NHS
The Rotherham
NHS Foundation Trust

The Rotherham NHS Foundation Trust
Digital Strategy
2024/28

Contents

# Foreward

Welcome to our "TRFTProud2bDigital"

These are exciting times for Rotherham FT and the NHS as we continue on our journey towards 2028, with a proven track record of digital excellence at both regional and national levels.

To ensure our future success, we must wholeheartedly embrace the digital challenge. While I acknowledge the significant technological improvements we have made in recent years, we still have a long way to go and our ability to deliver exceptional clinical services hinges on establishing a high quality digital infrastructure and empowering our digitally skilled workforce. Each individual and department should have the confidence and proficiency to seize the opportunities presented by digital technology and have seamless access to high-quality digital tools that enhance their work.

Collaboration and partnership with local and regional organisations play a pivotal role in our strategy. By forging strong alliances, we can leverage shared expertise and resources to create a leading digital environment that benefits everyone. We actively seek close engagement with our partners, working hand in hand to drive innovation and find creative solutions to healthcare challenges. Together, we aim to establish a robust ecosystem of collaboration that propels our collective progress towards outstanding patient care, while maintaining our positioning as trailblazers in the region's healthcare landscape.

As we refresh our strategy and redefine our commitment to digital excellence, we aim to capitalize on our strategic strengths while addressing our underlying weaknesses. Through collaboration and partnership, we can tap into the diverse perspectives and knowledge of our local and regional counterparts.

However, publishing this strategy marks just the beginning of a new phase characterized by close engagement and collaborative work. Achieving our ambitious vision requires a collective effort from all of us, including our valued partners and collaborators.
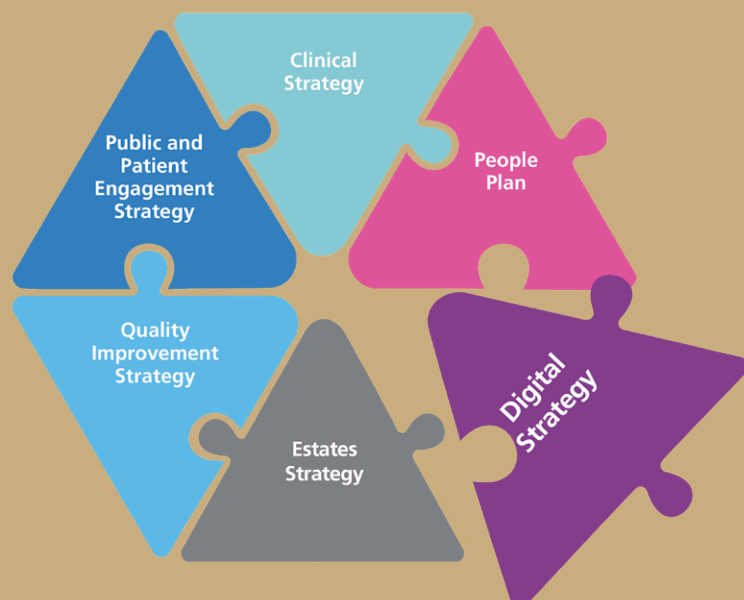
TRFTProud2bDigital

Introduction

Digital, Data and Technology are key enablers to the support the Trusts organisational strategy 'Our new Journey Together – together to excellence', which sets out the ambition of the Trust and provides a direction of travel for the organisation through what is a challenging and changing local, regional and national landscape.

In a society that is continually adopting and embracing technology, the NHS must not remain stagnant. Our vision outlines our commitment to incorporating digital solutions into every patient interaction, through clinical leadership, we aim to enhance the quality of care and improve the overall experience for our patients, while supporting our workforce with safe and efficient tools.

Our journey towards digital excellence involves eliminating transactional friction, implementing empowering modern technologies such as AI, aligning technology with specific roles, and ensuring high-quality data is readily available during care delivery. Furthermore, we emphasize the digitization of patient interactions and the automation of associated processes, facilitating the sharing of data across the healthcare system. Lastly, we will leverage our growing wealth of data and insights to provide decision-makers at all levels of the Trust with insightful self-service business intelligence.

This document sets out this enabling Digital, Data and Technology (DDaT) strategy over the next 5 years (2024 – 2028), taking into consideration our journey so far alongside regional and national ambitions[1]

NHS Providers define digital as:
"Applying the culture, processes, operating models & technologies of the internet era to respond to people's raised expectations"

A digital strategy is therefore as much about business transformation as it is adopting modern technology, with the ultimate aims of:
- Empowering and enabling all parts of our organisation to deliver efficient, safe, high-quality care
- Helping people and their families access services easily and manage their own health and wellbeing
- Improving wider population health and choices
- Improving the working environment for our workforce .

NHS Providers define digital as:

"Applying the culture, processes, operating models & technologies of the internet era to respond to people's raised expectations"

[1]Appendix 1 and 2

Vision

To provide excellent digital experience for our workforce and the communities we serve. Driving the highest standards of intuitive digital co-design and delivering exceptionally reliable solutions and insights. We will be '#TRFTProud2bDigital".

We will encourage, foster and develop a culture of "digital first", investing in co-designing digital change, and be at the heart of organisational transformation and improvement. We will deliver high performing customer-centric, digital environments where people will want to work with digital tools, that don't slow us down, intuitively supporting and guiding the work we do.

The NHS England Digital Maturity Assessment process will be used to measure our progress of this strategy and enable to us to compare our progress nationally and regionally. In addition, we will look to instigate a process of obtain regular usability and customer service feedback using global best practices, such as KLAS or NPS.

Our Digital Ambitions

During 2022 and 2023 we ran several online user workshops across the Trust in order to listen and understand our workforce's real-life aims and digital goals. Everyone recognised the digital journey the organisation has been on, and the significant level of digital adoption already embedded across the organisation, but also acknowledged there is lots still to do. We received over 300 responses of feedback that have been grouped into the following ambitions centred around our vision.

