Oxford Academic Health Science Network

Oxford AHSN Year 4 Q2 Report

For the quarter ending 30 September 2016

Professor Gary A Ford CBE FMedSci

Oxford AHSN's Sustainability Network:

"The Oxford ASHN has provided the expert knowledge and support our Trust required to kick start its sustainability programme. It has also helped us to develop strategic long term partnerships with other organisations outside the health and care sector, including academia and social enterprises / charities / non-profit organisations that has resulted in a 14% reduction of our carbon footprint in 2015 from our 2013 baseline and continues to help the Trust to improve not only our environmental but also our social and health care activities."

Louise Sawyer, Environmental Sustainability Manager, Southern Health NHS Foundation Trust

"Probably one of the best small sustainability networks in the UK."

John Palmer, Interim Energy & Sustainability Manager, Buckinghamshire Healthcare NHS Trust

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Chief Executive's Review

The full results of our stakeholder survey undertaken by ComRes are now available http://bit.ly/OxfordAHSNsurvey. I would like to thank all of you who took part in the survey. This independent survey with 563 questionnaire respondents and 20 qualitative interviews with key stakeholders, provides valuable feedback to shape our future work as we plan for the re-licensing process that NHS England are developing for after March 2018. The results are overall very positive with the vast majority of stakeholders believing Oxford AHSN is having a positive impact in the region.

Four in five respondents agreed that the network is building a culture of collaboration and partnership. This compares to three in five (61%) in the YouGov national survey of AHSNs carried out last year. The latest results suggest an increasing awareness and appreciation of Oxford AHSN and its work with a diverse range of partners across the NHS, patient groups, universities and industry. Almost two-thirds (64%) of respondents said the Oxford AHSN added value to their work and around three out of four respondents who knew at least a little about Oxford AHSN felt its team members were effective in working with them. The report states:

Value is seen to be added primarily through the collaborative focus of the AHSN, creating connections stakeholders report would not have occurred without the AHSN. The Oxford AHSN is critical to developing a more innovative, safe and cost-effective health system in the region. Stakeholders have seen the AHSN's impact in their own work creating positive outcomes in their region, citing numerous examples. Oxford AHSN is perceived to be a strong network with a good understanding of its stakeholders.

The results show that all our stakeholders recognise the value of the work to spread innovation, improve patient outcomes and support economic growth. There is clearly much more do to do to build a sustainable network across the region but the results are very encouraging given that the network has only been fully operational for about two years.

We have also published an independent report we commissioned from RAND Europe and the Office of Health Economics which evaluated four of our projects www.bit.ly/OHEOxford

The report concluded:

An evaluation of the Oxford Academic Health Science Network (AHSN) found that it is capable of promoting high quality care and delivering projects which improve patient outcomes at a cost that appears to represent good value for money.

We report at least three case studies each quarter. In this quarter's report we have case studies on: our Sustainability Network, which is facilitating significant cash release savings in several of our partners and supporting the target of a 34% reduction in NHS carbon emissions by 2020; the Imaging Network's award winning series of patient-narrated professional videos produced to take patients through everything they need to know before they visit hospital for a range of diagnostic tests; our Digital Health survey which examined the factors influencing the growth of the digital health sector in the region.

Following the Digital Health report, we are working with a range of stakeholders to develop a regional digital health strategy that focuses on strengthening the regional digital health opportunity, support opportunities for clinicians, developers and academics with particular emphasis on addressing the challenges of commercialising digital health products.

The Best Care team have produced an excellent review of the impact of the eight Oxford AHSN clinical networks – see http://bit.ly/BestCareImpact. The Young People with Dementia programme and MSNAPP accreditation supported by the Dementia Clinical Network have received national recognition by the Royal College of Psychiatrists and exemplify how clinical best practice can be spread and sustained by networks of clinicians to benefit patients and carers.

We continue to develop our support to the three Sustainability and Transformation Plans in the Oxford AHSN. Our clinical networks and existing programmes of work are supporting the acute, mental health and workforce health and wellbeing workstreams in the BOB STP, and we are offering support to all STPs to use innovation in diagnostics and digital health to transform care pathways.

I am pleased to see that all our partner Trusts have signed up to the Information Governance Framework which is starting to speed up the exchange of data to enable better clinical decision making and service planning and development across the region.

Finally, I would like to congratulate our partners, South Central Ambulance Service NHS Foundation Trust on being the first ambulance trust in the country to be rated ‘good’ by the Care Quality Commission, and join our mental health community providers who are all rated ‘good’. In addition, The University of Oxford for becoming the World’s leading University in the 2016-17 Times Higher Education World University Rankings. These are emblematic of the clinical and academic excellence present across our region.

Professor Gary A Ford CBE FMedSci

Chief Executive, Oxford Academic Health Science Network

Some comments from the Oxford AHSN’s independent stakeholder survey:

“There’s a greater sense of networking collaboratively across the AHSN area that would’ve existed before.”

“They’re listening, they’re identifying challenges and they’re trying to help us solve the problems associated with those challenges.”

“Without the likes of the AHSN small companies would really, really struggle to get any traction with the NHS.”

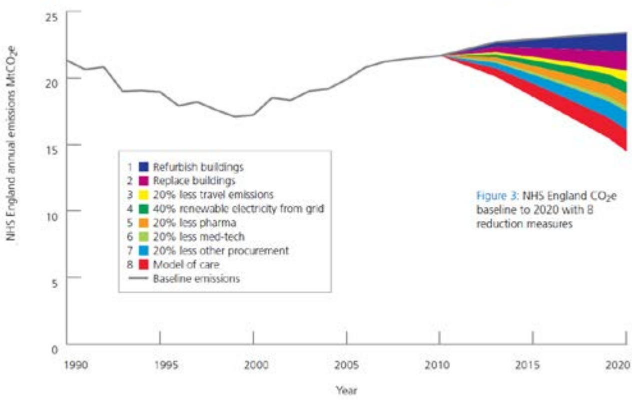
“If they weren’t there, I think we’d find it really difficult to do that all by ourselves.”

“The AHSN are a world class example of how collaboration should exist in health and social care.”

“What we’ve got there is a team that has got a huge wealth of information, great number of contacts, (and a) great understanding of comparative data between organisations.”

Case Study: Sustainability

The current NHS England strategy for reducing carbon emissions and generating cost savings sets a target of 34% reduction by 2020 with potential savings of £180 million (NHS Sustainable Development Unit. *Saving Carbon, Improving Health* (January 2010). The Oxford AHSN Sustainability Network aims to help the hospitals and universities in the region to reach these targets by co-ordinating regional efforts and identifying new ways for these organisations to work together.



The Network's programme has focused on five main themes:

- Benchmarking programme: cutting energy usage and carbon emissions
- Reducing energy consumption through behaviour change
- Sustainable transport
- Solar opportunities
- Supporting sustainability through health and food.

The benchmarking programme has focused on supporting ways in which institutions across the Oxford AHSN area can cut their annual £60m spend on energy. In collaboration with the Carbon and Energy Fund (CEF), work is underway on four projects across the Oxford AHSN region to implement savings of more than £5 million through investment in energy efficient technology practices. Feasibility studies are underway through the CEF which enables procurement of guaranteed performance contracts ensuing the specified savings are achieved over the life time of the contract at no cost to partner organisations.

In June 2015, the Oxford AHSN, in partnership with four of the nine NHS Trusts in the region, commissioned Global Action Plan to identify the level of potential savings available to each Trust through improving energy efficiency behaviours. A scoping review was conducted with each Trust involving day and night behaviour audits. The sites audited were found to have a collective savings opportunity of £284,500 per annum, or 2% on their total energy bill, with a payback period for an Operation TLC support programme ranging from 0.5 to 0.8 years depending on the delivery model and level of in-house implementation. Frimley Health is one of the first to implement this at Wexham Park Hospital.

Transport is one of the high carbon emission factors, where the health and care system accounts for a significant proportion of road traffic in England. 5% is attributed to NHS related travel, which is responsible for 13% of the NHS carbon footprint. Topics addressed included business travel, staff travel to work, patient

travel, collaboration with local government organisations and incentives through Green champions and best practice. A review of how electric vehicles can work and business cases can be supported was also undertaken.

The Network also brought together the most up to date knowledge to help understand the myths and opportunities that solar power could provide. This included a comparison of common EV models, an overview of charging technology and options, the latest changes in government 'feed-in-tariffs' and how the Cabinet Office Solar programme is impacted.

In the final theme the Network engaged with the Soil Association to understand more about their approach to improving good food provision in hospitals and universities, and the introduction of a Commissioning incentive for hospitals (CQUIN).

The approach of the Sustainability Network has focused on building strong engagement and delivering tangible benefits to member institutions.

"This network gets really useful speakers, not wasting time with salesmen or too difficult to achieve engineering projects. As such, it is a smart and practical network that meets to benefit its members, not because it feels it ought to meet.

There is also a useful synergy between NHS and Universities.

Probably one of the best small sustainability networks in the UK."

John Palmer, Interim Energy & Sustainability Manager, Buckinghamshire Healthcare NHS Trust

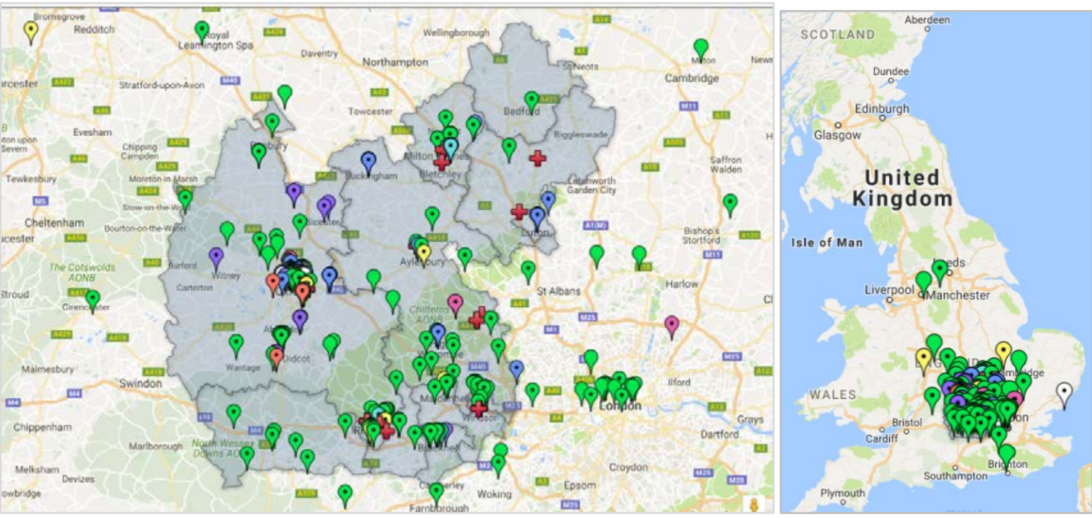
"The Oxford ASHN has provided the expert knowledge and support our Trust required to kick start its sustainability programme. It has also helped us to develop strategic long term partnerships with other organisations outside the health and care sector, including academia and social enterprises / charities / non-profit organisations that has resulted in a 14% reduction of our carbon footprint in 2015 from our 2013 baseline and continues to help the Trust to improve not only our environmental but also our social and health care activities."

Louise Sawyer, Environmental Sustainability Manager, Southern Health NHS Foundation Trust

Case Study: Oxford Thames Valley Digital Health Report

Over the last nine months the Oxford AHSN has been working in collaboration with the University of Oxford and Oxford University Innovation, to examine the factors influencing the growth of the digital health sector in the region that covers Oxfordshire and the Thames Valley. The partners commissioned a report to examine the state of digital health research and related commercial activity in the Oxford AHSN region, and to assess its ability to contribute to the transformation of healthcare envisioned in the NHS Five Year Forward View. The report will be launched in early October.

In a systematic review of the region 408 stakeholders were identified out of which 140 were academic institutions, 113 established companies and 45 startup or emerging companies. The region clearly represents a digital health cluster, with particular concentrations of activity around Oxford and Reading.



Eight dimensions were perceived as opportunities for digital health and evaluated within the report:

- Improved treatment - better use of technology to monitor patients coupled with freeing up nurses and doctors to talk to their patients.
- Efficiencies and savings - within the NHS by eliminating waste will allow reassignment of resources to where they will deliver the best value in terms of public health.
- Personalised medicine - tailoring treatments based on molecular diagnosis and an individual's genomic information coupled with life-style parameters and the patient's values.
- Population health - learning what makes a difference using very large studies with the resolution and sensitivity to reliably inform policy.
- Healthcare research - bigger data sets and better defined 'deeper' phenotypes mean better insights and ultimately better, more personalised treatments.
- Society engagement - use the launch of personal health records and centralised dynamic consent to change perception of the NHS from a resource allocated by a bureaucracy towards a shared social enterprise.
- Improved wellbeing - through better engagement with patients, better appreciation of their values and improved communication with medical staff, carers and family, brokered by a better connected health system.

- Improved outcomes - using mobile technology to improve recording of outcomes and tightening the feedback of this data to inform into improved care.

The report made a number of recommendations including the establishment of a permanent entrepreneurial hub for digital health, the creation of a digital health institute that focuses on the changes in healthcare, assembling a partnership to build an open source HER for the region, mapping out the vision for big data more clearly, and developing new sources of funding for early stage innovation.

On the basis of the report, the Oxford AHSN is working with a broad number of stakeholders to develop a regional digital health strategy that focuses on strengthening the regional digital health opportunity, support opportunities for clinicians, developers and academics to interact, and support the development journey for innovators with particular emphasis on addressing the challenges of commercializing digital health products.

Case Study: Demystifying diagnostic procedures through video

Start and end dates of work covered by case study

2014-ongoing

Headline quotes

"When I was asked to be part of this video, I thought it was a great idea to help inform and reassure patients about what it's like to have an MRI scan and help alleviate concerns. Other patients who have seen the video before coming for their MRI have told me it has really helped put them at ease, which is great to hear," patient narrator Becky

"Great to demystify the experience of getting scans done, thanks to Oxford AHSN for the video", Faculty of Radiologists, Ireland, via Twitter

"What's having a PET-CT scan like? A patient and radiographer explain in this excellent Oxford AHSN video," Royal College of Radiologists via Twitter

"I like how the patients were involved and their contributions. I really like how comprehensive and well-explained this resource is. The patients, and all the health professionals involved, were excellent communicators," Judge's citation, BMA Patient Information Awards 2016

"Patients in the film give their thoughts; this is very powerful. The language is very clear," Judge's citation, BMA Patient Information Awards 2016

Lead AHSN and joint partners

Oxford AHSN Imaging Clinical Network with Imaging departments at seven partner provider trusts across the region covered by the Oxford AHSN.

Key points at a glance

A series of professional videos have been produced to take patients through everything they need to know before they visit hospital for a range of diagnostic tests. Each one is narrated by a patient with input from staff and covers what to expect from receiving an appointment letter through to the scan itself. So far four films have been completed and uploaded to the Oxford AHSN YouTube channel (http://bit.ly/2dxEJg5) with new patients being made aware of them. Collectively they have had over 10,000 views. Three of the four

films have won awards. The project has won praise from the British Medical Association (BMA) and Royal College of Radiologists (RCR). More films are in the pipeline.

Background summary

Patients can get stressed and anxious when invited for a scan. Patient letters can allay some of these fears but more can be done to increase understanding and reduce anxiety. Enhancing the patient experience leads to fewer missed appointments and failed scans, ultimately saving NHS funds.

Challenge identified and actions taken

The Oxford AHSN Imaging Network identified a need for better information for patients about to have a diagnostic scan and began recording a series of videos to demystify a wide range of diagnostic procedures. The films, made with Oxford Medical Illustration, focus on general messages rather than specific geographical ones – to make them relevant to anyone having a particular scan regardless of where it is taking place. Each film is narrated by a patient who has been through the process, adding to its credibility.

Outcomes

The films are proving valuable to thousands of patients both within the Oxford AHSN region and across the country. So far four films have been completed and uploaded to YouTube and new patients made aware of them. Collectively they have had over 10,000 views. The subjects covered include MRI, CT and PET CT scans and the locations covered are Bedford, Oxford and Swindon. Three of the four films have won awards. In the 2016 BMA Patient Information Awards the MRI film recorded at the Great Western Hospital, Swindon was highly commended, while the PET CT scan film recorded at Oxford University Hospitals was commended. This film was described as 'excellent' by the Royal College of Radiologists. In 2015 the first film completed in this project was awarded a silver medal in the international Institute of Medical Illustrators awards.

Plans for the future

Four more patient information films are due to be completed in 2016/17. Further promotional work on the existing films to increase awareness among relevant patients is ongoing.

Contact for further information

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AHSN core objectives met

A – Promote health equality and best practice
C – Build a culture of partnership and collaboration

Operational Review

Building the Network

Collaboration is the foundation of the AHSN so together we can "get more from the sum of the parts" in the region; changes in practice and acceleration of uptake of innovation to improve outcomes, safety and experience for patients and build prosperity in the region. Through the programmes and themes, events, governance and communications, engagement grows and the network strengthens at all levels amongst healthcare and life science professionals throughout our region. The evidence for this can be seen in the steady growth of subscribers to the monthly newsletter which is now at more than 2,000, the growth in Twitter followers which is now 2,300 (2,054 at the end of June) and the results of the independent stakeholder survey which is highlighted in the Chief Executive's Review and in the Stakeholder and Communications section in this report. It's good to see that stakeholders value being part of the AHSN.

Given the breadth and depth of the AHSN programmes and the many partner organisations and their staff that are working collaboratively in the region we have to work hard to communicate the purpose, role, activities, output and added value. A few examples of communications activity in the last quarter include:

1. The Wealth Creation programme has created an industry portal to facilitate business creation and growth and accelerate clinical innovation adoption, bringing better health and wealth to our region. http://www.healthandwealthoxford.org/
2. Direct support of the development of the Hill, Oxford's digital healthcare ideas lab attended by 425 people over the summer
3. Publication of a summary of our 19 mental health projects www.bit.ly/MentalHealthOx
4. Best Care Clinical Networks has produced a high quality Impact Report of their 8 networks and 48 projects http://www.oxfordahsn.org/wp-content/uploads/2016/09/13846_Best_Care_Clinical-Networks_Impact_Report_40pp_LINKS.pdf
5. Wealth Creation has supported seven events in the quarter including the launch of the Oxfordshire Innovation Engine Update at Harwell which included astronaut Tim Peak and attracted 900 attendees to discuss Accelerating Healthcare Innovation
6. We have published a Digital Health Report, in collaboration with the University of Oxford, which examines the state of research and commercial activity in the region – please see Case Study in this report
7. EXPO – presentations by the EIP, Medicines Optimisation Network and PPIEE Leading Together programmes
8. Views to our website are up by 27% and visits are up by 18% compared to Q1 (see KPIs)

I presented the independent OHE/Rand health economics report of four of the AHSN's projects at EXPO in Manchester where I had the opportunity to meet Nicola Blackwood MP, the new minister for Public Health and Innovation, and highlight the region's leading role in mental health improvement and innovation, e.g the Anxiety and Depression Clinical Network's sustained superior recovery rates compared to national performance, Berkshire Healthcare's SHaRON system and Oxford Health winning a £12.8m BRC grant.

A key enabler of building the network is the ability for clinicians and researchers to share data. The Information Governance Framework, that all our partner Trusts have signed up to, is streamlining the data sharing process – down to three days in the most recent example. This local arrangement compares very favourably with the very lengthy and bureaucratic process to access national data sets from NHS Digital.

Governance

A well-attended Partnership Board met at the end of the month at which we reviewed the Best Care Clinical Networks, the Informatics Strategy and the Stakeholder Survey. We also discussed the process for the re-licensing of AHSNs. The AHSN Board met in July and discussed Informatics Strategy, local and national AHSN surveys, AHSN roadshows and a NIHR funded analysis of development of AHSNs which showed Oxford AHSN's main stakeholder groups – NHS, Universities and Life Sciences to be strongly linked. The AHSN is Board is due to meet in December to discuss and plan for the re-licensing of the AHSN.

Progress, KPIs, top level milestones and national AHSN metrics

The programmes and themes are largely on track. We also on track to deliver the key milestones (see table below and details on page 47).

Collaborative working across multiple partner organisations takes time to build as project objectives and timetables are aligned and engagement gets real momentum. We keep all our projects under review and a number have been completed or closed in the quarter. We have also started a number of new innovation adoption and evaluation projects (see CIA and Wealth Creation reports).

Selection of highlights from the programme and theme reports:

1. Best Care – Anxiety and Depression Clinical Network has been instrumental in supporting successful bids from the Thames Valley CCGs for integrated IAPT expansion funding for Early Implementer Sites
2. Best Care – Dementia Clinical Network has received national recognition by giving two presentations to the Royal College of Psychiatrists on developing Young People with Dementia and the accreditation of all the memory clinics in the region – probably the only region in the country to have achieved this
3. Best Care – Childrens', Maternity, and the three mental health networks have been supporting the development if STP plans
4. CIA – despite the Brexit shockwave, Tracey Marriott has led a collaboration with Sweden and Netherlands to secure a grant of Euro 324k from the European Institute of Innovation and Technology. This will further the development of a course to support our local innovators
5. CIA – a second cohort of 23 innovators from the region's providers have signed up for the next Practical Innovators course. The first course supported 28 clinical innovators in developing their ideas – some of these are very scalable across the region
6. CIA – respiratory diagnostic project launches next quarter in 3 GP practices – potential savings of £0.3m by reducing inappropriate prescribing to 500 patients.
7. Wealth Creation – Expression of Interest submitted under the BEIS Science and Innovation programme through the University of Oxford with Oxford AHSN taking the lead on Digital Health.
8. Wealth Creation – agreement signed with SomaLogic to support the evaluation of the SomaScan assay under Live Well, Stay Well in Buckinghamshire
9. Wealth Creation - detailed report on Point of Care Stroke IVD for Paramedic Use has been completed for Sarissa Biomedical under the SBRI Stratified Medicine programme
10. Informatics Strategy approved by CIOs, Oversight Group and AHSN Board
11. Informatics - significant progress in operationalising the Information Governance Framework and in data acquisition for programmes and themes despite the delays caused by NHS Digital
12. Patient Safety – the mental health "absence without leave" project is progressing well in Berkshire Healthcare and the team are working with CNWL to overcome data collection challenges.

