Oxford AHSN 2021-2022 Business Plan

Prof Gary A Ford CBE, FMedSci, CEO, Oxford AHSN

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Chief Executive's Introduction

We are now in the fourth year of the second AHSN licence period. This is an important year as we finalise the AHSN Network Strategy, prepare a business plan aligned to the strategy and review our governance arrangements. As the recently appointed Chair of the national AHSN Network I have an important role in working with the CEOs of all 15 AHSNs and our commissioners to prepare for and secure our renewed licence from April 2023.

In the past year, the AHSNs have shown great flexibility and resilience to support their local NHS systems mitigate against the pandemic. With a common purpose, priorities and urgency AHSNs have been involved in supporting significant change in the NHS during the COVID crisis. Joint working of AHSNs with Regional Medical teams has been key to maximising the support to our NHS partners during the pandemic. We will continue to work closely with Kent Surrey Sussex and Wessex AHSNs to provide support across the South East region to innovation adoption and patient safety and identify follow-on programmes after the success of Oximetry @home.

At a national level the AHSN Network will continue closer working with the NIHR Applied Research Collaborations (ARCs), NHS @home, NHSx, Health Education England and NICE.

During the latter part of 2020/21 the AHSNs have collated an innovation pipeline of innovations using a framework of discovery, development or deployment. The pipeline will help share opportunities across the network. The ARCs and AHSNs are also collaborating on shortlisting innovations for potential national deployment.

In 2021/22 each AHSN will ensure it has a common offer to innovators. We will also further strengthen the processes of selecting national programmes and providing support to policy makers on the selection of high value national programmes and future Accelerated Access Collaborative (AAC) products.

An increasing proportion of our resources, currently about half, are used to deliver national programmes which means that we must carefully prioritise local and regional programmes of work.

Professor Gary Ford, CEO

Business Plan Summary

Introduction

2021/22 is the fourth year of the second NHS England five-year licence period which ends in March 2023. This is the ninth Oxford AHSN Business Plan. The priorities in the plan were presented to the Oxford AHSN Board in May.

In 2020/21 we reprioritised our resources to support the local, regional and national efforts to manage the COVID-19 crisis. We will be available to support the system in 2021/22 should COVID place the NHS under severe pressure again.

Operating environment – "*necessity is the mother of invention"*

Under the ever-present threat of a third wave of COVID, driven by a new variant, the NHS is addressing the most severe backlog of elective cases since the late 90s – a time that led to a significant growth in NHS funding. NHS staff are tired, there are significant staff vacancies, social care is further weakened (NAO - *Initial learning from the government's response to the COVID-19 pandemic*) and there is a surge of poor physical and mental health in our population – particularly adults suffering from poorly managed long-term conditions or cancer and children and young people with mental ill-health. We are also facing a global climate change crisis.

Necessity is the mother of invention and the AHSNs have a key role in supporting our local systems in finding and deploying innovative products, services and practices to address the rising burden of ill-health and inequality, improve productivity of scarce clinical resources and contribute to the NHS net zero target. Innovations such as PlGF, a test to accurately rule out pre-eclampsia, enhanced patient safety and experience, improved productivity on maternity units and reduced the NHS carbon footprint. We need to identify and scale up more innovations like this where patients, the NHS and the environment all benefit. We have experienced an extraordinary pace of adoption of new products and practice during Waves 1 and 2 of COVID-19. In the cases of both dexamethasone treatment and oximetry @home there was the ideal combination of urgent need and readily available and evidence based low-cost innovation. In some cases, there was not time to evidence a solution eg the widespread adoption of remote consultation by GPs and the adoption by stroke physicians across the South East of Brainomix AI software for remote consultations.

The NHS needs to improve many aspects of healthcare prevention and delivery, and by improving many things in parallel, we can improve health of our population. In the business plan we have 69 individual projects. We must work in priority areas for the NHS such as the recovery, children and young people's mental health, remote monitoring and helping patients and clinicians better manage patients' conditions at home – these will focus our attention of potential new SE region-wide programmes in collaboration with KSS and Wessex AHSNs. We must consider a digital element in all our innovation adoption and improvement work eg monitoring or data collection or workflow.

There are also significant structural issues that will impact our work. There is widespread consolidation of the commissioning system, there will be a new CEO for the NHS this year and there is a desire to concentrate more NHS decision-making in the DHSC. Reorganisation of the commissioning system may impact delivery of innovation into primary care and may hold up decision-making of adoption of innovations that require a system-wide approach. CCGs have been

very important for the delivery of innovation into primary care, eg PINCER (reducing medication errors), and taking decisions in implementation of IT systems for remote monitoring eg Inhealthcare.

We have agreed a MOU with Eastern AHSN and the new Bedford Luton and Milton Keynes CCG to ensure this region is supported and also the CCG offers help in local engagement, especially primary care which historically has been challenging. We will work with the new Frimley CCG and have already agreed to lead on asthma biologics across the newly consolidated CCG.

Strategy and clinical themes

Led by Oxford AHSN CEO, Professor Gary Ford, the newly appointed Chair, the AHSN Network has developed a strategy in preparation for relicensing. The next steps are to develop a business plan for the AHSN Network and a new governance framework.

Oxford AHSN will develop its own strategy framed by the AHSN Network Strategy and local NHS priorities, increased regional collaboration and the significant academic and industrial life science capability in the Thames Valley. Developing the strategy is an opportunity to involve our staff.

In 2020/21 we agreed to focus on clinical areas where we had developed a critical mass of knowledge and engagement. In the last 12 months we have increased our focus on respiratory. Our clinical priorities are:

- Cardiovascular
- Mental health
- Maternity and neonatal
- Respiratory

We have simplified our planning, reporting and communications by clustering our work under our priority clinical themes.

Developing the organisation

In contributing to the AHSN Network Pipeline and Local Programme Reporting tool we are reviewing our systems for project management and reporting. Subject to agreeing a solution and approval of a business case by the senior management team we will implement a new system.

In line with the AHSN Network Strategy we will work with the other AHSNs to develop a unified offer to innovators. The AHSN Network will also develop a new triaging system for circa 2,500 innovations per annum. Julie Hart, Director of the Oxford AHSN Strategic and Industry Partnerships (SIP) programme, has completed a 12 months' secondment to DHSC where she has been evaluating new technologies to support COVID-19 testing. She has offered her knowledge and experience in designing the governance and processes of the new service. We have also suggested that the AHSN Network will need to establish a dispersed team of technical and market experts to evaluate technologies once they have been through the triaging process.

We will consult our staff on the ways of working post-COVID, taking into account preferences for home and office working and the importance of minimising unnecessary travel to meetings with stakeholders that can waste time and also harm the environment. We will also continue with a

wellbeing programme for those of our staff that wish to be included. We're planning our first whole team away day since summer 2019!

We have increased staff numbers in Patient Safety and Clinical Improvement (PS&CI) in response to the expanded commission from NHS Improvement. We will recruit two more staff for our Clinical Innovation Adoption (CIA) team in anticipation of the three new national programmes yet to be agreed.

Sources of innovation

The key sources for AHSN innovations are:

- Discovery – eg through our own Accelerator programme
- Discovery – through the Applied Research Collaboration/AHSN partnership (previously Beneficial Changes Network)
- Discovery and Development and Deployment – the AHSN Network pipeline
- Development – through undertaking real world evaluations of companies' products
- Deployment – our own horizon scanning
- Deployment – National Innovation Accelerator
- Deployment – Accelerated Access Collaborative

National vs Regional and Local

Since 2018, all AHSNs have collaborated on delivering ten national programmes and also supporting the uptake inf nationally commissioned innovation products, eg SecureAcath and PlGF. The work of the Patient Safety Collaboratives is determined by NHSI. National programmes allow both AHSNs and their commissioners to measure national impact.

Just over half our 40+ staff (excluding seven corporate staff) deliver NHSE/I commissioned national programmes/products. Oxford AHSN is also leading on the national rollout of asthma biologics which is utilising 2.5 WTE staff in CIA. Of the 19 staff we have working on local programmes ten are focussed on Discovery and Development projects in SIP. 2.5 PS&CI WTE staff work on local mental health programmes and 2.5 CIA WTE work on local CVD projects. Four staff work on local workforce and patient involvement projects.

Three new national programmes on top of FREED, ADHD and Lipid Management, will be developed and started in 2021/22. These are likely to be Home Blood Pressure Monitoring, an intervention in CYP mental health and a project to support NHS Recovery.

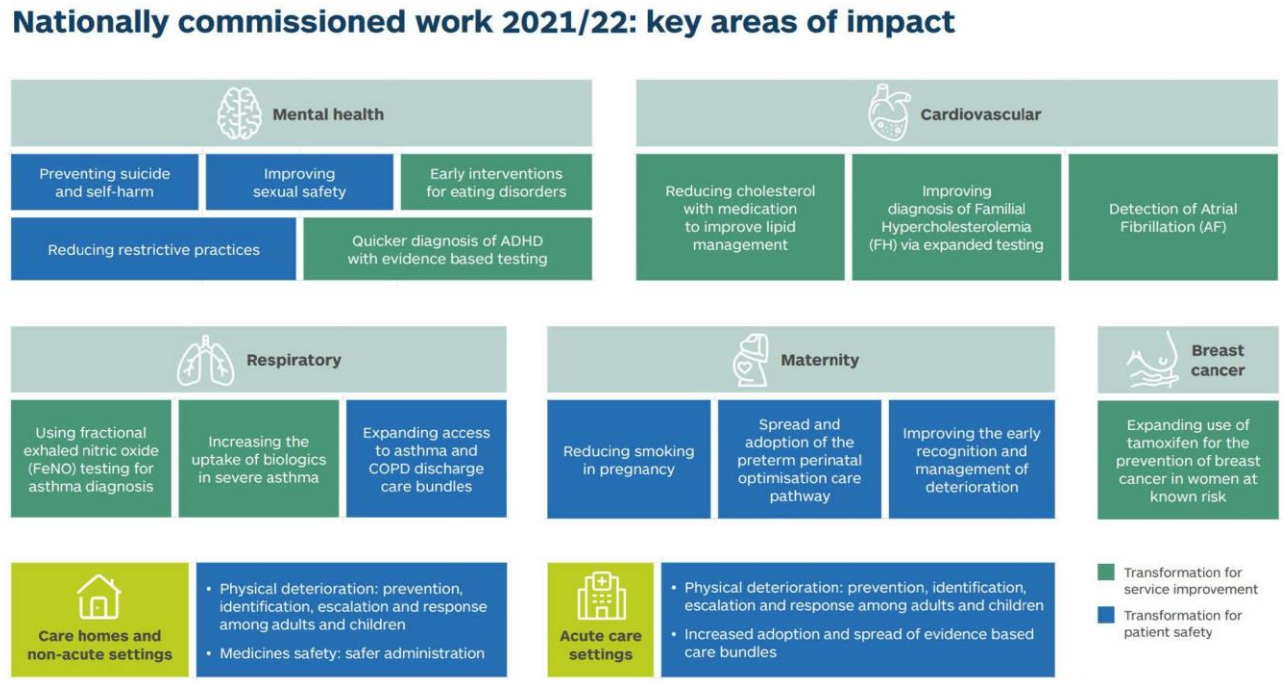
All this means that we must choose local projects very carefully, ensure the outcomes are clear, they align with local priorities, and keep them under review to ensure they are delivering. Local projects must have the potential for regionwide and national spread. National programmes such as PlGF or PReCePT (magnesium sulphate in labour to prevent cerebral palsy) started off as local AHSN projects.

