# Oxford AHSN Year 8 Q4 Report

For the quarter ending 31 March 2021

**Cover image:**

AHSNs responded at pace to a request from NHS England/Improvement for rapid roll-out of two pathways based on remote monitoring which are now safely and effectively providing an early warning system for thousands of COVID-19 patients at home, saving lives and easing pressure on the acute sector. Read more in our case study inside.

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# Chief Executive's Review

In the second half of the year our main focus was working with KSS , Wessex AHSNs and our local NHS partners and the South East Regional Medical Director's team to support the NHS manage demand during the second wave of the pandemic with the expansion of the COVID Oximetry @home services, a community self-management programme, and COVID Virtual Ward services - a secondary care step down model. Early pilots of these models of care developed in the South East helped achieve implementation of these services in all CCGs and acute Trusts across the region. The success of this programme demonstrates the importance of well designed pilot evaluations, clinical leadership and clear but adaptable implementation plans to achieve rapid spread of high value service models using remote monitoring. We continue to work closely with the SE regional team to ensure the services are sustained and able to support the anticipated third wave likely to occur later this year.

Our portfolio of national AHSN programmes continues to develop with support for the implementation of nine Accelerated Access Collaborative rapid uptake products that are NICE approved and support the NHS Long Term Plan key clinical priorities https://www.england.nhs.uk/aac/what-we-do/what-innovations-do-we-support/rapid-uptake-products/. Our Clinical Innovation Adoption team is the national lead team for asthma biologic drugs.

Cardiovascular disease is a major driver of health inequalities. The pandemic has disrupted routine identification and management of hypertension in primary care. A new AHSN Network blood pressure self-management programme is being developed with NHSX and NHS @home which builds on research on self-monitoring and management of hypertension undertaken by Professor Richard McManus and colleagues in the NIHR Applied Research Collaborative Oxford and Thames Valley. We will increase our joint work with the ARC focusing on the evaluation and spread of effective models of remote monitoring and remote consultation developed in response to the pandemic.

As the NHS adopts new service models in response to the pandemic, this provides new opportunities to maximise health prevention and self-management. One major change the NHS will see is the introduction of annual COVID vaccinations for most of the adult population. This offers a unique opportunity to undertake preventative health checks particularly for cardiovascular disease. We are working with the GIRFT team to collect experience and understand the impact of pulse checks to identify atrial fibrillation in people at increased risk of stroke, blood pressure checks in COVID vaccination clinics, to develop future service model templates.

The initial work in developing a future five-year strategy for the AHSN Network is now complete. To achieve our ambition for a substantial increase in adoption and spread of innovation across health and care systems, we plan to multiply our scale and depth of impact through outcome-led programmes and to build a high impact national innovation pipeline. The latter is well underway with all AHSNs now contributing local projects to an AHSN Network pipeline which will improve the visibility of innovations at different stages of development and deployment. The AHSN Network is strengthening our partnership work with NICE to identify high value innovation meeting the needs of Integrated Care Systems and drawing upon the internationally leading evidence evaluation expertise that NICE has developed.

We look forward to the outcome of the Life Sciences Industrial Strategy refresh being led by Sir John Bell, ensuring the work of AHSNs supports delivery of high value health innovation to the population, and that our support to commercial and academic innovators contributes to future growth of the UK economy.

**Professor Gary Ford CBE FMedSci**
**CEO, Oxford AHSN**

## Oxford AHSN case studies

Case studies included in this report:

**1: Patient safety/COVID-19**

## Rapid national roll-out of home-based safety net benefits thousands of patients with COVID-19

Academic Health Science Networks (AHSNs) responded at pace to a request from NHS England/Improvement for rapid roll-out of two pathways based on remote monitoring which are now safely and effectively providing an early warning system for thousands of COVID-19 patients at home, saving lives and easing pressure on the acute sector. Signs of deterioration are identified early and escalated quickly. This approach, recommended by the World Health Organisation, was rolled out rapidly nationally following initial regional success in the South East. This is an example of a whole health system approach, led by clinical experts, working collaboratively to successfully deliver new services to patients.

**2: Strategic and Industry Partnerships/Patient safety/Maternity**

## Two-thirds of maternity units in England adopt test to rule out pre-eclampsia following roll-out led by Oxford AHSN

Quick, accurate blood tests which can help rule out pre-eclampsia are contributing to safer pregnancies and better outcomes for tens of thousands of pregnant women and their unborn babies. More accurate diagnosis reduces the need for admission and enables a clearer focus on women needing closer monitoring. The pandemic has underlined the importance of safe and effective care, and minimising unnecessary hospital admissions. Within four years of the first real world evaluation in the Oxford AHSN region, 119 of England's maternity units (two-thirds of the total) have adopted the test into standard clinical practice following a rapid adoption project led by AHSNs. This is a successful example of AHSNs understanding the challenges to adopting new technology and helping the NHS and innovators work together to overcome them.

**Oxford AHSN case study 1**

**Date:** Q4 2021

**Programme/Theme:** Patient safety/Covid-19

**Title:** Rapid national roll-out of home-based safety net benefits thousands of patients with COVID-19

*Overall summary*

Academic Health Science Networks (AHSNs) responded at pace to a request from NHS England/Improvement for rapid roll-out of two pathways based on remote monitoring which are now safely and effectively providing an early warning system for thousands of COVID-19 patients at home, saving lives and easing pressure on the acute sector. Signs of deterioration are identified early and escalated quickly. This approach, recommended by the World Health Organisation, was rolled out rapidly nationally following initial regional success in the South East. This is an example of a whole health system approach, led by clinical experts, working collaboratively to successfully deliver new services to patients.

*What is the challenge?*

Detecting the early signs of deterioration in patients with confirmed or suspected COVID-19 is a significant challenge for health and social care teams. One of the early breakthroughs in the treatment of COVID-19 was the identification of silent hypoxia – the presence of low blood oxygen levels in a patient who might not otherwise seem unwell – as a symptom requiring urgent medical attention. As patients at risk of poorer outcomes can be identified by reduced oxygen saturation levels, the ability to recognise early decreases in blood oxygen levels before the patient becomes symptomatic is vital. A simple monitoring device called a pulse oximeter does this.

In autumn 2020 the NHS medical director for the South East approached AHSNs to lead rapid regional roll-out of COVID Oximetry @home.

In January 2021 NHS England recommended that all integrated care systems (ICSs) immediately establish a second related pathway - COVID virtual wards - to support the earlier and safe discharge of COVID-19 inpatients.

*What did we do?*

Two pathways relating to early identification of silent hypoxia through pulse oximetry monitoring have been rolled out at pace and scale building on already strong relationships with systems across the South East:

- COVID Oximetry @home (CO@h) – safe admission avoidance (step up)
- COVID Virtual Wards (CVW) – early supported hospital discharge and safe admission avoidance (step down)

The initial focus was on CO@h services. This is an enhanced package of remote monitoring for patients with confirmed/suspected COVID-19, who are at risk of future deterioration/admission, provided within a patient's own home overseen by a multidisciplinary team (MDT). It was successfully rolled out in under three months.

The Oxford AHSN hosted an initial webinar in September 2020: 'Innovations in Covid-19 Patient Pathways' which showcased examples from around our region of innovative ways of assessing and managing patients with suspected COVID-19 in the community. A recording is available here. Further webinars followed in January, February and March, some with other regional and national partners.

In October 2020 the Kent Surrey Sussex, Oxford and Wessex AHSNs were directly commissioned by NHS England and Improvement to work with integrated care systems (ICSs), primary care, key clinical leaders and others to codevelop CO@h services. This was achieved in all six ICSs across the South East by the end of November.

The joint programme board's membership includes Matt Inada-Kim, the national deterioration lead.

Patient safety teams supported the rapid spread of these solutions across the South East. They used a variety of methods and techniques including understanding the baseline for adoption and reviewing clinical pathways, producing, and curating materials, supporting with the production of metrics and evaluation. Their experience informed the roll-out of the programmes in other regions.

They also facilitated a national learning network (registration required). This workspace also includes an active discussion forum where evaluation reports from pilot sites are shared. These include Slough and Reading in our region and this evaluation from University College London.

In November 2020 NHS England/Improvement wrote to all clinical commissioning groups and trusts to encourage the development of local CO@h projects, following the publication of national guidance. This included the advice to follow the South East region approach to achieve rapid spread for this project.

In January 2021, the World Health Organisation recommended pulse oximetry monitoring at home as part of a package of care.

The CVW model was rolled out in under a month from January 2021. A national toolkit, learning networks and national guidance were rapidly developed, building on the success of the CO@h approach. Led by secondary care it supports step-down care for COVID patients leaving hospital, helping to mitigate pressure on beds and enable acute services to focus on sicker patients.

Both models use pulse oximeters for patients to safely self-monitor their condition at home, providing an opportunity to detect a decline in their condition that might require hospital review and admission.

***What has been achieved?***

Effective engagement has been achieved across secondary care, primary care and CCGs, with all partners involved in the many detailed conversations supporting development of the services. This included working with NHSX to support systems to identify, procure, test and integrate digital solutions to support this new model of care.

All the South East of England now has digital platforms to support remote monitoring of patients for other conditions and pathways.

Early experiences of CO@h have been linked to reductions in mortality, hospital length of stay and pressure on intensive care/critical care beds.[i]

By March 2021, CO@h coverage was at 100%, with CVW live in 21 sites and some blended services. In total 17,000 patients have been onboarded to these pathways so far in the South East. The peak for inpatient treatment was 5,577 in January, while for patients on CO@h/blended services it was 2,500 in January.

The CO@h toolkit has been viewed or downloaded almost 8,000 times.

Patient information has been produced including translation into several languages.


*What people said*

*"The care was very good. Knowing someone was monitoring the responses and answering queries was reassuring. Thank you."*

**Patient**


*"The implementation of Covid Oximetry @home, across all six system footprints that make up the SE region, would not have been possible without the support of the three regional AHSNs. From the outset, they have collaborated as one: drawing on their combined skills and expertise, working hand-in-glove with the regional digital team – and other partners – to deliver a comprehensive service, from scratch, to achieve impressive population of this innovative model of care to promptly identify patients who need hospital admission, and to monitor those who can be safely managed at home."*

**Vaughan Lewis, South East Regional Medical Director, NHS England & NHS Improvement**


*"For me, what's particularly exciting is how clinicians have been inspired to lead and create local networks for change, and how we've come together… as a growing collective of clinicians, healthcare managers and system leaders to create a way of working which is now arguably world leading."*

**Matt Inada-Kim, National Deterioration Lead**


*"From our early data, patients with non-severe COVID-19 can be safely managed in the community instead of being admitted to hospital. A virtual ward provides a safety net for this cohort of patients."*

**Joseph Nunan, ultrasound fellow in the acute medical unit, Royal Berks**


*"The Oxford AHSN was one of the key driving forces behind the setting up of the CO@h pathway at Bucks Healthcare and they are in the process of achieving the same feat in primary care. They had huge expertise in this sector, experience of having worked in other centres and, most importantly, a keen interest in getting it to work and work well. They were instrumental in the structure of the pathway, guided us through latest*

*developments on this ever-changing topic and even provided expert administrative support. Further continued support in future is very welcome."*

**Dr Raghu Raju, Consultant Respiratory Physician at Buckinghamshire Healthcare NHS Trust**


*"The Oxford AHSN team has been incredible to work with. It is not often commissioners are offered proactive human resource and we have certainly welcomed the support. Jo Murray and her team have shared practical examples of successful delivery of virtual wards from elsewhere, they have been facilitative and allowed the Buckinghamshire team to develop a pathway that is bespoke for our population. Having the pre-existing project knowledge, experience, and hands-on admin, as well as strategic support, has ensured the prompt delivery of this national requirement. They have demonstrated the importance of shared system learning to improve and disseminate best practice. Thank you and we look forward to continued collaborative efforts."*

**Dr Dal Sahota, Clinical Director for Unplanned Acute Care, Buckinghamshire Clinical Commissioning Group**


### What next?

The intensive AHSN-led support to implement these pathways began to wind down from April 2021. AHSNs are continuing to support systems to embed models, in particular capturing lessons learned, exploring ways to sustain the two COVID Oximetry pathways and investigating further opportunities for remote monitoring.

Next steps include data analysis to help close any gaps in service provision as well as exploring if this approach to remote monitoring and self-care could be applied effectively for other conditions and pathways e.g., long-term conditions including respiratory disease and mental health.

At inception it was unclear if these were temporary fixes or sustainable for the longer term. The transition to business as usual was not planned at the start and it was assumed that the peak would end in March 2020. In fact, the peak came in early 2021. All parts of the system are now working with NHS/I colleagues to transition from start-up/improvement stage to business as usual and assurance.


### Key learning

The ability to feed learning and concerns up to the national team, discuss at regional and national level with pilot sites and get quick responses that could be fed back at pace via AHSN networks was vital to the speed and success of this project.

The learning network events were free from hierarchy, featuring primary and secondary care colleagues, as well as commissioners, with a range of knowledge - including clinical, digital, IT - and all sites nationally have been exceptionally generous with sharing their materials. These were curated into toolkits to support other sites to develop their local models.

Patient surveys and case studies have been a strong part of the learning from the outset, recognising that both digital and paper-based services would be required as well as phone calls for reassurance and advice

above and beyond the scope of the pulse oximetry work, e.g., signposting/referring on to additional support services.

Flexibility in the models allowed local adoption and adaptation to suit the availability of services.

This work made full use of wide-ranging clinical expertise including community respiratory teams, acute medical unit physicians' assistants, GP hubs and staff who were shielding.

***Contact***

Jo Murray, Patient Safety Programme Manager jo.murray@oxfordahsn.org

[i] https://acutemedjournal.co.uk/wp-content/uploads/2020/11/p183-191-1.pdf

**Oxford AHSN case study 2**

**Date:** Q4 2021

**Programme/Theme:** Strategic and Industry Partnerships/Patient Safety/Maternity

**Title:** Two-thirds of maternity units in England adopt test to rule out pre-eclampsia following roll-out led by Oxford AHSN

*Overview*
Quick, accurate blood tests which can help rule out pre-eclampsia are contributing to safer pregnancies and better outcomes for tens of thousands of pregnant women and their unborn babies. More accurate diagnosis reduces the need for admission and enables a clearer focus on women needing closer monitoring. The pandemic has underlined the importance of safe and effective care, and minimising unnecessary hospital admissions. Within four years of the first real world evaluation in the Oxford AHSN region, 119 of England's maternity units (two-thirds of the total) have adopted the test into standard clinical practice following a rapid adoption project led by AHSNs. This is a successful example of AHSNs understanding the challenges to adopting new technology and helping the NHS and innovators work together to overcome them.

*What is the challenge?*
Pre-eclampsia (PE) is a multi-system hypertensive disorder - a serious disease that complicates around four per cent of all pregnancies – usually in the latter stages. It adversely affects thousands of women and their babies every year and can lead to small birth weight babies, organ damage and – in extreme cases – death. It is not unusual to induce the baby early, even with mild pre-eclampsia. Correctly diagnosing PE is notoriously difficult. Clinical teams have a high degree of suspicion for PE and a low threshold to admit pregnant women with suspected PE. However, only a small proportion of these go on to develop it. These places significant economic and capacity burdens on maternity systems. It costs the NHS an estimated £9,000 per pregnancy to treat. There has previously been no definitive way to accurately diagnose who is not at risk of developing pre-eclampsia. Women are routinely admitted for an anxious few days of hospital tests 'just in case' - but most do not actually have the condition. Based on the NICE guidance DG23 Resource Impact Model hospital admissions related to pre-eclampsia could be reduced by more than one third.

*What did we do?*
In 2017, the Oxford AHSN initiated a project to increase uptake and adoption of placental growth factor based (PlGF) testing which highlights women who are likely to develop pre-eclampsia within 7-14 days. The blood test can be taken as part of routine checks at between 20 weeks and 34 weeks plus 6 days of pregnancy in line with NICE guidance. The test supports clinical decision-making by providing an objective measurement to combine with other clinical symptoms, such as high blood pressure, blurred vision or high protein in urine.

Working with the Oxford Patient Safety Collaborative and clinical leads, laboratory heads, finance and management functions, the Oxford AHSN helped three of the first hospitals in England to adopt PlGF-based testing into standard clinical practice.

This successfully demonstrated that by offering tests to women suspected of having pre-eclampsia clinical teams were better able to identify women who did not have the disease and could safely be sent home, avoiding unnecessary hospital admissions for monitoring. It provided a platform for wider spread and adoption - both within and beyond the Oxford AHSN region. The Oxford AHSN developed an implementation pack to support this work. This supports a collaborative, multi-disciplinary approach including changes required to pathways and practices. For each maternity unit AHSNs are developing insight into their unique pathway and needs and providing project management and business support behind the adoption process.

The test was selected for the NHS England Accelerated Access Collaborative, Innovation Technology Payment and Rapid Uptake programmes in 2019/20 which introduce an accelerated pathway to market for highly transformative innovations. From April 2019 providers of maternity services were able to adopt and implement either the Quidel Triage PlGF test or the Roche Elecsys sFlt-1: PlGF ratio test fully funded, as NHS England centrally reimbursed the suppliers directly.

All AHSNs, led by the Oxford AHSN, have been working together to ensure rapid and widespread adoption of the test into standard clinical practice in maternity units across the country.