13. Patient Safety – regional sepsis event took place in September with over 100 attendees from across the region
14. Patient Safety – maternity; reducing never events of retained swabs to zero – data have been collected since February and some improvement is apparent. Work continues
15. PPPIEE - Over 100 professionals and lay partners, across the South of England, have been through our programme. Participants are in the process of completing their joint projects

Impact and return on investment

The full OHE/Rand health economics report of four of our projects was published on our website this quarter (see Wealth Creation report).

We are developing a Return on Investment (ROI) model to track the added value of the AHSN to the health economy over the first licence period.

Best Care is working with Professor David Stuckler to undertake health economics evaluation of the Medicines Optimisation CBT training of community pharmacists. This is supported by a Wellcome grant.

Funding and Re-licensing

We received confirmation in September of the funding for the Patient Safety Collaborative (PSC) of £448k. This represents a significant decrease in funding. We have planned for this and we will manage to sustain the patient safety theme until March 2019 assuming no further cuts. The contract for the PSC will move to NHS Improvement in April 2017.

We have undertaken a thorough reforecast of income, expenditure, balance sheet and cash. Total income is forecast to be £3.6m, £1.1m lower than last year and £0.5m lower than budget. Income from NHS England (and NHS Improvement for PSC) has fallen by £0.5m from last year to £2.9m. Expenditure is forecast to be £4.3m, £0.8m lower than budget. We have reduced the reliance on programme funding previously committed by almost £0.3m to £0.7m. With the action we have taken, the AHSN was getting close to breakeven on an annual basis had NHS England not further reduced funding. We keep the AHSN's finances under careful review ensuring that the programmes and themes have the resources they need but also with one eye on next year and the future licence period.

The re-licensing process is expected to commence before the end of the calendar year. The ROI model, the independent stakeholder survey, our performance to date and the national AHSN metrics will be used in the re-licensing process. Oxford AHSN is performing well in terms of patient outcomes, engagement and wealth creation in terms of national AHSN metrics.

Risks and issues

We are confident that we will have a very strong case for re-licensing Oxford AHSN. The AHSN Board is aware that we cannot be certain about the level of funding from 2017/18. This will be the subject of discussion when we meet in December.

The Informatics team has made great progress this quarter in operationalising the Information Governance Framework and addressing issues raised in the previous quarter on data sharing and acquisition. NHS Digital seem to move the goal posts regularly which has stalled the data access agreement. Mitigating actions by the Informatics team have reduced the negative impact on our programmes.

Dr Paul Durrands ACA CMILT

Key Milestones – progress to date

Programme/Theme	Key milestones	Q2 Progress
Corporate	Oxford AHSN 5 Year Strategy	Will be developed in 2016/17 in response to the Accelerated Access Review, re-licensing process and local STPs
Best Care	Imaging and Maternity clinical networks collecting high quality data from across the region through interoperability between NHS providers	Maternity network linked and sharing data between 4 trusts. 1 more trust pending. Imaging network due to make first link of data systems between OUH and RBH end September.
Clinical Innovation Adoption	5 more innovation adoption projects in final stage of deployment	2 projects closed (Nalmefene and Dementia), 2 are in the measure & monitor phase (Gestational Diabetes and Intermittent Compression Sleeves. Nationwide, there is renewed interest in BHFT's SHaRON system.
R&D	Trust R&D plans developed and progress made on Nursing/Allied Health Professional strategy	Programme manager appointed
Wealth	Work with partners to develop 3 exemplar innovation projects	3 pilots underway at 3 Trusts. 3 more in planning
Informatics	Develop a comprehensive Information Governance training programme for our partners	A training programme is being developed and will be communicated and agreed with partner Information Leads
PPIEE	Leading Together programme complete	On track
Patient Safety	Six themes showing safety improvement	On track
Stakeholder engagement and communications	Roadshows raising awareness of benefits of collaborative work, to improve patients outcomes and grow the economy, with local partners and external stakeholders Generation of support from stakeholders for continued activities post 2018	AHSN commissioned Survey responses from 563 respondents (26% of those approached). Overall very positive feedback – 80% saying that the AHSN is essential

Key Performance Indicators (KPIs)

Programme	High level KPI (measured annually unless otherwise stated)	As at Q2
Best Care	Further improve the recovery rate of patients suffering from anxiety and depression	June 2016 AHSN rate; 54.3% (June 2015 AHSN rate; 54.4%) National recovery rate: 46.3% Improved recovery rates sustained even though Increased activity in June 2016 data means an additional 149 patients recovered compared to June 2015
Best Care	Improve access, including waiting time standards for Early Intervention in Psychoses	National A&W standards have been implemented in Q1. 2nd annual audit now complete, with results due to be published in Q3.
Best Care	Improve medicines reconciliation rates across network	Data is incomplete: 4 of 7 trusts inputting with varying accuracy/sample sizes
Best Care	Reduce admissions and length of stay for childhood pneumonia	Admission rate: 126/100,000 Av. Length stay: 5.47 days GP Training organised for January and March 17 to effect reduction.
Clinical Innovation Adoption	Average number of Mental Health Trusts and Community adopting each innovation (1) Planning to implement (2) Implemented (3) Participating	83% 42% 100%
Clinical Innovation Adoption	Average number of Acute Trusts adopting each innovation (1) Planning to implement (2) Implemented (3) Participating	57% 26% 64%
Wealth Creation	Number of health and life science companies across the region	768
Wealth Creation	Number of people employed in life science industry	19,753
Patient Safety	Progress work in pressure ulcer reduction programme towards zero harm in project areas	On track
Patient Safety	Increase adoption of AWOL project in Berkshire Healthcare and CNWL to increase return rates by 50% on all acute wards	On track

Stakeholder engagement	Number of subscribers to the Oxford AHSN Newsletter and Twitter followers per quarter	Newsletter subscribers: 2,001 Twitter Followers: 2,313 8 clinical networks and patient safety total 1,100
Stakeholder engagement	Number of visits to Oxford AHSN website per month	Views: 356,185 (279,373, Q1) Visits: 85,950 (72,904, Q1) Hits: 641,434 (557,273 Q1)
Stakeholder engagement	Number of attendees at all AHSN events per quarter	1,026 (635, Q1)

Best Care

Quarter 2 has seen the publication of the Best Care Clinical Networks' Impact Report. We believe that this is a pivotal document, capturing the full range of activity and outputs of the programme – which is far more than the sum of its 48 projects. Network activities are not solely aimed at meeting milestones and achieving agreed deliverables; there is a key focus on engagement, and whilst reach and influence are notoriously difficult to measure, the programme does collect biannual data from the networks in order to try to understand its strengths and weaknesses.

We know from this information that we must do more to engage with CCGs, and the STP agenda is beginning to open doors in this regard. The clinical network plans for Children's and Maternity are now being adopted into the West Berkshire, Oxfordshire and Buckinghamshire STP, and we are working to ensure that the work of other networks is also understood and incorporated – particularly the mental health and dementia networks.

We also know that there is a disparity in levels of engagement between the East of the region and the West. Whilst this may to an extent reflect the overall distribution of healthcare staff in the region, we will investigate possible causes and take positive action to attempt to redress the balance.

Data acquisition has been a challenge in Q2. Previous channels (e.g CSUs) have now been closed by NHS Digital, whilst the official replacement channel, directly to NHS Digital and their Data Acquisition Advisory Group, has continued to withhold requested data sets.

Generally however, we believe that the programme has made enormous strides in both delivery and engagement. With the prospect of a relicensing process in the next six months, the Clinical Networks are in a strong position to contribute to that process.

Anxiety and Depression Clinical Network (A&D)

This network is maintaining the monthly reliable recovery rate at 53-55% across the region, well above the national average of 45-48%. However, this success is only part of the story, as numbers treated per month have also risen dramatically. A snapshot of June 2015 and June 2016 shows how, despite having the same recovery rates, June 2016 saw an additional 447 patients treated and an additional 149 patients recovered.

	June 2015	June 2016	*Difference*
Number of individuals completing treatment	2,013	2,460	447 more patients completed their treatment in June 2016 compared to June 2015
Number of people moving to 'recovery' at discharge	1,008	1,157	149 more patients recovered in June 2016 compared to June 2015

In addition to this core activity, the network has also been instrumental in supporting bids from Thames Valley CCGs for Integrated IAPT (Improving Access to Psychological Therapies) expansion funding. This support has included collaborating on proposal writing and the design and evaluation of data collection. All Thames Valley CCGs and their respective IAPT services have now been successful in their bids and will all be funded to become Early Implementer Sites.

Thames Valley Early Implementer sites have been awarded substantial national funding (pending financial clearance) to set up new, integrated and co-located services for people suffering with Long Term Conditions and co-morbid depression and/or anxiety over the next 18 months, and the network will continue to be integral to these developments.

Children

On the back of a very successful 'flu campaign and detailed data collection and analysis, the network published its second flu report and variation report in Q1. In Q2, these reports have led to excellent engagement with CCGs, local and national Public Health staff, acute providers and Health Education England.

The network has been commissioned by 2 CCGs to provide GP training in outlying referral areas. These were initially planned for September, but it has now been agreed to deliver this training during GP protected learning sessions. This will greatly increase attendance and impact, but has meant the sessions will not take place until January and March 2017.

There has been good engagement with the region's STP leads in the quarter, and the network's plans will now be enshrined in the West Berks, Oxon and Bucks STP. It is expected that this will add additional impetus to work which already has good regional engagement from clinicians, and has also more recently gained an increased profile with commissioners.

The work to harmonise the region's antibiotic prescribing guidelines nears completion, with the last trust (Royal Berkshire Hospitals) now performing a final review of the proposals, before formal endorsement and adoption.

Dementia

The network's report on its webinar series shows evidence of a very successful engagement programme, combining reach (677 known attendants over 28 webinars, with more likely to have shared a screen or watched a recorded webinar at a later date) with valuable content to ensure the network is associated with high quality. Over 50% of survey respondents said that they had changed practice as a result of attending a webinar, and other feedback was universally positive. The webinar series continues as a core component of the network activities.

The care home engagement project held its first workshop in July. This workshop was attended by all the region's in-reach teams, and each team agreed a project they would develop through the network focused on improving patient care.

The network-supported Young People With Dementia service in East Berkshire is proving so popular and effective that 2 additional staff have been recruited. The service's latest report can be seen in detail here.

A document with recommendations for a standardised pathway for fronto-temporal dementia is being finalised within the network, and is due for publication and adoption in Q3. The Dementia Network is making a presentation to the Royal College of Psychiatrists on October 3rd, showcasing its success in developing the Young People With Dementia work. This is national recognition of the achievements of the network.

Early Intervention in Psychosis (EIP)

Early on in the life of this network, NHS England (South) approached the AHSN to provide a preparedness and later, an assurance function for the new national access and waiting time standards. This work has required the developing of relationships with EIP/Mental Health services across the whole South region, and quickly led to the development of an online audit tool, to enable services and trusts to understand the inputs and outcomes of their work in comparison with others. The first regional audit was published in January 2016, and the second will be published in December 2016, with the datasets now complete and the process of analysis and narrative beginning.

The relationships developed for this work have proved extremely fruitful, allowing the sharing of ideas across a wide geography, and the rapid identification and addressing of local issues. Within the AHSN

region, a combination of this regional work and the AHSN team have collaborated with Berkshire Healthcare to re-form their EIP service. This was launched in mid-June this year, as a result of the evidence the network presented to the trust that EIP services were better value for money, and offered better outcomes for patients. The network continues to work with embedded Quality Champions to maintain access at 95% (people receiving a NICE concordant package of care within 2 weeks of referral), and plans to work with trusts to automate the monitoring of this, so that it can be used as a dashboard to empower clinical staff in real-time.

The network co-presented Berkshire EIP's new dashboard system (Tableau) at NHS Expo in September, and the other trusts in the region are now considering adopting it. This is alongside other innovations currently being rolled out across the region: Patient Knows Best in Oxfordshire and Buckinghamshire, and an online support network in Berkshire (either an adaptation of the existing Silvercloud anxiety and depression service, or the Berkshire Healthcare SHaRON service). Milton Keynes is currently being supported to choose an innovation which will match their needs. A physical health workshop is being held in December jointly with the wider AHSN, as many EIP services have voiced an interest in improving their physical health and wellbeing support for people with mental health issues.

Imaging

The network has made considerable progress in accessing data in Q2. This has partly been due to a developing relationship with the Royal College of Physicians, allowing the Lucada database (lung cancer data) to be released to the AHSN. It has also been partly thanks to the new network manager's concerted efforts to build relationships with key personnel across the network's seven acute trusts, and highlights the importance of these relationships in project work and data gathering.

The lung cancer data is being reviewed by the network and will be translated into a series of recommendations for pathway and protocol redesign in September/October. These will be discussed, amended where necessary and ultimately adopted across the region as best practice.

Aggregate data on prostate MRIs and biopsies performed has proved difficult to find and obtain from partner trusts, despite IG agreements being in place, and has highlighted the need for better data sharing.

With this in mind, the network is currently involved with trust IT teams at two trusts, piloting a fully auditable link which will allow imaging data to be accessed from either end. This pilot is due for completion in early October. It will allow relevant patient data to be viewed seamlessly by all clinicians involved in that person's care, and for second opinions and on-call networks to operate more effectively. The network is also inputting into the local STP for cancer.

A patient video ("Having an MRI scan at Great Western Hospitals") developed by the network was highly commended by the BMA at their Patient Information Awards. This is the third video to receive national recognition, and is further recognition of the value of this ongoing series. Videos under development include nuclear medicine and interventional ultrasound. Read more about this project in the case study above.

Maternity

This network is pioneering a revised set of pathways for expectant mothers and their babies, aimed at increasing the identification rates of Small for Gestational Age babies, while reducing the volume of scans performed. (Currently 2 mandatory scans are performed per pregnancy, yet at OUHT, the average mother receives 3.6 scans). Having discussed, designed and approved the new pathways with the network, a pilot is now fully underway at OUHT. Maternity staff throughout the pathways have been engaged and trained, and protocols and forms rewritten so that the theory of the risk escalation procedures is reflected in the care the mothers receive. In September, after the project being live for 4 months, staff following the new pathway delivered a baby by caesarean at 36 weeks which, under the previous regime, would not have been detected and would very likely have been still born. This was the first such episode in the pilot, and its data will continue to be monitored for the next 12 months, with a first detailed report due in December.

Early analysis and feedback suggests that more time needs to be spent engaging with and training GPs now, so that the revised pathways are properly understood and the criteria for referrals are met.
The pre-term baby project (improving rates of appropriate babies born in a tier 3 unit) has now moved to a 'business as usual' status, and will be monitored through existing channels and with an annual review meeting. The rates now remain stable around 75 – 80%, having been around 50% prior to the project.
Guideline harmonisation work continues. Three guidelines have been agreed and embedded throughout the region. A fourth (placental histology) has been agreed and is being embedded through changes to standard forms and through communications activities. A fifth (palliative care) is currently receiving comments, and is to be agreed in Q3.
Data sharing work has stalled in Q2 due to teething connectivity/compatibility problems at three of the four trusts currently participating. The network is committed to resolving these issues, which have been identified as a mixture of support (ensuring that IT teams at all trusts understand the function and importance of the system, and are able to support it), and infrastructure (the existing software solution does not interface perfectly with other existing systems present at different sites). The infrastructure issues should be addressed by the implementation of the Imaging Network's data link, and the two networks are now working together towards that implementation.
The network has also been heavily involved in the development of the West Berks, Oxon and Bucks STP, with its projects being the focus of maternity plans for the region. This is testament to the visibility and efficacy of the network's projects to date.

Medicines Optimisation

This network has had some major successes in Q2 with more due in Q3. It hosted a 'pop-up university' session at the NHS Expo, describing the successes of the pilot CBT training for community pharmacists project, which was very well received by an engaged audience. This training has been refined in collaboration with Health Education England (Thames Valley) and is currently awaiting final ethics approval for the proposed post-training patient follow-up and evaluation. The planned evaluation has been designed in collaboration with David Stuckler, professor of political economy and sociology at Oxford University, to enable effective health economics analyses to be undertaken. The training itself is planned for October, with most of the 150 places already taken.
The network also launched a public and primary care engagement initiative in August, called 'Open Up'. This adapted a Wessex AHSN initiative and, working through Berkshire and Oxfordshire CCGs, has distributed materials to 180 GP practices in the region. The initiative is aimed at encouraging patients to be more open with their GPs/prescribers about their medicines, what they take and what they do not. Quite aside from improving efficacy of treatments through adherence, and reducing waste, this initiative has allowed a promising dialogue to build between the network and CCGs, and through them to individual GPs and GP practices, who are key stakeholders in any medicines optimisation campaign.
A collaboration with industry (Pfizer) to evaluate and improve the appropriate prescription of Novel Oral Anti-Coagulants was also finalised in August, with contracts being signed and funds transferred to the network.
Difficulties persist in driving widespread participation in the medicines reconciliation and transfer of care projects. Both of these projects have (geographic) pockets of strong participation, but lack the volume of activity which would generate sufficient data to demonstrate their value to the economy.

Respiratory

This network has encountered severe difficulties in working with NHS Digital (or HSCIC, as they were formerly known) to obtain data. Weekly reviews of revised data requests throughout July and August ultimately yielded no data from them, and the network finally opted to collect its data directly from trusts and CCGs. This has proved far more straightforward, and a draft report was compiled for consideration by the network's inaugural steering group in September. This meeting was very successful, with members

from across the geography and from a range of disciplines participating fully in meaningful debate on the key issues of the report. The report will be published at the formal launch of the network, set for 6th October, Green Park Conference Centre (contact Richard.jerrett@respiratory.oxfordahsn.org to attend).

Clinical Innovation Adoption (CIA)

Clinical Innovation Adoption Programme – Q2 Progress Report

During Q2 the Clinical Innovation Programme has focused on the following:

- Reviewing the strategic priorities for providers and commissioners
- Keeping the present projects on course for completion
- Closing projects where work has completed
- Exploring new projects to come online next quarter

The chart of CIA Programme below shows the projects underway and those that have been assessed during Q2 for implementation.

Project Highlights to note include:

- Closing - **Nalmefene Project** (alcohol prevention drug): Work on market access for this product, requested by the NICE Innovation Collaboration Board has been completed. This work involved a number of CCGs and AHSNs across England. The final report will be released by the NIC Board shortly.
- Closing - Dementia: The Dementia Network worked with the CIA team to determine variation in **memory drug usage**. This was found to be relatively consistent across the region.
- Gestational Diabetes - suspending: **GdM-Health** has been successfully implemented at 4 Trusts (OUH, Frimley, Milton Keynes and Royal Berks) (cumulative savings estimated at £0.23m). Both patients and clinicians have found this to be invaluable to management of care. The App has been successfully developed to be used directly on patients own phone and during this period of testing implementation has been put on hold. In addition, the Oxford University Biomedical Engineering department is also considering how best to commercialise the device so as to ensure its' future sustainability.
- **Patient Monitoring** - Reviewing with an option to suspend depending on interest: Deteriorating patient care whilst on wards is a high priority for all of the acute trusts in the region. The CIA team has reviewed the patient monitoring systems on the market and one that is on the cusp of being available. We working with 2 Trusts interested in piloting the new patient monitoring product that has already been successfully implemented at the John Radcliffe Hospital within all wards. Some of the Trusts would prefer to go with one of the more established systems and due to the high value of these contracts, are in the process of sourcing capital and following the procurement process. A report is being prepared for the CIA Oversight Group that will outline functionality comparisons and value for Trust leads.
- New Projects: **Respiratory** – this project will be launched during Q3. Based on initial implementation at 3 GP Practices, we estimate a cumulate saving of £0.3m in the first year and a reduction in inappropriate prescribing of steroids to approximately 500 patients. We will be better placed to access the impact of this project at the end of 2017.
- Accessing Innovations for implementation: A number of innovations are being accessed for possible implementation Q3 through to Q1 2017.
- Support Hope & Online Network **(SHaRON)**: The Eating Disorders Social Network System continues to draw attention from other Trusts across the region. The Health Economics work on the system shows that implementation across the region could save £500k and that using the system has already reduced the level of patient harm (106 patients – measured as "not having to be admitted to hospital"). The Oxford AHSN has arranged for the Berkshire Healthcare Eating Disorders leads to meet with Dr Nigel Acheson, Regional Medical Director to demonstrate SHaRON.
- **FluidReview & LifeRay System**: One of our key functions is to support innovators and entrepreneurs by offering advice and appropriate support where possible. As demand has increased, it has become apparent that the team requires a system. The system will enable staff to

manage the requests and respond accordingly, share innovations with our clinical networks for comment and interest and assess innovations for possible implementation. This system comes online during Q3.

- **Successful Bid**: The CIA Programme has successfully secured 324k Euros from a bid submission to the European Institute of Innovation and Technology for the further development of the Innovation Course that will assist Innovators access the UK market; This will be a collaborative venture with Sweden and the Netherlands so as to replicate this approach elsewhere in Europe.

Please see Appendix D for full project information.

