



Oxford AHSN Year 9 Q1 Report

For the quarter ending 31 June 2021

Cover image:

Professor Gary Ford (above, left), Chief Executive of the Oxford AHSN, discussed how AHSNs have been supporting the NHS COVID-19 effort through technology and innovation on BBC TV News in May. He talked about the development of home support for people with COVID-19 using pulse oximeters and remote monitoring harnessing artificial intelligence solutions to support clinical decision-making in stroke care.

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Chief Executive's Review

In this quarter our focus has been on establishing the new programmes of work commissioned by NHSE/I for 2021/22. Our local programmes are making good progress and we are exploring extended roll out through collaboration with Kent Surrey Sussex and Wessex AHSNs.

The wider AHSN Network is undertaking development work on three potential topics for future national programmes: medicines optimisation, rehabilitation pathways for long Covid, and support for carers of people with dementia. A national programme of blood pressure (BP) self-management is planned to launch in the autumn in collaboration with NHSx. This will build on trial evidence generated by colleagues in the NIHR Applied Research Collaboration (ARC) Oxford and Thames Valley showing supported self-management can achieve improved BP control. This programme will act as a model for the evaluation and implementation of other digital remote monitoring technologies.

Following approval by individual AHSN boards of a five-year AHSN Network strategy last quarter, the Good Governance Institute is supporting the AHSN Network to develop a new governance framework. The AHSN Network is also developing a business plan for the remaining 18 months of our licence. Alongside this, the Oxford AHSN is developing its own five-year strategy which will align with the AHSN Network strategy and focus on our four clinical priorities: cardiovascular disease and stroke, mental health, maternity/neonatal and respiratory disease.

We continue to develop partnership working between AHSNs and ARCs at a local and regional level. Collaboration will be further strengthened through a National Insights Programme with £4.2 million funding. This will support AHSN-ARC partnerships to accelerate the evaluation and implementation of innovation supporting post-pandemic ways of working, building service resilience and delivering patient benefits.

It was a pleasure to attend two face-to-face meetings in the last month after the multitude of videoconference meetings in the last 15 months. The fifth Harwell HealthTec Cluster meeting held at the Rosalind Franklin Institute launched their refreshed strategy and ambition to create over 100 new companies and 5,000 new jobs in the next ten years through the development of scalable innovations in advanced medicines, devices and diagnostics.

The NIHR Strategy Board met in person for Professor Chris Whitty's last meeting as Chair of the Board before stepping down after five years as Chief Scientific Adviser for the Department of Health and Social Care to focus on his Chief Medical Officer responsibilities. His leadership following on from Dame Sally Davies' achievements has ensured the NIHR remains the largest national clinical research funder in Europe and provided the NHS research infrastructure and funding to universities that enabled Oxford and other centres to generate key advances in vaccination and treatment in response to the pandemic.

Professor Gary Ford CBE FMedSci CEO, Oxford AHSN

Oxford AHSN case study

Date: Q1 2122

Programme/Theme: Strategic and Industry Partnerships

Title: Support from the Oxford AHSN helps digital innovators develop and roll out automated

patient calls

Overview

Ufonia, an innovative Oxford-based digital health company, has built Dora – an autonomous telemedicine assistant – for use in routine clinical conversations. It increases clinical capacity, reduces providers' costs, improves patient convenience, and eases demand on healthcare staff. Dora is accessible and easy to use – patients simply receive a regular telephone call, they do not need new devices, apps or training and they avoid travelling to an appointment. It is suitable for everyone regardless of their access to or knowledge of technology.

Dora is focused on operational bottlenecks, particularly high volume, low complexity care that makes up the bulk of the current backlog in clinical activity. It is a like-for-like replacement for a follow-up call from a doctor or nurse, providing a reliable, consistent check. By digitally capturing conversations with patients, detailed data can be made available to review outcomes following surgery. Calls can be scheduled for multiple times to track progress and intercept problems.

The initial focus has been on the most common operation in the NHS – cataract surgery (400,000 procedures every year in the UK) – particularly post-operative calls to patients. The Oxford AHSN has provided extensive support including as a partner in successful funding applications to Innovate UK and the NHSX/NIHR AI Award. Dora will be rolled out to further NHS sites during 2021.

Initial funding support

A Harwell HealthTec Cluster Proof of Concept Award (£20,000) allowed Ufonia to develop and test a pilot version of Dora supported by an additional £25,000 from the Science and Technology Facilities Council (STFC). The project focused on assessing outcomes following knee surgery using the Oxford Knee Score. The Oxford AHSN provided support as part of an Innovate UK Digital Health Technology Catalyst feasibility grant (£75,000) to develop the value proposition and identify their beachhead market from a range of potential options, focusing on ophthalmology in Buckinghamshire Healthcare NHS Trust (BHT). Ufonia then collaborated with My Clinical Outcomes, Oxford University Innovation (OUI), STFC, BHT and Oxford AHSN to bid successfully for Digital Health Technology Catalyst funding (£665K) to support the launch and discovery phase focusing on follow-up post cataract surgery. The Oxford AHSN supported Ufonia's successful application for funding from the NHS AI in Health and Care Awards in 2020.

How has the Oxford AHSN been involved?

The Oxford AHSN has been involved in the project since its early stages in 2018 and has worked closely with Ufonia to explore their potential customer base, value proposition, articulate their business model and identify the clinical challenge that they are looking to solve.

In support of the launch and discovery phase, the Oxford AHSN performed a study to explore Dora's utility in clinical practice and the potential barriers to adoption. Clinical stakeholders were interviewed about how the technology would integrate into the care pathway. The results were discussed with clinicians and commissioners to gain insights into how the potential barriers could be overcome. A health economics model was developed comparing the cost of the Ufonia platform with the current standard care (nurse-led telephone calls) at Buckinghamshire Healthcare NHS Trust. The structured qualitative and quantitative analysis provided robust conclusions which have been an invaluable evidence-based reference document helping Ufonia gain further interest and investment.

The Oxford AHSN also explored patients' experiences of the existing pathway and their views on the use of this novel autonomous telemedicine system. Findings from this exercise highlighted the importance of including AI at the right stage of the pathway and the potential advantages and disadvantages as seen by patients. The findings are being incorporated into future iterations.

Ufonia has grown from 2.5 full time equivalent (FTE) employees to eight FTE and three part-time employees over the past year, both safeguarding and creating jobs within the Oxford area. Ufonia underwent an Angel investment last year and is currently raising a further seed round. Ufonia has also leveraged the partnership with the Oxford AHSN to secure interactions with other potential stakeholders such as investors, grant bodies and national bodies such as NHSX.

What people said

"Oxford AHSN has helped to anchor us into the ecosystem of healthcare and research. Their supporting work has aided us in ensuring we are addressing the relevant needs. This credible information is able to be shared with and gives confidence to our potential partners whether they are individual hospitals, integrated care systems or central NHS teams."

Nick de Pennington, CEO and Founder, Ufonia

"We have worked closely with Ufonia every step of the way, helping them develop a product which meets NHS needs and has the potential to enhances the experience of thousands of patients." Julie Hart, Director of Strategic and Industry Partnerships, Oxford AHSN

What next?

Dora will be rolled out to further NHS sites during the second half of 2021. Funded by a Phase 2 NIHR AI in Health and Care Award, Ufonia will develop evidence supporting the safe deployment of Dora, the automated telemedicine platform, to deliver routine clinical follow-up calls at two large NHS hospital trusts. Partners: University of Oxford, Imperial College London, King's College London, Buckinghamshire Healthcare NHS Trust.

Contact

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Operational Review

Introduction

The NHS is working hard to maintain services, tackle the elective backlog and manage a steady rise in hospitalisation and emergency callouts as COVID-19 case rates in the community double every fortnight. Rising cases of norovirus and RSV in children is a concern. The flu programme, booster programme and need to complete vaccination of younger people will also bring more pressure on primary care in the autumn. For the AHSN this means we need to stay focussed on interventions to reduce winter pressures by helping patients better manage their long-term conditions and improve patient safety to reduce emergency admissions. We will also support the adoption of innovations including remote monitoring, remote consultation technologies and improvements in diagnostics. These interventions will reduce demand on the system and increase productivity as well as improving patient outcomes and experience.

Our 2021/22 Business Plan was approved by the Regional Medical Director in June. This is the first quarterly report for 2021/22.

Julie Hart's secondment with the Department of Health and Social Care (DHSC) as part of the Technologies Validation Group (TVG) - Test and Trace ended in April 2021 and Julie has returned to her role as Director of Strategic and Industry Partnerships (SIP).

In this quarter the patient safety team has been focussed on planning and engagement to deliver a new portfolio of nationally commissioned interventions. CIA has been leading the national and local rollout of asthma biologics and developing the lipid management programme. SIP has refocussed its discover and develop pipeline to address our four clinical priorities. SIP has also delivering the AAC/RUP portfolio.

Oxford AHSN's performance on national programmes and innovation products is positive with good engagement and uptake throughout the region.

Strategy and clinical themes

The Oxford AHSN has started to develop its strategy framed by the AHSN Network Strategy and local NHS priorities, increased regional collaboration and the significant academic and industrial life science capability in the Thames Valley. This is an opportunity to involve all our staff. Nicola Bent, Deputy CEO of Wessex AHSN has kindly agreed to run a Rapid Insights session on values with all our staff.

We are focussed on clinical areas where we have developed a critical mass of knowledge and engagement. Our clinical priorities, which align with the priorities in the Thames Valley and across SE England, are:

- Cardiovascular
- Mental health
- Maternity and neonatal
- Respiratory

In collaboration with BOB ICS we have commissioned KSS AHSN to produce an inequalities dashboard for the Oxford AHSN population.

Integrated Care Systems and merging CCGs

On 1 April 2021 Bedfordshire, Luton and Milton Keynes CCGs merged into one. In March we agreed an MOU with Eastern AHSN and with the leadership of the new CCG on how we would support the system. Oxford will continue to support MKUH and Eastern will support all system-wide projects unless, eg in the case of lipid management, Oxford opts to take on responsibility for the whole system.

Eastern, Oxford and BLMK CCG have agreed to jointly fund a management post embedded in the CCG to improve the 'pull' of innovation into BLMK.

Berkshire East, NE Hampshire & Farnham and Surrey Heath CCGs have merged to create Frimley CCG. The Oxford AHSN has agreed with Kent Surrey Sussex AHSN and with Frimley CCG leadership that Oxford AHSN will support Frimley CCG.

The CIA team supported our local NHS partners in securing £300k of OLS Pathway Transformation Funding.

Developing the organisation

We had a very high response rate to our staff survey and this has helped us shape guidelines for ways of working post lockdown. In summary staff told us that they would like to work in the office for 1-2 days a week but without fixed days. To ensure that we all get together we will hold monthly team get togethers offsite where colleagues can meet in their programme teams, as a group and network. The first monthly get together is planned for 4 October. We have also upgraded screens, headphones and chairs for staff that needed them for better home working. We have upgraded screens and chairs in the office too. Staff will bring in their own personal equipment – laptop, keyboard, mouse and headphones. Staff are regularly using the office in small numbers. As wave 3 is taking off we have delayed opening up the office to the capacity of 20 staff, allowing for social distancing. We will keep this under review.

The whole AHSN team meets every Monday for an update meeting and there is a 'show and tell' session on Wednesdays where teams to share insights into their work or for talks from external speakers. The senior team meets twice a week. All of these regular meetings take place online and there are no immediate plans to alter these arrangements.

We have recently recruited a programme manager to lead on planning and reporting and management of the Oxford AHSN pipeline. Recruitment is underway to add two more managers to the Clinical Innovation Adoption team to meet the demand of further national programmes expected to commence later in the year.

KSS and Oxford are looking at a joint management post to lead on environmental sustainability across the two regions. The role holder would also work with colleagues in Wessex and the regional team.

Collaboration with the ARC is strong. We facilitated a meeting for all three SE ARCs to meet the NHSE Regional Director for Digital Transformation.

National, regional, and local programmes

The national programmes and main local programmes are set out below. Home blood pressure monitoring will start in Q3. Inclisiran has been added to the RUPs. The AHSN Network is working to identify two more national programmes from children's' health, mental health, long COVID recovery, polypharmacy and transformational recovery.

We are in discussion with KSS and Wessex AHSNs and the regional team about follow-on programmes to spread across the South East. We are exploring intervention in CYP mental health, eg student health and extending the ADHD project into Young Offenders Institutions (YOI). The regional group of mental health provider CEOs asked the AHSNs to support shared learning in eating disorder services and explore benchmarking of community mental health services.



Nationally commissioned work 2021/22: key areas of impact

Locally commissioned work 2021/22: clinical focus areas

Oxford Academic Health Science Network



Progress of national programmes and innovation products

Programme/product RAG	Comments
Eating Disorders	adopted by eligible trusts.
ADHD	issues resolved in Buckinghamshire. All parts of the region will have adopted.
Lipid management	Very positive engagement. The AHSN team supported application of PTF
	funding for Bedford, Luton and Milton Keynes CCG - £123k was awarded. This
	will accelerate implementation. Uptake of ezetimibe close to plan. PCSK9i
	targets achieved. Progress good on familial hypercholesteremia
FeNO	amber as target has been increased to include PCNs that rejected FeNO and
	will not be able to attract PTF funding
Asthma biologics	AHSN team secured £186k PTF funding for BOB ICS. Engagement positive
	across whole region
Heartflow	a trust has adopted, 1 is implementing, 2 in discussion and 1 ineligible - expect
	a positive outcome
Securacath	4 out of 5 trusts have now adopted and Milton Keynes University Hospital now
	implementing.
Gammacore	2 trusts have adopted and Royal Berkshire and Milton Keynes University
	Hospital have agreed to adopt
Tamoxifen	No longer a national project- now a local pathway improvement project

Report by clinical priority area (not exhaustive - see programme reports for all projects in our pipeline)

Cardiovascular

- CVD/lipid management programme is very complex and is making good progress launch meetings were held at ICS level. All five CCGs engaged. Plans and engagement opportunities shared with BOB, Frimley and BLMK ICSs. Detailed implementation plans being developed at ICS level. PTF Funding successfully secured for BLMK CCG. PCSK9 inhibitors are on target.
- Practice pack for **home blood pressure monitoring** developed. A link has been made with BP monitoring research and the AHSN national programme.
- Guidance developed for targeted AF detection in COVID-19 vaccination clinics.
- Working with Brainomix, the TITAN project has delivered (within the Thames Valley) the country's first AI-enabled regional stroke network. A three-year contract with NHSX for delivery of AI evaluative work on Brainomix has been signed with the project officially starting on 1 April 2021.
- **EchoGo Pro r**eal world evaluation of the impact of Ultromics' EchoGo Pro for automating coronary artery disease risk prediction in stress echocardiogram clinics.
- Supporting FedBucks in evaluating and implementing a D-dimer point of care test in their **deep vein thrombosis** clinic.

