Reference: FOI.ICB-2324/320

Subject: Digital Strategy and IT Systems

*I can confirm that the ICB **does hold the information requested**; please see responses below:*

QUESTION	RESPONSE
Clarification: Questions 1,2,3 are based on the <u>What Good Looks Like</u> framework, which sets out NHS England's expectations and guidance for ICSs to digitise, connect and transform NHS services. Where we use the term "ICS" in this request, we are referring to the integrated care system which is overseen by your Integrated Care Board. We understand that the information requested should be held by the ICB, as the statutory body responsible for NHS services across the ICS. For questions 1, 2 and 3, if the answers are "yes" – please could you attach the strategies/plans or provide links to them if they are publicly available.	
1. Does your ICS have: • Digital Strategy • Data strategy • Cyber security plan	BNSSG ICS has a published Digital Strategy that incorporates data and cyber resilience. Please find Digital Strategy enclosed.
2. Do you have an ICS-wide strategy for citizen engagement and citizen-facing digital services?	BNSSG's digital strategy incorporates a strategy for citizen facing digital services. Please find Digital Strategy enclosed.

3. Do you have an ICS digital inclusion strategy?	BNSSG ICS has a digital inclusion strategy. Please find Digital Inclusion Strategy enclosed.
4. Can you please state the number of – and type of IT systems, and the supplier - procured by the ICB on behalf of all relevant NHS providers in the ICS for 2023-24 (both completed and/or planned)? For example: 3 procurements for: bed management system, care traffic control system, waiting list validation system.	Three IT systems have been procured, or are planning to be procured, by the ICB during 2023/24: • Procurement has taken place for BNSSG system wide "Care Traffic Control" dashboard – supplier Faculty AI • Procurement is underway for BNSSG ICS's shared care record Connecting Care – supplier to be confirmed.

The information provided in this response is accurate as of 06 December 2023 and has been approved for release by Deborah El-Sayed, Chief Transformation and Digital Information Officer for NHS Bristol, North Somerset and South Gloucestershire ICB.

NHS

Bristol, North Somerset and South Gloucestershire
Integrated Care Board

Digital Strategy

2023–25

Healthier **Together**

Improving health and care in Bristol,
North Somerset and South Gloucestershire

Contents

Introduction from the Chair

The creation of the Bristol, North Somerset and South Gloucestershire Integrated Care System provides an exciting opportunity to forge a new path for health and social care in our region, setting a new standard for what it means for our partners to work together to improve outcomes for our population and to truly address health inequalities.

Against that exciting opportunity, we face some significant challenges. As we continue to recover from the impact of the Covid-19 pandemic, our health and care systems are under huge strain, facing greater demand than ever before.

Across the landscape of our system there are significant changes occurring - an ageing population with more complex health needs; greater demand for mental health services; ongoing recruitment and retention challenges; higher expectations for a more joined up and digitally enabled service across our provision; and patients having more control to determine how they are supported.

Key to our success will be facilitating a smoother flow of people and patients around our region's health and care systems. This will only be possible with greater use of digital tools, and smarter use of data.

We recognise that using technology effectively is a key enabler for our wider system ambition. It will create opportunities to enhance care, empower citizens and deliver efficiencies, helping make the system work better for everyone.

This document articulates a clear, focused and ambitious digital strategy, which reflects and responds to the needs of our population, our workforce and our system partners. It also reinforces the crucial role digital transformation will have in delivering our four system level strategic objectives:

1. **Improve outcomes in population health and healthcare**

2. **Tackle inequalities in outcomes, experience and access**

3. **Enhance productivity and value for money**

4. **Help the NHS support broader social and economic development**

This document is not intended to replace the individual digital strategies of our system partners, but rather is intended to elevate, clarify and codify what we are doing across the region, so that we can achieve together, that which cannot be done alone.

I look forward to working with all our system partners and stakeholders to deliver the outcomes that our population demands and deserves.

"a vision to deliver a better experience for staff, people and carers"

Dr Jeff Farrar QPM, OStJ
BNSSG ICB Chair

Our digital vision

To become an exemplar of a digitally advanced ICS.

Working collaboratively and optimising design, data and modern technology to make ground-breaking improvements for the health and well-being of our population.

Six aspects of our vision:

1   The benefits and opportunities of digital and data are embedded in our integrated design process.

2   We have a robust collaborative digital infrastructure that allows frictionless working for our staff across the full range of care settings.

3   We avoid duplication by integrating and reusing systems, architecture, shared services, support and expertise.

4   The experience of integrated seamless care for the person is underpinned and enabled by digital functionality and infrastructure that supports staff working.

5   Digital first channels are available for our citizens, empowering them to self-serve and make choices about their care journey.

6   Our integrated data-sharing and planning platform helps us to make the right decisions for people and our system.

Why are we doing this?

We have the opportunity to design a system-wide strategy that responds directly to the needs of our citizens and balances the pressures we face to create better outcomes for the people we serve.

Digital transformation and new technologies will be key enablers in delivering new models of care.

Key opportunities:

Making collaboration easier by improving information and data sharing

Using data analysis to predict healthcare needs

Using technology-enabled care to provide support to people in their own homes

Critical challenges:

Our health system is under huge pressure due to the rising demand for health and social care, resulting in slow patient flow through the system

Limitations in funding mean that we have to prioritise carefully and think differently to achieve our goals

There are systemic inequalities in health outcomes across our system that must be addressed, associated with ethnicity, deprivation, learning disabilities and autism

The high number of digital systems and tools in use across our system can make interoperability and compatibility difficult

What are we doing?

Digital teams from across our system have come together as a single group to explore and agree on how we can best work together to support our citizens.

Our discussion and assessment have led to the creation of three clear priorities for our digital transformation activity:

1. Designing a digitally enhanced ICS

a. Driving up digital and data integration opportunities

b. Establishing population health platform and tools

c. Increased collaboration and learning

d. Digital development leadership and training

e. Embedding collaboration and shared system development

f. Developing a culture and environment for innovation

2. Developing digitally empowered citizens

a. Improving information sharing between citizens and health and social care providers

b. Focusing on citizen engagement and digital inclusion

c. Implementing more citizen-based technology and shared care tools to enable greater choice

d. Providing more digital channels and services

e. Providing more support to citizens to improve their digital literacy

f. Embedding co-production and human-centred design in partnership with our citizens

3. Delivering digitally enabled care

a. Providing seamless and timely information sharing between all health and care providers

b. Ensuring care pathways work across organisational boundaries to support shared caseload and care planning

c. Releasing time to care, developing new models of care and digitally enabled pathways

d. Improving access to population health management insight

e. Improving our digital infrastructure and security, through single sign-on; common cyber standards;

f. Enhancing our electronic patient records interoperability

These priorities allow us to align our core activity, projects and resources to deliver for the people of the BNSSG system as a whole.

How will it make a difference?

We believe that this strategy will deliver a better experience for the three key groups of people we serve – staff, people and carers.

Improved experience for our staff

As a professional I will:

Have more time to spend with the people that need to see me the most

Be able to communicate quickly and easily with colleagues

Have confidence that the information I am looking at is accurate

Be able to update and share my findings, insights and agreed changes to a person's care plan

Be able to see the outcome for the person and understand how I have contributed

Have the tools and the training to consider the health of the wider population to influence and drive improvement

Feel confident that if I have new ideas on how technology can help us to improve I will be heard

Improved experience for people

As a person engaging with the system, I will:

Be able to make a choice about using digital services to access my information, get advice, and communicate with the team supporting me

Be cared for in the location most appropriate to me and my needs

Understand better what the clinician said after my consultation by viewing my notes and sharing this with my carer

Feel safer knowing my needs can be monitored whilst I am at home

Feel more able to make decisions about my own health and care by feeling a part of the team not just a recipient of care

Feel like you actually know me as I won't need to repeat the same information that I have already told somebody else

Be able to avoid potential problems by having access to advice about important aspects of my care

Improved experience for carers

As a carer I will:

Not spend as much of my time having to go to health and care establishments

Feel better supported by health and care professionals through bespoke advice and guidance

I will be aware of what clinical teams have said, what medications are prescribed and when appointments are due, so I can plan my needs around this information

Be able to plan for my caring duties better by being able to reschedule appointments and having access to the required information from my smartphone

