# Oxford AHSN Year 5 Q3 Report

For the quarter ending 31 December 2017

# Contents

**Chief Executive's Review**

Each year brings new challenges to the NHS and new opportunities despite the financial constraints that continue to bear down on NHS providers. The need for new approaches to treatment that provide more efficient care has never been greater. Diagnostic and digital innovation have great potential to empower patients in self-management, support decision-making and increase care that can be provided out of hospital.

Our three case studies this quarter reflect our work in supporting development and spread of digital and diagnostic solutions. We have published a **digital health roadmap** for innovators and entrepreneurs interested in developing and commercialising digital health products and services. Our initiative in East Berkshire on **reducing urinary tract infections in care homes by improving hydration** has won three prizes and is being scaled up across more care homes. Our pilot **growth restriction Identification programme** piloted in Oxford, is introducing additional ultrasound assessments to allow easier identification of unwell and small babies and reduce the risk of birthing complications.

During the quarter there have been three major publications by the Government on health and life sciences. The first was the Government's Response to the Accelerated Access Review published in November. This was followed by the Government's Industrial Strategy, published later that month, which sets out the strategy for supporting industry including life sciences. The Life Sciences Sector Deal was launched in December. These three publications represent important policy positions set out by the Government and identify significant roles for AHSNs and the NHS in supporting economic growth.

This has been the busiest year for the Oxford AHSN since we started back in 2013 with increasing focus from our main funders NHSE and NHSI on how the 15 AHSNs will deliver national impact through collaborative programmes of work. NHS England has proposed development of nine "Innovation National Networks" as the future framework for organising collaborative work across the AHSN Network. The NHS England Board, in partnership with the NIHR (National Institute for Health Research), published a paper outlining the 12 actions they will take to support and apply research in the NHS. AHSNs will play a key role in leading a process to identify and articulate the NHS's research priorities better, coordinating proposals for Local Integrated Care Record Exemplars and Digital Innovation Hubs and supporting a process that will improve and simplify the adoption ecosystem.

The AHSN relicensing process picked up significantly this quarter. Ian Dodge, the NHS England Executive Director for Commissioning Strategy who is responsible for the AHSN relicensing process, visited Oxford AHSN in November and spent a very positive morning with the senior team discussing the successes and challenges of building collaborations across the health system partnering with industry to speed up innovation adoption and provision of better value patient care. Oxford AHSN,

in line with the other 14 AHSNs, has submitted a "Plan on a Page" of financial benefits under four different funding scenarios for a second five-year licence from April 2018.

I would like to wish our partners and my team a successful 2018.

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

**Oxford AHSN case studies**

1. **Digital Health Roadmap published to guide digital health developers**
2. **Reducing urinary tract infections in care homes by improving hydration**
3. **Stillbirth prevention - Oxford Growth Restriction Identification programme saves a life**

**Oxford AHSN case study**

**Date:** Q3 2017/18

**Programme/Theme:** Strategic and Industry Partnerships

**Title** -Digital Health Roadmap published to guide digital health developers

**Supportive quotes**

*"Fantastic new resource from our colleagues @OxfordAHSN to help innovators turn ideas into products to improve health"* University College London Partners

*"Everything you need to get your idea to market!"* MedCity

*"This looks great – a really useful resource!"* Imperial College Health Partners

**Overview summary**

The Oxford AHSN, in collaboration with Oxford University Innovation and with consulting support from Oxentia, has produced a Digital Health Roadmap for innovators and entrepreneurs interested in developing and commercialising digital health products and services. It was launched at the Innovation Forum leadership conference in December 2017 and highlighted further at the NIHR MindTech conference two days later. Further details at: http://bit.ly/roadmapOX

The Roadmap was produced after a gap in support for SMEs developing and commercialising digital health products - including health management apps, wearable tech and online interactions – was identified.

The Roadmap was intended as an update of the Oxford AHSN 'Map the App' guide published in 2013. Since then there have been significant changes to the development pathway for digital health solutions and the need for a revised and updated report was very evident. The Roadmap sets out the different stages of development – from concept to adoption by the NHS and other health systems - and addresses each one in detail:

> **Stage 1** Needs assessment and idea generation
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> **Stage 2** State of readiness screening
>
> **Stage 3** Detailed feasibility study
>
> **Stage 4** Development and proof of concept
>
> **Stage 5** Evidence building
>
> **Stage 6** Market launch
>
> **Stage 7** Market uptake and exit

# Oxford AHSN's Digital Health Roadmap

Academia   NHS   Industry

**Stage 1** — Needs Assessment & Idea Generation — GO

- Revenue Strategy
- QA/RA Strategy
- Clinical/Patient/System Need
- Context – Macro and Micro Environment Analysis

**Stage 2** — State of Readiness Screening — STOP (Abandon / Seek Partner) — GO

- Clinical
- Technical
- Economic
- Regulatory
- Payment
- Context
- Commercial

**Stage 3** — Detailed Feasibility Study — STOP (Abandon) — GO / REVIEW

- Identify stakeholders
- Intellectual property
- Regulatory pathway
- Detailed assumption testing
- Market testing
- Identify payers
- Sales and cost model
- Scalability
- Business model
- Manufacturing

**Stage 4** — Development and Proof of Concept — STOP (Abandon / Licence) — GO / REVIEW

- Produce & test prototype
- Evidence for NICE evaluation
- 1st Clinical evaluations
- Regulatory and ethical approval
- Preliminary customer feedback
- Preliminary economic data

**Stage 5** — Evidence Building — GO

- Re-test assumptions with new data
- Conduct/publish clinical study (as required)
- Finalise manufacturing study
- Finalise pre-launch clinical strategy
- Achieve tier 1 territory reimbursement

**Stage 6** — Market Launch — GO

- Implement tier 1 distribution strategy
- Recruit team
- Gear up for manufacturing and launch

**Stage 7** — Market Uptake and Exit

**Valley of Death**

## Challenge identified

The rapidly developing global market for digital health products poses numerous challenges for both innovators and payers, with many innovators facing issues around digital health products that will be adopted by the health and social care systems, and in particular the NHS. There is currently no clearly defined pathway to support innovators in navigating their way through the development, commercialisation and commissioning of digital health products. More specifically there are a number of challenges at different stages of the pathway including the identification of the problem to be solved in any given care pathway, interoperability, information governance, evidence generation through the appropriate trial structure, regulatory requirements, scalability and the development of a commercial model and the NHS commissioning pathway.

Digital technology is an important enabler in the delivery of high quality services, improving patient outcomes and increasing efficiency and productivity in health and social care systems. Health and social care systems across the world are undergoing significant change and restructuring to manage demand, maximise self-management and to keep people healthy and out of hospital. Digital health is increasingly recognised as having the potential to play a leading role in this transformation.

**Actions taken**

The Oxford AHSN Digital Health Roadmap addresses each of the different challenges providing detailed guidance and support at each stage of the journey from concept through to adoption. Specific chapters in the guide cover key areas such as concept generation, design and development, interoperability, information governance and data management, the regulatory framework, clinical testing and the development of a commercial model. The Roadmap provides a tool also to support the interactions between the Oxford AHSN and innovators, facilitating easier navigation of the pathway, and providing a basis for a more detailed dialogue.

The Digital Health Roadmap will help innovators and companies develop digital health products that are more aligned with the needs of the NHS and which also have an improved chance of reaching the market. The report will also provide detailed signposting to different resources at various stages of the development pathway, thereby providing support and facilitating the pathway to adoption.

**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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**Further information**

- http://bit.ly/roadmapOX

**Oxford AHSN case study**

**Date:** Q3 2017/18

**Programme/Theme:** Patient Safety Collaborative Acute Kidney Injury

**Title:** Reducing urinary tract infections in care homes by improving hydration

**Supportive quotes**

*"The biggest benefit of the structured drinks rounds was the way it made staff aware of the importance to keep residents hydrated. Sometimes a simple method can achieve great things."* Abbas Abdeali, Manager at the Eton house residential home in Datchet, one of the four care homes taking part in the pilot project

*"Keeping it simple means it's not only easy to implement but also easy to sustain."* Sundus Jawad, Prescribing and Care homes support Pharmacist for the east Berkshire Clinical Commissioning Groups

*"The training has given us understanding of why it's important to ensure that residents have enough fluids – it's looking at the whole system, not just a drink"* Care home staff member



**Overview summary**

Fewer residents are suffering urinary tract infections (UTIs) following the introduction of a hydration programme in care homes. UTIs are closely associated with dehydration. The project was designed to encourage residents to drink more fluids with the aim that this would lead to fewer UTIs requiring medication or hospital admission. This approach involved introducing structured drinks rounds seven times a day, initially in four care homes which had higher than average UTI admission to hospital rates. The drinks rounds were designed and delivered by care home staff. The initial results showed a 33% reduction in UTI hospital admissions – and in the last six months there have been none at all.

The project also saw a reduction in the number of UTIs needing treatment with antibiotics within all four care homes. It has now been extended to six more care homes in east Berkshire and three in Oxfordshire - making 13 in total and there are plans to spread it further still. The care home hydration project won three prizes – including best overall innovation – in the national 2017 PrescQIPP awards and was highlighted at Patient First in November 2017. An e-learning package is now being developed.

**Challenge identified and actions taken**

Dehydration is one of the most common causes of admission to hospital for care home residents. One in four nursing home patients admitted to hospital is dehydrated. Dehydration increases the risk of urinary tract infections (UTIs) which can lead to multiple complications including confusion, falls, acute kidney injury and hospital admission. The Oxford AHSN Patient Safety Collaborative identified addressing care home hydration as a key priority within its acute kidney injury workstream. To address this it began building relationships initially with Windsor, Ascot and Maidenhead Clinical Commissioning Group and residential/nursing homes in their area.

A pilot project was established in 2016 with four care homes in east Berkshire with a total of 150 residents. These homes had above average hospital admission rates for UTIs over the previous three years. Hydration training was delivered to more than 220 care home staff who then designed and delivered structured drinks rounds seven times every day. The trolleys were bright, inviting and offered multiple options of drinks, cups and glasses. Staff used their imagination to create attractive themed trolleys, e.g. Halloween.

**Impacts/outcomes**

The initial target was to reduce UTI-related hospital admissions year-on-year by 5%. In reality the results were far more impressive. Across the four care homes there was a 33% reduction (from 18 cases to 12). The downward trend has been maintained with no admissions at all in the first six months of 2017/18. The number of UTIs requiring antibiotics also fell – from an average of one every 16 days to one every 45 days. Skin integrity also improved and GP calls fell.

The four care homes also demonstrated sustained compliance of 98% with the commitment to provide seven structured drinks rounds each day. Qualitative data from a focus group of managers and staff indicated that residents were more alert and willing to participate in activities. One resident who had had recurrent UTIs every six weeks has been UTI-free for over six months after getting actively involved in the project and recording their fluid intake in a diary. Their mobility improved as a result too.

**Priorities addressed**

- Care and quality
- Health and wellbeing



**Future plans**

The initiative has been extended to six more care homes in east Berkshire and three in Oxfordshire (making 13 in total) and there are plans to spread it further. An e-learning package is now being developed with funding from Health Education England Thames Valley.

**Contact**

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**Oxford AHSN case study**

**Date:** Q3 2017/18

**Programme/Theme:** Patient Safety Collaborative Maternity Network

**Title:** Preventing stillbirths - Oxford Growth Restriction Identification Programme (OxGRIP) saves a life

**Supportive quote**

*"The more vulnerable women are often the least articulate at expressing their concerns and worries about their pregnancy to the community midwife or GP, maybe because of language or cultural barriers, personality type, raised BMI issues, embarrassment. With the implementation of OxGRIP there is now a more equitable service which has identified babies at risk that have not previously been identified by routine community care. Scanning these women I have seen this on several occasions. The structured pathways of care have enabled the sonographer to refer the woman appropriately onto the next place of care when fetal growth or blood flow deviate and have resulted in a more joined up service for these women and babies at risk."* Alison Chevassut, Research Midwife Sonographer, Oxford University Hospitals NHS Foundation Trust

**Overview summary**

The Oxford Growth Restriction Identification Programme (OxGRIP) was launched in May 2016 to increase the identification of small babies that are at risk of stillbirth (Small for Gestational Age [SGA] babies). Piloting in the Oxford University Hospitals NHS Foundation Trust, all women using the maternity services are now offered an additional ultrasound scan at 36 weeks gestation which focusses on the growth and wellbeing of their baby. These women are also offered a simple risk stratification and additional non-invasive tests (uterine artery Dopplers) at the 20-week anomaly scan. The aim of this was to allow easier identification of unwell and small babies, allowing the maternity services to arrange appropriate treatment and reduce the risk of birthing complications.

**Challenge identified and actions taken**

Fetal growth restriction is one of the biggest risk factors for stillbirth (Gardosi *et al*, 2013), with "about one in three term, normally formed antepartum stillbirths related to abnormalities of fetal growth" (MBRRACE, 2015). Antenatal detection of these babies is therefore vital in order to have the ability to monitor, manage and decide appropriate delivery. A number of studies have shown that SGA babies were significantly more at risk of stillbirth compared to SGA babies that were identified in the antenatal period (Stacey *et al*, 2011; Smith, 2015; Gardosi *et al*, 2013).

Nationally, the detection has been poor with great variation across trusts in England in those that calculate their rates of detection (NHS England, 2016). Many trusts do not calculate their detection rates and are therefore unknown. Smith (2015) estimates that routine NHS care detects one in four SGA babies antenatally. This figure is higher in the Oxford AHSN region at 36.7%. By comparing measurements taken at the 20-week anomaly scan and the 36-week growth and wellbeing scan, OxGRIP allows clinicians to identify whether the growth of the baby has slowed and whether there could be any underlying issues. Thus, SGA babies are identified antenatally.

There is a national drive to identify these at-risk babies resulting in a big push towards using ultrasound scans for identification. However, there is shortage of sonographers qualified to conduct these scans. By introducing a routine scan for all in an environment of limited resources, it is even more important to prioritise the scans by clinical importance.

**Impacts/outcomes**

In August 2016 a woman whose first language was not English attended her 36-week growth and wellbeing scan. The midwife sonographer who saw her was concerned that her baby's growth velocity had decreased significantly since the anomaly scan at 20 weeks. They also noted that the blood flow between the mother and baby was very abnormal indicating that the baby was not coping well in utero. During the scan the baby did not move and during discussion the mother felt that the baby had not moved much recently.

The midwife sonographer raised urgent concerns and asked for the mother to be taken to the Maternity Assessment Unit (MAU) in light of a severely growth-restricted baby, abnormal blood flow and no fetal movements. Whilst in MAU, the baby's heart rate was monitored and found to be pathological (severely abnormal). The decision was made to perform an emergency caesarean section to save the baby. The baby was born that evening and due to its prematurity was admitted to the Neonatal Unit for care.

Four months later, the baby and mother are doing well at home. Had the mother not been offered and accepted the now routine 36-week growth and wellbeing scan, the outcome could have been very different.

Whilst the project is still ongoing, the full impact and associated outcomes have not yet been realised. However, we know that this has not been the only case where there has been a direct link between a life saved and the pathways associated with the project. It has significantly increased the amount of breech presentations identified before labour and the corrected perinatal mortality has reduced compared to the two years prior to the project.

The impact on workload has been modest – there is increased activity in the consultant clinics and ultrasound department. However, this has been manageable through a reduction in referrals for unsuitable cases. Although implementation was inevitably going to increase the number of growth scans, this has remained steady and controlled in contrast to the exponential growth seen in the previous years.

**Priorities addressed**

- Care and quality
- Health and wellbeing

**Contact**

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Rachel Davies – Maternity Network Project Officer    rachel.davies@oxfordahsn.org

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**Operational Review**

Overall the AHSN is performing well against plan and engagement across the network is broadening and deepening. The three main programmes: Patient Safety and Clinical Improvement, Clinical Innovation Adoption and Strategic & Industry Partnerships have had another very strong quarter and are on track to deliver significant benefits to patients and to the local economy.

Sustaining the AHSN through the next licence period occupies a great deal of thought and effort. AHSN relicensing is discussed below. The Office of Life Sciences (OLS) announced in the Industrial Strategy that it would provide £39m funding for the AHSN Network over three years. OLS recognises that a return on investment in R&D can only be fully realised if innovation adoption is supported – this is the critical role the AHSNs have. Discussions have also started with NHS Improvement regarding follow-on funding to Patient Safety Collaboratives after the initial five-year period ends in March 2019.

Landing commercial and grant opportunities is vital therefore to ensure we are sustainable through the new licence period to March 2023 and beyond and we are working on several strategic opportunities which if they come off will strengthen the AHSN's position operationally and financially.

We are more optimistic that funding from NHSE, OLS and NHSI will be realised in 2017/18.

**STPs**

I keep in regular contact with the Directors of the three Sustainability and Transformation Partnerships (STPs) to ensure they are aware of our enabling programmes. All of our work, whether locally initiated or nationally initiated, is with frontline clinical staff from our local partners and thus directly and indirectly for the STPs and Accountable Care Systems (ACSs). Closer alignment of our work with the STPs and ACSs will ensure more visibility and support across the system which we expect will accelerate implementation. For example, last quarter I reported that we hosted a joint workshop with UCLPartners 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. We followed up with BLMK with a call with 3 CCGs and local authorities and a well-attended workshop. Luton and Milton Keynes are looking to rollout our award-winning hydration project across their care homes with support from us in project design and measurement.

Gary Ford chairs the Buckinghamshire Oxfordshire and Berkshire West STP and I attend the Operational and Acute group meetings and the ALB STP Support meeting. Amy Izzard supports the Workforce Health and Wellbeing Group which is chaired by Karon Hart, Deputy Director of HR at Buckinghamshire Healthcare.

**Building the network**

Innovation and improvement work in primary care continues to grow strongly. In addition to more than 70 GP practices across Buckinghamshire and Berkshire, a further 18 practices from Oxfordshire joined the programme this quarter, taking the number to 49 out of 70 practices. Feedback from practices has been excellent, particularly around the educational support.

Both our electronic newsletter subscribers and Twitter follower numbers have increased again this quarter – Twitter followers now exceed 3,470 (8% increase on last quarter) and our newsletter subscriber base has increased by 21% since last quarter to more than 2,700.

Martin Leaver, our Head of Communications, has been asked to co-chair the AHSN Network Communications Forum for a second term. To promote the work of the entire AHSN Network new national resources include a video featuring a wide range of stakeholders from industry partners to national leaders which sets out what AHSNs have done in the first five-year licence period - and gives a

flavour of what they could deliver over the next five years: http://www.ahsnnetwork.com/unique-role-dramatic-impact-ahsns/

**Relicensing, the Accelerated Access Review and NHS Improvement**

The relicensing process accelerated last month. The AHSNs met to agree on nine national programmes of work including 10-14 innovations that have been selected from a long list of current AHSN projects. AHSNs will engage in nine Innovation National Network (INN) themes. We have mapped all our work against the nine themes – responsibility to deliver against the INNs by programme is summarised in the table below.

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

We will develop our detailed business plan in Q4 which will be a very strong offer combining current, national and new local programmes of work.

We are at the early stages of developing programmes with stakeholders in three national NHS priorities – mental health, cancer and emergency medicine. We have appointed a new lead for mental health improvement and innovation.

**Working with other AHSNs and national spread**

We have 15 active projects with other AHSNs. Examples include the Clinical Innovation Adoption programme's atrial fibrillation programme and Informatics' Global Digital Exemplar project with Greater Manchester AHSN.

