

## **Oxford AHSN 2018-2020 Business Plan**

**For the two years ending 31 March 2020**

**Prof Gary A Ford CBE, FMedSci, CEO, Oxford AHSN**

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## Chief Executive's Introduction

It is a testimony to the successes of the AHSN Network that NHS England has decided to relicence the AHSNs for another five-year period. AHSNs were created in 2013 following publication of the Innovation Health and Wealth (IHW) report which set out a delivery agenda for spreading innovation at pace and scale throughout the NHS. Sir David Nicholson, NHS Chief Executive at the time, emphasised the vital role innovation had to play in improving outcomes for patients and delivering value for money, and the importance of strong leadership – both clinical and managerial – at all levels in the system.

AHSNs were established as regional partnerships to build collaboration between NHS services, industry and academia to deliver improved patient outcomes and economic growth by driving diffusion of innovation and good practice. In our first five-year licence period, Oxford AHSN has developed support for innovators and clinicians to introduce new ideas and technologies, supported adoption of 50 innovations, delivered six patient safety programmes, met with 450 companies and established 25 formal partnerships and leveraged £25m to improve health in our region and support economic growth. We have reviewed over 350 innovations to select the best-evidenced and most impactful innovations for our region. We have brought inward investment into the region of £49m.

Some planned actions of the 2013 IHW report have yet to be implemented if the NHS is going to make changes necessary to deliver the Five Year Forward View. In particular, there remains a need for better alignment of system incentives to support and encourage innovation; the 'pull' for new ideas from patients and the NHS requires stronger development, the NHS needs to be less risk averse to change, and a longer-term view on investment in new NHS services and change is required.

During the first licence period Oxford AHSN has developed expertise in evaluation and adoption of innovation in diagnostics, digital and medical technologies, and supported development of clinical networking in mental health, maternity, and patient safety underpinned by patient and public involvement. We will continue to build on these strengths in the next licence period and focus our work with local partners on the NHS priorities of cancer, mental health and urgent and emergency care.

The new licence places a much greater emphasis on collaborating with other AHSNs to deliver national programmes. We will continue to deliver local programmes but more of our resources will be dedicated to the national innovation adoption and improvement programmes. The performance of the AHSNs will be measured by delivery of a Return on Investment, calculated as NHS savings and social benefits. NHS England policy is to create nine Innovation National Networks (INNs) which will develop over the next 12 months to foster deeper collaboration by the AHSNs. Our programmes are very well aligned to the new INNs and we will build on the existing collaborative work we undertake with other AHSNs.

Engagement with frontline staff is very strong and continues to grow through our programmes, eg primary care engagement in the AF programme. We meet with the three STP Directors regularly and we review the plans and priorities of our NHS partners annually to inform our work.

The Office for Life Sciences announced a commitment of £36m for the AHSNs over three years to deliver the government's life sciences industrial strategy following the Accelerated Access Review. Building on its successful track record, Oxford AHSN's Strategic and Industry Partnerships programme will continue to support life science companies along the innovation pathway.

It is my privilege to lead the Oxford AHSN team and work with partners in a region with outstanding organisations across health, academia and industry. I look forward to working with our local partners in the next five years to improve patient outcomes and build a sustainable health system for our region's population.

**Professor Gary Ford, CEO**

## **Business Plan Summary**

### **NHS England relicensing, Innovation National Networks, Accelerated Access Review and NHS Improvement**

This is the Oxford AHSN's sixth business plan and covers the two years ending March 2020. NHS England (NHS E) intends to license all 15 AHSNs for a second period of five years. AHSNs have been offered a financial settlement of £36m per annum for the next two years. The Office for Life Sciences (OLS) has committed £36m to the AHSNs over three years. NHS Improvement (NHS I) is engaged in a discussion on aligning relicensing of Patient Safety Collaboratives (PSCs) to the AHSN relicensing period. We believe there will be a financial settlement for PSCs to March 2020.

Since developing the Business Plan, NHS E has announced that it will increase funding to the AHSNs from £36m to £44m. As agreed with NHS England, this plan is based on a share of £36m funding from NHS England. The new contract matrix of metrics will be prepared and agreed with NHS E ahead of its May Public Board Meeting to take account of confirmed additional funding to accelerate the uptake of the national programmes we are supporting. We will also calculate the impact of the NHS pay settlement on our financial position for the next 3-5 years.

NHS E policy is encouraging deeper and more effective collaboration between AHSNs to deliver national programmes of innovation adoption and improvement. NHS E has initiated the creation of nine Innovation National Networks (INNs). AHSNs will develop the INN themes in the next few months. We have mapped all our work against the nine themes and there is very close alignment (see Governance section). In addition to NHS national programmes AHSNs are also collaborating at scale on additional programmes, eg WireSafe.

### **STPs and ACSs**

We will continue to support the local partners we work with including the three Sustainability and Transformation Partnerships (STPs) we work with and emerging Integrated Care Systems (ICS). We are focusing on the three NHS priorities; cancer, mental health, urgent and emergency care. We are working with the Thames Valley Cancer Alliance to develop a cancer programme. We have recently appointed a lead for Mental Health to develop a sustainable mental health programme in collaboration with Thames Valley Strategic Networks, the STPs and our own programmes. We have also brought together teams from local Emergency Departments to explore how collaborative work could support improvements in emergency care. The Chief Operating Officer meets with the three STP Directors on a regular basis to ensure we take full advantage of aligning plans. Each year we analyse local commissioner and provider strategic priorities to inform our programmes.

### **Experienced team and effective governance**

The Oxford AHSN delivers through its three major programmes – Patient Safety and Clinical Improvement, Clinical Innovation Adoption (CIA) and Strategic and Industry Partnerships (SIP). CIA and SIP were established four years ago and have an excellent track record of working with innovators across the innovation pathway, ultimately speeding up the adoption of innovation in the NHS at pace and scale. Patient Safety and Clinical Improvement includes the Patient Safety Collaborative which was formed three years ago and has a highly experienced team of clinical leaders with deep expertise on quality improvement and clinical governance. The programmes work right across the innovation pathway from evaluation of products in real world settings to adoption at scale and quality improvement, either as stand-alone activities or to support innovation adoption. We support all categories of innovation – medtech, diagnostics, digital, medicine and service improvements. These programmes are supported by three cross-cutting themes – Informatics, Patient and Public Involvement Engagement & Experience (PPIEE) and Research & Development. Oxford was probably the first AHSN to create an informatics capability and is national leader in PPIEE. In Informatics Oxford is the only AHSN with an agreement with NHS Digital enabling it to provide analytical specific support to the programmes using national data sets (Appendix C) and locally captured project specific data. In terms of research we have the benefit of Professor Gary Ford's extensive research track record and networks to bring local research leaders together as well as supporting the national Research INN. Each of the programmes and themes is chaired by a member of the AHSN Board (see Governance). We report quarterly to the Oxford AHSN Board, to our three commissioners

NHS E, NHS I and OLS, to the STP Directors and other stakeholders directly through email and indirectly through publishing our detailed Quarterly Reports on our website.

We have a very strong and experienced team of circa 35 clinicians and managers drawn from the NHS and industry. We will increase the size of the team next year to handle the national programmes. The senior teams and programme and theme teams work very closely together to ensure we make the most of our skills and relationships with the health system, industry and academia.

### **National programmes and collaborating with other AHSNs**

We will continue to support the National Innovation Accelerator (NIA) and the Small Business Research Initiative (SBRI). We will work with the other AHSNs and NHS England to support uptake of products in the Innovation Technology Payment scheme which gives Trusts free-to-issue medical devices. Oxford AHSN is the national lead on ITP devices WireSafe, PneuX and non-injectable connector

Oxford AHSN is participating in the following NHS England AHSN Network national programmes:

1. PINCER - for reducing clinically important errors in medication management
2. Escape Pain - enables participants to develop "coping skills" as well as their physical function
3. PReCePT - preventing cerebral palsy in preterm labour
4. Emergency Laparotomy – extend intra operative fluid management to emergency laparotomy
5. Atrial Fibrillation – detect and prevent (extend current programme)

Oxford AHSN is participating in five of the seven national programmes. We will be a fast follower of Transfer of Care About Medicines (TCAM) once there is clearer evidence of the benefits and sustainability of the programme. We are discussions with our local mental health providers regarding SIM (police liaison service); they are showing interest in commissioning SIM and if they wish to proceed we will discuss how we can support implementation.

Oxford AHSN is participating in the following NHS England AHSN Network national programmes:

1. WireSafe, led by Oxford AHSN (all 15 AHSNs are participating) which addresses the risk of retained guide wires; avoids Never Events and an estimated 27 deaths nationally per annum
2. Faecal calprotectin – accurate diagnosis of inflammatory bowel disease

Oxford AHSN is participating in the following national NHS I Patient Safety Collaborative programmes:

1. Sepsis and the deteriorating patient
2. Maternal and Neonatal Health Safety Collaborative (Oxford AHSN PSC is leading)
3. Safety culture
4. Adoption and spread of patient safety projects

Oxford AHSN has taken an organic approach to collaborating with other AHSNs – if we can accelerate improvement and innovation adoption in our region and the collaborating region then we collaborate. Our programmes have made a significant contribution nationally, eg:

1. Patient Safety and Clinical Improvement programme has developed national sepsis outcome measures, set the standards for early intervention in psychosis and for measuring improvements to access to psychological therapies
2. Clinical Innovation Adoption programme developed packs for adoption of critical care patient safety devices which are being used by other AHSNs for the ITP patient safety medical devices
3. Informatics has worked with Greater Manchester AHSN to develop the framework of Global Digital Exemplars
4. PPIEE has gained national recognition for training healthcare professionals and lay people in co-development of change programmes in healthcare

The Oxford AHSN CEO is Deputy Chair of the AHSN Network, our Head of Communications is Co-Chair of the AHSN Network Communication Forum and our Director of Commercial Development is Deputy Chair of the AHSN Commercial Directors group. Oxford AHSN will also provide financial management to the AHSN Network.

## Return on investment

The Oxford AHSN will be measured by NHS England on delivering a return on investment in terms of NHS savings:

NHS Benefits - Oxford AHSN	18-19	19-20	Total
<b>National Schemes</b>	£'m		
PINCER	0.14	0.14	0.27
TCAM			
SIM			
Escape Pain	0.15	0.29	0.44
PRECEPT	0.0	0.0	0.00
Emergency Laparotomy Collaborative	0.00	0.78	0.78
Atrial Fibrillation	0.35	1.17	1.52
<b>Sub-Total National Schemes</b>	<b>0.63</b>	<b>2.38</b>	<b>3.01</b>
<b>AHSN Network Collaborative Programmes</b>			
WireSafe NIA	0.05	0.15	0.19
Faecal calprotectin testing in primary care	0.12	0.59	0.71
iThrive			
<b>Sub-Total Network Collaborative Schemes</b>	<b>0.17</b>	<b>0.74</b>	<b>0.90</b>
NIA	1.96	2.48	4.44
<b>Local Schemes</b>			
PneuX	0.06	0.07	0.13
Urolift	0.01	0.01	0.02
Non Injectable Arterial Connector	0.50	0.44	0.94
AF - Perfect	0.72	0.00	0.72
The Deteriorating Patient integrated with SEPSIS	1.95	1.95	3.90
Anxiety (Reading)	0.00	0.01	0.01
SEND	0.02	0.02	0.04
GDM-health	0.01	0.01	0.02
EDGE	0.00	0.02	0.02
True Colours	0.02	0.02	0.03
Ufonia	0.00	0.02	0.02
Diabetes Monitoring	0.00	0.02	0.02
MYCOPD	0.10	0.10	0.19
SLEEPIO	0.16	0.16	0.32
AKI & Hydration in Care Homes	0.25	0.33	0.58
Mental Health Programme Anxiety & Depression	4.80	0.00	4.80
Maternity Network	0.10	0.10	0.20
POC - Specialist Paramedics & Out of Hours	0.01	0.01	0.02
Influenza POC in ED, Urgent Care &	0.06	0.00	0.06
POC Test for Urgent & Ambulatory Care (JD)	0.02	0.00	0.02
Faster & more accurate pre-eclampsia diagnosis	0.16	0.32	0.48
Rapid Identification of Stroke Mimics	0.34	0.69	1.03
COPD Exacerbation Alert	0.02	0.02	0.04
<b>Sub-Total Local Schemes</b>	<b>9.30</b>	<b>4.31</b>	<b>13.61</b>
<b>Economic Benefit to NHS</b>	<b>12.05</b>	<b>9.90</b>	<b>21.95</b>

Analysed by INN, the return over the next two years ROI is forecast to be:

INN	Oxford AHSN programme Leading INN	Savings (£'m)		Revenue (£'m)	
		NHS	Social	GVA (In Inv)	Total
1. Innovation, Economic Growth	Strategic & Industry Partnerships			14.18	14.18
2. Innovation Exchange	SIP & Clinical Innovation Adoption			0.14	0.14
3. Medicines Optimisation	Clinical Innovation Adoption	0.99	1.72		2.71
4. MedTech	Clinical Innovation Adoption	5.02	8.77		13.79
5. Digital & AI	SIP & Informatics	2.89			2.89
6. Patient Safety	Patient Safety & Clinical Improvement	4.47			4.47
7. Quality Improvement	Patient Safety & Clinical Improvement	6.22			6.22
8. Research	Research & Development	-		-	-
9. Genomics & Diagnostics	Strategic & Industry Partnerships	2.36			2.36
<b>TOTAL</b>	<b>TOTAL</b>	<b>21.95</b>	<b>10.49</b>	<b>14.32</b>	<b>46.76</b>

Although a lead Oxford AHSN programme has been identified to 'own' each INN, the Clinical Innovation Adoption (CIA) programme delivers across six of the INNs. We have allocated the national programmes to the nine INNs. Details of the underlying projects and ROIs can be found in Appendix A. ROI is a financial measure and, where possible, we will work out how many patient lives will be saved or patients that recover or avoid harm. Provisional figures forecast 53 additional lives will be saved in the region.

The Oxford AHSN Business Plan forecasts delivery of **£47m** of NHS, social benefits and inward investment over the next two years, a 5x ROI on Oxford AHSN's running costs. **NHS benefits amount to £22m. This represents a circa 5x ROI when compared to the NHS England funding.** Of the NHS benefits, the Clinical Innovation Adoption (CIA) programme is delivering 45%, Strategic and Industry Partnerships (SIP) 11% and Patient Safety and Clinical Improvement 43%. **CIA is forecasting to deliver almost £10.5m in social benefits.** CIA is delivering all £3m of the NHS benefits of the NHS England AHSN National programmes. **SIP have plans to deliver £14.3m GVA including inward investment** into the region.

