Oxford AHSN Year 5 Q2 Report

For the quarter ending 30 September 2017

Cover image: Talk to the (giant) hand! Hundreds of people got the message about acting quickly on joint pain thanks to a giant hand when it appeared in Reading, Oxford and London. Many followed the instruction to talk to the 12ft hand including patient Georgina McMasters who is supporting the campaign organised by the Oxford AHSN and the National Rheumatoid Arthritis Society. The aim is to raise awareness of issues relating to rheumatoid arthritis which affects about 30,000 people in the Oxford AHSN region. The giant hand – and the reactions to it – will feature in a film to be launched in October.

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Chief Executives Review

Summers are no longer quiet in the NHS, and probably never were. In most years attendances at A&E departments are higher in the summer than winter months. Work with our partners in the AHSN did not slow down either. This year our Clinical Innovation Adoption programme has initiated projects with 16 new innovations including three patient safety devices. The team has developed an adoption pack that AHSNs are using throughout the country.

Our programmes and themes have produced three excellent case studies this quarter:

- Use of point of care testing in a paediatric emergency department setting. Buckinghamshire Healthcare, Frimley Health and Oxford University Hospitals have evaluated the Hariba Microsemi to test for bacterial infection. They found that the speed of diagnosis improved and treatment started earlier improving throughput in the emergency departments.
- Defining and measuring suspicion of sepsis. These measures for determining the impact of sepsis programmes, developed by the team are now being used nationally.
- Oxford AHSN work on Digital Health in the Science Innovation Audit for Oxfordshire Transformative Technologies Alliance.

Work continues on the AHSN re-licensing process. There is much more emphasis on national collaboration and NHS England is coalescing AHSNs around nine "Innovation National Networks" or themes. Our work is well aligned to these themes. It is taking more time to agree detail and metrics and to allow more time to complete the 5-year re-licensing process NHS England is offering a six-month extension of AHSN funding to September 2018 should the new licence and contract process does not complete before April 2018.

I draw your attention to the Life Sciences Industrial Strategy led by Sir John Bell which is summarised in the Stakeholder and Communications report. This identifies an important role for AHSNs in helping the NHS support economic growth, particularly in terms in industry partnerships, innovation adoption and the potential development of a regional Digital Innovation Hub. I have taken on the role of Deputy Chair of the AHSN Network for the next year.

We have very good partnership working with the Oxford NIHR CLAHRC (Collaborations for Leadership in Applied Health Research and Care) led by Richard Hobbs with implementation of CLAHRC work across our Region. I facilitated with Department of Health and NHS England a joint meeting of the AHSN Chief Executives and CLAHRC Directors to discuss future joint working to maximise the national impact of both organisations work. This was a productive meeting and the group will identify high value innovations/interventions that AHSNs and CLAHRCs will jointly implement and evaluate nationally.

The NHS continues to face significant financial and other challenges but history shows the NHS has survived many crises. There is increasing recognition of the importance of innovative technologies to support system transformation in the NHS and the large, unrealised opportunity for the NHS to be a major partner with Universities and industry in increasing economic growth. In that context the Oxford

AHSN partners have the potential and opportunity to be national and world leaders in using the outputs of UKs life science research to develop new sustainable high quality NHS services.

Professor Gary Ford CBE, FMedSci, Chief Executive Officer, Oxford AHSN

Oxford AHSN case studies

- Use of point of care testing in a paediatric emergency department setting
- Defining and measuring suspicion of sepsis
- Our digital health insights feed into key report on Oxfordshire tech cluster

Oxford AHSN case study

Date: Q2 2017/18

Programme/Theme: Strategic & Industry Partnerships

Title: Point of care test evaluation points the way to quicker diagnosis of common childhood illnesses

Overview summary

An evaluation of a 'point of care' blood testing device at three hospitals found it was quicker than lab tests in most cases, reducing the process by several hours, leading to improved patient experience and savings for the NHS. The automated haematology analyser tested in paediatric emergency departments in Oxford, Aylesbury and Slough speeded up clinical decision-making in common childhood illnesses in 82% of cases at Wexham Park (WPH), 63% of cases at Stoke Mandeville (SMH) and 53% of cases at the John Radcliffe Hospital (JR). Independent economic analysis found potential combined net annual savings of more than £60,000 across the three hospitals.

Challenge identified

In paediatric emergency medicine blood tests are carried out in children whose diagnosis is unclear to help with clinical decision-making around admission. A C-Reactive Protein (CRP) assay is a commonly used blood test, particularly as a potential proxy indicator for bacterial infection, often alongside a full blood count (FBC). The test is normally performed in the hospital laboratory which takes about 60-90 minutes – but the time from needle to result can be considerably longer, up to several hours. The study aimed to improve the speed of diagnosis of common paediatric conditions by introducing point of care blood tests into emergency paediatric assessment units. The aim was to improve patient flow, reduce waiting time for families through more rapid assessment and reduce unnecessary antibiotic prescribing.

Actions taken

The Horiba Microsemi, an automated haematology analyser CRP/FBC point of care device, was selected for the evaluation. Results are available in four minutes for simultaneous FBC and CRP (15 tests per hour) and one minute for FBC only (55 tests per hour). As well as measuring the accuracy of the point of care instrumentation against lab values a service evaluation was conducted by investigating whether the introduction of point of care testing for CRP and FBC at SMH and WPH could:

- provide more rapid decision-making in a range of common paediatric conditions
- improve patient flow and reduce waiting time for families by more rapid assessment of children
- improve appropriateness of antibiotic prescription.

Laboratory staff validated and set up the Horiba Microsemi devices in the three hospitals for two-three months each. They compared point of care results against those from the standard laboratory analyser. A paper audit form was used to collect data on the time of availability of blood results and decision-making by the treating clinician. Lab-held data was used to determine the agreement of results in the clinical setting with standard laboratory assays. Initial evaluations from three hospital laboratories (JRH, SMH, WPH) concluded that the point of care device was sufficiently accurate to continue with the evaluation in a clinical setting.

The most common presentations at SMH were abdominal pain and fever without apparent source. Other diagnoses were lymphadenitis, tonsillitis, gastroenteritis, deliberate overdose and haematemesis. The majority of children at WPH had an initial diagnosis of either fever or sepsis. Patients presented at the JRH with limpness, rash and fever. The differences in the conditions seen likely reflect differences in the departments.

Outcomes

On average the results from the point of care device were made available 3 hours 5 minutes quicker than those the lab. Overall the point of care test was useful in decision-making for children with abdominal pain, fever without apparent source, limp and petechial rash and could have resulted in earlier decision-making in approximately 75% of cases.

The use of the point of care machine could have shortened the time to decision-making about antibiotic use. In one case the high CRP result on the point of care machine prompted urgent registrar review and initiation of IV antibiotics. The patient had pyelonephritis and use of the point of care device reduced the decision-making time by 50 minutes.

The study concluded that:
- the CRP reader was accurate in both the white cell count and CRP readings, when compared with lab values
- using point of care as a replacement for lab test could have resulted in more rapid decision-making in 82% of cases at WPH, 63% of cases at SMH and 53% of cases at the JR
- for children admitted from the paediatric decision unit (PDU) at SMH, an earlier decision could have been made in 35% of cases, saving an average of 173 minutes per case
- for children discharged from PDU at SMH, an earlier decision could have been made in 87% of cases, saving an average of 109 minutes per case
- for children referred to a speciality from A&E at SMH, an earlier decision regarding referral could have been made in 63% of cases, saving an average of 106 minutes per case
- the point of care result could have been used for more rapid decision-making regarding the use of antibiotics in approximately 52% of cases at SMH and 65% at the JR

The York Health Economics Consortium carried out an economic analysis across the three hospitals. This concluded that the use of the Horiba device would result in modest savings – see table below. The combined net annual savings would be more than £60,000 across the three hospitals due to reduced nursing and consultant or registrar time.

	Stoke Mandeville Hospital	Wexham Park Hospital	John Radcliffe Hospital
Annual cost of POCT device (rental model)	£12,811	£12,811	£12,811
Annual savings from eliminating waits for lab tests	£22,713	£18,511	£60,345
Net annual savings	*£9,902*	*£5,700*	*£47,534*

There are also potential savings from quicker treatment decisions when a delay could have adverse effects on the patient's condition. Other important benefits include the reduced waiting time for patients and their family and carers. The reduction in time waiting for test results can result in improved patient flow, particularly important at peak times, which might also create the opportunity to redesign process and generate further benefits.

AHSN priorities addressed

- Focusing on the needs of patients and populations
- Speeding up adoption of innovation into practice to improve clinical outcomes and patient experience
- Building a culture of partnership and collaboration
- Creating wealth through co-development, testing, evaluation and early adoption and spread of new products and services

Future plans

Proposals for broader uptake are being drawn up across the Oxford AHSN region and beyond through engagement with other AHSNs. The outputs of the evaluation will also be shared at future workshops.

Contact

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Oxford AHSN case study

Date: Q2 2017/18

Programme/Theme: Patient Safety

Title Defining and measuring suspicion of sepsis

Supportive quotes

"Working together regionally for a common goal has resulted in a pathway we are happy to use to save lives from sepsis"

Amanda Pegden, Acute Medical Consultant and sepsis clinical lead, Great Western Hospitals NHS Foundation Trust, Swindon

Overview summary

The lack of suitable outcome measures for sepsis has hampered evaluation of local and national campaigns and improvement programmes. The Oxford AHSN has developed a simple and effective means of measuring the impact of sepsis programmes.

A methodology was developed to identify patients with 'suspicion of sepsis' who are the critical target group both for clinical intervention and for sepsis detection and improvement programmes. The methodology uses routine administrative data to assess and compare patient outcomes (e.g. mortality, length of stay, readmission rate, intensive care admissions) over time and across organisations. The team developed a 'how to' guide which was shared across the Oxford AHSN region and their work was published in BMJ Open. The 'suspicion of sepsis' methodology is now being adopted by other organisations, including researchers and NHS England to further evaluate the burden of sepsis and impact of interventions.

Challenge identified

Sepsis, defined as a 'life-threatening organ dysfunction caused by a dysregulated host response to infection', is one of the leading causes of death. The incidence of sepsis is thought to be increasing with estimates of up to 300 cases per 100,000 population.

Worldwide awareness of sepsis has been increasing due to high-profile media attention, coupled with reports from the surviving sepsis campaign and a multitude of national regulators and expert bodies. The early detection and treatment of sepsis has been highlighted as a major focus for improvement. For example, in the UK, the identification and early treatment of sepsis is the target of a major national campaign and also a focus in Commissioning for Quality and Innovation for 2015-2018 - a financial incentive system.

However, a lack of suitable metrics for sepsis has hampered evaluation of sepsis improvement programmes.

Actions taken

A team consisting of a clinician, researcher, data analyst and patient safety expert Prof Charles Vincent worked together to define the target population for sepsis programmes and develop a methodology for monitoring patient outcomes.

They identified that most sepsis campaigns and improvement programmes do not target the treatment of fully developed sepsis but instead are aimed at the rapid detection and treatment of patients with suspicion of sepsis. Clinicians do not wait to diagnose sepsis but act promptly on suspicion. The target population is therefore suspicion of sepsis and not sepsis. To evaluate sepsis programmes the 'suspicion of sepsis' group needs to be defined and the outcomes of these patients monitored.

A list of 200 clinically validated ICD- 10 codes that relate to bacterial infection (the 'suspicion of sepsis' coding set) was developed to allow the identification of patients with suspicion of sepsis. The data source for the project was Hospital Episode Statistics (HES) data for all acute trusts in the Oxford AHSN region for 2012-2016. The HES dataset was analysed to identify all adult patients admitted to hospital with a diagnosis listed in the suspicion of sepsis coding set.

Impacts/outcomes

Our methodology for identifying suspicion of sepsis uses easily reproducible routine administrative data for assessing the SOS burden and comparing patient outcomes (e.g. mortality, length of stay, readmission rate, intensive care admissions) over time and across organisations. The analysis also allowed the most common and the most high-risk infections to be identified.

A short practical guide has been developed to allow other organisations to reproduce the dataset http://www.patientsafetyoxford.org/wp-content/uploads/2017/05/How-to-sepsis-guide-final.pdf and the work has been presented at a number of regional and national patient safety events including at the Sepsis Trust's 2016 conference.

Nationally, the methodology is now being used by NHS England to review national data.

This methodology has helped to inform cross-system sepsis programme board and change guidance on coding for sepsis, NHS Digital April 2017 Sepsis Coding Standards ICD-10 standard DChS.I.1: Sepsis, septic shock, severe sepsis and neutropenic sepsis https://www.england.nhs.uk/ourwork/part-rel/sepsis/

An open access publication in BMJ Open (May 2017) describes the project in more detail. Inada-Kim M, Page B, Maqsood I & Vincent C.: Defining and measuring suspicion of sepsis: an analysis of routine data. *BMJ Open* 2017;7:e014885 http://bmjopen.bmj.com/content/bmjopen/7/6/e014885.full.pdf

Priorities addressed

AHSNs

- Promoting health equality and best practice
- Speeding up adoption of innovation into practice to improve clinical outcomes
- Building a culture of partnership and collaboration
- Treating people in a safe environment and protecting them from avoidable harm.

NHS England
- Care and quality
- Funding and efficiency
- Health and wellbeing

Future plans

This work is being extended within the Oxford region by matching the HES data with microbiology blood culture data to validate the suspicion of sepsis methodology and refine it further. We are also working with the acute trusts in our region to understand local trends and extending the work to understand subpopulations such as patients suspected of having sepsis who are admitted by ambulance, and those admitted to critical care.

Tips for adoption

- Close collaboration with informatics teams and information governance leads is essential for data analysis and to establish effective data-sharing agreements.
- Producing a simple 'how to' guide helps to share the approach.

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Oxford AHSN case study

Date: Q2 2017/18

Programme/Theme: Strategic and Industry Partnerships

Title Oxford AHSN insights on digital health feed into key report on Oxfordshire's tech cluster

Supportive quotes

"This valuable report highlights opportunities where technologies converge, for example, through combining digital health with autonomous vehicles or satellite communications. Ultimately quantum computing is likely to have a transformative effect on the handling of large datasets. Such convergences could have a profound effect on healthcare."

Dr Nick Scott-Ram, Oxford AHSN Director of Commercial Development

Overview summary

The Oxford AHSN provided valuable input to a key new report for the government which concludes that Oxfordshire can play a major global role in driving forward the UK economy through transformative technologies. The Oxfordshire Transformative Technologies Alliance's science and innovation audit identified current strengths and future potential in the specific areas of:

- digital health (led by Oxford AHSN)
- space-led data applications
- autonomous vehicles
- quantum computing.

The report found that Oxfordshire can help strengthen the national economy as the lead UK region for these four science and innovation areas. It has the potential to develop data services, products and software, with opportunities for integrated research and development testing – proven in real-world environments. But investment is needed in infrastructure – to accommodate growth potential and appetite – whilst 'living lab' test beds are also required to develop, refine and prove technologies.

It will help ensure future investment, across science and innovation, is more targeted local collaboration strengthened.

Challenge identified

In Autumn 2016 the Department for Business, Energy and Industrial Strategy (BEIS) invited consortia to form around geographic and technological themes and apply to be involved in the science and innovation audit (SIA) process. These consortia are made up of businesses, universities, research and innovation organisations, Local Enterprise Partnerships (LEPs) and their equivalents in the devolved administrations. Oxfordshire was one of eight regions selected.

It follows a commitment made last autumn by the Chancellor of the Exchequer Philip Hammond to better understand the future economic impact that Oxfordshire and the other seven regions could have on the nation and the world through science and innovation.

Actions taken

The Oxfordshire project was led by the University of Oxford with the Oxford AHSN (leading on digital health), Oxfordshire Local Enterprise Partnership (OxLEP), Oxford Brookes University, the Science and Technology Facilities Council, the UK Atomic Energy Authority and the Satellite Applications Catapult. Input was also included from other industry, local government and research partners.

The aim was to improve understanding of Oxfordshire's outstanding capabilities in four key areas - digital health, quantum computing, autonomous vehicles and space-led data applications - and to predict the growth of each area until 2030. Oxford AHSN led the work around digital health.

Impacts/outcomes

The Oxfordshire Science and Innovation Audit published in September 2017 will lead to improved understanding of Oxfordshire's current strengths and future potential in the four key focus areas, particularly around opportunities achievable through combining these innovations.

- Summary Oxfordshire report: http://www.oxfordahsn.org/wp-content/uploads/2017/09/OxTTA_SIA_SUMMARY.pdf
- Full Oxfordshire report: http://www.oxfordahsn.org/wp-content/uploads/2017/09/OxTTA_SIAreport.pdf
- All eight Science and Industry Audits (SIAs): https://www.gov.uk/government/publications/science-and-innovation-audits-second-reports-published

Priorities addressed

AHSNs

- Speeding up adoption of innovation into practice to improve clinical outcomes
- Building a culture of partnership and collaboration

NHS England
- Care and quality
- Funding and efficiency
- Health and wellbeing
- Driving economic growth

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Operational Review

In a tight NHS funding environment, the senior team resolved last autumn to focus on attracting more grant and commercial income both for our local partners and to sustain Oxford AHSN for the long term. Revenue from grants and commercial activities in the last year that we have supported amounts to £9.8m, of which £2.3m comes directly to the AHSN. Most of the funding goes into the local system but some of the £2.3m will contribute to our operating costs. We are working on several strategic opportunities which if they come off will strengthen the AHSN's position operationally and financially in the long term.

The effect of reducing our cost base by £0.75m has extended the life of the AHSN to March 2019 as per the business plan. The Office for Life Sciences has announced that it will provide three years of funding for AHSNs which will sustain us for a further year to March 2020. Landing commercial and grant opportunities is vital therefore to ensure we are sustainable through the new licence period to March 2023 and beyond.

STPs

I am in regular contact with the Directors of the three Sustainability and Transformation Plans (STPs) that Oxford AHSN's NHS partners are members of to ensure they are aware of our enabling programmes. Timing is everything in these discussions and it is therefore essential to keep a regular open dialogue as STP/ACS plans develop and we gradually align innovation and improvement work with the new system structures. We hosted a joint workshop with UCLP and Eastern AHSNs for the Bedford, Luton and Milton Keynes STP Director with an emphasis on (1) atrial fibrillation and (2) health improvement in care homes. Follow up meetings are taking place.

We are directly supporting projects for the acute providers in the Buckinghamshire, Oxfordshire and Berkshire West (BOB) STP, eg Best Care is supporting tele-radiology, endoscopy, clinical procurement and workforce health and wellbeing. I attend the BOB Operational and Acute group meetings and the ALB STP Support meeting.

It should be noted that all our innovation evaluation, adoption and improvement work is with local partners within the STP systems. Highlights from the Oxford AHSN programme and theme reports are shown below.

Building the network

Innovation and improvement work in primary care has increased significantly over the last 12 months. More than 70 GP practices across Buckinghamshire and Berkshire are engaged in the atrial fibrillation programme. Patient Safety and the Dementia Clinical Network are building their engagement with local care homes – a key setting to keep frail elderly people well and out of hospital.

We are creating an AHSN image library with input from our local partners so that we have the widest possible view of the AHSN and its stakeholders

Both our electronic newsletter subscribers and Twitter follower numbers have increased again this quarter – Twitter followers now exceed 3,230 (8% increase on last quarter) and our newsletter subscriber base has increased by 21% since last quarter to 2,665.

Hundreds of people got the message about acting quickly on joint pain when a giant blue hand appeared in Reading, Oxford and London (see front cover image). Part of a national campaign by Oxford AHSN and the National Rheumatoid Arthritis Society to raise awareness of a disease that effects 30,000 people in our region. James Rose from our Clinical Innovation Adoption (CIA) team has been on the BBC and the

hand will appear in a film in October. Thanks also to a patient leader Georgina McMasters and our commercial partners.

Relicensing, the Accelerated Access Review and NHS Improvement

The timetable for relicensing has been extended and transitional funding has been offered from April to September 2018. AHSNs will engage in nine Innovation National Network (INN) themes. Our Chief Executive Professor Gary Ford leads the Research INN. Oxford AHSN has well-established programmes delivering innovation into practice, improving patient safety (in CIA, Strategic and Industry Partnerships and Patient Safety), maternity, mental health, information governance, diagnostics, digital health and a very strong industry partnerships programme. We have mapped all our work against the nine themes and we are confident that we have a strong offering. Work continues with the Office for Life Sciences to secure funding. The Oxford AHSN Patient Safety Collaborative is in the process of submitting plans to NHS Improvement.

We are at the early stages of developing programmes with stakeholders in three national NHS priorities – mental health, cancer and emergency medicine.

Working with other AHSNs and national spread

We have 15 active projects with other AHSNs. Examples include CIA's atrial fibrillation programme and Informatics' Global Digital Exemplar project with Greater Manchester AHSN. The toolkits produced by CIA for their clinical workshop on patient safety devices have been published and shared nationally.

The Patient Safety sepsis programme has developed improvement measures that are being adopted nationally (see Case Study).

CIA has been engaged in the process of selecting innovations in the National Innovation Accelerator and Innovation and Technology Tariff (free-to-issue products to trusts).

Three more of our case studies have been included in the AHSN Network Atlas of Solutions – Improving Patient Outcomes Following High Risk Surgery, Improved Return Rates on Psychiatric Wards and Better Monitoring and Fewer Hospital Visits for Women that Develop Diabetes during Pregnancy.

Martin Leaver, our Head of Communications, coordinated the production of the national AHSN Network Annual Impact Report. Oxford AHSN had a presence at the NHS Expo including presentations by the Early Intervention in Psychosis Clinical Network and Strategic and industry Partnerships. We are a key partner in the Bicester Healthy New Town which featured in a session chaired by NHS Chair Sir Malcolm Grant.