Clinical Innovation Adoption Work Programme

CIA Project	Medicines	Device	Service	Partners	STATUS
Early Inflammatory Arthritis	Biologics / Biosimilars	---	Early Arthritis Pathway	RBH, OUH, FHFT, GWH, BHT Trusts	Implementing
Alcohol Misuse	Nalmefene	---	Hospital-based Alcohol Care Team	Slough Borough Council, Public Health England, Ambulance Service, HWP Hospital, Alcohol Services	Completed Nalmefene & sign posting/Start Implementation Alcohol Teams
Fragility Fracture	---	---	Fracture Liaison Services	RBH, BHT, MK, GWH, FHFT, OUH Hospital Trusts	Starting - Bus case developed
AF Management	NOACs & warfarin, ECG devices	---	Primary Care Stroke Pathway/Pharmacist led New Model/DWAC	Berks W CCG, Berks East CCG, Aylesbury Vale & Chiltern CCGs	Implementing
Stroke	---	IPC sleeves	Thrombectomy/NSTEMI	All Stroke Units in region	Measure & Monitor
CAUTI	---	Bladder scan ultrasound	UTI & Continence Management Pathways	Oxford Health, OUH and Great Western Hospital Trusts	Implementing
IV Diuretics in ambulatory care setting		BNP diagnostic device	Primary Care Setting	Berks W CCG and RBH	Starting - interested Trusts signed up
Dementia		---	TBC	Oxford Health, Berks Healthcare, Central North West London NHS Hospital Trusts	Completed
Gestational Diabetes	---	Oxford GDm-health management system	Gestational Diabetes Pathway	RBH, OUH, MK, FHFT Trusts	Measure & Monitor
Anaesthesia	---	Intra-Operative Fluid Management (IOFM) Monitor	---	FHFT, BHT, GWH	Implementing
Falls	---	---	Acute & Community Pathways (FallSafe Bundles & Falls Innovations)	Oxford Health, OUH, BHT, BHFT, FHFT	Implementing
Respiratory		Circassia		Primary Care - Oxford to start with evaluative work	Starting - 1st project team meeting in October
Patient Monitoring		TBA		BHT, OUH	Starting - Initial assessment completed
Eating Disorders	---	---	SHaRON Programme	CNWL, Oxford Health, Berkshire Healthcare	Supporting
WireSafe	---	Central line Kit		OUH	Initiating
Non-injectable Arterial Connectors		Eliminates confusion of arterial & venous lines		To be agreed	Initiating
Ventillator Associated Pneumonia	---	Tracheal Tube without leakage		To be agreed	Initiating
Innovating in the Healthcare Setting Programme	Overarching Training Programme			RBH, BHFT, GWH, MK, OUH, OH	2nd Cohort of Students start
EIT Health	EIT Health			Working with Netherlands and Sweden to produce a Pathway to Outcomes for Innovators in Europe	Starting December 2016
Fluid Review/LifeRay	Innovation management system			Working with CIMIT and Manchester AHSN	Ready to launch October 2016

Research & Development (R&D)

The R & D Oversight Group, now chaired by Stuart Bell, Chief Executive of Oxford Health, met at the very end of Quarter 1. Hilary Coles from Janssen attended and provided a very detailed and informative update on Janssen's research activities (Janssen is part of Johnson & Johnson, and is a strategic partner with the AHSN) – there is huge potential for improving the offer to commercial life sciences companies in the Oxford AHSN region and further discussions are to take place with individual Trusts' R & D leads. Dr Joanna Cox described the research work at Cranfield University which is a post-graduate university with a number of research themes which have the potential for translation into health and life sciences.

Katharina Ladewig, Director of EIT Health (UK-Ireland) attended to update the group on the work of this EU funded organisation and the potential funding opportunities and events available to members of the AHSN. The impact of Brexit is yet to be understood.

Ben Thompson has been appointed to support the R & D Programme, working with Professor Ford, in addition to his main duties as Strategic Partnership Manager (Health) working with the University of Reading and Royal Berkshire NHS Foundation Trust. Ben started in July and will be attending the Group.

The R & D Group also met on 29 September and received updates from Oxford Brookes University – Professor David Evans, from Professor Helen Dawes on the work of OXINAHR (http://www.oxinahr.com/), and from Professor Anna Schuh on the work of the Oxford Molecular Diagnostics Centre. Further discussions will take place with the individual Trusts' R & D leads and others to push forward that really important initiative in diagnostics.

In addition, the meeting was joined by Chris Hill, Senior Programme Manager in the Innovations Directorate of the NIHR Central Commissioning Facility, who updated the group on their activities.

Once again, the meetings provided a great opportunity for networking between the NHS, the Universities and for the first time, the life sciences sector.

Updates from Milton Keynes University Hospital, the University of Buckingham and the two BRCs will be provided to the next meeting.

Wealth Creation

Overview

The Wealth Creation team has 69 projects that are at various stages of progress across all of its key priorities. To date it has completed 53 specific projects. The team has engaged with 55 companies during the quarter. It has been involved in seven events, including the Oxford University Innovation/the Oxford BRC/Oxford AHSN Tech showcase; as a sponsor of the launch of the Oxfordshire Innovation Engine Update; part of the organising committee for Harwell: Accelerating Healthcare Innovation, where the astronaut Tim Peake was a special guest; a workshop on Antimicrobial Resistance and four digital health incubator events 'The Hill'. Over 900 people attended the event.
Achievements in Q2 include:

- The launch of a new wealth creation website for industry which focuses on facilitating business creation and growth and accelerating clinical innovation adoption, bringing better health and wealth to the region. The link is http://www.healthandwealthoxford.org.
- The publication of **Four Case Studies to Explore the Added Value of the Oxford AHSN** by the Office of Health Economics and RAND Europe. www.bit.ly/OHEOxford
- The development of 'The Hill' digital health incubator based at the Oxford University Hospitals NHS Foundation Trust.
- Continued progress of three pilot evaluations across the region, with a further three in late stage planning.
- An Expression of Interest under the BEIS Science and Innovation Audit programme was submitted through the University of Oxford with the Oxford AHSN taking the lead on Digital Health.
- An agreement has been signed with the US company SomaLogic to supply services to support the evaluation of the SOMAScan™ assay under the Live Well, Stay Well programme in Buckinghamshire.
- A detailed report on **Point of Care Stroke IVD for Paramedic Use** was completed for Sarissa Biomedical under the SBRI Stratified Medicine programme.

Adoption

A new website designed to support industry engagement and provide information on the adoption pathway and the strength for the regional life sciences cluster was launched at the end of the September The site includes an interactive map detailing the types and numbers of organisations across the region broken down into therapeutics, medtech, diagnostics and digital health.

The Wealth Creation team has submitted a detailed report to Sarissa Biomedical on Point of Care (PoC) Stroke IVD for paramedic use. The report forms part of the outputs of a pathway evaluation under the SBRI Stratified Medicines Programme.

The development of a standard set of PROMS for IBD by ICHOM is progressing well and is expected to be published in the near future. Work is underway to see how the dissemination and further implementation of the standard set can be undertaken in partnership with ICHOM.

The following pilot studies are in progress with companies in a variety of care settings across the region:

- Evaluation of the Intelligent Ultrasound audit process for antenatal ultrasound images at the Royal Berkshire NHS FT.
- Now Technologies for the testing and evaluation of Gyroset™ in Stoke Mandeville Hospital.
- The evaluation of the Horiba Microsemi^{CRP*} haematology testing system in A&E at the Oxford University Hospitals NHS FT has been completed and a second site at Stoke Mandeville Foundation Trust has started a second evaluation of the system for paediatric Point of Care (PoC) testing.

Planning is underway to establish the following evaluation studies:

- Circassia's NIOX® FeNo testing in the management of asthma and COPD in primary care.
- The extension of using PoC testing in the Emergency Multidisciplinary Unit to Out of Hours GP vehicles for use in an at home setting.
- The evaluation of the SOMAScan™ assay in a newly commissioned care pathway, Live Well, Stay Well in Buckinghamshire. The Wealth Creation team is supporting the US company SomaLogic in the evaluation process.
- The Wealth Creation team has provided support to the National Innovation Accelerator programme 2016/17 call for applications.
- Julie Hart has joined the NHS Business Services Authority Point of Care Testing Strategy Group.

Investment

The University of Oxford has submitted an expression of interest in response to the BEIS call for Science & Innovation Audits. The submission, on behalf of a broad set of partners, includes the Oxfordshire LEP and the Oxford AHSN. The submission for the second call includes a theme on Digital Health, which the Oxford AHSN is leading with Oxford University Innovations, and involves 10 industrial partners.

The development of a Digital Health Strategy for the Oxford Thames Valley region is underway and is in co-development with key stakeholders. A strategy meeting was held to agree the vision and objectives for the digital health strategy.

The Wealth Creation team continues to work with the Precision Medicine Catapult in developing opportunities for Oxford as Centre of Excellence.

In Buckinghamshire, the ERDF Revenue funding bid for the Buckinghamshire Health and Social Care Innovation Hub continues to progress. The full business case for the accompanying Local Growth Fund bid for capital investment for the Buckinghamshire Health and Social Care Innovation Centre has been submitted to Bucks TVLEP. In Oxfordshire, the full business case for the consortium bid for ERDF funding in Oxfordshire for 'The Hill' has been submitted to the Oxfordshire LEP.

The funding application under the EIT-Health programme, 'Market Access Strategies for Community Solutions in Digital Health', that was submitted in partnership with the West Midlands AHSN, the North West AHSN, IESE Business School, Universidad de Navarra (Spain) and E-Seniors (France) was unsuccessful in its bid to receive funding support.

Applications for the position of Life Sciences Business Development Manager have been received and interviews for the post will be held in early October. This is a joint post between the Oxfordshire LEP, the Science and Technology Facilities Harwell Campus and the Oxford AHSN. The role will develop a more strategic approach to inward investment across Oxfordshire.

The Bicester Healthy New Towns programme continues to make good progress with further definition to the focus and delivery of activities under three workstreams: the Built Environment, Community Activation and New Models of Care - Creating care closer to home. The Oxford AHSN is providing support under for the development of digital health initiatives that could run across the three workstreams. The Oxford AHSN has also been approached by the Barton Healthy New Towns development and possible ways of interacting are being explored.

The Oxford AHSN has been named as a partner in two grant applications during the quarter: the first is an application submitted by Physiomics under the Innovate UK Biomedical Catalyst 2016 Feasibility programme. The second is for a further application under the SBRI Healthcare competition which has been submitted by Sarissa Biomedical.

The Oxford AHSN is supporting the Smart Oxford initiative (see http://oxfordsmartcity.uk/cgi-bin/index.pl), specifically around the opportunities in health and social care.

NHS Culture

The 'Hill' held four meetings at the John Radcliffe Hospital over the summer covering a series of topics including human factors design, software development and coding, funding and examples of digital health innovations. The final event of the summer held on the 22nd September was a 'pitch' event to a panel of judges. There were over 30 separate pitches put forward and a shortlist of five were then reviewed with a final winner announced at the end of the event. The potential for a number of new innovations to be considered seriously for further development and evaluation was evident.
During the summer a total of 425 people attended the meetings.

Partnerships

The collaboration with J&J/Janssen continues to make strong progress across a number of areas.

The Sustainability Working Group held one meeting during the quarter where progress on a number of initiatives were reviewed including sustainable travel and food, and opportunities around energy microgrids.
The Oxford AHSN hosted the South Region Sustainability and Health Network (SRSHN) Sustainability Masterclass on the 30th September.

Conferences / Events / Publications

The Wealth Creation either sponsored or supported a number of events during the quarter, including:

- The Oxford University Innovation, the Oxford AHSN and the NIHR Oxford Biomedical Research Centre Technology Showcase was held on the 6th July and focused on **Big Healthcare Challenges in Chronic Diseases** (http://innovation.ox.ac.uk/innovation-news/events/technology-showcase-2016/). The event was attended by 233 delegates.
- **Realising the Growth Potential. The Oxfordshire Innovation Engine Update** was launched on the 8th July. The event was attended by the Minister for Life Sciences, George Freeman, and attended by 99 people.
  The Oxford AHSN was a co-sponsor of the report (see http://www.oxfordahsn.org/wp-content/uploads/2016/07/Oxfordshire-Innovation-Engine-Update-2016-FINAL-REPORT-2.pdf).
- The astronaut Tim Peake was a special guest and speaker at a one day event held on the 21st September at the Harwell Campus on **Accelerating Healthcare Innovation**. The event also welcomed George Freeman in his new role as the Chair of the Prime Minister's Strategy Board and was attended by around 250 delegates. The Oxford AHSN provided assistance in the planning of the event.
- The Wealth Creation team ran a workshop on **Facilitating Effective Antimicrobial Stewardship in Primary Care** on 7th September in Reading. The meeting focused on the use of Point of Care diagnostics in reducing antibiotics prescribing.
- A member of the Wealth Creation team was a speaker at an event organised by OBN at the University of Warwick on **Driving Innovation and Collaboration in Digital Health** on the 12th July.

- A member of the Wealth Creation team chaired a panel discussion on “Innovation and healthcare systems – Creating access” at the **Innovation Forum 2016 - Leaders Conference** (see http://inno-forum.org/conference/) on 22nd September in Cambridge.
- A member of the Wealth Creation team presented at the **European Diagnostics Cluster Association European Diagnostic Matchmaking Event** in Paris on 22nd September (see https://www.b2match.eu/europeandiagnosticmatchmakingevent/pages/14316-agenda). There were 138 participants from 6 countries (Belgium, France, Germany, UK and the US) covering regulatory challenges, and a presentation of the latest updates and panel discussion about the new EU regulations by Commission experts and notified bodies. This was followed by matchmaking, translational and transdisciplinary B2B meetings. Pitch presentations were made by Beamline Diagnostics and Oxford Cancer Biomarkers to represent the Oxford cluster.

Publications

The following reports were published during the quarter:

- **Four Case Studies to Explore the Added Value of Oxford AHSN.** Final Report by the Office of Health Economics and RAND Europe (see www.bit.ly/OHEOxford) and http://bit.ly/2dExpiJ
- **Realising the Growth Potential. Oxfordshire Innovation Engine Update** was published by the University of Oxford in collaboration with the Oxfordshire LEP, The Oxford Trust and the Oxford AHSN: http://bit.ly/2cSr97n

Supporting activity

The Wealth Creation team has continued to support the Oxford AHSC Theme on Novel Partnerships, including the quarterly strategy meeting.

Informatics

Collaboration

Informatics has contributed to national and regional AHSN fora this quarter, with attendance at both the Southern and National Informatics Leads Groups, where challenges of data acquisition were discussed. Informatics has explored collaborative work going forward with the East Midlands AHSN, to explore an informatics training event which they have developed. Engagement with UCLP, alongside the Patient Safety Theme, has explored methods used by both organisations to understand the rates of sepsis within hospitals and the possibility of sharing methodologies to mutually increase understanding.

Operational Hybrid Analytics Service

We continue to have regular engagement with the Programmes and Networks to agree priorities and update on deliveries using the collaborative Workstack Tracker. The Informatics Team continue to leverage the Hybrid Analytics model where required to deliver our best service to the Programmes (see below).

Data Acquisition

We have continued to work with NHS Digital to acquire historic HES data (5 years) that will be updated every quarter. The Oxford AHSN data application has been through several rounds of Data Access Advisory Group (DAAG) assessment. This application is now in its latter stages as we agree the storage and access rights of the data. We remain optimistic of receiving the HES data required to meet Programme and Network requirements going forward.

This lack of access to data has, however, proved costly for some networks, most notably the Respiratory Network, whom we have had to provide with a reduced dataset through alternate sources so that their Network Launch was not impacted; namely OUH Emergency Department and Outpatient data.

In addition to this HES data application the data sharing protocols have allowed the secure transfer of data from partner organisations which have benefitted the programmes. This has provided rich, pseudonymised, datasets from local reporting systems.

Once this HES data is at our disposal we will be in a position to start thoroughly interrogating it to provide meaningful insights and a self-service platform in conjunction with the Visualisation Platform (see below).

Meanwhile development of the Data Warehouse model has continued in preparation for the additional datasets from NHS Digital.

Visualisation Platform

OUH Informatics were not receptive to hosting the Oxford AHSN on their Tableau platform. We are deploying to an alternative solution that meets all of our requirements.

We are leveraging our current investment in the Microsoft Office 365 stack to include Power BI as our visualisation platform. We have already fleshed out the super-user training requirements. Once this training is complete we can then deploy to the wider Oxford AHSN and start delivering rich insightful dashboards and analytics and provide the self-service reporting requirement for the Programmes.

There is little risk involved in this as it can be rapidly integrated into our existing technologies and presents minimal cost and exposure. Should it not prove fit for purpose we can withdraw from the service at any point.

Chief Information Officers Forum

A well-attended meeting of the CIO forum took place in August and provided an opportunity to welcome two new members; Peter Knight and Seamus Shaw who have recently joined Oxford University Hospitals and Oxford Brookes University respectably. Informatics updates focused on the operationalisation of the IG Framework and the implementation of the Informatics strategy with a CSU representative providing the group with an update on Local Digital Roadmaps.

Local mobile working – two local CIOs reflected on the challenges and opportunities of mobile working using portable technologies across community nursing teams. Oxford Health and Buckinghamshire Healthcare highlighted that some of the benefits included; better patient engagement in addition to a reduction in costs, travel and administration time.

Lee Rucker, regional business relationship manager at the HSCIC outlined the current strategic direction of the HSCIC which will incorporate uptake of existing technologies and provided an update on internal reorganisation focused on improving accountability, increasing responsiveness, alignment to wider NHS initiatives.

Kerrie Woods and Jim Davis from Oxford's Genomic medicine centre outlined the project work happening locally focused on patients with rare diseases, recruitment of patients from Oxford University Hospitals and ambitions to expand to include trusts across the Oxford AHSN region.

Oversight Group

Following a successful meeting in quarter one and positive feedback from the group on progress to date the group signed off the final Informatics Strategy. Throughout the last quarter support and guidance has been leveraged from group members to inform two key informatics programmes; Visualisation and IG. Paul King and colleagues at Microsoft have provided service and product advice on the business intelligence packages the company have developed. Chris Bunch has provided insight into the best approach to managing and developing the IG Framework going forward.

Information Governance

Informatics continue to support programmes to complete data sharing protocols to allow safe data sharing within projects. Protocols completed and submitted during quarter one have been signed off and the data sharing permitted has resulted in delivery of datasets across programmes. An assessment of the sign off process has been undertaken to ascertain where delays are happening and how this could be improved.

Working with senior management team within the AHSN and taking advice from a Caldicott Guardian within a partner organisation, engagement with Caldicott Guardians and Heads of IG has commenced to propose a steering group to develop, oversee and monitor the AHSN wide IG Framework that all the region's Trusts have signed up to.

Best Care's Imaging and Maternity protocols completed during quarter for the safe sharing of Prostate MRI data and view only access to pregnancy scans via a secure N3 portal, respectively, have been signed off.

Informatics Strategy

Following helpful engagement with the CIO community and steering from the Informatics Oversight group a draft strategy was presented to the oversight group on the 29th June for review and subsequently signed off by the AHSN board on 29th July. The strategy will now guide Informatics initiatives and member organisations towards helping develop their strategies and reflect aligning themes that benefit from a larger scale and collaborative approach.

The Informatics strategy was formally signed off by the Oxford AHSN board this quarter following amendments to the final draft was which was presented to the Oversight Group, who recommended some minor amendments last quarter.

Digital Maturity Model

Informatics has collated a regional view of the digital maturity assessments that were carried out nationally, mapping the local Oxford AHSN region to highlight variation and make comparisons to the national average. These outputs have been discussed with CIOs locally and used to support discussions with the Wealth Creation programme related to the production of a digital strategy for the region.

At this CIO forum this quarter, the group reflected on the national digital maturity assessment process and were in agreement that collectively it would be beneficial to work together on a second maturity assessment to explore local capability in more detail.

UK CRIS

The programme is now in the critical stage user testing and trust on-boarding ahead of planned programme closure at the end of Q3.

Ahead of planned closure in Q3 the testing and deployment results in the sites going live and the availability of the federation component to collaborate with other partners in the CRIS family.

Regrettably Berkshire Healthcare have taken the decision that they are not currently able to participate in the programme and their slot is likely to be taken up by another Mental Health provider.

A soft launch event was held on 27th September, bringing together participating organisation that form the expanded CRIS family.

Local Digital Roadmap

The Informatics Team continues to work closely with the CCGs and CSU in guiding member organisations toward the development of a local digital roadmap that represents and reflects the emergence of priority themes of the STP. A number of events have been held to support this process which will continue on the 29th Sept where the three LDR's under the STP will be examined for further alignment opportunities. Since submitting the first version of the LDR's on 30th June, work has taken place to assess the financial investments requirements to underpin the delivery of the recommended digital programmes and this will be incorporated into a second version which will be submitted to NHS England.

STPs

The Informatics Team continues to work with Local transformation boards exploring opportunities for data Interoperability and to better understand the ambitions and emergent themes in order to assess potential digital solutions.

Video Conferencing

The Informatics Team, again leveraging our investment in the Microsoft Office 365 stack, has deployed Skype for Business to the Oxford AHSN giving the Programmes and Networks the enhanced ability to host

remote meetings on demand. This will reduce costs in travel, reduce time out of the office and increase attendance at meetings.

Programme and Theme Support

Best Care Clinical Networks

- Anxiety and Depression – assessment of the network 's data linkage needs. Informatics can work with the HSCIC to link IAPT data to HES datasets to understand patient interactions with healthcare across acute and mental health services.
- Children – scoping of requirements ahead of the network's third variation report in anticipation of receiving HES data.
- Dementia – Advisory support provided around the Video Conferencing tool that Dementia use to facilitate their webinars.
- Imaging – Following a lengthy delay, the LUCADA data was finally received from the Royal College of Physicians (RCP) via the Office for Data Release. Analysis was carried out on this data and provided to the network. The analysis included looking at number and percentage or patients who had PET CT, the wait in days for scans and treatments. Data on Histology and basis of diagnosis and death was also provided, organised by Trust and Year/Month.
- Maternity – co-ordination with IG teams to get the viewpoint protocol successfully signed off with Buckinghamshire healthcare.
- Medicines Optimisation – review of current data held by the network and support required from informatics, particularly recognising the possibilities with the requested HES dataset.
- Respiratory – Informatics have provided GP prescribing data, organised by respiratory drugs and CCGs with the ability to understand individual practice variation across a 2 year period.
  Continued delays in receiving HES data have now impacted the network's ability to acquire regional data to compile their variation report in preparation of network launch. As a contingency informatics were able to work with the OUH Informatics team to extract data required for the Oxford hospitals, to provide a view of outcomes in Oxford over time.

Clinical Innovation Adoption

- IOFM – Informatics worked with the IG team at OUH and partner hospitals to submit a protocol compiled to access national emergency laparotomy data. Following sign off, Informatics have continued to work closely with the project manager to explore the format of the audit data to ensure each hospital is supported to provide a uniform dataset, this included visiting an audit coordinator at Wexham Park hospital.
- Falls – Informatics worked with the IG team at OUH and then Buckinghamshire to submit the protocol documents compiled to access local incident reports for Buckinghamshire Healthcare. Following sign off on the protocol, communications with the Buckinghamshire Datix manager have confirmed that dataset required and the frequency of delivery.

Patient Public Involvement Engagement and Experience

Time has been taken this quarter to plan out the variation in patient experience report along with the HEXI fellows. This has included the analysis and data representation requirements and investigation of geographical levels available in the datasets to map the data so regional variation can be highlighted.