In March 2021 the Oxford AHSN delivered a workshop on overcoming barriers to adopting placental growth factor testing as part of Bridging the Gap, an AHSN Network event offering insights and guidance to healthcare industry innovators.


***What has been achieved?***
By February 2021, 119 maternity services had adopted the test – which equates to around two thirds of maternity units in England. Thousands more pregnant women and their babies are benefiting. This is leading to improvements to patient safety, experience, and satisfaction. Projected annual savings in England are estimated at £4m per year relating to reduced hospital bed occupancy.

Positive impacts include:
- improved patient safety through accurate diagnosis on the suspicion of PE
- a reduction in the number of (unnecessary) admissions for suspected PE
- improvement in maternity capacity as the result of having fewer women to monitor as inpatients
- improvement in community midwifery capacity due to a reduction in the number of follow-on appointments required once PE is suspected
- a reduction in the direct costs to the system from the array of inpatient monitoring tests undertaken on the woman and her foetus by keeping women on the most appropriate treatment pathway (standard, Intermediate or Intensive) and not having to escalate the level of her care to a higher pathway during the pregnancy upon suspicion of PE, for which no additional funds are made available
- a reduction in the number of pre-term or emergency deliveries (delivery of the baby is the only 'cure' for PE)
- positive impact on workload and costs incurred by both maternity and paediatric services as a result of fewer pre-term births – cost savings based on fewer outpatient visits, admissions, monitoring, pre-term deliveries and less onward neonatal care. Savings in England are expected to be in the region of £4m per year, based on an estimated saving of £250-£600 per woman tested projected from health economic models.

In 2019 this initiative was a category winner at the HSJ Partnership Awards and won the inaugural UNIVANTS Healthcare Excellence award.

***What people said***

*"I was so happy not to be admitted to hospital; knowing I could go home and that I was safe was brilliant."*

**Mother**

*"Having a test that effectively triages patients into high risk and low risk groups means that we can focus our care."*

**Midwife**

*"This project showed high levels of innovation and sophistication. This evidence-based project delivered demonstrable improvements in patient experience."*

**HSJ Partnership Awards judges 2019**

"The key has been combining industry innovation and research evidence to meet a known NHS need. That is where the AHSNs came in. The Oxford AHSN's expertise and connections opened doors and enabled use of this test to spread from an initial hospital to multiple sites. They developed insight into pathways and needs as well as providing project management and business support for adoption. This test improves our diagnostic accuracy and is a welcome step forward."

**Dr Manu Vatish, Consultant Obstetrician, Oxford University Hospitals, and Senior Clinical Fellow with the University of Oxford's Nuffield Department of Women's and Reproductive Health**

*"The success of the ITP programme was dependent on collaboration, teamwork and innovative thinking. The Oxford AHSN and the national AHSN Network brought all these skills to the project and were crucial in opening doors and bringing together manufacturers, clinical teams and all stakeholders to ensure PlGF testing was adopted. PlGF testing remains an important tool to guide clinical management of these patients."*

**Eoin Madigan, Sales Manager, Quidel Ireland Ltd.**

*"Roche Diagnostics is delighted that the majority of NHS maternity services have adopted the PlGF-based test for pre-eclampsia. After a successful initial partnership with the Oxford AHSN, the project has widened to include all the AHSNs across England and their respective maternity services. We are grateful to all those partners involved within the AHSNs and NHS trusts who have adopted this test to give pregnant women the reassurance and safety benefits it brings."*

**Julia Eades, Market Access Manager - Women's Health, Roche Diagnostics UK & Ireland**

***Key learning***

Key to the success of the project is confirmation of local clinical need, drivers and priorities in each hospital, mapping current and future clinical pathways with associated costs and benefits.

To successfully deliver the project, key internal stakeholders (e.g., labs, finance) who are required to approve and then implement the adoption of the new test and pathway have to be identified and engaged early on in the process.

As with most diagnostic tests, simply adopting the test into existing clinical or patient pathways will likely add cost with limited additional benefit for the clinical team or pregnant women under their care. As such, clinical and laboratory teams must adopt new pathways to incorporate PlGF-based testing into standard clinical care. Example pathways are available through the AHSN Network.

### *What next?*
From April 2021 PlGF-based testing will be one of four technologies included under the new NHS MedTech Funding Mandate, an NHS Long Term Plan commitment to get selected NICE-approved cost-saving devices, diagnostics, and digital products to patients more quickly.

### *Contact*
Guy Checketts, Interim Director of Strategic and Industry Partnerships guy.checketts@oxfordahsn.org

## Operational Review

**Highlights of 2020/21**

Over the last year we have seen adoption of innovation by NHS services at an extraordinary pace, e.g. digitally enabled remote consultations, remote monitoring and the vaccine rollout. It has been a very challenging year for our staff with many falling ill with COVID-19 and some still suffering from the after-effects. The NHS and its staff have shown incredible resilience.

The Oxford AHSN and the other 14 AHSNs have played their part in mitigating the impact of COVID-19. As far as possible the AHSNs have continued to work on their programmes but many have been disrupted by the pandemic. During the year the AHSNs have worked with 4,000 companies, many involved in solutions and innovations in response to COVID-19. Many staff returned to frontline duties or volunteered to work on the vaccine programme.

In the first wave Oxford AHSNs staff supported sourcing PPE, working with PPE innovators on reusable PPE and supporting the rollout of Digital First. Julie Hart, our Director of Strategic and Industry Partnerships, has been seconded to the DH to assess new technologies in support of the national Test and Trace service. Gary Ford and Hannah Oatley have developed guides for stroke treatment and CVD in COVID conditions. They have also led the development of the new lipid management national programme due for implementation in 2021/22.

Following a request by the South East Regional Medical Director in September, Oxford AHSN collaborated with Kent Surrey Sussex and Wessex AHSNs to support the development of COVID Oximetry @home (CO@h) services and COVID Virtual Ward services throughout the region in the second wave. The SE was at the forefront of spread and adoption of COVID Oximetry @home, with every CCG having at least one service up and running by the end of November. Most CCGs had a COVID Virtual Ward service set up by the end of January. At its peak in the second week of January, 2,500 patients were referred to CO@h services – in the same week COVID patients in SE hospitals reached a high point of 5,577. More than 17,000 patients were cared for through oximetry at home by the end of March. The SE had excellent pilots to learn from, e.g., in Royal Berkshire, Slough and Dorset. The AHSNs created detailed 'how to' guides, fostered rapid shared learning and gave direct support to clinical and system leaders in developing their services. The AHSNs have worked very closely with the NHSE/I SE regional team to ensure services are sustained in case of another upsurge in community infection. Oximetry at home became a national programme in November and the whole AHSN Network got behind it – CO@h was developed in every CCG. COVID Virtual Wards covered 80% of England.  Useful lessons have been learned and shared regionally and nationally from the programme including handover packs at the end of AHSN support. Work continues to identify further remote monitoring interventions. You can read more about this work in case study 1 earlier in this report.

The other all-pervading crisis is climate change. The NHS contributes 5.6% of UK greenhouse gas emissions - as much as the airline industry. The NHS has declared it will be carbon neutral by 2040. To achieve this, we will need to change products, services and practices throughout our services. The Oxford AHSN is working with other AHSNs and the Greener NHS team to create a community of interest (COI) to support shared learning of best practice and innovations, and influence policy to enable uptake of environmentally friendly alternatives to current products and practices e.g. reusable PPE. The COI has yet to meet in person – working through Teams has proven to be very effective in fostering collaboration and contributing to sustainability in its own way.

During the last 12 months we have made good progress on the two new national programmes focussed on mental health: ADHD diagnosis and eating disorders in young people – both important areas given the growth in demand for mental health services by younger patients. From the original seven national programmes, six have been delivered and they are all closed. It is good to see very high levels of

compliance have been sustained for PReCePT in the Thames Valley. We have also seen rapid rollout in the SE of Brainomix technology to support remote consultations for stroke patients. The Oxford AHSN has supported the company's development for several years.

We have also delivered our Patient Safety commission and we were very pleased to announce that the team, in collaboration with OUH and RBH, won the HSJ Patient Safety Award for Innovation for Intelligent Intermittent Auscultation – the e-learning tool has been taken up nationally and HEE is promoting it internationally.  We have expanded our patient safety team and are in the process of doing the same with our Clinical Innovation Adoption team. The local implementation plan for 2021/22 has been signed off by NHSI. Our Strategic and Industry Partnerships programme has supported many innovators over the last 12 months. The AHSN Network is developing a shared pipeline which will improve the visibility of innovations at different stages of development and deployment.  The Oxford AHSN is improving its planning, reporting and pipeline management, grouping its national and local work under clinical headings to manage the portfolio more strategically.

The Bedford, Luton and Milton Keynes area falls into three AHSN regions. We have worked with Eastern and UCL Partners AHSNs as well as the CEO of the newly merged BLMK CCG to agree principles for support. Eastern will deliver on the nationally commissioned NHSE/I programmes at BLMK system level and the Oxford AHSN will focus on secondary care interventions in Milton Keynes. Our goal is to improve engagement and innovation uptake in primary care across the region which historically has been sub-optimal.

Remote working has enabled rapid and effective shared learning and programme management at scale locally, regionally, and nationally. The whole AHSN team meets weekly, with the senior team getting together twice a week. We hold shared learning events for the AHSN team most weeks. In partnership with Optimus, we offered a wellbeing programme to all staff. I would like to thank our staff for their commitment, resilience, and adaptability. We will consult staff on ways of working post-COVID.

This quarter we include two case studies which update significant pieces of work that grew from small beginnings to achieve national impact. As mentioned above, the first is the rapid roll-out of two pathways based on remote monitoring which are now safely and effectively providing an early warning system for thousands of COVID-19 patients at home, saving lives and easing pressure on the acute sector. Special thanks to Jo Murray from our patient safety team for the success of this roll-out. The second details the journey of a test to rule out pre-eclampsia from first real world evaluation in the Oxford AHSN region to two-thirds of England's maternity units adopting it into standard clinical practice. The PlGF national rollout led by Guy Checketts, Oxford AHSN, has achieved the highest ROI of any AHSN Network programme. It's an exemplar of how AHSNs can take an evidence-based product to at scale adoption in our NHS.

**Original national programmes**
Six of the seven 2018-20 national programmes have been delivered, ESCAPE-Pain being the exception with very little interest in the Thames Valley. Targets for Atrial Fibrillation (AF) Detect and Protect, Emergency Laparotomy, PINCER, and PReCePT were achieved by Q4 2019/20. Integrated mental health care and policing teams programme target was exceeded by Q4 2020/21. COVID-19 disrupted AF and Emergency Laparotomy. Transfer of Care Around Medicines (TCAM) targets were not achieved but referrals have increased in Buckinghamshire Healthcare. Royal Berkshire has developed an IT solution to accommodate TCAM, but the service is delayed. Models of care for high dependency service users, based on the police/mental health service model in Hampshire, have been implemented and sustained in Reading and Oxford with Berkshire Healthcare and Oxford Health.

**New national programmes for 2020/21 (see table below)**

**Mental Health**

- **ADHD** - QbTest is already implemented in Berkshire and Oxfordshire, and Buckinghamshire CAMHS service aims to implement shortly.
- **FREED** pump-priming funds have been successfully secured during Q4. This has enabled Berkshire Eating Disorders Service and Buckinghamshire's ED service to recruit FREED champions and offer a service from May 2021, with soft launches planned for June 2021.

**Cardiovascular**

- **CVD/lipid management programme** – engagement with CCG and clinical CVD leads has started. Launch meetings are due to be held in the next quarter.

**National innovation products (see tables below)**

Heartflow and SpaceOAR numbers are below target – largely due to the impact of COVID-19 on service provision. SecurAcath, PlGF and PCSK9 inhibitors are on or in excess of target. Cladribine is awaiting further instruction from the AAC.

The Oxford AHSN has led the rollout of PlGF nationally – this is an excellent example of a local innovation that, following an AHSN-supported real world evaluation, has become a successful national programme. PlGF is now used on almost all maternity units in England. Read more on this in case study 2 above.

The Oxford AHSN is leading on the rollout of asthma biologics – a new innovation product to be delivered nationally in 2021/22.

**Report by clinical area**

**Maternity**
- The Intelligent Intermittent Auscultation 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.
- PlGF – Q4 focus has been developing the communication strategy and provision of support for adopted trusts in their transition from ITP funding to Med Tech Funding Mandate (MTFM).

**Respiratory**
- The national asthma biologics (AAC) programme is being led by our Clinical Innovation Adoption team and through collaborations (national NHSE/AAC, clinicians, industry, AHSNs/NHS).

**Cardiovascular**
- Lipid management launch meetings due to be held in Q1 of 2021/22.
- 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.

**Covid Oximetry @home and Covid Virtual Ward**
- Full roll-out of Covid Oximetry @home and Covid Virtual Ward resulted in at least 5,000 patients being supported at home in the winter peak of the pandemic in the Thames Valley and 17,000 across the SE.

**Breast Cancer**

- Baseline survey circulated to all 15 AHSNs to provide a baseline position of service provision and identify variation across the country.

**Other key areas of work**

**Workforce**
This quarter we:
- continued to work with the Working Together Partnership with our regional healthcare and research colleagues, agreeing further joint funding and a series of workshops throughout 2021/22.
- Made summary reports for our seldom heard webinars available via our YouTube channel.
- continued to support the NHSE RUP programme with a series of evidence summary reports. These will help to inform Equality and Health Inequality Impact Assessments (EHIAs) and patient and public involvement plans.
- supported the lipids and CVD work, leading on community involvement.
- supported Workforce Innovation – the BOB ICS people strategy and plan are working in five themes. Theme four (Retention) has been awarded funding to design and develop two hubs to facilitate staff wellbeing. The first, addressing psychological wellbeing, went live this quarter to all NHS staff in the region. The second is enhanced occupational health and wellbeing. The Oxford AHSN is leading the mixed methods evaluation of physical wellbeing and local health.
- Supported the development of AHSN Network PPI strategy through the Director of Community Involvement and Workforce Innovation.

**Communications and stakeholder engagement**
The move to online working has, in many ways, enabled faster and more inclusive collaboration. We have run many shared learning events in collaboration with other AHSNs and other partners and we have achieved good attendance rates. Teams and other video meetings allow much greater participation from clinical and non-clinical colleagues from all around the system. The burden of time to travel and park has gone. In addition, our practical innovators and Accelerator programmes were delivered online for the first time.

There was a strong correlation between peaks in social media engagement and our best practice webinars or the launch of resources supporting frontline services. The highest single day for impressions (almost 13,000) on the @OxfordAHSN Twitter account came in July and coincided with our popular webinar explaining COVID Oximetry @home.

Further online successes during 2020/21 included:
- achieving more than 500,000 Twitter impressions – a 30% increase on 2019/20
- passing one million views (and 2,000 subscribers) on our YouTube channel
- doubling the number of followers of our LinkedIn account

Our monthly email stakeholder newsletter is closing in on its 100th edition – thank you Martin Leaver.

