

**Barnsley Hospital NHS Foundation Trust**

**Digital Transformation Strategy 2022-27**

**Published 17/09/2021**

**“To provide the best possible care for the people of Barnsley and beyond at all stages of their life” – BHNFT Mission Statement**



# Contents

1. Foreword
2. Introduction
3. Executive Summary
4. Contexts
5. Data Transformation Vision
6. Digital Roadmap
7. Digital Maturity
8. Engagement and Governance
9. Conclusion

# 1. Foreword

Welcome to the new Barnsley Hospital NHS Foundation Trust Digital Strategy.

Digital transformation is one of the key enablers to accelerate progress toward our ambitious new strategic long-term goals and this strategy has been developed to support the delivery of our new Five Year Strategy as an NHS Trust.

One of the most important components of our future success will be how well we embrace the challenge of an increasing digital environment and changing technologies to support the work we all do. The Covid-19 Pandemic has brought about an unprecedented pace of change, enabling us to utilise a range of digital solutions to support new and innovative ways of working. We have made significant progress however there are always things we can do to go further in this field to support the care and services we deliver so well.

We must continue to ensure that our Trust is best placed to deliver excellent high-quality clinical services and to do this, it is vitally important that we have first-class digital infrastructure working hand-in-hand with a digitally skilled and enabled workforce.

Every individual and department should have easy, round the clock access to high quality digital tools to support their work and both the ability and confidence to seize the opportunities of digital technology.

We will continue to focus on our patients' individual and diverse needs, enabling them to be in control of their appointments and to use digital solutions to both access care and communicate with us, for example, booking and viewing their own appointments online and the use of digital appointments. Alongside this, we want to reduce the inequity of access to digital care, working to reduce barriers for individuals to receive digital care such as language and access to equipment, supporting our strategic goal of further increasing our sustainability by recycling our equipment for those who need it.

Publishing this innovative strategy is just the start of a new phase of close engagement and collaborative working across our regional healthcare system. Delivering its ambitious vision will require a combined effort from us all to realise the considerable benefits of a digital sustainable future for our incredible workforce and the people we care for.

At its core this strategy will help create a leading digital environment that works for everyone. It is part of our Trust's ambition to provide the best possible care for the people of Barnsley at all stages of their life.



Dr Richard Jenkins  
Chief Executive Barnsley Hospital



## 2. Introduction



Word Cloud built from staff feedback at ICT strategic sessions

This document details the BHNFT Digital Transformation Strategy, and the benefits it will provide through transformation to both the Trust and its surrounding partners. The strategy and document have been created to encapsulate our ambition, in conjunction with our colleagues across the Trust and local partners through a series of workshops, one-to-one interviews and surveys. The document contains:

### Executive Summary

A summary of key points in the strategy.

### Contexts

Who we are as a Trust, the local community we are a part of, and the national outlook.

### Our Digital Vision

What are we going to change using digital transformation and what are the outcomes for our Trust, our patients, and our local healthcare system.

### Supporting Strategies

Looking in more detail at workforce transformation, data analytics, and technology, and how they support the main strategic aims.

### What & When

The key elements we are planning to deliver now and into the future, in a single quick reference page.

### How It Will Feel

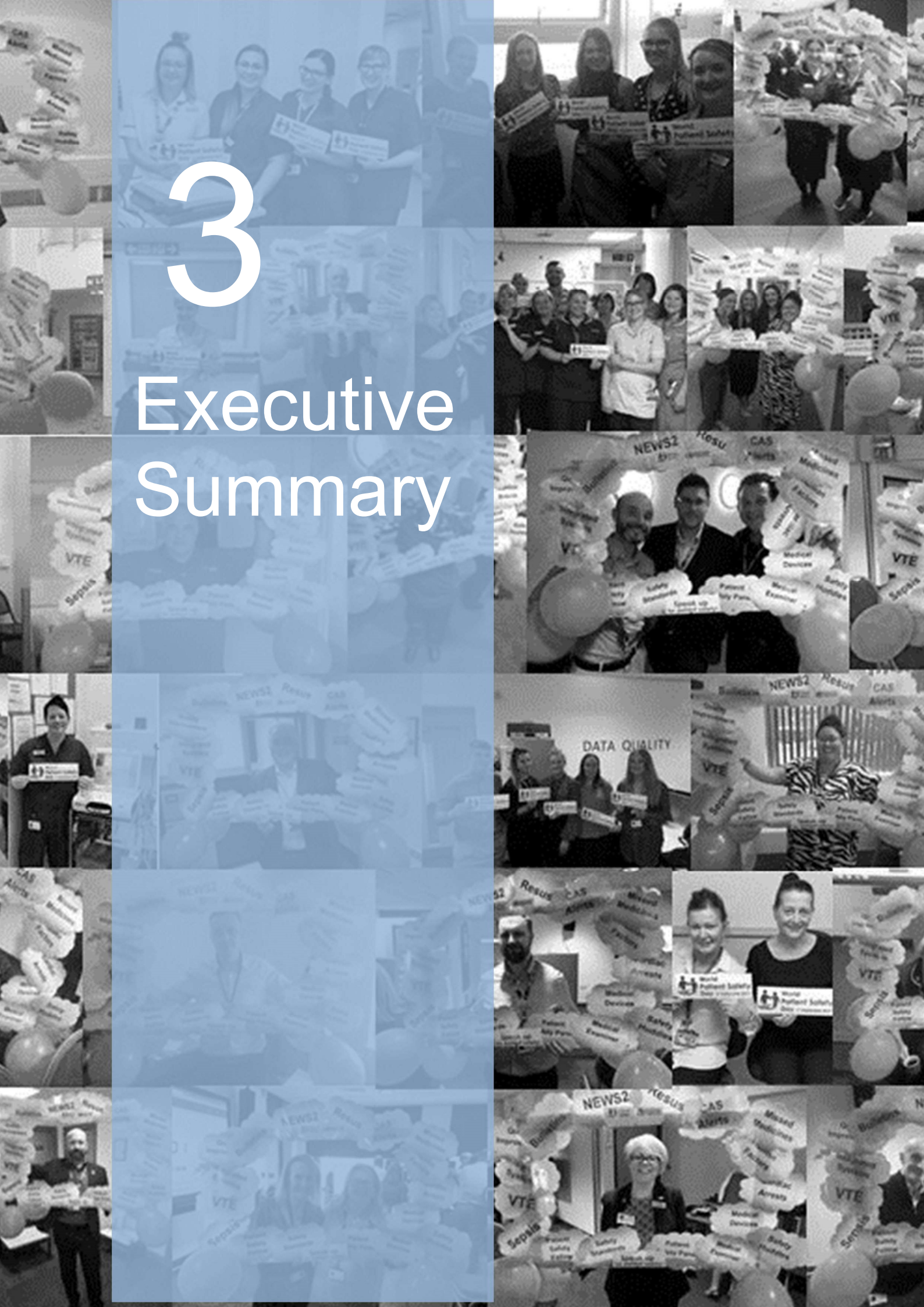
Practical examples of how transformation will change the way we work from multiple perspectives.

### Our Digital Maturity

A review of the aims of the strategy, and the material increase in capability and digital maturity the strategy delivers, aligned to the NHSX “What Good Looks Like” index.