Patient Safety Collaborative

- Sepsis – an abstract submitted for a conference using the aggregate outcomes data provided as part of the sepsis work has been accepted for an oral presentation in October. Informatics have engaged with the sepsis clinical lead at the University College London Partners (UCLP), regarding

presenting our Risk of Sepsis methodology at their conference in September. Agreed to explore ways in which the methodology can be applied to their data

- AKI – Informatics have worked with the Informatics team at OUH to test linking pathology biomarkers and hospital outcomes data to identify AKI inpatients; highlighting patterns of deterioration linked to demographic and outcomes data. This work has been successful and will now be replicated across the region using a data sharing protocol to facilitate.
- Pressure ulcers – data sharing protocol has been reviewed and signed doff by Buckinghamshire healthcare to allow the sharing of incident reporting data focused on the Spinal unit at Stoke Mandeville Hospital.
- AWOL – received data from Berkshire Healthcare and Oxford Health documenting incident data at pseudonymised patient level on AWOL and missing events, following the signing of data sharing protocols across the organisations involved.

Wealth Creation

- We worked with the Wealth Creation team to understand data requirements on cardiac angiograms – investigations of coding schemes led to looking at The National Interim Clinical Imaging Procedure Code Set (NCIP) and Snowmed Codes. Engaging clinical lead for validation of required codes.
- Protocol Completion – informatics provided advice on data sharing between Oxford Health and OUH to support the assessment of a point of care testing project within Out of Hours Services.

Patient and Public Involvement, Engagement & Experience (PPIEE)

The Team

Our lay leaders

We are in the process of appointing a new lay partner to work with us as part of our team. This person will also liaise with the Best Care Programme and their newly appointed lay partner. Douglas Findlay, our existing lay partner, continues to co-chair our Operational Group, sit on our Oversight Group and liaise with the CIA Programme. He will also be part of appointment panels to posts of Grade 7 and above and we are exploring developing training for other lay partners so that they can also take on this role.

Training and development

The Leading Together Programme

Over 100 professionals and lay partners, across the South of England, have been through our programme. Participants are in the process of completing their joint projects. Teams of professionals and lay partners are undertaking local joint projects. These range from developing a local newsletter to mapping opportunities for lay involvement in revalidation.

We ran a very well attended pop-up university at NHS EXPO that generated interest in the Programme from across the country. We will be developing options for continuation of the Programme over the coming months, including ideas for a course for people with learning disabilities and professionals.

Our Celebrating Success Event in November will launch our Network for people who have been through the Programme.

We have appointed Twocan Associates to independently evaluate the Programme. They have started interviewing participants and others associated with the Programme and will produce a final report by January 2017.

Other training

We will be commencing one-day participation training in the New Year. This will be open to lay partners and professionals from research, education and service delivery backgrounds. It will focus on why involve and cover involvement methodologies and techniques.

We are also developing, with partner organisations, a series of lunchtime seminars for professionals covering aspects of PPI e.g payment and running meetings.

Public Engagement

We have successfully applied for a Wellcome grant to take forward our work focusing on seldom heard communities. The funding will be used to run a pop-up shop in Temple Cowley Shopping Centre early next year, This week long event will focus on aging and dementia and will be informed by community engagement events over the coming months.

The Living Well Project ran sessions in two children’s summer camps exploring what things mattered/were of interest to them.

Developing Networks and Communications

As a result of our survey to find out how people across the Thames Valley want to be kept informed we are

developing a joint bulletin across research, education and service delivery highlighting the involvement opportunities that exist.

Developing metrics

We continue to develop our ideas for how routine data could be used to reflect person-centred care. We have refined a set of indicators and are populating with local data to allow us to reflect with partner organisations on robustness and potential utility.

Patient Safety

Progress in Quarter Two

In Quarter 2, the main issue affecting the Oxford PSC has been the ongoing delay from NHSI in our funding agreement for the coming year. We finally received confirmation of our funding in late August. The delay created significant concerns about maintaining the current programme of our patient safety initiatives. NHSI will issue a contract with the PSCs from April 2017. The move to reporting to NHSI has also seen further discussion about the metrics used to assess the impact of the PSCs. A further trial metrics report will commence during Q2 and will be finalised and implemented during Q3. The Patient Safety Leads Group has been working on the feasibility of spread and adoption of practice innovations and improvements at a national level. Each PSC has presented their projects for assessment of readiness for adoption and a final decision will be made in Q3. A system of peer review amongst the PSCs is to be developed and the areas for learning to be agreed.

The PCS participated at the Patient Safety Congress stand on 5-6th July to demonstrate the work of the PSCs and feedback from visitors was very good.

At a local level, Cindy Whitbread has left the PSC. Interviews for a new Patient Safety Manager take place on 30th September.

Clinical Programmes

Safety in Mental Health: Absence without leave project

Clinical Lead: Dr. Jill Bailey, Head of Patient Safety

The project continues to sustain at Oxford Health. At Berkshire Healthcare, Consultant Nurse, Caroline Attard, reported data showing that Bluebell Ward had achieved its aim and they are now working on adoption. Central and North West London have launched the project at Milton Keynes and Ebery Ward in central London but unfortunately, they have struggled to collect consistent baseline data. The data collection has been re-commenced, but importantly learning is taking place about the delivery of QI projects

The project was submitted to BMJ Quality and received favourable reviews. A response to the reviewers' comments has been made and we are optimistic of final acceptance.

Acute Kidney Injury (AKI)
Clinical Lead: Emma Vaux; Patient Safety Manager: Katie Lean

There are 3 workstreams within the AKI programme. The workstreams are divided into prevention, recognition and management to allow for focused project work. The prevention work stream commenced a hydration project on the 1st July 2016 in 3 residential care homes and one nursing home in Windsor, Ascot and Maidenhead. The aim of the project is to reduce the rate of admissions to hospital for urinary tract infections by 5% compared to the same months in previous year's data. Hydration training was delivered to 40 nurses and carers in June 2016 and further training is planned for October. The first test of change is introducing a structured drinks round where care homes offer a variety of drinks at set times ensuring a

minimum of 7 drinks rounds are undertaken each day. Outcome data is being collected via safety crosses and HES data will also be reviewed.

The recognition workstream is being led by our partners at the Great Western Hospital, Swindon and aims to reduce the incidence of mortality by 3% from AKI by ensuring the implementation of the AKI care bundle within 24 hours of alert. A team has now been appointed locally to lead on sepsis and AKI.

The management group has designed and implemented an electronic care bundle at Oxford University Hospitals which is linked to the AKI alert on creatinine testing. This was released on 18th April 2016. The aim is to identify if the introduction of an electronic AKI care bundle reduces the progression of the disease during the inpatient stay. Baseline data of 14,000 alerts and outcomes is being analysed and a small audit of the usage of the bundle being completed. A separate part of the project is looking at introducing an electronic medications review tool which will be linked to the AKI alert. It is being tested over the summer and hoped that this will be released in the autumn.

Data sharing agreements are being developed to review the burden of AKI throughout the region to look at biochemical markers and HES data.

Oxfordshire’s primary care AKI bundle which was developed within the group has been ratified by OCCG. The primary care AKI alerts are due to be switched on mid November 2016. The 4 care bundles developed will be released for all GPs to use as guidance for this clinical condition. Training has been arranged for GPs and trainees throughout Oxfordshire which will take place in October/November. Work is underway to develop an electronic template which GPs could complete with ease in regards to AKI.

Scoping work is being undertaken throughout the region to identify how many primary care settings have the alerts switched on and if they are using a care bundle to aid GPs in decision-making.

Sepsis
Clinical Lead: Andrew Brent; Patient Safety Manager: Katie Lean

There have been 3 stakeholder meetings with around 30 attendees from the community and acute settings. The group has been focused around many changes within sepsis guidance nationally and internationally. The release of the international definition of sepsis in February 2016, changes in the national CQUIN March 2016 and the release of the NICE guidance on the 13th July 2016. The group has divided into 2 work streams to allow for focussed project work; sepsis leads and nurses in secondary care and community care.

Following the release of the NICE guidance the sepsis leads and nurses group has been developing an agreed regional sepsis pathway. Agreement has also been sought for the sharing of CQUIN data between most secondary care hospitals in the region. The community care work stream has highlighted the need to develop improvement work specifically within the out of hours/urgent care service, community hospitals, South Central Ambulance Service (SCAS) and district nursing areas.

Data is being captured for the region with the aim of identifying a more robust picture of the burden of sepsis, and to measure patient outcomes from our improvements in managing septic patients.

A regional sepsis working together event took place on the 19th September 2016. There was representation of around 100 attendees from SCAS, regional community and secondary care providers. The focus was around what the national priorities of sepsis are at present as well as looking at current research and local quality improvement initiatives. Sessions included hearing about sepsis from the patient perspective and how it affects families and individuals. The evaluation of the event was extremely positive and has given food for thought for further regional work. Read more here:

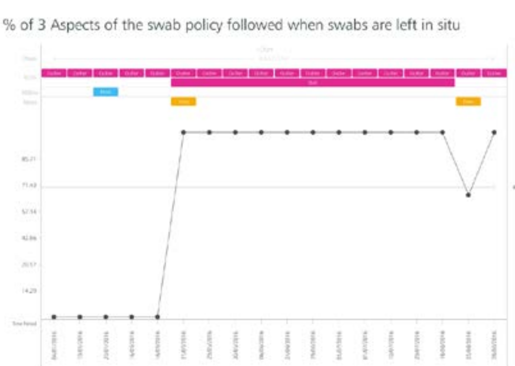
http://bit.ly/2dExSRX

Maternity
Clinical Lead: Jane Hervè; Patient Safety Manager: Katie Lean

This quality improvement project aims to reduce the never events of swab retention to zero by November 2018 within the Maternity Department at Oxford University Hospitals. The first test of change of improving handover from delivery suite to theatres was implemented on the 1st February 2016. Data has been reviewed on a regular basis and improvement noted. Posters, topic of the month boards and newsletters are some of the ways that information is shared. This is particularly important with the frequent rotation of staff to delivery suite. There has been marked improvement in one specific area which is ensuring that if a swab is in situ on transfer to theatre that 3 aspects of the policy are followed:

1) It is verbally handed over to the theatre staff
2) It is signed for by both the theatre and midwifery staff
3) Any other swabs/red strings opened in the birthing room are transferred in the paper bag within the delivery pack.

Since the 16th May there have been 13 incidents of women transferred to theatre with a known swab in situ and 92% of these cases followed the guideline 100% which is a dramatic improvement from the baseline data of 0%. This is evidence that at present a reliable process is in place.



Baseline data is being collected at present for the 2nd test of change “Standardising the process of handover of swabs/packs in situ from Theatre to OA/DS”.

Pressure Ulcers

Clinical Leads: Ria Betteridge, Sarah Gardner. Patient Safety Manager: Geri Briggs

The pressure ulcer programme aims to reduce acquired pressure damage across the boundaries of community and acute care throughout the region. The programme continues to develop and evolve. The initial objective of improving the reliability of pressure ulcer baseline assessments is on-going, with tests of change being implemented at multiple sites. Knowledge and experiences associated with harm reduction strategies are being shared which is influencing clinical practice. National, regional and local data is being reviewed alongside the outcomes of quality improvement projects.

Paediatric Gastrostomy

Clinical Lead: Dr Alex Lee, Patient Safety Manager: Geri Briggs

Set up of the paediatric gastrostomy project has continued during Q2 with outline mapping of the patient pathway and initial identification of key patient safety issues. A multi-professional Steering Group is being convened with representation from both acute and community sectors, and multiple partner Trusts across the region; the first meeting will be held on 20/10/16.

Developing Capability and Capacity

Improving serious incident investigation processes in mental health integrated trusts across the Oxford AHSN. Lead: Dr Jane Carthey, Clinical Human Factors expert and Dr Jill Bailey, Head of Patient Safety

Dr Carthey has completed her assessment of 60 (20 per Trust) serious incident investigations across our three integrated partner Trusts (Berkshire Healthcare, Central and North West London and Oxford Health). The report to each trust details the areas where we can support teams to improve their investigations and action plans through enhanced understanding of human factors. The report also highlights the areas of good practice where a systematic investigation has been undertaken and includes the influence of systems factors in the overall synthesis of the incident. Common areas for learning across trusts will help to inform a training day on 18th October for the three trusts to reflect upon the findings, share learning and develop their understanding of clinical human factors.

LIFE Platform Steering Group. Lead: Dr Jill Bailey, Head of Patient Safety

The number of users accessing and developing their skills in the use of the LIFE system continues to grow in line with our clinical programme development. The Best Care Programme is also able to access the platform for quality improvement projects across the region. The feedback from users is supporting the development of the platform over time. The recently formed steering group is working on the upcoming contract renewal and customer service areas with Seedata.

Developing our approach to implementing quality improvement projects. Leads: Charles Vincent, Clinical Lead & Jill Bailey, Head of Patient Safety

Quality improvement coaching continues with our partners in the safety in mental health, pressure ulcers, AKI and maternity programmes. The PSC coaches provide coaching on a regular basis to support the successful implementation of QI methodology.

We are awaiting the outcome of our application to HEETV for a small grant to develop our understanding of the most effective framework to support the development of capability and to describe the necessary capacity for organisational improvement.

The South of England Mental Health Quality and Safety Collaborative. Lead: Jill Bailey, Head of Patient Safety

The AHSN PSC continues to support the development of capability in our region with our partners through the South of England Mental Health Quality and Safety by direct funding. The collaborative is based upon the IHI Breakthrough series model. Each of our Mental Health integrated trusts is supported to facilitate 10 people to join the three two-day learning sets each year. The South of England Mental Health Collaborative has now also joined the National group MHImprove which was established to link all mental health quality improvement collaboratives / programs globally.

The re-stated purpose of the Collaborative defines the aim is to ***make care safer by improving quality in mental healthcare****.* The collaborative aims to achieve this by:

- Supporting organisations to develop a safety culture and to become a system for learning
- Build the quality improvement capability in members, supporting them from being learners of quality improvement to becoming leaders of quality improvement
- Develop the capacity and capability for co-production in quality improvement work of participating organisations
- Use the IHI Break through Series Methodology learning system
- Reduce variation in clinical practices and aim for 95% reliability in care processes
- Create a network that uses measurement only for improvement and learning, and uses the model for improvement to develop test and spread new or existing, alongside local and national innovation.

Programme co-ordinator, Heather Pritchard, has now made a series of visits to our partners to assess progress and to identify areas in which the collaborative can develop. An evidence scan of progress across the region is underway in collaboration with Programme Managers, as well as the development of a website to support the activity of the collaborative. Learning set 11 (LS11) runs in November and it is envisaged that each of our integrated trust partners will support staff to attend. The collaborative is now also promoting the LIFE platform to encourage consistent use across our region, but also to promote sharing and learning.

Q Initiative, Health Foundation. Lead: Jill Bailey, Head of Patient Safety

The Health Foundation is piloting the Q initiative and has received 200 applications to participate. Work continues with the Health Foundation to agree which part of phase three the Oxford PSC will join. The joint decision of the Oxford PSC leads is to observe the progress of the initiative over the first two cohorts to develop the narrative regarding the product to share with our partners. Once greater clarity is gained about the benefit of participation for our partners, we will commit to a wave of recruitment from across our region.

The report to the Health Foundation on our asset mapping project has now been submitted and the information from potential interested Q participants shared with the Health foundation (with consent). Our

asset mapping exercise has now been extended to follow up on information about local courses in quality improvement.

Sign up to safety. Beneath the Surface – the implementation gap. Lead: Jill Bailey, Head of Patient Safety

Following participation in the first SU2S Beneath the Surface event in London, the Oxford PSC, is collaborating with the SU2S campaign again to work with experienced improvement staff to understand in detail the implementation gap. The work was initiated between the Head of Patient Safety, Su2S, and the Q initiative. following a conversation about the experience of improvers, and the need to develop greater understanding of the phenomenon. The PSC will host an event in October to work to develop this critical understanding.

Measurement for Improvement: Lead: Jill Bailey, Head of Patient Safety

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

Informatics. Leads: Charles Vincent, Clinical Lead & Jill Bailey, Head of Patient Safety

The Patient Safety in Mental health programme has now received the information necessary for the projects in the programme. The data sharing agreements have been developed between the informatics team, the PSC and then with the partners before signatures are achieved.

Stakeholder Engagement and Communications

A key event was the meeting of the AHSN Partnership Board on 22 September – the second of the year. Items covered included the update report on the Best Care programme, (including the newly published Best Care Impact Report - see above), the Informatics Strategy and an update on the local and national AHSN surveys.

An important event over the summer was the independent stakeholder survey on the effectiveness and impact of the Oxford AHSN carried out by ComRes. 563 stakeholders took part in the quantitative phase in May-June, 20 of which participated in the detailed follow-up interviews (qualitative phase). We are delighted with the response rate of 26%, and we now have some really robust data to base our future priorities and activities.

We are encouraged by the results. In particular it was great to see an increasing awareness and appreciation of Oxford AHSN and its work to spread innovation, improve patient outcomes and support economic growth with partners across the NHS, universities and industry.

You can read the full report here: http://bit.ly/OxfordAHSNsurvey

Key findings include:

- 80% agreed that the network is building a culture of collaboration and partnership
- 64% said the Oxford AHSN added value to their work
- 73% who knew at least a little about Oxford AHSN felt its team members were effective in working with them.

The report states: “Value is seen to be added primarily through the collaborative focus of the AHSN, creating connections stakeholders report would not have occurred without the AHSN.

“The Oxford AHSN … is critical to developing a more innovative, safe and cost-effective health system in the region.

“Stakeholders have seen the AHSN’s impact in their own work creating positive outcomes in their region, citing numerous examples.

“The Network’s reputation as an innovator comes through, with more than a third of stakeholders using words like innovation, innovative, entrepreneurial, forward-thinking and visionary to describe Oxford AHSN.”

Comments from people taking part in the survey included:

- *“There’s a greater sense of networking collaboratively across the AHSN area than would’ve existed before.”*
- *“They’re listening, they’re identifying challenges and they’re trying to help us solve the problems associated with those challenges.”*
- *“Without the likes of the AHSN small companies would really, really struggle to get any traction with the NHS.”*
- *“If they weren’t there, I think we’d find it really difficult to do that all by ourselves.”*
- *“What we’ve got there is a team that has got a huge wealth of information, great number of contacts, (and a) great understanding of comparative data between organisations.”*

We recognise there is still work to do in developing relationships with our partners, and we look forward to working with them to identify more opportunities where clinical innovation can improve outcomes and add value to the NHS.

In addition, the AHSN took part in the second annual YouGov survey of all the AHSNs for NHS England. There were 93 responses in relation to the Oxford AHSN, the response rate affected by the survey running through the summer season, some issues with links and a potential 'survey fatigue' from partners who had recently completed the Oxford AHSN ComRes survey. A report is expected in Q3.

The AHSN sponsored the CAIPE Conference at the Oxford Examination Schools from 6th – 9th September called All Together Better Health – the bi-annual conference brought together healthcare professionals from across the world and focused on the importance of joint professional training across all areas. The main organiser in UK was Oxford Brookes joined with the University of Oxford. The AHSN took the opportunity to invite Health Education England Thames Valley to join the stand – this proved very successful and a number of good contacts were made. In particular, the value of the Leading Together Programme (see below) was recognised.

This year's NHS EXPO on 7th and 8th September in Manchester was widely regarded as the best yet for AHSNs, both in numbers at the stand and attendance at AHSN-led events. A good number of Oxford AHSN stakeholders attended and many thanks to all who contributed.

Dr Paul Durrands, Oxford AHSN Chief Operating Officer, presented the independent health economics assessment undertaken by OHE/Rand on four Oxford AHSN projects (www.bit.ly/OHEOxford) during the collective AHSN discussion on innovation and growth. This meeting was joined by Nicola Blackwood MP (Oxford West and Abingdon) who is the new minister for public health and innovation. She expressed particular interest in mental health. Paul Durrands mentioned the SHaRON and Anxiety recovery Oxford AHSN-supported projects to the minister and we took the opportunity to highlight our new report summarising our mental health activities (www.bit.ly/MentalHealthOx) and invite the minister to visit the AHSN to hear about progress since her last visit.

The workshops led by the Medicines Optimisation Clinical Network and PPIEE Theme were well attended with some strong feedback. For example, Jo Johnson from NHS England's Self-Care support programme said of the Leading Together programme: "The session was fabulous and I really enjoyed and love the work that you are doing. I would really appreciate meeting you to hear more about this fabulous work." The Medicines Optimisations Clinical Network is also taking part with AHSN colleagues from across England in the Pharmacy Show at the end of September and Patient First in November.

The AHSN Atlas of Solutions in Healthcare (http://atlas.ahsnnetwork.com/) was launched at a reception attended by well over 100 people. It includes the Dementia Clinical Network's memory clinics best practice case study.

Improving patient and workforce health remains an important part of the AHSN's activities through Get Physical. Three events in Berkshire, Buckinghamshire and Oxfordshire are planned for November working in partnership with Janssen/J&J, Vodafone UK and BMW/Unipart. Further information: www.getphysical.org

The AHSN has been involved in a day meeting at Harwell involving the UK Astronaut Tim Peake and a tour of the facilities at Harwell including the Diamond Light. George Freeman MP and Professor Sir John Bell were also speakers. Sir John was interviewed on the Today programme in advance of the meeting on 21 September.

A shortlist for the OBN AHSN Award for the 2016 Best Public-Private Collaboration was drawn up and the winner will be announced, following adjudication by an expert independent panel, at the Annual OBN Dinner on 6th October at Oxford Town Hall. Previous winners include Isansys Lifecare and Cranfield University with Bedford Hospital. The shortlist is:

- Abbott Point of Care
- McLaren Applied Technologies
- Structural Genomics Consortium

Plans are already underway for BioTrinity 2017 in May 2017 with the AHSN working jointly with the Oxford Academic Health Science Centre. There will be opportunities for posters so please do start thinking about that. Updates will be posted on the website and in forthcoming newsletters.

The AHSN has been actively involved in the development of The Hill, Oxford's digital healthcare ideas lab, supported by Oxford University Hospitals, Digital Health Oxford, Better Value Healthcare and the Oxford AHSN. It held its launch event on 22 June and this was followed by further events in July, August and two in September. People with ideas were invited to come along to pitch ideas, form teams, develop solutions, find support and hear from successful digital health experts and entrepreneurs. More than 400 did so.