Best Care has secured funding from Health Education England Thames Valley to sustain the successful Dementia Clinical Network webinar series – 43 sessions to date with over 900 attendees. Milton Keynes Memory Assessment Service has started a service for young onset dementia with support from the network. Early Intervention in Psychosis has secured further funding for the region and updated the regional matrix showing compliance against NICE standards. The LiveFit pilot in Berkshire EIP services is to be extended into Bracknell and Newbury. The teleradiology project has linked up OUH, RBH, MKUH and BucksHT allowing access to historic scans between trusts.

The new IBD/endoscopy programme, which is largely funded by commercial partners, will be part of the Strategic and Industry Partnerships programme which has extensive experience of managing commercial relationships and managed the original related patient reported outcomes project with ICHOM.

In the next quarter the remaining four clinical networks will need to secure external funding to sustain beyond March 2018.

The Clinical Innovation Adoption programme is growing at pace with 16 new innovations initiated this year including an expansion in the number of medical devices. This experienced team has built a strong reputation regionally and nationally. CIA is codeveloping a bid for the Innovate UK Digital Health Catalyst with Sleepio, Oxford Health and Bucks GP Federation. Development of the Innovation and Technology Learning Platform is progressing well – this guide to market access across the EU of SMEs is funded by a grant from the European Institute of Innovation and Technology (EIT). The catheter-associated urinary tract infection programme has almost completed its e-learning package, supported by HEETV. The intra operative fluid management project was closed this quarter after three years; median length of stay for emergency laparotomies has been reduced by two days, mortality rates have been reduced by 4% in three trusts, and, four trusts are achieving mortality rates below national average. There has also been an increase in uptake of IOFM equipment in the region to 99 machines (from 86). The FallSafe programme is extending to Buckinghamshire Healthcare; Oxford Health, Berkshire Healthcare and Frimley Health are already implementing the FallSafe Care Bundles. Twenty more innovators signed up for the latest Practical Innovation in Healthcare Settings course with support from HEETV which started in September.

Research and Development continues to support collaboration by the research community in universities and the NHS. Gary Ford convened a joint meeting of AHSN Chief Officers and CLAHRCs to discuss future working arrangements. The University of Reading held an event called "Demystifying NIHR Research Funding".

Strategic and Industry Partnerships (SIP) - over 50 projects are at various stages of progress across all of its key priorities. The programme has completed 47 projects to date. The team engaged with 38 companies in Q2. SIP's programmes in diagnostics and digital health are developing at pace. Highlights in Q2 include:

- Horiba diagnostics study in emergency paediatric units at John Radcliffe, Stoke Mandeville and Wexham Park hospitals (see case study) – shortening the time for diagnosis and delivering cost savings
- Oxfordshire Transformative Technologies Alliance Science and Innovation Audit was published on 21st September - Oxford AHSN led on the Digital Health theme (see case study)
- Oxford AHSN is a partner in successful applications for NIHR grants to create two MedTech and In Vitro Diagnostic Co-operatives (MICs)
- Work has started on two Innovate UK grants that have been awarded to Sarissa Biomedical – Oxford AHSN is a sub-contractor
- A study to evaluate Abbot i-STAT has commenced with South Central Ambulance Service
- Digital Health Roadmap will be launched next quarter

Informatics is supporting the AHSN's programmes and themes. The Information Governance Framework is being updated to take account of the General Data Protection Regulation that will be implemented next May. The Informatics team, in collaboration with the SIP team and partners, Arden and GEM CSU and GM AHSN, is undertaking three strategic projects on behalf of NHS England to measure and improve digital capability in the NHS.

PPIEE held a very well attended and positive Leading Together workshop for people with learning disabilities.

Patient Safety goes from strength to strength. The Maternity Clinical Network is fully integrated in the theme and is undertaking a huge programme of work – eg harmonising oxytocin protocols across the maternity units in the region, a programme to reduce incidence of still births and a project to reduce the number of Never Events. The sepsis programme has developed measures for determining the impact of

sepsis programmes – these measures are now being used nationally (see Case Study). Data from the project to improve hydration of care home residents is showing a reduction in the incidence of UTIs and hip fractures. Negotiations over the SeeData Life contract are progressing positively.

The Head of Patient Safety and the Patient Safety Managers continue to offer QI training to all clinical project teams to develop their skills. 64 applications were received to join our new Q community; this includes 30 people new to the patient safety team.

We are delighted that Steve MacManus, CEO of Royal Berkshire is chairing the Patient Safety Oversight Group.

Key Milestones – progress to date

Programme/Theme	Key milestones 2017/18	Q2 Progress
Corporate	Oxford AHSN relicensing Procurement contract Application for OLS funding	The process for relicensing AHSNs from April 2018 is becoming clearer. Procurement contract is on track – confirmation September 2017. OLS funding has been confirmed.
Best Care	Secure funding for clinical networks Close networks that cannot secure funding	Five pre-existing networks and one new clinical network funded. Three networks closed.
Clinical Innovation Adoption	5 more innovation adoption projects in final stage of deployment 25 more innovators trained on Practical Innovation course	5 more new projects started in Q2 20 more innovators signed up for the September Practical Innovation course
Strategic and Industry Partnerships	One new joint venture or industry partnership	Several options are under consideration
Informatics	Bid for Digital Innovation Hub	On track
PPIEE	Plan for sustainability beyond March 2018	Ongoing
Patient Safety	Three programmes showing safety improvement	On track
Stakeholder Engagement and Communications	Partner showcase events	Five events during May and further stakeholder events continue to be delivered at a variety of locations across the year

Key Performance Indicators (KPIs)

Programme	High level KPIs (measured annually unless otherwise stated)	As at Q2
Best Care	TBC, following consultation process – update will be provided in Q1	KPIs remain in discussion within senior AHSN team. Work remains on going to identify funding opportunities beyond March 18
Clinical Innovation Adoption	Average number of Community/Mental Health Trusts and Community adopting each innovation	
	• Planning to implement	90%
	• Implemented	42%
	• Participating	100%
Clinical Innovation Adoption	Average number of Acute Trusts adopting each innovation	
	• Planning to implement	95%
	• Implemented	52%
	• Participating	100%
Strategic and Industry Partnerships	Amount of investment leveraged in the region (including savings)	£5,466,048
Strategic and Industry Partnerships	Number of people employed in life science industry	19,753
Patient Safety	Maintaining and increasing the amount of premature babies born in a level 3 unit (≤27 weeks gestation or ≤28 weeks in multiple pregnancy, or estimated fetal weight of 500g)	The improvement in the percentage of premature babies being born in a Level 3 unit has remained steady for this quarter (between 75%-80%)
Patient Safety	Increase adoption of AWOL project (Safer Leave) in Berkshire Healthcare	The Safer Leave project has been on going on two wards at Milton Keynes and progress is currently

Programme	High level KPIs (measured annually unless otherwise stated)	As at Q2
	and CNWL to increase return rates by 50% on all acute wards	being reviewed. Sustainability has been achieved in Oxford Health with all seven wards showing an on-time return rate of 84%. Sustainability has been achieved at Berkshire.
Stakeholder engagement	Number of subscribers to the Oxford AHSN Newsletter and Twitter followers per quarter	The number of Twitter followers 3,226 at the end of the quarter (3,025 at the end of Q1 2016/17) An additional 400 Newsletter subscribers signed up by the end of Q2 – total 2,679.
Stakeholder engagement	Number of visits to Oxford AHSN website per month	KPIs to be reviewed to take account of additional websites – consolidation of stats planned for Q3
Stakeholder engagement	Number of attendees at all AHSN events per quarter	C 300 people have attended events during Q2 (which included the summer months) – these included TheHill events, Living Well and the Patient Safety ED event

Finance

17-18 forecast expenditure (£4.87m) is £.76m higher than plan. Other Income of £0.79m from our Programmes accounts for this difference.

The forecast factors in prior year underspend brought forward of £.62m. Forecast revenue of £4.25m is £0.75m better than plan, largely attributed to Other Income Programmes & Themes.

Six months in to the new financial year we have just received the PO from NHS England for Oxford AHSN Patient Safety Collaborative. Letters to our local partners for contributions went out on 30th June 2017.

We have a robust five-year financial plan. We are working hard to fill the funding shortfall anticipated from April 2019 as NHS England reduces our funding further.

	Opening Plan	Forecast	Opening Plan	Forecast	Actual
Model Period Beginning	01-Apr-17	01-Apr-17	01-Apr-17	01-Apr-17	01-Apr-17
Model Period Ending	31-Mar-18	31-Mar-18	31-Mar-18	31-Mar-18	31-Mar-18
Financial Year Ending	**2018**	**2018**	**2018**	**2018**	**2018**
Year of the 5 Year Licence Agreement	**5**	**5**	**Q2**	**Q2**	**Q2**
	Opening Plan	Forecast	Opening Plan	Forecast	Actual
NHS England funding	2,819,507	2,819,507	1,409,754	1,409,754	1,409,754
Partner contributions	411,500	443,896	205,750	221,948	254,630
Other partner income	150,000	171,292	75,000	85,646	78,146
Other income - Programmes & Themes	0	790,150	0	349,807	325,650
HEETV income for continuous learning programme	118,300	28,960	59,150	28,960	28,505
Total income	**3,499,307**	**4,253,805**	**1,749,654**	**2,096,115**	**2,096,685**
Programmes and themes	3,002,766	3,670,279	1,681,536	1,739,522	1,637,799
Total core team and overhead costs	1,117,591	1,204,576	558,796	579,485	541,724
Total expenditure	**4,120,357**	**4,874,855**	**2,240,332**	**2,319,007**	**2,179,524**
Net Income/Expenditure	**621,050**	**621,050**	**490,678**	**222,892**	**82,838**
Programme funding previously committed	621,050	621,050	490,678	222,892	82,838
Surplus/(deficit)	**0**	**0**	**0**	**0**	**0**

Please note Forecast figures previously shown netted off against expenditure within Programmes & Themes is now shown gross in the table above

Risks and issues: No new risks and issues to report.

Dr Paul Durrands ACA CMILT

Chief Operating Officer, Oxford AHSN

Best Care

Programme Overview

Over the next quarter the challenge for the four clinical networks is to secure external funding beyond March 2018.

A fifth network - Inflammatory bowel disease and gastroenterology, has secured external funding from NHS and commercial partners for an ambitious three-year programme of work to enable the ICHOM patient outcome measures to be implemented across the region and identify and share best practice for the treatment of this debilitating condition. Professor Simon Travis (Oxford University) and Dr John Gordon (Hampshire Hospitals) have been appointed to provide clinical leadership. A project manager has been appointed and will join us in Q3. The programme has been transferred to Strategic and Industry Partnerships which ran the original ICHOM project and has extensive experience of managing relationships with commercial partners.

The networks continue to deliver their projects:

- The Anxiety and Depression Network had their highest recorded recovery rate of 57.2%
- New York Times reported on the work conducted through the Anxiety and Depression Network
- Annual EIP Matrix update across the South Region has been completed demonstrating service improvements
- LiveFit personal trainer findings presented to the Royal College of Psychiatrists International Congress
- CQUIN introduced to improve transport to post-diagnostic support groups for dementia
- Milton Keynes Memory Service now established and embedded
- A new patient information video - CT scans at Stoke Mandeville Hospital - released
- Four hospital sites now able to share historic radiology images

Anxiety and Depression Clinical Network

The network is now very good at recording problem descriptors (ICD-10 codes). Every service is over 90%, this is a massive improvement on the baseline of 40% and an important service transformation as it has been shown that there is a link between higher recovery rates and accurate recording of ICD-10 codes.

Last recovery rates data available for the whole of the AHSN network is for June which shows highest recovery rate yet at 57.2%. This is an amazing achievement considering the churn in the services as they are currently setting up new, integrated services (patients with long-term conditions and anxiety/depression) which involves transferring experienced therapists across as well as taking in larger numbers of trainees. We are expecting recovery rates to temporarily dip in the next quarter whilst new services are set up.

Numbers of patients moving to recovery continues to increase month on month with 1159 for the month of June (on average a 9% increase a month). Work on the Durability of Clinical Gains continues. Report on follow-up results currently in draft form to be presented at October workshop. Maintaining Therapeutic Gains (Patient Forum led) questionnaire awaiting final clearance from Audit before sending out to some 300 ex-service users in October. Development work for next phase of these projects (an app) has started and we are currently looking for funding.

An article published in the New York Times **was released in July that discusses the work conducted through the Anxiety and Depression Network.**

Dementia Clinical Network

The Dementia Clinical Network has continued to support its two best practice networks:

- *Care Home In-Reach Staff* – the network continues to back the projects that have come from this group. Projects include "Promoting Oral Care" and "Dementia Champions". Planning started to create a toolkit which covers the measurement of outcomes for such projects as well as project start up and implementation.
- *Post-Diagnostic Support* – CPD events included opportunities for teams to discuss services and set goals; where the majority of these improvement goals have been met. These include: planning and running more groups, increasing staff levels and improving data collection. Participants surveyed noted that many of the project teams had made service improvements as a result of attending the CPD events. It was evident in discussions that there was also a patient transport issue to and from post-diagnostic groups. Thanks to the efforts of the Dementia Network, t**he Thames Valley SCN has now introduced a CQUIN to improve the transport**.

The network's highly regarded webinar programme continues to go from strength to strength, with HEETV now funding the programme. The mailing list now holds over 360 people and as of September 2017, 43 sessions have been held with a total of over 900 attendees from multiple disciplines. The latest webinar in the programme was on the topic of Lewy Bodies. A recent survey completed by the network demonstrates a significant level of changes in clinical practice as a direct result of attending the webinars.

Milton Keynes Memory Assessment Service has now started a service for people with young onset dementia and their families as a direct result of and with the support of the Dementia Network. The service has been well received and Milton Keynes is now responsible for all activities. The implementation of this service would have reduced variation across our geography in terms of post-diagnostic support for this group of people.

The Driving and Dementia project continues to be explored – the use of telematics in the process of monitoring whether a person with cognitive impairment may stop driving. Plans for further studies are currently in exploration.

Memory services have been undergoing the Royal College of Psychiatry reaccreditation process with the facilitation of the network. The services have been sharing good practice and service improvements as appropriate. There are new standards for accreditation so achieving these is more challenging. New standards include enhanced recording of ethnicity so that better monitoring of BME patients can occur.

Early Intervention in Psychosis Clinical Network

In August, the network **conducted the annual EIP Matrix update for all teams across the Oxford AHSN area** and produced reports demonstrating delivery against NICE concordant interventions, based on CCQI thresholds, as well as caseloads and workforce. Comparisons against the previous year's data have been made and also with performance of EIP teams across South of England region. Particular successes reflected within the data include an increase in the number of clients being offered Cognitive Behavioural Therapy for Psychosis (CBTp) in Oxford (28% compared with 17% last year), Buckinghamshire (23% compared with 8%), and Berkshire (24% compared with 6%), and Family Intervention in Oxford (11% compared with 3%), Buckinghamshire (14% compared with 3%), and Berkshire (41% compared with 20%). All teams offered good or outstanding levels of smoking cessation: Berkshire (100%), Milton Keynes (95%), Oxford (77%), and Buckinghamshire (70%).

In conjunction with Wessex AHSN, work has been done to establish a format and a plan for preparatory work which will support the EIP Peer Review process which will be conducted in November. Colleagues from EIP

teams within Oxford AHSN will visit, and in turn be visited, by teams from Wessex to share good practice and develop service over the coming year.

Individual Placement Support (IPS) provision has been developed across the AHSN area with a series of well attended workshops (September) which encourage collaborative bids for national funding within STP footprints. As part of this, the Milton Keynes team has been supported in sharing best practice with the Central and North West London Centre of Excellence.

The pilot project (LiveFit Personal Trainer) was initiated in Berkshire EIP services in Reading and Slough. **The initial findings of this project were presented at the Royal College of Psychiatrists International Congress** in Edinburgh showing that all 14 participants consistently reported improvements across several key areas of the QPR post-intervention. Plans are in place to extend this to Bracknell and Newbury.

A new campaign and suite of materials aimed at young people has been instigated with the design agency Preface Studios and service user volunteers. The materials will include a website, leaflets and other collateral to help engage young people entering the service. Case studies and films are due to be created as part of a recruitment drive to seek clinicians to specialise in EIP.

Initial meetings took place with South Hill Park Arts Centre about developing a creative project to engage young people with first episode psychosis with a view to presenting an exhibition of work to challenge stigma and raise awareness.

Imaging Clinical Network

The patient information video project continues to grow with a new film released in the last quarter, bringing the total to six videos now published and referenced on Patient Information Leaflets and websites. The viewing figures also continue to grow with over 17,000 views overall. These videos demystifying the scanning process play a significant role in demystifying radiological procedures reducing patient anxiety, the number of scans and non-attendance rates.

The Teleradiology Project has now established connectivity between Oxford Universisty Hospitals, Royal Berkshire, Milton Keynes and Buckinghamshire Healthcare; allowing automatic access to historic scans and reports between trusts. While a quantitative analysis is still underway, the system is being well received anecdotally. A reporting network continues to be established and the structure of technical connectivity around governance, invoicing and payment is included. Once established and embedded, there are potential savings of approximately £400k per annum.

Lung Nodule Risk Stratification is a series of projects aiming to develop an Artificial Intelligence model that will allow a risk score to calculate for Lung Nodules Detected on Chest CT Scans. Overall this is expected to reduce the numbers of rescans for lung nodules by approx. 20%. An EIT funded project is well underway. This is a three-way collaboration between Oxford, Groningen and Heidelberg Universities. We have identified two out of three of the 3,000 relevant CT scans and are now progressing to marking up the data to be suitable for input and training the AI model. Additionally, a three-year NIHR funded grant will start in Q3 partnering Oxford University with hospitals in Leeds and Nottingham.

Clinical Innovation Adoption (CIA)

Even within this traditionally "slow" period of the year, the pace of activities and initiation of projects with the CIA programme has continued to accelerate with us now hitting a new high of 16 new innovations initiated within a year. This has been facilitated through a combination of a stable experienced team of professional and highly qualified project managers building on a well-laid foundation of regional and national reputation. We have also extended our activities to include international interactions within Europe which has opened up doors for contact with other innovation work streams, SMEs and the opportunity for funding to support our objectives of promoting and establishing innovation within the UK health market.

In addition to inititating a further five new innovation projects during Q2, we have also been:

- ramping up national involvement - attended and reviewed innovations from both the NHS Innovation Accelerator and Innovation and Technology TarrifTaf.

- co-developing a bid for the Innovate UK Digital Health Technology Catalyst call (£1mil bid) with Sleepio, Oxford Health and Buckinghamshire GP Federation

- independently reviewed 13 innovations of interest and put these through our innovation exchange (fluid review).

- meeting six SMEs to discuss commercial launch and midstream innovations.

- completing the IT learning platform and 75% of the content for the SMEs Guide to EU Market Access (EIT Health funded).

- recruiting, with the assistance of our Innovation Programme Champions (all ex-students spreading the word at their Trusts), a **third cohort of students on the Practical Innovation course** held at Bucks New University and funded by HEETV. The new intake started in September.

- talking to the BBC and other media about rheumatoid arthritis following visits by our 'angry hand' to Oxford, Reading and London (see cover image and below).