Feel more assured that technology is supporting the person I am caring for, when I am not around to be caring directly
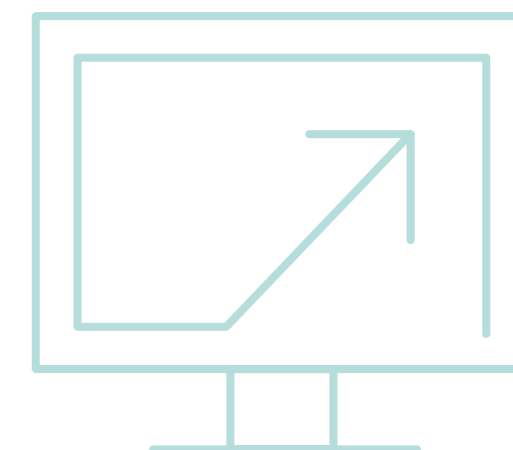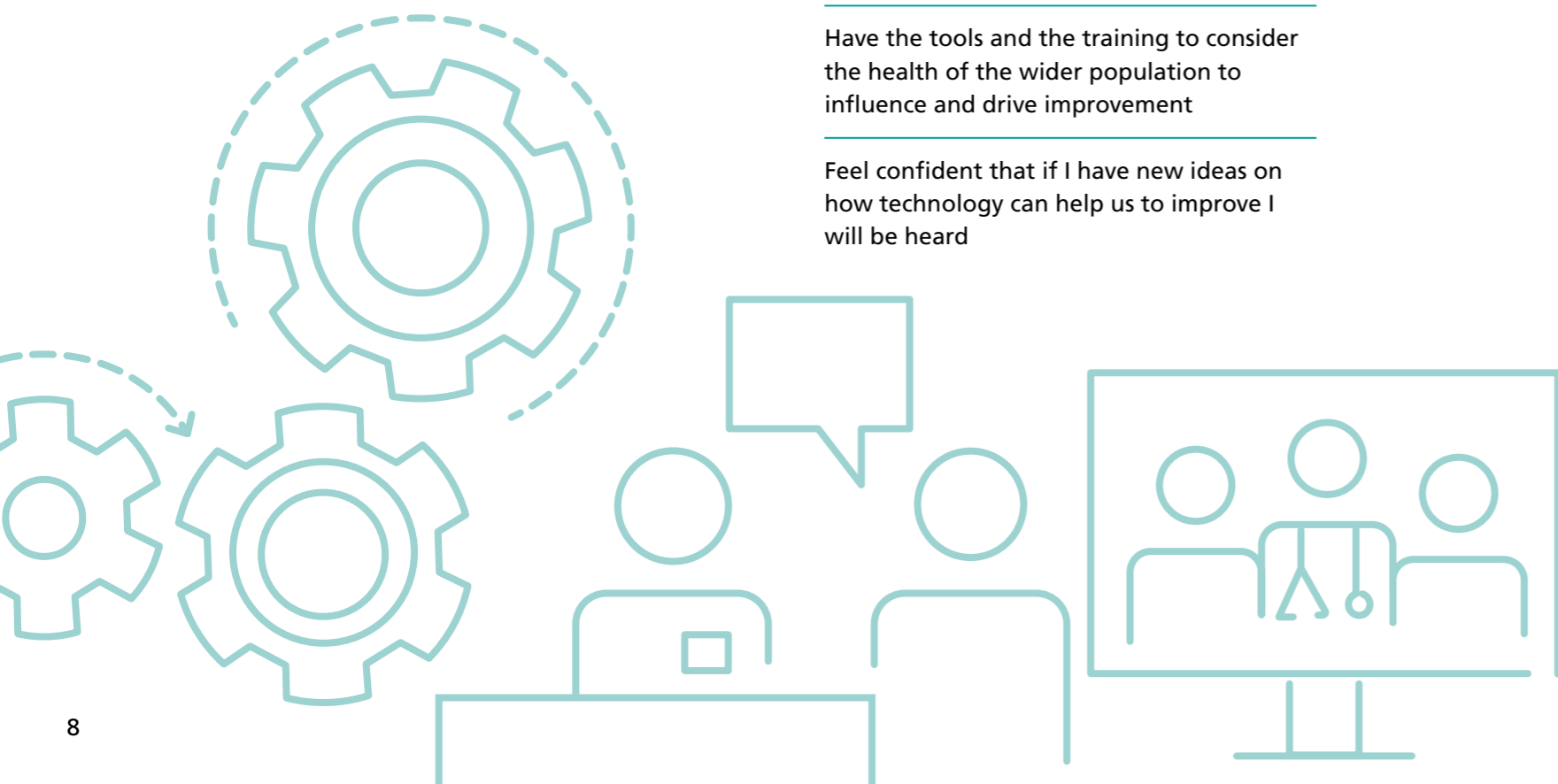
Examples of Our Digital Future

Example 1:
84 year old woman is admitted to hospital with a fall, unable to mobilise

1 Ambulance record an Electronic Assessment in the home at beginning of electronic ED assessment. This is visible to everyone on the patient record.

2 There is a single electronic patient record throughout patient's hospital stay.

3 There is an autogenerated discharge summary from stay.

4 Hospital clinical discharge codes automatically update primary care codes (single patient record) and medications in records.

5 Electronic Medications update the community pharmacy supplying dosette box.
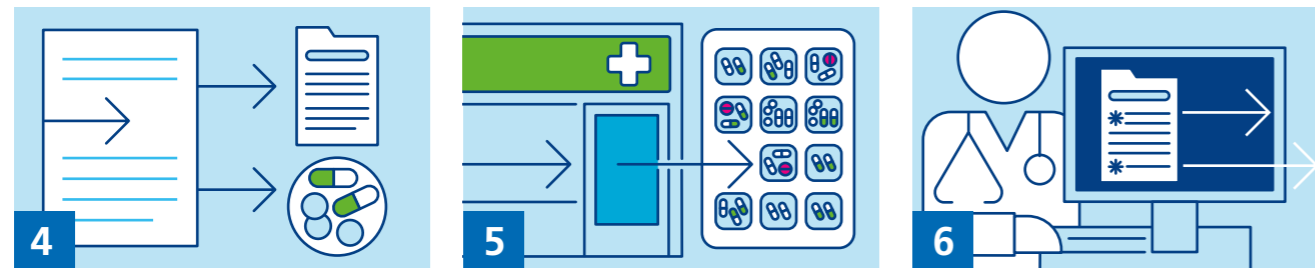
6 GP actions are automatically included into primary care record with prompts on the patient record.

7 CPR and Advanced care plan are updated with Read/Write plans in hospital in real time, which communicates to South West Ambulance Service, primary care and community records.

8 Social information, such as details of care package and key contacts, visibility of falls alarm data are on the shared care record.

9 Avon and Wiltshire Mental Health Partnership Trust (AWP) information is visible on cognition and mental health reviews.

Example 2:
Ambulance called to a 55 year old man found collapsed at home

1 Crew access the integrated care record en-route and find that he has seen the GP with headaches, takes warfarin, is allergic to penicillin and is hypertensive.

2 The ambulance crew suspect a neurological cause and divert directly to North Bristol Trust.

3 The Emergency Department team at NBT are pre-alerted and have the integrated care record open in resuscitation prior to arrival.

4 They can see the ambulance crew observations and notes in real time and prepare for intubation on arrival.

5 The integrated record contains details on the difficult airway and appropriate kit and senior anaesthetic staff are convened.

6 The patient is intubated on arrival and immediately CT scanned. He is taken to the interventional radiology suite and the aneurysm is coiled.
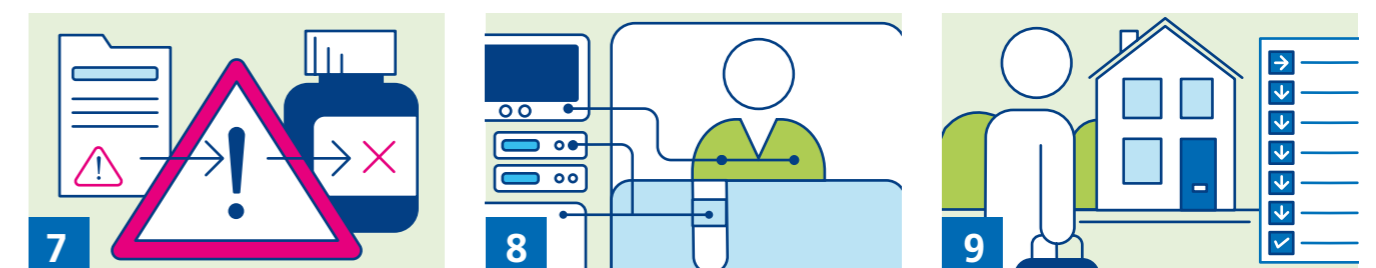
7 No antibiotics are given.