In 2020/21 we collaborated with KSS and Wessex to deliver six regional programmes across the SE. Together we are exploring three priority areas:

- Children and Young People's Mental Health, perhaps building on the national ADHD and Eating disorders programmes
- Remote monitoring for frail patients
- Environmental sustainability – the national and regional priorities are anaesthetic gases, inhalers and remote monitoring

The SE ARCs and the AHSNs are collaborating, and we will explore how we may be able to support the regional team in evaluation of new clinical models.

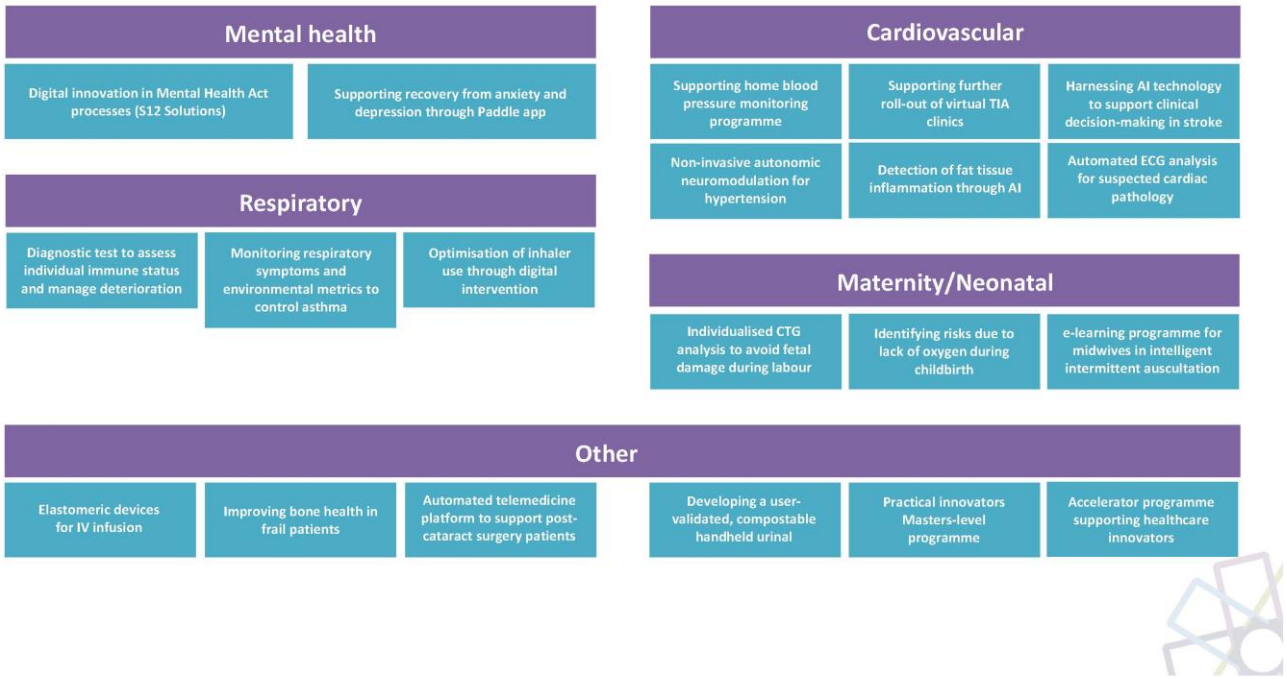
The national programmes are summarised in the graphic below:



Our principle local programmes are summarised in the following graphic:

Locally commissioned work 2021/22: clinical focus areas

Oxford Academic Health Science Network



Environmental sustainability – *NHS Net Zero*

In 2020/21 we appointed a lead for Environmental Sustainability who has been working with leaders in the Thames Valley and with AHSN and Greener NHS colleagues nationally. We have also been very active in developing the AHSN Network Community of Interest focused on environmental sustainability and a strategy paper. Environmental sustainability is also included in the AHSN Network Strategy.

The NHS Net Zero report requires both the AAC and AHSNs to support the future development and adoption of environmentally sustainable technologies through ensuring that:

- All national innovation support programmes make the environmental impact of products and services part of the application process.
- Sustainability is embedded in assessment criteria and decision-making processes for all innovation programmes by the end of 2020.
- AHSNs' business processes include net zero as a matter of course and develop a Network wide ambition and look at ways of working to promote the drive to reach net zero
- Innovations that support the push for Net Zero are specifically considered and identified by the Accelerated Access Collaborative.

Our focus will be on:

- Sharing best practice through a series of online shared learning events
- Influencing policy makers to enable uptake of environmentally friendly innovations
- Calculating the environmental impact (positive and negative) of our main interventions
- Working with innovators to facilitate uptake of innovations that will support the NHS net zero target.

Finance

Total income is budgeted to be £5.3m with planned expenditure of £5.3m; 78% being direct programme costs. Commissioner income of £4.1m is flat once the £0.2m carry over for patient safety is factored in. Partner contributions are planned to be £0.3m, unchanged from last year. Third party income of grants and commercial income is planned to be £0.9m, similar to last year.

Risks

The most significant risk to delivery is the reorganisation of CCGs which may impact innovation adoption in primary care.

Dr Paul Durrands, Chief Operating Officer

Governance

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	Julie Hart	Simon Greenstreet, Head of Communications, Bayer UK, and Ireland
Research and Development	Gary Ford	Joe Harrison, CEO Milton Keynes University Hospital
Community Involvement and Workforce Innovation	Siân Rees	Co-chairs: Minoo Irani, Medical Director, Berkshire Healthcare and Karen Owens, Public Co-chair

Gary Ford chairs the AHSN Network and is also the Network's CVD lead. Paul Durrands is a member of the AHSN Network Operations Group, the AHSN Network Governance Review 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. Matthew Lawrence represents Oxford AHSN on the AHSN Network Commercial Directors group. Sian Rees co-chairs the AHSN Network Patient and Public Involvement group. Guy Rooney chairs the AHSN Network Clinical Leaders group. Amy Izzard, Emma Fairman and Martin Leaver are, respectively, part of the AHSN Network HR, Finance and Communications groups.

Gary is on the BOB ICS Senior Leaders Group and on the board of Oxford Academic Health Partners.

Patient Safety and Clinical Improvement

The Patient Safety and Clinical Improvement team (which encompasses the Oxford Patient Safety Collaborative) uses a blended approach to improvement, responsive to the needs and requirements of the upcoming work. For example, we use supported QI coaching to facilitate team or area improvement cycles where development, measurement and testing is required at a small scale. We use a supported network approach to develop improvement in multiple sites in the same speciality or theme, or to encourage broader sharing of learning and best practice. This helps develop a healthy safety culture across boundaries and facilitating adoption and spread at pace. We also work with multiple stakeholders, including patients and families, to develop system level changes based in quality improvement methodology that would not be possible in isolation, for example, when there are issues in referral pathways between providers. As a result of this, we have good engagement with a wide range of stakeholders who we have worked with in a variety of ways, giving us a supportive platform to continue with the coming years work. Over the last period we have built strong links with the South East NHSE/I Regional Team as key stakeholders and have worked to effectively maximise resources with our colleagues in KSS and Wessex, who make up the rest of the South East region. We plan to use this approach when appropriate through the next period of activity.

Networks

As part of our work, we are facilitating several clinical or patient safety networks which include key stakeholders from across the Oxford AHSN region-

- **Deterioration** – led by Mr Andrew Brent, Consultant in Infection & Medicine, Clinical Lead for Infectious Diseases & Sepsis, Oxford University Hospitals
- **Care Homes** – in development
- **Mental Health Safety** – in development
- **Maternal and Neonatal** – led by Mr Lawrence Impey, Consultant in Fetal Medicine, Oxford University Hospitals, Meena Bhatia, Consultant Obstetrician & QI Lead, Oxford University, Michelle East, Consultant Midwife, Buckinghamshire Healthcare NHS Trust and Anda Bowring, Advanced Neonatal Practitioner, Oxford University Hospitals
- **Anxiety and Depression** – led by Professor David Clark, Chair of Experimental Psychology at the University of Oxford

Cross cutting themes

The following themes form a vital part of all our improvement work. For example, we are working closely with the CIWI team to review the health inequalities implications of projects, concentrating initially on Mental Health and Respiratory and Maternity, including effective patient involvement and looking at workforce implications of our work

- Addressing inequalities
- Patient and Carer Co-design
- Safety Culture
- Improvement Leadership
- Building Quality Improvement Capacity and Capability and Workforce development

- Insight into emerging improvement and innovations

Our current and planned activity follows

Deteriorating Patient Safety Improvement Programme – National (Deploy)

***NEW* Identification of deterioration in Children**

Aim is to support the testing, spread and adoption of the national acute Paediatric Early Warning Score (PEWS) and a system-wide paediatric observations tracker for children across all appropriate care settings. Activity to include

- Test and evaluate PEWS in at least 2 acute in-patient settings by July 2021.
- By September 2021, develop a local adoption and spread plan for increased adoption of the acute in-patient PEWS and ED aligned system and implement in at least 90% of appropriate acute settings by March 2023.
- Adoption and spread of a common primary care system aligned to PEWS for managing the deterioration of children in at least 80% of appropriate non-acute settings by March 2024.

For 2021/22, testing of PEWS will be with Frimley Health

Managing Deterioration in non-acute settings

Aim is to support an increase the adoption and spread of appropriate deterioration management tools, reliable personalised care and support planning (PCSP) and tools and approaches to support Learning Disabilities, Mental Health and Dementia care management in relation to deterioration in at least 80% of appropriate non-acute settings across health and social care by March 2024. This includes

- Delivery of phased adoption of deterioration management tools and approaches across non-acute settings - in care homes to include at least 60% local coverage by March 2022 and more widely 80% of non-acute settings by March 2024
- *NEW* Delivery of review and testing of Personalised Care and Support Plans (PCSPs) in non-acute settings by September 2021, and phase adoption - in care homes to include at least 60% local coverage by March 2022 and more widely 80% of non-acute settings by March 2024.
- Delivery of review, testing and phased adoption of specific tools and approaches in care homes to support deterioration management in relation to dementia, mental health, end of life care and learning disabilities to include at least 10% local coverage by June 2021 and 60% local coverage by March 2022.

For 2021/22 work will be with care homes across the region, starting predominantly with Buckinghamshire

Maternity and Neonatal Safety Improvement Programme – National (Discover/Deploy)

The overall aim of this workstream is to contribute to reducing the national rate of preterm births from 8% to 6% and reduce the rate of stillbirths, neonatal death and brain injuries occurring during

or soon after birth by 50% by 2025. Includes existing **Maternal and Neonatal Patient Safety Network.** Work is divided into main aims -

Support the spread and adoption of the preterm perinatal optimisation care pathway across England by 95% or greater by March 2025

- To support an increase in the proportion of babies (less than 27 weeks' gestation) born in appropriate care setting for gestation to 95% or greater by March 2023.
- To support an increase in the proportion of eligible women (less than 30 weeks' gestation) receiving antenatal administration of magnesium sulphate (MgSO4) in the 24 hours prior to delivery to 95% or greater by March 2022.
- *NEW* To support an increase in the proportion of women less than 34 weeks with threatened preterm labour receiving a full course of antenatal corticosteroids within one week prior to delivery to 95% or greater by March 2023.
- *NEW* To support an increase in the proportion of women in threatened preterm labour (less than 34 weeks gestation) who receive a dose of appropriate intravenous antibiotics within six hours of birth to 95% or greater by 2025.
- *NEW* To support an increase in the proportion of eligible preterm babies (less than 34 weeks' gestation) who receive delayed cord clamping at the time of birth to 95% or greater by 2025.
- *NEW* To support an increase in the proportion of preterm babies (less than 32 weeks' gestation), who have measured normothermia (temperature between 36.5- 37.50C) at admission to a neonatal unit, within one hour of birth to 95% or greater by 2025.
- *NEW* To support an increase in the proportion of preterm babies (less than 34 weeks gestation) who receive maternal breast milk within 6hrs of birth to 95% or greater by 2025.