# 3

## Executive Summary





## 3. Executive Summary

**Our BHNFT Digital Transformation is an ambitious strategy that presents the need for changing the culture through digitally enabled solutions combined with an opportunity for accelerated delivery and a focus on record sharing.**

As a Trust, we are facing significant challenges now and, in the future, including sustained pressure from unprecedented demand for clinical services over the coming years, it is crucial that we use every available tool, including technology, to improve the safety, quality of care and efficiency of providing our services.

We have reflected on national place and our local trust's Strategies and have highlighted the strategic imperatives. These have been used to frame this strategy and have helped to focus feedback from our staff, patients and partners. The key learning from our review is evident we must

In a society that is rapidly embracing and adopting technology, the NHS cannot stand still. Our vision outlines how we intend to integrate digital solutions into every patient interaction and how, through clinical leadership, we will use these to improve the quality of care and experience of our patients and support our workforce providing safe and efficient tools.

Our road to embracing digital will see us making IT easy, improve our workforce's digital literacy, implement enabling technologies, and enable high quality data at the point of care. Additionally, we describe the digitisation of patient interactions, and the automation of related processes, enabling the sharing our data across the system.

Finally, we will reflect our growing wealth of data back to decision-makers at all levels of the Trust through our compelling self-serve BI.

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Together we will transform our clinical care, how we engage with our patients, staff and partners.

We have an ambition to be an excellent digital trust where IT is easy.

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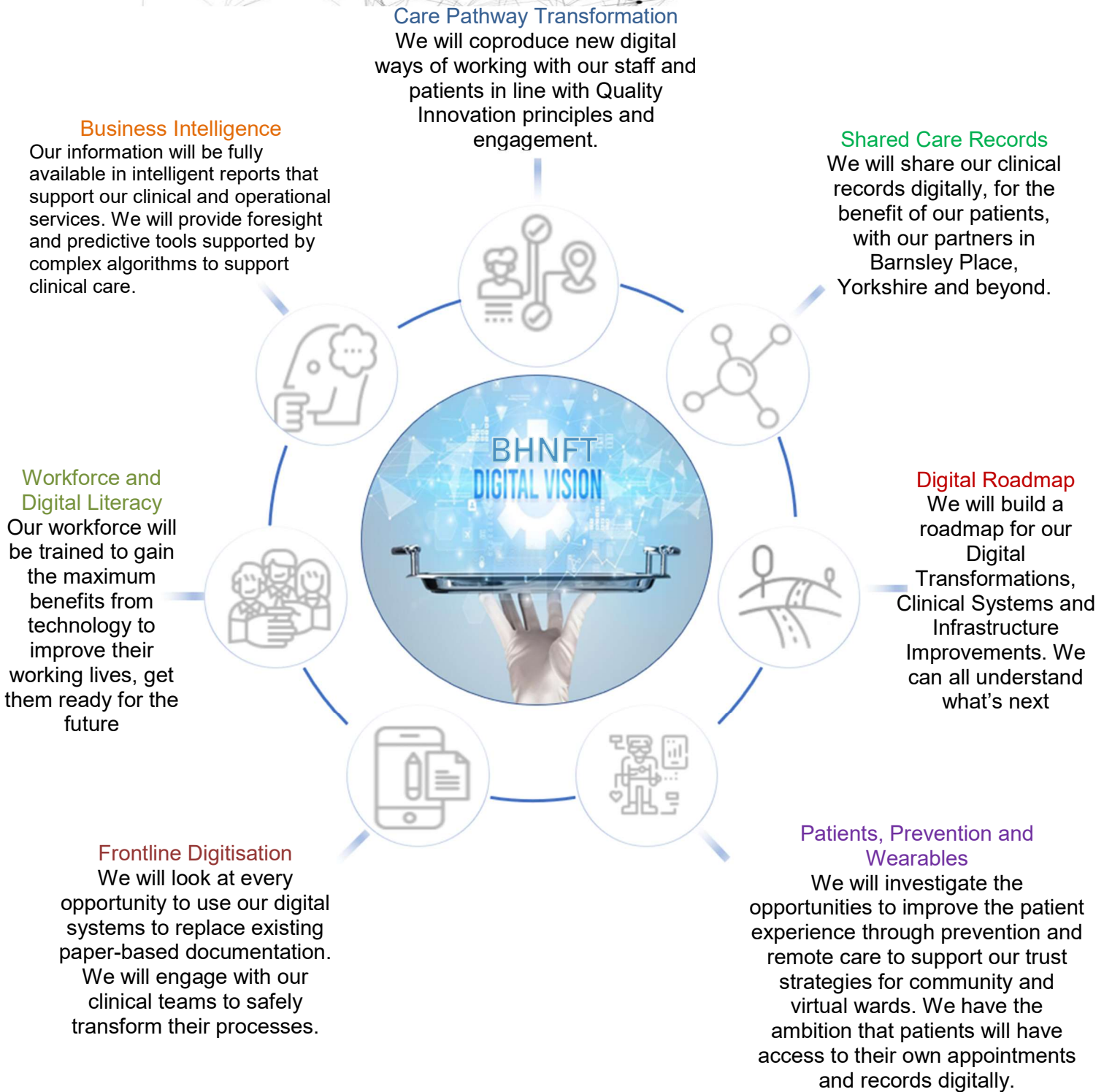
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Our aim is not to simply “go paperless”, although this will be a by-product of digitisation, but to ensure that the information our teams require is available in the right place, at the right time and on the right device. With the information needed to hand, our teams will be able to perform to their maximum potential, this leads to increased quality, safety and efficiency which will in turn drive down cost.

The need to collaborate and interoperate with our local partners is also key to our digital vision, and reflects that we are part of a wider team of organisations and that patient care will be greatly improved if we all have sight of each other's actions.

To quote the highly regarded Wachter report “... the one thing the NHS cannot afford to do is remain a largely non-digital system. It is time to get on with IT”; this is our response to that challenge

# Our Digital Vision at a glance





## 4. Contexts

### Barnsley NHS Foundation Trust: Our vision and values...

Since the 1970s Barnsley Hospital has provided acute healthcare for the people of Barnsley and surrounding areas. We're a medium-sized district general hospital serving around a quarter of a million people. We pride ourselves on our community as so many of our patients have relatives employed here it feels like we're one large family.

Not only do we have a full range of the services you would expect in a hospital of our size, we also have a fantastic new Children's Emergency Department and Assessment Unit which we completed during the Covid19 pandemic in early 2021. Our state-of-the-art Neonatal unit opened in 2018 and has received glowing feedback from families and the staff who work there. Our next large project is to completely redevelop our critical care provision with a unit which will expand capacity and improve patient experience.

Our specialised services include cancer and surgical services in partnership with other local healthcare providers such as neighbouring hospitals in Rotherham and Sheffield. We also have an Assistive Technology team which serves a large part of the North of England.

Because we feel so strongly about our place in the local community, we take care to look after our environment. We have green credentials with features such as electric charging points in our staff car parks and access to the NHS car lease scheme for easy access to electric vehicles.

In 2020 our investment and commitment to digital working saw the first ever introduction of a major IT system achieved remotely. This puts us at the forefront of digital excellence - the project was shortlisted in the Nursing Times Awards 2020 in the Technology and Data in Nursing category. Our innovative teams also set up an 'E-Midwife' service on Facebook, and developed a communications app for intubated patients to communicate with staff. Because we had committed early to digital working, we could move quickly to respond to the pandemic and were offering video appointments within days.