8 He is woken up the next day and leaves ICU a day later.

9 He returns home within a week.

Our digital strategy on a page

Vision

Clarity

Challenges and opportunities

Clinical and care priorities

'What good looks like' framework

Digital Principles

Guide

Guide

Focus

System-level priorities

Alignment

Infrastructure

Innovation

Strategic themes

Support

Support

Key outcomes

Vision

Our single vision to develop BNSSG into an exemplar for a digitally advanced ICS provides the clarity and direction for our strategy. Every priority and action is in service to delivering this. *See page 4 for more details on our vision.*

Challenges + opportunities

Every strategy must be designed to work within its context. We must respond to our environment and balance competing pressures to create the outcomes we desire. *See page 6 for more details of our key challenges and opportunities.*

Clinical + care priorities

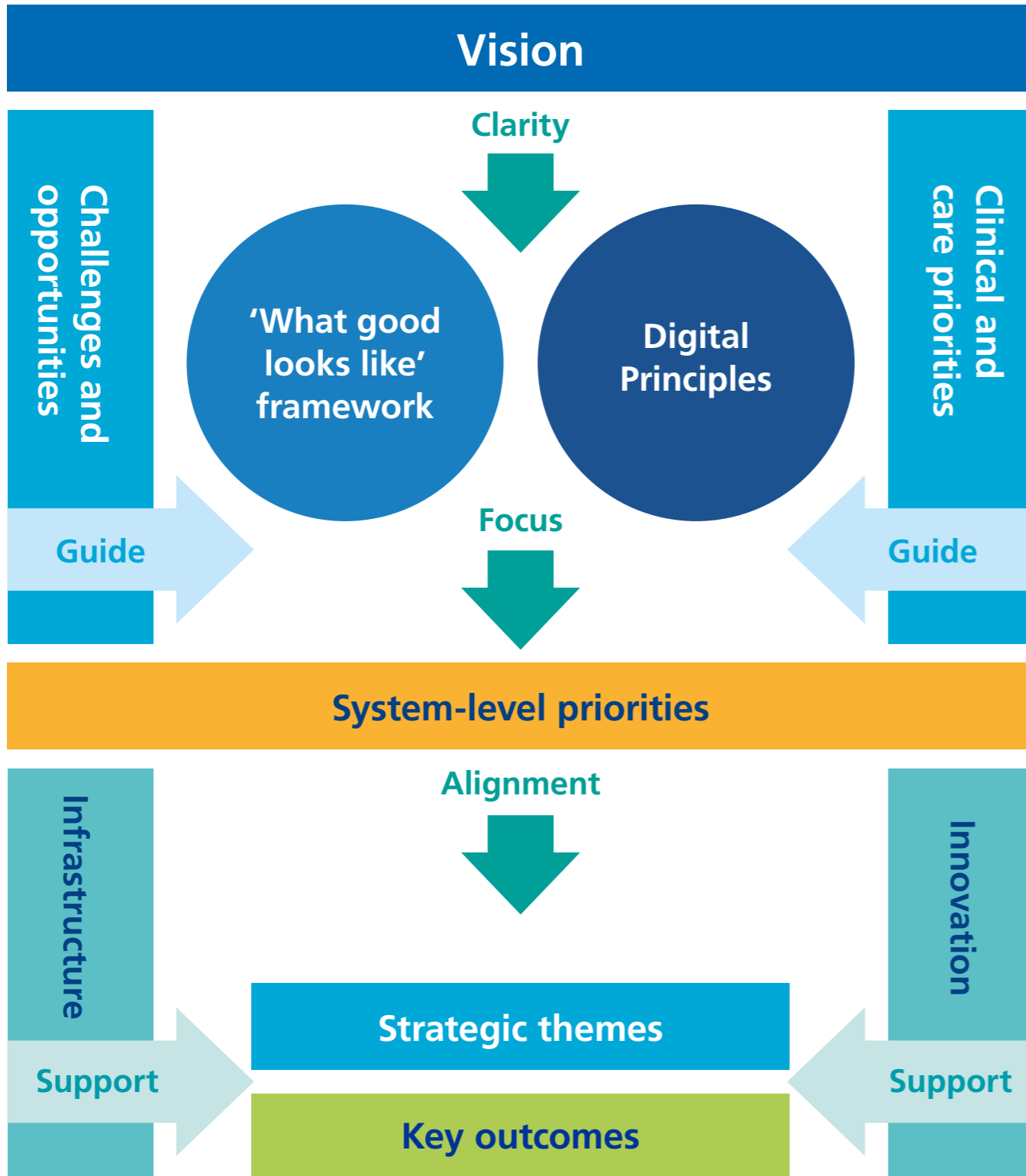Digital transformation is an enabler of new models of care, and as such must be deployed in support of clear clinical and care aims. *See page 12 for details of our clinical and care priorities.*

'What good looks like' framework

The NHS have published the What Good Looks Like (WGLL) programme that draws on local learning and builds on established good practice to provide clear guidance for health and care leaders to digitise, connect and transform services safely and securely. *See page 18 for more details.*

Digital principles

To help guide digital teams across our system on our digital transformation journey we have developed clear principles. We will be holding ourselves – and each other – to account against these principles. *See page 16 for details.*

System level priorities

Synthesising our vision, context and clinical and care priorities allows us to establish clear priorities that provide focus to digital transformation activity across our system. These will change over time as we deliver our programme. *See page 7 for details of our current priorities.*

Strategic themes

To deliver our priorities, and in response to the challenges and opportunities we face, we have structured our activity into delivery themes. These allow us to structure and align projects and activity across our ICS. *See page 22 onwards for more details.*

Key outcomes

All of our digital transformation activity is designed to achieve tangible outcomes for our staff, ICS population and carers. Monitoring progress against these outcomes will inform our activity, and measure the effectiveness of our strategy. *See page 8 for more details.*

Infrastructure + innovation

The efficient use of our system-wide infrastructure and the maximisation of opportunities for innovation are two crucial enablers which will allow us to deliver our system-wide priorities. *See page 29 for more details.*

How we will deliver our vision

Five clinical and care priorities

1 Health and care practitioners will share information securely to enable informed decisions about peoples' care

2 We will inform and empower, patients, families and carers

3 Care pathways will be designed for the person and work across organisational boundaries

4 We will improve BNSSG health and care services through population level insight

5 We will build robust and reliable infrastructure, access and security to enable all citizens and staff to access digital health and care services

Four strategic themes

1 Digitally integrated community health and care

2 Supporting our workforce

3 Using data better

4 Connecting the person

Three outcomes

1 Improve experience for staff

2 Improved experience for people

3 Improve experience for carers

Two strategic enablers

1 Digital Infrastructure Alliance

2 Digital Innovation Hub

One vision

1 To become an exemplar of a digitally advanced ICS. Working collaboratively and optimising design, data and modern technology to make ground-breaking improvements for the health and well-being of our population.

5 4 3 2 1

Our digital principles

As a newly-formed ICB comprising a diverse set of partners, each with different individual strategies and aims, we recognise the need to establish a clear way of working as a system to deliver the health outcomes our population deserve.

To facilitate and inform us on that journey, we have developed two sets of principles. The first set are for the system as a whole, for when our partner group are working together. The second set are for each partner, expressing the role they will all play in driving system-wide success.

We will be holding ourselves – and each other – to account against these principles.

ICB Digital Principles

1 We will always act in the best interests of the system as a whole, putting the needs of our people at the centre of our decisions

2 We will be an independent arbiter to manage competing demands

3 We will dedicate leadership and resources to support our system partners, to create the best environment for our workforce and the best outcomes for our citizens

4 We will foster a culture of collaboration and trust between all system partners

5 We will empower collective decision making

6 We will define success at a system level, and share performance data to better understand our impact

System partner principles

Each system partner commits to:

1 Make a clear **organisational contribution** to support the system achieve its priorities and deliver system first benefits

2 Sign a BNSSG **digital alliance strategic agreement** (DASA) which will underpin the digital strategy and make formal the shared focus and commitment of each organisation

3 Establish appropriate project and programme **governance** processes, delegated authority, gateway reviews and standardised methodology, which enable the successful implementation of system priorities

4 Drive the values of **shared accountability, mutual respect, support and collaboration**

5 **Provide dedicated leadership and system wide resources** to support the system deliver its objectives

6 Improve the **pace of decision making,** allowing the system to respond and adapt to changing events quicker

7 **Focus and commit to a clear and agreed set of priorities** that directly enable our system ambitions

8 **Provide investment** which acknowledges the potential Digital has to support system financial sustainability, under a spend to save delivery approach

The role of digital in transforming health and social care

The NHS's *'What Good Looks Like'* framework sets out seven digital capability success measures for Integrated Care Systems to judge themselves against. Meeting and exceeding these measures will ensure our digital delivery improves the outcomes, experience and safety of our citizens.