## AHSN Network - new national programmes for 2021/2022

| Programme RAG for Q4 | Contracted Metric | Plans | 2020/21 taget | 2020/21 Progress |
|---|---|---|---|---|
| Workforce theme | N/A | Plan: A Workforce Theme will be developed and agreed with BOB ICS by Q3, early consideration given to staff health and wellbeing. The Workforce Theme will draw on innovation, particularly digital technology from Oxford AHSNs programmes. | NA | NA |
| | | Progress: Workforce programme manager in post and relationships building with BOB ICS people board. Enhanced Health and wellbeing hub evaluation commenced in BOB ICS region. Work within digital SE3/4 continues to evolve. | | |
| Eating Disorders – early intervention | Number of patients benefitting from an early intervention first episode eating disorder programme | Early intervention for Eating Disorders (FREED) model is predicated on the existence of a dedicated Band 7 (0.6 WTE) FREED Champion to direct and implement the approach within the existing ED team. The provision of pump priming funding to enable the recruitment of FREED champions locally will present an opportunity to engage teams and encourage the adoption of the FREED approach in 2020/21. | TBC | N/A |
| | | Progress: All eating disorder services have been engaged. Successful applications for NHSE/I funding were submitted by Berkshire Eating Disorder Service (BEDS) and the Buckinghamshire ED Team (Oxford Health). Both teams have booked their team members onto the required FREED training and are recruiting for FREED Champions locally. Teams will 'soft launch' FREED in April 2021. South East FREED Support Network has been created to share best practice and encourage the development of FREED for Oxfordshire (and in Milton Keynes, potentially as an extension of the work in BLMK). This is in addition to assistance provided by SLaM and the FREED Network. | | |
| Cardiovascular Disease | Number of CCGs engaged % of known cases of FH Metrics relating to prescription of high intensity statin, ezetimibe or PCSK9i | Plan: Develop Familial hypocholesteraemia and lipid management workstreams, including child parent screening for familial hypercholesterolaemia | TBC | NA |
| | | Progress: Delivery framework developed and shared with national team for comment. Pathway mapping across region commencing. ICS level launch meetings planned for Q1 2021/22 | | |
| Attention Deficit and Hyperactivity Diagnosis (ADHD) | Number of diagnoses of ADHD made using a continuous performance test product | Plan: work with NHS trusts to improve the process and speed of diagnosis of ADHD and appropriate use of computer-based tests (measuring attention, impulsivity, and activity) to assist with diagnosis. | 86 | 0 |
| | | Progress: 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 | | |

# AHSN Network 2018/19-2019/20 (original) national programmes

| Programme RAG rating for 20/21 | Contracted Metric | Plans to complete and sustain (DELIVERED – indicates delivered by March 2020) | 2020/21 target | 2020/21 progress |
|---|---|---|---|---|
| AF | Number of previously unknown AF patients diagnosed with AF | **DELIVERED**. AF Detect and Protect targets exceeded for 2019/20. Risk to sustain: The significant and sustained reduction in face to face contacts in primary care is likely to lead to a reduction in the number of new AF detected (against trajectory). Various approaches to detecting AF during the COVID-19 period being investigated and discussed with partners, including targeted detection (over 65s) in COVID vaccination clinics. 2020/21 target remains at risk | 4,000 | TBC |
| Emergency Laparotomy | Number of emergency laparotomies in hospitals implementing the pathway | **DELIVERED**. 2018/20 two-year target exceeded. 2019/20 target exceeded. 2020/21: target expected to be exceeded. The year-long pandemic has significantly challenged the ELC teams. Whilst emergency surgery continues, anaesthetists have been in the front-line response, some other professionals and grades have been re-deployed and reduced access to certain resources has an impact. The interim NELA report on Covid-19 (March-September 2020) concluded that "overall standards of care for patients undergoing emergency laparotomy were maintained during the COVID-19 pandemic". Recording emergency surgery occurrences continues but without the resources in place and required for sustaining best practice, it is a remarkable achievement by staff to sustain some level of data recording. The Q4 official sign-off is due on 21/06/21. Likely cases for the year expected to be around 1009. Interim NELA report for March to September 2020 shows that approximately 8% of patients requiring emergency surgery had a perioperative diagnosis of Covid-19. Infection was associated with a 5% higher mortality at 30 days (7.2% infection free; 12.5% for infected patients) and infection extended length of stay by three days (9 days; 12 days if Covid-19 positive). | 912 | 1,009 |
| ESCAPE-Pain | Number of people completing the ESCAPE-PAIN programme | **NOT DELIVERED**. Despite wholesale engagement across the healthcare system take up is minimal. This is not expected to change. Sites providing the programme are within the leisure sector, but due to COVID-19, the programme is not being delivered. | 25 | 0 |

| Programme RAG rating for 20/21 | Contracted Metric | Plans to complete and sustain (DELIVERED – indicates delivered by March 2020) | 2020/21 target | 2020/21 progress |
|---|---|---|---|---|
| PINCER | Number of GP practices adopting PINCER | **DELIVERED**. Two-year target exceeded with 4 CCGs participating, 206 GP practices adopting, and 250 people trained.<br>As of Jan 2021, 178 practices have uploaded follow-up data. In these practices, there has been a 35.5% reduction in the number of at-risk patients in the GI bleed indicators and a 2.4% reduction in the number of at-risk patients in at least one of the overall indicators. | 204 | 206 |
| PReCePT | Number of additional mothers where MgSO4 given | **DELIVERED**. Two-year target met and sustained. Some expectation COVID-19 would affect numbers, but local data showed 92% for 2020 (target 85%) | 8 | 10 |
| SIM | Number of high-intensity service users covered | **DELIVERED**. Reading and Oxford Police and Mental Health Liaison pilots have both passed as equivalent to the National programme. We continue to support the two localities which are supporting 17 people at the most intensive level of input. | 8 | 17 |
| TCAM | Number of completed referrals using TCAM | **NOT COMPLETELY DELIVERED**. In initial phase of COVID-19 community pharmacies overwhelmed and 'completion' rate fell to zero. Buckinghamshire Healthcare referrals lower than plan. Royal Berkshire is planning on launching soon after development of an IT solution. OUH considering the solution for patients discharged to care homes | 1,679 | 518 (includes DMS which replaced TCAM from 15 Jan) |

## AHSN Network – national innovation products for 2021/22

| Programme RAG rating for 20/21 | Contracted Metric | 2020/21 target | 2020/21 progress by Q4 |
|---|---|---|---|
| HeartFlow | No of Heartflow scans appropriately used | 569 | 232 |
| SecurAcath | No units sold | 5,500 | 9,612 |
| SpaceOAR hydrogel prostate cancer spacer | No of patients injected with SpaceOAR hydrogel – uptake has been impacted by COVID-19 | 48 | 35 |
| Placental growth factor tests for pre-eclampsia | No of placental growth factor test kits supplied | 1,861 | 1,925 |
| PCSK9i | Half the number of Cholesterol lowering drugs dispensed. | 247 | 233 |
| Cladribine | No of unique patient Blueteq approvals for treatment with cladribine | 28 | Not available |

# AHSN Network- Regional Programmes 2021/22

| Programme | Background | Plan and progress |
|---|---|---|
| **Sleepio** – led by Oxford | Clinically evidenced CBT for insomnia delivered via online sleep improvement programme. Widespread adoption across the Thames Valley.<br><br>Big Health made the system free for NHS staff to December 2020.  An extension to April 2021 is being established to continue free access.<br><br>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 since 1st October 2020 within that geography. | Engaging with KSS and Wessex AHSN colleagues to establish priorities and outcomes for the project across the South East.<br><br>Sleepio has been made available (alongside Daylight, Headspace, and Unmind) for NHS England staff, presenting an opportunity to explore the beneficial impact on the healthcare workforce.<br><br>The project has now closed, though opportunities to continue collaborating with KSS and Wessex will continue to be sought. |
| **S12 Solutions** – led by Wessex | S12 Solutions is an app and website that connects Approved Mental Health Professional (AMHPs) with available, local s.12 approved doctors, to facilitate setting up of Mental Health Act assessments. | Oxford AHSN presented on S12 Solutions to BOB ICS Mental Health Delivery Board in November, and this was also discussed at the February meeting. After interviewing AMHP leads a document was prepared outlining the issues and challenges in each of the BOB areas, to help CCGs with decision-making about the platform.  It is likely there will be a mixed picture with respect to adoption in BOB CCGs. (Kent and Medway, and Portsmouth are in the process of going live and the remainder of the SE Region has already adopted S12 Solutions.) |
| **Remote Monitoring in Care Homes** – led by KSS | Current Health is a passive remote patient monitoring wearable device which supports clinicians to monitor, manage and engage with their patients inside or outside of the clinical setting – specifically in their own homes or in care homes.<br><br>It is a continuous monitoring device with integration into the electronic medical record.<br>Status in SE: Well-adopted in Kent & Medway – possibility to scale.  Other solutions exist and can be factored in to spread and scale implementation | Bring together group from 3 AHSNs and identify technologies that can enable remote monitoring for various conditions.<br><br>Map statuses engage stakeholders and identify gaps that can be supported.<br><br>Project complete |
| **Covid Oximetry @home and COVID Virtual Ward** – joint delivery KSS, Oxford and Wessex | Part of our Patient Safety Collaborative commission, the aim of this regional workstream (national from November) is to reduce avoidable harm for patients who may be at risk of or experiencing physical deterioration in acute and community settings.<br><br>NHS E/I South East Medical Director asked the three SE AHSNs if the programme could be accelerated ahead of the surge in COVID-19 cases | All CCGs have a CO@h service. All acutes have a CVW service. More than 5,000 patients have been supported so far in BOB and Frimley and 17,000 across the SE by the end of March. At peak in week 2 of January 2,500 patients were taken on to both pathways |

| Programme | Background | Plan and progress |
|---|---|---|
| | There are two pilots in the Oxford AHSN region.<br><br>We and the other SE AHSNs have also supported the rollout of a digital solution to capture patient data | The lessons from the programme have been captured and shared regionally and nationally |
| **AI Stroke Decision making evaluation** | Working with Brainomix, the TITAN project has delivered (within the Thames Valley) the country's first AI-enabled regional stroke network (see case study 1).<br><br>With the evolution of the Integrated Stroke Delivery Networks (ISDN) nationally, the adoption of AI assisted diagnostic tools and digital communication technologies is rolling out across the SE Region (and nationally) with two providers of the technology in the South East.<br><br>Brainomix has also been successful in the National AI in Health & Care awards (AAC/NHSX). Securing the work being undertaken within the TITAN network and allowing the further establishment of networks across the UK. | Commissioned by NHSE, Oxford AHSN is a leading the evaluation of the AI acute stroke decision support tools being adopted in the South East.  Looking at the impact of the technology on clinical pathways, clinical decision making, acceptability for clinicians and ease of implementation employing mixed methodologies of pathway mapping, quantitative and qualitative analysis.<br><br>This work has started with a planned 1-year finish date.  A more detailed analysis is planned for the TITAN network, incorporating some economic data.<br><br>The Oxford AHSN was successful in a bid for the national NHSX-AAC evaluation of the Brainomix AI in Health and Care award. |

# Finance

Commissioning income received as at Q4 compared to Q3 forecast increased by £150k in respect of an NHSI contract variation for Covid oximetry @home. £140k was transferred to Accelerare to leave a breakeven position in our OUH accounts. Other income is made up of Grants from EIT Health and Innovate UK and included one-off funding for Digital First SE and OCCG Wellbeing Strategy. Programme expenditure was 74% of total expenditure.

| | Model Period Beginning | 01-Apr-20 | 01-Apr-20 |
|---|---|---|---|
| | Model Period Ending | 31-Mar-21 | 31-Mar-21 |
| | Financial Year Ending | **2021** | **2021** |
| | | | |
| **INCOME** | | Opening Plan | Actual |
| NHS England & Improvement funding | | 3,170,708 | 3,320,708 |
| Office of Life Sciences Funding | | 830,300 | 830,230 |
| Partner contributions | | 330,000 | 317,018 |
| Other Income - Recharges to Accelerare/Cogentis | | 42,375 | 27,844 |
| Other income - Programmes & Themes | | 1,002,260 | 812,935 |
| Other Income - Health Education England | | 0 | 0 |
| **Total income** | | **5,375,643** | **5,308,735** |
| **ACTIVITIES** | | | |
| Programmes and themes | | 4,189,375 | 3,931,705 |
| Grant Paid to Accelerare Ltd | | 0 | 140,400 |
| Corporate Overhead | | 1,186,268 | 1,236,629 |
| | | | |
| **Total expenditure** | | **5,375,643** | **5,308,735** |
| | | | |
| **Net Income/Expenditure** | | **0** | **0** |
| Programme funding previously committed | | 0 | 0 |

**Risks and issues**

CCGs have been very important in supporting rollout of innovation in primary care, e.g., PINCER successfully implemented in 204 GP practices, supported by 4 out of 5 CCGs. Adoption of CO@h was supported at a local CCG level too. The merger of CCGs and the restructuring of ICSs poses a significant risk to innovation uptake in primary care and system wide working. The risk has been raised with the SE Regional NHSE/I team by the three SE AHSNs.

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

# Patient Safety and Clinical Improvement (PS&CI)

**Summary**

During this very challenging year we have worked hard to align our work to the needs of services and patients in our region, pausing some of our work where engagement was not possible and starting new projects as required.

Some key points to highlight include

- Supporting the full roll out of Covid Oximetry@Home and Covid Virtual Ward services across the region in collaboration with our AHSN colleagues in Wessex and KSS, resulting in at least 5,000 patients being supported at home in the winter peak of the pandemic in the Thames Valley and 17,000 across the SE.
- Our Intelligent Intermittent Auscultation package won the HSJ Patient Safety Innovation of the Year and is now available internationally
- Rates of Magnesium Sulphate administration in preterm labour to reduce the incidence of Cerebral Palsy increased to 94% across the year
- Police and mental health liaison pilots were both accredited as fulfilling the core principles of high quality care for prevention of repeat MH crises services, ensuring they are providing a high level of support for service users with mental health issues who often have interactions with police
- We were pleased to recently welcome three new Improvement Project Managers – Nigel Sims, Jon Vollam and Hayley Trueman to complement our expanding portfolio of work.

Details as to our activity in the past quarter follows

**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 3 distinct elements:

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

**Covid Oximetry@Home**

Building on the success of Q3, working with colleagues in the South East, with all areas setting up effective Covid Oximetry @Home services, the focus in Q4 has been implementing COVID Virtual Wards – stepdown services for patients admitted to hospital/attending ED. These were already in place in 3 of our Trusts with the other 2 came online in January. In addition, we have transitioned support from AHSNs to NHSE/I. This has included securing robust data collection and understanding challenges to this, ensuring clinical governance is in place, and that this is at ICS level.

We supported a webinar hosted by Kent Surrey Sussex AHSN for respiratory clinicians sharing progress in implementing COVID Virtual Wards in the Oxford AHSN region In January. We hosted a South East regional learning event in February, including SCAS, and supported Wessex AHSN with a rapid insights event in March. More details available here.

An additional pilot project has started with Oxfordshire CCG to proactively distribute pulse oximeters to areas of deprivation. Evaluation of this will be with Professor Trish Greenhalgh and team from Oxford University via NIHR ARC Oxford and Thames Valley.

**Recognition and response to physical deterioration in non-acute (hospital) settings**
We have continued to support local partners to **roll out RESTORE2 in care homes and other care settings,** looking at how this can be embedded into local systems, working with care homes, CCGs, County Councils, Education and Social Care. Services have switched to virtual training sessions and we have engaged Professor Ray Fitzpatrick, Oxford University, via the NIHR ARC Oxford and Thames Valley, to support the evaluation through qualitative and quantitative methods, making use of the bespoke care homes dashboard developed by the Clinical Support Unit. Learning and tools have been shared from pilots around the country relating to domiciliary care and learning disabilities. **We are on target to meet the first milestone of 10% of care homes implementing a tool by June 2021**.

**Paediatric 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 KSS and Wessex PSCs to submit a regional bid to test the national PEWS tool. At the time of writing the 30 test sites had not yet been selected. This is part of the System-wide Paediatric Observations Tracking (SPOT) Programme.

In addition, w**e continue to use the** Suspicion of Sepsis **(SOS) dashboard as our high-level measure of deterioration management. The latest data shows a COVID related peak in wave 1, with regional mortality and length of stay continuing to be at or below the national average.**

**Maternity and Neonatal Safety Improvement Programme– (MatNeo SIP)**

The overall ambition of this workstream is to improve the safety and outcomes of maternal and neonatal care by reducing unwarranted variation and provide a high-quality healthcare experience for all women, babies, and families across maternity care settings in England. 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 remains high despite the challenges of the COVID-19 pandemic. We continue to be sensitive to the changes in service delivery and the impact on mothers, babies, partners, families and staff which were highlighted in our regional staff survey during the first phase of the COVID-19 pandemic.

Over this period strength of collaborative working is evidenced by even closer working relationships with our Local Maternity Systems - Buckinghamshire, Berkshire, Oxfordshire (BOB) and Frimley LMS, with the South East Regional Perinatal Safety Groups chaired by the Regional Chief Midwife and with the Maternity Voice Partnership Representatives in the South East (MVP's). For example, working with the BOB LMS MVP is resulting in some key opportunities to support projects funded by the BOB Local Maternity System (LMS) to challenge and address health inequalities which lead to poor outcomes for pregnant women. This work is at an early stage but has considerable potential to ensure 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 national MatNeo SIP priorities.

We are delighted to have appointed an obstetric, midwife and neonatal regional clinical improvement lead. **Meena Bhatia, Consultant Obstetrician & QI Lead (Oxford), Michelle East, Consultant Midwife (Buckinghamshire) and Anda Bowring, Advanced Neonatal Practitioner (Oxford)** will work with our MatNeo SIP lead and PSNs leading on specific elements of the preterm optimisation workstream, supporting improvement work on smoke free pregnancies and work within the deterioration workstream.

**Optimisation care pathway for the preterm**

Our work on supporting the right place of birth for the preterm baby with established pathways and regionally agreed guidelines continues to be a priority for our PSN. Although we are a high performing region evidenced by sustainability in key elements for example **regularly achieving 90% for place of birth and 100% for the administration of magnesium sulphate** for eligible women in threatened preterm labour, we continue to look for areas where further improvements can be made. We continue to support a perinatal review of all cases where a preterm baby has not been born in the right place, the multidisciplinary discussion allows a much broader examination of excellent practice and where different care would have made a difference to the outcome. We have committed to thematic analysis to inform shared learning across our patient safety network and use the intelligence to do focussed improvement work as appropriate.

Our focus for Q4 has been on agreeing with our stakeholder's specific elements of the optimisation care bundle to focus on for the next quarter. We have established Task & Finish groups with membership from each trust within the Oxford AHSN footprint to work in two areas, **optimal cord clamping and the timing and administration of antenatal corticosteroids**. We are fortunate to have subject matter experts to support this work and take advantage of our links with universities in securing the expertise of a Consultant Neonatal Intensivist who also holds an academic position with the NPEU. This enables our improvement work to be informed by the latest research. We will incrementally incorporate other key elements to support improvement in outcomes for the preterm baby such as early breastmilk and regional work to understand variation in current practice in the appropriate administration of intravenous antibiotics to women in threatened preterm labour.

