

# Accelerating Innovation Adoption in the NHS

Tracey Marriott

Director of Clinical Innovation Adoption

# Clinical Innovation Adoption Programme








*Tracey Marriott, Director of Clinical Innovation Adoption. Tracey is leading the Programme for the Oxford AHSN, working closely with the Oxford AHSN clinical networks, providers, commissioners and suppliers for innovation implementation.*



# What is the route to Success?

# Developing a New Product, Engaging the NHS

				
<b>An Idea</b>	<b>Get the Idea Straight</b>	<b>Get into Position</b>	<b>Ready to Launch</b>	<b>Strike the Target</b>
<ul style="list-style-type: none"> <li>-Know your USP</li> <li>-Check the clinical need</li> <li>-Get clinicians on board early</li> <li>-Have a Business Plan</li> <li>-Do initial Market research of interest</li> <li>-Do a small Health Economic piece</li> <li>-Understand the care pathway</li> <li>-Research the competition</li> <li>-Check feasibility</li> </ul>	<ul style="list-style-type: none"> <li>-Make contact with possible routes for assistance such as SBRI, Innovation Technology Fund, Innovation UK, your local AHSNs</li> </ul>	<ul style="list-style-type: none"> <li>-Do impact studies in Clinical Setting to determine real benefits.</li> <li>- Do a detailed Health Economics proposal to get into the detail.</li> <li>-Always ask yourself are you providing a solution to a problem?</li> <li>-Ask the right questions –?</li> <li>-Is the evidence fit for purpose?</li> </ul>	<ul style="list-style-type: none"> <li>-Get advice from your local AHSN</li> <li>- Choose your Early Adopters wisely</li> <li>is the innovation fitting in/or changing the care pathway and is there a comprehensive Business Case for it?</li> </ul>	<ul style="list-style-type: none"> <li>- Best positioned to succeed!</li> </ul>

Five key propositions will be used as a framework for more detailed analysis and evaluation, and for further engagement with stakeholders in the next phase of the review...



Interim Report published  
(27<sup>th</sup> October 2015)



[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/471562/AAR\\_Interim\\_Report\\_acc.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/471562/AAR_Interim_Report_acc.pdf)

# The Report also identifies common drivers of the uptake of innovative products



Figure 1 – Common drivers of rapid access

# Accelerated Access Framework

## Putting the patient centre stage

- Patients should be given a stronger voice at every stage of the innovation pathway

## Getting ahead of the curve

- A radically new approach is required to accelerate and manage entry for the emerging products that promise the most significant, potentially transformative impact in terms of patient benefit and overall value

## Supporting all innovators

- Our end-to-end innovation pathway can, and should, be more responsive to the wider, irrepressible surge of innovation presented at all levels of the system

## Galvanising the NHS

- The NHS must be an active partner in promoting innovation, and must be incentivised to adopt new products and systems quickly and effectively

## Delivering Change

- Building on existing health system structures, a new system architecture is required at local and national level to accelerate access to the best new products and related models of care. (AHSNs are mentioned as key)

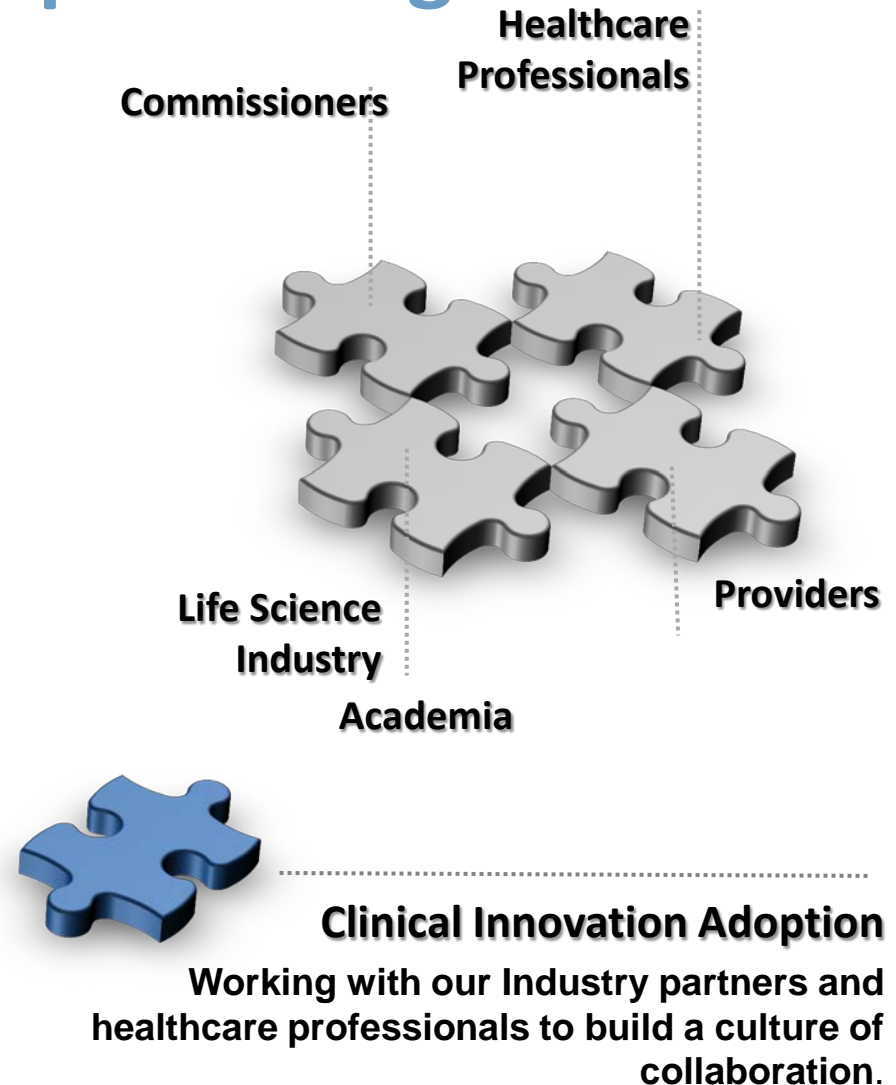
# Clinical Innovation Adoption Programme

## Our Aim

- Support the adoption of proven innovations at scale across the region to improve patient outcomes, safety, experience and cost effectiveness.
- Create a legacy culture of innovation adoption in the region