Well Led

Own an ICS-wide digital and data strategy that drives 'levelling up' across the ICS and is underpinned by a sustainable financial plan

Establish ICS governance to regularly review and align all organisations' digital and data strategies, ICS-cyber security plan, programmes, procurements, services, delivery capability and risks

Ensure that your ICS digital and data strategy has had wide input from clinical representatives from across the ICS

Identify ICS-wide digital and data solutions for improving health and care outcomes by regularly engaging with partners, citizen and front line groups

Invest in regular board development sessions to develop digital competence

Support investment in ICS-wide multidisciplinary CCIO and CNIO functions

ICB digital priority which responds to these criteria: 'Designing a Digitally Enhanced ICS'

Ensure Smart Foundations

Have a system-wide strategy for building multidisciplinary teams with clinical, operational, informatics, design and technical expertise to deliver the ICS digital and data ambitions

Ensure progress towards net zero carbon, sustainability and resilience ambitions by meeting the Sustainable ICT and Digital Services Strategy (2020 to 2025) objectives

Make sure that all projects, programmes and services meet the Technology Code of Practice and are cyber secure by design

Oversee across organisation investment in modern infrastructure to retire unsupported systems

Drive organisations towards 'simplification of the infrastructure' by sharing and considering consolidation of spending, strategies and contracts

Ensure levelling up of the use and scope of electronic care record systems, including using greater clinical functionality and links to diagnostic systems and EPMA

Lead the delivery and development of an ICS-wide shared care record (ShCR) which adheres to the Professional Records Standard Body's (PRSB) Core Information Standard

ICB digital priority which responds to these criteria: 'Designing a Digitally Enhanced ICS'

Safe Practice

Have a system-wide plan for maintaining robust cyber security, including development of centralised capabilities to provide support across all organisations

Establish a process for managing the cyber risk with mitigation plans, investment and progress regularly reviewed at ICS level

Have an adequately resourced ICS-level cyber security function, including a senior information risk owner and data protection officer (DPO)

Ensure that you fully use national cyber services provided by NHS Digital

Ensure the organisations in your ICS are supported to comply with the requirements in the

Data Security and Protection Toolkit which incorporates the Cyber Essentials Framework

Have an adequately resourced clinical safety function, including a named CSO, to oversee ICS-wide digital and data development and deployment

Ensure ICS-wide clinical systems meet clinical safety standards as set out by DTAC and DCB0129 and DCB0160

Establish a clear system-wide process for reviewing and responding to relevant safety recommendations and alerts, including those from NHS Digital (cyber), NHS England, the MHRA and the Healthcare Service Investigation Branch (HSIB)

Ensure compliance with NHS national contract provisions related to technology-enabled delivery, for example, clinical correspondence and electronic discharge summaries

ICB digital priorities which respond to these criteria: 'Designing a Digitally Enhanced ICS' and 'Delivering Digitally Enabled Care'

Healthy populations · Well led · Improve care · Empower citizens · Ensure smart foundations · Support people · Safe practice · Transform · Digitise · Connect

The role of digital in transforming health and social care (continued).

Support People

Create and encourage a digital first approach across the ICS and share innovative improvement ideas from frontline health and care staff

Promote the use of systems and tools to enable frictionless movement of staff across the ICS - allowing staff from different organisations to work flexibly and remotely where appropriate

Ensure that front-line staff across your ICS have the information they need to do their job safely and efficiently at the point of care, including an ICS shared care record

Create ICS-wide professional development, front-line skills development, peer support mechanisms and training opportunities Pool resources to provide resilient digital support services across your ICS

ICB digital priority which responds to these criteria: 'Developing Digital Empowered Citizens'

Empower Citizens

Develop a single, coherent ICS-wide strategy for citizen engagement and citizen-facing digital services that is led by and has been co-designed with citizens

Make consistent, ICS-wide use of national tools and services (NHS.uk, NHS login and the NHS App), supplemented by complementary local digital services that provide a consistent and coherent user experience

Ensure and monitor a consistent citizen offer by ICS organisations

Ensure a system-wide approach to the use of digital communication tools to enable self-service pathways such as self triage, referral, condition management, advice and guidance

Ensure a system-wide approach for people to access and contribute to their health and care data

Take an ICS-wide approach to access to care plans, test results, medications, history, correspondence, appointment management, screening alerts and tools

Have a clear ICS digital inclusion strategy, incorporating initiatives to ensure digitally disempowered communities are better able to access and take advantage of digital opportunities

ICB digital priority which responds to these criteria: 'Developing Digitally Empowered Citizens'

Improve Care

Have an ICS-wide approach to the use of data and digital solutions to redesign care pathways across organisational boundaries to give patients the right care in the most appropriate setting

Ensure that organisations across your ICS make use of digital tools and technologies that support safer care, such as EPMA and bar coding

Ensure that organisations across your ICS employ decision support and other tools to help clinicians follow best practice and eliminate quality variation across the entire care pathway

Ensure that organisations across your ICS provide a consistent and cost-effective approach to remote consultations, monitoring and care services

Lead a system-wide approach to collaborative and multidisciplinary care planning using an array of digital tools and services alongside PRSB standards

ICB digital priority which responds to these criteria: 'Delivering Digitally Enabled Care''

Healthy Populations

Lead the delivery and development of an ICS-wide intelligence platform with a fully linked, longitudinal data-set (including primary, secondary, mental health, social care and community data) to enable population segmentation, risk stratification and population health management

Use data and analytics to redesign care pathways and promote wellbeing, prevention and independence (for example, identifying patients for whom remote monitoring is appropriate)

Create integrated care models for at risk population groups, using data and analytics to optimise the use of local resources and ensure seamless coordination across care settings

Ensure that local ICS and place-based decision making forums, including PCN multi-disciplinary teams, have access to timely population health insight and analytical support

Make data available to support clinical trials, real-world evidencing and AI tool development

Drive ICS digital and data innovation through collaborations with academia, industry and other partners

ICB digital priority which responds to these criteria: 'Designing a Digitally Enhanced ICS'

Section 3
Our Digital delivery themes

To deliver our priorities, and in response to the challenges and opportunities we face, we have structured our activity into four delivery themes. These are:

**Theme 1:
Digitally enabled community health and care**

**Theme 2:
Supporting our workforce**

**Theme 3:
Using data better**

**Theme 4:
Connecting the person**

All these themes are supported by our Infrastructure and Innovation practices. In this section, we outline the outcomes each theme will provide, and identify some of the key projects happening across our system that will deliver them.

Theme 1:
Digitally enabled community health and care

Enable multi-disciplinary teams working in the community and support place-based partnerships and integrated models of care.

This theme is focused on delivering three strategic outcomes for the system.

a.
Enable locality partnerships

Key projects and activities which support the delivery of this outcome include:

Read Write Care Plan project will enable an interoperable digital care plan with read and write capability that can be integrated with ICS clinical systems. This will accelerate care for those most in need, reduce admissions and conveyances for those at the end of life, release time to care for hospital staff and improve care in the community, across a broad range of clinical pathways

Implement a new clinical management tool to enable locality partnership working, including managing patient workflows, bed management and reporting on where a patient is on their journey

Roll out an Advice and Guidance solution to enable dynamic clinical advice guidance, soft hand-over, referral of a patient onto an agreed pathway, and reporting across a number of pan-ICS services

b.
Re-procure Electronic Patient Records (EPR) systems

Key projects and activities which support the delivery of this outcome inculde:

Shared Care Record system re-procurement with improved functionality, which will release time to care by providing accurate and live data feeds, leading to improved patient care and outcomes

Mental health EPR re-procurement with enhancements that enable greater pan-ICS collaboration and interoperability

Primary care EPR re-procurement with enhancements that enable greater pan-ICS collaboration, and support faster data sharing between ICS EPRs, leading to improved patient care and outcomes

Community EPR re-procurement to promote improved working across community, primary care, mental health and acute pathways

c.
Address gaps in digital maturity

Key projects and activities which support the delivery of this outcome include:

Our ICS Digital Executive will ensure robust design authority, finance oversight and cyber security governance, which will embed metrics to ensure minimum standards of digital capability across the system are acheived or exceeded

Digital Maturity in Care Settings project will improve the digital maturity of care organisations, helping them to use ICS health clinical systems and solutions. This will reduce admissions and conveyances due to providing the right care in the right place, and will release time to care for staff and improve patient care

VCSE Digital Action Plan will identify and bridge gaps in digital maturity across the sector, enabling our VCSE partners to engage with our system to effectively support our ICS priorities
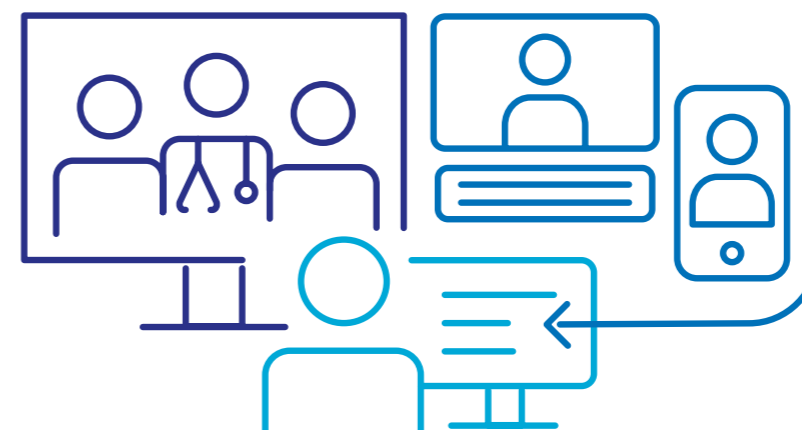
Theme 2:
Supporting our workforce

Using digital to release time to care, create frictionless working and drive new pathways and models of care that help support the workforce shortages we will continue to face.