Maternity/Neonatal

- The **Intelligent Intermittent Auscultation** (IIA) package won the HSJ Patient Safety Innovation of the Year and is now available internationally.
- Rates of magnesium sulphate administration in pre-term labour to reduce the incidence of **cerebral palsy** increased to 94% across the year.
- Fit for Labour test health economic evaluation suggests cost savings are derived from reduced cerebral palsy incidents, leading to a reduction in litigation costs and a reduced number of emergency caesarean sections. This project will progress to 'Develop' stage.

- **PIGF** – Q4 focus has been developing the communication strategy and provision of support for adopted trusts in their transition from ITP funding to MedTech Funding Mandate (MTFM).

Mental Health

- ADHD QbTest is already implemented in Berkshire and Oxfordshire, and Buckinghamshire CAMHS service aims to implement shortly. Engagement work is now ongoing with several units looking to implement. No new sites have yet implemented QbTest though we have at least one which is planning to do so. We do not yet know the new numbers of tests that are proposed. There have also been some discussions about services for adults though these are outside the national Focus ADHD programme, specifically the introduction of QbTest in young offender institutions.
- **FREED** Berkshire Healthcare is making significant progress with 16 assessments undertaken and one patient on the FREED pathway. Buckinghamshire is due to launch in July 2021 and the numbers benefitting from FREED are due to increase significantly in Q2.
- **S12 Solutions.** Discussions took place within BOB about adopting this as an ICS. It is now anticipated that Oxfordshire will be the first in the ICS area to adopt this platform.
- Sleepio. The six Primary Care Networks in North Hampshire CCG have partnered with Big Health to embed Sleepio in primary care. Training for clinicians and support staff was delivered and over 1,150 patients have signed-up, with over 650 commencing the CBT element of the programme between 1 October 2020 and 30 April 2021 within that geography. The project will continue in 2021/22.
- **Student mental health.** We are exploring student mental health as a potential area where the AHSN may add value, in liaison with NHSE/I SE Clinical Networks and Kent Surrey Sussex AHSN.

Respiratory

- The Oxford AHSN is leading nationally on the rollout of the Asthma Biologics RUP programme and through collaborations (national NHSE/AAC, clinicians, industry, AHSNs/NHS). This involves the development of numerous tools and resources to support improvement work across the Severe Asthma pathway. Oxford AHSN leads coordination of the 15 AHSNs to benchmark, plan and deliver improvement activity in Severe Asthma care across their geography through 2021/22.
- We have secured PTF funding at four PCNs to buy **FeNO** monitors (although not bought yet). We will introduce FeNO monitors into primary care as part of the Asthma Biologics programme.
- In June, Matt Inada-Kim, Cheryl Croker and Paul Durrands presented lessons learned from the **COVID Oximetry @home** initiative at the NHS Confederation Virtual Conference.
- Patient recruitment is almost complete for the real world evaluation of Turbu+, a digitally enhanced inhaler for **COPD** and **asthma** patients.

Other clinical areas

- **Breast Cancer** survey circulated to all 15 AHSNs to provide a baseline position of service provision and identify variation across the country.
- Tamoxifen following feedback and concerns expressed by several AHSNs and their stakeholders, the AAC decided to terminate this project and withdraw PTF funding. Oxford AHSN has agreed to support our local stakeholders to deliver a re-scoped, clinically led project to improve breast cancer pathways that will begin in Quarter 2.
- **Heartflow** and **SpaceOAR** numbers are below target largely due to the impact of COVID-19 on service provision. **SecurAcath** is in excess of target.

- **Bone Health**: patient and clinician workshop held to discuss requirements for educational resources, plus agreement from nine GP practices across Oxfordshire to participate in the project.
- With aseptic services under strain across BOB and Frimley ICS, the Oxford AHSN is supporting stakeholders to conduct a review of aseptic services and ready-to-administer medicine to identify future operating models.
- **Elastomeric devices** to administer IV antibiotics and chemotherapy either at home or in hot covid wards. Significant bed days can be saved through adoption of this technology. We are working with Oxford University Hospitals and NHS Supply Chain. There is the potential to scale this pilot.
- **FatHealth** detects fat tissue inflammation using new AI techniques applied to CT scans.
- **Ufonia** (see case study above) has developed an **automated speech-based service** (Dora) to contact patients who have undergone cataract surgery to assess their eye health and need for further follow up. The impact of this project is to increase patient satisfaction of their follow-up care and relieve clinician burden as an increasingly ageing population affects workload demands.

Workforce

We are working with the BOB ICS to support their fourth theme in the people strategy - retention of staff. KSS, Oxford and Wessex AHSNs are working together to support the spread and adoption of evidence based digital innovations across the region. Oxford, Yorkshire & Humber and North East North Cumbria AHSNs have developed an evaluation framework which has been shared with the national workforce leads. This will support the introduction of the workforce theme across all local projects.

Environmental sustainability

The national and regional priorities for environmental sustainability and achieving a net zero NHS by 2040 are asthma inhalers, anaesthetic gases and transport. We are exploring with KSS and Wessex AHSNs how we may support a move to environmentally sustainable asthma inhalers.

The AHSN Network Community of Interest is running shared learning events for stakeholders – the first one featured a presentation of the progress in the North East. 157 people registered for the event with 99 attending. Future events will include shared learning on anaesthetic gases and optimising asthma inhaler use. Shared learning on procurement categories where there are important new environmentally friendly innovations will become more prominent – where policy, procurement and clinical practice can be aligned. AHSNs have a role to play in supporting changes in clinical practice.

The Greener NHS team is expanding and various agencies involved in innovation and procurement such as SBRI, AAC and NHS Supply Chain are gearing up to support the net zero commitment.

Economic growth and company support

Sixty-four companies were supported in Q1. The 2021 Accelerator programme seeks to address these core clinical themes: mental health, respiratory, maternity/neonatal, cardiovascular disease, stroke and cancer. In May and June 2021, 11 innovators attended the commercialisation workshops. A further event in July has already attracted 16 sign-ups. Participants come from across the Thames Valley region.

Communications and stakeholder engagement

The move to online working has enabled faster and more inclusive collaboration. We ran many well attended shared learning events in collaboration with other AHSNs and other partners. Teams and other video meetings allow much greater participation from clinical and non-clinical colleagues from all around

the system. Our Practical Innovators and Accelerator programmes are now fully established online. We have continued to add to the growing bank of <u>case studies demonstrating how we supported our partners</u>.

We took part in regional and national online events and publications with partners in other AHSNs, the NHS, research and industry. We also contributed to a number of publications produced by the AHSN Network including a detailed report into the <u>collective impact of England's 15 AHSNs</u>. We continued to invest in social media activities. Our Twitter impressions peaked in May, coinciding with our Chief Executive Professor Gary Ford's appearance on BBC TV News discussing the impact of AHSNs in promoting clinical innovation through the pandemic. The number of LinkedIn followers rose by 10% in the first quarter of 2021/22. We are on track to pass 1,000 followers this year.

Finance

The table shows the plan and forecast outturn (as at Q1) by programme, theme, and corporate. The forecast spend includes the AI Award funded by NHSX. Over 50% of planned spend relates to national programmes. In line with our master service agreement corporate overheads are under the 25% threshold.

Financial Year Ending 31 Marc	h 2022	
	Opening Plan	Forecast
INCOME		
Commissioning Income - NHS England Master Licence	2,723,651	2,723,651
Commissioning Income - Office for Life Sciences	823,900	823,900
Commissioning Income NHSI - PSC	577,901	577,901
Other Income - Partner Contributions	330,000	330,000
Other Income - Grant Funding from Accelerare Ltd	211,981	259,578
Other Income - Management Charges	25,000	25,000
Other Income - Clinical Innovation Adoption	298,000	298,000
Other income - Strategic & Industry Partnerships	319,917	311,697
Other Income - CIWI	28,320	28,320
Total income	5,338,669	5,378,046
AHSN FUNDING OF ACTIVITIES		
Patient Safety	577,901	576,794
Clinical Improvement	215,407	215,408
Clinical Innovation Adoption	1,445,115	1,490,875
Strategic & Industry Partnerships	1,150,217	1,141,638
Community Involvement & Workforce Innovation	433,613	447,348
Communications, events and sponsorship	134,980	128,344
General Contingency	0	0
Programmes and themes	4,181,105	4,257,704
CORPORATE		
Pay costs	701,710	697,002
Non-pay costs	455,854	423,339
Total Corporate Costs	1,157,564	1,120,342
Total expenditure	5.338.669	5.378.046
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Net Income/Expenditure	0	-0

Risks and issues

Pressure on the NHS due to wave 3 may impact engagement and delay implementation.

Dr Paul Durrands ACA CMILT, Chief Operating Officer, Oxford AHSN

Patient Safety and Clinical Improvement (PS&CI)

Summary

All five workstreams within the Patient Safety commission (detailed below) are now well underway with good engagement and support from across the system. Development of more local and regional work within mental health is progressing with support from stakeholders across the system.

Deterioration Safety Improvement Programme (DetPat SIP)

The overall aim of this programme is to reduce deterioration-associated harm by improving the prevention, identification, escalation, and response to physical deterioration, through better system co-ordination and as part of safe and reliable pathways of care. This programme has three distinct elements:

- COVID Oximetry @home
- recognition and response to physical deterioration in non-acute (hospital) settings
- supporting the roll-out of the national Paediatric Early Warning Score (PEWS).

Covid Oximetry @home

The pilot project with Oxfordshire CCG to proactively distribute pulse oximeters to areas of deprivation, has been designed as an exploratory qualitative study that took place initially in three settings (a food bank, mosque and homeless shelter via linked GP practice). Evaluation of this will be with Professor Trish Greenhalgh and team from Oxford University via NIHR ARC Oxford and Thames Valley. Initial findings were shared on the final national COVID Oximetry @home learning network meeting in June. Deliverables expected in Q2:

- 10-page report describing how the implementation went in each of the three sites, along with anonymised vignettes which illustrate the key challenges of people recruited from this site.
- Recommendations for CCG to improve uptake of oximeters in socio-economically deprived groups.
- Suggestions for a research study (eg NIHR Research for Patient Benefit).

Recognition and response to physical deterioration in non-acute (hospital) settings

Progress continues to be made supporting local partners to **roll out** <u>RESTORE2</u> in care homes and other care settings. In Buckinghamshire, the training is now being delivered by Immedicare telemedicine service and further development of this, together with accreditation via Buckinghamshire New University, has been included in a bid of circa £800,000 from the Community Renewal Fund by Buckinghamshire Health and Social Care Academy (BHSCA). It is expected to be confirmed if this bid has been successful in July 2021.

We have exceeded the target to meet the first milestone of 10% of care homes implementing a tool by June 2021, with nearly 50% either in the testing phase or implementation.

Work has begun to establish where we can best support Personalised Care Support Plans (PCSPs) in relation to deterioration. We are linking with the Oxfordshire Palliative and End of Life Care Forum, supporting the task and finish group to provide a digital solution for Palliative and End of Life care plans including resuscitation decisions and implementing ReSPECT.

Paediatric Early Warning Score (PEWS)

We have collaborated with the Thames Valley and Wessex Paediatric Critical Care Operational Delivery Network, NHS SE Children and Young People programme, as well as Kent Surrey Sussex and Wessex Patient Safety Collaboratives (PSCs) supporting seven Trusts across the SE to test the national PEWS tool. This is part of the System-wide Paediatric Observations Tracking (SPOT) Programme. Initial feedback on the pilot tool has been shared with the national team, sites have completed a Memorandum of Understanding and are currently undertaking a Site Assessment Tool survey to identify local areas for improvement. Regional training materials and data collection are being scoped while awaiting further national guidance and next steps for the pilot.

We held our first **regional Deterioration and Sepsis Stakeholders Patient Safety Network** meeting since February 2020, chaired by Dr Andrew Brent, regional clinical lead. The agenda included:

- Updating the region on the new commission
- Virtual High-Dependency Unit (Virtual HDU) study a multi-phased project, run by the NIHR Oxford BRC Technology and Digital Health team, to refine and develop an ambulatory monitoring system that is wearable, reliable, and user-friendly.
- A multicentre project testing a Digital Alert for Sepsis (DIALS) (including OUH and RBH)

In addition, we continue to use the <u>Suspicion of Sepsis</u> (SOS) dashboard as our high-level measure of deterioration management. The latest data shows a COVID related peak in wave 2. Mortality was higher than national average during this peak with length of stay continuing to be at or below national average.



Maternity and Neonatal Safety Improvement Programme (MatNeo SIP)

The MatNeo SIP programme aims to improve the safety and outcomes of maternal and neonatal care by reducing unwarranted variation and provide a high-quality healthcare experience for all women, babies, and families across maternity care settings in England. The Oxford PSC is supporting the delivery of the MatNeo SIP key national programme ambitions in collaboration with our well-established mature regional maternity and neonatal Patient Safety Networks (PSNs) where engagement is consistently high despite the challenges of the COVID-19 pandemic.

We work closely with our Local Maternity & Neonatal Systems - Buckinghamshire, Berkshire, Oxfordshire (BOB) and Frimley LMNS. We contribute to the SE Perinatal Safety Group chaired by the Regional Chief Midwife and to the BOB LMNS Serious Incident Panel set up to align with the requirements of the Patient Safety Strategy (2019) and the Ockenden report (2020).

We are continuing to progress work to support projects funded by the BOB LMNS to address health inequalities which lead to poor outcomes for pregnant women. This work is aimed at ensuring that we hear the voices of service users and citizens including those who are not currently part of our PSNs and use the data and intelligence to inform improvement plans aligned to the MatNeo SIP priorities.

Our obstetric, midwife and neonatal regional clinical improvement leads. Meena Bhatia, Consultant Obstetrician & QI Lead (Oxford), Michelle East, Consultant Midwife (Buckinghamshire) and Anda Bowring, Advanced Neonatal Practitioner (Oxford) are working closely with our MatNeo SIP lead leading on specific elements of the preterm optimisation workstream to improve outcomes for babies born before 34 weeks' gestation. Our June PSN meeting was attended by obstetric, midwifery and neonatal colleagues from BOB, Frimley & GWH. We were pleased to introduce the newly appointed Patient Safety Specialists from Milton Keynes University Hospital (MKUH).

