

# **Summary Digital and Data Strategy 2022–2025**

Investing in digital and data to enable 'intelligence into action'



### **Contents**

Thank you for your interest in our Digital and Data Strategy for the Cheshire and Merseyside Integrated Care System (ICS). You can navigate through to each section of our Digital and Data Strategy Summary by using the links below. A **fully interactive version of this strategy**, containing additional features and content, can be **viewed online**.



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### **Foreword**

Our digital and data work will be care profession led and informed to drive the best health and care outcomes for the population we serve and will ensure that we use the best intelligence in the planning and delivery of care to benefit those most in need.

This Digital and Data strategy describes an ambition to improve the health and well-being of our region right now and into the long term by weaving our digital and data infrastructure, systems and services throughout the pathways of care we provide.

This requires 'levelling up' our digital and data infrastructure to help address the significant inequalities so clearly faced by parts of our population and ensure we successfully support all we serve.

We are committed to turning 'Intelligence into Action' where we have increasingly sophisticated ways of understanding the health and care needs of our population, and then finding and intervening for those in greatest need to 'turn the dials' on improvement in their health and care outcomes in an equitable way.

As we invest into 'levelling up' our digital and data systems and relentlessly drive 'intelligence into action', we will deliver high quality, safe and equitable services that underpin the health, well-being and independence of our whole population both now and into the future.



Prof. Rowan Pritchard-Jones
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Our digital and data work will be care profession led and informed to drive the best health and care outcomes for the population we serve.



## 1. Why is digital and data important for the ICS?

Cheshire and Merseyside Integrated Care System (ICS) has a current digital strategy (called 'Digit@ II') that has been a key driver for investment in key IT systems and underpinning IT infrastructure to support health and care delivery ('digital' solutions).

These solutions should not be treated in isolation from the health and care 'data' that is held inside of those systems. When this data is used to create health and care 'intelligence', its value increases significantly, providing insight into the healthcare needs of the population. Reducing the gap between data and action enables health and care services to exploit opportunities to reduce suffering and decrease mortality.

Since development of 'Digit@II', there has been rapid adoption of digital tools such as team collaboration software, video consultations, remote monitoring and the adoption of digital diagnostics, that has changed the way health and care staff work now and in the future. There has also been accelerated use of population health and intelligence tools since the start of the pandemic, enabling researchers to pioneer new models of care.

The public expectation of digitally enabled health and care services has also expanded significantly, although alternatives will still need to be available for those who do not have access to digital tools and skills. Public expectation also means that health and care services will be delivered with environmental sustainability at the core in support of the NHS Net Zero ambition.

National policy through the 'What Good Looks Like' framework has also reinforced the digital and data focus. Clear guidance is provided, along with the impetus for health and care leaders to connect and transform services safely, securely and sustainably through the increased use of digital, data and intelligence for the efficient and effective delivery of health and care services. They can be used to directly have a positive impact on the health and care outcomes for individuals and the population as a whole; 'intelligence into action'. We set out how we will show that every pound spent on digital, data and intelligence has a greater return, delivering a positive impact on health and care services which in turn improves the relevant health and care outcomes for a person and or a community; 'turning the dials through digital, data and intelligence'.





## 2. Understanding the challenges and key stakeholders

Cheshire and Merseyside ICS represents a large and diverse geographical footprint. There are 2.7 million people living across areas of both significant wealth and substantial deprivation.

The mental and physical health and care challenges are faced by some of the most deprived neighbourhoods with the greatest health inequalities in England. Deprivation has a direct impact on mental health and socioeconomically disadvantaged children and adolescents are two to three times more likely to develop mental health problems. The pandemic has negatively impacted the health and wellbeing of the nation over and above the immediate impact of Covid-19 itself and the numbers awaiting investigations and treatments have increased significantly. Digital exclusion is another facet of deprivation and socioeconomic inequalities and can increase health inequalities further.

Against this complex backdrop, digital and data are key enablers to improving care. There is an opportunity to standardise care and ensure that the public receives maximum benefit from addressing the most significant factors that impact physical and mental health, wellbeing and independence. The Integrated Care System (ICS) creates a common framework and provides an operating model under

which a complex map of stakeholders can find new ways of working together, aligned around the needs of the local population.

The ICS footprint is broken down into Places, which are made up from a series of health and care organisations. Cross provider working is also supported by the formation of ICS wide Provider Collaboratives.

Places and Provider Collaboratives are the key organisational structures that will enable the transformational changes digital and data seek to support for the local population.