We also reviewed the Trust 2022 Strategy, the Rotherham Health and Care place plan 2023 – 2025 and the current South Yorkshire and Bassetlaw Integrated Care System Digital strategy[2]

[2]Appendix 1

Our digital systems and tools need to be intuitive and instinctive to use, with the minimal number of clicks and data input to get the job done. Information about our patients needs to be readily available to our clinical teams from wherever and whichever organisation created it.

We will look to further enhance our clinical input into all our digital programmes, embedding and skilling teams in the principles of co-design. We'll also consider where we can leverage emerging technologies such as AI-driven speech recognition, or machine learning with chatbots to drive our digital interactions for both our workforce and patients.

We will also prioritize digital patient inclusion as an integral part of intuitive ambition. Recognizing the importance of equitable access to healthcare services, we will aim to ensure that all patients can benefit from our digital initiatives., we will actively seek input and feedback of groups such as the Rotherham Digital Inclusion forum, to tailor our digital solutions to their needs. By considering factors such as accessibility, language diversity, and digital literacy, we will strive to bridge the digital divide and create intuitive inclusive digital platforms that empower patients to actively participate in their healthcare journey.

HELPFUL

Our digital tools need to support and alleviate the mental burden, not add to it. Ideally, they will have embedded clinical decision support aiding our workforce and guiding them through a specific process.

Our non-clinical processes are often overly complex to navigate and understand, often relying on antiquated systems or ways of working, making telephone calls to obtain updates, walking the estate looking for kit or manually copying information from sheets of paper into electronic systems.

Patients and their carers increasingly want to digitally interact with our services and contribute to their own health record in a safe and secure manner and be kept updated about their own care, so they can choose well.

INNOVATIVE

Within the Trust there is a powerful desire to continue to be digitally innovative and leverage our digital capabilities as a positive force for change. We will look to establish digital innovation capability where teams can bring transformative ideas and problems and after a process of prioritisation, work with digital experts to co-design scalable solutions.

RELIABLE

As our reliance and dependency on digital environment has grown, we recognise our whole digital portfolio, from systems, infrastructure and data needs to be exceptionally reliable and secure, and work seamlessly wherever and whoever we are. This will mean systematically and routinely investing in our infrastructure, transforming how we deliver applications, with embedded Single Sign-On (SSO), and put in place processes that routinely measure meaningful end-user metrics.

In addition, being a relatively small organisation, we'll need to accelerate our 'cloud-first' journey, outsourcing infrastructure management to global specialists, and invest training and culture of our digital support services to provide more self-services, self-healing systems an excellent and responsive customer service.

INTEGRATED

Compared to other NHS organisation we do have substantial levels of integration between our internal and external clinical systems, which has raised our user's expectation and there is more to do. Staff, at times, must access several different systems to be able to obtain a total picture of a patient's care, and as we move to increased integrated and partnership working across the ICS (Integrated Care System), the expectation and demand on interoperable systems will rightly increase, and we will positively consider EPR alignment across the ICS as a way of achieving deep digital integration.

In addition, as we accelerate the adoption of smart medical machines across the estate or in patients' homes, we need to ensure the data they produce is fully and automatically interoperable with our EPRs (Electronic Patient Record).

This Integration challenge also applies to our non-clinical systems and process, with staff also telling us they have multiple solutions to navigate, with duplication of information or antiquated 'word' forms that are cumbersome to complete.

We will be unwavering in our digital integration strategy, and follow national standards, which may mean hard choices in not progressing potential opportunities where there is a lack of integration capability.

INFORMATIVE

We generate a tremendous amount of data daily as a by-product of the digital systems we use,and this is only going to increase exponentially. Whilst we've made significant strides in providing high quality data and information back into the organisation, access to this information is generally limited to a few individuals and teams and there is increasing appetite clinical and non-clinic teams to obtain their own insights and support clinical research.

We will build upon our self-service data strategy, make more of our data transparent to those in and out of our organisation and explore establishment of our own internal Trusted Research Environment.

What does this mean?

Our organisation and our values, is all about people and communities. People in terms of our workforce, those accessing our services and the communities and families that wrap around and provide support.

Yasar has a young family, lives in Swinton at the edge of town near Mexborough. He's the main carer for his elderly mother who still live in Brinsworth, who has home help services. Yasar has Type I diabetes managed well with a CGM.

Yasars story

Yasar is playing football and has a very serious knee injury. Using the NHSApp his coach can see our UECC is the 'quietest' across South Yorkshire. Upon arrival, he 'taps' in his phone to be booked in, and the Yorkshire and Humber Care Record produces an AI generated clinical summary of Yasars history for the triage nurse, picking up his diabetes, CGM history and allergies or hospital appointments / GP Appointments.

Some x-rays are taken, with AI giving a diagnosis in 30 seconds. Whilst not serious, he's given a digital prescription for painkillers, to be picked at any Pharmacy, and an internal referral is made to our community physio team. In the NHS App Yasar, can see all his notes, and also receives updated from community physio who would like to book a virtual video consultation.

Using video Yasar, meets the physio team, who can see his full hospital, GP and community records and send over via the NHS App some exercises for him to carry out and how to update the NHSApp with his progress. Physio teams use voice recognition to update SystmOne.

AI, and pain surveys can see his pain is not getting better, and automatically invite Yasar to schedule a hospital appointment with an Orthopaedic surgeon – again Yasar can see through the NHSApp when the referral has been received, triaged and booked, and whilst waiting keeps in touch about his condition.

Upon arrival at the hospital, Yasar taps to check in and is instantly sent a link to where the clinic is, and how long roughly he'll be waiting. He see the consultant, who uses voice to interact with the EPR who decides he needs an operation and start the 1st phase of electronic consent. Whilst waiting for his operation, Yasar is given options about where he can have his operation and decides to select MEOC, and using a chatbot type interface is give some dates as to when he'd like be seen – all the time having access to videos of his procedure and what to expect.

At MEOC he receives amazing care, his wife is automatically kept informed of his progress and the clinical team can see, electronically, all the information about him. At the end of the operation, his surgeon films a quick video as to how it went

and what to expect next. Yasar is discharged onto a virtual ward who occasionally check in by video.