Managing the prevention, identification, escalation and response to maternal and neonatal deterioration

- *NEW* Working with key stakeholders to support the development and testing of a national maternal early warning score (MEWS) by March 2021 and then the spread to all providers by March 2023
- *NEW* Supporting the spread and adoption of the neonatal early warning 'trigger and track' score (NEWTT) to all maternity and neonatal services by March 2023

Contribute to the national target of increasing the proportion of smoke-free pregnancies to 94% or greater

- Test and scale interventions to increase smoke-free pregnancies.

For 2021/22 the Maternal and Neonatal Safety work will include all acute providers and work closely with BOB and Frimley Local Maternity Systems (LMS)

Intelligent Intermittent Auscultation (local work) (Deploy)

For 2021/22 we will continue the spread and adoption of the innovative and award-winning E-Learning package developed by the PSC and clinical colleagues at OUH, RBH and the University of Oxford using simulation of fetal heart sounds for training and assessment of midwives - aiming to

improve the identification and escalation of deterioration of babies in normal labour. This includes promotion of the package across England and internationally.

Medicines Safety Improvement Programme – National (Discover/Deploy)

This programme aims to reduce medicine administration errors in care homes by 50% by March 2024 and reduce harm from opioid medicines by reducing high dose prescribing (>120mg oral Morphine equivalent), for non-cancer pain by 50%, by March 2024. Includes the development of a **Care Homes Patient Safety Network.** The programme includes testing interventions that have demonstrably improved patient safety in care homes and have shown the potential to be implemented at a national scale in order to improve the safety of medicines administration, such as

- Safety huddles
- Learning from things that go wrong
- Managing interruptions
- 3-way communication

It also aims to identify existing interventions that have demonstrably reduced the prescribing of opioids for chronic non-cancer pain without increasing the risk of harm to patients from other causes and have demonstrated the potential to be delivered at a national scale.

For 2021/22 this programme will include key stakeholders from across the region and an incremental spread across individual care homes as appropriate.

Respiratory – National (Deploy)

Asthma Discharge Care Bundle

NEW Supporting an increase in the proportion of patients in acute hospitals receiving every element for which they are eligible of the BTS Asthma discharge care bundle to 80% by March 2023.

This includes

- Assessment of inhaler technique
- Review of medications
- Medication adherence discussed
- Personalised asthma action plan issued/reviewed
- Addressing tobacco dependency
- Appropriate follow up arrangements

For 2021/22 this work will include all acute providers across the Oxford AHSN region

COPD Discharge Care Bundle

Supporting an increase in the proportion of patients in acute hospitals receiving every element for which they are eligible of the BTS COPD discharge care bundle to 80% by March 2022

This includes

- Inhaler technique assessed with the patient prior to discharge

- Provision of written information on discharge
- Provision of medication rescue packs on discharge
- Patient assessed and offered referral to stop smoking services if a current smoker
- Patient assessed for suitability for enrolment into a pulmonary rehabilitation programme
- Appropriate post discharge follow up arranged within 72 hrs

For 2021/22 this work will include all acute providers across the Oxford AHSN region

Mental Health

Mental Health Safety Improvement Programme – National (Deploy)

***NEW* Reduce suicide and deliberate self-harm in inpatient mental health services, the healthcare workforce and non-mental health acute settings**

- Test and scale interventions to reduce the number of incidences of absence without official leave (AWOL) in participating organisations
- Test and scale interventions to reduce suicide and deliberate self-harm whilst on agreed leave.
- Undertake initial testing, further testing (prototyping) and scale up if appropriate interventions are identified through the National Collaborating Centre for Mental Health (NCCMH) scoping work around suicide and deliberate self-harm in non-mental health acute hospital settings.
- Undertake initial testing, further testing (prototyping) and scale up if appropriate interventions are identified through the NCCMH scoping work around risk of suicide of staff working within the healthcare system

***NEW* Reduce restrictive practice in inpatient mental health and learning disability services**

- Further test (prototype) and scale up interventions that reduce the number of incidences of restrictive practice in participating organisations.

***NEW* improve sexual safety in inpatient mental health and learning disability services**

- To test and scale interventions to improve the sexual safety in staff and patients in participating organisations.

For 2021/22 this work will include all Oxford Health NHS Foundation Trust, Berkshire Healthcare NHS Foundation Trust and partial support to CNWL of their Milton Keynes site. We are also supporting these Trusts to join the South of England Mental Health Collaborative to access wider resources and opportunities for shared learning.

Focus ADHD – National (Deploy)

We are working with mental health trusts and community paediatric services to improve the assessment process for Attention Deficit Hyperactivity Disorder (ADHD) using computer-based tests (measuring attention, impulsivity, and activity). ADHD is neurobiological – a disorder of brain development that impacts on behaviour, affecting around 5% (1 in 20) of school aged

children. ADHD is a treatable disorder yet if left untreated, can have significant impact on personal development, academic outcomes, and family interaction.

The anticipated outcomes for this work include

- To increase in the number of children and young people who have an objectives assessment as part of the clinical assessment.
- Reduction in time for assessment and decision making (from first referral to decision to diagnose/rule out).
- Reduction in number of outpatient appointments between referral and diagnosis
- Reduction in nurse observation visits in schools
- Improved patient / family satisfaction / experience
- Improved clinician satisfaction and confidence in diagnosing or excluding ADHD

For 2021/22 we are supporting Buckinghamshire services to implement (already in place for Oxford Health ADHD services in Oxfordshire)

Anxiety and Depression Network – Local (Discover/Deploy)

The A&D Network includes all IAPT (Improving Access to Psychological Therapies) services across Thames Valley and Milton Keynes. The overarching objective of the network is to continuously improve patient outcomes and service delivery, working very closely with its active Patient Forum.

This work includes

- **Development and roll-out of the PADDLE app** which has been developed by patients for patients to help them make the most of therapy by storing all related information in one secure location. It can be used during, and perhaps more importantly after, a course of psychological therapy to help people stay well for longer. Aiming for roll-out of Phase 1 across the Thames Valley Oct 2021-Feb 2022
- **Development and production of training webinars and pocket guides for Age UK volunteers/ befrienders and managers** in response to an identified need for additional skills, with an increase in older adults suffering with anxiety/ depression as a result of increased social isolation.
- **Relapse prevention/ staying well after patients have been discharged -** report and recommendations expected Nov 2021
- **Improving Access to Psychological therapies for older adults - t**his work has been significantly impacted by COVID but should recommence this year
- **Psychological Perspectives in Education and Primary Care (PPEPCare)- Children and Young people** - training experienced staff within CAMHs services to deliver training sessions to teachers and others with a focus on increasing confidence in detecting and managing CYP's distress and MH issues.

MH Programme activity – regional and local

In this period, we are working to develop an enhanced programme of activity in mental health, having recruited additional resource to do this across the organisation. We aim to have at least one substantial regional project (South East region), and a number of local projects we are developing in consultation with our key stakeholders in order to be responsive to local needs and requirements.

Clinical Innovation Adoption

We deliver adoption of innovation in the Oxford AHSN region through systematic methods brought about by the introduction of national programmes for AHSNs and local proactive activities. We work in local, regional and national networks such as Meds Optimisation, CVD and Respiratory to enable uptake of innovative products, services and practices in the NHS.

Collaborations that the CIA team will develop further during 2021/22:

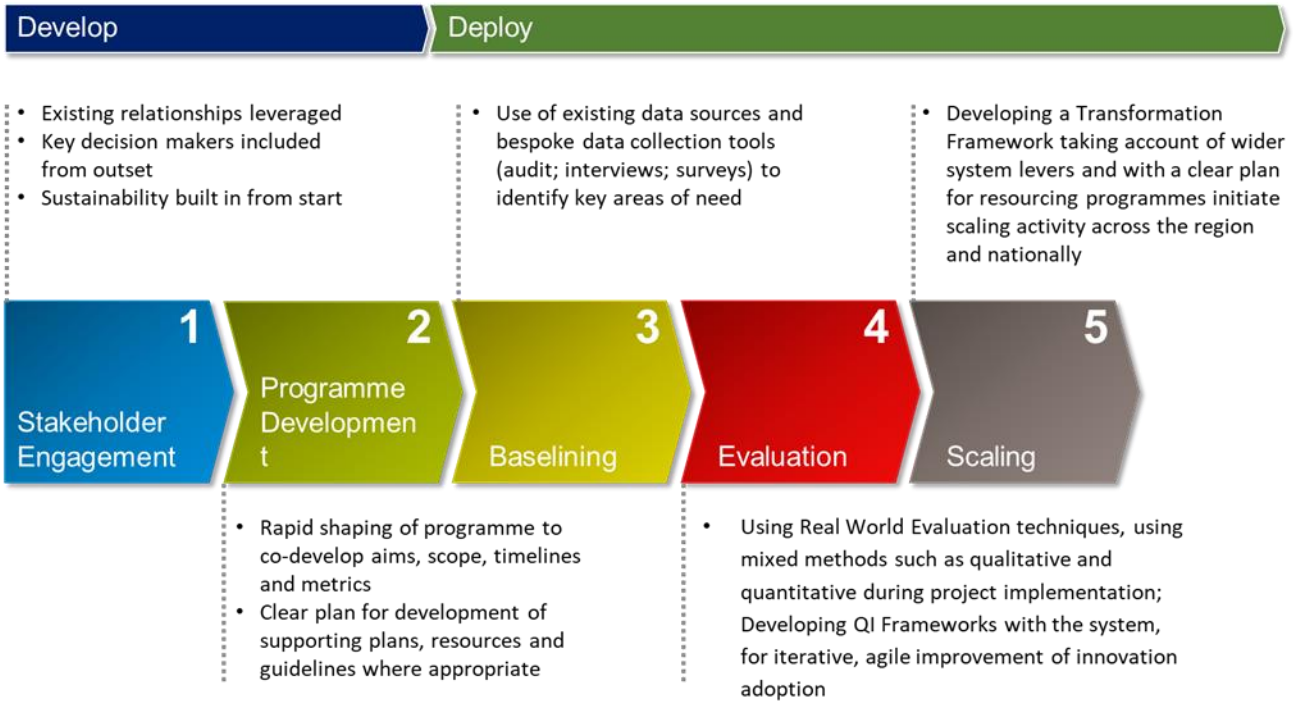
- Sleepio (CIA Led) was one of six regional projects implemented collaboratively with KSS and Wessex AHSNs resulting in contract discussions with a CCG.
- Cross boundary programme coordination with complex system arrangements (BLMK ICS – FeNO, CVD
- Nationally, with additionally commissioned activities where our skillset adds value (AI Award NHSx).
- The CIA Director also works closely with the Oxford ARC Director with a jointly appointed Implementation Manager (50:50 CIA/ARC) and the University of Oxford ARC Theme Leads, to influence research to incorporate forward planning in their research designs for NHS "best fit".
- The CIA team has a close, stable team, with a skill mix of industry/consulting, transformational projects, charity experience, mental health, hospital management, commissioning, medical and pharmaceutical backgrounds, research (academic and scientific), evaluation and analytical capabilities.

