North East
North Cumbria
Health & Care
Partnership

NHS
North East and
North Cumbria

North East and North Cumbria Health & Care Partnership

Digital, Data and Technology Strategy

2023 – 2026

North East North Cumbria Health & Care Partnership

A message from Samantha Allen

Digital technology is changing our lives beyond recognition.

We now manage so much of our lives online – whether that's our finances, how we shop and our leisure time.

Increasingly, we manage our own health this way too; from ordering repeat prescriptions, booking appointments and viewing our medical records online, to using apps to monitor our own health and medication.

With technologies becoming more advanced, people can do so much more on their phones and watches, and in more community settings such as care homes and GP surgeries.

There is no doubt that since the NHS was formed, just over 75 years ago, we've seen a digital revolution with rapid advancements in information technology, artificial intelligence and data analytics, to name a few.

These advances have enabled us to pioneer new treatments and less invasive surgical techniques, as well as diagnose new diseases and even prevent them in the first place.

From robotic surgery, the use of data to drive decisions and the application of artificial intelligence, to the pivotal role of telemedicine which is breaking down geographical barriers and improving access to care for many.

We are proud to say that some of these advances have even been born here in the North East and North Cumbria, including life sciences and innovative research in the field of genomic medicine, which is helping to inform development of new treatments and diagnostic approaches.

We have access to more data than ever before and can extract meaningful insights to enhance clinical decision-making and contribute to the advancement of medical research and population health management.

We are now able to share data and information more easily too - speeding up access to treatment and improving safety.

By putting the right digital technology in place and linking data together across services, we can develop a deep understanding of the communities we serve and used well this can improve health and care, ensuring services are better focussed around people's needs.

This revolution is of course not without its challenges, it is a fast-paced environment which is changing all the time. It's one we have to keep up with, but at the same time balance it with the many competing priorities we have and available resources.

We also need to be mindful to ensure we support everyone in our community to access and use the technology. It is estimated around 6% of people in our region still have no internet connection at home and not all have access to digital devices.

This strategy is an important one. It sets out the steps we will be taken collaboratively across the region to embrace new digital technologies and data so that we can transform how we provide care that's faster, safer, more efficient, higher quality and easier to access for all our communities - so they can live longer and healthier lives.

Samantha Allen
NHS North East and North Cumbria
Integrated Care Board
Chief Executive

North East North Cumbria Health & Care Partnership

Foreword

Digital technologies, along with the effective and safe use of information has the potential to not only address many of the issues in health and care for the North East and North Cumbria but can also be used to predict and help prevent ill health.

We're developing digitally enabled heath and care services around the needs of our patients, public and our health and care professionals. This approach will enable seamless interactions with the health and care services across our region.

Over recent years we have been laying down the solid foundations on which to build these digital services – to help us meet both the technical challenges of linking complex systems together, putting in the right infrastructure, standards and security measures.

We recognise the tremendous benefits digital technology can bring when implemented well. Often the barriers to good implementation are around processes which do not work for the people involved. Therefore, we must balance **people**, **processes** and the **technology**, to enable the best possible outcomes, for the people of our region.

We have a long history of working together as a region and developing or repurposing a range of digital solutions. We have an ethos of continuous improvement; through our strong collaborative approaches.

In 2020, during the peak of the first wave of the pandemic, we refreshed our original 2019 digital strategy, the production and collaboration being virtual and digitally enabled, a great example of people, process and technology working together across the North East and North Cumbria.

Access to health and care services for our public were severely impacted by the pandemic. Through the continued expansion and adoption of digital, data and technology solutions, we can support system recovery and assist in easing current pressures.

We acknowledge the introduction of digitally enabled health and care brings potential barriers for those not digitally connected, we are addressing these challenges through our regional approach to digital inclusion by design.

This updated strategy builds upon our previously published strategies, the work accelerated during 2020 in response to the pandemic and accounts for recent national and regional direction.

It incorporates lessons learned from the great achievements in digitally enabled health and care, whilst recognising the importance of realising the potential of the safe use of data, to drive forward the ambitions of our region.

Our region is working collaboratively; sharing lessons and best practices while seeking citizen and patient input – to deliver seamless and cost-effective health and care services, to achieve the best outcomes for the 3.2 million people of our region.

Professor Graham Evans
NHS North East and North Cumbria
Integrated Care Board
Executive Chief Digital & Information Officer

North East North Cumbria Health & Care Partnership

Introduction

Integrated Care Systems (ICSs), have been introduced to join-up care and create improved services based on local need, which leads to better outcomes for people.

Their aim is to improve health and care services – with a focus on prevention, better outcomes and reducing health inequalities.

The North East and North Cumbria Integrated Care System (ICS) is the largest in England, serving a population of around 3.2 million people and covering a physical geography approximately the same size as Wales:

NHS North East and North Cumbria Integrated Care Board (ICB), is a statutory NHS organisation with responsibility for developing a plan for meeting the health needs of the population, managing the NHS budget and arranging for the provision of health services.

ICBs were legally established on 1st July 2022, replacing Clinical Commissioning Groups (CCGs), taking on the NHS planning functions previously held by CCGs.

North East and North Cumbria Integrated Care Partnership (ICP) is a partnership of organisations including NHS, local authorities, community services and voluntary sectors, coming together to plan and provide joined up health and care services, joining up expertise and resources, to work collectively in providing the best health and care.

This updated strategy for health and care enabled through digital, data and technology, builds upon our 2019 and 2020 Digital Strategies and has been developed through collaboration across this partnership, involving significant regional engagement. It sits within the wider developing ambitions of the ICP and its vision, goals, objectives and operating principles.

Throughout this document, terms like 'we' and 'our' refer to our collective organisations, that make up the Integrated Care System and Integrated Care Partnership:

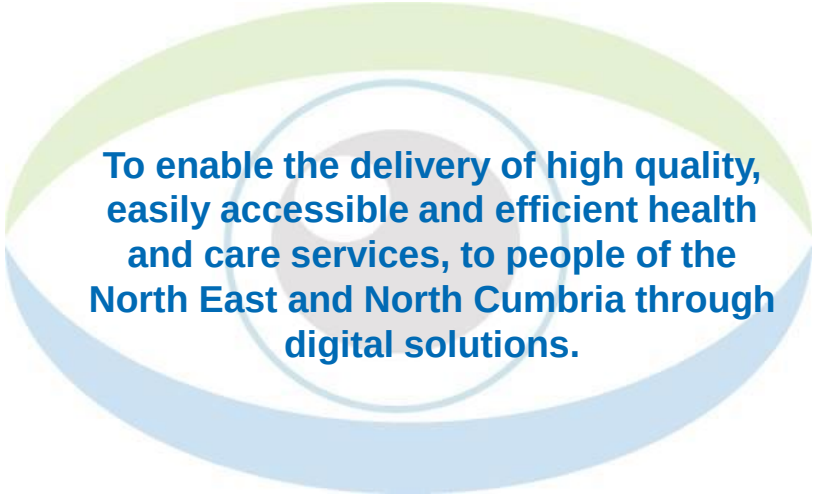
Through sharing resources, developing our workforce and making better use of technology, our ambition is to significantly improve the health and wellbeing of people in all our communities.

North East North Cumbria Health & Care Partnership

Introduction

In 2019, leaders and professionals from around the region collaborated to produce the first North East and North Cumbria Digital Care Strategy and described the shared vision, to create a connected health and care system.

Our Vision



To enable the delivery of high quality, easily accessible and efficient health and care services, to people of the North East and North Cumbria through digital solutions.

This strategy is essentially about delivery and transformation, and as such, this requires all parts of our health and care system to be fully aligned and in agreement. In order to make this happen, it requires senior leadership from all parts of the health and care system to support the vision, aims and objectives, and make the vision a reality.

Vision without action is merely a dream. Action without vision just passes the time. Vision with action can change the world.
- Joel Barker

We reflect on achievements we will build upon, national drivers and regional context, as well as acknowledging international learning; all of which influence our future direction.

Our key areas of focus are grouped into five ‘themes’, which interlink to deliver our vision:

- **The essentials** – Getting the basics right.
- **Improving** – Continuing to advance and innovate.
- **Connecting** – Linking the region and beyond.
- **Empowering** – Bringing personalised care closer to home.
- **Insight** – Using data in context to deliver action.

Fundamental to our strategy and woven throughout our key themes is the delivery of digital enablers, to assist access recovery to primary and secondary care services, following the impact of the pandemic, (with a section focussed on a number of those solutions).

Impacts and benefits delivery of our vision will bring are highlighted throughout, with a specific section concentrating on what this will mean for the population we serve and our workforce.

Whilst this strategy outlines our broad direction of travel and key priorities, we acknowledge the health and care landscape and technologies are continually changing and advancing. As such, we will reflect and iterate the strategy and associated delivery plans as time progresses.

We’ve developed a digital animation to provide an overview of this Strategy. The animation looks back at some of the achievements and what the vision for the future looks like. Please click here.

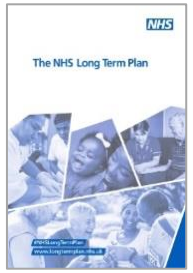
Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future

Context

National context and drivers

In January 2019, NHS England published the NHS Long Term Plan that sets out how the NHS should invest to deliver the best results for patients and citizens. The NHS in England was asked to:

- **Develop a new service model for the 21st Century that boosts 'out-of-hospital' care**. It will provide a new health and care offer of urgent community response and recovery support whilst establishing primary care networks of local GP practices, social care provision and community teams. It will guarantee support to people living in care homes and also support people to age well.
- **Reduce pressure on emergency hospital services** by improving pre-hospital urgent care, reforming hospital emergency care and cutting delays in patients being able to go home.
- **Enable people to have more control over their own health** and more personalised care when they need it.
- **Develop digitally-enabled primary and outpatient care**, which will become mainstream across the NHS.
- **Ensure that NHS organisations will increasingly focus on population health** – moving to Integrated Care Systems everywhere.



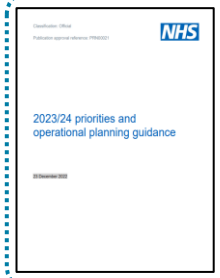
The UK National Data Strategy, published in December 2020, aims to drive the UK in constructing 'a world-leading data economy while ensuring public trust in data use'. Acknowledging, enhanced use of data can assist organisations of every kind in succeeding, across the public, private and third sectors:

- Data can support the delivery of existing services, from manufacturing to logistics
- It can be used to create entirely new products
- It is a driver of scientific and technological innovation, and central to the delivery of a whole range of vital public services and societal goals, from tackling climate change to supporting the NHS
- As businesses embrace technology, data creates jobs, opens up whole new markets and drives demand for a highly skilled workforce

In June 2022, the Department of Health and Social Care published **Data Saves Lives: Reshaping Health and Social Care with Data**. The Strategy sets out plans to harness the potential of data and how its use will be used to improve health and care in England, while maintaining the highest standards of privacy and ethics, in a safe, trusted and transparent way.

