

Cover Sheet

Trust Board Meeting in Public: Wednesday 13 July 2022

TB2022.055

Title: OUH Digital Strategy 2022-2025

Status: For Decision

History: None

Board Lead: Chief Digital and Partnership Officer

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Confidential: No

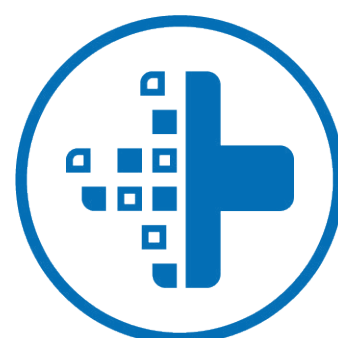
Key Purpose: Strategy

Executive Summary

1. Delivering digitally enabled care and becoming a data-driven and digitally literate organisation is fundamental to improving safety, experience and outcomes for our people, patients, and populations.
2. To achieve this, we have developed a new OUH Digital Strategy setting out our ambitions for the next three years.
3. This paper provides an overview of the OUH Digital Strategy within the context of National, System and Trust Strategies.
4. The strategy is informed by the continuous dialogue the Digital team have at all levels of the organisation and the feedback received both formally and informally in meetings and Trust briefings where digital is referenced.
5. We have established our Digital strategy in three pillars: Fundamental, Improving & Transforming.
6. This strategy is supported by an annual Digital Workplan which will inform resourcing and prioritisation. The Workplan is overseen by the Trust Management Executive.
7. The Digital Strategy was reviewed and recommended to Board at Trust Management Executive 30 June 2022.

Recommendations

8. The Trust Board is asked to:
 - Discuss and Approve the Digital Strategy.



OUH Digital Strategy

2022-2025

Our vision to deliver
digitally enabled care

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Welcome

At OUH, we are one of the largest teaching trusts in the UK, with an international reputation for the innovative treatments we provide and pioneer through our world-class research, education and University partnerships. We work across four main hospital sites in Oxford and Banbury and 44 other locations.

In our 2020 Trust strategy we set digital by default as a key strategic theme. Since then we've had the pandemic where we delivered critical capability at pace. Our aim is to leverage that experience, within the context of a changing system landscape, including the ICS becoming a statutory organisation in July 2022, delivering digitally enabled care and to expand on our Global Digital Exemplar status.

We are delivering Digitally Enabled Care to improving safety, experience and outcomes for our patients and populations. To achieve this, through working with our clinical and digital teams we have developed a new OUH digital strategy setting out our ambitions for the next 3 years. This strategy will be supported by an annual digital work plan to ensure it is delivered.

This document sets out the OUH digital strategy within the context of National Policy, our local ICS and the wider Trust.