Our Early Intervention in Psychosis collaboration with the CLAHRC across the South of England has been published on the AHSN Network Atlas: http://atlas.ahsnnetwork.com/better-care-for-people-with-psychosis-thanks-to-joined-up-approach-across-southern-england/

The **Best Care** clinical networks programme will close at the end of March. The Maternity Clinical Network which has been absorbed by Patient Safety and Clinical Improvement will continue. The Anxiety and Depression Clinical Network has funding to September 2018. Dementia, Early Intervention in Psychosis and Imaging networks need to secure external funding to continue after March 2018. We have started a consultation process with the managers who are at risk. Networks that attract sufficient external funding and have plans that are approved by the AHSN will report into Patient Safety and Clinical Improvement. The Dementia Clinical Network is supporting five memory clinics to achieve the higher level MSNAP accreditation. Imaging Clinical Network's patient videos have attracted more than 20,000 views on YouTube.

**The Clinical Innovation Adoption** programme highlights include:

- the CIA and SIP teams with Oxford Health and the Bucks GP Federation have codeveloped and won a £1m bid for the Innovate UK Digital Health Catalyst for enabling better health and self-care at scale with digital sleep medicine.
- the AF programme extends across a large portion of primary care in the region and ensuring that many more patients are appropriately anticoagulated and is reducing the incidence of stroke.
- the Continence and Catheter Care e-Learning for Health, supported by Health Education England,(HEE), was launched and already has 291 users. https://www.e-lfh.org.uk/programmes/continence-and-catheter-care/
- the third cohort of students on the Innovation and Change Programme (supported by HEE) started the course. The fourth cohort starts in March 2018 bringing the total trained to 72 with representation from all NHS trusts in our region, although participation by Royal Berkshire is very low. We have extended the offering to STP/ACS projects and candidates that are working on multi-organisational innovative solutions, including local authorities.
- developed with a panel of patients, Oxford AHSN, Sandoz and the National Rheumatoid Arthritis Society have partnered to develop a video to be used to help reduce anxiety around switching from originator drugs to biosimilars. The video can be found at https://www.youtube.com/watch?v=6P7kwu3UzmQ
- work continues with Buckinghamshire Healthcare and Frimley Health where £7.2m savings can be realised in preventing fragility fractures in Berkshire and Buckinghamshire. The project has been extended due to interest from Frimley Health and Care STP.

**Research and Development** continues to support collaboration by the research community in universities and the NHS. A joint working framework is being developed to evaluate promising innovations identified by AHSNs to establish benefit to the NHS and AHSNs supporting national spread of high value innovations identified by CLAHRCs.

**Strategic and Industry Partnerships (SIP)** - over 50 projects are at various stages of progress across all of its key priorities. Achievements in Q3 include:

- the SIP team has established the first, clinically-led industry-funded programme for inflammatory bowel disease.
- a grant has been awarded by Ufonia for autonomous speech-based clinical outcome measures for £75k.
- a Biomedical Catalyst grant has been awarded to Jupiter Diagnostics for over £200,000. Oxford AHSN is a sub-contractor in the delivery of the project.
- a Memorandum of Understanding has been signed with Drayson Technologies covering GDm-health, SEND and EDGE-COPD.

- a project to assess the impact of flu point of care diagnostic tests in Emergency Departments has started in Berkshire.
- a contract has been signed with Sharp Life Science to provide services for clinical pathway evaluations in diagnostics.
- the *Digital Health Roadmap*  - http://www.oxfordahsn.org/news-and-events/news/new-digital-health-roadmap-provides-tools-to-turn-ideas-into-products/ was launched on 5 December at the Innovation Forum Leaders Conference. See Case Study above.

**Informatics** has been instrumental in developing a nationally approved NHS Digital data acquisition request application in collaboration with NHS Digital, East Midlands AHSN and Health Innovation Network AHSN. The AHSN's Information Governance framework documents have been updated to comply with the upcoming rollout of GDPR. This has been done with guidance from solicitors and the Chair of the UK Caldicott Guardian Council. This provides a robust set of documentation that will allow the continuation and free flow of data from all trusts that are signed up to the framework. In collaboration with our five health systems, the Informatics team has been developing a bid for a Digital Innovation Hub.

**PPIEE** held a reunion of the alumni from the Leading Together Programme. The co-design work for our Leading Together Programme for Learning Disabilities continues. Douglas Findlay, who is a member of the AHSN PPIEE Group, won the Patient Leadership award at the Thames Valley Health Research Awards held on 26 October 2017 particularly recognising his work at Royal Berkshire. Oxford AHSN is chairing the AHSN Network national PPI group.

**Patient Safety and Clinical Improvement** highlights include:

- Hydration in Care Homes project (part of the AKI workstream), in partnership with Windsor Ascot and Maidenhead CCG, won three PrescQIPP awards noting the improved outcomes for residents from the pilot four care homes (see Case Study). The awards won were:
  - Best Patient Safety Award 2017
  - Best Interface Award 2017
  - Best Overall Innovation Award 2017 - GOLD Award
- the Maternity Swab Never Event project has been published in the European Journal of Obstetrics and Gynaecology. The article has been made OpenAccess to help with spreading this work, and has been very well received.
- 'Improving survival rates of extremely premature babies' was presented at Patient First, in London in the Best Practice Theatre, see Case Study above.
- our Maternity shared learning event, held in collaboration with TVSCN in November, was attended by over 80 midwives, clinicians and other interested parties from all trusts in the area to hear from a number of innovative projects and learn from incidents and rare cases. At least two of the projects presented are being forwarded for local spread, with one attracting attention from the Royal College of Midwives.
- nationally, Patient Safety Collaboratives have been tasked with delivering three national workstreams - The Deteriorating Patient, Safety Culture and supporting the Maternal and Neonatal Health Safety Collaborative. In this quarter we were pleased to receive from NHSI official sign-off of our plans detailing our local response to the PSC national workstreams.
- the second patient safety e-newsletter was published, and Twitter presence to disseminate relevant patient safety information, grew by 100 to 800 followers.

**Key Milestones - progress to date**

| Programme/Theme | Key milestones 2017/18 | Q3 Progress |
|---|---|---|
| **Corporate** | Oxford AHSN relicensing<br><br>Procurement contract<br>Application for OLS funding | Oxford AHSN submitted relicensing document with support from major stakeholders<br><br>Awaiting letter of intent from prime contractors<br><br>OLS funding has been confirmed |
| **Best Care** | Secure funding for clinical networks<br><br>Close networks that cannot secure funding | Five pre-existing networks and one new clinical network funded for 2017/18.<br><br>Funding for maternity confirmed for 2018/19 and A&D for 6 months. Others at risk. |
| **Clinical Innovation Adoption** | Aim to open 4th cohort adopting Innovation and Managing Change in Health Settings course in March 2018.<br><br>2 projects to be started – Digital Health Technology Catalyst Project and eMAPSII. | Third cohort of 20 frontline staff has started the Adopting Innovation and Managing Change in Health Settings Course at Buckinghamshire New University (HEE supported).<br><br>CAUTI QI Training launched.<br><br>2 projects completed:<br><br>• National MSK Activity Collation completed.<br>• Early Inflammatory Arthritis – early detection educational tool (GPs and patients – phase 2) completed. |
| **Strategic and Industry Partnerships** | One new joint venture or industry partnership | Memorandum of Understanding signed with Drayson Technologies |
| **Informatics** | Bid for Digital Innovation Hub | On track |
| **PPIEE** | Plan for sustainability beyond March 2018 | On going |
| **Patient Safety** | Three programmes showing safety improvement | On track |
| **Stakeholder Engagement and Communications** | Partner showcase events | Five events during May as planned and further stakeholder/programme specific events have been delivered at a variety of locations across the year; plans underway for 18/19 |

**Key Performance Indicators (KPIs)**

| Programme | High level KPIs (measured annually unless otherwise stated) | | As at Q3 |
|---|---|---|---|
| Best Care | On hold | | Work on going to identify funding after March 2018 for four at risk networks |
| 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) | | £1,638,607 |
| | 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%) |
| | Increase adoption of AWOL project (Safer Leave) in Central North West London to increase the number of patients who return on time and safely from leave to 95% on all acute wards. | | Safer Leave project going on two wards at Milton Keynes and now includes an older people's assessment ward. Progress has been reviewed and the there is improvement. Work is currently underway to scope a technological solution which allows rapid identification of late returners. Sustainability has been achieved in Oxford Health with all seven wards |

| Programme | High level KPIs (measured annually unless otherwise stated) | As at Q3 |
|---|---|---|
| | | 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 3,480 at the end of the quarter (3,226 at the end of Q1 2016/17). An additional 150 Newsletter subscribers signed up by the end of Q3 - total 2,730 |
| Stakeholder engagement | Number of visits to Oxford AHSN website per month | 300,000 page views across the main AHSN and patient safety sites |
| Stakeholder engagement | Number of attendees at all AHSN events per quarter | Nearly 350 people attended events during Q3 - these included TheHill, Leading Together, 'Outcomes that matter to patients', Patient Safety Events and Oversight Group meetings |

**Finance**

2017-18 income is forecast to be £4.2m, £0.8m higher than budget which offsets the forecast increase in expenditure of £0.7m. Forecast revenue is better than plan, largely because the Programmes & Themes have been successful in attracting new streams of income.

The forecast factors in prior year underspend brought forward of £0.6m.

As at Quarter 3 our net forecast shows a £0.1m favourable variance against plan. We expect to maintain our year-end forecast through movement in Quarter 4.

Assuming the AHSN is relicensed by NHS England, OLS funding comes through, our partners continue to make a contribution and the grant and industry funding that the programmes are securing comes in as planned, Oxford AHSN is sustainable in 2018/19.

| | 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** | | **Q3** | **Q3** | **Q3** |
| | | Opening Plan | Forecast | | Opening Plan | Forecast | Actual |
| NHS England funding | | 2,819,507 | 2,819,507 | | 2,114,630 | 2,114,630 | 2,114,631 |
| Partner contributions | | 411,500 | 443,000 | | 308,625 | 332,250 | 406,396 |
| Other partner income | | 150,000 | 171,292 | | 112,500 | 117,219 | 117,219 |
| Other income - Programmes & Themes | | 0 | 768,189 | | 0 | 475,515 | 444,451 |
| HEETV income for continuous learning programme | | 118,300 | 28,960 | | 88,725 | 28,960 | 28,505 |
| **Total income** | | **3,499,307** | **4,230,948** | | **2,624,480** | **3,068,574** | **3,111,202** |
| Programmes and themes | | 3,002,766 | 3,576,509 | | 2,342,152 | 2,564,460 | 2,445,007 |
| Total core team and overhead costs | | 1,117,591 | 1,275,489 | | 838,193 | 957,261 | 909,158 |
| **Total expenditure** | | **4,120,357** | **4,851,998** | | **3,180,345** | **3,521,721** | **3,354,165** |
| | | | | | | | |
| **Net Income/Expenditure** | | **621,050** | **621,050** | | **555,865** | **453,147** | **242,963** |
| Programme funding previously committed | | 621,050 | 621,050 | | 555,865 | 453,147 | 242,963 |
| **Surplus/(deficit)** | | **0** | **-0** | | **-1** | **-0** | **-0** |

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

## Risks and issues

Risks and issues are reviewed regularly and when appropriate escalated to the AHSN Board. No new risks and issues to report.

## Closing comments

I would like to thank the team for another exceptional quarter's work and particularly Katie Lean who won no less than three prizes for her Hydration in Care Homes collaboration to reduce incidence of UTIs and has also had a paper published on retained swabs. Congratulations also go to James Rose and patient leader Georgina McMasters as the "Angry Hand" rheumatoid arthritis awareness project (see Q2 report) has been shortlisted for two prizes. Our programmes collaborate really effectively – CIA and SIP teams collaborated to win the £1m grant to improve sleep.

**Dr Paul Durrands ACA CMILT**

**Chief Operating Officer, Oxford AHSN**

**Best Care Clinical Networks**

**Programme Overview**

The Oxford AHSN Board has now decided to formally close the Best Care Programme with effect from 31st March 2018. Clinical Networks that succeed in attracting funding for the next year will move under the management of the Patient Safety and Clinical Improvement programme from the start of the new licensing period providing the plan is approved by the AHSN.

We have spent much time ensuring that robust plans are in place and that funding is secure. Where we are not going to be able to continue to support a project we are planning for a graceful completion or withdrawal from the activity.

Key activities from the Clinical Networks are described below.


**Anxiety and Depression Clinical Network**

We are on target with both our Relapse Prevention audit (a survey to establish the degree of relapse prevention work by Psychological Well Being Practitioners in the Thames Valley is now underway) and our Patient Forum led Maintaining Therapeutic Gains questionnaire (qualitative exploration of support needed post-discharge to stay well) has also been distributed. Responses to both will be collated in early January. These surveys will play a significant role in identifying the user need in advance of designing and developing post-discharge therapy support app; as well as identifying the requirement for additional relapse prevention training.

A paper has been presented in the Lancet on "Transparency about the outcomes of mental health services (IAPT approach): an analysis of public data".

**Durability of clinical gains pilot**: small sample results show 80% of patients remain well BUT much more support is needed in the first 6 months following discharge

**Integrated IAPT Services Health Economics Evaluation**: Early indicators show potential savings between £34 and £453 per patient (depending on severity of physical/ mental ill health) over a 3-month period

**Maintained recovery rates at >55%** despite greater number of trainees now working in the core services and this quarter saw a slight, expected reduction of patients who moved to recovery (8%) as a number of experienced staff were moved from core IAPT to set up the new Integrated IAPT services which have meant reduced clinic time for a short period prior to Q3.

**Dementia Clinical Network**

The clinical network strives to reduce unwarranted variation throughout memory assessment and post-diagnosis by working collaboratively with clinicians, patients, carers and others to improve experience and outcomes.

**Webinar Series:** 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 45 sessions have been held with a total of over 900 attendees from multiple disciplines. An evaluation report on the 2016/17 webinar programme has been released. Feedback on webinars has been very positive with reports from many clinicians of changing clinical practice as a result.

**Care Home Support:** The good practice network is open to health in-reach teams to support their use of evidence-based approaches, focussing on the care of patients with dementia. A CPD workshop series is ongoing with recent presentations on Hydration, and a demonstration of dementia simulation suits (so

that carers that develop empathy on the experiences of physical and sensory impairments.) The work of the best practice network was presented on a poster at the UK Dementia Congress, November 2017.

**MSNAP**: The Royal College of Psychiatry Memory Services National Accreditation Programme works with services to assure and improve the quality of memory services for people with memory problems/dementia and their carers. With AHSN supported facilitation, two memory clinics in the region have achieved the updated accreditation against updated and more exacting standards, and a further three are expected to complete the process next quarter.

**Driving with Cognitive Impairment:** the project is developing the use of telematics in the process of informing whether a person with cognitive impairment should stop driving. The project is setting up a pilot study, with the expectation this will lead to a larger longitudinal study.  The aim of the pilot is to test acceptability of driving telematics in these groups, the duration required to adequately sample driving cross-sectionally and to enable calculation of the sample size required for a longer project.

 **Early Intervention in Psychosis Clinical Network**

The EIP Clinical Network has hosted and has supported the South Region EIP programme within the AHSN region.

**EIP Peer Review:** The EIP Peer Review is using a process of appreciative inquiry to support services across the southern region to review each other to prepare local service development plans.  Training sessions have been held across the region in November attended by over 50 individuals.  The team is currently in a scheduled series of review meetings with local EIP teams.  A report is expected in early 2018.

**EPIC Minds:**  The Epic Minds Campaign has been launched http://www.epicminds.co.uk/.  The campaign brought together a group of people who have accessed EIP, families and carers, clinicians and commissioners to co-produce a staff recruitment and retention campaign.  The group has developed a suite of digital, paper and wearable resources that aim to raise awareness about psychosis and early intervention in psychosis; and attract new people to the workforce.

**EIP Matrix:** Annual Report: the EIP matrix annual report is being drafted and waiting for final approval from the South Region EIP Programme board.  The Report contains data collected via the EIP Matrix (with comparisons against annual EIP Matrix submissions from 2016 and 2015.) The main conclusions are More People Seen Quicker: 85% of people referred for suspected psychosis were seen by EIP within 14 days of referral.  More People Receiving CBTp: More people have received CBT for Psychosis, from 12% in 2016 to 21% in 2017. Better Physical Health Monitoring: 56% of people with first episode psychosis are reported to have had a comprehensive physical health check in the last 12 months compared to 41% in 2016

On 27th November, we met with Rt. Hon Norman Lamb, who has been a key activist for mental health and EIP, to discuss our region's progress - including challenges, lessons learned and ambitions for the future. We also delivered an early Christmas present in the form of materials developed as part of the EPIC Minds campaign.

**Imaging Clinical Network**

The Imaging Clinical network continues to work across the region to support the interoperability and improvement of diagnostic imaging services.

**Lung Nodule Risk Stratification:**  The project aims to develop an Artificial Intelligence that can identify a malignancy risk score from CT scans of lung nodules.  The stated aim is to improve diagnostic accuracy to reduce the number of follow up scans and biopsies by >20%.  We are currently completing a successful EIT-Health funded project in collaboration with The University Medical Centre Groningen and Heidelberg University Hospital where over 2,000 scans have been collected and marked up, and early developments of the AI system are giving positive results. Oxford University Hospitals has now started a 3-year NIHR funded grant in partnership with Nottingham University Hospital, and Leeds Teaching Hospitals that will develop this model further and subject it to a Clinical trial (starting in June 2018) to test the impact on the access to health services.

**Interoperability:**  The system interconnectivity and been established between five hospitals and further spread across the region is being planned. This allows scans to be automatically shared between hospitals within the network.  Building on this foundation we have now successfully piloted a solution to allow cross trust reporting (i.e. that a radiologist/radiographer can directly report a scan from another trust.) rolling this out across the network will allow genuine interoperability between trusts and allow development of regional service and reduce the level of commercial outsourcing.

**Patient Videos:**  [The award winning series of patient videos has now reached 20,000 views.](#)  The portfolio is still being expanded with a Cardiac CT scan information video to be released imminently.

**Clinical Innovation Adoption (CIA)**
**Programme Overview**

Activity has ramped up further during Q3 due to projects initiated in Q2, relicensing and normal year on year planning prior to the Christmas period.