**Highlights from programmes** (more detail on the national and local workstreams is presented in each of the three programme sections that follow).

#### Patient Safety

- Mortality reviews
- Specialist paediatric care in the community
- Acute kidney injury – online package to support spread

#### Mental Health

- Develop a sustainable mental health programme to meet local and national requirements incorporating improvement and innovation
- Ongoing support to Anxiety and Depression Clinical Network targeting patients with both physical and mental ill-health

#### Maternity

- Development and rollout of region-wide guidelines as well as support to the BOB STP in collaboration with the Thames Valley Strategic Clinical Network
- Reduced foetal movements project to reduce over- and under-intervention
- Completion of pilot to reduce incidence of stillbirths through improvement ultrasound workflow – this is already reducing incidents of stillbirth

#### Digital and Artificial Intelligence

- MyCOPD – self-management programme for patients
- Sleepio – self-management app to improve sleep
- Eating disorders digital technology

- Online treatment for childhood anxiety
- Insulin penpal for transformation of insulin pen into smart device
- Support to Drayson Technologies focussing on real world evidence for GDM (diabetes management in pregnancy), SEND (vital signs) and EDGE (COPD management)
- Support the development and bid for a Local Health and Care Record Exemplar/Digital Innovation Hub across an extended regional footprint

### Med tech

1. WireSafe – to eliminate retained guidewires and prevent Never Events
2. Atrial fibrillation detection devices

### Genomics, diagnostics and precision medicine

- Faecal calprotectin diagnostic in primary care to diagnose inflammatory Bowel Disease and avoid false positives and unnecessary colonoscopies
- Faster and more accurate test for pre-eclampsia – reduce unnecessary admissions
- Influenza test in emergency department – reduce unnecessary admissions
- Stroke point of care test in emergency department
- Support for the Oxford NHS Genomic Medicine Centre including PPIEE

### Economic growth

- Inward investment of £14.2m will be attracted to the region
- Continue to support and provide leadership to the creation of the Buckinghamshire Life Sciences Innovation Centre which is being funded through Local Growth Fund and ERDF;
- Continue to be a core partner and support the Bicester Health New Towns Programme
- Support the Oxfordshire Transformation Technologies Alliance Science & Innovation Audit where the team led on the Digital Health theme
- Support the creation of a multidisciplinary health accelerator at Harwell;
- Developing EMAPS (EIT funded) to support market access

### High level KPIs

In addition to being measured on the delivery of ROI by NHS England and the development of the nine INNs, the proposed high level KPIs will be monitored and recorded by the Oxford AHSN.

Programme	High level KPIs (measured annually unless otherwise stated)
Patient Safety and Clinical Improvement	Adoption of 2-3 proven improvements from outside the AHSN area
	Implementation of 2-3 clinical improvement/innovation projects in mental health
Clinical Innovation Adoption	Number of innovations adopted per annum
	Number of NHS organisations adopting
Strategic and Industry Partnerships	Number of real world evaluations completed
	Amount of investment leveraged into the region through SIP activities
Stakeholder engagement	Number of Twitter followers across all accounts (reported each quarter)
	Number of Newsletter subscribers (reported each quarter)
	Year on year increase in participants/attendees at AHSN-related events



The following table summarises the key milestones in 2018/20 (Details of the milestones for each Programme/Theme can be found in Appendix B):

### Key milestones for 2018/20

Programme/Theme	Key milestones 2018/19	Key milestones 2019/20
<b>Corporate</b>	Hosting agreement with OUH Commercial vehicle development	
<b>Patient Safety and Clinical Improvement</b>	Re-licence of Patient Safety Collaborative past March 2019	
<b>Clinical Innovation Adoption</b>	Launch the eMAPs website for market access aimed at SMEs Delivery of five national innovation adoption programmes	Initiate two major investment funded projects that significantly benefit the NHS
<b>Strategic and Industry Partnerships</b>	Roll-out of faecal calprotectin POC Roll-out of pre-eclampsia diagnostic test	Launch of Project Accelerate Affordable Medicines
<b>Informatics</b>	Initiate Local Health and Care Record Exemplar	Establish Digital Innovation Hub
<b>PPIEE</b>	Deliver timetabled level 1 and level 2 training and development activities  Deliver and evaluate pilot learning disabilities Leading Together Programme	Continue to embed lay partners in the work of the AHSN and develop at least two industry client relationships  Annual programme of training and development that will contribute to funding PPIEE team
<b>Stakeholder Engagement and Communications</b>	Independent stakeholder survey	

### Capability building

Oxford AHSN offers practical support to clinicians and managers who are working to improve patient care and speed up adoption of innovation into practice. We have been working with Health Education England for five years to develop training and development programmes:

1. Patient Safety and Clinical Improvement continues to support the development of quality improvement capability. This includes supporting recruitment to the new Q Community. We also support training in care settings (eg care homes) aligned to specific improvement projects
2. Clinical Innovation Adoption - training frontline staff on the Adopting Innovation and Managing Change in Healthcare Settings course developed by CIA. To date, 97 staff have trained on this programme and two further cohorts for 40-50 people will start in 2018. Health Education England continue to support the programme which will allow more cohorts to be trained
3. Clinical Innovation Adoption has developed the eMAPS website which provides companies with an interactive “one stop shop” for information on how to access three key European health markets
4. Strategic and Industry Partnerships programme is dedicated to supporting industry along the innovation pathway
5. Informatics - analytics training and Information Governance training
6. PPIEE – further development of the Leading Together programme for healthcare professionals and people with learning disabilities

## Stakeholder engagement and communications

We will ensure that the programmes and themes have the strongest advice and support on communications and engagement. This includes developing online and printed materials in support of events and campaigns and ensuring consistency of branding for the AHSN, whilst recognising the individuality of programmes and themes.

Plans are already in place for events throughout 2018 and 2019; we have a grid that includes AHSN events, stakeholder events and others at which AHSN staff are speaking. The grid also highlights courses that are intended to provide opportunities for NHS staff to develop their capability and capacity.

Close partnerships will be developed further with Communications teams across the NHS, universities and life science industries to highlight key strengths, resources, expertise and opportunities for collaboration across the AHSN region.

The 50<sup>th</sup> edition of the AHSN monthly newsletter was published in January 2018. This includes content from partners and stakeholders. It is delivered to almost 3,000 subscribers.

Twitter is the primary mechanism for wider communication. The main account passed 3,600 followers in early February, with over 1,000 more following other linked accounts.

## Financial plan and sustainability

Most of the Oxford AHSN's income is from NHS England, NHS Improvement and the Office for Life Sciences. Our local partners contribute circa £0.4m per annum. We have not increased the level of partner contribution since 2014. Income from industry and grant income has grown significantly in the last year and is planned to grow over the planning period. This income from industry and grants allows the AHSN to deliver its policy objectives at greater scale and intensity. The net cost of our programmes is planned to decrease as the programmes secure work from industry and new grant income, eg EIT Health. The programme costs are the direct costs of the teams, sub-contracted costs, a small amount of other non-pay spend and a fair apportionment of overheads including communications, accommodation costs, finance, IT and HR support. Each of the programmes has a budget. However, in line with NHS E's policy to create INNs we have presented the financial plan in terms of the nine INNs by allocating the cost according to the activity within each INN:

### Two Year Financial Plan (full overhead apportionment) (£)

<u>Oxford Academic Health Science Network</u>	<u>2 year financial plan fully apportioned overheads</u>	
	<u>2018/2019</u>	<u>2019/2020</u>
NHS England	(-2,228,000)	(-2,228,000)
NHS Improvement	(-447,925)	(-447,925)
Office of Life Sciences	(-831,000)	(-831,000)
Other Revenue	(-2,063,197)	(-2,001,171)
<b>Sub-Total Revenue</b>	<b>(-5,570,122)</b>	<b>(-5,508,096)</b>
<b><i>Innovation National Network:-</i></b>		
Digital & Artificial Intelligence	926,238	1,074,554
Genomics Diagnostics & Precision Medicine	785,546	1,069,959
Innovation & Economic Growth	1,203,273	1,050,775
Innovation Exchange	108,757	121,393
Medicine Optimisation	332,885	242,786
MedTech	435,029	485,572
Patient Safety	1,085,612	1,068,344
Quality Improvement	663,065	360,784
Research	29,716	33,929
<b>Sub-total Expenditure</b>	<b>5,570,122</b>	<b>5,508,096</b>
Overheads (Apportioned out)	0	0
<b>Net (Revenue)/Expenditure</b>	<b>0</b>	<b>(-0)</b>

The AHSN is sustainable over the planned two-year period and we are working to ensure it is sustainable over the new five-year licence period and beyond. We review our five-year cashflow each quarter and report this to the AHSN Board and to our host trust's Chief Finance Officer.

### **Risks and issues to delivery of national and local programmes**

All our projects are based on collaboration of frontline clinicians, managers, our teams and often industry and academic partners. Adoption and spread is dependent on local appetite, the strength of the business case and competing priorities in a stretched NHS. Projects whether national or local all depend on local uptake.

The main component of the ROI to the NHS we have committed to is from the AF programme which is well established with excellent engagement across the region. Given that Oxford AHSN focuses on protecting people from AF through ensuring appropriate anticoagulation in addition to the detection of AF which is the focus of the national programme we are confident of meeting or exceeding the planned ROI.

Delivery of the national programme ESCAPE-Pain is dependent on local commissioning as we understand the annual cost to be circa £0.5m.

Adoption of WireSafe by NHS acute providers will be influenced by its presence on the ITP.

We have a strong portfolio of local programmes which will more than compensate for any shortfall in ROI from national programmes.

**Dr Paul Durrands, Chief Operating Officer**

## Governance

The Oxford AHSN continues to be hosted by the Oxford University Hospitals NHS Foundation Trust (OUH).

The governance arrangements for the AHSN have been in place since their endorsement by the Oxford AHSN Board in March 2014 and were reviewed again in March 2015 and no changes were proposed. The AHSN works within the policies of OUH and delegated authority agreed with the AHSN Board. These relate to financial, procurement and HR policies, processes and procedures.

Each of the three programmes and three themes has an oversight group chaired by a member of the AHSN Board which meets four times a year to oversee the strategy and operation of Oxford AHSN.

<b>Programme/Theme</b>	<b>AHSN Director</b>	<b>Chair of Oversight Group and member of the AHSN Board</b>
Patient Safety and Clinical Improvement	Katherine Edwards	Steve McManus, CEO, Royal Berkshire
Clinical Innovation Adoption	Tracey Marriott	Neil Dardis, CEO, Frimley Health
Strategic and Industry Partnerships	Nick Scott-Ram	Nick Edwards, Chairman, MedInnovate
Research and Development	Gary Ford	Stuart Bell, CEO, Oxford Health
Informatics	Mike Denis	Stuart Bell, CEO, Oxford Health
Patient, Public, Involvement, Engagement and Experience	Sian Rees	Minoo Irani, Medical Director, Berkshire Healthcare

The Oxford AHSN has an independent chair, Nigel Keen. The Deputy Chair is Bruno Holthof, CEO of the AHSN's host, OUH. The AHSN's CEO, Gary Ford, and COO, Paul Durrands, are also members of the AHSN Board.

The Oxford AHSN is subject to a quarterly assurance meeting with the NHS England Regional Medical Director. In the new five-year licence period the Office for Life Sciences and NHS Improvement are joining NHS England in the quarterly assurance process which is being developed. Details of the Oxford AHSN's governance arrangements can be found on our website.

Under the new five-year licence NHS England is seeking closer collaboration between the 15 AHSNs to deliver national programmes. To this end NHS England has created nine Innovation National Networks. Seven national programmes have been agreed as part of the relicensing process. AHSNs are not expected to participate in all the programmes but are expected to participate in a reasonable number. We have not had to restructure as Oxford AHSN's programmes are very well suited to engage and deliver the emerging national projects and we have allocated responsibility for the INNs to the AHSN's programmes. Our programmes work very closely together and some of the projects will be delivered by programmes that do not "own" the INN in question. The INNs are supported by the Oxford AHSN programmes as follows:

<b>INN</b>	<b>National stakeholder</b>	<b>Oxford AHSN programme</b>
Innovation and economic growth	Director of Life Sciences and Innovation, NHS E	Strategic and Industry Partnerships
Innovation exchange	Director of Life Sciences, OLS; Director of Life Sciences and Innovation, NHS E	Clinical Innovation Adoption/Strategic and Industry Partnerships
Medicines optimisation	Chief Pharmaceutical Officer, NHS E	Clinical Innovation Adoption
Medtech	Director of Life Sciences and Innovation, NHS E	Clinical Innovation Adoption
Digital and artificial intelligence	Chief Information Officer, NHS E	Strategic and Industry Partnerships/ Informatics
Patient safety	National Director of Patient Safety, NHSI	Patient Safety and Clinical Improvement
Quality improvement	Executive Director of Improvement, NHS I	Patient Safety and Clinical Improvement
Research	Director of Science Research and Evidence, DH	Research and Development
Genomics diagnostics and personalised medicines	Chief Scientific Officer, NHS E	Strategic and Industry Partnerships

Under the new NHS England licence AHSNs will be measured on ROI – net savings to the NHS and social benefits. These benefits result from both national and local programmes.

# Patient Safety and Clinical Improvement

## Overview

The Patient Safety team is now well established, with a track record of delivering sustained impact in patient safety. A significant priority will be to secure relicensing of the Patient Safety Collaborative through NHS Improvement in order to continue to develop our established programmes for further patient benefit and capitalise on our strong local relationships with stakeholders.

It is anticipated that in this period the Patient Safety and Clinical Improvement programme will be further aligned with national priorities and workstreams to help maximise the benefit of collaborative current patient safety work across the AHSNs and Patient Safety Collaboratives. The Patient Safety and Clinical Improvement programme will therefore continue to use a range of approaches to improve safety and capability in quality improvement, whilst allowing room and capacity for adoption and spread of evidence-based quality improvement work and innovations from other areas.

Our approach will continue to focus on supporting local clinical QI projects identifying where additional benefit can be found with the support of the AHSN as a regional body. We continue to look towards working alongside STPs, LMSs and ACSs to support plans as appropriate. In addition, we will be increasing our focus on improving skills in quality improvement methodology, clinical human factors and measurement for improvement through the provision of coaching and training, and supporting the development of sound safety culture interventions.