This theme is focused on delivering three system-level outcomes:

a.
Release time to care

Key projects and activities which support the delivery of this outcome:

Provide our workforce with the tools to work anywhere across the BNSSG locality hubs and buildings network, ensuring our digital infrastructure is set-up to accommodate this. For example, providing accessible fixed wire or Wi-Fi at any site and an easy to access network connection from all sites to allow staff to connect to necessary networks

Deployment of a virtual desktop that will enable all relevant BNSSG staff access to clinical and operational systems required to deliver a specific service

Development of standardised and agreed digital practices and operational processes to ensure the safe, efficient and consistent operational use of shared solutions, whilst also improving frontline staff experience and adoption of new digital systems

A single order communications solution will enable all clinicians to easily locate – or be automatically presented with within their EPR – a patients test results, saving time which will release time to care for patients

b.
Develop new models of care

Key projects and activities which support the delivery of this outcome:

Healthier Together at Home project will enable the remote home care of our citizens through a single team, supported by a consistent set of digital tools. This will reduce admissions and conveyances, reduce the length of stays in hospital, release time to care and improve patient care

c.
Enable digital confidence

Key projects and activities which support the delivery of this outcome:

Implementation of our Digital Workforce Plan, focusing on pan-ICS digital training and development for clinical and care staff

Our Digital Academy will deliver workforce development programmes which upskill our staff and develop a pool of digital healthcare professionals who can progress into digitally focused roles in the future

We will conduct an ICS wide care home staff training audit, which will inform the design and delivery of a corresponding upskilling programme that will increase digital confidence in staff working across social care

Theme 3:
Using data better

Improving clinical decision making by embedding population health management and developing a system-wide platform to make data and analytics more available to support key decisions.

This theme is focused on delivering three system-level outcomes:

a.
Connect care

Key projects and activities which support the delivery of this outcome:

Our re-procured shared care record will consume and present key clinical and population health management data to enable better clinical decision making and support improved patient outcomes

Enhancement to our EPR systems across the ICS will lead to improved communication between inter-organisational teams. For example, the acute Patient Administration System project will enable greater access to North Bristol NHS Trust and University Hospitals Bristol and Weston NHS Foundation Trust Patient Administration Systems (PAS), simplifying clinical communication across pan-ICS pathways

b.
Improve care traffic control

Key projects and activities which support the delivery of this outcome:

A Care Traffic Control programme will develop a platform that provides real-time assessments of activity, patient flow and the cross-system impact of initiatives across BNSSG, supporting system-wide, evidence-based decision making

A shared data and planning platform (SDPP) will make data easier to find, understand and use, improving our ability to manage patient flows across the system
See over the page for more details.

c.
Enhance population health management

Key projects and activities which support the delivery of this outcome:

Our Population Health Management Intelligence Hub will allow us to understand more about how people with different needs interact with the various healthcare services, and identify opportunities for prevention, and to improve and better co-ordinate the delivery of healthcare across our region to support operational and clinical decision making

Continuous development of our Population Health Management Academy curriculum and advanced modules will improve our workforces' understanding of how to turn linked health and care data into improvements in frontline service delivery
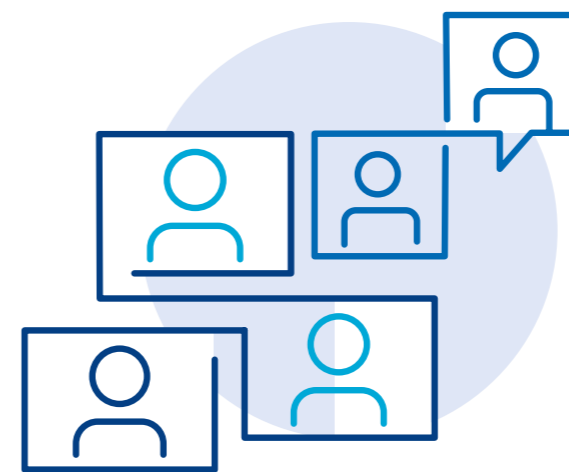
Shared Data and Planning Platform (SDPP) Alignment to BNSGG Digital Strategy

Localities & Primary Care Networks

Care providers

Researchers

BNSSG Shared Data

Security and Governance

Interoperability and Standards

BI • Planning

Interoperability • PHM • Operations

Security and Governance

Interoperability and Standards

Research

Direct Care

Data-informed Decision Making

Provider & ICB Business Intelligence

Modelling & Analytics

Clinicians

Commissioners

Connecting Care

Shared Data and Planning Platform

Healthier Populations

Single information source that allows ICS to collaborate at scale

Fewer systems and associated governance (de-duplication)

Fewer interfaces between systems to manage

Standardisation of data (easier collective decision making)

Simpler interoperability (now and in the future)

Theme 4:
Connecting the person

Creating a programme of citizen-first digital to drive up self-service and empower the person.

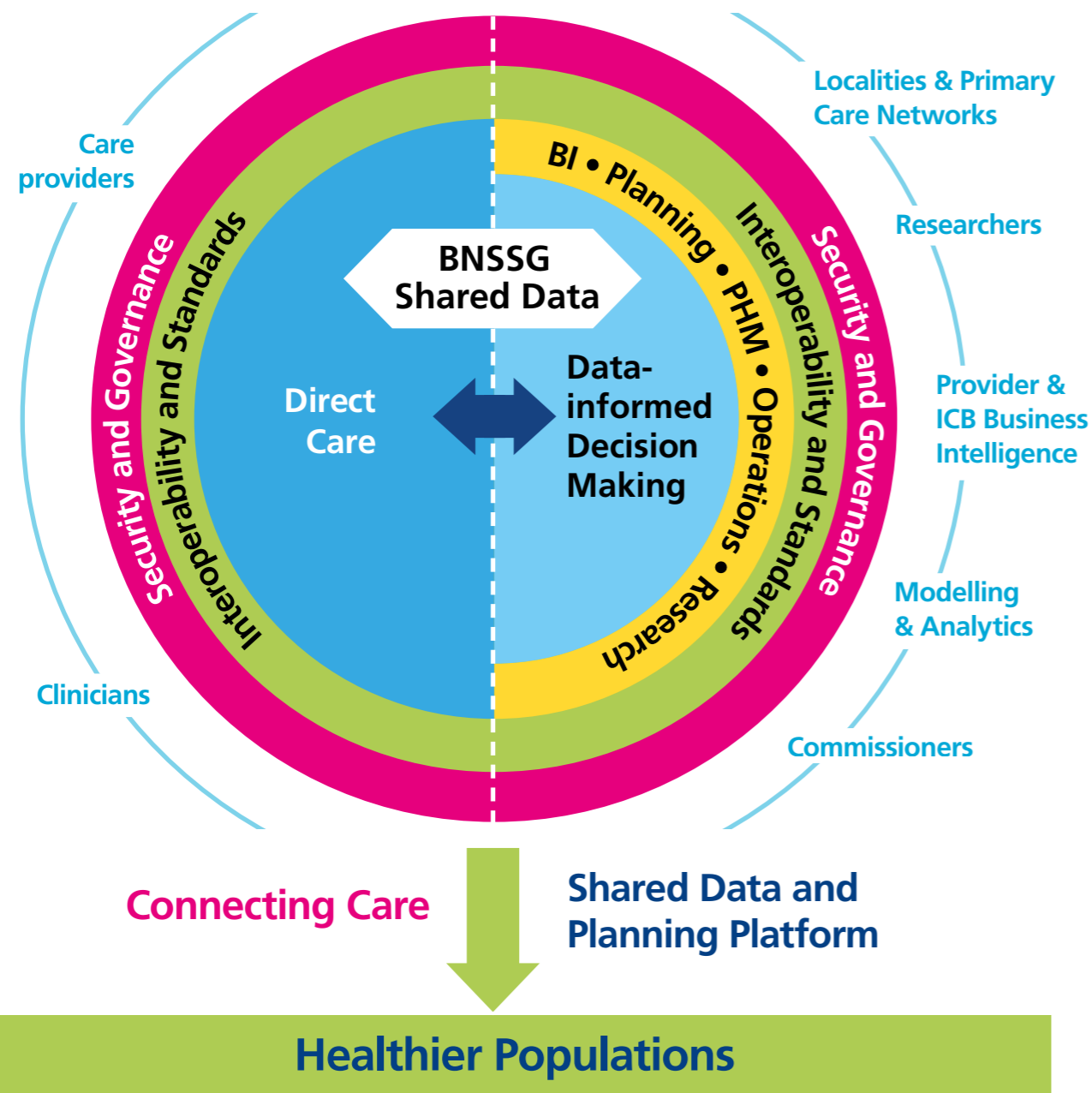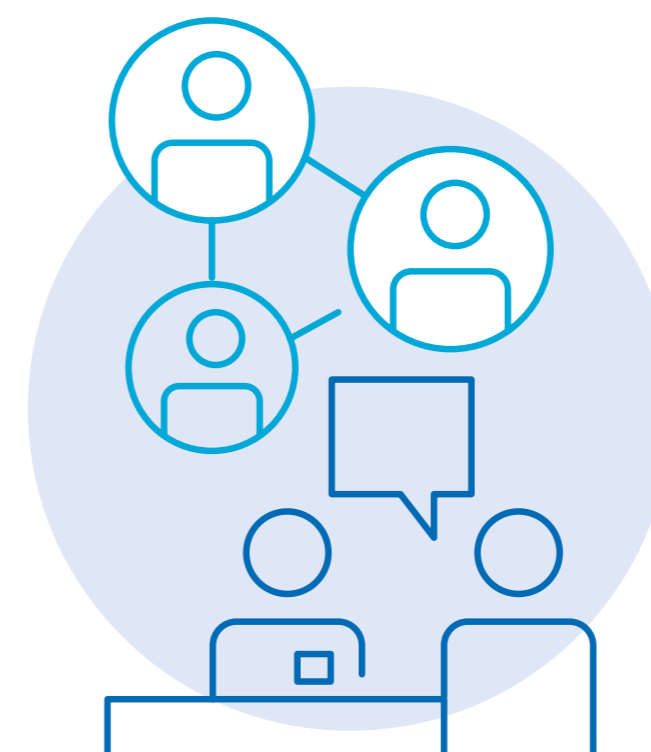This theme is focused on delivering three system-level outcomes:

a.
Increase access to digital first services

Key projects and activities which support the delivery of this outcome:

Home First Care solutions will more allow move citizens to remain at home when receiving support or when their condition is being monitored, providing clinical readings via devices or apps, that are reported (and acted upon) via an interactive dashboard

Technology Enabled Care in Hospitals project will deploy technology-enabled care solutions within Discharge to Assess pathways, so staff in acute wards are confident and able to accelerate discharge and support citizens' recovery at home by deploying technology enabled support. This will reduce the length of stays, release time to care and improve patient care

Technology Enabled Care in Care Settings project will deploy technology-enabled care tools across care homes in BNSSG, including acoustic monitors, point of care testing and falls, predictors. This will reduce admissions and conveyances, reduce the length of stays, release time to care and improve patient care

Theme 4:
Connecting the person

b.
Citizens become a partner in care

Key projects and activities which support the delivery of this outcome:

Digital Patient project will allow patients in acute and mental health settings to interact with clinicians regarding their outpatient care, including: appointment information, digital correspondence, virtual consultation and information collection

A new citizen interaction portal will support citizen's care journey to promote shared decision-making and person-centred care. For example, the Autism Discovery project will improve the experience for parents and carers of children waiting for an autism diagnosis

We will enable citizens to access the appropriate advice and support through clinically assured apps and platforms (such as ORCHA), to enable them and to manage ongoing conditions

c.
Address digital inclusion

Key projects and activities which support the delivery of this outcome:

Increase citizen uptake by embedding user centred design into all digital projects. For example, our BNSSG User Experience Lab will use of human-centred design as to ensure we consider digital inclusion and factor in health inequalities and diversity into the projects we take forward

Promote the use of apps to support citizen's health management. For example, we are piloting the deployment of Hear Me Now app to improve take-up of annual health checks and self-care for people with learning difficulties

Ensure our Digital Inclusion Strategy is consistently applied across all aspects of digital delivery including: improving health literacy, increasing citizen self-care competence and providing access to technology and data to tackle data poverty

Infrastructure and Innovation

The efficient use of our system-wide infrastructure and the maximisation of opportunities for innovation are two crucial enablers which will allow us to deliver our system-wide priorities. Consequently, we are establishing two new entities which will bring system partners together to make better decisions about the use of our resources and develop new, innovative ways of delivering care; which will improve the experience for our citizens, carers and staff.

Digital Infrastructure

We will create a BNSSG-wide collaborative Digital Alliance that joins up key systems to deliver cost savings by removing duplication and creating shared services and resources, creating greater value across the whole system.

Projects of immediate focus for the Digital Alliance:

Primary Care IT support options review

Digital Patient project

Support options for Connecting Care

Review of system-wide architecture, shared services and software

Creation of a single diagnostics hub

Create a single digital shared services hub in partnership with or to replace the CSU

Build on the existing joint Cyber Team and organisational commitments to enable greater collaboration and reflect the security we need for an integrated approach

Digital Innovation

In partnership with the Academic Health Science Networks, Bristol health partners, the University of Bristol and the University of the West of England we will create a Digital Accelerator and Innovation Hub to test new technology and models of care. We will develop a pipeline of digital innovation that ensures we are able to use new developments in technology to deliver better care and outcomes for our population.

The Digital Accelerator and Innovation Hubs will:

Be clinically led with key clinical innovators at the helm.

Engage with professional and clinical teams across our system to ensure that ideas for technology-led improvements are taken through a robust and structured methodology that ensures both pace of development and a strong connection to the existing digital infrastructure in the system.

Be a joint endeavour linking the medical effectiveness capability across the system and technology-enhanced care teams in local authorities.

Bring together the significant resource within our system to drive up the levels of innovation moving from research into practice, including Tech Assistive Labs, Living Labs and Robotics Hubs.

Develop international partnerships to draw learning from experts across the globe to support our ICS systems and its citizens.

Secure external investment to maximise the impact for our citizens.

Thank you

With thanks to everyone who has contributed to the development of this document.

We look forward to working with you to deliver our strategy over the next three years.

V0.3.2

Digital Inclusion Strategy

Contents

1. Version Control & Document management

Version	Author(s)	Summary of the changes	Date
3.0	Rebekah Evans / Sam Jeynes	Revisions to earlier drafts (and iterations following digital team review)	10/09/21
3.1	Rebekah Evans / Sam Jeynes	Updates following DPWG presentation, incl to section 4 - Vision statement	15/09/21
3.2	Rebekah Evans	Updates to 4.1 Additions to section 4.2 – approach to embedding and measurement (and formatting changes) to address feedback from Digital Delivery Board & CCG Exec team.	15/10/21
3.3	Samuel Jeynes	Review and update of all sections	26/10/21

Version	Governance	Decision / Comment	Date
3.0	Digital Population Working Group (DPWG)	Shared for input and feedback	06/09/21
3.1	Digital Delivery Board (DDB)	Feedback provided; Sign-off agreed	21/09/21
3.2	CCG Exec Team	Partnership board seminar requested Update on progress requested in two months' time	22/09/21

Introduction

Digital products and services can improve health and care services for the 92%[1] of adults in the UK who have the digital access, skills and confidence to use them. The adoption of digital solutions has shown improvements in patient safety, patient outcomes and improved efficiency, such as reductions in cancelled or unattended appointments (DNAs) across a variety of settings. However, a significant portion of the UK population are not digitally active – due to a range of complex barriers and issues – and are not necessarily able to utilise digital solutions that may be of benefit to their health and care journey.

The purpose of this strategy is to make addressing digital exclusion more straightforward and so become part of the standard project practice across Healthier Together (HT) organisations and should be applied while there is a risk that at least one person may be unable to access a service via a digital platform due to digital exclusion.

The scope of this strategy is to address digital exclusion with public-facing digital healthcare products and services initially. Our longer-term aspiration is to extend this work to address digital exclusion experienced by our staff when using digital platforms at work. In order to help colleagues tasked with implementing public-facing digital products, this strategy will be accompanied by documents containing practical tools for teams to apply to their projects, covering various relevant areas/specialisms that impact digital exclusion.

'The power of the web is in its universality"

Tim Berners-Lee Director of the World Wide Web Consortium (W3C)

1.1. Definitions

1.1.1. Services and products

Throughout this document, reference is made to digital services and products. The Service Design book 'Good Services', defines services as "simply something that helps someone to do something" (Downe, 2020).

Digital products are often utilised in order to deliver or improve a particular service within healthcare. A plethora of digital products exist today, including:

1. Wearables and monitoring technology
2. Appointment booking (and other transaction services, such as prescription ordering services)
3. Remote triage consultation and communication tools (such as accuRx and Attend Anywhere)
4. Access to shared care records and plans
5. Apps (from Nationally products such as the NHS App and NHS Covid-19 App, to privately developed and licensed Apps like 'Brain in hand' and 'Hear me now', which supports people with Learning Disabilities' in a range of contexts).

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[1] https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/LB-Consumer-Digital-Index-2018-Report.pdf

Various reports[2] have shown positive links between adoption of these technologies and improved patient care, whilst also reducing strain on health services, even several years before[1] the Covid19 pandemic largely accelerated adoption of technology to support minimising face to face contact during several National lockdowns.