Optimisation care pathway for the preterm

Thanks to the hard work of our PSNs we continue to be a high performing region evidenced by sustainability in key elements of this pathway, regularly achieving 85-90% for place of birth and 95-100% for the administration of magnesium sulphate for eligible women in threatened preterm labour. The perinatal review of all cases where a preterm baby has not been born in the right place is established. Learning from recent cases is focussed on improving the structured conversation between district and tertiary units and reviewing the use of technology such as Teams/Zoom to aid this process and guidance to interpret fetal monitoring for preterm babies.

We are making steady progress on additional elements of the optimisation care bundle, deferred cord clamping and the timing and administration of antenatal corticosteroids, working with our regional clinical improvement leads and stakeholders from each organisation within the Oxford AHSN footprint.

Organisations are at different points on their improvement journeys with some taking a stepped approach, but all really benefit from the shared learning opportunities to refine and develop their QI approach. One of our organisations is working on improving the uptake of early breastmilk with support from our MatNeo SIP lead. This is an important element of the optimisation pathway, and we are delighted to see their multidisciplinary approach.

Finally, work continues to agree an approach for a QI & Education project to support the optimisation pathway with some funding agreed at LMNS level.

Regional perinatal governance group

The group met in May and were pleased to welcome Sian Summers, Senior QI, Lead Hampshire & TV Maternity & Perinatal Mental Health Network and colleagues from the Health Safety Investigation Branch (HSIB). This is an important forum for sharing safety concerns as well as practical examples of safety recommendations incorporated into clinical practice. The group have been instrumental in the development of a BOB regional maternity dashboard working with Dr Foster Intelligence (due for signing off with the BOB LMNS board in Q2). The dashboard will facilitate opportunities for maternity services within the BOB LMNS to benchmark against each other and with exemplar performing organisations nationally to improve safety and quality of care for women and birthing people.

Avoiding term admissions to the neonatal unit (ATAIN)

A subgroup of the regional perinatal governance group is working to agree an in- region structured review of term admissions to the neonatal unit (ATAIN). This work is innovative, and we are proud of our maternity and neonatal services who are committed to working together to identify babies whose admission to the neonatal unit could be avoided and support understanding of the importance of keeping mother and baby together when it is safe to do so.

Fetal monitoring in low-risk labour: intelligent intermittent auscultation

The intermittent auscultation e-learning programme to improve safety for low-risk women and babies in labour continues to generate interest nationally. We were invited to present at the 'Monitoring May' initiative, a month-long shared learning programme facilitated by East Midlands AHSN. The programme was dedicated to fetal monitoring surveillance and we shared the safety recommendations related to intermittent auscultation identified during HSIB investigations and which are included in our e-learning for health programme https://www.e-lfh.org.uk/programmes/intelligent-intermittent-auscultation-in-labour/

We were pleased to have our abstract accepted by the British Intrapartum Care Society and presented as part of a series of webinars on improving the teaching of fetal monitoring and assessment of competence; a key requirement from the Ockenden report.

Fetal monitoring in high-risk labour: Electronic fetal monitoring

The MatNeo SIP lead is supporting a regional task and finish group with aiming to review and improve the current decision aid used by the maternity services in our region to support interpretation of fetal monitoring in labour. This is important because fetal monitoring (CTG) interpretation is highlighted in national reports related to poor outcomes for some babies. Development of an e-learning programme will accompany the revised decision aid.

Medicines Safety Improvement Programme (Med SIP)

The overarching aim of this programme is to reduce medication-related harm in health and social care, focusing on high-risk drugs, situations and vulnerable patients. It will contribute to the 2017 WHO Challenge target to reduce severe, avoidable medication related harm globally by 50% over five years. The PSCs have been commissioned to work on two main projects:

- 1. Safer administration of medicines in care homes
- 2. Reducing inappropriate High-dose opiate prescribing for non-cancer pain

Care homes

During Q1 2021/22, care homes were still severely impacted by the pandemic; although Covid-19 infection rates of residents and staff were down on the previous quarter, issues caused by the ongoing vaccination programme, staff shortages and wellbeing issues, coupled with low occupancy rates continued to make their capacity for engagement challenging.

Of the 511 registered care homes in the region 10% had indicated via the e-survey sent to all homes during the pre-pandemic diagnostic phase that they were interested in working further with the AHSN and in April these were contacted directly to see if this was still the case. Initial positive responses were received from just six homes, with three of these failing to respond to further follow-up contacts. This situation is not unusual from feedback from other AHSNs and reflects the current difficult situation within the sector.

The three remaining engaged homes are all undertaking a validated Safety Attitudes Questionnaire (SAQ); analysis of this will constitute a proxy measure for baseline data, with the SAQ repeated at the conclusion of the project to demonstrate impact.

Each home is considering which of the four interventions are most relevant to them, and individualised codesigned measurement plans will be produced. The four interventions are:

- Implementing safety huddles
- Learning from safety incidents
- Managing interruptions in drug rounds
- Improving three-way communications between care home, prescriber and dispensing pharmacy.

Work is underway to develop a QI training package suitable for care home staff, to equip them with the skills and tools to run their own QI projects.

Part of the MedSIP commission is to establish a Care Homes Patient Safety Network, in conjunction with the DetPat SIP. Key stakeholders were identified and invited to an inaugural meeting in early May. Attendance was good, and at a subsequent meeting in June terms of reference were ratified. Work is now underway to map all care home-related support work, either in progress or planned, across the region to identify potential overlaps and opportunities for collaborations.

Deprescribing opioids

At the conclusion of the diagnostic phase of this work at the end of Q4 2020/21, over 100 interventions had been submitted to the national team by all the AHSNs to be considered for inclusion in the adoption and spread phase - five of these were from Oxford.

A three-day meeting was hosted by the national workstream leads to theme and evaluate the projects, but a decision on the most suitable to take forward will be delayed to allow for the publication of new national guidance expected shortly. Once this is available, a QI change package will be developed to align with its recommendations.

Adoption and Spread Safety Improvement Programme (A&S SIP)

Work has recently resumed on this workstream which was put on hold because of the pandemic. This includes supporting the uptake of the BTS COPD Discharge Care Bundle (a resumption following initial work undertaken pre-pandemic) and the BTS Asthma Discharges Care Bundle (starting this quarter). Scoping work has also been undertaken as to whether work on Emergency Laparotomy Care Bundles will continue (also suspended during the pandemic). We will primarily be supporting all through a QI approach with each relevant provider and facilitating the sharing of best practice. There are also opportunities for linking in through other AHSN respiratory workstreams including asthma biologics and FeNO testing.

COPD and Asthma Discharge Care Bundles

All regional acute care trusts have adopted both care bundles into practice. Success criteria is measured through the National Asthma and COPD Audit Programme (NACAP). This has shown that while trusts in the region are performing favourably in comparison to those nationally, there are differing areas of potential improvement for each Trust. Initial work in this area has focussed on:

- Establishing and re-establishing contacts with COPD and asthma leads and those involved in data collection this is challenging due to the lack of an existing respiratory network in the region
- Improving data collection tools and processes (to better understand any shortfalls)
- Opportunities for reducing health inequalities, particularly through improving access to written patient information through easy-read, non-English and accessible versions.

Emergency Laparotomy Care Bundles

The national Emergency Laparotomy Collaborative programme (ELC) promotes standardisation in emergency abdominal surgery through the adoption of a bundle of evidence-based best practices (the Oxford AHSN Clinical Innovation Adoption team previously led on this work with support from PSC). Over 2019, the regional Collaborative grew and interest with improvements evident at all six acute hospitals, including some metrics that compared favourably nationally and well attended quarterly regional meetings. Following interruption by the pandemic, NHS Improvement is undertaking a review of the progress made within this programme, before deciding whether it will be re-commissioned. A decision is anticipated in Q2. In support of this, we have collated a response on



regional progress from regional acute hospitals through a stocktake survey. Results suggest that organisational and infrastructure limitations are the key barriers in increasing the adoption of care bundles advocated in the ELC programme.

Mental Health programme

Oxford AHSN maintains a significant focus on mental health within its work. The AHSN's mental health programme comprises national, regional and local programmes and we are discussing with trusts and BOB ICS their priorities for our potential future work. As well as the programmes listed below, we continue to

work with the other teams in the AHSN on mental health related work. For information about the FREED eating disorders programme, please see the Clinical Innovation Adoption section of this report below.

Mental Health Patient Safety Improvement Programme (MH SIP)

The emphasis of the MH SIP throughout Q1 has been on workstream 1: *reducing restrictive practice in inpatient MH and LD services (RRP).* We have increased the number of trusts we are working with; in addition to Oxford Health and Berkshire Healthcare we are now supporting Central and North West London. CNWL have decided that it would be advantageous to split AHSN support with the majority of their sites (in London) supported by Imperial College Health Partners and their Milton Keynes services supported by Oxford.

MH SIP had a successful national launch event on 10 May. Working with the South of England Quality and Patient Safety Mental Health Collaborative (SEMHC) a learning event was held on 22 June with attendance from all three of our trusts. Three further learning events are now scheduled between September and April 2022 in addition to monthly 'coaching sessions. For AHSN workstream leads there are monthly national meetings and weekly SEMHC meetings but support from NCCMH national coaches is not operational yet.

We are working with the trusts to try to ensure a breadth of services are included in the wards taking part in RRP. Oxford Health is establishing complex QI infrastructure with multiple new 'QI Hubs' and training of ward staff. This will form their delivery and assurance mechanisms for the MH SIP and their wider ambitions. We have been invited to join the QI Hub monthly meetings as they become established and the strategic oversight group. We have been invited to visit wards in all three trusts, starting in July. These visits will help refine our support for each individual ward.

We are considering the best way to establish a PSC MH Network for the MH SIP, including options to incorporate it into a broader AHSN MH Steering Group.

Anxiety and Depression (IAPT) Network – Local programme

The overarching objective of this network is continuously to improve patient outcomes and service delivery, working very closely with its active patient forum.

- The main focus this quarter has been on ensuring all governance requirements are in place to deliver Paddle app Phase 2. To learn more about our Paddle therapy support app visit: www.paddleapp.org. Phase 2 is a service evaluation looking at how long patients stay well following a course of treatment with their local, NHS talking therapies service. As this study involves both data flow (from the app to the patient electronic record) and data sharing (between Oxford Health, University of Oxford and Oxford AHSN) all aspects of this work are scrutinised closely and the governance framework is comprehensive.
- The DCB 0129 process was commenced for Paddle (this is an MHRA requirement to assess clinical safety).
- Latent Profile 7 project: this project is moving ahead, and good, initial progress has already been made. It involves identifying patients who we know generally do badly in our talking therapy services (a latent profile has been identified). We are running a couple of pilots to explore if these patients might do better when, in addition to their course of psychological therapy, they are also offered employment and/or wellbeing support. Early results look promising.
- As a response to COVID restrictions resulting in increased levels of isolation and depression/ anxiety in vulnerable older adults the network is planning further training to supplement that already delivered earlier in the year for Age UK staff. The new topic is Understand and Responding Grief.

Network for care homes in-reach teams who work with people with dementia - local programme

We are currently looking at how the network might evolve to reflect more regional working, and the introduction of multi-disciplinary teams as part of the PCN role within care homes.

Focus ADHD – Introduction of computerised test into ADHD assessment – national programme

Focus ADHD is a national AHSN programme aimed at improving the ADHD assessment for school age children. The core of the programme is implementation of a computerised test such as QbTest. This test is already in place in Berkshire and Oxfordshire ADHD services and the Buckinghamshire CAMHS service is aiming to begin implementation shortly. There have also been some discussions about services for adults though these are outside of the Focus ADHD programme, specifically the introduction of QbTest in Young offender institutions and prisons (YOIs). An evidence synthesis of ADHD in YOIs and prisons has been completed and this continues to be explored.

S12 Solutions – supporting the process of Mental Health Act assessments – regional programme

S12 Solutions is an app and website which enables S12 doctors to define their availability for undertaking Mental Health Act assessments thus enabling Approved Mental Health Professionals (AMHPs) to build an assessment team using the most appropriate doctors available, and for the doctors to create and submit payment claim forms. This is one of the innovations within the SE Regional Collaborative Spread and Adoption initiative and is widely adopted across England. Discussions took place within the BOB area about adopting this as an ICS. It is now anticipated that Oxfordshire will be the first in the ICS area to adopt this platform.

Student mental health - Regional and local programme

We are currently exploring student mental health as a potential area where the AHSN may be able to add value - we are liaising with NHSE/I SE Clinical Networks and Kent Surrey Sussex AHSN on this. The work would link in with CYP focus, population health and would dovetail with work on eating disorders, all of which are highlighted within the NHS Long Term Plan (LTP) and BOB ICS LTP response plan.

Clinical Innovation Adoption (CIA)

Key achievements:

- Successfully supported partner organisations to secure over £300k of Office for Life Science Pathway Transformation Funding which has included:
 - £186k for OUH/ BOB ICS to redevelop asthma pathways with a focus on severe asthma (Asthma Biologics RUP).
 - o £123k for BLMK CCG to transform its lipid management pathway (Lipid Management RUP).
 - ~£21k for 4 PCNs across the region to obtain FeNO bundles to deliver testing in primary care (FeNO RUP).
- AHSNs Network activities: Tracey Marriott, is supporting the AHSN's activities for Digital Strategy and International Strategy; Also attending the NAPOG and leading on the ARC/AHSN local and regional work.
- As national lead on the Asthma Biologics RUP Programme, the Oxford AHSN has completed data collection on a national benchmarking exercise looking to understand variation in pathways and practice in management of severe asthma. The exercise had an outstanding response rate receiving nearly 200 organisational responses from tertiary and secondary care sites, PCNs and GP practices and commissioning organisations.
- FREED: Berkshire Healthcare Foundation Trust is making significant progress with 16 assessments undertaken and one patient on the FREED pathway.
- Progress has been made on the national CVD programme; launch meetings for the lipid programme and broader CVD programme were held at ICS level. PTF Funding was successfully secured for BLMK CCG, practice packs for hypertension home monitoring were developed and guidance developed for targeted AF detection in COVID-19 vaccination clinics.
- The Brainomix NHSX AI Award evaluation: second review held with NHSX evaluation and letter of approval received.
- Bone Health: patient and clinician workshop held to discuss requirements for educational resources, plus agreement from nine GP practices across Oxfordshire to participate in the project.
- ARC: Working with the NIHR Oxford & Thames Valley Applied Research Collaboration (ARC) with
 involvement in all six themes and particular progress made on Themes 2 and 3 Blood Pressure and
 Mental Health. A Link has been made with BP monitoring research and the AHSN national programme;
 OSI (Online support and intervention for children with anxiety) implementation support is being
 provided by the CIA team and Oxford University Innovation; This is a strong fit to current regional
 priorities and has the potential for spread beyond region.
- Delivered a short turn around package of support for the BOB and Frimley ICS Aseptic Services Transformation group under the CIA Medicines Optimisation activity. The package of work involved primary and secondary research around innovation and best practice in aseptic service provision, delivery of a focussed workshop for regional stakeholders to develop the programme strategy and a final report and recommendations.