Yasars Mum, Sadai, has CPD and home help and is on a frailty virtual ward.

The AI enabled falls sensors knows Sadia is at home, but detects something abnormal in her day to day activity, and telephone calls Sadai home with no response, after which an automatic notification is sent to IRR who can see her vitals are active. Real-time nurse tracking shows a District nurse is already in the area, he's auto re-scheduled and given details of how to access Sadai's property and send sent links to her care plans (his previous appointment is auto notified that there will be a delay).

Sadai is not well and an ambulance is called. As Yasar his is the prime carer as recorded on Sadai care plan he is auto notified, along with contact details of the district nurse who re-assures him. YAS crews can also see Sadia care plans and Yasar can see which A&E Sadai is taken to. A transfer of care document is created, along with a detailed AI advanced clerking summary.

Sadai receives amazing timely intervention, staff use RTLS find equipment, are auto notified of test results, but she does require some overnight care – as Sadai moves through the hospital Yasar is kept updated.

Unfortunately Sadai needs transferring to Northern General – clinical teams make one 'order' and automatically, PTS are scheduled, then porters, NGH can see a pre-registration before arrival. Upon admittance at NGH, clinical teams can see all Sadai information.

After specialised care at NGH, Sadia is re-patriated back TRFT (Yasar continues to be informed), and ultimately discharged back to the frailty virtual ward

Rotherham
**Transfer
of Care
Hub**

Adoption of this strategy, over the next 3 years will impact the following people in the following ways.

Our patients, families, communities

The COVID-19 pandemic has proven there is societal willingness (and now expectation) for patients to digitally interact with healthcare services. In Rotherham we want this to continue, as enabling digital interactions allows us to provide personalised care and at the same time freeing up much needed capacity for those who are unable to access these digital services.

By 2028, patients will be in control and be informed electronically about their care and transact with us fully electronically 24x7. They will be able to:

• Updating their own care plans, or inviting carers to interact with us on their behalf.

• Traditional hospital services will increasingly be provided directly into people's homes with home intuitive home monitoring solutions, linked to virtual ward capability

• If patients do need to come to hospital, it will feel like a modern digital organisation, we'll provide digital tools, that will guide them before they arrive, so they know what to expect, when and where and after leaving we'll digitally keep in touch to make sure they are well.

• If things change, we'll let them know in near real-time, and why and importantly inform the people they would like us to.

• We will always be open and transparent with our patients and their carers and use digital apps to keep them informed in all stages of their care, and if they wish you digital technology to communicate directly with us.

• In addition, the communities we serve will be able to know in real time how we're performing across several domains, for them to be empowered to make their own informed choices.

Those who directly provide and support care delivery

Over the next 4 years, we will:

- Have transitioned to a modern EPR, that is intuitive to use and maintains deeply integrated across all our major care pathways with clinical decision support capability.

- Clinicians will be updating patients records in real time in some places using their own voice.

- Ideally this platform will be like our partners, but if this not possible, we will ensure the very highest levels of integration so that we can instantly access and share information.

- Being an integrated organisation, with the input of a dedicated clinical digital team, we will have determined which elements of our EPR(s) need to be fully and automatically integrated, so that staff no longer have to access multiple systems with different user interfaces.

- All our diagnostic machines will be fully integrated into our digital systems and no-one will be manually taking readings from one machine to type into another.

- If clinical teams want or need to access the data they're contributing to; they'll be able to self-serve or use AI technology to extract high quality datasets.

Partners, and wider health and care systems

Across the ICS and beyond our digital systems will positively support pathway re-design, integration and partnerships, to a level that patients will not be concerned with traditional organisational boundaries and facilitating (not hindering) skills and resources to move with the patient across the ICS, and by positively considering EPR alignment across the ICS our clinical teams will benefit from seamlessly being able to access and share information.

All our partners and local communities will also be able to see our performance in real-time, we'll be openly sharing our data and information so we can make shared decisions in real-time.

Our collegues and how we work

By 2027, we will have moved to modern office platforms enabled by AI, reducing reliance on excel spreadsheets on shared drives or cumbersome MS word 'forms', to manage our processes.

Our staff Intranet, will be transformed to a modern platform, with the ability for colleagues to access information and receive updates that matter to them. By 2028, we will have fully deployed a GenerativeAI organisational chatbot, that is available 24x7 to answer queries, search policies and interact with the organisational knowledge. New starters will have had a modern and seamless onboarding processes, and we would have re-designed interactions with all our back-office services such as IT Service desk to be 100% electronic and intuitive and helpful using AI where applicable.

The technology and infrastructure we use on a daily basis will work reliably 24x7, be fit for purpose and operate any location with integrated Single Sign On technology and we will use the latest technology and regional and national systems to ensure we are Cyber safe and able to operate safely if there are any issues.

Interactions within the organisation TRFT will feel 'easy', communications will be responsive and we will know what's going on with a specific process without having to 'chase people up'. We will be able to intuitively find 'things' in real time and stock will automatically order and replenish itself. We will continue to support and skill up the Trust QI programme.

Digital professionals

By 2028, we'll have re-branded the Health Informatics directorate to the Digital, Data and Technology (DDaT) directorate, making it clearer what we are responsible for. The directorate will have a reputation for being professional, responsive and customer focused and would have achieve Level 2 of Health Informatics accreditation, demonstrating our commient to digital change delivered by professionals. Our staff will continued to encourage in self-development and other digital professionals will have 'heard' of TRFT and will want to come to work for us.

Whilst we currently have good levels of clinical engagement, we continue to lack dedicated medicine, community and nursing leadership that can support us in driving through change, co-designing new services and helping make those hard choices.