The overarching vision, mission and objectives of the ICS are set out in the 2021-2025 ICS Strategy. These are focussed on tackling the big issues that need to be addressed to improve health and reverse the widening gaps in life expectancy between the poorest and wealthiest in our population.

The purpose of the ICS Digital and Data Strategy is to support the achievement of the ICS vision, mission and objectives (detailed overleaf).



# Our ICS vision, mission and objectives



#### Vision

We want everyone in Cheshire and Merseyside to have a great start in life, and get the support they need to stay healthy and live longer.



#### **Mission**

We will tackle health inequalities and improve the lives of the poorest fastest. We believe we can do this best by working in partnership.

#### **Objectives**



Improve population health and healthcare



improving outcomes and access to services



Enhancing quality, productivity and value for money



broader social and economic development

#### **Our ICS digital vision, mission and goals**







Improving Health and Wellbeing

in Cheshire and Merseyside

### 3. Our digital goals

#### **Goal 1: Building strong digital and data foundations**

Digital Maturity Assessments clearly show that there is a need to invest in core technologies and services to ensure that there is increased equity of provision across the whole of the system to improve the effectiveness and safety of care for all of the population. This 'levelling up' of the basic digital and data infrastructure and systems supports safe practice and ensures we build strong foundations on which to deliver our ambition.



The ICS will continue to develop and expand its strategic digital and data platforms for use within all health and care providers and in all Places to leverage the benefits of at-scale investment and deliver improved outcomes for the population. This includes: -



#### **Shared Care Records**

- supporting **improved decision making** to help
provide better, safer care
when it is most needed.



# Patient Empowerment Portals (PEPs) and Person Held Records (PHRs)

- enabling people to increasingly selfmanage their long-term conditions, mental health, care plans and wellbeing by providing access to services that best suit individual needs as well as their **increasing resilience**.



Remote Care - using technology to allow an individual to monitor their own physical and mental health and wellbeing, with the support of relevant health and care workers, from their usual place of residence, reducing demand and improving care quality through early identification of issues.



**Digital Diagnostics** – allows the person to choose when and where their diagnostic examination will take place, with the most appropriate laboratory and clinician providing the study to the requesting clinician.







#### **Intelligence Delivery Platforms**

- The ICS will continue to:
- Use DSCRO data provided by NHS Arden and GEM CSU and the NHS National Data Platform for access to national data sets.



- **Utilise Combined Intelligence for Population Health Action** (CIPHA) as the core population health management platform for the ICS, its Transformation Programmes and Places. Ongoing development will:
  - Enable alignment with the overall Population Health approach (as being developed by **System P**).
  - Further identification of populations at risk of adverse outcomes, patterns and trends to support those with the greatest health and care needs
  - Evaluate the success of interventions and campaigns and manage resources effectively to deliver the very best standard of care
  - **Explore Secure Data Environments** for researchers.
  - Increasingly provide a large scale and evolving picture of metrics across multiple initiatives that demonstrate activity and outcome changes and identifies the critical Key Performance Indicators (KPIs) of success.

#### **Goal 3: System wide digital and data tools** and services

The ICS will further leverage the 'at scale' platforms through the development of ICS level applications, tools and services that support delivery of the ICS health and care objectives. This includes:

**Population Health and Business** Intelligence Services - ICS wide business intelligence services will create automated analytics to develop 'one version of the truth' across the ICS for use in epidemiology based analytics, population health management, capacity and demand modelling and performance, as well as responding to bespoke requirements.



**Digital Tools and Services** - the ICS is supporting the delivery of digital wide tools and services that are used by all relevant stakeholders in Cheshire and Merseyside to ensure equity of provision and leverage economies of scale. This includes a wide variety of applications including Robotic Process Automation (RPA), Office 365 training and Clinical Decision Support tools.





### 4. Critical success factors

The implementation and delivery of this strategy can only be regarded as successful if alongside the technical developments a small number of additional critical conditions are met.

These critical success factors (CSFs) are:

- Developing and retaining a highly skilled workforce
- Increasing digital inclusion
- Working towards net zero targets
- Ensuring sustainable financial investment.



#### **Increasing digital inclusion**

People will need skills to utilise digital and data platforms and be able to benefit from them. The ICS will work with all providers and at Place level to ensure that everyone who struggles to access and engage with digital technologies has the opportunity to do so or is provided with an alternative means of service (to ensure we retain equity of provision).