Key plans for next quarter

- Work with the ARC to maintain involvement and commitment to the NHS Insights Prioritisation Programme (NIPP, formerly known as BCN). Also, plan to identify future opportunities for regional alignment and explore capacity development opportunities relating to real world evaluation
- Al Award Brainomix: Progress with pathway mapping, qualitative interviews and quantitative analysis; prepare for first report on findings
- Lipid Management: Continue to support BLMK CCG through the contracting and planning phase for PTF community lipid project
- Familial Hypercholesterolemia (FH): Work with East Berkshire to prepare for FH child-parent screening programme
- Asthma Biologics: Support national and regional development of services
- Bone Health: Finalise the case-finding tool, including running a test report on one of the nine participating GP practices
- Management of stroke patients discharged during the COVID-19 pandemic (Joint working with Bayer) write up findings from qualitative and workshop for publishing
- Heart Failure: Support BOB ICS with a bid to secure funding for expansion of the project
- The Adopting Innovation and Managing Change in Healthcare Settings programme: Work with HEE to determine future of the programme
- Launch USA module of eMaps.

National programmes

CVD PREVENTION

Background:

The new CVD national AHSNs' programme for 2021-2023, builds on the atrial fibrillation (AF) national work achieved previously. It consists of lipid management (including familial hypercholesterolaemia), hypertension and AF and combines the NHSEI and AAC commissions.

Lipid Management

Progress in Q1

Delivery framework has been developed and shared with stakeholders and plans discussed with key stakeholders at ICS level (BOB, Frimley, BLMK).

Trajectories for high intensity statins (HIST), PCSK9i and ezetimibe have been reviewed and agreed.

Aim by Q4 2021/22 for our region:

- PCSK9I: 464
- Ezetimibe: 84,204 (cumulative by Q4)
- HIST: 62.6% of all statins prescribing by Q4

Familial Hypercholesterolemia Services

• Pathway mapping completed. Work underway to demonstrate potential impact that FH programme may have on pathway before engaging stakeholders in solutions.

High-intensity statins

- Engaged Berkshire West CCG around search tools for statin intensification.
 - Agreed adoption of modified UCLP search for statin intensification in diabetic patients. Projected to impact 2,000 high risk patients.
- Re-engagement of CCGs with FH child-parent screening programme now that the programme has been signed off by NHS England.
 - Agreed to run regional pilot in one large practice in East Berkshire. Go-live anticipated to be Q3.
- Supported BLMK CCG with a successful PTF bid.
 - £123k secured for development of a community lipid management service. Project due to commence October 2021. Work underway to facilitate contract signature and develop detailed project plan.

AAC RUP PCSK9i programme is well underway with two separate Pathway Transformation Projects which have been awarded funding from the AAC.

- Buckinghamshire CCG
 - Project aims to identify, work up and refer highest risk secondary CVD prevention patients
 - Model includes a pharmacist-led lipid management service in primary care in a number of PCNs across Bucks
 - o Pharmacists recruited and clinical protocols now finalised

- Patients already being seen in secondary care through service and data being collected on national RedCAP data system
- Currently finalising onboarding process for pharmacists to start work in primary care.

• Royal Berkshire Hospital

- Project will create a new cardiac pharmacist role to support secondary prevention around lipids for patients discharged from cardiology services
- \circ $\;$ Recruitment complete and a cardiac pharmacist and nurse are now in post $\;$
- \circ A cardiac pathway is currently in development and is planned for launch in July

Clinical patient-facing work started this quarter with expected improvements in numbers of patients optimised on lipid lowering therapy, and eventually PCSK9i therapies.

Hypertension

Ongoing work to support implementation of hypertension monitoring at home for BOB ICS (which has successfully bid to become a hypertension 'trailblazer' site).

• Trailblazer project commenced in March 2021 and will run until Q3.

Atrial Fibrillation

Guidance for AF detection in vaccination clinics published in June 2021.

• Positive feedback received.

Digital Technology

Ongoing work with OMRON and Precordior on virtual AF detection.

• Data sharing agreements and data protection impact assessments being worked through.

Plans for Q2

- Continue to support BLMK CCG through the contracting and planning phase for PTF community lipid project
- Work with East Berkshire to prepare for FH parent-child screening programme
- Share learning from Berkshire West and Buckinghamshire on statin intensification
- Progress AF detection project to pilot phase.

FREED (First episode Rapid Early intervention for eating disorders) (National)

Currently, young adults seeking treatment for an eating disorders face long waits which have been exacerbated by the COVID-19 pandemic. FREED is an innovative, evidence-based, specialist care package for 16- to 25-year-olds with a first episode eating disorder of less than three years duration. Using this programme, young people are referred from primary care to the FREED pathway, where they receive an engagement call from a FREED Champion within 48 hours. The FREED Champion supports and pre-screens for suitability to the programme or facilitates other support or further assessment. The added benefit of this process is that, even where a young person is deemed not to be suitable for FREED (the model will not be appropriate for everyone), the existence of this approach benefits patients as they have received their assessment and, potentially, additional information and support. The central focus of the programme is on supporting 'emerging adulthood' and Champions, who are there to support young service users, help patients and their families navigate the adult ED services.

Following initial engagement, a more detailed FREED assessment is conducted within two weeks and service users may be offered an evidence-based treatment that may include treatment for adults with anorexia, individual or group eating disorder-focused cognitive behavioural therapy (CBT-ED), individual or group Maudsley Anorexia Nervosa Treatment for Adults (MANTRA), Specialist Supportive Clinical Management (SSCM), eating disorder focused family therapy (FT) or eating disorder-focused Focal Psychodynamic Therapy (FPT).

The CIA Team supported the successful applications to NHSEI, for FREED pump-priming funds. This has enabled Berkshire Eating Disorders Service (BEDS) and Buckinghamshire's ED service to recruit FREED Champions and offer a service from June 2021 via BEDS, with a further 'soft' launch for Buckinghamshire planned for July 2021.

A South East FREED Support Network has been established to share good practice and help develop services in other locations, primarily Oxfordshire. The Network also aims to provide a forum for other innovations to be considered for adoption to support FREED and to raise issues, such as workforce or additional training, from the participating teams.

Plans for Q2

- Develop focussed approaches to raise awareness of eating disorders and the FREED service in settings such as universities, colleges, online communities and in primary care
- Further develop engagement and collaboration with the community mental health framework activities that are also being created to benefit patients who currently face significant waiting times; particularly where their condition is mild to moderate
- Further engage with trust service providers to ensure that the service is sustainable.

NHSx-AAC Artificial Intelligence in Health and Care Award

A three-year programme as the Technology Specific Evaluation Team for Brainomix, on behalf of NHSx-AAC that officially started on 1 April 2021.

Progress in Q1

Q1 marked the start of the implementation phase of the evaluation. This included:

- Completion and submission of the evaluation plan with subsequent discussion with the HRA.
- Governance set up with agreed membership of the steering group.
- Regular meetings with Brainomix to discuss go-live dates for deployment/progress.
- Preparation for the September second workshop with working group, themed on profiling and clustering.
- Extensive stakeholder engagement through presentations and attendance at the SE ISDN oversight group, ISDN oversight/board meetings, ISDN acute workstream and rehabilitation and life after stroke workstream meetings and ISDN thrombectomy meetings. Tracey Marriott participated in a Brainomix webinar Impacting Stroke Care: Reflections from the NHSx AI Award.
- Information governance, DPIA (10 returned/14 being signed), DSA and DSP form management. Ongoing work to establish data sharing agreement for national audit extracts.
- Development of the accuracy theme audit draft.

- Schedule in place for pathway mapping exercises (16 undertaken, 10 booked, many pending) and qualitative interviews have started and being booked (allows three-month bedding in of technology), prioritising the earliest deployments first.
- Qualitative questions guide written.
- Defining specification for the quantitative analysis with the support of KSS AHSN's analytics team.
- Seeking exemplar sites for key focus areas such as rehabilitation that will then provide shared learning/knowledge and add to the QI Framework.

Plans for Q2

- Qualitative questions survey creation.
- Pathway mapping survey creation.
- Implementation survey creation.
- Workshop 2: profiling and clustering.
- Ongoing pathway mapping exercises and qualitative interviews.
- Ongoing establishment of Information Governance with sites.
- Patient workshop being arranged with support of the Oxford AHSN Community Involvement and Workforce Innovation team.
- Defining specification for the quantitative analysis with the support of KSS AHSN's analytics team and early quantitative analysis.
- Ongoing stakeholder engagement and management with meetings, presentations and attendance.

The South East Region Stroke Imaging Evaluation which includes other suppliers, will complete end of October 2021.

AAC Activities

Asthma Biologics

This AAC Programme is led nationally by Tracey Marriott and James Rose (Joint National Leads), Seema Gadhia (Pharmacist Lead) and Marianna Lepetyukh (Strategic and Industry Partnerships Project Manager).

Background

- Severe Asthma (SA) is sub-type of asthma that remains uncontrolled despite optimised therapy.
- Biologics are effective for a SA patient but only around 20% of eligible patients are currently able to access.
- It is estimated that it can take up to 12 years to identify and initiate an eligible SA patient onto a biologic.
- There is significant variation in identification, referral, triage and prescribing of biologics in this population nationally.
- The objectives of the programme are to improve care for SA patients through increasing appropriate access to Asthma Biologics. The approach to achieve this is shared in Figure 1 below.
- This is a national programme the Oxford AHSN is leading on the programme nationally across the 15 AHSNs as well as delivering the programme locally across the Thames Valley.



Figure 1: Asthma Biologics programme approach

Progress in Q1

National Delivery

- The CIA Team coordinated the AHSN Network to support and develop a wealth of very high quality PTF bids (21 received) of which eight were funded; we continue to provide advice to help the AHSN Network support any unsuccessful PTF applicants and to ensure enthusiasm and willingness to deliver improvements is not lost.
- CIA coordinated a national benchmarking exercise through the AHSN Network, which looked to capture current practice and variation across severe asthma pathways across the country. Responses from over 190 provider and commissioning organisations across England have now been received and analysis is underway. Benchmarking data will be made available to sites along with other data tools developed by Oxford AHSN and Astra Zeneca which include: an AHSN homecare data dashboard, an NHSBSA oral steroid dashboard, an AZ respiratory outcomes dashboard, and the AZ Oberoi early identification dashboard.
- We have also successfully convened a first national meeting to develop a consensus pathway for SA, stakeholders from all key organisations in attendance (including NICE, BTS, NHSE, PCRS, ARNS, RCGP, RMOC, primary care, CCGs, secondary care and Severe Asthma Centres). A first draft of a potential national pathway was presented which is being worked up in further detail currently.



Figure 2: A draft overview of the Severe Asthma pathway in development

• Working with leadership from Dr Hitasha Rupani and Dr Alexandra Nanzer-Kelly, we have developed a roadmap for the development and commissioning of an NHS-developed and NHS-owned remote monitoring solution for Asthma Biologics.



Figure 3: Overview of remote monitoring workstream

- The CIA Team, working with PCRS and ARNS and clinical champions, developed a specification for training and upskilling of primary care and commissioners around severe asthma. Following review of providers, a decision has now been made to move forward with Cogora
- A case study template and guidance around completion has been developed. Case studies have started to be shared with AHSN leads.

Oxford AHSN Regional Delivery

- After a successful effort around PTF engagement the Oxford AHSN has managed to draw key stakeholders and organisations together to submit and secure PTF funding
- The joint OUH/BOB ICS bid was awarded £186k to develop an integrated severe asthma service to support primary care identification of potential severe asthma patients, secondary care MDT formation and tertiary care service expansion
- All local stakeholders: severe asthma centre, acute trusts (OUH, RBH, BHT and Frimley Health), CCGs (Oxfordshire, Buckinghamshire, East Berkshire, Berkshire West and Milton Keynes) and some GP practices across the BOB ICS were contacted directly for the benchmarking exercise and discussions about the PTF opportunities.

Plans for Q2

National Delivery

• The next phase for AHSN Network is to develop AHSN-wide improvement plans based on the data and previous engagement. A template is being developed to help AHSNs capture areas of focus for the next 12 months.

PTF Application Process	Benchmarking Exercise	Developing Local Plans	Delivery of Local Plans
Jan – May 2021	Feb – May 2021	June – Jul 2021	Jul/Aug onwards 2021
 AHSNs engaging local systems to develop bid applications for structured programmes of work Excellent engagement – high quality ideas developed Some sites will have funding to pilot and evaluate new 	 Connecting AHSNs with relevant stakeholders involved in care for uncontrolled asthma Severe Asthma patients Continues to support shared understanding of the opportunity for improvement 	 AHSNs will be asked to pull together plans for improvement using intelligence gathered through Benchmarking National Data Engagement Template will be supplied for the AHSNs to complete with their systems 	 Launches of several AAC endorsed tools and PWG outputs AHSNs supported to deliver plans Robust set of programme wide metrics
models of care, or usage of tools being developed in the PWG	 Captures great practice in identification and management Complete Analysis underway 	Key elements on Engagement with ICSs, CCGs, PCNs and GPs Identification of patients (using tools available) Improving capacity Training HCP workforce Supporting commissioners ("hooks" and sustainability)	

Figure 4: Overview of Key AHSN Network Activities

- Oxford AHSN is supporting the launch of three key resources for the programme in the next quarter
 - An AAC endorsed primary care search tool to identify patients with uncontrolled asthma.
 Developed with AZ the tool called SPECTRA will be launched through the AHSN Network in July.
 - \circ $\,$ An Oxford AHSN national homecare data dashboard for severe asthma centres $\,$
 - An NHSBSA dashboard to look at prednisolone prescribing (a proxy for uncontrolled, potentially severe asthma patients)
- Further progress is planned on workstreams focussing on home monitoring, the AAC severe asthma pathway and primary care education, with likely launches in Q3 for these resources
- The final analysis of the national benchmarking exercise will be released and formally published.

Oxford AHSN Regional Delivery

- Having developed a delivery group for the OUH/BOB ICS PTF project the team is focussed on understanding the landscape and ensuring the programme can be delivered through links with primary care
- Recruitment is underway for this project with an expected start date of 1 Sept 2021

- The Oxford AHSN has supported OUH and BOB ICS through developing additional applications to the industry partners on the programme GSK and AZ to secure additional funding for the role
- The Oxford AHSN is supporting the relatively under-resourced severe asthma service at OUH to make a case for further substantive internal investment to maintain the excellent service it provides.