The Oxford Patient Safety Collaborative hosted an event on the new sepsis guidelines from NICE 'Sepsis and the Patient Pathway'; speakers included Sue Morrish, mother and sepsis campaigner, Celia Ingham Clark from NHS England, and Professor Charles Vincent, Oxford AHSN's Lead for Patient Safety. The new Respiratory Clinical Network is holding its Launch on 6 October at Green Park Conference Centre in Reading from 1300. A lead speaker is Dr Mike Morgan, NHS England's Respiratory Clinical Lead.

Further information on all past and future events can be found at http://www.oxfordahsn.org/news-and-events/events/

Communication

This quarter has had a focus on producing key documents and updating websites for the programmes and themes. A new website for Wealth Creation was launched in the quarter and two key publications: A Summary of the Mental Health Activities across the AHSN and the Best Care Clinical Networks Reports were published in September. See earlier in this report for links to these.

The AHSN's newsletter is an important mechanism to reach a wide audience and we strive to ensure that each monthly edition contains a comprehensive summary of latest developments involving the AHSN and its partners activities. The number of subscribers plateaued at just under 2,000 during this quarter while we worked out how to progress beyond the free platform. This has now been resolved and we expect the number of subscribers to start increasing again.

Twitter continues to be an effective means of communicating and the number of accounts now held across the AHSN and its activities means that we reach a wide audience. The AHSN account now has 2,310 followers (up from 2,046 at the end of Q1) In addition, the eight clinical networks and patient safety now have collectively over 1,100 followers.

Review against the Business Plan milestones

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
Establishment of the Oxford AHSN	Partnership Council Meetings/roadshows		✓	✓	✓				◆
	Delivery of the Annual Report and Annual Review	✓	✓	✓	✓ ✓				◆
	Oxford AHSN 5 Year Strategy			✓					
Best Care	Open publication of Annual Report for each Clinical Network (1st report due April 2015)			✓			◆		◆
	Annual review of network progress and plans			✓			◆		◆
	Review of network progress and plans. Decisions on future funding for networks			✓					◆
	Publication of 'Best Care Review'			✓		✓			◆

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
(Anxiety and Depression)	**Reduce variation in IAPT outcomes – Implementation plan agreed** **- Further increase in recovery rates**			✓					◆
(Anxiety and Depression)	**Support/expand local service innovation – Report on adoption progress** **-Roll out of additional service innovation**			✓				◆	
(Anxiety and Depression)	**Local service innovation – Reduced secondary care utilisation report - Economic benefit of integrated care analysis**						◆		
(Anxiety and Depression)	**Data Completeness in Child and Young Persons IAPT – Implementation plan agreed** **-25% increase in the use of ROMS in target groups**			✓				◆	

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
(Children)	**Reduce admissions and length of stay for childhood pneumonia, asthma, bronchiolitis and meningitis in outlying CCGs**			✓				◆	
(Children)	**Improve research facilitation - Enrol children into a research study at Milton Keynes Hospital, Wexham Park & Stoke Mandeville (6,5,5)**			✓				◆	
(Children)	**Improve ‘flu vaccination rates in region**		✓	✓				◆	
(Children)	**Standardise antibiotic prescribing guidelines across network and audit adherence**							◆	

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
(Dementia)	**MSNAP accreditation - 8 of 13 Trust localities across the network working through the Self-Review Phase of the Royal College of Psychiatry Memory Services National Accreditation Programme.**			✓					
	- All Trusts to record BME data for 90% patents accessing memory clinics						◆		
	- 85% of memory clinics to be reaccredited under new MSNAP standards								◆

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
(Dementia)	**Unwarranted variation** **- Hold at least 5 webinars across region, aimed at reducing variation in dementia** **- webinar participation increased** **- variation reduced in three areas of unwarranted variation** **- Establish LTC PROMS for dementia patients and carers**				✓			◆ ◆	◆
(Dementia)	**Young Onset Dementia (YOD)– Secure commissioner funding for rollout of service throughout at least 1 county in region** **-Evaluate roll-out of workshops to East Berkshire. Report on outcomes and achievements**			✓			◆		
(Dementia)	**Addressing variation in service delivery for YOD- YOD service in at least one more CCG area than at baseline**							◆	

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
(Dementia)	**Post-diagnostic support – all post-diagnostic services participating in best practice network**				✓				
(Early Intervention in Psychosis)	**Reduce Variation** **- Action plans for improving care quality in each Mental Health Trust** **- Implementation of service improvement plan across all Trusts/agreement from all EIP service leads**			✓				◆	
(Early Intervention in Psychosis)	**Service Innovation** **- All four EIP services in the Oxford AHSN geography supported to adopt at least one new service innovation** **- Report on implementation of adoption plans** **- Improved patient experience of people accessing EIP service by 5%**					✓	→ ◆ ◆		

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
(Imaging)	Standardise prostate cancer diagnosis pathway and demonstrate improved referral to treatment times and reduced biopsies			✓				◆	
(Imaging)	Network-wide data sharing platform installed (1) and in use for specialist opinions (2)			→	→	✓ (1) →	(2)		
(Imaging)	Common pathway for PET-CT in lung cancer established (1) and demonstrating improved outcomes (2)				→	→	◆	◆	◆
(Imaging)	Publish and publicise 5 patient videos (1) and a further 5 patient videos (2) describing typical patient experiences				→	→	◆		◆

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
(Maternity)	**Care & Consistency - Improvement in outcomes/ reduction in variation across network by >5%:** **1) Rhesus: assessment of anaemia once antibody titre > accepted threshold** ***2)* Growth restricted babies: delivery in unit with Level 3 neonatal care** **3) No variation in magnesium sulphate regime for eclampsia across the region** **4) Increase in use of magnesium sulphate for neuroprotection**				✓				

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
(Maternity)	**Care & Consistency - Improvement in outcomes/ reduction in variation across network in:** **Syntocinon use, cardiotocograph interpretation, and use of placental histology.**						◆		
(Maternity)	**Information sharing – all trusts contributing to regional database**			✓			◆		
(Maternity)	**Launch Small for Gestational Age identification pilot (1) and publish initial findings (2)**				✓				◆
(Medicines Optimisation)	**Medicines reconciliation database used across network (1) and demonstrating improvements (2)**				✓			◆	
(Medicines Optimisation)	**Roll out CBT training to pharmacists (1) and report improved adherence (2)**			✓			→ ◆	◆	

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
(Medicines Optimisation)	Transfer of Care – interim (1) and full-term(2) report demonstrating improved outcomes			✓		→	◆	◆	
(Medicines Optimisation)	Implement (1) and show impact of (2) Medicines Authentication System					✓		◆	
(Respiratory)	Build network engagement and launch						◆		
(Respiratory)	Audit current ED asthma protocols (1), revise protocols and show impact of revisions (2)							◆	◆
(Respiratory)	Audit existing clinical trial participation in network (1) and show improvement (2)						◆		◆
Clinical Innovation Adoption	Collection of data regarding adherence to all relevant NICE TAs and High Impact Innovations		✓	✓	✓				◆

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Establishment of a Clinical Innovation Adoption Oversight Group and Programme	✓							
	Establish process and governance under CIA Programme Board for the 2013/14 and 2014/15 implementation of 5-10 high impact innovations **CIA Oversight Group established and meeting**	✓	✓						
	Establish full process for Clinical Innovation Adoption (CIA) Programme and its Oversight Group (Providers, Commissioners) to include PPIEE		✓						
	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.	✓	✓	✓	✓				◆

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Identification of potential funding sources for innovation initiatives (cf RIF, SBRI Grand Challenges etc.) SBRI and Horizon 2020 briefing meetings held (see also Wealth Creation)		✓						
	Creation of an innovation dashboard (including uptake)			✓					
	Creation and Implementation of an Innovation Adoption course for NHS partners (based on CIA 10 Step Process)			✓					
	Creation and Implementation of an automated online platform that will enable the organisation to create, manage, track and measure the innovation process from idea creation through to final implementation and impact reporting			→	→	→	◆		
	Work with Wealth Creation to create a plan to grow local focused innovations for adoption				✓				

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Intra Operative Fluid Management Project Estimated Completion (commenced 2014/15)			✓ Phase 1				◆ Phase 2	
	Catheter Acquired Urinary Tract Infection Project Estimated Completion (commenced 2014/15)						◆ Phase 1&2	◆ Phase 3	
	Intermittent Pneumatic Compression Devices for Stroke Project Estimated Completion (commenced 2014/15)			✓					
	Atrial Fibrillation (NICE) & Ambulatory ECG Project Estimated Completion (commenced 2014/15)							◆ ◆	
	SHaRON (Eating Disorders Social Network) Project Completion (commenced 2014/15)			✓ Phase 1		✓			

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
Deploying to 4 trusts only - will complete year 4, Q2	**Gestational Diabetes m-Health Project Estimated Completion (commenced 2014/15)**					✓			
	Dementia NICE Project Estimated Completion (commenced 2014/15)			✓ **Phase 1**				◆	
	Early Inflammatory Arthritis NICE Project Estimated Completion (commenced 2014/15)			✓ **Phase 1&2**				◆	
	Biosimilars						◆		
	Home IV Project Estimated Completion (commencing 2015/16)								◆
	Alcohol Services Project Estimated Completion (commencing 2015/16)							◆	
	NIC Nalmafene Project				✓				

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Fragility Fracture Prevention Service Estimated Completion (commencing 2015/16)							◆	
	Falls Prevention Strategy Project Estimated Completion (commencing 2015/16)							◆	
	Respiratory- Estimated Completion (commencing 2016/17)								◆
	Wealth Creation Project to be agreed - Estimated Completion (commencing 2016/17)								◆
	Wealth Creation Project to be agreed - Estimated Completion (commencing 2015/16)								◆
	National AHSN Innovation Project to be agreed- Estimated Completion (Commencing 2016/17)								◆

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	National AHSN Innovation Project to be agreed- Estimated Completion (Commencing 2016/17)								◆
Research & Development	Publication of Annual Report (or section within AHSN Annual Report) on agreed research metrics							◆	
	Establishment of baseline from NHS partners for commercial research activity							◆	
	Establish network of R&D Directors in NHS providers, agree strategy for commercial research development							◆	
	Support commercial research plans for each NHS providers							◆	
	Develop a nursing and AHP research strategy							◆	

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
Wealth Creation	**Establish pipeline of innovations for commercialisation** • **ensure industry and academics can access the NHS clinicians they need to work on concepts and pilots of new products and services** • **work with tech transfer offices and other partners to ensure commercialisation is more efficient and effective**			✓	✓				◆
Wealth Creation **Objective 1 Supporting companies along the adoption pathway**	**Establish a regional evaluation and adoption programme in diagnostics**				✓				
	Establish a regional evaluation adoption programme in digital health						◆		
	Provide on-going support for existing pilot projects across the region				✓	✓	◆	◆	

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Work with the Oxford Biomedical Research Centres, the CLAHRC and Isis Innovation, to develop clear pathways for the adoption of innovations into the NHS				✓	✓	◆	◆	
	Lead the assessment of ROI and health economic outputs across the AHSN				✓				
Wealth Creation Objective 2 Supporting investment into the region	Support industry group to improve infrastructure across Oxfordshire			✓		✓			◆
	Support plans with key partners for a science park at Milton Keynes			✓	CLOSED				
	Provide support to the partners in establishing Oxford as Centre of Excellence under the Precision Medicine Catapult				✓	✓	◆	◆	

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Work with the Structural Genomics Consortium to develop open innovation models of drug discovery							◆	
	Provide input into the development of a Gestational Diabetes Health Management (GDHM) business opportunity						◆		
	Host the Bicester New Towns working group and work with the partners to further refine the opportunity				✓		◆		
	Engage with the Smart Oxford project and provide support in healthcare				✓			◆	
	Continue to support the development of the Oxford – Thames Valley cluster as a leading national and international region				✓		◆		

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Work with the Academic Health Science Centre, in particular on the theme of building novel partnerships				✓	✓	◆	◆	
	Run a joint showcase event with Isis Innovation and the Biomedical Research Centre					✓			
	Run at least two other wealth creation events across the region						◆	◆	
Wealth Creation Objective 3 Building a culture of innovation in the NHS	Run two entrepreneurs programme events for healthcare workers			✓	✓		◆		
	Deliver the Challenge 2023 Competition across the Oxford AHSN region with Health Education England Thames Valley and the Thames Valley and Wessex Leadership Academy					→	◆	◆	

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Establish a mechanism of IP and legal support for those Trusts across the region that require it						◆		
Wealth Creation Objective 4 Building long-term partnerships with businesses and other organisations	Provide support in the establishment of Oxford E-health lab in partnership with Isis Innovation						◆		
	Provide support in the running and marketing of digital health events across the region	✓	✓	✓	✓	✓			◆
	Sign strategic partnership with Johnson & Johnson. Continue to support and build on the Strategic Collaboration			✓		✓			
	Support the development of the IBD PROMS collaboration with ICHOM						◆		
	Continue to support the Sustainability and Energy Working Group				✓	✓	◆	◆	

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Identify a further project within sustainability and energy				✓				
Informatics Informatics Strategy	Final draft for approval by AHSN Board			→	✓				
Informatics 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 Research Informatics Focused on the deployment of Clinical Records Interaction Search (CRIS).	Partner engagement			✓					

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Federation – enabling federated queries to be run against local CRIS databases (Oxford)						◆		
	Berkshire Healthcare Install extract utility and validate data dictionary					CLOSED			
	Berkshire Healthcare User acceptance testing and tech go live.					CLOSED			
	Berkshire Healthcare – CRIS deployment					CLOSED			
Informatics **Information Governance** **Mobilisation of IG Working Group (Caldicott Guardians and Heads of IG) in order to produce, sign off and implement an IG Framework for the AHSN region.**	Developing local capability through training Heads of IG and establishing peer group network						◆		
	Engaging CCGs to extend coverage to GPs						◆		

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Patient Engagement with PPIEE to develop a consent for contact approach							◆	
Demonstrate IG framework is working	Enable two region wide projects – Imaging and Maternity				→	✓			
Informatics Personal Health Records_Platform development	Develop case for change as basis for consultation, now as part of the interoperability work			✓					
Informatics Developing analytics	Demonstrate to users how they will be able to interact with the new platform and access reports.				→	→	◆		
	Run training sessions for users to access and refresh reports from the new data platform					→	◆		
	Training super users in the ability to create new reports.						◆		
PPIEE	PPI/PPE reported on in each network annual report and reviewed by patient/public panel				✓				

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Framework for supporting organisational and system–based patient centred care developed and implemented across all partner organisations								◆
	Broadening public and patient involvement 1st mtg of lay partners from across Thames Valley				→	→	→	→ ◆	
	Strategic direction Strategy and work plans presented at Oxford AHSN Partnership Board (Jan 2015)		✓						
	Communications and broadening PPIEE activity across the Oxford AHSN region Involvement newsletter up and running, including publicising PPIEE events and case studies				✓				

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	PPIEE Network development **Visits to partner organisations completed and case studies of good practice publicised, and at least two events held to address concerns/issues highlighted by partners**				✓	→	→	◆	◆
	Patient stories evaluation completed and case study written							◆	
	Leading Together – full roll out				→	→	◆		
	Informatics **Agreed set of measures and data collection developed**				✓				
	Three case studies across networks and CIA written up and disseminated								◆

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
	Development of lay involvement in strategic priority setting for networks and CIA, built into process for AHSN strategic work going forwards			✓	✓	✓	◆	◆	◆
Living well Oxford	**Public involvement** **Pilot events run and additional funding secured**							◆	
	Research **Joint statement on PPI in research with links into work plans for individual organisations. Research included in Patient Leadership Programme**				✓				
	Continued education **Links with PPI in Universities to be developed over the year**		✓	✓	✓	✓	◆	◆	◆

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
Patient Safety	**Patient Safety Collaborative** **Establish data sources and analytic requirements**					✓			
	Patient Safety Collaborative **Establish baseline metrics**					✓			
	Patient Safety Collaborative **Consolidate and review requirements**					✓			
	Patient Safety Collaborative **Produce report on safety in Oxford AHSN region**						◆		
	Patient Safety Collaborative Clinical programmes **Consolidate and review interventions**				✓				
	Patient Safety Collaborative Clinical programmes **Initial review and evaluations**				✓				

Programme/Theme	Milestone	Year 1	Year 2	Year 3	Year 4 Q1	Year 4 Q2	Year 4 Q3	Year 4 Q4	Year 5
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		✓	✓	✓	✓	◆	◆	◆
	Communications (strategy and) plan linked to overall AHSN 5 year strategy				✓				

Finance

NHS England funding shows a 20% reduction against plan, and The Oxford AHSN Partnership Board agreed contributions to remain as 15/16 outturn.

We now have confirmed funding by NHS Improvement for the Patient Safety Collaborative reduced by 30% and our Forecast reflects this below.

At this stage, our funding from Health Education England is yet to be confirmed however our forecast can reflect any further changes without any risk to the Oxford AHSN

Our reforecast as at Quarter 2 reflecting confirmed funding streams is as follows:

OXFORD AHSN FINANCE PLAN

Model Period Beginning	01-Apr-15	01-Apr-16	01-Apr-16
Model Period Ending	31-Mar-16	31-Mar-17	31-Mar-17
Financial Year Ending	**2016**	**2017**	**2017**
Year of the 5 Year Licence Agreement	**3**	**4**	**4**
INCOME (REVENUE)	Outturn	Budget	Fcast
NHS England funding	2,716,843	2,625,843	2,419,650
Partner contributions	444,957	539,809	444,957
Other partner income	0	150,000	150,000
HEETV income for continuous learning	504,365	200,000	130,000
Other income	438,000	0	27,703
NHS England funding - PSC income	648,032	616,032	447,925
Total income	**4,752,197**	**4,131,684**	**3,620,235**
AHSN FUNDING OF ACTIVITIES			
Best Care Programme	118,664	1,189,809	1,071,058
EIP Preparedness	250,000		2,024
Clinical Innovation Adoption Programme	555,294	532,038	529,497
Research and Development Programme		70,000	20,000
Wealth Creation Programme	753,195	621,427	521,236
Informatics Theme	459,648	376,462	412,137
PPIEE Theme	54,064	111,185	110,900
Patient Safety Theme	805,850	686,032	448,861
Contingency for programmes		151,000	
Programmes and themes	**2,996,716**	**3,737,953**	**3,115,713**
CORE TEAM AND OVERHEAD			
Pay costs	548,594	561,626	518,598
Non-pay costs	464,568	544,400	442,168
Communications, events and sponsorship	351,797	264,348	264,348
Total core team and overhead costs	**1,364,960**	**1,370,374**	**1,225,114**
Total expenditure	4,361,675	5,108,326	4,340,827
Programme funding previously committed	391,000	-980,000	-720,592
Surplus/(deficit)	**-479**	**3,358**	**0**

Appendix A- Matrix of Metrics

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 4)	Milestone activities (Year 4)	Outcome Framework Domain	Associated Funding	Current Status
1	Focus upon the needs of Patients and local populations (A)	Best Care Programme (Clinical Networks) The Best Care Programme is designed to deliver AHSN licence objective one: focus on the needs of patients and the local populations.	Further improve the recovery rate of patients suffering from Anxiety and Depression Improving access, including waiting time standards for Early Intervention in Psychoses Improve medicines reconciliation rates across network Reduce admissions and length of stay for childhood pneumonia	Imaging and Maternity clinical networks collecting high quality data from across the region through interoperability	1,2,3,4,5	£1,071,058	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 4)	Milestone activities (Year 4)	Outcome Framework Domain	Associated Funding	Current Status
2	Speed up innovation in to practice (B)	Clinical Innovation Adoption Programme The Clinical Innovation Adoption (CIA) Programme aims to improve significantly the speed at which quality clinical innovation is adopted and in the process of adoption - improve clinical pathways and outcomes for patients. The goals of the programme are to; Support adoption of innovations at scale across the region to improve patient outcomes, safety experience and cost effectiveness	Average number of Trusts adopting each innovation <u>Acute trusts to date:</u> Implemented relevant innovations = 29% Plan to implement relevant innovations = 48% <u>Mental Health trusts to date:</u> Implemented relevant innovations = 33% Plan to implement relevant innovations = 40%	5 more projects in final stage of deployment Measuring and monitoring phase	1,2,3,4,5	£529,497	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 4)	Milestone activities (Year 4)	Outcome Framework Domain	Associated Funding	Current Status
3	Build a culture of partnership and collaboration (C)	To promote inclusivity, partnership and collaboration to consider and address local, regional and national priorities.	All of the AHSN's seven programmes and themes are a collaborative effort by all the partners in the region, and address local and national priorities.		1,2,3,4,5		
		R&D The R&D Programmes aims are to improve R&D in the NHS through closer collaboration between the Universities, NHS and Industry.	Commercial R&D income increase	Trust R&D plans developed and progress made on Nursing/AHP strategy		£20,000	
		Informatics The informatics business plan for 2016/17 represents programme of capacity building and		Develop a comprehensive IG training programme for our partners		£412,137	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 4)	Milestone activities (Year 4)	Outcome Framework Domain	Associated Funding	Current Status
		delivery to support the key aims of the Oxford AHSN.					
		PPIEE Patient and Public Engagement and Experience (PPIEE) is a crosscutting theme, working across the programmes of the AHSN, relevant work is cross-referenced to other sections of the business plan.		Leading Together programme		£110,900	
		Team, overhead, communications, events and sponsorship	Number of subscribers to the Oxford AHSN Newsletter and Twitter followers per quarter Number of visits to Oxford AHSN website per month	Raising awareness of benefits of collaborative work, to improve patients outcomes and grow the economy, with local partners and external stakeholders Generation of support		£1,225,114	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 4)	Milestone activities (Year 4)	Outcome Framework Domain	Associated Funding	Current Status
			Number of attendees at all AHSN events per annum	from Stakeholders for continued activities post 2018			
4	Create wealth (D)	The Wealth Creation Strategy is to help the region become the favoured location for inward life science investment, life science business creation and growth, whilst helping the NHS to accelerate the adoption of medical innovations of significant benefit to patients. The aims of the programme are to: Support companies along the adoption pathway, and provide a continuum with the Clinical	Number of health and life science companies in region Number of people employed in life science industry	Work with partners to develop 3 exemplar projects for Precision Medicine Catapult	1,2,3,4,5	£521,236	

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 4)	Milestone activities (Year 4)	Outcome Framework Domain	Associated Funding	Current Status
		Innovation Adoption Programme Support investment into the region Build a culture of innovation in the NHS Form and sustain long-term partnerships with businesses.					