The methodology for innovation adoption is evolving, moving from the 10-step process where many local or Oxford AHSN regional drivers to a more blended national/South East regional approach that involves wider engagement across the region and country, contributing to rapid shaping and implementation of national programmes and incorporating baselining through benchmarking activities, and real-world evaluation using mixed methods such as quantitative and qualitative analysis. This more agile approach enables the development of Transformation Frameworks that can be shared quickly and widely (AI Stroke Technology, Respiratory, CVD national network links).

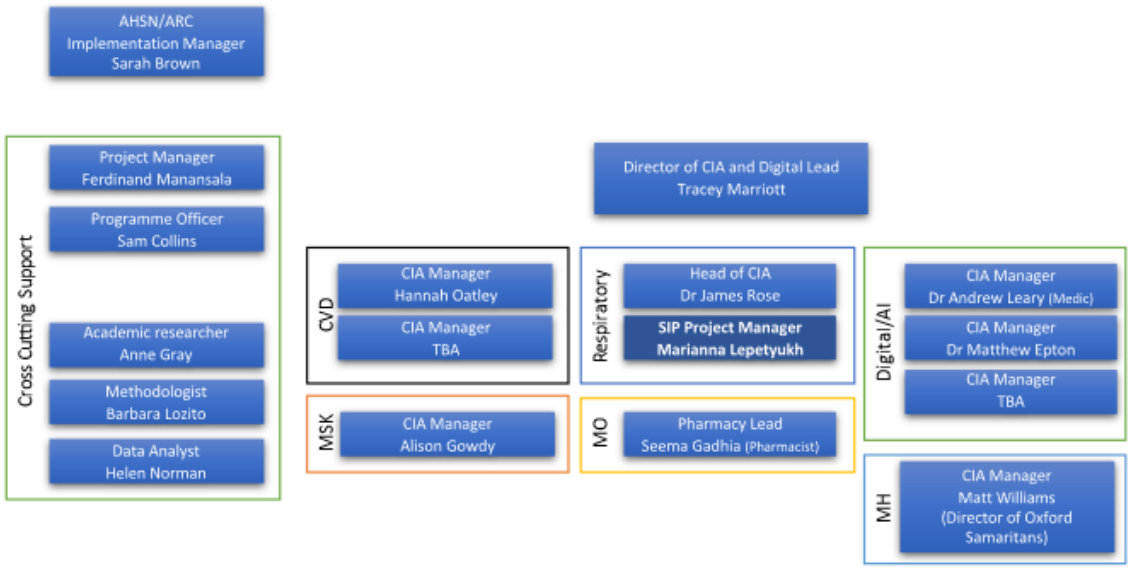
Over the next year we will:

- Deliver on the national, regional portfolio (24 open projects being delivered by 13 individuals plus two secondees: An Academic Researcher, Anne Gray, accessible for all the AHSN, and a Methodologist specifically supporting CIA evaluation activities (Barbara Lozito).
- We will focus on population health inequalities with the support of the Community involvement and Workforce Innovation Team (CIWI).
- Seek new NHS commissioning opportunities and collaboration with industry.
- Continue to extend collaborative activities with other AHSNs across ICSs and the SE Region
- Incorporate digital solutions to improve the quality of every aspect of care delivery
- Regarding workforce, we will investigate how the Innovation Course (300 attendees to date) can be sustained and extended across the region.
- Continue to listen and respond to support the local and SE region in the development of projects of impact, as new governance arrangements emerge.
- Work with the Oxford ARC to build strong reciprocal knowledge sharing.

Methodology



THE CLINICAL INNOVATION ADOPTION TEAM



Acronyms: ARC – Applied Research Collaboration; CIA Clinical Innovation Adoption; CVD Cardiovascular Disease; MH – Mental Health; MO Medicines Optimisation; MSK Musculoskeletal conditions

CIA pipeline

Clinical Area	DEVELOP (Local/Oxford AHSN Region/SE Region		DEPLOY (National)		DEPLOY (Local/Oxford AHSN Region/SE Region/Commissions
CVD	Heart Failure	C	Lipid management pathway (NHSEI)	C	
	Hypertension - build on work from 2020/21 (monitoring pack developed and shared with Practices)	N	Familial Hypercholesterolaemia (FH) diagnosis programme (NHSEI)	N	
	Atrial Fibrillation - working with GIRFT to further develop guidance for targeted AF detection	C	FH pathway mapping (NHSEI)	C	
	Targeting diabetes patients to identify CVD risk (links to FH and AF).	N	Improving High Intensity Statins (HIST), PCSK9i, Ezetimibe uptake. (NHSEI)	N	
RESPIRATORY			Asthma Biologics (AAC-RUP) FeNO (AAC-RUP)		
MEDS OP	Aseptic Management	C		C	Meds Optimisation - Opioid
	Osteoporosis (Fraility)	C			
	Elastomeric devices - early discharge	C		C	Electronic Repeat Dispensing (eRD)/links with Workforce
	Study to Evaluate Structured Medication Reviews	N		N	Polypharmacy Action Learning Sets
CANCER	Population Management	E			
MENTAL HEALTH			FREED (NHSEI)	C	Sleepio
	Online Support and Intervention for Anxiety (OSI)	E			
DIGITAL	Digital Assessments with industry	E			AI Evaluation Stroke AI SE Region Deployment
	Digital Assessments/evaluation with industry	E			AI Evaluation for NHSX Brainomix AI Ward - UK
	Digital Assessments/evaluation with industry	E			
	Seek funding to develop/further implement a local tried/tested digital support tool				
WORKFORCE					Practical Innovation Adoption and Change Management MSC Course
INDUSTRY					Market Access Platform eMAPS(EIT Health funded - USA, Germany, Portugal, Italy & other modules, promotion)
OTHER	2 projects to be agreed across the SE Region for deployment aligned to priorities	E	2 of the 3 new national projects will be managed by CIA	N	

C = continuing/N = new/E = exploring

Cardiovascular Disease

Lipid Management, Familial Hypercholesteremia (FH), Lipid Lowering Therapies are National NHSE Commission and AAC RUP:

- The national CVD programme consists of **Familial hypercholesterolaemia** diagnosis which will include primary care searches and child-parent screening.
- **Lipid management** includes primary care database searches and medicines optimisation and the RUPs (high intensity statins, ezetimibe, PCKSK9i)).
- **Hypertension** is yet to be fully defined but likely however, regional work taking place on blood pressure that may be taken up nationally.

This CVD programme addresses issues in lipid management in primary and secondary care. Local pathway development and improvement activity through the well-established network of CVD stakeholders in the Thames Valley which will now include BLMK CCG from May 2021. Activities around FH management and NHSE England funded pathway transformation in Buckinghamshire and Berkshire West will also be delivered over the next year.

The national targets for our region are as follows:

Metrics 2021/22 – Lipid Management			
	START	**END**	**METHODOLOGY**
HIST (patients)	119,858 (58%)	126,944 (63%)	5% increase
Ezetimibe (patients)	16,162 per quarter	17,293 per quarter	7% increase
PCSK9i (patients)	271 per year	464 per year	71% increase

Atrial Fibrillation – we will continue work on identifying patients in the Oxford AHSN region.

Stroke: The CIA team is an active member of 5 Integrated Delivery Stroke Networks (ISDN). These include TiTaN Thames Valley, SW Peninsula, Kent, Medway & Sussex, London Central & NE, and Greater Glasgow & Clyde. We have also been invited to participate in the Frimley & Surrey Heartlands ISDN. There is a massive drive to further improve stroke services with focus on Mechanical Thrombectomy service development. In addition, we are involved with local and regional CVD leads within ICS, CCGs, PCNs and hospitals.

Respiratory - **Asthma Biologics and FeNO (AAC RUP): National**

Metrics 2021/22 – Respiratory		
	METRICS	**SUB METRICS (no numbers set as dependent on baseline findings).**
Asthma Biologics	80 additional patients treated	• Reduce waiting times. • Reduce no. of patients on Oral Steroids. • Increase the no. of patients converted to Homecare.
FeNO testing	Increase the number of machines being used in the Oxford AHSN Region by 8.	• AHSN activity to increase the number of mouth pieces used by 1077.

The CIA Team leads on this programme nationally: led by Tracey Marriott (Director) and Dr James Rose (Heading of CIA), Seema Gadhia (Pharmacy Lead) and Marianna Lepetyukh (SIP team Project Manager) and supported by members of the CIA team leads nationally from an AHSN perspective of the AAC Asthma Biologics Rapid Uptake Programme. This project focuses on improving severe asthma care nationally, through developing tools, resources to support local pathway development. Oxford AHSN will continue to play a lead role on this programme, in shaping work across identified key priority areas.

Respiratory/ Asthma*:* Through the nationally commissioned projects in respiratory the CIA team has bought together key stakeholders involved in asthma care. This network includes tertiary, secondary, primary care and commissioning stakeholders, aligning on key initiatives to improve identification, management, and referral of uncontrolled asthma patients.

This programme has some overlap with FeNO testing, led nationally by Wessex AHSN; we work closely with our AHSN colleagues, providing joint knowledge sharing adoption sessions to the other AHSNs.

During 2021-22

The CIA team will continue work with the Accelerated Access Collaborative (AAC) to:

- develop National benchmarking frameworks to support AHSN engagement with local teams and to highlight areas of variation in practice around severe asthma care.
- build national programme dashboards to support stakeholders to understand progress against key metrics (NHSBSA Respiratory oral steroid dashboard, NHS Asthma Biologics Homecare dashboard)
- support AHSNs to develop local asthma improvement plans with data, tools and resources
- shape Pathway Transformation Funding projects to develop Vanguard models of care nationally.
- design and develop novel home monitoring solutions for Asthma Biologics users, that will collate data on outcomes, asthma control, quality of life and interface with the Severe Asthma registry.

The Oxford AHSN team will continue work with the SE regional asthma network to develop an integrated care pathway across tertiary, secondary, and primary care for uncontrolled and poorly controlled asthma patients. This work is being bought together through close collaboration with the Oxford AHSN PSC work ongoing around BTS asthma discharge bundle adoption and, also CIA work on scaling access to FeNO testing across the Thames Valley.

SE regional Impact for increased uptake of Asthma Biologics is estimated at 100 additional patients.

Mental Health

As many programme activities require clinical innovation adoption activities, we coordinate and collaborate with the Oxford AHSN MH team (under PSC Programme) to determine where projects are best suited to be delivered. During 2021, the following will be managed by CIA:

First Episode Rapid Early Intervention for Eating Disorders (FREED) – National

FREED is an innovative, evidence-based, specialist care package for 16- to 25-year-olds with a first episode of an eating disorder of less than 3 years' length. The approach aims to overcome barriers to early treatment and recovery and provides highly co-ordinated early care, with a focus on reducing the duration of an untreated disorder. It consists of a service model and care package to reduce waiting times for assessment and treatment and address some of the issues commonly faced by young people with an eating disorder as they move from children's services and begin their adult life (employment, university and leaving home).