Rapid Uptake Products 2021/22

Fractional Exhaled Nitric Oxide breath analyser (FeNO)

A FeNO test is a way of measuring the amount of nitric oxide in an exhaled breath. This test can help with the diagnosis of asthma by showing the level of inflammation in the lungs. FeNO is used for assisting in diagnosis and management of asthma. FeNO is one of the AAC's Rapid Uptake Products.

Benefits of FeNO - clinicians (primary care):

- Faster and more accurate diagnosis within primary care.
- Increased objectivity of patient evaluation by using fractional exhaled nitric oxide as a biomarker for the indication of active airway inflammation.
- A positive FeNO test, alongside respiratory diagnosis and lung function tests, supports diagnosis which could otherwise be complex.
- Potential for use in monitoring patient response to treatment by measuring their FeNO score before and after treatment treatment could be adjusted accordingly.
- Covid 19 deemed as low risk for being aerosol generating as per published guidance from the Association for Respiratory Technology and Physiology (ARTP).
- FeNO is recommended by NICE as a diagnostic tool for asthma.

Benefits of FeNO - patients:

- More accurate diagnosis of asthma.
- Non-invasive, simple and safe test.
- Patients are less likely to be referred onto secondary care for additional testing.

Progress in Q1

Working with Primary Care Networks (PCNs) we have successfully secured Pathway Transformation Funding (PTF) to buy four FeNO monitors, each with a year's supply of mouthpieces, with a total value of ~£21k.

Draft PTF 'grant agreements' have been approved with PCNs that set out the terms by which the PCNs will received the equipment. Project milestones and timelines have also been agreed by PCNs.

FeNO in primary care is also integral to the Asthma Biologics programme. Funding for nine additional FeNO machines has also been secured in Q1 (see Asthma Biologics section above for more detail).

Plan for Q2

The PTF grant agreements will be signed by each PCN. Usage data and reporting mechanisms will be developed to aid monitoring and management of FeNO implementation. We will work with PCNs to review and redesign their asthma pathways to incorporate FeNO to improve the diagnosis and management of asthma. FeNO training for PCN staff will be delivered.

We will also continue to work with commissioners to explore any further opportunities to increase the level of FeNO testing.

New risk identified in Q1

• In June 2021 the AAC increased the annual target for delivery of FeNO monitors from 8 to 10. The target for 'number of mouthpieces used' remains under review by AAC at the time of writing.

South East Region and Local Projects

Regional

Sleepio – deployment to the SE Region

Sleepio is a clinically evidenced CBT for insomnia delivered via online sleep improvement programme with widespread adoption across the Thames Valley. Data from this source, provided at a regional level, has been shared with workforce colleagues within the AHSN.

Sleepio was one of the three regional projects ('SE3') selected for deployment across the South East working with KSS and Wessex AHSNs.

Progress in Q1

During Q1 the six PCNs in North Hampshire CCG (in Wessex AHSN region) have continued to partner with Big Health to embed Sleepio in primary care. Launched in October 2020, this project has (to date) resulted in 1,612 registrations, 918 CBT starts.

Despite officially closing in November 2020, the Innovate UK-funded Thames Valley project, continues to provide support for those in the Thames Valley with a total (since October 2018) of 29,653 registrations, 14,298 CBT starts within the patch.

Plans for Q2

- Other opportunities to expand this approach are being explored (with colleagues from KSS and Wessex AHSN) and a new formula for calculating the potential cost for Sleepio (by population) has been developed with Big Health, offering a degree of clarification for adopting sites or geographical areas.
- The Oxford AHSN is also assisting the NICE review of Sleepio, including sharing the data from the Thames Valley project in support of this work.

Electronic Repeat Dispensing (eRD)

Background

- Electronic Repeat Dispensing (eRD) enables GPs to authorise up to a year's worth of repeat medication for patients whose repeat medicines are relatively stable. Community pharmacists can then carry out a number of checks and dispense medicines at regular intervals (usually monthly).
- 77% of all prescription items are repeat prescriptions. eRD, where deployed successfully, can free up significant GP capacity (up to 45 minutes of GP time per day, per practice) and enable community pharmacy to manage the medicines supply chain.
- eRD is not new, it has been part of the Community Pharmacy Contractual Framework since 2005 and from 2019 has been a General Medical Services contract requirement. However, uptake is hugely variable with many practices having never taken advantage of this technology.

- To reduce ongoing workload and footfall, as part of the primary care response to the Covid-19 pandemic, in the Preparedness Letter for General Practices of 5 March, NHS England recommended converting all suitable patients onto eRD when their next repeat prescription is issued.
- During this period, Oxford AHSN supported primary care with implementation by producing benchmarked data for CCG Medicines Optimisation leads, delivering CCG, PCN and practice level training sessions, and providing hands-on support to convert patients to eRD.
- In December 2020, eRD was selected to be continued as a workforce programme for the southern AHSNs.

Progress in Q1

- Across Oxford AHSN the eRD uptake rates, similar to other regions, has been relatively low.
- As of March 2020, eRD uptake for Oxford AHSN was 8.17% compared to 10.36% nationally.
- As of April 2021, Oxford AHSN had increased its rate to 11.97%. There was also an increase in the national rate to 13.33% (Figure 1).
- There is variation in uptake across CCGs in the Oxford AHSN region ranging from 13.59% to 7.72%.



Local impact metrics

Impact	Metric	Comments	Q4 20/21	Q1 21/22
1	Number of staff trained	Cumulative	53	53
2	GP Practice time released	Additional eRD items x 16 secs	4,545	
3	Percentage of GP Practices	Cumulative	ТВС	
4	Patient benefit	Number of patients	13,611	
5	Items prescribed	Number of eRD items	1,048,250	

Plans for Q2

- Work with Berkshire West CCG medicines optimisation leads to promote eRD and scope need for additional webinars for new PCN pharmacists.
- Work with Buckinghamshire CCG GP practice to improve eRD uptake.

• Circulate eRD benefit calculator to CCG medicines optimisation leads.

Bone Health

Background: this project is a collaboration between the University of Oxford, PRIMIS and the Oxford AHSN. The project aims to work with GP practices, initially within Oxfordshire, to improve the management of patients with osteoporosis who are at high risk of sustaining a fragility fracture. The project will see the development of a case-finding tool to ensure high-risk patients are identified and are managed in accordance with NICE guidelines and optimised on treatment.

Progress in Q1

There has been much progress during Q1. The project team has continued to develop the case-finding tool, and this is currently going through the final testing and refinement phase with a couple of GP test practices.

A stakeholder workshop was held in May 2021 with both patient and clinician representatives. During this meeting, views were sought on the information that would be most valuable to both clinicians and patients, as a means of supporting both newly diagnosed and existing patients with their osteoporosis treatment regime. The insights from this meeting will be used to help develop educational material for clinicians.

Invitations to participate in the project were sent to GP practices within Oxfordshire. Nine practices have expressed an interest in this project, five of which sit under one PCN.

Plans for Q2

- Finalise the case-finding tool, including running a test report on one of the nine participating GP practices
- Create the supporting materials for participating GP practices
- Introductory meeting with practices participating in the project
- Commence baseline reporting with practices

Elastomeric Devices

Background: Elastomeric devices are small, single use pumps used to administer medication such as IV antibiotics or chemotherapy, which can be used in patients' homes. As such they could help relieve some of the pressure on hospital beds, by either facilitating an earlier discharge from hospital of patients who would otherwise only remain in hospital purely to receive IV antibiotics, or to support the prevention of admissions for such patients.

This is a local project, working with OUH which has introduced elastomeric devices into clinical practice. The project will assess the impact of these devices and capture the lessons learned from their introduction. In turn this will be used to support other trusts wishing to introduce the devices.

Progress in Q1

During this quarter, further analysis has been undertaken of the data from OUH. This is helping to inform the case study being developed by NHS Supply Chain as part of their value-based procurement programme.

Work has progressed on developing the project plan and following earlier communication with the Medical Directors across the region the next step is to engage with the chief pharmacists.

Interest from trusts across the UK continues, and a call was held with Belfast Health and Social Care Trust, OUH and the Oxford AHSN to outline the work undertaken to date by OUH.

Plans for Q2

- Work with NHS Supply Chain and OUH to finalise the case study
- Present OUH findings to the regional chief pharmacists' meeting
- Develop plans for wider roll out, including virtual workshops to support trusts to implement the devices

LOCAL

Polypharmacy

- Polypharmacy, the concurrent use of multiple medications, has been described as a significant public health challenge.
- It increases the likelihood of adverse effects, with a significant impact on health outcomes and expenditure on healthcare resources. Polypharmacy is a key part of the World Health Organisation Global Challenge to reduce harm from medication errors by 50%.
- The local polypharmacy project includes:
 - Adoption and spread of polypharmacy action learning sets
 - \circ $\;$ Support for a study to evaluate structured medication reviews
 - Improving the use of opioid medication.

Adoption and spread of Polypharmacy Action Learning Sets

- The action learning sets have been developed by Wessex AHSN and Health Education England based on work originally undertaken in Yorkshire and Humber AHSN.
- They aim to help GPs and pharmacists understand the complex issues surrounding stopping inappropriate medicines safely and help PCNs deliver the Medicines Optimisation elements of the GP contract.
- The Action Learning Sets are delivered as three half-day sessions:
 - Session 1 covers the scale, impact and challenges related to polypharmacy and stopping medicines safely. Attendees are provided with polypharmacy data reports for their practice.
 Session 2 covers the tools and resources that are available to carry out structured medication reviews and the principles of shared decision making.
 Session 3 involves facilitated discussions where attendees can share their experience of medication reviews and complex issues with local geriatricians.
- The polypharmacy action learning sets have been delivered to one cohort of 45 GPs and pharmacists during 2020/21. The plan is to deliver the action learning sets to a second cohort in 2021/22 if funding and resource permits.

Support a study to evaluate structured medication reviews

- Oxford AHSN has partnered with the NIHR ARC Oxford and Thames Valley on a successful bid to carry out a real-time observational cohort study with integrated qualitative evaluation on optimising structured medication reviews (SMRs).
- The study aims to evaluate how national policy is impacting on the care of those with complex multimorbidity (4+ conditions) as a group with the most potential to benefit from such an intervention.
- The proposed evaluation aims to understand and optimise how SMRs are applied to people with complex multimorbidity.

• The bid was submitted in December 2020. Notification was received in March 2021 that the bid was successful and that 87% of the funding requested had been approved.

Improve the use of opioid medication

- Thames Valley CCGs suggested a joint initiative to improve opioid prescribing supported by the AHSN would be valued in this area. This became a higher priority following a report produced by Public Health England that identified the scale of the problems associated with dependence related to opioid medication.
- To identify the scale of the problem at a local level an opioid prescribing data pack was produced for the Thames Valley CCGs on their benchmarked position against a variety of nationally available opioid prescribing indicators. In addition, to understand the innovation in this field, the role of artificial intelligence technology in improving the use of opioid medication is being reviewed.
- The national Medicines Safety Improvement Programme has subsequently included an initiative to reduce harm from opioid medicines by reducing high dose prescribing in their Medicines Safety Programme. This is being led by the Oxford AHSN Patient Safety and Clinical Innovation team (see above) supported by the CIA team.

Progress in Q1

- Contributed to development of protocol for the SMR study
- Met with South East AHSN leads to form a collaborative to share and support local opioid initiatives

Plans for Q2

- Confirm if funding is available to deliver another cohort of polypharmacy action learning sets for Thames Valley pharmacists and GPs
- Continue to work with the ARC to develop the SMR study protocol and methodology
- Include local opioid initiatives on the Oxford AHSN website and share with MO and pain management leads
- Meet OUH pharmacists to discuss their opioid project
- Meet Buckinghamshire CCG pharmacists to discuss their opioid project

Aseptic transformation support

Background

- With aseptic services under strain across BOB and Frimley ICS, the Oxford AHSN is supporting stakeholders to conduct a review of aseptic services and ready-to-administer medicine to identify future operating models over the next 12 months.
- Activity will include desk-based research, interviews with pioneering stakeholders in this space and finalising with a stakeholder workshop and report of the findings.
- The MO network is considering a single model approach across both ICSs following the Carter Review. This is supported and of interest to the regional chief pharmacist for the South East.
- The ICSs have decided to make a start on planning prior to the anticipated funding due to arrive in the next financial year.

Progress in Q1

- Literature review of national and international models completed
- Interviews carried out with five manufactures and representatives from the commercial compounders group

- Interviews carried out with key stakeholders locally to understand system priorities and challenges
- Workshop delivered.

Plans for Q2

• Produce report of findings from the research and workshop discussion.

Excellence in heart failure

Background: Excellence in heart failure is a methodology for improving medicines optimisation for heart failure patients in primary care.

Progress in Q1

The project had been on hold due to COVID. In Q1 communications went out to all practices in Buckinghamshire to re-engage them in the project. Five further practices have signed up. There is a slight delay in restarting the project due to contractual issues between Novartis and the supplier.

Oxford AHSN is working on a toolkit to support other regions to implement the project. The toolkit content has now been finalised and is with a designer prior to publication. The toolkit will be completed in August 2021 and we will aim to launch in September 2021.

Plans for Q2

- Restart project in Buckinghamshire
- Finalise toolkit
- Finalise launch plan

Heart failure inequalities

Background: Heart Failure diagnosis rates and outcomes are worse in areas of high socioeconomic deprivation. Oxford AHSN has entered into a joint working agreement with Astra Zeneca to deliver a programme to support identification of patients with heart failure and support practices with optimal management.

Progress in Q1

- The project was presented to the Berkshire West long-term conditions board
- Communications have been sent out to practices
- Four out of 16 practices invited to participate have expressed an interest to date. Further engagement activities are planned.

Plans for Q2

- Follow-up with practices yet to respond
- Q&A session for practices
- Delivery in practices starts
- Opportunity to build on this work through inequalities funding call from NHS England. Supporting BOB ICS with a bid to secure funding for expansion of the project.

Management of stroke patients discharged during the COVID-19 pandemic

Background

During the COVID-19 pandemic some stroke inpatients were discharged earlier in their recovery than usual. There have been concerns expressed across the stroke community that this cohort of patients may not have had the same access to rehabilitation and follow-up care as those discharged before COVID-19.

The aim of the project is to use a combination of data and qualitative analysis to provide an in-depth understanding of the impact of the COVID-19 pandemic on the provision of post-acute stroke services. This will enable the NHS to identify potential solutions and system changes to optimise current and future patient care. The project will be delivered through a Joint Working Agreement (JWA) between Bayer and Oxford AHSN.