Table 1: Innovation Dashboard Update

2014-2017/18 Innovation Dashboard
300+ reviewed, 50 Clinical Innovations selected

Oxford Academic Health Science Network

10   9   12   16
2014/15   2015/16   2016/17   2017/18

16 ongoing projects 17/18

6 closed over 4 year period (not wanted)

8 Trusts involved **in 233** project interactions, **12** CCG interactions & **104** SMEs involved with projects

Trusts   CCGs   SMEs
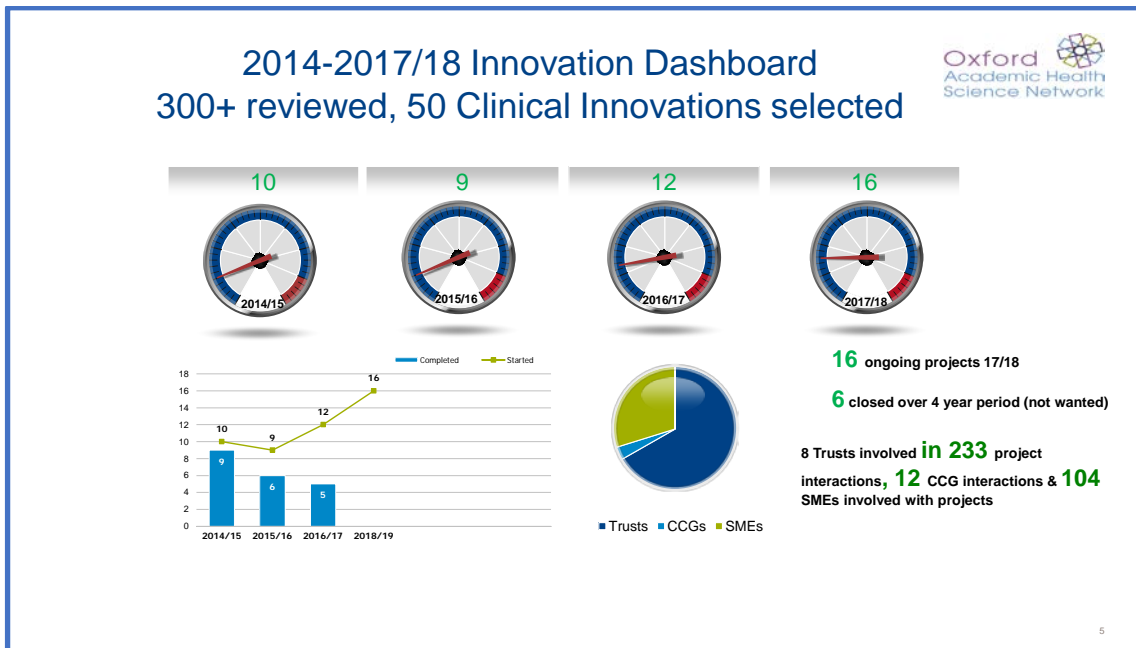
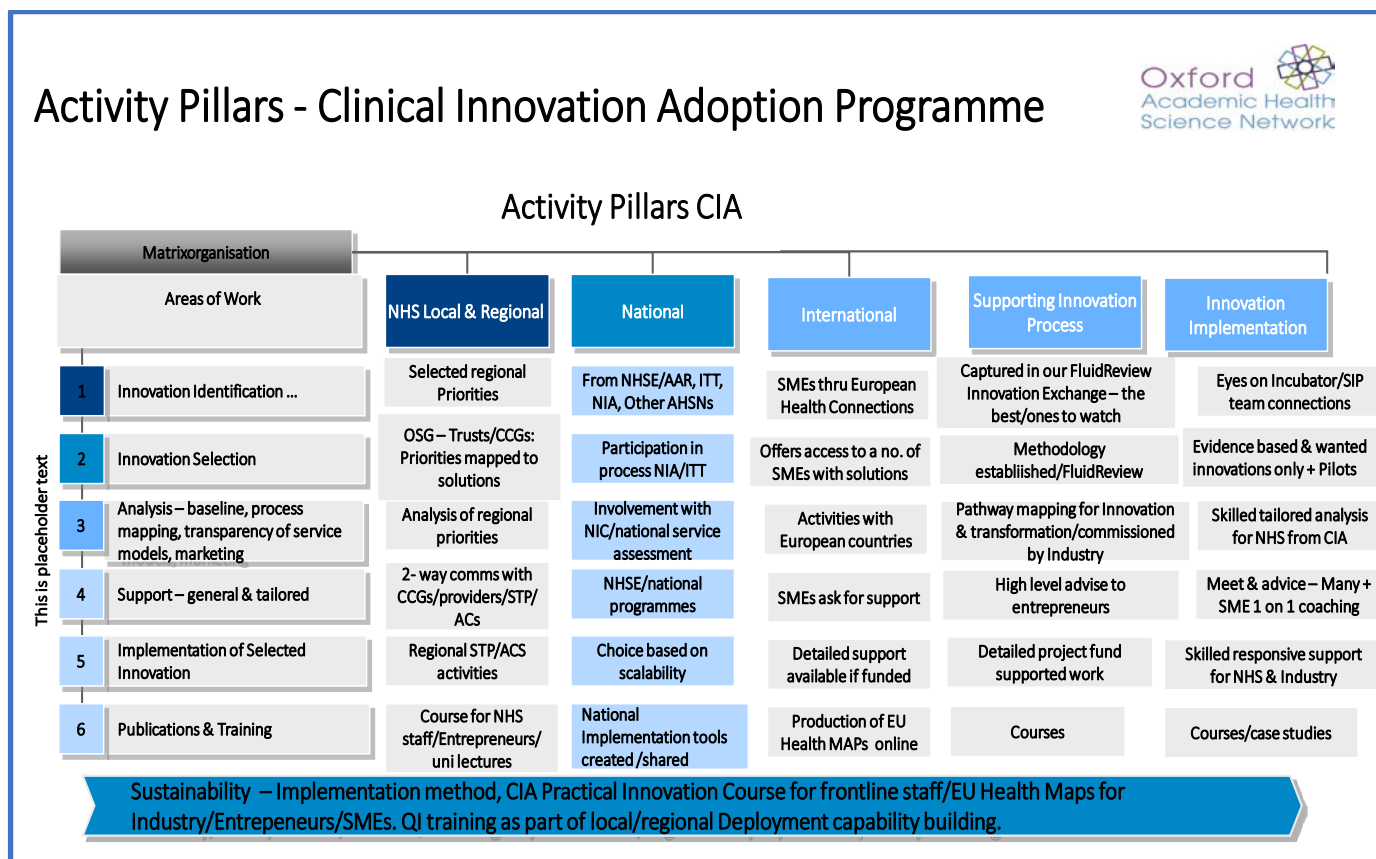**Highlighting mid-year internal programme review**

The focus on further increasing the quality of our outputs has resulted in a mid-year reflective review on our activities and categorisation into pillars of activities (see diagram below).

Table 2: Activity Pillars within the Clinical Innovation Adoption Programme

Activity Pillars - Clinical Innovation Adoption Programme

Oxford Academic Health Science Network

Activity Pillars CIA

Matrixorganisation					
Areas of Work	**NHS Local & Regional**	**National**	**International**	**Supporting Innovation Process**	**Innovation Implementation**
1 Innovation Identification ...	Selected regional Priorities	From NHSE/AAR, ITT, NIA, Other AHSNs	SMEs thru European Health Connections	Captured in our FluidReview Innovation Exchange – the best/ones to watch	Eyes on Incubator/SIP team connections
2 Innovation Selection	OSG – Trusts/CCGs: Priorities mapped to solutions	Participation in process NIA/ITT	Offers access to a no. of SMEs with solutions	Methodology establiished/FluidReview	Evidence based & wanted innovations only + Pilots
3 Analysis – baseline, process mapping, transparency of service models, marketing	Analysis of regional priorities	Involvement with NIC/national service assessment	Activities with European countries	Pathway mapping for Innovation & transformation/commissioned by Industry	Skilled tailored analysis for NHS from CIA
4 Support – general & tailored	2- way comms with CCGs/providers/STP/ACs	NHSE/national programmes	SMEs ask for support	High level advise to entrepreneurs	Meet & advice – Many + SME 1 on 1 coaching
5 Implementation of Selected Innovation	Regional STP/ACS activities	Choice based on scalability	Detailed support available if funded	Detailed project fund supported work	Skilled responsive support for NHS & Industry
6 Publications & Training	Course for NHS staff/Entrepreneurs/ uni lectures	National Implementation tools created /shared	Production of EU Health MAPs online	Courses	Courses/case studies

This is placeholder text

Sustainability – Implementation method, CIA Practical Innovation Course for frontline staff/EU Health Maps for Industry/Entrepeneurs/SMEs. QI training as part of local/regional Deployment capability building.

Table 3: Innovation Adoption Progress

| #	CIA Project Titles	Start	End		Project Description
13	Alcohol Hospital Service	Sep-15	Jun-17	Closed	Trusts, Commissioners and Local Authorities not committing to implementation.
15	Respiratory	Sep-16	May-17	Closed	Working with Precision Medicine Catapult to deploy a pheno-testing device for Asthma to GP Practices. Worked with SIP team & SME to produce bus case. PMC closed May 2017.
16	Fragility Fractures regional service - support to WPH for implementation - Phase 2	Jan-17	Dec-17	Plan to close	Slow progress - plan to close at end of year.
17	Innovation Course - BNU/HEETV - Cohort 1 (25)	Apr-15	**Feb-16**	**Completed**	Created a Practical Innovation Course for NHS staff. 1st cohort completed course.
18	Fragility Fractures regional service mapping with estimated savings that would be generated from deployment - Phase 1	Jun-15	**Jan-17**	**Completed**	Completed and shared.
19	Innovation Course cohort 2 (24) - Support by HEETV	Sep-15	**Jun-16**	**Completed**	Training NHS clinicians/managers to accelerate adoption/diffusion. 2nd cohort completed.
20	Alcohol Sign posting doc created with Council - Phase 1	Sep-15	**Jun-17**	**Completed**	Distributed and closed - Slough area.

#	CIA Project Titles	Start	End		Project Description
21	Falls Prevention - Phase 1 - regional analysis to determine which Falls projects to do in Phase 2	Sep-15	Nov-16	Completed	Regional group established. Agreed on data requirements & how we get it. National Falls Survey was reproduced for MH. All Trust analysis of performance, innovations was agreed.
22	Intra Operative Fluid Management - Phase 2	Apr-16	Sep-17	Completed	3 Trusts implemented/purchased IOFM equipment. Final report October.
23	Alcohol Nalmefene	Jun-16	Jun-17	Completed	Produced a national report for the NICE Implementation Collaborative Board.
24	Patient Monitoring	Jun-16	Jun-17	Completed	Implemented at 2 Trusts (GWH, BHT). Supported development of a new Patient Monitoring innovation designed by OUH.
25	Innovation Course cohort 3 (20)	Sep-16	Jun-17	Completed	Training NHS clinicians and managers to accelerate adoption and diffusion. 2nd cohort completed course.
26	Catheter Acquired Urinary Tract Infection - phase 2	Oct-16	Oct-17	Completed	Educational e-learning training videos - national product. Awaiting marketing.
27	Innovation Exchange - FluidReview	Dec-15	Sep-17	Completed	Now functioning for the entire AHSN.
28	Early Inflammatory Arthritis - early detection educational tool (GPs & patients) - PHASE 2	Jun-16	Sep-17	ongoing	In progress. Implementation and analysis.
29	Biosimilars	Jun-16	Mar-18	ongoing	Started with Biologics for EIA (Etanercept). Broadened through regional interest with the objective of encouraging adoption of Biosimilars on a joint-share agreement with CCGs.
30	Falls Project 2/Phase 2: FallSafe Bundles	Dec-16	Mar-19	ongoing	Selected FallSafe. Implementing at 4 Trusts.
31	Falls Project 1/phase 2: CLAHRC falls innovation regression testing for success.	Sep-16	Mar-18	ongoing	In progress; this model will be usable for providing evidence that an innovation had an impact.
32	Falls 3 project/phase 2: Stay in the Bay (falls innovation)	Jan-17	Mar-18	ongoing	In progress. Implementation and analysis.
33	Patient Safety – Wiresafe (ITP)	May-17	Jun-19	ongoing	Initiated through regional interest.
34	Atrial Fibrillation Project 1 - Excellence in AF (Bayer)	May-17	Mar-19	ongoing	Adoption adapted from another AHSN (Don't Wait too Anti-Coagulate - WoE AHSN).
35	Catheter Acquired Urinary Tract Infection QI Training	Apr-17	Oct-17	ongoing	Working with HEETV to get it embedded in our region.
36	Atrial Fibrillation Project 2 - Pharmacist Lead (Pfizer)	May-17	May-18	ongoing	New model of care provided by Pharmacist for AF patients within Primary Care supported by industry funding.
37	Atrial Fibrillation Project 3 - anti-coagulation project (Pfizer)	May-17	Mar-18	ongoing	New model for medicine optimisation keeping patients in their TTR.
38	Pat Safety innovation - Pneux Tracheal Tube (ITP)	Jun-17	Jun-19	ongoing	Innovation via Innovation Tariff.
39	Thrombectomy	Jun-17	Mar-19	ongoing	Working with Innovator; scoping.
40	EU Health MAPS I (map access tool phase 1)	May-17	Dec-17	ongoing	Working with entrepeneurs to accelerate access to UK & EU markets.
41	Heart Failure - treatment optimisation (Novartis)	Jul-17	Jan-19	ongoing	New project 2018 initiated from regional interest.
42	Pat Safety Innovation - Non Injectable Connector (ITP)	Jul-17	Jun-19	ongoing	Innovation via Innovation Tariff.
43	Sunovion - Mental Health and Physical Health	Jun-17	Mar-18	ongoing	Exploration of feasibility. Project (weight/diabetes outcomes analysis).
44	National MSK activity collation	Jul-17	Nov-17	ongoing	Report to be collated of AHSN MSK activities for national STP/ACs.
45	Surgical - benign prostatic hyperplasia - Urolift (ITP)	Sep-17	Jun-18	ongoing	Innovation via Innovation Tariff MK, OUH (one stop shop being created), FPH (no help required), RBH, WPH (working to implement), BHT (not interested).

#	CIA Project Titles	Start	End		Project Description
46	Atrial Fibrillation - Detect Innovation (ITT)	Sep-17	Mar-18	ongoing	Devices supported by NHSE procurement.
47	Activity Pillar to be developed for future years.	Sep-17	2023	ongoing	Planned.
48	Innovation Course cohort 3 (24)	Sep-17	Jun-18	ongoing	Training NHS clinicians & managers to accelerate adoption and diffusion started.

Patient Safety Devices

Project Overview

The CIA team in conjunction with Oxford AHSN Patient Safety Collaborative is working closely with two NHS Innovation Accelerator (NIA) Fellows to implement three patient safety devices within critical care and operating theatres across the Oxford AHSN region. The devices provide engineered solutions that significantly reduce the possibility of human error and improve the safety of the most critically ill patients. The diagram below shows the three devices:
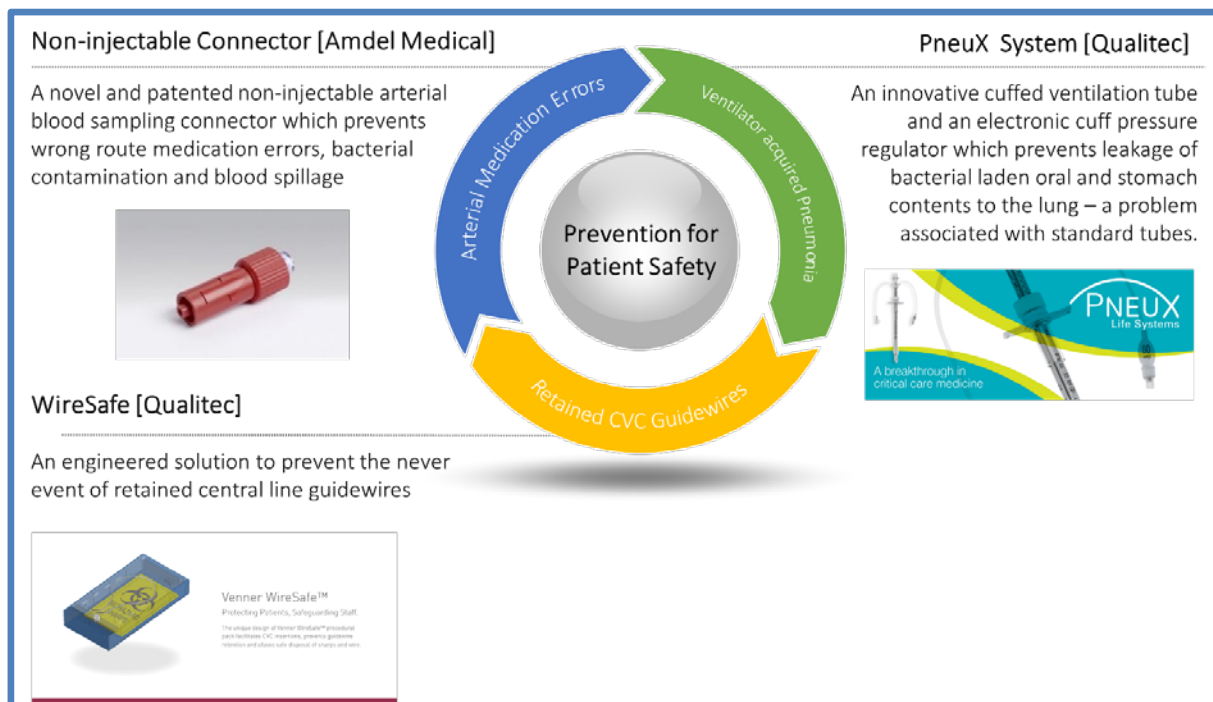
The PneuX System and the Non-Injectable Arterial Connector are two of six innovations that from April 2017 attract the new NHS England Innovation and Technology tariff. The WireSafe, while not attracting this tariff, has been recognised by the NHS Innovation Accelerator programme.

Developments in Q2

Engagement

The Oxford AHSN is working with all Trusts across the region to provide support and guidance in implementing these devices.

Engaged Trusts	
Frimley Health NHS Foundation Trust	Royal Berkshire NHS Foundation Trust
Milton Keynes University Hospital NHS Foundation Trust	Oxford University Hospitals NHS Foundation Trust
Great Western Hospitals NHS Foundation Trust	Buckinghamshire Hospitals NHS Trust

Implementation Packs

- The original implementation support packs have been updated with new information, such as updated minimum dataset requirements from NHS England and additional challenges to adoption that have been encountered both within the Oxford AHSN region and other AHSNs

- Feedback on these implementation packs has been extremely positive with requests to share coming from a number of organisations, other AHSNs, as well as other companies covered by the Innovation and Technology tariff

- The Oxford AHSN has had several requests from other AHSNs to discuss in detail the approach taken to engage with provider organisations and how to implement the devices.

Implementation of the devices

- The AHSN continues to engage and meet with local teams to encourage and assist with the adoption of these devices

- To date, four Trusts have committed to using, or are already using, one or more of the devices (Royal Berkshire; Great Western; Milton Keynes; Buckinghamshire Healthcare) See table below for more detail

Trust	PneuX	WireSafe	NIC
Royal Berks	Implemented Sept 2017	Implemented August 2017	Implemented June 2017
Great Western Hospitals	Implemented July 2017	Not progressing	Implemented June 2017

Bucks	Started real world trial of PneuX. Control phase: data collection underway; PneuX phase scheduled for Q3.	Order placed for small trial at 2 hospitals	Not progressing - Currently have SafeDraw system in place.
Frimley	Not progressing	Not progressing	Agreement from theatres to implement; awaiting decision from ICU.
Oxford	Meeting with supplier in November	Some interest, but concern regarding potential cost pressure; AHSN has offered to draft business case	Not progressing
Milton Keynes	Not progressing	Discussing with current supplier of CVC packs to see if WireSafe can be included; awaiting end of current contract	Due to be implemented September 2017

Activities for Q3

- Meetings are scheduled with provider organisations to continue to support the uptake of the devices.

- The AHSN will seek feedback from Trusts regarding the implementation process and support provided.

Fragility Fractures

Estimated End date: December 2017

This project is working with a number of Trusts to implement new or expand current Fracture Liaison Services (FLS). These services ensure eligible patients are assessed after sustaining a fragility fracture and offered treatment, and in doing so the potential for secondary or subsequent fractures is reduced. This in turn has a positive impact on the number and cost of unplanned hospital admissions, and makes significant reduction in morbidity and mortality in older people.

The Clinical Innovation Adoption team has worked with local services to review and audit provision. Across the region service provision ranges from no service to full service provision.

As well as patient benefits, FLS has the potential to generate significant financial savings across health and social care. Across the Oxford AHSN region, over five years, these services could generate nearly £13m savings. The table below outlines these five-year savings by CCG, if full services were in place, alongside the savings that will be realised with the current level of service.

Table: Potential five-year savings by CCG (includes health and social care)

	Total Fractures Saved	Total Financial Savings (£)	% Current Service Provision	Benefits Realisation based on current FLS provision (£)
Aylesbury Vale	168	1,381,271	35	1,361,399
Chiltern	289	2,508,439		
Berkshire East	291	2,543,715	0	0
Berkshire West	341	2,867,033	40	1,146,813
Milton Keynes	163	1,375,427	0	0
Oxfordshire	533	4,658,467	100	4,658,467
TOTAL	**1785**	**15,334,352**		**7,166,679**

The Oxford AHSN has continued to seek engagement and to work with Trusts, and has worked closely with the National Osteoporosis Society (NOS). The AHSN is actively working with clinical teams within Buckinghamshire Healthcare and Wexham Park Hospital to develop the business cases for their Fracture Liaison Services. Milton Keynes Hospital is being supported by the NOS and has not taken up the offer of support from the AHSN. Commissioners within Berkshire West previously advised they would not be investing further in the Fracture Liaison Service that is run from the Royal Berkshire Hospital.

It has been reassuring to see falls and fracture prevention highlighted in STPs and the need to ensure pathways for FLS and falls prevention fit seamlessly together is crucial.

 Q2 update and activities for Q3

- An audit has been undertaken at Wexham Park Hospital to understand the opportunity for identifying appropriate patients for FLS within fracture clinics. This has helped inform the business case for the service

- To date, the Oxford AHSN has been unable to secure managerial engagement at WPH to assist with progressing the business case

- Meeting held with BucksHT's FLS and the Falls and Bone Health service to understand the synergies between the services

- The Oxford AHSN will be attending a fragility fractures study day hosted by NOS in September

- Business cases will be completed with a view to closing at the end of the quarter

UroLift Project

This project aims to support Trusts to implement UroLift as an alternative treatment option for men with benign prostatic hyperplasia (BPH), or enlarged prostate. UroLift can be undertaken as a day case procedure under local anaesthetic, as an alternative to TURP or HoLEP, and has the benefit of not having the same potential side effects of the other more invasive surgery. UroLift is one of six innovations that

attract NHS England's Innovation and Technology tariff from 2017/18. The procedure has a new OPCS code that will ensure Trusts are appropriately reimbursed for the procedure.

All Trusts within the region have been contacted, with all but one (BucksHT) wishing to implement this treatment option if they are not already offering it.

Q2 update and activities for Q3

- Meetings held with clinical and operational teams at RBH and Milton Keynes

- Business case for RBH service has been drafted and sent to the Trust team for review and progression

- Work has started on developing the business case for the service at Milton Keynes

- Continued engagement with NeoTract (company who supply UroLift)

- Draft implementation pack has been written and sent to UroLift for their consideration

- Work with those Trusts wishing to implement a one stop clinic to support the modelling of such a service and development of business case, if required

Catheter Associated Urinary Tract Infection (CAUTI) Project

E-learning

The e-learning package has gone through user testing and final changes and is now complete. The package consists of two modules:

1) Promoting best practice in continence care

2) Promoting best practice in catheter care
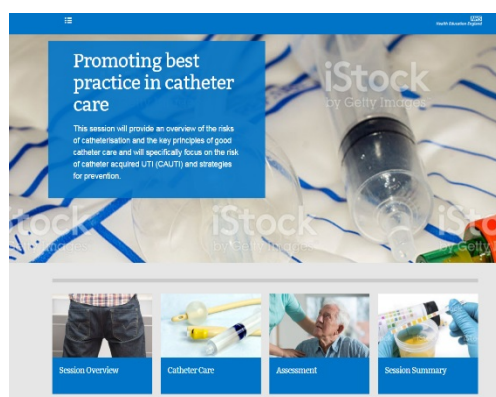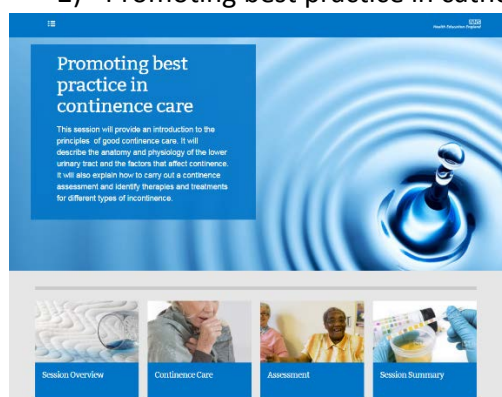
The package was launched nationally w/c September 18th 2017. A detailed communications plan has been developed with e-learning for Health and Health Education England.