#### **Respect:**

We treat people  
How we would  
like to be treated  
ourselves

#### **Teamwork:**

We work  
together to  
provide the best  
quality care

#### **Inclusive:**

We focus on  
your individual  
and diverse  
needs

## Our Strategic Goals 2021-2026, Ambitions and Digital Vision Objectives

<p><b>Best for Patients &amp; The Public</b> We will provide the best possible care for our patients and service users</p>	<p>To be the best for our patients and the public we will deliver strategic <b>Digital Roadmap</b> projects that improve patient care and patient experience. <b>Care Pathway Transformation</b>, <b>Frontline Digitisation</b> and <b>Patients, Prevention and Wearables</b> objectives will improve the quality of the patient record. They will also enable improved efficiency and release time to care. The public will be able to interact with our clinical services digitally.</p>
<p><b>Best for Place</b> We will fulfil our ambition to be at the heart of the Barnsley place partnership to improve patient services, support a reduction in health inequalities and improve population health.</p>	<p>We will share our clinical information with our strategic partners in Barnsley Place. This will be achieved via our <b>Shared Care Records</b> strategic projects. We will support the smooth transition of care beyond our organisational boundaries. This will also support patients to access their own clinical information and digitally hold their own records. We hope this will substantially improve their experience.</p>
<p><b>Best for Planet</b> We will build on our sustainability work to date and reduce our impact on the environment.</p>	<p>Through <b>Frontline Digitisation</b> we will reduce our dependency on paper. We currently print the equivalent of 200 trees a month and our strategic digital initiatives will make significant inroads in solving this and many other sustainability challenges. We will ensure we commit to the Sustainable ICT and Digital Services Strategy (2020 to 2025) objectives.</p>
<p><b>Best for Performance</b> We will meet our performance targets and continuously strive to deliver sustainable services</p>	<p>All of our digital vision objectives enable improved performance as they increase efficiencies in the way we deliver care. Our <b>Business Intelligence</b> initiative will give us the Insight to improve our services through dynamic and self-service reporting.</p>
<p><b>Best for People</b> We will make Barnsley Hospital the best place to work.</p>	<p>Our <b>Workforce and Digital Literacy</b> and <b>Digital Roadmap</b> visions will support our people to become highly skilled in the best technologies in the NHS making Barnsley Hospital an excellent place to work that will improve their working lives. We plan to make digital devices more accessible and mobile so all staff have a work device in their pocket.</p>
<p><b>Best Partner</b> We will work with partners within South Yorkshire &amp; Bassetlaw Integrated Care System to deliver improved and integrated patient pathways.</p>	<p>Our <b>Business Intelligence</b>, <b>Digital Roadmap</b> and <b>Shared Care Records</b> digital vision objectives will enable us to become excellent partners in the Integrated care system. Our intelligence is combined with our partners to create system wide <b>Care Pathway Transformation</b>. We will work with our partners to tackle the challenges of inequality, digital poverty and language barriers.</p>

## Our National and Integrated Care System Digital Context...

Digital is becoming increasingly important as we stretch our clinical teams to deliver even smarter. Our patients have ever increasing acuity and digital has great potential to meet that gap by transforming our care pathways. Digital solutions provide an opportunity to help meet some of the key priorities for the NHS. Current innovations in digital technology have enabled the rise of virtual outpatient appointments, artificial intelligence is providing key insights to support individualised care and Robotic Process Automation (RPA) is helping ease the repetitive administrative burden.

The NHS has published a number of key documents that describe the digital essentials for the NHS's future. These map directly to our Digital Vision Objectives as indicated in the below information.

### The NHS Long Term Plan: Practical Priorities.

#### **Supporting health and care professionals:** - *Workforce and Digital Literacy*

The information technology revolution in the NHS also needs to make it a more satisfying place for our staff to work

#### **Supporting clinical care:** *Care Pathway Transformation, Frontline Digitisation and Patients, Prevention and Wearables*

Patients, clinicians and the carers working with them will have technology designed to help them, through digitisation of records, EPRs and modern IT infrastructure.

#### **Improving population health:** *Business Intelligence Patients, Prevention and Wearables*

Shared care records and population health management solutions will support ICSs to understand the areas of greatest health need and match NHS services to meet them.

#### **Improving clinical efficiency and safety:** *Care Pathway Transformation, Frontline Digitisation and Patients, Prevention and Wearables*

Digital technology can support the NHS to deliver high quality specialist care more efficiently, including digitising diagnostic images, and the use of wearable technology.

#### **Empowering people:**

People will be empowered, and their experience of health and care will be transformed, by the ability to access, manage and contribute to digital tools, information and services.

### The Barnsley Plan.

That people of Barnsley are enabled to take control of their health and wellbeing and enjoy happy, healthy and longer lives, in safer and stronger communities, wherever they are and wherever they live.

The Barnsley Plan identifies and addresses three key challenges to improving population health and wellbeing, and to providing high quality sustainable services to our population:

1. The Health and Wellbeing Gap
2. The Care and Quality Gap
3. The Finance and Efficiency Gap

We need to support this plan by sharing records with our partners. *Shared Care Records*

## South Yorkshire and Bassetlaw Integrated Care System Digital Transformation Strategy

South Yorkshire and Bassetlaw  
Integrated Care System



# Digital Transformation Strategy

2021-2024

## OUR VISION

Using data and digital transformation for the benefit of all SYB citizens and staff, to improve health and wellbeing, reduce health inequalities and deliver excellent services

### OUR MISSIONS

### CAPABILITIES



#### Digital Citizen

Empower citizens with the digital tools and skills to manage their health and care effectively.



- citizen digital inclusion and literacy
- common digital citizen offer
- condition specific digital citizen offer
- AI to support citizens



#### Data Intelligence

Use data and tools to create intelligence and insight to address the health inequalities of the SYB population



- population health intelligence platform
- system-wide intelligence cell
- information governance
- decision support and AI



#### Workforce

Provide the digital tools and skillsets for staff to work safely and effectively, building a digitally literate, resilient, and capable workforce



- whole workforce digital skills and literacy
- elearning and collaboration tools
- integration with Citizen Offer
- agile / remote working
- automation and AI tools



#### Integrated Care

Digitally transform processes and share data to better integrate care, improve efficiencies and enhance patient care



- digital standards and IG
- data-rich clinical and social care systems
- regional diagnostic systems / networks
- an integrated shared patient record
- data standards

## UNDERPINNING CAPABILITIES

#### Infrastructure

- Networks
- Hardware
- Cybersecurity
- Cloud computing

#### Change Management

- Leadership and governance
- Digital Maturity Benchmarking
- Communication / engagement
- Communities of Interest
- Quality improvement & Benefits

#### Innovation

- Innovation Management
- Learning networks
- Rotherham Digital Aspirant Programme

Standards

*"Think Big, Start Small, Scale Fast"*

Principles

Supports our Frontline Digitisation, Patients, Prevention and Wearables, Business Intelligence and Workforce and Digital Literacy digital objectives.

## The NHS Service design principles:

1. Put people at the heart of everything you do
2. Design for the outcome
3. Be inclusive
4. Design for context
5. Design for trust
6. Test your assumptions
7. Make, learn, iterate
8. Do the hard work to make it simple
9. Make things open, it makes things better

We believe these principles ring true for our Digital Transformation projects and we will be referring to these throughout the Digital Transformation Strategy delivery.

## The NHSX Data Strategy:

The following are key outcomes highlighted by the Strategy and which objectives they map to in our own strategy.