David Walliker
Chief Digital and Partnerships Officer

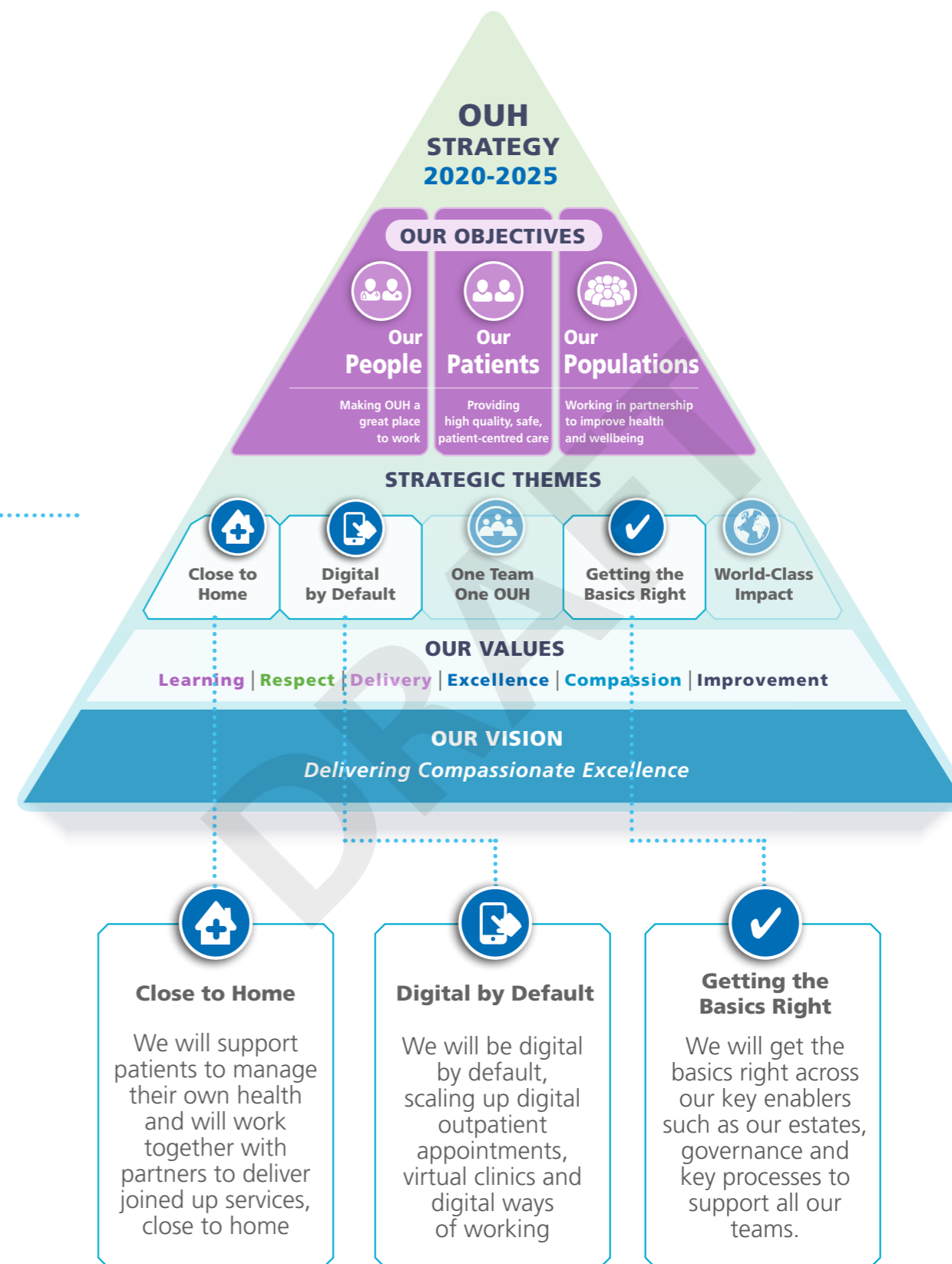


OUH Digital Strategy Context

The **OUH Digital Strategy** outlines our commitment to delivering digitally enabled care. It will align with and support the Trust's overarching five year strategy.

We will define "what good looks like" and focus our delivery plan on three of the **Trust's Strategic themes**:

-  **Close to Home**
-  **Digital by Default**
-  **One Team One OUH**
-  **Getting the Basics Right**
-  **World-Class Impact**