No.	Core License Objective	Purpose of the programme	Health/Wealth delivery KPI (Year 4)	Milestone activities (Year 4)	Outcome Framework Domain	Associated Funding	Current Status
5	Patient Safety	The principal aims of the collaborative will be to: Develop safety from its present narrow focus on hospital medicine to embrace the entire patient pathway Develop and sustain clinical safety improvement programmes within the AHSN Develop initiatives to build safer clinical systems across the Oxford AHSN	Progress work in pressure ulcer reduction programme towards zero harm in project areas Increase adoption of AWOL project in Berkshire Healthcare and CNWL to increase return rates by 50% on all acute wards	Six themes showing improvement		£448,861	
						£4,340,827	

Appendix B- 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 prosperity of the region	Low	Med	> 6 / 12	Leadership supporting a culture of collaboration, transparency and sharing. Agreed organisational Vision, Mission and Values. Strategy development underway Ensuring a culture of inclusivity and sharing, through inter alia, and the use of appraisals. Stakeholder analysis of our Clinical Networks to ensure geographic spread and multi-disciplinary representation. Funding Agreement contains explicit requirements to share and collaborate. Partnership Board representation drawn from across the geography and key stakeholders. Oversight Groups in place for each Programme and Theme, broadening representation across our stakeholders.	AHSN Chief Executive	Programme SROs	06-Sep-13		AMBER

#	Prog/Theme	Risk	Description of Impact	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date added	Date mitigated	RAG
							Within the Wealth Creation Programme local working groups have been established with each of the each of the LEPs. Celebrate early successes through Case Studies & Events Regular monthly newsletter. Quarterly review of breadth and depth of engagement by Clinical Networks and all programmes and events. CIA analysis of strategic priorities of commissioners and providers as highlighted priority areas for AHSN programmes and themes. Designation as Precision Medicine Centre of Excellence drawn on resources across the Network 7 Roadshow events held across the region – 350 attendees, 35 different presentations tailored to the local partner, and 20 partner contributions – NHS, academia and industry. New					

#	Prog/Theme	Risk	Description of Impact	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date added	Date mitigated	RAG
							contacts made, existing ones strengthened and awareness increased for how the AHSN's programmes and networks can improve working lives and patient care. Oxford AHSN commissioned a stakeholder survey on the effectiveness and impact of the Oxford AHSN. 563 response rate (26% of those approached). Results are very encouraging. 80% saying that the AHSN is essential. In addition to the local survey, Oxford AHSN also took part in the National YouGov Stakeholder Survey – results to be published in the Autumn (Q3) Oxford AHSNs 'Get Physical programme' will host three workplace wellbeing events in November'16 in collaboration with our local industry partners. This work has been extended across the BOB STP prevention programme, and					

#	Prog/Theme	Risk	Description of Impact	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date added	Date mitigated	RAG
							will support the workforce wellbeing element, alongside the CCGs, providers, Public Health and Local Authority – multi agency working.					
6	Oxford AHSN Corporate	Failure to sustain the AHSN should NHS England not renew license	Programme activities cease	Med	Med	> 6 / 12	Successful delivery of all Programmes against the AHSN license objectives as per the Business Plan will strengthen Partner support. Establishment of collaborative working across, and between, Partners as the 'normal' way of working Leadership team preparing material for the re-licensing process, e.g stakeholder survey, options, analysis of added value workshop	AHSN Chief Operating Officer	AHSN Chief Operating Officer	31–Jul – 14		AMBER

Oxford Academic Health Science Network

Issues Log

#	Programme / Theme	Issue	Severity	Area Impacted	Resolving Action	Owner	Actioner	Date Added	Current Status	Date Resolved
18	Oxford AHSN Corporate	Clarity of NHS England funding	Significant	Financial	Partner contributions remain the same. Reappraisal of budget allocations to Networks, Programmes and Themes completed in anticipation of this second cut of 20% in 2 years. Actual cut 21% central NHS England funding for 16/17. Year 4 delivery secure, decision to be made later in the year to decide priorities and delivery beyond this period aligned to re-licensing which is expected to be completed by March 2017.	AHSN Chief Operating Officer	AHSN Chief Operatin g Officer	28/11/2013	Action – 50% Complete	
19	Oxford AHSN Corporate	The interface with, and respective roles of, the Strategic	Minor	Strategy	Results of the improvement architecture review received – AHSN Best	AHSN Chief Executive	Best Care SRO	03/06/2014	Action - 90% Complete	

#	Programme / Theme	Issue	Severity	Area Impacted	Resolving Action	Owner	Actioner	Date Added	Current Status	Date Resolved
		Clinical Networks (SCN) and the Senate remain unclear. There may also be elements of duplication.			Care programme has aligned its clinical networks with SCN. Round 2 panel for clinical networks included SCN Director. Regular meetings by Best Care with SCN to ensure alignment					
25	Oxford AHSN Corporate	Lack of awareness by local partners and national stakeholders of progress and achievements of the AHSN	Minor	Culture	Each clinical network and programme developing a comms plan. Website refreshed regularly and new content added – visits per month increasing Followers and subscribers increasing. Links being enhanced throughout the region through Comms networks – e.g. for R & D Produced comprehensive annual report and new look annual review focused on impact.	AHSN Chief Operating Officer	Head of Communi cations	19/01/15	90% complete	

#	Programme / Theme	Issue	Severity	Area Impacted	Resolving Action	Owner	Actioner	Date Added	Current Status	Date Resolved
					Events - improve marketing and evaluation of events. Roadshows with all partners. Level of engagement closely monitored across all programme and themes (see KPIs). Oxford AHSN survey has been commissioned by the Board. Stakeholder participation in AHSN growing each quarter					
	Best Care	Delays in obtaining required data have delayed project delivery and eroded reputation of core AHSN	Significant	Organisation	Work is ongoing to try and obtain prostate MRI data. Network Manager (Parwaez Khan) is now attempting to collect this data locally himself.	AHSN Chief Operating Officer	Imaging Lead Parwaez Khan	29-Jun-16 Issue Updated 05/10/16	Action – 80% complete	
	Best Care	Delays in delivering a functioning data	Significant	Organisation	Maternity network now progressing the preferred solution, having liaised	AHSN Chief Operating Officer	Maternity Lead Katherine	29-Jun-16	Action – 20% complete	

#	Programme / Theme	Issue	Severity	Area Impacted	Resolving Action	Owner	Actioner	Date Added	Current Status	Date Resolved
		sharing system have delayed project delivery and eroded reputation of core AHSN			**with John Skinner and OHIS directly.**		**Edwards**	**Issue Updated 05/10/16**		

Appendix C - Oxford AHSN case studies published in quarterly reports 2013-2016

Quarterly report	Case study summary	Programme/Theme
2016/17		
Q2 2016/17	Digital survey results	Wealth Creation
	Imaging patient info films	Best Care
	Sustainability project	Wealth Creation
Q1 2016/17	Bicester healthy new town	Wealth Creation
	Children's immunisation	Best Care
	Perinatal SHaRON	Clinical Innovation Adoption
2015/16		
Q4 2015/16 (annual report)	Memory clinic accreditation update	Best Care
	Meds optimisation CBT programme	Best Care
	AWOL project	Patient Safety
	J&J collaboration	Wealth Creation
	CAUTI project	Clinical Innovation Adoption
Q3 2015/16	EIP data based approach	Best Care
	Leading Together programme starts	PPIEE
	Get Physical event review	Corporate
Q2 2015/16	Targeted medicines support	Best Care/Patient Safety
	Memory clinic accreditation	Best Care
	IPC stockings	Clinical Innovation Adoption
	Alumni Summit review	Wealth Creation
Q1 2015/16	A&D recovery rates	Best Care

	Pre-term birth location saves lives	Best Care
	In2vu data visualisation	Informatics
2014/15		
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
2013/14		
Q3 2013/14	App development route map	Wealth Creation
	2023 Challenge	Wealth Creation

Appendix D – Clinical Innovation Projects – progress to date

Project Report: Catheter Associated Urinary Tract Infection (CAUTI)

Catheter Associated Urinary Tract Infection (CAUTI)

Clinical Champion- Catherine Stoddart, Deputy Chief Nurse, Oxford University Hospitals NHS Foundation Trust

Project Completion: March 2017

The CIA programme selected this project because of its' potential impact and the opportunity to significantly improve a process with the inclusion of a non-invasive device for bladder scanning.

The estimated return on investment over a three year period when this project is delivered through transformation of UTI management (including systematic introduction of non-invasive bladder scanning) is £1.1m for the region; We estimate that there will be a significant reduction in harm to patients (estimate 900 patients) and UTIs are also related to a small number of incidences of sepsis resulting in death (estimated at 7 over the three years in Oxford Region).

CAUTI

Developing a CAUTI is the major risk of catheterisation.

Bacteriuria develops in approximately 30% of catheterised patients after 2-10 days and around 25% of these patient will develop a CAUTI.

Approximately 5% of those with CAUTI will go on to develop life threatening secondary infections such as bacteraemia or sepsis.

Key steps in reducing the risk of CAUTI
1)Only catheterise when absolutely necessary
2) Use Aseptic Non Touch Technique for insertion
3) Ensure a closed system
4) Ensure the catheter is removed as soon as it is no longer necessary

Urinary Tract Infections (UTIs) have been found to extend a patient's length of stay in hospital by 6 days. Around 5% of hospital acquired UTIs develop into secondary bacteraemia which can be life threatening if it develops into sepsis (we estimate approximately 7 lost lives in the Oxford AHSN region by 2017). Public Health England data indicates that 17.2% of all Health Care Acquired Infections are attributed to UTI with the highest prevalence in the over 65 age groups and particularly high in the frail elderly.

Reducing unnecessary catheterisations is an effective way of reducing the incidence of Catheter Acquired UTI (CAUTI). It has been shown that the use of bladder scanners, as part of a complete package of care can lead to a reduction in unnecessary catheterisation with subsequent reduction in CAUTI.

An initial survey of acute and community Trusts across the AHSN region found that best practice in catheter care was not being followed throughout the region. Some Trusts did not have bladder scanners and those that did had not integrated them into their clinical pathway with staff having limited knowledge on how to use them.

Initially three Trusts have agreed to participate in the first wave of this project, the aim of which is to raise awareness and reduce the incidence of CAUTI through embedding best practice in catheter and continence care, including the use of bladder scanners where appropriate.

Trusts engaged

Oxford Universities NHS Foundation Trust, Oxford Health NHS Foundation Trust, Great Western Hospitals NHS Foundation Trust

Project objectives and expected outcomes

Key objectives:

- Reduce the number of unnecessary catheterisations
- Reduce the number of CAUTI across the region to bring performance in line with national average

Project metrics and impact

The following metrics are being collected:
Outcome measures:

- Number of Catheter Acquired Urinary Tract Infections

Process measures:

- Number of bladder scanners to beds (acute) or population (community)
- Number of catheters inserted
- Number of catheter days
- Number of staff completing e-learning package
- Staff knowledge audit

It is estimated that 20-25% of all inpatients will have a catheter at some point in their stay and 7% of these patients will go onto develop a CAUTI (estimated 2500 for the 3 Trusts involved). By reducing the number of unnecessary catheterisations and improving staff knowledge and awareness it is estimated that around 25% of CAUTI could be prevented, representing a saving of £880k to the health economy.

Developments in Q2 2016/17

The key developments in Q2 were:

Bladder scanners

- Oxford health business case submitted to capital investment group – awaiting outcome
- Supplier showcase arranged at Great Western Hospital. A number of devices will be trialled on the wards before a decision is made
- OUH have declined to progress with the business case at this time – Project Manager will discuss with Nursing Director to understand reasons.

E-learning package

The AHSN developed a proposal for a high quality and unique e-learning package for continence and catheter care which was submitted to Health Education England Thames Valley (HEETV). HEETV have agreed to support and fund the development of the e-learning package if it is of sufficient quality to be made available to all NHS staff nationally. With the support of HEETV, the AHSN have submitted a proposal to the National HEE steering group which has been positively received. A patient leader has been involved in the development of the e-learning package and will continue to be involved in the project going forward.

The content of the package has been jointly developed by the 3 Trusts and an outline of the package is as follows:

Education strategy: All three Trusts have developed CAUTI education strategies in Q2.
Next steps
• Continue to progress the e-learning package • Develop plans for wider dissemination • Determine potential for spread to care homes – link with commissioners and patient safety collaborative.

Project Report: Fluid Review and LifeRay system

Project Report: Fluid Review and LifeRay system
The objective of this project is to develop the Clinical Innovation Adoption (CIA) process by creating an online platform that will enable innovators, partners, NHS organisations and the AHSN to create, manage and track their innovation submissions. Innovation forums will be set to enable interested Oxford AHSN partners to comment on and register their interest in innovations and have a more direct influence on the CIA project choices. **Fluid Review** is a cloud based system that allows organisations to create and manage a number of workflows (or calls to innovation) simultaneously. The system will be open for new innovations 24/7, 365 days of the year – which means that the system will create a constant stream of opportunity for innovators to submit their ideas. The system will also have the flexibility to allow the CIA Team to set up specific requests for innovations based on an area of clinical interest to the region. **Life Ray** is a cloud based system that works as a website, it offers many of the normal features seen on a standard website, with the increased capability of allowing for the creation of forums, that can be linked to specific topics or innovations that have been submitted and processed through the Fluid Review system. The intention is to build networks of interest (such as cardiovascular) that involve clinicians, innovators, academia and industry. The dynamics of such a network should provide additional opportunities for collaboration with innovators, healthcare, academia and industry.
Key Benefits
The key benefits are; • Ability to create and manage a number or workflows (or calls to innovation) simultaneously • Continuous calls to innovation • Ability to create, manage, track and measure innovation submissions • Making the innovation submit process clear and visible to innovators • The creation of collaborative innovation networks linked to specific topics or innovations • The ability to constantly share innovations within the region
Strategic Need
The objective of both online tools is to automate the process currently undertaken by the CIA team and to support: • Innovators to suggest innovations all year round and not just at the 'call to innovation'; • Automate the process of selection against regional NHS strategic priorities and health needs; • Streamline the communication and engagement with innovations, the oversight group and participating NHS organisations. • Creation of an online collaborative innovation network to support, encourage and facilitate industry, academia and the NHS to work collaboratively and support, give guidance on proposed innovations for CIA adoption across the region.
Anticipated Impact of Implementation

The potential impact of this system could be far reaching. The systems allow for a more collaborative approach to working and identifying innovations with NHS England and other Academic Health Science Networks. It also allows more opportunities for innovators in the organisations region to submit their innovations for timely scoring and feedback on their current position. **This is the first time that these platforms will be combined and used in this way.** It will create a pipeline from innovator to CIA team and shared with clinicians with specialist interests. It will enable ongoing decision-making as to whether to proceed with the innovation either within partner trusts directly or via the CIA team.

During 2015/16 the CIA programme identified the need for an interactive workflow system to be created to manage the annual innovation submission process. The system currently used by the CIA programme is paper based, very resource heavy and offers no clear process/sight to innovators who are submitting proposals for consideration. Due to the complexity of the processes followed, the programme is only able to run an annual 'call to innovation'. The process followed also requires members of the CIA Oversight Group (consisting of Chief Executive, Medical Directors and Chief Operating Officers) to review the innovations submitted for consideration and score them against an agreed set of scoring criteria. This part of the process is paper based and requires a substantial time commitment from the CIA Oversight Group members, who have very busy and important roles in healthcare.

Quarter Two Progress

Q2 achievements:

- FluidReview process has been fully developed and is now fully functioning. The final UAT with members of the CIA team to be arranged at the beginning of October.
- LifeRay system is being developed and will be completed mid-October. A contract has been arranged with TRUSTech to create the websites pages and add content. This contract also provides support and ongoing maintenance of the site for a period of 1year.
- Initial draft of LifeRay site has been created. The CIA team have been creating specification and content for website project pages. This specification will be used by TRUSTech to build the website. The first draft of the website will be available during the first week of October.

Next Steps

- Arrange final user acceptant testing of system with CIA team.
- Training sessions to be arranged training CIA team to use FluidReview process.
- Final review and sign-off of CIA LifeRay webpages.
- Launch website (LifeRay) and innovation portal (FluidReview) at the End of October 2016.
- Launch first call to innovation to launch in January 2016.

Project Report: Biosimilars

Biosimilars Project

The Oxford AHSN's Medicines Optimisation programme and Clinical Innovation Adoption programme are collaborating on a project which focusses on supporting regional partners to optimise the financial savings arising from the introduction of biosimilars. Over recent months the project team has engaged a wide number of key stakeholders in the region who will be impacted by the introduction of biosimilars. Feedback from this engagement highlighted that stakeholders across the region would value a gain share agreement template which can be considered locally by CCGs and Trusts in their local negotiations. Ideally this would be employed in negotiations across the Oxford AHSN region which would reduce regional variation and inequalities. This project has looked to pull together a number of resources for engaged stakeholders to support the adoption of biosimilars at scale and pace across the region.

Oxford Academic Health Science Network

<u>**Project Report: Early Inflammatory Arthritis**</u>

Early Inflammatory Arthritis
Engaged Partners: Frimley Health Foundation Trust (Wexham Park), Great Western Hospital, Buckinghamshire Healthcare Trust Royal Berkshire Hospital, Oxford University Hospitals

Background to Project

Inflammatory arthritis (IA) is a term used to describe a group of conditions which affect the immune system. The three most common forms of inflammatory arthritis are rheumatoid arthritis; ankylosing spondylitis and psoriatic arthritis. The course of IA is variable and unpredictable but for a significant number of patients it is a severe group of diseases resulting in persistent pain, stiffness, progressive joint destruction, functional decline and premature mortality. There is also the potential loss of social and financial independence and the burden of care on direct (e.g. medical care) and indirect costs (e.g. effects on the individual's ability to work). Approximately one-third of people with rheumatoid arthritis stop work because of the disease within 2 years of onset, and this prevalence increases thereafter. The total costs of rheumatoid arthritis alone in the UK, including indirect costs and work-related disability, have been estimated at around £2.4 billion per year.

The first phase of this project was completed in Q1 2016/2017 and largely focussed on understanding how EIA services are commissioned and delivered across the region to identify where the most significant opportunities are likely to lie in terms of improving outcomes in this important group of patients. This insight has been gained through a series of 1:1 meetings with consultant rheumatologists, specialist nurses and commissioners. In addition, the Oxford AHSN in partnership with local trusts audited both Departmental Organisation as well as Service Performance of existing EIA services in the region. These audits were complex and required a significant effort from the staff in rheumatology departments for which the network is extremely grateful (Figure 1).

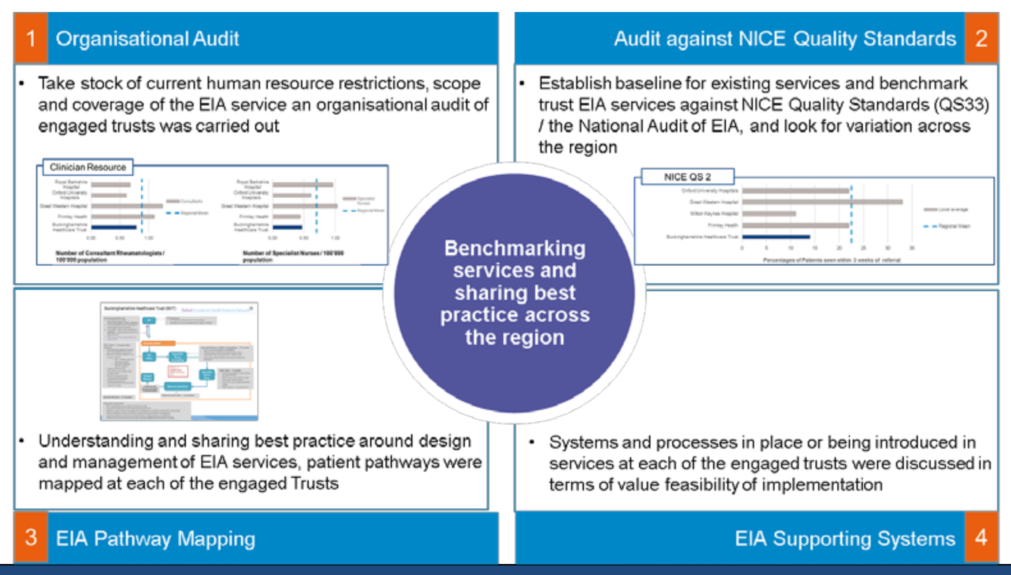


Figure 1 Recap of Benchmarking activities conducted across the region.

Phase II – Primary Care and Patient Education around EIA

After reviewing the data from the benchmarking activity the Oxford AHSN EIA Network identified three areas which if improved across the region could have a significant impact on patient experience, patient prognosis and outcomes. In addition, these improvements could lead to realisation of financial benefit for those trusts who had already agreed a move to the EIA Best Practice Tariff with their

local CCG (**Error! Reference source not found.**).

Figure 2 Overview of EIA Pathways across the region (blue) and opportunities for improvement (red)

One area of concern for all trusts across the region was the level of education on Early Inflammatory Arthritis. For GP's this knowledge gap is in understanding the prevalence, key risk factors and symptoms of the disease and when, where and how they should refer patients to Rheumatology services. For patients a broader campaign is required to help raise the awareness of the disease in themselves and in friends and family.

The Rheumatology network have decided that the most appropriate way to address this knowledge gap will be through a series of webcast, podcasts and other information sources (Figure 3).

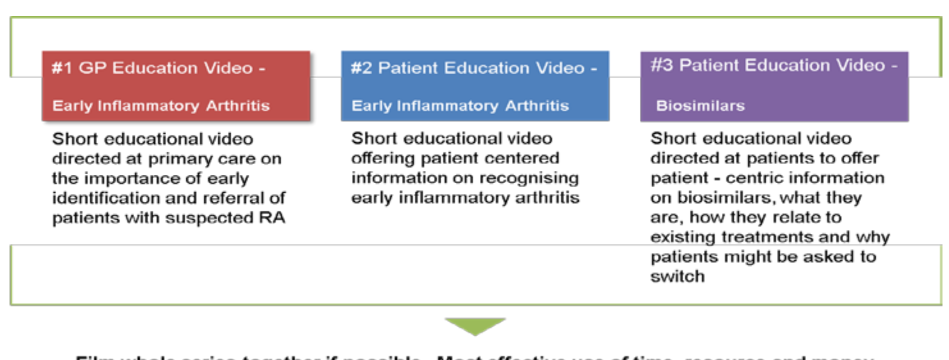


Figure 3 Overview of Webcast/ Video Series being developed

Led by the clinical champion Prof. Peter Taylor this video series will be developed with rheumatologists, primary care, patients and industry. The network has maintained close contact through quarterly meetings which have been key to driving this project forward. In June the network was hosted by Bucks Healthcare Trust. At this meeting plans for the video series were further developed and the key messages and structure for the videos was defined.