Project closure event

This is being planned for Q4 and will showcase the learning from the CAUTI project and share the various elements of the CAUTI toolkit with partners from across the region.

Whilst the CAUTI project will close in Q4 of 2017 the AHSN will develop an offer to support the remaining Trusts in our region, aligned to the priorities within the STP.

Heart Failure Project – Berkshire East Heart Failure Optimisation

Optimisation Project

The Berkshire East CCG Federation has 2630 patients on the heart failure register across the three CCG areas. The prevalence rate for heart failure in Berkshire East at 0.59% is considerably lower than the national average of 0.76%.

In 2016/17 there were approximately 700 admissions with a primary diagnosis of heart failure from the Berkshire East CCG Federation. There are long lengths of inpatient stay (11.2 days versus national average of 7.4) and high rates of non-elective admissions and readmissions compared to the national average.

The Oxford AHSN will develop a joint working agreement with Novartis for the delivery of a heart failure optimisation project in Berkshire East. The project aims to improve quality of life, improve heart failure mortality, reduce emergency admissions and reducing length of stay for heart failure patients.

The project will include a case-finding element, identifying patients with heart failure who are currently not included on practice heart failure registers. This will also increase the recorded prevalence of heart failure.

Project outline

The project will be funded by Novartis through a joint working agreement with Oxford AHSN. Key stages of the project will include:

- Clinical audit

- Desk-top review of patient records by heart failure nurse specialists

- Face to face review of patients by heart failure nurse specialists

- Re-audit

Expected outcomes

1) 75% of Berkshire East practices (36 practices) engage with the project

2) Heart failure prevalence increases to 0.65%

3) 1500 patients with LSVD HF have a desk top review

32

4) 750 patients have their treatment optimised

5) Reduction in emergency admissions for heart failure to national average

6) Reduction in length of stay for patients admitted with heart failure to national average

Key project milestones

Milestone	Date
Develop PID	Complete
Sign off PID	20th September 2017
Develop JWA	October 2017
Sign JWA	December 2017
Practice recruitment	January 2018
Project launch	February 2018
Project Evaluation	March 2019

Atrial Fibrillation workstream

Developments in Q2

Excellence in AF project – Buckinghamshire

The Excellence in AF project continues to progress well in Buckinghamshire. The project is being collaboratively delivered by the Buckinghamshire CCGs, Buckinghamshire Healthcare Trust, Oxford AHSN, Interface Clinical Services and Bayer Plc. The AHSN has developed a joint working agreement with Bayer which will provide the AHSN with additional Quality Improvement resource to assist the GP practices in project delivery.

There are 30 practices signed up, 29 of which have had audits completed. Practices are well underway with their quality improvement activities which include developing processes for ensuring the ongoing review of patients on DOACs.

Consolidated audit data is not yet available but the latest data (around 50% of practices) suggested that:

- 19% of high risk patients are not receiving an oral anticoagulant

- 11% of DOAC patients are not receiving the appropriate dose

- 4% of AF patients are not on the AF register

Significant work has been carried out by practices and specialist pharmacists from Buckinghamshire Healthcare Trust and the project team are confident that a significant improvement will be demonstrated following the re-audit.

Excellence in AF project – East Berkshire

Excellence in AF launched in East Berkshire in July 2017. The project is delivered under the Bayer JWA with quality improvement and face to face review support being provided by QuintilesIMS.

23 practices have signed up to date with 11 audits completed.

The CCG are aiming to get another 15 practices signed up by end October.

Pharmacist led anticoagulation initiation service in primary care.

The project went live in July 2017 delivering a service across eight practices in Berkshire with a further practice coming on line in September and a further two in November.

The expected outcomes of the project are:

- An increase in anticoagulation rates in participating localities

- Greater GP and patient satisfaction

GP feedback to date has been positive and the pharmacists have also found it to be a positive experience.

Early data shows that for the first five weeks for the project:

- 134 patients were reviewed

- 65 were initiated on oral anticoagulation

- 2 patients had their existing anticoagulation adjusted

Extrapolating forward to the end of May 2018 there is the potential to review 1200 patients and initiate therapy in 600, potentially preventing 19 strokes.

Oxfordshire Anticoagulation Optimisation Project

Significant progress has been made in Q2. Concerted efforts were made to target practices with poor TTR to invite them to take part in the project. Currently the specialist pharmacists have engaged with 31 practices offering them tailored support around anticoagulation and the review of patients with poor TTR. Feedback from practices has been excellent, particularly around the educational support. Early data shows an improving trend in TTR.

The project has benefited from a £10k industry grant which has been offered to practices to backfill educational activities related to the project. Eight practices have now applied to access these funds.

Consideration is now being given to future commissioning of this service and what shape the service might take in 2018/19.

Mobile ECGs

The CIA team has engaged all CCGs, with the exception of Bedfordshire, in the mobile ECG or 'detect' project. Specifications of devices have been shared with CCGs along with the evidence base and suggestions for how they may be used in AF detection pathways.

CCG requests have been collated and submitted. However, a delay in the signing of the national business case means that the devices have not yet been centrally procured.

Early Inflammatory Arthritis

Overview summary

Rheumatology teams across the Oxford AHSN region have been bought together to form an Early Inflammatory Arthritis (EIA) Network focused on improving secondary services for EIA patients, and improving patient and GP awareness of the symptoms of EIA and the risks and consequences of delayed diagnosis and treatment.

Challenge identified and actions taken

There is strong evidence to suggest that if inflammatory arthritis is identified, diagnosed and treated at an early stage, then patients are less likely to suffer debilitating irreversible joint damage. Nationally, there is evidence that patients with inflammatory arthritis experience a multitude of unnecessary delays between symptom onset, presentation in primary care and eventual referral, diagnosis and treatment. Recognising a clinical need in this area, the Oxford AHSN has bought together healthcare professionals from across the region to form an Early Inflammatory Arthritis network. Led by Professor Peter Taylor the network has had engagement from rheumatology consultants; registrars; specialist nurses and pharmacists. Over the first 15 months the network has focused on five core workstreams based on improving care for EIA patients (see diagram below)

EIA Network	Tasks	Acheivement	Workstream Status
Rheumatology teams in 5 Acute NHS Trusts in the Oxford AHSN region		Accountable for success of individual workstreams	
1 Understand variation in practice in secondary care	• Map EIA pathways across the region • Analyse service outcome data against NICE quality standards	• Service baselines established • Variation in practice and areas of service improvement highlighted • Data used in local business cases for service improvement	Complete
2 Optimise EIA pathways in line with "best practice"	• Supporting partner trusts to move to "best practice tariffs"	• 2 trusts implemented "best practice tariff" with one other trust currently transitioning	Complete
3 Understanding variation in workforce across region	• Audit staff levels at partner trusts around consultants, registrars and specialist nurses	• Audit used to highlight variation in staff workforce across the region • Data used in business case to secure 3 new rheumatology nurse posts	Complete
4 Adoption of biosimilars in Rheumatology	• Supporting local partner trusts in switch program for etanercept	• All trusts started patient-centric, biosimilar etanercept switches • Since biosimilar launch (Feb 16) estimated savings of £800k across the region	Ongoing
5 Improving awareness of EIA in patients and primary care	• Develop video campaign to address the need for awareness and education around	• Working with ICC-HC productions and an engaged patient group currently developing video content • Engaging GPs to understand best format and channels through which to target our primary care resources	Ongoing

Overview of the workstreams in the Oxford AHSN Early Inflammatory Arthritis Network

Impacts to date

The formation of the network has given rheumatology leads across the region a forum to share best practice, to share resources and codevelop plans for improving care for EIA patients across the region.

In addition, the workstreams described have delivered some specific benefits in a number of trusts:

- Additional rheumatology nurse posts authorised, which once training is complete will increase capacity and the number of EIA clinics offered. Allowing more people with potential EIA to be seen by a specialist and receive disease modifying drugs at an earlier stage

- Sharing information and planning resources to free up time in local clinical teams to spend more time improving services for patients.

    o   Business cases
    o   Patient tracking tools and databases
    o   Patient information
    o   Shared care guidelines

- Identification of areas needing improvement, highlighting where investment is required, and helping teams to make the business case locally for support to improve care for patients

- Through working with patients to switch them from branded biologic etanercept to biosimilar etanercept local teams in the EIA network have saved their trusts over £100k in the past 8 months.

Q2 Activity

Patient awareness campaign

The Oxford AHSN, National Rheumatoid Arthritis Society and Sandoz partnered on a patient awareness campaign called "Angry Hand" to raise awareness about early RA.

The campaign started in early September with a giant blue hand visiting shopping centres in Oxford and Reading and then the Cutty Sark in London.

The hand was voiced by a hidden comedian who helped engage with the public and raise awareness of RA and what to do if they experience symptoms of the disease.

Events were covered well by local and regional media including the BBC - see links to some coverage:

- Get Reading - see here

- Oxford Mail - see here

A campaign video covering footage from all the events will be produced for launch on World Arthritis Day Oct 12th 2017 on website www.angryhand.com

GP education

- GP e-learning module for EIA is under development. This will be launched on the Health Education England e-learning for health web platform.

- Content for the learning is brought together by GPs and rheumatologists.

Ongoing work

- The AHSN is collaborating the Sandoz, a pharma company to develop patient and GP education resources focussing on early inflammatory arthritis.
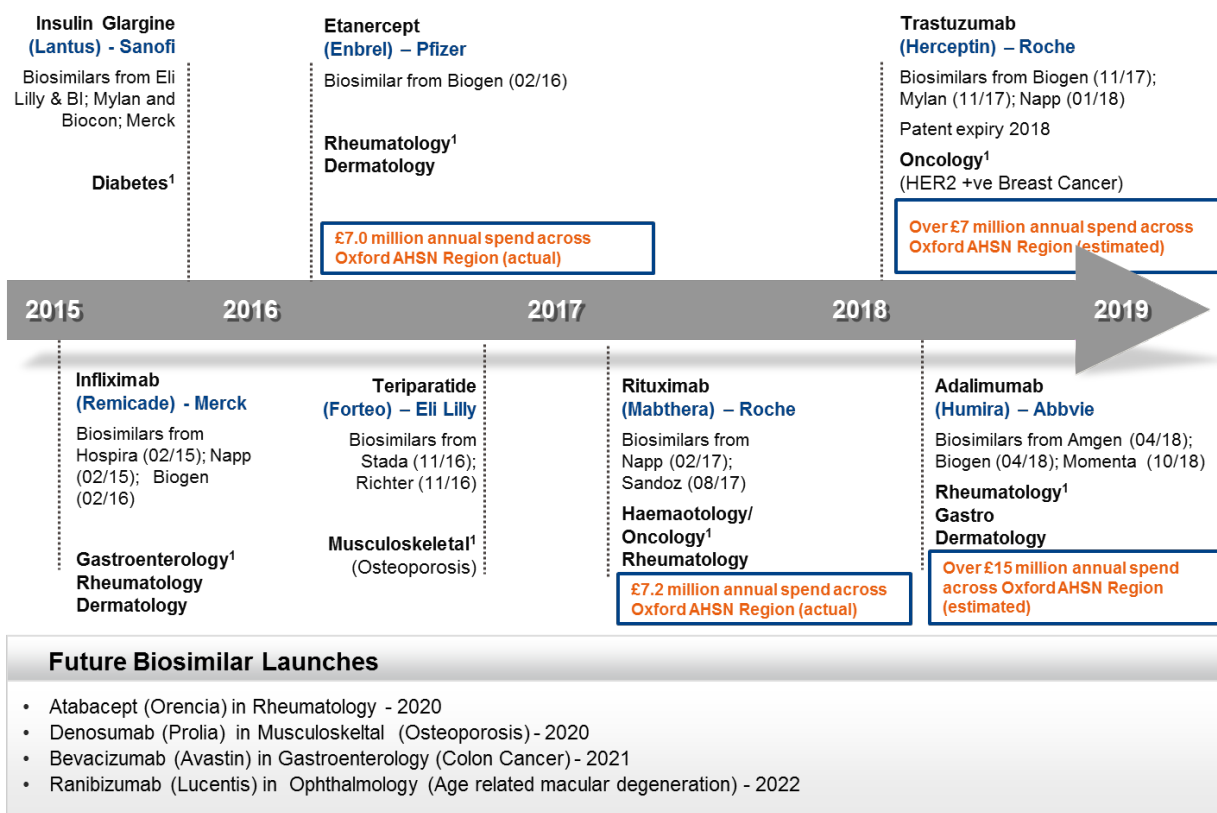
- In addition, through the joint working we are looking to develop educational resources for patients around biosimilars.

Biosimilars

Participating trusts: Frimley Health (Wexham Park), Great Western Hospitals, Buckinghamshire Healthcare, Royal Berkshire, Milton Keynes University Hospital; Oxford University Hospitals

Overview

The aim of the project is to support regional partners to take advantage of the regional opportunity offered by the introduction of biosimilars. This project has support the introduction of biosimilar Infliximab and etanercept already and is now focusing on future biosimilars in the pipeline below.

Insulin Glargine (Lantus) - Sanofi
Biosimilars from Eli Lilly & BI; Mylan and Biocon; Merck

Diabetes[1]

Etanercept (Enbrel) – Pfizer
Biosimilar from Biogen (02/16)

Rheumatology[1]
Dermatology

£7.0 million annual spend across Oxford AHSN Region (actual)

Trastuzumab (Herceptin) – Roche
Biosimilars from Biogen (11/17); Mylan (11/17); Napp (01/18)
Patent expiry 2018
Oncology[1]
(HER2 +ve Breast Cancer)

Over £7 million annual spend across Oxford AHSN Region (estimated)

2015 2016 2017 2018 2019

Infliximab (Remicade) - Merck
Biosimilars from Hospira (02/15); Napp (02/15); Biogen (02/16)

Gastroenterology[1]
Rheumatology
Dermatology

Teriparatide (Forteo) – Eli Lilly
Biosimilars from Stada (11/16); Richter (11/16)

Musculoskeletal[1]
(Osteoporosis)

Rituximab (Mabthera) – Roche
Biosimilars from Napp (02/17); Sandoz (08/17)

Haemaotology/ Oncology[1]
Rheumatology

£7.2 million annual spend across Oxford AHSN Region (actual)

Adalimumab (Humira) – Abbvie
Biosimilars from Amgen (04/18); Biogen (04/18); Momenta (10/18)
Rheumatology[1]
Gastro
Dermatology

Over £15 million annual spend across Oxford AHSN Region (estimated)

Future Biosimilar Launches

- Atabacept (Orencia) in Rheumatology - 2020
- Denosumab (Prolia) in Musculoskeltal (Osteoporosis) - 2020
- Bevacizumab (Avastin) in Gastroenterology (Colon Cancer) - 2021
- Ranibizumab (Lucentis) in Ophthalmology (Age related macular degeneration) - 2022

Patient education

Oxford AHSN and Sandoz are partnering on a project to develop a video to be used to help reduce patient anxiety around switching from originator drugs to biosimilars. This should be ready in October 2017.

Haematology and oncology

Working with TV Chemotherapy group to look at regional implementation of biosimilar rituximab.

Using OUH implementation plan other trusts in the region will be looking to adopt biosimilar rituximab either for all patients; for all new patients or not adopt.

Currently working with pharmacy leads at each trust to get access to prescribing data through either defined dataset or Aria e-prescribing system.

Planning to run questionnaire before and after implementation to unpick barriers to implementation.

Rheumatology

All trusts currently using biosimilar etanercept except for Bucks. AHSN is supporting Bucks to remove barriers to adoption.

Currently working with Rheumatology network to identify future needs in clinical training around biological medicines.

Intra-Operative Fluid Management Technologies

Estimated End Date: November 2017

Participating Trusts: Frimley Health (Wexham Park), Great Western Hospitals, Buckinghamshire Healthcare, Royal Berkshire, Milton Keynes University Hospital

Intra-operative Fluid Management technologies support anaesthetists in optimising fluid levels in patients undergoing high-risk surgery. The Oxford AHSN is supporting a regional network of anaesthetists and theatre staff from six acute trusts enabling them to make better use of IOFM technology, overcome barriers to adoption and establish a consistent, structured approach to IOFM use. The objectives are to standardise the use of the technology in all surgical cases of emergency laparotomies, major elective colorectal surgeries, free flaps and hip revisions.

Over three years this project has aligned closely with both national and supra-regional quality improvement initiatives to deliver significant region-wide improvements in care. These include:

- Reducing the median length of stay for emergency laparotomies by almost two days

- Reducing mortality rates by more than 4% in three out of five trusts

- Achieving mortality rates below the national average for emergency laparotomies at four out of five trusts

As well as supporting frontline NHS staff this work is influencing national policy-makers. The project's Phase 1 Benchmarking Report highlighted barriers to clinical adoption. It was referenced in the NICE review of Medical Technology Guidance 3 (page 5).

Activity over last quarter

Final report writing

- Oxford AHSN has been closing off action this project and writing up the final report for this project, to capture learning points and make recommendations for the future

Regional review meeting

- Oxford AHSN brought together consultants anaesthetists from each engaged trust in the region to review the status of local IOFM projects and to determine the plan of action for project reporting and closure in May 2017

IOFM training and education

- Oxford AHSN has facilitated several IOFM roadshows at Great Western; Wexham Park; Milton Keynes. Unfortunately Bucks and Reading have been unable to commit to supporting the delivery of this training.

- Roadshows typically included AHSN presentations on regional usage and project plans; talks from clinical advocates of IOFM and talks and presentations from suppliers of the technology

- Surveys to identify training needs conducted at 4/5 trusts engaged – AHSN working with suppliers to address training needs of anaesthetists across the region

IOFM utilisation

- Collection of data for IOFM use in elective gastrointestinal surgeries remains a challenge with only two trusts able to collect and report on this data robustly

- In last quarter, the focus has been on collecting NELA data for the years over which the AHSN IOFM project has been running.

  - The project target was to see anaesthetists use IOFM in more than 75% of cases of emergency laparotomies across all trusts in the region (as well as free flaps, revision hips and elective colorectal surgeries at agreed trusts depending on case mix)
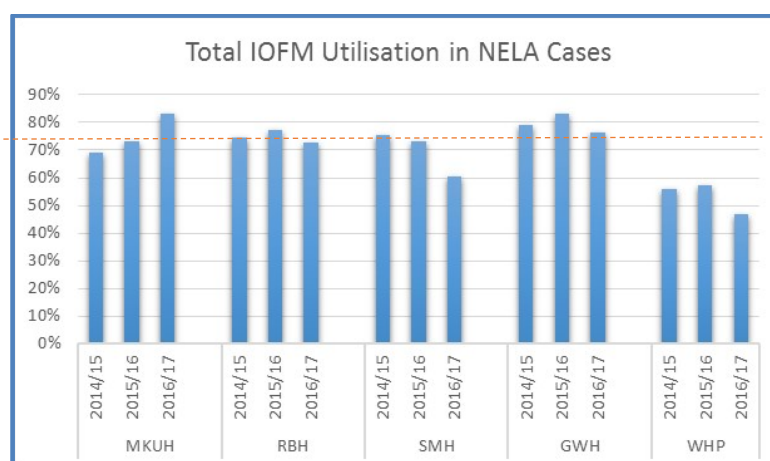

Figure 1 Total IOFM utilisation across the AHSN region in emergency laparotomies plotted over the years in which AHSN IOFM project has been running. Note: This is only emergency cases and numbers utilisation is expected to be somewhat higher in these cases as the evidence is stronger

1. **Learning points to be explored in the final report**
   - Optimising usage

     o Whilst many clinicians see the value in using IOFM technology, its adoption is affected by factors including patient condition, procedure type and appropriateness/availability of IOFM technology.

     o Oxford AHSN worked with local partners' fluids leads to embed IOFM in local policies.

   - Evidence of effectiveness

     o Many clinicians accept that evidence justifies IOFM use to improve outcomes of high risk surgery. However, some are still awaiting a conclusive answer from a randomised control trial.

     o The AHSN conducted a comprehensive literature review and summarised the evidence. This helped clinicians agree where IOFM should be used.

   - Access to IOFM equipment

     o Some trusts had limited access to IOFM monitors

     o The AHSN supported trusts to develop business cases and secure executive sponsorship to procure 13 new IOFM monitors taking the total in the region from 86 to 99 (a 15% increase).

   - Training

     o Junior anaesthetists expressed an interest in learning how to use IOFM technology and the lack of opportunity to train/use monitors.

     o The AHSN facilitated structured training.

   - Tracking

     o A significant issue for many trusts was that IOFM usage is not recorded accurately in theatre systems and the appropriate code Y73.6 is rarely used. This data is important in enabling trusts to optimise usage

     o Plans have been made to modify theatre systems to allow more accurate recording, reporting and coding of IOFM usage.

2. **The AHSN looked to support work to optimise IOFM use in selected high-risk surgery (emergency laparotomies). Over the course of the project:**
   - All trusts in the region utilising IOFM above national average

   - Four out of five trusts achieved Oxford AHSN utilisation target of 75%

3. **Aligned closely with both national and supra-regional quality improvement initiatives, this project contributed to deliver significant region-wide improvements in care:**
   - The median length of stay for emergency laparotomies reduced by almost two days

- Three out of five trusts reduced mortality rates by more than 4%

- Four out of five trusts currently have mortality rates below the national average for emergency laparotomies.