System Context

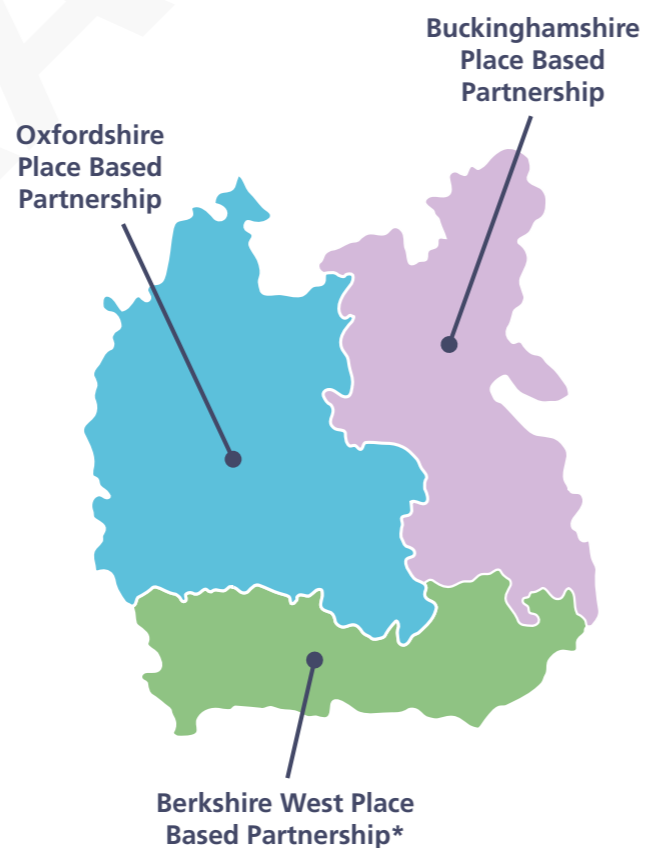
To support and inform our strategy development we have referenced National, Regional and our wider Trust strategies.

We will work closely with the Buckinghamshire Oxfordshire and Berkshire West Integrated Care Service (BOB ICS) to deliver jointly the Digital Priorities. We will support the creation of a lean and effective digital team and decision making structure to both level-up and advance the use of digital capability across the ICS.

We are working closely with the ICS on the development of the Digital strategy.

We will work in partnership to deliver the goals of the ICS:

- Improve outcomes in population health
- Tackle inequalities in health outcomes, experience and patient access
- Enhance productivity and value for money
- Help the NHS support broader social and economic development



*Made up of three unitary authorities of West Berkshire, Reading and Wokingham

National Context

In 2021, NHSx (now part of NHS England) set out the national policy direction for digital in the NHS within their What Good Looks Like (WGLL) framework. This has helped shape our Digital Strategy.

For further information please visit the [nhsx website](#).



These are:

Well led

Boards are equipped to lead digital transformation and collaboration

Ensure Smart Foundations

Digital, data and infrastructure operating environments are reliable, modern, secure, sustainable and resilient

Safe practice

Routinely review digital and data systems to ensure they are safe, robust, secure, sustainable and resilient

Support people

Digital and data tools and systems are fit for purpose and support staff to do their jobs well

Empower citizens

Citizens are at the centre of service design and have access to a standard set of digital services that suit all literacy and digital inclusion needs

Improve care

Digital solutions enhance services for patients and ensure that they get the right care when they need it and in the right place

Healthy -populations

Organisations use data to inform their own care planning and support the development and adoption of innovative ICS-led, population-based, digitally-driven models of care

Digital at OUH

Where we're starting from

At Oxford University Hospitals we are building great foundations for Digital ways of working, reflected in our HIMSS stage 6 award by the International Healthcare Information and Management Systems Society (HIMSS) and our recent Global Digital Exemplar Accreditation.

We will build on our successes and experience, including through the pandemic, in our ability to rapidly innovate and deploy digital capabilities in support of our patients and staff.

Capability we have delivered:

- ✓ Trust-wide roll-out of Video Consultations; 67,000 consultations, providing 30,000 consultation hours with 117 digital waiting areas with 1,300 staff providing consultations since the start of the pandemic
- ✓ Digital outpatient appointment letters with 850,000 uploaded on to our platform with nearly 730,000 letters viewed
- ✓ Online booking for COVID-19 vaccinations enabling almost 59,000 vaccinations to be delivered by the OUH vaccination service
- ✓ Enabling remote working for significant groups of OUH staff including deployment of new virtual desktop environment and roll-out of new end user compute hardware and upgrades
- ✓ Migrated all our staff on to Microsoft 365 and Windows 10
- ✓ Digital blood transfusion with decision support, reducing unnecessary use of blood products
- ✓ Integrated vital signs early warning application
- ✓ Prescribing Medications Administration (ePMA) & Medicines prescribing decision support and robotic pharmacy dispensing
- ✓ Safer medicines administration through patient wristband bar code and drug package bar code scanning
- ✓ Prompts and alerts to improve the management of critical aspects of care including the reduction of antibiotic over-use and antibiotic resistance, with care planning suggestions
- ✓ Paperless work flow in ED enabling instant discharge summaries and letter messaging
- ✓ Voice recognition integrated with our Electronic Patient Record
- ✓ Mobile version of our EPR on hand-held devices – PowerChart Touch