## Our Work

- 15 projects currently open generating over 30 local sub-projects directly involving Trusts and CCGs.
  - *Medicinal Products*
  - *Medical Devices*
  - *Apps or IT platforms*
  - *Pathways and processes*
- Working with partners to empower the regional workforce in understanding and driving innovation adoption and quality improvement





# Ongoing Projects

CIA Project	Medicines	Device	Service/ Process	Partners
Early Inflammatory Arthritis	Biologics / Biosimilars	---	Early Arthritis Pathway	RBH, OUH, HWP Hospitals
Alcohol Misuse	Nalmefene	---	Hospital-based Alcohol Care Team	Slough Borough Council, Public Health England, Ambulance Service, HWP Hospital, Alcohol Service Providers
Fragility Fracture	---	---	Fracture Liaison Services	BHT, RBH, MK, GWH, HWP, OUH Hospital Trusts
Electronic Blood Transfusion	---	Bedside scanners	---	OUH, RBH, MK, BHT, HWP, GWH Hospital Trusts
AF Management	NOACs & warfarin	---	Primary Care Stroke Pathway	Berks E&W CCGs, Aylesbury Vale & Chiltern CCGs
ECG Opportunistic Screening		ECG Device	---	Berks E&W CCGs, Aylesbury Vale & Chiltern CCGs
Intermittent Pneumatic Compression Devices	---	IPC sleeves	---	All Stroke Units in region
Catheter-Associated Urinary Tract Infection	---	Bladder scan ultrasound	UTI & Continence Management Pathways	Oxford Health, OUH and Great Western Hospital Trusts
IV Diuretics in ambulatory care setting	Furosemide	---	Ambulatory Care Setting	
Dementia	NICE TA217	---	TBC	Oxford Health, Berks Healthcare, Central North West London NHS Hospital Trusts
Gestational Diabetes	---	Oxford GDM-health management system	Gestational Diabetes Pathway	OUH, MK, RBH, HWP, BHT, GWH Hospital Trusts
Intra-Operative Fluid Management (IOFM)	---	IOFM Monitors	---	HWP, OUH, BHT
Falls	---	---	Acute & Community Pathways	Oxford health, OUH, BHT, BHFT, RBH
Eating Disorders	---	---	SHaRON Programme	Central And North West London NHS Trust

# What Innovators, Industry and SMEs would most appreciate is...

- Transparency – what, when and how does the health sector purchase goods and services?

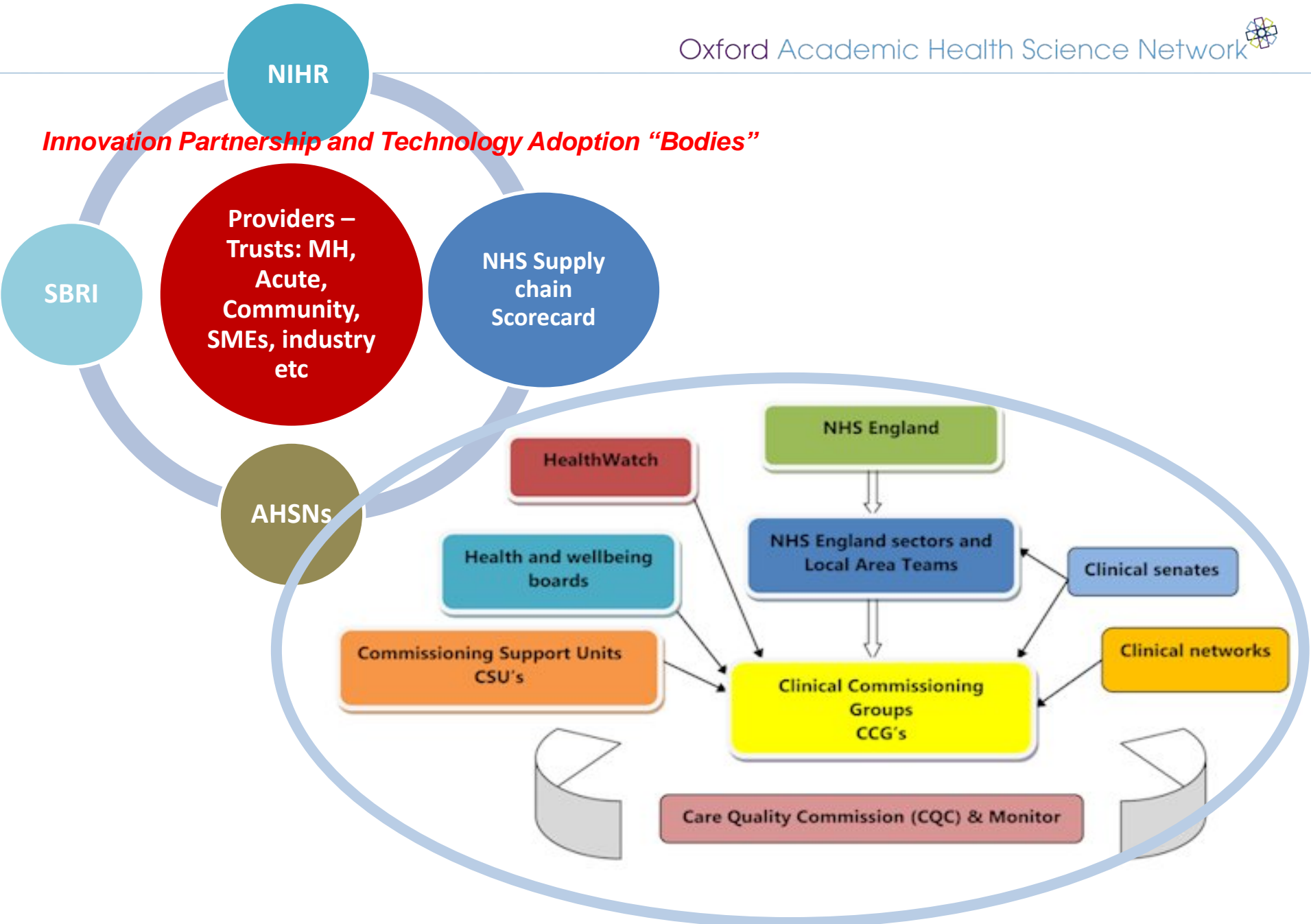
*and*

- How/who pays?