1. Bringing people closer to their data - **Business Intelligence Patients, Prevention and Wearables**
2. Giving health and care professionals the data, they need to provide the best possible care– **Business Intelligence** and **Digital Roadmap**
3. Supporting local and national decision makers with data - **Business Intelligence**
4. Helping colleagues develop the right technical infrastructure - **Digital Roadmap**
5. Helping developers and innovators to improve health and care **Frontline Digitisation** and **Care Pathway Transformation**

## The Information and Communication Technology Directorate:

The ICT Directorate have 100 staff providing a service across the following areas:

- Coding – Code Procedures, Treatment and Diagnosis for all our inpatient services
- Business Intelligence – Reporting nationally and locally. Analysis and insight for service design decisions, Data Quality support and Clinical Patient Information reporting/Audits.
- Desktop and Infrastructure – Support the Digital devices and underpinning infrastructure.
- Clinical systems and IG – Support the trust wide clinical applications. Accounts, configuration, faults and information governance.
- Data Quality – RTT and Patient Information checking and correcting.
- ICT Development Team – New programming developments, data warehouse management, interfacing and configuration support.
- ICT Projects – implementing large scale projects across the Trust
- Clinical Digital Team- providing the interface between ICT and clinical staff to drive digital changes, whilst ensuring the digital solutions are safe to use and fit for purpose.

In **conclusion** our strategy is built upon robust intelligence that aligns with national, regional and local policy. There are 3 key underpinning priorities running through these strategies and have been used as the foundations for our digital vision:

- **First**, we must share information with our patients, partners and the rest of the clinical and care community.
- **Second**, we must digitise our health care records using fast, intuitive, user friendly and supportive solutions.
- **Third**, to build the right technical foundations – by engaging with all our staff and patients– to make that possible.

# 5. The Vision for Digital Transformation

## Our Digital Vision:

Together we will transform our clinical care, how we engage with our patients, staff and partners.

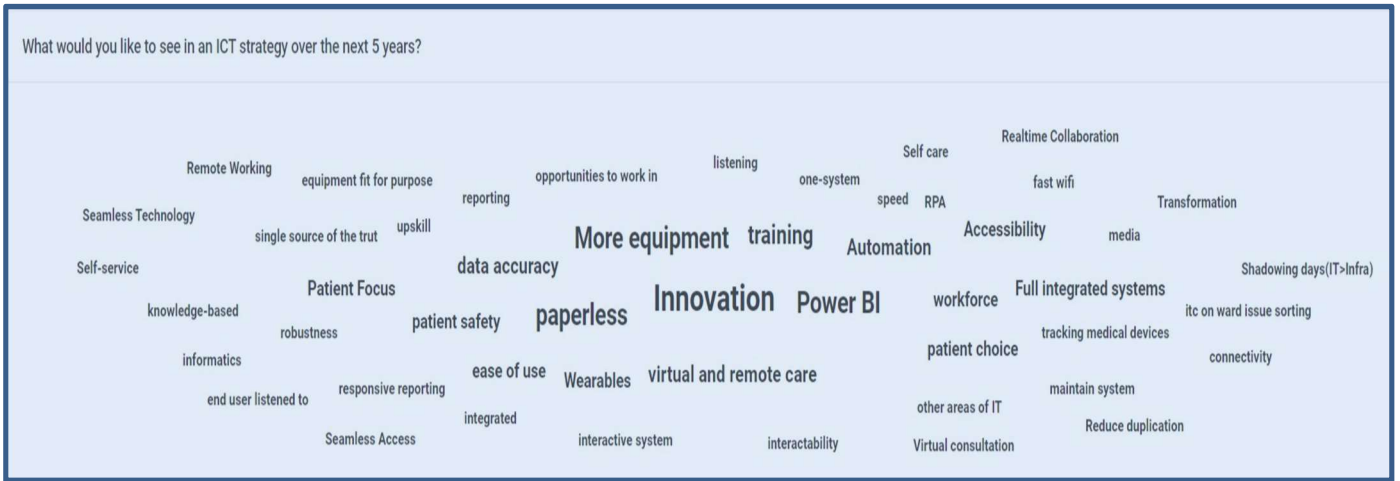
We have an ambition to be an excellent digital trust where IT is easy.

## Developing our vision:

To develop our digital transformation vision and strategy we held a number of engagement events across the trust

- Digital Strategy workshop sessions – Virtual and in person.
- Executive Team and Senior Leadership
- All Clinical Lead 1:1 discussion
- Clinical Reference Group.
- Various consultant and Nurse Forums.
- CCIO Leaders group and Barnsley Place Digital Group.
- We used modern technologies to capture input across the trust using SLIDO and Teams.
- Asking patients who were currently waiting for services in the trust.

When we asked you what you would like to see in a future Digital Strategy and the importance of the work we are delivering you told us...



## Our detailed ambitions for our Digital Vision Objectives:

Objective:	<b>Care Pathway Transformation</b>	
Ambition:	We will coproduce new digital ways of working with our staff and patients in line with Quality Innovation principles and engagement.	
	<b>Within 1<sup>st</sup> Year</b>	<b>Within 5 Years</b>
How we will measure success.	<ul style="list-style-type: none"> <li>• Deliver our E-Prescribing plans</li> <li>• Deliver Clinical System for Intensive Care Unit</li> <li>• Deliver Ophthalmology System</li> <li>• Continue our Careflow Programme of work.</li> <li>• D1 Discharges on Medway</li> <li>• Use intelligence to understand unwarranted variation in outcomes to drive improvements in clinical services</li> <li>• Support the Implementation of systems to prevent avoidable harm</li> </ul>	<ul style="list-style-type: none"> <li>• Fully integrated Clinical Systems with electronic referrals and shared reporting</li> <li>• Careflow Workspace Live</li> <li>• Deliver Clinical Notation</li> <li>• Deliver New Order Comms solution</li> <li>• High Digital Maturity on the NHS “What good Looks Like” Framework.</li> <li>• A fully paperless single patient record.</li> </ul>
High Level Benefits	<ul style="list-style-type: none"> <li>• Increase Patient Safety and Quality.</li> <li>• Improved clinical efficiency releasing time to care.</li> </ul>	<ul style="list-style-type: none"> <li>• Benefits of fully accessible single patient record.</li> <li>• Paper removed completely from the trust</li> </ul>

Objective:	<b>Patients, Prevention and Wearables</b>	
Ambition:	We will investigate the opportunities to improve the patient experience through prevention and remote care to support our trust strategies for community and virtual wards. We have the ambition that patients will have access to their own records digitally and amend their appointments online. We will be mindful and manage the challenges of public digital literacy.	
	<b>Within 1<sup>st</sup> Year</b>	<b>Within 5 Years</b>
How we will measure success.	<ul style="list-style-type: none"> <li>• Review our Patient Digital Communication Technology Contract.</li> <li>• Establish a plan for Patients to hold their own records, book and amend their appointments digitally.</li> <li>• Support the Virtual Wards and Virtual Clinic Configurations.</li> <li>• Deliver Outpatient E-Prescribing solution.</li> <li>• Ensure we have put in resources and support patient safety plans for Vital signs solutions.</li> <li>• Assess our patients Digital Literacy</li> </ul>	<ul style="list-style-type: none"> <li>• Invest in technology that monitors patients’ conditions remotely and gives them the assurance they need when they are worried.</li> <li>• All patients can access their records from their digital devices and update them to share with their clinicians.</li> <li>• Fully considered and implemented any affordable opportunities using Artificial intelligence and pattern matching.</li> <li>• Have a plan for managing the digital literacy gap.</li> </ul>
High Level Benefits	<ul style="list-style-type: none"> <li>• Improve Patient Experience</li> <li>• Lower DNA Rates.</li> </ul>	<ul style="list-style-type: none"> <li>• Fully paperless single patient record fully accessible and contemporaneous.</li> </ul>