What we have heard from our staff

Through listening to our staff; we know we need to improve some fundamental capabilities, for example:

- ➔ Supply and support high performing laptops and desktops and ward & theatre digital equipment
- ➔ Improve our Wifi and network performance
- ➔ Update our digital support processes and systems
- ➔ Enhance access to and use of data for operational planning and research purposes
- ➔ Enable patients to access and add to their clinical record and take control of their appointments
- ➔ Support elective care recovery including Outpatient improvement and theatres productivity
- ➔ Increase our clinical analytics and research capacity and available data

117 digital waiting areas with 1,300 staff providing consultations

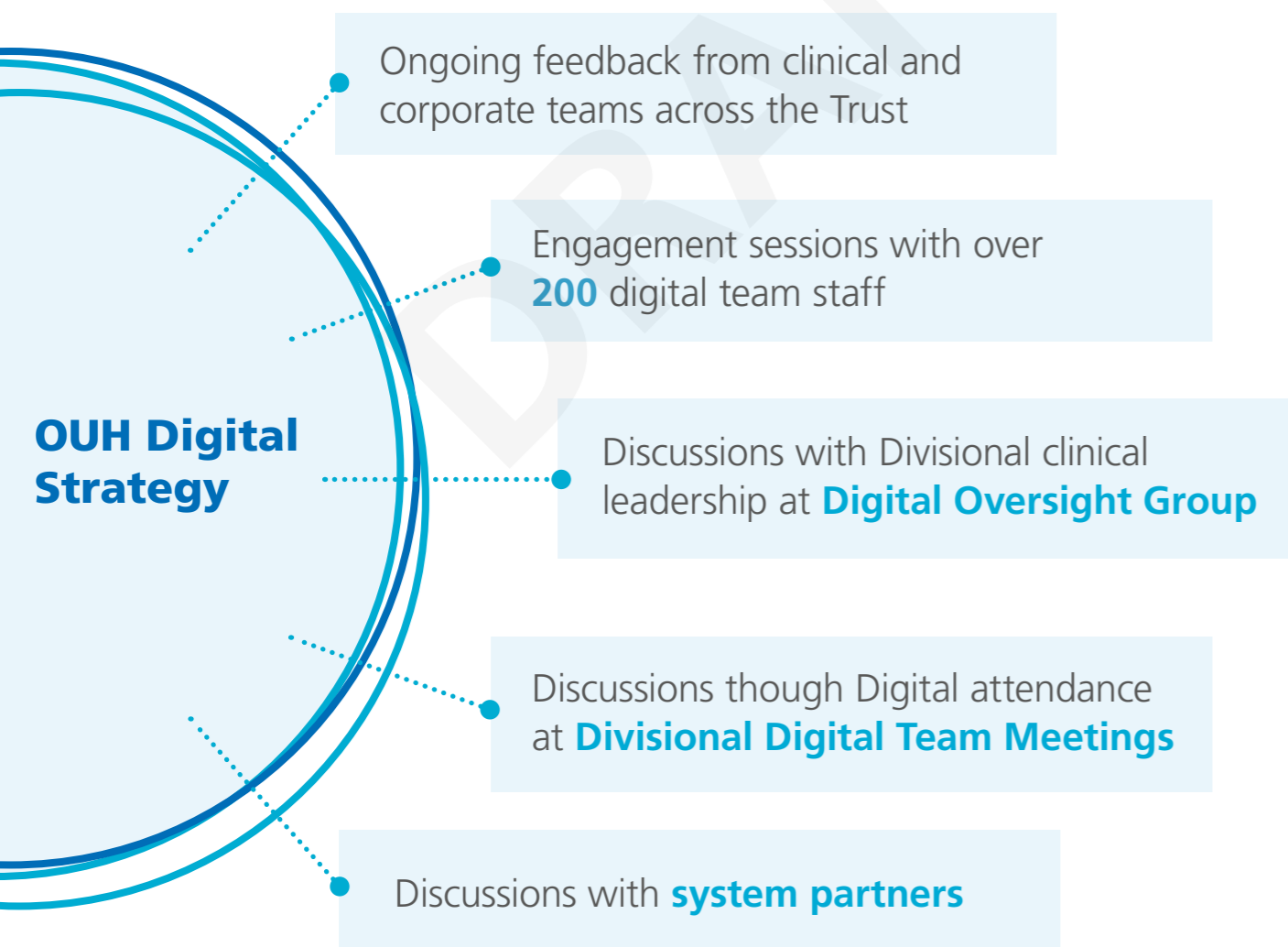
59,000 vaccinations delivered (Via online booking)



OUH Digital Strategy Framework 2022-2025




Through our ongoing discussions with our staff in multiple forums we know there is still a lot to deliver. Having the basics in place, computers that work well, a network that's reliable and access to information when and where you need it. Building on our successes above and the learning from the pandemic, over the last 6 months, we have been working to develop our Digital Strategy.

This has been informed by:



Our Three Pillars At a glance

Our Digital Strategy framework is formed of 3 pillars; they outline our digital strategic approach to capability delivery and support at OUH.

	 Fundamentals	 Improving	 Transforming
Our Ambition	Modernizing existing IT infrastructure	Optimised clinical and administrative systems and data services	Population level data for research and planning
What this means for you	High performing and secure computing	Paper free No information silos	Improved care pathways, improved access to data
How we get there	Device and infrastructure uplift Cyber Security	Maternity EPR Theatres, Anaesthesia & device integration Data and analytics improvement programme	ICS Population health Trusted Research environment

Our Three Pillars

In detail

In response to our changing context and what we have heard from staff we have developed a new digital strategy framework organised around 3 pillars. These are:



Fundamentals

- Core Fundamentals are the foundation of everything we do in digital. It involves our digital infrastructure, our cyber security, our hardware, software, support offering and governance processes
- This is the commitment we make to our staff, patients and populations as a baseline capability for our business
- A secure and reliable, efficient network with computers, software that allow staff to access the data and systems they need to do their job and to provide excellent care to their patients



Improving

- Improving our process is about Delivering Digital by default in line with the Trust's Strategy.
- Being paper-free at the point of care
- Improving access to information supporting patient care ensuring everyone has access to the information where and when they need it: new systems implementation, integration or replacement
- Working with services to Improve how our systems and processes work throughout the Trust.
- Using our data and analysis tools and teams to improve efficiency, safety & patient outcomes
- Delivering automation and collaboration tools such as Office 365 functionality



Transforming

- Deploying solutions that enable us to use our data to improve our care planning and decision making, including Machine Learning
- Providing timely and secure and access to health and care data to support research using analytical and statistical tools
- Contributing to the ICS-wide population health management platform
- Sharing our knowledge and expertise to help inform national policy and standards in research and planning capabilities
- Taking the lessons learned from the transformation process and operational activity to inform opportunities for innovation and development



Pillar 1 Fundamentals

Our aim and vision is to deliver excellent infrastructure and capability.

For our PEOPLE:

- Have a technology performance commitment to all staff; robust, high performing, cybersecure, and that meets the relevant clinical and digital safety standards and all supported and maintained
- Ensure Staff have the correct systems and applications to perform their roles
- Provide a modern digital support offering for our staff through the use of improved systems and processes
- To invest in digital literacy training for our whole workforce linking with the O.U.H. People Plan and in conjunction with our system partners
- Expand our Division based Digital Leads to other staff groups within the Trust
- Ensure that all projects have appropriate leadership from clinical divisions and corporate services, ensuring where digital components are scoped
- Enhance our work with the Trust Board on our digital plans and embed Digital in the Business Planning Process
- Ensure all our systems are within supplier support lifecycles and Service Level Agreements

For our PATIENTS:

- Use our digital platforms to improve our communications to them and about them to our system colleagues
- Make the registration process easier for patients to have access to the patient portal (HealthforMe) increasing subscription uptake
- Resource our digital teams to fully support our digital systems already deployed
- Offer our patients and families a simple and readily accessible infrastructure to allow access to digital services when using our services
- Support those who are digitally excluded, meeting the needs of all sections of our patient population

For our POPULATIONS:

- Deliver sustainable ICT provision- towards target Net Zero in line with our Green Plan
- Working with our ICS and system Partners on capabilities for regional shared care record, including data and analytics capability, enabling patients to move across provider boundaries



Pillar 2 Improving

Our aim and vision is to enhance care and experience through Digital Platforms and processes.

For our PEOPLE:



- Be paper free at the point of care, a fully digital hospital
- Reduce non-value add manual process through the use of Automation Software for teams helping to release time to care, improving care and administration processes
- Move to real-time reporting for clinical and operational services
- Remove silos of information through either system integration or replacement
- Improve our data and analytics capability and capacity with a focus on supporting a culture of data driven decision making and data quality improvement
- Improve staff experience of digital solutions (user centred design) by putting clinicians at the heart of clinical solution design, testing, implementation and adoption

For our PATIENTS:



- Digitise and streamline Outpatient booking – put patients in control of their appointments – implement self service, digital Patient Initiated Follow Up and “see me sooner”
- Work with our ICS to enhance the regional shared care record
- Make sure that the views and experience of our patients are taken in to account when designing our digital care processes. Look and enhance our solutions through a patient\service user lens

For our POPULATIONS:



- Make data and analytics platforms available to all clinicians.
- Work on a Digital Inclusion strategy in conjunction with our ICS partners
- Co-design and address health inequalities capabilities and platforms and population health management platforms



Pillar 3 Transforming

Our aim and vision is to transform the system through data, Machine Learning Techniques, research and innovation.

For our PEOPLE:



- Provide a single source of the truth which is trusted by both operational staff and researchers
- Improve access to O.U.H. data for clinical & operational planning and long-term forecasting
- Develop partnerships to improve our data and analytics capability

For our PATIENTS:



- Look at emerging Machine Learning tools and techniques around patient care, pathways and staff productivity
- Using population health techniques to inform service design and provision
- Use TheHill to increase digital innovation adoption in the NHS to improve efficiency and effectiveness, thus empowering staff and benefiting patients
- Work with industry to utilise machine learning tools to optimise our patient pathways and drive efficiencies through data analysis and change
- Have a clear public engagement plan to communicate our Research strategy
- High quality data and the operational planning process to inform innovation opportunities

For our POPULATIONS:



- Develop digital capabilities for long term conditions monitoring, such as diabetes.
- Enhance and expand Digital capabilities for Virtual Wards ensuring that this interfaces, securely, to our electronic patient record.
- Deliver improvement through innovation, working with TheHill
- Help to identify and address digital inclusion; working with our local and regional partners
- Enhance our engagement with our populations to address health inequalities through Trust initiatives and with our partner organisations



Our Design Principles

To deliver the strategy, we will implement a core set of design principles and values.

✓ Co-design and co-produce with the person at the centre

Work with our population and staff to ensure that the services we develop are designed around people not technology. Working to reduce Health Inequalities with our clinical services and ensure digital capabilities are not a barrier to using the services we provide.

✓ Usability

Implement user research methods and skills to understand what people are trying to do and how they are trying to do it, so that we don't just digitise a bad process or that it is felt that digital is done to you – that we co-design the answers. We will not compromise on the best clinical outcomes for our population based upon their ability to access the technology, digital is not always suitable, available or understood and should not be a barrier to accessing our hospital.

✓ Simplify Simplify Simplify

Buy and build solutions that are intuitive, simple and make sense and try to reduce the training need. Rationalise and reduce the number of systems where we can.

✓ Faster

Take every opportunity to provide solutions, processes, suggestions, and learning to reduce the burden on staff of slow software, hardware or networks. Digital should be something which makes work easier, not hinder and delay.