Our clinical projects will continue to demonstrate outcomes to patients founded upon Quality Improvement coaching approaches, bringing about behavioural changes, process changes and enhanced capability. Our collaboration with the Informatics team and our academic researcher post (in collaboration with the University of Oxford), and additional patient safety fellow posts will ensure effective evaluation of impacts. Projects resulting in sustained impact will be packaged to enable adoption and spread outside the Oxford AHSN area. This will include publication in academic journals, online education packages and comprehensive reports on the project.

We will continue to attend and participate in several national Patient Safety and Quality Improvement events in order to share our work and continue to learn from the collaborative experience of others in the field.

Our plans are summarised below and within the INN tables included in this document.

## Sepsis and the Deteriorating Patient - National Workstream

The aim of this workstream is to reduce avoidable harm and enhance the outcomes and experience of deteriorating patients across England. This will be achieved by improving the reliability of recognition, response and communication. A key component of the national strategy is to assist with the implementation of National Early Warning Score (NEWS 2) across the country to reduce the variation and improve the quality of care across the entire NHS.

Other local work includes the development of identifying patients suspected of having sepsis to inform improvement work, and the continued development and implementation of care pathways for the identification and treatment of sepsis, and co-design of support for patients.

## Maternal and Neonatal Health Safety Collaborative (MNHSC) – National Workstream

The overall ambition of this workstream is to improve the safety and outcomes of maternal and neonatal care by reducing unwarranted variation and provide a high-quality healthcare experience for all women, babies and families across maternity care settings in England. This aim includes improving outcomes and experience of care, addressing the national ambition of reducing rates of maternal deaths, stillbirths, neonatal deaths and brain injuries that occur during or soon after birth by 20% by 2020 and 50% by 2030.

We will provide leadership and support to the MNHSC and contribute to its ambitions as described above. This will be by directly supporting organisations and teams that are part of an 'active wave' of the MNHSC and by supporting the development of communities of practice at local maternity system level along with other network colleagues.

In this period the Oxford PSC will continue to develop our considerable regional maternity network structure and experience to support the MNHSC. This includes a well-established network and steering group of maternity stakeholders including midwives, managers, clinicians and other relevant networks such as the Neonatal ODN. We have well-established relationships with each maternity care provider and with several key representatives involved in the MNHSC. Local participants in the MNHSC have access to our established regional maternity shared learning events, designed to spread learning from clinical incidents, best practice and innovation in maternity care to a regional multi-professional audience. The PSC team uses and supports model for improvement QI methodology through a mixture of coaching, supporting and, as necessary, additional training, as we have with our current and previous local workstreams. We will maintain our active role in the LMSs, and ensure that the MNHSC work and local Communities of Practice feed into LMS plans and activities, and ensure continuing support of the MNHSC work by the LMSs.

### **Safety Culture – National Workstream**

This workstream aims to help create the conditions that will enable healthcare organisations to nurture and develop a culture of safety.

Promoting a culture of safety is inherent in all Oxford AHSN activity being undertaken. We currently work on safety culture in some specific areas, such as creating shared learning events which promote learning from incidents and sharing best practice, and supporting Quality Improvement capability for both senior and less senior clinical staff with coaching and training. We will support and develop a programme that promotes positive safety practices, including Learning from Excellence and Appreciative Inquiry.

### **PRCePT (Preventing cerebral palsy in preterm labour) 3 – National programme**

At a cost of £1 per dose of magnesium sulphate to mothers, PRCePT is transforming lives by preventing cerebral palsy in pre-term babies - avoiding a £1m cost to the care system during the person's lifetime.

This cost-effective project has been co-designed with patients and clinicians. It provides a supported quality improvement toolkit, information materials and practical tools and training to raise awareness of evidence-based practice regarding use of magnesium sulphate (MgSO<sub>4</sub>). With our existing strong relationships in maternity it is expected this project can be rolled out at pace in 2018/19.

### **Adoption and Spread – Local/National Workstream**

We will review several improvement initiatives that are now showing sustained improvement, with a view to adoption of those meeting local and national needs. We anticipate facilitating the adoption of 2-3 per year in this period.

### **Mortality Reviews – Local Workstream**

We will support the implementation of mortality reviews, taking a regional perspective on resulting themes and learning. This will be supported by a regional (South) Patient Safety Fellow which we will host who will facilitate learning across the AHSNs in 2018/19.

### **Specialist Paediatric Care in the Community – Local Workstream**

With improvements in care there are a growing number of children requiring long-term ventilation or gastrostomy being cared for in the community. As a result, these children and their parents face a number of potentials for harm. This project aims to reduce harm by using a collaborative QI approach involving clinicians, nurses and parents from across the region.

## **Emergency Department Collaborative- Local Workstream**

We will further develop a Collaborative for frontline ED clinicians, nurses and ambulance services to share learning and develop a platform for spreading patient safety improvements in our region.

## **Acute Kidney Injury – Local Workstream**

Our work in developing structured drinks rounds and staff training in care homes has resulted in a significant reduction in urinary tract infections requiring antibiotics, and admissions to hospital as a result of a UTI in the care home population. Over the next period we will develop an online package to facilitate adoption and spread at pace of this successful intervention.

## **Mental Health Care Improvement Strategy**

We will develop our Mental Health Improvement Strategy to meet local and national requirements, supporting local STP plans with a focus on safety and adoption and spread of effective innovation. In the first six months of 18/19 we will develop this plan with key stakeholders, expecting 2-4 improvement plans to be undertaken per year after that.

### *Anxiety and Depression*

We will continue to support the existing Anxiety and Depression Clinical Network for 2018/19, which works closely with all IAPT (Improving Access to Psychological Therapies) services, their commissioners and academics at the cutting edge of psychological treatment. The network aims to continue to enhance recovery rates of patients entering the IAPT service through clinical collaboration and targeted training; to support the roll out and dissemination of innovations with particular reference for patients with chronic health problems, to better understand relapse rates for patients suffering with depression/anxiety disorders and to develop more effective post-discharge support mechanisms and the development of a bespoke app for post-discharge.

## **Maternity – Local Workstream**

### *Network-wide Best Practice Guidelines*

We will continue to run our established rolling programme of developing and introducing network wide guidelines that reflect local and national needs and priorities, integrating this work into the newly developing Local Maternity Systems.

### *Reduced Fetal Movements (RFM)*

Whilst significant attention has been given to making sure women report reduced fetal movements in pregnancy, the care given once the woman has presented is variable, and based on limited evidence. There is potential for both under- and over-intervention, both of which increase the potential for harm. The RFM project will continue to work to address this issue.

Expected impacts include potential reduction in workload, improved identification of those at risk of stillbirth/reduction of adverse outcomes and reduction in over-intervention (such as induction of labour).

### *OxGRIP- Oxford Growth Restriction Identification Programme*

OxGRIP is a pilot service improvement implemented at the Oxford University Hospitals NHS Foundation Trust aiming to reduce stillbirth whilst making best usage of resources, and restricting inequitable and ad hoc practice and obstetric intervention. As a result of this project we are seeing a reduction in third trimester stillbirth, reduction in emergency caesarean section for undiagnosed breech, with improved workflows in the ultrasound department. In this period, we anticipate publishing the results and roll-out of the programme in other units regionally as appropriate.



### **Quality Improvement Capability and Capacity – Local Workstream**

We will continue to support the development of QI capability by offering training, shared learning and networking. This includes supporting the recruitment and development of the Q Community in our locality.

We will also be developing specific training tailored to different settings (such as Primary Care, Care Homes, Mental Health Providers etc) in Measurement for improvement, QI science, tools, techniques and methods, QI coaching, Human Factors training and Developing patient leaders in safety.

# Clinical Innovation Adoption

## Overview

The organisational structure and portfolio of the Clinical Innovation Adoption Programme (CIA) for the two-year period of 2018-20 will continue to provide stability for innovation projects already underway and a fertile environment for recognition of potentially transformational innovative opportunities from all spheres of our contacts - regional, national and international. Our primary purpose is to deliver and enable adoption and diffusion and this requires an in-depth understanding of how to navigate the NHS and the ability to work as a bridge of trust between partners so as to ensure that the best in class entrepreneurs/innovators are steered through the challenges to achieve success.

The activities of CIA have been structured around six cross-cutting areas of work: Innovation identification selection, NHS system baselining and mapping, supporting delivery in collaboration with industry, academia and the NHS through to implementation of selected innovations and finally publication and training for sustainability:

Scale and Focus		Areas of Work				
		NHS Local & Regional	National	International	Supporting Innovation Process	Innovation Implementation
1	Innovation Identification	Selected regional Priorities	From AAR, ITT, NIA, Other AHSNs	EU Innovations through EIT Health	Oxford AHSN Fluid Review Process	Connections with AHSN SIP team
2	Innovation Selection	Oversight Group: Priority mapping	Participation in process NIA/ITT	Engagement with EU SMEs	Fluid Review Methodology	Support on focused pilots to support HE
3	Analysis – baselining, process & stakeholder map	Analysis of regional priorities	Involvement with NICE Impl. Collab.	Activities with European countries	Industry market access support	Tailored analysis for NHS stakeholders
4	Support for Innovators and Industry	Engagement CCGs/providers/STP	NHSE/national programmes	SMEs ask for support	Advice to entrepreneurs	Meet and Advise: SME coaching
5	Implementation of Selected Innovation	Regional STP/ACS activities	Choice based on scalability	Detailed support available if funded	Full Implementation Projects	Change Management Support for NHS
6	Publications & Training	Courses for NHS staff/Entrepreneurs	National Resources for Implementation	Production of eMAPs	Academic papers and reports	Conferences and Case studies

Over the previous five years the CIA team has reviewed over 350 innovations, implemented over 50 innovations, engaged and deployed at least five projects to each of our 11 acute hospitals, deployed innovation projects to 200 GP practices, trained nearly 100 frontline staff in innovation implementation and change management, led on implementation of patient safety linked Innovation and Technology Payment national projects and facilitated innovation and economic growth for SMEs internationally; most importantly, our activities have saved 155 lives, prevented 2,490 incidences of harm and generated circa £9m cost savings. We have attracted external income of £0.75m from national and international sources which has been used to support our core activities

The focus areas of the CIA programme map well to regional, national and international innovation activities as well as aligning with the INNs.

The CIA Programme focuses on delivering innovation at scale. This often takes the form of a combinatorial approach delivering innovation into the NHS that generates significant benefit and transformational change that encompasses new medicines, smart and efficient ways of creating time and cost-saving opportunities for patients and the health system to interact through innovations such as onsite accessible/quick

diagnostics; medtech that offers improved outcomes and quality of life and digital health innovations that enable patients and provide opportunities for remote monitoring and rapid identification of care requirements. The ambition is to support the region to optimise resources in such a way as to provide or have access to appropriate levels of care for citizens. This will be achieved through collaborative working across health settings, co-design with patients/citizens and exploration of innovation solutions with academia and industry. The CIA programme often works side-by-side with the Strategic and Industry Partnerships (SIP) programme along the value chain; eg, CIA supports promising industry solutions as they often require insight into how to express the value proposition and benefits based on the actual, rather than theoretical behaviours and interactions in healthcare settings.

The team specialises in using assessment, evaluation and its business acumen to recognise useful innovations aligned with priorities for the NHS. Selected innovations are evidenced and compared with incumbent practice. The team also provides facilitation and implementation support within operational healthcare settings. This, along with trusted relationships, built over time, has resulted in higher and more rapid rates of adoption and diffusion.

Summary of the innovations that the CIA programme will work on during 2018-2020:

<b>INNS</b>						
<b>Projects</b>		<b>Status</b>	<b>Harm avoided</b>	<b>Lives saved</b>	<b>Savings 18/19 £000s</b>	<b>Savings 19/20 £000s</b>
<b><i>Innovation &amp; Economic Growth</i></b>						
<b>National</b>						
<b>Local</b>	eMAPs	Ongoing				
<b><i>Quality Improvement</i></b>						
<b>National</b>	Escape Pain	New			147	294
<b>National</b>	Emergency Laparotomy	New				776
<b>Local</b>	Prostate Cancer (COMPACT)	New	20			
<b>Local</b>	GP appointment model	Ongoing				
<b><i>Medicines</i></b>						
<b>National</b>	PINCER	New			995	995
<b>Local</b>	AF Perfect	Ongoing	89	22	720	
<b><i>Digital</i></b>						
<b>National</b>						
<b>Local</b>	MYCOPD	New			95	95
<b>Local</b>	Sleepio	New	100		157	159
<b>Local</b>	Eating Disorders	Ongoing	360	50	180	180
<b><i>Medtech</i></b>						
<b>Local</b>	Non-injectable Connectors	Ongoing			500	440
<b>Local</b>	Pneux	Ongoing	15		60	67
<b>Local</b>	Urolift	Ongoing	70		10	10
<b>National</b>	Atrial Fibrillation Detect tech	Ongoing	127	31	4,618	5,672
<b>Local</b>	Wiresafe	Ongoing			48	145
<b>TOTAL</b>			<b>781</b>	<b>103</b>	<b>7,530</b>	<b>8,833</b>

## 1. Innovation and Economic Growth

Activities within this INN during the two-year period will focus on further developing the innovative eMAPS I project which is an online website for companies that provides an interactive “one stop shop” for information on how to access three key European health markets: digital, medtech and drugs. This project is being funded by EIT Health. The development of this online tool aims to accelerate market access coaching SMEs so that they are prepared and best aligned with their target markets taking into consideration how individual countries provide reimbursement or conduct procurement. Other examples of content include contextual expressing of value proposition and regulations to be aware at a pan-European and national level.

**Project 1: eMAPSI covers:** UK, Netherlands & Sweden – production due to complete April 2018.

**Project 2: eMAPSII covers:** France, Spain, Denmark, Switzerland – 2018 to 2019.

**Project 3: eMAPSII - Plans to cover** Germany & Italy – 2019 to 2020.

See guide to eMAPs <https://www.dropbox.com/s/2uu5jwmuyz47nbh/emaps-guide-final.mp4?dl=0>

The CIA programme has attracted funding to enable this project.

## 2. Quality Improvement

All of the innovation projects undertaken have a quality improvement component to them. However, some of the projects that we are undertaking are primarily about introducing new innovation service models that improve process and pathways so that patients have demonstrable better outcomes. During 2018-2020 the CIA team will focus on:

### NATIONAL PROJECTS

**Project 1: ESCAPE-Pain** programme has been successfully deployed at 31 sites. The CIA team will work with these AHSNs to deploy this model of care to this region. This has been classified as a QI project because it introduces a change to how services are provided to the patient. Course sessions are run by physiotherapists with 8-10 patients who meet twice a week for 10-12 sessions. The programme includes a combination of education, self-management and coping advice with physical exercises enabling participants to develop “coping skills” as well as their physical function<sup>1</sup>. There is a significant risk to successful implementation and sustainability of ESCAPE-Pain. Since ESCAPE-Pain was chosen as a national programme, the originating AHSN has clarified that it has commissioned the service at £0.5m per annum. Oxford AHSN will only be able to implement ESCAPE-Pain if local commissioners contract the service.