- Provides an overarching description and action plan to address cultural, behavioural and structural barriers, with the aim of having a health and care system, which is reinforced by high-quality and readily available data.
- Marks the next steps of how we can best utilise data and information, for the benefit of patients, service users, and the health and care system.

The Strategy was informed by a report by Professor Ben Goldacre, commissioned by the government in February 2021, to review how improvements can be made to improve safety and security in the use of health data for research and analysis. The report makes 185 recommendations that would benefit patients and the healthcare sector.



In December 2022, NHS England published 2023/24 Priorities and Operational Planning Guidance, highlighting three tasks over the coming year:

- recover our core services and productivity;
- as we recover, make progress in delivering the key ambitions in the Long Term Plan, and;
- continue transforming the NHS for the future.

North East North Cumbria Health & Care Partnership

Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future

Context

National context and drivers

What Good Looks Like

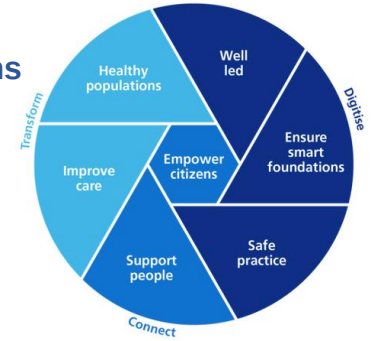
The NHS What Good Looks Like (WGLL) Framework was published in August 2021 outlining:

- **The Challenge** - The pandemic drove the need to enabling levels of digital transformation that might have otherwise taken several years. Moving through the recovery period, it is critical that we build upon the progress made, ensuring all health and care providers have a strong foundation in digital practice.

- **Direction** - WGLL was directed at all NHS leaders, emphasising the need for system-wide planning and delivery, to provide personalised care and support for those who need it, and to help everyone live healthy lives. The framework aimed to set out what good looks like at both at regional and organisation levels. It described how arrangements across a whole ICS, including all its constituent organisations can support success. Building on established good practice to provide clear guidance for health and care leaders to **digitise**, **connect** and **transform** services safely and securely.

The WGLL framework has seven success measures:

- **Well led**
- **Ensure smart foundations**
- **Safe practice**
- **Support people**
- **Empower citizens**
- **Improve care**
- **Healthy populations**



In June 2022, The Department of Health and Social Care published the policy paper, **A Plan for Digital Health and Social Care in June 2022**.

The plan is 'laying the foundations of a brighter digital future by 2025 and beyond' and toward delivery of four goals of reform, equipping the health and care system to:

- **Prevent** people's health and social care needs from escalating
- **Personalise** health and social care and reduce health disparities
- **Improve** the experience and impact of people providing services
- **Transform** performance

The document unites the different national digital goals, investments and guidance into one single action plan for achieving these goals on four complementary fronts:

1. Equipping the system digitally for better care

- Digitising health and social care records
- A life-long, joined up health and social care record
- Digitally supported diagnoses

2. Supporting independent healthy lives

- Putting NHS services in people's pockets through digital channels
- Scaling digital health self-help, diagnostics and therapies

Digital Social Care

3. Accelerating adoption of proven tech

- Systematising tech research and development partnerships
- Buying tech better across health and social care

4. Aligning oversight with accelerating digital transformation

- Using regulatory levers – exploring oversight options with NHSE and the CQC.
- Enforcing technical and data standards
- Supporting social care, ensuring care providers have the right foundations in place to enable digital transformation

Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future

Context

National context and drivers

Reducing healthcare inequalities

The Core20PLUS5 is a national NHS England approach to inform action to reduce healthcare inequalities at both national and local level.

The approach defines a target population – the 'Core20PLUS' – and identifies '5' clinical priority areas requiring targeted action and improvement:

Target population

CORE20 PLUS 5

The most deprived **20%** of the national population (as identified by the Index of Multiple Deprivation)

ICS-identified population groups experiencing poorer-than-average experience and/or outcomes, who may not be captured within CORE20.

Digital, Data and Technology enablers are key to delivering the **5 clinical priorities**, identified through **CORE20PLUS5**

Clinical Priorities:

1 MATERNITY – Ensuring continuity of care for women from Black, Asian and minority ethnic communities and from the most deprived groups.

2 SEVERE MENTAL ILLNESS (SMI) – Ensure annual Physical Health Checks for people with SMI to at least, national set targets.

3 CHRONIC RESPIRATORY DISEASE – A clear focus on Chronic Obstructive Pulmonary Disease (COPD), driving up uptake of Covid, Flu and Pneumonia vaccines to reduce infective exacerbations and associated emergency hospital admissions.

4 EARLY CANCER DIAGNOSIS – 75% of cases diagnosed at stage 1 or 2 by 2028.

5 HYPERTENSION CASE FINDING –Optimal management and lipid optimal management.

The North East and North Cumbria Core20PLUS5 for Children and Young People framework has been developed to complement the national framework by applying a regional lens.
Please click here for further information.

We will respond to this framework through digital enablement and in alignment with key principles.

North East North Cumbria Health & Care Partnership

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Context

National context and drivers

We are the NHS: People Plan 2020/21 – action for us all, along with Our People Promise, set out what NHS people can expect from their leaders and from each other.

It includes specific commitments around:

- **Looking after our people** – with quality health and wellbeing support for everyone
- **Belonging in the NHS** – with a particular focus on tackling the discrimination that some staff face
- **New ways of working and delivering care** – making effective use of the full range of our people's skills and experience
- **Growing for the future** – how we recruit and keep our people, and welcome back colleagues who want to return.

Building a Digital, Data and Technology workforce to 2030

A report was commissioned by Health Education England (HEE), published in 2021, to identify capacity and capability challenges facing NHS Digital, Data and Technology (DDaT) workforce through to 2030. The findings predicted this expert and vital workforce will need to grow from a 2020 baseline of 46,000 to 78,000 specialist DDaT roles by 2030, to meet our demands for a data driven future. If not addressed, we can expect that there will be a shortage of approximately 17,700 DDaT professionals in the NHS.

Priorities for Digital Mental Health

Since January 2022, NHS England's Digital Mental Health team has been developing the Priorities for Digital Mental Health (previously referred to as the Digital Mental Health Strategic Delivery Plan).
The Priorities for Digital Mental Health document has been developed to amplify the role of digital in supporting and delivering on the commitments made under the NHS Long Term Plan for Mental Health, between now and 2024/25 and beyond.
They provide a much-needed additional level of action focused detail below the LTP and Mental Health Implementation Plan.

The Priorities for Digital Mental Health set out five key priorities which will inform and focus planning and prioritisation at a local, regional and national levels; aiming to maximise collective progress to the benefit of service-users and the mental health workforce.

The priorities are:

1. **Ensuring the digital basics are in place**
2. **Enhancing data sharing across systems and organisations**
3. **Improving how people get the support they need**
4. **Supporting the workforce to deliver the highest quality of care**
5. **Embedding digital products and services in mental health pathways**

North East North Cumbria Health & Care Partnership

Context

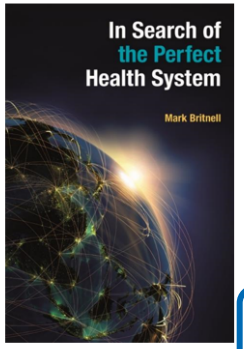
International context and insight

We recognise the learning that can come from international strategies, research and insight…

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

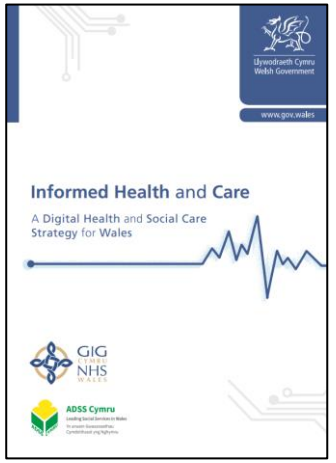
Professor Mark Britnell (KPMG and a global healthcare expert. – Former Director General at the Department of Health), set out in his award winning book 'In Search of the Perfect Health System', learnings from analysis of 25 national health systems from around the world. As illustrated below, **digital infrastructure** is a key component:

High performing integrated care systems have…



1. **A clear focus on quality** with recognised quality management systems in place
2. **Multi-professional teams** across health and social care working to agreed protocols and pathways
3. **Aligned financial incentives**, usually bundled payments and capitation
4. **A digital infrastructure** that supports care pathways and measures and monitors in near real time
5. **Rigorous guidelines** that enhance compliance, recording and reflection. A self improving, intelligent system.
6. **Accountability for performance** across and within organisations. Shared risk.
7. **Defined populations** with active participation of patients. A deeply collaborative culture.
8. **New clinician-management partnerships** that bring the best from both and don't confuse committees with action
9. **A clear vision**, Target Operating Model, levels of delegation and accountability.
10. **A workforce designed to enhance integration** for the patient and not just the clinical team or organisation

"The purpose for a Global Strategy on Digital Health is to promote healthy lives and wellbeing for everyone, everywhere, at all ages. To deliver its potential, national or regional Digital Health initiatives must be guided by a robust Strategy that integrates financial, organisational, human and technological resources."



Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future

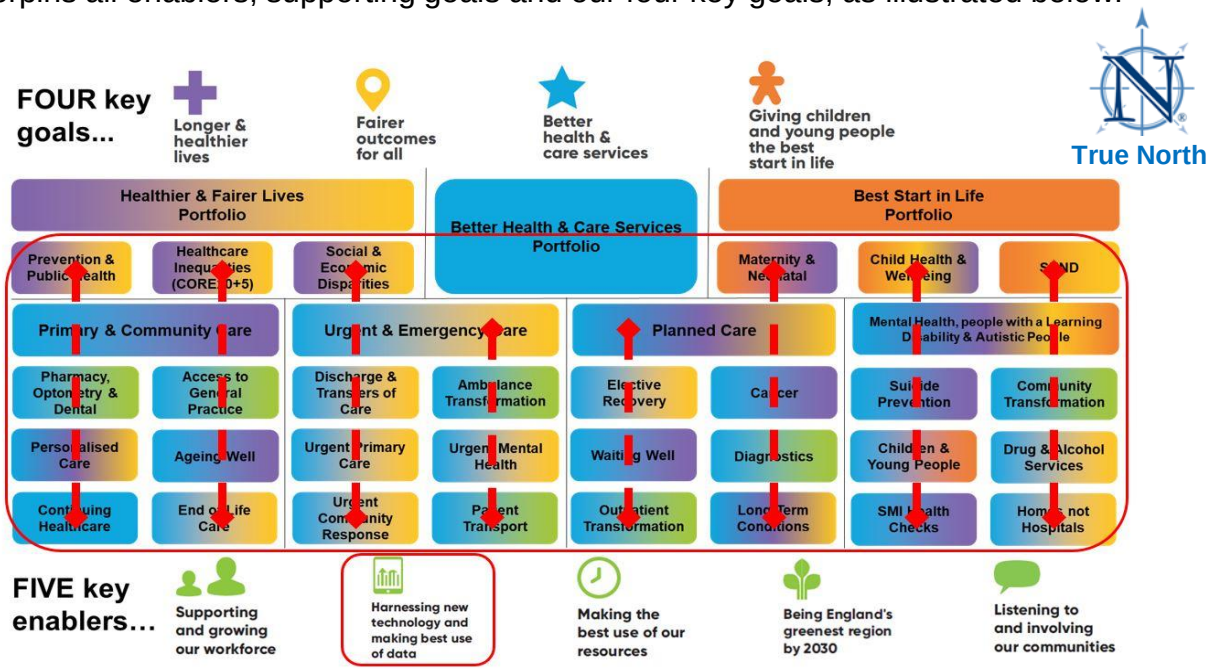
Context

Integrated Care Partnership Strategy

North East and North Cumbria Integrated Care Partnership (ICP) has a broad focus, covering Integrated Care System-wide strategy, public health, social care, and wider issues impacting the health and wellbeing of the local population.
The ICP is responsible for setting out key priorities and developing our strategy for health and care to meet the needs of our population by bring together local councils, hospitals, community services, primary care, hospices, and voluntary, community and social enterprise (VCSE) organisations and Healthwatch across the region.

In December 2022, North East and North Cumbria Health and Care Partnership published our integrated care strategy – Better health & wellbeing for all.

The strategy, which is our **True North** of direction for the region, sets out four key goals, eight supporting goals and five key enablers. One of these enablers is 'Harnessing new technology and making best use of data, however, digital, data and technology essentially underpins all enablers, supporting goals and our four key goals, as illustrated below:



North East North Cumbria Health & Care Partnership

Context

Regional context – Some of our organisations, partners and engagement in developing our strategy…

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

During 2019, **over 400 stakeholders** were engaged and involved in the development of our first North East and North Cumbria Digital Strategy

In 2020, regional organisations and partners and were invited to a series of **virtual workshops**, to shape, refresh and agree our Digital Strategy.

Annual **regional digital summits and conferences** have taken place since 2019, to celebrate successes, revisit our vision and further shape our strategic goals.

During 2023, engagement included a **regional workshop and events** with partners to update and refine our Strategy.

We are joining up expertise and resources, working collectively in designing services to provide the best health and care for our citizens and communities.

North East North Cumbria Health & Care Partnership

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Context

Regional context

Some of our achievements to date, which we're continuing to build upon.

We have…

Introduced **free public wi-fi** in our buildings.

Introduced **assistive and monitoring technologies**, that enable people to better manage conditions and remain living independently in the community for longer.

Established a regional **Digital Inclusion** Steering Group and Strategy.

Digitised records in adult care homes and domiciliary care settings.

Supported improvements in maternity care, through enhancing maternity records using digital and data solutions, including **connectivity to the Great North Care Record**.

Worked together to reduced duplication and costs; using our collective purchasing power to get **the best value for public money**.

Implemented a regional **Strategic Coordination Centre** – providing a consistent and collective approach to managing system demand, using the latest real-time information.

Introduced a regional **Digital Skills Development Network** – to enhance the skills of our workforce.

Worked with the **Northern Cancer Alliance** to establish efficiencies and opportunities, through the use of **Robotic Process Automation**.

Worked with partners in delivering a regional **Digital Champions Programme**, providing all NHS Primary Care workforce opportunities to embrace digital technologies.

Delivered **information sharing at scale**, through the **Great North Care Record** – providing relevant health and care information to be **available to professionals, at the point of care**.

Secured funding from NHS England to implement a regional **Sub-National Secure Data Environment**, which will become the default way for researchers and analysts to access data for research and development.

Improved access to health and care through implementing **online and video consultation tools**.

Enabled **data-driven decisions** about services provided, through our approach to Population Health Management.

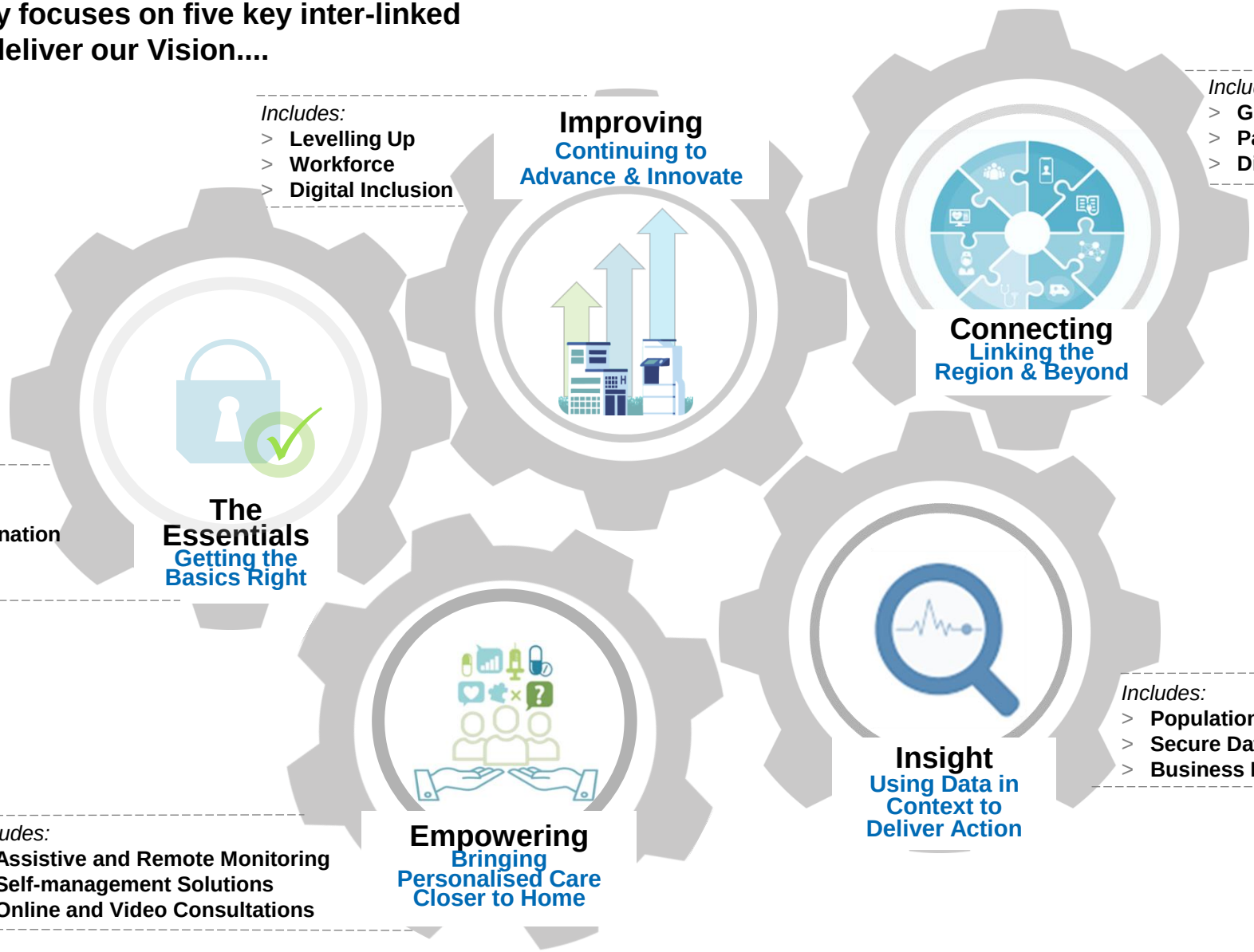
Digitally enabled **Community Diagnostic Hubs**.

North East North Cumbria Health & Care Partnership

Our Themes

Our Strategy focuses on five key inter-linked Themes to deliver our Vision....

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future



Includes:
- **Levelling Up**
- **Workforce**
- **Digital Inclusion**

Improving
Continuing to Advance & Innovate

Includes:
- **Great North Care Record**
- **Patient Engagement Platform**
- **Digitising Social Care**

Connecting
Linking the Region & Beyond

Includes:
- **Cyber Security**
- **Strategic Coordination Centre**
- **Public WiFi**

The Essentials
Getting the Basics Right

Includes:
- **Population Health Management**
- **Secure Data Environment**
- **Business Intelligence**

Insight
Using Data in Context to Deliver Action

Includes:
- **Assistive and Remote Monitoring**
- **Self-management Solutions**
- **Online and Video Consultations**

Empowering
Bringing Personalised Care Closer to Home

North East North Cumbria Health & Care Partnership

The Essentials

Getting the Basics Right

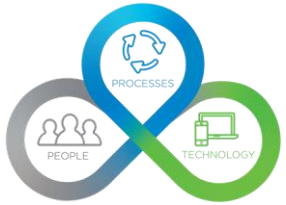
By getting the basics right and working together using shared approaches, we can safely move forward on our digital journey.

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Back Start Next

We are working together to implement a regional Cyber Response

ensuring all organisations follow an appropriate methodology that focusses equally upon;



***People, Process and Technology*.**

We have learned lessons from the WannaCry cyber-attack in May 2017. There have been several NHS initiatives which have all increased our ability to withstand future attacks. We have deployed new security arrangements across the whole regional health and care digital estate and are continually assessing our digital security and associated strategic plans.

Our individual organisations are collaborating, considering others and working as a joined-up system to strengthen our capabilities to interact over secure digital infrastructures.

Because we had the basics right, we were able to respond at pace to the COVID-19 Pandemic.

We worked together to solve new problems; delivering digital solutions to our region.

We rapidly ensured our clinicians and staff were provided with the right equipment, digital tools and technologies, to adapt to new ways of working and to provide continuity of services for the citizens of our region.

Strategic Coordination Centre

We've implemented a regional Strategic Coordination Centre (SCC), which provides tactical oversight, with the latest real-time information feeds, ensuring the safest and highest quality of care possible for our population across all acute, community, mental health, primary care, and social care services.