By 2028, we'll have a dedicated and properly funded digital clinical team that everyone in the organisation knows, they will be experts in digital improvement and will integrate and communicate with the rest of the organisation. This team will run the new Digital Innovations Unit and build a network of digital ambassadors with links into the Trusts QI programme.
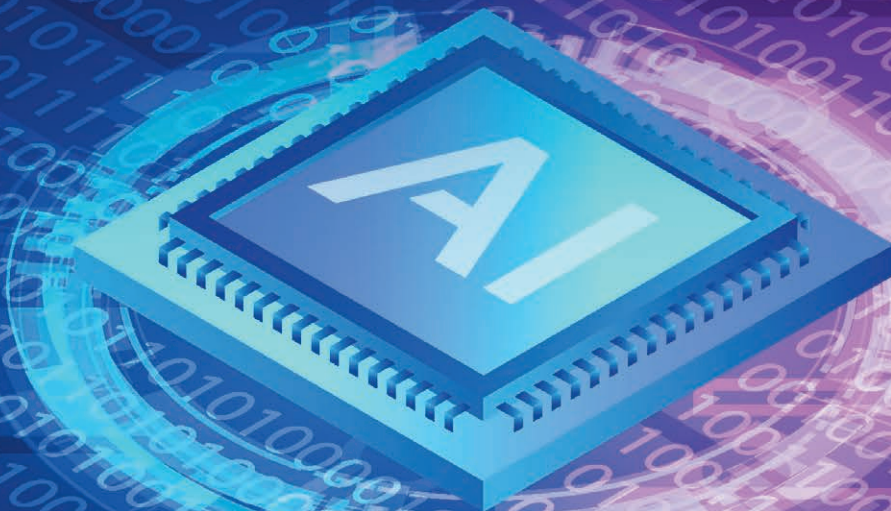
Objectives

This section shows the tangible changes we will undertake over the next five years to breathe life into our vision and manifest our visionary aspirations.

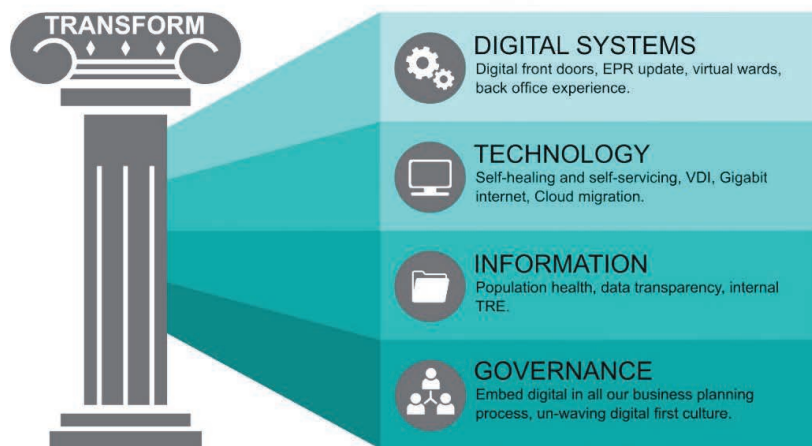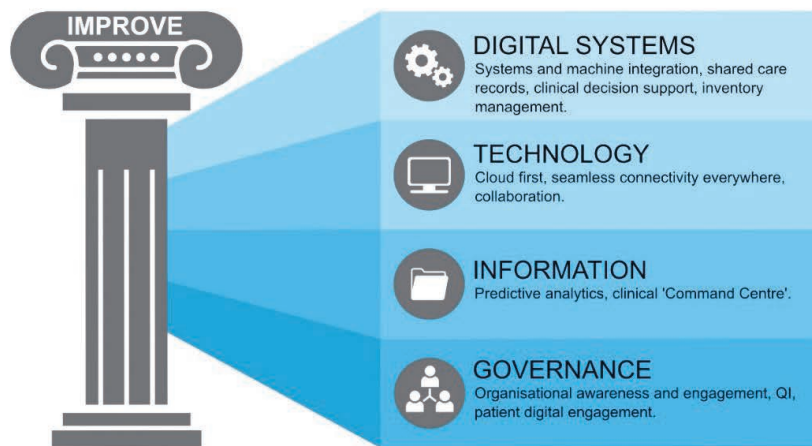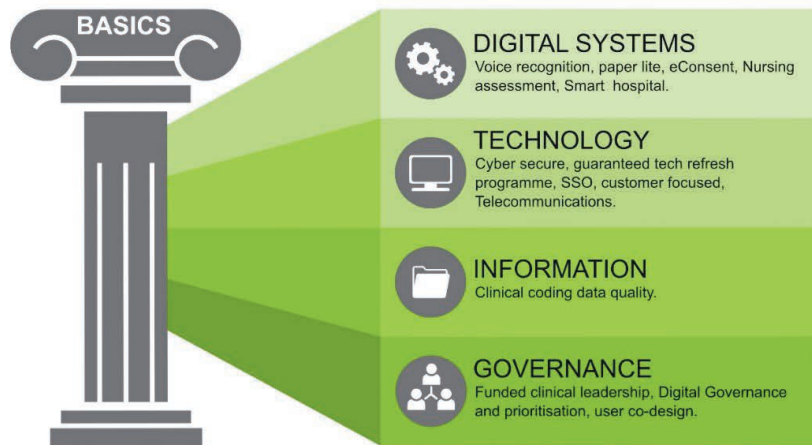It is constructed from 4 digital enablers across 3 pillars of change.

It sets out the broader programme of work to achieve our vision over the term of the strategy. These pillars and enablers will also serve as the ongoing reference point for future decision making.

Appendix 2 – provides further details on each of the objectives in the table below.

	PILLARS		
	Basics Getting the fundamentals right and ensuring reliability	**Improve** Building on the basics, and leveraging existing investments and capabilities	**Transform** Changes that enable us to change how we deliver care
Enablers			
Digital systems	Voice Recognition Paper light eConsent Nursing assessment Smart Hospital Inventory management	Systems and Machine Integration Shared records Clinical Decision support End-to-End Recruitment and onboarding	Digital Front Door EPR Future Virtual Wards In zhospital wearables Back Office experience
Technology	Cyber Secure Guaranteed tech refresh programme SSO Telecommunications	Cloud first Seamless connectivity everywhere Collaboration	Self-healing and self service VDI Gigabit Internet Cloud migration
Information	Clinical Coding Data Quality Mandate External Returns/Data Flows	Predicative analytics Clinical 'command centre' Info easily accessible at the point of need.	Population Health Data Transparency Internal TRE
Our People and Governance	Funded clinical leadership Digital Governance and prioritisation. User co-design	Data Essential Programme QI Patient digital engagement Ongoing professional development	Embed Digital in all our business planning process Un waving digital First culture Digital innovation Unit

BASICS

DIGITAL SYSTEMS
Voice recognition, paper lite, eConsent, Nursing assessment, Smart hospital.