Our MatNeo SIP programme lead is scoping a new project within the preterm optimisation care pathway which aims to increase the knowledge and confidence of all members of the multidisciplinary team who care for women in threatened preterm labour. The project team includes two Consultant Midwives who work within ambulance services in London and the South East Coast and a paramedic with the South-Central Ambulance Service. Together with Consultant Midwives and education and QI leads from our regional trusts, the Thames Valley & Wessex ODN project manager and MVP input from a mother with lived experience of preterm birth, the group plans to use **simulation and filming of the entire pathway of preterm birth to address the complex and multifactorial issues which impact on optimal care for women in threatened preterm labour and birth.**

**Intelligent Intermittent Auscultation**

The intermittent auscultation e-learning programme to improve safety for low-risk women and babies in labour won the HSJ Patient Safety Innovation of the Year category in November 2020 and received accreditation from the Royal College of Midwives, the Intelligent Intermittent Auscultation (IIA) programme is **now available on the E-integrity platform, allowing it to be accessed by health professional internationally**. We are in communication with the Healthcare Safety Investigation Branch (HSIB) who are working on their findings related to intermittent auscultation and categorising safety recommendations. Our regional HSIB maternity investigation team will share their findings with our PSN's, and we will use the learning to support focussed improvement work within the deterioration workstream.

**Medicines Safety Improvement Programme (Med SIP)**

The overarching aim of this programme is to reduce medication related harm in Health and Social Care, focusing of 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 2 main projects -
1. Safer administration of medicines in Care Homes
2. Reducing inappropriate High-dose opiate prescribing for non-cancer pain

**Care Homes**

During Q4 2020/21, although generally in a better place than earlier in 2020, Care Homes were still severely impacted by the pandemic; by Covid-19 infections of residents and staff, the start of the vaccination programme and staff shortages and wellbeing issues. This has made engaging directly with them for this programme at this time for the most part inappropriate, although good links have been made with provider organisations and attendance at their regular meetings has provided good contacts and an invaluable window into their world.

The diagnostic phase of the programme concluded just before the pandemic and identified four interventions with the potential to improve the safety of medicine administration. These will be taken forward to testing once homes have the capacity to engage. They are:

- Safety Huddles
- Learning from Safety Incidents
- Managing Interruptions
- Improving 3-way communications between Care Home, Prescriber, and dispensing pharmacy

The diagnostic phase also identified that there is no systematic data collection on medication errors in Care Homes, thus no baseline data exists for QI projects. Instead, it was decided to use an assessment of Safety Culture as a proxy measure and during Q4, work has been undertaken to determine the most effective tools to use for this, and to establish a process.

Collaborative workshops have also taken place to evaluate the most effective methodologies to employ for the QI projects, and as the pandemic impact lessens, Care Homes within the region are now being approached to engage with this work.

A Care Homes Patient Safety Network is being formed to support this work and the implementation of RESTORE2.

**Deprescribing opioids**

This workstream is in a diagnostic phase. Work in Q4 has focussed on scoping initiatives which have already been tried to achieve the workstream aim, whether successful or otherwise. A set of these from across our region have now been **submitted to the national team for consideration.**

**Mental Health Patient Safety Improvement Programme (MH SIP)**

This new national programme aims to improve patient safety in three areas

- Reduce restrictive practice in inpatient MH and LD services.
- Reduce suicide and deliberate self-harm in inpatient MH services, non-mental health acute settings and the healthcare workforce.
- Improve sexual safety in inpatient MH and LD services.

**We will be establishing a new Patient Safety Network for Mental Health to support this work, and we will be working as part of the existing [South of England Quality and Patient Safety Mental Health Collaborative](#) to allow shared learning and effective use of resources across a wider geographical area.**

We will be working with Oxford Health NHS Foundation Trust (OH) and Berkshire Healthcare NHS Foundation Trust (BerksHT) to fully engage with the programme and form the core of the new MH Patient Safety Network. Central and North West London NHS Foundation Trust will be participating in the MH SIP via UCLP AHSN who we have agreed will lead on this national programme with CNWL but are able to request support from ourselves.

A large number of materials have been produced nationally around reducing restrictive practice, this 'change package' to support improvement within Trusts is expected to be formally finalised in April. The launch event for the workstream is scheduled for Monday 10th May and the first national collaborative event will take place in June.

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

This workstream went on hold because of the pandemic and will be starting again as we progress into Q1 of 20/21. We will primarily be supporting the use of both the **BTS COPD Discharge Care Bundle and the BTS Asthma Discharges Care Bundle** through a QI approach with each relevant provider.

**Mental Health**

Oxford AHSN maintains a significant focus of Mental Health within its programmes. The AHSNs mental health programme comprises National, Regional and Local programmes. As well as the programmes listed below, we continue to work with the other teams in the AHSN on Mental Health related work.

**Anxiety and Depression – 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 network has

- Supported the Long COVID (Post COVID Syndrome) training webinars for skilling up staff within IAPT services who will be part of the Long COVID Multidisciplinary assessment teams and patient care pathway
- As a response to COVID restrictions resulting in increased levels of isolation and depression/ anxiety in vulnerable older adults the network **delivered training and development webinars for Age UK staff who supervise their volunteers and befrienders to feel more confident in managing more complex conversations**
- Produced a pocket guide for Age UK volunteers to support them in the more complex/ distressing conversations they now have with their service users.
- Had the network's **health economics study results published:** *"The employment and mental health impact of integrated Improving Access to Psychological Therapies services: Evidence on secondary health care utilization from a pragmatic trial in three English counties"* (JHSRP-20-022.R1). Published in the Journal of Health Services Research & Policy

**Network for Care Homes In-reach Teams who work with People with Dementia – Local Programme**

In the normal course of events this network holds quarterly meetings for sharing of best practice and CPD for these teams. In spring 2020 at the start of the Covid pandemic, we held meetings every two to three weeks to support the in-reach teams with sharing best practice related to the very difficult situation evolving in care homes, however we have now reverted to the usual quarterly meetings. In March we held a meeting focused on people with young onset dementia living in care homes. We are 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.

**Integrated mental health care and policing teams** This is a programme, in which a police officer works proactively alongside care coordinators with high impact users of services, helping them towards safer and healthier lives. The two pilot projects that the AHSN continues to support, in Reading and Oxford, have now both been accredited as equivalent to the national programme. There have been some key successes working with service users.

**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.

**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. We presented at the BOB ICS Mental Health Delivery Board in November. Following that, interviews were held with the AMHP leads in Berkshire (West and East), Buckinghamshire and Oxfordshire to look at issues and challenges to look at the case for implementation. It is likely that the eventual CCG response will be mixed with some areas adopting S12 Solutions and others possibly not.

## Clinical Innovation Adoption (CIA)

**Key achievements:**

- Successful spread of Sleepio through the SE regional collaboration with KSS and Wessex AHSN: Sleepio is in the commissioning stage with North Hampshire (Wessex AHSN region) for GPs at 6 PCNs/16 Practices.
- InHealth went live at Buckinghamshire Healthcare (Covid Virtual Ward) in Feb 2021; OUH and MKUH are ongoing; This project was transitioned to NHSE at the end of Q4.
- TCAM has evolved into the new Discharge Medicines Service (DMS) on 15 January and Buckinghamshire Healthcare continues to refer patients with a combined total of 751 referrals, 66.7% being converted by the Community Pharmacists into appointments with patients (an improvement on the Q3 rate which was 59%).
- The Brainomix NHSX AI Award evaluation officially started 1st April; All 7 Integrated Stroke Diagnostic Networks (IDSNs) across the UK (includes Scotland) are engaged. This will generate improvements in these stroke networks with evaluative feedback.
- The national Asthma Biologics (AAC) programme is being led by the CIA Team and through collaborations (national NHSE/AAC, clinicians, industry, AHSNs/NHS), transforming how severe asthma patients are treated.

**Key Plans for next Quarter**

- Further development and inclusion of the digital agenda within innovation implementation rollouts.
- The Mental Health agenda is being developed internally across programmes to provide a more defined and cohesive Mental Health Programme that will create a pipeline for new projects (from sources such as the ARC and National etc), that can be implemented and spread.
- Further set up work for the National CVD Programme.
- Evaluation and implementation work will continue for Stroke activities in the SE Region and the AI Award; Other opportunities are being explored.
- Planning with the Applied Research Collaborative and the AHSN for potential implementation projects that could be shared across the SE Region.

## 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.

## Progress to date:

**Lipid Management:** Q4 2020/21 focused on project planning and preparation.

| LIPID MANAGEMENT | |
|---|---|
| **Progress to date:** | **Outcome** |
| A 2-year delivery framework has been developed, discussed and approved with national team. This covers activities relating to familial hypercholesterolaemia programme diagnosis and the lipid optimisation programme. | Launch meetings will be held in Q1 of 2021/22 |
| Trajectories for high intensity statins (HIST), PCSK9i and ezetimibe have been reviewed and agreed. | **Aim by Q4 for our region:**<br><br>• PCSK9I: 464<br>• Ezetimibe: 84,204 (cumulative by Q4)<br>• HIST: 62.6% of all statins prescribing by Q4 |
| Pathway mapping for FH services across the region is ongoing. | Due to complete June 2021 |
| Supporting Frimley ICS and BLMK ICS with pathway transformation funding bids. | AAC Pathway Transformation Funding (PTF) submission for Lipid Management is due in on 30th April. We anticipate contract award in June 2021. |
| Regional meeting with Wessex and West Midlands AHSNs together with the regional genomic laboratory hub to discuss the FH programme. | Further meeting planned for May 2021 to agree governance structure for FH project. |
| AAC RUP PCSK9i programme is well underway with 2 separate Pathway Transformation Projects which have been awarded funding from the AAC<br><br>• Buckinghamshire CCG<br>   o  Project aims to install a Pharmacist led lipid mgmt. service in primary care in a number of | Clinical patient facing work due to start Q1 21/22, with expected improvements in numbers of patients optimised on lipid lowering therapy. |

| LIPID MANAGEMENT | |
|---|---|
| **Progress to date:** | **Outcome** |
| PCNs across Bucks<br><ul><li>Pharmacists recruited and clinical protocols in development</li><li>Focus in first instance will be patients with suspected FH currently untreated with lipid lowering therapy</li></ul><br>• Royal Berkshire Hospital<br><ul><li>Project will create a new Cardiac pharmacist role to support secondary prevention around lipids for patients discharged from cardiology services</li><li>Recruitment underway</li><li>Cardiac pathway in development</li></ul> | |

| HYPERTENSION | |
|---|---|
| Developed a home hypertension monitoring pack together with Professor Richard McManus, University of Oxford. | Shared with practices across the region during Q4. |
| Developed plan to support implementation of hypertension monitoring at home for BOB ICS (who have successfully bid to become a hypertension 'trailblazer' site). | Trailblazer project commenced in March 2021 and will run until Q3. |

| ATRIAL FIBRILLATION | |
|---|---|
| • Together with GIRFT, Oxford AHSN organised a workshop to bring together clinicians who are interested in targeted AF detection (>65 population) in COVID-19 vaccination clinics. | Guidance for targeted AF detection being produced. |
| • Supported Frimley and BOB ICSs in developing bids to the Pfizer-BMS alliance for funding for AF detection post COVID. | Contracts will be awarded in August 2021. |
| • Worked with Omron and AHSN CVD Clinical Champion to develop pilot project for remote AF detection in Buckinghamshire and Oxfordshire. | Pilot still in development. |

| NEXT QUARTER | |
|---|---|
| • ICS level launch meetings for lipid programme.<br>• Child parent screening for Familial Hypercholesterolaemia – aim for 1 practice to go live.<br>• Develop hypertension pack.<br>• Progress AF detection project to pilot phase.<br>• Refine and circulate guidance document for AF detection in COVID vaccination clinics | |

**FREED (First episode Rapid Early intervention for Eating Disorders) (National)**

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. FREED aims to overcome barriers to early treatment and recovery and provides highly co-ordinated early care, with a central focus on reducing the duration of an untreated disorder. It consists of a service model and a care package.

Oxford AHSN supported the successful applications to NHSEI, for FREED pump priming funds. This has enabled Berkshire Eating Disorders Service and Buckinghamshire's ED service to recruit FREED Champions and offer a service from May 2021, with 'soft' launches planned for June 2021.

Colleagues from both services are booked on online FREED training and a South East FREED Support Network has been established to share good practice and help develop services.

The impact of the pandemic has increased demand on all Eating Disorders services across the patch and presented challenges to colleagues in terms of delivering their service and implementing FREED. The FREED national programme will continue during 2021-22. Engagement with Oxfordshire is also underway to establish the model.

**PINCER**

This national project supports pharmacists and GPs to identify patients at risk from their medications and helps them take the right action. Prescribing errors in general practice are an expensive, preventable cause of safety incidents, illness, hospitalisations and even deaths. Serious errors affect 1 in 550 prescription items, while hazardous prescribing in general practice contributes to around 1 in 25 hospital admissions.

Led by primary care pharmacists and pharmacy technicians, AHSNs rolled out the PINCER intervention nationally in 2018-20. It involves searching GP clinical systems using computerised prescribing safety indicators to identify patients at risk from their medications and then taking acting to correct them.

Further information about the PINCER programme is available at www.ahsnnetwork.com/pincer

**Progress**

PINCER was adopted by Berkshire West CCG, Buckinghamshire CCG, Milton Keynes CCG and Oxfordshire CCG.

Over the course of the programme, Oxford AHSN delivered PINCER Quality Improvement action learning set (ALS) training to **over 200 pharmacists and GP practice staff**. **A member of the AHSN team became an accredited PINCER trainer to facilitate delivery** of additional ALS sessions to new PCN pharmacists.

As of April 2020, PINCER has reduced the risk of a serious adverse event in at least one PINCER indicator in 2,338 patients, which was one of the highest reductions in at risk patients from any AHSN region in the country.

The latest data for Oxford AHSN (Jan 2021) shows that of the 206 practices that have implemented PINCER, 178 practices have uploaded follow up data. In these 178 practices, there has been a 35.5% reduction in the number of at-risk patients in the GI bleed indicators and a 2.4% reduction in the number of at-risk patients in at least one of the overall indicators. However, there has been a **38.8% increase in the number of patients identified in at least one monitoring indicator** (see **Table 1**). This overall increase is likely to be

because of the COVID-19 pandemic where patients' blood tests have been postponed. A similar picture can be found in other AHSN areas.

**Table 1. Change in number of at-risk patients identified in the composite indicators for 178 practices that have uploaded data at least twice to CHART Online (Oxford AHSN)**

| Indicator | Baseline* | | Latest ** | | Change in absolute number of at-risk patients (n) | % change in absolute number of at-risk patients (%) | Change in prevalence per 1,000 patients (n) |
|---|---|---|---|---|---|---|---|
| | Numerator (n) | Prevalence per 1,000 patients (n) | Numerator (n) | Prevalence per 1,000 patients (n) | | | |
| Number of at-risk patients identified in at least one GI Bleed indicator | 7,752 | 3.79 | 5,003 | 2.37 | -2,749 | -35.5 | -1.42 |
| Number of at-risk patients identified in at least one monitoring indicator | 6,050 | 2.96 | 8,399 | 3.98 | 2,349 | 38.8 | 1.02 |
| Number of at risk patients identified in at least one other indicator (heart failure, AKI or exacerbation of asthma) | 3,257 | 1.59 | 3,134 | 1.48 | -123 | -3.8 | -0.11 |
| Number of at-risk patients identified in at least one indicator (all indicators) | 16,648 | 8.14 | 16,255 | 7.70 | -393 | -2.4 | -0.43 |

*Baseline total practice population = 2,046,340
**Latest total practice population = 2,110,599

The national commission for AHSN delivery of PINCER came to an end 31st March 2021. PRIMIS are currently working with NHS England/Improvement to develop a sustainable model for PINCER that will be free of charge at the point of use. The delivery of the training is likely to be provided by the Centre for Pharmacy Postgraduate Education. Until the new model is up and running, access to the PINCER searches and CHART online comparative analysis continues for all CCGs, PCNs and practices that are currently implementing PINCER up to 30th June. Training during this transition period is available directly from PRIMIS. From 30th June, PRIMIS will transition users to their new model of delivery. Four additional PINCER training sessions have been delivered by Oxford AHSN for new PCN pharmacists to support sustainability. Beyond June, the AHSN may no longer have access to PINCER data via chart online. This is still under review. However, all trained PINCER leads will be able to access the data directly from PRIMIS and CHART online.

**2021**

To sustain the great progress made by the CCGs in the region, it is recommended that:

- Patients that are at risk of a serious adverse effect caused by a delay in monitoring are prioritised for review in recovery plans.
- Regular reporting of outcomes and progress is continued at ICS/CCG/PCN medicines optimisation governance meetings.

**Inappropriate High-Dose Opiate Prescriptions for Non-Cancer Pain**

**Background**

This initiative is one of the elements of the Medicines Safety Improvement Programme *Figure 2*.

The aim of this initiative is to reduce harm from opioid medicines by reducing high dose prescribing (>120mg oral Morphine eq.), for non-cancer pain by 50%, by March 2024.