Progress in Q1

Successful workshop held with Berkshire Healthcare NHS Foundation Trust to explore the identified themes and develop solutions.

Activity next quarter

- Write up first phase of project
- Share with other trusts through ISDN rehabilitation stream.

The Adopting Innovation and Managing Change in Healthcare Settings programme

Background: This programme supports the upskilling of NHS staff to understand change management, innovation adoption and introducing new ways of improving patient care within the NHS.

Progress in Q1

Two cohorts who were impacted by the COVID-19 pandemic were reinstated this year (Cohort 9-module 2 and Cohort 10-module 1). In June, both cohorts presented their projects and proof of concepts to members of the Oxford AHSN to support refining of their projects. Projects introduced by these cohorts highlighted the range and breadth across different clinical settings. This translates to over 40 additional change projects that will be introduced to the system which can improve patient outcomes, experience and the efficiency and effectiveness of services delivered. Both cohorts will finish in August 2021.

A new evaluation is underway and will aim to capture the impact of the programme to date.

Knowledge about the programme was shared with regional NHS ealth education leads and opportunities for embedding/funding the programme in the regional/ICS setting are being explored.

Risk: Funding for the programme is at risk. Another cohort will be funded in September however failing to immediately identify a funding source would result in the programme having to close.

Plans for Q2

- Follow up with National HEE and Regional HEE to explore funding opportunities
- Recruitment for cohort 11
- Complete the evaluation and share the report with stakeholders.

NIHR Applied Research Collaboration Oxford and Thames Valley

Background: The Applied Research Collaboration Oxford and Thames Valley (<u>ARC OxTV</u>) started in October 2019 and runs for five years to September 2024. There are 15 ARCs across England, funded by the NIHR. The purpose of the ARCs is to undertake and implement applied health and social care research, based around local health and social care needs, both for people and the systems the care is provided within. ARCs work in collaboration with AHSNs, universities, NHS trusts, councils and charities.

The ARC OxTV is hosted by Oxford Health NHS Foundation Trust and based at the University of Oxford's Nuffield Department of Primary Care Health Sciences. The Programme Director is Richard Hobbs, and the Implementation Lead is Professor Gary Ford who is also Chief Executive of the Oxford AHSN. The ARC OxTV is working closely with the Oxford AHSN to implement ARC research outputs into practice across the Oxford AHSN region and, where appropriate, across the wider South East region, and nationally.

Priorities for the OxTV ARC	Six major research themes
 Improve patient outcomes across the Oxford AHSN region Provide high-quality evidence of clinical and cost effectiveness Lead evidence –based implementation nationally Develop new services addressing key NHS and public health priorities Improve regional and national capacity to conduct, high- quality world-class health and social care research 	 Disease prevention through health behaviour change (Theme 1) Patient self-management (Theme 2) Mental health across the life course (Theme 3) Improving health and social care (Theme 4) Applied digital health (Theme 5) Novel methods to aid and evaluate implementation (Theme 6)

Progress in Q1 (focus on ARC/AHSN collaboration)

- Evidence submitted to NIHR to show progress against the conditions of the ARC OxTV award
 - Confirmation received June 2021, NIHR Independent Selection Committee recommend ARC OxTV should continue to be designated and funded until the end of the contractual period (September 2024).
- Annual reporting to NIHR
 - Submitted Finance and Activity report, Narrative report and Added Value Examples as part of annual contractual reporting requirements to NIHR. This demonstrated the collaborative approach across the Oxford AHSN and ARC, identifying further opportunities during this financial year.
- ARC OxTV/AHSN Implementation Oversight Group
 - First ARC Implementation Oversight Group meeting held (April 2021). Discussed progress relating to implementation across the ARC themes, with a high-level overview provided for ARC Strategy Board. Also, reviewed progress against the implementation objectives in the original ARC bid (see concerns and risks below). Looking to develop several impact case studies.
- Continued joint working of three ARCs and AHSNs across the South East region as part of the NHS Insight Prioritisation Programme (formerly Beneficial Changes Network - BCN)
 - Included evaluation of innovations submitted as part of the BCN (Phase 1)
 - Development of projects which linked to BCN themes and are reflective of current regional and ICS priorities (Phase 2). The South East projects are spread across three workstreams:

Remote monitoring (Wessex lead (ARC/AHSN)

- Remote and self-monitoring in Wessex to address frailty
- Supporting community oximeter use in socio-economically deprived groups in Oxfordshire: an exploratory study of implementation
- Understanding the rapid implementation of self-monitoring of blood pressure **during pregnancy due to the Covid-19 pandemic**

Mental Health (Oxford lead (ARC/AHSN)

• Supporting Hospital and Paramedic Employees during and after COVID (SHAPE)

Discharge (KSS lead (ARC/AHSN)

- The impact of criteria to reside and discharge to assess. Stage 1: A Qualitative Evaluation of East Surrey Integrated Care Partnership (ICP) Hospital Discharge Programme (HDP)
 - Next stage (Phase 3)- NHS Innovation, Research and Life Sciences (IRLS) team are providing £4.2m funding to AHSNs/ ARCs for a two-year NHS Insight Prioritisation Programme (2021-23) to evaluate NHS service changes post pandemic. Details of process for allocation and distribution to be agreed.
- Continue AHSN support for ARC projects (focus themes 2 and 3)
 - Specifically, projects on self-management of hypertension & online support and intervention for children with anxiety.
- Continued to explore feasibility for joint ARC/AHSN Public Health registrar post
 - \circ $\,$ To strengthen joint working across AHSN, Local Authority and ARC $\,$
 - ARC Public Health Lead completing Faculty of Public Health Educational Supervisor training to support registrar
 - AHSN to write project brief, to be submitted to Faculty and Deanery for approval of the placement

Plans for Q2

- National ARC Implementation Leads meeting
- Development of ARC Evaluation request triage form and process
 - Facilitate consistent approach to requests, including those identified by AHSN.
- Develop a standard operating procedure to support implementation of ARC research outputs, linked to the AHSN CIA ten-step process for implementation, spread and adoption

Additional Information

- A new objective has been added that will focus around AAC/NHSX programmes. This aligns more closely with the work of the ARCs. In addition, three new objectives have been identified relating to implementation (detail below), all of which are complete:
 - 1. Development of ARC Implementation Strategy to increase potential for sustained implementation of ARC research outputs
 - 2. Maintain involvement and commitment to the NHS Insights Prioritisation Programme (formerly BCN) programme to further opportunities for ARC research and evaluations which are reflective of regional priorities
 - 3. Development of national network to support those with operational implementation roles.

International activities

European Market Access for Partners (eMaps)

<u>eMaps</u> is a digital knowledge hub developed to support life science innovators and entrepreneurs in accessing healthcare markets across Europe and beyond in the areas of drugs, digital health, diagnostics and medical devices. It provides information and advice on regulation, reimbursement and adoption.

Progress in Q1

A comprehensive review of the USA module was commenced in preparation to promoting it as a key module.

Plans for Q2

- Attract traffic to the platform to increase profile of USA module.
- Explore opportunities within the UK educational system and universities on how eMaps could be used within educational settings.

Strategic and Industry Partnerships (SIP)

Highlights

Julie Hart's secondment with the Department of Health and Social Care (DHSC) as part of the Technologies Validation Group (TVG) - Test and Trace ended in April 2021 and Julie has returned to her role as Director of Strategic and Industry Partnerships (SIP).

Innovators and businesses from the UK and overseas continue to approach the Oxford AHSN for direct support, signposting and guidance in developing their value proposition and accessing the NHS. Oxford AHSN continues to contribute to the Health Tech Connect platform to review and support innovations. NHS England and Improvement is using the Health Tech Connect user group as a primary stakeholder in developing the new 'Innovation Service', due for launch in September 2021. Matthew Lawrence will be taking up the chair of the Health Tech Connect AHSN group in Quarter 2 of 2021 from North East North Cumbria AHSN.

No. of companies supported (April-June): 64

The Oxford AHSN Accelerator programme helps innovators and early stage companies to commercialise great ideas and to address the most urgent issues facing health and social care. The 2021 programme seeks to address the six core clinical themes: mental health, respiratory, maternity/neonatal, cardiovascular disease, stroke and cancer. In May and June 2021, 11 innovators attended the commercialisation workshops. A further event in July has already attracted 16 sign-ups. Participants came from Oxfordshire, Buckinghamshire and London with innovations from primary care, cardiac surgery, translational research from universities, mental health and dementia support. Previous cohorts of the Accelerator in 2019 and 2020 have yielded strong businesses that have gone on to implement their technology in a range of NHS sites and to gain national recognition through grants and private sector investment:

- Mendelian, whose MendelScan product is a primary care case finding tool for rare diseases has been in use at over 45 NHS sites since the 2019 programme. They have received mor than £633,000 in Innovate UK awards.
- MetaGuideX have a new cancer diagnostic biomarker, giving clinicians better prognostic insight in multiple cancer types. They have raised over £300,000 in capital since the 2020 programme and created three new jobs.

Communications activities in the last quarter focused on promoting the Accelerator Programme which is now in its third year. Social media campaigns featured the five companies successful in grant applications for the National Institute for Health Research (NIHR) Artificial Intelligence (AI) in Health and Care Award, supported by Oxford AHSN and totalling more than £5 million in the last quarter. Julie Hart spoke on funding options for AI healthcare projects at a webinar in June organised by The Thames Valley AI Hub and Bayer. Followers of the SIP Twitter account are continuing to increase, and our LinkedIn account is also having more impact promoting our programmes.

A member of the SIP team, with pharmacy expertise, contributed to a joint project with the Clinical Innovation Adoption (CIA) team, to explore options for the Buckinghamshire, Oxfordshire and Berkshire West (BOB) Integrated Care System (ICS) and the Frimley Health ICS on the provision of aseptic services in hospitals. The project explored innovations in products and partnerships with the commercial sector and pharmaceutical providers for Ready to Administer (RTA) medicines in comparison with making up patient medications directly near the clinical units. A group of regional and national transformation leads who are exploring aseptic services attended a workshop hosted by the Oxford AHSN.

The Sustainability programme plans to evolve the recognition and delivery of the environmental benefits of AHSN projects and those of our wider regional and national partners. Environmental sustainability is now a key area in the AHSN national network strategy. A 'Sharing Innovation and Best Practice to Deliver a Net Zero NHS' online event took place on 23 June. This was the first in a series of webinars hosted by the AHSN Network, specifically focussed on supporting NHS organisations to get started on their sustainability journey. Speakers included Kathy Scott from Yorkshire & Humber AHSN, Nicky Philpott, Greener NHS, and James Dixon, Newcastle Upon Tyne Hospitals. 157 people registered for the event with 99 attending. There was good representation from both NHS trusts and AHSNs. The event exceeded expectations and received very positive feedback on the day. Future areas of focus include the agreed NHS priorities of asthma inhalers, anaesthetic gases, transport and sustainable procurement. Engagement also continues locally with Oxford University Hospitals NHS Foundation Trust, regionally across the South East and nationally with the national Personal Protective Equipment (PPE) team.

The activities of the Strategic and Industry Partnerships programme and the Office for Life Sciences core functions are aligned with the Project and Portfolio Management Process (PPMP) that is being developed as part of the national AHSN portfolio management initiative driven by Health Innovation Manchester. The development of the pipeline is being led by the Strategic and Industry Partnerships team until the appointment of a new Programme Manager in Quarter 2. Positive steps have been made towards integrating the spirit of the portfolio and pipeline approach into everyday Oxford AHSN activity. An updated Minimum Data Set (MDS) was submitted to Health Innovation Manchester in June, the third MDS contributed by Oxford AHSN. A portfolio view was produced by each team to include within the 2021/22 Oxford AHSN business plan. The portfolio view shows each team's current projects aligned to the 'Discover - Develop - Deploy' continuum and set out by clinical focus area and technology type. These portfolio views have already proved to be extremely useful when discussing the activity, focus and resource deployment of the Oxford AHSN teams.

- Core Function 1 Identify need and communicate demand: Discover
- Core Function 2 Signposting: Discover
- Core Function 3 Broker Real World Evaluation: Develop
- Core Function 4 Support Adoption and Spread: Deploy

CARDIOVASCULAR DISEASE

Discover: FatHealth. Caristo Diagnostics is a new technology company associated with the University of Oxford. Caristo will collaborate with other institutions to transform FatHealth into a commercial product. The intention is to analyse 20,000 computed tomography ('CT') scans to train its AI algorithm. Caristo will develop an automated web-based system for rapid and reliable AI analysis of CT scans to deliver accurate risk predictions. FatHealth detects fat tissue inflammation using new AI techniques applied to routine CT scans. FatHealth can identify people who may be at risk of developing diabetes, and people with diabetes who are at high risk of death from cardiovascular disease. Caristo will work with NHS organisations and

patient groups to evaluate the effectiveness of the FatHealth test in patients at risk of diabetes. The team will conduct a clinical study that compares the results of FatHealth to the current method for diagnosing diabetes and pre-diabetes (the Oral Glucose Tolerance Test). By the end of this NIHR AI Award project, our intention is to have FatHealth adopted into routine use, thereby saving the NHS considerable costs and improving the lives of many at-risk patients.

Develop: EchoGo Pro. This NIHR AI Award funded project kicked off in January 2021 to conduct a real world evaluation of the impact of Ultromics' EchoGo Pro for automating coronary artery disease risk prediction in stress echocardiogram clinics. This project aims to show that EchoGo Pro helps doctors to diagnose heart disease using EchoGo Pro more reliably by using AI to analyse stress echo scans and provide a report to the diagnosing clinician enabling them to make a diagnosis more quickly and accurately. Earlier diagnosis will allow patients to get the treatment they need earlier, without undergoing unnecessary tests. A multi-centre prospective trial is being carried out to evaluate EchoGo Pro compared to the standard of care for coronary artery disease. The Oxford AHSN team will capture the economic benefits of using EchoGo Pro to reduce inter-reader variability and increase accuracy of stress echocardiograms in reducing errors and healthcare costs.

Develop: Point of Care Diagnostic Test for D-dimer. FedBucks is a Buckinghamshire-based GP Federation of 45 GP practices covering a population of over 485,000 patients across Bucks. FedBucks contacted the SIP team requesting support in evaluating and implementing a D-dimer point of care test in their deep vein thrombosis clinic. D-Dimer is one of the protein fragments produced when a blood clot gets dissolved in the body. It is normally undetectable or detectable at a very low level unless the body is forming and breaking down blood clots when its level in the blood can significantly rise. A D-dimer test is used to rule out the presence of serious blood clots. The current pathway involves sending patients' blood samples to the laboratory and waiting up to two hours for the result to come back, while patients wait in the clinic for their results. This limits the number of patients that the clinic can see each day and restricts efforts to reduce their waiting list which has grown as a result of COVID-19. Introducing a point of care test, with a <20-minute time to result will reduce the waiting time for patients, allowing for a better, less stressful patient experience. It will lead to increased throughput at the clinic, allowing them to see more patients and provide better patient care. The SIP team is helping in the selection of the best point of care test to use in the clinic and supporting this real world evaluation. Work is ongoing to develop the evaluation protocol, and the test supplier will be contacted to provide training for clinical staff.

