



Academic Health Science Networks Supporting diagnostic innovation

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Barriers to Uptake and Development of Innovation in the NHS

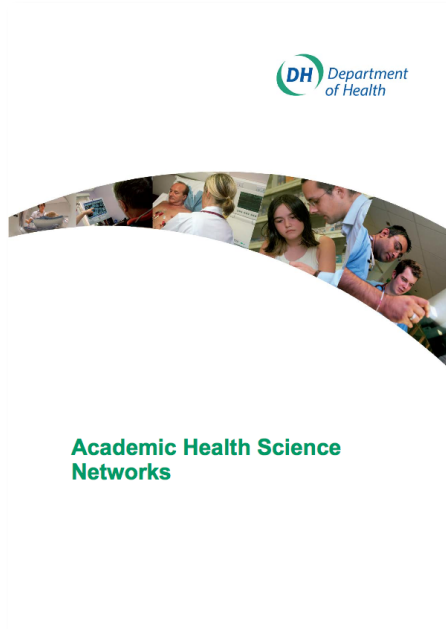
- Cost
- National strategies and plans – absent in many
- Financial incentives - lacking
- Training
- Procurement
- Culture of healthcare professionals and organisations
- Clinical engagement
- NICE ‘blight’
- Failure to evaluate impact of new innovations when implemented
- Failure of the NHS to stop doing things that do not deliver promised benefits

NHS Slow to adopt Innovation

- CT and MR imaging invented in the UK
- Poor access and utilisation in UK stroke services
- Australian Professor Stroke Medicine 2005
“You guys invented CT but your use of it in acute stroke is pathetic”