During Q3 the Clinical Innovation Adoption Programme has

- closed, in accordance to plan, three projects – Early Inflammatory Arthritis, CAUTI e-learning and MSK National Collation of activities report.
- delivered following with regard to the AF projects :
  - o excellence in atrial fibrillation (AF) - 36 practices in Bucks signed up, 29 audits completed. 12 practices have completed their QI cycles and been re-audited.
  - o pharmacist led anticoagulation service in primary care started July – now in nine Berkshire Practices resulting in 316 patient reviews, 66 of 90 AF treatment naïve patients now on anticoagulation – potentially three strokes saved.
  - o the Oxfordshire Anticoagulant Project has won a "showcasing best practice award" from the AF Association. 49/70 practices now engaged and positive feedback from GPs with TTR data showing improvement.
- launched the Continence and Catheter Care e-Learning for Health successfully, supported by Health Education England, (HEE), – already 291 users have completed this with 86% passing the assessment and formal feedback 80%+ for all aspects of the package. https://www.e-lfh.org.uk/programmes/continence-and-catheter-care/
- received confirmation of having won the first round of the Digital Health Technology Catalyst bid from the Innovate UK (£1m bid) jointly worked up with SIP and involving, Oxford Health and Bucks GP federation. Planning has started for May launch.
- met three SMEs to discuss commercial launch and midstream Innovations.
- attended Medica to understand opportunities within MedTech and point of care testing.
- Shaped the eMAPS1 platform and course content with nine SMEs filmed for inclusion in the SMEs Guide to EU Market Access (EIT Health funded).
- started the Third Cohort of students on the Innovation and Change Programme (supported by HEE) and have opened the register for a Fourth Cohort to start in March 2018 – bringing the total trained to 72 having had representation from all NHS organisations in the region. We have extended the offering to STP/ACS projects and candidates that are working on multi-organisational innovative solutions (including LAs). The course is run in collaboration with Bucks New University and funded by HEETV. We are aiming for 100 students by end of this financial year.
- reviewed seven additional innovations for the 2018/19 portfolio.
- initiated new GP service model audit for practice management.
- provided estimated outputs on adoption projects for AHSN re-licensing scenarios.
- collated a list of new innovations for 2018/19.

**Table 3: Innovation Adoption Progress**

| Project Titles | Start | End | | Project Description |
|---|---|---|---|---|
| **Biosimilars** | Jun-16 | Mar-18 | ongoing | Started with Biologics for EIA (Etanercept). Broadened and Initiated through regional interest with the objective of encouraging adoption of Biosimilars on a joint-share agreement with CCGs. |
| **Falls Project 1/phase 2: CLAHRC falls innovation regression testing for success** | Sep-16 | Mar-18 | ongoing | In progress |
| **Falls Project 2/Phase 2: FallSafe Bundles** | Jan-17 | Mar-19 | ongoing | Selected FallSafe. Implementing at Four Trusts. |
| **Falls 3 project/phase 2: Stay in the Bay (falls innovation)** | Jan-17 | Mar-18 | ongoing | In progress. Implementation and analysis. |
| **Catheter Acquired Urinary Tract Infection QI Training** | Apr-17 | Oct-17 | ongoing | HEETV to get it embedded in our region. |
| **Patient Safety - WireSafe** | May-17 | Jun-19 | ongoing | Initiated through regional interest. |
| **Atrial Fibrillation Project 1 - Excellence in AF (Bayer)** | May-17 | Mar-19 | ongoing | Adoption from another AHSN |
| **Atrial Fibrillation Project 2 - Pharmacist Lead (Pfizer)** | May-17 | May-18 | ongoing | New model supported by industry funding |
| **Atrial Fibrillation Project 3 - anti-coagulation project (Pfizer)** | May-17 | Mar-18 | ongoing | New model for medicine optimisation keeping patients in their TTR |
| **EU Health MAPS I (map access tool phase 1)** | May-17 | Dec-17 | ongoing | Working with entrepreneurs to accelerate access to UK and EU markets |

| Project Titles | Start | End | | Project Description |
|---|---|---|---|---|
| **Patient Safety innovation - Pneux Tracheal Tube** | Jun-17 | Jun-19 | ongoing | Innovation via Innovation Tariff |
| **Thrombectomy** | Jun-17 | Mar-19 | ongoing | Scoping being considered |
| **Heart Failure - treatment optimisation project (Novartis)** | Jul-17 | Jan-19 | ongoing | Initiated through regional interest - scoping and deciding on how to deliver |
| **Patient Safety Innovation - Non Injectable Connector** | Jul-17 | Jun-19 | ongoing | Innovation via Innovation Tariff |
| **Surgical - benign prostatic hyperplasia - Urolift** | Sep-17 | Jun-18 | ongoing | Innovation via Innovation Tariff.  MKUH, OUH (one stop shop), Frimley Park Hospital, RBH, Wexham Park Hospital , Bucks HT (don't want to) |
| **Atrial Fibrillation - Detect Innovation (ITT)** | Sep-17 | Mar-18 | ongoing | Devices supported by NHSE procurement |
| **Innovation Course Cohort Three (24)** | Sep-17 | Jun-18 | ongoing | Training NHS clinicians and managers to accelerate adoption and diffusion |
| **Activity Pillar to be developed for future years** | Sep-17 | 2023 | ongoing | Planned |
| **Innovation Course cohort Four** | Feb-18 | Jun-19 | new | Training NHS clinicians and managers to accelerate adoption and diffusion |
| **Innovation Course cohort Five** | Sep-19 | Jun-20 | new | Training NHS clinicians and managers to accelerate adoption and diffusion |
| **EU Health MAPS II (EIT Health funding)** | Jan-18 | Dec-19 | new | Working with entrepreneurs to accelerate access to UK and EU markets |
| **Hypertension** | Mar-18 | Dec-20 | new | Regional |
| **PINCER** | Mar-18 | Dec-20 | new | National |
| **Peezy** | Mar-18 | Dec-20 | new | National |

| Project Titles | Start | End | | Project Description |
|---|---|---|---|---|
| **Digital Health Technology Catalyst** | Apr-18 | Dec-20 | new | National |

**Patient Safety Devices**

**Project overview**

As reported last quarter, we are 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:
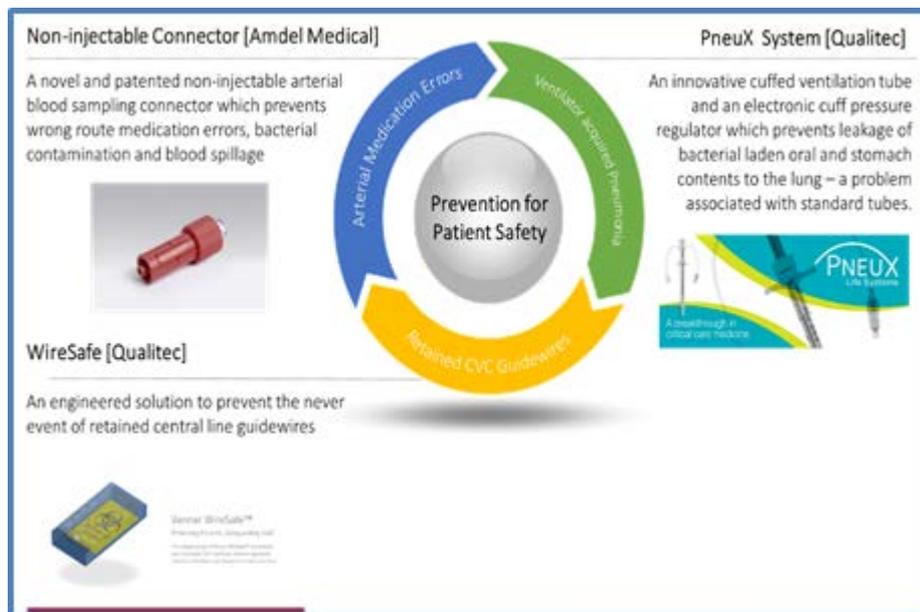


**Developments in Q3**

**Engagement**

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

| Trusts/Sites | Engaged | Adopted / in process of adopting Patient Safety innovations (out of the 3) |
|---|---|---|
| **Royal Berkshire** | ✓ | 3/3 |
| **Great Western Hospitals** | ✓ | 2/3 |

| | | |
|---|---|---|
| **Buckinghamshire Healthcare** | ✔ | 2/3 |
| **Frimley Health– Frimley Park** | ✔ | 3/3 |
| **Frimley Health– Wexham Park** | ✔ | 1/3 |
| **Oxford University Hospitals** | ✔ | 0/3 |
| **Milton Keynes University Hospital** | ✔ | 2/3 |

## Implementation packs update

- 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 continued to engage with other AHSNs following requests for advice and discussion on the approach taken within the Oxford AHSN region.

## Implementation of the devices

- The AHSN continues to engage 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; see table below for more detail:

| Trust | PneuX | WireSafe | NIC |
|---|---|---|---|
| **Royal Berkshire** | Awaiting training | Awaiting supply | Implemented June 2017 |
| **Great Western Hospitals** | Implemented July 2017 | Not progressing | Implemented June 2017 |
| **Buckinghamshire Healthcare** | Started real world trial of PneuX. Control phase: data collection underway; PneuX phase scheduled for Q3 | Small trial at Stoke Mandeville Hospital and Wycombe General Hospital | Not progressing |
| **Wexham Park** | Not progressing | Not progressing | Agreement from theatres to implement; awaiting decision from ICU |
| **Oxford University Hospitals** | Not progressing | Some interest, but concern regarding potential cost pressure; AHSN has offered to draft business case | Not progressing |

| Milton Keynes University Hospital | Not progressing | Discussing with current supplier of CVC packs to see if WireSafe can be included; awaiting end of current contract | Implemented September 2017 |
|---|---|---|---|

**Feedback**

- The AHSN has sought feedback from Trusts regarding the implementation progress and support provided. This has been very positive.
- As part of this process, feedback on the reasons for non-adoption are being collated.

**Activities for Q4**

- The Oxford AHSN is continuing to support other AHSNs where required in rolling out the three patient safety innovations
- The AHSN will continue to seek feedback from Trusts regarding the implementation process and support provided.
- The AHSN is continuing to provide support to Trusts and other AHSNs who wish to adopt the devices.

**Fragility Fractures**

**Estimated End date: extended to March 2018 due to interest from STPs/ACS in the region**

During the last quarter, the CIA team has continued to work with two Trusts (Buckinghamshire Healthcare and Frimley Health - Wexham Park site), and the National Osteoporosis Society, to develop the business cases for expanding the current Fracture Liaison Service or implement a new service. 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 teams at both Trusts are well engaged with this work and have assisted with reviews and audits of local service provision. There has been difficulty with securing managerial engagement, however assurance has been given by both Trusts that this is a priority area and meetings are scheduled in Quarter 4 with the relevant management teams.

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 5 years, these services could generate nearly £13 million savings. The table below outlines these 5-year savings by CCG, if full services were in place, alongside the savings that will be realised with the current level of service. These savings have been updated from the previous quarter as a result of the National Osteoporosis Society updating their benefits calculator.

**Table: Potential 5-year savings by CCG (includes health and social care)**

| CCG and Social Care | Total Fractures Saved | Total Financial Savings | % current service provision | Benefits Realisation based |
|---|---|---|---|---|

| | | | | on current FLS provision |
|---|---|---|---|---|
| **Aylesbury Vale** | 168 | 1,462,247 | 35 | 1,396,429 |
| **Chiltern** | 289 | 2,527,549 | | |
| **Berkshire East** | 291 | 2,562,825 | 0 | 0 |
| **Berkshire West** | 341 | 2,890,311 | 40 | 1,156,124 |
| **Milton Keynes** | 163 | 1,386,552 | 0 | 0 |
| **Oxfordshire** | 533 | 4,693,429 | 100 | 4,693,429 |
| **TOTAL** | **1,785** | **15,522,913** | | **7,245,982** |

**Q3 update and activities for Q4**

- Pathway mapping of the service at Buckinghamshire Healthcare has been completed
- The business case for the new service at Wexham Park Hospital has been drafted.
- A meeting is scheduled for Q4 with the appropriate management team at Wexham Park Hospital to progress the case.
- The business case for the expansion of the service at Buckinghamshire Healthcare has been drafted.
- A meeting with the Divisional Director at Buckinghamshire Healthcare is scheduled for Q4 to discuss and progress the case.
- The Oxford AHSN attended a fragility fractures study day hosted by NOS and Buckinghamshire Healthcare in September.

**UroLift Project**

This project aims to support Trusts to implement UroLift (ITT innovation) as an alternative treatment option for men with benign prostatic hyperplasia (BPH), or enlarged prostate.

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

**Q3 update and activities for Q4**

- Meetings held with clinical and operational teams at Royal Berkshire, Milton Keynes and Wexham Park Hospital
- Business case for RBH service has been approved, with the first list planned for early Q4
- The AHSN presented at Milton Keynes University Hospital's Urology Department's strategy workshop in December, to seek agreement from team to implement the treatment option
- The business case for Milton Keynes University Hospital has been drafted and sent to the operational team for review
- Continued engagement with NeoTract (company who supply UroLift)
- The implementation support is to be finalised and disseminated across the AHSN network to assist other regions in implementing this innovation

- Request for support to Trusts outside the AHSN region have been received via the supplier of UroLift

**Catheter Acquired Urinary Tract Infection (CAUTI) Project**

**E-learning**

The e-learning package was launched nationally via the e-learning for health platform in September 2017 and has now been downloaded onto the local e-learning platforms for the Trusts involved in the project.

The package consists of two modules:

1. Promoting best practice in continence care
2. Promoting best practice in catheter care

Since the launch in September, 291 users have completed the package with 86% passing the assessment. Formal feedback has been left by 18 users, the scores (out of 5 where 5 is good) are as follows:

a. Content 4.3
b. Interactivity 4.3
c. Presentation 4.3
d. Assessment 4.1
e. Overall score 4.2

**Project closure event Q4**

In Q4 the AHSN, together with partner Trusts will deliver a project closure event. The aim of this event is to highlight the learning from the project and share best practice with Trusts across the region.

**Heart Failure Project – Berkshire East Heart Failure Optimisation (project has been put on hold)**

**Optimisation Project**

In the Q2 report we outlined a potential project that we were scoping with Novartis to launch in East Berkshire however, this has been put on hold as we further explore how best service changes could be delivered in this area.

**Atrial Fibrillation work-stream**

**Developments in Q3**

**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 36 practices signed up, 29 of which have had audits completed. 12 practices have completed their quality improvement cycles and been re-audited. Consolidated data for these 12 practices shows that:

- An additional 105 patients have been added to the AF register, increasing the combined prevalence by 0.1%
- The number of patients with moderate or high stroke risk who were not on an anticoagulant has decreased by 110
- The number of patients with a high stroke risk who were not on an anticoagulant has decreased by 73 (83% to 87%)
- The number of patients on too high/too low a dose of DOAC or who have other clinical issues with their DOAC has decreased by 32
- The combined projected 12-month stroke incidence for these practices has decreased by 11 strokes
- The projected savings to the health economy are £270k

**Pharmacist led anticoagulation initiation service in primary care.**

This service launched in July 2017 and is now being delivered across nine practices in Berkshire with a further tranche of practices (four) due to come online in Q4.

Between end of July 2017 and end of August 2017:

- 316 patients have been reviewed
- average age of patients was 79
- 302 had AF with an average $CHA_2DS_2VASc$ of four
- 90 AF patients were treatment naïve and of these, 66 were initiated on anticoagulation
- 212 warfarin patients with AF were reviewed and 106 were switched to DOAC
- A potential three strokes saved

The project has been well received by practices. Formal feedback has been received from one practice (following completion of reviews of all eligible patients). Feedback is out of 5 where 5 is excellent and 1 is poor.



Comments included "I am much more informed on which DOAC to use" and "fab service".

**Oxfordshire Anticoagulation Optimisation Project**

In Q3 the Oxfordshire Anticoagulation Optimisation project won a 'showcasing best practice award' from the AF Association. The project will be published as a case study in the AF Association Healthcare Pioneers Report 2018.

Significant progress has been made in Q3 with a further 18 practices engaging with the service (49 in total out of 70 practices). Practices were made to target practices with higher levels of poor TTR were specifically targeted for participation in the project. Feedback from practices has been excellent, particularly around the educational support.

99 GP feedback forms have been completed following delivery of the educational sessions. Analysis has showed a trend to improving knowledge and confidence:



How confident are you in assessing anticoagulation control of a patient on warfarin?



How confident would you say you are with your knowledge of DOACs?



How confident would you say you feel about prescribing DOACs?
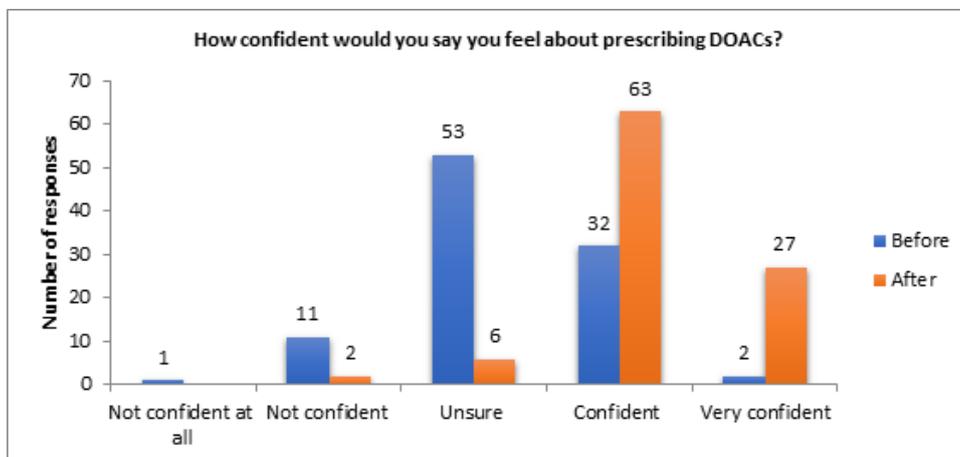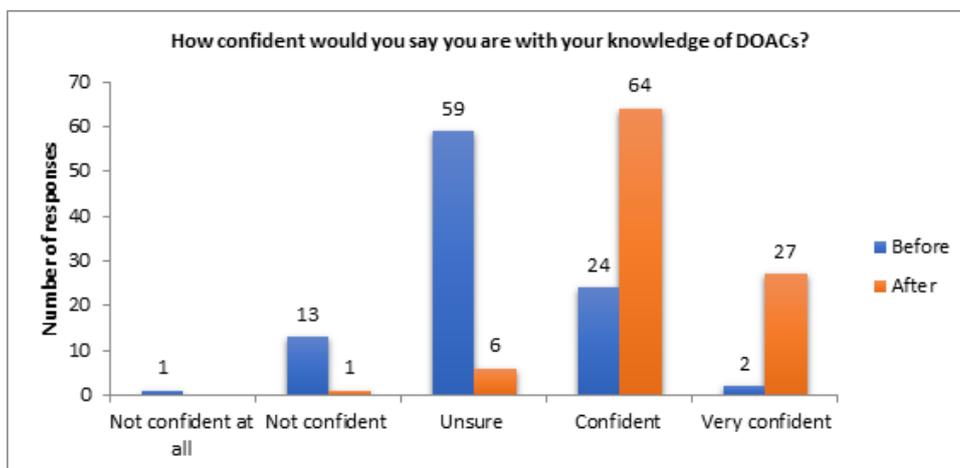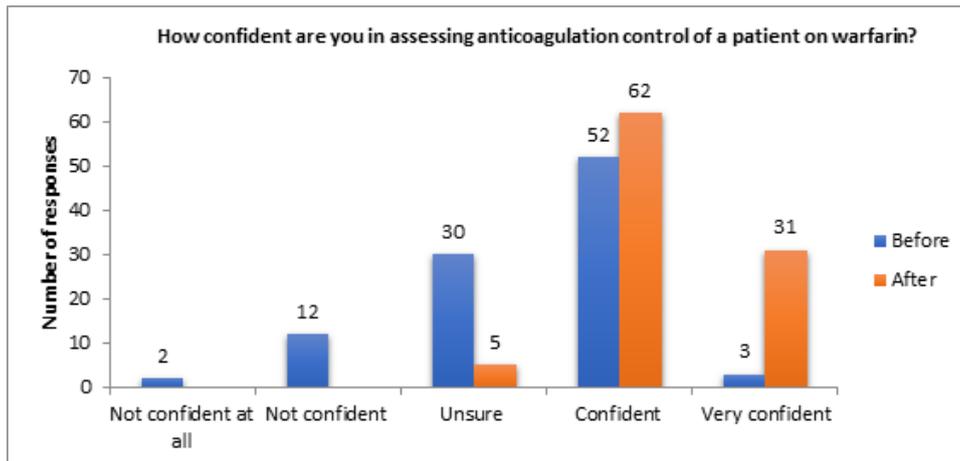
Feedback has been received from 7 practices on specific actions they have taken following their educational visit. Together these 7 practices reviewed 159 patients with poor TTR and switched 52 of these onto a DOAC. Other patients received advice on improving TTR.