#### **Working towards Net Zero targets**

The ICS is committed to the NHS environmental sustainability ambition. The ICS Green Plan commits to: a focus on (digital and data enabled) ways to streamline care and support service functions; to improve the use of resources; and to reduce carbon emissions. The Recycle / Rethink / Reduce / Reuse concept drives innovation and practical objectives in digital and data that support the overall drive towards Net Zero.

# Developing and retaining a highly skilled workforce

The ICS is committing to supporting the development of enhanced skill sets and new practices for both the digital and data experts and the health and care professionals who lead the change. Investment in formal professional standards, talent development and retention is key for the digital and data specialists. For the wider workforce the focus will be on digital and data skills, development of specialist champions and investment in future digital leaders.











# **Ensuring sustainable financial investment**

Investment in digital and data during a financially constrained period is a challenge but it is a key way to deliver against these key NHS pressures by focussing on where care is needed the most through 'levelling up', and applying evidence-based 'intelligence into action'. In this way the investment can demonstrably show the benefit and 'turn the dials' on outcomes for individuals and the population as a whole.

**Accessing investment** 

As funding is devolved down to ICSs to invest in their systems, the funding principles and the associated business case and assurance processes will ensure this investment is focussed on delivering tangible outcomes.

#### **Prioritisation of investment funds**

The ICS will make future investment decisions and utilise an approach to prioritisation that will create most impact in the 'levelling up' and 'intelligence into action' agendas.

We can look to 'level up' digital maturity across stakeholders in the system whilst ensuring that we remain at the forefront of digital and data utilisation to improve outcomes where possible. There is currently a range of investment locally in digital and data and as a result, an imbalance exists in population experience.

All our investments are informed by public involvement and aligned with National Priorities, ICS objectives and local Place priorities. In addition, prioritisation factors will also be considered in making the critical investment decisions including ability to scale, ability to deliver improved outcomes, achievability in proposed timeframes, likelihood of embedded adoption into working practice and value for money.

As the ICS access to investment and decision-making increases then the prioritisation approach will evolve and consolidate to deliver a flexible and transparent process for the allocation of funds to digital and data programmes and ensure ongoing visibility of benefits realisation for the public.





# 5. Mechanisms for implementing transformational change

Creating momentum to drive 'intelligence into action' and positively impact the population outcomes requires explicit mechanisms for change and ongoing monitoring.

Perhaps most particularly with digital and data solutions, it is important to acknowledge they cannot be successful in 'turning the dials' in isolation. This strategy outlines four key mechanisms for implementing the required change:

- 1. Transformation Programmes
- 2. Robust governance, leadership and management
- 3. Partnerships
- 4. Innovation and future proofing our Digital and Data Strategy.

#### **Transformation Programmes**

One of the critical mechanisms for delivering digital and data enabled change are the ICS Transformation Programmes.

These represent a combination of existing ICS and nationally funded Programmes that work through individual Providers, Provider Collaboratives and Places to deliver transformational change.

Rigorous assessment of where digital and data initiatives support change now and into the future has taken place and informs how the investment in digital and data can positively impact on individual and population level outcomes.

The ICS Transformation Programmes do not represent the full extent of transformation activity across the whole Cheshire and Merseyside system as there is a vast level of change activity being led at Place and organisation level. Close working with Places is essential to ensure the more local programmes are well placed to take advantage of what digital and data have to offer and to create meaningful feedback loops on digital and data requirements and future ambition.

# Robust governance, leadership and management

Governance arrangements provide strong oversight of ICS delivered digital and data programmes and services and robust assurance to ensure alignment with ICS wide standards and plans. Draft Target Operating Models (TOMs) for both digital and data / business intelligence services have been developed and are expected to be agreed before the end of 2022.



#### **Partnerships**

Multiple organisations form the landscape to support an individual's health and care experience. There are several key partners that are critical to changing process and culture through digital and data over and above the Provider collaboratives and Places.



**The public** - Increased engagement with the public also drives digital and data innovation that better reflects the needs of the population. This ensures greater long-term alignment with public expectation in the areas that matter most.

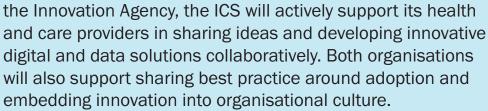
Health and care staff - A core principle of the development of this strategy has been that it is care profession led. The involvement of care professionals will continue to be critical to ensure that digital and data driven change is meeting need and is embedded into working practices to ensure that 'fit for purpose' solutions are commissioned and delivered to support achievement of the ICS objectives.

Other health and care providers - A number of key health and care providers do not form part of the Provider Collaboratives but play a critical role in delivering health and care services in our system and additional initiatives are therefore being supported by the ICS with a focus on Primary Care, Social Care (Adult and Child) and the Voluntary, Community and Social Enterprise (VCSE) sector.