Objective:	Shared Care Records	
Ambition:	We will share our clinical records digitally, for the benefit of our patients, with our partners in Barnsley Place, Yorkshire and beyond.	
	Within 1 <sup>st</sup> Year	Within 5 Years
How we will measure success.	<ul style="list-style-type: none"> <li>Build a plan for a Barnsley place and a SY+B MVP in line with NHSX Initiative.</li> <li>Build a plan for a Barnsley place and a SY+B MVP in line with NHSX Initiative.</li> <li>Reflect and build opportunities for partnership working and formation of anchor institution.</li> <li>Understand the requirements of the ICS digital pathology projects.</li> </ul>	<ul style="list-style-type: none"> <li>Deliver a board approved business case</li> <li>Deliver a shared care record for Barnsley Place.</li> <li>Deliver a shared care record for South Yorkshire and Bassetlaw.</li> <li>Submit BHNFT Patient information to a Yorkshire and Humber Wide based Sharing Solution</li> </ul>
High Level Benefits	<ul style="list-style-type: none"> <li>Understand our plan for Sharing Patient Information with our partners.</li> </ul>	<ul style="list-style-type: none"> <li>Reduce repetitive patient assessments</li> <li>Avoid unnecessary admissions</li> </ul>

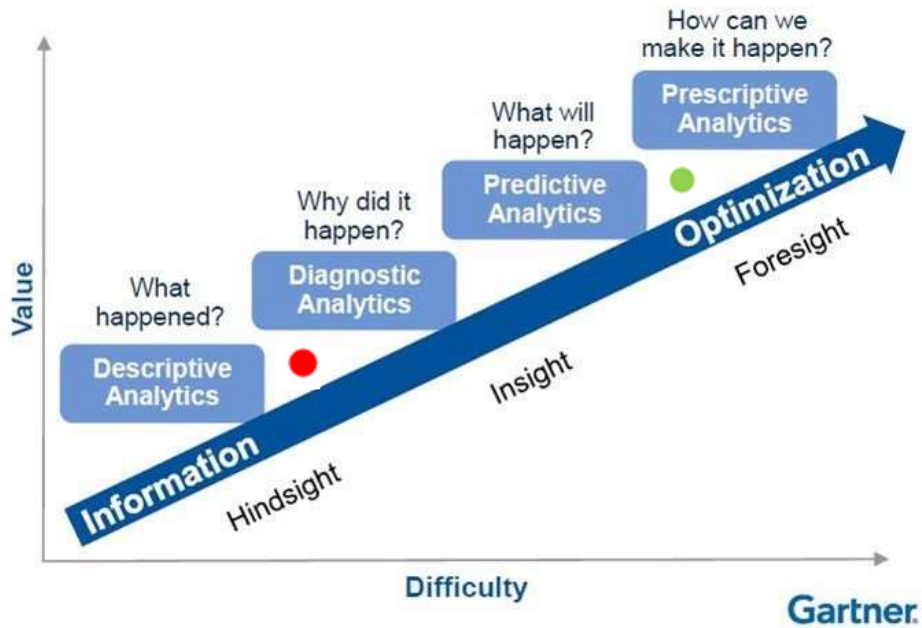
Objective:	Digital Roadmap	
Ambition:	We will build a clinically led roadmap for our Digital Transformations, Clinical Systems and Infrastructure Improvements. We can all understand what's next for digital.	
	This will be a dynamic document that adapts to the challenges and opportunities in the organisation over the life of the Strategy.	
	Within 1 <sup>st</sup> Year	Within 5 Years
How we will measure success.	<ul style="list-style-type: none"> <li>Assess our desktop and infrastructure refresh needs and develop a plan for delivery.</li> <li>Complete the Outpatient Modernisation Programme works.</li> <li>Continually access and assure the Cybersecurity Infrastructure.</li> <li>Continue to deliver COVID-19 response to help manage the pandemic.</li> <li>Ensure ICT supports the Efficiency and Productivity Requirements.</li> </ul>	<ul style="list-style-type: none"> <li>The Technology estate in the trust is secure, mobile, modern, robust and fit for purpose.</li> <li>The Devices in the trust continue to meet the need of clinical staff and Digital Transformation projects.</li> <li>Ongoing support for our digitally dependant departments in BHNFT and their development programmes. For example: BFS, Procurement, E-Rostering, Diagnostics, Assistive Technologies and Medical Devices</li> <li>Our Digital roadmap includes the needs of all our non-clinical services.</li> </ul>
High Level Benefits	<ul style="list-style-type: none"> <li>High Digital Device Availability</li> <li>Robust Modern infrastructure</li> <li>High Efficiency and Productivity</li> </ul>	<ul style="list-style-type: none"> <li>Technology that is easy and Just works well for our staff</li> <li>All staff will carry or access a digital device.</li> </ul>



Objective:	<b>Frontline Digitisation</b>	
Ambition:	We will look at every opportunity to use our digital systems to replace existing paper-based documentation. We will engage with our clinical teams to safely transform their processes.	
	<b>Within 1<sup>st</sup> Year</b>	<b>Within 5 Years</b>
How we will measure success.	<ul style="list-style-type: none"> <li>• Complete our Scanning Projects for Health Care Records</li> <li>• Have a full register of clinical paper forms and a plan to digitise them.</li> <li>• Have a full register of clinical paper forms and a plan to digitise them.</li> <li>• Complete our Pro-App plans</li> <li>• Stabilise the rapid development work during COVID-19.</li> <li>• Investigate the opportunities of Artificial intelligence and robotic process automation to bring real benefits to our patients and organisation.</li> </ul>	<ul style="list-style-type: none"> <li>• Fully investigate and deliver corporate scanning opportunities.</li> <li>• All careplans are up to date, fully optimised and shared with all our health and social care partners.</li> <li>• Fully delivered technology opportunities that fit with our organisation for example. RPA, Artificial Intelligence, mobile and remote / self-care technologies.</li> <li>• Our Non-clinical services are also substantially digitised</li> </ul>
High Level Benefits	<ul style="list-style-type: none"> <li>• Financial, Quality and Efficiency benefits as mapped out in our business cases.</li> <li>• We achieve a high level of digital maturity and receive appropriate accolades.</li> </ul>	<ul style="list-style-type: none"> <li>• Paperless – Where the formal record of the patient is digital. Fully accessible, fully shared and easy to use.</li> </ul>

Objective:	<b>Workforce and Digital Literacy</b>	
Ambition:	Our workforce will be trained to gain the maximum benefits from technology to improve their working lives, get them ready for the future.	
	<b>Within 1<sup>st</sup> Year</b>	<b>Within 5 Years</b>
How we will measure success.	<ul style="list-style-type: none"> <li>• Develop a digital training needs analysis</li> <li>• All staff have access to digital training and support which utilises a range of learning techniques including virtual and face to face</li> <li>• Technical training plan for ICT staff</li> <li>• Support new wellbeing and onboarding trust objectives.</li> </ul>	<ul style="list-style-type: none"> <li>• Digital literacy programme embedded into staff roles - within all appraisals and staff induction</li> <li>• Online collaboration using new tools is the norm for staff. Emails no longer have attachments.</li> <li>• New ways of working improve staff's working lives</li> </ul>
High Level Benefits	<ul style="list-style-type: none"> <li>• Fully understand our staff digital literacy.</li> <li>• We are in a position to move to fully digital.</li> </ul>	<ul style="list-style-type: none"> <li>• Attract staff to work at BHNFT.</li> <li>• Help improve staff morale and staff survey results.</li> </ul>

The Business Intelligence team is gaining maturity in our organisation. We believe we are currently at the Red Dot ● and in 5 years' time we aspire to be at the green dot ●.