# Transparency

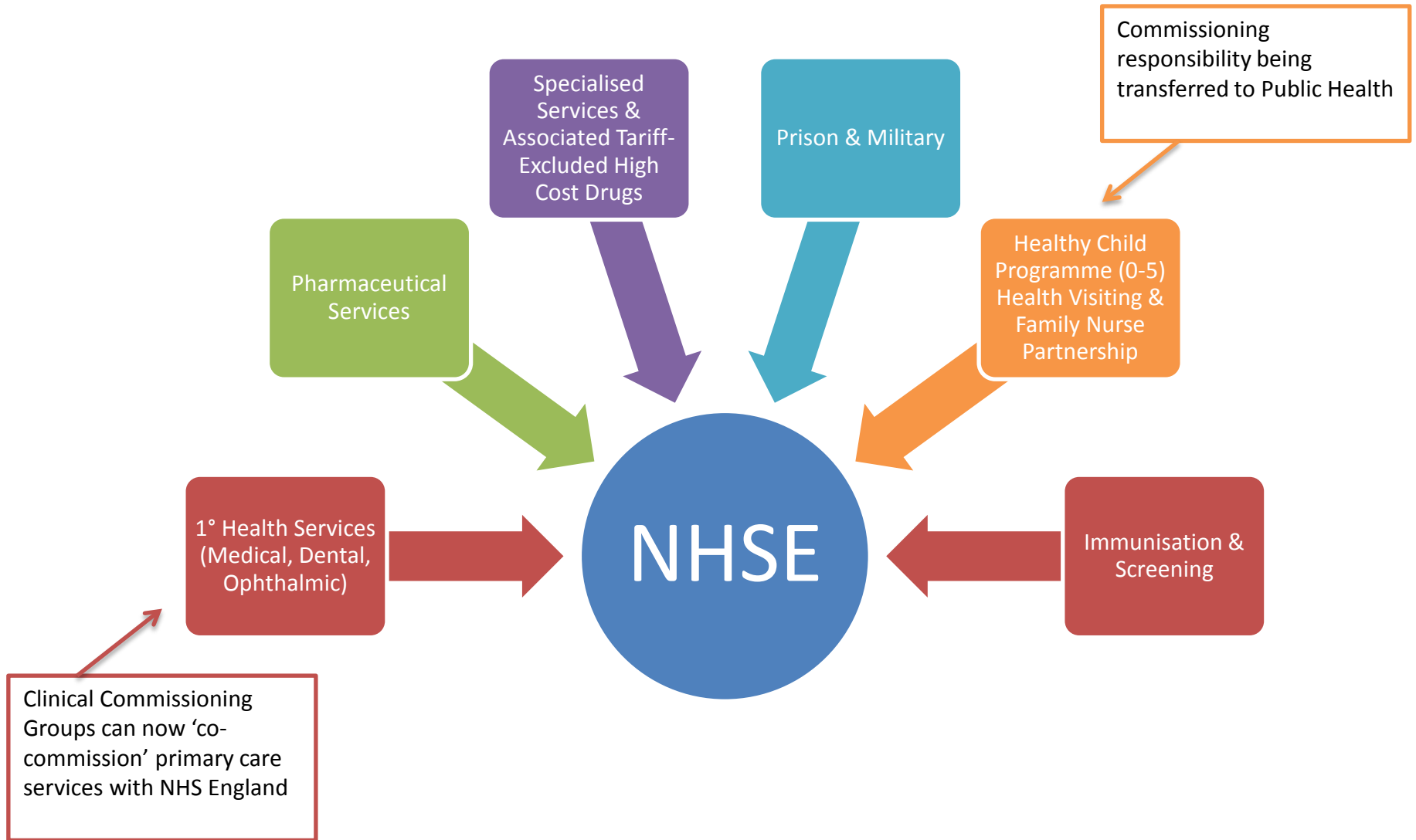
## 1. The Structure of the NHS.....

**Innovation Partnership and Technology Adoption “Bodies”**



# Who buys what in the NHS?

# NHS England is responsible for commissioning a number of services including specialised services



# CCGs are responsible for commissioning the majority of elective care for their local population\* – including associated tariff-excluded high cost drugs



\* Registered patients and unregistered patients usually resident in the area, but excluding armed forces and prisons (see NHS England)

# Local Authorities are responsible for commissioning a number of services as well as providing population health advice to CCGs...





# Doing Business with NHS Organisations (*Commissioners & Providers*)...

## **3 general categories:**

- Clinical services – such as physiotherapy or wheelchair services
- Medical supplies – such as medicines, or scanning equipment
- General supplies – such as furniture, cleaning services

Clinical Services	Clinical Products
Usually purchased by <b>Commissioners</b> of NHS services	Usually purchased <b>by Providers</b> of NHS services
<b>Some providers</b> will contract with other providers	

## NHS organisations may purchase in the following ways...



- Centralised procurement system – via online portals which act as marketplaces that bring suppliers and buyers together e.g. Contractsfinders)

Via NHS Supply Chain- for medical & general supplies

Via Commercial Medicines Unit's eTendering system (<https://cmu.bravosolution.co.uk>) for Opportunities to supply medicines to NHS or Dept of Health or SID4GOV