✓ Agile Deployment

We know that using agile principles will allow us to make rapid progress, whilst retaining flexibility to user need and organisational priorities – we will ensure that our plans are just that.

✓ Open standards

Our approach will be based on open standards and where possible being vendor agnostic, with principles of working together to implement through this approach, including agreed standards.

✓ Communicating and engaging throughout

We want to make sure that as we are developing new solutions we engage with both our patients and staff and the wider community to involve them in our design and roll-out process. Beyond that, we know that it's really important for people to know what is available, what is coming, and when – in non-technical language.

✓ Licence to succeed, permission to fail

Create an environment and culture where we encourage innovation and learning and accept that with innovation there can be projects which can either fly or fail, this will not stop us trying new things out.

✓ Share our learning

Share our work openly and transparently and with external colleagues, creating a learning from best practice approach. We aim to contribute to blueprints locally and nationally. Where appropriate, share, co-commission or jointly procure systems.

..engage with both our patients and staff and the wider community to **involve** them in our designs..



Delivering the Strategy

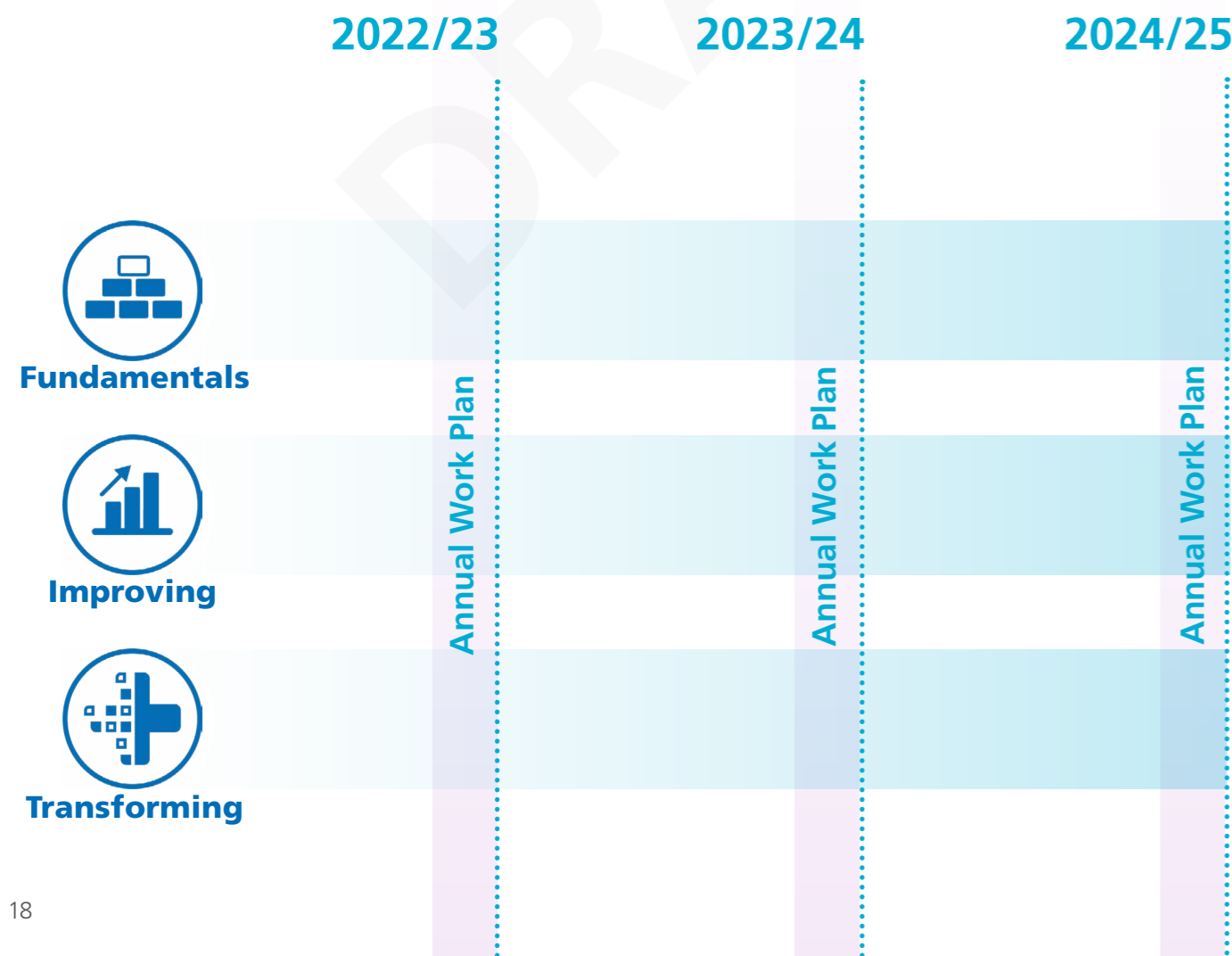
Our Annual Work plans

To deliver this strategy, we will work with divisions and services to develop annual plans.

The Digital Team will produce a separate annual workplan which will include indicative projects for years two and three. The creation of the plan will be driven by our strategic pillars and informed and agreed by working closely with Divisional teams, ensuring we deliver what is most important to our staff and patients.

The annual workplan will be aligned with the emerging ICS Digital Strategy, this is a key requirement as the future funding model means ICS will fund the delivery of technology plans.

Having an annual, costed and realistic workplan will allow the digital team to be flexible in their approach to capability delivery and provide the scope to work in an agile manner with the ability to address in year priorities and also delivery capability in line with the Trust's Clinical Strategy.



Our Future Strategic Plans

We will continue to develop our future strategic plans to further Improve and Transform our delivery of Digital and Data capability.

Cloud First

Onsite data centres (where we run our applications and store our data) are a substantial investment, they require significant hands on maintenance, management and take valuable space on our estate that could be better utilised for patient care, they also take up a lot of electricity to heat and cool.