Objective:	<b>Business Intelligence</b>	
Ambition:	Our information will be fully available in intelligent reports that support our clinical and operational services. We will provide foresight and predictive tools supported by complex algorithms to support clinical care.	
	<b>Within 1<sup>st</sup> Year</b>	<b>Within 5 Years</b>
How we will measure success.	<ul style="list-style-type: none"> <li>We will build a plan to deliver improved BI Maturity.</li> <li>We will deliver our plans for PowerBI technologies.</li> <li>Improve consistency and data quality</li> <li>Reporting for Trust Objectives in place and fully support our quality improvement plans.</li> </ul>	<ul style="list-style-type: none"> <li>Our Business Intelligence Maturity meets Foresight and Prescriptive Analytics.</li> <li>Our Information is fully integrated into ICS reporting and analytic solution.</li> </ul>
High Level Benefits	<ul style="list-style-type: none"> <li>Improved reporting, Performance Monitoring and Governance.</li> <li>Self Sufficient, Self-servicing reporting infrastructure.</li> <li>We will develop dashboards that are intuitive and staff can use to revolutionise decision-making</li> </ul>	<ul style="list-style-type: none"> <li>Our clinical staff get insight into their patient's care needs.</li> <li>Our Management have helpful reports that inform them of the impacts of new models of care and design.</li> <li>Our Board and Executives can gain new strategic insights and assurance.</li> </ul>

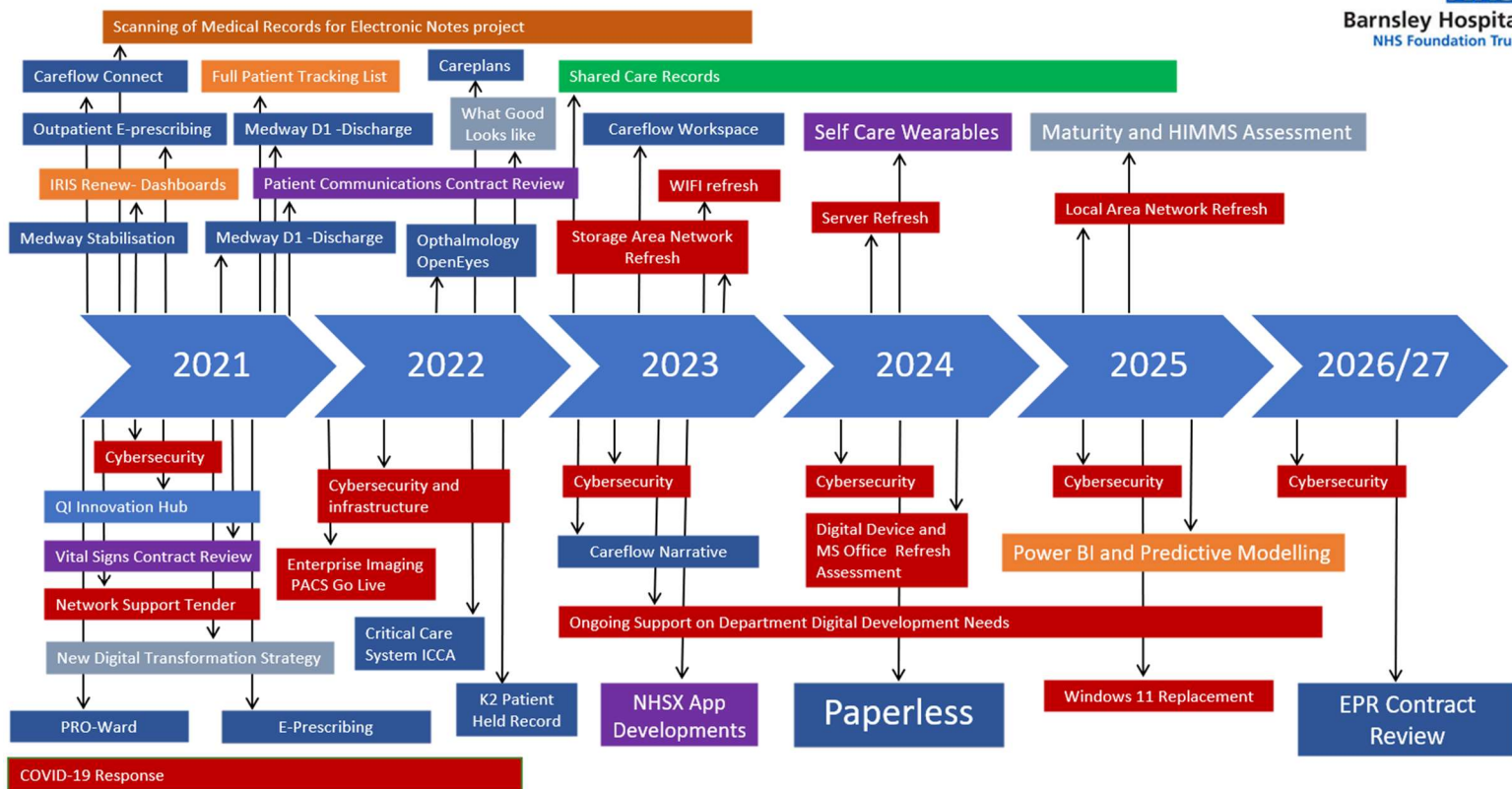
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## Digital Roadmap



# 6. Digital Roadmap

## Digital Transformation Strategy Roadmap 2021-2027



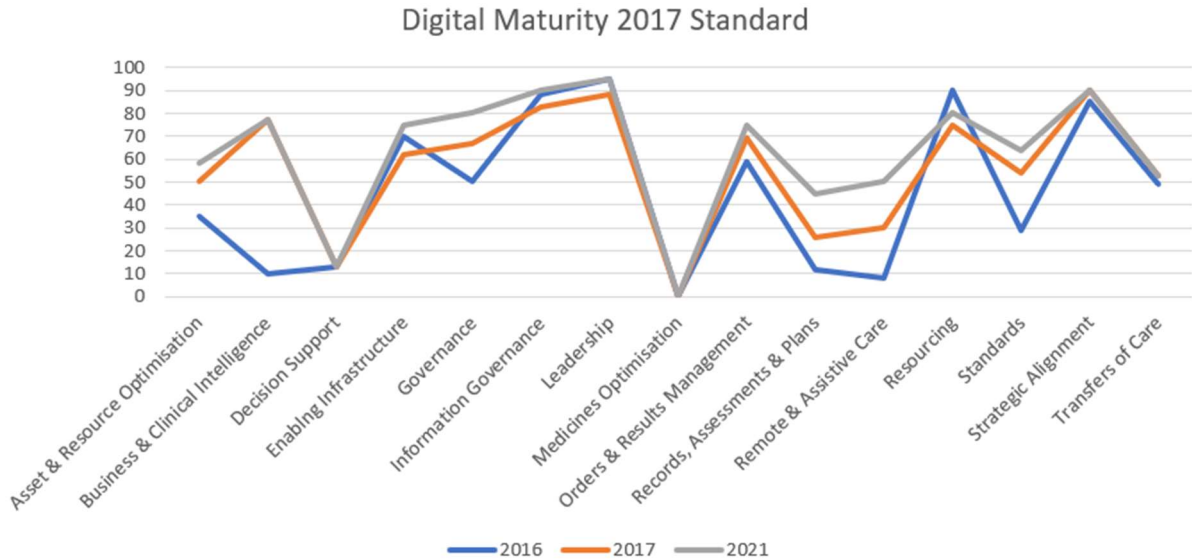
The purpose of a co-produced digital transformation roadmap is to co-ordinate our different teams on the same overall strategy, so we arrive together following our journey. To ensure effective delivery we must collaborate and engage our clinical colleagues and teams to come up with a smart plan. This might be part of a quality improvement delivery, or a strategic objective implementation, but it will only work if we agree the goals together.

Our Digital Transformation Roadmap is colour coded to show the fit with our digital vision objectives. It is a dynamic document that we will adapt over time, as new digital strategic objectives arrive, over the lifetime of the strategy. We will adapt the document as the details become clear. The Digital Roadmap allows us to effectively communicate our plans and monitor our progress to reach the objectives of our vision. Our progress will be reported monthly to the Board Sub-Committees and managed via our governance detailed in our “Governance and Engagement” section. All of our digital projects and services will meet the Technology Code of Practice

By embracing the strategy and making digital technology a key component of all organisational transformation, we will ensure it is part of every clinical pathway and contributes to the care given to, and safety of, our patients. Digital transformation will blend into our culture to become a foundation of change that leads to improved patient care and safety. The formidable ICT teams can help enable the transformation, but we must deliver these changes as an organisation with everyone involved.

# 7. Digital Maturity

Our Digital Maturity was last formally assessed in 2017 and we have used the same standard to assess our position today. This graph represents our digital maturity.



The world has moved on since 2017 and this does not reflect our maturity well. When we deliver E-prescribing and Digital Health Care Records scanning as planned in 2021 most of these scores will be closer to 100%.

NHSX a new department of health directorate focused on digital transformation is bringing out a new digital framework called “What Good Looks Like” that will measure our organisation against our peers and give us a route for improvement. We will also use other maturity assessments to rate ourselves i.e. Digital Maternity Maturity 2021. The HIMSS EMRAM is a maturity model long recognised by the Health Informatics Industry. We are currently at the Red dot ● and we have an ambition to get to the Green dot ●

Our Digital Roadmap will enable us to reach these new levels of Maturity over the 5 years of the Strategy.

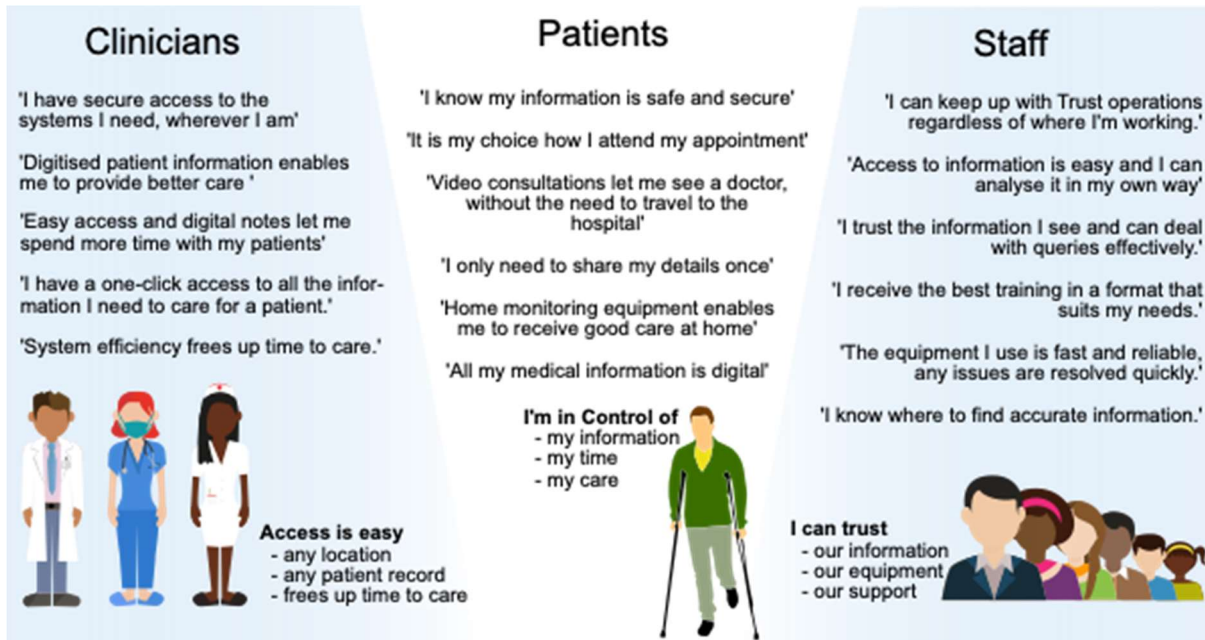
STAGE	HIMSS Analytics EMRAM EMR Adoption Model Cumulative Capabilities
7	Complete EMR; External HIE; Data Analytics, Governance, Disaster Recovery, Privacy and Security <span style="float: right;">●</span>
6	Technology Enabled Medication, Blood Products, and Human Milk Administration; Risk Reporting; Full CDS
5	Physician documentation using structured templates; Intrusion/Device Protection
4	CPOE with CDS; Nursing and Allied Health Documentation; Basic Business Continuity <span style="float: right;">●</span>
3	Nursing and Allied Health Documentation; eMAR; Role-Based Security
2	CDR; Internal Interoperability; Basic Security
1	Ancillaries - Laboratory, Pharmacy, and Radiology/Cardiology Information systems; PACS; Digital non-DICOM image management
0	All three ancillaries not installed
0	Definition for additional capabilities

## What Good Looks Like Framework



## 8. Engagement and Governance

We will know when our strategy is successful because:



The infographic is divided into three columns: Clinicians, Patients, and Staff. Each column lists several key indicators of success and includes an illustration of the respective group.

Clinicians	Patients	Staff
<ul style="list-style-type: none"> <li>'I have secure access to the systems I need, wherever I am'</li> <li>'Digitised patient information enables me to provide better care'</li> <li>'Easy access and digital notes let me spend more time with my patients'</li> <li>'I have a one-click access to all the information I need to care for a patient.'</li> <li>'System efficiency frees up time to care.'</li> </ul>	<ul style="list-style-type: none"> <li>'I know my information is safe and secure'</li> <li>'It is my choice how I attend my appointment'</li> <li>'Video consultations let me see a doctor, without the need to travel to the hospital'</li> <li>'I only need to share my details once'</li> <li>'Home monitoring equipment enables me to receive good care at home'</li> <li>'All my medical information is digital'</li> </ul>	<ul style="list-style-type: none"> <li>'I can keep up with Trust operations regardless of where I'm working.'</li> <li>'Access to information is easy and I can analyse it in my own way'</li> <li>'I trust the information I see and can deal with queries effectively.'</li> <li>'I receive the best training in a format that suits my needs.'</li> <li>'The equipment I use is fast and reliable, any issues are resolved quickly.'</li> <li>'I know where to find accurate information.'</li> </ul>
<p><b>Access is easy</b></p> <ul style="list-style-type: none"> <li>- any location</li> <li>- any patient record</li> <li>- frees up time to care</li> </ul>	<p><b>I'm in Control of</b></p> <ul style="list-style-type: none"> <li>- my information</li> <li>- my time</li> <li>- my care</li> </ul>	<p><b>I can trust</b></p> <ul style="list-style-type: none"> <li>- our information</li> <li>- our equipment</li> <li>- our support</li> </ul>

Engagement is key to ensuring digital transformation and digital inclusion works. As outlined in 'The vision for digital transformation' we engaged numerous groups to understand their requirements and priorities for the digital roadmap at the Trust.

The Topol review which was published in 2019, sets out the steps required to prepare staff now for the future, where the NHS is the world leader in the revolutionary technologies, this will allow the service to continue to provide the best care and treatment possible. One of the recommendations from this review is for NHS organisations to invest in their existing workforce to develop specialist skills, including the assessment and commissioning of digital technologies.

As a Trust, we understand the importance that clinical staff have in driving digital projects, and since the previous Strategy, we have invested in our digital clinicians. Not only do we involve clinicians from across the Trust for specific projects, we now have a permanent CCIO, a permanent full time CNIO, a permanent full time Clinical Digital Lead (Nurse), two permanent digital Midwives, a seconded digital pharmacist and two seconded pharmacy technicians. By the end of 2021, we will have five Clinical Safety Officers (CSO) in the Trust, as we appreciate the vital role clinicians play in analysing and approving the clinical safety of our digital solutions. By investing in our clinical digital team, the Trust staff have a regular and trusted point of call to voice any concerns and request any changes in relation to anything digital.

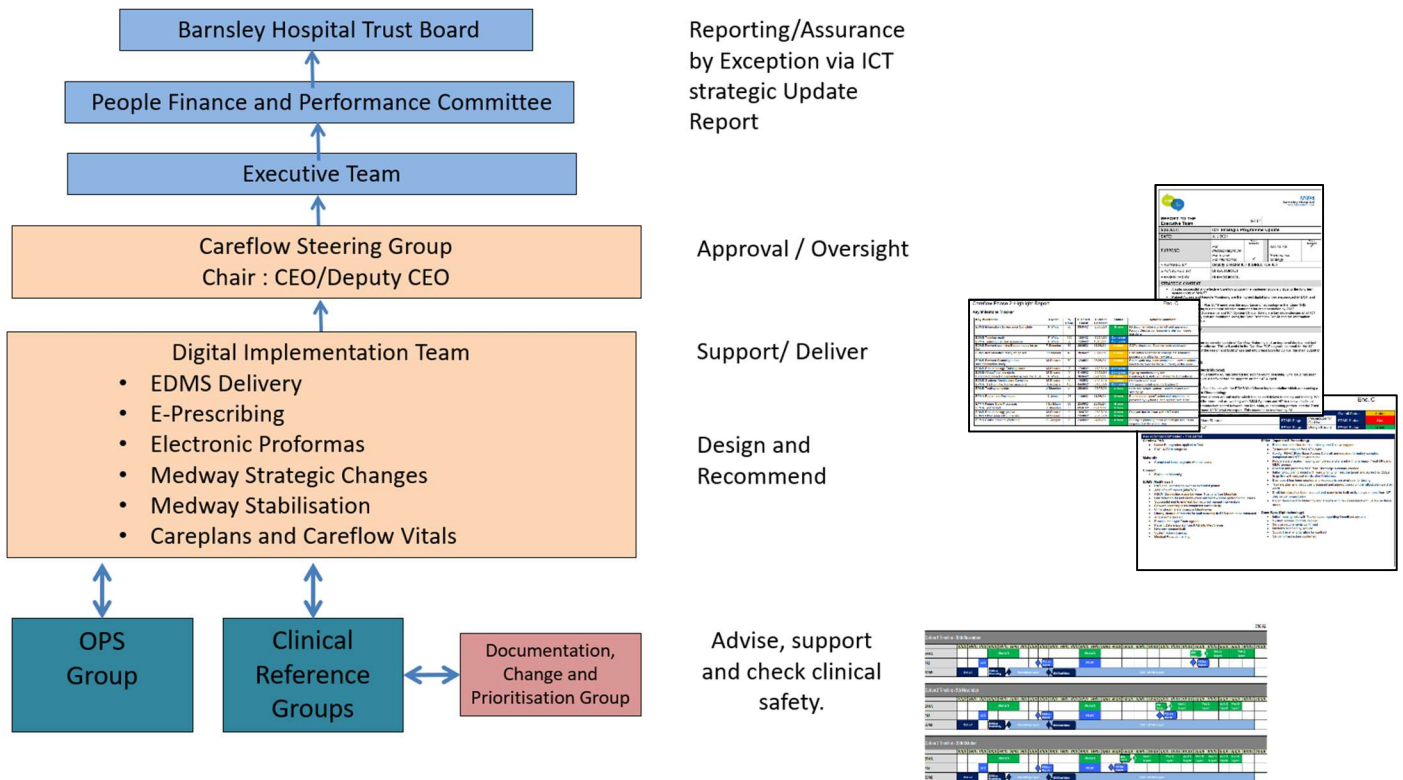
We will continue to engage exceptionally well with all of our patients and staff, to gain the maximum intelligence, to help co-produce every digital transformation project. This ensures we win hearts and minds, minimise disruption and substantially increases the safe delivery of every project.

We will continue to ensure we have the right governance in place, so digital transformation projects deliver value, are well managed and the decisions are made by the right people. We want our staff to have a voice in digital and to ensure comments and suggestions are welcome by anyone in the Trust, we have an eForm for any digital change requests, which will be discussed in our new Documentation, Change and Prioritisation Group (DCPG).

Staff in the Trust are kept up to date with anything digital through:

- Trust-wide communications
- The new digital newsletter
- Our digital nurses attend the CBU Lead Nurse meetings
- Social media (Twitter and Facebook)
- Face to face communications

The ICT team have robust governance, reporting and clinical safety officer processes in place.



## 9. Conclusion

**By pursuing our vision, we will build solutions where the core aim is to benefit our patients and staff ahead of our organisation.**

We will act with the interest of the local health economy at the centre of everything we do and ensure collaboration is built into our digital solutions from the outset rather than added as an afterthought. Collaboration will not stop at the technology as we will share our resources and learning to ensure that as a community we are not re-inventing solutions. We will accelerate our digital transformation by assimilating existing best practice solutions into our organisation. As a Trust we will learn from implementations elsewhere in the NHS and beyond, recognising that others also have the skills and ability to create transformational solutions which we can assimilate into our operations.

**Executing our strategy means quality, safety and patient experience will improve by using our digital solutions to create an environment in which the right information is available to our staff at the right time. By listening and co-designing our solutions with all stakeholders, we will provide innovative, intuitive and vastly improved ways of interacting with the NHS.**

We cannot forget the rapid digital developments and literacy that were a consequence of the unprecedented COVID-19 pandemic. We all agree it is very important we retain these significant improvements and integrate them into everything we do to improve working lives. We will ensure we do not forget about inequality, digital poverty and language barriers by planning this into everything we do.

We look forward to an exciting digital future for our Hospital, patients and staff.