Our SCC provides a consistent and collective approach to managing system demand and capacity as well as reducing risks, such as winter pressures and cyber-related threats.

Local authorities and health working in information security have been sharing alerts and experiences since 2013.

Information Security for the North East - the North East's public sector WARP (Warning, Advice and Reporting Point) - currently brings together all North East councils with colleagues from local NHS organisations, Foundation Trusts, NHS Counter Fraud Authority and NHS Blood and Transplant.

Our Regional Infrastructure…

We have secured and channelled funding to organisations within our region, to improve technical infrastructures, which underpin our digital estates and enhance capabilities to further transform our digital and data services.

North East North Cumbria Health & Care Partnership

The Essentials

Getting the Basics Right

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

We Will Continue To…..

- Ensure health and care digital technologies are clinically safe, with patient safety embedded within and enhanced through those technologies.
- Adhere to, adopt and implement national standards, government best practice and guidance.
- Provide assurances to our citizens and each other that our infrastructures are safe, strong and secure; through working together to develop and agree a set of regional standards.
- Collectively design our infrastructures and systems to improve flexibility, cross-system working and movement of staff. - Upskilling our workforce in parallel along our journey.
- Continually achieve at least minimum national cyber security standards and work together as a region to identify and combat potential cyber-attacks.
- Reduce complexity, duplication and costs; using our collective purchasing power to get the best value for money.
- Standardise and join our digital systems to release more time to deliver care and improve safety.

Supporting Levelling-up our Secondary Care Organisations

Across our region, in our Hospitals, we have a mix in levels of digital maturity and capabilities of Electronic Patient Records (EPRs).

Whilst some are at world-class leader levels, others are working to reach the Minimum Viable Product (MVP) functionalities for their EPRs and achieve the benefits of those capabilities.

We are continuing to work with those organisations to attract and receive national investments to support the levelling-up agenda; acknowledging as a Health and Care Partnership

we will only ever be as strong as our weakest link.

Our citizens know our technologies are clinically safe and their health and care information is held securely and managed appropriately.

Health and care professionals will have safe, secure and reliable technology, and this skills to use these digital tools.

Our organisations will take all necessary steps and precautions to protect not only their own organisational data and infrastructure, but also those of the broader ICS.

Our Health and Care Partnership will benefit from system-wide safe, reliable, flexible digital infrastructures.

North East North Cumbria Health & Care Partnership

The Essentials

Getting the Basics Right

Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future

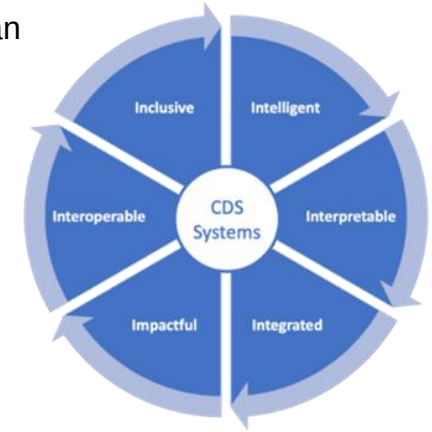
Back Start Next

Standardising how we work, supported by Clinical Decision Support Systems

Clinical decision support (CDS) are digital tools that promote the use of best practice and can support clinicians to make evidence-based decisions; improving the delivery of healthcare through having the right information, reducing errors and variation, as well as supporting shared decision making.

Recent guidance was published by NHS England, to support all healthcare providers on the implementation of CDS systems, for the benefit of patients and staff, outlining six critical success factors (*as illustrated*):

Across the North East and North Cumbria, we have a long history of using digital CDS tools, developed through collaborating with and health and care professionals.



We have developed, standardised and adopted digital clinical resources; to enable delivery of patient care ***safely, efficiently and effectively****.*

Free public WiFi

We're providing **free WiFi** in our public buildings to help our citizens to stay connected.

We Will Explore How…..

We can introduce regional document storage, to enhance collaboration, continue to learn lessons, share expertise and reduce duplication.

We can develop a central, regional register of supplier contracts, accessible to all organisations. – To work together to drive cost efficiencies and closer collaboration.

We can support new ways of working, including updating our IT infrastructures, to enable the use of technologies, such as cloud-based telephone systems.

We will work with third-sector and voluntary organisations, involved in delivery of health and care, to provide better communications, including (where appropriate) access to and contribution to digital data and technology.

North East North Cumbria Health & Care Partnership

Improving

Continuing to Advance & Innovate

Our Health and Care Partnership needs digitally mature organisations and a digitally capable workforce.

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Back Start Next

Assessed ourselves against the What Good Looks Like Framework

Digital Inclusion

In response to the publication of the What Good Looks Like (WGLL) Framework, we evaluated our strengths and weaknesses, looking at where we may have gaps requiring further focus and attention.

Key areas identified were around addressing **digital inclusion** and enhancing **citizen engagement**.

We initiated a regional Digital Inclusion Steering Group, involving participation from representatives from across our region. We've developed a Digital Inclusion Strategy (an ongoing piece of work, which will change and develop with the needs of our population), we've focussed on research, development of Digital Inclusion by Design Principles (which will be embedded in the design of future initiatives and implementations) and a 'toolbox' of options to optimise citizen interaction with digital health and care solutions.

Digital Maturity Assessment

In line with the success measures outlined in WGLL and the national Plan for Digital Health and Social Care, we've worked as a collective to carry out a review across our region, the outputs from this are informing frontline digitisation areas of focus and priority.

We have implemented new ways of working that can be summarised as "*not doing the same things better, but perhaps doing better things*".

We have worked together to understand the scale of the challenges linked to digital exclusion; research has found…

- 10.2 million people in the UK are lacking basic digital skills.
- 1 in 14 household have no home internet access.
- Over 1m people in the UK have lost broadband access during the cost-of-living crisis.
- A report by the North of Tyne Combined Authority, in 2020, concluded around 6.2% of households in the region did not have access to the internet, which equates to around 30,000 households.
- A 2019 report by the Carnegie UK Trust found that 12% of the North East's population were digitally excluded, compared to 10% nationally.
- According to the Office for National Statistics, in 2020, 9% of adults in the North East region had never used the internet, compared to 6% nationally.
- A 2020 report by the Good Things Foundation found that 29% of adults in the North East had limited digital skills, compared to 21% nationally.
- Compared to extensive users of the Internet, non-users are:
  - 2x more likely to have a disability or health condition
  - 12x more likely to be over - 65

Based on our findings, we are…

- ✓ Designing an approach whereby Digital Inclusion by Design Principles are embedded across the NENC ICB and partner organisations.
- ✓ Working with regional colleagues, to expand upon device repurposing and recycling initiatives; providing equipment to our public, which would otherwise be disposed of.
- ✓ Developing a communication plan, to better engage with our public.
- ✓ Developing a digital inclusion toolkit for organisations and service teams across the NENC ICS, to share and use good practice for supporting people to access the resources they need.

Improving

Continuing to Advance & Innovate

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

We have…

- ✓ Launched a regional Digital Skills Development Network
- ✓ Announced Digital Fellowship places to support the award-winning Shuri Network
- ✓ Created an accredited Analytics Learning Programme
- ✓ Engaged with Primary Care staff to provide training, to educate and empower patients in the use of digital tools.

skills development network

Shuri Network

We will…

- Work to **ensure our workforce have basic digital skills** and understanding of our technologies and how to use them.
- Ensure new digital tools we introduce contribute to **reductions in workforce pressures**.
- Design solutions that are more intuitive to the workforce through **user-centred design** approaches.
- Work as a region, to aim toward easing current pressures in workforce capacity and capability, through **finding new and innovative ways to bring specialist skills and resources together**.

Our workforce design principles centre around:

- Recognising that an emerging part of the workforce will be:
  - Members of the public choosing self-management of their care needs.
  - Care home and third sector staff.
  - First responders such as fire and police and risk assessors in the community.
- Designing and delivering models that are not based on organisational boundaries, or only around health and care sector digital networks.
- Building upon the foundations of delivering care closer to home using digital technology and infrastructure to enable a true ‘shift of the point of care delivery’.
- Actively facilitating and promoting learning between clinicians, care professionals and back-office staff.
- Establishing learning and education; systems, services and networks and promoting engagement and uptake.
- Enhancing recruitment through the development of innovative working practices, new roles and relationships.
- Recognising that digital health and care services require a significant mind-set change and the right skills to enable health and care professionals to support personalised self-care.

North East North Cumbria Health & Care Partnership

Improving

Continuing to Advance & Innovate

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Back Start Next

We Are…..

- **Building a digital, data and technology workforce to 2030**, through engaging with national and regional colleagues, in addressing the future risks around specialist workforce capacity and capability risks (*as outlined in the 2020 research commissioned by Health Education England*).
- Taking the necessary steps to ensure that all parts of our Health & Care Partnership reach the required levels of maturity, so we can create a truly integrated system.
- Working with colleagues from across our region and national partners, to create a workforce that have the skills and confidence to use new technologies and to digitally enable patients on supported self-management tools.
- Enabling a digitally flexible system, that maximises and exploits economies of scale; to transform health and care services; creating value for money through collaboration and convergence.
- Continually measuring and raising the digital maturity bar to enable true transformation.
- Facilitating staff agile working and seamless movement across our region.
- Working to improve the systems we have in place, to make services more useable, useful and used.

We are rapidly delivering and adopting a range of digital technologies and capabilities that will enable our workforce to function in more mobile and agile ways.

As citizens of the North East and North Cumbria, we will have access to the latest digital health and care options, that will ultimately support prevention and self-care.

Our workforce will learn new skills, achieving individual personal growth while allowing us to flex and respond as a region.

Digital Champions

We're working with partners and delivering a Digital Champions Programme, providing all NHS Primary Care workforce across our region with opportunities to learn, share and inspire staff and patients to embrace digital technologies. In doing so, ***Digital Champions are helping transform patient care provisions for all.***

North East North Cumbria Health & Care Partnership

Connecting

Linking the Region & Beyond

Through continuing to connect the region's health and care digital systems and through secure sharing of information, we are improving the quality and safety of care.

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

We have a fantastic track record in the North East and North Cumbria for digital innovation in health and social care. Working collaboratively, we have already delivered and are advancing many examples of digital solutions.

Since the early 2000's we've built on our successes to continuously improve and learn. We've:

- Implemented information sharing at scale and pace across the region with the Great North Care Record (GNCR). GNCR provides relevant healthcare information to be safely made available to clinical and healthcare professionals, in real-time, from multiple health and care services, at the point of patient care.
- Worked through the information governance, legal and ethical issues around safe data sharing and access to care records; installing the building blocks needed to move to the next phases of the programme.
- Gathered extensive research and insight from our public, academics and digital leaders to shape our approach.