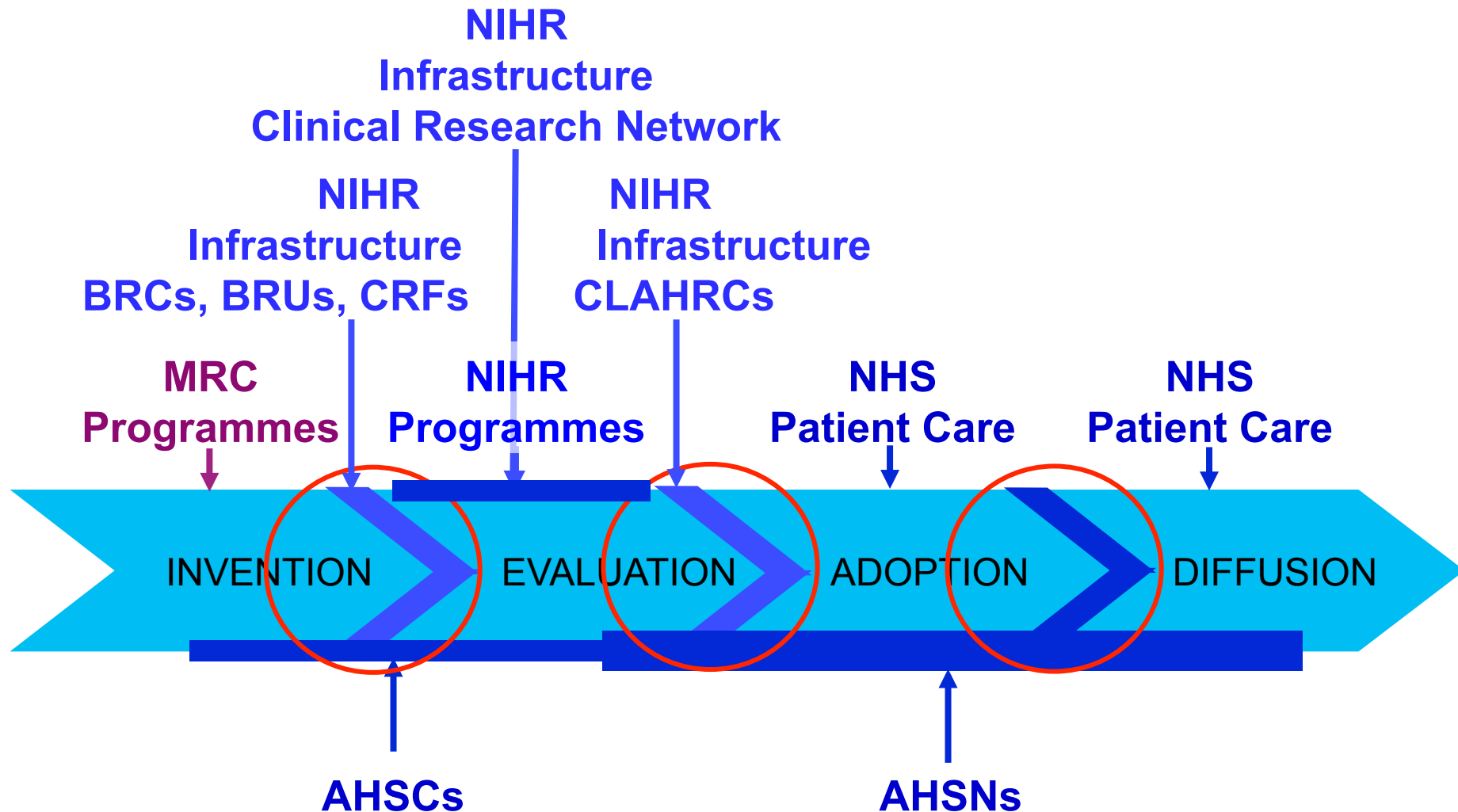


NHS Response: Academic Health Science Networks and Academic Health Science Centres

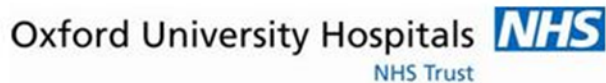


- 15 AHSNs licensed by NHS England for 5 years to:
 - focus on the needs of patients and local populations.
 - speed up adoption of innovation into
 - build a culture of partnership and collaboration
 - create wealth
-
- 6 AHSCs represent partnerships between “world-class” universities and leading NHS organisations:
 - research new treatments
 - improve health education and patient care
 - bring scientific discoveries “from the lab to the ward”
 - drive economic growth through partnerships with industry.

AHSNs, AHSCs and the Research and Innovation Landscape



The Oxford AHSC



GlaxoSmithKline



6 interconnected themes:

1. Big Data: Delivering the Digital Medicine Revolution
2. Building Novel NHS, University and Industry Relationships
3. Modulating the Immune Response for Patient Benefit
4. Managing the Epidemic of Chronic Disease
5. Emerging Infections and Antimicrobial Resistance
6. Cognitive Health: Maintaining Cognitive Function in Health and Disease.

AHSN core purpose – health and wealth



Academic Health Science
Networks

- Licensed by NHS England for 5 years to deliver four objectives:
- **Focus on the needs of patients and local populations:** support and work in partnership with commissioners and public health bodies to identify and address unmet health and social care needs, whilst promoting health equality and best practice.
- **Speed up adoption of innovation into practice** to improve clinical outcomes and patient experience - support the identification and more rapid uptake and spread of research evidence and innovation at pace and scale to improve patient care and local population health.
- **Build a culture of partnership and collaboration:** promote inclusivity, partnership and collaboration to consider and address local, regional and national priorities.
- **Create wealth** through co-development, testing, evaluation and early adoption and spread of new products and services.

What and where

Oxford AHSN – 1 of 15 in England
3.3M population
Annual NHS spend circa £5bn
NHS employees 65,000
12 Clinical Commissioning Groups
4 Local Enterprise Partnerships
12 Councils
Major international companies
300 Life Sciences businesses



Complex landscape with many providers and agencies

The Oxford AHSN

- **Our Vision.** Best health for our population and prosperity for our region
- **Our Mission.** We will support collaboration, research and innovation across the NHS, universities and business, building on our strengths to deliver exemplary care and create the strongest life science cluster

The Oxford AHSN

- **Strategy and objectives.** Our strategy is to be facilitative and work through **our partners** . We will build infrastructure and support the development of people to accelerate innovation and early adoption in our NHS partners that improves health and adds value, including funding clinical networks and developing teams for commercial development and innovation adoption to promote and accelerate change. Wherever it is possible we will ensure that the programmes, themes and resources support each other to maximise the chance of delivering against the four licensed objectives. We will avoid duplication of functions and activities and support our partners to collaborate and work together as a matter of course.
- **Our values.** We will be inclusive, transparent and fair