In meeting with several companies working with products for Inflammatory arthritis, the AHSN has recently made plans to collaborate with a biosimilars company Sandoz. Sandoz have agreed in principle to support the video series workstream both financially and through project management support.

- Increasing GP awareness and understanding of EIA
- Increasing Patient Awareness of EIA
- Increasing Patient Understanding of Bio-similars

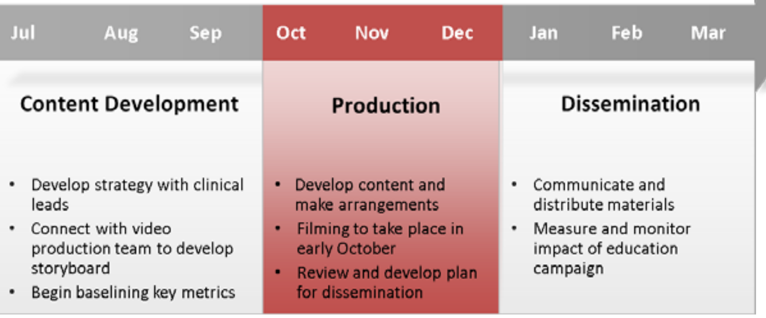
Measures and Metrics

To measure the impact of this video series locally, the network agreed that the project should look to track three important measures.

- The average time between patient presentation to GP and referral
- The percentage of patients referred within 3 days of presentation
- The average time between referral and patients being seen by a consultant Rheumatologist

Timelines for the Patient and GP Education Materials

This workstream will look to deliver the suite of e-materials ready for dissemination, before the end of the year (see timelines below)



The next steps in this workstream will be to

- Review key messages and film content with Rheumatology patient panel
- Develop script and storyboard to share with team and video production team
- Schedule next meeting / filming session
- Develop communication plan for the webcast series
- Ensure measures are in place to collect baseline data prior to the development of the video resource

Project Report: FallSafe Care Bundle

Project: FallSafe Care Bundle

Innovation Coverage: All acute Trusts who wish to participate – two phases of implementation will be taken by the project

Project Completion: April 2018

Project background

Leads from Bucks Healthcare, Oxford University Hospitals NHSFT, Great Western Hospital, Berkshire Healthcare FT and Oxford Health met in May 2016 to decide on the aims of this "Falls" prevention project. The aims were agreed as follows:

Deliverables	Progress
To initially review "Falls" services across the Oxford AHSN region.	✓
To conduct a literature review on falls prevention innovations and collation of best practice in falls prevention work locally, nationally and internationally.	✓
To select evidence based innovation/innovations for implementation across the region.	✓
For the CIA Programme to work with Trusts to implement the selected innovation/innovations as appropriate for their care setting.	*Work underway*
Work to develop a region wide Falls Prevention Strategy as agreed by local NHS Clinicians, drawing on the work being undertaken within organisations currently and sharing best practice and policies.	*Group has decided not to pursue*

The project has established a Falls Prevention Best Practice Group and agreed that the project would support trusts to implement or improve utilisation rates of FallSafe Care Bundles. "FallSafe" is a quality improvement approach to support frontline staff to deliver evidenced based falls prevention initiatives and provide multifactorial assessments and interventions that identify and treat the underlying reasons for falls. This approach has been shown to reduce falls by around 25% on implementation wards.

Quarter Two Progress

Berkshire Healthcare NHSFT, ***Executive Lead:*** *Helen Mackenzie - Director of Nursing and Governance.* ***Project Leads:*** *Nathalie Zacharias - AHP Professional Lead and Cris Spring - Senior Nurse.*

Project Stage:

The local project leads, clinical champion and local project group for implementation have been established at BHFT. The project governance documentation, project initiation document, terms of reference have been finalised and signed off. The project group have meet twice and are starting work on stage one of the project plan.

The project has identified and created groups for tasks that will be undertaken during stage one of the project. The following groups have been established; Policy Review Group, GAP Analysis Group, Datix Review Group and Process Mapping Group.

The project team have started undertaking working on the GAP analysis, the findings of the analysis will be reported at the end of

October. The findings of the analysis will be used to identify elements of the FallSafe Care Bundles that are in need of improvement or implementation during stage two, scheduled to commence early 2017.

Others tasks that have been initiated during Q2 are the undertaking of a review of all falls policies and procedures, this work will be supported by the findings of the GAP analysis. The project will undertake process mapping of both ward areas (due to the difference in patient cohorts) which will feed into the GAP analysis findings and recommendations.

The project will provide a number of staff on the project wards with quality improvement training. This training will be provided by a QI expert and will support staff with the implementation of FallSafe Care Bundles during stage two of the project.

The initial wards that will implement the FallSafe care bundles are an older Adult Dementia Mental health ward and a physical rehabilitation ward with a mixed patient cohort.

The project is also supporting the AHP Professional Lead with a project to identify and implement a new innovative fall prevention monitoring system. This system will consist of a patient worn device that alerts clinical staff if a patient is moving (getting out of bed, get up from chair, going to toilet etc), allowing clinical staff to prioritise if a patient at high risk of falling needs assistance or support. The worn device alerts a pager worn by the clinician in charge with information i.e. the patients name and their location in the room. The trust is currently agreeing IP and contracting arrangements with the technology provider. Once contracts are in place the Oxford AHSN will provide support to test the equipment on one ward area.

Oxford Health NHSFT, *Executive Lead:* *Deborah Humphrey.* ***Project Lead:*** *Caroline Griffiths, AHP Clinical Lead.*

Project Stage:

The project governance documentation, project initiation document, terms of reference have been developed and are awaiting executive sign-off. The first scoping meeting of the project team took place in September 16. The project team is now established and wards to be involved in stage one of the project have been identified and engaged with. The project team has established and agreed roles and responsibilities, the timeline of the project plan for stage one has also been agreed.

The next steps are to identified and create groups for tasks that will be undertaken during stage one of the project. These will be GAP Analysis Group, Ulysses Review Group and Process Mapping Group. The project will also seek Consultant and Out of Hours GP representation on the project team. The trust has recently completed a review of fall prevention policies and procedures. The project review group will complete a review of this and look to use work to support the GAP analysis.

The project will provide a number of staff on the project wards with quality improvement training. This training will be provided by a QI expert and will support staff with the implementation of FallSafe Care Bundles during stage two of the project.

The initial wards that will implement the FallSafe care bundles are Sandford and Cherwell wards (Mental Health wards) and City Hospital (Community ward).

Frimley Health NHSFT, *Executive Lead:* *TBC,* ***Project Leads:*** *Anna Facchini, Orthogeriatric Consultant Physician and Sophie Porter, lead nurse for patient safety.*

Project Stage:

The project manager has met with the Trust fall leads to explore appetite in participating in the project. The project will be formally presented to the trust Falls Steering group on 17th October. Participation in the project has been approved by the steering group, formal agreement from the trust board is anticipated by the end of Sept. The project will establish a project team over the coming weeks, along with creating project documentation for sign-off. The project team will establish tasks to be undertaken as part of the project stage one.

Oxford University Hospitals NHSFT, *Lead:* *Natasha Goswell, Lead Nurse Quality Improvement, Practice Development and Education,* ***Project Lead:*** *Caroline Monzon, Quality Improvement Nurse, Falls and CAUTI Lead*

Project Stage: Not actively participating in Project

The trust has created a local implementation plan for the implementation of FallSafe care bundles. The FallSafe bundles will be implemented on identified wards over a 4-week period, based on 3 elements of the bundle being implemented each week. The utilisation rates and fall rates will be reviewed 4 months' post implementation. The project is hoping to reach 68 wards over a two-year period. The Implementation of the bundle started on wards in June 2016. The project has offered to support to the trust with the project if required.

Milton Keynes University Hospitals NHSFT, *Executive Lead:* *TBC,* ***Project Lead:*** *TBC.*

Project Stage: Not actively participating in Project

The trust has a comprehensive approach to Falls Prevention that is incorporated into a patient centred 'treating the patient as a whole' programme. Considerable investment has also been made into supporting staff with falls prevention education and training.

The trust has also undertaken a complete review of falls care plan, risk scoring and falls reporting documentation.

The learning from the MK Falls Prevention programme has been shared with the AHSN project. The AHSN project will continue to link with the MK programme and share learning and best practice.

Project Report: Gestational Diabetes m-Health

Project: Gestational Diabetes m-Health

Clinical Champion – Dr Lucy MacKillop, Consultant in Obstetric Medicine, Oxford University Hospitals NHS Trust

Innovation Coverage: All acute Trusts who wish to participate

Project Completion: Complete when all trusts have adopted *(or confirm no-go position)*

The Gestational Diabetes m-Health project is in the measure and monitor stage of the Clinical Innovation Adoption 10 step process, as highlighted below;

Project background

It is estimated that gestational diabetes mellitus (GDm), which may occur, most commonly, in the third trimester during pregnancy currently affects about 10% of all pregnancies. The national incidence of GDm has increased in recent years, due to a widening of the screening criteria, lowering the diagnostic thresholds and underlying demographic changes with an increasing proportion of overweight or obese pregnant women. This has led to a raise in the prevalence of GDm, from a baseline of around 4% in 2008 to a predicted value of 16% in 2020.

In order to minimise the risks to the pregnancy, intensive medical treatment and follow-up is instituted so as to attempt to normalise blood glucose. This involves very frequent home blood testing and hospital visits every 1-2 weeks, a time consuming and difficult process for the women involved. A system which allows less regular face-to-face contacts with HCPs while still providing adequate input when required would be hugely advantageous. The tele health in gestational diabetes project (GDm-health) is a collaboration between Obstetric medicine, OCDEM and Biomedical Engineering to produce a system whereby blood glucose readings are transmitted (with appropriate annotations) through a smartphone to the specialist diabetes midwife and the midwife, or other staff, can send messages back to the patient advising on dose titration or asking them to attend a clinical appointment. The business cases for GDm have been approved by Trusts based on raising demand, capacity and safety. The alternative for Trusts would be to increase capacity by opening up additional clinics at an estimated cost of £100k per annum per clinic. In addition, the system offers better clinical management as patients at risk can be more closely monitored, which may lead to a reduction in the risk to the foetuses and neonatal care requirements - and increasing the probability of normal deliveries. Research is underway into the impact on neonatal care requirements and caesarean section, this should be published.

Quarter 2 Progress

The new configuration of the GDm-Health system, called BYOD (bring your own device) has been fully developed and deployed since the last Q1 report. The new configuration has been deployed to trusts within the region who have implemented the GDm system (with the exception of Milton Keynes Hospital). Go-live of the new configuration started at OUH in July 2016, with RBH and FPH going live at the beginning of Sept 2016. Implementation of the BYOD configuration is now complete and the project again moves into the measure and monitor stage. The project will continue to evaluate the effects of the system and new configuration on clinical, economic and satisfaction outcomes during the measure and monitor stage.

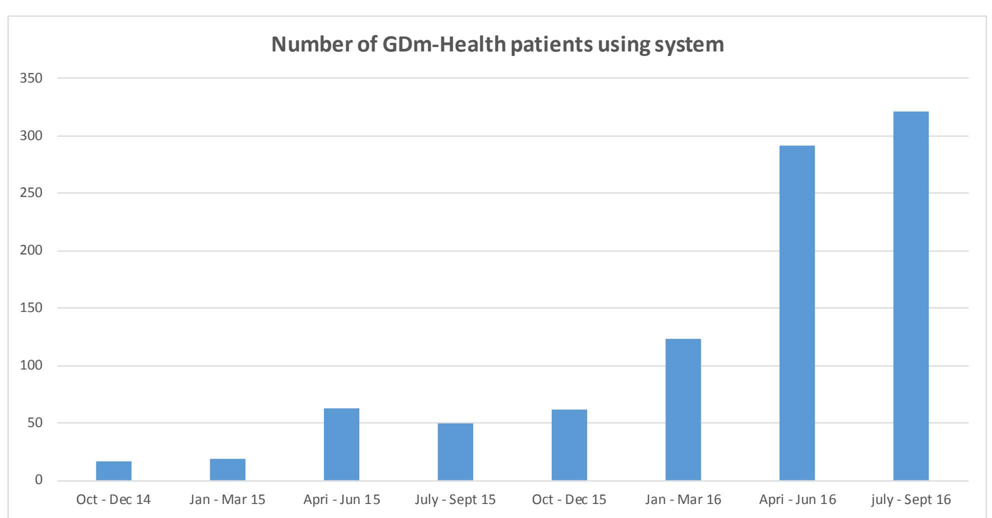
Whilst the CIA Team has engaged with Trusts who have not as yet adopted the GDm-Health System, implementation has been put on hold because of continued discussions taking place regarding the future commercialisation of the GDm system. The Innovation Lead (Prof Lionel Tarassenko) has requested that GDm project be put **on hold until April 2017**. It is anticipated that after this time a

decision would have been made regarding the future sustainability and commercialisation of the system. After this time implementation to the remaining trusts within the region will be pursued.

The outstanding trusts (Great Western Hospital, Buckinghamshire Healthcare, Heatherwood & Wexham Park Hospital) will be kept informed of progress with the new GDm BYOD system and scheduled for implementation post April 2017.

Integrating the GDm app into the antenatal care pathway for gestational diabetes has the potential to improve patient satisfaction with care and will enable pregnant women to understand and better control their diabetes.

Utilisation Rates – Quarter 2



The graph above demonstrates the continued increase in the number of patients going through the GDm system during since the project initial implementation. The graph demonstrates the GDm systems increasing utilisation, despite Milton Keynes NHSFT not using the GDm system since April 2016. The project predicts that during Q3 the number of patients using the GDm system will grow further, due to there being no limitations to the amount of patients that can be prescribed use of the GDm system (due to BYOD configuration implementation).

An independent assessment at the RBH has demonstrated, over a four-month period, a 26% reduction in clinic visits for women using the GDm-Health App, in comparison to those receiving usual care. In addition, the time spent by the diabetes midwives on clerical and administrative tasks has decreased by 50%.

OUH Maternity conducted a Randomised Controlled Trial of 200 women during September to March 16. This RCT looked at two groups of women - the first using the GDm-Health management system and the second using conventional care. This trial is to evaluate the effects of the system on clinical, economic and satisfaction outcomes (Clinicaltrials.gov NCT01916694). The results from the trial will be published in the coming months.

OUH has also undertaken a time in motion exercise to explore and demonstrate the potential time savings achieved in clinical visits and administration/clerical support post GDm implementation.

Patient Benefits

- Reduce unnecessary visits to hospital
- Improved timely support and advice from health care professionals (previously would have to wait 2-4 weeks)
- Better managed gestational diabetes will reduce complications in pregnancy
- Better managed gestational diabetes will reduce complications in labour
- Reduce the risk of neonatal complications and the long term risks of Type 2 diabetes and obesity

Clinical Benefits

- Rapid transmission and feedback
- Electronic transfer of data
- Flexibility of display
- More information recorded
- Easier to target patients who require extra support/intervention

Service/Trust Benefits

- Increase capacity within clinics
- NICE Guidance has demonstrated that reducing the risks associated with gestational diabetes could potentially reduce:
    - caesarian sections
    - neonatal care

Estimated numbers of women who could potentially benefit from this Innovation across the Oxford AHSN region are:

	Number of births/year	Estimate of number women with GDM*
Clinical Commissioning Groups in Oxford AHSN area	36,437	1817-5828

**this is dependent on the prevalence of risk factors for GDM (such as non-white ethnicity and obesity) in the CCG population (Data from Public Health England published report March 2014, for deliveries in 2012 calendar year).*

Potential cost saving achieved by implementing the system, instead of opening a new clinic:

	Savings	Savings achieved to date
Cost per additional clinic is £100k. Eight additional clinics across the region required without GDm	£800k (clinics)	Rolled out to 3 Trusts 2014/15 - £300k
Potential reduction in neonatal care required	£1,224 (per patient)	
Potential reduction in caesarean sections	£2,400 (per patient)	

System commercialisation

The commercialisation of the GDm system is still under discussion. It is anticipated that a decision on a potential future commercial model will be made by the end of 2016.

Project Report: Intermittent Pneumatic Compression Sleeves

Project: Intermittent Pneumatic Compression Sleeves

Clinical Champion – Dr Matthew Burn, Consultant Stroke Physician, Buckinghamshire Healthcare NHS FT

Innovation Coverage: All acute trusts within region

Measure and Monitor Completion: March 2017

The Oxford AHSN has been working with acute Trusts across the region to introduce Intermittent Pneumatic Compression Sleeves for eligible patients who have had a stroke. The project commenced in April 2014 and will close in March 2016.

Oxford AHSN chose the Intermittent Pneumatic Compression Sleeves (IPC) as one of their Clinical Innovation Adoption Programme projects for 2014/15 based on the following rationale:

- Prevention of stroke and reducing mortality following a stroke are strategic health need priorities for the region.
- The benefits of applying IPC to eligible patients after a stroke was well evidenced by the Clots in Legs or Stockings after Stroke (CLOTS) 3 Trial undertaken by researchers at the University of Edinburgh.

As part a major national programme to improve outcomes and reduce mortality following a stroke, NHS Improving Quality (NHS IQ) secured £1m pump priming money from 1st April 2014 to fund six month's supply of IPC for all stroke units in England. This funding played an important first step in enabling stroke units to acquire the devices and to build on-going costs into 2014/15 budgets. Oxford AHSN managed the implementation of the IPC sleeves supporting Trusts to implement and carrying out analysis.

In delivering this project the AHSN has worked in partnership with:

- Thames Valley Strategic Clinical Network (TVSCN)
- East of England Strategic Clinical Network
- NHS Improving Quality
- Oxford University NHS Foundation Trust
- Buckinghamshire Healthcare NHS Foundation Trust
- Royal Berkshire NHS Foundation Trust
- Frimley Health NHS Foundation Trust
- Bedford Hospitals NHS Trust
- Milton Keynes University NHS Foundation Trust
- Centre for Clinical Brain Sciences, University of Edinburgh

Project objectives and expected outcomes

The following objectives were set for the project:

- Implement and embed the use of IPC sleeves into clinical practice across all participating stroke units
- Achieve 80% utilisation of IPC sleeves within the immobile patient cohort across the region
- Application of sleeves within 72 hours of admission

The expected outcomes are:

- A reduction in the risk of symptomatic or asymptomatic DVTs in patients immobilised by stroke, leading to a reduction in DVT as per the CLOTS 3 trial evidence.
- A reduction in stroke mortality as per the CLOTS 3 trial evidence.

Results to date

The project has now reached the 'Measure and Monitor' phase of the CIA 10 step process and IPC utilisation across the region will be monitored until April 2017.

<u>Utilisation across the region</u>

Regional performance has continued to be strong with the AHSN average utilisation reaching 62% in Q4 of 2015/16 (Jan-Mar 2016) compared to a national average of 37%. This level of utilisation was sustained in Q1 of 2016/17 but data for the first two months of Q2 (Jul-Aug 2016, not shown on graph) indicate a drop in utilisation to 56%, partially due to a drop in performance at the John Radcliffe Hospital. Full Q2 results will not be available until October 2016.

There is still significant variation in performance across the region but all units are out performing the national average.

Cumulative number of sleeves

Cumulative impact

Since project commencement, nearly 1500 patients across the region have received IPC sleeves. Extrapolating from the CLOTS3 trial this represents the potential for 75 fewer DVTS, 45 fewer deaths and 8 fewer PEs.

Next Steps and future milestones

The drop in performance at the John Radcliffe Hospital will be investigated to see if it is simply random variation (patient eligibility) or if there are other factors involved.

The AHSN will continue to monitor utilisation and will support Trusts to increase implementation as requested.

Following the publication of the Office of Health Economics the AHSN will combine this with a qualitative review of the project and publish a final report.

Project Report: Practical Innovating in Healthcare Setting Programme

Project: Practical Innovating in Healthcare Setting Programme

Project Overview

'Innovating in Health Care Settings' is a one-year programme for NHS frontline staff with 60 level 7 M-level credits (PG Cert) awarded on completion that can be used towards future study.
The Oxford Academic Health Science Network has collaborated with Buckinghamshire New University to develop and deliver a new programme: 'Practical innovating in healthcare settings'. This programme has been created to assist healthcare staff in identifying innovations and innovative projects that deliver improved quality of care for patients, sustainability and cost-effectiveness to the NHS. The course has been funded by Health Education England Thames Valley and is free to healthcare staff.
The programme is open to colleagues who work in an NHS organisation who can engage with innovation, service improvement and service redesign.
The programme includes:

1. Defining and distinguishing clinical innovations and service redesign (developing theoretical analytical skills)
2. Understanding processes of change management and spread of innovation using validated change management models (people management)
3. Using systematic tools to diagnose opportunities and obstacles to innovation (developing systematic approaches to assessing readiness for innovation adoption)
4. Using the PDSA cycle to systematically implement and monitor innovation deployment
5. Using run and control charts to understand/interpret variation and monitor impact of innovation (using local data to inform decision making and effectiveness)
6. Assimilating innovation into practice (what is and is not working and why)
7. Project management (using a systematic approach to project management including timelines and setting, meeting and modifying objectives).

The first cohort of the programme was extremely successful. All but one student due to personal reasons, completed the first module. All students will be progressing to complete module two of the programme that is scheduled to begin in September 2016.

Roles and organisations of students (cohort one and two):

The first cohort of the programme was extremely successful 29 completed module one of which 17 students will go on to complete module two. We have 25 students enrolled to join cohort two of the programme. The trusts that have staff participating in cohort one and cohort two can been seen below.