We will continue to support Berks, Bucks (already appointed Champions) and Oxfordshire (post their FREED Champion appointment) by providing training, information, and connections across these counties and acting as the conduit with the Health Innovation Network and the FREED Network (based at SLaM).

Working with colleagues in the Eastern AHSN and BLMK ICS, we will explore the opportunities for Milton Keynes to become FREED ready, possibly with Bedford and Luton's Eating Disorders Services widening their scope to include MK. Monitoring progress will include completion of the FREED tracker and submitting the data about patients who are placed on the FREED pathway. This includes Equalities and Diversity monitoring as well as encouraging service co-design with service users. A key part of creating robustness in this system is to provide ongoing training and updates for FREED Champions and those involved in Eating Disorders services by co-ordinating the SE FREED Support Network and engaging in other regional and

national workshops, conferences, and webinars. Key quality improvement activities will include working with FREED teams to explore ways to improve the referral pathway for patients potentially eligible for FREED with Primary Care and FE and HE Colleges/Universities and exploring with FREED colleagues, the potential for developing digital offers or support for patients, particularly around CBT-ED and other potential innovations in this space.

Sleepio – SE Region

Based on the work undertaken as part of the SE3 project, establish a Task and Finish Group to explore the potential for commissioning Sleepio across the South East Region.

There is potential to position Sleepio as a method to support University Students for wider rollout in the SE, building on the mental health in higher education work commenced by KSS colleagues. We will explore potential opportunities to use Sleepio to address medicines optimisation across the SE Region and other opportunities that may arise within the workforce and digital health agenda. We will continue to support National Institute for Health and Care Excellence (NICE) with their evaluation of Sleepio as part of their Medical Technologies Evaluation Programme.

Online Support and Intervention for Anxiety (OSI)

This is an ARC project. OSI is a treatment-supported, parent-led cognitive behavioural treatment (CBT) for 5–12-year-old children with anxiety disorders; It consists of a parent website, a clinician case management system, and a game app for children. This will be supported by CIA over the coming year, as it is partially in use already but requires some support to launch fully.

Medicines Optimisation

Through the Oxford AHSN connections with medicine optimisation leaders across the Oxford Region, support is planned for several initiatives that will transform the role of pharmacy and medicines optimisation in the new system models of care. This will include:

Aseptic Services Transformation:	**Structured Medication Review:**
With Aseptic services under strain across BOB and Frimley ICS, the Oxford AHSN is supporting stakeholders to conduct a review of aseptic / ready-to-administer medicine services to identify future operating models over the next 12 months. Activity will include desk-based research, interviews with pioneering stakeholders in this space, and finalising with a series of workshops. The MO Network are considering a single model approach across both ICSs following the Carter Review. This is supported and of interest to the Regional Chief Pharmacist for SE Region, Sue Ladds. The ICSs have decided to make a start on planning prior to the anticipated funding due to arrive within this financial year.	To assess the effectiveness and impact of recently commissioned structured medication reviews, the CIA Pharmacy lead, Seema Gadhia is supporting a consortium led by Prof Richard McManus at the University of Oxford. This is part of the collaborative work between the Oxford AHSN and the ARC.
Electronic Repeat Dispensing (eRD)	**Opioids**
This is being delivered by Oxford, Wessex, South West and, KSS AHSNs. The overall aim of the programme is to increase the conversion of patients onto eRD, reducing GP practice staff time involved in the administrative task of issuing repeat prescriptions. All GPs have access to eRD however, usage is variable. There are no national or regional targets however, the Oxford AHSN Region averages 12% against the national uptake of 13%.	This initiative for safer prescribing of opioids is a PSC Medicines Safety Improvement Programme. CIA's pharmacist supports PSC with local partners to reduce high dose prescribing for non-cancer pain by 50%, by

	March 2024.
Osteoporosis – Development of a Primary Care Patient Search Tool/Local QI project	
Osteoporosis (Bone Health Project - Fragility): This local project aims to improve management of patients with osteoporosis. One of the barriers for this project has been the need for a clinically approved search tool for primary care; the alternative is for primary care searches through 3rd party commissioned contractors which is costly. The CIA team has coordinated University of Oxford research clinicians and PRIMIS to produce a tool. During 2021-22, we will work with a up to 10 GP Practices to test the case-finding tool, development of supporting materials, schedule workshop with pharmacists and patients to discuss supporting materials, conduct searches and support appropriate treatment procedures.	

Significant efforts have been put into engagement and support for development of a pharmacy and medicines optimisation network across the BOB and Frimley ICS. Through supporting leadership training and successful collaboration, the Thames Valley Medicines Optimisation network provides a source for potential innovation and improvement ideas to feed the 'discovery' element of the pipeline whilst providing assurance for delivery and monitoring of "deployment" projects.

Digital

The CIA Director is also the Digital Lead for the AHSN and is working with the other programmes to consider how the different elements of the AHSN's digital offering may extend over the coming year linking in with the "discover, develop and deploy" process. In addition to the osteoporosis search tool, the CIA Team has several digital and AI activities that include exploring opportunities to use the Connected Care Population Management Data information. We are working with Frimley CCG to identify patients at risk of lung cancer for proactive management. This activity is also of interest to the Thames Valley Cancer Alliance. The data has the potential to identify groups of at-risk patients from other therapeutic areas.

The team will also conclude on the SE AI Evaluation report and continue with the AI Award commission that specifically requires more in-depth evaluation of the AI decision support tool, Brainomix. The AI Award evaluation will provide national information on how the technology is being implemented and used in Trusts, its effectiveness, accuracy, safety, and value. It will be one of few examples, of how complicated evaluation activities can be done whilst implementing at scale in complex pathways.

There also apps being evaluated or clinician-patient monitoring and management within Stroke and Respiratory pathways.

Oxford Applied Research Collaborative (ARC)

CIA Director and Oxford AHSN's CEO work closely with Oxford ARC to convert research into practice and to stimulate research topics closely aligned with NHS objectives. This has been a very successful collaboration to date, with projects already being put forward for the National Insights Prioritisation Programme ((NIPP) previously known as Beneficial Change Network (BCN)). Examples of activities include BP hypertension (which may become part of the new AHSNs National Programmes) and Children & Young People digital technologies being prepared for use in the NHS. It is expected that this work will be further developed during 2021/22.

Strategic and Industry Partnerships

Overview

Under the leadership of Director of Strategic and Industry Partnerships Programme, Julie Hart, and day-to-day management by Guy Checketts, the activities of the Strategic and Industry Partnerships Programme in 2021/22 will deliver the Innovation Exchange model and its four core functions. The key strength of the Strategic and Industry Partnerships programme is the real-world evaluation and adoption of diagnostics. More than 100 trusts have now adopted suspected pre-eclampsia testing which originated from a collaboration between Oxford AHSN, Roche Diagnostics and Oxford University Hospitals NHS Foundation Trust.

The aim of the Strategic and Industry Partnerships Programme is to support the development of strong partnerships between academia, industry, and the NHS. The Office for Life Sciences Commission provides extra funding for the Strategic and Industry Partnerships programme to increase its capability and capacity, to support the evaluation and diffusion of innovative technologies. During the Discover phase, innovative technologies will undergo robust due diligence before moving into the Develop and finally the Deploy phase. Deployment could be as part of our own programme, another Oxford AHSN programme or as a future national or regional programme. Examples being Mendelian who were part of our first Accelerator cohort (Discover phase). MendelScan will undergo real world evaluation in 2021/22 (Develop phase). Releaf2 has gone through Discover and is in Develop phase currently, we have an objective to move Releaf2 into local deployment by the end of the financial year. The Strategic and Industry Partnerships Programme is also leading an initiative to quantify the positive environmental impact and sustainability benefits of AHSN projects in addition to the patient, financial, capacity and pathway benefits of AHSN-led projects.

Methodology

The Strategic and Industry Partnerships Programme uses its Lean Assessment Process (LAP) methodology to assess healthcare technologies at the early stages of development. This helps support manufacturers in deciding and refining the direction of development for their healthcare technology. Reference: The Lean Assessment Process (LAP) – experiences of NIHR London IVD Cooperative working with early-stage medical technologies. The International Federation for Medical and Biological Engineering (2017). Semi-structured qualitative and quantitative questionnaires capture product perception and individual views about the potential for the technology in the care pathway.

An instrument is used to identify stakeholders, who might use the technology, in terms of their importance and influence adapted from “World Health Organization (2005). Health service planning and policy-making: Module 2: Stakeholder analysis and networks”. A standardised questionnaire on perceived usefulness of technologies is adapted from Davis, Fred D. (1993). User acceptance of information technology. Questions to assess interviewees intention to promote the use of the healthcare technology (Net Promoter Score) is adapted from Reichheld, FF. (2003). Harvard Business Review 1(12):46-54, 124.

Function 1 - Identify need and communicate demand (Discovery)
Core Function Lead – Dr Mamta Bajre – Lead Methodologist

The Market Access team will help innovators understand healthcare needs and priorities and the evidence requirements for new medicines, medical technologies, diagnostics, and digital/AI products 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.

CVD 0.5 WTE (Lauren Hudson)

Artificial Intelligence: Cardiometabolic Risk Evaluation using CT (Funded by NIHR AI Award)
Caristo Diagnostics is a new technology company associated with the University of Oxford. FatHealth, detects fat tissue inflammation using new artificial intelligence techniques applied to routine computed tomography ('CT') scans. FatHealth can identify people who may be at risk of developing diabetes, and people with diabetes who are at high risk of death from cardiovascular disease. Partners: University of Oxford, Leeds Teaching Hospitals, Milton Keynes University Hospital NHS Foundation Trust

Medical Device: Autonomic neuromodulation using trans-cutaneous vagal stimulation in uncontrolled hypertensive patients (Funded by NIHR i4i PDA)
Afferent Medical Solutions have developed a novel solution for treatment of hypertension involving non-invasive autonomic neuromodulation achieved by transcutaneous electrical stimulation of auricular sensory innervation, tAN. Afferent's Proof of Concept study showed significant reductions in 24-h ambulatory BP following a course of tAN treatment in patients with drug-resistant hypertension, also leading to a reduction in the number, and doses, of anti-hypertensive medications taken in patients with uncontrolled arterial hypertension. Partner: Queen Mary, University of London

Respiratory 1.0 WTE (Florence Serres) 0.25 WTE (Lauren Hudson) 0.4 WTE (Julie Hart)

Diagnostics: IMmune Profiling of ICU Patients to address Chronic Critical illness and ensure healThy ageing (Funded by EIT Health)
Biomerieux SA have developed the Immune Profiling Panel (IPP), a diagnostic test based on a panel of biomarkers that can assess a patient's immune status. The test gives ICU clinicians information about the immune status of ICU patients and risks of deterioration. Using this information doctors can give personalised care, including preventative measures and specialised treatments. The impact we can expect includes shortened ICU stays, improved patient recovery and limited antibiotics use. Partners: Imperial College London, University of Oxford, Assistance Publique - Hôpitaux de Paris, Karolinska Institutet

Artificial Intelligence: Prediction and prevention of Asthma attacks in Children (Funded by NIHR AI Award)
BreatheOx Limited is medical technology spinout company from the University of Oxford who have developed a small non-contact table-top device that monitors respiratory symptoms and environmental metrics without the patients having to do or wear anything. Early recognition and management of deteriorations in asthma control can prevent attacks and emergencies. Partners: Imperial College London, Asthma UK, Birmingham Women's and Children's NHS Foundation Trust

Mat Neo 0.25 WTE (Lauren Hudson)

Artificial Intelligence: Decision-support for individualised risk assessment of fetal health during labour (Funded by NIHR i4i PDA)
This University of Oxford project will provide an innovative, data-driven system for individualised CTG analysis to enhance clinical decision-making and avoid foetal damage during labour. The intelligent data analysis software (OxSys) will provide computer-based, real-time estimates of oxygen deprivation risks during labour. Partner: University of Oxford

Function 2 – Signpost and support innovators (Discovery)
Core Function Lead - Matthew Lawrence – Head of Industry and Innovation

The Industry and Innovation team will provide the AHSN universal support offer to innovators without any entry/eligibility requirements.