The email advice line is being well used with 64 email enquiries received from GP practices with general themes including:

- Switching patients from warfarin to DOAC
- Initiating anticoagulation for AF
- Side effects of DOAC
- Suitability of continuing current anticoagulation

RAID data, showing the number of AF patients with poor TTR shows an improving trend:
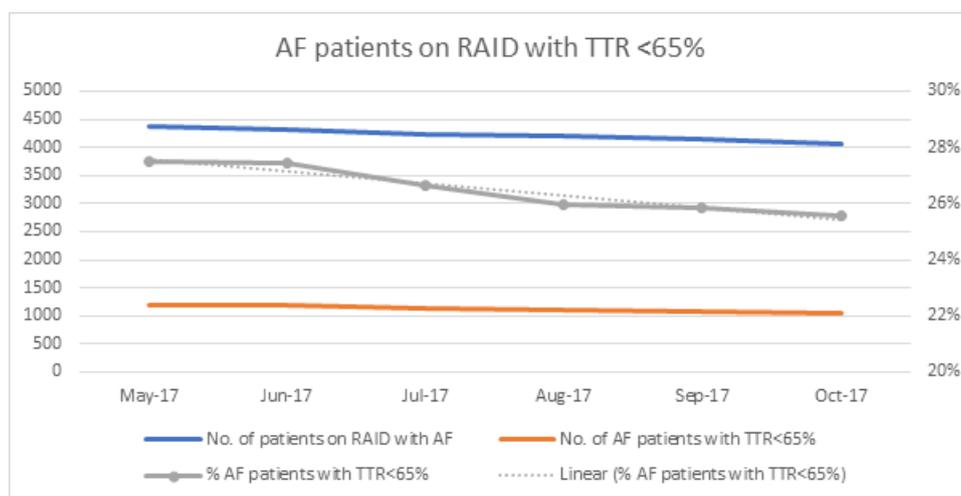


We are now starting to explore the future commissioning of this service and what shape the service might take in 2018/19. A business case is being developed for Oxfordshire CCG.

**Mobile ECGs**

As mentioned in the Q2 report, the CIA programme has engaged all CCGs, with the exception of Bedfordshire, in the mobile ECG or 'detect' project and 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.

NHSE have received and processed the CCG requests and delivered via the CIA team, 109 WatchBP devices to CCGs in Berkshire. However, further distribution has been delayed as NHS England is seeking legal advice on AHSN liability for these devices.

**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**

Over the first 18 months the network has focused on five core work streams based on improving care for EIA patients (see diagram below)

**Overview of the work streams in the Oxford AHSN Early Inflammatory Arthritis Network**

**Q3 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
- Angry Hand campaign used Giant Blue Angry Hand to spread message about EIA across the region with live events held in Oxford, Reading and Cutty Sark in London in early September.
- Significant social reach developed through numerous media and communications channels. See figure below for some of them
- Campaign video launched on campaign website www.angryhand.com viewed over 10,000 times. Video can also be viewed at https://www.youtube.com/watch?v=b2sBz8hlELA

**The Angry Hand**
Raising public awareness of early rheumatoid arthritis

## GP Education

- GP e-learning module for EIA under development. Module will be launched on Health Education England e-learning for health web platform. Expected launch in January
- Content for the learning is bought together by GPs and Rheumatologists

## Biosimilars

**Participating Trusts: Frimley Health - Wexham Park, Great Western Hospitals, Buckinghamshire Healthcare, Royal Berkshire, Milton Keynes University Hospital; Oxford University Hospitals**

### Overview of the Project

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, etanercept and rituximab.

### Patient Education

Oxford AHSN, Sandoz and the National Rheumatoid Arthritis Society have partnered to develop a patient education resource to be used to help reduce patient anxiety around switching from originator drugs to biosimilars. The video was developed with a panel of patients who had already been or were in the process of switching to a Biosimilar, and covers key questions such as

- What are biosimilars?
- Will they be different from your current medication?
- What is likely to change for you? And
- Why are you being asked to switch?

The video can be found at https://www.youtube.com/watch?v=6P7kwu3UzmQ

**Haematology and Oncology**

- Working with TV Chemotherapy group the Oxford AHSN is looking to understand the barriers to using biosimilar Rituximab.
- Responses received from pharmacy departments in four Trusts across the region, with further two yet to respond. The questionnaire looks to gather information on barriers to adoption and the time and resource required to support biosimilar switch programmes
- Some early data shown below suggest most pharmacists rate the "interchangeability of safety profiles between originator and biosimilar rituximab" as being the most significant issue in pharmacy
- 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.
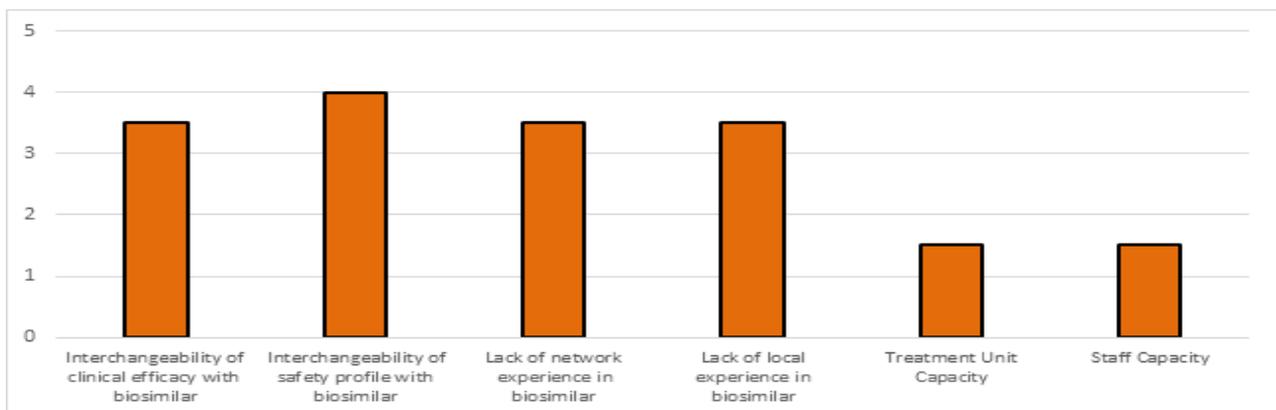


Figure 1 Responses from Four Trusts in biosimilar questionnaire. Trust Pharmacies asked to rate from 1 to 5 (5 being most significant) the perceived significance of several recognised barriers. Data represents average rating (n=4)

**Rheumatology**

- All Trusts currently using biosimilar etanercept including Buckinghamshire Healthcare
- Currently working with Rheumatology network to identify future needs in clinical training around biological medicines.

**Intra-Operative Fluid Management Technologies**

**Estimated End Date: Jan 2018**

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

This project has run for three years linking with the National Benching Marking Audit and EL Audit activities for data, discussion and implementation. The AHSNs network of networks is expressing an interest in running a national project in Emergency Laparotomy which may benefit from the work we have done within the IOFM project however, this project closes during Q3.

**Final Report**

Oxford AHSN has a closing off action for this project. The final report for this project will capture learning points and make recommendations for the future.

**Falls Prevention Project**

**Estimated End date: March 2019**

**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, Frimley Health and Buckinghamshire Healthcare 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** | Buckinghamshire Healthcare – *scoping project requirements* |
| **Frimley Health** | |
| **Berkshire Healthcare** | |

The project is estimated to reduce falls by 25% on wards implementing the FallSafe care bundles.

**Q3 update and activities for Q4 (FallSafe)**

- Oxford Health and Berkshire Healthcare have started the implementation phase of the project; there have been some amendments to the project plans at both Trusts due to staff changes
- It has been agreed that an additional ward at Berkshire Healthcare will commence the project from January 2018

- There is potential for additional wards in Oxford Health to commence the project; discussions regarding this are planned for early Q4
- The AHSN presented the project at the Lead Nurse and Matron meeting in Buckinghamshire Healthcare Trust, to seek support and agreement for the work
- Work is ongoing at Buckinghamshire Healthcare to fully understand the resource and data requirements to ensure the success of the project, while ensuring duplication of data capture is avoided across all the Trust's audits

**Buckinghamshire Healthcare Stay in the Bay (SITB) Improvement Project:** The CIA Programme is working with Buckinghamshire Healthcare 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 to complete an evaluation on 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. Data downloads are being provided to the project to enable the analysis.

**Q3 update and activities for Q4 (Stay in the Bay):**

- Results have shown a reduction in the monthly rate of falls of 4.59 falls per 1000 occupied bed days, which equates to a reduction of 46.3%. These results were presented in a poster at the Royal Statistical Society's Young Statisticians Annual Conference in August, and won the prize for best oral presentation
- Continue to support Buckinghamshire Healthcare with SITB CLAHRC project where required.
- Continue to enable CLAHRC to have access to data to continue analysis on SITB evaluation.

**Adopting innovation and managing healthcare settings programme**

Formerly the 'Innovating in healthcare settings programme', the change in the name reflects the focus of the programme and also a modification of the eligibility criteria. Starting from the fourth cohort, the programme is now open to multi-organisational teams working on an innovation or change management project within the Oxford AHSN region such as from Accountable Care Systems (ACS) and Sustainability and Transformation Partnerships (STP) teams. Local Authority and Social care staff are eligible as long they are part of either of the STP or ACS team.

The programme is currently on its third cohort and application is now open for the fourth cohort which is due to start in March 2018.

More information about the programme can be found in the programme's website:

http://clinicalinnovation.org.uk/project/innovating-practical-care-setting-programme-pgcert/

**Organisation and Cohorts**

| Organisation | Cohort 1 | Cohort 2 | Cohort 3 | Total |
|---|---|---|---|---|
| Berkshire Healthcare | 1 | 5 | 2 | 8 |
| Great Western Hospitals | 2 | 3 | 0 | 5 |
| Milton Keynes University Hospital | 1 | 1 | 0 | 2 |
| Oxford University Hospitals | 21 | 4 | 4 | 29 |
| Oxford Health | 1 | 3 | 4 | 8 |
| Royal Berkshire | 1 | 0 | 0 | 1 |
| Buckinghamshire Healthcare | 0 | 8 | 5 | 13 |
| Frimley Health | 0 | 0 | 4 | 4 |
| NHS England | 0 | 1 | 1 | 2 |

**Research & Development (R&D)**

NIHR is reviewing future role and function of CLAHRCs. Prof Gary 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 Gary Ford has also met with Professor Richard Hobbs to discuss future Oxford AHSN / Oxford CLAHRC working. In parallel, NHSE is looking to the AHSNs to strengthen the relationship with research funders to improve the identification and uptake by the NHS of research and innovation with high value. A promising innovation may lack robust evidence to support uptake by the NHS, or conversely there may be poor national uptake of research outputs with a strong evidence base of clinical benefit and value because of cultural barriers or lack of change management resources. The discussions resulted in the partners committing to working closer together to remove barriers to uptake of high value therapies and system changes. A joint working framework is being developed to evaluate promising innovations identified by AHSNs to establish benefit to the NHS and AHSNs supporting national spread of high value innovations identified by CLAHRCs. The principles from this work will inform further alignment of AHSNs with other research infrastructure, such as the NIHR Biomedical Research Centres and MedTech and In vitro diagnostic co-operatives. NHSE have also indicated they propose 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.

The Berkshire Healthcare Research and Development team have moved onto the University of Reading Campus to enable closer working with the TVCTU with and have embedded some capacity in the unit. Royal Berkshire and University of Reading held a Joint Strategy workshop 6th November, led by the Chief Executive Officer and Vice Chancellor, with a range of people from across both institutions present to discuss the how to best develop the collaborative relationship. Significant commitments were made from both sides and an action plan will be developed in due course. A number of individual, research specific, links were made during the networking session which will be facilitated moving forward by the institutions' AHSN partner.

The University of Reading hosted a "Demystifying NIHR Research Funding" event, with speakers including the Research Design Service, local PPI champions, the Thames Valley Clinical Trial Unit, the University research support team, NIHR experience academics and representatives from Royal Berkshire and Berkshire Healthcare. Colleagues from across the two Trusts and University were invited along with collaborators from further afield. The event was well received and planning is underway for similar events to be geared more towards BHFT and RBFT staff.

Royal Berkshire held an open day on 23rd September for a membership community made up of a public constituency of local people and a staff constituency for all permanent member of staff. It is 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 Trust and the Thames Valley Clinical Trials Unit, celebrating the cross-institution links and research going on in the region. The day was very well attended by a broad spectrum of people, with a lot of interest and discussion taking place with the members of the R & D community who were present.

A reciprocal strategic partnership has been formed between the Oxford MIC and the AHSN with the latter delivering technologies through an innovation exchange and sharing unmet clinical needs and PPIEE expertise with the MIC and the MIC delivering evidence for technologies to support the adoption process and developing a new cost-effective service to support AHSN evaluations. The parties will jointly develop, share and integrate methodologies and toolkits such as the AHSN roadmap and lean triaging

process. Strategic and Industry Partnerships will host triaging workshops, showcases and networking events for commissioners, providers and industrial partners. A collaborative approach will be taken to identify the evidence required to support adoption.

A reciprocal strategic partnership has also been developed between MindTech and the AHSN, the former delivering technologies to the AHSN networks and teams for service improvement studies and the AHSN delivering innovations to MindTech to spread nationally, in particular from the IAPT network and the Oxford Health BRC. Jointly we would share/integrate methodologies and develop toolkits such as the AHSN digital roadmap and MindTech digital framework Strategic and Industry Partnerships will host Digital Mental Health triaging workshops, showcases and networking events for commissioners, providers and industrial partners. MindTech will provide Oxford AHSN with digital mental health-focused support in terms of activities mentioned in the new digital pathway in the Accelerated Access Review: idea generation and identifying and promoting digital innovation, adoption support and promotion to patients and professionals.

The most recent R & D group meeting took place on 31st October and was opened by Prof Gary Ford giving his Chief Executive update. Key points included:

- a summary of the recent developments in the AHSN relicensing process mentioning that a 6 month contract extension has been put in place to September 2018 should a new license not be agreed in time.
- a description of the proposed nine Innovation National Networks – Prof Gary Ford has been named as the AHSN CEO Convener for the research network, alongside Louise Wood, Director of Science, Research and Evidence, Department of Health, as the Senior National Partner – described above.
- an update on the Oxford AHSN innovation implementation programme – now showing over 50 clinical innovations selected.

The agenda then moved on to a discussion about the development of a programme for professional doctorates in health innovation involving the region's HEIs, Trusts and industry partners. The consensus was that the proposal is an exciting opportunity worth pursuing but it is key to have input and engagement from more than 10 employers in the region in the preparation of the bid built around "trailblazing" group. There is an opportunity to develop alongside clinical/academic/research pathway related Level 8 bid that has already submitted as Expression of Interest but it is obviously key to involve employers from the earliest possible stage to determine what they actually need and match with HEI skill sets, not vice versa, whilst considering what innovation looks like from inside the sector. Prof Sean Mackney, Bucks New University, and Prof Richard Ellis, University of Reading, will move forward with input from colleagues at HEETV and support from the AHSN where relevant.

Presentations were then given by Julie Hart, Head of Diagnostics and Precision Medicine, Oxford AHSN, and Chris Butler, Clinical Director, NIHR Clinical Healthcare MedTech and *in vitro* Diagnostic Co-operative (MIC), on "How the MICs are working with the AHSN" and "An Overview of the Community Healthcare MIC" respectively, emphasising the remit, aims, key strategic partners and describing the working relationship with the AHSN.

Planning has commenced for the next R & D group meeting, to be held 8th February 2018, with the draft agenda including presentations from Prof Sean Mackney (Bucks New University), Mr Mandeep Singh Bindra/Denise West (Bucks Healthcare) and Prof John Clapham/Dr Alan Martin (University of Buckingham).

**Strategic and Industry Partnerships**

**Overview**

During the quarter there have been three major publications by the Government on health and life sciences. The first was Government Response to the Accelerated Access Review, which was published on the 5th November. This was followed by the Government's Industrial Strategy, which was published on the 27th November (see https://www.gov.uk/government/publications/industrial-strategy-building-a-britain-fit-for-the-future). It sets out the strategy for industrial support including the life sciences. The third publication, the Life Sciences Sector Deal was launched on the 6th December 2017 (https://www.gov.uk/government/publications/life-sciences-sector-deal). These three publications represent important policy positions set out by the Government and identify significant roles for the AHSNs.

The SIP team has had a busy quarter building on pre-existing programmes of work and in securing a number of significant grant awards. Overall the team is actively pursuing 50 projects and has completed 52 specific projects. The team has engaged with 70 companies during the quarter.

Achievements in Q3 include:

- The SIP team have established the first, clinically led industry funded programme for inflammatory bowel disease.

Two grants have been awarded by Innovate UK under the Digital Health Catalyst programme

  - With Big Health for enabling better health and self-care at scale with digital sleep medicine to the value of £998,672 (in collaboration with CIA).
  - With Ufonia for Autonomous speech-based clinical outcome measures for £74,937.
- A Biomedical Catalyst grant has been awarded to Jupiter Diagnostics for over £324,993. The Oxford AHSN is a sub-contractor in the delivery of the project.
- A Memorandum of Understanding has been signed with Drayson Technologies covering GDm-health, SEND and EDGE-COPD.
- A project to assess the impact of Flu point of care diagnostic tests in ED has started in Berkshire.
- The Strategic and Industry Partnerships Oversight Group meeting was held on the 28th November.
- A contract has been signed with Sharp Life Science to provide services for clinical pathway evaluations in diagnostics.
- The *Digital Health Roadmap* (http://www.oxfordahsn.org/news-and-events/news/new-digital-health-roadmap-provides-tools-to-turn-ideas-into-products/) was launched on the 5th December at the Innovation Forum Leaders Conference. See Case Study.

Ms Marianne Lepetuykh has joined the SIP team as Senior Project Manager for the Inflammatory Bowel Disease (IBD) Network/programme on the 8th December.

Mr Guy Checketts has been appointed as Programme Lead for Diagnostics and will start in the New Year.

Ms Geraldine Murphy, who has been the project manager covering digital health and providing support for The Hill, will transfer to the Informatics team on the 1st January.

**Supporting companies along the adoption pathway**

Further work has been undertaken in building an offer for companies around the Strategyzer methodology, which is designed to help companies de-risk their development activities. A number of companies have now participated in this process as part of a feasibility evaluation to determine the effectiveness of this approach. Andy Hill attended a two-day Strategyzer Masterclass to support this process. The Strategyzer workshops will be used with companies seeking commercialisation support.