**Figure 2 Medicines Safety Improvement Programme Driver diagram**
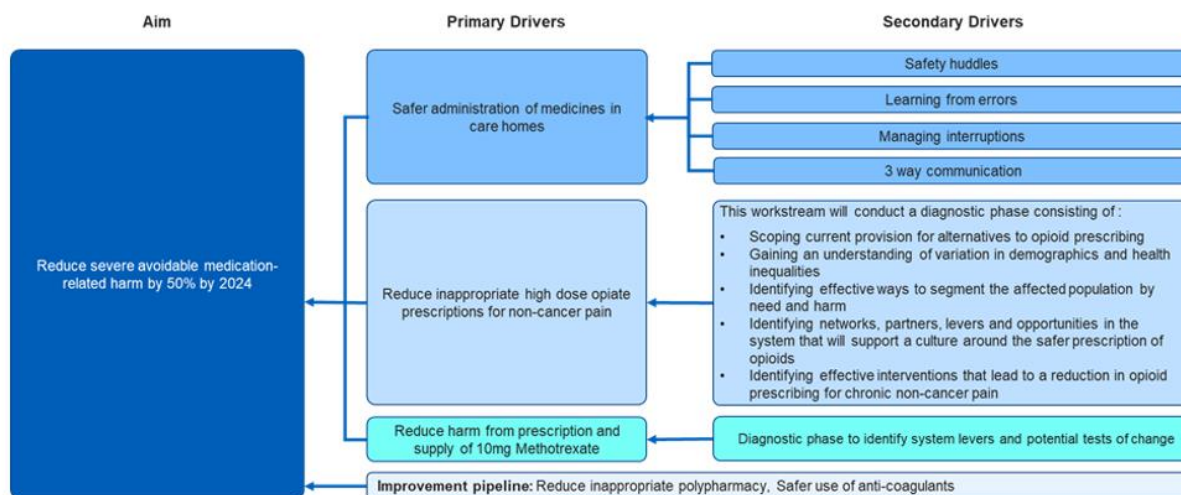
This national work stream will initially conduct a diagnostic phase to identify effective interventions that lead to a reduction in opioid prescribing for chronic non-cancer pain. This will be conducted at a regional level by AHSN leads carrying out semi-structured interviews with people that have led on local initiatives in their areas. The aim is to identify and submit five locally delivered initiatives to NHS England and NHS Improvement. The national team will assess initiatives submitted by all AHSN's and will make recommendations on which will be recommended for national adoption and spread by the AHSN's.

**Progress**

In December 2020, a request was sent to Thames Valley Medicines Optimisation, pain management and addiction service leads and the Nuffield Department of Primary Care Health Sciences to signpost to any local initiatives that were being delivered to reduce high dose opioid prescribing for chronic pain.

**Across Thames Valley, 5 initiatives were identified**: 1 from Berkshire West CCG, 1 from Oxford University Hospital and 3 from the Nuffield Department of Primary Care Health Sciences. Interviews were carried out with the leads for these initiatives and submitted to NHS England and Improvement. In total, **97 initiatives** have been submitted to the national team with a few more expected.

Open prescribing data was used to identify the current scale of the problem in local systems. For the high dose opioid prescribing metric (opioid items with a likely daily dose of $\geq$ 120mg morphine equivalence). Buckinghamshire, Oxfordshire and Berkshire ICS, Frimley ICS, and Bedfordshire, Luton and Milton Keynes ICS all had prescribing rates higher than the national median.

**Q1 2021**

- NHS England and NHS Improvement to collate, assess and evaluate all the initiatives submitted and produce a report (May 2021)
- NHS England and NHS Improvement make recommendations on quality improvement initiatives that can be adopted and spread locally by medicines optimisation and pain management teams supported by local AHSNs
- Oxford AHSN will carry out an analysis of local prescribing with a focus on regional demographics and health inequalities to support implementation of recommended initiatives. The intention is that this work becomes part of the Regional Meds Optimisation Group and Pain Management Teams.
- To add some of the local initiatives found to the Oxford AHSN website

# Transfers of Care Around Medicines (TCAM)

**Help for patients who need extra support with prescribed medicines when they leave hospital**

When some patients leave hospital, they need extra support taking their prescribed medicines. This may be because their medicines have changed, or they need support taking their medicines safely and effectively. 30-70% of patients experience unintentional changes to their treatment, or an error is made because of a miscommunication.

This issue is addressed through TCAM. When patients discharged from hospital are identified as needing extra support, they are referred through a safe and secure digital platform for advice from their local community pharmacist.

**Key Achievements**

- 751 referrals made by Trust.
- 518 'completed' in community.
- A conversion rate of 69% (compared with 59% in Q3)
- The **Discharge Medicines Service (DMS)**, a new Essential Service of the Community Pharmacy Contractual Framework - (CPCF), was launched on 15 January. The work we have done in preparation for TCAM has facilitated a successful and smooth transition to this new service (as shown by no change in the rate of referrals completed - see graph opposite).



Combined TCAM and DMS referrals Q4 2020/21
— Referred — Completed
DMS replaces TCAM on 15 Jan
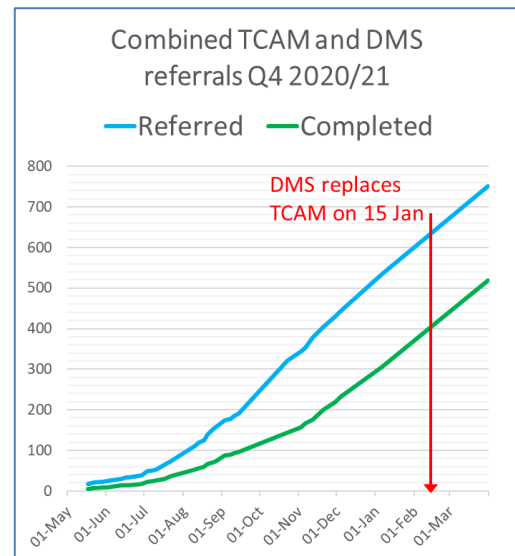
**Challenges**

- RBH continues to have IT issues with the integration of PharmOutcomes into their system.
- On a positive note, we have successfully launched an interim nhs.net email DMS solution at RBH while the IT issues are being resolved.

**Issues**

- It is of significant concern that our remaining Trusts do not have a DMS referral system in place. Their patients will be disadvantaged by the lack of this service. Community pharmacy will not benefit from the improved communication/information sharing that DMS provides as well as missing out on this potential income stream. Given that approximately a third of Trusts nationwide have yet to implement a DMS referral service, we will raise this as an issue for the National Meds Optimisation (MO) team. Working with Pinnacle Heath Partnerships, the National MO team will be able to monitor which Trusts are not providing a DMS referral service through PharmOutcomes and escalate to NHSE/I is necessary.

**Future plans**

- Formal support from Oxford AHSN ended on 31 March 2021 but we still provide ad hoc advice, signposting etc where possible.
- Our remaining Trusts are actively working to set up nhs.net email DMS referral solutions.

## Emergency Laparotomy Collaborative (ELC)

**Purpose:** The national Emergency Laparotomy Collaborative programme (ELC) promotes standardisation in emergency abdominal surgery through the adoption of a bundle of evidence based best practises. CIA led with support from a PSC colleague.

**Key achievements**: Over 2019, the regional Collaborative grew and interest with improvements evident at all six hospitals, including some metrics that compared favourably nationally and well attended quarterly regional meetings.

**Key programme structures included**: A Steering Group; quarterly regional meetings; quarterly site visits to explore challenges, review performance and to provide constructive thinking towards change activities; additional site visits to present the evidence base to local surgical and anaesthetic meetings; a real-time data dashboard, through the national NELA audit underpinning the Programme, enabling sites to review progress, compared against peers. Peer to peer site visits had commenced immediately prior to the pandemic and attention was focused on activities to ensure the delivery of the critical path to sustainability of best practice.

**Challenges, Opportunities and Next Steps**: at the time of writing, staff are still focused on internal organisation recovery plans; Early opinions suggest revisiting the Programme activities in a few months' time. Given the potential for new coronavirus strains, recorded CPD credited ELC learning sessions available remotely at a time of convenience for the listener and short (hour long) subsequent meetings for questions and discussion, may offer a workable means to sustain, support and gently re-invigorate the Collective established during 2019/20.

Interrupted by the pandemic, there remains a need for Trust Executives to revisit the commitment to deliver the critical path to sustainability of best practice in emergency general surgery. In summary this means ensuring: ELC pathway signed-off by the Board; regular senior governance review of ELC performance; site ELC-NELA leads afforded 2PAs in their job plan to lead the management of change at their site, reverting to 1PA when change established and sustainable; job planned PAs for geriatrician / perioperative physicians to review frail-elderly emergency surgical patients; priority access to theatre for the most urgent cases; research nurse/ physician associate level role (5 hours per month) to complete NELA audit section 7, to release site ELC-NELA leads to socialise the evidence-base and engage colleagues.

## AI Award Technology Specific Evaluation Team for Brainomix

The 3 year contract with NHSX for delivery of AI evaluative work on Brainomix has been signed with the project officially starting 1st April 2021.

Set up stage was completed during Q4. This included:

- Completion and submission of the Scoping Document which has been signed off by NHSX.
- Governance set up with Working Group (WG) includes ISDN Leads/Bx/Oxford AHSN.
- Regular meetings established with Brainomix to discuss go-live dates for deployment/progress and contacts for IG/clinicians.
- Theory of Change workshop successfully held with WG.

- Met with NHSX Evaluation Advisory Group (EAG) lead to discuss our intended evaluation approach; The approach was confirmed as being acceptable.
- Introductions made and conducted with all newly appointed ISDN leads.
- Information governance, DPIA forms sent out for signing and a few have already been returned.
- 4 of the pathway maps have been conducted and a schedule is now in place, prioritising the earliest deployments first.

**Next quarter**

- Qualitative questions guide being written for interviewers.
- Defining specification for the quantitative analysis with the support of KSS AHSN's analytics team.
- Scheduling of interviews for both pathway and qualitative meetings.
- Establishing exemplar sites for key focus areas such as rehab that will then provide shared learning/knowledge and add to the QI Framework.
- Following up on DPIA form sign off.
- Attending meetings with ISDNs and Mechanical Thrombectomy.

## AAC Activities

## Asthma Biologics

**CIA team is leading on the Asthma Biologics National deployment working closing with the SIP team.**

**Background**

- Severe Asthma (SA) is sub-type of Asthma that remains uncontrolled despite optimised therapy.
- Biologics are effective for a SA patient but only ~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.
- Significant variation in identification, referral, triage and prescribing of biologics in this population nationally.
- The objectives of the programme are to improve care for severe asthma patients through increasing appropriate access to Asthma Biologics. The approach to achieve this is shared in Figure 1 below.
- Whilst this is a national programme the Oxford AHSN are leading on the programme nationally, across the 15 AHSNs as well as delivering the programme locally across the Thames Valley.
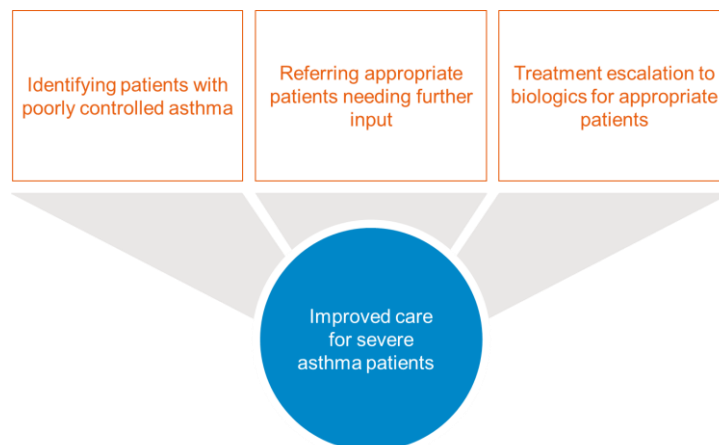


*Figure 1 Asthma Biologics programme approach*

**Progress in Q4**

**National Delivery**

- Regular monthly meetings with Programme Priority Leads and the AHSN Leads were held during the Q4.
- All Programme Priority areas are making progress.
- A launch of the Developed Guidance and Data Collection Tool for Benchmarking exercise took place in February; an additional drop-in session to support AHSN leads with this activity was held in March.
- A case study template to capture good clinical practice has been completed.
- Trajectories across the AHSNs have been modelled, agreed, and signed off by the National Spread and Adoption Programme Oversight Group (NAPOG).
- Clinical leads sign off was received for metrics and sub-metrics.
- Clinical Champions recruited.
- Active discussions with pharmaceutical companies (Astra Zeneca, GSK, and Novartis) to have collaborative approach in supporting the development of the Digital Platforms to support case finding in the Primary care and home care monitoring in the Secondary care took place.

**Oxford AHSN Regional Delivery**

- Engagement with clinical leads for Pathway Transformation Fund (PTF) opportunities was slow earlier in the Q4 due to the limited or no capacity available across primary and secondary care as an impact of the COVID-19 second wave.
- This position was gradually improved, and activity recommenced later in the Q4.
- All local stakeholders: Severe Asthma Centre, Acute Trusts (OUH NHS FT, RBH NHS FT, BHT NHS and Frimley Health NHS FT), 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.
- Intensive discussions took place with the respiratory leads across the BOB ICS to develop a joint Asthma Biologics and FeNO PTF bid across the system.

## Next Quarter

**National Delivery**

- Working up an AAC endorsed primary care search tool to identify patients with uncontrolled Asthma.
- Benchmarking responses from all 15 AHSNs covering 70% of acutes and CCGs will be received by May 7th.
- AHSNs will be asked to develop local plans around improvement for the AAC RUP biologics programme.

**Oxford AHSN Regional Delivery**

- A joint Asthma Biologics and FeNO PTF bid for the BOB ICS to be agreed and finalised for the submission by 30th April.
- Bringing together a shared network to develop an improvement plan.

# Rapid Uptake Products 2020/21

## Fractional Exhaled Nitric Oxide breathe analyser (FeNO)

Used for assisting in diagnosis of allergic asthma alongside other respiratory tests and aids in the management of asthma

### Background

- Over **5.4 million people** in the UK suffer from asthma with the NHS spending **£1.1 billion** on asthma annually.
- **90%** of this cost goes directly on asthma medication including the excessive prescription of steroid inhalers.
- **30%** of patients currently diagnosed with asthma are suspected to have been misdiagnosed.
- Only **half of asthma patients** adhere to medications, increasing morbidity and treatment costs.
- Current primary care context due to **COVID** and varied acceptance amongst GPs about non aerosol generating product.
- **No clear reimbursement mechanism** for FeNO testing currently – exploring tariff models, DES payments, and Pathway Transformation Funding.

### RUP Objectives

- Improve patient care and outcomes by more accurate and effective diagnosis of patients suspected of having asthma.
- Be able to measure fractional exhaled nitric oxide (FeNO) concentration in the patient's breath.
- Improve management of asthma patients by using FeNO monitoring to adjust dosing of steroids or guide biological agents' treatment.



**Two suppliers approved by NICE:**

NIOX VERO® from Circassia (left)

NObreath® from Bedfont (right)

### Challenges

- Although liked by clinicians, cost of equipment is a significant barrier to adoption.
- Limited PTF available (circa £500k split across 15 AHSNs).

### Risks

- Even if FeNO is deployed at pilot sites to demonstrate patient benefits and positive financial impact, there will not be enough time to gather sufficient data to influence commissioners and/or to impact on their commissioning cycles. It will, therefore, be extremely difficult for all 15 AHSNs to attain their uptake trajectory targets.

**Key Achievements**

- Oxford and Eastern AHSNs are working together to help BLMK CCG with a PTF bid.
- We are supporting five individual PCNs with their PTF bids.

## Tamoxifen for the prophylactic management of breast cancer risk

**Background:** Tamoxifen is a drug used in both the treatment of, and as chemoprevention measure for, breast cancer. This national project, led by the AAC through the Rapid Uptake Programme, aimed at increasing the uptake of Tamoxifen for prevention of breast cancer.

For women at known risk, Tamoxifen can halve the risk of breast cancer when taken over five years. However, uptake of the drug is low in clinical practice. The aim of this national project is to improve patient care and outcomes, and ultimately prevent avoidable breast cancer by increasing the prescribing of Tamoxifen for prophylaxis.

There will be the opportunity for organisations to bid for Pathway Transformation Funding (PTF) later in the year.

**Activity last quarter**

This project was due to commence from April 2021. However, during the latter part of Q4 2020/21, a baseline survey was circulated to all 15 AHSNs. The aim of this survey is to provide a baseline position of service provision and identify variation across the country. Engagement has been made with commissioners and secondary care providers across the Oxford AHSN region to respond to the survey questions.

**Plans for next quarter**

- Submit survey responses to Health Innovation Manchester (lead AHSN for this project).
- Engage with organisations across the AHSN region to scope potential programmes of work.
- Identify systems that may wish to submit a bid for Pathway Transformation Funding (PTF) for a specific project in this area.

**Please note that this project will be managed by the Strategic Industry Partnership (SIP) team in Q1 2021. Tamoxifen reporting will move to their section of the Oxford AHSN report.**

## Innovation and Technology Payment Programme / MedTech Funding Mandate

The Innovation and Technology Payment (ITP) programme was delivered by the Accelerated Access Collaborative (AAC) to support NHS organisations to implement technologies and medicines identified by the AAC for rapid adoption. This programme first started in 2017 and was known as the Innovation and Technology Tariff. As of 31 March 2021, the ITP programme has ended meaning there will be no further central funding for these technologies. It also marks the end of the AHSN commission to provide support for the adoption of the innovations.

The innovations that will no longer receive central funding and support from March 2021 include:

| Programme | Product |
|-----------|---------|
| ITT | Non-Injectable Arterial Connector (NIC) |
| | FMT |

| Programme | Product |
|-----------|---------|
|           | UroLift (funded via national tariff) |
| ITP       | SpaceOAR |
|           | Troponin |
|           | Endocuff Vision |
|           | Plus Sutures |

Four products have been selected to be part of the new MedTech Funding Mandate (MTFM) which comes into effect from 1 April 2021. The MTFM policy aims to direct the NHS on which MedTech innovations are effective and likely to give savings on investment, and to ensure the NHS has a sustainable approach to overcoming the financial barriers to adopting medical devices, diagnostics, and digital products.

The launch of the MTFM was delayed due to CV-19 and to minimise the burden on the NHS at this time, it has been agreed that for the first year of the policy, technologies must have been previously support via the ITP programme. The four innovations that will be supported by the MTFM in 2021/22 are:

- Placental growth factor-based testing (PlGF): blood test to rule out pre-eclampsia in pregnant women
- SecurAcath: for securing percutaneous catheters
- HeartFlow: creates a 3-D model of a patient's coronary arteries and assesses the extent and location of blockages
- GammaCore: handheld device which alleviates the symptoms of severe cluster headaches

**GammaCore**

GammaCore (non-invasive vagus nerve stimulator) is a non-drug treatment for adults who suffer from primary headache conditions such as cluster headache and migraine.
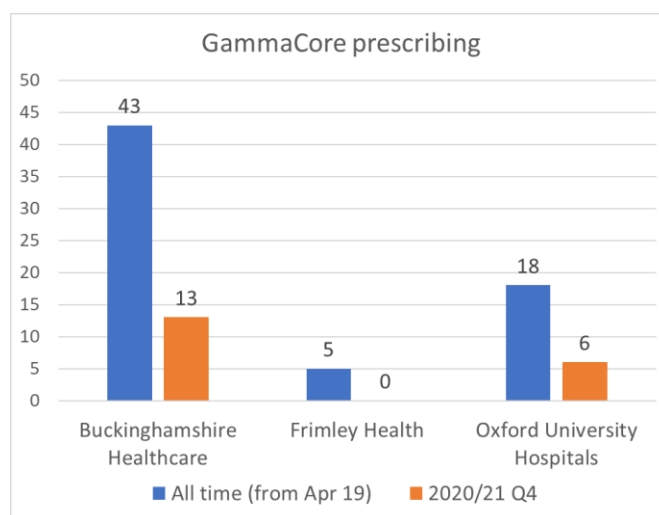


**Trusts adopting:**

**Challenges**

- Although the shift to Medtech Funding Mandate (MTFM) had been communicate at senior levels to all Trusts the message had not filtered down to some procurement managers.

**Key Achievements**

- Transition to the MTFM was achieved with no interruption in provision for patients.

Please note that MTFM will be managed by the Strategic Industry Partnership (SIP) team in Q1 2021. MTFM reporting will move to their section of the Oxford AHSN report.

## 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 (since October 2020 there have been 5,500 new CBT starts within the Thames Valley). The online digital therapeutic has been offered to all NHS England staff (alongside Daylight, Headspace, and Unmind) in response to the COVID-19 pandemic. Sleepio is one of the 3 Regional projects selected for deployment across the South East (SE) Region working with KSS and Wessex AHSNs.

During Q4, the six Primary Care Networks in North Hampshire CCG (in Wessex AHSN region) have partnered with Big Health to embed Sleepio in primary care.  Launched in October 2020, this has resulted in 1,152 registrations, 738 CBT starts, and the remission rate is 52% (n=66). 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.

Health Economic Evaluation from the Thames Valley project has demonstrated that there are cost savings in Primary Care settings (graph below) and a paper is being prepared for publication which highlights the observed savings at nine trial GP practices in Buckinghamshire. The AHSN is also assisting NICE review of



Net benefits across 9 GP practices in OHE study (Years 1-3)
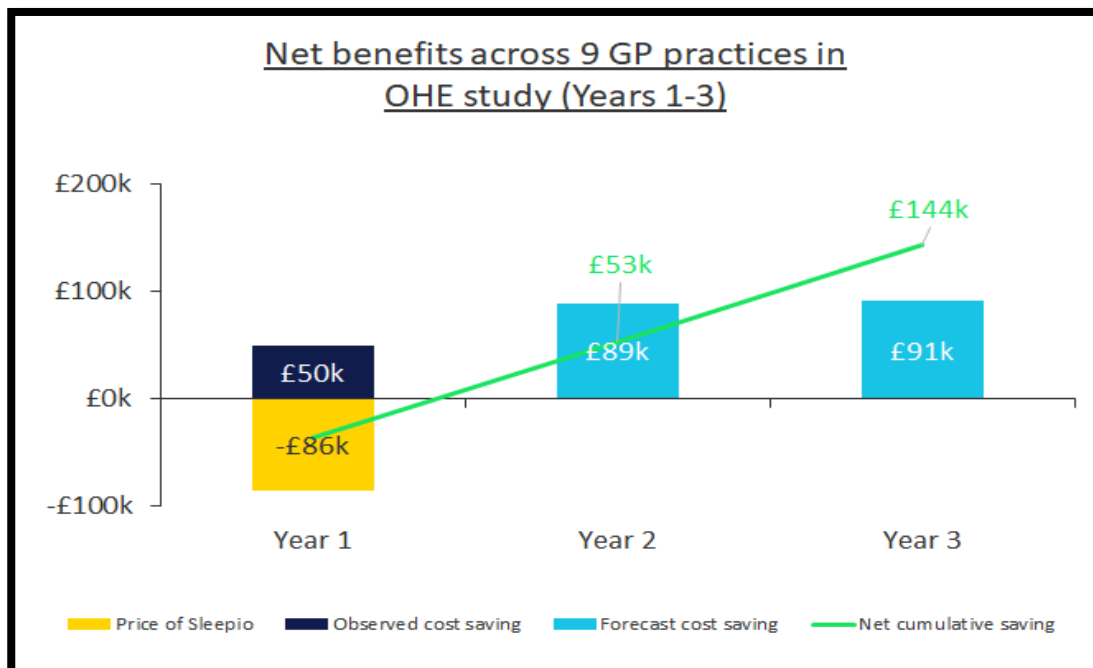
Sleepio and sharing the data from Thames Valley project in support of this work.

## Electronic Repeat Dispensing (eRD)

### Background

At the start of the COVID-19 pandemic (March 2020), Oxford AHSN and local Medicine Optimisation teams prioritised support to increase the uptake of eRD. This was triggered by NHS England and NHS Improvement guidance to Primary Care to convert all suitable patients onto eRD when their next repeat prescription was due. The benefits being reduced footfall into GP Practices; reduced workload for prescribers and controlled management of the supply chain reducing the number of temporarily unavailable medicines. Successful implementation of eRD has been reported to save up to 46 mins of GP time a day through more efficient management of the repeat prescription reauthorisation process.

Additional information is available at: https://clinicalinnovation.org.uk/project/electronic-repeat-dispensing/

In December 2020, eRD was selected to be continued as a workforce programme for the Southern region. The five AHSNs collaborating to deliver this programme are Oxford, Wessex, West of England, South West and, Kent, Surrey, and Sussex.

### Progress

Across Thames Valley, training has been delivered by the CIA team to CCG Medicines Optimisation Teams and GP Practice Pharmacists. All five CCGs within Oxford AHSN have engaged their GP Practices to implement and convert suitable patients to eRD in their local areas. CCG prioritisation of support was temporarily paused in Q3/Q4 to enable the roll out of the vaccination programme. However, the initial work continued to deliver an increase in the % of eRD items across Oxford AHSN from 8.02% (Feb2020) to 11.94% (Feb 2021). See Figure 1. Below.

**FIGURE 1: eRD trend for Oxford AHSN region compared to National**
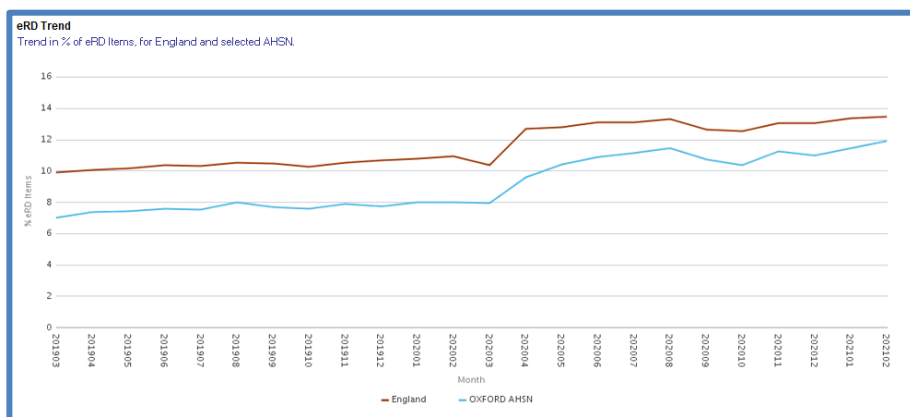


From April 2020, Oxford AHSN has organised and delivered training for 28 pharmacists and GP practice staff across Thames Valley.

The workforce metrics agreed by the AHSN collaborative for 2021/22 are:

- **Number of patients benefitting from eRD**: Source NHS BSA eRD dashboard
- **Time saved**: based on time saving of 15 seconds time saved per item. Source NHS BSA eRD dashboard
- **Increase in eRD items**: by month and cumulatively. Source NHS BSA eRD dashboard
- **Number of people trained**: the number of people attending eRD webinars
- Number of practices benefitting from eRD: not currently included as a core metric, may be incorporated in the future

**Q1 2021/22**

- Submit eRD workforce metrics (once available form NHS BSA) to the AHSN local impact capture
- Communicate eRD workforce programme to CCG Medicines Optimisation Leads
- Circulate data from eRD time benefit calculator to CCG Medicines Optimisation Leads
- Update Oxford AHSN eRD webpage with workforce programme
- Scope needs for additional webinars for new PCN pharmacists
- Confirm if eRD is included in CCG/ICS medicines optimisation plans for 2021/22

## Polypharmacy Action Learning Sets

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 health care 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 included the adoption and spread of the Polypharmacy Action Learning Sets developed by Wessex AHSN and Health Education England. The aim was to help GPs understand the complex issues surrounding stopping inappropriate medicines safely and will also help Primary Care Networks deliver the Medicines Optimisation elements of the Direct Enhanced Service.

**Progress**

The Action Learning Sets were delivered as three half day sessions. Session 1 was delivered pre-COVID-1919 as a face-to face session to 45 GPs and Pharmacists. This was delivered in March 2020. In Q3, the sessions were reformatted to enable them to be delivered remotely online. These were delivered to the original cohort in September and October 2020. The breakdown of participants per CCG is shown in table 1.

**Table 1. Participants per CCG**

| | |
|---|---|
| Total number of participants | 41 |
| Berkshire West | 10 |
| Buckinghamshire | 9 |
| East Berkshire | 3 |
| Milton Keynes | 1 |
| Oxfordshire | 18 |

**Q1 2021**

To scope if there is resource available from HEE to deliver the Action Learning Sets again to a second cohort of participants across Thames Valley.

## Bone Health

**Background:** this is a primary care-based medicines optimisation project that is a collaboration between the University of Oxford, PRIMIS (part of the School of Medicine, University of Nottingham) and the Oxford AHSN. The project aims to improve the management of patients with osteoporosis who are at high risk of sustaining a fragility fracture.

This local project with GP practices will ensure high risk patients are identified and are managed in accordance with NICE guidelines and optimised on treatment. The project will also include a review of patient and clinician education materials and identification of potential gaps.

**Activity last quarter and overall progress during 2020/21**

Progress on this project has been affected by CV-19 during 2020/21. However, work continued finalising the contracts with the three parties (University of Oxford, PRIMIS and Oxford AHSN) and all necessary contracts are now in place. Discussions and refinement of the case-finding 'know-how' have taken place throughout the pandemic, and PRIMIS are now building the case-finding tool, with the aim of testing it in Q1 2021/22.

An initial stakeholder meeting was held in June 2020, with clinician, patient and third sector representatives. During the year, work has been undertaken to seek patients' views on patient information, and through engagement with the Fracture Liaison Service at OUH, patients were sent flyers asking for their participation in a discussion on this topic. Work has also commenced on developing the supporting materials for GP practices who participate in this project.

**Plans for next quarter**

- Testing the case-finding tool with a small number of GP practices
- Development of supporting materials for participating GP practices
- Schedule workshop with pharmacists and patients to discuss supporting materials
- Engagement with GP practices to participate in the project

## Elastomeric Devices

**Background:** Elastomeric devices are small, single use pumps used to administer medication such as IV antibiotics or chemotherapy. These devices can be used in patients' homes, and as such could be used to 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.

**Activity last quarter and overall progress to date**

During this year, analysis of the data from OUH implementation of the devices was undertaken and support given to OUH in order embed the devices into clinical practice. This support took the form of data analysis, writing presentations and papers for presentation to management.

In collaboration with the clinical team at OUH, the Oxford AHSN developed an implementation support document. This document captures the outcomes and lessons learned from OUH and aims to assist other Trusts who may wish to implement elastomeric devices and to understand the potential benefits that may be realised. This document has been shared with Trusts across the Oxford AHSN region and Trusts further afield including Wales and Manchester. Some discussions have been held with interested Trusts.

Furthermore, OUH and the Oxford AHSN are working with NHS Supply Chain, who is looking at the elastomeric device as part of their value-based procurement programme.

**Plans for next quarter**

- Work with NHS Supply Chain to finalise the case study
- Develop plans to share implementation document more widely
- Continue to engage with Trusts across region to gauge interest

**Local**

**Study to evaluate structured medication reviews**

**Background**

Oxford AHSN have partnered with the Applied Research Collaboration on a successful bid to carry out a real-time observational cohort study with integrated qualitative evaluation on optimising structured medication reviews.

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 will aim to:

- Understand how SMRs are being applied to people with complex multimorbidity.
- Use best practice examples along with practice dashboards to feedback performance to optimise SMRs including reducing inequalities in provision or performance.
- In this way to optimise the performance of SMRs for people with complex multimorbidity.

**Progress**

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.

**Q1 2021**

- To join key delivery partners in a kick-off meeting on May 4th to plan next steps

## Excellence in Heart Failure

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

### Activity in last quarter

In Q4 the joint working agreement with Novartis was extended to cover the period of delay due to COVID. Planning took place to restart delivery of the project in Buckinghamshire in Q1 of 2021/22.

Oxford AHSN is working on a toolkit to support other regions to implement the project, this has been developed in draft and shared with stakeholders for comment. Meetings were held with Novartis and other AHSNs who are working in the heart failure space to establish a communication and launch plan for the toolkit and other heart failure outputs.

### Activity next quarter

- 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.

### Activity in last quarter

- The joint working agreement with Astra Zeneca was signed.
- Practices with highest levels of deprivation in BOB identified
- Planning meeting with BOB CVD leads
- Communication plan developed

### Activity next quarter

- Presenting project to Berkshire West Long Term Conditions Board
- Communication sent to practices
- Delivery in practices starts

## 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 pre-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.

**Activity during Q4**

During Q4 qualitative interviews were carried out with staff from the multidisciplinary team at Berkshire Healthcare NHS Foundation Trust and with Stroke Association staff. Several themes emerged from the interviews including health inequalities. Positive themes also emerged around resilience and team working. Work did not progress with other rehabilitation providers in the region because of the pressures of the ongoing COVID-19 pandemic.

**Activity next quarter**

Workshop with Berkshire Healthcare NHS Foundation Trust to explore the identified themes and develop solutions. Re-engagement of other Trusts.

### The Adopting Innovation and Managing Change in Healthcare Settings

*'This course has equipped me with knowledge and skills to initiate new projects that will be sustainable. As a direct result of this course my Trust is now offering an excellent service for patients who have suffered from a stroke to include an Orthoptic led eye stroke vision screen. I highly recommend this course'*
*- Sajida Hanif, BOB AHP Faculty Lead and Lead in Visual Processing Difficulties (VPD) Service Deputy Head Orthoptist, Buckinghamshire Healthcare NHS Trust.*
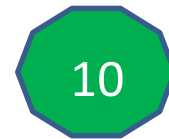
**300 attendees and 300 change projects**

Students from Primary care, PCNs, Trust's hospitals, secondary care, community and commissioners within the region

**Remote learning**
To provide flexibility to healthcare staff.

**10**
**Ten cohorts** delivered to date.

**Background**

The programme was developed to address the need of the local healthcare system, the need for change management capabilities to exist within workforce. The goal of the programme is to upskill the workforce population on how to implement innovation taken into consideration digital change on how this could be embedded in pathways in appropriate ways. In addition, it also aims to create transformation leaders who can support innovation adoption. This fulfils the workforce objective of the BOB Long term plan (BOB Long Term Plan Area: Improving Leadership Culture and Making NHS the best place to work), and the NHS Long term plan (NHS Staff will get the backing they need).

**need**

CHANGE MANAGEMENT

INCREASING DEMAND

RESTRICTED RESOURCE

**goal**

SET OF TOOLS, SKILLS & KNOWLEDGE

LOCAL IMPLEMENTATION

CULTURAL CHANGE

To date, the programme has supported the upskilling of nearly 300 healthcare professionals across all healthcare settings and as a key outcome, 300 change projects have been deployed within the region and a health changed focused alumni was established.

The project was evaluated using the Kirkpatrick Model and this evidenced the programme's effectiveness at bringing about successful innovation and show a Return on Investment (ROI) approach to convert benefits into resource or cost savings. A second evaluation is underway.