Great North Care Record

Connecting:

- Foundation Trusts
- Primary Care
- Out of Hours GPs
- Local Authorities
- Community Health Services
- Hospices
- 0-19 Services
- Child Health Information
- Out of Hours Dentistry
- Maternity Services

GPs, hospitals, community teams, mental health services and social workers all hold different electronic patient health and care records.

GNCR makes it possible for relevant, patient information stored across these different systems to be available to health and care professionals, **at the point of care**.

GNCR currently has **25,000 users**, with over **500,000** user views each month.

10 million views in the summer of 2023.

North East North Cumbria Health & Care Partnership

Connecting

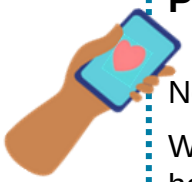
Linking the Region & Beyond

Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future

Back Start Next

We created a regional network of dedicated professionals who are working together to make our vision real. We've…

- Engaged with over 200,000 patients using care pathway specific components of HealthCall.
- Given health and care professionals the tools to collaborate and connect online; creating more options for the region to '***work as one***'.
- Digitised Social Care records in adult domiciliary care and care home settings.
- Digitally enabled Community Diagnostic Hubs.
- Providing support to Ageing Well national priorities and Community Health Services, including development of a Community/Ageing Well Digital Strategy and exploring connectivity to the Great North Care Record for anticipatory care, palliative and end-of-life information.



Patient Engagement Platform

We are building a Patient Engagement Platform (PEP), which will link to the Great North Care Record and Wayfinder (NHS App) services.

Wayfinder will provide patients access to securely view summaries of their scheduled hospital appointments and enable access to further details about those appointments.

The PEP will work with the NHS App and will give people living or receiving treatment in the North East and North Cumbria a way of digitally interacting with health and social care services.

The PEP will build on the capability within the NHS App and offer more functionality, including receive clinical correspondence electronically and setting correspondence and sharing preferences.

"*As an active type 1 diabetic and a carer, I think that health and social care information is like a giant jigsaw puzzle. The trouble is nobody ever looks at the image on the box. As a patient I want to help to put all the pieces together.*"
Bruce, a patient from Darlington

"*Being able to access a patient's GP record means that I have more information to make an informed decision about the most appropriate care for the people I treat.*"
Dr Phil Stamp, A&E Consultant, Northumbria Healthcare NHS Foundation Trust

"Being able to access medication information quickly and safely using the Great North Care Record is really useful. It means I don't have to ring their GP and I can find out exactly what my patients have been prescribed and what dosage."
Karen Hertwick, Community Palliative Care Nurse specialist

North East North Cumbria Health & Care Partnership

Connecting

Linking the Region & Beyond

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

We Are…

> Continuing to connect the region's health and care digital systems together, using the latest technologies, while building in '**privacy by design**'.

> Expanding the Great North Care Record, making more information more widely available and accessible across our health and care system; to support frontline care, individual self-management, planning and research, while exploring how **relevant information** can be safely and securely be made **accessible to all partners across our footprint.**

> Exploring opportunities to allow **information sharing beyond our regional boundaries**.

> Delivering digitally enabled diagnostic services (i.e. Pathology, Radiology) and connecting Laboratory Information Systems, to improve our region's diagnostic services; providing platforms and capabilities for securely sharing diagnostic images and reports; **transforming the speed of delivery as well as the quality of care provided**.

> Supporting improvements in maternity care, through enhancing quality and safety of maternity records using digital and data solutions, including connectivity to the Great North Care Record.

> Exploring potential benefits of sharing health and care information with voluntary organisations directly involved in patient care.

Our citizens' experiences of health and care are being improved through the safe sharing of information with the professionals involved in their care.

Health and care professionals have access to information about the people they treat. As well as skills and competence to use digital tools and services appropriately.

Digitising Adult Social Care

Across our region, there are approximately 1276 Adult Social Care (domiciliary care and care homes providers), many of which currently use paper-based records.

Digital Social Care

In line with the national Plan for Digital Health and Social Care, we're continuing to **digitise**, **connect** and **transform** these vital health and care providers.

We are establishing a support network of Digital Social Care Champions including Local Authorities to build on and promote success amongst the harder to reach care providers.

North East North Cumbria Health & Care Partnership

Empowering

Bringing Personalised Care Closer to Home

By using digital technologies where appropriate, we will empower people to be partners in their own health and care.

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

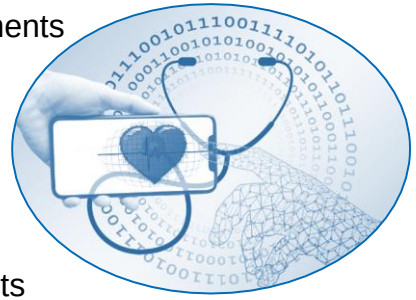
Digital Primary Care

Access to GP practices and primary care services were severely impacted by the pandemic.

We worked together to accelerate the implementation of 'Digital First Primary Care' initiatives, providing people with more and improved options to communicate and interact with their GP services.

These initiatives included:

- Online consultations
- Ability for patients to book appointments and arrange vaccinations online
- Video consultations
- Increasing the use of messaging
- Refreshment of equipment
- Primary Care Network Developments



In responding to the pandemic, we very quickly enabled new ways for our citizens to interact and communicate with their health and care professionals through online and video consultation technologies.

We've introduced assistive and monitoring technologies, that enable people with health and social care conditions to better manage those conditions and remain living independently in the community for longer.

HealthCall is a collaboration of hospital trusts across the region and supports NHS organisations to design, develop and implement digital health services; allowing patients to self-test and record their own health readings and help them to interact digitally with their care team.

By working together with the HealthCall programme, regional hospital trusts have and are continuing to develop new digital solutions, to help manage specific conditions and pathways of care, including:

- **Respiratory Remote Screening Application** – A system to identify, triage and provide treatment for high-risk respiratory patients.
- **Digital Care Home** – Electronic referrals for those who need urgent care.
- **INR Self-Testing Service** – Enhancing care for patients on warfarin.
- **Undernutrition Service** – An award winning digitally enabled care pathway for those at risk of undernutrition.
- **Gestational Diabetes Service** – Home monitoring for expectant mothers with gestational diabetes.
- **Falls Prevention Service** – A digitally enabled care pathway to help those at risk of falls.

North East North Cumbria Health & Care Partnership

Empowering

Bringing Personalised Care Closer to Home

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Back Start Next

Virtual Wards

Virtual wards (*also known as hospital at home*) are being introduced, to allow patients to get the care they need, in their own homes, safely and conveniently, rather than being in hospital.

Digital tools for virtual wards can improve patient experiences, healthcare resources and health outcomes, by facilitating remote monitoring, voice or video calls and provide patients more control over their appointments.

Across the North East and North Cumbria, we're working with partners to introduce **new virtual wards digital tools**, to bring improvements including:

- **Increased Bed Capacity**: Shifting appropriate patient care to virtual wards frees up bed capacity for those requiring in-person treatment, reducing congestion and additional infrastructure.
- **Enhanced Patient Flow**: Patients can be monitored remotely, decreasing the need for physical appointments, while healthcare providers can better allocate resources and promptly respond to urgent cases, supporting more efficient patient flow.
- **Patient-Centric Care**: Empowering patients with control over their appointments, access to health information, and personalised care plans aligns with the principles of patient-centric care, improving patient engagement and satisfaction.
- **Cost-Effective Care**: Avoiding unnecessary hospital admissions and reducing the strain on in-patient facilities contributes to more cost-effective healthcare delivery.

Cancer remote monitoring

The Northern Cancer Alliance are working to introduce new ways for interaction in cancer pathways of care and are looking to the future, to create opportunities to test emerging technologies such as artificial intelligence, to support our shared aim to improve outcomes for patients. Digital transformation is high on the Northern Cancer Alliance agenda.

Digital improvement is to be integrated into all cancer projects from earlier and faster diagnostics, through to personalised care and remote monitoring for patients.

Low risk cancer patients who are stratified to self-managed pathways of care are being supported by such digital solutions.

We are adopting a '*shift left*' approach, which is essentially about moving people more toward self-management solutions, to ease pressures on primary and secondary care services; with the intent that this will lead to better health and wellbeing, better quality of care as well as sustainable and efficient services.

North East North Cumbria Health & Care Partnership

Empowering

Bringing Personalised Care Closer to Home

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Creating and optimising digital options for our public to access health and care services

Demand and complexity in primary care and secondary care services are increasing.

In GP practices, we are facing a widening gap between patient demand and the capacity available to meet that demand.

All health and care services have pressures and challenges, particularly while we are still recovering from the impact and effects of the Pandemic.

Many have accomplished amazing work to adapt to these challenges but more support is needed to make sure the right digital tools are available and they are used in a way which brings the maximum benefit to patients and practices.

We are:

- Making available digital tools to allow patients to access GP practices digitally.
- Optimising the use of digital tools to modernise general practice access.
- Empowering patients to manage their own health.
- Ensuring where possible, our public and patients have options to be digitally included.

We Are…..

…developing a 'toolbox' of digital tools, making those tools as widely available as possible (where appropriate) and looking at how we can help people to develop the necessary skills to make best use of the digital tools/technologies available to them.

…exploring further enhancement of the use of assistive technologies for Mental Health and Learning Disabilities.

…finding new ways to reduce digital exclusion.

…continuing to transform and progress Palliative and End of Life Care, through improving access to high-quality specialist services, enhancing the quality of care with a confident and capable workforce and through ensuring services are equitable and sustainable.

People will feel more involved in their care and will have a range of digital options to help manage their own conditions care needs, ultimately helping citizens with life-style decision support, and enabling illness prevention.

North East North Cumbria Health & Care Partnership

Insight

Using Data in Context to Deliver Action

Through the use of reliable, up-to-date information, data and research we can proactively respond to the needs of our population.

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Back Start Next

Over recent years we have been laying down the solid data and analytical foundations we plan to build upon to leverage insight into our population, to enable increases in early detection and prevention of ill health.

We're developing and implementing a Sub-National Secure Data Environment

The North East and North Cumbria has received funding from NHS England to implement a regional Sub-National Secure Data Environment (SNSDE).
This will become the default way for researchers and analysts to access data for research and development, providing an opportunity for us to bring together expertise from across academia and health and care.

The SNSDE will provide data for specific projects and will focus on local health and care priorities, to improve the health and wellbeing of our population.

We are working with members of the public, who are helping us to shape our approach to how data is used and accessed.

