGE** will build the first European interoperable and open IoT ecosystem.

1000 residents supporting a range of use cases:-
 Reducing social isolation, Fall detection/prevention, Personal health and symptoms monitoring and Independent living support using energy monitoring





Reducing Health Inequalities through Digital and Information

Why invest in Leeds - Differentiators Part 2

- Open Platform Approach
- Convening Power of professionals and communities of interest
- Great Test Bed
- Proven Approaches to Co-Design/Co-Production



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Reducing Health Inequalities through Digital and Information

Challenges

- Issues of boundaries and control
- Leaders taking a City/Place first whole system approach (accepting trade offs)
- Scaling up of innovations
- Capacity and capabilities (recruitment and retention of talent)
- Some vendors protecting their market position
- Funding and investment



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Delivering better outcomes for less through digital and information



Developing digital practitioners & People driving digital in Leeds

[\(Click here to view Prezi\)](#)

Dr Victoria Betton, Director, mhabitat



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Leeds Centre for
Personalised
Medicine
and Health



A whole-system approach to delivering personalised medicine and health in Leeds

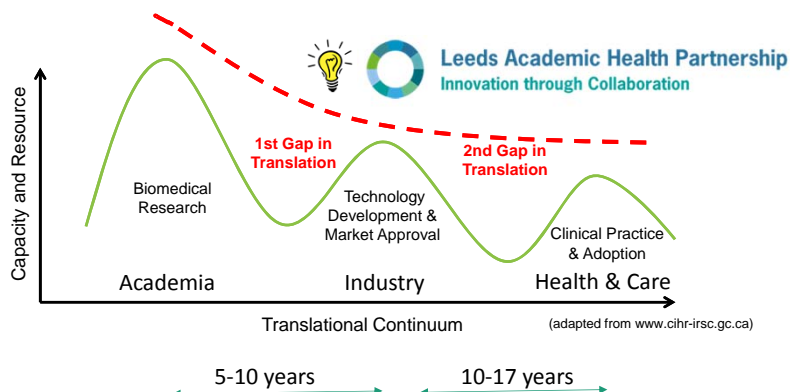
Mike Messenger

Background

- **April 2016** - agreed we should expand beyond the Precision Medicine Catapult (PMC) into personalised medicine and health, including public, community and mental health settings.
- **June 2016** - LAHP held PMH conference
- **July 2016** – LAHP agreed that UoL would lead the formulation of a city-wide strategy for PMH
- **October 2016** – Soft launch at Leeds Precision Oncology Symposium
- **November 2016** – Showcased "Whole System" approach at UK-India Tech Summit

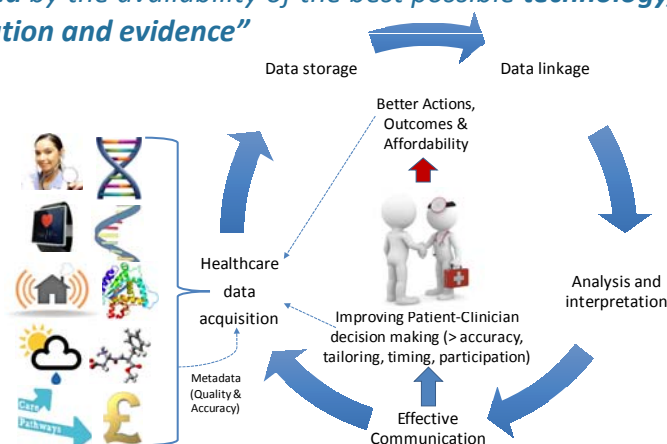
What is the challenge?

"In 2016, we face the most significant challenges for a generation. We know that we must keep innovating and improving if we are to meet the needs of our population in a tough financial climate" –WY STP

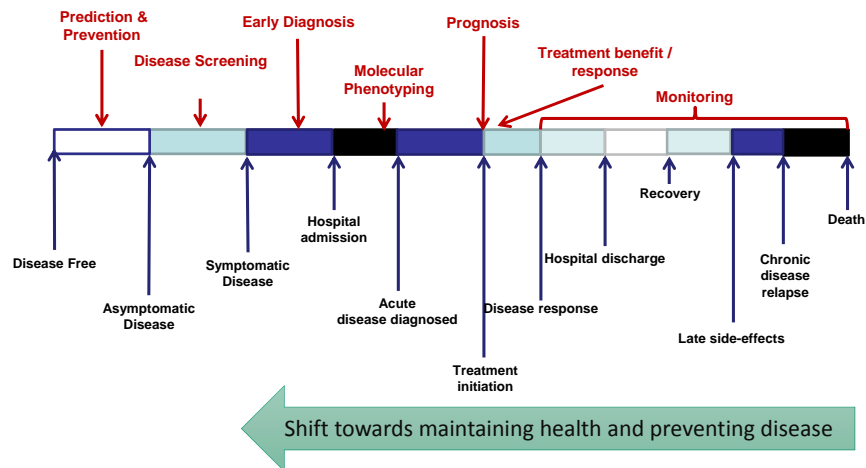


Personalised Medicine & Health

*"a process by which the **decisions** made about health and care by patients and the public, supported by clinicians, are **enriched** and **improved** by the availability of the best possible **technology, information and evidence**"*