TECHNOLOGY
Cyber secure, guaranteed tech refresh programme, SSO, customer focused, Telecommunications.

INFORMATION
Clinical coding data quality.

GOVERNANCE
Funded clinical leadership, Digital Governance and prioritisation, user co-design.

IMPROVE

DIGITAL SYSTEMS
Systems and machine integration, shared care records, clinical decision support, inventory management.

TECHNOLOGY
Cloud first, seamless connectivity everywhere, collaboration.

INFORMATION
Predictive analytics, clinical 'Command Centre'.

GOVERNANCE
Organisational awareness and engagement, QI, patient digital engagement.

TRANSFORM

DIGITAL SYSTEMS
Digital front doors, EPR update, virtual wards, back office experience.

TECHNOLOGY
Self-healing and self-servicing, VDI, Gigabit internet, Cloud migration.

INFORMATION
Population health, data transparency, internal TRE.

GOVERNANCE
Embed digital in all our business planning process, un-waving digital first culture.

Strategic timeline

Enablers		2024	2025	2026	2027	2028
Digital systems	Care plans and Assessments					
	Clinical Digital Support					
	Digital Recruitment and Onboarding					
	eConsent					
	EPR Future					
	EPR Replacement					
	EPR Optimisation					
	In Hospital Wearables and sensing					
	Medical device Integration					
	Patient Digital front door					
	Shared Records					
	Shared LIMS, PACS, Maternity					
Technology	Smart Hospital inc Inventory Management					
	Voice Recognition					
	AI Back Office inc Intranet refresh					
	Cloud Migration and N365					
	Gigabit Internet					
	Pager Replacement					
	Tech refresh programme					
Information	Virtual Desktop and SSO					
	AI supported data Analysis					
	Clinical 'command centre'					
	Data Strategy					
	Discrete Simulation					
	Faster Data Flows					
	Predictive Analytics					
	Sustainable Coding					
People and Governance	Clinical Leadership					
	Data Essential Programme					
	Shared Services					

Enterprise Architecture

Enterprise Architecture aims to provide a a blueprint for how we will achieve the objective of this digital strategy, aligning our DDaT systems and processes with the NHS Long Term Plan for digitally enabled care. Enterprise Architecture (EA) serves as a critical framework for aligning our information technology strategies with our overarching organizational goals and clinical objectives. This comprehensive approach is essential for managing the inherent complexity of our healthcare systems, driving our digital transformation, and ensuring that our DDaT capabilities effectively support the delivery of high-quality patient care. The purpose of EA in our context extends beyond mere technology management; it is a strategic tool that bridges the gap between our clinical needs and technological solutions.

The scope of our EA is comprehensive, encompassing business architecture, data architecture, application architecture, and technology architecture. Our business architecture component maps our clinical and operational processes, organizational structures, and service delivery models, including patient pathways and clinical workflows. Our data architecture focuses on our approach to data management, governance, quality, and analytics, supporting initiatives like population health management and personalized medicine. Our application architecture details our portfolio of clinical systems, diagnostic tools, and support applications, while our technology architecture outlines our DDaT infrastructure, including networks, servers, and end-user devices, as well as our approaches to cloud computing and cybersecurity.

Adopting EA is considered good practice in healthcare DDaT for several reasons. It improves our decision-making by providing a holistic view of our DDaT landscape, enhances our agility in responding to changing requirements, and supports better resource allocation. Our EA also plays a crucial role in ensuring our compliance with NHS standards and regulations, maintaining public trust, and meeting our statutory obligations.

Moreover, it provides us with the framework for managing our digital transformation.

Our Full EA document is available **HERE**

Appendix 1 – Strategic context

TRFT

In 2022 the Trust took the decision to refresh its organisational strategy. The new strategy, 'Our new journey, together' sets out the ambition of the Trust over the coming five years and provides a clear direction of travel for the organisation through what is a challenging and changing local, regional and national landscape.

The strategy sets our vision for the Trust and our values. These are outlined below:
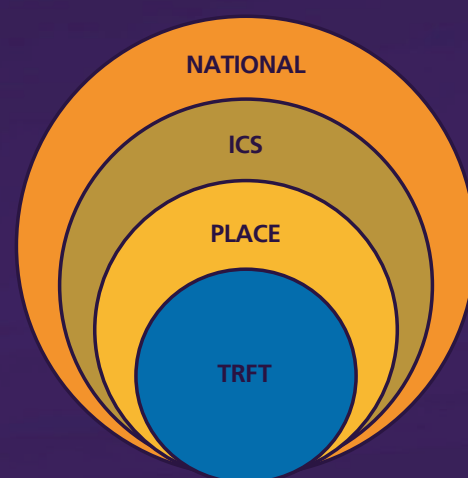
VISION:
We will always ACT in the right way and be PROUD to provide exceptional healthcare to the communities of Rotherham

VALUES:
Ambitious, Caring, Together (ACT).
To support he delivery of this vision the Strategy sets out five strategic ambitions. These are:

NATIONAL
ICS
PLACE
TRFT

Patients
We will be proud that the quality of care we provide is exceptional, tailored to people's needs and delivered in the most appropriate setting for them

Rotherham
We will be proud to act as a leader within Rotherham, building healthier communities and improving the life chances of the population we serve

Our partners
We will be proud to collaborate with local organisations to build strong and resilient partnerships that deliver exceptional, seamless patient care

Us
We will be proud to be colleagues in an inclusive, diverse and welcoming organisation that is simply a great place to work

Delivery
We will be proud to deliver our best every day, providing high quality, timely and equitable access to care in an efficient and sustainable organisation

The Trust is and continues to work to embed and deliver the ambitions set out within the strategy. A key pillar to this is the alignment of other strategies to this overarching Trust strategy, including Digital.

