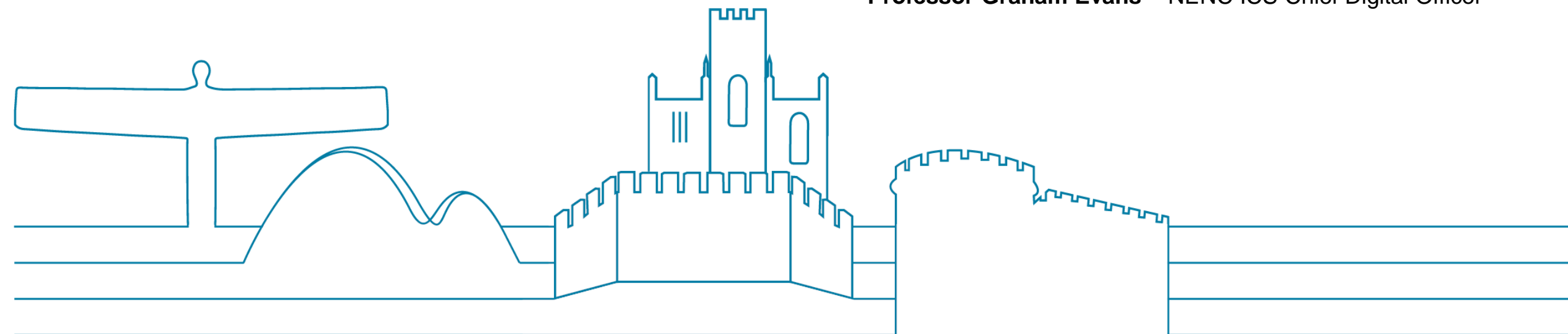




# North East & North Cumbria ICS Digital Care Programme

*Digital Summit – Regional Digital Strategy*  
*16 September 2021*

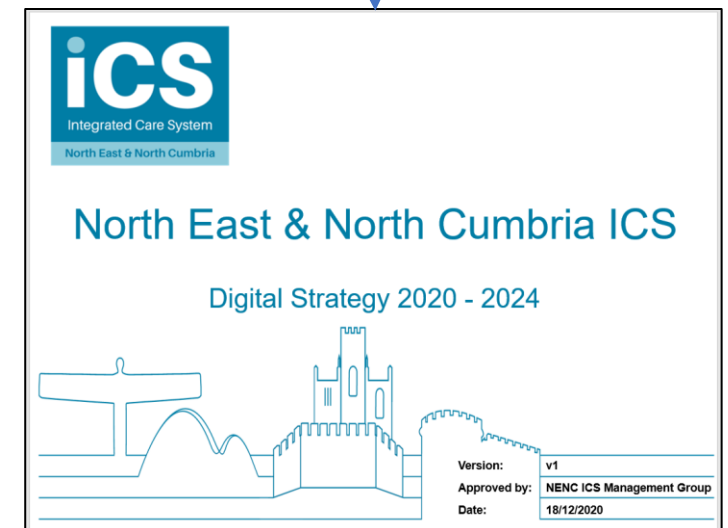
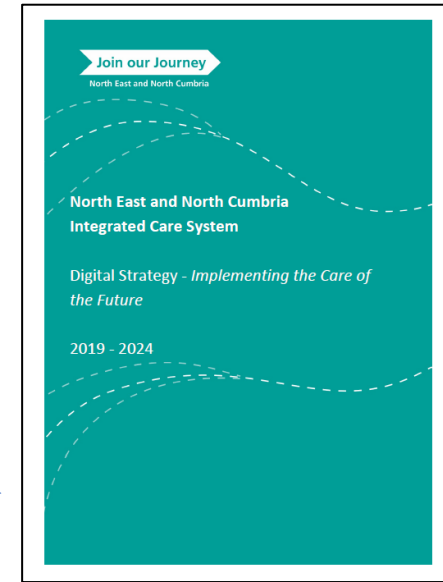
**Professor Graham Evans – NENC ICS Chief Digital Officer**



# Recap - Digital enablement

## NENC ICS Priority Workstreams

1. Improving population health and preventing ill health
2. Optimising health services – specifically through ensuring high quality standards across all services and delivering safe and sustainable care in the most appropriate setting
3. **Digital transformation** – making the best use of technology, data and IT to ensuring efficient and effective services
4. Workforce transformation – identify how doctors, nurses and other health and care professionals can work across organisations and sites, particularly hospital and community services; support and train staff to work differently; retain our existing workforce and jointly address recruitment challenges.
5. Mental health – improve access to services and standards of care.
6. Learning disabilities – improve quality of care, waiting times and outcomes for patients.