Our Health and Care Partnership will have the latest data and information to predict, plan and respond to the health and care needs of our citizens.

Population Health Management

Our regional Population Health Management (PHM) approach uses all of the data available to understand the health and care needs of the population, accessible to health and care organisations to enable data-driven decisions about services provided.

By unlocking the insight within the vast amount of data we have, we are continuing to learn and improve our services to our populations.

We have and are further developing the PHM data store to include more joined up data, which is securely stored within dedicated analytics environments, strictly protected to ensure confidentiality.

We are establishing an **Intelligence Function,** to provide insight into population need, identifying impactable cohorts to improve care for people with ongoing health conditions and reducing variations in outcomes.

The vision is for this function to be multi-organisational, comprising analysts and insight specialists from all relevant partners; **collaborating to deliver insight in support of our Health and Care Partnership goals**.

North East North Cumbria Health & Care Partnership

Insight

Using Data in Context to Deliver Action

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Back Start Next

We Are…..

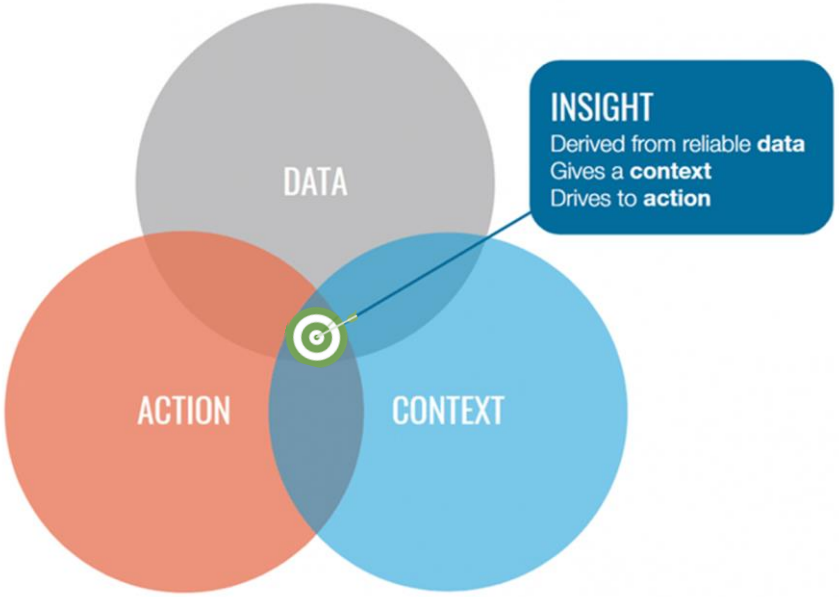
> Enabling the NENC Health and Care Partnership to be as responsive and responsible as possible; equipping the system to best respond to the needs of the population in our area.

> Acknowledging the quality of data must be implicit and embed an ethos of **'get it right first time'**.

> Working across organisations and teams, to address barriers created by inconsistencies in data quality; to bring greater standardisation through bringing together data and clinical teams to solve problems.

> Adopting an agile approach in the gathering of accurate, timely and appropriate levels of data for risk stratification, planning and prediction; to anticipate and inform better decision making.

> Driving forward with next generation technologies.



We Will…..

> **Underpin all decisions with robust data evidence** through developing a greater analytics capacity, leveraging existing capabilities, and ensuring the generated insights flow into the decision making process.

> Build our population analysis and behaviours predicted capabilities to better inform the design of health and social initiatives to drive **improved outcomes for the population**.

> Develop a strong pipeline of digital and analytics capacity through supporting **upskilling and recruitment**, in collaboration with business, academia and system partners.

> Work with the national team, in understanding and implementation of the **NHS Federated Data Platform**.

> Introduce **predictive analytics** to move from a model of Hindsight (past) and Insight (present) reporting to Foresight (future).

North East North Cumbria Health & Care Partnership

Supporting Service Recovery

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

Back Start Next

We are improving patient discharges from hospitals

Optica is a secure Cloud application built in collaboration with NHS Trusts and Local Authorities, which tracks all admitted patients and the tasks relating to their discharge in real-time through their hospital journey.

The application helps care teams properly plan for timely patient discharges, reducing unnecessary delays leaving hospital and avoiding hospital beds being needlessly occupied.

It's fully integrated with hospital electronic patient records and combined with other local health and social care data systems, ensures that relevant information relating to patient discharges is available to clinical teams and leaders, **in one place**.

OPTICA
Patient discharge optimisation

Through the use of the digital web-based Capacity Tracker - built in partnership with NHS England, Local Authority representatives and care home providers, care homes are sharing their available capacity in real time and enabling users to search for care home availability across England.

Capacity Tracker
Insight for Care

The system helps in improving patient flow through identifying suitable vacancies across care homes, hospices and residential substance-misuse providers.

The solution is assisting individuals and Local Authorities to make the right choice, ensuring that they don't stay in hospital any longer than is necessary.

Primary Care Access Recovery

We're supporting the recovery of access to primary care services, to '*tackle the 8am rush*' through embedding the use of digital technologies and promoting digital tools, including:

- Providing citizens with access to their own records
- Ensuring directly bookable online appointments are made available
- Offering secure NHS App messaging to patients
- Improving ways for patients to communicate with their GP practice
- Updating GP practice websites, improving access to online tools

Transforming Outpatient Services

We are working in collaboration with regional and national colleagues to digitally enable further outpatient transformation.

The national mobile first programme includes the further development of patient portals, to help patients to take control of their care through the NHS App, including managing appointments and accessing resources to support better care.

– Resulting in **improved patient satisfaction** scores and **lower rate of missed appointments** when booking appointments through patient portals.

A further initiative, eMeet and Greet is designed to accelerate the move to self-service and reduce administrative burden on secondary care.

North East North Cumbria Health & Care Partnership

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

What this means……

…for our citizens

"My experience of health and care is improved as I don't have to keep repeating the same information. There are fewer appointments and delays to my care."

"I know my information is stored securely and only shared when and where it is needed."

"I feel more empowered and involved in my care."

"I have a choice to book online and video consultations when I need them."

"I can set my communication and sharing preferences."

"I can use assistive technology to manage my care."

"I can use my own device to manage my care.."

"I can book, cancel and manage my GP and hospital appointment online."

"I can manage my own conditions better because I have access to more information."

…for our organisations and staff

"Reduction in the duplication of work for staff."

"Digitally mature"

"Happier, more satisfied staff."

"More cost effective and efficient services."

"Improved patient experience and outcomes."

"Targeted interventions and care that meets people's health and care need."

"Less time wasted searching for information about patients."

"Through seeing more information sources to support decision making, I know I am making safe decisions.."

For our places

"We can design services suited to our local population, based on insights from the data, and our experience of working in our community."

For our ICPs

(Integrated Care Partnerships)

"Working in a digitally connected health and care partnership, will enable staff to become more mobile and agile, and patients will receive more integrated and joined-up health and care services"

For our ICS

(Integrated Care System)

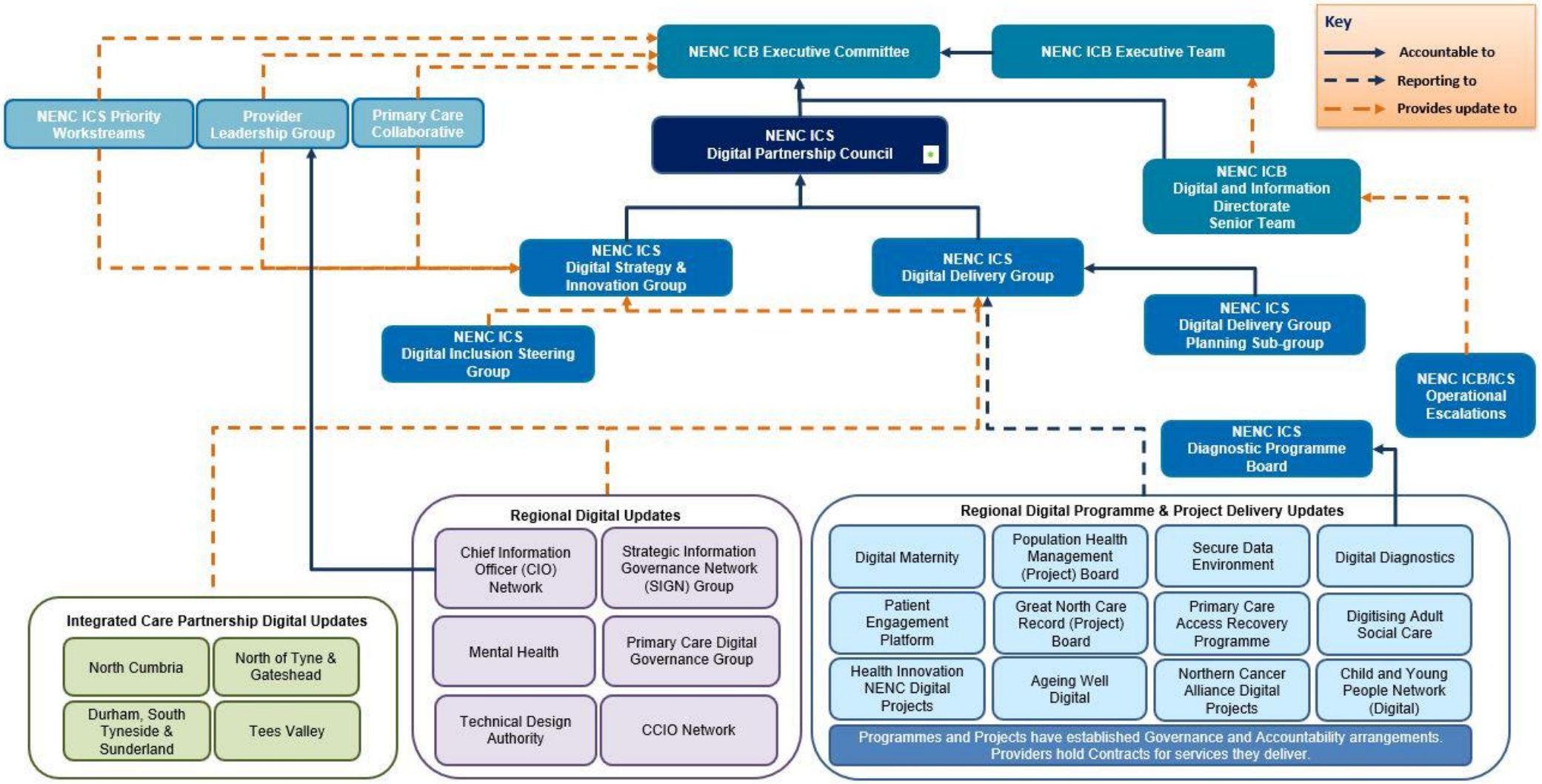
"Patients are not restricted to geographic boundaries for their health and care services, interoperable digitally enabled health and care services can be delivered where they are needed, allowing workforce and estate opportunities to be strategically managed and delivered, moving our system from "***isolation to integration***"

North East North Cumbria Health & Care Partnership

Governance & Accountability

Following an internal review with senior leaders from across the health and care system in the North East and North Cumbria – the way regional digital programmes are managed is changing.