1.1.2. Digital inclusion/exclusion

'Digital exclusion is about not having the access, skills and confidence to use the internet and benefit fully from digital technology in everyday life.'

To be digitally included, people need the right access, skills, confidence, and motivation to use these digital services or products. The barriers to digital adoption affect a wide range of people from diverse socio-economic backgrounds. Age, employment status, level of education, language, geographical location, and homelessness are just some of the social indicators around digital exclusion. The latest progress tracking against the UK Government's Essential Digital Skills framework was published in 2020. This found that 9 million people are unable to use the internet independently and a further 2.7 million can use the internet but lack all the essential digital skills for life.

As digital technology becomes more commonplace – and in many cases the 'default' means of service delivery – digital exclusion must be addressed to avoid a society in which health inequalities are even further exacerbated; for those that are digitally excluded due to being locked out of using digital health tools and services. This reflects access barriers (not having a suitable device or connectivity); personal motivational barriers; and skills, confidence and trust barriers (lack of digital literacy which may overlap with lack of health literacy).

'Digital exclusion in a digital world is a health inequality challenge: it reflects, creates and compounds health and wider inequalities. There is no single or silver bullet solution.'

'Digital inclusion' activity looks to retroactively lessen citizens' exclusion from **existing** digital tools or services, which have already been designed and deployed in a way that has not addressed this exclusion.

1.1.3. Inclusive Digital Transformation

'Inclusive digital transformation' is about designing and building digital services to meet users' needs; making things easy to use and meeting accessibility standards as part of the initial product design to be wholly inclusive.

Inclusive digital transformation isn't only about the technology - but also about ensuring business processes meet the needs of staff and that our staff have the knowledge, skills and confidence to assist users accordingly.

The definitions of digital inclusion and inclusive digital transformation are further outlined in Figure 1:

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[2] https://www.goodthingsfoundation.org/wp-content/uploads/2021/04/DigitalInclusioninHealthandCare-LessonslearnedfromtheNHSWideningDigitalParticipationProgramme2017-2020.pdf
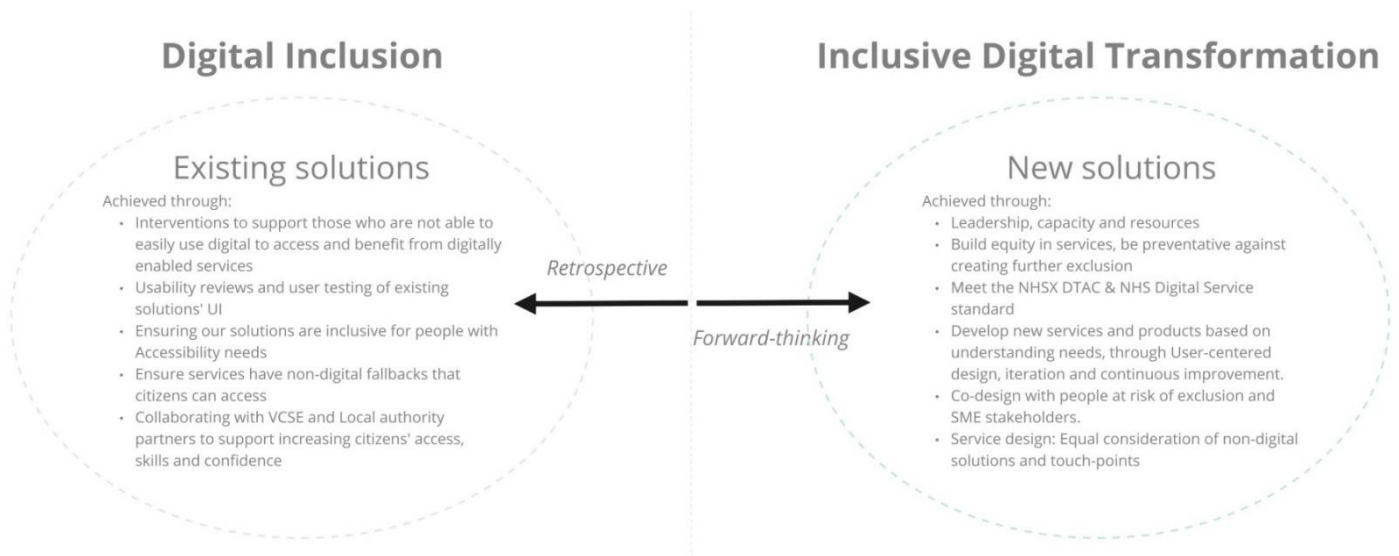
Digital Inclusion — Inclusive Digital Transformation

Digital Inclusion

Existing solutions

Achieved through:
· Interventions to support those who are not able to easily use digital to access and benefit from digitally enabled services
· Usability reviews and user testing of existing solutions' UI
· Ensuring our solutions are inclusive for people with Accessibility needs
· Ensure services have non-digital fallbacks that citizens can access
· Collaborating with VCSE and Local authority partners to support increasing citizens' access, skills and confidence

Retrospective

Forward-thinking

Inclusive Digital Transformation

New solutions

Achieved through:
· Leadership, capacity and resources
· Build equity in services, be preventative against creating further exclusion
· Meet the NHSX DTAC & NHS Digital Service standard
· Develop new services and products based on understanding needs, through User-centered design, iteration and continuous improvement.
· Co-design with people at risk of exclusion and SME stakeholders.
· Service design: Equal consideration of non-digital solutions and touch-points

Figure 1 – Digital Inclusion and Inclusive Digital Transformation

2. Where are we now?

BNSSG has a population of around 1 million people across three local authorities, which are further split into six localities. The population of each locality has unique demographics, some of which are known to affect digital exclusion such as socio-economic levels, age and registered disabilities[3]. Encouragingly, organisations that the HT Digital Team have engaged with have displayed an appetite to address digital exclusion, albeit somewhat independently. . To address the disparate nature of digital inclusion efforts, the strategy encourages collaborative working to address the four common digital exclusion causes. Below are examples of the multiple Digital Inclusion schemes being run discretely and concurrently in the ten partner Healthier Together organisations, as well as many of the BNSSG voluntary community and social enterprise (VCSE) organisations.

Baseline data and insight

Quantitative data example projects
- North Somerset Council described an approach of 'stitching' related data sets together to build a picture of likely digital exclusion, to inform a recent bid for funding. Their work allowed information such as employment status or education/qualification level to be considered a risk factor that indicates higher likelihood for digital exclusion
- Bristol City Council have undertaken an internal stakeholder engagement process and mapping exercise to consolidate and coordinate internal digital inclusion activity.

Qualitative insight example projects
- Commissioned research undertaken in South Gloucestershire Council reflects trends in national data, particularly in terms of the socio-economic factors that increase risk of being digitally excluded, such as age and disabilities

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[3] https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/LB-Consumer-Digital-Index-2018-Report.pdf

- Many organisations informing work through surveys, door to door canvassing (Wellspring, Knowle West Health Park, South Gloucestershire Council), commissioned research and or are informed by CCG organised listening events (Sirona).

Skills and training initiatives

- It is well understood that skill and confidence levels vary across both professional staff and citizens in the community. It is also well understood across BNSSG that device provision alone is not a sufficient means of tackling digital exclusion – that also removing barriers around confidence, skills and training is vital to a successful approach.
- There are a number of skills and training initiatives being conducted across BNSSG, including Sirona health care app pilots and library support schemes.
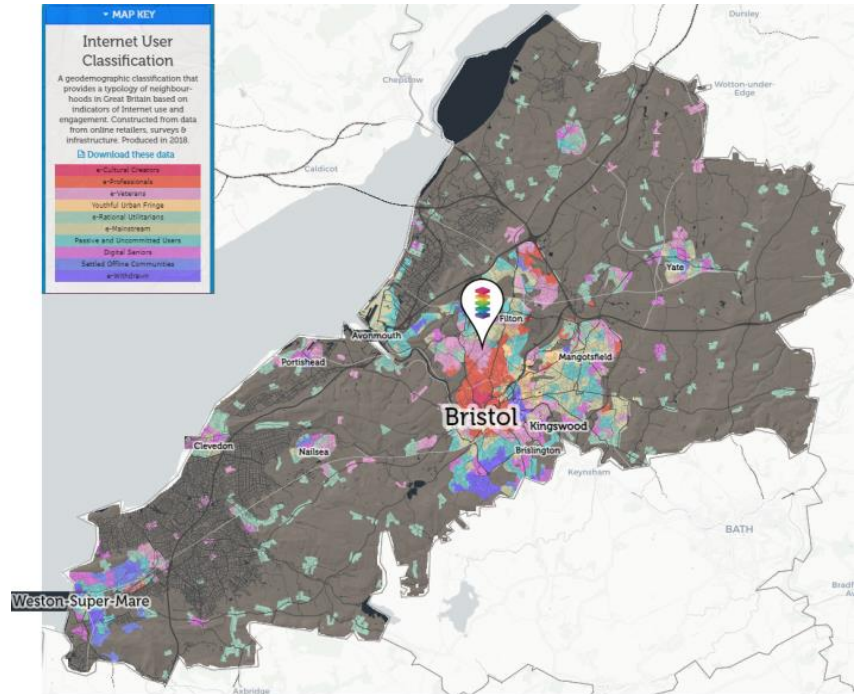

Figure 2 - Insight from 2018 data showing the spread of 10 differently digitally inclined groups across BNSSG https://data.cdrc.ac.uk/dataset/internet-user-

3. Where would we like to be?

Our Vision for citizens:

> Create an approach that enables all our citizens to be digital included,
> so that digital can have a positive impact on their health, wellbeing – and ultimately their life.

as fundamental to improving system efficiency and patient experience, for those that can access it.