### Project 2: Emergency Laparotomy

The CIA team produced an audit into use of Intra Operative Fluid Management (IOFM) as part of the Theatre audit undertaken by NHS Benchmarking. The one key objective was to obtain opinion on an agreed list of procedures that should mandate the use of IOFM. A key finding was the IOFM should be used with emergency laparotomy. QI continued with regional Trusts and has extended to involve the National Emergency Laparotomy Audit which will build on the work that we have done with the National Emergency Laparotomy Audit and the Intra Operative Fluid Management project.

### LOCAL PROJECTS

During 2017/18 the team has been exploring variation in care for liver and prostate cancer patients. The two-year business plan will include:

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<sup>1</sup> The King’s Fund, Ben Collins, Jan 2018, “Adoption and Spread of Innovation in the NHS”

### **Project 3: Prostate Cancer project**

The project will develop a patient-led symptom tracker for men living with and beyond prostate cancer. It will empower patients to track clinical symptoms suggestive of disease recurrence or progression. A triggering system will highlight to the overseeing clinician which patients should be reviewed urgently. The aim is to improve the time to diagnosis and time to treatment for prostate cancer patients in this region. The project will be collaboratively delivered with industry partners and the Cancer Alliance.

### **Project 4: GP Emergency Appointment Model**

CIA is analysing and supporting a new model of care within a GP Practice for the management of Emergency Appointment Models. The intention is to share the findings with other GP practices and Commissioners.

## **3. Medicines**

### **NATIONAL PROJECTS**

**Project 1: PINCER** – (Pharmacist-led **I**nformation technology **I**ntervention for reducing **C**linically important **E**RRors in medication management). PINCER has been selected as a medicine related project as a national project in light of it being incorporated into national guidelines to support medicines optimisation by NICE and NHS England. PINCER 1 (trial with 72 GP practices see Lancet article) saw a 44% reduction of patients with at least one medication error. The intervention model for PINCER requires a clinical pharmacist to work with GP practices to run a search of 11 prescribing safety indicators on their clinical system. The search and results are generated and viewed in PRIMIS software. We are developing a workforce training package with the support of Health Education England.

The CIA programme will be a fast follower of Transfer of Care Management (TCAM) once there is much clearer evidence that the programme yields the claimed benefits. Initiatives similar to TCAM have been tried on several occasions across the NHS.

### **LOCAL PROJECTS**

**Project 1: AF – perfect.** We will continue our programme of local AF projects across Oxfordshire, Berkshire and Buckinghamshire. With detection and protection forming part of the national AF programme our local deliverable will focus on optimising anticoagulation control using specialist anticoagulation pharmacists to review patients and upskill GPs.

**Project 2:** There is a lot of interest in Gene Therapy and so it is with some excitement that we await the EMA approval later on in 2018 for the treatment of B cell acute lymphoblastic leukaemia (ALL). Clinical trial of the drug caused remission in 83% of 63 young patients. The CIA team intends to work with the drugs company to explore how this may be implemented in the future.

## **4. Digital**

### **LOCAL PROJECTS**

CIA will focus on the following projects within the digital sector:

**Project 1: MyCOPD (NIA/ITT)** – this is a web-based self-management programme for patients with severe or very severe COPD with an app for patient-clinician monitoring. This has been shown to improve management of the condition and reduce acute admissions. Within the Oxford AHSN region, there are approximately 50,000 diagnosed COPD patients. Stages 3 and 4 account for 30.7% of COPD patients, which

equates to just over 15,000 patients within the region. The estimated reduction in acute admissions for this region is approximately 900.

**Project 2: Sleepio** – A self-management sleep app. Through joint working with the SIP team, Innovate UK has awarded funding for the exploration of how this app could be commissioned and achieve wider adoption and diffusion.

**Project 3: Eating Disorders Digital Technology:** Supporting Berkshire Healthcare under an agreement (to be established) that focuses on the generation of a scalable system for adoption and diffusion within other UK Trusts and Europe.

**5. MedTech**

The CIA team was the National lead during 2017/18 for the patient safety ITT/NIA patient safety projects. Outputs to support deployment nationwide included holding a patient safety event attended by 50 clinicians and AHSN leads nationwide with Prof Charles Vincent as the keynote speaker. A toolkit was developed and shared with other AHSNs. It provided support and advice for replication of our implementation approach. Four out of six Trusts have signed up to use one or more of these devices.

**NATIONAL PROJECTS**

National ITT Projects that will be continuing include:

The diagram illustrates four national ITT projects contributing to patient safety. At the center is a grey circle labeled 'Prevention for Patient Safety'. Four colored arrows point outwards to four product boxes:

- Top Left (Blue):** Non-injectable Connector [Amdel Medical]. Description: A novel and patented non-injectable arterial blood sampling connector which prevents wrong route medication errors, bacterial contamination and blood spillage. Image shows a red connector.
- Top Right (Green):** PneuX System [Qualitec]. Description: An innovative cuffed ventilation tube and an electronic cuff pressure regulator which prevents leakage of bacterial laden oral and stomach contents to the lung – a problem associated with standard tubes. Image shows a blue and white tube.
- Bottom (Yellow):** Retained CVC Guidewires. Description: An engineered solution to prevent the never event of retained central line guidewires. Image shows a blue and white device.
- Bottom Left (Red):** UroLift. Description: A minimally-invasive surgical management of benign prostate hyperplasia. Image shows a surgical device.

The following projects will continue during 2018-2020:

**Project 1: Non-Injectable Connector**

**Project 2: PneuX - for prevention of Ventilator Acquired Pneumonia**

**Project 3: UroLift - surgical management of benign prostate hyperplasia**

**Project 4: Atrial Fibrillation - Detecting AF using technologies (ITT). This ambitious project aims to**

increase AF diagnoses to 85% of prevalence over the next two years through the use of mobile ECGs and other AF detection devices. Savings will be delivered through detection of AF and subsequent anticoagulation to prevent stroke.

The CIA team is an exemplar site for AHSN engagement, adoption methodology and implementation capability for all of the five aforementioned national medtech projects and the national lead for NIC, PneuX and WireSafe – supporting the deployment of ten other AHSNs to date.

**LOCAL PROJECTS**

The local medtech projects that the CIA team will explore may provide national opportunities in following years.

**Project 1: WireSafe:** Guide wires account for the second most common foreign object retention in the NHS, occurring in 1 in 3,000 procedures. This can lead to very serious complications for patients with increased length of stay, and increased expenditure for the Trust in terms of additional procedures required. Nationally the NHS Litigation Authority has estimated the litigation costs for retained central guidewires at £800k over the last 10

years (covering 33 successful cases). It can therefore be estimated that the litigation cost per never event is approximately £24k. 27 lives can be saved per annum if fully implemented across the NHS.

#### **4. Capability & Capacity**

- The CIA programme will continue to publish reports and documents where appropriate.
- Summer educational sessions for SMEs at Said Business School and EIT Health's offices.
- Continue to train frontline staff on the CIA-developed Adopting Innovation and Managing Change in Healthcare Settings Course<sup>i</sup>. To date, 97 staff have trained on this programme with 40-50 more joining cohorts in 2018. Students completing the programme are awarded a Post Graduate Certificate (60 Masters level 7 (Masters Level) credits). The course has also been adapted by Imperial College Health Partners AHSN for use in their region. Health Education England continue to support the programme and we have secured funding for additional cohorts.

# Strategic and Industry Partnerships

## Overview

The activities of the Strategic and Industry Partnerships Programme (SIP) for the two-year period of 2018-20 have been structured around government policy, which is set out in a number of recent publications<sup>[1]</sup> – The Life Sciences Industry Strategy, the Government response to the Accelerated Access Review, the Industrial Strategy and the Life Sciences Sector Deal. The NHSE re-licensing process is framed around nine Innovation National Networks (INNS) and the SIP business plan focuses on the delivery of activities across three INNS:

- Innovation and economic growth
- Digital and artificial intelligence (working with Informatics)
- Genomics, diagnostics and personalised medicine

To date the SIP team has met with over 450 companies, has over 25 formal partnerships with industry and has helped leverage over £25 million into the AHSN region, which represents a return on investment of over 10 times. Over 4,000 delegates have attended meetings either organised by or involving the SIP Programme. The activities of SIP have been restructured from the four themes (assisting companies along the adoption pathway, supporting investment into the region, building a culture of innovation within the NHS and long-term partnerships) to align with the INNS: Innovation and Economic Growth; Genomics, Diagnostics and Precision Medicine; and Digital and Artificial Intelligence.

The aim of the SIP Programme is to support the development of partnerships between academia, industry and the NHS across the development pathway for new products and services. In practice this covers new medicines, diagnostics, medtech and digital health innovations. The ambition is to support the region to become the favoured location for life science inward investment, life science business creation and growth, and support the NHS to accelerate the adoption of medical innovations of significant benefit to patients. In practice the activities of the SIP Programme connect closely with the CIA Programme, and focus on a number of crucial stages in the pathway from the concept of a new innovation through to evidence gathering and business model generation. In particular the team specialises in supporting the creation and triaging of novel innovations that have the potential to fit with NHS need, support the generation of a real-world evidence package that can demonstrate system, patient and clinical benefit (including health economic analysis), and support the development of viable business models and strategies for company growth.

## 1. Innovation and Economic Growth

The team has developed a detailed innovation pathway and website for companies<sup>[2]</sup> and provides a broad offer to industry. The approach taken is also centred on opportunities arising from the *Industrial Strategy*. During the next two years, the team will focus on the following projects:

- Continue to support and provide leadership to the creation of the Buckinghamshire Life Sciences Innovation Centre which is being funded through Local Growth Fund and ERDF;
- Continue to support the development of The Hill at the John Radcliffe Hospital (<http://www.thehill.co>) which is part of the Oxford County Council ISfB funding;
- Continue to be a core partner and support the Bicester Health New Towns Programme (<https://www.cherwell.gov.uk/info/206/bicester-developments/429/healthy-new-town>);
- Provide input and support to the Oxford Martin School Programme on Affordable Medicines (<https://www.oxfordmartin.ox.ac.uk/research/programmes/affordable-medicines>);
- Offer tailored workshops to industry based on the Lean start-up and Strategyzer approaches to support the development of business plans for new and evolving businesses;
- Support the Oxfordshire Transformation Technologies Alliance Science & Innovation Audit where the team led on the Digital Health theme ([http://www.oxfordahsn.org/wp-content/uploads/2017/09/OxTTA\\_SIAreport.pdf](http://www.oxfordahsn.org/wp-content/uploads/2017/09/OxTTA_SIAreport.pdf));
- Support the creation of a multidisciplinary health accelerator at Harwell;



- Continue to support regional cluster development and to provide input into regional investment strategies where appropriate;
- Play a leadership role in developing consultancy services to industry on behalf of the AHSN;
- Support the growth of Advanced Oxford.

## **2. Genomics, Diagnostics and Precision Medicine**

Building on the successes of the work in diagnostics to date the aim over the next two years will be to expand the activities to cover genomics and precision medicine and to deliver a broad range of projects across different pathways and care settings. The team has focused on securing additional grant income to support its activities and this has proven an effective approach to resourcing specific projects. The team has secured over £400,000 in direct funding to cover AHSN support to date and will seek to expand this.

The Oxford AHSN is working with the Oxford NHS Genomic Medicine Centre (GMC) to transform NHS service delivery through the introduction of Whole Genome Sequencing (WGS) as part of the range of genetic tests available to clinicians in mainstream service delivery. We will provide support across the following activities: (i) Increasing recruitment of cancer and rare diseases; (ii) Developing the infrastructure to deliver the project through mainstream clinical service delivery wherever possible, and (iii) Developing a ‘hub and spoke’ model for genomics that involves all the NHS providers across the Oxford AHSN region.

The roll out of new diagnostic tests across the NHS has been a key part of the Oxford AHSN SIP programme. The main focus has been on delivering core projects across different care settings both regionally and nationally. The operation of the Diagnostics Industry Advisory Council supports a stronger dialogue across different partner organisations. The Oxford AHSN has a broad and varied portfolio of projects both at national and local level. The team will focus on the delivery of the following projects:

- Faecal Calprotectin (FC) diagnostic testing in primary care (AHSN Network national programmes programme);
- Faster and more accurate diagnosis of pre-eclampsia (PE) (Roche Diagnostics);
- Introducing Point of Care (POC) diagnostic tests during patient visits in an out of hospital setting, for example by specialist paramedics and out of hours GPs (Abbott);
- The introduction of Influenza POC tests into ED, urgent care and out-of-hours GP services (FujiFilm, Roche);
- POC test for urgent and ambulatory care delivery in the community (Jupiter Diagnostics);
- The introduction of a stroke POC test into ED (Sarissa Biomedical);
- COPD exacerbation alert for patient stratification (Mologic).

Several projects (faecal calprotectin and pre-eclampsia) will enable closer collaborations with a number of different organisations outside of the region, including other AHSNs (West Midlands, East Midlands, Yorkshire & Humber, North East and North-West Coast - The Innovation Agency).

In line with the Life Sciences Industry Strategy, the team will explore opportunities covering the industry grand challenge on “Data to early diagnosis and precision medicine”.

The team will also focus on generating additional sources of income based on its offer around clinical pathway evaluations and the generation of real world evidence to support quantitative health assessments.

## **3. Digital and Artificial Intelligence**

Digital technologies and artificial intelligence (AI) have the potential to revolutionise the way health and care services are delivered. They present a huge opportunity for the NHS to drive improvements in quality and efficiency in the health service as well as supporting patients to manage their own health and wellbeing.

The digital health programme will build on the solid foundations laid down in the last year through the work on the Digital Health Roadmap and engagement with a broad number of digital health companies. While the pathway to the adoption of digital health technologies in the NHS is becoming clearer there remain a number of challenges for innovators around demonstrating clinical and economic benefit, management of data and business models. The Digital Health Roadmap provides a detailed guide for innovators to help navigate the various stages of digital health development.

The new GDPR will come into effect in May 2018 and will have an impact on the manner in which data is managed. There remain several areas that require clarification around the commercialization of algorithms generated from research data and the team will continue to work on this.