New governance structures are maturing and will be expected to be fully operational from January 2024.



Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future

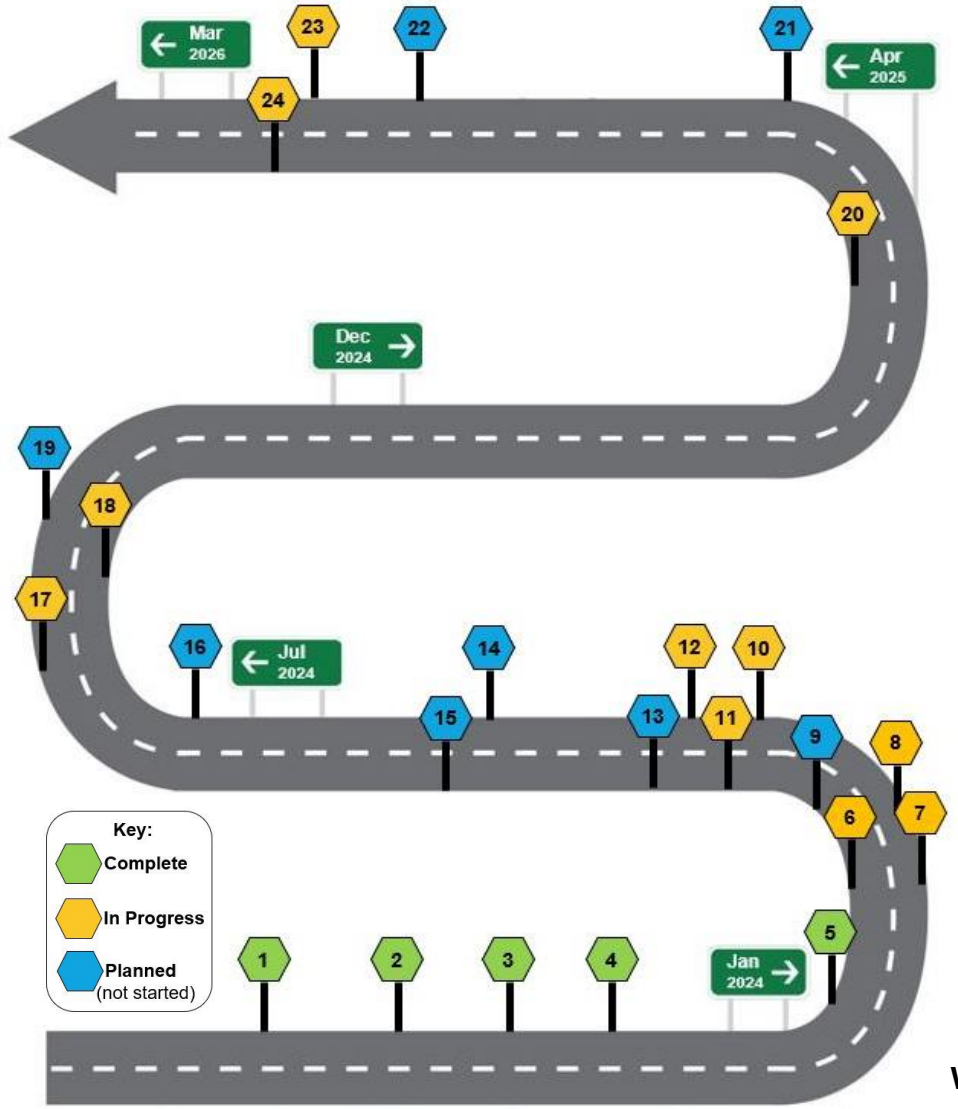
North East North Cumbria Health & Care Partnership

Our Roadmap

Some of our key Milestones & Measurements…

Our digital, data and technology roadmap illustrates a number of key milestones planned for our journey ahead.

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future



No.	Date	Deliverable
1	Sep-23	Out of hours Dentistry viewing access to the Great North Care Record
2	Oct-23	Completion of development of regional digital inclusion heat map
3	Nov-23	Initiation of Maternity Services integration to the Great North Care Record
4	Dec-23	Start of implementation of digital solution to enable Virtual Wards
5	Jan-24	Artificial Intelligence 'Bootcamp' session to define opportunities/next steps
6	Mar-24	Public awareness/launch of NENC ICS Digital, Data and Technology Strategy - to inform citizens of plans and direction of travel
7	Mar-24	90% of GP practices offering digital services via the NHS App
8	Mar-24	75% of population aged 13+ age groups to have downloaded the NHS App
9	Mar-24	Conclusion of regional Analytic Learning Programme - lessons learned and next steps
10	Apr-24	Completion and approval of NENC ICS Digital Inclusion Strategy
11	Apr-24	All GP practices to enable prospective online records access
12	Apr-24	All GP practices with analogue telephone systems to be moved to cloud-based telephony
13	Apr-24	Start of GP practices COIN upgrade implementation
14	Jun-24	Shared development of the Great North Care Record - reinvestment and marketing
15	Jun-24	Completion of development of NENC ICB/ICS Cyber Strategy
16	Jul-24	Stock-take of professional uptake and utilisation of digital tools and solutions, - education, awareness and promotion to enhance optimisation
17	Aug-24	All Local Authorities to be connected to the Great North Care Record for Adult Social Care
18	Sep-24	All regional Trusts (*with technical capability*) to be connected to the Great North Care Record for both viewing and sharing information
19	Sep-24	Regional equipment repurposing project complete and operational
20	Apr-25	80% uptake of Digital Social Care records for CQC registered Adult Social care providers
21	Apr-25	Single data platform live for data and analytics
22	Sep-25	Great North Care Record to link to other national shared care record initiatives
23	Mar-26	All NENC Trusts live with regional digital diagnostics solutions
24	Mar-26	Deliver Electronic Patient Record (EPR) capability in every Trust in the Region to meet the Minimal Viable Product, as defined by NHS England

We will deliver annual work aligned to NENC ICB joint forward planning priorities.

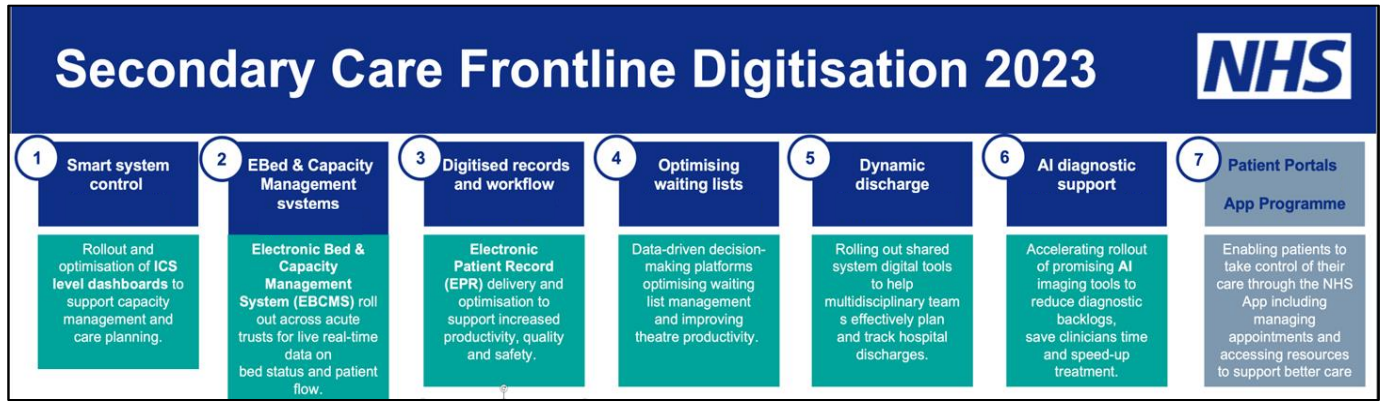
North East North Cumbria Health & Care Partnership

Our Roadmap

Areas for further consideration for our roadmap…

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

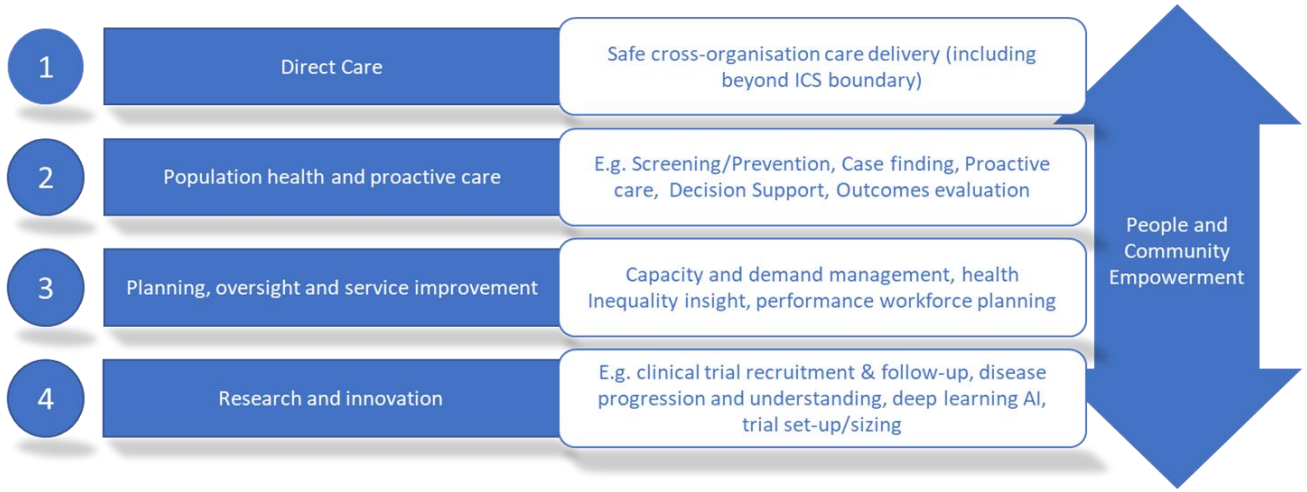
Following a recent re-prioritisation exercise, which took place within NHS England, Ministers asked the NHS to focus on six areas of digitisation for secondary care.
These are more recently being referred to Secondary Care Frontline Digitisation 2023 6+1, which we are engaging with as this work evolves:



Future State Design

We will align our future state design (also referred to as target state architecture) around four identified use cases for data.
Adopting and integrating existing local and regional assets, such as the **Great North Care Record**, with new technologies, including the **Sub-National Secure Data Environment (SNSDE)**.