Falls Prevention Project

Estimated End date: March 2018

FallSafe Care Bundle Project: The FallSafe approach is to complete multifactorial assessment and intervention upon a patients' admission to a care setting to identify and treat the underlying reasons for falls and to ensure preventative steps have been taken to ensure patients do not fall while in the care setting. Many of the care bundles are already in hospitals' policies and protocols, but they are not being delivered to patients nearly as often as they should or as a 'packaged innovation' solution. This project is working with Oxford Health, Berkshire Healthcare and Frimley Health trusts to implement the FallSafe Care Bundles and/or improve utilisation rates where FallSafe Care Bundles have already been implemented. Below is a table to show the progress the project has made during stage one of phase one.

Trusts engaged in project	Scheduled second phase engagement (2017/18)
Oxford Health NHS Foundation Trust	Buckinghamshire Healthcare NHS Trust – *Exploring participation*
Frimley Health NHS Foundation Trust	
Berkshire Healthcare NHS Foundation Trust	
Trusts not participating	
Milton Keynes University Hospital NHS Foundation Trust: The trust has a comprehensive approach to Falls Prevention that is incorporated into a patient centred 'treating the patient as a whole' programme.	
Oxford University Hospitals NHS Foundation Trust: The trust has created a local implementation plan for the implementation of FallSafe Care Bundles.	
Bedford Hospital NHS Trust	
Great Western Hospitals NHS Foundation Trust	

Projected Project savings *(25% reduction in total anticipated falls if all hospitals and relevant wards participate in the project within the region*

Trust	Falls Prevented	Savings
Frimley Health NHS FT	104.65	**£127,149**
Berkshire Healthcare NHS FT	118.5	**£143,977**
Oxford Health NHS FT	200.68	**£243,826**
Buckinghamshire Healthcare NHS FT	116.75	**£202,601**
Total impact on region	**540.58**	**£717,553**

Buckinghamshire Healthcare NHS FT Stay in the Bay (SITB) Improvement Project:

The CIA Programme is working with Buckinghamshire Healthcare NHS FT to support the trust's 'stay in the bay' project. The Trust was awarded funding as part of the Sign up to Safety Improvement Plan to reduce falls throughout the hospital. The Trust started deploying the 'desk' to wards in April 2016. The

project is looking at how increasing nursing presence on wards can reduce the number of falls that happen and the level of harm resulting from a fall.

Collaboration for Leadership in Applied Health Research and Care (CLAHRC) SITB Evaluative Project:

This project will be working with colleagues at Buckinghamshire Healthcare NHS Trust to complete an evaluation of the desk in a bay intervention. The project will evaluate the intervention, look at potential value to the organisation, sustainability and any cost savings achieved from reducing the rate and harm of falls. The data-sharing agreement has been signed and agreed by all parties. The first data download has been provided to the project to start the analysis.

Activities during Q2 2017/18:

During the first quarter of 2017/18 the first phase of trusts involved in the project have completed a comprehensive GAP analysis to understand the current bundle elements provided to patients. This GAP analysis has been used to understand which bundle elements being applied to patients within the wards involved in the project. All the GAP analysis work has been completed and a recommendation report produced for each trust advising the bundle elements needing improvement or implementation. The project is now in the plan stage for implementation of the identified bundle elements. The implementation of the bundle elements is supported by training staff involved in the project on quality improvement. The bundle elements are implemented using quality improvement methodologies. All the organisation involved in the project have had train provided to support the projects implementation and ongoing sustainability.

The CLAHRC SITB evaluative project has progressed considerably, with an interim report being produced. The analysis has shown a significant reduction in the rate and harm of falls on the SITB wards. This analysis will continue until April 2017 to ensure enough data points are capture to confirm that the intervention has continued to deliver a reduction in the rate and harm from falls. The project receives monthly data downloads from the trust to support the evaluative analysis. This project will continue until the end April 2018, when a final report will be written up along with publications on the evaluation's findings.

The SITB improvement project has created a survey for SITB ward staff to complete to understand the barriers to using the SITB desks and what improvements they would like to see incorporated. Further work is needed on this. The organisation is going through restructuring of their community services which is impacting on the SITB improvement. The Chief Nurse is in full support of the project and will ensure that there are no barriers to future improvement tasks and projects within the trust are successful.

Activities for Q2 2017/18

- Further engagement with Bucks Healthcare to explore appetite to join project.

- Support current organisations in project to commence stage two, which is active implementation of relevant elements of the FallSafe Bundles.

- Further support Buckinghamshire Healthcare NHS Trust with SITB CLAHRC project where required.

- Continue to enable CLAHRC to have access to data to continue analysis on SITB evaluation.

- To explore the links and collaborative opportunities between the FallSafe and Fragility Fracture projects.

- To review FallSafe Toolkit created as an implementation resource, with the potential to add to CIA website as a tool for Trusts.

Research & Development (R&D)

The recent R&D group meeting was attended by the HEIs and Trusts from across the region. Prof Gary Ford updated the group on developments, including the AHSN's move to become a full partner in the EIT Health KIC along with recent engagement with Drayson Technologies, the OUH and the University of Oxford to facilitate widespread uptake of digital technology (complementing "The Hill"). Detail on the AHSN objectives for 2018-23 was also summarised for the group. Following previous presentations and discussion around the Professional Doctorate in Health Innovation scheme, options are going to be explored with Trusts, HEIs, HEETV and commercial partners in the region.

Presentations were then given by Dr Becky Nadal, University of Reading, on the EIT Food KIC, Dr Martin Kerr, University of Oxford, on the EIT Health KIC and the AHSN Patient and Public Involvement, Engagement and Experience theme lead Dr Sian Rees.

The Berkshire Healthcare Research and Development team has moved onto the University of Reading Campus to enable closer working with the Thames Valley Clinical Trials Unit (TVCTU) with plans to embed some capacity in the unit. Along with RBH, the three parties are planning joint strategy planning sessions for later in the year.

NIHR is reviewing future role and function of CLAHRCs. Prof Ford has had discussions with Dr Tony Soteriou, NIHR, and convened a joint meeting of AHSN Chief Officers and CLAHRC Directors to discuss future working between AHSNs and CLAHRCs. Prof Ford has also met with Prof Richard Hobbs to discuss future Oxford AHSN / Oxford CLAHRC working.

NHS England has indicated it proposes to establish nine Innovation National Networks (INNs) in the next AHSN licence period. Each will be led by an AHSN Chief Officer with national responsibility for delivering an agreed programme of work. Prof Ford has been asked to lead a Research INN and will discuss with NHSE and DH colleagues a future programme of national work.

Following the resignation of Emily Moore as Executive Director of the TVCTU, Dr Ben Thompson, Strategic Partnership Manager (Health) and AHSN R&D group manager, has taken on the role of Interim Executive Director.

The University of Reading has hosted a "Demystifying NIHR Research Funding" event, with speakers including the Research Design Service, local PPI champions, the TVCTU, the University of Reading research support team, NIHR experience academics and representatives from RBH and Berkshire Healthcare. Colleagues from across the two Trusts and the University of Reading have been invited along with collaborators from further afield.

RBH held an open day on 23 September for a membership community made up of a public constituency of local people and a staff constituency for all permanent staff. It was also open to the general public. Dr Atul Kapila, R&D Director for the Trust and member of the AHSN R&D group, was the keynote speaker and the Trust R&D team had a stand alongside Berkshire Healthcare and the TVCTU, celebrating the cross-institution links and research going on in the region.

Planning for the next R&D group meeting, to take place on 31 October is underway with agenda items likely to include AHSN and CLARHC joint working strategies, professional doctorates in health innovation discussions involving HEETV along with the regional HEIs and trusts and Oxford's new Medtech and In Vitro Diagnostic Cooperative (MIC).

Strategic and Industry Partnerships

Overview

- The Life Sciences Industrial Strategy led by Professor Sir John Bell was published on 30 August (see https://www.gov.uk/government/publications/life-sciences-industrial-strategy) and set out an ambitious vision for long-term support in the life sciences and which builds on the Accelerated Access Review.
- The SIP team continued to work across a broad range of projects during the quarter. A total of 50 projects are at various stages of progress across all of its key priorities. To date the programme has completed 47 specific projects. The team has engaged with 38 companies during the quarter.
- Achievements in Q2 include:
  - The Horiba diagnostics study involving the emergency paediatric units at the John Radcliffe, Stoke Mandeville and Wexham Park has been written up and has shown a net annual saving but more importantly faster diagnosis for children and faster throughput in ED. Further details can be found in the case study at the front of this report.
  - The Oxfordshire Transformative Technologies Alliance Science and Innovation Audit was published on 21 September. The Oxford AHSN led on the Digital Health theme. Further details can be found in the case study at the front of this report.
  - Oxford Health and University of Oxford were awarded £1.24 million for a NIHR Community Healthcare Hub. The AHSN is a partner in the MedTech and In Vitro Diagnostics Cooperative (MIC).
  - The AHSN is a partner in a second MIC, the NIHR MindTech MedTech Co-operative, which was awarded £1.36 million.
  - Contracts for the Oxfordshire Innovation Support for Business (ISfB) Phase 2 are under review for a total project value of £5.16 million. Under the terms of the award, The Hill will receive £285,508 to support the establishment of the hub at the John Radcliffe Hospital.
  - Work has commenced on two Innovate UK grant that have been awarded to Sarissa Biomedical and Mologic. The Oxford AHSN is a sub-contractor in the projects, with both valued at £2 million each.
  - Dr Mamta Bajre was appointed to an Oxford AHSN funded post in health economics at the London DEC and took up her position in August.
  - In partnership with the Best Care programme an industry-funded clinical network in Inflammatory Bowel Disease has been established. This builds on the work done under the ICHOM PROM collaboration.
  - A study to evaluate the Abbott i-STAT system in a pre-hospital setting with South Central Ambulance Service has just started.
  - Baseline data collection has started in the Faecal Calprotectin project in Buckinghamshire and Oxfordshire.
  - Good progress has been made in preparing for the roll-out across Thames Valley and West Midlands using Roche's pre-eclampsia test.
- Mr Andy Hill has been appointed to the new position of Director of Business Development and will commence employment on the 2nd October.
- Dr Amulya Misra has been appointed as Diagnostics & Pathways Lead to replace Dan Lasserson and Dr Craig McDonald has been appointed as Peadiatric Lead for diagnostics.

Supporting companies along the adoption pathway

Diagnostics

The diagnostics team has made solid progress across a number of projects:

- The evaluation of the Horiba Microsemi Whole Blood Count and CRP test in Children's A&E at Oxford University Hospitals, Stoke Mandeville and Wexham Park hospitals has been completed. A business case will be submitted to Stoke Mandeville Hospital and Wexham Park has been completed and written up by Craig Macdonald and Julie Hart. A business case will be submitted to Stoke Mandeville and Wexham Park. Discussions are underway with the Deputy Chief Scientific Officer, BIVDA and East Midlands AHSN.
- An evaluation for the use of PoC testing in the Emergency Multidisciplinary Unit to Out of Hours GP vehicles for use in an at home setting has been completed using the Abbott i-STAT system. Final data collection is underway and the full results and report will be available in the next quarter.
- The assessment of the Abbott i-STAT system in a pre-hospital setting has been agreed with South Central Ambulance Service based out of Reading. The study commenced at the end of September and has been supported by Wokingham CCG.
- Baseline data collection for the Faecal Calprotectin (FCP) diagnostic test is underway at Oxford University Hospitals. This project is part of the Pacific Programme (NHS Strategic Business Authority) and Point of Care Testing (NHS Business Services) and builds on work done by Yorkshire and Humber AHSN. A roll out plan is in preparation with Aylesbury & Chiltern Vale CCGs.
- A BNP evaluation study measuring heart function has been completed at the John Radcliffe Hospital in an ambulatory care setting and is being written up.
- In July the Maternity network steering group approved use of the Roche pre-eclampsia test across the Thames Valley. Work is now commencing with patient safety for clinical training and with Roche to install or validate equipment and write business cases. An ambitious national roll-out is being planned. WM AHSN kicked off meeting happened on 22 September with 50 attendees. EM AHSN and Yorks & Humber AHSN will start kick off in 2018. There is also interest from the north west AHSN. Support has been agreed with the Pacific programme and a launch event will be planned for Q1 2018 with support from Pacific and Roche. The forum will be similar to the WM Emergency medicine event and likely to be hosted in Nottingham or Leicester
- Planning is underway to establish the following evaluation studies:
    - Assessment of Curetis' Unyvero system in infectious diseases in Oxford University Hospitals and Royal Berkshire;
    - A trial of pro-calcitonin and pro-ADM point of care testing will commence shortly at Oxford University Hospitals in an ambulatory care setting;
    - A new silver amplified PoC immunoassay for Flu A and Flu B flu test developed by Fujifilm will be evaluated in Buckinghamshire out of Hours and GP surgeries. Planning is also underway for an evaluation of the Roche Liat PCR test for Flu in Berkshire to help manage flu this winter season.
- Oxford Health and the University of Oxford have been awarded £1.24 million for a NIHR Community Healthcare Hub. This is one of a number of MICs that have been awarded (see http://www.oxfordhealth.nhs.uk/news/1-24-million-for-new-medical-diagnostics-hub/). The MIC will aim to speed up the development, evaluation and use of diagnostic tests. The Oxford AHSN is a partner in the collaborative.

- The Oxford AHSN is also a partner in a second MIC, the NIHR MindTech MedTech Co-operative, which was awarded £1.36 million. The MIC is based at the Institute of Mental Health in Nottingham (see http://www.institutemh.org.uk/x-news-and-events-x/news/680-funding-boost-for-national-mental-health-tech-centre).
- Sarissa Biomedical has been awarded an Innovate UK SBRI grant to the value of £1,998,604 for a project entitled "Purines for rapid identification of stroke mimics". The Oxford AHSN is a partner in the delivery of the project, which has just commenced.
- Mologic has also been awarded an Innovate UK SBRI grant for £2 million. The project will focus on the development and evaluation of a test for COPD. This project has commenced.
- The Oxford AHSN is a partner in a grant submission submitted under the i4i programme with UCL.
- The team is delighted to welcome Dr Amulya Misra (Buckinghamshire Healthcare) as the new clinical lead for the diagnostics programme. Dr Misra replaces Dr Dan Lasserson who has taken up a new post in Birmingham. The team would like to record its thanks to Dr Lasserson for his support and input into the programme over the last few years.
- A grant submission has been made for an i4i challenge award with UCL, Maudsley, Jupiter Diagnostics and Oxford AHSN for "Developing technologies to reduce antipsychotic toxicity'
- Recruitment for an additional project manager to support the team was undertaken in July but placed on hold due to a review of internal funding priorities.

Digital

Planning for the launch of the *Digital Health Roadmap* is underway and is expected to take place in the next quarter.

The Innovate UK funded project "Decision Support Systems for Stratified Cancer Treatment, which is led by Physiomics, is making progress. Work on the health economics and clinical pathway components are underway.

It has been announced that Intelligent Ultrasound will be acquired by Cardiff-based MedaPhor Group plc. MedaPhor is a global provider of advanced ultrasound skills training simulators (see http://www.bqlive.co.uk/healthcare-medical/2017/09/21/news/medaphor-acquires-intelligent-ultrasound-for-up-to-3-6-million-27780/).

Planning is underway with the digital health company Big Health to evaluate the insomnia CBT app Sleepio in primary care. The team is working with CIA to develop a plan for assessing Sleepio across a number of GP practices and to undertake a health economic study. Opportunities for funding through the Innovate UK Digital Health Catalyst completion.

The team also provided support to Patient Safety on OxGRIP (Oxford Growth Restriction Identification Programme) on the development and regulatory pathways.

Discussions have been held with several stakeholders including Medcity and NHS Digital.

The gestational diabetes health management system, GDm-Health, has been approved for inclusion in the NHS Apps Library (see https://pharmaphorum.com/news/diabetes-app-nhs-apps-library/). It is only the second app to be approved for inclusion.

Building investment opportunities across the Oxford AHSN region

The Oxfordshire Transformative Technologies Alliance Science and Innovation Audit has been published (see http://www.oxfordahsn.org/news-and-events/news/our-insights-on-digital-health-feed-into-key-

report-on-oxfordshires-tech-cluster/). Further details can be found in the case study at the front of this report.

The Bicester Healthy New Town programme was presented at NHS Expo. The programme continues to make strong progress across a broad range of deliverables.

The iCapital 2017 application submitted by Oxford City Council failed to reach the shortlisting stage this year.

Contracts have been drawn up for the Innovation Support for Business (ISfB) programme. The total funding under this bid is £5,158,693, with a total value going to TheHill of £571,016. This figure includes a 50% match from Oxford University Hospitals and the Oxford AHSN (£30k contribution per annum in kind). The funding will be used to recruit a hub manager and it is anticipated that this process will commence in the next quarter.

The assessment of the ERDF Revenue funding bid for the Buckinghamshire Health and Social Care Innovation Hub is continuing. No date has been set yet for when this process will be completed.

NHS Culture

The Hill ran its latest *Experts in Residence* event at the John Radcliffe Hospital on 27 July. Across the four events held over the spring and summer a total of 55 individuals discussed their projects in one-to-one sessions with seven different experts drawn from industry. A pitching event will be held in November where the experts will act as judges. The Hill is also collaborating with Oxford Brookes University on an innovation hub project to develop an architectural design for an ideas lab.

Partnerships

The Affordable Medicines Programme, which is funded by the Oxford Martin School, has appointed Thomas Greve as the health economics post-doctoral researcher. A similar position for intellectual property is being re-advertised following an unsuccessful first round of interviews. The programme is a collaboration between the Structural Genomics Consortium, the Office of Health Economics and the Oxford AHSN (see http://www.oxfordmartin.ox.ac.uk/research/programmes/affordable-medicines).

Funding has been secured for the establishment of a Clinical Network for Inflammatory Bowel Disorder. The Best Care programme has set up the network, which is led by Dr Simon Travis. The running of the Network has been transferred to the Strategic and Industry Partnerships team since it is an industry-funded network. Two companies will support the network.

An internal review of the Sustainability programme has been undertaken. While good progress has been made in several of the large CEF projects, the focus of the programme will shift to developing stronger benchmarking of carbon and energy reduction metrics across the region. The quarterly meetings with the partners will be discontinued.

The SIP is supporting the Harwell HealthTec Cluster and is a partner in helping to develop a life sciences hub. The aim is to build on Harwell's unique facilities and skills sets, and capitalise on the multi-disciplinary research and development. Further details can be found http://harwellcampus.com/about/news/harwell-campus-life-science-brochure/?home=1. The Cluster was launched at an event attended by companies and cluster partners on 20 September at the Diamond Light Source.

Conferences / Events / Publications

Julie Hart presented at NHS Expo on the pre-eclampsia project with Roche on the 11 September in Manchester.

Julie Hart presented at the POCT Connectivity National Networking Forum on 12 September in Birmingham.

Nick Scott-Ram presented at a Science and Technology Facilities Council CLASP meeting on innovation adoption in the NHS on 22 September in London.

The first life sciences roundtable was held at the offices of Bayer in Reading on 20 September. The event was organised by the Thames Valley Chamber of Commerce and focused on the topic:*'How do we ensure that the Thames Valley remains a great place for life sciences companies to do business?'*

Informatics Theme

Q2 2017/18

A valued member of the Informatics team has sadly moved on to a new opportunity this quarter. Katie James has played an invaluable role within the team over the past three years, not least of which has been initiating and developing the Information Governance framework and protocols that enable information sharing across the Oxford AHSN region. The Engagement Lead position will be filled and the recruitment process is under way to achieve this. Meanwhile we have put in place a robust contingency plan to fulfil all Informatics requirements within the Oxford AHSN.

Data Acquisition & Warehouse

The Oxford AHSN Data Sharing Agreement has been extended with NHS Digital.

The National AHSN Informatics Group have approached NHS Digital to discuss a collaborative approach to AHSN engagement and data acquisition with NHS Digital. The initial meeting was positively received by all in attendance, including NHS Digital, and we have collectively agreed a way forward for NHS Digital to disseminate data to the AHSNs. This plan will be implemented over the coming months.

Meanwhile we continue to pursue data direct from the Trusts.

The Data Warehouse is now fully loaded with Outpatients, Inpatients and Critical Care data. The Informatics team have conducted several classroom sessions with each of the Programmes to detail exactly what data is available, the data definitions and how the data can be manipulated, cut and presented. These have been well received and the Programme and Network managers now have a greater understanding of what can be achieved with the data at their disposal to further their projects and networks.

Visualisation Platform and Self-Service

We have postponed applying to vary the terms of our data sharing agreement with NHS Digital to allow our use of Power BI in the Microsoft Azure Stack. This is because cloud storage for NHS Digital Data is being considered by the DH. We await confirmation of this decision.

As an interim measure, we are developing a solution using existing tools that, whilst not as visual, give a certain element of self-service functionality to the programme and network managers

Information Governance (IG)

The Informatics team hosted classroom IG training sessions during this quarter. These were held to ensure teams are up to date with GDPR, familiar with the new Privacy Impact Assessment (PIA) process and are able to complete the AHSN forms independently. The Informatics Team will always be on hand to provide support.

The IG framework continues to be used to benefit projects across the network. The second IG Forum meeting is being scheduled for early December 2017

We have developed the IG agreements for the Procurement project (below) with guidance from the Chair of the UK Caldicott Guardian Council [from OUH]. This provides a robust set of documentation that will allow the free flow of data from the reference Trusts that will be engaged as part of this process.

Informatics Strategy

The Team continue to progress the agreed Informatics Strategy. We continue to meet regularly (twice monthly) to monitor and advance the key activities. The guidance from the Oversight Group and the CIO Forum steers the operationalisation of the strategy, drawing on the importance of digital integration and maturity.

New Opportunities

Connected Care Assessment (CCA)

This extensive work for NHS England, to identify understandable, recognisable and meaningful measures for the whole community of digitalisation in support of health and wealth, reflecting experience of staff whilst recognising the importance of digital maturity for potential industry partnerships with the NHS is ongoing.