Our Healthcare, Academic and LEP partners

NHS in the Network



- | | |
|---|---------------------|
| 1 Berkshire Healthcare NHS Foundation Trust | Aylesbury Vale CCG |
| 2 Buckinghamshire Healthcare NHS Trust | Bedfordshire CCGs |
| 3 Central and North West London NHS Foundation Trust (community and mental health services) | East Berkshire CCGs |
| 4 Heatherwood and Wexham Park NHS Foundation Trust | West Berkshire CCGs |
| 5 Milton Keynes NHS Foundation Trust | Chiltern CCG |
| 6 Oxford Health NHS Foundation Trust | Milton Keynes CCG |
| 7 Oxford University Hospitals NHS Trust | Oxfordshire CCG |
| 8 Royal Berkshire NHS Foundation Trust | |
| 9 South Central Ambulance Service NHS Foundation Trust | |
| 10 Southern Health NHS Foundation Trust (Learning Disabilities) | |

(Locations of HQs except for 3 and 10)

Universities in the Network



- 1 Buckingham University
- 2 Buckinghamshire New University
- 3 Cranfield University
- 4 Oxford Brookes University
- 5 The Open University
- 6 University of Bedfordshire
- 7 University of Oxford
- 8 University of Reading
- 9 University of West London (Reading Hub)

Local Enterprise Partnerships



- Buckinghamshire LEP
- Oxfordshire LEP
- South East Midlands LEP
- Thames Valley Berkshire LEP



Oxfordshire Local Enterprise Partnership

SEM LEP

South East Midlands
Local Enterprise Partnership

Buckinghamshire
Thames Valley
LOCAL ENTERPRISE PARTNERSHIP
THE ENTREPRENEURIAL HEART OF BRITAIN

The Oxford AHSN

5 Programmes and 2 Themes

- **Best Care programme** 10 AHSN funded clinical networks
- **Continuous learning** Patient Safety and 8 Evidenced Based Medicine MScs
- **Innovation Adoption** Clinically led, working with the NHS providers and industry to accelerate adoption of medical innovations
- **Research and Development programme** work with Local CRN NIHR, CLAHRC, life science industry and other research infrastructure
- **Wealth creation programme** help the region become the favoured location for inward life science investment, life science business creation and growth
- **Informatics** provide strategic leadership to the Oxford AHSN and Oxford AHSC partners' strategies
- **PPIEE** embed partnership with patients and the public across programmes