Four Use Cases for Data:



North East North Cumbria Health & Care Partnership

Keeping our eyes on the Future & Innovation

We are keeping up-to-date and acknowledge rapidly evolving technologies.
– We are looking to developing a toolbox of capabilities including:

> **Artificial Intelligence**
> **Genomics**
> **Robotics**
> **Machine Learning**
> **Population Health Management**

What is the difference between Robotic Process Automation and Artificial Intelligence?...

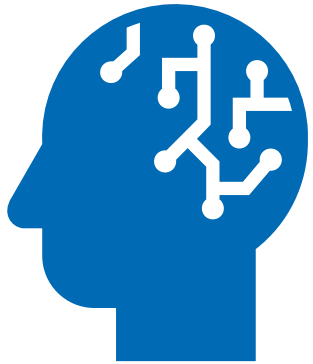
Robotic Process Automation is a software robot that mimics human actions, whereas Artificial Intelligence is the simulation of human intelligence by machines.

Artificial Intelligence (AI)

We will work together as a region to **understand the capabilities of AI and its safe use** in health and care.

Research is finding widespread adoption of AI could offer benefits in the following areas:

- **Keeping Well** – To help people stay healthy, by encouraging healthier behaviour (Shift left).
- **Early Detection** - Already being used to detect diseases, such as cancer, more accurately and in their early stages.
- **Diagnosis** - AI can review and store vast medical data (every medical journal, symptom, and case study of treatment).
- **Decision making** - Alignment of health data with appropriate and timely decisions, predictive analytics supporting clinical decisions/actions.
- **Treatment** - Help clinicians with a more comprehensive approach for disease management, better coordinate and comply with care plans.
- **End of life (EoL)** – AI can support “isolation” and help people to remain independent for longer during EoL phase.
- **Research** - Directing the latest AI to streamline the drug discovery and drug repurposing, potential to cut both the time to market for new drugs and their costs.
- **Training** - Through simulations and the ability of AI to draw instantly on a large database of scenarios, means responses to questions, decisions or advice from a trainee can challenge in a way that a human cannot.



Research source https://www.pwc.com/gx/en/industries/healthcare/publications/ai-robotics-new-health/transforming-healthcare.html

Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future

North East North Cumbria Health & Care Partnership

Keeping our eyes on the Future & Innovation

- Foreword
- Introduction
- Context
- Our Themes
- The Essentials
- Improving
- Connecting
- Empowering
- Insight
- Supporting Service Recovery
- What this means
- Governance & Accountability
- Our Roadmap & The Future

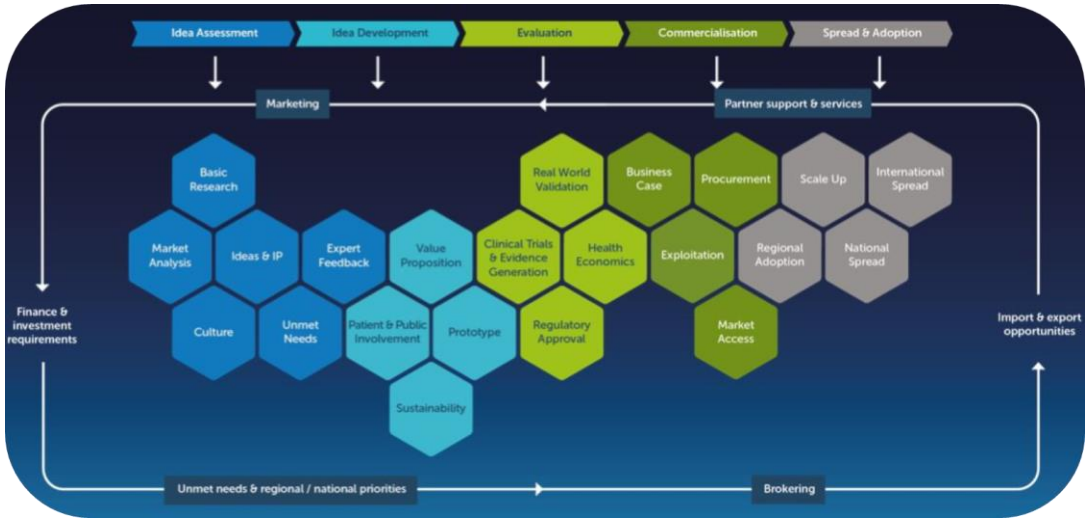
We Have.....

- Supported the delivery of national innovation programmes such as the Remote Monitoring at Scale and Digitising Social Care.
- Established new governance structures to identify opportunities for new technologies and digital approaches to care.
- Integrated Health Innovation North East and North Cumbria digital programmes into NENC ICS governance structures.
- Supported the establishment of a fund to support Digital Innovation in Primary Care.
- Worked with the Northern Cancer Alliance to establish efficiencies and opportunities, through the use of Robotic Process Automation.
- Developed specialist capabilities regarding Artificial Intelligence and clinical digital needs, to explore how emerging technologies can support the region.

We are working with partners to develop an innovation pathway

The innovation pathway will see initial innovation ideas from conception through several stages of:

- **Idea assessment**
- **Idea development**
- **Evaluation**
- **Commercialisation**
- **Spread and adoption**



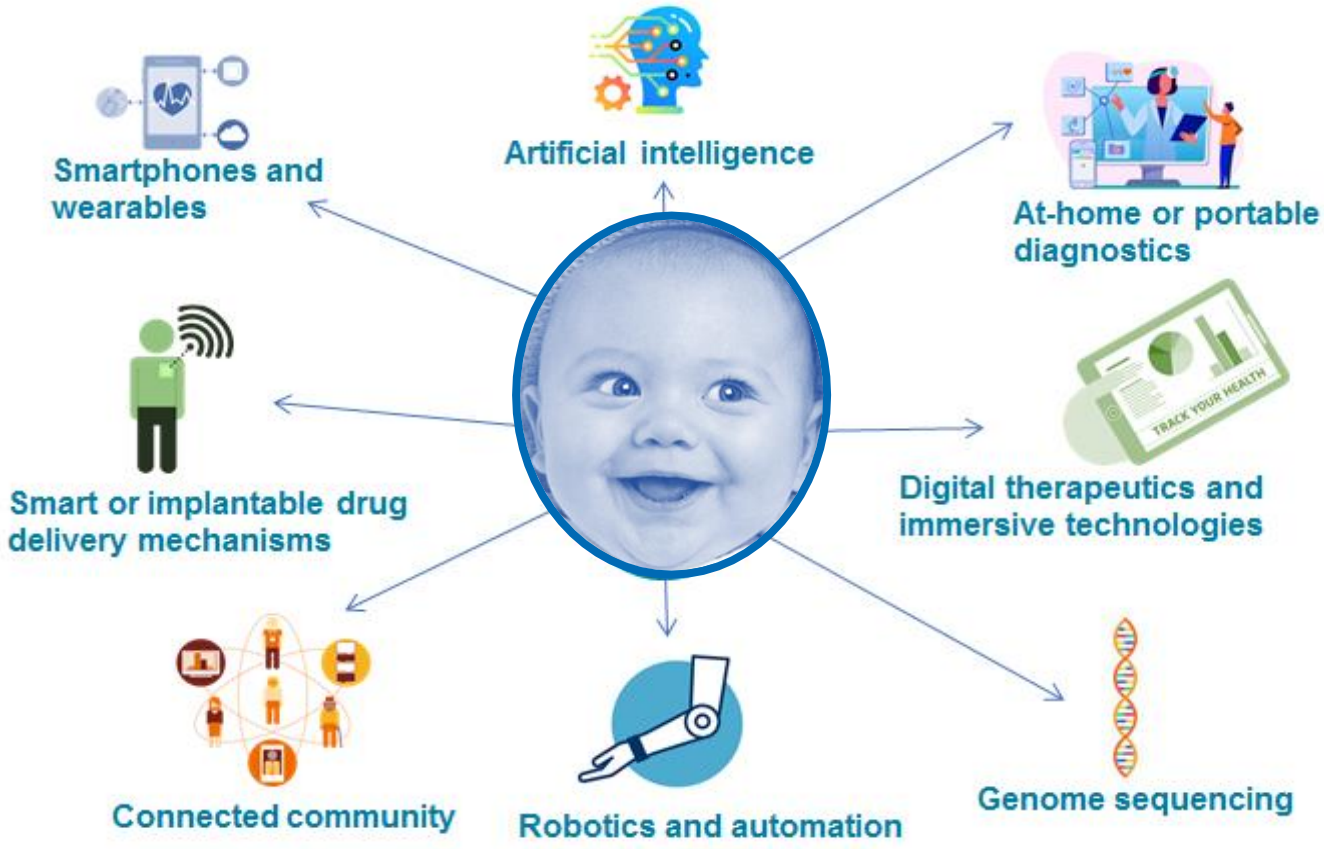
North East North Cumbria Health & Care Partnership

Keeping our eyes on the Future & Innovation

Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future

We are evaluating and delivering digital systems and services that are most likely to positively change health and care outcomes and experiences over the coming years. As a consequence of digital and technology 'miniaturisation', a number of such technologies are already in many people's pockets, on their wrists as well as, within local GP surgeries, hospitals, care homes and wider communities.

We will look at all opportunities to realise their full potential; to achieve better outcomes, more efficient care and improve our citizens' experiences.



North East North Cumbria Health & Care Partnership

Supporting and Related Strategies

To deliver our regional vision and Digital Strategy, partners from across our region have developed supporting, complimentary and related Digital Strategies.

Please see the links below *(links will be activated, once Strategies are finalised, approved and published):*

North East and North Cumbria Digital Inclusion Strategy

North East and North Cumbria Digital Primary Care Strategy

North East and North Cumbria Cyber Security Strategy

North East and North Cumbria Digital Community Health Services Strategy

Some of the core initiatives and programmes…

Great North Care Record

Virtual Wards

Digitising Social Care

Northern Cancer Alliance

Child Health and Wellbeing Network

North East and North Cumbria Local Maternity and Neonatal System – Digital Transformation

Innovation Pathway

Foreword
Introduction
Context
Our Themes
The Essentials
Improving
Connecting
Empowering
Insight
Supporting Service Recovery
What this means
Governance & Accountability
Our Roadmap & The Future