**Academia** - We will work closely with our academic partners to increase alignment on development of solutions to support research needs and collaborate in the use of existing and new tools to continually increase the effectiveness of health and care provision through application of translational research.

# Innovation and future proofing our Digital and Data Strategy

Innovation is a core part of future proofing the digital and data strategy. Cheshire and Merseyside has a long history of digital and data innovation, driven by care professionals wanting to address unmet needs. In conjunction with



The ICS will also implement an innovation pipeline process that seeks to identify medium- and long-term opportunities and manage their evolution and impact on Cheshire and Merseyside digital programmes and the health and care outcomes experienced by the population.



### **Summary**

Cheshire and Merseyside ICS has set a challenging and compelling ambition for digital and data.

We are committing to the **levelling up** of infrastructure to ensure all our population can derive the same benefit from technology.

We are committing to turning 'intelligence into action' to focus on purposeful and evidence-based interventions. Through targeted resourcing and delivery, we will 'turn the dials' on improvement in health and care outcomes.

We have a great starting point and targets for delivery that will support the ICS meet its stated ambition, vision and goals.





# **Appendix 1 – Summary of our commitments to deliver** the digital goals

#### **Goal 1: Building strong digital and data foundations**

To level up digital infrastructure we will ensure:

- Every member of health and care staff in NHS and Local Authority Adult Social Care providers that needs access to digital equipment to undertake their role will have access to reliable and fit for purpose access devices by March 2025.
- Health and care staff in NHS and Local Authority Adult Social Care providers will have access to reliable, seamless and secure network infrastructure to enable them to deliver their role, wherever they are working in Cheshire and Merseyside, by March 2025. This will be facilitated by working in partnership with other public services and network providers to access initiatives such as Gov Roam and the rollout of 5G through initiatives such as LCR Connect.
- For NHS Providers, 90% of NHS trusts will have a minimum standard Electronic Patient Record (EPR) by December 2023, and 100% by March 2025.

Appropriate convergence of EPRs will be encouraged where possible to make it easier for staff to use them and ease the interoperability challenge.

 For Adult Social Care, 80% of CQC registered adult social care providers (residential and non-residential) will have adopted a Digital Social Care Record (DSCR) by March 2024. This is in line with the 'Plan for Digital Health and Social Care' requirements.

To level up data and intelligence infrastructure we will ensure:

- Access to ICS wide person level health and care linked datasets by March 2023 as a corner stone for population health analytics.
- The broadening of linked datasets available for analytics to include those outside of health and care such as education and housing by March 2024, through working with the ICS, Local Authority and national partners.
- The transfer of core health and care information between providers, within relevant Information







Governance agreements and for the purposes of direct care, population health management, care planning and research, will be undertaken through a single health and care data architecture by March 2025. To support this we will:

- Expand the information governance framework to include implementation of Data Sharing Agreements for use of data for research and innovation and full compliance with national data opt-out by March 2023.
- Implement electronic management of data sharing agreements via the Information Sharing Gateway by March 2023.

To level up 'safe practice' we will ensure:

- Provision of cyber security services including cyber security operations, incident response and assurance that complements and works alongside local health and care provider cyber security functions.
- Access to clinical safety subject matter expertise to ensure that the digital and data solutions in use across Cheshire and Merseyside are DCB0129 compliant (i.e., have appropriate safeguards associated with clinical and care hazards) and have been implemented in line with 'best practice' clinical safety standards (as outlined in DCB0160).

- Access to Information Governance subject matter
   expertise to enable statutory health and care providers
   to operate safely with regards to information sharing
   legislation and protocols supporting the improvement of
   dataflows and streamlining necessary data sharing.
- Access to technical and data architecture expertise to ensure that system wide solutions are reliable and align with Place and Provider systems to allow connectivity and ease of data flow across Cheshire and Merseyside.
   We will also ensure that national architecture standards and principles are maintained (e.g., 'cloud first', interoperability standards such as FHIR and the use of OpenAPIs).
- Digital environmental sustainability support to ensure that any system and Place based digital and data initiatives support the ICS' 'net zero' ambitions as outlined in the ICS' 'green plan'.
- Data quality to establish a common approach for improvement in data quality across the ICS so that our decisions are based on sound data.
- Data safety so that the public can be reassured that their data is used lawfully, with respect, held securely and that the right safeguards will be in place (through supporting adoption of the 'Five Safes' model and the Caldicott Principles).