The engagement with stakeholders has now finished. We ran four workshops, a round table with the Academy of Medical Sciences and attended a number of regular meetings to gather feedback. This was to both gather opinion on what matters to stakeholders and to present a proposed approach to assessment, which has been refined with support of the steering group throughout. The testing phase has started to see if the approach works for a number of place based systems. The focus for testing is a number of STPs.

Supply Chain Bid

The Informatics Team has worked closely with Vizient to design and refine the data fields required and the Information Governance documents to allow the free flow of data from the recruited reference Trusts (see IG section above). We have been working with OUH Informatics to extract datasets to enable a proof of concept process.

We anticipate an announcement from the Department of Health on 6th October and we are confident of success in at least some of the bids that we are involved with. We continue working with our partner trusts to acquire the financial and clinical data required to deliver the Future Operating Model (FOM) analysis and reporting. We have agreed with three Trusts ongoing data sharing, storage, IG and analyse vendor spend against patient encounters and outcomes in collaboration with DHL and Vizient.

Provision of Learning Network Support for the GDE sites

Discussions are ongoing to understand the role informatics will play initially in the Learning Network. The Oxford AHSN in partnership with Arden & GEM CSU and the Greater Manchester AHSN was successfully awarded the contract for this work.

Presentations

- The Director of Information Strategy presented at The Annual Strategic forum in Health Technology 28/09/2017. Talk was on A Patient centred approach to digital transformation.

Programme and Theme Support

Best Care

- EIP – Informatics presented the second wave of EIP common assessment framework data at the Steering Group meeting, this was well received and was decided that the data should be regularly extracted at presented at these meetings going forward.
- Imaging – working with the imaging team to ensure IG compliant data management following the retention of the LUCADA dataset extracted a year ago – the dataset was no longer needed, so has been deleted.

Clinical Innovation Adoption

- **IOFM** – Continued informatics assistance to the IOFM project, refining the analysis across trusts submitting data.

- **Fractures** – Informatics undertook some analysis on inpatient admissions to help form a business cases to develop new or expand existing fracture liaison services across the region; for population over 50 years of age need to understand number of ED attendances and hospital admissions due to a fracture in the region

Strategic and Industry Partnerships

Informatics continued working closely with this programme in our commercial ventures

Patient Safety Collaborative

- **Acute Kidney Injury** – linked operational hospital data and biomarkers data has now been received for all AHSN trusts apart from Buckinghamshire. This data has been presented to allow an understanding of progression of AKI in inpatients across the region. The data have been presented to the steering group and well received. Specific outputs were pulled and presented for use in two posters; a national AKI conference and the AHSN regional safety conference. There may be opportunities for a paper with this data going forward.

- **Sepsis** – providing support for the planning of a QI project across primary care in the region working with local GP trainees to identify patients admitted to hospital with sepsis who had previously presented to their GP. Informatics is providing IG support.
  Ongoing work to provide the project with further HES data; linking the inpatients episodes to other cuts of the wider datasets to understand the pathway of sepsis pathway. The current focus is understanding ambulance presentations and patients admitted to critical care.

- **Gastric buttons** – working with project manager and NRLS to build a request to extract incident data. Carefully refining the request recognizing these incidents are rare in children but ensuring the search terms are appropriate. Exploration into terms used in incident reporting has taken place with OUH incident team to help refine the request. Informatics have also supported with required IG documentation.

- **Maternity** – Informatics has been engaged by the [new] Maternity network now hosted under the Patient Safety Collaborative, to help monitor reduced fetal movement. We are providing the IG guidance and protocols to allow data sharing between sites to be stored centrally and analysed.

Patient and Public Involvement, Engagement & Experience (PPIEE)

The summer has seen the completion of several projects and the start of the thinking and planning process for the coming year.

Training and development

Level I training

We have successfully delivered two lunchtime sessions for lay contributors from research and services and will be running another session in November. In response to feedback received, and as with level two and three training, future sessions will be for lay people and professionals.

Level 2 training

We have a series of three workshops planned with our partners at the CLAHRC and CRN. These will be for equal numbers of lay partners and professionals from a range of backgrounds. In December, we will run our second session on outcomes important to patients and then in January and April sessions on methods and techniques for joint working. We are rotating the organisation and support for running these sessions between partner organisations and will be ensuring that two of the sessions are held outside of Oxford.

Level 3 training

The Leading Together Programme

We have held the first meeting of our Advisory Group for co-designing our programme for people with learning disabilities. The Advisory Group includes representation from local trusts, HE TV, NHS England, My Life, My Choice and Oxfordshire Family Support Network who are out partners for developing the programme. The process of co-design has started and will be completed by Christmas so that we can run the pilot course in the New Year.

Public Engagement

In July, we held the celebrating success event for our Living Well Project at the Oxford Academy, the local secondary school we have worked with. We had poetry readings, a dementia choir, artwork and prizes. The independent evaluation of the project found that it had successfully achieved it stated aims as an innovative engagement project in a local shopping centre and was a successful pilot. We will now look at how we can build on and extend the work.

Network development

In response to request for a peer support group, we have sent a questionnaire to lay partners to determine what sort of group network they would like to have. We plan to support them to run an initial event over the next couple of months.

Our first graduates from the Leading Together Programme will be held at Newbury Racecourse in November. We will use this as an opportunity to hear how people have developed their thinking, work and relationships based on their experience of the Programme. We will also use the event to help further develop the Programme.

Patient Safety

Overview for Q2 2017/18

In Q2, work on all our clinical projects has been progressing well, as detailed below in the summaries of each programme.

We are very pleased to be able to welcome Mr Steve McManus, CEO of the Royal Berkshire NHS Foundation Trust as the new Chair for the PSC Oversight Board. Mr McManus has a keen interest in Patient Safety and is in a key position to assist the Oxford AHSN Patient Safety Collaborative in its future aims and ambitions.

Working in partnership with the Health Foundation, the PSC have been actively recruiting for the Q community in this quarter. Q is a Health Foundation initiative designed to help support people experienced in quality improvement in healthcare with their current improvement work and ongoing development. The PSC is planning a 'welcome event' for new Q members in our region in January 2018, which we hope will be a dynamic and interesting event bringing together stakeholders from diverse backgrounds to learn from each other and engage in PSC and AHSN activities.

Nationally, the PSC is planning for activities aligned with the new national PSC workstreams – Physical Deterioration, Safety Culture and supporting the Maternal and Neonatal Health Safety Collaborative. In addition, we are continuing to collaboratively develop ways of assisting our partners in implementing The National Mortality Case Record Review (NMCRR) programme, and using the reviews to support regional patient safety learning.

We were please to hold a new Emergency Department sharing and learning event on 21 September bringing together emergency department multidisciplinary teams from across the region with representation from Buckinghamshire, Berkshire, Frimley Park and Oxford and SCAS.

The day was born out of an approach to the Oxford AHSN from two Emergency Department (ED) nurses from Buckinghamshire Healthcare NHS Trust, Lucie Saberton and Claire Lazaruk, who had been impressed with the success of our regional approach to tackling sepsis.

The day ended with a firm commitment to act on the energy and learning from the day. Colleagues from Royal Berkshire NHS FT offered to host a day in January 2017 and the Oxford AHSN will continue to work with the clinicians to support the next event and provide a platform to ensure that safety in patient care remains at the top of the AHSN agenda.

This quarter has also seen the publication of our first dedicated Patient Safety newsletter, which will be used to keep stakeholders up to date with opportunities and events, progress with projects and workstreams, and key patient safety resources.

We have also been pleased to be able to offer a bursary to support a stakeholder to undertake a Masters Degree in Patient Safety at Imperial, London after applications were invited from across the region.

A summary of our clinical safety programmes and the aligned stakeholders are outlined in Table 1 below.

Table 1. Q2 programme status and stakeholder groups

Programme	Our Aim	Our Measures	Comments	Our Partners	Status
Acute Kidney Injury	Reduction of UTIs requiring hospital admission or antibiotics in residential and nursing homes	Introduction of a structured drinks around and drinks chart		Windsor, Ascot and Maidenhead CCG, Slough CCG, Oxfordshire Care Home Services, Chiltern CCG	Active
	To ascertain the use and benefit of sick day rules cards	Survey monkey with GPs and Pharmacists A write up to be undertaken of the work done and thoughts for future		Bracknell and Slough CCG Oxfordshire CCG, Berkshire West and East CCGs	Planned 2017
	Reduce regional mortality, length of stay and readmission from AKI	To introduce the National Patient Safety Alert algorithm into laboratories and release with training into community and secondary care settings		Oxford University Hospitals, Great Western Hospital Buckinghamshire Healthcare, Milton Keynes University Hospital, Royal Berkshire Hospital, Frimley Health (Wexham Park),	Active
	To reduce the incidence of AKI in the community setting	Introduce care bundles and alerts into primary care with training for GPs		Oxfordshire, Milton Keynes, Wiltshire, Swindon, West and East Berkshire CCGs	Active Planned Swindon/Wiltshire
	To reduce the disease progression of in patients	Introduction of an electronic AKI care bundle linked to the AKI alerts. Introduction of an electronic medicines review tool.		Oxford University Hospitals Oxford University Hospitals	Active Active

Programme	Our Aim	Our Measures	Comments	Our Partners	Status
Reducing Pressure Ulcers	We aim to reduce the number and severity of pressure ulcers across the Oxford AHSN region over the next five years. In particular, we aim to reduce the number of the most severe pressure ulcers (grades 3 & 4)	% completion scores of risk assessment tools and prevention/care bundles, % compliance with required reporting reaction times Outcome measures: Numbers of new PUs developed, days between new PUs developed, grade progression of existing PUs	Programme is currently paused at end of Phase 1, as agreed at Steering Board on 21st March, although data collection continues for several projects. Phase II will commence once national priorities are clear, to ensure projects are in alignment with these.	Oxford Health, Oxford University Hospitals, Berkshire Healthcare, Royal Berkshire Hospital, Buckinghamshire Healthcare	Paused
Safety in Mental Health	For each ward to reduce failure to return from Section 17 leave or agreed time away from the wards by 50% within 12 months of the start of their project	% inpatients, detained or informal, who fails to return to the ward later than 10 minutes over the leave period that was agreed and documented by ward staff, and who have not made contact with the ward to agree a later return time		Oxford Health, Berkshire NHS FT and Central and North West London.	Active
Maternity Never Events	To reduce the incidence of retained swab 'never' events to zero within 36 months of the start of the project	% of handover of swabs between clinicians when moving from delivery suite to theatre and theatre to observation area.		Oxford University Hospitals	Active

Programme	Our Aim	Our Measures	Comments	Our Partners	Status
Identification of SGA Babies (OxGRIP)	To increase the identification of small for gestational age babies (SGA) to reduce the rate of stillbirth	% of SGA babies identified in the antenatal period.		Oxford University Hospitals, University of Oxford	Active
Network wide guidelines	To develop and introduce a range of network/region wide guidelines addressing local priorities. Current work in progress-		Projects are aligning with the BOB STP LMS Safety workstream	Royal Berkshire Hospital, Oxford University Hospitals, Buckinghamshire Healthcare, Great Western Hospital, Milton Keynes Hospital, Wexham Park Hospital	Active
1.Network-wide Oxytocin administration	To align protocols for the administration of Oxytocin administration for augmentation at each site				Active
	To have the same 'Fresh Eyes' CTG interpretation tool used across the region	Number of Trusts with guideline implemented successfully			
	To ensure that as a region we are treating women who present with reduced fetal movements in pregnancy according to the best available evidence	Number of Trusts with guideline implemented successfully			Active

Programme	Our Aim	Our Measures	Comments	Our Partners	Status
2.'Fresh Eyes' CTG Interpretation tool

3.Reduced Fetal Movements | | To be determined | Currently in audit stage | | Active |
| Shared Learning in Maternity | To increase networking and shared learning across Trust/area boundaries and between multi-professional groups to increase the spread of innovative practice and learning from adverse or near miss incidents | n/a | Our next Shared Learning Event will be held in Autumn 2017, in collaboration with the Thames Valley SCN. | Thames Valley Maternity SCN, Royal Berkshire Hospital, Oxford University Hospitals, Buckinghamshire Healthcare, Great Western Hospital, Milton Keynes Hospital, Wexham Park Hospital | Active |
| Place of Birth | To increase the percentage of extremely preterm babies born in a Level 3 unit in the region | % of >27/40 or estimated birth weight >500g, or >28/40 multiples who are born in a Level 3 unit | Project is close to business as usual, and is sustaining the improvement. | Thame Valley Neonatal ODN, Royal Berkshire Hospital, Oxford University Hospitals, Buckinghamshire Healthcare, Great Western Hospital, Milton Keynes Hospital, Wexham Park Hospital | Active – near to completion |

Programme	Our Aim	Our Measures	Comments	Our Partners	Status
Sepsis	To reduce mortality by using a regional sepsis pathway	Review of aspects of the sepsis 6 bundle including IV antibiotics within the hour and review within 72 hours		Oxford University Hospitals, Great Western Hospital, Buckinghamshire Healthcare, Milton Keynes University Hospital, Royal Berkshire Hospital, Frimley Health (Wexham Park)	Active
	Ensure septic patients seen promptly in ED	Introduce a clinician led pre-alert		SCAS Frimley Health (Wexham Park)	Pilot
	Identify deteriorating patients in care homes	Introduction of a tool to assist carers to identify the deteriorating patient		Oxfordshire Care Home Services	Design phase
	To ensure the prompt recognition of the septic patient	The use of the sepsis pathway for deteriorating patients		Royal Berkshire Hospital	Planning
Paediatric Gastrostomy	To improve patient safety along the pathway for children receiving gastrostomies.	Programme aims have been defined following QI training. Measures for QI projects to achieve were discussed at the Steering Board on 16/06/17 with work ongoing to set up projects focussed around HCP communication pathways, and training packages for parents		Oxford University Hospitals, Royal Berkshire Hospital, Berkshire Healthcare, Frimley Health, Milton Keynes University Hospital, CNWL, Great Western Hospital, Helen & Douglas House	Set up

Clinical Programmes

Safety in Mental Health: Safer Leave project

Clinical Lead – Vacant, Patient Safety Manager – Eileen Dudley

The project continues to sustain at Oxford Health. Aggregated data for all wards show that the baseline mean return on time rate was 51.6% and this increased post-intervention to a mean return on time rate of 88.2% and is now sustained at an average of 87%. Sustainability has also been achieved at Berkshire.

Two wards at the Campbell Centre in Milton Keynes are working on making leave safer for formal and informal patients. A review of the project has been completed by the Patient Safety Programme Manager and Research Assistant and preparation of a report in underway to be shared with the Senior Leadership and Management team at Central and North West London ahead of a planned conference call in September. The report will include analysis of the data collected over the last eight months, thematic analysis of patient and staff questionnaires to understand their perceptions of the value of planned leave as part of a patient's recovery and the resources which are necessary to support the project team going forwards.

A further ward at Bletchley Adult mental health services unit is interested in being included in the safer leave project as a result of a recent serious incident.

The sharing/learning event planned for 12 July 2017 at the Campbell Centre in Milton Keynes has been rescheduled until the project has completed its review stage. We are also actively looking to engage a new Clinical Lead for this project now that Jill Bailey has left the team.

Future plans include undertaking a full analysis of Safer Leave data across the region.

Acute Kidney Injury (AKI)

Clinical Lead - Emma Vaux, Patient Safety Manager - Katie Lean

At the last steering board there was a consensus to draw all projects together ensuring a regional approach to improvement rather than individual projects taking place in separate areas. The regional driver diagram was updated to incorporate these changes (see below).

The theme running through the work will focus on hydration messages for community, secondary and primary care. Biochemical data matched with hospital operational data has been received and analysed from 5/6 acute hospitals which will provide crucial baseline data.

Hydration programme of work within care homes (in collaboration with Windsor Ascot and Maidenhead CCG)

| Aim | Primary Drivers | Secondary Drivers | Change Ideas |

Reducing the Incidence of AKI and reduction of harm from AKI

Regional improvement in LOS, Mortality and Readmission over 3 years

Reducing regional variation*

This aim is a guide at present and will be reviewed by the stakeholder group when all Trust AKI data sets are received and analysed.

Prevention HYDRATION → Primary Care, Secondary Care, Community

Hydration
- GPs - hydration leaflets and video roll (young and elderly)
- Pharmacies—hydration leaflets (young and elderly)
- Hydration charts and fluid balance in ward areas
- Structured drinks rounds optimising fluid intake in care homes
- Heart failure nurses - hydration message
- Focus on elderly wards
- Hydration/AKI Champions

Recognition DATA → Primary Care, Secondary Care, Community

Hydration
- Quarterly updates of Trust Data
- UTI - safety cross data
- Feedback of data to organisations
- Response to outcome of data i.e. amend data pull/analysis
- Coding and data
- G/P data - focus on accessing community data
- Review renal registry data

Management CARE PLANNING → Primary Care, Secondary Care, Community

Hydration
- Discharge planning from hospital
- Targeted use of AKI care bundle
- Follow up of patients discharged from hospital with AKI - hydration leaflet, blood tests etc
- Patient information on AKI
- Combining sepsis and AKI bundles - possibility
- Trust IV Fluid leads—possible link
- Education (AKI and Hydration) - including uni curriculum

All organisations united to overarching programme rolling out each change idea in own areas

Programme Aim: To reduce the incidence of urinary tract infections (UTIs) requiring antibiotics or admission to hospital

Project commenced in May 2016 and continues to demonstrate improvement.

Outcome Measures *(see table 1)*:

- Number of UTIs admitted to hospital (Since the introduction of the hydration project UTIs have more than halved during the 1st year of the project in 4 residential/nursing homes)
- Number of UTIs requiring antibiotics

Process Measures:

- Staff Training on hydration, anatomy/physiology of the renal system, Acute Kidney Injury and UTIs
- Introduction of a structured drinks round (7 drinks rounds to take place at a set time each day, offering a wide variety of choices of hot and cold drinks for residents)

Further care homes in Slough have commenced the project and training of staff is being undertaken within Oxfordshire Care Homes. Chiltern CCG hasregistered an interest in the project.

Table 1: Number of UTIs and Fractured Neck of Femurs admitted to hospital in East Berkshire
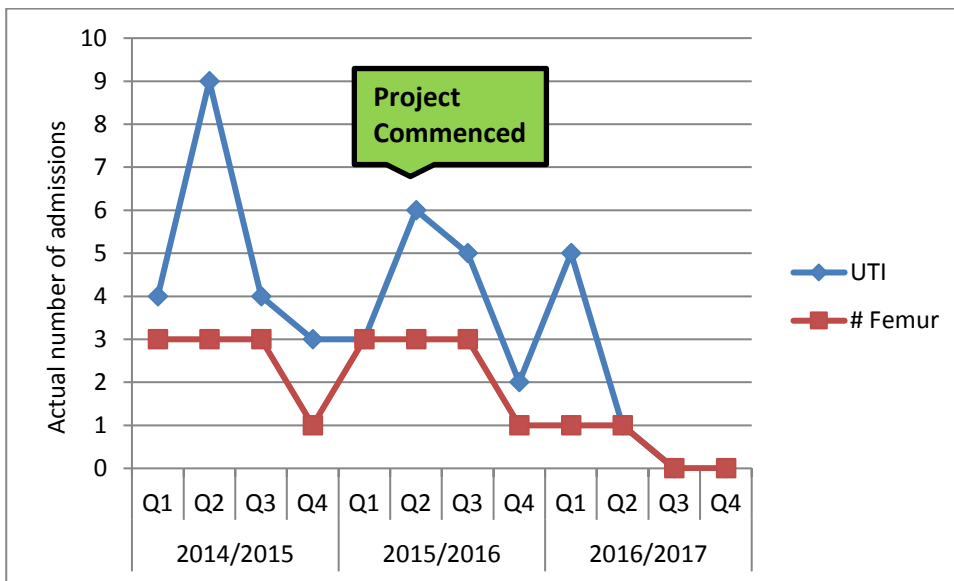
Sepsis

Clinical Lead - Andrew Brent, Patient Safety Manager - Jo Murray

Stakeholder meetings continue to take place every three months with around 35 representatives attending from community and secondary care. The group has been focused around many changes within sepsis guidance nationally and internationally and has fed back on the NICE quality standards. The group has divided into two workstreams to allow for focussed project work; sepsis leads and nurses in secondary care and community care. The group will be linking with the PSC national workstream focusing on physical deterioration. The emphasis nationally will be on improving recognition and response through the use of National Early Warning Scores and communication tools across the whole patient pathway.

The systematic quality improvement project (QIP) with the GP School related to sepsis and NEWS for 100+ trainee GPs was launched 05 September 2017. Data will be collected on 3 patients per trainee to assess the pre-hospital management for patients with a confirmed diagnosis of sepsis that have been managed by a GP practice as part of their episode of care. The data will be aggregated and analysed by the AHSN Informatics Team and the GP trainees will then be facilitated to identify themes and complete small tests of change using quality improvement methodology.

Patient engagement work continues to develop, linking with three patient champions in the region to identify what is needed. A learning/awareness event is planned for early 2018, linking patients and carers with clinicians, through the use of patient stories, to identify areas for improvement. The AHSN PPIEE team are supporting this work.

Work is on-going with the AHSN Informatics team to develop metrics using the hospital episode statistics (HES) data, at individual trust as well as regional level, annotating this with key project milestones. This will facilitate an understanding of the burden of sepsis in inpatients across the region and the impact of a standardised pathway and assessment tool in individual patients.

Work has begun to match hospital outcome data with microbiology blood culture data to further inform and refine identification of the sepsis population.

A paper on the suspicion of sepsis (SoS) has been published in BMJ Open journal. This has also been written up as a case study. The implementation of the regional Sepsis Pathway into electronic patient records at OUH has also been published in Computer Weekly, following a joint presentation at our partner showcase event at the John Radcliffe Hospital in May.

The stakeholder group work has been shared at the OUH Foundation Year Quality Improvement Project Symposium. A poster of the Suspicion of Sepsis work has been accepted for the national Patient First conference in November 2017.