- Assess an innovation's value proposition with the innovator and identify any areas that require development to access the NHS marketplace
- Provide tailored advice and guidance on sources of support that could aid an innovator's development of the value proposition
- Develop innovators understanding of national and local NHS needs and challenges, the NHS as a system and as a marketplace
- Communicate the opportunities available to innovators and companies to help the development of their value proposition

Oxford AHSN Accelerator 0.5 WTE (Matthew Lawrence) 0.5 WTE (Ruby Urwin replacement)

The Industry and Innovation team will focus on helping companies to develop innovative solutions that meet healthcare needs through a corporate-sponsored (target £60,000) Oxford AHSN Accelerator programme (a qualified support offer for innovators), also forming a pipeline of opportunities for the other Strategic and Industry Partnerships Programme core functions. This year we will ask for entrants from six core clinical themes: Mat Neo, Stroke, Respiratory, CVD, Mental Health, Cancer.

Company Support 0.5 WTE (Matthew Lawrence) 0.5 WTE (Ruby Urwin replacement)

The Head of Industry and Innovation will work with the Medical Director of Oxford AHSN to understand and articulate the needs of the local Integrated Care Systems (Buckinghamshire, Oxfordshire, and Berkshire West (BOB), Frimley and Milton Keynes), the local NHS and health and social care providers and commissioners, to identify new opportunities for the evaluation of innovative technologies. The Head of Industry and Innovation will continue to triage incoming opportunities and provide the AHSN universal support offer to innovators (as detailed above), as well as leading our key strategic partnerships such as J&J, Bayer, and Astra Zeneca. Working together with the Head of Communications, the national and local Innovation Exchange websites will be regularly updated, case studies produced and the activities of the Strategic and Industry Partnerships Programme communicated through the dedicated social media platforms. The Industry and Innovation team will support Health Tech Connect and contribute to the development and implementation of the new Innovator Portal.

Portfolio and Pipeline 0.4 WTE (Nadia Okhai) 0.5 WTE (Executive Assistant) 0.1 WTE (Guy Checketts)

The Industry and Innovation team will capture and report the OLS metrics and map the pipeline of local opportunities that exist with our key academic communities such as the Applied Research Collaborative, Oxford Academic Health Partners and the Bayer Life Hub.

Function 3 – Broker Real World Evaluation Opportunities (Development)
Core Function Lead – Ashley Aitken – Senior Programme Manager

The Evaluation programme was originally established in 2016 as the Diagnostics programme and has continued to grow and excel in its evaluation activities of Artificial Intelligence (AI) innovations. 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. Evaluation opportunities will come from our Discover programmes but also from interrogation of the AHSN Network Portfolio Project to find technologies matched to clinical needs.

CVD 0.4 WTE (Mamta Bajre)

Artificial Intelligence: Ultromics, EchoGo Pro (Funded by NHSX Phase AI Award)
EchoGo Pro provides automated analysis of echocardiograms for patients undergoing echocardiographic assessment for suspected cardiac pathology. Through specialised image-based machine learning, EchoGo Pro assists physicians identify heart disease risk rapidly to enable appropriate care. Partner: NCIMI

COVID-19 Recovery and Reset 0.4 WTE (Nadia Okhai) 0.4 WTE (Julie Hart) 0.2 WTE (Guy Checketts)

The NHS is accelerating the delivery of operations and other non-urgent services as part of a £8.1 billion plan to help the health service recover patient services following the intense winter wave of COVID-19. We will evaluate innovations to help treat people with conditions, other than COVID-19, by working with the Integrated Care System we will develop a list of health and care technologies to evaluate that reflect the needs of the local population and address health inequalities. We will work with the Oxford AHSN Community Involvement and Workforce Innovation team to include patients and workforce in our evaluation projects. The following innovations have been identified for consideration.

- Healthy.Io's ACR uses a patient's smartphone to read a urine dipstick to identify diabetes patients at risk of chronic kidney disease earlier (NHSX Phase 4 AI award)
- FebriDx is a point of care pin prick blood test which differentiates between a bacterial or viral infection, when used with patients presenting with general respiratory illness symptoms can guide antibiotic prescribing.
- D-dimer Point of Care testing in Cardiac Outpatients could help improve the turnaround time of patients and allow for more patients to be seen per clinic during (post-) COVID-19 restrictions.
- POC testing for the frail elderly and use of the Clinical Frailty Scale (CFS) app to help health care professionals quickly identify frailty in people over the age of 65, as a reliable predictor of outcomes in the urgent care context.

Genomics 0.2 WTE (Ashley Aitken) 0.2 WTE (Mamta Bajre)

Artificial Intelligence: MendelScan
The Strategic and Industry Partnerships team will evaluate the use of MendelScan which will interrogate patient records in a Primary Care Network (50,000 patients) to flag patients who could potentially have one of twenty rare diseases. Flagged patients will be referred to local NHS Genomics Medicine Service. One key worker in each PCN will be trained in genomics and rare disease management. Identifying rare disease patients sooner will improve patient experience and outcomes and provide cost savings to the NHS. Partner: Buckinghamshire CCG, Central and South Genomic Medicine Service Alliance (CAS GMSA), Wessex AHSN, Health Education England

Respiratory 0.2 WTE (Nadia Okhai) 0.2 WTE (Guy Checketts)

Digital: AZ Turbu+
Turbu+ developed by AstraZeneca is a digital app and smart inhaler. It is designed to optimise inhaler use and to provide asthma patients with information on their medication use via their mobile phone. Asthma UK suggests that smart inhalers could lead to better self-management among people with asthma, reducing the use of inhalers and reducing the need to access healthcare resources. Partners: Modality, Ashfield Nurses

Other 0.4 WTE (Mamta Bajre) 0.2 WTE (Ashley Aitken) 0.2 WTE (Guy Checketts)

Artificial Intelligence: Autonomous Telemedicine (Funded by NIHR AI Award)
This project will develop evidence that will support the safe deployment of Ufonia's automated telemedicine platform to deliver calls to cataract surgery patients at two large NHS hospital trusts. Ufonia proposes to replace routine clinical follow-up with DORA - a natural-language AI assistant delivered via a regular telephone call following cataract surgery. Partners: University of Oxford, Imperial College London, King's College London, Buckinghamshire Healthcare NHS Trust

Medical Device: Development of a sustainable urinary continence management device to help reduce COVID-19 infection risk (Funded by Innovate UK)
This project will complete the development of a user-validated, compostable, handheld urinal. It is designed for elderly and infirm users and those with ongoing urinary continence challenges. Releaf 2 from Binding Sciences Limited enables users who have some degree of voluntary control to urinate unaided when seated, standing, or crouching without the skin coming in to contact with urine. Partner: Buckinghamshire Healthcare NHS Trust

Function 4 - Support adoption and spread of promising innovation (Deployment)
Core Function Leads – Guy Checketts, Deputy Director

This core function will drive the uptake and adoption of innovative Accelerated Access Collaborative (AAC) products aimed primarily at improving patient safety and patient outcomes and giving patients faster access to innovations that can transform their care. We will support the MedTech Funding Mandate (MTFM) products and as future Rapid Uptake Product (RUPs) are announced, the SIP team will support the adoption of these products together with the Clinical Innovation Adoption team.

MTFM	N	SecurAcath	Only MK not adopted	0.1 WTE (Flora Hatahintwali) 0.1 WTE (Ashley Aitken)
	N	Heartflow	Buckinghamshire - Stage 2 - Interest Frimley - Stage 5 - Adoption MK - not applicable Oxford - Stage 4 - Implementation Royal Berkshire - Stage 2 - Interest	0.1 WTE (Flora Hatahintwali) 0.1 WTE (Ashley Aitken)
	C	PLGF	Adoption complete	0.2 WTE (Guy Checketts)

MTFM	N	SecurAcath	Only MK not adopted	0.1 WTE (Flora Hatahintwali) 0.1 WTE (Ashley Aitken)
	N	GammaCore	Buckinghamshire - Stage 5 - Adoption Frimley - Stage 5 - Adoption MK - Stage 1 - Knowledge Oxford - Stage 5 - Adoption Royal Berkshire - Stage 1 - Knowledge	0.1 WTE (Flora Hatahintwali) 0.1 WTE (Ashley Aitken)
RUP	N	Tamoxifen	Early engagement MK lead is Eastern	0.7 WTE (Flora Hatahintwali) 0.4 WTE (Mina Moawad) 0.3 WTE (Ashley Aitken)
	C	Asthma Biologics	Early engagement Reporting into CIA	1.0 WTE (Marianna Lepetyukh) 0.1 WTE (Mina Moawad)

Sustainability 1.0 WTE (Carl Lynch) 0.5 WTE (Mina Moawad) 0.1 WTE (Guy Checketts)

Following agreement by the Chief Officers in March 2021, sustainability is now a feature in the AHSN Network strategy. We continue to establish and grow the AHSN Network Environmental Sustainability Community of Interest (COI) whose work is structured around 4 themes:

- Building a movement by sharing best practice across the AHSN Network
- Working with innovators on products, services and practices that reduce the environmental harm caused by delivering healthcare
- Influencing policy to enable uptake of environmentally friendly innovations (e.g., getting NHS supply chain to take on PeRSo)
- Calculating the impact of our main programmes (e.g., PlGF-based testing)

Key areas of focus going forward are:

- Holding regular share and learn events promoting best practice in environmental sustainability. The events to be jointly branded as AHSN/Greener NHS programme events.
- Innovation – to assist Trusts in meeting their Net Zero targets
- Reducing patient travel – to reduce CO2 emissions and to reduce air pollution.
  Influencing policy – especially in sustainable procurement
- Addressing supply chain barriers to the adoption of innovative and sustainable products
- Reusable PPE
- Reducing waste

The programme plans to evolve the recognition of the environmental benefits of projects using "Sustainability Calculators" in business cases within the AHSN and with our wider regional and national partners' plans.

Summary

Clinical Area	Discover (Local)	N/E	Develop (Local)	N/E	Deploy (National)	N/E	National Scheme
CVD	Afferent*	N	Ultromics*	N	Heartflow	N	MTFM
	Caristo*	N					
Respiratory	IMPACCT*	C	Turbohaler	C	Asthma Biologics	C	AAC RUP
	BreatheOx*	N					
Mat Neo	OxSys*	N			PLGF	C	MTFM
Cancer					Tamoxifen	N	AAC RUP
Other			MendelScan*	N	SecurAcath	N	MTFM
			Ufonia*	N	GammaCore	N	MTFM
			BSL/ ReLeaf2*	C	Sustainability	C	
Industry	Accelerator	C					
	Companies	C					
	Pipeline	C					

Key: N = new for 2021 **C = continued from 2020** *** = Grant /non-OLS funding**

Research and Development

The theme supports collaboration between the NHS and Higher Education Institutes, working with the NIHR and other research infrastructure across the Thames Valley. The theme is led by the CEO, Gary Ford. The Oxford Academic Health Partners (OAHP) 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 group 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 is chaired by Joe Harrison, CEO Milton Keynes University Hospital and Oxford AHSN Board member and has representatives from Universities, NHS Trusts, and NIHR research infrastructure from the AHSN's region. Key points from the revised Terms of Reference are 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
- liaise with NIHR regional infrastructure including the Biomedical Research Centres, Local Clinical Research Network, the Oxford Applied Health Research Collaboration (ARC) and the Oxford MIC to ensure sharing of information and opportunities
- influence the strategy for R&D through engagement with the NHS and academic stakeholders, and particularly in support for the NHS Trust R&D Directors
- share exemplars from across the region
- share information on national policy, local initiatives and events that can benefit the whole R&D community
- provide support, (through the Chairman, AHSN CEO, and other members) to individual organisations or groups of organisations wishing to take forward specific initiatives
- explore opportunities on research skills, education, and training for current and future workforce
- understand the R&D activities and portfolios of individual HEI and NHS organisations.

Megan Turmezei, Senior Programme Manager for OAHP, is supporting the group having attended its inaugural meeting in 2013. The R&D theme will continue its collaboration with OAHP and the ARC on scoping and implementation of the AHSN Network pipeline to understand the pipeline of innovation across the Thames Valley. Work with the ARC is coordinated through Gary Ford as Implementation Lead for the ARC with support of Sarah Brown, ARC Programme and Implementation Manager.

AHSN teams are receiving requests to undertake real world evaluations, including the NHS England SE Regional Team. We will review the evaluation capabilities within Oxford AHSN to identify areas that require development so we can deliver high-quality real-world evaluations particularly for regional initiatives. Planned activities for the coming year include:

- an update on the plans, priorities, and approach of BOB ICS, Frimley ICS and BLMK ICS
- review of Public Health plans for the region
- an assessment on AI capability and update on tech/knowledge transfer capacity across the AHSN with organisation of workshops
- contribution to the OAHP strategic plan and priorities in 2021 and summary of the two Biomedical Research Centre applications

Community Involvement and Workforce Innovation

Introduction

CIWI is a new team within Oxford AHSN.

We provide support to:

- internal AHSN programmes
- other AHSN colleagues regionally and nationally
- our local partner organisations

Health and care innovation is ultimately about people; those who receive care and those who provide it. Considering needs, preferences and values of both patients and staff is essential to successful innovation and sustained adoption of new ways of working and of delivering care. To achieve this, we focus on:

Community Involvement

- helping to understanding population health inequalities and
- helping to develop patient and public involvement and coproduction plans, including understanding what matters to patients and their experience of health and care.

Workforce Innovation

- considering the impact of our programmes on the people who work in health and care and what they might need to support innovation
- considering where innovation maybe needed to support health and care staff, and the organisations they work for, to deliver the highest quality care

In line with other crosscutting themes such as sustainability, we can help by giving advice, working with teams, or carrying out work on their behalf, working across all areas AHSN activities as shown below.

Governance

To oversee the work of the Team we are reconstituting our Oversight Group to cover community involvement and workforce innovation with new terms of reference and extended membership. We will form a new CIWI Oversight Group in place by end of Q2.

Health Inequalities

The increasing focus on population health inequalities presents an important challenge to the way in which we work, informing both community involvement and a focus for workforce going forwards. We will apply the following principles to the way we work:

- Advancement of equity is an important component of our work, recognising that individuals have differing needs and will be impacted differently by the innovations, policies, and services we implement.
- Population health inequalities will inform our work through understanding:
    - Incidence and prevalence: do specific individuals or communities experience differences in the health condition or relevant risk factors?
    - Access to services: is there any evidence to suggest that specific individuals or communities do not, or cannot, access relevant services?
    - Health outcomes: is there evidence to suggest that specific individuals or communities experience differences in clinical or safety outcomes of treatment and care?
    - Experience of health and care: is there any evidence to suggest that specific individuals or communities differ in their experience of relevant health and care services?
- This will be used to inform implementation plans, which will include relevant workforce and patient and community involvement and action.
- Plans to address inequalities, and any related metrics to measure success of implementation, will be proportionate, considering available resources.

This approach allows us to support our national commissions, local and regional priorities. We will be supported by the Oxford AHSN's cross programmes EDI Group.

How we will work

CIWI will work with the SIP Team to address all four aspects of the Innovation Exchange within the OLS commission

- Needs definition
- Innovator support and signposting
- Real world validation
- Spread and adoption of supported innovations

To ensure that we are involved in the early stages of work we have established regular 6 weekly meetings to review work as it is developed. The activities that we will undertake will be determined by the projects going forwards. The sort of activities could include running patient focus groups to help define need for innovation, being co-applicants on research bids or supporting spread and adoption by focusing on workforce changes needed.

We will continue to support the Rapid Uptake Programmes with scoping reviews to describe relevant epidemiology and delineate health inequalities, in order that appropriate community involvement plans can be developed nationally and locally.

This approach will also apply to the existing and new National AHSN Programmes that sit within CIA and PSC. Both the patient safety commission and the overall AHSN Network Master Service Agreement have community involvement and coproduction as essential crosscutting themes. Specifically, we will support programmes in the following areas:

CVD

Lipids: we are developing an animation for medicines adherence and work with seldom heard communities that will feed into the national education strategy. Alongside this we will explore with our local implementation team the workforce implications for primary care. A similar approach will be taken to the new BP programme being developed.

Mental Health

We will help to ensure that the Safety Network developed has appropriate patient and public membership and that potentially vulnerable service users are well supported to be involved. We will work with the eating disorders team to support workforce challenges identified.

Care Homes

Similarly, we will help recruit resident and family membership for the Safety Network and work to better understand models of good practice for involvement in this setting. We will consider where we might develop a workforce focus with the Network, in health and wellbeing for example.

Maternity

We will be supporting local Maternity Voices Partnerships to carry out work to address the known inequalities in outcomes for pre-term birth.

Staff Health, Wellbeing and Productivity

This continues to be a priority for national, regional, and local planning. We will work with the BOB system, our regional and SE AHSN colleagues to develop a shared plan in Q1. Specifically, we will:

- complete our evaluation of the BOB Enhanced Occupational Health and Wellbeing (HWB) pilot and SE Leadership Academy Bitesize Coaching offer
- carry out an evaluation of SE Regional HWB offers (with KSS and Wessex AHSNs)
- develop a project on flexible working

Working Together Community Involvement

We will continue to work with our local patient and public involvement colleagues through our Working Together Operational Group, having just appointed an independent lay chair. The focus of work this year will be:

- training and development
- extending our work with seldom heard or marginalised groups
- impact and evaluation

To address the last two, we be developing a community of practice in conjunction with the time bank and skills share platform Hexitime.

Outputs

Case studies

Two workforce and two community involvement case studies/year/programme.

Community Involvement

Health inequalities scoping documents and involvement plans for each national project and those local ones where specific help is required.

An active on-line community of practice by Q4

Workforce

A regionally agreed plan of work. Workforce plans for those projects where there are significant workforce challenges. We will aim for at least one for each of our AHSN Programme Teams. In the first instance this is likely to be for eating disorders and primary care CVD work. At least one new workforce project for BOB and one working across the SE Region.

Workshops

By end of Q4 the following will have been held:

- Three working with the seldom heard
- Three understanding and using data
- An introduction to patient and public involvement
- Writing for the public
- Methodologies for involvement

Stakeholder Engagement and Communications

Since 2013, when it started, the Oxford AHSN has established effective relationships with wide-ranging partners across healthcare, research, and industry. The value of this investment paid off when the rapid onset of the pandemic triggered a swift adjustment in the means of engagement. Despite the challenges of moving from face-to-face to online, these networks have continued to develop and deepen – adapting to support our partners' new priorities. Many examples of how we spread innovation and shared best practice are captured in a growing bank of case studies on our website. Shared learning events online can be organised quickly and are much more inclusive as they are more time efficient for busy stakeholders.

We will build on this approach in 2021/22, taking the best of virtual working and restoring face-to-face communications where there are clear benefits. We will continue to work closely with other AHSNs and the overarching AHSN Network.

In terms of our wider communication, we will continue to publish our monthly e-newsletter which has around 1,400 subscribers and is due to reach its 100th edition in 2022.

We will expand content on our app (search 'Oxford AHSN' on Apple and android devices) and regularly update our web content at www.OxfordAHSN.org, www.patientsafetyoxford.org and elsewhere.

Regarding social media, the @Oxford AHSN Twitter account will pass 6,000 followers in 2021. We aim to top the 500,000 impressions achieved in 2020/21. We will also look to reach 1,000 followers or our LinkedIn account and expand the content on our YouTube channel which passed one million views and 2,000 subscribers in 2020/21.

Events and publications grid 2021/22

Date	Event	Publication
May		Targeted AF detection in COVID-19 vaccination clinics guidance
	Accelerator Commercialisation workshops	
		Oxford AHSN 2020/21 Q4 report
June	15-17 NHS Confederation. Contributors include Oxford AHSN Chief Executive Gary Ford on spread and adoption of innovation and Chief Operating Officer Paul Durrands on the roll-out of support at home for patients with COVID-19	
	Accelerator Commercialisation workshops	
	AHSN Network Environmental Sustainability Community of Interest – Paul Durrands and Kathy Scott presenting to AHSN Network All Staff event	
		Oxford AHSN Business Plan 2021/22
	Understanding and using patient data workshop	
July	Understanding and using patient data workshop	
	Accelerator Commercialisation workshops	
		Mechanical thrombectomy – updated guidance
		Oxford AHSN 2021/22 Q1 report
September		
	Accelerator Market discovery pre-accelerator workshops	
	Accelerator pitch day (invite only)	
October		Oxford AHSN 2021/22 Q2 report
	Oxford AHSN Accelerator Programme, runs to November	
November		
	Oxford AHSN Accelerator final pitch and awards day	

Financial plan and sustainability

Oxford Academic Health Science Network

Financial Plan Year Ending 31 Mar 2022	2021/22 Agreed budget (£'000)
INCOME	
NHS England	-2,724
NHS Improvement - PSC	-447
Office for Life Sciences	-830
Deferred NHS Improvement - PSC	-153
Partner Contributions	-330
Other Income - Grants from Accelerare Ltd	-183
Other Income - Cogentis Recharges	-25
Other income - Strategic & Industry Partnership (Grants)	-161
Other income - Strategic & Industry Partnership (AAC)	-159
Other Income - Clinical Innovation Adoption	-298
Other Income - Community Involvement & Workforce Innovation	-28
TOTAL INCOME	**-5,339**
AHSN FUNDING OF ACTIVITIES	
Clinical Improvement	193
Clinical Innovation Adoption	1,420
The AHSN Network	168
Patient Safety Collaborative	600
Strategic & Industry Partnership (Grants)	185
Strategic & Industry Partnership (AAC)	965
Community Involvement & Workforce Innovation	434
Programme Overhead Communications	135
Programme Overhead Pipeline Software	56
Sub-Total Programmes & Themes	**4,156**
Corporate Office	1,183
Sub-Total Corporate	**1,183**
TOTAL EXPENDITURE	**5,339**

Appendix A - Risks Register & Issues Log

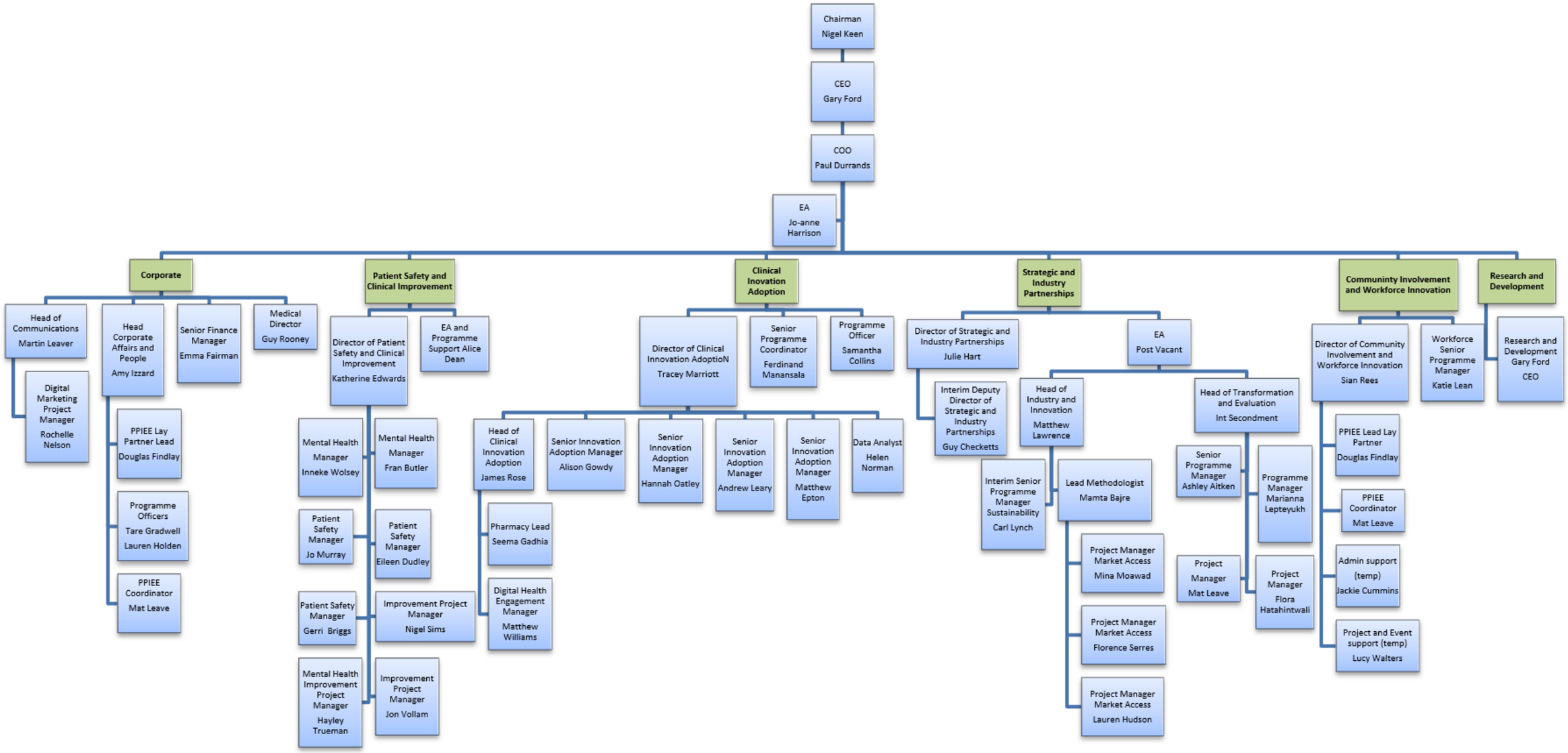
Risks Register

#	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 PSC 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. ADHD and FREED progressing will. Lipid management is with established network. Innovation products – generally performing well	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 on primary care and system wide deployment projects	CCGs have played an important part in engaging primary care in adopting innovation, e.g., PINCER and COVID Oximetry@home. The re-organisation of CCGs is a risk to effective engagement.	Med	Med	ongoing	Engagement with new management teams and clinical leaders. Established links with leaders in BLMK with Eastern. AHSN CEO on BOB SLT. Strengthen links with new Frimley CCG through Medical Director.	AHSN Chief Operating Officer	AHSN Programme Leads	April 2021	Ongoing	AMBER

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 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 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 - Organisation Structure

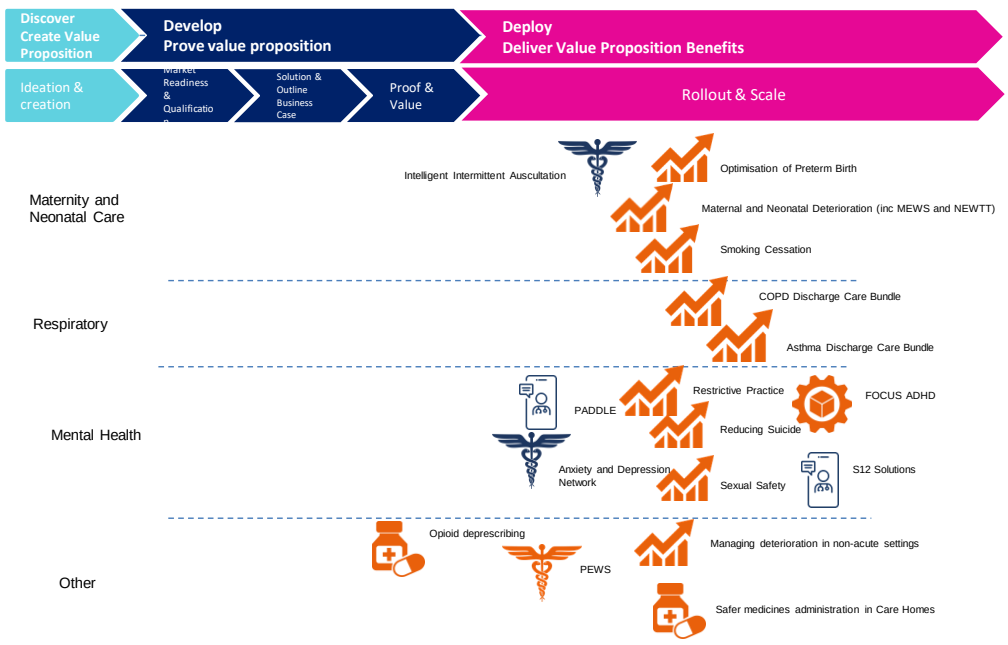


Appendix D- Pipeline Portfolio (shown by clinical priority under each programme)

Technology Theme	Local	Regional	National
Medicines			
Diagnostics			
Digital Health			
Remote Monitoring			
Artificial Intelligence			
Devices			
Sustainability			
PPIE			
Quality Improvement			
Other			

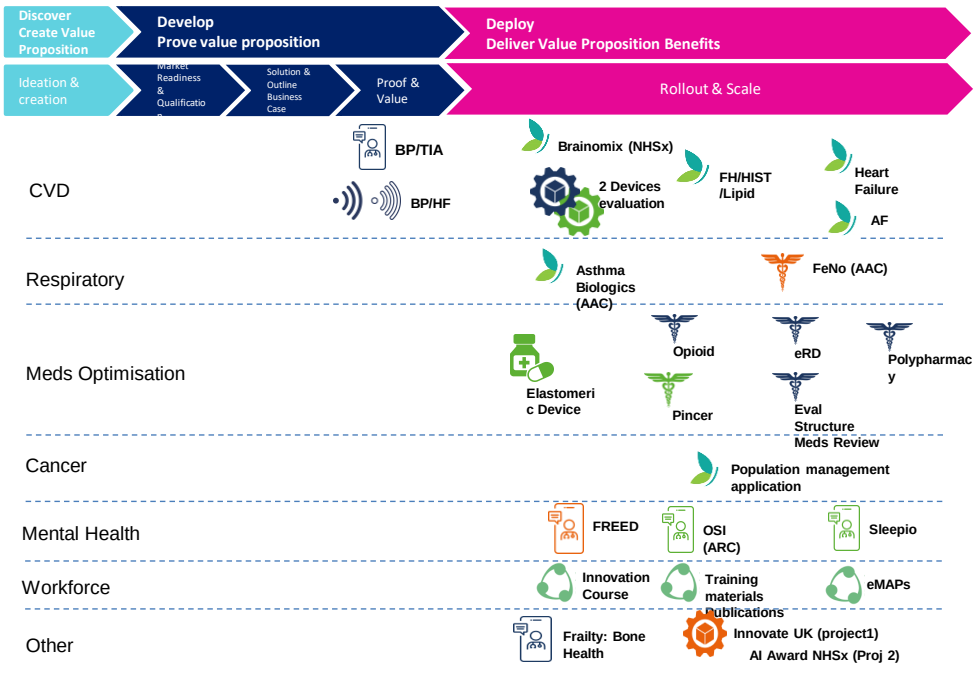
Patient Safety and Clinical Improvement programme

Oxford Academic Health Science Network



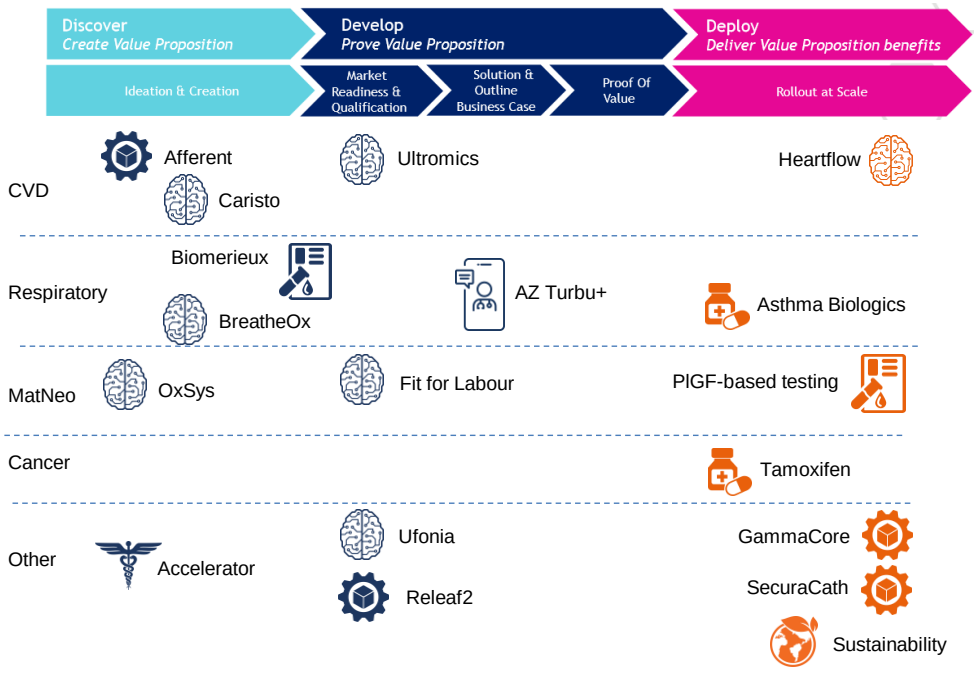
Clinical Innovation Adoption programme

Oxford Academic Health Science Network



Strategic and Industry Partnerships programme

Oxford Academic Health Science Network



Community and Workforce Innovation theme

Oxford Academic Health Science Network