Develop: Point of Care Diagnostic Test for High Sensitivity Troponin. The SIP team was approached by Berkshire and Surrey Pathology Service (BSPS) to assist with the health economics analysis for a point of care High Sensitivity Troponin (HST) test for use in Emergency Departments (ED) in Berkshire and Surrey. High-sensitivity cardiac troponin assays are essential for the diagnosis of acute myocardial infarction but are increasingly also used in the assessment of cardiovascular risk to identify patients in the emergency department who are low risk and could be directly discharged. Hospitals in Berkshire and Surrey are currently sending patient samples to the laboratory for testing, with poorer than anticipated turn-around times, which is interfering with patient care. The aim of this evaluation is to show that the use of a point of care test for HST in ED, combined with a strict patient selection algorithm, will improve patient throughput in ED by allowing for quicker diagnosis and treatment decisions. The SIP team has previously developed a theoretical health economics model around HST, which will be adapted to the real world evaluation and data provided from the trial. It is hoped that the model will provide enough information to inform a business case for BSPS, as well as a journal publication. The evaluation is due to go live in Quarter 2.

Deploy: HeartFlow. HeartFlow is diagnostic software used to create a personalised digital 3D model of the patient's coronary arteries, to simulate and assess the impact of blockages on coronary blood flow. The software allows rapid diagnosis of patients with suspected coronary heart disease using advanced image analysis software. It removes the need for invasive angiogram procedures and delivers fast results (median five hours). Frimley Health NHS Foundation Trust has adopted HeartFlow into standard clinical practice. Oxford University Hospitals NHS Foundation Trust is at the implementation stage, and the software is installed locally. Discussions are currently underway with both Buckinghamshire Healthcare NHS Trust and Royal Berkshire NHS Foundation Trust has an annual coronary CT angiography volume of less than 300 and therefore they do not meet the eligibly criteria to adopt HeartFlow.

RESPIRATORY

Discover: Immune Profiling Panel. IMmune Profiling of ICU **PA**tients to Address **Ch**ronic **C**ritical illness and ensure heal**T**hy ageing (IMPACCT), funded by EIT Health, aims to evaluate an innovative diagnostic test. Patients in intensive care units (ICU) are at high risk of death from infection and deterioration due to immunosuppression that makes them more vulnerable to acquiring Hospital Induced Infections. This innovative test will help identify those patients with a compromised immune system and help clinicians in predicting those at increased risk of Hospital Induced Infection and/or mortality. In future this technology might support patient stratification for new immunotherapies. This project started in January 2020 and so far views and insights have been sought from 84 clinicians in England, France and Sweden, as well as that of ~40 payers involved in a range of commissioning roles. Data collected from face-to-face and online interviews is being collated and analysed to create a value proposition. Next steps are to work with our industry and clinical partners to create an education plan and develop a health economic model. Partners: Imperial College London, University College London, Assistance Publique - Hôpitaux de Paris, Karolinska Institutet / Region Stockholm.

Discover: BreatheOx. BreatheOx Limited (trading as 'Albus Health') is a medical technology spinout company from the University of Oxford founded by researchers from the Institute of Biomedical Engineering and Department of Respiratory Medicine. BreatheOx has developed a small non-contact table-top device and associated AI algorithms that automatically monitor a range of physiological and environmental metrics without requiring patients to do or wear anything. Using motion sensors, the device captures small movements in the body when someone breathes, and the algorithms estimate breathing rates. Acoustic sensors capture other clinical symptoms and environmental sensors monitor living conditions and other environmental triggers. In this project, the team propose implementing this innovative monitoring and prediction technology for children. Funded by a Stage 2 NIHR AI Award, the aim of this project is to further develop algorithms and clinical decision support tools for early detection of asthma attacks in children by capturing early warning signs before patients perceive them through continuous long-term monitoring, enabling early treatment to stop attacks at home. In this project we are demonstrating the value in NHS care pathways by deploying the system within existing NHS infrastructure and generating real-world evidence of clinical and economic value. The project team includes BreatheOx,

Birmingham Women's and Children's Hospital NHS Trust (one of the busiest UK paediatric asthma centres), Imperial College London (largest UK paediatric severe asthma translational research programme), Asthma UK (leading Asthma charity, representing patient and public opinion) and Oxford AHSN. The Oxford AHSN team will conduct a feasibility study to help identify potential barriers to adoption and look for areas where the product could be improved. Oxford AHSN will also be responsible for the health economic study. Primarily, the device will improve accuracy of diagnosis of acute risk of respiratory deterioration to inform early prevention strategies for patients and clinicians to stabilise the condition.

Develop: Astra Zeneca Turbu+ Inhaler. 'Turbu+' is a digital app and smart inhaler. It is designed to optimise inhaler use and provide asthma patients with information on their medication use via their mobile phone. Asthma UK suggests that smart inhalers could lead to better self-management among people with asthma, reducing the use of inhalers and reducing the need to access healthcare resources. The objective of this real world evaluation is to demonstrate that the addition of a digital intervention (Turbu+) for asthma and/or COPD patients using the Symbicort Turbohaler supports improvements in health outcomes. Focus during the quarter has been on patient recruitment, with 173 patients enrolled into the study by the end of May. 29 additional patients are pending enrolment, with 65 three-month questionnaires and six six-month questionnaires completed. During June the focus was on completing patient recruitment, so no updated figures are available for the end of the quarter. The patient recruitment target is 300 and the end of the live phase is due in September 2021. Partners: Modality Partnership (provider of primary healthcare and community services across the UK), Ashfield Nurses.

Develop: FebriDx. FebriDx is a small, self-contained, point of care blood test which differentiates between a bacterial and viral infection in patients with Acute Respiratory Tract Infections (ARTIs). It provides a result in only ten minutes by measuring the levels of C-reactive protein (a measure of bacterial infection) and myxovirus resistance protein A (MxA) (an indicator of viral infection). The test allows clinicians to make an informed treatment decision between antivirals (if appropriate) or antibiotics. Use of the test helps clinicians to work towards the NHS's aim of reducing unnecessary antibiotic use, especially in Emergency Departments. The project will evaluate FebriDx in the Emergency Department at the Royal Berkshire Hospital in Reading, investigating how use of the test changes clinicians' treatment decisions and any reduction in antibiotic prescribing. The clinical project team has been assembled and other key stakeholders engaged. The evaluation is planned to start in September, in time for the usual seasonal uplift in respiratory illnesses seen over the winter.

Deploy: Asthma Biologics. This is a national programme under the Accelerated Access Collaborative. One of the SIP team has been providing project leadership in support of the CIA team, which is leading on the national deployment of the AAC RUP Asthma Biologics project (see above). Severe asthma places a huge burden on the NHS. Patients with severe asthma should be referred to a severe asthma centre by their GP to explore the possibility of other treatments, such as biologics, which can only be prescribed by the specialist centres. Current statistics suggest that it can take up to 12 years for a patient to be identified as having severe asthma and treatment with a biologic initiated. The Asthma Biologics RUP project aims to increase GP and patient awareness of the availability of biologics as a treatment for severe asthma and to open appropriate access to them via better referrals to the specialist centres. The project also aims to reduce reliance on oral corticosteroids as a treatment for severe asthma, especially where the use of a biologic would be more appropriate. Better treatment and management of severe asthma by patients will decrease the burden that the disease places on the healthcare system and improve patients' quality of life.

The SIP team has participated in the national benchmarking exercise and supported local partners with their Pathway Transformation Fund (PTF) bids.

MATNEO

Deploy: PIGF-based tests for women with suspected pre-eclampsia. This is a national programme led by Oxford AHSN as part of the Accelerated Access Collaborative (AAC) which saw widespread adoption during the Innovation Technology Payment (ITP) funding period which came to an end in March 2021. Quarter 1 has been dedicated to the provision of support to trusts and CCGs to help them transition from provision of the test under ITP funding to provision under the MedTech Funding Mandate (MTFM). The dynamic of this project is now such that both manufacturers agree that it has entered the phase of 'business as usual' as they assume ongoing business relationships with the trusts. Oxford AHSN involvement has now essentially reduced to maintenance discussions, facilitation, signposting and issue resolution via the AAC.

Roche-adopted sites:

- · Green: 45
- · Amber: 35
- · Red: 14

Quidel-adopted sites:

- · Green: 20
- · Amber: 18
- · Red: 13

GREEN – Service currently funded and provided, or confirmed to fund under MTFM AMBER – Service adopted under ITP. Discussions to confirm ongoing funding in progress RED – Trusts/CCGs not prepared to fund, or considering reverting back to old methods of care

CANCER

Deploy: Tamoxifen. Tamoxifen is no longer one of this year's Accelerated Access Collaborative (AAC) Rapid Uptake Products (RUP). Tamoxifen is the first licensed repurposed medicine for chemoprevention in women at risk of developing breast cancer; it has been shown to reduce the risk of breast cancer by 30-50%, seven years after taking the drug for five years (NICE CG164). However, the uptake of Tamoxifen is low in clinical practice at around 10% of eligible women. Activity in Quarter 1 focused on identifying and engaging with local stakeholders, including CCGs, the Thames Valley Cancer Alliance (TVCA) and the local genetics service, to gauge their interest in the project. A Pathway Transformation Funding (PTF) application commenced with Frimley CCG. Following feedback and concerns expressed by several AHSNs and their stakeholders, the AAC decided to terminate this project and withdraw PTF funding. Oxford AHSN has agreed to support our local stakeholders to deliver a rescoped, clinically-led project to improve breast cancer pathways that will begin in Quarter 2. Discussions are taking place with KSS and Wessex AHSNs to explore the possibility of delivering the rescoped project on a regional basis.

OTHER

Discover: Dora. The Innovate UK funded project involving the artificial intelligence company, Ufonia, is concluding. Ufonia has developed an automated speech-based service (Dora) to contact patients who have undergone cataract surgery to assess their eye health and need for further follow up. The impact of this project is to increase patient satisfaction of their follow-up care and relieve clinician burden as an increasingly ageing population affects workload demands. Working with Buckinghamshire Healthcare, the team conducted a study identifying the potential barriers to adoption and held a workshop to discuss ways in which the barriers could be overcome. Partners: Buckinghamshire Healthcare.

Develop: Dora. This project funded by an NIHR AI Phase 2 award will implement Dora in addition to the current standard of care for a cohort of patients at Imperial College and Oxford University Hospitals. The study will evaluate the agreement of Dora's decision with an expert clinician. In addition, it will test the acceptability of the solution for patients and clinicians, the sensitivity and specificity of the system in deciding if a patient requires additional review and the health economic benefits of the solution to patients (reduced time and travel) and the local healthcare system. A proposal is being developed to roll the solution out to all patients at each site in anticipation of an application for a Phase 3 award for wider NHS deployment.

Develop: MendelScan. Mendelian, one of our 2019 Accelerator cohorts, has developed MendelScan which looks into the coded sections of a patient's GP record for rare genetic diseases. These diseases are individually quite rare, with each one affecting <0.1% of the UK's population, but collectively they affect over 3 million people and place a huge burden on the healthcare system. Most GPs don't come across many of these patients during their working lives. Patients can therefore spend years interacting with healthcare resources while they struggle to manage their symptoms and obtain a definitive diagnosis, placing a significant burden on the healthcare system. MendelScan sits alongside patients' GP records and scans them to look for the common signs and symptoms of these rare diseases. It generates reports for clinicians to review which will assist in the diagnosis and potential referral of the patient to specialists in secondary care. The evaluation is being supported by the Central and South Genomics Medicine Service Alliance as well as Health Education England. Primary Care Network selection has been slower than anticipated due to the current pressures of COVID-19.

Develop: Frailty app. Buckinghamshire Healthcare NHS Trust would like help from the SIP team in evaluating a free app which will assist clinicians in creating a patient frailty score. The aim of the evaluation is to measure the number of frail patients who are discharged from hospital, either from a ward or the emergency department, with an obvious frailty score, resulting in a care plan in their medical records. It is anticipated that these patients will be better cared for within the community as a result and will require fewer hospital admissions and unplanned visits. This will reduce the burden that is currently being placed on emergency departments and geriatric services. During Quarter 1, the evaluation metrics have been considered. Next steps will involve the creation of an evaluation protocol and patient selection algorithm.

Deploy: SecurAcath. SecurAcath is a medical device used to securely anchor peripherally inserted centralline catheters (PICC lines) without the need for sutures or adhesives. SecurAcath can lower the total cost of patient care by dramatically reducing complications associated with PICC lines related to the use of sutures and adhesive dressing changes such as insertion site infections and dislodgement. Oxford University Hospitals, Buckinghamshire Healthcare, Royal Berkshire and Frimley Health have all implemented SecurAcath into standard clinical practice. During Q1 the focus was supporting these trusts and their respective CCGs to ensure that funding under the MedTech Funding Mandate (MTFM) is agreed. Milton Keynes University Hospital has yet to adopt SecurAcath into standard clinical practice, but discussions are now underway with the trust and its CCG to support their implementation plans.

Deploy: gammaCore. gammaCore is a hand-held, non-invasive vagus nerve stimulator for the treatment of cluster headache pain, which is widely acknowledged as being extremely debilitating. The gammaCore device enables patients to self-administer non-invasive vagus nerve stimulation therapy on demand, as an alternative to more costly injected medication. By the end of Q1, both Royal Berkshire and Milton Keynes University Hospital have agreed to implement gammaCore under the MTFM. Buckinghamshire Healthcare, Oxford University Hospitals and Frimley Health have previously adopted gammaCore under Innovation Technology Payment (ITP) funding and continue to offer the intervention.

Note: The MTFM is a new adoption mechanism introduced by NHS England in April 2021 for ensuring proven medical technologies are adopted across England. The AHSNs support provision of the technologies and act as facilitators and brokers between trusts, CCGs, the AAC and manufacturers.

Research & Development (R&D)

The programme aims to support the development of effective collaboration and working between the NHS and higher education institutes, working with the NIHR and other research infrastructure across the Thames Valley and the AHSN's footprint. The aim is to identify potential innovation for future implementation across Oxford AHSN partners and the wider NHS, to ensure research outputs come with relevant evidence and information for NHS services to understand benefits, costs and value prior to adoption, and to identify and facilitate collaborative research opportunities between NHS and university partners in the region. This theme is led by the CEO, Professor Gary Ford.