We have embarked on a significant programme of works to replace or upgrade our aging, end of usable life and end of vendor support infrastructure within our data centres. This programme of works has required significant investment not just financially but also in hands-on technical resource.

We will begin implementing a cloud first approach; this means that we will look to run new solutions in the public cloud in the first instance and plan to move our existing infrastructure over time. The public cloud is a secure data centre offered by third parties which instead of being on our estate is provided over the Internet, making them available to anyone who wants to use or purchase them.

Without taking action, the process of refreshing and upgrading our on-site provision will need to be repeated in order to keep abreast of ever evolving technologies. This is not a sustainable practice and does not make best use of resource or finances.

Innovate

TheHill provides a step-change in our ability to engage with innovators, and is an invaluable source of innovation for the Trust, as well as developing the innovative capacity of the organisation. The community that is being built by TheHill is empowering staff, improving care and ultimately helping to digitise the NHS for the benefit of patients.

We will further develop TheHill's Market Access Accelerator programme, which in the last three years has become a flagship programme in digital health. So that it delivers real value to participants by being embedded within Oxford University Hospitals and is a valued source of high-quality innovation for the Trust.

Data Driven

We will implement solutions which will provide high quality data to our staff and researchers, to enable highly assured data driven decisions. This will be the standard way to access data for research and analysis, and our data environments will ensure that we are transparent about the data we will hold, why we are holding it and who has access to it and that we involve the public, actively, in how this data is used and only when patients consent for us to use their data.

We will ensure that Data made available for analysis will be de-identified to protect patient confidentiality, and that data will only be linked with other data sets within another accredited data environments.

Finally we will operate a policy of open-working, and that we are able to support flexible and high-quality analysis for the diverse range of uses being supported.


Getting Involved

More information

If you'd like to know more about our Digital Strategy please get in touch via the following channels:

 strategy@ouh.nhs.uk

 www.ouh.nhs.uk

 @OUHospitals #OneTeamOneOUH

 @OUHospitals

Or for more information regarding BOB ICS please go to:
www.bobics.uk.engagementhq.com

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OUPH Digital Strategy

2022-2025

**Our vision to deliver
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