Oxford AHSN – Best Care Programme

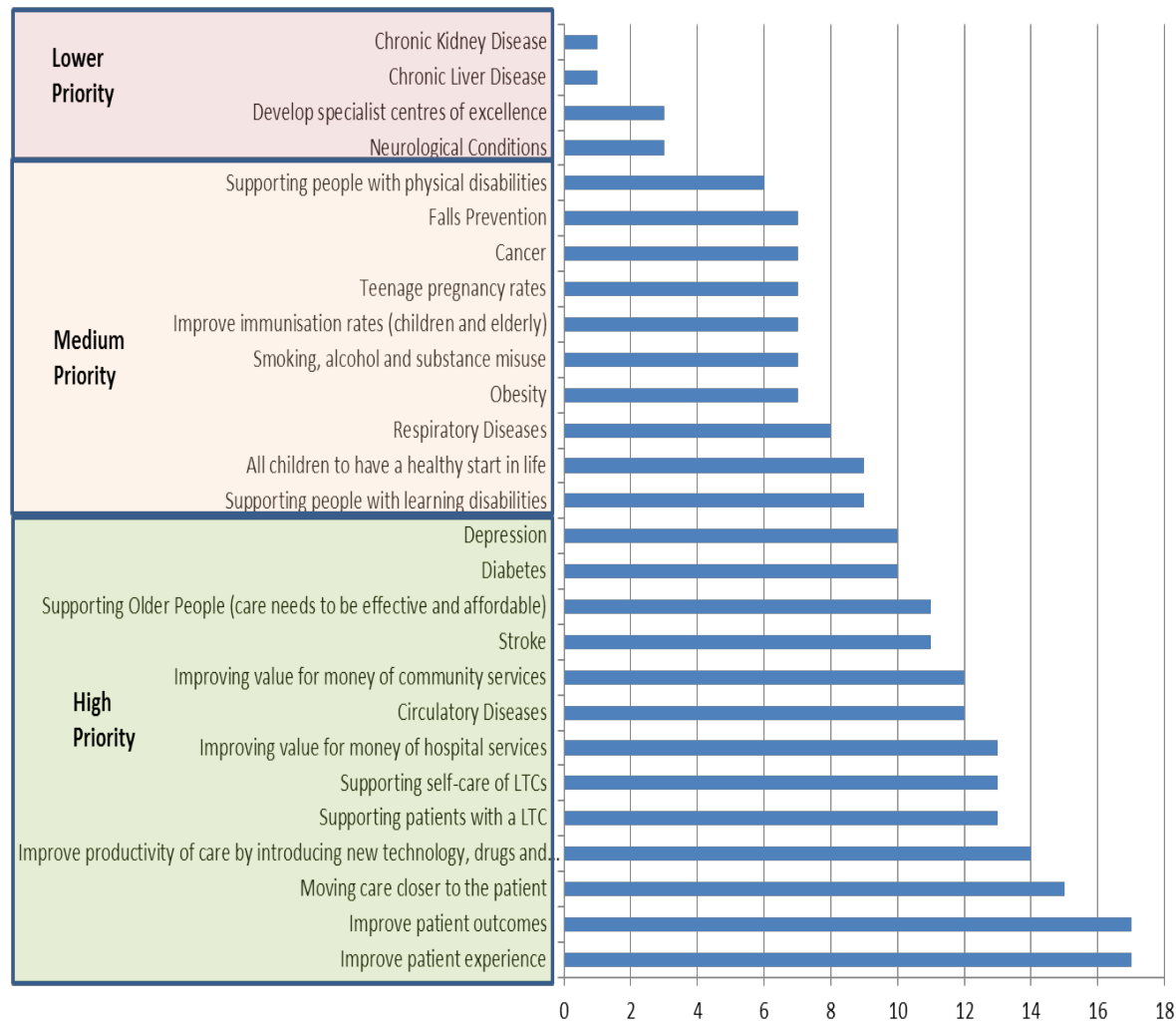
- **Ten Clinical networks**
 - Diabetes – Prof Stephen Gough
 - Dementia – Dr Rupert McShane
 - Depression and anxiety – Prof David Clark
 - Mental and physical co-morbidity – Prof Mike Sharpe
 - Early intervention in mental health – Dr Belinda Lennox
 - Imaging - Prof Fergus Gleeson
 - Medicines optimisation – Boo Vadher
 - Maternity – Prof Stephen Kennedy / Mr Lawrence Impey
 - Children – Prof Andrew Pollard
 - Out of Hospital – Dr Dan Lasserson
- **Continuous Learning** in collaboration with Health Education Thames Valley
 - 8 Fellowships (MScs) in Evidence Based Medicine
 - Patient Safety Academy

Facilitating rapid adoption of innovation with demonstrated value

- **Identify the innovations**
 - NICE technology appraisals previous year
 - Other interventions proposed by clinical networks where value is clear
- **Prioritisation by NHS providers, clinical networks, commissioners and patients**
- **Develop an implementation plan for top 10 innovations across AHSN partners**
 - Identify potential barriers, appoint clinical champion, finance and procurement plan, training issues, process to record utilisation
- **Review impact at 12 months**
 - If failure of adoption identify reasons
 - Compare uptake of interventions not supported by an implementation plan

Oxford AHSN Clinical Innovation Adoption

AHSN Regional Strategic Priorities



Facilitating evaluation of innovation with promising potential

- **Identify the innovations**

Clinical networks, industry proposals, University/NHS partners

- **Prioritisation by NHS providers, clinical networks, commissioners and patients**
- **Develop an implementation plan for provisional adoption of 5-10 innovations – some / all AHSN**

Identify potential patient population, appoint clinical champion, finance and procurement plan, training issues, process to record utilisation, costs and patient outcomes

- **Review impact**

Effectiveness, cost and cost effectiveness

Potential barriers to adoption in clinical practice

How might AHSNs support diagnostic innovation

- Facilitating development of partnerships
- Identifying areas of clinical need for improved diagnostics
- Providing clinician and patient perspective at an early stage of development, identify potential for diagnostics to reengineer patient pathway
- Supporting early evaluation of promising diagnostics
- Supporting rapid adoption of diagnostics with demonstrated value