Personalised Medicine and Health



Leeds Centre for Personalised Medicine and Health

Our Purpose:

“Enable Leeds’s population to benefit from the latest innovations in personalised medicine and health, by accelerating discovery, development, evaluation and adoption of new treatments and technologies.”

Our Vision:

“Make Leeds a global leader in Personalised Medicine and Health Service Provision, Research, Education and Business”

Our Aims

1. Catalyse multi-disciplinary cross sector collaborations with industry, academics, patients and health/care providers and commissioners across the city and beyond.
2. Develop and implement robust methodology and processes to improve the pace and quality of research and implementation.
3. Strengthen Leeds' personalised medicine and health infrastructure
4. Simplify access to the whole ecosystem
5. Communicate our capability and success widely internally and externally, building the reputation of all LAHP organisations
6. Train and develop our research, care and industry workforce through the Leeds Health and Care Academy
7. Inform and empower the public, patients and carers

Moving from Push to Pull

Matching our populations health and care needs with excellent science and innovation

1. Patient and Population "Pull"

"Urgent health needs requiring innovative solutions"

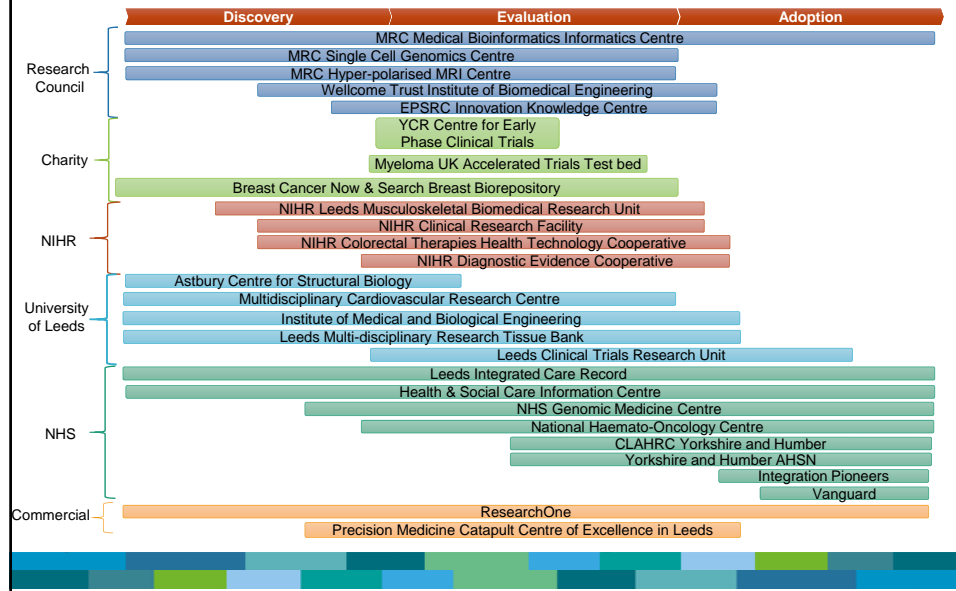
- Initiated by Clinical and Commissioning Strategy Group
- Horizon scan in collaboration
- Targeted local innovation and development
- Evaluate and adopt locally
- Scale and disseminate widely

2. Science and Innovation "Push"

"Excellent ideas in need of applications"

- Initiated by Science and Technology Strategy Group
- Evaluate and adopt locally
- Scale nationally & internationally

Personalised Medicine Infrastructure



Summary

- Leeds is ideal to trial personalised medicine and health innovations, as it has a large but simple healthcare system, excellent clinical data, relevant expertise within our universities and a diverse patient population.
- CPMH will:
 - help Leeds to respond to increasing demand for healthcare services with limited financial resources, by accelerating research, evaluation and adoption of personalised medicine and health innovations.
 - design programmes that reduce cost, reduce waste and improve patient outcomes.
 - attract global clinical, academic and commercial talent to Leeds and enable wealth creation.

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 www.personalisedhealthleeds.com

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