To succeed in delivering this vision for digital inclusion in BNSSG, we must support all of our of provider organisations to have a clear understanding of how to undertake activity that will measurably improve digital inclusion within their relevant services or pathways. We will do this through a combination of distinct work streams, aimed at:

1. Arming our teams' with the information needed to make informed decisions within their projects
2. Building stronger, systematic links between health, care and community assets that are pivotal in providing support in the community to those who need it
3. Increasing our system-wide project teams' awareness of digital best practice (from assisted digital to accessibility standards), and support leadership to build capacity and resources to address this systematically as part of every project with a digital element.

4. How will we get there?

4.1. Work streams

The Digital Inclusion Roadmap (Figure 3) looks at the following three distinct strands of work that would be suitable for Healthier Together organisations to collaborate on in order to address digital exclusion in BNSSG.

1. **Data & Insight**: Use existing and new data to find who is likely to be at risk of digital occurs and which barriers are most likely to be impacting that population cohort.
   a. **Collate existing resources:** Share useful existing resources relevant to teams needing to factor this into the existing equality impact assessment (EIA) process.
   b. **BNSSG Digital inclusion data map:** A project with CCG Business Intelligence (BI) using population health management data to produce a more recent and local map view of digital exclusion risk, using age and deprivation determinants initially. For iteration and improvement with clinical teams.
   c. Share work with UWE and collaborate on upcoming research project(s) looking at digital inclusion, e.g. health and care staff motivation towards digital tools

2. **Support routes (with Access, Skills, Training & Motivation)**: This work streams focuses on building more consistent, system-wide links to **existing** routes to support with digital (such as community-based support, equipment lending, connectivity, and training)
   a. **Map public facing assets:** Ambition to have a centralised means for VCSE, NHS and local authority staff to view available digital support details (i.e., where in BNSSG, when, transport requirements, etc.)
      i. This direction has also been recognised by other areas, such as Norfolk & Waverley. We will network with other ICSs/Trusts to build on existing insight/requirements relevant to achieving a digital inclusion map and signposting service.
   b. **Training and Volunteer support**: Improve digital health service support and training for community volunteers ('digital health champions') in Local Authorities and VCSE to be able to make every contact count, by assisting the people they meet.
      i. Note regarding device loaning: The majority of device and connectivity provision is led by councils. A small number of pilots are being run by health care organisations (e.g., Sirona) but overall, the remit for device loaning continues to lie with our councils
   c. **Library/Community link projects:** Assist people that have been supported to use health care digital apps by health care organisations to transition into using community digital support.
   d. **Digital champions – Front line staff:** Training for our workforce to use digital technology in their work and to support people in a specific service or pathway to access healthcare via digital means.

3. **Digital Tools for teams**: Create a digital inclusion framework for all HT organisations to work towards, featuring best practice existing resources and practical tools for teams that cover the following areas:
   a. **Interventions & Assisted Digital:** Work-plan approaches to interventions or service changes that better support those experiencing access, skills, confidence or motivational barriers (includes both methods to get the willing online and non-digital fall backs for those who can't and never will adopt digital).
   b. **Inclusive Design Tools**
      i. **Understanding User Needs and User-centred Design**: How to build the business case for user-centred design and ensure future transformation is inclusive from the outset, whether building, buying or commissioning digital products

    ii. **Usability and Accessibility:** This looks at how well a given digital tool or product meets best practice and is scored against five key areas: ease of learning; efficiency of use; memorability; error proneness (lower better) and user satisfaction. A combination of good design and robust development, accessibility looks at how well a product has been designed for its audience and includes aspects such as visuals, language level used and consistency.

    iii. **Alternatives to Digital**: Guidance that helps consideration of offline support or alternatives for those people without digital capability or access.

: These three focus areas align with the practical responses reported in Good Things Foundation Digital Exclusion Briefing Paper (August 2021)[4]:

1. better data and understanding (1 – Data & Insight)
2. supporting remote access to services in health (and more widely) (2 – Improving routes to support)
3. inclusive design and resources (3 – Inclusive Design Tools)

4.2. Engagement and success measures

Engagement to embed this strategy: We will develop a healthcare provider, VCSE and local authority engagement plan. Through this we will continue to engage with HT partner organisations, to share our vision and strategy for a more coordinated and collaborative approach. We recognise that this is the start of a journey; we seek partners' input and feedback to inform iterations and improvement to our work in this space.

Health and social care provider engagement focuses:

- Late Nov/early Dec 2021 workshop:
  - o Introduce our work to date on Digital Inclusion
  - o Discuss the strategy and work streams (with particular focus on the 'Digital inclusion Interventions and Tools for teams')
  - o Consider reasonable actions/activities within provider organisations' teams (individually or collaboratively)

VCSE & Local authority engagement focus:

- October 2021:
  - o Re-engage colleagues consulted in the early stages of this work and share strategy materials produced to date
- Hold a workshop to get inform further development of activities in each work stream (with particular focus on the 'Data & Insight' and 'Support routes')

Measuring success: We consider success measures in two ways for this work:

1. For the digital inclusion strategy as a whole
   - o Success will be measured in part through level of engagement with partner organisations, and the extent to which that engagement enables us to iterate and improve on our initial approach.
   - o Planning stages: Number of projects considering digital inclusion (where relevant) at EIA stage
   - o Long term: Requires further consideration
2. Within each work stream
   - o Data and Insight

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[4] [Good-Things-Foundation-2021-–-Digital-Exclusion-and-Health-Inequalities-Briefing-Paper.pdf (goodthingsfoundation.org)](#)

- Short term: Clinical teams' involvement to iterate BNSSG Digital inclusion data map.
- Long term: This work steam, in collaboration with the ICS BI/Data team, holds central data about digital usage in projects (e.g., through surveys or quantitative data)
  - Support routes
    - Short term: Measured on a quarterly basis through feedback from partner organisations, uptake and platform usage for Digital Health Champion project, Library link project through Sirona led surveys.
    - Long term: Success measured through usage analytics of digital inclusion map/signposting service.
  - Digital Tools for teams
    - For further consideration - still in development
    - Digital inclusion interventions:
      - Patient satisfaction and digital skills/attitude measures (pre and post intervention)
      - Data capture about digital usage over time (feeds BI & Data aims)

5. Our Roadmap

This roadmap was first drafted in Sept 2021, live versions will be managed outside of this document.

QUARTERS (START DATE)

		Q1 2021	Q2 2021	Q3 2021	Q4 2021	NEXT	
	STRATEGY	Research: National guidance	Draft Strategy	Update to VCSE & LA stakeholders			
		System-wide engagement: Baselining current DI activity	DPWG Approve Strategy	Review with Inclusion Council			
		Options appraisal to inform priority activity	DDB Presentation of Strategy				
	DATA & INSIGHT	Identify Existing Resources: CRDC Open Data Maps	PHM/BI Work request	UWE Led Research Project: Digital tools & Staff motivation			
INITIATIVE AREA	**ACCESS, SKILLS & TRAINING**	Digital Champion Volunteer project: MOU & Engagement	Council Library Leads & Sirona pilots collaboration			Digital Champions: Front line staff - Phase 1 (Definition)	Di lin ou
		Adopt Healthwatch materials	Digital Champion Volunteer Project: Training starts - BNSSG 15 seat pilot			BNSSG Access & Support Asset map	
	TOOLS FOR TEAMS FRAMEWORK	Tools Framework - Phase 1 (Definition)	Tools Framework - Phase 1 (Drafts)	Tools Framework - Phase 1 (MSK Test Bed)			Te Co
			NHSX Funding Opportunity (Cancer/MSK)	Tools Framework - Phase 2 (Revisions based on MSK feedback)			
			Tools Framework - Phase 1: Establish Cross provider feedback group	Tools Framework: Evaluation approach			
				Tools Framework - Phase 2 (HT Outpatients test bed)			

■ STRATEGY ■ DATA & INSIGHT ■ ACCESS, SKILLS & TRAINING ■ TOOLS FOR TEAMS FRAMEWORK

Published on **September 15, 2021**

Figure 3 - Digital Inclusion Roadmap