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 services and improve data sharing to better integrate care, improve efficiencies and enhance people's 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

6   Enabling Workstreams

6.1   Digitally Enabling Our System

The Rotherham Place Partnership Digital Group has been operating for many years, it has representation from all key partners and has supported the development of strong working partnerships between the digital teams across Rotherham, which helps to drive forward our joined up digital initiatives. Our first place-wide digital strategy was co-produced in 2019, it supported us in our bid for funding from the national Digital Aspirant Programme (DAP) in 2020, which in turn supported the significant acceleration in delivery of the strategy over the period 2020 – 2022. Our inclusive partnership approach to working together enabled us to use the DAP funds to support the delivery of digital transformation across the place including in health, care, and voluntary services.

In 2022 we updated and refreshed our place digital strategy, acknowledging that much has changed for the health and social care organisations in the place because of the Covid-19 pandemic. This unprecedented period of demand for public services dramatically changed the preconceptions of both citizens and the health and social care workforce about how those services should be provided, with a surge in digital and remote delivery. We need to take stock of the ongoing ramifications of the pandemic, updated strategy elaborates on the following five overarching objectives. We will:

1. ensure that place partners build integrated digitally supported care pathways in a way that involves the wider health community (e.g., community pharmacy and ambulance), puts citizens and their needs at the centre of service design, and gives staff the skills they need to manage these services effectively.
2. keep digital innovation at the heart of our service commissioning and delivery planning.
3. continue to work towards ever closer alignment of our individual organisations' digital programmes and increase the information that is shared for patient care.
4. continue be full partners in the development of NHS South Yorkshire's digital strategy and plans and contribute to ICS wide initiatives.
5. continue to leverage the power of our collective data to design and commission services to meet the needs of the population.

These objectives are then augmented by specific actions set out in four themed sections, which reflect on Rotherham's ambitions in those areas, the challenges experienced, and the steps required to achieve them: The themes and associated actions are detailed in the following sections:

1.   Digital infrastructure

Acknowledging that many new digital technologies have been implemented across Rotherham to support the Place-wide Covid-19 response, we commit to a review programme that will consolidate and optimise them and develop and document use cases and standard operating procedures, we will:

- ensure that all digital solutions implemented are fully compliant with mandated standards and staff are fully trained to use them.
- Build on the implementation of remote patient monitoring technologies in Rotherham, we will develop service models that harness the potential to support patients in their own homes, intervene when patients' health deteriorates, and reduce unnecessary face-to-face attendance.
- ensure that care homes and PODAC providers have robust and secure digital infrastructure, and access to key systems, building on the pharmacy integration work started between TRFT and community pharmacies to implement the NHS Discharge Medicines Service.
- continue our programme of reviewing and improving GP network performance.
- support our NHS partners and care homes to meet required bandwidth capacities

3.   The digital citizen - we will:

- review the impact of the Covid-19 pandemic on the digital maturity of the voluntary sector, recognising the significant contribution that the sector makes to the lives of Rotherham citizens.
- when we procure or design digital tools for public use, we will engage citizens or citizen groups in co-design and testing, to ensure ease of use is built in.
- continue to work with GP surgeries to align their website to those of their PCN.
- continue to develop Gismo as a tool to signpost citizens to voluntary organisations, by increasing its functionality and driving higher usage.
- support the work of the Digital Inclusion Team and look for opportunities to share learning across the place partners.

2.   Shared care records - we will:

- assess the long-term role of the Rotherham Health app in the context of:
  - the 2022-23 Priorities and Operation Planning Guidance requirement to raise NHS app registrations to 60% of GP adult lists size.
  - potential to secure NHS Digital's support for integration of the Rotherham Health app into the NHS app.
- review, and if required develop and communicate a set of use cases for the Rotherham Health Record.
- work with partners across the ICS and Yorkshire and Humber region to build the availability of data and number of people using the Yorkshire Humber Care Record.

will continue work to improve the datasets available in Rotherham Health Record.

4.   Intelligence and analytics - we will:

- continue to develop the sustainable analytical resources that we need to support the delivery of population health management across the Place, from data analysis tools techniques to skilled analysts and general data skills in the workforce.
- contribute to better population health management at ICS-level by developing and improving data links with health and social care organisations outside Rotherham.
- create information products in collaboration with all of the ICP partners, ensuring that they provide insights from which commissioning and service redesign decisions can be made.
- maintain a forward view of innovative data analysis techniques and technologies, e.g., artificial intelligence and machine learning.

The table below show some of the key ongoing projects from our digital strategy mapped to the strategic aims for the Rotherham Place that are detailed in this plan:

Prevention and Health Inequalities	Ensuring the Best Start in Life	Enjoying the Best possible Mental Health and Wellbeing	Enabling people to Live Well for Longer	Improving care for Life-limiting illnesses and End of Life Care	Transforming Healthcare Delivery
Dedicated digital inclusion programme underway in Rotherham Closely linked with work to reduce health inequalities and response to cost of living crisis • Flexible digital support arrangements planned to complement formal digital skills courses already available • Established strong links with communications teams to improve how we shared information and guidance with our local populations • Partnership with local colleges and voluntary groups are under discussion • Plans for access to devices, mobile data packages, free wi-fi sites. Training and support in development Work to support deliver of the proactive (anticipatory) care programme is ongoing. Initiatives include: • Providing appropriate digital solution to support the identification of people for anticipator care support • Providing the MDT with the necessary information to fully support proactive care delivery in a joined-up way • Enabling the sharing of care plans with the patient and across the MDT	• Supporting the development of a joined up digital offer for the Family Hubs that will be developed in Rotherham • Integration of data from RMBC Children and Young Peoples Service (CYPS) into the Rotherham health record, starting with inclusion of a SEND data set • Onboarding staff from CYPS as users of the Rotherham Health Record	• Working with place partners to ensure digital is embedded within mental health transformation projects • Supporting community mental health reporting requirements (MHDS specification) for AFRRS identifiable activity • Scoping the use of eReferrals for mental health services • Development of the Community Mental health Transformation Hubs • Reconciliation of SMY registers across the place • Development of the Bluebox devices for outreach SMI health checks	• Further development of the Rotherham Health App functionality to provide people with the information and tools to support management of their long-term condition • Widening use of the Rotherham Health App functionality through integration that will enable direct access via the App	• Digital transformation for Enhanced Health in Care Homes: • Rolling out secure access to the Rotherham Health Record in care homes to improve information sharing between settings • Enabling key documentation to be uploaded to the Rotherham Health Record, enabling detailed plans and information to be shared more effectively across care settings • Working with the ICB wide programme to increase the uptake of digital care record systems and falls detection systems in our care homes	Primary care digital plan for FY 23/24 developed to continue optimised use of core systems and tools to support primary care colleagues to: • Improve access and personalised care • Increasing and optimising capacity • Addressing variation and encouraging good practice • Improving communications with the public Urgent, Emergency and Community Care: Virtual Wards – understanding gaps in information sharing across the end to end pathway to help ensure patients get the best outcomes and can avoid unnecessary hospital (re) admissions and get the care they require in their usual place of residence Improving information sharing – linking our place shared records with the wider Regional record (Yorkshire and Humber Care Record)