#### Goal 2: 'At scale' digital and data platforms

- We will ensure that the Share2Care platform is available in all NHS and Local Authority Adult Social Care providers, enabling sharing of a core set of health and care data across the whole health and care system by March 2024.
- We will further support all Places to ensure that all NHS and Local Authority Adult Social Care provider organisations of the ICS are connected to integrated life-long health and social care records by March 2024, enabled by core national capabilities, local health records and shared care records, giving individuals, their approved caregivers and their care team the ability to view and contribute to the record.
- We will ensure that all Providers have implemented a
   Patient Empowerment Platform (PEP) that integrates
   with NHS App (as the 'front door' to health and care
   service for an individual or their carers) by March 2025.
- We will continue to build on the existing Remote Care platform delivering virtual ward and Long Term Condition (LTC) monitoring services, and expand this offering to deliver additional virtual ward beds (40 to 50 virtual ward 'beds' per 100,000 of the population by March 2024. We will also continue LTC monitoring for other specialties, as well as support for the wider NHS@Home

programme which will drive the focus of the platform going forward. This will include:

- Supporting the availability of digital monitoring of vital signs for people in care homes and at home, contributing towards the national aim of a further 500,000 people being supported by this technology by March 2023.
- Develop a tech-enabled annual physical check for people with severe mental illness by March 2023.
- We will also agree the care pathways where this platform can be used for supporting 'Care@Home' applications such as environmental monitoring and medicines management of those living at home (or in supported accommodation) to ensure they remain safe as part of the discussions regarding alignment with Technology Enabled Care (TEC) developments in Adult Social Care. Agreed pathways where people are supported in this manner will be in place by March 2024 and prevention and detection technologies will be used to protect the 20% of care home residents who are identified as at high risk of falls by 2024.
- We will continue the development of the CIPHA Platform to include further Population Health Management reporting that enables the identification, segmentation and evaluation of cohorts for the targeting of interventions.





The work here will align with the overall population segmentation approach as being developed by the System P programme, which will focus on identification of populations most vulnerable and at risk of adverse outcomes, and developing services for those population segments most in need of improved health and care outcomes. It is intended to embed CIPHA reporting in action via System P and Population Health Board Programme/Networks by March 2023.

 We will embed Public View across Providers and Service Planners to include access, quality, activity, outcomes and workforce, containing national and local flows and underpinned by granular detail on Aristotle by March 2023.

# Goal 3: System wide digital and data tools and services

#### We will:

 Implement ICS wide Capacity and Demand reporting (based on an Operational Intelligence Hub) in the areas of urgent care (inclusive of community and mental health) and elective care by March 2023 (with further development 2023/24) to enable an ICS wide view to inform both planning and operations.

- Implement a Trusted Research Environment (TRE) on the CIPHA platform by March 2025 so that data can be mobilised for research and innovation for our partner organisations, particularly for Stage 3 clinical trials and translational research.
- Implement a single, mature performance information system (activity, finance, quality and outcomes) that all partners can access by March 2024.
- Work with providers to create analytical networks and assist in streamlining of data flows, processes and quality across the ICS.
- Work with Local Authority and Public health analytical networks and strengthen joint work programmes in delivery of the ICS objectives.

The ICS is supporting the delivery of digital system wide tools and services that are used by all relevant stakeholders in Cheshire and Merseyside to ensure equity of provision and leverage economies of scale. These include:

 Implementation of Robotic Process Automation (RPA) to perform and automate high-volume repetitive tasks (using process flows), to free up time for their clinical and/or nonclinical workforces, through a rollout plan in line with a clear evidence base of productivity benefits by March 2024. This builds on the work done by Trusts such as Alder Hey, who are establishing an RPA Centre of Excellence.



- Delivery of Office 365 optimisation and training services to frontline health and care staff to support the use of these business-critical tools by March 2023.
- Supporting the on-going development of primary care through the establishment of a common online and video consultation platform, implementation of high-quality clinical decision support tools and the rollout of accredited apps for people to support management of their own physical and mental health and wellbeing by March 2023.
- To safely refer patients directly from community optometry services to hospital specialists and to share diagnostic imaging between primary and secondary care to support diagnosis without the need for additional scans or photos by March 2023.
- Support the rollout of electronic care records into care homes and other providers of social care including domiciliary care by March 2024.



### **Find out more**

You can read the full Digital and Data Strategy by visiting our website:

www.cheshireandmerseysidepartnership.co.uk

For more information about our digital and data plans to enable 'intelligence into action' connect with us online:













