



Oxford AHSN Business Plan



2023/24



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Chief Executive's Introduction

I am pleased to introduce our 11th business plan. We have a strong portfolio which aligns to the priorities of our Integrated Care Boards and NHS South East regional team, and to the requirements of our national commissioners NHS England and the Office for Life Sciences. Our local engagement is very strong, and we are clear about our deliverables in 2023/24.

NHS England has extended our current five-year Master Licence Agreement by a year whilst they undertake a review of the role of AHSNs. We expect to be informed in the first quarter of 2023/24 if structural or other changes will be required of AHSNs before a further licence agreement is issued to AHSNs. I will continue as Chair of the AHSN Network for a third year during this important time. I have joined the Innovation Ecosystem review group chaired by Roland Sinker, CEO Cambridge University Hospitals NHS Foundation Trust, that is reviewing the role of the NHS in research and innovation and which will have an important influence on the future role and function of AHSNs.

We support our ICBs to adopt high value innovation and transform services through our NHSE Innovation Research and Life Sciences commission, and improve patient safety through our NHSE patient safety commission. We work with industry innovators to develop and deploy innovation in the NHS and support investment in and growth of companies through our Office for Life Sciences commission. We undertake horizon scanning, real world evaluation and support accelerated implementation of promising local innovations through our core commission, locally commissioning by NHS partners or through external grants. Patient involvement, health inequalities, workforce and Net Zero are cross-cutting themes in all our programmes.

We play an important role in linking with the wider research and innovation landscape across our population of three million people (Figure 1). We will continue to work closely with Oxford Academic Health Partners and the NIHR Applied Research Collaboration Oxford and Thames Valley and bring together research leads from NHS organisations and universities. We will support ICBs in developing their research and innovation strategies to give clear demand signals, increase uptake of innovation locally and ensure the health and care system supports research for the benefit of the local population.

I would like to thank my team for their dedication and hard work during these challenging times for the NHS and express my gratitude for the support of my Chair and Board and from our host, Oxford University Hospitals NHS Foundation Trust.

Professor Gary A Ford, CBE, FMedSci Chief Executive Officer, Oxford Academic Health Science Network Chair of The AHSN Network





Oxford Academic Health Science Network



Figure 1 Oxford AHSN in the research and innovation landscape





Overview

Our Business Plan 2023/24 describes our priorities and sets out our innovation and improvement support services and a portfolio of innovation projects. The services we provide and projects we support are commissioned by NHS England and the Office for Life Sciences (OLS), commissioned locally by our system partners, by industry partners or grant funders. We work with three Integrated Care Boards (ICBs): Buckinghamshire, Oxfordshire, and Berkshire West (BOB) ICB, Frimley ICB and, in collaboration with Eastern AHSN, Bedfordshire Luton and Milton Keynes (BLMK) ICB. This business plan has evolved through working closely with our ICB partners and focussing on four clinical areas: Cardiovascular disease (CVD) and stroke, Maternity/Neonatal, Mental Health and Respiratory, which align to the NHS Core20PLUS5 initiative, as well as local, regional and national priorities. We will be exploring cancer diagnostics with ICB cancer leads this year. The portfolio includes innovations that address healthcare challenges such as medicines optimisation, urgent and emergency care, elective recovery and technology enabled community services (e.g. virtual wards) – see *Figure 2 Local, Regional and Network wide priorities*. Critical to delivery are the relationships we have established in our networks of clinical leaders – see *Figure 3 Oxford AHSN: Our reach through networks*

We are committed to addressing NHS healthcare challenges through supporting service transformation and discovery, development, evaluation, spread and adoption of effective healthcare innovation, working with innovators from industry and universities and local health and care providers. We collaborate with other AHSNs, especially Eastern, Kent Surrey Sussex (KSS) and Wessex. For each of the clinical priorities we have a pipeline of innovations at different stages of the innovation pathway. Throughout our work we will involve patients, address inequity of access, workforce issues and environmental sustainability. The Oxford AHSN is a recognised leader in digital/AI, in vitro diagnostics and patient and public involvement.

Highlights

The AHSN Network (the umbrella body encompassing all of England's 15 AHSNs) will agree to a network wide **CVD prevention programme** for 2023/24. The Oxford AHSN has a broad portfolio of interventions at different stages of the innovation pipeline. In 2023/24 the AHSN Network will continue to support the Innovation for **Healthcare Inequalities Programme (InHIP)**. Each AHSN will continue to provide the **National Innovation Service (industry engagement)** and the **Patient Safety Collaborative** programmes. We have agreed with our ICBs to continue to support **Polypharmacy** and **Transforming Wound Care** with Frimley. Polypharmacy and Transforming Wound Care are being supported by other AHSNs too and we will collaborate on training and education, shared learning, and measurement of impact.







Figure 2 Local, Regional and Network wide priorities

*Network wide projects allow AHSNs to work locally to deliver key programmes and to come together nationally to facilitate wider impact and ensure improvements benefit more patients, faster. Oxford AHSN agree the network wide projects that we deliver with local partners, based on local priorities.





Oxford AHSN: Our reach through networks

We facilitate and participate in many networks allowing us to have far reaching engagement with key stakeholders and clinical staff

- CVD • BOB Integrated cardiac and stroke delivery networks
- BOB, Frimley and BLMK and South East Region CVD prevention groups
- Frimley Integrated cardiac and stroke delivery networks
- East of England CVD Clinical Advisory Group
- Figure 3 Oxford AHSN: Our reach through networks

group







Oxford AHSN: Our portfolio

| Clinical Area | Programme Name | BOB | Frimley | BLMK |
|--------------------------|--|------|------------|--------|
| Cardiovascular/Stroke | | Ador | tion in pr | ogress |
| | AffeX-CT (Discover) | | | |
| | Aisentia (Develop) *New Project* | | | |
| | Blood pressure optimisation programme (Deploy) | ٠ | • | • |
| | Brainomix AI Stroke Imaging Technology Evaluation (NHSX-AAC Artificial Intelligence in Health and Care | • | | |
| | Award) (Develop) | | | |
| | CardioSignal (Develop) | • | | |
| | EchoGo Pro (Develop) | | | |
| | Innovation for Healthcare Inequalities Programme (InHIP) - BLMK (Deploy) | | | • |
| | Lipid Management (Deploy) | • | • | • |
| | Stroke Rehabilitation (Develop) | • | • | |
| Development and Learning | ng | | | |
| | Developing NHS Health and Wellbeing Leads (Develop) | | | |
| Elective Recovery | | | | |
| | Peri-operative Innovation (Develop) | • | | |
| Frailty | | | | |
| | GRASP-Osteoporosis (Deploy) | ٠ | | |
| | Restore2 training (Deploy) | ٠ | • | |
| | Transforming Wound Care (Deploy) | | • | |
| Maternity | | | | |
| | Intelligent Intermittent Auscultation (Deploy) | ٠ | • | • |
| | Maternity and Neonatal Safety - Deterioration (Deploy) | ٠ | • | • |
| | Maternity and Neonatal Safety - Preterm Optimisation (Develop) | • | • | • |
| | OxSys (Discover) *New Project* | | | |
| | Threatened preterm labour (Deploy) | • | • | |





| Clinical Area | Programme Name | BOB | Frimley | BLMK |
|------------------------|---|---------|------------|------|
| Medicines Optimisation | | Adoptio | on in prog | ress |
| | AMR-UTI (Develop) | | | |
| | Medicines Safety Improvement Programme (Develop and deploy) | | • | • |
| | Polypharmacy (Develop and deploy) | • | • | • |
| Mental Health | | | | |
| | Bracknell Forest CYP Self-Harm Workforce Project (Develop) | | ٠ | |
| | Digital Children and Young People (CYP) Project (Develop) | • | | |
| | Personality Disorder Positive Outcomes Programme (PDPOP) (Develop) | • | | |
| | Reducing restrictive practice (Deploy) | • | • | • |
| Respiratory | | | | |
| | Albus Home (Discover) | | | |
| | BreatheOx home monitoring for asthma in CYP (Develop) | • | | |
| | Innovation for Healthcare Inequalities Programme (InHIP) - BOB (Deploy) | • | | |
| | Innovation for Healthcare Inequalities Programme (InHIP) - Frimley (Deploy) | | • | |
| | MyAsthmaBiologics App (Develop) | | | |
| | Sentinel Plus – Improving asthma control and reducing environmental impacts of care (Develop) | | | • |
| | Turbu+ - Improving Adherence with Smart Inhalers (Develop) | | • | |
| Urgent and Emergency C | are | | | |
| | Elastomeric Devices (Develop) | • | • | |
| | Virtual Wards/Virtual Care (Develop and deploy) | • | • | |
| Other | | | | |
| | Dementia - digital approach (Develop) | | | |
| | FSL- Brain imaging (Develop) *New Project* | | | |
| | GaitQ (Develop) *New Project* | | | |
| | MedTech Funding Mandate to increase uptake of NICE approved products (Deploy) | • | • | • |
| | Supporting the development of transparent use of patient data (Develop) | • | • | • |





Corporate activities

Developing the organisation

We continue to focus on supporting staff with health and wellbeing initiatives. Our programme of online team meetings helps to consolidate strong relationships across our distributed teams. Every Monday the whole Oxford AHSN meets for a general update and on Wednesdays we have a 'show and tell' session for teams and invited external contributors to share insights. Each month the whole AHSN meets for a face-to-face morning session which often includes an in-depth presentation from a programme team and introductions to new members of staff. The senior team meets each week.

Diversity, inclusion, and equality is fundamental to our core values, ensuring a positive and supportive culture, where all staff and communities feel empowered and respected. The Oxford AHSN has signed up to the AHSN Network diversity, inclusion, and equality pledge. Empowering and supporting our staff to be positive role models for diversity, inclusion and equality is essential to reach our collective ambition. Our work aims to benefit all communities and reduce health inequalities, supporting the NHS Core20PLUS5 and other equality initiatives.

To underpin our delivery we have developed reporting and governance structures, supported by PowerApps and Salesforce systems. We have strengthened the AHSN's evaluation capabilities in 2022/23 with key appointments to the team. We will continue to strengthen and broaden our reporting and knowledge-sharing using our digital systems to support team delivery.

Communications and stakeholder engagement

The AHSN's communications team supports the AHSN's business plan objectives at a local and regional level. Nationally, we contribute to the collective efforts of all AHSNs through the central team and with other AHSNs. We provide corporate and strategic communications, as well as specific communications support and advice relating to the spread and adoption of innovation. This plan outlines how the Oxford AHSN will support local health and care systems to deliver improved health outcomes in line with population needs and system priorities. This relies on effective collaboration, engagement and communication.

We will continue to build relationships with communications teams within the integrated care systems in our region. We will demonstrate our collective impact in a targeted way, highlighting progress and future plans. This will include producing more illustrative case studies at each of the Discover, Develop and Deploy stages of the innovation pipeline.

We will continue to update and improve our websites in line with our priorities. We aim to increase traffic to the main and patient safety sites which will be measured in higher page view numbers.

We will continue to extend the reach of our newsletters, social media channels and our app. We will continue to add content to our YouTube channel and target promotion.





AHSN financial plan

The financial plan for 2023/24 is detailed on page 12.

2022/23 outturn will be break-even vs budget £0.2m deficit. Outturn income is £0.3m higher than budget.

Plan for 2023/24 is break-even. For 2023/24 there is a decrease of £0.4m in income (NHS England -£0.7m, OLS +£0.1m, HEE -£0.2m, Other income +£0.4m). Total Other income of £1.4m is planned, secured, or received in 2022/23 to be carried over as direct reserves for release in 2023/24. All programmes have met 2023/24 income targets.

2023/24 planned expenditure £5.4m, a reduction of £0.3m. £0.4m savings will be achieved through a hold on recruitment of Medical Director, Head of CIA, 8a in PSC; ending anxiety and depression network funding; reduced central AHSN Network budget of £0.1m. Planned payroll increase of 3% under Agenda for Change (AfC) adds £0.1m.

Risks and issues

The largest risk in 2023/24 is the lack of clarity on the future roles, structure and commissioning of the 15 AHSNs which are subject to review by NHS England. The Office for Life Sciences has indicated a commitment to AHSNs for a further three years.

Risk to income of £0.6m (Other income £0.3m and PSC commission £0.3m) is considered to be low. There is a high risk to expenditure of £0.1m should the AfC pay award settle at 5% instead of planned 3%. Our programme leads will seek further in-year funding that supports local priorities. We will select external opportunities for income generation, from industry clients and national grant funders. The AHSN can also use its general reserves held in the AHSN's company limited by guarantee (CLG).

We will start work on 2024/25 Other Income from May 2023.





Oxford Academic Health Sciences Network 22/23 Forecast and 23/24 Plan

| Financial Year | 2022/23 Forecast (£) | 2023/24 Plan (£) |
|--|----------------------|------------------|
| Year of Licence Period | 5 | 1 |
| INCOME (Revenue) | | |
| NHS England - Core | -2,723,650 | -2,090,000 |
| OLS Additional Funding | 0 | -216,667 |
| Office for Life Sciences | -824,600 | -824,600 |
| NHS England - Patient Safety Collaborative | -433,095 | -471,770 |
| Partner Contributions | -345,000 | -345,000 |
| Health Education England | -222,000 | -30,000 |
| Other Income - Patient Safety & Clinical Improvement | -43,750 | -173,000 |
| Other Income - Grants or Direct Funding & Release from Reserve | -447,152 | -553,000 |
| Other Income - AHSN Chair Network Recharges | -75,000 | -60,000 |
| Other income - SIP | -190,144 | -339,009 |
| Other Income - CIA | -214,245 | -160,000 |
| Other Income - CIWI | -157,239 | -174,883 |
| TOTAL INCOME | -5,675,875 | -5,437,929 |
| | | |
| AHSN FUNDING OF ACTIVITIES | | |
| Patient Safety Collaborative | 433,050 | 471,770 |
| Clinical Improvement | 374,657 | 325,445 |
| PSC Pre Term Birth Project | 11,750 | 73,000 |
| Clinical Innovation Adoption | 1,577,025 | 1,465,441 |
| Strategic Industry Partnerships | 1,074,444 | 1,136,445 |
| Community Involvement & Workforce Innovation | 411,490 | 426,364 |
| Communications | 109,103 | 112,266 |
| ICS Costs | 33,802 | 20,532 |
| The AHSN Network | 214,912 | 107,256 |
| Grant Payable | 71,000 | 0 |
| Sub-Total Programmes & Themes | 4,311,233 | 4,138,519 |
| Corporate Office | 1,364,642 | 1,299,410 |
| Sub-Total Corporate | 1,364,642 | 1,299,410 |
| | | |
| TOTAL EXPENDITURE | 5,675,875 | 5,437,929 |
| NET INCOME/EXPENDITURE | 0 | 0 |





Governance

Oxford AHSN is accountable to the NHS England South East Medical Director. AHSNs report metrics each quarter to NHS England and the Office for Life Sciences.

Oxford AHSN has an oversight group for each of its five programmes and themes, chaired by a member of the AHSN Board.

| Programme/Theme | AHSN Director | Chair of Oversight Group and member of the AHSN Board |
|---|-------------------|---|
| Patient Safety and Clinical Improvement | Katherine Edwards | Steve McManus, CEO, Royal Berkshire |
| Clinical Innovation Adoption | Tracey Marriott | Neil Dardis, CEO, Frimley Health |
| Strategic and Industry Partnerships | James Rose | Peter Ellingworth, CEO, Association of British HealthTech Industries |
| Research and Development | Gary Ford | Joe Harrison, CEO, Milton Keynes University Hospital |
| Community Involvement and Workforce | Siân Rees | Co-chairs: Minoo Irani, Medical Director, Berkshire Healthcare, and Karen |
| Innovation | | Owen, Public Co-chair |

Other members of the Board are the AHSN's independent chair Nigel Keen, AHSN COO Paul Durrands and Director of Oxford Academic Health Partners Keith Channon.

Gary Ford chairs the AHSN Network, is the Network's CVD lead and the link to NICE where he serves as Non-Executive Director. Gary is also on the BOB ICP Board and on the Board of Oxford Academic Health Partners.

Paul Durrands is a member of the AHSN Network Programme Operations Group and the Community of Interest for Environmental Sustainability.

Katherine Edwards is the national MatNeo Lead and sits on the Patient Safety Leads group.

Tracey Marriott is leading the national asthma biologics programme.

James Rose represents Oxford AHSN on the AHSN Network Commercial Directors group.

Amy Izzard, Emma Fairman and Martin Leaver are, respectively, part of the AHSN Network HR, Finance and Communications advisory groups.





AHSN Network governance



Each AHSN is independently governed. Each is a member of the AHSN Network. In 2022/23 the AHSN Network implemented this governance structure to facilitate joint decision-making and oversight, strategic development and relationships with commissioners.

Operating subgroups have oversight for different areas of the AHSN Network Business Plan activity, as well as overseeing contractual delivery and risk management. Each subgroup has defined terms of reference, a programme of work and reports to the AHSN Network Executive to support oversight and assurance.





Cross-cutting themes

Health inequalities

Through innovation and improvements to health systems, treatment pathways and care environments, all AHSNs are determined to widen access to care and create health equity across the population. We are aligned with the NHS Core20PLUS5 initiative and many of our programmes concentrate on this initiative's key areas of focus, such as maternity, mental illness and respiratory disease.

Whilst addressing health inequalities is embedded through all our work, we also partner in running projects funded through a specific national initiative, the Innovation for Healthcare Inequalities Programme (InHIP), focused solely on this issue. InHIP is run in collaboration with the NHS Accelerated Access Collaborative (AAC) and in partnership with integrated care systems (ICSs). Its focus is on scaling medical technologies to under-served populations as described in Core20PLUS5. In collaboration with the ICB health inequality leads, we have commissioned health inequalities dashboards in our clinical priority areas.

We will do this by:

- Building connections with those communities which are not always listened to. We will work with them to ensure their ideas influence health innovations. We will work with our colleagues in the regional Working Together Partnership to avoid duplication of work.
- Promoting the AHSN Outcomes Framework so that health inequalities and community requirements form a key part of the planning and development of all AHSN initiatives.
- Embedding the use of equality and health inequality impact assessments in AHSN initiatives.
- Working with community members to explore the benefits and drawbacks of digital technology in relation to health inequalities.
- Further developing our panel of equality advisors.
- Running development and learning events for our AHSN colleagues.





Environmental sustainability and NHS net zero

The NHS is responsible for 4% of England's total carbon footprint. This contributes to increased air and water pollution, more allergens and extreme heat, which can cause illness, exacerbate long-term health conditions and lead to poor mental health (Jones, 2022).

Our unique role working with industry, academia and the health and care system in regional and national settings puts us in the perfect position to support the drive for sustainability at every level.

We are leaders in the AHSN Network Environmental Sustainability Community of Interest which was established in 2020. This functions as a hub for sharing best practice and finding innovative ways to collectively solve common issues. The Oxford AHSN is delivering a programme to support the NHS to achieve its net zero ambition, which will continue in 2023/24. We are focused on ensuring we capture positive environmental benefits across the breadth of our programmes. In 2022/23 we made a joint appointment with KSS AHSN of an Environmental Sustainability lead, Amelia James, who has made strides towards embedding the environmental sustainability agenda across the South East region. Critically, alongside finding solutions for the NHS to be more environmentally sustainable, we're holding ourselves accountable for our own impact on the environment. The Oxford AHSN will support its NHS partners to achieve their net zero carbon targets helping them to embed environmental sustainability into local adoption and spread projects to improve health and productivity. One regional adoption and spread project will be supported over the year.

In 2023/24 we will:

Embed net zero into governance, delivery and employees

Carbon reduction guidance for KSS and Oxford undertaken by Amelia. Exploration of emission hot spots and what actions can be taken to reduce them.

- 1. Complete sustainability assessments for TIA and PRO-MAPP projects.
- 2. Deliver net zero training to all employees across Oxford and KSS AHSNs.
- 3. Look to generate £25,000 net contribution to the two AHSNs (£12,500 for each AHSN).

Support innovators

- 1. Complete innovator support package and socialise across network.
- 2. Support SBRI winners—3 from KSS and 1 from Oxford.





Engage with ICBs

- 1. Complete asthma resource, distribute and execute engagement plan.
- 2. Engage ICSs through the national Clean Air Framework programme, look to engage with two ICSs in each region (KSS: Surrey and Kent; Oxford: BOB and Frimley).

Community involvement

Working with people who use NHS services reminds us of what we are here to do. Together we can co-produce programmes and roll out innovations and improvements that achieve better outcomes for patients. Involving patients, carers and communities – particularly the marginalised or seldom listened to in our work is not only the right thing to do, it builds trust, demonstrates good governance and helps to create a healthcare system that is safe, effective, patient-centred, timely, efficient and equal.

We will do this by:

- Developing the role of our place-based link partners to support two-way communication between our communities and our AHSN colleagues.
- Building long-term relationships with people from a range of communities, especially those who find it harder to influence local services and systems.
- Listening to them, act on what we hear and tell them afterwards how their ideas have changed or influenced the innovation.
- Advising colleagues and industry partners on effective approaches to community involvement and support them to deliver community involvement activities.
- Continuing to convene the regional Working Together Partnership, made up of organisations with a shared interest in supporting and developing patient, public and community involvement, co-production, and person-centred care. We coordinate a programme of joint learning and development in public involvement to maximise resources, avoid duplication and provide a larger platform than any single organisation working alone could achieve.
- Improving our communication through the Involvement Matters quarterly newsletter (which brings together involvement opportunities and news across the Thames Valley) and by increasing our social media presence.
- Supporting public and community involvement in the development of local shared care records, and secure data environments.





Workforce

Demand for NHS and social care services is increasing due to an expanding population and a growing number of people living with long-term health conditions. At the same time, upwards of one million people working for the NHS are part of an ongoing cycle of immense pressure and staff shortages. Our existing models of care will not close this gap between demand and capacity. Workforce innovation is vital to meet the changing needs and expectations of the population in an increasingly technological world.

We will do this by:

- Demonstrating how evidence-based innovations can drive efficiencies and improvement in methods of working, creating more capacity for upskilling and releasing time to care.
- Working closely with innovators and the health and social care workforce to ensure we address their multi-faceted challenges.
- Undertaking real world evaluation including designing new pathways in collaboration with the workforce, supporting long-term sustainability for innovations.
- Evaluation of other health networks' training and projects to understand barriers and enablers in greater depth.
- Seeking to identify need within the workforce and co-designing innovative solutions.
- Collaborating and co-designing with health and wellbeing leads and senior responsible officers nationally to identify how to support and sustain this service and those who run it. This in turn will promote improved staff wellbeing, recruitment and retention.

Research and development

The theme supports collaboration between the NHS and higher education institutes, working with the National Institute for Health and Care Research (NIHR) and other research infrastructure across the Thames Valley. The theme is led by the CEO, Professor Gary Ford.

The Oxford AHSN R&D group is chaired by Professor Joe Harrison, CEO of Milton Keynes University Hospital and Oxford AHSN Board member, and has representatives from universities, NHS trusts and NIHR research infrastructure from across the Oxford AHSN region.





Supporting our local systems with a portfolio of innovation and improvement projects

All projects in the portfolio are defined and developed locally. Where projects are marked as **network-wide projects** this indicates that several AHSNs across the country are also participating in these initiatives. AHSNs work locally to deliver key programmes and also come together nationally to facilitate wider impact and ensure improvements benefit more patients more quickly. The Oxford AHSN agrees the network-wide projects that we deliver, based on the local priorities and needs in our region.

Each of our projects is assigned a Discover, Develop, Deploy stage which indicates the nature of the work being undertaken, as outlined in the diagram below:







Cardiovascular

Over 6.4 million people are living with or are affected by heart or circulatory disease in England. The NHS Long Term Plan (LTP) sets out an ambition to prevent 150,000 cardiovascular events by 2029. This will be achieved through tackling the A, B, C - <u>A</u>trial fibrillation (AF), <u>B</u>lood pressure, <u>C</u>holesterol - as well as other factors influencing CVD risk such as activity, smoking etc. The AHSN CVD programme aims to support the LTP objectives, working with stakeholders to support them in tackling the ABC. We also work on heart failure, an area identified within the long-term plan and an area which we know is of high priority for our stakeholders.

27% of all CVD deaths are due to MIs/strokes (one death every three minutes), with stroke the fourth biggest killer in the UK (36,000 deaths/year).

The healthcare costs related to CVD are estimated to be £7.4 billion/year. This figure is rising every year in the UK, where we have the highest levels of obesity in Europe - this will lead to a major increase in CVD incidence in the next 20 years.

Objectives:

- Work with ICSs, at place level, at organisation level (e.g. with NHS trusts) and at primary care network (PCN)/practice level.
- Support stakeholders to understand their data, the improvement gap and the impact of reducing that gap (admissions, mortality, efficiency, reduction in costs etc). We look at health inequalities and how these can be tackled.
- Use various tools to support with delivering improvements these include database tools that can identify people who are not optimally treated and bespoke searches that can help identify patients who may have as yet undiagnosed conditions.
- Digital is becoming increasingly important. We review available digital options to support CVD workstreams this includes meeting with innovators and understanding the functionality and potential health economic impact of various tools. For example, we have recently completed a review of digital tools to support hypertension management and are supporting BLMK to identify which tool would best suit their needs, budget and existing infrastructure. We also support implementation of digital tools for example, one of our AF projects is looking at the implementation of CardioSignal and AliveCor KardiaMobile, two digital tools that can identify AF.





| Projects | BOB | Frimley | BLMK |
|----------|-----|---------------|-------|
| | Ado | ption in prog | gress |
| | | | |

AffeX-CT (Discover)

AffeX-CT developed by Afferent is a non-invasive device that uses the concept of transcutaneous autonomic neuromodulation via electrical stimulation through auricular innervation for use in the management of treatment-resistant hypertension and blood pressure reduction. Proof of Concept study showed significant reductions in 24-hr ambulatory BP following a course of transcutaneous electrical stimulation of auricular sensory innervation treatment in patients with drug-resistant hypertension, and a reduction in the number, and doses, of anti-hypertensive medications taken in patients with uncontrolled arterial hypertension. Partner: Queen Mary, University of London.

Oxford AHSN has collaborated on a research project funded by the National Institute of Health Research entitled "Evaluation the Safety, Acceptability and Efficacy of Autonomic Neuromodulation using transcutaneous vagal stimulation in uncontrolled hypertensive patients" (SCRATCHHTN)". In 2023/34 we will produce a health economics report.

Aisentia (Develop) *New Project*

The technology developed by Aisentia provides a digital contrast alternative to help enhance the image of CT scans as opposed to the use of physical contrast CT providing a quantitative report showing the abdominal aortic aneurysm (AAA) diameter. The technology may help with reduction in the use of physical contrast CT and can enhance care for patients who are allergic to physical contrast CT. There is also scope reduce the environmental impact generated from the use of physical contrast, helping the NHS achieve its net zero ambition.

The role of Oxford AHSN is to conduct a barrier to adoption study (delivery expected in Q2 2023/24) to explore the perceived usefulness and barriers to adoption of using physical contrast CT.





Blood pressure optimisation programme (Deploy, Network Wide)

The AHSN blood pressure optimisation (BPO) programme supports local systems to ensure that people with hypertension are appropriately monitored and have their blood pressure and broader cardiovascular risk optimised to prevent heart attacks, strokes and vascular dementia at scale.

The objectives of the programme include:

1) Supporting PCNs to implement the UCLP proactive care framework for hypertension (or analogous framework) to optimise clinical care and self-management in people with hypertension

2) Support PCNs to increase detection of people with hypertension through case-finding interventions

3) Support ICSs to reduce health inequalities by targeting the 20% most deprived populations and other local priority groups.

CardioSignal (Develop)

Currently a very small-scale pilot. We are working with two practices in BOB to test out using an app that uses the gyroscope in the phone to detect the movement of the heart. It is widely used across Europe but currently is not widely used in the UK. The aim will be to offer the equivalent of a 'virtual pulse check' to people aged over 65 who are having long-term condition reviews.





EchoGo Pro (Develop)

Ultromics have developed the EchoGo Pro device and received FDA 510(K) clearance. The technology uses artificial intelligence to analyse stress echo scans to support clinical decision-making by automating the reading of echocardiograms (ECGs). EchoGo Pro provides automated analysis of ECGs for patients undergoing echocardiographic assessment for suspected cardiac pathology.

Through specialised image-based machine learning, EchoGo Pro assists physicians to identify heart disease risk rapidly and enable appropriate care. Ultromics' recruitment of sites was completed in Q4 2022/23 and have the last participants' follow-up visit in June 2023. The Oxford AHSN will use real world data to develop a health economic assessment comparing the EchoGo Pro intervention to standard care.

Innovation for Healthcare Inequalities Programme (InHIP) - BLMK (Deploy, Network-Wide)

Launched in Q2 2022/23, this programme aims to enable accelerated access to innovations for people suffering healthcare inequalities across the four clinical areas of focus outlined in the Core20PLUS5 approach.

In BLMK the project will focus on optimising management of CVD through proactive outreach into practices to identify those with known CVD and develop a service model, co-designed with the target populations, that provides additional clinical review with a suitably qualified, competent and experienced healthcare professional. This review would support both self-management and treatment with evidence-based therapies, including novel lipid-lowering agents such as Inclisiran and bempedoic acid for those meeting the NICE TA criteria, and dapagliflozin and empagliflozin in those with co-existent heart failure with reduced ejection fraction.

Each ICB has a separate InHIP project. Where other parts of the country have similar InHIP themes there is an aspiration to form a community of practice to support knowledge-sharing and to leverage collective learnings.



Lipid Management (includes FH to reduce death and disability/aims to reduce cholesterol using PCSK9i, high intensity statins and education, implementation of novel therapies, Inclisiran) (Deploy, Network-Wide)

The aim of the AHSN lipid management programme is to embed the NICE/AAC lipid management pathway into clinical practice and ensure that clinicians are aware and confident to prescribe the appropriate therapy to the appropriate patient cohort. The programme also aims to increase diagnosis rates for familial hypercholesterolaemia (FH).

Evaluating Brainomix AI Stroke Imaging Technology (NHSX-AAC Artificial Intelligence in Health and Care Award) (Develop)

Brainomix AI Evaluation: Includes 33 sites across five integrated stroke delivery networks (ISDNs). There is strong ongoing South East (SE) engagement. The first year of evaluating the Brainomix product has gone well. Despite workforce challenges faced by clinicians, engagement has still been positive, enabling us to work with all bar three of the sites that signed up to participate. Constructive meetings have taken place throughout the year that have facilitated relationship-building with the clinical users, including SE Clinical Leads, Stroke GIRFT, SSNAP, Mechanical Thrombectomy meetings and approximately 52 ISDNs meetings (except for London and Kent & Medway). The evaluation will continue until Q4 2024/25.

Stroke Rehabilitation (Develop)

Rehabilitation is a key component of the stroke pathway and a priority area for the ISDNs. Following discussions with Frimley, Surrey Heartlands and BOB ISDNs, it was agreed that the Oxford AHSN Clinical Innovation Adoption team will support their rehabilitation programmes.





Mental Health

One in four people experience at least one diagnosable mental health problem in any given year. People in all walks of life can be affected - and at any point in their lives. Challenges remain in implementing successful and appropriate innovation in an area that is increasingly under severe strain.

There are opportunities to build our Mental Health portfolio, responding to local needs, in 2023/24. We will focus on support for patients awaiting diagnosis/treatment, support for digital solution evaluation and implementation and evaluation of improvements and innovations appropriate to setting.

| Projects | BOB | Frimley | BLMK |
|----------|-----|--------------|-------|
| | Ado | ption in pro | gress |

Bracknell Forest CYP Self-Harm Workforce Project (Develop)

A scoping and engagement project, partnering with Rohan Borschmann (Academic Psychologist at the Department of Psychiatry, University of Oxford).

This project is funded and supported by Bracknell Forest public health as part of the Health and Wellbeing strategy 2022-2026 and has been developed following the publication of new NICE guidance on self-harm. The project aims to bring together the CYP workforce from across the Bracknell Forest geography to better understand professionals' knowledge, responses, and confidence in supporting children and young people who self-harm, empowering and connecting those closest to young people with those who can help to drive change. The work includes bringing the Bracknell Forest workforce together to create a learning network, an online workforce

The work includes bringing the Bracknell Forest workforce together to create a learning network, an online workforce survey, cross-discipline reflective sessions, analysis of local data, review of the literature, resources, policy and services and support to organisations to complete the NICE baseline assessment and resource impact tools following the changes in guidance.





Digital CYP Project (Develop)

A CAMHS digital project was initiated at the request of BOB ICS colleagues to conduct an audit of the digital solutions available to young people via CAMHS within the BOB geography and across the country. We are focussing on the Thrive framework model and how digital solutions can support traditional service provision. The work was accelerated in Q3 2021/22 on request from the BOB ICS Chair for Mental Health. Engagement and views of clinicians and young people were sought during Q1 2022/23 with a jointly hosted webinar presented on 30 June 2022 to share learning and information gathered. A report on this work was published in Q3 2022/23. Work on this project formally completes in Q4 2022/23, however further work is currently under discussion.

Personality Disorder Positive Outcomes Programme (PDPOP) (Develop)

PDPOP is a training programme (delivered in person or online) for whole teams within GP and PCN staff to increase confidence and skills when attending to patients with personality disorder. The programme has been delivered in several practices over the past two years and data collected. From September 2022, the Oxford AHSN is developing and delivering a Kirkpatrick Level 3 Evaluation of the delivery of PDPOP to demonstrate behaviour change. A Kirkpatrick Level 4 Evaluation is also being explored using expertise from the University of Oxford to interrogate the EMIS data to demonstrate results and benefits from the PDPOP training.

Reducing restrictive practice (Deploy)

In July 2019 NHS England launched the Patient Safety Strategy which highlighted safety as the biggest concern for mental health services. An aim was set to reduce restrictive practice by a third by April 2020 and an improvement collaborative formed. Following this, Patient Safety Collaboratives were commissioned to reduce restrictive practice in their regions by 50% by March 2024. These aims are focused directly on reducing incidents for patients. In 2023/24 we will achieve 10% of wards in the AHSN region working on the project.





Maternity and Neonatal

The NHS Long Term Plan identifies significant progress in maternity and neonatal care: Since 2010, the NHS has seen an 18.8% reduction in stillbirths, a 5.8% reduction in neonatal mortality and an 8% reduction in maternal mortality which now occurs in fewer than one in 10,000 pregnancies. However, there is still unwarranted variation in the outcomes of maternity and neonatal care due to health inequalities. For instance, MBRRACE-UK reports that outcomes are worse for Black, Asian and Mixed ethnic groups and people living in the most deprived areas. Maternity and neonatal remains the costliest specialism for litigation, and requirements for improvement are a key system focus – such as the Ockenden and Kirkup reports and subsequent urgent actions.

In 2023/24 we will look at identifying fetal and maternal risk at all points during the pregnancy and birth continuum, continue to focus on addressing health inequalities and inequity. We will leverage system-wide working to maximise resources and impact of improvements and work with our partners, addressing service requirements as a result of Ockenden and Kirkup reviews.

| Projects | BOB | Frimley | BLMK |
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Maternity and Neonatal Safety - Deterioration (Deploy, Network-Wide)

 The National Maternity Early Warning Score (MEWS) tool is designed to focus on early identification,
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Maternity and Neonatal Safety - Preterm optimisation (Develop, Network-wide)

Optimisation of the preterm baby is a key priority outlined in the national Maternity and Neonatal Safety improvement Programme (MatNeoSIP) and in the BAPM Perinatal Management of Extreme Preterm Birth (before 27 weeks).

NHS trusts are required to work together on several elements within the optimisation care bundle, for example, place of birth, optimal cord management, normothermia, steroid and magnesium usage and early colostrum and breast milk which will ensure that the preterm baby has the best possible start in life.

We are working collaboratively with a diverse group of stakeholders to improve outcomes for preterm infants and experience for the families and staff who care for them.

The project aims are to support an increase in the proportion of preterm babies born in the appropriate care setting, to translate national policy and guidance into clinical practice for the multi-professional teams who provide care and to improve the confidence of midwives and paramedics to support intrauterine transfer.

OxSys (Discover)

This University of Oxford project provides an innovative, data-driven system for individualised cardiotocography (CTG) analysis to enhance clinical decision-making and avoid fetal damage during labour.

The Oxford AHSN is collaborating with clinicians and scientists from the University of Oxford on a project funded by the National Institute for Health and Care Research where the overarching goal is to improve clinical decision-making around labour management and CTG monitoring by providing timely, data-driven and individualised assessment of fetal wellbeing, so that fetal damage due to oxygen deprivation intrapartum can be avoided.





The intelligent data analysis software (OxSys) will provide computer-based, real-time estimates of oxygen deprivation risks during labour. Partner: University of Oxford. A feasibility study was completed in 2022/23. There will be further evaluation in 2023/24.

Threatened preterm labour (Deploy)

This programme of work is developing an education and quality improvement package for multi-disciplinary teams. It is aimed at perinatal staff teams involved in the pre-hospital and hospital pathway of care for women in threatened preterm labour and birth (midwives and student midwives, trainee doctors and consultants, advanced neonatal nurse practitioners, neonatal doctors and nurses, support workers, paramedics and ambulance staff).

The purpose is to facilitate the development of an exemplar education and quality improvement (QI)programme which will support the perinatal teams in our trusts with skills and training enabling them to deliver improvements in safety and quality to optimise care for the preterm baby. It will address specific key enablers for improving system safety such as addressing inequalities and co-production with patients with lived experience representing the diversity of our population. It will support the transfer of policy and evidence into clinical practice.







Respiratory

Respiratory disease affects one in five people in the UK and is the third largest cause of death, with around 68,000 people dying every year¹. Lung diseases account for approximately 700,000 UK hospital admissions and over 6m inpatient bed-days each year. Despite the inclusion of lung health as a clinical priority in the NHS Long Term Plan, outcomes continue to stagnate.

Incidence and mortality rates are worse in deprived areas and for disadvantaged groups. From 2017 to 2019 in England, early mortality from respiratory disease was 2.9 times higher in the most deprived areas compared to the highest socioeconomic areas, contributing to the widening life expectancy gap².

In 2023/24 we will support horizon-scanning of innovation for our partner organisations around challenges and priorities, establish Innovation Review Panels in respiratory to support selection of promising innovations with strong potential to impact partners' priorities.

We will support a broad portfolio of innovation projects that aim either to establish the value of a healthcare innovation in a pathway or assess and evaluate novel models of delivering service in respiratory care.

| Programme Name | BOB | Frimley | BLMK |
|----------------|-----|---------------|-------|
| | Ade | option in pro | gress |

Albus Home (Discover)

Albus Home monitoring device is developed by BreatheOx, a medical technology spinout company from the University of Oxford that has developed a small non-contact table-top device that monitors respiratory symptoms and environmental metrics without patients having to do or wear anything. Early recognition and management of deterioration in asthma control can prevent attacks and emergencies.

To deliver this evaluation we are partnering with Imperial College London, Asthma UK and Birmingham Women's and Children's NHS Foundation Trust.

² The Marmot Review - https://www.parliament.uk/globalassets/documents/fair-society-healthy-lives-full-report.pdf



¹ Public Health England - https://www.gov.uk/government/publications/respiratory-disease-applying-all-our-health/respiratory-disease-applying-all-our-health/



The Oxford AHSN is working to validate the clinical utility of the non-contact tabletop monitoring device to predict and prevent asthma attacks in children and understand the potential utility, benefits and barriers to adoption of the asthma monitoring device. The work package for the Oxford AHSN consists of feasibility study and health economics analysis report.

BreatheOx home monitoring for asthma in CYP (Develop)

Early-stage feasibility of contactless nocturnal monitoring solution for paediatric asthma, providing continuous, objective and long-term monitoring of asthma control and exacerbation risk.

Innovation for Healthcare Inequalities Programme (InHIP) - BOB (Deploy, Network-Wide)

Launched in Q2 2022/23, this programme aims to enable accelerated access to innovations for people suffering healthcare inequalities across the four clinical areas of focus outlined in the Core20Plus5 approach.

The funding in BOB will be used to support evidence-based management and clinical optimisation of people with uncontrolled and severe asthma living in the most deprived areas of the BOB ICS region. Individuals identified with potential severe asthma will be referred to the rapid access clinic for review and if appropriate started on biologic therapy (mepolizumab; benralizumab; reslizumab, omalizumab or dupilumab).

Each ICB has a separate InHIP project. Where **other parts of** the country **have** similar **InHIP** themes there is an aspiration to form a community of practice to support knowledge-sharing and to leverage collective learnings.





Innovation for Healthcare Inequalities Programme (InHIP) - Frimley (Deploy, Network-Wide)

In Frimley, the project will extend the provision of community AIRS teams which provide excellent care to people with chronic respiratory disease. Increasing access to and availability of this service will support more patients, in targeted cohorts, to address inequalities. It will need to deal with the anticipated increase in diagnosis rates and demand. We can also focus our approach to ensure we are addressing inequalities. There are existing links between the ICB and community leaders which will be explored to encourage engagement. This InHIP will include a proactive outreach programme. To complement this, we are looking at remote management opportunities in both primary care and secondary care to support prevention of deterioration in patients with chronic respiratory disease or ensuring the best care at the earliest point of deterioration.

MyAsthmaBiologics app (Develop)

A deliverable from the AAC Asthma Biologics programme has been the development of a patient-centred digital remote monitoring solution. This has been developed in partnership with digital therapeutics company My mhealth. The app, referred to as MyAsthmaBiologics, is designed to support ongoing monitoring of patients on asthma biologics. Evaluation is live in Southampton, Guy's and St Thomas' and Bristol.

Through the AAC programme and partnership with Industry, funding has been secured to support implementation and licences to MyAsthmaBiologics for all biologic prescribing sites in England (plus devolved nations) until March 2025. After this time a sustainable funding approach will be required most likely through the UK Severe Asthma Registry (UKSAR) network. The objective of this real world evaluation is to establish the value of the MyAsthmaBiologics app to both patients and the Severe Asthma Service (SAS) overseeing their care. The expectation is that the findings and results from the evaluation will support decision-making around future investment.

Sentinel Plus – Improving asthma control and reducing environmental impacts of care (Develop)





Early discussions around supporting a quality improvement programme to improve outcomes for asthma patients and reduce environmental impacts of care through addressing short-acting beta agonist (SABA) over-reliance and where appropriate - use of preventer dry powder inhalers.

Turbu+ - Improving Adherence with Smart Inhalers (Develop)

Evaluation of the use of smart inhalers and digital solutions to optimise adherence to inhaled medicines in asthma and COPD.





Medicines optimisation

Total expenditure on medicines in England by the NHS in 2020/21 was estimated to be £16.7 billion (Source: NHS BSA), and is growing year on year, contributing to the continued rising cost of the NHS. This is amplified by wasted medicines, with a report from NHS England estimating that unused medicine costs the NHS around £300 million every year.

As the population ages, more people are living longer with more illnesses to treat. NICE guidelines outline how a quarter of people over 60 have at least two long-term health conditions, but between 30-50% of medicines prescribed for these issues are not taken as intended.

The Oxford AHSN will continue membership of the Frimley ICS Meds Board and BOB Medicines Optimisation (MO) Collaborative Leadership Group. We will also work across ICBs to explore innovation and establish a clinical panel to review AI technology to improve opioid use.

| Programme Name | BOB | Frimley | BLMK |
|----------------|-------|-------------|------|
| | Adopt | ion in prog | ress |

AMR-UTI (Develop)

The Oxford AHSN is a collaboration partner for a Product Development Award funded by the National Institute for Health and Care Research (NIHR) i4i programme entitled "Point-of-care antibiotic susceptibility testing (AST) to aid urinary tract infection (UTI) treatment using dip-and test microcapillary devices".

The Oxford AHSN is working on the feasibility study and health economic analysis to help develop the proofof-concept microcapillary system into a point of care (POC) AST device for patients with suspected UTI. the report will explore usability, barriers to adoption and generate evidence of health economic and patient benefits.





Medicines Safety Improvement Programme (Develop and deploy. Network Wide)

The commission for 2023/24 is focused on reducing harm from opioids prescribed for non-cancer pain. We will continue to work with Frimley ICS on a collaborative programme of improvement, focusing on areas with higher prescribing.

Polypharmacy (Deploy, Network-Wide)

Polypharmacy is one of the key themes of the World Health Organisation's Global Patient Safety Challenge, aiming to reduce severe avoidable medication-related harm by 50% globally over five years. Primary care in England prescribes and dispenses over one billion items each year. In April 2022, almost one million people in England were taking ten or more medicines and 370,000 of those people were aged 75 or over. A person taking ten or more medicines is 300% more likely to be admitted to hospital.

Medicines do so much good but as more people live longer with multiple long-term conditions, the number of medicines they take increases, and this can sometimes expose them to harm. They may increase their risk of a fall or being admitted to hospital, or generally reduce their quality of life. Of course, no doctor, pharmacist or nurse wants this for their patients but sometimes the system that we work in can result in people taking too many medicines.

In April 2022, 'Polypharmacy: Getting the Balance Right' was agreed as a network-wide programme to be delivered by the AHSN Network. The Oxford AHSN is in phase 1 of implementation and will continue delivery of this programme in 2023/24. The programme's core principle is to support local systems in addressing problematic polypharmacy through establishing a community of practice to address:

- Population Health Management using data to identify patients deemed to be at greatest risk from harm from problematic polypharmacy
- Education and Training helping clinicians to improve their confidence to stop medicines safely, especially in older patients using an Action Learning Set training model





• Patient behaviour change – increasing patient awareness of the problems of taking too many medicines (especially in older age) and supporting initiatives that increase their willingness to open up about their medication issues, concerns and expectations.

Local delivery in 2023/23 include Oxford AHSN working with BOB, Frimley and BLMK ICBs, identifying trainers for ALS, setting up Community of Practice, running patient focus group workshops and getting ready to pilot a patient-facing campaign 'Me and my medicines' with six PCNs across all ICSs.

Cancer

The fifth national priority of Core20Plus5 is to improve early cancer diagnosis and reduce health inequalities in cancer diagnosis.

We will explore with the ICBs' cancer leads and the Thames Valley Cancer Alliance whether there is interest in undertaking a horizon scan on cancer diagnostics. There will be an opportunity to collaborate with KSS and Wessex AHSNs.

Obesity

Obesity costs the NHS c.£6 billion annually and this is set to rise to over £9.7 billion each year by 2050³.

We will explore with the ICBs' interest in undertaking a horizon scan on obesity, and explore technologies and solutions that could be developed or deployed in this area.

This links in with the AHSNs focus on reducing health inequalities as there is strong evidence that people from socio-economically deprived populations and certain ethnic minority groups experience poorer health than the rest of the population, so it is particularly important to focus preventative services on these groups. Obesity is second only to smoking as the largest driver of health disparities between the most and least affluent quintiles.

³ https://www.gov.uk/government/news/new-obesity-treatments-and-technology-to-save-the-nhs-billions#:~:text=Obesity%20costs%20the%20NHS%20a,billion%20each%20year%20by%202050.





Adoption in progress

Other

Programme Name BOB Frimley BLMK

Elective Recovery

Peri-operative Innovation (Develop)

The team together with Buckinghamshire, Oxfordshire, and Berkshire West (BOB) Integrated Care System (ICS) led a successful collaborative bid for an NHSx Perioperative Adoption Fund grant to support innovation in the perioperative (before surgery) care pathway to assist elective recovery. The programme is looking to evaluate four digital technologies, in four pathways, in three hospitals in high volume low complexity pathways, with a view to the ICS procuring the successful technologies for roll out across the region.

The AHSN is providing project management for the evaluations, and health economics support will be provided by the York Health Economics Consortium (YHEC). We are also exploring the workforce implications of one technology (PRO-MAPP) and the patient/carer experience.

Frailty

GRASP-Osteoporosis (formerly Bone Health) (Deploy)

This project is a collaboration between the University of Oxford, PRIMIS and the Oxford AHSN. The project is working with GP practices, initially as a pilot within Oxfordshire, to improve the management of patients with osteoporosis who are at high risk of sustaining a fragility fracture. The project has developed a case-finding tool to ensure high-risk patients are identified and managed in accordance with NICE guidelines and optimised on treatment, thereby reducing the risk of further fragility fractures.





National Wound Care Strategy Programme (Deploy, Network-Wide)

Chronic lower limb wounds account for at least 42% of all wounds in the UK, and leg ulcers are the most common type (34% of the total wound population, compared to 7% pressure ulcers and 8% diabetic foot ulcers). A large proportion of the resources allocated for wound care is spent on these chronic lower limb wounds because of their slower healing rates. In 2019, there were an estimated 739,000 leg ulcers in England with estimated associated healthcare costs of £3.1 billion.

Based on evidence from the National Wound Care Strategy Programme, the total number of leg ulcers will increase by around 4% annually – driven by an increase in leg ulcers that either recur after healing or do not heal – and will reach over 1 million by 2036 if there is no intervention.

The programme, hosted by the AHSN Network, is an outcome-led programme commissioned by the nursing directorate of NHS England and NHS Improvement. The programme aims to address unwarranted variation in wound care services to improve healing rates and reduce patient suffering, expenditure on ineffective treatments and the amount of clinical time spent on wound care.

The programme to implement the National Wound Care Strategy will deliver an estimated 30% reduction in lower limb wound prevalence, 23% reduction in clinical time spent on care and an in-year reduction of 11% of spend on wound care products.

The AHSN Network will provide the vehicle for the systematic implementation of the strategy as part of a large-scale improvement programme, building on the work already delivered. We will seek to improve current pathways of care for lower limb wounds and implement point-of-care NHS compliant digital technology in the form of wound management digital systems within community services as a key enabler.

Urgent and Emergency Care



Elastomeric Devices (Develop)

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

Virtual Wards/Virtual Care (Develop and deploy)

The five-year vision for BOB ICS is that a fully integrated virtual ward (VW) and virtual care (VC) pathway will be in place across its area. All VW and care home residents support will be optimised through technology which ensures that patients are able to be safely treated in their home wherever possible and are monitored for improvement or deterioration across the long-term condition spectrum including frailty on a 24-hour basis. The integrated pathway will ensure that patients who are 'at risk' of hospital admission while under VC can be transferred to the VW and be under consultant level care without ever leaving their usual place of residence. They will then be seamlessly discharged back to the care of their GP/local multi-disciplinary teams (MDTs) or carers with appropriate follow-up arrangements in place.

The success of this approach will be evaluated within the first year of operation to inform the future funding from 2024/25. Throughout the programme the ICS will compare outcomes, capacity and flow, cost efficiency and ensure value for money is maximised across the ICS.

BOB will prioritise patient cohorts for opportunities for admission avoidance and early discharge and ensure a particular focus on care home residents testing out two models of care to demonstrate the most effective ways to support acute flow between Hospital @Home (H@H) and VW.

Other





Dementia - digital approach (Develop)

The Oxford AHSN has collaborated with the University of Oxford on a study to identify older patients at high shortterm risk of dementia and cognitive decline using routinely collected hospital electronic clinical and brain imaging data to improve care funded by NIHR. The study aims to produce risk scores for dementia and dementia subtype and accelerated cognitive decline in hospitalised older people (Digital Biomarkers for Dementia – DBD).

The work package for the Oxford AHSN consists of feasibility study and health economics analysis report.

FSL - Brain imaging (Develop) *New Project*

FSL-clinical, an analysis software for clinical use in the dementia care pathway, is being adapted from FSL, a comprehensive library of analysis tools for neuroimaging developed by scientists. When developed the software may help clinicians with analysing MRI scans by providing quantitative information of cerebral structures typically measured as part of the dementia diagnosis pathway.

The role of the Oxford AHSN is to conduct a barrier to adoption study to explore the perceived usefulness and barriers to adoption of using FSL clinically as part of the dementia diagnosis pathway.

GaitQ (Develop) *New Project*

GaitQ is developing a smart cueing system to address challenges faced by people with Parkinson's (PwP). It comprises two wearable devices, strapped on the upper calves, that deliver vibrational cues to users. The cueing pattern and pace can be varied over time and adapted to the user's individual walking style. The system can automatically activate and deactivate vibrational cues as and when needed; this decreases the likelihood of PwP becoming used to the cues and reduces the manual input required from the user. GaitQ will revolutionise the use of cueing in PwP's daily lives, helping them maintain their walking as they go about their everyday lives.





The Oxford AHSN is working on this project to validate the clinical utility of using GaitQ for improvement in walking difficulties in PwP through the use of 'cueing' using their wearable device. The work package for the Oxford AHSN consists of a feasibility study to understand the potential utility, benefits and barriers to adoption of the GaitQ device. Also, health economics analysis will be performed to evaluate the impact of reducing gait difficulties and/or falls on healthcare costs and quality of life scores. We will also gather insights from healthcare professionals on product acceptability and perception.

MedTech Funding Mandate (MTFM) (Deploy)

The MTFM policy aims to accelerate the uptake of selected NICE approved medical devices, diagnostics and digital products, as identified by the Accelerated Access Collaborative.

AHSN support for 2021/22 MTFM products will cease in 2023/24 due as high levels of adoption already achieved: SecurAcath, Placental Growth Factor (PIGF) -based testing, Heartflow and GammaCore.

New products added in 2022/23 will continue to be supported:

- Urolift, GreenLight XPS, Rezum, PLASMA system (technologies to treat Benign Prostatic Hyperplasia (BPH), or enlarged prostate) good current level of adoption
- Xpress (balloon sinus dilation) possible interest at Oxford University Hospitals
- Spectra Optia (treatment for sickle cell disease, nationally commissioned service) very complex service offering. Close working with Eastern and Wessex AHSNs, NHS Blood and Transfusion Service,
 Haemoglobinopathy Coordination Centres and commissioners to identify best solution to current patient inequalities
- Thopaz + (digital chest drain) Oxford University Hospitals use Thopaz+ extensively: working through them to explore opportunities at other area providers [Royal Berkshire and Buckinghamshire Healthcare have so far expressed an interest to adopt].





Supporting the development of transparent use of patient data (Develop)

Continue to work with the TVS shared care record programme and starting to work with the local secure data environment team. The development of transparent and trusted processes is essential to maintaining public and staff trust in the use of patient data.

Developing NHS health and wellbeing leads (Develop)

NHSE wishes to understand the best pathway to grow and develop health and wellbeing leads in the NHS. In collaboration with the North East North Cumbria AHSN and an independent researcher we are undertaking scoping in three phases to gather intelligence and data to inform this pathway. Phase One - interviewing health and wellbeing leads to understand their role, responsibilities and reporting structure. Phase 2 - using intelligence from phase 1 co-designing and undertaking survey and workshops for health and wellbeing leads and those with strategic responsibility. Intelligence from this phase will be used to co-design competencies and pathways for organisations around the health and wellbeing agenda. Phase 3 - to test the competencies/pathways in NHS trusts.

Phase 1 and 2 complete in 2022/23. Phase 3 - pilot and report due Q2 2023/24

Patient Safety

The safety of patients is a critical thread running through all our programmes. In addition, we deliver patient safety-specific programmes covering a multitude of care settings including acute care, maternity and neonatal units, mental health trusts, primary care, community services and care homes. These all link to the NHS England National Patient Safety Improvement Programme (SIP), which focuses on improving the safety of patients across systems.

The Oxford AHSN has expertise to support the development of new safe ways of working and spread proven ways of improving safe patient outcomes, both locally and through working with the national patient safety team.





New improvement approach for safety

A refreshed set of principles has informed the new improvement approach for 2023/24, with an aim to:

- Shift the overall patient safety approach from bureaucratic to proactive and generative
- Learn from what works, and learn from and with organisations that are making it work
- Provide more improvement support for those struggling, employing different strategies to help shape solutions
- Understand the scale of problems alongside the improvement potential, acknowledging that some areas may require further research
- Move from an obsession with individual problems to an obsession with system problems
- Utilise networking and collaboration to help provide a focus on major safety challenges
- Support systems to demonstrate marginal gains in the absence of silver bullets
- Co-design improvement approaches with outcome focussed ambitions
- Utilise a robust prioritisation process for national issues.

The existence of Patient Safety Specialists and the advent of the Patient Safety Incident Response Framework provides an opportunity to refine the approach for patient safety improvement; one that wraps around Integrated Care Boards and Integrated Care Partnerships (Integrated Care Systems, ICSs).





The national patient safety priorities for improvement 2023/24

Building on the work of previous years, the PSCs are being commissioned by the National Patient Safety Team to support:

- PSIRF implementation
- Reducing harm for people with chronic pain by reducing the prescribing of opioids
- Preventing and managing deterioration across systems

In addition, and subject to funding by the Maternity Transformation Programme (MTP) and Mental Health, Learning Disability and Autism Transformation Programme (MHLDATP), PSCs are asked to support:

- Maternity and Neonatal Safety
- Mental Health, Learning Disability and Autism Safety until October 2023

All PSCs will support ICSs with all the commissioned patient safety improvement priorities and, in doing so, provide a comprehensive national network of support for these areas.







Innovation adoption and real world evaluation







Understanding the need and communicating demand

The Oxford AHSN market access team helps innovators to understand healthcare needs and priorities and the evidence requirements for new medical technologies using the Lean Assessment Process methodology (a qualified support offer for innovators). This core function is topped up with significant additional grant funding to allow for a more robust assessment to be performed.

We undertake horizon scans to support our partners as they look to transform their systems and support a deeper understanding of the innovation landscape around particular challenges. We can assist in shortlisting innovations with the most relevant functionality and in reviewing evidence and adoption readiness for sets of innovations and technologies.

Support and signposting for innovators

We support innovators from commercial, clinical, academic or other backgrounds to accelerate the development of their solution to reach patients faster and meet the needs of the NHS. The Universal and Enhanced Offer for innovators is mandatory for all AHSNs to deliver. Distinctive Offer support is dependent on resource availability and will feed the pipeline for Core Function 1 (Level 3 support) and Core Functions 3 and 4 (Level 4 support).

The **Universal Offer** (minimum meeting time, 30 minutes) is open to all innovators at no cost. Following receipt of the engagement form, the Head of Business and Innovation will review and respond, then set up a meeting to assess, triage and provide advice and guidance. Following a review meeting with the core function leads, innovators will be directed to opportunities outside of the Oxford AHSN (Level 1 support) or transition to the Enhanced Offer by meeting the Oxford AHSN threshold of local demand or AHSN priority (Level 2 support). The **Enhanced Offer** is available to innovators that meet the AHSN threshold at no cost to England but potentially chargeable to devolved and international innovators.

Our support can be along the whole length of the innovation journey from ideation to implementation. We seek to understand the next stage that is needed and how to move onwards. In Q1 to Q3 2022/23 the Oxford AHSN supported 132 innovators.





Annually, we ask innovators that we have supported to complete an economic growth impact survey. In 2021/22, innovators who responded to this survey attributed 20 new or safeguarded jobs and over £3,136,696 of economic growth to our support.

Working together with the Head of Communications, the Oxford AHSN and AHSN Network websites will be regularly updated, case studies produced and the activities of the Strategic and Industry Partnerships programme communicated through our dedicated social media platforms.

Broker real world evaluation opportunities

The Evaluation programme was originally established in 2016 as the Diagnostics programme and has continued to grow and excel in its evaluation activities. The team will focus on validation in a real world setting of breakthrough innovations and creating impact reports that will be developed into high quality case studies for dissemination and into business cases to facilitate adoption. This helps innovators, who have often invested significant time and resource demonstrating that their product is clinically viable and then find that this level of evidence is necessary but insufficient for buyers or key decision-makers, who also need to know whether the product is suitable for implementing into a pathway or patient population.

We will work with the Oxford AHSN Community Involvement and Workforce Innovation team to include patients and workforce in our evaluation projects.

Support adoption and spread of promising innovation

The final core function commissioned by the OLS focuses on ensuring the spread and adoption of innovations. Due to the nature of innovation, it is difficult to define this work for 2023/24, as it often emerges through the year, however we are committed to develop and maintain a network of contacts to gain rapid insight into the feasibility and desirability of innovative products, and work with system partners to build a pipeline of local projects that address local challenges.





Annex 1 – NHSE Master License Agreement requirements mapping to 23/24 Business Plan

| MLA Requirement | MLA Requirement Detail | Business Plan Reference |
|--|--|--|
| Network wide Innovation Spread Programmes | Hand over the 21-23 spread programmes to local/regional systems by Q1 2023 | Hand over to systems of 21-23 programmes is in progress. Some programmes to be continued as local initiatives, as detailed from page 19 onwards. |
| Horizon Scanning and Demand Signalling | Working with the IRLS team to scope and co-develop standardised approaches and common definitions to Horizon Scanning and Demand Signalling, locally, regionally, and nationally. Supporting the harmonisation of data flows across AAC partners to better enable effective pipeline analyses for horizon scanning and market intelligence, through active promotion of the NHS Innovation Service as the front-door for innovators and NIHR Innovation Observatory as the central coordinating body for intelligence. Coordinating and align signalling to elevate impact, prevent duplication/contradiction and better guide the research and innovation communities in the efforts. | Page 13-14 - Governance structure to support standardisation and common definitions. Page 8-9 - Our portfolio of innovation and improvement projects. Page 45-47 - Demand signalling and innovation adoption. Page 10 - Communication and elevation of impact. |
| Supplier NHS Innovation Pipeline | The Supplier will be involved throughout the innovation pipeline from identification to implementation. The AHSN Network will focus programme development in the areas of greatest population need and inequity in health outcomes, including the clinical conditions with the Core20plus5 approach: cardiovascular disease, respiratory diseases, severe mental illness, maternal and neonatal health, and cancer. Supporting and tracking the development, identification, evaluation and adoption of innovative solutions (including medicines, medical technologies, diagnostics, digital and artificial intelligence innovations) which can improve outcomes in population health and healthcare through prevention of ill-health, earlier diagnosis, more effective treatments, and faster recovery. | Page 8-9 - Our portfolio of innovation and improvement projects. Page 45-47 - Demand signalling and innovation adoption. Page 10, 15, 23, 31, 32 - Focus programme development in the areas of greatest population need and inequity in health outcomes. Clinical conditions with the Core20plus5 approach: Page 20 - cardiovascular disease. Page 20 - respiratory diseases. Page 25 - severe mental illness. Page 27 - maternal and neonatal health. Page 36 - cancer. Page 36 - obesity. |





| Medicines pathway | Using detailed research and mapping of 18 pathways across 5 medicines archetypes to identify tactical and strategic/policy solutions to remove barriers and accelerate access to medicines innovations. A range of supportive activities, blueprints, and toolkits to support ICS (Integrated Care System) in ensuring medicines innovations are made available at scale, pace and equitably. | Page 34 - medicines optimisation. Further scoping of medicines pathway work will be undertaken in Q1 23/24. |
|--|---|---|
| Innovation for Health Care Inequalities Programme (InHIP) | Continuation of the programme commenced Q2 2022/23. Supporting systems to adopt evidence-based innovations to narrow healthcare inequalities, addressing the five key clinical conditions set out in the NHS Core20PLUS5 working directly with ICSs to identify and respond to population health needs. Working with the AHSN Central Team, AAC Performance and Evaluation team and UCL Partners AHSN to understand available datasets, build on previous dashboard and population analysis experience to develop an approach to impact monitoring for the AHSN Network. Working with the AAC Performance and Evaluation team to develop a measurement framework which would be translated and integrated into the AAC Information Portal to report on national level metrics. The Supplier will develop a Network Wide approach, with delivery of InHIP project activity in 23/24 funded as their local programme. | Page 15 - Health Inequalities and InHIP. Page 23 - InHIP programme details (BLMK). Page 31 - InHIP programme details (BOB). Page 32 - InHIP programme details (Frimley). |





| Medtech Pathway | Supporting development and communication about the AAC's MedTech innovation and adoption pathway strategy via local intelligence gathering on MedTech innovation and adoption barriers and enablers, sense checking strategy recommendations, and amplifying communication of recommendations once published. Supporting implementation of the AAC's MedTech innovation and adoption strategy by supporting delivery of a suite of policy and programme interventions by AAC partners. This will include supporting local adoption and evaluation of products that receive a positive NICE Early Value Assessment. Implementing local initiatives to drive adoption of NICE-recommended MedTech products. Raising awareness of the mature technologies supported by SBRI programme. Ensuring patients have access to proven medical technologies, diagnostics and digital technologies that have NICE MTG or DG guidance, are cost saving within three years and are affordable for the NHS to implement through the MedTech Funding Mandate. | Page 41 - MedTech Funding Mandate programme details |
|--|---|--|
| Implementation methodology programmes | Developing shared policies and approaches to spread and scale, setting out the menu of innovations for spread that can be used by the Authority and partner organisation, promoting the evaluation of the appropriateness of different methods for different innovations and sharing learning. | Page 13-14 - Governance structure to support shared approaches. Page 20 - Our portfolio of innovation and improvement projects. Page 45-47 - Demand signalling and innovation adoption. Page 10 - Communication and elevation of impact. Oxford AHSN will supply data in line with Minimum Data Set requirements to populate the menu of innovations available for spread. |





| Innovator/Innovation support programmes | Supporting innovators through nationally commissioned innovator/innovation programmes which include the Clinical Entrepreneur Programme (CEP), the NHS Innovation Accelerator (NIA), the Small Business Research Initiative Healthcare (SBRI Healthcare) and the AI Health and Care Award. Building and understanding of the changes required for adoption within local care pathways, the enablers, and challenges, co-creating case studies and evaluations with the innovators and programme management offices to inform further regional spread and potential for national uptake. | Page 47 - Supporting adoption and spread of promising innovations Page 4 - Supporting and Signposting for Innovators. Page 10 - Co-creating case studies and evaluations with the innovators and programme management offices to inform further regional spread and potential for national uptake. Page 17 - Co-production and creation. |
|--|--|---|
| Local Programmes | The supplier will work with their Integrated Care Systems (ICSs) to support adoption of evidence-based innovations which seek to narrow healthcare inequalities, utilising the approach set out in Core20PLUS5. The InHIP programme funding will be used to deliver projects at ICS level, to a maximum 10% of the programme funding award. | Page 20 onwards - Supporting our local systems with a portfolio of innovation and improvement projects. Page 15 - Health Inequalities and InHIP. Page 23 - InHIP programme details (BLMK). Page 31 - InHIP programme details (BOB). Page 32 - InHIP programme details (Frimley). |





Annex 2 – SE Regional Priorities by ICB and AHSN

| Regional priority 23/24 | | KSS | | Oxford | | | Wessex | |
|-------------------------------------|--------------------|--------|--------|--------|---------|------|--------|-----------|
| Core 20 Plus 5 | Kent and Medway | Surrey | Sussex | BOB | Frimley | BLMK | Dorset | Hants/IOW |
| Cancer early diagnosis | • | • | • | • | | | • | |
| Cardiovascular/Stroke | • | • | • | • | • | • | • | • |
| Maternity | • | • | • | • | • | • | • | |
| Mental Health | • | • | • | • | • | | | • |
| Respiratory | • | • | • | • | • | • | | |
| Early discharge | • | • | • | • | • | | | |
| Elective Recovery | • | • | • | • | | | | |
| Tech enabled comm services (eg VWs) | • | • | • | • | • | | • | • |
| UEC (including polypharmacy) | • | • | • | • | • | • | • | • |

Notes (Oxford AHSN)

Elective recovery includes perioperative innovation

Early discharge includes elastomeric devices

Tech enabled comm services includes Transforming Wound Care and Virtual Wards