The digital health and AI theme will focus on the following projects:

- The establishment of an industry funded programme for Inflammatory Bowel Disease using True-Colours Ulcerative Colitis (TCUC) as a patient reported outcomes measure (J&J, Takeda);
- Enabling better health and self-care at scale with digital sleep medicine (Big Health);
- Autonomous speech-based clinical outcomes measures (Ufonia);
- Online treatment programme for childhood anxiety disorders (University of Reading and Red Ninja);
- Insulin penpal for the transformation of a mechanical insulin pen into a smart device (Adelie Health);

The team will also provide support to Drayson Technologies under a strategic partnership that focuses on the generation of real evidence for the deployment and business case generation of three products:

- System for Electronic Notification and Documentation (SEND);
- Gestational diabetes digital health management system for remote monitoring (GdM-Health);
- EDGE, a system for the management of chronic obstructive pulmonary disease (COPD);

The team will develop a strategy to support the identification, development and deployment of artificial intelligence (AI) outputs and to support the data processing opportunities that AI now affords. This will include exploring opportunities under the industry grand challenge theme for AI and the digital economy.

The team will also support Informatics in the development of a proposal for Local Health and Care Record Exemplars and Digital Innovation Hubs.

		2018-19				2019-20			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Innovation and Economic Growth</b>	Bucks Life Sciences Innovation Centre					★			
	The Hill							★	
	Bicester Healthy New Town						★		
	Oxford Martin School Affordable Medicines								★
	Oxfordshire TTA SIA				★				
	Project Accelerate Harwell							★	
	Consultancy Services to Industry				★				
	Regional Cluster Development					★			
<b>Genomics, Diagnostics and Precision Medicine</b>	GMC Support								
	Faecal calprotectin POC				★				
	Pre-eclampsia POC				★				
	Out of Hours POC			★					
	Influenza POC				★				
	Urgent & ambulatory care POC								★
	Stroke POC in ED								★
	COPD Exacerbation							★	
<b>Digital Health and AI</b>	IBD Programme				★				
	Big Health							★	
	Ufonia								
	Online treatment for childhood anxiety disorders							★	
	Smart insulin pen device				★				
	SEND								
	GdM-Health								
	COPD								

#### 4. Other Activities

The SIP team will continue to support strategic partnerships with industry, including the collaboration with Johnson & Johnson/Janssen. Under the Sustainability Programme we will continue to monitor the implementation of carbon and energy savings projects across various trusts within the region. during the first licence period.

The team will also work with partners to deliver high quality events and conferences such as the OUI/BRC/AHSN Technology Showcase and Venturefest, and also deliver specific events associated with each of the INN themes. The SIP Programme will continue to publish reports and documents where appropriate.

[1] *Life Sciences Industry Strategy – A report to the Government from the life sciences sector* (August 2017); Department of Health, Department for Business, Energy & Industrial Strategy. *Making a reality of the Accelerated Access Review* (November 2017); HM Government *Industrial Strategy. Building a Britain fit for the future* (November 2017); HM Government *Industrial Strategy. Life Sciences Sector Deal* (December 2017)

[2] See [www.healthandwealthoxford.org](http://www.healthandwealthoxford.org).

## Research and Development

The R&D theme supports the development of capability, capacity and collaboration across the NHS and the Universities to make the region a more attractive place for research to improve healthcare locally and nationally.

The R&D Oversight Group is chaired by Mr Stuart Bell, Chief Executive of Oxford Health NHS Foundation Trust. The primary focus of the group is to share information about R&D across the Network and its partners. The group draws upon expertise from regional clinical, academic and commercial partners with time commitment being the main resource contributed from external sources. The group is led by the AHSN CEO and has a small budget for managerial support. The group includes other regional infrastructure, for example, the NIHR, CRN, CLAHRC and regional Clinical Trials Units and Biomedical Research Centres.

The main objective for the R&D programme is determining the research and innovation priorities of the AHSN STPs (ie the NHS in this instance) as outlined in the NHSE/NIHR paper “Twelve actions to support and apply research in the NHS” (November 2017). Professor Gary Ford, CEO of Oxford AHSN, and Dr Louise Wood, Director of Science, Research and Evidence at the Department of Health, through their leadership of the Research Innovation National Network, are heading the national group of 15 AHSNs in working up and setting out a statement of local NHS research and innovation needs to ensure a consistent approach. The task will involve close working with the local and national NIHR infrastructure listed above, already core partners of the R&D group, and an approach has been proposed and discussions initiated by Professor Ford.

Professor Gary Ford and Dr Nick Scott-Ram are supporting the innovative Therapeutics for Ageing Consortium (iTAc) initiative. iTAc is a national public private partnership to accelerate the discovery and development of therapeutics for ‘ageing’ focusing on biological pathways that underlie human ageing. iTAc addresses one of the Life Sciences Industrial Strategy ‘Grand Challenges’ and is led by Prof Mike Ferguson (Dundee University) and Prof Gary Ford as basic science and clinical lead roles. iTAc is seeking investment from industry and charities of £200M over 5 years and matched government funding. The Oxford AHSN team provide an understanding of the future needs of NHS partners in managing older people with age-associated multiple morbidity and supporting development of partnership working with industry to meet this challenge facing health services across the world.

Further two-year objectives include:

- Promoting development of individual Trust R&D strategic plans
- Increasing Trust commercial research income year-on-year
- Promotion of collaborative projects between academia, healthcare and industry?
- Increasing senior R& D support and engagement

The Oxford AHSN aims to help deliver world leading research in partnership with the NHS to deliver innovation to patients by making the region a more attractive area for commercial, non-commercial and collaborative research building on the vast amount of effective R&D that is already being undertaken, supporting the development of new, cross organisational, interdisciplinary health research. This will maintain the area as a world leading centre for health research whilst expanding from its current circles to being fully inclusive.

# Informatics

## Overview

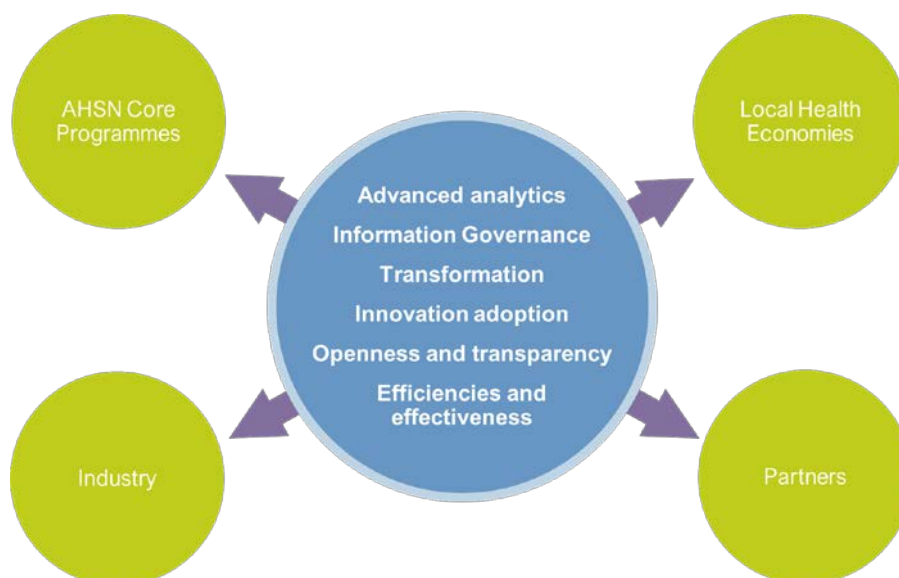
The aim of the Informatics theme is to exploit the currency of data, facilitating wider partnerships and drawing important insight, to improve digital maturity within the region, to attract innovators to our region, to help transform the experiences of our population and to support our partners; representing an attractive region, easy place to come and work with - a live innovation test bed.

We continue to apply an effective engagement model in support of the programmes by drawing insight from population data, understanding and contributing to the challenges, collaborating in the design of data collection, whilst providing support to facilitate a baseline assessment, tracking of change and outcome analysis.

Pursuing the aims of the Innovation National Network (INN) we shall be working with the Strategic and Industry Partnerships team to develop a digital and artificial intelligence strategy for the region.

The Informatics plan for 2018/20 continues to provide this focus whilst also working with the senior leadership team at the AHSN to create new business opportunities and partnerships through collaborative working.

The Five Year Forward View continues to provide external context for our programmes of work and has specifically influenced the development of the AHSN Informatics Strategy which provides the framework for the Business Plan activities alongside the clinical theme priorities.



We continue to work to adapt the service model to pursue a more commercial service, exploring new business opportunities. We also continue to refine the hybrid model –working further with partners including Optum for advanced analytics potential. We strive to develop the team to provide sharper assessment of need, design and analytics to enable the move from reporting to advanced analytics.

## Data Warehouse and Analytics

Building on both the data warehouse development in 2017/18 and the development of the joint AHSN NHS Digital Data application, which was based solidly on the successful Oxford AHSN application, Informatics will be enhancing the data available to the AHSN Programmes to include National Hospital Episode Statistics (HES) Data (see Appendix C for current Oxford AHSN data sources).

We will also be approaching local trusts directly to share their hospital data (leveraging the IG Framework), thus working towards achieving one of our key strategic goals of reducing dependency on NHS Digital for data.

The recently published guidance from NHS Digital suggests a positive move toward acceptance of cloud-based storage and processing of data supplied by NHS Digital. We will be seeking to amend our data sharing agreement with NHS Digital to allow us to migrate our data warehouse to the cloud, utilising existing Oxford AHSN infrastructure with UK-based physical servers.

This will allow for a more versatile platform to visualise data outputs (see Advanced Analytics below).

### **Advanced Analytics**

Adding to the cloud-based data storage solution, Informatics will be able to implement a shift from reactive client-led analytics to a more advanced analytics capability with the aim of bringing predictive, forecasting analysis, creating insights into the data, allowing the users to make better decisions, faster and be able to execute them more effectively.

We will bring self-service capability to the users which will give them advanced reporting on-demand, allowing them to select their own reporting criteria such as; age-bands, date-range, diagnosis, procedure, Trust etc.

AHSN users will be trained and supported extensively in the use of this visualisation platform, but where there is an appetite, we will also train super users to an expert level.

We will engage with partners and experts to guide our implementation and to deliver high quality training in advanced analytics.

Once the solution is in place and the users trained, the Informatics team will be able to deliver sustainable insightful, predictive analytics on an ongoing basis.

We will also explore the use of artificial intelligence (AI) and machine learning which allows predictive analytics, complementing analytical programming.

### **Training**

One of the key recommendations of the Oxford AHSN Informatics Strategy is to develop an analytics training programme for partner data analysts and clinicians.

Having considered this, our current approach is based on engagement with East Midlands AHSN which has an existing programme and we have been in discussion to adopt this. We will engage with other organisations including NHS Digital Academy, British Computer Society, Health Education England and the University of Oxford to ensure our approach is sound and that we are aware of other opportunities that may exist.

Additionally, we will consult other Oxford AHSN teams who have been involved with running similar opportunities to gather advice on design and delivery.

Informatics will also explore designing and implementing IG training for our partners.

### **Information Governance (IG)**

Since its successful implementation during 2016/17, The Information Governance Framework has been regularly used to safely share data across organisational boundaries in a consistent manner.

We have recently updated the agreements to comply with the new General Data Protection Regulation (GDPR) which will come into effect in May 2018. This includes the introduction of a new Data Protection Impact Assessment (DPIA) which provides a risk assessment for any personal identifiable data that is shared and is used in conjunction with any Data Sharing Protocol.

We are reviewing the IG sign off process to explore how we can make it smarter and shorten timelines. We are considering a central, web-based portal, so signatories can log on, review and sign off documents. We will continue to support Oxford AHSN programmes and projects and, whilst managers are familiar with the process, are often still heavily guided by the Informatics team. We will review whether further training is required for managers to oversee this process independently.

### **Connected Care Assessment (CCA)**

Building on the successful testing of the Connected Care Assessment (CCA), a tool for measuring digital maturity, the Informatics Team will be working to support local health and care systems develop their digital strategies to deliver improved outcomes.

The Informatics team will be supporting local health and care systems to undertake digital health assessments where there is a strong emphasis on identifying how effectively local health economies are delivering what matters to stakeholders; their real-world experience. The stakeholders are patients/service users, frontline clinicians and industry.

The assessment aims to identify understandable, recognisable and meaningful measures for the whole community of digitalisation in support of health and economic growth. The measures address quality and safety, population health, prevention/ patient activation, person-centred care/patient experience, support to carers, and, working with researchers, the voluntary/community /social enterprise sector, innovators and industry.

### **Local Health and Care Record Exemplar (LHaCRE) and Digital Innovation Hub (DIH)**

The LHaCRE is a collective arrangement across a regional footprint enabling a partnership approach between local health and care systems operating local integrated care record services.

It will promote key areas such as:

- the adoption of interoperability standards to enable wider data integration when required
- the acceleration of plans within a footprint enabling all local health and care systems to reach the same level of capability
- value add services such as individual record locator enabling identification of subject in more than one system
- support for a service network spanning more than one local care system e.g. Thames Valley Cancer Alliance, BOB LMS, Frimley Health and Care
- enabling service planning and population health management at scale
- establishing a patient facing app ecosystem

The Informatics team will support the coordination of the health and care systems to establish a LHaCRE. As part of this we will support the digital and analytics around three clinical theme priorities: cancer, maternity and mental health.

We will also establish a region-wide plan around:

- i) population health management
- ii) patient-facing applications

This LHaCRE is a pre-cursor to the Digital Innovation Hub (DIH) which the Informatics team has been preparing for a bid to submit once the application process has been announced. The DIH will provide a de-identified, integrated data set across a population base of circa 4 million people.

**Milestones:**

		2018/19				2019/20				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Data Warehouse	Secure National Data	●								
	Secure Permissions to use cloud-based storage from NHS Digital	●								
	Migrate to the cloud platform		●							
	Process to collect Local Trust Data independent of NHS Digital	→								
Advanced analytics	Secure Permissions to use new platform from NHS Digital	●								
	Implement solution	●								
	Develop Capabilities		●							
	Train Users and Super-Users			●						
Deliver Advanced Analytics	→									
Information Governance	Design and run Partner training sessions			●						
	Trusts signed up to new Framework	●								
	Implement Streamlined Portal		●							
Adding Value	Identify opportunities to extend the commercial capabilities	→								
	Identify and build relationships with a number of partners, selected for their capabilities for each opportunity that arise	→								
Digital Maturity	Implement the Connected Care Assessment	●								
	Engage BOB STP to support Digital Workstreams	●	→							
	Support Local Health and Care Teams to undertake DigitalHealth Assessments		●							
LHACRE / Digital Innovation Hub	→									
BAU	→									
Implementing the Informatics Strategy	→									



## Patient and public involvement, engagement and experience

The PPIEE theme ensures that working with the public, patients and carers is integral to the work of the Oxford AHSN and supports the delivery of person-centred care by our partner organisations.

- Involving lay partners is a policy imperative across service delivery, research and education as outlined by NHS England, the GMC, HEE and NIHR
- In practice services can fall short of aspirations as exemplified in complaints, inquiry reports and national surveys
- In the future, healthcare will be unsustainable without increases in self-management, changes in health literacy and communications between professionals and the public and development of systems that are easily navigable

### Highlights

**1: Leadership and participation training** for patients, professionals and the public – gained additional funding for further roll-out of the Leading Together Programme, developed lunchtime introduction training and one-day participation training. Conducted independent evaluation.

<http://www.oxfordahsn.org/our-work/patient-and-public-engagement-involvement-and-experience/leading-together/>

**2: Community Engagement - Living Well Oxford** – ran innovative week of activities in Temple Cowley Shopping Centre on ageing and dementia with positive independent evaluation.

### Working with partners and strategy development

Over the first licence period we have developed productive relationships with key infrastructure organisations across the Thames Valley – the CLAHRC, CRN and NHS England, alongside lay partners who have become integral to our ongoing work. We have recently developed relationships with the local Genomics Medicine Centre and Research Design Service who have become part of our Operational Group.

We will revise our joint strategy No Decision About Me Without Me; this work was planned for 2017, but given NHS England reorganisation has been delayed.

**Target:** by end of 2018 - revised joint strategy, with annual review in the following years

### **Genomics**

Sian Rees has recently been appointed lead for the Oxford Genomics Medicine Centre and will work with them to review good practice, develop a local strategy and appoint lay partners to work with local teams.

### **Working with other AHSNs**

In 2018/19 we will chair the AHSNs PPI Network of Networks meeting. We will continue to look for collaborative ventures as part of this role.

### **Lay partners and AHSN work programmes**

We will continue to support AHSN programmes to model coproduction and good practice in involvement activities. We will continue to expand the number of lay partners working with the AHSN. We will establish a means of determining impact and establish a peer support structure/process.

**Targets:** Four meetings with CIA team and four meetings with Patient Safety and Clinical Improvement annually, and case studies for AHSN programmes to be published alongside LTP projects on AHSN website

### **Capacity and Capability Building**

We have developed a suite of training opportunities that can be delivered to health service, education, research or industry partners. This will be integrated into our consultancy offer and will help to ensure the sustainability of the PPIEE team.

### **Training and development**

#### **Level 1 – Introductory seminars and workshops**

Introductory training aimed at lay contributors and professionals or both.

**Target:** Four events/year

#### **Level 2 - Developing skills workshops**

Aimed at lay contributors and professionals who are more actively involved in co-production to support how they can apply their knowledge and experience in a practical way to improve lay involvement and participative decision making in, for example, research dissemination, service redesign or curriculum development.

**Target:** Four workshops over 2 years

#### **Level 3 – Leadership development, the Leading Together Programme (LTP)**

Aimed at lay partners and professionals who are, or want to be, working together at a strategic level, for example in governance structures or within assurance processes.

**Target:** At least four more cohorts run over coming two years – increased focus on seldom heard groups and offer to industry

### **Developing networks**

We will continue to develop a network of LTP graduates, to support their continued learning, relationships and projects.

### **Oxford Empathy Programme**

The Programme has run two successful colloquiums and we will plan the third international one for 2019, alongside developing a training offer.

**Targets:** Run conference during 2018/19, and awards for Person Centred Care established

#### **2020 Targets:**

- Run third Colloquium
- Develop and evaluate training offer
- *Person-centred care conference* - joint conference to promote person centred care and lay involvement across service delivery, research, education and innovation

### **Community Engagement**

We ran a successful Living Well week focused on ageing and dementia in a local shopping centre in OX4 with a positive independent evaluation.

**2020 Target:** develop work with OX4 as Living Lab and hub for engagement work.

# Stakeholder Engagement and Communications

## Overview

The Communications Team, led by Martin Leaver, will ensure that the programmes and themes have the strongest advice and support on communications and engagement. This includes developing online and printed materials in support of events and campaigns and ensuring consistency of branding for the AHSN, whilst recognising the individuality of programmes and themes.

Wider engagement with stakeholders is also vital as we move into the new licence period and deliver against national and local priorities.

We will develop the emerging '6i's' concept to highlight Impact for patients and stakeholders across all sectors. The '6i's' are three programmes:

- Innovation
- Improvement
- Industry

Supported and enabled by three themes:

- Informatics
- Involvement
- Invention

A review of collaborative achievements over the first licence period – and a look ahead to priorities for the second licence – will be produced in Q1/Q2.

## Stakeholder engagement

Plans are already in place for events throughout 2018 and 2019; the grid below includes AHSN events, stakeholder events and others at which AHSN staff are speaking. The grid also highlights courses that are intended to provide opportunities for NHS staff to develop their capability and capacity – including the AHSN's programme for innovators at Bucks New University (funded by Health Education England) and various courses for lay partners and others relating to working together effectively.

A partner showcase event in May is planned with Royal Berkshire, Berkshire Healthcare and the University of Reading. Other planned events include one to share the insights of people who have completed the programme supporting innovators.

A regular communications meeting is held internally to share knowledge, ideas and information. Proactive steps will be taken to highlight forthcoming events and publications so that maximum benefit can be gained.

## Communications

Close partnerships will be developed further with communications teams across the NHS, universities and life science industries to highlight key strengths, resources, expertise and opportunities for collaboration.

In addition, the links with the Oxford Academic Health Science Centre will be developed further and the regional narrative developed, working with, for example, the Oxfordshire Local Enterprise Partnership and Oxford University Innovation.

Nationally, the Head of Communications is Co-Chair of the AHSNs' Communications Forum, linking in to planning of national events and publications including the AHSNs' annual Impact report and the Health and Care Innovation Expo. In addition, he attends regular meetings with, for example the R&D organisations' communications leads and with NHS Trusts, CCGs and NHSE communications teams.

The 50<sup>th</sup> edition of the AHSN monthly newsletter was published in January 2018. This includes content from partners and stakeholders. It has almost 3,000 subscribers.

Twitter is the primary mechanism for wider communication. The main account passed 3,600 followers in early February, with over 1,000 more following other linked accounts.

Oxford AHSN Events Grid April 2018 to March 2020

Month/PUBLICATION	Date		Event
Q4 AND ANNUAL REPORT	March 2018		
	March-Sep 2018		NHS70 leading up to 6 July 2018
April 2018	23 - 25 April	BioTrinity 2018 - Next Generation Healthcare	AHSN scaling back presence and sponsorship but key individuals still attending and taking part
	25 April	Working together: approaches and techniques	For people with some experience of patient and public involvement. Suitable for healthcare professionals, researchers, patients, carers and the public. AHSN Course run in conjunction with the NIHR Oxford CLAHRC and Clinical Research Network Oxford and South Midlands.
	Tbc	AHSNs Network event	National event to launch the 2nd five-year licence period
May 2018	1 - 3 May	Fusion: all things digital health and wellbeing	Open University Milton Keynes campus 2nd annual OU digital health and wellbeing conference
	1 May	Sepsis learning event	Learning/awareness event is planned for May 2018 by the Sepsis Team, the AHSN PPIEE team and Patient Safety
	Tbc	Partner Showcase Berkshire Healthcare and RBH	Both CEOs wish to repeat the joint Showcase event following success in 2017
June 2018 Q1 Report	13 June	Technology Innovation Showcase	Said Business School with focus on Therapeutics. BRCs/OUI/Oxford AHSN opportunities to display and talk about work. Stand to be taken and ? posters

Oxford AHSN Events Grid April 2018 to March 2020

Month/PUBLICATION	Date		Event
	13 - 14 June	NHS Confederation	Liverpool
July 2018	9 - 10 July	Patient Safety Congress	A national event
September (2018 and 2019)	5 - 6 September	EXPO	AHSNs showcase and opportunities during pop-ups and other events. Strong NHS England presence and a good opportunity for Oxford AHSN to network and link with colleagues
(2018 and 2019)	12 September	VentureFest	Oxford Brookes. Already booked to support and man a stand. Nick Scott- Ram and others likely to participate in/run sessions. Focus on Digital Health\Life Sciences, Quantum Technologies, Space and Autonomous Vehicles/Robotics. The event will showcase the technologies, the application and the opportunities within these sectors and will engage big business and investors.  Opportunities for participation in Digital Health/Life Sciences streams
Q2 REPORT		AGMs across the region for NHS Trusts	Potential for showcasing the work of the AHSN at these various events; tailoring to each individual Trust on joint/supported projects
October 2018	12 October	Oxford Patient Safety Collaborative annual conference	
November 2018			

Oxford AHSN Events Grid April 2018 to March 2020

Month/PUBLICATION	Date		Event
December 2018			
January 2019			
February 2019			
March 2019			

## Appendix A - Programme Summary (Matrix of Metrics)

INN – Patient Safety						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
<b>Patient Safety and Clinical Improvement</b>	National project 1 The Deteriorating Patient (integrated with existing Sepsis work stream)	To reduce avoidable harm and enhance the outcomes and experience of deteriorating patients. This will be achieved by improving the reliability of recognition, response and communication	Awaiting national guidance	Awaiting national guidance	3.9 (reduction in LOS for SoS patients of 0.5 days)	All local NHS Trusts, West Berkshire Out of Hours GPs, Oxfordshire Care Home Services, SCAS
<b>Patient Safety and Clinical Improvement</b>	National project 2 Safety Culture	To help create the conditions that will enable health care organisations to nurture and develop a culture of safety.  <b>A Safety Culture innovation fund will be established.</b>  <b>Events supporting positive safety culture</b>	Not applicable to this workstream	Not applicable to this workstream	Not applicable to this workstream	All NHS Trusts, CCGs, Primary Care

INN – Patient Safety						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
<b>Patient Safety and Clinical Improvement</b>	National project 3 Maternal and Neonatal Health Safety Collaborative	To support the MNHSC by directly assisting organisations and teams that are part of an 'active wave' of the MNHSC and by supporting the development of communities of practice at local maternity system level along with other network colleagues.  <b>Four Learning Systems for the MNHSC will organised and supported per year</b>	Awaiting national guidance	Awaiting national guidance	Awaiting national guidance	All local providers of Maternity Care, Thames Valley SCN, TV&W Neonatal ODN
<b>Patient Safety and Clinical Improvement</b>	National project 4 Adoption and spread	Adoption and Spread of specific national improvement projects and of evidence based projects that meet local and national needs  <b>This is to include PRECEPT 3</b>	Awaiting national guidance	PRECEPT 3 - reduction in cerebral palsy cases – 1400 across the UK	Awaiting national guidance	All local NHS providers, CCGs and other stakeholders as appropriate



INN – Patient Safety						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
<b>Patient Safety and Clinical Improvement</b>	Local programme 1 Acute Kidney Injury	To improve the prevention, recognition and management of acute kidney injury (AKI) through a collaborative approach. Aims include - <b>Reduction in admissions and readmissions related to AKI</b>  <b>Reduction in LOS related to AKI</b>  <b>Reduction in UTIs in care homes</b>  <b>Reduction in admissions as a result of UTIs</b>  <b>Introduction of QI methodology to care home staff</b>	Not applicable to this workstream	Harm avoided – reduction in UTIs in Care home population by 66%	0.57  (reduction in LOS by 0.1 for those at risk of AKI)  (reduction in admission for UTI from care homes)	All local NHS providers, CCGs, Care Homes, Primary Care, HEETV

INN – Patient Safety						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
<b>Patient Safety and Clinical Improvement</b>	Local Programme 2 Specialised Paediatric Care in the Community	With improvements in care there are a growing number of children requiring long term ventilation or gastrostomy being cared for in the community. These children and their parents face a number of potentials for harm as a result. This project aims to reduce harm by using a collaborative QI approach involving clinicians, nurses and parents from across the region.	Not applicable to this workstream	Reduction of 10% of incidents of harm related to gastrostomy and ventilation in paediatric patients	£0 – cost neutral	All local NHS trusts, Community Care providers, related charities, University of Oxford, Oxford Childrens Network
<b>Patient Safety and Clinical Improvement</b>	Local programme 3 OxGRIP – Stillbirth prevention	Evaluation and rollout of OxGRIP pathway - a innovative pathway for risk assessing and identifying babies at risk of stillbirth with efficient use of staff and hospital resources	40 to 160 stillbirths prevented	Reduction in undiagnosed breech presentations in labour to 0	Awaiting full data on resource use – due Summer 2018	All local NHS Maternity Care providers

INN – Patient Safety						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
<b>Patient Safety and Clinical Improvement</b>	Local Programme 4 Emergency Department Collaborative	To provide a collaborative space to share learning across Emergency Departments in the region. <b>In this period we hope to support 2 QI projects and consider adoption of existing innovations in this area</b>	TBD – project in development	TBD – project in development	TBD – project in development	All local Acute Trusts and ambulance services
<b>Patient Safety and Clinical Improvement</b>	Local Programme 5 Learning from Deaths – Mortality Reviews	To improve the standardisation of mortality review processes within the community, mental health and secondary care settings, thereby supporting the development of quality improvement projects based on the thematic learning from mortality reviews	TBD – project in development	TBD – project in development	TBD – project in development	All local Acute Trusts
<b>Sub-Total Patient Safety</b>					<b>4.47</b>	

INN – Quality Improvement						
			Projected benefits (total 2 years)			Stakeholders
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
<b>Clinical Innovation Adoption</b>	National project 1: Escape Pain	To deliver a rehabilitation programme to over 45s with chronic hip/knee pain	Not applicable to this workstream	250	0.44	Community care, GPs
<b>Clinical Innovation Adoption</b>	National project 2: Emergency Laparotomy	To deliver ELC methodology into at least 2 hospitals in the region	1	100	0.77	All regional hospitals
<b>Clinical Innovation Adoption</b>	Local project 4: Prostate Cancer	A patient-led symptom tracker for men living with and beyond prostate cancer. It will empower patients to track clinical symptoms suggestive of disease recurrence or progression. Financial Impact TBD following pilot.	Not possible to calculate at this stage	20	TBD	Cancer Alliance, regional hospitals
<b>Clinical Innovation Adoption</b>	Local project 5: GP Emergency Appointment Model	To audit impact and efficiency of new model of urgent care/emergency appointment clinic in	Not applicable to this workstream	Not applicable to this workstream	TBD – audit still in progress	GP Practices, CCGs

INN – Quality Improvement						
			Projected benefits (total 2 years)			Stakeholders
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
		primary care				
<b>Patient Safety and Clinical Improvement</b>	Local Programme Region Wide Guidelines in Maternity	Continuing to build on our existing programme of network wide guidelines in maternity, supporting the BOB and Frimley LMSs. <b>5 region wide guidelines to be developed, agreed and implemented per year</b>	20	Reduction of extreme preterm birth – 80 cases  Reduction of never events by 48 (retained swabs)	0.2	All local NHS Maternity providers
<b>Patient Safety and Clinical Improvement</b>	Local Programme Anxiety and Depression	To enhance recovery rates of patients entering the IAPT service through clinical collaboration and targeted training; to support the roll out and dissemination of innovations with reference for patients with chronic health problems; and to	Not applicable to this project	TBD	4.8 (18/19)  At average of £200 per patient	All NHS Trusts, Primary Care

INN – Quality Improvement						
			Projected benefits (total 2 years)			Stakeholders
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
		better understand relapse rates for patients suffering with depression/anxiety disorders and to develop more effective post-discharge support mechanisms and the development of a bespoke app				
<b>Patient Safety and Clinical Improvement</b>	Local programme Mental Health Improvement Strategy *NEW for 18-20	We will be developing our Mental Health Improvement Strategy to meet local and national requirements, supporting local STP plans with a focus on safety and adoption and spread of effective innovation. In the first 6 months we will be developing this plan with key stakeholders, expecting 2-4 improvement plans to be undertaken per year	TBD	TBD	TBD	All local Mental Healthcare providers, Primary care, CCGs

INN – Quality Improvement						
			Projected benefits (total 2 years)			Stakeholders
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
<b>Patient Safety and Clinical Improvement</b>	Local Programme Quality Improvement Capability	Developing specific training tailored to different settings (such as Primary Care, Care Homes, Mental Health Providers etc) in Measurement for improvement, QI science, tools, techniques and methods, QI coaching, Human Factors Training and Developing patient leaders in safety. Supporting shared learning and networking	Not directly applicable to this project	Not directly applicable to this project	Not directly applicable to this project	All NHS Trusts, CCGs, Primary Care, Care Homes, HEETV
<b>Sub-Total Quality Improvement</b>					<b>6.21</b>	

INN –Innovation Exchange						
			Projected benefits (total 2 years)			Stakeholders
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
<b>Clinical Innovation Adoption</b>	Local project 1: FluidReview	Further build on the system that we use to share innovations internally and interface with external SMEs/entrepreneurs. Also used for management of innovations.	Not applicable	Not applicable	Not applicable	



INN – Medicines Optimisation						
			Projected benefits (total 2 years)			Stakeholders
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
<b>Clinical Innovation Adoption</b>	National project 1: PINCER	To roll out PINCER to at least half of the practices in the Oxford AHSN area	Not applicable	9	0.27 (NHS) 1.72 (Social)	GPs and Pharmacists
<b>Clinical Innovation Adoption</b>	Local project 1: AF - perfect	To optimise anticoagulation control and reduce stroke	22	89	0.72	CCGs across Berkshire, Oxfordshire, Buckinghamshire and Milton Keynes
<b>Sub-total Medicine Optimisation</b>			<b>22</b>	<b>98</b>	<b>2.71</b>	

INN – Medtech						
			Projected benefits (total 2 years)			Staekeholders
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
<b>Clinical Innovation Adoption</b>	National project 1: Non- Injectable Connector	Prevention of injection into wrong line	Not applicable	National data unavailable to calculate	0.94	All NHS Hospitals in the region
<b>Clinical Innovation Adoption</b>	National project 2: PneuX	Prevention of pneumonia	Not applicable	15	0.127	All NHS Hospitals in the region
<b>Clinical Innovation Adoption</b>	National project 3: UroLift	Alternative day case treatment for benign prostatic hyperplasia	Not applicable	70	0.02	All NHS Hospitals in the region
<b>Clinical Innovation Adoption</b>	National project 4: Atrial Fibrillation – detection	Detect AF	31	127	10.3	All CCGs in Berkshire, Buckinghamshire, Oxfordshire and Milton Keynes.
<b>Clinical Innovation Adoption</b>	Local project 5: WireSafe	Prevention of guidewire being left in patient	Not applicable	8	0.193	All NHS Hospitals in the region
<b>Clinical Innovation Adoption</b>	NIA National	50%			2.2	
<b>Sub-total MedTech</b>			<b>31</b>	<b>220</b>	<b>13.78</b>	

INN – Innovation and Economic Growth						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	Gross Value Add (GVA) £	Jobs created	Inward Investment (£'m)	Stakeholders
<b>Clinical Innovation Adoption</b>	International Project: eMAPs – European Market Access for Partners I	Acceleration to and successful market access	0.1	Not applicable	0.03	SMEs
<b>Clinical Innovation Adoption</b>	International Project: eMAPs – European Market Access for Partners II	Acceleration to and successful market access	0.1	Not applicable	0.03	SMEs
<b>Clinical Innovation Adoption</b>	International Project: eMAPs – European Market Access for Partners III	Acceleration to and successful market access	0.1	1	0.03	SMEs
<b>Strategic and Industry Partnerships</b>	Local programme: Bucks Innovation Hub - ERDF funded	Innovation centre to support formation and growth of SMEs	0.2	1	0.1	Bucks Healthcare Trust, Bucks New University, Bucks County Council, Chiltern CCG, J&J, GE Healthcare
<b>Strategic and Industry Partnerships The Hill</b>	Local programme: The Hill – ERDF funded	Support for innovators and healthcare professionals in a hospital setting	0.3	1	0.2	Oxford University Hospitals NHS FT and ISfB Partners
<b>Strategic and Industry Partnerships</b>	Part of NHS E national healthy new towns programme: Bicester	To develop an integrated approach to healthier living in a	0.1	0	0.1	Oxfordshire CCG, Cherwell District Council, A2 Dominion

	Healthy New Towns	community town setting				
<b>Strategic and Industry Partnerships</b>	Affordable Medicines - Local programme funded by the Oxford Martin School	To explore open innovation in drug development	0.2	1	0.2	Structural Genomics Consortium, University of Oxford, Office of Health Economics
<b>Strategic and Industry Partnerships</b>	Local SIA project with national connectivity through other LEPs and BEIS - Oxfordshire Science & Innovation Audit	To develop new opportunities on the back of the Digital Health and other themes within the SIA	0.4	1	0.3	OxLEP, Oxford University, Oxford Brookes University, RACE, Satellite Applications Catapult,
<b>Strategic and Industry Partnerships</b>	Harwell Accelerator - Local project in early stage of development	Supporting creation of new companies aligned with convergent technologies in healthcare	4.5	7	4.1	STFC, Harwell Campus
<b>Strategic and Industry Partnerships</b>	Local project to develop long-term cluster strategy and delivery – Cluster development	Link across the region to support cluster growth	0.1	1	0.1	OxLEP, Harwell and other partners
<b>Strategic and Industry Partnerships</b>	SBRI	Projected regional SBRI Grants	1.1		1.1	Various
<b>Strategic and Industry Partnerships</b>	Innovate UK & Other Grants		4.5		4.0	Innovate UK

<b>Strategic and Industry Partnerships</b>	Additional SIA Enabling projects		2.47		1.73	
<b>Sub-total Innovation &amp; Economic Growth</b>			<b>14.18</b>		<b>12.03</b>	

INN – Digital Health and AI						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
<b>Clinical Innovation Adoption</b>	Local project 1: MyCOPD	Online self-management tool for people with severe or very severe COPD	Not applicable	Not applicable	0.19	CCGs, GPs and Hospitals
<b>Clinical Innovation Adoption</b>	Local project 2: Sleepio		Not applicable	100	0.32	GP Practices in Bucks, Berks and Oxfordshire
<b>Strategic and Industry Partnerships</b>	Local project in AI	Autonomous speech-based clinical outcomes measures			0.02	Oxford University Innovation
<b>Strategic and Industry Partnerships</b>	Local project on Inflammatory Bowel Disease	Use of True Colours (TCUC) as a patient reported outcomes measure			0.03	Johnson & Johnson, Takeda
<b>Strategic and Industry Partnerships</b>	Local project in mental health	Online treatment for childhood anxiety disorders			0.01	University of Reading and Red Ninja
<b>Strategic and Industry Partnerships</b>	Local project in diabetes monitoring	Development of a smart penpal device			0.02	Adelie Health

INN – Digital Health and AI						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
<b>Strategic and Industry Partnerships</b>	Local project on SEND	System for electronic notification and documentation			0.04	Drayson Technologies
<b>Strategic and Industry Partnerships</b>	Local project on GDM-health	Gestational diabetes health management system			0.02	Drayson Technologies
<b>Strategic and Industry Partnerships</b>	Local project on EDGE-COPD	Patient monitoring of COPD			0.02	Drayson Technologies
<b>Strategic and Industry Partnerships</b>	NIA National	50%			2.22	
<b>Sub-total Digital &amp; AI</b>					<b>2.89</b>	

INN – Genomics and Diagnostics						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
<b>Strategic and Industry Partnerships</b>	National project in gastroenterology	Roll-out of FCal pathway in Aylesbury / Chiltern to better diagnose ISD/IBD, ensure patient gets the most appropriate treatment quickly & reduce number of unnecessary colonoscopies	Positive impact on 18-week wait list (reduction)  Capacity management – colonoscopy service (allowing focus on cancer referrals)  Utilisation of resources: High % of colonoscopy referrals confirm diagnosis of IBD	Adopt clinical evaluation plan from YHEC based on Vale of York implementation	<u>Net savings</u> 1760 patients tested per annum  335 fewer patients referred for colonoscopy  Net £270k annual cost saving for Aylesbury / Chiltern compared to “Standard” FC pathway  0.71	Aylesbury / Chiltern CCG – primary care (54 GP practices)  Measure uptake % of GP practices adopting  NB. Barrier: Inconsistent results profiles from different FCal tests – impact on cut-offs? (primarily Buhlmann and Diasorin). Consensus required
<b>Strategic and Industry Partnerships</b>	National project in maternity	Introduction of ELECSYS test to rule-out women with preeclampsia and reduce unnecessary admissions	>1,500 fewer (unnecessary) admissions for suspected preeclampsia	Reduction in the number of subsequent in-patient and community clinic appointments and follow-up / monitoring	Net savings of £390k per annum across the Thames Valley Maternity Network (reduced admissions off-set against the cost of the test.	Hospitals in Thames Valley Maternity Network  NB. Drivers for Finance Dept. are predominantly cash releasing (reduction in



INN – Genomics and Diagnostics						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
				tests requested for patients admitted for PE	% adoption of ELECSYS tests compared to DG23 model 0.483	headcount / beds closed) not cost savings or patient centred care
<b>Strategic and Industry Partnerships</b>	Local programme using point of care and specialist paramedics	Improving pre-hospital diagnosis and informed discharges in the >75s  This project is training specialist paramedics in the use of Point Of Care blood Testing (POCbT) to assist in clinical decision making	>75yrs frail and elderly discharged on scene with breathlessness, confusion or falls OR pts presenting with these complaints who may or may not require admission and are referred by crews to the specialist Paramedic team.	Confidence in discharge, Gather data for POCT pre-hospital, Early management of deranged bloods either through earlier admission or communication with primary care.	Will conduct a health economic analysis 0.02	South Central Ambulance Service (Reading) ACP Fellowship team Wokingham CCG Urgent Care Board

INN – Genomics and Diagnostics						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
<b>Strategic and Industry Partnerships</b>	Local programme in diagnosis of infectious diseases	Introducing influenza POC tests into the ED and community setting. Influenza infections can pose a significant healthcare burden during winter months.	POCT resulted in a reduction in median time to diagnosis, isolation, antiviral prescription and discharge. The greatest reduction was seen in time to result and time to antiviral prescription.	Less bed time - Less hospital time by testing in community - Fewer admissions  Appropriate and early use of Tamiflu – Lower use of prophylaxis  Reduction in secondary cases – Treated for both flu AND secondary infection	0.06	Royal Berkshire Bucks CCG and Trust (WestCall)
<b>Strategic and Industry Partnerships</b>	Local programme for diagnosis in the community	A point-of-care diagnostic solution for urgent and ambulatory care delivery in the community  Using POC in urgent care offers an alternative solution to A&E	20% of A&E visits are for breathlessness or chest pain  70% of breathlessness or chest pain patients could avoid A&E	Current blood testing solutions are inadequate for cardiac diagnosis in urgent care  Patients at low risk can be	For a population of 200k, it is estimated that 2-8 hospital admissions per day could be avoided through rapid diagnosis and decision making within	Jupiter Diagnostics, urgent care centres in Oxford AHSN and Lakeside Corby  Barrier – grant funded development of the test panel

INN – Genomics and Diagnostics						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
		Jupiter's diagnostic solution will enable POC testing of multiple cardiac and infection markers from a finger prick of blood to deliver lab-quality results in 10 mins	Clinicians will be able to deliver hospital-quality diagnostics in the community, using a low-capital intensive (readers provided free of charge), easy-to-use system that any health professional can be quickly and easily trained to use safely. This will enable earlier diagnostic and risk stratification, allowing clinicians and care teams to rapidly refer	discharged earlier or managed in the community, easing the financial burden and time pressure of current practice, and increasing patient throughput. In the UK, there are around 5 million patients (2-4% (700,000) & 20% (4.58M) of the 22.9M A&E attendees in 2015/16) presenting with symptoms of chest pain or breathlessness each year	urgent care centres and community support teams, with cumulative net savings of £6.4M over 5 years per 100k people attending A&E  0.02	

INN – Genomics and Diagnostics						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
			patients in need of hospital care or investigate and treat the other underlying causes			
<b>Strategic and Industry Partnerships</b>	Local programme in stroke POC in ED	Our vision is to transform emergency care pathway for stroke by introducing novel diagnostic technology to aid the accurate identification of stroke and rapid delivery of thrombolysis and thrombectomy from earliest moment of onset.	Acute emergency care is under severe pressure and unable to meet demand, including stroke where 40% of stroke patients are treated outside Hyper-Acute Stroke Units (HASUs) due to lack of available HASU beds	Ischemic strokes (85% of strokes) are a highly complex condition to diagnose  Every minute of delay in delivery of thrombolysis results in the patient losing around 2 days of healthy life.  If 1% more stroke patients were thrombolysed, and those patients who	A health economics study by the Newcastle Stroke Research Group (NSRG) estimated that a modest (5%) improvement in diagnostic performance, would correctly identify 9,500 mimics (out of a total estimate 13,400 mimics) and save HASUs £25m out of an estimated £31m cost to HASUs for treating mimics.	Sarissa Biomedical, OUH, SMH, RBH  Barrier – applied for Innovate grant funding for service evaluation and health economics

INN – Genomics and Diagnostics						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
				could benefit from mechanical thrombectomy were more accurately identified thus obviating inter-hospital transfers then around 430 patients (out of 100k strokes/yr) would return to their <i>healthy life</i> .	Over a 10 year period this would save the NHS £1.2bn in compounded care costs. 0	
<b>Strategic and Industry Partnerships</b>	Local programme in COPD	To help COPD patients identify their exacerbations earlier, and lead to faster treatment.	Cost savings on the following tests – spirometry, chest Xray, complete pulmonary function tests, CT scan, ABG blood gases – on those	Reduction in A&E visits, GP contacts, hospital (re)admissions	0.04	Mologic; Medivation; Newcastle MIC; NENC AHSN; Leicester PPH; Oxford MIC

INN – Genomics and Diagnostics						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Stakeholders
			patients who catch their exacerbations early enough to avoid system contacts			
<b>Strategic and Industry Partnerships</b>	Local Programme in Stroke	To effectively triage stroke patients from the mimics in a paramedic setting	Introducing efficiencies into the stroke care pathway – allowing for better treatment of stroke patients	60,000 patients saved from unnecessary treatment (40% stroke mimics). Allows these 60,000 mimics to access their required treatment quicker	1.03	(Northumbria Healthcare NHS FT; Sarissa; Coventry University; North East Ambulance Service; Newcastle MIC) Sarissa Biomedical
<b>Sub-total Genomics &amp; Diagnostics</b>					<b>2.36</b>	

INN – Research						
			Projected benefits (total 2 years)			
Oxford AHSN Programme	National project or local programme	Aim	lives saved	harm avoided/ patients recovered	financial (£'m)	Local participating organisations
Research & Development	National	Identify STP research needs	NA	NA	NA	Local and national NIHR structure and STPs
Research & Development	Local	Technical support to iTAC to address Life Sciences Strategy “Grand Challenges”	NA	NA	£200m grant	National public/private partnership

## Appendix B- Summary of Key Milestones

Programme/Theme	Milestone	Year 6 Q1	Year 6 Q2	Year 6 Q3	Year 6 Q4	Year 7
<b>Patient Safety and Clinical Improvement</b>	Maintain, consolidate and sustain current clinical programmes and function of PSC - maintaining funding from March 19 onwards			◆		
	Adoption of 2 to 3 improvement projects that have shown sustained improvement in patient safety from outside of the Oxford AHSN region	◆	◆	◆	◆	◆
	Implementation of 2 to 3 clinical improvement projects or innovations in mental health care				◆	◆
	Support and enable all 3 national PSC work streams	◆	◆	◆	◆	◆
<b>Clinical Innovation Adoption</b>	Select NICE TAs and High Impact Innovations linked to key regional priorities so as to determine adherence and to support uptake where applicable.			◆		



Programme/Theme	Milestone	Year 6 Q1	Year 6 Q2	Year 6 Q3	Year 6 Q4	Year 7
	Horizon scan innovations in industry, NHS, NICE TAs, international and other sources so as to obtain a minimum of 5 new contenders per annum for implementation			◆		
	Deliver 4 to 6 high value funding initiatives to support delivery of the transformational innovations per annum			◆		
	AF Detect (National Programme)					◆
	ESCAPE-pain (National Programme) – Go/No go confirm with local commissioners that they wish to commission the service			◆		
	Prostate Cancer (Pilot phase)					◆
	Emergency GP appointment model	◆				
	Non-Injectable Arterial Connector	◆				
	PneuX	◆				
	WireSafe	◆				

Programme/Theme	Milestone	Year 6 Q1	Year 6 Q2	Year 6 Q3	Year 6 Q4	Year 7
	UroLift	◆				
	myCOPD – Go/No go		◆			
	PINCER - completed					◆
	Sleepio				◆	
	eMAPs	◆				
	eMAPs II				◆	
	eMAPs III					◆
	Emergency Laparotomy					◆
	Fluid Review			◆		
<b>Strategic and Industry Partnerships</b>	Bucks Life Sciences Innovation Centre	◆				
	Bicester Healthy New Town	◆				

Programme/Theme	Milestone	Year 6 Q1	Year 6 Q2	Year 6 Q3	Year 6 Q4	Year 7
	Oxford Martin School Affordable Medicines	◆				
	Oxfordshire TTA SIA				◆	
	Project Accelerate Harwell	◆				
	Consultancy Services to Industry				◆	
	Regional Cluster Development					◆
	GMC Support					◆
	Faecal calprotectin POC				◆	
	Pre-eclampsia POC				◆	
	Out of Hours POC				◆	
	Influenza POC					◆
	Urgent & Ambulatory Care POC				◆	
	Stroke POC in ED					◆
	COPD Exacerbation					◆

Programme/Theme	Milestone	Year 6 Q1	Year 6 Q2	Year 6 Q3	Year 6 Q4	Year 7
	IBD Programme					◆
	Big Health					◆
	Ufonia				◆	
	Online treatment for childhood anxiety disorders					◆
	Smart insulin pen device			◆		
	SEND					◆
	GdM-Health					◆
	COPD					◆
<b>Informatics</b> Local Digital Maturity	Implement Connected Care Assessment in local Health and Care systems	◆				
	Engage BOB STP to support Digital Workstreams	◆				

Programme/Theme	Milestone	Year 6 Q1	Year 6 Q2	Year 6 Q3	Year 6 Q4	Year 7
Informatics Information Governance	Developing local capability through training Heads of IG and establishing peer group network			◆		
	Implement Streamlined Portal		◆			
Informatics Personal Health Records Platform development	The case for change developed through the LHaCRE delivery plan					◆
Informatics Developing analytics	Implement new visualisation platform.			◆		
Informatics	Run training sessions for users to access and refresh reports from the new data platform			◆		
	Training super users in the ability to create new reports.			◆		
<b>PPIEE</b>	Framework for supporting organisational and system-based patient centred care developed (year 5) and implemented (year 6) across all partner organisations	◆				

Programme/Theme	Milestone	Year 6 Q1	Year 6 Q2	Year 6 Q3	Year 6 Q4	Year 7
	Genomics - lay partners appointed		◆			
	Lay partners and AHSN work programmes - first peer support meeting run	◆				
	New lay partners appointed for PPIEE, patient safety and clinical	◆				
	Measuring impact – trial use of reflection diaries		◆			
	<b>Training and development</b> Level 1 2018 planned events delivered as timetabled - two general introduction sessions, one writing for a lay audience and one involving lay people in interview panels	◆	◆			
	Level 2 Delivery of two participation techniques workshops		◆	◆		

Programme/Theme	Milestone	Year 6 Q1	Year 6 Q2	Year 6 Q3	Year 6 Q4	Year 7
	Level 3 Leading disabilities programme co-designed and co-delivered and evaluated				◆	
	Two organisations signed-up to work with us to deliver train the trainer and general cohorts			◆	◆	
	Developing networks - quarterly newsletter	◆	◆	◆	◆	◆
	Developing networks - graduate event			◆		
<b>Stakeholder engagement and communications</b>	Joint publication with HEE and TVSCN	◆				
	Sponsorship and events (updated programme in place) Supporting materials developed - generic and specific - regular updates going forward including new branding	◆ ◆				

## Appendix C – Oxford AHSN Data Sources



The slide features a light blue background with a decorative graphic of a brain-like structure on the right side. At the top left is a logo consisting of a colorful geometric pattern. The title 'Oxford AHSN Data Sources' is positioned at the top center. Below the title, there are three main sections: 'Clinical Domains', 'Data Source', and 'Data Source Details'. The 'Clinical Domains' section lists six categories. The 'Data Source' section lists 20 specific data sources. The 'Data Source Details' section is currently empty.

**Oxford AHSN Data Sources**

**Clinical Domains**

- Acute
- Community Services
- Emergency
- Mental Health
- National
- Primary care
- Social Care

**Data Source**

- AWOL
- Children and Young People's Health Services Data Set
- Community Information Data set
- CPRD (Clinical Practice Research Datalink)
- Diagnostic Imaging Dataset
- HES A&E
- HES Inpatient
- HES Outpatient
- Improving Access to Psychological Therapies Data Set
- Index of Multiple Deprivation (IMD)
- Maternity and Children's Data Set
- Mental Health and Learning Disabilities Data Set
- Mortality data from the Office for National Statistics
- National Diabetes Audit
- Office of National Statistics
- Patient Reported Outcome Measures
- Patient Safety Thermometer
- QOF The Quality and Outcomes Framework
- SUS Payment by Results

**Data Source Details**

◀



## Appendix D - Risks Register & Issues Log

### Risks Register

#	Prog/Theme	Risk	Description of Impact	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date added	Date mitigated	RAG
1	Oxford AHSN Corporate	Failure to establish culture of partnership and collaboration across the region	Insufficient engagement of clinicians, commissioners, universities and industry will prevent the AHSN from achieving its license objectives e.g. tackling variation, speeding adoption of innovation at scale and improving prosperity of the region	Low	Med	> 6 / 12 months	<p>Leadership supporting a culture of collaboration, transparency and sharing.</p> <p>Agreed organisational Vision, Mission and Values.</p> <p>Oversight Groups in place for each Programme and Theme, broadening representation across our stakeholders.</p> <p>Celebrate successes through Case Studies &amp; Events.</p> <p>Regular monthly newsletter and Twitter. Regular refresh of website and monitor usage.</p> <p>Quarterly review of breadth and depth of engagement</p>	AHSN Chief Executive	Programme SROs	06-Sep-13	Ongoing	AMBER

#	Prog/Theme	Risk	Description of Impact	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date added	Date mitigated	RAG	
							<p>by programmes and events.</p> <p>CIA analysis of strategic priorities of commissioners and providers.</p> <p>Focussed events for clinicians and managers to foster collaboration for better patient care.</p> <p>Oxford AHSN commissioned a stakeholder survey. 26% response rate (536 responses) Results positive. We will commission another survey in 2018.</p> <p>Oxford AHSN also took part in the National YouGov Stakeholder Survey but response numbers (circa 20) statistically invalid to draw any conclusions</p> <p>Active engagement with STPs and ACSs</p>						

#	Prog/Theme	Risk	Description of Impact	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date added	Date mitigated	RAG
2	Oxford AHSN Corporate	Failure to sustain the AHSN	Programme activities cease	Med	Med	> 6 / 12 months	<p>NHS England has confirmed that AHSNs will be re-licensed. Discussions started with NHS E and NHS I regarding funding of PSC beyond March 2019.</p> <p>OLS has confirmed funding for AHSNs for 3 years</p> <p>Actively pursuing industry partnerships, JVs and grants to reduce reliance on NHS E and NHS I funding.</p>	AHSN Chief Operating Officer	AHSN Chief Operating Officer	31-Jul - 14	Ongoing	AMBER
3	Oxford AHSN Corporate	INNS – weak local uptake		Med	Med	>6/ 12 months	<p>Identify clinical leadership. Ensure evidence based is robust. Collaborate with other AHSNs already implementing projects. Robust governance through CIA, Patient Safety and Clinical Improvement and SIP Oversight Groups. Ensure strong local case for implementation.</p>	AHSN Chief Operating Officer	AHSN Chief Operating Officer	19 February 2018	Ongoing	Amber

## Issues Log

#	Programme / Theme	Issue	Severity	Area Impacted	Resolving Action	Owner	Actioner	Date Added	Current Status	Date Resolved
2	Oxford AHSN Corporate	Lack of awareness by local partners and national stakeholders of progress and achievements of the AHSN	Minor	Culture	<p>Overarching comms strategy.</p> <p>Level of engagement monitored across all programme and themes.</p> <p>Website refreshed regularly - visits per month increasing.</p> <p>Twitter followers and newsletter subscribers increasing.</p> <p>Oxford AHSN stakeholder survey.</p> <p>Quarterly report sent to all key stakeholders</p> <p>Pipeline of publications and case studies.</p>	AHSN Chief Operating Officer	Head of Communications	19/01/15	90% complete	

## Appendix E – Organisation Chart

	Corporate	Programmes			Themes		
		Patient Safety and Clinical Improvement	Clinical Innovation Adoption	Strategic and Industrial Partnerships	R&D	Informatics	PPIEE
<b>Chair</b> Nigel Keen	<b>Head of Communications</b> Martin Leaver	<b>Head of Patient Safety and Clinical Improvement</b> Katherine Edwards	<b>Director</b> Tracey Marriott	<b>Director</b> Dr Nick Scott-Ram  <b>Director of Business Dev</b> Dr Andy Hill	<b>Lead</b> Professor Gary Ford	<b>Director</b> Mike Denis	<b>Director</b> Dr Sian Rees
<b>CEO</b> Professor Gary Ford CBE	<b>Senior Prog Mngr</b> Sonya Farooq			<b>Heads of SIP</b> Nicki Bromwich Julie Hart		<b>Head of Informatics</b> James Brannan	
<b>COO</b> Dr Paul Durrands	<b>Finance Manager</b> Emma Fairman	<b>Patient Safety Managers</b> Katie Lean Geri Briggs Jo Murray Eileen Dudley	<b>Senior Innovation Adoption Managers</b> Dr James Rose Hannah Oatley Alison Gowdy	<b>Senior Programme Manager (Diagnostics)</b> Guy Checketts	Dr Ben Thompson		
<b>Executive Assistant</b> Jo-Anne Harrison	<b>Corporate Affairs Manager and HR Lead</b> Amy Izzard	<b>Mental Health Managers</b> Fran Butler Ineke Wolsey					<b>Project Manager</b> Mildred Foster
	<b>Administrator (Comms and Informatics)</b> Rochelle Nelson	<b>Programme Officer</b> Rachel Davies  <b>EA &amp; Snr Prog Officer</b> Amanda Garner	<b>Programme Coordinator</b> Ferdinand Manansala	<b>Project Managers</b> Ashley Aiken Marianna Lepteyukh		<b>Clinical Engagement Manager</b> Geraldine Murphy	<b>Data Analyst</b> Imran Maqsood Helen Norman