The sepsis resources section on the PSC website is regularly updated with papers, presentations, patient stories and education material for both patients and staff.

Maternity

Clinical Lead – Lawrence Impey, Head of Patient Safety – Katherine Edwards

Patient Safety Manager – Eileen Dudley

In this quarter Eileen Dudley, Patient Safety Manager has taken over the majority of Maternity PSC work.

Network-wide guidelines

Unwarranted variation in maternity can cause a number of issues, including introducing risks to patient safety, pockets of less than best clinical practice, and cause complications for staff that regularly rotate through different units in our area which can adversely affect care and safety.

We continue to run a rolling programme of developing and introducing network wide guidelines that reflect local needs, and are now integrating this work into the newly developing Local Maternity Systems, which sit within STP footprints.

In Q2 we have been working on the following:

Oxytocin

IV Oxytocin (Syntocinon) is very commonly used in maternity care to augment or induce labour. We found significant variation in the methods of administering Oxytocin; no Trust in our region followed the same protocol. With regularly rotating medical staff this presented an unnecessary patient safety risk.

In this quarter, implementation has been successful in the majority of Trusts, with only 2 now outstanding as the Guideline undergoes local Governance approvals.

'Fresh eyes' CTG interpretation tool

To aid CTG monitoring in labour (monitoring of the fetal heartbeat), Trusts in our area use an interpretation tool which is used hourly by two members of staff to independently assess the wellbeing

of the baby by analysis of the CTG reading. However, each tool has been developed in isolation by each Trust, resulting in differing methods and application. In Q2 we have progressed with developing this, and the tool is undergoing final iterations before wider consultations.

Reduced fetal movements

Reduced fetal movements (RFM) in pregnancy can be a precursor to an adverse outcome, such as a stillbirth, or fetal compromise. However, in the majority of cases, reduced fetal movements are benign. This is therefore an area in which both over intervention and under intervention can present risks. We are currently carrying out an audit in our partner Trusts to identify how women who report reduced fetal movements are treated, and their subsequent outcomes, in order to inform the direction of our work in this area. There have been some delays with collecting the full data, due to local workloads. We expect to be able to report provisional finding by the next Steering Group meeting planned for the beginning of November.

Shared learning in maternity

To promote shared learning across Trust boundaries and increase engagement of clinical staff with the Oxford AHSN we hold multidisciplinary 'shared learning' events, inviting midwives, doctors and other interested parties to present or attend.

The six-monthly events focus on sharing learning from clinical incidents, challenging or interesting cases and good or innovative practice. In Q2, we are now booking speakers and sending invites for the next event to be held in Autumn 2017, working with the Thames Valley Maternity SCN on this event for the first time.

Place of Birth – Preterm delivery

This project is now sustaining the improvements made over the duration of the project since the end of 2015, with 75-80% of all very premature babies who meet the criteria being delivered in the safest place for them.

This work will be presented at the Patient First event in November, and submission of an article to an academic journal is planned.

OxGRIP- Oxford Growth Restriction Identification Programme

Lead – Katherine Edwards

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. The first women entered the project in May 2016. In summary, the pathway includes the introduction of Dopplers at the 20 week scan, simplified risk stratification, and an additional scan which is offered to women at 36 weeks, in which MCA and umbilical artery Dopplers are measured.

Implementation has been complex and challenging with, for instance, multiple guidelines changes, new ultrasound request forms and vetting of these, change management, staff training and methods for audit and QA. The project is intended to run to March 2018, during which time its impact on resource usage, obstetric intervention, maternal satisfaction and perinatal mortality and morbidity will be assessed.

In Q2, we have developed a Quality Assurance system for assessing the pathway scans, and successfully gained Ethics approval to allow the data collected to be used to address research questions regarding the pathway. A number of papers are now being submitted for publication by the OxGRIP team.

Maternity Never Events programme

Clinical Lead – Lawrence Impey, Patient Safety Manager - Katie Lean

Programme Aim: To reduce never events of swab retention to zero by November 2018 within the Maternity Department at Oxford University Hospitals.

Project commenced in September 2015 and continues to demonstrate improvement.

Outcome measures:

- Days between never events: incident free since the project commenced
- Days between near miss events (where a swab was in situ upon transfer to theatre, not handed over but theatre staff noted it): baseline data four near misses in two months, there has been only one near miss in the 15 months since the interventions were implemented

Process measures:

- Verbal handover from Delivery Suite to theatre staff when swabs have been opened: 28.8% - 75.6%
- Written handover of swabs from Delivery Suite to theatre staff: 4.4% - 62.9%
- All three aspects of the swab policy followed when transferring women form Delivery Suite to theatre: 0% - 76%
- The "VP" sticker used on all women with a known vaginal pack in situ: 0% - 92.9%

Work continues to be undertaken to reduce variability.

Maternal and Neonatal Health Safety Collaborative

The PSC team has been supporting the OUH Maternity team progress their work in Quality Improvement projects as part of the Maternal and Neonatal Health Safety Collaborative. The OUH is the first trust in our area to start work on this, with the other acute trusts due to follow in Wave 2 (2018) and Wave 3 (2019).

<u>Pressure Damage Prevention</u>

Clinical Leads - Ria Betteridge and Sarah Gardner, Patient Safety Manager - Geri Briggs

The Pressure Damage Prevention programme aims to reduce acquired pressure damage across the boundaries of community and acute care throughout the region. The initial Programme objective was to improve the reliability of pressure ulcer baseline assessments, with tests of change being implemented at multiple sites. Knowledge and experiences associated with harm reduction strategies have been shared, which has influenced clinical practice.

Following the Programme review and pause agreed earlier in the year, discussions have been ongoing regarding the optimal strategy for the Programme as it moves into Phase II. The detail of this will be decided and agreed upon at the next Steering Board in October, but is most likely to focus on regional implementation of the national consensus guidelines, publication of which is anticipated shortly. Additionally, QI projects which had demonstrated improvements in patient outcomes at the end of Phase I will continue to be supported, and the professional networking activities of the Programme will continue.

A poster illustrating the QI project running at the National Spinal Injuries Centre in Stoke Mandeville was presented by the project lead Hester Dunne at the European Wound Management Association

conference in Amsterdam on 3-5 May 2017, and has also been accepted for presentation at Patient First in London in November.

A presentation entitled 'A collaborative regional approach to reducing pressure damage: lessons from a Patient Safety Collaborative' was delivered by the Programme Manager at the Pressure Ulcer Summit in London on 26 June 2017.

Paediatric Gastrostomy

Clinical Lead and Chair - Dr Alex Lee, Patient Safety Manager - Geri Briggs

The Paediatric Gastrostomy programme has now completed three Steering Boards, the next one will meet on 29 September.

Work in Q2 has focused on building the multidisciplinary network of professionals working in the speciality and scoping the Programme's QI projects which will focus on improving critical communications between professionals along the pathway, and developing training packages for parents to support them in caring safely for their children, who frequently have very complex needs

Capability Building and Leadership Development

The PSC continues to develop the capability for safety and quality improvement through a wide range of different activities. These activities are designed to increase skills in quality improvement methodology, clinical human factors, measurement for improvement and leadership skills.

Coaching in quality improvement programmes

The Head of Patient Safety and the Patient Safety Managers continue to offer QI coaching to all clinical project teams to develop their skills. The approach is particularly helpful to clinical teams who can learn together in busy clinical environments as they advance their projects. In addition to this, the systematic quality improvement project (QIP) with the GP School related to sepsis and NEWS for 100+ trainee GPs was launched in this quarter.

Health Foundation Q initiative

In Q2, the Oxford PSC launched its recruitment programme with the application window open from 3 August to 11 September 2017. In the period before and during, the team publicised the initiative widely, with the aim of attracting at least 100 people from around the region to join the Q community. This was achieved with 64 applications received. This process has identified 30 new people with an interest in improvement that were previously not part of our networks. We will also be taking part in assessing applications, together with our Q founding members and patient representative, throughout October 2017, and will hold a 'welcome event' in 31 January 2018 for all new members.

Measurement for Improvement

The AHSN continues to support the provision of measurement for improvement surgeries with Mike Davidge for all project leads across the PSC and the AHSN.

Informatics

The Informatics provision of data requests is on schedule with no outstanding issues.

Stakeholder Engagement and Communications

Q2 has been relatively quiet with the summer months but a number of events with stakeholders in both July and September proved popular and provided opportunities for networking and the sharing of ideas and good practice. In addition, this time provided the opportunity for the team to review plans and documents and prepare material to support all staff in the important area of communications. A monthly meeting, chaired by the Head of Communications, includes the Communication team and representatives from each programme and theme and ensures the sharing of information. The Stakeholder calendar also ensures that all are aware of forthcoming events and meetings across the programme and themes.

The annual NHS innovation Expo event held in Manchester in early September, included the strong collective presence of all 15 AHSNs through the AHSN Network. A number of talks were given by individual members of the Oxford AHSN – e.g. Early Intervention in Psychosis and Strategic and Industry Partnerships.

The event gave us the opportunity to speak with colleagues from other AHSNs, clinical innovators and industry partners. We are a key partner in the Bicester Healthy New Town which featured in a session chaired by NHS England Chair Sir Malcolm Grant. The AHSN Network also hosted a well-attended reception.

The AHSNs' involvement was coordinated through the AHSN Network Communications forum. Our Head of Communications is a key member of this group. The AHSN Network recently appointed a Coordination Director, Mike Burrows, and an Assistant Coordinator, Chris Taylor. The regular bulletins it produces are now of real interest and value.

Oxford AHSN Twitter activity during the event and particularly on day 1 was significant giving the highest number of impressions this quarter (over 8,000 in a 24-hour period). Key statistics are as follows:

- ❖ 500 copies of the impact report distributed
- ❖ 34 exhibiting innovators – biggest feature zone at Expo
- ❖ 2 main stage sessions
- ❖ 140 VIP reception guests
- ❖ 11 pop up universities
- ❖ 10 VIP visits

The AHSN was involved in the planning and delivery of the POCT Connectivity National Networking Forum, held in Birmingham on 12 September. Julie Hart, a member of the Strategic and Industry Partnerships Programme, spoke and her talk was described as well paced, innovative and informative.

Stakeholders have contributed greatly to the AHSN image library which is being developed for use by all in enhancing our publications and other materials. The intention is to draw together the widest possible view of the AHSN, its stakeholders, its geography and its activities in a series of original images. Stakeholders are invited to continue to contribute images – we welcome the opportunity to illustrate their work.

The work of stakeholders is well demonstrated in the shortlist (see below) for the 4th Annual Oxford AHSN Award for best public-private collaboration. The winner will be announced at the OBN Annual Awards Dinner on 5 October at Oxford Town Hall. (see www.obn-awards.com)

- **Johnson and Johnson (J&J)/Janssen** for ongoing collaborative work in the field of health and wellbeing, including work in mental health, inflammatory bowel disease and digital innovation.

Partners include Buckinghamshire Healthcare NHS Trust, Oxford Health NHS Foundation Trust and the NIHR Oxford Collaboration for Leadership in Applied Health Research and Care.

- **Sarissa Biomedical** for work in the development of a simple point of care diagnostic blood test (SMARTChip) as an aid to emergency stroke identification leading to better patient outcomes and more efficient use of NHS resources. Partners include Oxford University Hospitals NHS Foundation Trust, the South Central Ambulance Service NHS Foundation Trust, other AHSNs and universities.
- **The University of Oxford, Oxford University Innovation, Oxford University Hospitals NHS Foundation Trust and Drayson Technologies**. These organisations have signed a strategic research agreement to evaluate, develop and commercialise digital health applications including GDm-Health for the management of gestational diabetes.

Work on health and wellbeing is very important to the AHSN and other key stakeholders including the County Sports Partnerships, NHS trusts and Public Health England (PHE), in addition to companies including BMW, Unipart, J&J and Vodafone. We work together on a number of initiatives and the Get Physical website www.getphysical.org.uk has recently been updated and relaunched. PHE will be using the site as one of its means of highlighting its events and activities. A wellbeing in the workplace event took place at Unipart on 29 September.

The Royal Berkshire NHS Foundation Trust held an open day on 23 September for its membership community and the public. Dr Atul Kapila, R&D Director for the Trust and member of the AHSN R&D group, was the keynote speaker. Berkshire Healthcare NHS Foundation Trust and the Thames Valley Clinical Trials Unit, demonstrating the cross-institution links and research in the region.

The life sciences industrial strategy was published. You can read the document here: https://www.gov.uk/government/publications/life-sciences-industrial-strategy

It was led by Prof Sir John Bell, Regius Professor of Medicine at the University of Oxford. Key references reflecting the current and future work of the AHSNs are given below:

- *P23: Clinical research*

Importantly, our universities also provide key partners for NHS hospitals and together create strong **Academic Health Science Centres and Networks** that allow the NHS to participate in cutting-edge clinical research. They also provide ideal venues for convergent science activity.

- *P38: Developing life sciences hubs*

Regions should make the most of existing opportunities locally to grow clusters and build resilience by working in partnership across local Government, LEPs (in England), universities and research institutes, NHS, **AHSNs**, local businesses and support organisations, to identify and coalesce the local vision for life sciences. Science & Innovation Audits, Local Growth Funds and Growth Hubs (in England), Enterprise Zones and local rates and planning flexibilities can all be utilised to support a vision for life sciences.

- *P54: Supporting spread and adoption of innovation*

SMEs producing innovative products can find it challenging to engage with the NHS. Efforts must be made to improve uptake of innovative products by the NHS, building on the promising early start being made by **Academic Health Science Networks.** It is clear that NHS procurement approaches and systems for setting reimbursement tariffs, together with the sheer number of purchasing or commissioning organisations within the NHS, can, make it very difficult for SMEs to find a route to market. This should be reconsidered if the NHS is to be a good customer for the sector.

- *P59-60: Digital Innovation Hubs*

A selection of 2-5 regions, corresponding to **AHSN** footprints capable of establishing such DIHs, should be made, utilising: evidence of EPR infrastructure, which has received significant investment and is maturing quickly; alignment with global digital exemplar sites; potential for data linkage along the care pathway; attractiveness to industry and collaborative partners; a track record of working effectively with industry; analytical expertise applied at scale to large data sets; methodological expertise in trial design; coherent geography covering 3-5 million people that aligns with patient flows; and a strong environment for clinical academic research, for example co-location / partnership with existing NIHR / CRN infrastructure. As these hubs develop, there will need to be support for study design, data management and project management, and each may evolve to support several hundred individuals in these roles. Ultimately, the goal should be to have coverage across the whole of the UK.

Events involving a single specific topic or theme have continued to prove popular and the AHSN Patient Safety theme supported World Sepsis Day https://www.world-sepsis-day.org/ marked every year on 13th September. Organisations took the opportunity to raise awareness with events locally. The Oxford University Hospitals NHS FT held an open day highlighting it approach and working with others to enhance chances of recognition and early treatment.

The Patient Safety Collaborative is working with organisations across the Oxford AHSN region to improve the recognition and management of sepsis across the whole health economy. Our website provides information and resources including our regional sepsis pathways, adopted by all 6 acute trusts for both adults and paediatrics. http://www.patientsafetyoxford.org/clinical-safety-programmes/sepsis/sepsis-resources/

This year the global focus was on maternal and neonatal sepsis https://wscspotlight.org/. The inclusion of the Maternity network under the PSC umbrella provides an opportunity for shared working in this area http://www.oxfordahsn.org/our-work/clinical-networks/maternity/

In addition, teams from emergency departments across the Oxford AHSN region had a productive initial meeting on 21 September to discuss patient safety issues and share best practice. The meeting was coordinated by the Oxford AHSN Patient Safety Collaborative.

Communications

Both our Twitter activities and monthly electronic newsletters continue to thrive with increasing numbers signing up for both. Followers for the main AHSN Twitter feed have now reached 3,242 - an increase of 600+ during Q2. The first day of the NHS Expo event (11 September) saw the highest number of impressions in the quarter – over 8,000 – reflecting the strong AHSN presence and collaboration with key national partners including NHS Digital, NHS Innovation and NHS England.

The announcement of the shortlist for the annual AHSN partnership award also garnered considerable interest on Twitter. Individual programmes, themes and clinical networks run their own Twitter feeds – nine in total – which encourages activity and information-sharing across a wide range of activities.

The following graph shows the steady rise of followers of the AHSN's Twitter feed since March 2015.

Twitter followers by Quarter 2015 - 2017
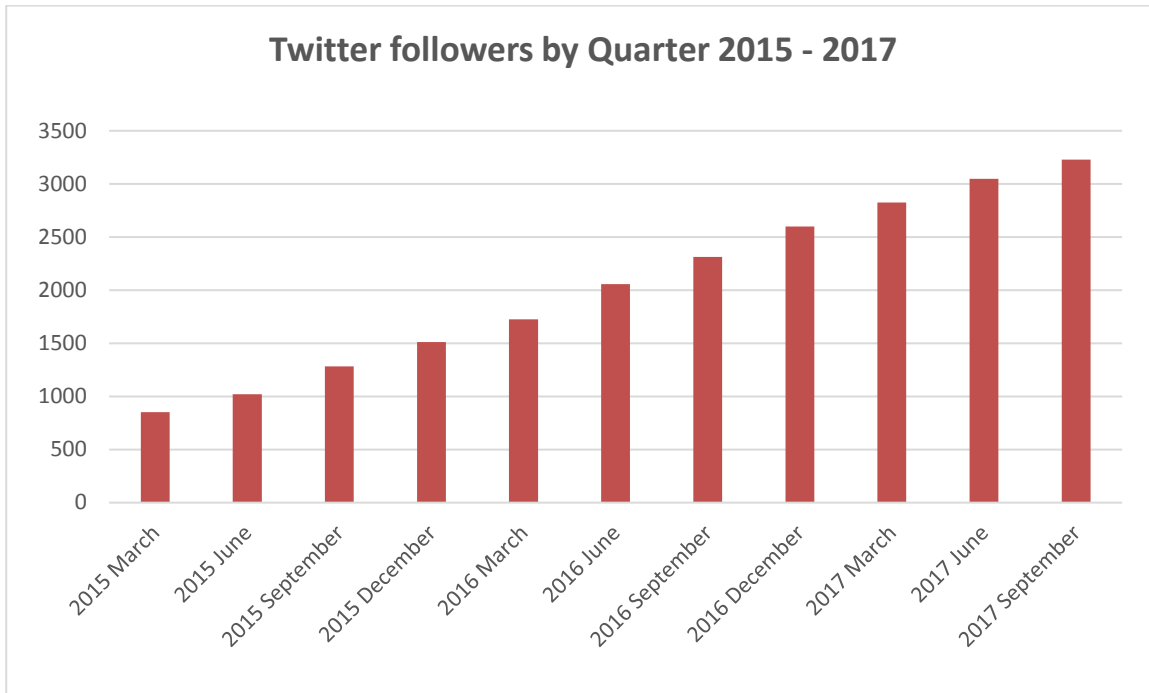
Work has continued to support the Oxford AHSN brand ahead of relicensing. The Head of Communications, Martin Leaver, is finalising a style guide for all team members to ensure the readability, quality and consistency of materials. An updated template for PowerPoint presentations is also available.

The newsletters continue to provide good updates on AHSN-wide activities and news with current circulation to 2,679. The Patient Safety team also published its first newsletter. Items of particular interest featured in recent editions include:

- Hundreds of people got the message about acting quickly on joint pain thanks to a giant hand when it appeared in Reading, Oxford and London (see image on the cover of this report). Many followed the instruction to talk to the 12ft hand with some even attempting a (very) high five. It's part of a campaign organised by the Oxford AHSN and the National Rheumatoid Arthritis Society to raise awareness of issues relating to rheumatoid arthritis which affects about 30,000 people in the Oxford AHSN region. Interest in the hand earned James Rose, Senior Clinical Innovation Adoption Manager, appearances on BBC radio and the giant hand will feature in a film in October.
- Three more Oxford AHSN case studies have been added to the national Atlas of Solutions in Healthcare which highlights the best examples of AHSNs' impact in improving health and spreading innovation. They are:
  - o Improving patient outcomes following high-risk surgery through better use of technology – key partner Milton Keynes University Hospital NHS Foundation Trust
  - o Award-winning approach achieves improved return rates on psychiatric wards – key partner Oxford Health NHS Foundation Trust.
  - o Better monitoring and fewer hospital visits for women who develop diabetes during pregnancy
- All the Oxford case studies can be seen here http://atlas.ahsnnetwork.com/AHSN/oxford/

The website activity has been variable with a high during the quarter in August but lower than expected figures in September. The activity is shown below for the last three years to date (August figures).