Thia quarter benefitted from discussions of the meeting of the R&D oversight group at the end of March 2021 which evidenced an increasing engagement in this agenda across the whole AHSN. Individual organisations – both NHS and academic – appear to have both thriving and developing R&D agendas and increasingly the organisations are looking to work together and collaborate for mutual benefit. The updates provided from all attendees proved particularly helpful and will be continued as a regular feature of the agenda.

The value that the NHS and academic members are drawing from the NIHR infrastructure represented at the group, including the NIHR RDS Thames Valley, the South Midlands and Thames Valley CRN and the ARC Oxford and Thames Valley, is also increasingly clear. We expect that this will continue with great input and support from the Oxford Academic Health Partners. The Oxford AHSN was designated as a full partner in the Oxford Academic Health Partners from September 2020 and Professor Ford is a member of the Partners' Board. Professor Keith Channon joined the Board of the AHSN last August. The AHSN R&D Group will also play a key role in extending the activities and understanding of those activities across the wider AHSN.

Plans are being developed for the coming Quarter (Q2) and a key item will be discussion at the July 2021 meeting with the BOB ICS which is currently developing its plans for its new structure and roles. The AHSN R&D Group has the potential to make significant contributions to the BOB ICS and its work through developing links, and bringing research impacts into consideration.

Community Involvement and Workforce Innovation

Community Involvement



Governance

We are in the process of re-establishing our Oversight Group so that it covers both community involvement and workforce innovation. The first group meeting is scheduled for September.

AHSN Network

We continue to chair the AHSN Network Patient and Public Involvement Leads forum which meets every six weeks. We are currently in discussions about a piece of work on patient involvement in digital innovation. The suggestion is to run some workshops with patients, public and innovators to help inform the work. In April we co-hosted a successful Network Lunch & Learn session on equality, diversity & inclusion (EDI) and community involvement, with Health Innovation Manchester and Imperial College Health Partners. The session was attended by 37 colleagues and a recording of the session has been uploaded to the Oxford AHSN YouTube channel <u>here</u>.

Oxford AHSN Programmes

We are in the last part of a process of discussions with AHSN colleagues to develop a better understanding of where they feel community involvement or workforce support is needed in their projects. This will inform our workplan for the rest of this year.

Regional and ICS Work

The summary reports for our seldom heard webinar series 2020, which can be found <u>here</u>, supported development of a wrap-up workshop we ran for people who wanted to consider how to actively engage with seldom heard communities. We also edited the webinar recordings and put them online on the Oxford AHSN YouTube channel – the <u>videos</u> have had 114 views to date. The wrap-up workshop was attended by a mix of both patients and professionals. The workshop received very positive feedback, and a report providing an overview of the workshop can be found <u>here</u>.

We continue to support the Thames Valley and Surrey Care Records Partnership, running the first two of three workshops on understanding and using patient data. The workshops were geographically focused and aimed at patients and the public who work with the health and care system, for example as patient participation group chairs or trust governors. The first event was very well attended with 43 participants joining on the day. The second event was also well attended with 34 participants. The workshops featured

talks from Professor Sir Jonathan Montgomery, Chair of Oxford University Hospitals, and Natalie Banner from Understanding Patient Data. Workshop reports will be circulated in the next quarter.

National Programmes

We continue to support the NHSE Rapid Uptake Products programme and have completed evidence summary reports for hypercholesteremia, asthma biologics, FeNO and Tamoxifen.

The reports on our two high cholesterol patient and clinician workshops, run in April, have been circulated and are available on request. The workshops combined were attended by 38 invited participants, and received overwhelmingly positive feedback, with all attendees wanting to remain informed about the programme and future work. The key messages from the workshops have informed the development of an animation to support patient adherence to treatments for high cholesterol. In addition, we are working with patients who attended the workshops to create patient stories in different formats that can be included in educational materials. We are also developing plans for further seldom heard engagement work with our patient representatives.

Workforce Innovation

Workforce Innovation

The workforce innovation theme within the Oxford AHSN aims to support the <u>national ambition</u> of more people working differently in a compassionate and inclusive culture through innovation, pathway redesign, improvement and evaluation.



Workforce across the BOB ICS region

We are working with the BOB ICS to support their fourth theme in the people strategy - retention of staff.

This quarter we released the phase one evaluation report on the implementation of the enhanced occupational health and wellbeing hub, which aims to 'level up' health and wellbeing services across BOB ICS.

The key themes that arose were:

- There is an overwhelming amount of resources
- Equity of access for all staff is essential
- Robust data collection of key metrics to demonstrate impact is imperative
- Common language of services will support equity across the region.

Equitable adoption of flexible working has been highlighted within the BOB ICS as critical for the retention of staff. We are supporting redesign of the service, firstly through the review of all six trusts' flexible working policies. This work will note the common offers as well as disparities, starting the process of designing equitable offers across the region.

Workforce across the South East

The three South East AHSNs (Kent Surrey Sussex; Wessex; Oxford) are working together to support the spread and adoption of evidence-based digital innovations across the region. Two examples of these are Electronic Repeat Dispensing (eRD) and Sleepio. Workforce metrics have been designed and last quarter saw a saving of 4,545 GP hours in BOB ICS due to the use of eRD. Over the last year, 2,340 staff in the South East region benefitted from using the online cognitive behaviour therapy intervention Sleepio. An evaluation of 'bitesize coaching' commissioned by the South East Leadership Academy to support frontline staff and leaders in the first two waves of the pandemic has been completed. Between December 2020 and May 2021, a total of 229 people undertook bitesize coaching out of 266 applicants. The overall feedback was extremely positive and the following key themes about these sessions were noted:

- They created space in a non-judgemental environment
- Enabled staff to build longer term strategies
- Gave permission to undertake self-care.

Several poignant comments were gleaned including these:

"It felt like a gift of time and conversation" "It's given me confidence in myself and headspace to decide what is the right thing to do at this time" "If we all do coaching, culture will change"

Workforce Nationally

Across all 15 AHSNs in England, workforce leads have gathered to collaborate, establishing what can improve the workforce (personally, team or service) in either pathway redesign or innovation. Three AHSNs - Oxford, Yorkshire & Humber and North East North Cumbria - have together developed an evaluation framework which has been shared to the national workforce leads. This will support the introduction of the workforce theme across all local projects.

Communications and Stakeholder Engagement

As we entered the second year of the new world supporting our NHS partners through the pandemic, we continued to adapt to meet the evolving needs of the healthcare system. For example, our Practical Innovators and Accelerator programmes are now fully established online. We have continued to add to the growing bank of <u>case studies demonstrating how we supported our partners</u>.

We took part in regional and national online events and publications with partners in other AHSNs, the NHS, research and industry. These included a report on how introducing extra health checks at vaccination clinics can help reduce stroke risk. We also contributed to a number of publications produced by the AHSN Network including a detailed report into the <u>collective impact of England's 15 AHSNs</u>.

We continued to invest in social media activities. Our Twitter impressions peaked in May, coinciding with our Chief Executive Professor Gary Ford's appearance on BBC TV News discussing the impact of AHSNs in promoting clinical innovation through the pandemic. Followers of the main account will pass 6,000 in Q2 while the Patient Safety account will shortly reach 1,500. The number of LinkedIn followers rose by 10% in the first quarter of 2021/22 and is on track to pass 1,000 this year (see graph below).

A series of information videos we made with NHS partners to help patients understand diagnostic scans reached a significant milestone, passing one million views on YouTube.



Appendix A - Risks Register & Issues Log

Risks Register

#	Programme	Risk	Description of	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date	Date	RAG
			Impact								mitigated	
1	Oxford AHSN	Failure to	Insufficient	Low	Med	ongoing	Stakeholder and communication	AHSN Chief	Programme	06-Sep	Ongoing	GREEN
	Corporate	establish culture	engagement of				strategy for the AHSN	Executive	SROs	13		
		of partnership	clinicians,				Each project has an engagement plan,					
		and	commissioner				including patient involvement.					
		collaboration	universities and									
		across the region	industry.									
2	Oxford AHSN	Failure to sustain	Programme activities	Low	Med	ongoing	NHS England has re-licensed all AHSNs.	AHSN Chief	AHSN Chief	31-Jul	Ongoing	GREEN
	Corporate	the AHSN	cease				NHSI has confirmed funding to March	Operating	Operating	14		
							2023. Actively pursued industry	Officer	Officer			
							partnerships and grants. NHSI increased					
							funding for PSCs in 20/21					
3	Oxford AHSN	National	Reputation Protect	Low	Med	ongoing	Robust engagement plans in place. Five	AHSN Chief	AHSN Chief	19-Feb	Ongoing	AMBER
	Corporate	Programmes	breach of contract.				of seven programmes delivered.	Operating	Operating	18		
		delivery					However, COVID-19 has slowed down	Officer	Officer			
							TCAM and Escape-Pain.					
4	Oxford AHSN	Diversity and	Perpetuate inequality	Low	Med	ongoing	Oxford AHSN has Signed up to the	AHSN Chief	Director for	June	Ongoing	GREEN
	Corporate	inclusion	either in our own				AHSN Network D&I pledge	Operating	Communities	2020		
			team or in our work				Unconscious bias training for staff	Officer	and Workforce			
			across the region				Ensure adhere to OUH policies on		Innovation			
							recruitment					
							Ensure programmes consider					
							inequalities in programme design and					
							implementation. Staff unconscious bias					
							training.					
5	Oxford AHSN	Failure to	CCGs have played an	Med	Med	ongoing	Engagement with new management	AHSN Chief	AHSN	April	Ongoing	AMBER
	Corporate	maintain	important part in				teams and clinical leaders.	Operating	Programme	2021		
		effective	engaging primary					Officer	Leads			
		engagement	care in adopting									

#	Programme	Risk	Description of	Likelihood	Impact	Time	Mitigating Action	Owner	Actioner	Date	Date	RAG
			Impact								mitigated	
			innovation, e.g.,									
			PINCER and COVID									
			oximetry@home. The									
			re-organisation of									
			CCGs is a risk to									
			effective									
			engagement.									

Issues Log

#	Programme	Issue	Severity	Area	Resolving Action	Owner	Actioner	Date	Status	Date
				Impacted						Resolved
1	Oxford AHSN	Lack of awareness by local	Low	Engagement	Overarching comms strategy. Level of engagement monitored across all	AHSN Chief	Head of	19 Jan	90%	Ongoing
	Corporate	partners and national			programme and themes.	Operating	Communications	18	complete	
		stakeholders of progress and			Website refreshed regularly visits per month increasing. Twitter followers and	Officer				
		achievements of the AHSN			newsletter subscribers increasing. Oxford AHSN stakeholder survey. Quarterly					
					report sent to all key stakeholders.					
					Electronic Newsletter to stakeholders.					
					Oxford AHSN organise and participation stakeholder events. Participation in					
					ICS and STPs committee structures.					
					Closer working with Regional NHS/I team and COVID cell structures					
					Attendance at Regional Mental Health Board to present regional mental					
					health programmes					
2	Oxford AHSN	Staff health and wellbeing		Staff	In line with government and OUH guideless our staff are asked to work from	AHSN Chief	AHSN Chief	17	90%	Ongoing
	Corporate	during the COVID-19			home unless it is not possible. Staff are subject to a personal risk assessment	Operating	Operating Officer	March	complete	
		pandemic			in accordance with OUH policy. We have made taken measures to ensure	Officer		2020		
					social distancing and infection control in the office for those staff who choose					
					to work there. Staff wellbeing is monitored by our senior HR Manager and a					
					programme of wellbeing and resilience training courses has been extended.					
					Staff communications were stepped up when the office was closed. Regular					
					team calls are held to report progress, undertake training and development,					
					and hold social events online. Quarterly Team Get Together online in place of					
					an annual team Away Day is being held each quarter. Staff have been					
					surveyed and the consensus is that home working and using Teams works for					
					most people – although everyone misses the social interaction of the					
					workplace.					

Annual	Case Study Topic
Year	
2020/2021	Rapid national roll-out of home-based safety net benefits thousands of patients with COVID-19
	Two-thirds of maternity units in England adopt test to rule out pre-eclampsia following roll-out led by Oxford AHSN
	AHSNs play key role in supporting patients with Covid-19 at home
	Unique midwife education and training programme improves safety for mothers and babies in low-risk labor
	Harnessing AI technology to speed up stroke care and reduce costs
	Spreading digital innovation in the NHS and supporting the workforce
	Keeping frail elderly people out of hospital - decreasing risk of Covid-19 infection
	Supporting stroke services through the pandemic
	Supporting NHS personal protective equipment needs (PPE)
	Improving timely observation of vital signs of deterioration in care homes
	Improving detection and management of atrial fibrillation (AF)
2019/2020	Thousands more pregnant women benefit from test to rule out pre-eclampsia following national rollout led by the Oxford AHSN
	Supporting leadership and collaboration in medicines optimization
	Paddle – Psychological therapy support app helps patients steer a course to recovery

Appendix B - Oxford AHSN case studies published in quarterly reports 2018-2021

Annual	Case Study Topic
Year	
	Adoption and spread of a quality improvement programme to prevent cerebral palsy in preterm labor (PReCePT)
	Preventing prescribing errors with PINCER
	Feasibility study for introducing a new rapid point-of-care HIV test into sexual health clinics (Owen Mumford)
	Healthcare tech company's expansion and Stock Exchange listing enabled by Oxford AHSN expertise
	Oxford AHSN support enables AI company to leverage £700,000 of grant funding (Ufonia)
	The Oxford AHSN assists Fujifilm in real-world evaluation of point of care flu test
2018/2019	Learning together through a regional patient-centered event to improve sepsis support and information
	Improving detection and management of atrial fibrillation
	Understanding the impact of a new model of urgent care within a GP practice
	AHSN-led collaboration brings multi-million-pound investment to Buckinghamshire and supports SMEs to meet health and social care needs
	Better diagnosis of pre-eclampsia improves patient safety and reduces burden on maternity services
	Patient forum helps improve NHS services for people with anxiety and depression
	Healthcare tech company's expansion and Stock Exchange listing enabled by Oxford AHSN expertise

Annual	Case Study Topic
Year	
	Unique point of care blood test speeds up clinical decision-making improves quality of care and reduces costs AHSNs come together to create new sepsis identification tool
	Spreading best practice in dementia through webinar programme

More case studies can be found on our website. We include around three in each of our quarterly reports. We have been producing these since 2014. You can find them here: <u>Quarterly reports - Oxford Academic Health Science Network (oxfordahsn.org)</u>