Direct Sale – selling directly to GP Practice, hospital or other health service

2-Year Operational Plan

5-Year Strategic Plan

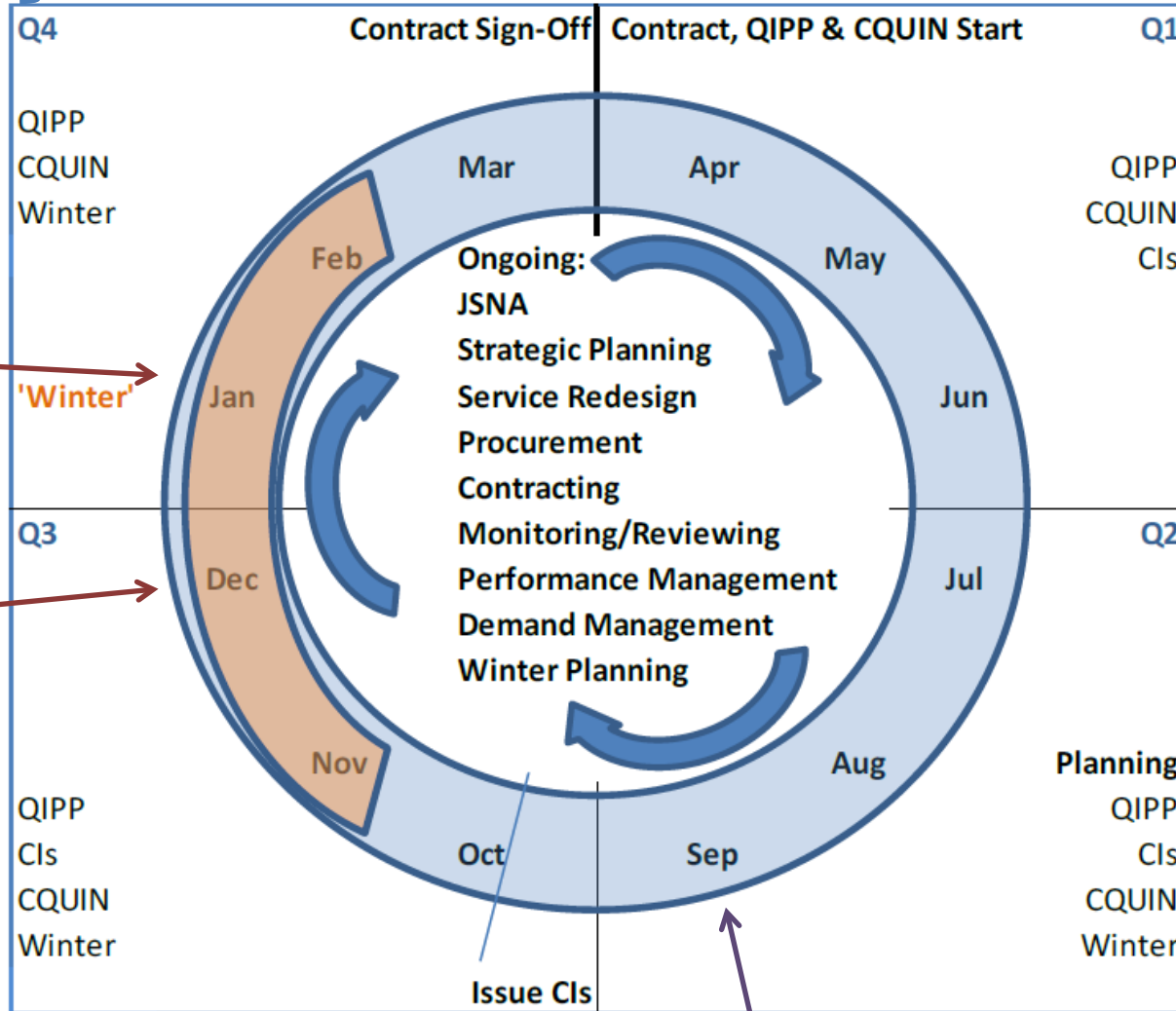
Better Care Fund Plan

CCG

# Annual Commissioning Cycle

Tariff & National Contract Published

NHSE Planning Guidance & CCG Funding Allocations Published



Trust letter to commissioners re. contracting changes

From North East Essex CCG

**CI**s – Commissioning intentions each year the commissioning bodies announce what changes they will be making to the commissioning arrangement down to service level for the forthcoming year.  
**QIPP** – Quality Innovation Productive and Prevention (guiding principles for all services commissioned in the NHS need to comply with)  
**JSNA** – Joint Strategic Needs Assessment  
**CQUIN** – Commissioning for Quality and Innovation Schemes which is 5% of a NHS contract value dependant on achieving stretch of quality or innovation

The Clinical Innovation Adoption Programme has mainly been involved with innovations that provide:

*Efficiencies and maintain quality for patients within Provider Trusts*

- And/or

*Innovations that identify efficiencies and quality improvement opportunities to Commissioners for consideration*

# Real-time management (GDm-Health)

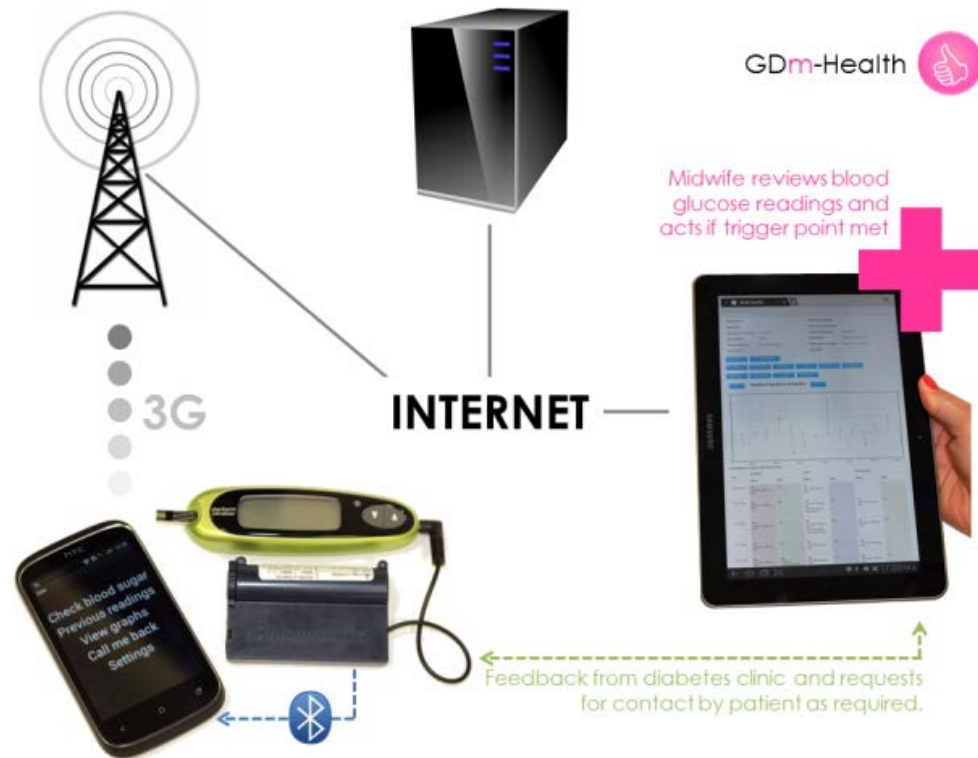


Patients use the **smartphone app** to:

*Annotate* blood glucose data with meal tags, medication doses and other comments

*Review* personalised data screens (for example linking food intake and blood glucose)

Algorithms on server prioritise patients for review by the diabetic team. This allows them to:  
view blood glucose results in real time;  
institute an intervention between clinic visits.



***The system improves blood sugar control and pregnancy outcome***

# Adoption of GDM-health in clinical practice

2012 – 2015: Beta testing + service development (50 women, approximately 20,000 BG readings)

2013 – 2015: Randomised Controlled Trial in OUH NHS Trust (200 women)

Best Digital Initiative award for Quality in Care Diabetes 2014

Clinical Innovation Adoption in local region supported by Oxford AHSN

26% reduction in clinic visits for women using the GDM-health app

50% decrease in time spent by diabetes midwives on clerical and admin tasks

## Benefits

- Assists with patient self management
- Remote clinical monitoring with alerts
- Regular opportunity to communicate with patient
- Reduction in unnecessary clinic visits so increased capacity
- Further research underway on impact on difficult births and birth defects

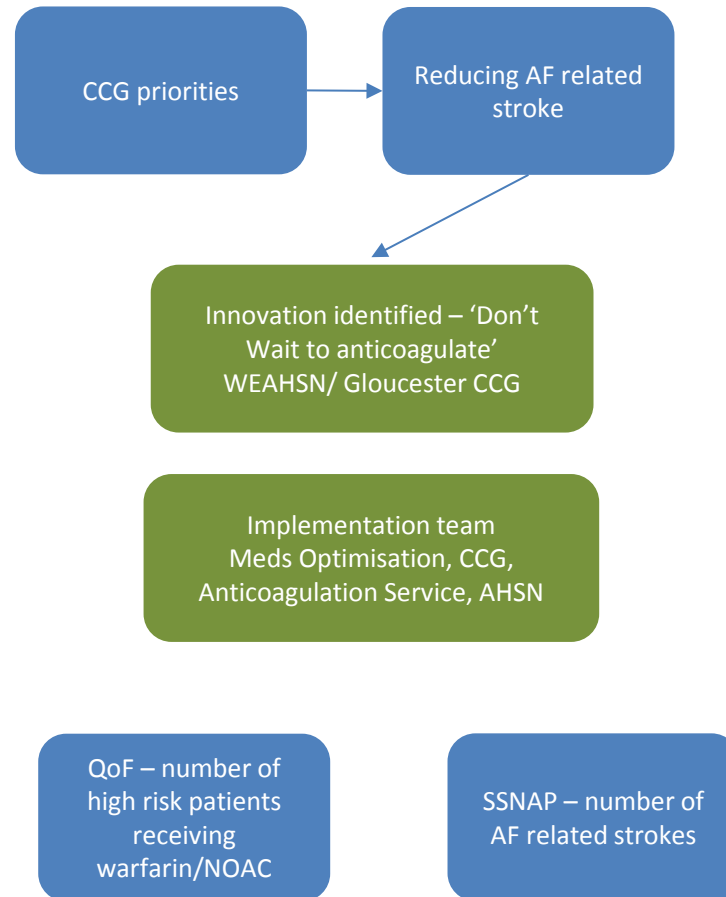


Roll out Completed and Planned		
Trusts	2014-16	2016-17
Oxford Uni Hosp	✓	
Royal Berks Hosp	✓	
Milton keynes	✓	
Frimley Healthcare	✓	
Bucks Healthcare		Planned
Great Western		Planned

*Developed as a collaboration between OUH (Lucy MacKillop) and Institute of Biomedical Engineering at the University of Oxford (Lionel Tarassenko)*

## Primary Care Innovation Adoption in Action – Atrial Fibrillation Project

### Role of AHSN



### Stakeholders – points of influence:

#### CCG:

- Prevention agenda
- Cost of acute stroke vs cost of prescribing
- Service specification for new service model
- Agree incentivisation scheme

#### GP:

- Patient outcomes
- Multiple practices with differing views
- Require support to implement
- Training requirements

#### Meds Optimisation:

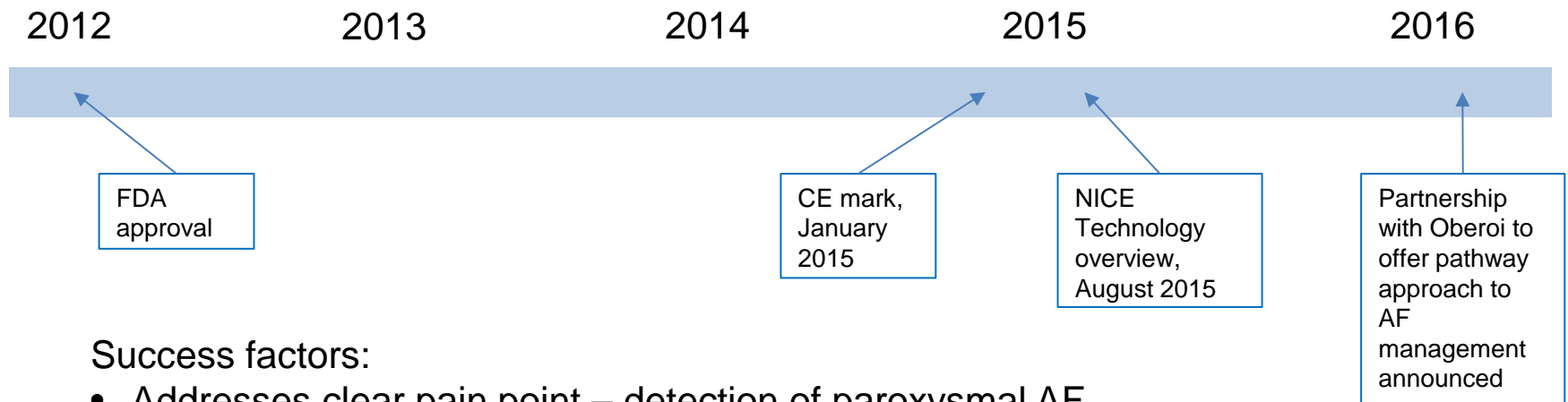
- Support practices in delivery
- Manage incentivisation scheme

#### Anticoagulation Service

- Support with training

## Primary Care diagnostic case study: Alivecor (Kardia) – mobile ECG

Alivecor is a mobile ECG device that can be attached to a patient's own phone. The device can detect AF, the most common form of cardiac arrhythmia.



### Success factors:

- Addresses clear pain point – detection of paroxysmal AF
- Aligned to NICE guidelines
- Clear return on investment – cheap to buy and use versus cost of AF related stroke
- Strong evidence base
- Garnered strong support from AF and stroke related charities – supported public screening events
- Potential for combinatorial innovation across the AF pathway



# The Plan for Primary Care Innovation

- How do we plan to engage?
- All deployments require a Clinical Lead/Champion
- Evidence for the innovation reviewed and explained simply (inc. forecast benefits)
- Key stakeholders and potential early adopters identified/project team set up (inc supplier/patient rep)
  - Identify likely early adopters - GPs who have an interest in the disease or innovating
  - Agree 2 pilot sites – for evaluative research
  - Health Economics worked up
  - Understand and address unintended consequences
    - “Thorny” issues such as – i.e. QOF incentives that may be affected by change
  - Visit all of the GP Medical Centres/large primary care providers (20-30k patients)/review CCG plans/possibly set up a tender if appropriate
  - Start regional campaign/role out
  - Embed in Business as usual – measuring and monitoring performance for sustainability

**There are some good sources for assistance out there ...**

## Where to look for tenders....

**publicTENDERS.NET**

The **latest public tenders** from across the UK and EU



<https://www.supplying2nhs.com/procontract/healthservice/cms.nsf/vHomePage/fSection?OpenDocument>



The online version of the 'Supplement to the Official Journal of the EU



**NHS**

South of England  
Procurement Services  
Commissioning Support

<https://in-tendhost.co.uk/soepscommissioning/asp/Home>



Shared Business Services

<https://www.sbs.nhs.uk/procurement/information-for-suppliers/contracting-opportunities>

 **SID4GOV**

The Supplier Intelligence Database for Government

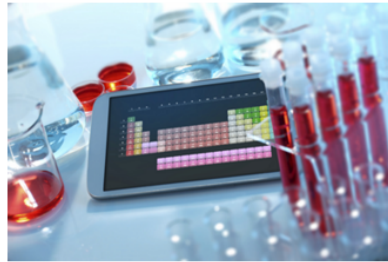
Shows all public sector tenders with a value of more than £10,000

<https://sid4gov.cabinetoffice.gov.uk/sid4gov>

**BETA** This is a beta service – please contact us with feedback.

[Home](#) > [Access to Funding](#)

## Access to Funding



### Introducing Access to Funding

This section allows you to search for funding opportunities for science, engineering and manufacturing activities available to the health life sciences industry including bio-pharmaceuticals; medical biotechnology; or medical technologies (devices and diagnostics). Funding may also be available indirectly through collaboration with academic or other industry partners. This website includes UK-wide opportunities as well as national funding programmes for Scotland, Wales and Northern Ireland.

Local funding may also be available.

R & D Funding	Knowledge Transfer & Skills	Investment Funding	Business Development Funding	Academic - Industry Collaboration
---------------	-----------------------------	--------------------	------------------------------	-----------------------------------

#### R & D Funding

Funding for companies for specific projects focused on research and development, clinical trials and / or commercialisation of a product or process

#### Knowledge Transfer & Skills

Funding for companies to enable transfer of expertise and knowledge from academics to companies or to increase workforce skills

#### Investment Funding

Loans or grants to start-up a company or to support investment in new assets

#### Business Development Funding

Schemes to support growth of businesses in areas such as export or growth of existing products or services

#### Academic - Industry Collaboration

Funding to academics to support work in partnership with industry

### Business Support Links



#### Applying for finance

Web guidance for business on applying for finance in general, including introduction to types of finance





#### Patent Box

The Patent Box enables companies to apply a lower rate of Corporation Tax to profits earned after 1 April 2013

The UK Life Sciences Website has information on funding opportunities – both national....

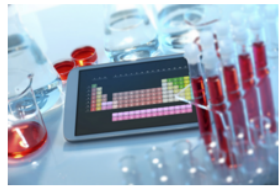
**UK Life Sciences** Search for:

 Office for Life Sciences  UK Trade & Investment Home About Us Mapping Tool Access to Funding Latest News Contact Us Register/Login

**BETA** This is a beta service – please contact us with feedback.

Home > Access to Funding > Region Specific grants, funding and business support links

### Access to Funding



#### Region specific grants, funding and business support links

Across the UK there are a range of regionally focused grants and business support for companies across all sectors. These range from investment funding including equity and loan schemes to business support portals giving advice and information. The information on this page gives an overview of what is available and links to obtain further information.

### Regional Business Information and Advice services

Across England the majority of Local Enterprise Partnerships (LEPs) provide advice and funding for businesses within their geographical area. Companies from all sectors of industry including life sciences are eligible to receive advice and apply for grants and other assistance. The LEPs have established growth hubs as a source of key information on business support in the areas and these are listed on this page



#### Black Country - Black Country Growth Hub

The Growth Hub offers a variety of events, drop-in sessions and business services and information for businesses looking to grow.

Additionally, there is customised support available designed to address manufacturing SMEs specific needs enabling them to compete and achieve sustainable growth.

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



#### Buckinghamshire - Buckinghamshire Business First

Welcome to the website of Buckinghamshire Business First (BBF), the Growth Hub for Buckinghamshire. Our role is to provide the link between public policy and the business community in Buckinghamshire, to bring together the collective voice of Buckinghamshire's businesses and to work with our partners to create a dynamic business environment in the Entrepreneurial Heart of Britain.

[www.bbf.uk.com](http://www.bbf.uk.com)



#### Coast to Capital - Business Navigator Growth Hub

This website is Coast to Capital's Business Navigator – a web portal for businesses. It includes an online directory of business support organisations and a calendar of business events in the Coast to Capital region. The aim of the Business Navigator is to help business people in the region quickly find the most relevant support.

[www.c2cbusiness.org.uk](http://www.c2cbusiness.org.uk)



#### Coventry and Warwickshire - Coventry & Warwickshire Growth Hub

The Coventry & Warwickshire Growth Hub provides support to local businesses. Through our expert advisors, we represent the most influential business support organisations in the region, including The Coventry & Warwickshire Chamber of Commerce, Coventry University Enterprises (CUE), Warwickshire County Council and Coventry City Council.

[www.cwlep.com/growth-hub/](http://www.cwlep.com/growth-hub/)



### Regional Investment Funding

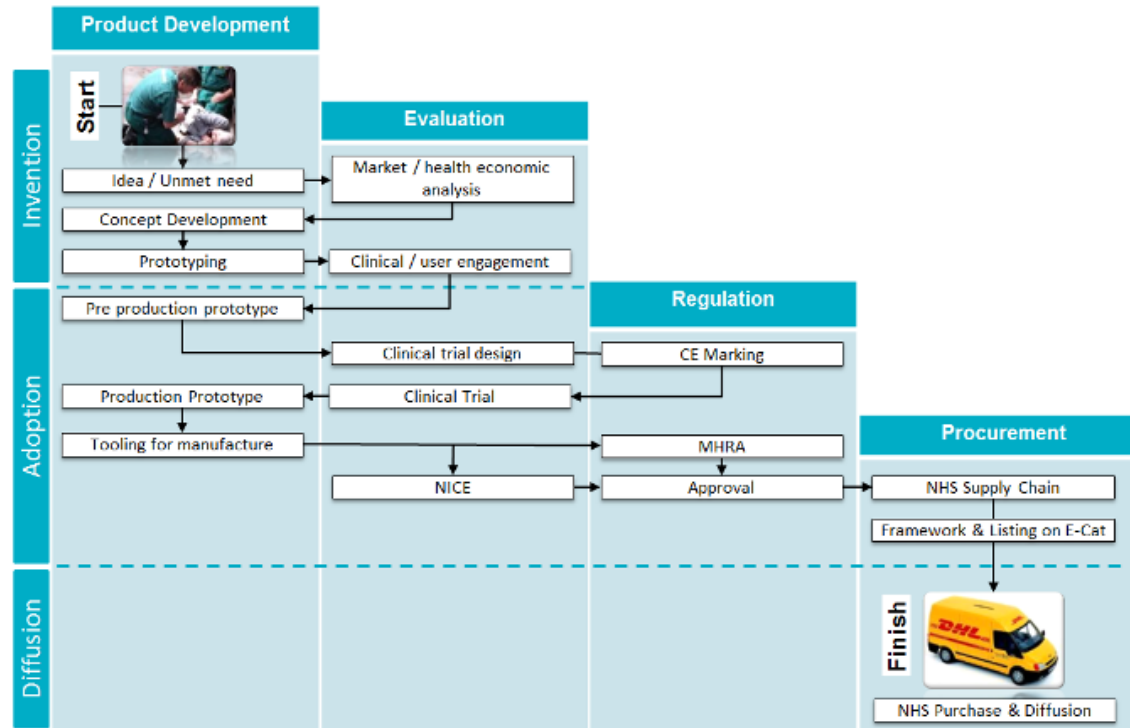
In addition to the national funding scheme links below.



# An Innovation Roadmap provides an overview of organisations, groups and teams that support innovation, innovators and entrepreneurs: <http://www.innovation.england.nhs.uk/web/nhs-england/road-map>

## → Browse Road Map by stage of development

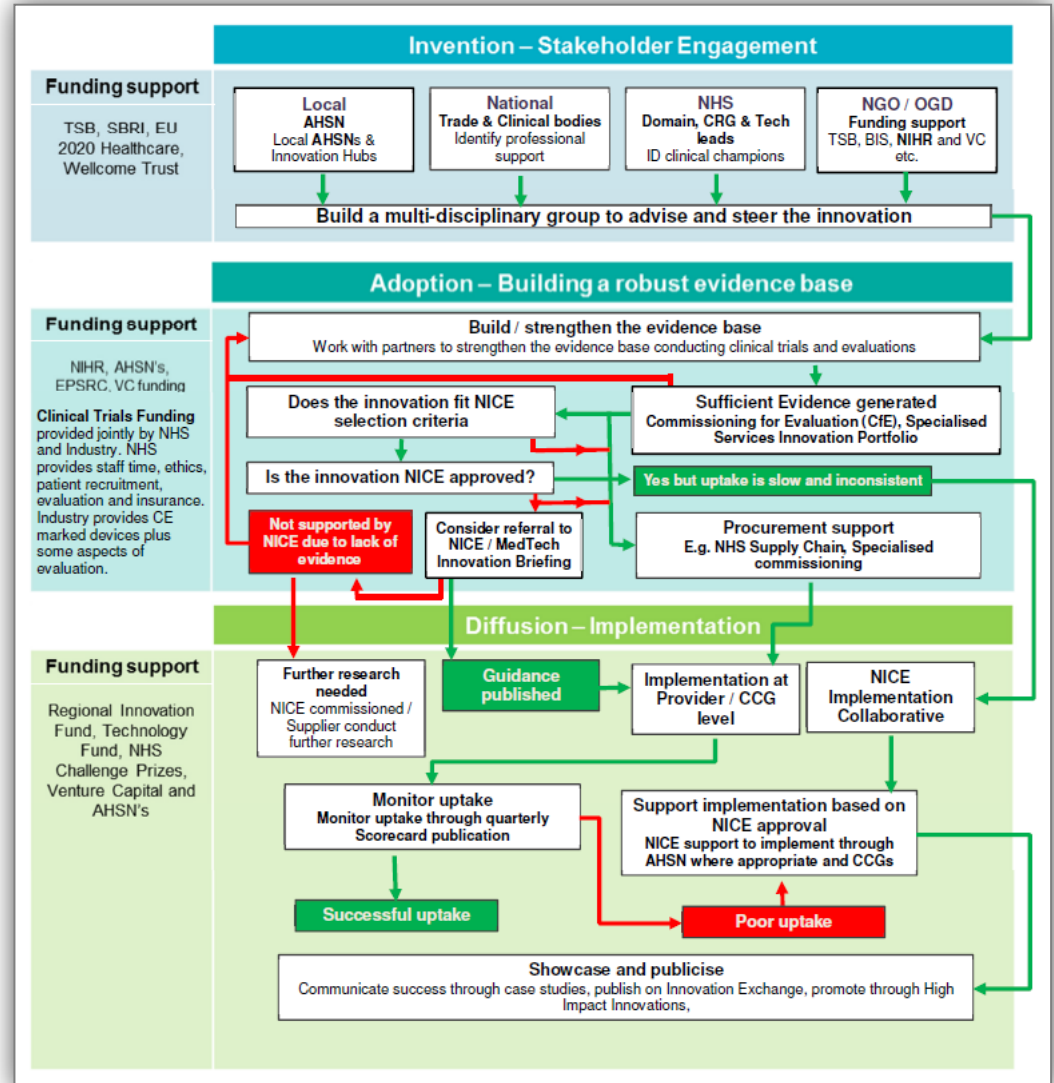
Click in the blue headers to view organisations providing support in those areas. A filtered list of organisations will appear above.