*Genomics, Diagnostics and Precision Medicine*

In line with the introduction of Innovation National Networks by NHS England, the Diagnostics programme will be renamed Genomics, Diagnostics and Precision Medicine. Julie Hart will continue to lead the programme building on the strong pipeline of projects and strengthening the network across the region and nationally. The team continues to work across a deep and varied pipeline of projects:

- Solid progress has been made on the roll-out of the Roche Elecsys® pre-eclampsia test, which helps predict at risk women. Seven hospitals across the Maternity Network are confirmed for implementation. The clinical and lab leads have been identified and engaged at all hospitals. A Business Case is in active development for five hospitals, focusing on improved quality of care, cost savings and freeing up of resources. A progress and implementation update has been provided to a number of other AHSNs and NHS Business Services to assist with local roll-out.
- An evaluation of a Roche Flu test started on the 14th December in ED in Berkshire and a further evaluation in Buckinghamshire using the Fujifilm Flu A and Flu B test will commence in the New Year.
- On the Faecal Calprotectin (FCP) diagnostic test, approval to proceed has been received in primary care for Aylesbury and Chiltern CCGs (54 GP practices). Implementation has been paused awaiting clarification from Yorks & Humber AHSN and NHS England on how to proceed given disparate results from different FCP tests.

Jupiter Diagnostics has been award a Biomedical Catalyst grant for over £324,993 covering a novel point of care test. The Oxford AHSN is a sub-contractor and will provide clinical pathway support.

An agreement has been signed with Sharp Life Science covering selected clinical pathway analyses and health economic assessments across a selection of diagnostic opportunities.

The team continues to provide support to the Oxford Genomics Medicine Centre in terms of advice and resource for the introduction of whole genome sequencing into the NHS.

The Diagnostics Industry Advisory Council (DIAC) met on the 6th December to review the Life Sciences Industry Strategy and discuss regional opportunities in diagnostics.

*Digital*

Work is due to be completed by the end of this quarter on the SBRI-funded feasibility study for the Physiomics "Decision Support System for Stratified Cancer Treatment". The focus has been on oesophageal cancer and the work has included the use of the London DEC's Lean Methodology approach, as well as some competitor analysis and commercialisation planning.

The Oxford AHSN is a delivery partner in a grant awarded to Big Health for the value of £998,672. The award covers enabling better health and self-care at scale with digital sleep medicine. The CIA and SIP teams worked together in preparing the grant submission and will continue to work closely in the evaluation and implementation of a digital therapy for insomnia. The digital therapy will be rolled out across GP practices.

A second Digital Health Catalyst award was made to Ufonia to the value of £74,937. The grant covers autonomous speech-based clinical outcome measures and the AHSN will provide support in the development of a business model.

The digital health team has provided support to a new anxiety digital platform that has been developed by the University Of Reading through NIHR funding. The platform is directed at childhood anxiety and planning for evaluation and implementation is underway.

A Memorandum of Understanding has been signed with Drayson Technologies covering support for three products – GDm-health, SEND and COPD EDGE. Under the MoU we will explore approaches to the continued evaluation and implementation of each product both at a regional and national level.

The team has provided support to the Informatics team on the IG Framework, and in particular to ensuring that it is consistent with the new General Data Protection Regulation.

**Building investment opportunities across the Oxford AHSN region**

The HEFCE Connecting Capability Fund awarded £4.8 million to Oxford and Birmingham Universities for the UK Spine in Ageing. The Oxford AHSN is a partner in the UK Spine for Ageing.

The Bicester HNT programme held its Partnership Meeting on the 19th October in Bicester. The meeting provided an opportunity to highlight the progress made by the programme over the last six months, and was followed by a Local Stakeholder Workshop. The engagement and feedback provide invaluable support for the programme.

There have been delays in finalising the Innovation Support for Business (ISfB) programme, which is being co-ordinated through OxLEP. The Department for Communities and Local Government (DCLG) requested a more detailed analysis of the impact of State Aid, which has now been submitted covering the activities of TheHill. A revised timetable anticipates that the relevant contracts will be signed in the next quarter.

There has been gradual progress in the assessment of the ERDF Revenue funding bid for the Buckinghamshire Health and Social Care Innovation Hub. No date has been set yet for when this process will be completed, although the partners are working to further define the operating and delivery model.

The Oxford AHSN continues to work with the other partners in the Oxford Transformative Technologies Alliance. Scoping work on a living laboratory is underway and the partners are considering proposals for a second wave of audits. One of the team attended a SIA Stocktake Workshop organised by BEIS on the 7th December.

**NHS Culture**

The Hill ran a pitch event on the 23rd November, which was attended by over 150 people. A panel of expert judges headed by Professor Sir John Bell, selected the three best pitches out of a selection of [20] entrants. Further information can be found on https://www.phc.ox.ac.uk/news/blog/a-view-from-the-hill.

**Partnerships**

A bi-annual meeting was held with between the senior management teams of the Oxford AHSN and its strategic partner Johnson & Johnson/Janssen. A number of projects were discussed and evaluated.

The Affordable Medicines Programme has appointed a post-doctoral position for intellectual property. The Programme is a collaboration between the Structural Genomics Consortium, the Office of Health Economics and the Oxford AHSN

http://www.oxfordmartin.ox.ac.uk/research/programmes/affordable-medicines), and is supported by a grant from the Oxford Martin School.

Funding has been secured for the establishment of a Clinical Programme for Inflammatory Bowel disease. Led by Professor Simon Travis, and managed by a newly appointed senior project manager within the Strategic and Industry Partnerships Team, this is the first industry-funded network. Three companies, Janssen, AbbVie, Takeda will be supporting the network on an annual basis (£110,000).

The Harwell HealthTec Cluster hosted a second networking event on the 21st November and has set out a second call for Proof of Concept proposals (see http://www.oxfordahsn.org/news-and-events/news/harwell-launches-call-for-innovative-industry-collaboration-ideas/ ). The call focuses on collaborative projects between industry and members of the HealthTec Clusters. Successful applicants will receive up to £20,000 per project.

**Conferences / Events / Publications**

- Nick Scott-Ram presented on the Oxfordshire Transformative Technologies Alliance Science and Innovation Audit at a NHS Confederation Webinar on Science and Innovation Audits - http://www.nhsconfed.org/integration-and-new-care-models/local-planning/growing-local-economies/local-growth-webinars. The Webinar was broadcast on the 23rd November.
- The Oxford AHSN was active at the Innovation Forum Leaders Conference, which was held in Oxford on the 4th and 5th December. Nick Scott-Ram was part of a panel session on *Convergence and Open Innovation as Drivers of the Future* on the first day and then gave a keynote address on the following day on *Building a Digital Health Ecosystem.*
- The *Digital Health Roadmap* (http://www.oxfordahsn.org/news-and-events/news/new-digital-health-roadmap-provides-tools-to-turn-ideas-into-products/) was launched on the 5th December at the Innovation Forum Leaders Conference. Further details of the *Roadmap* can be found in the Case Study.
- Nicki Bromwich gave a talk at the NIHR MindTech HTC Mental health Symposium 2017 on *From evidence to implementation* on the 7th December in London.

**Informatics Theme**

We have recruited to the role of Informatics Engagement Lead and welcome Geraldine Murphy to the team. Geraldine is an internal hire, coming to us from Strategic Industry Partnerships and brings a wealth of knowledge into the team.

Informatics continue to host the regular workstack meetings within the team and external project update meetings with each of the programmes to collaboratively agree priorities and RAG status of individual projects.

**Data Acquisition**

Following on from a positive first meeting, Oxford AHSN Informatics has been instrumental in developing a nationally approved NHS Digital data acquisition request application in collaboration with NHS Digital, East Midlands AHSN and Health Innovation Network AHSN

Together we have developed a robust NHS Digital Application that has been approved by the Data Access Team. This will now be presented to the iGuard committee who are responsible for the due diligence of data dissemination out of NHS Digital. Once the first test case (East Midlands AHSN) data application has been approved at this level, we will be able to distribute the template out to *all* ASHN's to apply to receive NHS Digital Data with a high probability of success.

As part of this intra-AHSN application we have included the request for national data to be given to each AHSN in order to monitor and analyse spread and adoption of various projects outside of the originating AHSN patch. This will give us a much richer data source with which to progress existing and future projects within the Oxford AHSN.

We are still continuing to pursue data direct from the Trusts and are drafting data sharing protocols to help realise this.

**Data Warehouse**

This quarter the HES data warehouse received complete overhaul. Structural changes were implemented to allow for incremental versus full load of the warehouse. Performance tuning led to data loads to being completed in 15% of the original times.

Auditing capability was added as was the ability to rollback updates to the system. Technical documentation was also produced and training delivered within the informatics team.

On completion of this work, a system analyst from Concentra was invited to audit the system. The audit was success and the system has been certified to be using best practices and fit for purpose.

The Critical Care dataset was added, which gives us the capability to see measures such as how many admitted patients were also in critical care and what was their average length of stay within critical care.

We are currently completing work up upgrading our infrastructure from SQL Server 2014 Standard Edition to SQL Server 2016 Enterprise Edition. Databases have been migrated and are currently undergoing testing.

**Visualisation Platform and Self-Service**

With the warehouse now complete, focus has turned towards the self-service element. A platform agnostic approach has been taken and requirements gathering meetings have been held with all the programmes in view of getting them involved in project.

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

We are still waiting for the Department of Health to decide if they are willing to embrace cloud based technology for storage and processing of NHS Digital data.

**Information Governance (IG)**

The IG framework continues to be used to benefit projects across the network. The second IG Forum meeting is being scheduled for early February 2018.

The IG documents have been updated to comply with the upcoming rollout of GDPR. This has been done with guidance from solicitors and the Chair of the UK Caldicott Guardian Council. This provides a robust set of documentation that will allow the continuation and free flow of data from all Trusts that are signed up to the framework.

**Informatics Strategy**

The Team continues to progress the agreed Informatics Strategy. We continue to meet twice a month to monitor and advance key activities.

The guidance from the Informatics 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), (formally Place-Based Digital Maturity Assessment Development)**

We are now in the final phase of work for the Connected Care assessment. We have developed a toolkit comprising key instruments for preparing and undertaking the assessment process which are now versioned off for the test phase of the project. Recruitment of test sites has been a challenge due to the timing requirements for completion, relating to project milestones. Testing has now commenced in two sites, East Sussex and Surrey following local engagement and consultation with key stakeholders. The test phase will complete mid- December and an evaluation report with recommendations will reviewed by the steering group shortly after. With Greater Manchester AHSN we have proposed through the Digital INN a role for AHSNs to support the national adoptions of the assessment process for STPs and ACSs. This project, commissioned by NHS England is expected to complete February 2018.

This extensive work for NHS England is 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.

**Digital Innovation Hub**

Whilst a defined application process has only just been formalised, the Informatics team has been developing a robust bid in preparation for the anticipated process for applications for the 3-5 Digital Innovation Hubs.

**Programme and Theme Support**

**Best Care Clinical Networks programme**

- **Dementia** – Informatics are supporting a study by supplying the diagnosis codes from HES data. Having reviewed this we have decided that CRIS will supply a vastly richer source of data and we have initiated the process to start receiving that data. This work will continue into the next quarter.
- **EIP** – Informatics continues to support the EIP Project and we have requested additional data from Oxford Health and Berkshire to further our understanding of this patient group. This project aims to help improve outcomes for these patients through early diagnosis and intervention.
- **Imaging** – We have continued to provide support and guidance to 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 programme**

- **Anticoagulant Project** - The drug Warfarin is given to patients to thin the blood, reducing the risk of clots and strokes. Patients on Warfarin need to be given regular blood tests by their GP and after these their dose may be adjusted accordingly. The Time in Therapeutic Range (TTR) is an important measure in this area examining the % of time that a patient's INR blood results are in the therapeutic range. NICE recommends that patients below TTR 65% are reviewed. This project sets out to reduce the number of patients with a poor TTR %, either through improving compliance or switching to a different anticoagulant. The data provided so far has been much appreciated by those working on the project.

**Strategic and Industry Partnerships programme (SIP)**

Informatics continues to work closely with SIP.

**Patient Safety and Clinical Improvement programme**

- **Reduced Fetal Movement** - Informatics liaised with all participating trusts to ensure IG compliance was met for the smooth flow of data. We received signed protocols from all trusts and proceeded to analyse the data, collected as part of a clinical audit. Data was gathered for patients presenting with Reduced Fetal Movement as either a primary or secondary presentation. This project involved analysing data gathered from 6 trusts across the AHSN region and making inter-trust comparisons. Our analysis focused on both the pregnancy and the baby, examining gestation periods, risk factors, outcomes, SCBU admissions, number of scans, number of patients induced, several births/deaths. The aim is to further understand this group of patients to achieve better outcomes. The data was well received by the project lead and presented to the RFM stakeholders group in November and it will allow the analysis

of data on a greater number of reduced fetal movement cases and the possible development of a streamlined pathway of care for this common clinical presentation.

- **Sepsis CQUIN (Unify data)** – We charted further data on the percentage of patients screened and the percentage of patients who were given antibiotics for Sepsis, either in the Emergency Department or as an inpatient.

- **Sepsis (HES Data)** – Another round of Sepsis HES data work was completed and delivered. This now includes data linkage to Critical Care to show how many patients with Suspicion of Sepsis were admitted into critical care, how many times they were admitted and the average length of stay. Linkage work to the A&E dataset was also delivered. This involved identifying how many of the non-elective Admitted Patients arrived by ambulance.

- **AKI** – linked operational hospital data and biomarkers data has now been received for all AHSN trusts apart from Buckinghamshire Healthcare. This data has been presented to allow an understanding of progression of AKI in inpatients across the region. The data has 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 annual Oxford AHSN Patient Safety conference. There may be opportunities for a paper with this data going forward.

**Patient and Public Involvement, Engagement & Experience (PPIEE)**

**Training and development**

Our approach to development and training relates to the three levels shown below.



Level 2 training

In December, we ran our second session on outcomes important to patients with very positive feedback from the thirty participants who arrived despite the snow.  Our January and April sessions on methods and techniques for joint working are being planned.

Level 3 training

*The Leading Together Programme*

The co-design work for our Leading Together Programme for Learning Disabilities continues with 1:1 interviews, focus groups with families, people with learning disabilities and professionals. We will start recruiting to the Programme in January with a view to the first workshop running in April.

**Network development**

Forty graduates from the Leading Together Programme met in Newbury to showcase work that has happened in the year since the end of the Programme. We were pleased to see that relationships had been sustained and heard from partners who had developed work in the following areas:

- dementia care pathways;
- bringing the voluntary sector together in Abingdon
- improving patient experience at the Oxford Eye Hospital.

We will continue to develop the network through a new section to the AHSN website, regular news updates and a second annual meeting in 2018.


AHSN National PPIEE network development

We will be taking over the chairing of the national AHSN PPI Network in January and look forward to developing the relationships and work of the Group.

**Patient Safety and Clinical Improvement** (includes Patient Safety Collaborative)

**Programme Overview**

Patient Safety and Clinical Improvement has had a busy quarter, with a number of highlights, including

- Our Hydration in Care Homes project (part of the AKI workstream) in partnership with Windsor Ascot and Maidenhead CCG, won 3 PrescQIPP awards noting the improved outcomes for residents from the pilot 4 care homes. These are NHS awards for innovation in medicines optimisation.

  The awards won were:

  - Best Patient Safety Award 2017
  - Best Interface Award 2017
  - Best Overall Innovation Award 2017 - GOLD Award

  In addition, HEETV has provided us with a grant to develop training materials in relation to the hydration project to spread this work further, and we have had interest from the BLMK STP and from further afield.

- The Maternity Swab Never Event project has been published in the European Journal of Obstetrics and Gynaecology. The article has been made OpenAccess to help with spreading this work, and has been very well received.

- We were pleased to attend Patient First, a large healthcare conference in London and had the opportunity to present our work - 'Improving survival rates of extremely premature babies' in the Best Practice Theatre as well as a number of posters from our workstreams.

- Our Maternity Shared Learning Event, held in collaboration with TVSCN was held in November, attended by over 80 midwives, clinicians and other interested parties from all Trusts in the area to hear from a number of innovative projects and learn from incidents and rare cases. At least two of the projects presented are being forwarded for local spread, with one attracting attention from the Royal College of Midwives.

Nationally, Patient Safety Collaboratives have been tasked with delivering 3 national workstreams - The Deteriorating Patient, Safety Culture and supporting the Maternal and Neonatal Health Safety Collaborative. In this quarter we were pleased to receive from NHSI official sign off of our plans detailing our local response to the PSC National Workstreams.

In addition, our second e-newsletter was published in this period, designed to engage a wider audience in our projects and work alongside advertising key events and training opportunities and we are developing our Twitter presence to disseminate relevant patient safety information, build new connections and publicise our work, with over 800 current followers (up by 110 in the last two months).

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

Table 1. Q3 programme status and stakeholder groups

| Programme | Our Aim | Our Measures | Our Partners | Status |
|---|---|---|---|---|
| Acute Kidney Injury | Reduction of UTIs requiring hospital admission or antibiotics in residential and nursing homes | Introduction and sustained use of a structured drinks around and drinks chart

Reduction in UTIs +/- requiring antibiotics | 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 and paper on findings | Bracknell and Slough CCG


Oxfordshire CCG, Berkshire West and East CCGs | Near Completion |
| | Reduce regional mortality, length of stay and readmission from AKI | Introduction of 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, Frimley Health (Wexham Park), | Active |
| | To reduce the incidence of AKI in the community setting | Introduction of 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 | Active |

| Programme | Our Aim | Our Measures | 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 | Oxford Health, Oxford University Hospitals, Berkshire Healthcare, Royal Berkshire, 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 Healthcare 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 | Complete |
| 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 Hospital University of Oxford | Active |

| Programme | Our Aim | Our Measures | Our Partners | Status |
|---|---|---|---|---|
| Network wide guidelines<br><br>Network- wide Oxytocin administration<br><br>2.'Fresh Eyes' CTG Interpretation tool<br><br>3.Reduced Fetal Movements | To develop and introduce a range of network/region wide guidelines addressing local priorities. Current work in progress:<br><br>To align protocols for the administration of Oxytocin administration for augmentation at each site<br><br>To have the same 'Fresh Eyes' CTG interpretation tool used across the region<br><br>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<br><br><br>Number of Trusts with guideline implemented successfully<br><br><br>To be determined | Royal Berkshire Hospital, Oxford University Hospitals, Buckinghamshire Healthcare, Great Western Hospital, Milton Keynes Hospital, Wexham Park Hospital | Active<br><br><br><br><br><br>Active<br><br><br><br>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 | Thames Valley Maternity SCN, Royal Berkshire, Oxford University Hospitals, Buckinghamshire Healthcare, Great Western Hospital, Milton Keynes University Hospital, Wexham Park Hospital | Active |

| Programme | Our Aim | Our Measures | Our Partners | Status |
|---|---|---|---|---|
| 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 | Thames Valley Neonatal ODN, Royal Berkshire, Oxford University Hospitals, Buckinghamshire Healthcare, Great Western Hospital, Milton Keynes University Hospital, Wexham Park Hospital | Complete |
| Maternal and Neonatal Health Safety (MNHSC) Collaborative - National Workstream | The aim of the MNHSC is to improve outcomes and experience of care and through this approach, address the national ambition of reducing the rates of maternal deaths, stillbirths, neonatal deaths and brain injuries that occur during or soon after birth by 20% by 2020 and 50% by 2025.<br><br>This national ambition requires all NHS trusts and independent providers of maternity services in England to make measurable improvements in safety outcomes for women, their babies and families by exchanging ideas and best practice | Amount of QI projects seen through from baseline to completion against those initially planned at each Trust CoP facilitated x4 per year Shared Learning Events attended by representatives from all relevant Trusts. | Oxford University Hospitals, Great Western Hospital, Buckinghamshire Healthcare, Milton Keynes University Hospital, Royal Berkshire, Frimley Health (Wexham Park Hospital) | Active |

| Programme | Our Aim | Our Measures | Our Partners | Status |
|---|---|---|---|---|
| Sepsis and the Deteriorating Patient | 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, Frimley Health (Wexham Park) | Active |
| | Ensure septic patients seen promptly in ED | Introduce a clinician led pre-alert | SCAS<br><br>Frimley Health (Wexham Park Hospital) | 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 | Planning |
| Paediatric Gastrostomy | To improve patient safety along the pathway for children receiving gastrostomies. | % of children with personalised care plans and escalation plans in place at discharge<br><br>% of parents of discharged children who receive training and achieve competency, as assessed by both trainer and parent<br>% of specialist HCPs receiving training and achieving competency | Oxford University Hospitals, Royal Berkshire, Berkshire Healthcare,<br><br>Frimley Health, Milton Keynes University Hospital, CNWL, Great Western Hospital, Helen & Douglas House | Active |

| Programme | Our Aim | Our Measures | Our Partners | Status |
|---|---|---|---|---|
| | | feedback scores on awareness packages from non-specialist HCPs Feedback scores from specialist HCPs regarding perceptions on network connectivity across the region | | |
| Mortality Reviews | To improve the standardisation of mortality review processes within the community, mental health and secondary care settings<br><br>To support the development of quality improvement projects based on the thematic learning from mortality reviews | Currently forming group and establishing metrics: · Mortality numbers/rate using HES data · 30 day mortality TBC · "Avoidable deaths" as determined by SJR tool · SIRIs relating to death of patient · Regional themes for improvement identified via SJR reviews · Portfolio of learning from deaths TBC (AHSN Network Atlas case studies) | Oxford University Hospitals, Royal Berkshire, Berkshire Healthcare, Frimley Health, Milton Keynes University Hospital, Oxford Health incl. mental health, Great Western Hospital, Buckinghamshire Healthcare incl. mental health, CCGs | Active |
| Paediatric Gastrostomy | To improve patient safety along the pathway for children receiving gastrostomies. | % of children with personalised care plans and escalation plans in place at discharge<br><br>% of parents of discharged children who receive training and achieve competency, as assessed by both trainer and parent<br>% of specialist HCPs receiving training and achieving competency | Oxford University Hospitals, Royal Berkshire, Berkshire Healthcare<br><br>Frimley Health, Milton Keynes University Hospital, CNWL, Great Western Hospital, Helen & Douglas House | Active |

| Programme | Our Aim | Our Measures | Our Partners | Status |
|---|---|---|---|---|
| | | Feedback scores on awareness packages from non-specialist HCPs Feedback scores from specialist HCPs regarding perceptions on network connectivity across the region | | |
| Emergency Department Collaborative | To provide a collaborative space to share learning across Emergency Departments in the region | TBC | Oxford University Hospitals, Great Western Hospital, Buckinghamshire Healthcare, Milton Keynes University Hospital, Royal Berkshire, Frimley Health, SCAS | Active |
| Capability Building, Leadership Development and Safety Culture | To build and develop QI and Patient Safety awareness and skills in the Oxford AHSN area To help create the conditions that will enable health care organisations to nurture and develop a culture of safety | We will be using the PMSU baseline measurement and ongoing measurement (TBC) to measure against progress for this workstream | Oxford University Hospitals, Great Western Hospital, Buckinghamshire Healthcare, Milton Keynes University Hospital, Royal Berkshire, Frimley Health (Wexham Park), Oxford Health, Berkshire Healthcare and Central and North West London, HEETV | Active |

**Patient Safety Clinical Programmes**

**Acute Kidney Injury (AKI)**

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

The focus for this quarter in the workstream has been the project reducing urinary tract infections through increasing hydration in care homes (in collaboration with Windsor Ascot and Maidenhead CCG). The project commenced in May 2016 and was designed using the IHI rapid cycle of change methodology.

Below are the plan, do, study, act (PDSA) cycles of change used to date.
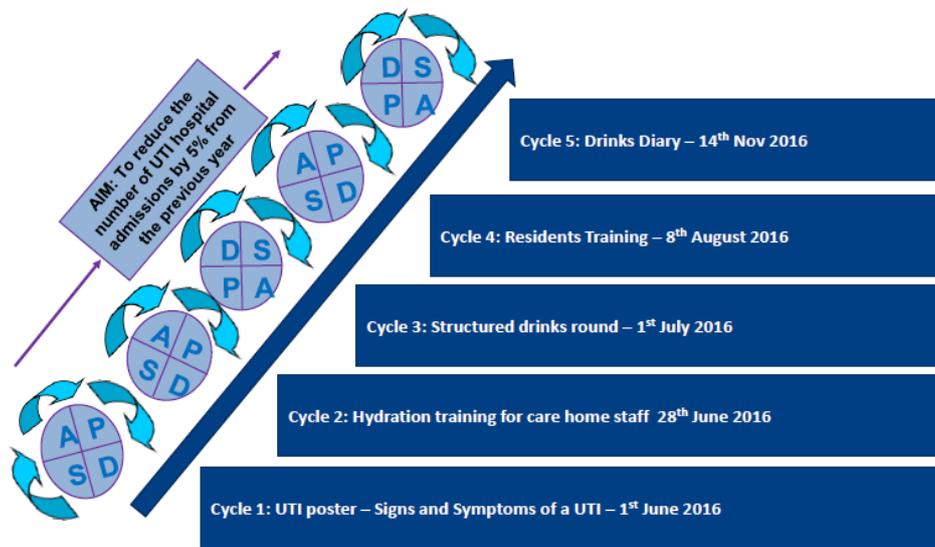


The aim of the project is to reduce the number of urinary tract infections (UTI) requiring antibiotics or admission to hospital and all four nursing/care homes have vastly improved over the last 18 months. Since the project commenced there has been a 33% drop in admissions to hospital for a UTI (see figure 1).
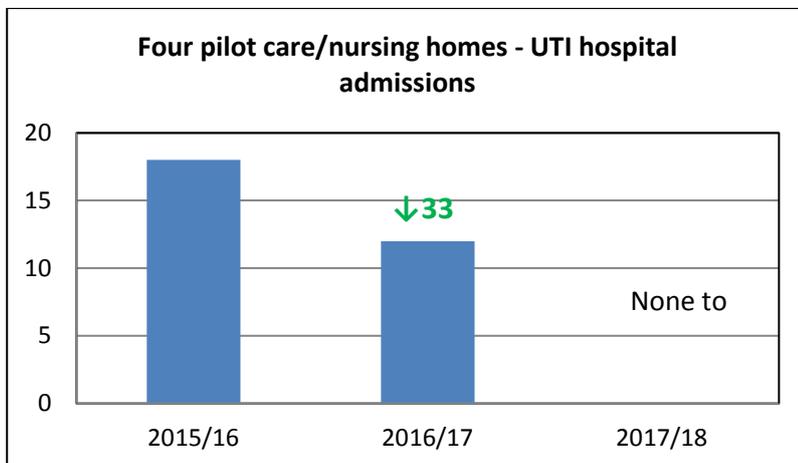


Figure 1

The table below indicates the increase in number of days between UTIs requiring antibiotics in each care/nursing home following the daily introduction of seven structured drinks rounds and staff training.

| WAM PILOT CH code | Started Project | Baseline Average (2 months) | Average to date | Days since last UTI as of 10th October 2017 | Greatest number of days between UTIs within the 14 months |
|---|---|---|---|---|---|
| 1H | 01/07/2016 | No UTIs | 1 UTI per 53 days | 208 days | 208 days |
| 2E | 01/07/2016 | 1 UTI per 16 days | 1 UTI per 45 days | 110 days | 174 days |
| 3M | 01/07/2016 | 1 UTI per 15 days | 1 UTI per 69 days | 14 days | 225 days |
| 4L | 01/07/2016 | 1 UTI per 10 days | 1 UTI per 21 days | 11 days | 92 days |

In October 2017 the project received three national PrescQIPP awards for best interface, patient safety and best overall innovation. A poster was presented at the Patient First Conference in November and both of these events have generated significant interest in the adoption of the work. The project has been presented at Bedford, Luton and Milton Keynes STP with local authorities and CCGs present as well as the Thames Valley care homes best practice forum. Interest has been far reaching including Devon and York CCGs. Resources have been uploaded onto the patient safety website to assist interested parties and a grant was awarded from HEETV to further develop the training within the project. A large training session took place for East Berkshire care homes in December where over 40 members of staff were represented from care homes and local authorities.

To date the workstream has trained over 500 staff on AKI awareness in the community and hydration in care homes. The community staff includes GPs, paramedics, out of hours and care home workers.
The steering board met in December and agreed to continue to focus on hydration messages for community, secondary and primary care.

**Pressure Damage Prevention**

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. There is a continued lack of clarity regarding the national consensus on best practice for pressure damage prevention as the anticipated guidelines have yet to appear, which was acknowledged at the Steering Group meeting held on 9 October 2017. The group felt the current 'paused' status of the programme should continue pro term although QI projects which had demonstrated improvements in patient outcomes at the end of Phase I will continue to be supported, and the valuable professional networking activities of the Programme will continue.

The QI project at the National Spinal injuries Centre in Stoke Mandeville has come to a successful conclusion, having demonstrated a sustained decrease in pressure damage incidence across all wards in the unit since the spread of the original initiative on St Patrick's ward. A poster on the project was presented at Patient First on 22 November 2017.

A national Pressure Ulcer Collaborative was launched by NHSI on 12 October 2017 and 90 Trusts submitted expressions of interest. Buckinghamshire Healthcare was selected to go forward in the first wave, and will have two QI projects focused around education which the PSC hopes to support.

**Safety in Mental Health: Safer Leave project**

Clinical Lead - Potential Lead Identified, 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 by Berkshire Healthcare.

Two adult mental health wards at the Campbell Centre in Milton Keynes and one older people's assessment service ward 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 a report was shared with the Senior Leadership and Management team at Central and North West London. The report included 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. Below is an example of the improvement achieved on the male ward at the Campbell Centre.
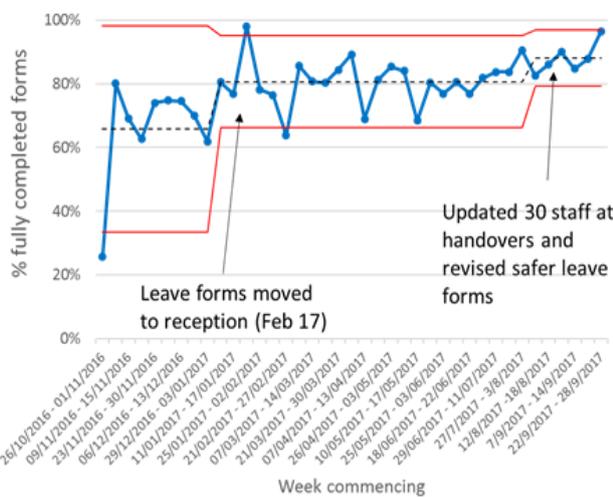


62
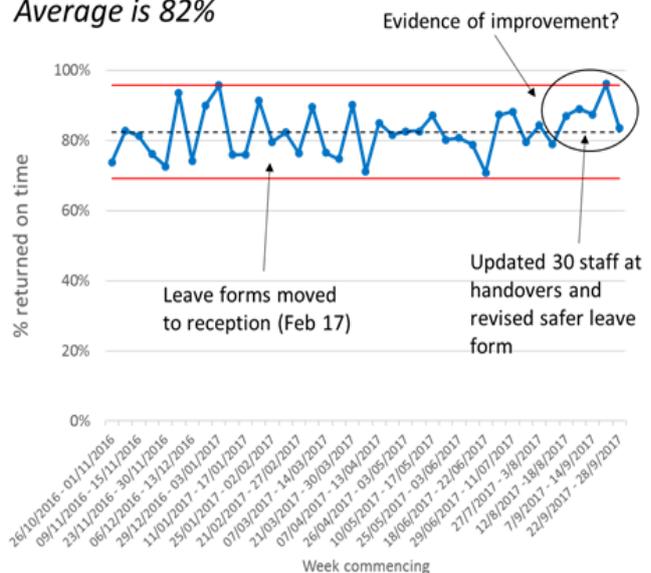
The current focus is on scoping a technological solution which would enable staff to know quickly when a patient was late returning from a planned episode of leave , arranging QI coaching for the team and potentially supporting them to adopt the LIFE QI platform. Future plans include undertaking a full analysis of Safer Leave data across the region.

**Maternity**

Clinical Lead - Lawrence Impey, Patient Safety Manager - Eileen Dudley, Project Officer - Rachel Davies

**Maternity Never Events**

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

The aim of this project undertaken at Oxford University Hospitals is to reduce the incidence of retained vaginal swabs and near misses within maternity services.

It was identified that handovers and transfers are a key point of vulnerability in the swab counting process. Interventions were introduced to improve communication at handover from the delivery suite to theatre and from theatre to the high dependency unit. Process data was collected to monitor compliance.

The process measures undertaken within the project are noted in the table below.

| Intervention | Process measure | Date implemented | Baseline* | Post-intervention** | *p* |
|---|---|---|---|---|---|
| 1. New policy for swab handover from delivery suite to theatre | Completed verbal handover for all transfers to theatre | 8/2/16 | 13/45 (28.8%) | 227/291 (75.6%) | p<0.0001 |
| | Completed signed handover for all transfers to theatre | 8/2/16 | 2/45 (4.4%) | 183/291 (62.9%) | p<0.0001 |
| | Three aspects of swab policy followed when swabs are in situ upon transfer | 8/2/16 | N/A | 67/88 (76.1%) | - |
| 2. Improve communication for transfer of a vaginal pack | Percentage of women with a vaginal pack in situ who had a "VP" sticker in place on handover | 5/12/16 | N/A | 52/56 (92.9%) | - |
| *Baseline data is take from the 30/11/2015 - 7/2/2016 | | | | | |
| **Post-intervention data is taken from the date of implementation to 30/06/2017 | | | | | |

The outcome measures were the incidence of retained swab never events and the incidence of near misses. Following a baseline of four near misses in two months, there has been only one near miss in the 15 months since the interventions were implemented, (33.3% vs. 1.1%, p<0.0001). There have been no retained swab incidents since the project commenced.

A paper demonstrating the improvement within this project has been published by the European Journal of Obstetrics and Gynaecology and Reproductive Medicine and is now available via open access using the following link.

This project has now been handed over to the hospital to continue to run with oversight from the patient safety collaborative.

**OxGRIP- Oxford Growth Restriction Identification Programme**

Lead - Katherine Edwards

OXGRIP is a service improvement pilot implemented at Oxford University Hospitals 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.

In this quarter we have progressed with data analysis, and are planning for handover of this project to the OUH in the next financial year.

**Network-wide guidelines**

Unwarranted variation in maternity can cause several 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 Q3 we have been working on:

**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 all of the Trusts in the region.

**'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 fetus by analysing the CTG reading. However, each tool has been developed in isolation by each Trust, resulting in differing methods and application. In Q3 work has progressed sufficiently on a CTG sticker based on FIGO guidelines, developed by the Consultant Midwives with input from the Consultant labour ward leads to the extent that the sticker has been ratified by the Maternity Network Steering Group. It has been circulated with a list of definitions for ease of use to the Consultant Midwives and Labour Ward Leads in the region for adoption within their own units. The adoption of the sticker will have affect other local guidelines which may increase the time to implementation. The implementation will begin in January to allow time to update local guidelines and develop the training package. A review of efficacy will take place in 6-8 months' time.

**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. Therefore this is an area in which both over intervention and under intervention can present risks. An audit has been completed 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. A report on the provisional findings was presented at the November Steering Group meeting and work is now under way to interrogate the data further. Future work includes preparation of individual reports for each Trust alongside a regional report.

**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 Q3, we had a successful event working in partnership with the Thames Valley Maternity SCN on this event for the first time. We have had useful feedback which will help us further develop this very popular event.

**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 was presented at the Patient First event in November, and submission of an article to an academic journal is planned.

**Maternal and Neonatal Health Safety Collaborative**

This national collaborative launched in February 2017 by NHSI with the aim to reduce the rates of maternal deaths, stillbirths, neonatal deaths and brain injuries that occur during or soon after birth by 20% by 2020 and 50% by 2030.

The Patient Safety Collaborative was co-opted to support this programme within the Oxford AHSN region. Oxford University Hospitals is part of 'wave 1' and the PSC have been supporting them in their improvement planning (now signed off by NHSI) and delivery of projects within the plan. The next wave of Trusts will launch in February 2018 and meetings have taken place with the heads of midwifery in Royal Berkshire Hospital and Frimley to ensure support is in place. The PSC have supported NHSI in attending their national training sessions, planning for the SCORE (safety, communication, operational reliability and engagement) survey which will be undertaken within each Trust and developing communities of practice regionally to support the work.

### Sepsis and Deteriorating Patient

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

In quarter 3 work has focused on three main areas:

1. The systematic quality improvement project (QIP) with the GP School related to sepsis and NEWS for 100+ trainee GPs was launched on 5 September 2017. Data has been collected on three patients per trainee in 42 practices, 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 has been aggregated and plotted into charts. GP trainees will then be facilitated to identify themes and complete small tests of change using quality improvement methodology. This project is in conjunction with HEETV.

2. 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 May 2018, linking patients and carers with clinicians, through the use of patient stories, to identify areas for improvement. The AHSN PPIEE team is supporting this work.

3. The AHSN Informatics team has completed the work to develop metrics using the hospital episode statistics (HES) data, at individual trust as well as regional level, for four patient outcomes - length of stay, 30 day readmissions under the same speciality, critical care admissions and mortality.

To establish if trends are related to sepsis alone or other external changes (e.g. improvements in patient flow affecting length of stay), the data for all diagnoses has been added. This data has been produced at individual trust level, for the six acute trusts in the region, in SPC charts that can then be annotated with local initiatives to plot progress over time.
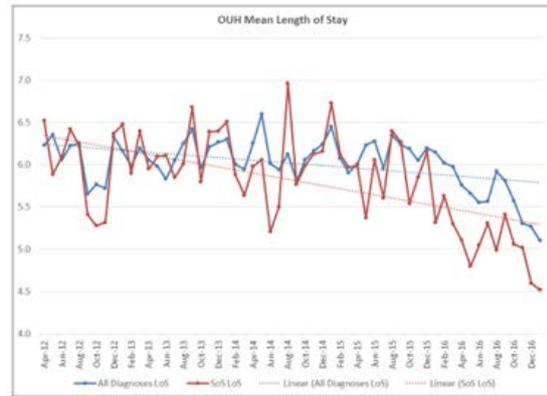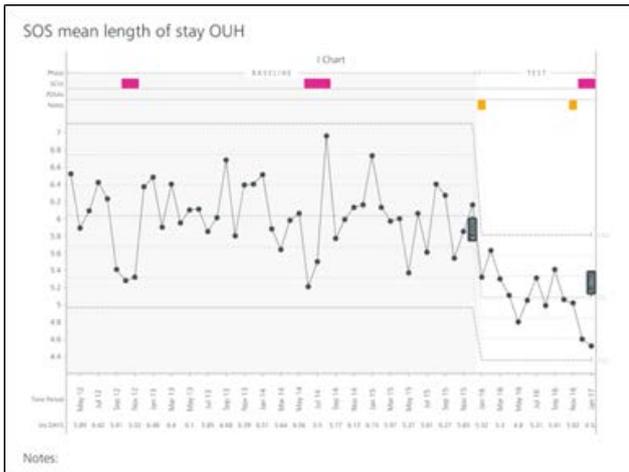
As a proxy for the "sickest" patients, those admitted via ambulance has been produced by matching A&E HES data with in-patient HES data. This will be reviewed at the next stakeholder meeting in January 2018.
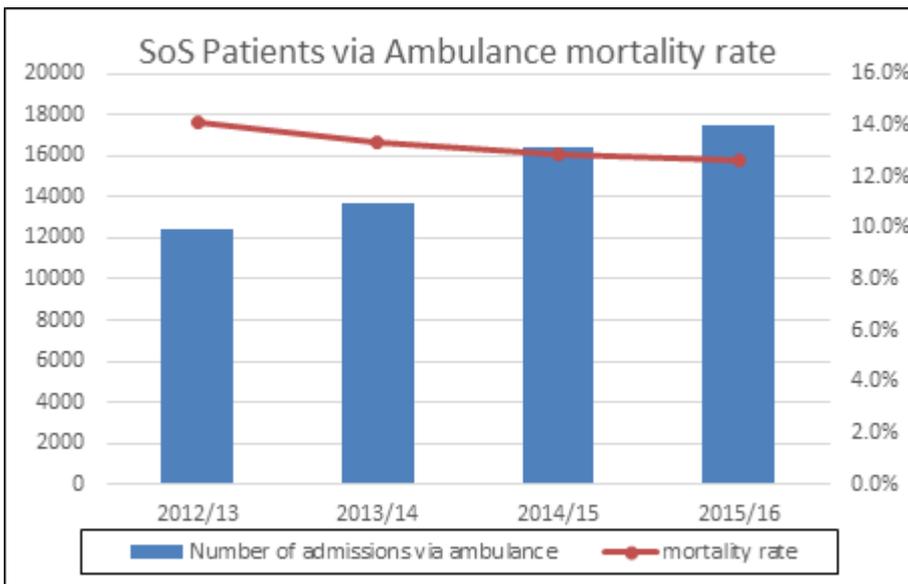


Work is continuing to match hospital outcome data with microbiology blood culture data to further inform and refine identification of the sepsis population.

A poster of the Suspicion of Sepsis work has been presented at the national Patient First conference in November 2017.

The Bodleian library is now producing a sepsis bulletin every two weeks. These are added to the sepsis resources section of the PSC website and circulated to the regional sepsis stakeholder group.

**Deteriorating Patient**

Oxford AHSN Patient Safety Collaborative (PSC) Lead - Jo Murray

Deteriorating patient is one of the three national workstreams developed this quarter. The aim of this workstream is to reduce avoidable harm and enhance the outcomes and experience of deteriorating patients across England. This will be achieved by improving the reliability of recognition, response and communication.

The ambition of the workstream is for people to use a clear and common language when patients are deteriorating. This includes when healthcare staff are communicating with each other in teams, across different parts of the healthcare system and when clinicians are having conversations with patients and their carers. A key component of the national strategy is to implement National Early Warning Score (NEWS) across the country to reduce the variation and improve the quality of care.

The first national meeting was held on 28th November and will continue to meet quarterly, with monthly teleconferences in between. A suite of metrics has been discussed and a NEWS baseline survey was sent out to medical directors and directors of nursing in acute and ambulance trusts, from NHSI. Data are to be collated for AHSN regions by the Patient Safety Measurement Unit (PSMU).

Each PSC shared the local work relevant to this workstream. For Oxford PSC this included:

- OUH System for Electronic Notification and Documentation (SEND)
- GP Sepsis QIP as groundwork for NEWS implementation
- ED collaborative sharing ED checklist
- SCAS pre-alerts at Wexham Park Hospital
- NEWS implementation in community hospitals & care homes

- links with mortality reviews (see below)

The Oxford PSC will build on the new and established programmes which have existing focus on physical deterioration; continuing to support providers with implementation of NEWS where it is not in place; and supporting improvements in how NEWS (or equivalent system) is used to rapidly recognise and act on the deteriorating adult patient.

**Mortality Reviews**

A new programme was established this quarter, at the request of the regional partners.

Programme Definition

To engage stakeholders in the Oxford AHSN region and ascertain what measurable aims the group wish to set to improve the standardisation in mortality reviews in community, mental health and secondary care settings.

Programme Aim

- To improve the standardisation of mortality review processes within the community, mental health and secondary care settings
- To support the development of quality improvement projects based on the thematic learning from mortality reviews
- Several projects within the programme are being developed to focus on the following:
- To help regional organisations improve their mortality review processes including engagement with bereaved families case note selection/screening tools and the Royal College of Physicians (RCP) Structured Judgement Review (SJR) tool
- To support regional roll out of training of SJR
- To share best practice in mortality review processes, measurement, education and improvement
- To share thematic lessons learned from mortality reviews
- To support the development of quality improvement projects at local/regional level based on the thematic lessons learned

On 3 November 2017 SJR training was provided for 26 clinicians and managers from acute, community and mental health settings. Delivered by Dr Allen Hutchinson, Emeritus professor in public health, University of Sheffield, and creator of the SJR method and supported by Royal College of Physicians, this training is CPD accredited.
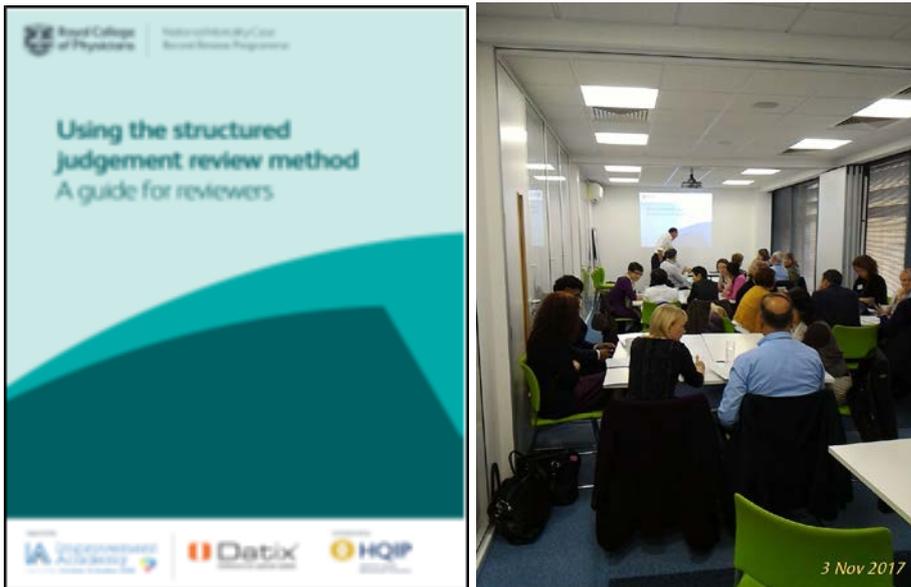
The first stakeholder meeting was held on 6 December 2017, with representatives from acute, community, mental health, CCGs and SCAS. Learning from West of England AHSN mortality group was shared by Kev Hunter, Patient Safety Programme Manager.

**Paediatric Gastrostomy**

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

The Oxford AHSN PSC programme to improve patient safety along the paediatric gastrostomy (PG) pathway has been in existence for just over a year. It now has a cohesive steering group which has completed the diagnostic phase of its work and there is now clarity around its objectives, the QI projects it will undertake and the actions necessary to complete them

The aims for the programme have been defined as follows:

a. each child will be discharged from their surgical episode at OUH with an appropriate personalised care plan which can be managed safely by their family in their home environment,

b. and with a personalised escalation plan the threshold for implementation of which is clearly understood by the parents,

c. and that all children within the region can access the necessary consistent high quality specialist care locally without the need to travel back to the hub,

d. and that non-specialist care, which the patients may need to access for their conditions in an out of hours situation, is adequate and safe.

e. also, to improve communication between the healthcare professionals (HCPs) along the pathway particularly at the boundaries of care

The mechanisms for delivering these aims have been defined as being:

a. a proforma care plan for each pathway, a copy of which is held by the hub/parent/GP
b. co-produced training and competency assurance packages for parents/carers to enable them to:  a) safely manage their children within the scope of their care plans,
   b) understand and recognise when an escalation threshold is reached
   c) how to implement it
c. standardised training and competency assurance packages for appropriate specialised HCPs caring for the children locally [e.g. Community Children's Nurses, Complex Needs Children's Nurses, School Nurses in the special schools etc.] to ensure consistent care across the region
d. awareness information packages for GPs, A&E staff etc. to whom a patient on an escalation plan may present to out of hours

The programme measurables will thus be:
a. % of children with personalised care plans and escalation plans in place at discharge
b. % of parents of discharged children who receive training and achieve competency, as assessed by both trainer and parent
c. % of specialist HCPs receiving training and achieving competency
d. feedback scores on awareness packages from non-specialist HCPs
e. feedback scores from specialist HCPs regarding perceptions on network connectivity across the region

The potential to measure the proportion of PG referrals back into the hub at the OUH from discharged patients which should have been able to be adequately managed locally is currently being explored. Planning for a baseline survey of a sample PG parents looking at current levels of knowledge about their children's equipment and care needs is underway. It will be repeated on a similar sample after the training package has been developed/delivered.

A poster outlining the establishment of this regional Multidisciplinary programme was presented at Patient First on 22/1/17. The next PG Steering Group meeting is on 19th January.

**Emergency Department Collaborative**
The second Emergency Department (ED) sharing and learning event will take place on February 2nd 2018 and will be led by the ED team from Royal Berkshire. This multi-professional event brings together clinicians from the Trusts in the region and includes representation from the CCG and SCAS. The focus will be on vulnerable groups in ED with presentations from Berkshire's on their work on the 'Frailty Journey' and caring for patients with 'Parkinson's' in the emergency department. An open forum will see presentations on caring for patients with mental health problems, alcohol and drugs and dementia within the ED.

**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.

We have 62 new local members to the Health Foundation Q Community, a significant percentage of which are experienced QI practitioners previously not known to the PSC or AHSN. We are holding a welcome event on the 31st January to connect them and look at how we can support them in their regional work.

A final session was held for the Clinical Human Factors in Incident Investigations Collaborative work that Dr Jane Carthey has overseen over the last 18 months. A final report on this work is expected by the end of the year.

**Informatics**

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

**Stakeholder Engagement and Communications**

All 15 AHSNs covering England work collectively through the AHSN Network to spread and accelerate the adoption of clinical innovations. Professor Gary Ford has been elected as the AHSN Network's Vice-Chair. The first five-year licence period is drawing to a close and all AHSNs have now submitted outline relicensing documents for the next five years. In the new licence period AHSNs will fully establish the network as a joined-up national network of networks.

New national resources include a video featuring a wide range of stakeholders from industry partners to national leaders which sets out what AHSNs have done in the first five-year licence period - and gives a flavour of what they could deliver over the next five years. Watch it here: http://www.ahsnnetwork.com/unique-role-dramatic-impact-ahsns/

The Oxford AHSN Head of Communications has been elected to serve as Co-Chair of the AHSN Network Communications Forum for a second time. This forum provides key support to the AHSN chief officers, particularly around events planning and developing relationships with key stakeholders.

The first infographic below also highlights the activities and impact of AHSNs nationally. The second includes information on the impact of the Oxford AHSN.
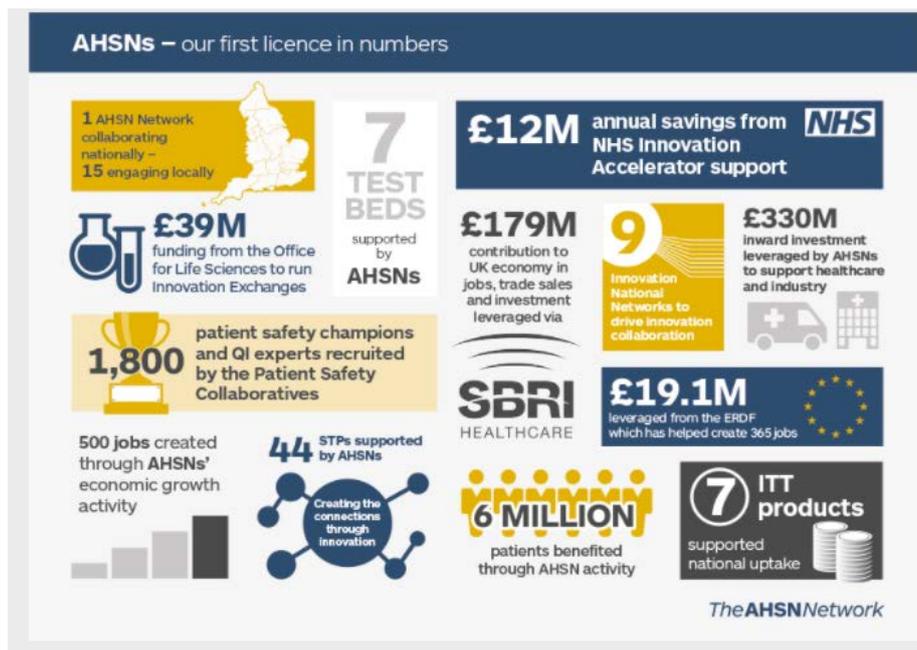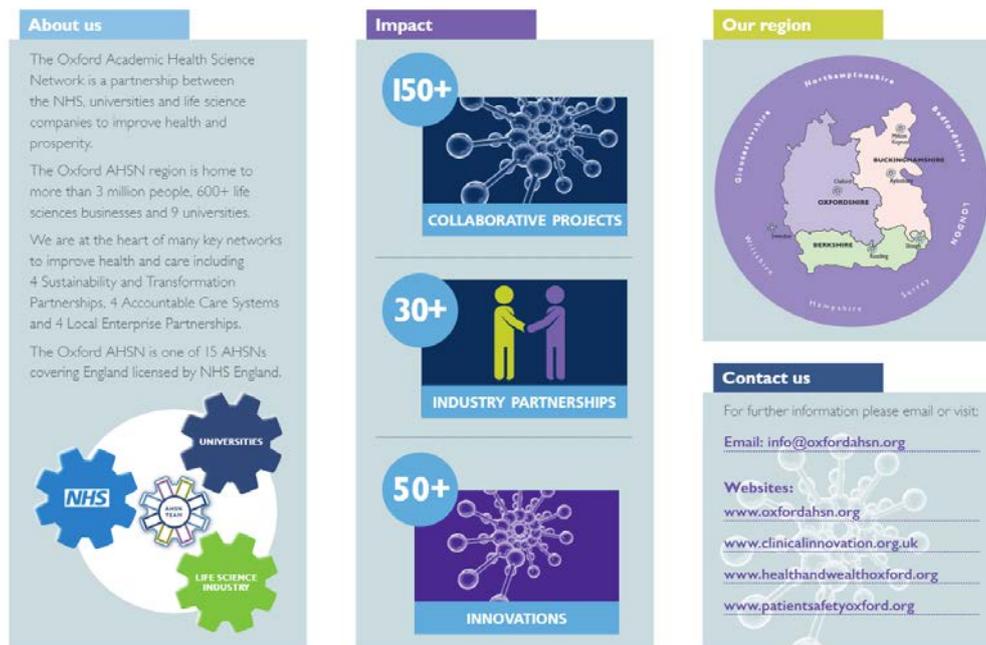
A key event involving a number of stakeholders within the NHS and life sciences was the announcement of the winners of the 4th Annual Oxford AHSN Award for Best Public-Private Collaboration at the OBN Awards dinner on 5 October 2017. This award recognises innovative partnerships between universities, industry and the NHS which will ultimately benefit patients. The shortlisted partners were:

- **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 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.

The winners were **The University of Oxford, Oxford University Innovation, Oxford University Hospitals and Drayson Technologies**.

Professor Gary Ford, Chief Executive of Oxford AHSN, said: "This project is a very worthy winner of our 2017 Best Public-Private Collaboration award. It encapsulates everything this prize was set up to reward. Partnership across the research and innovation pathway has been at the heart of this clinically-led initiative from day one. Our Clinical Innovation Adoption programme team coordinated the roll-out across NHS trusts in our region and our Strategic and Industry Partnerships (SIP) programme team

brought together Professor Lionel Tarassenko from the University of Oxford's Institute of Biomedical Engineering and Paul Drayson, the head of Drayson Technologies.

"The result is a ground-breaking collaboration between the university, a commercial partner and the NHS which will bring investment back into the public sector. It is already on the list of approved NHS apps and promises to improve the lives of hundreds of pregnant women."

Lord Drayson, Chairman and Chief Executive Officer of Drayson Technologies, said: "This award is a real boost for our partnership, as we work together to ensure that patients benefit from clinically-led digital innovations and real-world insights born out of Oxford's world-class medical research and that this generates a financial return back into the NHS trust and the university."

Representatives of the SIP programme attended the Innovation Forum conference in Oxford on 4-5 December 2017. This event provided the backdrop for Nick Scott-Ram to launch of the Oxford AHSN Digital Health Roadmap produced with Oxford University Innovation and Oxentia. A copy can be downloaded at http://bit.ly/roadmapOX. Nick said: "We hope those involved in developing innovative digital products designed to improve patient care will find this an invaluable resource." The launch of this guide generated considerable interest on Twitter including much positive feedback.

A project led by the Oxford AHSN and Windsor Ascot and Maidenhead CCG has successfully reduced urinary tract infections among residents in care homes and scooped three awards at the PrescQIPP national awards.

The Oxford AHSN Patient Safety Collaborative presented at the annual Patient First conference held in London on 21-22 November. Katherine Edwards, Head of Patient Safety, was among the speakers in the Best Practice Theatre where she discussed how improved access to specialist maternity care is increasing the survival chances of extremely premature babies. Posters covering pressure ulcers, hydration (see above), sepsis and paediatric gastrostomy were also presented.

Douglas Findlay, who is a member of the AHSN PPIEE Group, won the Patient Leadership award at the Thames Valley Health Research Awards held on 26 October 2017 particularly recognising his work at the Royal Berkshire NHS Foundation Trust.

Plans are underway for stakeholder and partnership events during 2018. Nearly 350 people have attended events and meetings organised by the AHSN during the quarter and members of the AHSN have also attended and spoken at many more across the country. There are specific examples in the individual programme and theme sections above. The table below is a working document setting out outline plans and events for 2018 together with a publications schedule. Partner events are included where relevant.

**Communications**



A new Style Guide and updated branding document have been completed and shared with staff along with other related materials including templates for presentations. The aim is to continue to improve clarity and consistency provided for our wide-ranging audiences and stakeholders.

An updated general leaflet highlighting our focus on 'Innovation, Improvement and Industry' was produced (see above), reflecting the approach outlined to Ian Dodge, National Director for Strategy and Innovation from NHS England, which took place at the AHSN on 13 November 2017.

Communications for patients have been a focus with a series of information films targeting diagnostic imaging procedures. Coordinated by the AHSN Imaging Clinical Network, these have had more than 20,000 views on YouTube.

Subscribers to the monthly AHSN newsletter continue to rise steadily (2,730 at 31 December) - a special 50th edition is planned for January 2018.  Twitter followers continue to rise with 3,480 at 31 December with followers also increasing for other related Twitter accounts.

Website activity peaked in the autumn months with over 300,000 page views across the main AHSN and patient safety sites in September 2017. Numbers are much lower for three other newer sites supporting the Clinical Innovation Adoption programme, Strategic and Industry Partnerships programme and the Get Physical partnership. Information on Twitter followers, newsletter subscribers and website activity can be found in the charts below and overleaf.

## Twitter followers to 20 December 2017

| Month | Followers |
|-----------|-----------|
| June | 3050 |
| July | 3120 |
| August | 3165 |
| September | 3225 |
| October | 3328 |
| November | 3455 |
| December | 3472 |

## Newsletter Subscribers to November 2017

| Month | Subscribers |
|-----------|-------------|
| June | 2210 |
| July | 2205 |
| August | 2650 |
| September | 2680 |
| October | 2695 |
| November | 2735 |

www.patientsafetyoxford.org



www.oxfordahsn.org

| OXFORD AHSN COMMUNICATIONS GRID FOR 2018/2019 | | | |
|---|---|---|---|
| **Month** | **Date** | **Event** | **Opportunities** |
| **January** | | | |
| | 18 Jan | Keeping your workforce active | 07.45-10.45 Unipart House, Cowley OX4 2PG A business breakfast seminar focusing on achieving a healthier workforce through increased activity and healthier eating. Organised by the Oxfordshire Workplace Wellbeing Network and supported by the Get Physical programme (coordinated by Oxford AHSN). |
| | 31 Jan | Patient Safety and Clinical Improvement Q Welcome Event | 09.00 Introduction to new Oxford AHSN Q Community members - including scene-setting about Oxford AHSN and patient safety and clinical improvement |
| **February** | 1 Feb | Transforming Drug Discovery – the pathway to innovation | 17.00-18.00 Oxford Martin School Immense ingenuity and unprecedented levels of funding are available for drug discovery, yet pharmaceutical research and development is failing to produce the medicines society requires. New organisational models of drug discovery are clearly needed – are open science approaches the way forward?  Contributors include Dr Nick Scott-Ram |
| | 2 Feb | The power of recombination to create innovation | 14.30-15.30 Oxford Martin School From biology to technology, a powerful mechanism to create innovation is recombination – the formation of new systems by combining old parts in new ways. |
| | 7 Feb | Second Information Governance Forum meeting | Event organised by Informatics Team for Chief Information Officers |

## OXFORD AHSN COMMUNICATIONS GRID FOR 2018/2019

| Month | Date | Event | Opportunities |
|---|---|---|---|
| | 8 Feb | Current and future opportunities for the Internet of Things in healthcare | 13.00-14.00 Conference Room, The Magdalen Centre North, 1 Robert Robinson Avenue, Oxford Science Park, OX4 4GA. Coordinated by Oxford AHSN with Henley Business School |
| | | Adopting innovation and managing change in healthcare settings programme starts | Scope extended on programme 4 to include change management as well as adopting innovation. Participants now include commissioners, managers and others, as well as clinicians. Delivered at Bucks New Uni in High Wycombe with funding from Health Education England Thames Valley |
| | 15 Feb | The growing and ageing population: implications and solutions | 17.00-18.00 Oxford Martin School, Broad Street, Oxford OX1 3BD Professor Sarah Harper, Director of the Oxford Institute for Population Ageing, will explain how population change will transform the world and looks at what we can do to meet the challenges that lie ahead. |
| | 20 Feb | De-risking the valley of death | 17.30-21.00 Said Business School, Oxford OX1 1HP How R&D companies can access the knowledge network to maximise success. The 'valley of death' phase in the development of an R&D company is identified as the phase from one to six years, where they are moving from lead generation through to phase 1 development.  Speakers including Nick Scott-Ram |
| | 28 Feb | Celebrating Trauma Research | 09.00-17.00 Hilton Hotel, Reading Regional symposium for staff working in trauma, emergency and related studies. Organised by the Royal Berkshire NHS Foundation Trust with the NIHR Clinical Research Network and Thames Valley Trauma Network. |
| | 28 Feb and 25 April | Working together: approaches and techniques | For people with some experience of patient and public involvement. Suitable for healthcare professionals, researchers, patients, carers and the |

| | | OXFORD AHSN COMMUNICATIONS GRID FOR 2018/2019 | |
|---|---|---|---|
| **Month** | **Date** | **Event** | **Opportunities** |
| | | | public. AHSN Course run in conjunction with the NIHR Oxford CLAHRC and Clinical Research Network Oxford and South Midlands. |
| | | | |
| | | | NHS70 leading up to 6 July |
| **March** | 15 March | Mental Health Network Conference | Consider how mental health networks might be involved? |
| | Tbc | CAUTI learning events | CIA to organise event with partner Trusts to discuss learning |
| **April** | 23 - 25 April | BioTrinity 2018 - Next Generation Healthcare | AHSN scaling back presence and sponsorship but key individuals still attending |
| | Tbc | AHSNs Network event | National event to launch the 2nd Five year licence period |
| **May** | 1 - 3 May | Fusion: all things digital health and wellbeing | Open University Milton Keynes campus 2nd annual OU digital health and wellbeing conference |
| | 1 May | Sepsis learning event | Learning/awareness event is planned for May 2018 by the Sepsis Team, the AHSN PPIEE team and Patient Safety |
| | Tbc | Partner Showcase Berkshire Healthcare and RBH | Both CEOs wish to repeat the joint Showcase event following success in 2017 |
| **June** | 13 June | Technology Innovation Showcase | Said Business School with focus on Therapeutics.  BRCs/OUI/Oxford AHSN opportunities to display and talk about work.  Stand to be taken and ? posters |

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

| Publication | Month |
|---|---|
| Q4 and Annual Report | **March 2018** |
| AHSN Business Plan 2018/2019 | **March 2018** |
| Oxford AHSN Five Year Review | **May 2018** |
| Patient Safety and Clinical Improvement Report | **May 2018** |
| Q1 Report | **June 2018** |
| Q2 Report | **September 2018** |
| Q3 Report | **December 2018** |
| Q4 Report | **March 2019** |

**Oxford AHSN Finance**

**Quarter 3**

Actual revenue received is broadly in line with forecast. We received good responses from Trust & University Partners to our funding reminder letters.

Expenditure within Programmes and Themes is lower than forecast due to certain expenses such as Training. Our training includes PPIEE's Leading Together programmes, CIA's Practical Innovator courses at Bucks New University, and training within our Patient Safety allocation where MSC Bursaries have been forecast.

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. It is anticipated that any underspend will be deferred to 2018/19 to ensure all external income is utilised.

Core Team Non-Pay forecast includes legal fees and contracting that are additional to the original plan.

| | 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** | Q3 | Q3 | Q3 |
| **INCOME (REVENUE)** | | Opening Plan | Forecast | Opening Plan | Forecast | Actual |
| NHS England funding | | 2,304,119 | 2,304,119 | 1,728,089 | 1,728,089 | 1,728,090 |
| Partner contributions | | 411,500 | 443,000 | 308,625 | 332,250 | 406,396 |
| Other partner income | | 150,000 | 171,292 | 112,500 | 117,219 | 117,219 |
| HEETV income for continuous learning | | 118,300 | 28,960 | 88,725 | 28,960 | 28,505 |
| NHS England funding - PSC income | | 515,388 | 515,388 | 386,541 | 386,541 | 386,541 |
| Other Income - Patient Safety Collaborative | | 0 | 19,500 | 0 | 19,500 | 19,500 |
| Other Income - Best Care | | 0 | 107,352 | 0 | 67,339 | 75,367 |
| Other Income - Clinical Innovation Adoption | | 0 | 271,515 | 0 | 150,486 | 167,738 |
| Other income - Strategic & Industry Partnerships | | 0 | 231,542 | 0 | 139,343 | 73,660 |
| Other income - Informatics | | 0 | 97,248 | 0 | 67,648 | 80,658 |
| Other Income - PPIEE | | 0 | 41,032 | 0 | 31,199 | 27,528 |
| **Total income** | | **3,499,307** | **4,230,948** | **2,624,480** | **3,068,574** | **3,111,202** |
| **AHSN FUNDING OF ACTIVITIES** | | | | | | |
| Patient Safety Collaborative | | 530,388 | 619,143 | 397,791 | 462,675 | 417,668 |
| Best Care | | 686,785 | 575,236 | 605,166 | 454,721 | 445,426 |
| Clinical Innovation Adoption | | 726,416 | 852,539 | 544,812 | 585,604 | 601,885 |
| Strategic & Industry Partnerships | | 545,867 | 790,740 | 409,400 | 503,009 | 492,001 |
| Informatics | | 402,202 | 502,181 | 301,652 | 377,202 | 359,045 |
| PPIEE | | 111,108 | 236,670 | 83,331 | 181,247 | 128,983 |
| **Programmes and themes** | | **3,002,766** | **3,576,509** | **2,342,152** | **2,564,460** | **2,445,007** |
| **CORE TEAM AND OVERHEAD** | | | | | | |
| Pay costs | | 549,235 | 648,157 | 411,926 | 475,606 | 473,143 |
| Non-pay costs | | 347,783 | 461,204 | 260,837 | 357,047 | 331,958 |
| Communications, events and sponsorship | | 220,573 | 166,127 | 165,430 | 124,609 | 104,057 |
| **Total core team and overhead costs** | | **1,117,591** | **1,275,489** | **838,193** | **957,261** | **909,158** |
| | | | | | | |
| **Total expenditure** | | **4,120,357** | **4,851,998** | **3,180,345** | **3,521,721** | **3,354,165** |
| | | | | | | |
| **Net Income/Expenditure** | | **621,050** | **621,050** | **555,865** | **453,147** | **242,963** |
| Programme funding previously committed | | 621,050 | 621,050 | 555,865 | 453,147 | 242,963 |
| **Surplus/(deficit)** | | **0** | **-0** | **-1** | **-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) | | | | **Phase 2 underway** | ◆ |
| | Respiratory- Estimated Completion (commenced 2016/17) | **Closed** | | | | |
| | Pneux (tracheal tube for ICU ventilator) | | | | | ◆ |
| | NIC (Non-injectable Connectors) | | | | | ◆ |
| | WireSafe (guidewire patient safety) | | | | | ◆ |

| Programme/Theme | Milestone | Year 5 Q1 | Year 5 Q2 | Year 5 Q3 | Year 5 Q4 | Year 6 |
|---|---|---|---|---|---|---|
| | Thrombectomy (Mechanical device) | | | | | ◆ |
| | 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) | | ⟶ | | ◆ | |

| Programme/Theme | Milestone | Year 5 Q1 | Year 5 Q2 | Year 5 Q3 | Year 5 Q4 | Year 6 |
|---|---|---|---|---|---|---|
| Strategic and Industry Partnerships | Establish pipeline of innovations for commercialisation<br><br>• ensure industry and academics can access the NHS clinicians they need to work on concepts and pilots of new products and services<br>• work with tech transfer offices and other partners to ensure commercialisation is more efficient and effective | ✓ | | | | |
| | 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 | | | | ◆ | ◆ |

| Programme/Theme | Milestone | Year 5 Q1 | Year 5 Q2 | Year 5 Q3 | Year 5 Q4 | Year 6 |
|---|---|---|---|---|---|---|
| | Support regional cluster activity | | ✓ | | ◆ | |
| | Deliver one new funding initiative | | | | ◆ | ◆ |
| | West Midlands AHSN partnership | | | ✓ | | |
| Informatics<br><br>Local Digital Maturity | Review CCG assessment and roadmap | ✓ | | | | |
| | CIO forum to initiate local maturity model for the region | | ✓ | | | |
| | Initiate a cross organisation assessment and visualisation | | | | ◆ | |
| Informatics<br><br>Research Informatics<br><br>Focused on the deployment of Clinical Records Interaction Search (CRIS). | Partner engagement | ✓ | | | | |
| | Federation - enabling federated queries to be run against local CRIS databases (Oxford) | | ✓ | | | |

| Programme/Theme | Milestone | Year 5 Q1 | Year 5 Q2 | Year 5 Q3 | Year 5 Q4 | Year 6 |
|---|---|---|---|---|---|---|
| | 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** | | | | |
| Informatics<br><br>Information Governance<br><br>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 | | | | ◆ | |

| Programme/Theme | Milestone | Year 5 Q1 | Year 5 Q2 | Year 5 Q3 | Year 5 Q4 | Year 6 |
|---|---|---|---|---|---|---|
| Demonstrate IG framework is working | Enable two region wide projects - Imaging and Maternity | ✓ | | | | |
| Informatics<br><br>Personal Health Records Platform development | Develop case for change as basis for consultation, now as part of the interoperability work | | | | | |
| Informatics<br><br>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 | | | ⟶ | ◆ | ◆ |

| Programme/Theme | Milestone | Year 5 Q1 | Year 5 Q2 | Year 5 Q3 | Year 5 Q4 | Year 6 |
|---|---|---|---|---|---|---|
| | Strategic direction<br><br>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<br><br>Regular publications - involvement newsletter, publicising PPIEE events, and case studies | ✓ | ✓ | ✓ | ◆ | ◆ |
| | PPIEE Network development<br><br>Leading Together network newsletter published<br><br>Leading Together events held | | | ✓<br>✓ | | |
| | Leading Together<br><br>- Co-designed and co-delivered pilot for learning disabilities<br>- Train the trainer programme held<br>- Funding sought for further rollout | | | ✓ | ◆<br>◆ | |
| | Informatics<br><br>Agreed set of person-centred care metrics developed and tested with local organisations | | | → | ◆ | |

| Programme/Theme | Milestone | Year 5 Q1 | Year 5 Q2 | Year 5 Q3 | Year 5 Q4 | Year 6 |
|---|---|---|---|---|---|---|
| Living Well Oxford | Public involvement<br><br>Evaluated and held celebrating success event for aging and dementia pop-up shop | | | ✓ | | |
| | Continued education<br><br>Links with PPI in Universities to be developed over the year | ✓ | ✓ | ✓ | ◆ | |
| 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 | ✓ | ✓ | ✓ | ◆ | ◆ |

| Programme/Theme | Milestone | Year 5 Q1 | Year 5 Q2 | Year 5 Q3 | Year 5 Q4 | Year 6 |
|---|---|---|---|---|---|---|
| | Build widespread capability in partnership with local organisations | →———————————→ | | | ◆ | ◆ |
| Stakeholder engagement and communications | Quarterly and annual reports | ✓ | ✓ | ✓ | ◆ | ◆ |
| | Sponsorship and events (updated programme in place) | ✓ | ✓ | ✓ | ◆ | ◆ |
| | Supporting materials developed - generic and specific - regular updates going forward including new branding | ✓ | ✓ | ✓ | ◆ | ◆ |

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**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<br><br>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<br><br>Close networks that cannot secure funding | 1,2,3,4,5 | £575,236 | |

| 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<br><br>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.<br><br>The goals of the programme are to;<br><br>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<br><br>- Planning to implement<br>- Implemented<br>- Participating | 5 more innovation adoption projects in final stage of deployment<br><br>25 more innovators trained on Practical Innovation course | 1,2,3,4,5 | £852,539 | |

| 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<br><br>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<br><br>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 | £502,181 | |
| | | PPIEE<br><br>Patient and Public Engagement and Experience (PPIEE) is a crosscutting theme, | | Plan for sustainability beyond March 2018 | 4 | £236,670 | |

| 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 |
|---|---|---|---|---|---|---|---|
| | | working across the 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<br><br>Number of visits to Oxford AHSN website per month<br><br>Number of attendees at all AHSN events per annum | Stakeholder roadshows (years 5 and 6)<br><br>Independent stakeholder survey (year 6) | | £1,259,143 | |

| 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<br><br>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)<br><br>Number of people employed in life science industry | One new joint venture or industry partnership (years 5 & 6) | 1,2,3,4,5 | £790,740 | |

| 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 and Clinical Improvement | The principal aims of the collaborative will be to:<br><br>Develop safety from its present narrow focus on hospital medicine to embrace the entire patient pathway<br><br>Develop and sustain clinical safety improvement programmes within the AHSN<br><br>Develop initiatives to build safer clinical systems across the Oxford AHSN | Increase adoption of safer leave (AWOL) project in CNWL to increase return rates by 50% on all acute wards<br><br>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. Improvement sustained at Oxford and Berkshire.<br><br>Plan for sustainability beyond March 2019 | 1,2,3,4,5 | £619,143 | |
| | | | | | | £4,852,652 | |

# Oxford Academic Health Science Network

**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 scale and improving | 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 Programme and Theme, broadening | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | prosperity of the region | | | | 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. Focussed events for clinicians and managers | | | | | |

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

| # | Prog/Theme | Risk | Description of Impact | Likelihood | Impact | Time | Mitigating Action | Owner | Actioner | Date added | Date mitigated | RAG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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. Submitted Plan on a Page o NHS E as part of AHSN Network process. Discussions started with NHS E and NHS I regarding funding of PSC beyond March 2019.<br><br>OLS has been confirmed funding for AHSNs for 3 years<br><br>We are actively pursuing industry partnerships, JVs and grants to reduce our reliance on NHS E and NHS I funding.<br><br>Action has been taken reduce costs by £1m and we have a robust financial plan for the next | AHSN Chief Operating Officer | AHSN Chief Operating Officer | 31-Jul - 14 | Ongoing | AMBER |

| # | Prog/Theme | Risk | Description of Impact | Likelihood | Impact | Time | Mitigating Action | Owner | Actioner | Date added | Date mitigated | RAG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | two years. Review January 2018 | | | | | |

**Issues Log**

| # | Programme / Theme | Issue | Severity | Area Impacted | Resolving Action | Owner | Actioner | Date Added | Current Status | Date Resolved |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | Oxford AHSN Corporate | Lack of awareness by local partners and national stakeholders of progress and achievements of the AHSN | Minor | Culture | Overarching comms strategy that is refreshed regularly. Website refreshed regularly and new content added - visits per month increasing<br><br>Twitter followers and subscribers increasing.<br><br>Links being enhanced throughout the region | 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | through Comms networks. | | | | | |
| | | | | | Partner showcase events with all partners. | | | | | |
| | | | | | Level of engagement closely monitored 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 and case studies. | | | | | |
| | | | | | Updates provided to partner boards. | | | | | |

**Oxford Academic Health Science Network**

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

| Quarterly report | Case study summary | Programme/Theme |
|---|---|---|
| Q3 2017/18 | Roadmap published to guide digital health developers | Strategic and Industry Partnerships |
| | Reducing urinary tract infections in care homes by improving hydration | Patient Safety and Clinical Improvement |
| | Oxford Growth Restriction Identification Programme (OxGRIP) saves a life | Patient Safety and Clinical Improvement |
| 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) |

| Quarterly report | Case study summary | Programme/Theme |
|---|---|---|
| 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 | Strategic and Industry Partnerships |
| | 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 | Strategic and Industry Partnerships |
| | Imaging patient info films | Best Care |
| | Sustainability project | Strategic and Industry Partnerships |
| Q1 2016/17 | Bicester healthy new town | Strategic and Industry Partnerships |
| | 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 | Strategic and Industry Partnerships |
| | CAUTI project | Clinical Innovation Adoption |

| Quarterly report | Case study summary | Programme/Theme |
|---|---|---|
| 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 |

| Quarterly report | Case study summary | Programme/Theme |
|---|---|---|
| Q3 2013/14 | App development route map | Wealth Creation |
| | 2023 Challenge | Strategic and Industry Partnerships |