National

What good looks like

In August 2021, NHSx, (now subsumed into NHSE), published its strategic framework for delivering digital transformation across our health and social care services.

The What Good Looks Like (WGLL) framework draws on local learning. It builds on proven good practice to supply clear guidance for health and care leaders to digitise, connect and transform services safely and securely.

Well led

Articulating a need to develop clear digital strategies and align these across Integrated Care Systems.

Ensure smart foundations

Ensuring digital, data and infrastructure operating environments are reliable, modern, secure, sustainable, and resilient.

Safe practice

Maintain robust cyber security practices as well as routinely review system-wide security, sustainability, and resilience.

Support people

To build digital tools and systems that are fit-for-purpose and support staff to do their jobs well.

Empower citizens

Ensuring citizens can access and contribute to their healthcare information, taking an active role in their health and wellbeing.

Improve care

Embedding digital and data within their improvement capability to transform care pathways, reduce unwarranted variation and improve health and wellbeing.

Healthy populations

Using longitudinal data to design and deliver improvements to population health and wellbeing, making best use of collective resources; with insights from data used to improve outcomes and address health inequalities.

Transform

Digitise

Connect

Healthy populations

Well led

Improve care

Empower citizens

Ensure smart foundations

Support people

Safe practice

NHS Minimum Digital Foundations (MDF)

Building on the WGLL framework, the Minimum Digital Foundations has been published, and is a key stepping stone to delivering the extent of WGLL, in support of the LTP. The MDF identifies eight elements of maturity relating to the digitisation of care records, specifically: Records and Assessments, Transfers of Care, Diagnostics Management, Medicines Management, Decision Support, Remote and Assistive Care, Asset and Resource Optimisation, Business and Clinical Intelligence. Across each of these categories, the MDF has been split in to three areas related to:

Foundational elements: The foundational capabilities set the bar for a minimum level of digital maturity for the levelling up agenda and there is a well-established market offering (although organisations should use this as a base to deliver transformation and future innovation).

Transformational elements: Where some example implementations are present in selected organisations, but this is not widespread. There is an emerging and scalable market offering for these functionalities and this is what all advanced Trusts should aim to achieve.

Innovation elements: such technologies have yet to be proven at scale but hold promise. Such areas should be included in future development plans of digitally mature organisations, with support from the market to develop such solutions, including developments to support future national requirements

Digital Maturity Assessment

The Digital Maturity Assessment (DMA) is a tool developed by NHS England to help providers and integrated care systems across England understand their level of digital maturity. The DMA is based on the What Good Looks Like Framework, which identifies seven dimensions of digital maturity:
• Leadership and governance
• People and skills
• Information and data
• Technology
• Products and services
• Patient experience

The DMA consists of 50 questions that assess each of these dimensions. Providers and integrated care systems can use the DMA to identify their strengths and gaps in digital maturity, and to develop a plan to improve their performance.

The DMA was first launched in 2015, and a new version was launched in July 2022. The new version of the DMA includes a number of improvements, including:

• A focus on outcomes, rather than just processes
• A more comprehensive assessment of the seven dimensions of digital maturity
• A more user-friendly interface

The DMA is an important tool for helping the NHS to improve its digital maturity. By understanding their level of digital maturity, providers and integrated care systems can identify areas for improvement and develop a plan to make better use of technology to improve patient care.

The below pictogram, shows TRFT average score across each of the What good looks like DMA domains, relative to all providers in Yorkshire and Humber and the three ICS's in Yorkshire and Humber. The Y&H average provider analysis, mirrors exactly the Y&H analysis, with a national average score of 2.8.
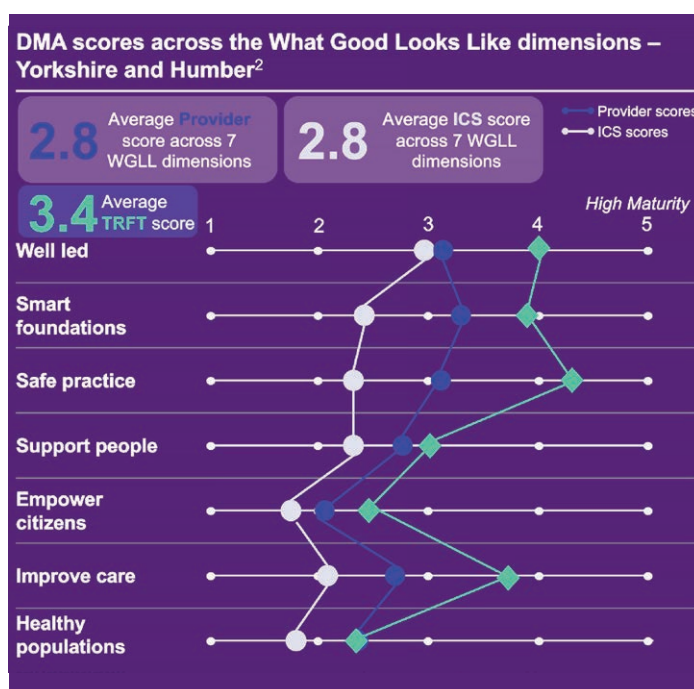
DMA, whilst a crude and developing tool, demonstrates TRFT continues to be reasonably mature compared to other healthcare organisations national and regionally. Particular strengths are in in safe practice especially clinical safety, led by Dr Mark Ryan and Smart Foundations, reflecting our extensive use of a fully integrated EPR system and investments in Wifi and End User Devices over the last 3 years.