**Activity last quarter and overall progress during 2020/21**

This year, two more cohorts were introduced. In the middle of its delivery, Covid-19 pandemic occurred and to mitigate the risk of the course not being delivered and also to cater to the needs of the students, which are mostly medical front liners, learning was delivered remotely. This shift to remote learning was a success as this both provided flexibility for students to address Covid-19 initiatives and to engage with the course.

During Q4, 'knowledge about the programme' was shared with National Health Education England (HEE). We have discussed the digital element of incorporating this into the course more explicitly. 2 out of 4 of their focus areas, Workforce development and Digital Readiness, aligns with the programme.

**Risk**

There is continuous demand for the course as evidence with the waiting list for cohort 11. However, the programme requires funding to support further cohorts. Funding for the programme is now at risk. Failing to immediately identify a funding source would result to the programme to close.

**Plans for next quarter**

- Explore how to develop the 'Digital transformation' aspect of the course.
- Follow up with National HEE to discuss this further.
- Explore funding opportunities within the region.

**NIHR Applied Research Collaboration Oxford and Thames Valley**

**Background**

The ARC Oxford and Thames Valley (ARC OxTV) https://www.arc-oxtv.nihr.ac.uk/ started in October 2019 and runs for five years, ending in September 2020. There are 15 ARCs across England, all who have received funding from 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, local NHS trusts, local 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 Gary Ford. The ARC OxTV is working closely with the Oxford AHSN to implement ARC research outputs into practise across the Oxford AHSN region and where appropriate across the South East and nationally.

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

**Activity in Q4 and overall progress during 2020/21 (focus on ARC/AHSN collaboration)**

- **ARC Implementation Strategy approved**
  - Developed jointly between AHSN and ARC.
  - Four objectives which will be monitored via ARC Strategy Board:
    - Implementation of research outputs locally, regionally, and nationally
    - Capacity development
    - Evaluation of implementation of research outputs
    - Establish a joint (ARC/AHSN) approach to real world evaluation

- **Progressed collaboration across ARC, AHSN and Oxford University Innovation (OUI)**
  - To facilitate smooth progress of research outputs to implementation
  - Non-disclosure agreement now in place to enable open discussion and sharing of information across all parties

- **Commenced joint working of three ARCs and AHSNs across the South East region as part of the NIHR/ AAC programme** (currently to run for one year)
  - Includes evaluation of innovations submitted as part of the Beneficial Changes Network (BCN) (Phase 1) https://www.england.nhs.uk/beneficial-changes-network/
  - Development of projects which link to BCN themes and are reflective of current regional and ICS priorities (Phase 2)
  - Defined process across South East region to support implementation by AHSNs

- **Held next round of ARC/AHSN Theme Implementation Update meetings to discuss progress on potential adoption and implementation of research outputs by the Oxford AHSN**

- **Input from Theme 2 lead (Richard McManus) to the system level guidance produced by the Oxford AHSN on cardiovascular disease prevention**
  https://www.oxfordahsn.org/our-work/covid-19/covid-19-case-studies/overcoming-disruption-to-cardiovascular-disease-prevention-services/new-guidance-helps-healthcare-systems-overcome-disruption-to-cvd-prevention-due-to-pandemic/

- **First National ARC Implementation Operational Leads meeting (OxTV initiative)**
  - To provide peer support, share resources and highlight research outputs for wider implementation

- **Evidence submitted to NIHR to show progress against the conditions of the ARC OxTV award. Outcome expected July 2021, to confirm continuation of funding for the duration of the ARC.**

For the ARC overall during 20/21, key achievements have been:

| Year in numbers |
| --- |
| 60 projects supported by the ARC |
| 8 new Covid projects |
| 5 Postgraduate students (DPhil) supported |
| 2 Priority setting partnerships (Community nursing research & Prioritising weight and obesity research) |
| 87 Publications produced |

**Plans for next quarter**

- **ARC OxTV/AHSN Implementation Oversight Group (April 2021)**
  - To review and monitor progress with implementation of research outputs across all six themes

- **Work with AHSN to develop detail to support delivery of objectives in Implementation Strategy**
  - Focus on capacity development both for ARC and AHSN teams

- **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

- **Confirm projects for the NIHR/ AAC programme across the South East region**
  - To enable all 3 AHSNs to plan for implementation (where relevant)

- **Explore feasibility for joint ARC/AHSN Public Health registrar post**
  - To strengthen joint working across AHSN, Local Authority and ARC

## International activities

## European Market Access for Partners (eMaps)

eMaps is a digital platform developed to support Life Science innovators and entrepreneurs access healthcare markets across Europe in the areas of Drugs, Digital Health and Diagnostic and Medical Devices. It provides information and advice on regulation reimbursement and adoption.

**Activity last quarter and overall progress during 2020/21**

eMaps was released for use during 2020/21 and attracted revenue of c£40k. The majority of this was earned through educational seminars on European markets and delivered to University of Erlangen-Nuremberg and Aletta Jacobs School of Public Health at the University of Groningen (INPHECT society).

**Partnerships formed include**

| Innovate UK | The Hill, Oxford University Hospitals | University of Erlangen-Nuremberg |
|---|---|---|
| ABHI | EIT health Accelerator | Oxford AHSN Accelerator |
| ISPOR | EIT Health events including Boot Camps and Web Summits and others | Aletta Jacobs School of Public Health at the University of Groningen/ INPHECT society |

**Key Launch Milestones**

- Comprehensive Review of all UK content (now up to date)
- Attract traffic to the platform ahead of high-profile USA content launch.
- USA content launch Nov / Dec 2020 (key market for 2021)
- Germany content launched December 2020 and January 2021
- Portugal content launched March 2021

**Plans for next quarter**

- Following the success of delivering eMaps within the two Educational institutions in Europe, this approach will be explored on how eMaps can be used within educational settings.
  - Discussions with University of Erlangen-Nuremberg have commenced for further collaboration and purchase for 2021.
  - Explore opportunities within the UK educational system and universities on how eMaps could form part of a curriculum or module.
- The USA module has attracted substantial interest and we will be exploring on how to promote this as a key module in 2021.

## 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 ends in April 2021. Julie is one of the Scientific Advisers to the Technologies Validation Group (TVG), supporting industry engagement and triage of COVID-19 diagnostics so that they may be progressed through the appropriate validation process.

The SIP team continues to contribute to the Health Tech Connect AHSN reviews and Oxford AHSN agreed in March to take the chair of the AHSN review group from July to September 2021. The Innovation Service replacement for Health Tech Connect remains in development and was in testing phase through Quarter 4. A public beta version is anticipated in June 2021 to mirror and expand on the current Health Tech Connect platform. Oxford AHSN and other Health Tech Connect accessors continue to provide input and guidance for the new platform.
No. of companies supported (January-March): 20

Guy Checketts contributed to the AHSN Network Bridging the Gap event and hosted a webinar on PLGF with 50 people attending. The AHSN website has been updated to include the Accelerator programme for 2021 and funding calls have been updated. Twitter followers have steadily increased month by month. The focus of our social media activities this quarter has been to promote the national AHSN Network Bridging the Gap event and the forthcoming Accelerator programme. We are working with national colleagues to develop alternative case study templates which better reflect the broader scope of our work with industry partners as evidenced in this report and we will update the national Innovation Exchange website with our end of project case studies.

The SIP team is leading the Oxford AHSN activities to develop a local portfolio and pipeline management process (PMPP) as part of the national AHSN portfolio management initiative driven by Health Innovation Manchester. The scope of the project includes delivering a pipeline process for managing all Oxford AHSN projects (both local and national); setting up common project management processes for all teams; streamlining the reporting requirements of all teams and providing a Minimum Data Set for all local AHSN projects.

The Thames Valley Cancer Alliance activities during most of the last quarter were put on hold due to the limited capacity across secondary care as an impact of the COVID-19 second wave. The RDS Working Group resumed its activity with having two meetings taking place towards the end of March 2021 with attendance by a SIP team representative.

The activities of the Strategic and Industry Partnerships programme and the Office for Life Sciences core functions are now aligned with the PMPP process described above:
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**

**Develop: Sarissa Biomedical.** This Innovate UK funded project, Purines for Rapid Identification of Stroke Mimics (PRISM), ended this quarter. Sarissa Biomedical is working with researchers and NHS services to develop a simple Point of Care Diagnostic blood test (SMARTChip) which measures blood purine levels. Accurate identification of stroke and mimic patients in ambulances and A&E departments would lead to improved patient outcomes and better use of limited specialist resources. A final report has been prepared for the project closure meeting. Teams from the John Radcliffe and Royal Berkshire hospitals have expressed an interest in being real world evaluation sites in the future. However, the company has since gone into financial administration as the clinical trials have been delayed due to COVID-19. It is still unclear as to the fate of the technology and whether it could be progressed through acquisition.

**Develop: Ultromics.** This NHSX AI award funded project kicked off in January 2021 to conduct a real-world evaluation of the impact of 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 more reliably, using EchoGo Pro, which uses artificial intelligence to analyse stress echo scans, to provide a report to the diagnosing clinician to enable 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. This project is currently in the planning stage. The SIP team are producing a health economics plan and providing input into the clinical protocols to ensure the appropriate data is captured for a health economic analysis.

**RESPIRATORY**

**Discover: IMPACCT.** IMmune Profiling of ICU Patients to Address ChronicCritical illness and ensure healThy ageing (IMPACCT) aims to evaluate an innovative diagnostic test. Although the use of emergency bundles has drastically improved the rates of survival in the first 24 to 48 hours in ICU, patients are still at high risk of death from infection and deterioration due to immunosuppression that makes them more vulnerable to acquiring Hospital Induced Infections (HAI). This innovative test will help identify those patients with a compromised immune system and help the clinician in predicting those at increased risk of HAI and/or mortality. Over 200 ICU stakeholders, including both payers and clinicians, have been contacted to date in the UK, France, and Sweden to collect views and insights on the technology through semi-structured interviews and online surveys. Partners: Imperial College London, University of Oxford, University College London, Assistance Publique - Hôpitaux de Paris, Karolinska Institutet

**Develop: Astra Zeneca Turbu+ Inhaler.** 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 inhaler supports improvements in health outcomes. By the end of March, the statistical analysis model had been completed and 155 patients had been recruited (up from 72 in Q3) with another 19 pending. Due to this success in recruitment, the decision has been made to extend the recruitment phase to a further ~20 GP practices with the ambition of recruiting ~300 patients in total. This will allow for improved statistical analysis, an opportunity to analyse sub-populations and to allow for several patients not completing the live phase. The end of the live phase is now extended to September 2021, at which time health economic analysis on the outcomes will be performed by York Health Economics Consortium (YHEC) and the final report written. Partners: Astra Zeneca, Modality Partnership (provider of primary health care and community services across the UK), Ashfield Nurses, YHEC

**Develop: Mologic.** This Innovate UK funded project, COPD exacerbation alert for patient stratification, ended this quarter. Mologic has developed two products for patient stratification for COPD. These are simple urine-based tests that work like a home pregnancy test with the addition of a reader. Headstart identifies the first signs of exacerbation, so the patient knows when to take medication and when to seek medical attention. Rightstart is used to identify whether to use antibiotics or corticosteroid treatment. Early identification of COPD exacerbation has the potential to reduce the severity of exacerbations by allowing faster treatment and reducing the need for GP and emergency visits to A&E. Use of Rightstart to identify the cause of the exacerbation will help ensure the correct treatment is given and has the potential to reduce unnecessary antibiotic treatment which supports the UK governments strategies for antimicrobial stewardship. A final report has been prepared for the closure meeting. The SIP team will re-engage with Mologic in mid-2022 when the clinical trials are completed to help to develop a business case. Partners: Stoke Mandeville Hospital, Boathouse Surgery in Pangbourne

**Deploy: Asthma Biologics.** This is a national programme under the Accelerated Access Collaborative (AAC). Marianna Lepetyukh has been providing project leadership in support of the CIA team, who are leading nationally on the AAC's Asthma Biologics project. As part of the AAC's work to support stronger adoption and spread of proven innovations, the AAC has selected a range of late-stage innovations (post-NICE appraisal) to accelerate uptake in the NHS called 'Rapid Uptake Products' (RUPs). Biologic therapy drugs aim to improve symptoms and reduce asthma attacks in people with severe asthma by helping to stop the body processes that cause lung inflammation. The main aim of this project is to achieve improved care for severe asthma patients through identifying patients with poorly controlled asthma, referring appropriate patients needing further input and treatment escalation to biologics for appropriate patients. This project is in planning stage of understanding the scope and deliverables of the project and establishing working groups and key priority areas. For the activities delivered and reported for Q4 2020/21, please see CIA section above.

## MAT NEO
**Discover: Fit for Labour test.** The Fit for Labour test is a clinical decision-support tool designed for use at the onset of labour to identify a baby at risk of brain damage or death due to lack of oxygen so that a caesarean section can be performed in a timely manner. The software analyses cardiotocography (CTG) traces at the onset of labour and considers multiple clinical risk factors relating to mother and baby. A study was performed to assess the potential utility of the test in labour management. It was concluded that the test may lead to faster and more effective decision making in labour management. A health economic evaluation suggests cost savings are derived from reduced cerebral palsy incidents therefore a reduction in litigation costs and a reduced number of emergency caesarean sections being performed. This project will be taken into the Develop stage. Partners: Oxford University Hospitals NHS Foundation Trust, University of Oxford

**Deploy: PLGF-based tests for women with suspected pre-eclampsia.** This is a national programme under the Accelerated Access Collaborative. The period of Innovation & Technology Payment (ITP) funding for PlGF-based tests came to an end this quarter. The number of NHS trusts adopting these tests under ITP funding increased to 117, with two additional services adopting PlGF-based tests from a manufacturer not supported by ITP. PlGF-based testing is one of the technologies that now falls under the new MedTech Funding Mandate (MTFM) and as such commissioners are required to commission PlGF-based testing in all maternity services in England and to offer the test as part of standard clinical practice. The focus of activity

this quarter has been on the communication strategy and provision of support for adopted trusts in their transition from ITP funding to the MTFM.

**Discover: Cardiotoxicity.** This project is one of the National Consortium of Intelligent Medical Imaging (NCIMI) exemplar projects. The role of NCIMI is to build a pipeline for innovation to allow new medical imaging Artificial Intelligence (AI) tools to be developed, tested, validated, and adopted into the NHS. This project is looking at understanding the utility of applying of AI to echocardiography to identify and predict cancer therapy-related cardiac dysfunction through qualitative interviews with key stakeholders. The potential impact of introducing this technology is that fewer treatment courses are being interrupted or stopped prematurely, as well as reducing the risk of developing heart failure.

### OTHER CLINICAL AREAS

**Discover: Ufonia.** This is an Innovate UK funded project. Ufonia are developing an automated speech-based service to contact patients who have undergone cataract surgery to assess their eye health and their need for further follow up. The impact of this project is to increase patient satisfaction with their follow up care and relieve clinician burden as an increasingly ageing population affects workload demands. Previously, the team performed a study to assess the utility of incorporating the technology into the post-operative ophthalmology pathway.  During this quarter, a health economic model was created which shows that Ufonia's platform could be cost-effective when compared to the standard of care and could help with the better utilisation of nurse's time in the cataract care pathway. Partners: Buckinghamshire Healthcare NHS Trust.

**Discover: Releaf Seated.** This newly developed product from Binding Sciences Limited is an aid for patients suffering from urinary incontinence (UI). It is a handheld, easy to use, portable urinal designed with a reusable collar attached to a disposable replaceable superabsorbent bag. A study was undertaken to assess the potential utility of Releaf Seated for patient management and concluded that Releaf Seated could increase patient independence, dignity and wellbeing. In addition, use of the product could decrease the number of falls related to the use of other UI aids and reduce skin rashes and lesions associated with absorbents which may in turn contribute to reduction of COVID-19 infection risk by reducing patient/carer interactions and hospital admissions. Partner: Buckinghamshire Healthcare NHS Trust

**Discover: The Oxford AHSN Accelerator.** The 2020 Oxford AHSN Accelerator closed in December 2020. Planning for the 2021 Oxford AHSN Accelerator commenced in Quarter 4 with delivery partner BioCity. Three commercialisation workshops will take place in May, June, and July in the lead up to the invitation only Pre-Accelerator in September and selective Accelerator programme through October and November. The 2021 planning includes an emphasis on the core Oxford AHSN clinical themes and a drive to include more local industry and academic partners in the content delivery, innovator support mentorship, and programme structure than in previous years.  Key impacts of our 2020 programme include:

The 2020 winners MetaguideX have won a £210,000 Innovate UK grant to support their development and founder Ryan Pink selected for the BioIndustry Association Pulse 2021 programme.
Becky Cotton from 2020 Accelerator finalist Lumino is joining the Cambridge Social Ventures incubator.

Spring 2021 cohort alongside 14 other social enterprise start-ups.

**Discover: MRCP+.** This Innovate UK funded project investigates the utility of using AI algorithms developed by Perspectum Diagnostics, applied to MRCP images, to provide improved visualisation of hepatic ducts, bile ducts, biliary tree, and gall bladder volume. A study was conducted to assess the potential utility and value of using AI enhanced imaging, MRCP+, in the diagnosis, monitoring and management of patients with Primary Sclerosing Cholangitis (PSC). Primary sclerosing cholangitis (PSC) is a long-term progressive disease of the liver and gall bladder characterised by inflammation and scarring of the bile ducts. The study concluded that clinicians were of the view that MRCP+ has considerable potential in monitoring patients and planning treatments in patients with PSC. In the next quarter we will assess the potential cost benefits of implementing MRCP+ in the care pathway for PSC patients.

**Deploy: Sustainability.** The NHS published a report in October 2020, delivering a 'Net Zero' NHS, which provides a clear focus for our sustainability work. The national Personal Protection Equipment (PPE) Strategy report was also published in September 2020. We are actively working with the National PPE team and the National PPE Innovation and Sustainability Hub particularly on innovative and reusable PPE. The AHSN Network Environmental Sustainability Community of Interest (COI) group was established in August 2020 and the Oxford AHSN has taken a lead role within the PPE sub-group. Engagement with Partners continues, Advanced Oxford, the Oxfordshire Local Enterprise Partnership, and the Sustainable Healthcare Coalition. A training session was held within the AHSN where the Sustainability toolkit was presented and demonstrated to now encourage its adoption to help measure the environmental impact of Oxford AHSN programmes. The SIP team is actively engaged with the following local NHS trusts on sustainability to identify suitable projects.
- Oxford University Hospital NHS Foundation Trust
- Frimley Health NHS Foundation Trust
- South Central Ambulance Service NHS Foundation Trust
- Berkshire Healthcare NHS Foundation Trust

## 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 across the Thames Valley. The theme is led by the CEO, Professor Gary Ford.

The Oxford Academic Health Partners was designated for five years by NHSE/I with effect from 1 April 2020 as one of eight Academic Health Science Centres, each embedded within an AHSN.  Professor Ford sits on the OAHP Board. OAHP is committed to working as an organisation embedded within the AHSN and its membership of the R&D Committee is key to furthering its relationship beyond Oxfordshire in line with its strategic vision and goals available here. The OAHP and AHSN senior teams have met to discuss future working and close collaborations are being developed.

The Oxford AHSN R&D group, chaired by Professor Joe Harrison, CEO Milton Keynes University Hospital and Oxford AHSN Board member, comprises representatives from Universities, NHS Trusts, and the NIHR research infrastructure across the Region.  It met four times during the year: April, July, November and most recently, in March 2021.  The November meeting approved updated terms of reference and details on the AHSN website were also updated.  Key points from the Terms of Reference are included below:

- To identify, encourage and provide opportunities for collaboration and information sharing between NHS and university partners across the Oxford AHSN in all aspects of R & D impacting on health, health care, social care, and public health.
- To liaise closely with NIHR regional infrastructure including the Biomedical Research Centres, Local Clinical Research Network, the Oxford Applied Health Research Collaboration, and the Oxford MIC to ensure sharing of information and opportunities
- To influence the strategy for R & D through engagement with the NHS and academic stakeholders, and particularly in support for the NHS Trust Directors of R & D
- To share examples and information on, for example COVID 19, presenting and collating exemplars from across the region.
- To share information on national policy, local initiatives and events that can benefit the whole R & D community, for example, the work of the BOB ICS and developments in Public Health, and to contribute to development
- To provide support, (through the Chairman, AHSN CEO, and other members) to individual organisations or groups of organisations wishing to take forward specific initiatives
- To explore opportunities around research skills, education, and training for current and future workforce
- To understand the R & D activities and portfolios of individual HEI and NHS organisations

Key topics discussed at the meetings included the future regional work programme of the NIHR ARC, Oxford Academic Health partners, and the Oxford Institute of Nursing, Midwifery and Allied Health Research (OxINMAHR). Updates from the AHSN Strategic Industry Partnerships team and Digital /AI programmes were presented to the group.

A presentation at the November 2020 meeting from Harim Sellahewa, Dean of Computing, University of Buckingham highlighted work in Artificial Intelligence (AI) and its applicability in clinical areas. Milton Keynes University Hospital's Research Lead, Dr Simon Bowman, and Antoanela Colda, Head of R & D, presented on research at the Hospital at the very well attended meeting held on 15 March 2021. A new feature for the meeting was an update from all partners present. These updates will feature in forthcoming meetings as it became clear that all partners were very keen to identify potential collaboration opportunities.

It is proposed that the meetings follow a pattern of two short presentations, presentation from Gary Ford, presentations on, for example, the work of the Integrated Care System, development of Public Health, the work of the Local Enterprise partnership, followed by general updates/exception reports. Updates from Gary Ford include updates from the NIHR Strategy Board and the AHSN Network's programme of work, including strategy development and.

A full programme of meetings is being planned for 2021/2022 following this approach. Megan Turmezei, Senior Programme Manager for the OAHP is now providing support for the Group having attended its inaugural meeting in 2013.

Our work with the NIHR Applied Research Collaboration Oxford and Thames Valley is coordinated through Professor Gary Ford as Implementation Lead for the ARC and with the support of Sarah Brown, ARC Programme and Implementation Manager who works across the ARC and AHSN to support optimising and accelerating adoption of research outputs across the region. Joint quarterly meetings will be held with the AHSN and ARC theme leads to discuss implementation.

The R&D theme will continue its collaboration with the R&D group, Oxford Academic Health Partners, and Oxford and Thames Valley NIHR Applied Research Collaboration, on the scoping and implementation of the Health Innovation Manchester pipeline model to understand the pipeline of innovation across the Thames Valley.

Work in this area has included research and innovations relating to COVID 19 and stroke management and the development of AI/digital projects (e.g., Brainomix and Sleepio). The AHSN teams are receiving increasing requests to undertake real world evaluations from partners, including the South East Regional Team. We will commission an external review of the evaluation capabilities within the Oxford AHSN team to identify areas of strength and those which require further development through new staff appointment, training, or collaboration with external partners, to ensure we can deliver high-quality real-world evaluations particularly for regional initiatives.

The R & D Theme is confident that it can continue to contribute to the development and impact of research and collaborations across the AHSN and beyond.

## Community Involvement and Workforce Innovation

Community Involvement and Workforce Innovation (CIWI) is a cross cutting theme. We work with our AHSN colleagues within Oxford AHSN to embed best practice in working with patients, public and staff as well as working with local and national health and care systems. We can offer advice and collaborative project working or carry out specific pieces of work on behalf of others.



Over the past quarter we have consolidated our team with events, communication and administrative support appointed to cover maternity leave.

### Oxford AHSN Programmes

We continue to work with internal colleagues to support the development of a new PID that embeds all cross-cutting themes, including workforce, health inequalities and community involvement.

We are developing our plans for supporting patient safety projects. This will include running workshops on health inequalities and working with the seldom heard for our local Maternity Voice Partnerships.

We have worked with a number of companies to submit bids for funding – formal feedback from assessors commented on how credible the patient and public involvement plans were.

### Regional and ICS Work

We continue to develop the Working Together Partnership with our regional health care and research colleagues, agreeing further joint funding and a series of joint workshops for the coming year. We have produced summary reports for our seldom heard webinars and now have these on our You Tube Channel. We continue to contribute to the Innovation Course at Bucks New University.

**National Programmes**

We completed our input into the national Network Reset Programme and will be publishing our report on coproduction.

We are supporting the NHS E RUP Programme through producing a series of evidence summary reports covering baseline epidemiology, including health inequalities; shared decision making; patient experience and patient reported outcomes measures. Reports for hypercholesteremia and asthma biologics have been completed and FeNO and Tamoxifen started. These reports will help to inform Equality and Health Inequality Impact Assessments (EHIAs) and patient and public involvement plans.

We are also specifically supporting the Lipids and CVD work of the AHSN Network alongside the RUP programme, leading on community involvement. We have appointed patient members to three of the working groups. We have run two workshops with patients and clinicians to inform ongoing patient and professionals education work and are planning work with seldom heard communities.

We have worked as part of the team that has produced the LGBTQ+ call for innovations as part of the National AHSN Network EDI Forum.

We contributed to the NIA Fellows appointment panels.

# Workforce Innovation

The workforce innovation theme within the Oxford AHSN aims to support the [national ambition](#) of more people working differently in a compassionate and inclusive culture through innovation, pathway redesign, improvement and evaluation.



## Workforce across the BOB ICS

The BOB ICS people strategy and plan are working in five themes. Theme four (Retention) has been awarded funding to design and develop 2 hubs to facilitate staff wellbeing. The first one addresses psychological wellbeing and went live this quarter to all NHS staff in the region. The second is enhanced occupational health and wellbeing. Wellbeing leads, chief people officers and some seldom heard group leads have been interviewed to map the current service/provision. This has enabled identification of gaps in the service where innovations can be introduced, and real-world evaluation can take place. The phase one report will be submitted to the BOB ICS at the end of the quarter and planning for phase two is underway.

The Covid-19 pandemic has highlighted the need for flexible working and one where there is equity across the region. A proposal has been submitted to the BOB ICS around converting current policies to a framework/pathway that prioritises staff, patients, and service.

## Workforce across the South East

The South East AHSNs (Kent, Surrey, and Sussex; Wessex; Oxford) are working together to support the spread and adoption of evidence based digital innovations across the region.  Workforce metrics have been designed for four innovations (Sleepio, S12, electronic repeat prescribing and remote monitoring in care homes) and will now become business as usual for each region.

An evaluation of bitesize coaching commissioned by the NHS South East Leadership Academy to support frontline staff and leaders in wave 1 and 2 Covid-19 is being undertaken.  A snapshot of staff are being interviewed by Oxford AHSN which is gathering understanding of stressors throughout the pandemic.  It will add to the growing evidence of change factors necessary to ensure retention of staff, as well as drilling down as to what ongoing support is required for all.

## 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.  Oxford AHSN is part of a team designing a framework to support workforce conversations within each project/programme locally.  It is hoped for this to be embedded in each organisation.

## Communications and Stakeholder Engagement

The pandemic had a disruptive effect on the way AHSNs worked with their stakeholders and the wider world. As well as adjusting to an almost overnight shift in priorities for many of our NHS partners, we had to rapidly change the way we communicated from predominantly face-to-face to virtual alternatives. While there were inevitable hurdles, looking back at the end of 2020/21 it is clear that the depth and quality of interactions is better now than in pre-COVID times.

Many examples of how we rose to the challenge and delivered wide-ranging benefits for our partners in the NHS and industry are captured in a growing bank of case studies on our website.

Hundreds of people attended our wide-ranging webinars and workshops – many of them around sharing innovation and best practice in response to the pandemic – from innovation in personal protective equipment to masterclasses for midwives on our award-winning training programme developed in partnership with senior clinicians. Recordings were made available to those unable to attend them live – extending the audience further.

In addition, our practical innovators and Accelerator programmes were delivered online for the first time. We also contributed to regional and national online events with partners in other AHSNs, the NHS, research, and industry.

There was a strong correlation between peaks in social media engagement and our best practice webinars or the launch of resources supporting frontline services. The highest single day for impressions (almost 13,000) on the @OxfordAHSN Twitter account came in July and coincided with our popular webinar explaining COVID Oximetry @home.

Further online successes during 2020/21 included:
- achieving more than 500,000 Twitter impressions – a 30% increase on 2019/20
- passing one million views (and 2,000 subscribers) on our YouTube channel
- doubling the number of followers of our LinkedIn account – see chart below
- our monthly email stakeholder newsletter closing in on its 100th edition.



LinkedIn followers increases over time.
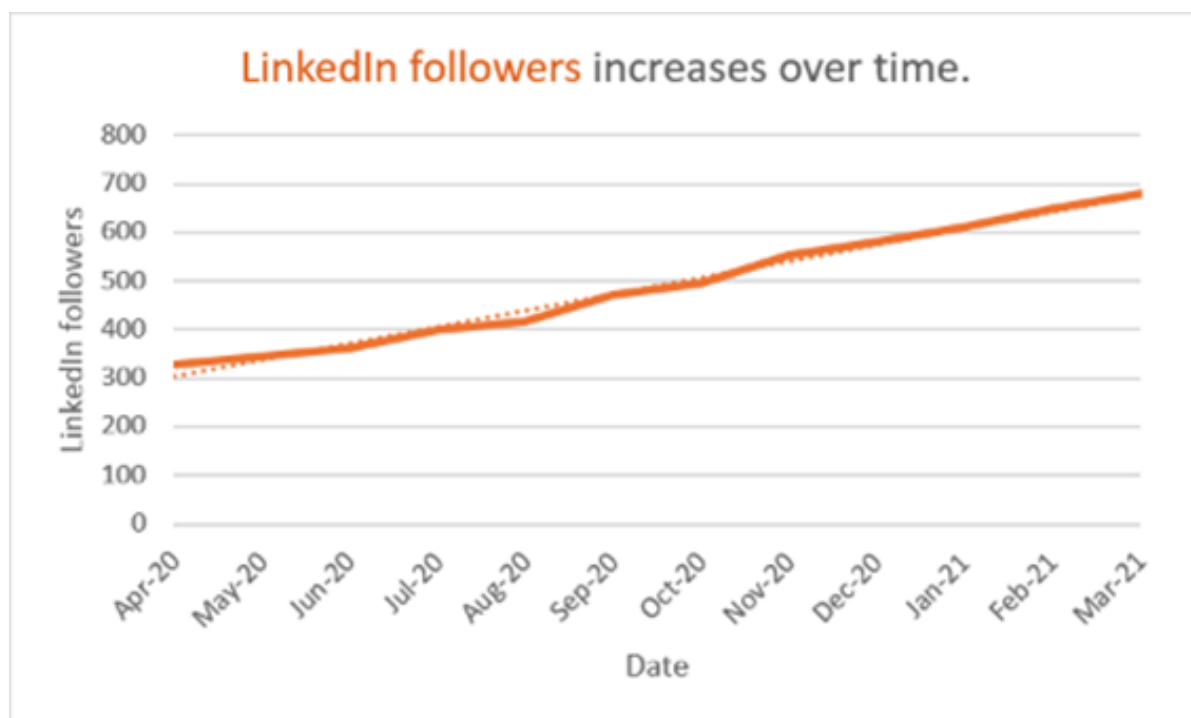
More details of our events and publications in 2020/21 are provided in the table below.

## Events and publications 2020/21

| Month | Event | Publication |
|---|---|---|
| May | | Adapting stroke services in the pandemic practical guidance |
| | | Evaluation of adoption of digital therapeutics at scale paper published in BMJ Innovations, based on Sleepio |
| June | Summer programme for innovators, Bucks HSC Ventures (continued to July) | |
| | Webinar: Update on research and innovation infrastructure, chaired by Gary Ford, part of the HSRUK conference | |
| | | Training resource launched on Health Education England eLearning platform for primary care clinicians on preventing stroke related to atrial fibrillation |
| | Webinar: Writing for lay audiences | |
| | Patient workshop on bone health | |
| July | Webinar: Supporting stroke services through the pandemic | Supporting stroke services in the restoration and recovery phase of the pandemic, second practical guide |
| | Commercialisation workshops, Oxford AHSN Accelerator programme with BioCity | |
| August | TCAM medicines optimisation workshop for Berkshire community pharmacists | |
| September | Practical innovators programme cohort 9 starts with Bucks New University | |
| | Market discovery pre-accelerator workshops, Oxford AHSN Accelerator | |
| | Webinar: Covid-19 patient pathways | |
| | Oxford AHSN Accelerator programme pitch day (invite only) | |
| | Webinar: Spreading digital innovation in the NHS – a Sleepio case study | |
| October | | Oxford AHSN Q2 report |
| | Oxford AHSN Accelerator Programme runs to November | |
| November | HSJ Patient Safety Awards – midwives training package based on fetal heart sounds shortlisted in three categories, wins in one | |
| | Oxford AHSN Accelerator final pitch and awards day | |
| Nov/Dec | Seldom heard webinar series | CVD prevention guide – primary care |
| January | The Hill cancer briefing for innovators/pharmaceutical companies | |

| Month | Event | Publication |
|---|---|---|
| **February** | Covid oximetry @home/Covid virtual wards webinar | |
| | OLS Brexit briefing | |
| | | Oxford AHSN Q3 report |
| **March** | Bridging the gap – industry briefing including pre-eclampsia test workshop | CVD prevention guide – whole systems |

**Appendix A - Risks Register & Issues Log**

**Risks Register**

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

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

**Issues Log**

| # | Programme | Issue | Severity | Area Impacted | Resolving Action | Owner | Actioner | Date | Status | Date Resolved |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Oxford AHSN Corporate | Lack of awareness by local partners and national stakeholders of progress and achievements of the AHSN | Low | Engagement | Overarching comms strategy. Level of engagement monitored across all programme and themes. Website refreshed regularly visits per month increasing. Twitter followers and 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 | AHSN Chief Operating Officer | Head of Communications | 19 Jan 18 | 90% complete | Ongoing |
| 2 | Oxford AHSN Corporate | Staff health and wellbeing during the COVID-19 pandemic | | Staff | In line with government and OUH guideless our staff are asked to work from home unless it is not possible. Staff are subject to a personal risk assessment in accordance with OUH policy. We have made taken measures to ensure 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. | AHSN Chief Operating Officer | AHSN Chief Operating Officer | 17 March 2020 | 90% complete | Ongoing |

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

| Annual Year | Case Study Topic |
|---|---|
| 2020/2021 | 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 |
| | Adoption and spread of a quality improvement programme to prevent cerebral palsy in preterm labor (PReCePT) |

| Annual Year | Case Study Topic |
|---|---|
| | 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 |

| Annual Year | Case Study Topic |
|---|---|
| | 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 |
| | 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 usually include three in each of our quarterly reports. We have been producing these since 2014. You can find them here: https://www.oxfordahsn.org/about-us/documents/quarterly-reports.