Cohort One Participants	
Trust	**# Staff**
Berkshire Healthcare NHSFT	1
Great Western Hospitals NHSFT	2
Milton Keynes Hospitals NHSFT	1
Oxford AHSN	1
Oxford Health NHS Foundation Trust	1
Oxford University Hospitals NHSFT	21
Royal Berkshire Hospital NHSFT	1

Cohort Two Participants	
Trust	**# Staff**
Berkshire Healthcare NHSFT	5
Great Western Hospitals NHSFT	3
Milton Keynes Hospitals NHSFT	1
NHS England	1
Oxford Health NHS Foundation Trust	3
Oxford University Hospitals NHSFT	4
Buckinghamshire Healthcare NHST	8

There is a more diverse spread of trusts with staff participating in cohort two of the programme. The final cohort three, scheduled to start in January 18 will aim to address the lack of participation from Royal Berkshire Hospital, Bedford and Milton Keynes hospitals.

The final cohort (three) of the programme will begin in January 2018. This will be the last programme ran with money award by Health Education England Thames Valley (HEETV). Further work is underway to explore options for the ongoing sustainability of the programme after this time. A meeting has been arranged with HEETV to discuss options and funding for the future of the programme after the currently funding is spent.

The impact that the programme has had on the region is also being investigated at present. A meeting will take place with Dr Ii at the Centre of Advancement of Sustainable Medical Innovation (CASMI) at the beginning of October to explore options. Dr Ii is interested in conducting a research study of the programme to understand how the programme fellows are building knowledge translation skills and promoting innovation in healthcare. This will support a current research study looking at academic and clinical fellows in a private industry fellowship programme. The study will look to understand how NHS staff are being supported by the AHSN to implement high impact innovations through the programme.

Project Report: Atrial fibrillation and stroke

Atrial fibrillation and stroke

Clinical Leads: Primary Care: Dr. R Thakker, GP Pound House Surgery and Commissioner, Chiltern CCG

Secondary Care: Satinder Bhandal, Consultant Pharmacist, Buckinghamshire Healthcare NHS FT

Project background

- 2.4% of the adult population of England (1.5 million people) are estimated to have atrial fibrillation (AF).
- AF is a major risk factor for stroke, contributing to 1 in 5 strokes.

- An estimated one third of people with AF nationally are undiagnosed.
- Detecting AF can be a challenge due to AF frequently being asymptomatic and intermittent
- Strokes caused by AF are often more severe with higher mortality and resulting in greater disability.
- Treatment with warfarin or a NOAC (novel oral anticoagulant) reduces the risk of stroke in someone with AF by two thirds.
- Of those people known to have AF only half receive the correct treatment with anticoagulation.
- Only half of stroke patients with known AF are on anticoagulation treatment at the time of their stroke.

AF in the Oxford AHSN Region

Between October 2014 and September 2015, 637 patients in the Oxford AHSN region who had previously been diagnosed with AF suffered a stroke. Only 46% of these patients were receiving anticoagulation treatment. This means that 342 patients (7 per week) suffered a stroke that could potentially have been preventable had the patient been appropriately anticoagulated.

If all patients with AF across the Oxford AHSN region received optimal anticoagulation it is anticipated that around 200 strokes per annum could be prevented.

The AF project

The AF project has the overarching goal of reducing the number of strokes caused by AF. This goal will be delivered by:

- Raising awareness of the importance of appropriate AF management in stroke prevention
- Increasing opportunistic detection of AF
- Increasing detection of AF in patients who have suffered a transient ischaemic attack (TIA) by standardising practice
- Supporting CCGs and GPs to identify those patients with AF who are currently receiving no anticoagulation or sub-optimal anticoagulation
- Reducing variation in the management of AF across the region

In delivering this project the AHSN is working with a large number of stakeholders including:

- CCGs and GPs (Berkshire West, Berkshire East, Buckinghamshire, Oxfordshire)
- Acute providers (Buckinghamshire CCG)
- The Stroke Association
- Industry Partners (Bayer, Pfizer, Bristol Myers Squib, Alivecor)
- Public Health England
- West of England AHSN
- AHSN AF Network

Measures and Metrics

The AHSN will measure and monitor this programme through a number of measures and indicators including the following:

- Prevalence of AF compared to expected prevalence (number of undiagnosed patients)
- Proportion of adults with non-valvular AF and a CHA2DS2VASC stroke risk of 1 or above who are not receiving anticoagulation (source - QoF)
- Number of strokes in people with known AF who are not receiving anticoagulation (source –SSNAP)

The table below gives a projection of performance and stroke risk in 2016/17 and the actual numbers of AF related preventable strokes in 2014/15 as recorded on the SSNAP data base.

	Known AF, CHA2DS2VASc>1 and not on OAC			Warfarin			
	Number of patients not receiving OAC	Number of strokes	Number of preventable strokes	Estimated Patients on Warfarin	Estimated patients outside of TTR	Estimated strokes	*SSNAP data illustrating actual numbers of preventable strokes in 2014/15*
Oxford AHSN Region	8296	415	265	25106	5774	185	*229*

Developments in Quarter 2 of 2016/17

AF Detection

The AHSN jointly hosted a stall with the Stroke Association at the Oxford Science Fair. Pulse and blood pressure checking was offered to members of the public who also had the opportunity to learn more about AF and other risk factors for stroke.

The project manager met with the Stroke Association to discuss how the AHSN and the stroke association could collaborate in future on AF detection projects.

The project manager raised the issue of mass screening events with commissioners in Berkshire and Buckinghamshire but it was felt that a more targeted approach was required.

Don't Wait to Anti-Coagulate (Buckinghamshire)

Following a successful pilot at 1 practice in Buckinghamshire, the local NHS organisations are working on refining the patient pathways using an outcome based approach. To ensure sustainability, each participating practice will be empowered to design their own quality improvement project within the outcomes based framework and local guidelines. This process is being led by the AHSN who will be accessing support from the West of England AHSN.

The joint working agreement between the AHSN and Bayer (to cover the quality improvement support team) has been finalised and it is anticipated that this will be signed before end of September.

The project will be formally launched in October.

Pfizer Bid

Together with Buckinghamshire Healthcare NHS FT the AHSN submitted a bid to Pfizer for funding to pilot a Primary Care based pharmacist led anticoagulation service.

The AHSN also supported Chiltern CCG in submitting a bid for an AF Champions Education programme.

Successful bidders will be informed at the end of October

Shared Learning

- Oxford AHSN wrote and submitted a case study to the AF pioneers on behalf of the Buckinghamshire health economy
- Oxford AHSN has been asked to prepare a best practice case study for the Stroke Association

- Oxford AHSN is an active member of the AHSN AF network and part of a core group of AHSNs implementing DWAC projects

Next Steps
• Finalise joint working agreement with Bayer • Continue to support Buckinghamshire CCGs on the DWAC project • Continue to support other CCGs in developing their AF workstreams

Point of Care Testing for NT-proBNP in Primary Care and in the Emergency Department: Early detection and risk stratification of heart failure patients
Innovation Proposal Submitted by:
Wealth Creation Programme – Roche Diagnostics International
Clinical Champions
Dr Raj Thakkar – Primary Care; Dr Will Orr – Secondary Care
Proposal Description

Heart Failure

Heart failure is a deficit in heart function leading to increasing arterial pressures and symptoms such as breathlessness and swelling. Heart failure is caused by abnormalities in the structure and function of the heart with around 70% of heart failure cases being caused by coronary heart disease.

Heart Failure accounts for 2% of the total NHS budget with 2% of all inpatient bed days and 5% of all emergency medical admissions to hospital being due to the condition. Re-admissions to hospital are common with around 25% of patients being readmitted within 3 months of discharge. Heart failure is linked to age and lifestyle factors and admissions due to heart failure are projected to rise by over 50% over the next 25 years.

Prognosis is poor with 40% of newly diagnosed patients dying within the first year and total annual mortality ranging from 10-50%. National audit has shown that outcomes are consistently poor for patients who receive suboptimal care but input from heart failure specialist and adherence to evidence based therapies can have a significant impact on prognosis and life expectancy.

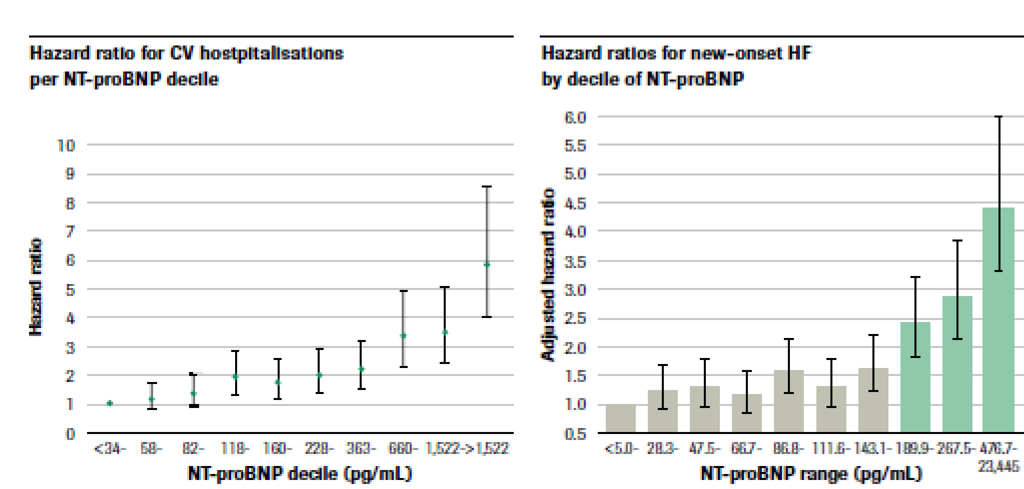
Local context

The national prevalence for heart failure is 0.7% (QoF) and yet the prevalence of heart failure within the Oxford AHSN region is 0.6%, suggesting under-diagnosis. Late diagnosis of heart failure generally leads to an increase in the likelihood of hospital admission and a poorer overall prognosis. The detection of heart failure at the earlier stages of the condition is a key objective in improving patient outcome, life expectancy and quality of life.

In 2014/15 there were 3211 admissions for primary diagnosis of heart failure recorded within the Oxford AHSN region (source: National Heart Failure Audit). If patients were diagnosed earlier and risk stratified it is likely that a proportion of these admissions could be prevented.

NT-proBNP in the diagnosis of heart failure

Making the correct diagnosis in patients with heart failure is challenging and is confirmatory is only 40-50% of cases[i]. Measurement of natriuretic peptides has been shown to improve diagnostic accuracy and as such they are recommended by NICE. Elevated natriuretic peptide levels in patient with suspected heart failure are associated with a 90% increased risk of hospitalisation and an 80% increased risk of death.



The heart secretes natriuretic peptides (NT-proBNP and BNP) in response to cardiac haemodynamic stress caused by volume or pressure overload. NT-proBNP and BNP have been shown in clinical trials to be a robust biomarker for heart failure with high specificity. NT-proBNP is more stable than BNP at room temperature making it a superior marker in a primary care or point of care setting.

Whilst natriuretic peptide levels alone cannot confirm heart failure (further assessment with echocardiography is required to confirm) the ability to rapidly raise the suspicion of heart failure due to a high natriuretic peptide reading will allow rapid and targeted investigation to confirm the diagnosis. Earlier diagnosis of heart failure will enable more rapid treatment which may prevent admission, shorten length of stay and reduce mortality.

As well as aiding diagnosis of heart failure, early measurement of NT-proBNP or BNP can reliably rule out symptomatic patients who do not have heart failure, preventing them from undergoing unnecessary tests, ensuring a more rapid investigation of non-cardiac conditions and enabling a more efficient use of resources.

NICE Guidance

NICE clinical guideline 108: Chronic Heart Failure: management of chronic heart failure in adults in primary and secondary care sets out a number of recommendations for BNP or NTproBNP testing. Including:

- Measure serum natriuretic peptides in patients with suspected heart failure without previous myocardial infarction
- Because very high levels of serum natriuretic peptides carry a poor prognosis, refer patients with suspected heart failure and an BNP level above 400pg/ml or an NTproBNP level above 2000pg/ml urgently to have transthoracic Doppler 2D echocardiography and specialist assessment within 2 weeks
- Refer patients with suspected heart failure and a BNP level between 100-400pg/ml or an NTproBNP level between 400-2000pg/ml to have transthoracic Doppler 2D echocardiography and specialist assessment within 6 weeks.
- Consider specialist monitoring of serum natriuretic peptides in patients for whom up-titration is problematic

NICE clinical guideline 187: Acute Heart Failure diagnosis and management sets out the following recommendations:

- In people presenting with new or suspected acute heart failure, use a single measurement of serum natriuretic peptides and the following thresholds to rule out the diagnosis of heart failure. BNP less than 100ng/litre or NT-proBNP less than 300ng/litre.
- In people presenting with new suspected acute heart failure with raised natriuretic peptide levels perform

transthoracic Doppler 2D echocardiography to establish the presence of absence of cardiac abnormalities

NICE note that:

- Patients with raised natriuretic peptide levels and preserved ejection fraction may have a number of associated conditions, earlier treatment of which will reduce the number of patients who need admission to hospital.
- Quicker referral of patients for Doppler echocardiogram and specialist assessment is likely to lead to earlier diagnosis of heart failure which may result in fewer hospital admissions.

Current utilisation of BNP or NTpro-BNP testing

The extent to which natriuretic peptides are used in the diagnosis of heart failure across the Oxford AHSN region is currently unknown and assessing this will form part of the project. Where natriuretic peptide testing is not available clinicians carry out an ECG (contrary to NICE guidance).

Roberts et al note that whilst adoption of natriuretic peptides has been relatively widespread in the outpatient setting their use in the acute care setting has only partly been adopted because the tests are not consistently available in emergency departments for rapid assessment of patients presenting with breathlessness. The barriers to adoption are felt to be a) perceived additional cost b) perceived lack of additional diagnostic value c) uncertainty over which natriuretic peptide to use.

By providing a convenient point of care test for proNT-BNP this project aims to:

- Increase uptake of this NICE recommended test
- Ensure that clinicians receive a rapid result that can be acted on immediately – ensuring quicker diagnosis

Benefits of point of care *testing*

In the emergency department:

- Reduce the uncertainty over the heart failure diagnosis
- Improved stratification of patients can facilitate earlier and more aggressive patient management
- Enable rapid consideration of non-cardiac causes in patients where heart failure is rule out
- Reduce time spent in the Emergency Department
- Reduction in length of hospital admission due to quicker diagnoses and treatment

In Primary care

- In the primary care setting, NT-proBNP:
- Has a high negative predictive value (NPV) for ruling heart failure
- Provides a powerful tool for detecting early states of the disease
- Pre-selects high risk patients for urgent echocardiogram
- Is cost effective and could substantially decrease echocardiogram referrals
- Reduces clinician workload – enabling rapid test and referral to be made in real time
- Enables risk stratification

Purpose of change

NT-proBNP has been proven to be a robust biomarker for heart failure and can also rule out heart failure in symptomatic patients. Introducing a point of care NT-proBNP test will:

- Increase utilisation of NT-proBNP testing in primary care to speed up diagnosis and reduce unnecessary test

for patients without heart failure

- Enable rapid NT-proBNP testing in the ED which will speed up diagnosis and enable risk stratification of patients with HF
- Speeding up diagnosis will improve outcomes, reduce admission rates and reduce length of stay.

Patient Benefits

- Faster diagnosis enabling treatment to be started sooner resulting in better outcomes and reduced mortality
- Avoidance of unnecessary tests

Health economy benefits

- Reduction in number of unnecessary tests and ECGs
- Clinicians can stratify patients in the ED enabling tailored management to be given
- Reduction in admissions

Estimated Cost of Innovation

Each POC device costs £1500 with each individual test costing £39.

The cost of the test needs to be balanced against the savings from the GP performing an ECG (electrocardiogram) and a reduction in the number of patients who would go on to have an unnecessary echocardiogram.

NICE has estimated that rolling out natriuretic peptide testing could result in savings of £3.8m applied across England. Extrapolating this for the Oxford AHSN region suggests savings of £190k. See appendix for details.

The first phase of the project will scope the level of natriuretic peptide testing in the region to determine the potential for point of care testing to increase utilisation.

Organisational Relevance

All CCGs/GP practices in the Oxford AHSN region

All acute Trusts in the Oxford AHSN region

Ease of Implementation

Estimate that full implementation can be achieved within one year following proof of concept

Project Report: Respiratory

Project: Respiratory - Biomarker-based diagnosis and monitoring of airways disease

Clinical Champions – Prof. Ian Pavord and Dr Richard Russell

The goal is to implement biomarker directed use of inhaled and oral corticosteroid treatment in asthma and chronic obstructive pulmonary disease (COPD) in our region and beyond. The project initially proposed to be the lead project for the Precision Medicine Catapult (PMC) is a partnership between the Oxford AHSN Best Care Respiratory Network and the Clinical Innovation Adoption Program. At current the status of the PMC's involvement in this project is unclear, which may mean the AHSN partners look to take this project forward alone.

Despite a greater understanding of pathophysiology and improvements in treatment, key outcomes of asthma and chronic obstructive pulmonary disease such as hospitalization rates and mortality have not improved over the last 10 years. This is thought to be due to poor targeting of treatment. Treatment use and associated costs have increased significantly over the same period. The AHSN team propose that a new, precision medicine, biomarker directed approach to management is required to address this stalling of progress.

- First, it is now accepted that airways diseases such as asthma and COPD represent a heterogeneous collection of pathologically distinct conditions poorly represented by our current classification system.
- Second, the development of simple, clinically accessible biomarkers of eosinophilic airway inflammation (exhaled nitric oxide (FeNO) and the peripheral blood eosinophil count) means it is now possible to identify one of the dominant pathological patterns of disease in non-specialist settings.
- Third, there is compelling and consistent evidence that treatment guided by these biomarkers results in better outcomes and more economical use of treatment

Organisational inertia, costs and concerns about the feasibility of this new approach in primary care have limited uptake of biomarker directed management, despite positive recommendations from NICE. The aim of the Oxford AHSN - Precision Medicine Catapult (PMC) project is to introduce and evaluate biomarker directed management in local primary care practices with a view to driving regional implementation

FeNO is a simple breath test that can be carried out by children as young as 5 and provides an immediate result. A raised FeNO has been shown to be more predictive of the risk of asthma attacks and the likely response to inhaled corticosteroids than other routine tests including spirometry. Values <25 ppb identify patients with low risk disease who are unlikely to respond to inhaled corticosteroids. The simplicity of the technique, its provision of an immediate and accurate result, and its ability to identify both risk and likely treatment response make it ideal for use in non-specialist settings. Resource problems together with the factors discussed above have led to the lack of uptake of the technology into routine practice by the NHS. Without the support and input of resources from the PMC/ AHSN the technology is danger of continuing to see poor uptake locally as is typical of the NHS. The peripheral blood eosinophil count is also closely linked to the risk of attacks and the likely response to treatment. Values below 2% or 0.15 x 109/L largely exclude eosinophilic airway inflammation and there is consistent evidence that the 40-50% of patients with counts below this threshold have a low risk of serious attacks and do not respond to inhaled or oral corticosteroids. The blood eosinophil count has particular value in older patients with COPD as recent results are available in the medical record in as many as 70% of patients; FeNO is a less helpful in this condition; and blood eosinophil levels are not that responsive to inhaled corticosteroids meaning that low values retain clinical value in patients receiving this treatment.

Project Objective

To evaluate and implement the use of FeNO and blood eosinophil directed management of Asthma in primary care across the Oxford AHSN region.

Scope

- Planning for the project will take place in coming months but it has been proposed provisionally that FeNO and blood eosinophil testing will be implemented in primary care in adults and paediatrics over the age of 7.
- The project will most likely be operated in a number of waves

1. Pilot

- In the pilot we will equip 3 Practices with the FeNO device and infrastructure to provide better, targeted treatment. We will look to compare patient outcomes in these practices over the year with a control Practice that does not have access to FeNO devices and infrastructure. We will interrogate local data to select the practices exhibiting average performance and have around 20,000 patients. On average 10% of those patients will have asthma or COPD.
- We will target newly presenting patients or untreated patients presenting with relapsed disease and those already taking high dose inhaled steroids. Our management algorithm is presented in Figure 1 and 2 below. With those on high dose inhaled steroids we would look to step down their treatment if their biomarker count is low or convert to a LABA/LAMA therapy if they have biomarker low symptomatic COPD (figure 2). We will target patients with asthma and COPD patients.
- We will measure treatment costs, corticosteroid use, prescribing data, hospitalisation and A&E attendance in the year before intervention and in the year after and in comparison to the control practices to assess the result of using the technology on

treatment decision and outcomes. We will collect an Asthma Control Questionnaire (ACQ) at the annual review and symptoms score sheets.

- The evaluation phase will be led by expert clinicians to evaluate the use of the FeNO diagnostic in the patient pathway. We will establish the relevant baseline practice and outcomes for the evaluation phase, determining the opportunity for the use of FeNO to improve diagnosis, treatment and outcomes for asthma and COPD. We will do an initial review of the evidence base to understand the innovations value proposition, and key value messages.

2. First wave adoption

- Using the robust data collected during the pilot, the plan would then be to work with CCGs to implement FeNO and eosinophilic blood testing at a number of GP practices who are considered willing and able to make the change to practice
- The project ill measure changes over time in patients' motivation, experience and outcomes; service utilisation including hospital admission, A&E attendances; and prescribing habits, in comparative cohorts where the use of FeNO is or is not implemented.
- The project will look to work up protocols for local adoption and develop an outline business case on which CCGs and providers will make their decisions to adopt the technology at scale.

3. Second Wave Adoption

- Through close engagement of CCGs, the project will look to drive the adoption of FeNO and eosinophilic blood testing to remaining GP surgeries, most likely in small manageable groups across the region.
- The project will monitor uptake and impact on outcomes across the 300+ GP practices and 11 CCGs as the use of FeNO is rolled out at scale across the region.

Approach

The home for the project is being decided over coming months but, it appears likely that the project will sit with CIA. The project will benefit from the CIA team's extensive experience to support the project including the use of Oxford AHSN's CIA 10 step process.

Next Steps

In light of the uncertainty around the PMC involvement, the clinical innovation adoption team will be taking ownership over the project and drafting project plans for delivery

- Initial collaboration with Wealth Creation (and Circassia the device manufacturer); the respiratory network will help shape the project in terms of scope, responsibility, resource and timelines. A meeting scheduled for 7th October will be used to define
  - Resource and funding requirements
  - Roles and responsibilities
  - Scope and timelines
  - Data collection