The DMA is an important tool for helping the NHS improve its digital maturity. By understanding their level of digital maturity, providers and integrated care systems can identify areas for improvement and develop a plan to make better use of technology to improve patient care.

Appendix 2 – Programme Definitions

Programme Definition

Programme	Ambition
Back Office experience	Digitise high volume back office process such as onboarding, recruitment, IT support, payroll, communications
Clinical 'command centre'	Adapt our command centre and processes and analytics to view managed critical quality and safety metrics
Clinical Coding	Achieve 95% flex targets and maintain very high levels of depth and quality
Clinical Decision support	Digital tools to guide clinicians through care pathways
Cloud first	New systems and upgrades to placed in the 'cloud' providing resilience, reliability and scaleability, and supporting carbon energy targets – unless there is compelling reasons not to do so.
Cloud migration	Migrate existing on premises system to the public cloud, improving reliability, scalability, access and support carbon energy targets
Cyber Secure	Protect and secure our systems and services from cyber incidents
Data Literacy	
Data Transparency	Provide public access to our operational and summative clinical information
Digital Front Doors	Patient and families being able to digital access and interact with our services. e.g. Appointment management, preferences, Personal care plans
Digital Governance and prioritisation.	Develop a mechanism, along with senior leaders to support prioritisation
eConsent	Digital tools to capture consent and pre-operative information
Embed Digital in all our business planning process	
EPR update	Review and migrate to a modern and intuitive patient record system that improves functionality and usability
Funded clinical leadership	Substantially fund a clinical digital improvement team, skilled and trained in co-design
Gigabit Internet	Update all our community data connections to minimum of 1GB, ensuring all our staff benefit from high speed access
Guaranteed tech refresh programme	Refresh end user devices and IT Infrastructure, periodically and systematically, so no-one, especially our patient facing clinicians has to make do with out dated and unreliable technology.
Internal TRE	Abstract the data from our clinical systems so that our clinicians and researchers can securely and easily directly access

Programme	Ambition
Inventory management	Electronic automated stock control, reducing admin burden and waste
Nursing assessments and care plans	Assessments and plans to be digital, reduce duplication, shared across health and care and patients able to contribute and view
Organisational awareness and engagement	
Paper light	Remove the use of paper where possible throughout our clinical and non-clinical process. (NB: mass scanning of historic clinical records is not included)
Patient digital engagement	
Population Health	Use the data and intelligence we have about our local population to target interventions and address health inequalities
Predicative analytics	Use our data to predict
QI	
Self-healing and self service	Deploy technology that self-heals and proactively manages itself, reducing need to 'contact' IT and things are not working
Shared records	Connect Community, Hospital, Primary and social care records across the ICS and beyond.
Smart Hospital	Fabric of our estate has capability to track and locate 'things'.
SSO	Implement Single-Sign on technology, with access cards, across all our digital estate
Systems and Machine Integration	Connect medical devices directly into electronic patient records, enabling near instantaneous viewing, alerts, sharing and eradicate manual data entry and charting
Telecommunications	Upgrade telecommunications infrastructure to improve reliability, directory management and support voice recognition enabling quicker contact
Un waving digital First culture	
User co-design	Skill all our digital professionals in co-design
VDI	Virtual Desktop technology, initially within our UECC to enable very very fast access to clinical systems
Virtual Wards	Effectively and safely provide care for patients in their own homes
Voice Recognition	Use natural language speech to input and control our electronic patient record systems

Appendix 3 – Contributors and feedback

During 2022, we held a number of online workshops with NHS Providers, Digital experts, Digital Transformation Committee and Trust Senior leaders. During these workshops, we posed a number of questions around thoughts and views on our current digital offer, and in the future how they would foresee a future digital NHS.

It is the year 2027, what 5 words would you use to describe the our digital offer   20

- innovative
  Votes: 6
- Inclusive
  Votes: 4
- efficient
  Votes: 3
- Reliable
  Votes: 3
- Accessible
  Votes: 3
- Fast
  Votes: 3

It is the year 2027, what 5 words would you use to describe the our NHS digital offer   9

NAME	TITLE
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Mark Ryan	Consultant Anaesthetist
Richard Slater	Consultant Surgeon, CCIO
Kristy Barnfield	Continence Service Lead Nurse
Jo Butler	Digital Midwife
Kevin Grice	Digital Programme Manager
James Rawlinson	Director of Health Informatics
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David Simm	Head of Business Intelligence and Data Warehouse
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Andy Clayton	Head of Digital - NHS Rotherham CCG and Rotherham Integrated Care Partnership (ICP)
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Rhona McCleery	Information Governance Manager
Sam Ramsden	Interim Head of EPR
Christine Hazlehurst	IT Customer Service & RA Manager
Christopher Birks	IT Integration & Development Manager
Ian Watson	IT Support Service Manager
Wendy Herman	IT Training & Identity and Access Management Manager
Shahzan Zafar	Lead Pharmacist EPMA
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Amelia Old	NHS Providers, Administrator
Louise Stopford	NHS Providers, Programme Lead
Angela Ford	Patient Access Service Operational & Performance Manager & Clinical Operations Lead
Cate McLaurin	Public Digital, Director
Connie van Zanten	Public Digital, Principal Lead
Steven Cheung	Radiology Systems Manager/ Department of Clinical Radiology
Claire Hudson	Service Manager, Therapies, Dietetics and Community