Website activity 2015 - 2017 (Q2)
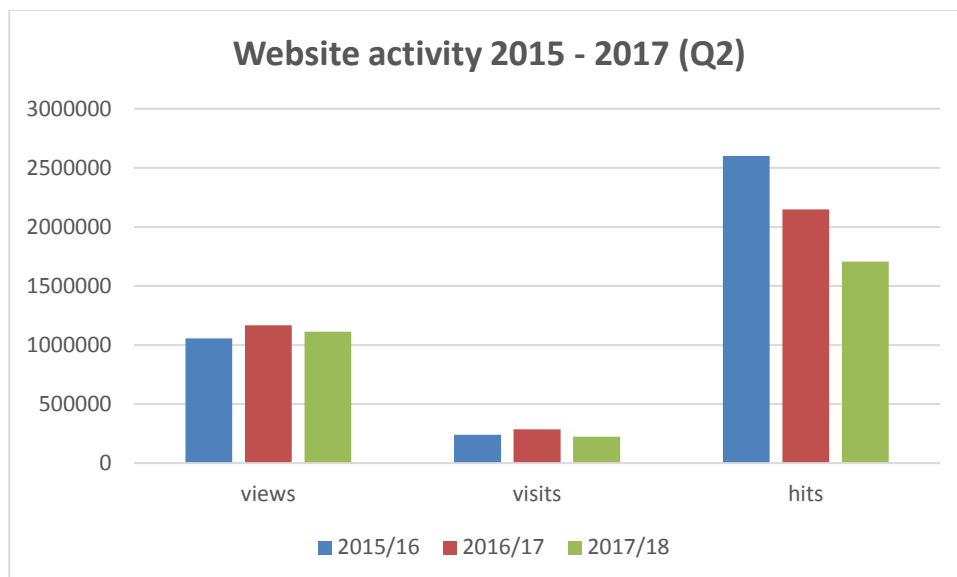
Events planned for the coming Q3 include:

5 October, 2017 Annual OBN Awards Dinner, Oxford Town Hall

11 October 2017 Regional Sepsis Stakeholder meeting

17 October 2017 Connect Harwell Workshop, Harwell Campus

24 October 2017 AHSNs and CLAHRC meeting, University of Leicester

24 October 2017 Oxford empathy programme international colloquium, St Catherine's College, Oxford

25 October 2017 AND 30 November 2017 public and patient involvement in health and medical research, the John Radcliffe Hospital West Wing/Botnar Institute, NOC

31 October 2017 AHSN Research and Development Group, Oxford AHSN

10 November 2017 Early intervention in Psychosis peer review, The Belfry, Milton Common

16 November 2017 World Stop the Pressure Day, Headington Hill Hall, Oxford Brookes

21-22 November 2017 Patient First Conference, London Excel

4-5 December 2017 Innovation Forum Leadership, Said Business School, Oxford

4 December 2017 Data, drugs, diagnostics and devices, Oxford Mathematical Institute

Additional events and information can be found at www.oxfordahsn.org

Webinars: Leading collaboration for change and improvement

The AHSN's Dementia Clinical Network has used webinars very successfully.

NHS England's Sustainable Improvement team and London South Bank University are hosting free webinars on network leadership. They will provide know-how and insights into what it takes to lead

networks, partnerships and collaborations. (www.source4networks.org.uk/resources/events/89-network-leadership-webex-series)

Dates and themes are:

- 16 Oct 15:00–16:00 What does it take to be a network leader?
- 27 Nov 15:00–16:00 Creating value and impact in networks
- 11 Dec 15:00–16:00 Sustaining your network

Oxford AHSN Finance

Quarter 2

Actual revenue received is in line with forecast. We have received a good response to our letters from Trust & University Partners, having invoiced 57%.

Expenditure within Programmes & Themes is lower than forecast due to certain expenses such as Training and contractor costs moving to Q3/Q4, and late implementation of The Life QI system within our PSC which covered within the forecast outturn.

Patient & Public Involvement Experience & Engagement (PPIEE) forecast includes an additional £138k of funds received and carried forward from 16-17 in additional to the AHSN budget of £111k, which relates to training and Leading Together Programme.

Core Team Non-Pay forecast includes legal fees that are additional to the original plan, plus some extra contracting during August & September.

	01-Apr-17	01-Apr-17	01-Apr-17	01-Apr-17	01-Apr-17
Model Period Beginning					
Model Period Ending	31-Mar-18	31-Mar-18	31-Mar-18	31-Mar-18	31-Mar-18
Financial Year Ending	**2018**	**2018**	**2018**	**2018**	**2018**
Year of the 5 Year Licence Agreement	**5**	**5**	**Q2**	**Q2**	**Q2**
INCOME (REVENUE)	Opening Plan	Forecast	Opening Plan	Forecast	Actual
NHS England funding	2,304,119	2,304,119	1,152,060	1,152,060	1,152,060
Partner contributions	411,500	443,896	205,750	221,948	254,630
Other partner income	150,000	171,292	75,000	85,646	78,146
HEETV income for continuous learning	118,300	28,960	59,150	28,960	28,505
NHS England funding - PSC income	515,388	515,388	257,694	257,694	257,694
Other Income - Patient Safety Collaborative	0	26,163	0	13,082	13,000
Other Income - Best Care	0	115,954	0	54,192	60,647
Other Income - Clinical Innovation Adoption	0	270,150	0	110,180	114,295
Other income - Strategic & Industry Partnerships	0	240,028	0	108,426	73,410
Other income - Informatics	0	97,248	0	43,624	43,996
Other Income - PPIEE	0	40,607	0	20,304	20,302
Total income	**3,499,307**	**4,253,805**	**1,749,654**	**2,096,115**	**2,096,685**
AHSN FUNDING OF ACTIVITIES					
Patient Safety Collaborative	530,388	631,484	265,194	285,945	255,603
Best Care	686,785	528,416	523,546	394,750	386,820
Clinical Innovation Adoption	726,416	859,637	363,208	333,452	345,241
Strategic & Industry Partnerships	545,867	858,679	272,934	319,289	293,611
Informatics	402,202	502,571	201,101	260,085	228,384
PPIEE	111,108	289,492	55,554	146,001	128,141
Programmes and themes	**3,002,766**	**3,670,279**	**1,681,536**	**1,739,522**	**1,637,799**
CORE TEAM AND OVERHEAD					
Pay costs	549,235	558,794	274,618	281,021	288,220
Non-pay costs	347,783	448,537	173,892	196,529	173,289
Communications, events and sponsorship	220,573	197,245	110,287	101,936	80,215
Total core team and overhead costs	**1,117,591**	**1,204,576**	**558,796**	**579,485**	**541,724**
Total expenditure	**4,120,357**	**4,874,855**	**2,240,332**	**2,319,007**	**2,179,524**
Net Income/Expenditure	**621,050**	**621,050**	**490,678**	**222,892**	**82,838**
Programme funding previously committed	621,050	621,050	490,678	222,892	82,838
Surplus/(deficit)	**0**	**0**	**0**	**0**	**0**

Appendix A - Review against the Business Plan milestones

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
Establishment of the Oxford AHSN	Annual Report				◆	
	Oxford AHSN 5 Year re-licensing			◆		
Best Care	Closure/handover of network activities to other entities.	✓				
	Launch of new structure to govern remaining clinical network activities		→→→	◆		
Clinical Innovation Adoption	Collection of data regarding adherence to all relevant NICE TAs and High Impact Innovations			◆		
	Update innovation portfolio that will have agreed implementation plans with sign off from the CIA Oversight Group. Horizon scan innovations in industry, NHS, NICE TAs and other sources.	✓				
	Intra Operative Fluid Management Project Estimated Completion (commenced 2014/15)		→→→	◆		

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
	Catheter Acquired Urinary Tract Infection Project Estimated Completion (commenced 2014/15)			◆		
	Early Inflammatory Arthritis NICE Project Estimated Completion (commenced 2014/15)			◆		
	Biosimilars – Chief Pharmacists picking this up for BOB STP	Closed				
	Fragility Fracture Prevention Service Estimated Completion (commenced 2015/16)					◆
	Falls Prevention Strategy Project Estimated Completion (commenced 2015/16)				◆	
	Respiratory- Estimated Completion (commenced 2016/17)	Closed				
	Pneux (tracheal tube for ICU ventilator)					◆
	NIC (Non-injectable Connectors)					◆
	Wiresafe (guidewire patient safety)					◆
	Thrombectomy (Mechanical device)					◆

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
	Urolift (benign prostatic hyperplasia implants)					◆
	Strategic and Industry Partnerships Project to be agreed- Estimated Completion					◆
	National AHSN Innovation Project to be agreed- Estimated Completion (Commencing 2016/17)					◆
	Select 10 innovations for 2018/19				◆	
	Start delivery of 2018/19 innovation portfolio					◆
	National AHSN Innovation Project to be agreed- Estimated Completion (Commencing 2016/17)			◆		
Strategic and Industry Partnerships	Establish pipeline of innovations for commercialisation • ensure industry and academics can access the NHS clinicians they need to work on concepts and pilots of new products and services • work with tech transfer offices and other partners to ensure commercialisation is more efficient and effective	✓				

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
	Support industry group to improve infrastructure across Oxfordshire	✓				
	Provide support in the running and marketing of digital health events across the region	✓				
	Establish one new JV or industry partnership				◆	◆
	Establish consultancy business			◆		
	Initiate diagnostic evaluations	✓		◆		◆
	Establish digital innovation pathway and accelerator			◆		◆
	Oxford Martin School Project				◆	◆
	Support regional cluster activity		✓		◆	
	Deliver one new funding initiative				◆	◆
	West Midlands AHSN partnership			◆		
Informatics Local Digital Maturity	Review CCG assessment and roadmap	✓				

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
	CIO forum to initiate local maturity model for the region		✓			
	Initiate a cross organisation assessment and visualisation				◆	
Informatics Research Informatics Focused on the deployment of Clinical Records Interaction Search (CRIS).	Partner engagement	✓				
	Federation – enabling federated queries to be run against local CRIS databases (Oxford)		✓			
	Berkshire Healthcare Install extract utility and validate data dictionary	CLOSED				
	Berkshire Healthcare User acceptance testing and tech go live.	CLOSED				
	Berkshire Healthcare – CRIS deployment	CLOSED				

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
Informatics Information Governance Mobilisation of IG Working Group (Caldicott Guardians and Heads of IG) in order to produce, sign off and implement an IG Framework for the AHSN region.	Developing local capability through training Heads of IG and establishing peer group network	───────────────►		◆		
	Engaging CCGs to extend coverage to GPs		──────────►		◆	
	Patient Engagement with PPIEE to develop a consent for contact approach		──────────►		◆	
Demonstrate IG framework is working	Enable two region wide projects – Imaging and Maternity	✓				
Informatics Personal Health Records Platform development	Develop case for change as basis for consultation, now as part of the interoperability work					

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
Informatics Developing analytics	Demonstrate to users how they will be able to interact with the new platform and access reports.	→————	————→	◆		
	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.		———→	◆		
PPIEE	Framework for supporting organisational and system–based patient centred care developed (year 5) and implemented (year 6) across all partner organisations			◆		◆
	Strategic direction Revise strategy and publish including joint statement on PPI in research with links into work plans for individual organisations.			◆		
	Communications and broadening PPIEE activity across the Oxford AHSN region Regular publications - involvement newsletter, publicising PPIEE events, and case studies	✓	✓	◆	◆	◆

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
	PPIEE Network development Leading Together network newsletter published Leading Together events held			◆ ◆		
	Leading Together - Co-designed and co-delivered pilot for learning disabilities - Train the trainer programme held - Funding sought for further rollout			◆	◆ ◆	
	Informatics Agreed set of person-centred care metrics developed and tested with local organisations			◆		
Living Well Oxford	Public involvement Evaluated and held celebrating success event for aging and dementia pop-up shop			◆		
	Continued education Links with PPI in Universities to be developed over the year	✓	✓	◆		

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
Patient Safety	Maintain, consolidate and sustain current clinical programmes and function of PSC	✓	✓	◆	◆	
	Design integrated approach to clinical adoption across PSC, Industry Partnerships and Clinical Innovation Adoption	→————————→		◆	◆	
	Deliver integrated approach to clinical adoption of patient safety devices across three themes and evaluate			→———→	◆	◆
	Support and enable Maternity and Neonatal Collaborative	✓	✓	◆	◆	◆
	Build widespread capability in partnership with local organisations	→————————→		◆	◆	◆
Stakeholder engagement and communications	Quarterly and annual reports	✓	✓	◆	◆	◆

Programme/Theme	Milestone	Year 5 Q1	Year 5 Q2	Year 5 Q3	Year 5 Q4	Year 6
	Sponsorship and events (updated programme in place)	✓	✓	◆	◆	◆
	Supporting materials developed – generic and specific – regular updates going forward including new branding	✓	✓	◆	◆	◆

Appendix B- Matrix of Metrics

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 5/6)	Milestone activities (Year 5/6)	Outcome Framework Domain	Associated Funding	Current Status
1	Focus upon the needs of Patients and local populations (A)	Best Care Programme The Best Care Programme is designed to deliver AHSN licence objective one: focus on the needs of patients and the local populations.	KPIs remain in discussion within senior AHSN team. Work remains on going to identify funding opportunities beyond March 18	Secure funding for clinical networks Close networks that cannot secure funding	1,2,3,4,5	£528,416	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 5/6)	Milestone activities (Year 5/6)	Outcome Framework Domain	Associated Funding	Current Status
2	Speed up innovation in to practice (B)	Clinical Innovation Adoption Programme The Clinical Innovation Adoption (CIA) Programme aims to improve significantly the speed at which quality clinical innovation is adopted and in the process of adoption – improve clinical pathways and outcomes for patients. The goals of the programme are to; Support adoption of innovations at scale across the region to improve patient outcomes, safety	Average number of: Acute, Community/Mental Health Trusts and Community adopting each innovation - Planning to implement - Implemented - Participating	5 more innovation adoption projects in final stage of deployment 25 more innovators trained on Practical Innovation course	1,2,3,4,5	£859,637	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 5/6)	Milestone activities (Year 5/6)	Outcome Framework Domain	Associated Funding	Current Status
		experience and cost effectiveness					
3	Build a culture of partnership and collaboration (C)	To promote inclusivity, partnership and collaboration to consider and address local, regional and national priorities.	All of the AHSN's seven programmes and themes are a collaborative effort by all the partners in the region, and address local and national priorities.		1,2,3,4,5		
		R&D The R&D Programmes aims are to improve R&D in the NHS through closer collaboration between the Universities, NHS and Industry.		Ongoing work to support the development of individual trust R&D strategic plans		£17,000	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 5/6)	Milestone activities (Year 5/6)	Outcome Framework Domain	Associated Funding	Current Status
		Informatics Informatics theme has been designed to support the core programmes/themes of the AHSN across all four license objectives by drawing insight from population data for the purpose of transparent assessment of health status, measurement of health improvement and research.		Bid for Digital Innovation Hub (year 5)	1,2,3,4,5	£502,571	
		PPIEE Patient and Public Engagement and Experience (PPIEE) is a crosscutting theme, working across the		Plan for sustainability beyond March 2018	4	£289,492	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 5/6)	Milestone activities (Year 5/6)	Outcome Framework Domain	Associated Funding	Current Status
		programmes of the AHSN, relevant work is cross-referenced to other sections of the business plan.					
		Team, overhead, communications, events and sponsorship	Number of subscribers to the Oxford AHSN Newsletter and Twitter followers per quarter Number of visits to Oxford AHSN website per month Number of attendees at all AHSN events per annum	Stakeholder roadshows (years 5 and 6) Independent stakeholder survey (year 6)		£1,187,576	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 5/6)	Milestone activities (Year 5/6)	Outcome Framework Domain	Associated Funding	Current Status
4	Create wealth (D)	Strategic and Industry Partnerships Aim is to help our region become the favoured location for inward life science investment, life science business creation and growth – helping the NHS to accelerate the adoption of clinical innovations bringing significant benefits to patients.	Amount of investment leveraged in the region (including savings) Number of people employed in life science industry	One new joint venture or industry partnership (years 5 & 6)	1,2,3,4,5	£858,679	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 5/6)	Milestone activities (Year 5/6)	Outcome Framework Domain	Associated Funding	Current Status
5	Patient Safety	The principal aims of the collaborative will be to: Develop safety from its present narrow focus on hospital medicine to embrace the entire patient pathway Develop and sustain clinical safety improvement programmes within the AHSN Develop initiatives to build safer clinical systems across the Oxford AHSN	Increase adoption of AWOL project in Berkshire Healthcare and CNWL to increase return rates by 50% on all acute wards Maintaining and increasing the amount of premature babies born in a level 3 unit (≤27 weeks gestation or ≤28 weeks in multiple pregnancy, or estimated fetal weight of 500g)	Three programmes showing safety improvement Plan for sustainability beyond March 2019	1,2,3,4,5	£631,484	
						£4,874,855	

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Appendix C- Risk Register and Issues Log

Risk 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	Low	Med	> 6 / 12 months	Leadership supporting a culture of collaboration, transparency and sharing. Agreed organisational Vision, Mission and Values. Stakeholder analysis to ensure geographic spread and multi-disciplinary representation across the programmes. Partnership Board representation drawn from across the geography and key stakeholders. Oversight Groups in place for each	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
			scale and improving prosperity of the region				Programme and Theme, broadening representation across our stakeholders. Celebrate successes through Case Studies & Events. Regular monthly newsletter and Twitter. Regular refresh of website and monitor usage. Quarterly review of breadth and depth of engagement by programmes and events. CIA analysis of strategic priorities of commissioners and providers. 7 partner showcase events held across the					

#	Prog/Theme	Risk	Description of Impact	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date added	Date mitigated	RAG
							region in 2016. Five more held May 2017. Showcasing local examples of effective collaboration towards better patient care. Oxford AHSN commissioned a stakeholder survey on the effectiveness and impact of the Oxford AHSN. 26% response rate (536 responses) Results positive. We will commission another survey in 2018. In addition to the local survey, Oxford AHSN also took part in the National YouGov Stakeholder Survey but response numbers (circa 20)					

#	Prog/Theme	Risk	Description of Impact	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date added	Date mitigated	RAG
							statistically invalid to draw any conclusions Active engagement with STPs and ACSs					
6	Oxford AHSN Corporate	Failure to sustain the AHSN	Programme activities cease	Med	Med	> 6 / 12 months	NHS England has confirmed that AHSNs will be re-licensed. We must be successful in securing a new licence. No indication thus far from NHS Improvement that funding will continue for patient safety beyond March 2019. OLS money has been confirmed. We are actively pursuing industry partnerships, joint venture opportunities and grants to reduce our reliance on	AHSN Chief Operating Officer	AHSN Chief Operating Officer	31–Jul–14	Onging	AMBER

#	Prog/Theme	Risk	Description of Impact	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date added	Date mitigated	RAG
							NHS England and NHS Improvement funding. Action has been taken reduce our costs by £1m and we have a robust financial plan for the next two years. Review January 2018					

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Issues Log

#	Programme / Theme	Issue	Severity	Area Impacted	Resolving Action	Owner	Actioner	Date Added	Current Status	Date Resolved
25	Oxford AHSN Corporate	Lack of awareness by local partners and national stakeholders of progress and achievements of the AHSN	Minor	Culture	Overarching comms strategy that is refreshed regularly. Website refreshed regularly and new content added – visits per month increasing Followers and subscribers increasing. Links being enhanced throughout the region through Comms networks. Partner showcase events with all partners. Level of engagement closely monitored	AHSN Chief Operating Officer	Head of Communications	19/01/15	90% complete	

#	Programme / Theme	Issue	Severity	Area Impacted	Resolving Action	Owner	Actioner	Date Added	Current Status	Date Resolved
			 		across all programme and themes (see KPIs). Oxford AHSN survey was commissioned by the Board. Stakeholder participation in AHSN growing each quarter. Pipeline of publications. Updates provided to partner boards.					

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Appendix D - Oxford AHSN case studies published in quarterly reports 2013-2017

Quarterly report	Case study summary	Programme/Theme
Q2 2017/18	Point of care test evaluation points the way to quicker diagnosis of common childhood illnesses	Strategic and Industry Partnerships
	Oxford AHSN insights on digital health feed into key report on Oxfordshire's tech cluster	Strategic and Industry Partnerships
	Defining and measuring suspicion of sepsis	Patient Safety
Q1 **2017/18**	Improving patient outcomes following high-risk surgery through better use of technology	Clinical Innovation Adoption
	Improving return rates to psychiatric wards	Patient Safety
	The Hill – putting innovation at the heart of healthcare in Oxford	Strategic and Industry Partnerships
	Improving the care and life chances of young people who develop psychosis through effective early intervention	Best Care (Early Intervention in Psychosis)
Q4 2016/17	Digital health initiative leads to better monitoring and fewer hospital visits for women who develop diabetes during pregnancy	Clinical Innovation Adoption
	Better data sharing through regional information governance framework	Informatics
	Catalysing innovation and driving economic growth in Buckinghamshire	Strategic and Industry Partnerships
	Lives of more premature babies saved through improved referral pathways	Best Care (Maternity)
Q3 2016/17	Promoting workforce health and wellbeing through our Get Physical initiative	Corporate
	Improving detection and management of atrial fibrillation (AF)	Clinical Innovation Adoption

	New standard measures to improve care for patients with IBD developed by international collaboration	Wealth Creation
	Leading together – patients and professionals take a collaborative approach to solve health issues	PPIEE
	Better network-wide data sharing improves patient care	Best Care (Maternity)
Q2 2016/17	Digital survey results	Wealth Creation
	Imaging patient info films	Best Care
	Sustainability project	Wealth Creation
Q1 **2016/17**	Bicester healthy new town	Wealth Creation
	Children's immunisation	Best Care
	Perinatal SHaRON	Clinical Innovation Adoption
Q4 2015/16 (annual report)	Memory clinic accreditation update	Best Care
	Meds optimisation CBT progamme	Best Care
	AWOL project	Patient Safety
	J&J collaboration	Wealth Creation
	CAUTI project	Clinical Innovation Adoption
Q3 2015/16	EIP data based approach	Best Care
	Leading Together programme starts	PPIEE
	Get Physical event review	Corporate
Q2 2015/16	Targeted medicines support	Best Care/Patient Safety
	Memory clinic accreditation	Best Care
	IPC stockings	Clinical Innovation Adoption
	Alumni Summit review	Wealth Creation

Q1 **2015/16**	A&D recovery rates	Best Care
	Pre-term birth location saves lives	Best Care
	In2vu data visualisation	Informatics
Q4 2014/15 (annual report)	GDm remote monitoring	Clinical Innovation Adoption
	IOFM benchmarking	Clinical Innovation Adoption
	Sustainable energy	Wealth Creation
Q3 2014/15	Developing patient leaders	PPIEE
	CFT – heart attack test	Wealth Creation
Q2 2014/15	Memory clinics	Best Care
	Managing acute appendicitis	Best Care / Patient Safety (PSA)
	A&D recovery	Best Care
Q1 **2014/15**	Dementia network launch	Best Care
	Medicines optimisation launch	Best Care
	Wealth creation explained	Wealth Creation
	GDm remote monitoring	Clinical Innovation Adoption
Q3 **2013/14**	App development route map	Wealth Creation
	2023 Challenge	Wealth Creation