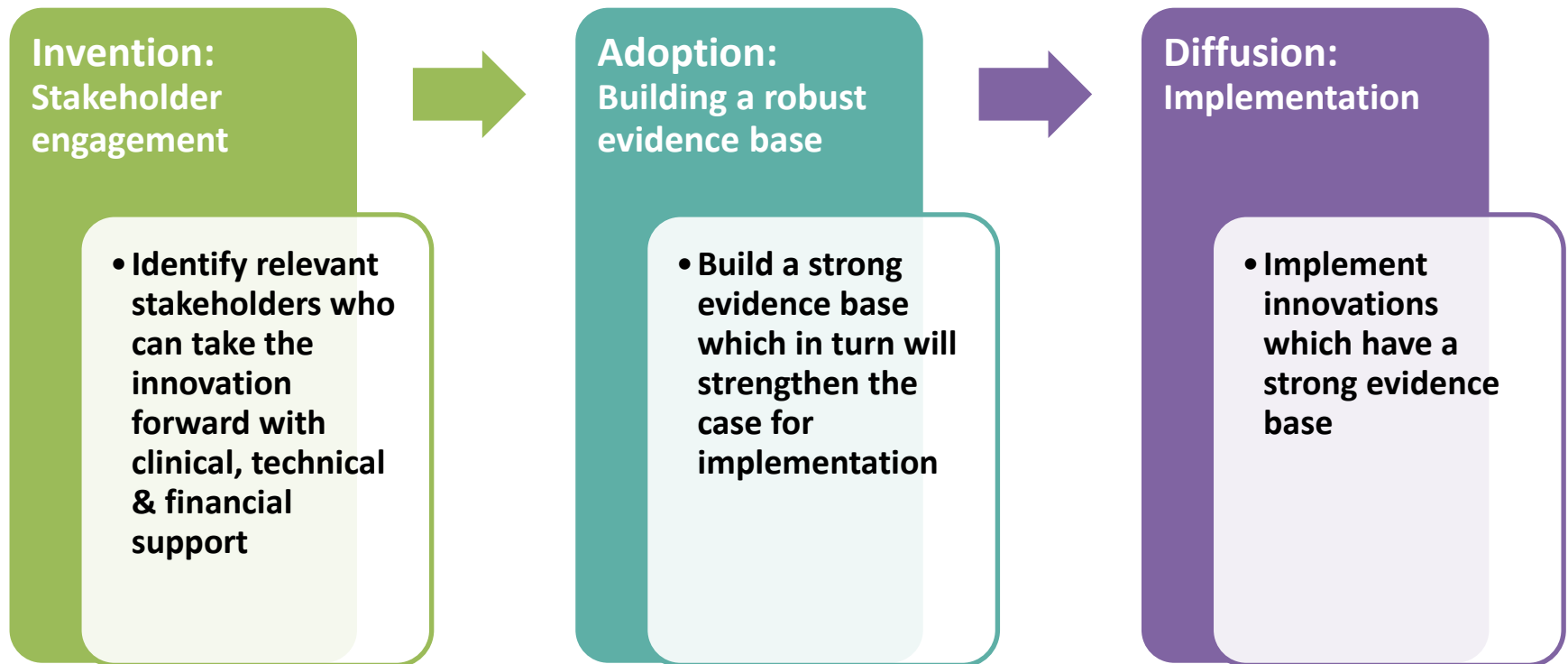
# NHS England published a Roadmap to Innovation Support in 2014



[https://nhs-ihw-colab.induct.no/maya/companymain.aspx?document\\_name=road%20map](https://nhs-ihw-colab.induct.no/maya/companymain.aspx?document_name=road%20map)

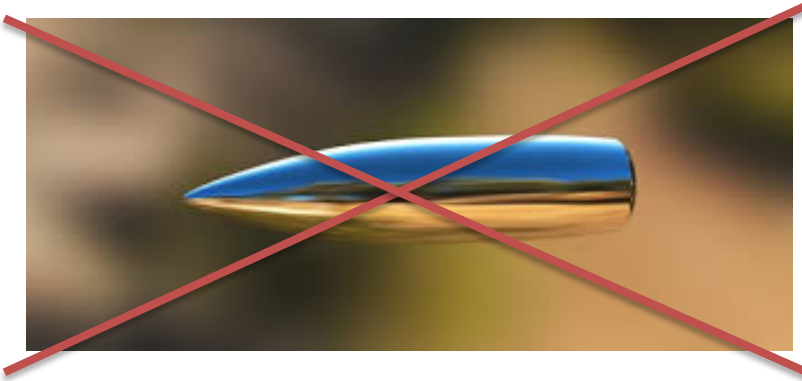


# The Road Map splits the innovation process into three distinct stages





## Complexity, detail and localisation



- **No silver bullet**
- **Oxford AHSN - over 100 workstreams**

*"The whole principle came from the idea that if you broke down everything you could think of that goes into riding a bike, and then improved it by 1%, you will get a significant increase when you put them all together"*

Sir Dave Brailsford, British Cycling's Performance Director



**Thanks for listening**

**Any Questions.....?**

## Contact details:

Tracey Marriott

Director of Clinical Innovation Adoption  
Oxford Academic Health Science Network

The Magdalen Centre North

Robert Robinson Avenue

Oxford Science Park

Oxford

OX4 4GA

[tracey.marriott@oxfordahsn.org](mailto:tracey.marriott@oxfordahsn.org)

T: 01865 784873

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

## Newsletter:

<http://www.oxfordahsn.org/news-and-events/network-newsletters/>

## Annual report:

[http://www.oxfordahsn.org/wp-content/uploads/2014/06/Oxford\\_AH\\_SN\\_Annual\\_Report\\_2014.pdf](http://www.oxfordahsn.org/wp-content/uploads/2014/06/Oxford_AH_SN_Annual_Report_2014.pdf)