# Digital strategy approach/format

[https://www.northeastandnorthcumbriaics.nhs.uk/media/5jdnarmg/nenc-ics-digital-strategy-2020\\_v1-2-3.pdf](https://www.northeastandnorthcumbriaics.nhs.uk/media/5jdnarmg/nenc-ics-digital-strategy-2020_v1-2-3.pdf)

**Dynamic Navigation** (Red arrow pointing to the navigation menu in the 'Context' page)

**We will do...** (Red text pointing to the 'What we will do...' section in 'The Essentials' page)

**What we have done...** (Red text pointing to the 'What we've already done...' section in 'The Essentials' page)

**The Essentials: Getting the Basics Right**

**We Will...**

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

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

- Our citizens know their health and care information is held securely and managed appropriately.
- Health and care professionals will have safe, secure and reliable technology, and the skills to use these digital tools.
- Our organisations will take all necessary steps and precautions to protect not only their own organisational data and infrastructure, but also those of the broader ICS.
- Our ICS will benefit from system-wide safe, reliable, flexible digital infrastructures.

**What we've already done...**

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

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

**We've worked together to implement a regional Cyber Response Approach**, ensuring all organisations follow an appropriate methodology that focusses equally upon:

**People, Process and Technology.**

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

Information Security for the North East - the North East's public sector WARP (Warning, Advice and Reporting Point), currently brings together all 12 north east councils with colleagues from local NHS organisations, Foundation Trusts, NHS Counter Fraud Authority and NHS Blood and Transplant.

**Free public WiFi**

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

# Digital strategy approach/format

Consider mid-term (effectiveness) review in line with ICS Design Framework/WGLL?

**ICS Governance & Accountability**

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

New governance structures are maturing and will be expected to be fully operational by April 2021.

Page 10

**ICS Our Roadmap**

Digitally enabled Population, Systems and Organisations

Page 9

**ICS Keeping our eyes on the Future**

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

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

Page 9

**ICS Supporting and Related Strategies**

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

Please see the links below:

- North Cumbria ICP
- North of Tyne and Gateshead ICP
- Durham, South Tyneside and Sunderland ICP
- Tees Valley ICP

North East and North Cumbria GPIT

Population Health Management

Page 9

- ICS Digital Governance review new arrangements in place.

- ICS Digital Roadmap
- Lots delivered, COVID helped
- More to do – future opportunities

- Miniaturisation driven evolution
- Digital by default
- Solid foundations essential

- Regional strategic direction
- Domain & place/ICP delivery plans
- ICP/Place/Organisational alignment

Example

# NHS Long Term & People plans

## Digital Interactions

- Consultations
  - Digital first access to primary care
  - ‘Digital models’ to reduce outpatients \*
  - Video consultations \*
- Apps- NHS App- Becomes ‘front door’
- Personalisation - Self-Care / Remote monitoring \*
  - Increased use of apps (diabetes / respiratory / maternity / online therapies)



\* Examples of rapid adoption to COVID response



## Digital Infrastructure

- All trusts fully digitised by 2024
- Standards: info sharing and Cyber security
- Development of shared records (GNCR)

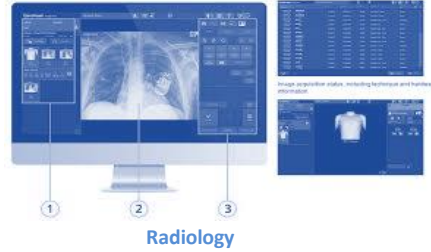


Whilst it is recognised that virtual digital tools have helped during the pandemic, there is now a time for reflection and consideration to offer patients/citizens a choice of interaction options



# ICS – Strategic digital programmes

## Optimising Health Services - Diagnostics



Strategic/Tactical oversight  
i.e. Winter/COVID  
Cyber



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

Many other priority digitally enabled health and care programmes evolving

# ICS – GP and Primary care



- Strategy developing, align with ICS direction
- Digital Maturity dashboard development (DFPC)

### Delivered: Remote consultation solutions

- 100% access to video consultations across general practice – **reduced unnecessary footfall**
- 100% access to online consultations across general practice – **39 (average no. of practice OC submissions per week Apr 20-July 21)**
- 2 way messaging systems deployed across North Tyneside, Newcastle Gateshead and Durham - **saving visits to GP practices**

### Transforming now: Digital first primary care

- Digital Champions development - CCG/AHSN collaboration – **increase confidence in digital**
- Primary Care Innovation hub – CCG/AHSN collaboration
- Refresh & update of GP websites - **easier navigation for public**
- Sound Doctor, new service for patients in North Cumbria - **staying well at home**



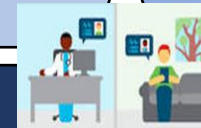
### Infrastructure

- Compliant GP estate W10/N365 **reduced cyber risk**
- **Over 1800 laptops and peripherals** deployed to enabled remote access
- BUYOD enabled for staff working **remotely in excess of 300 staff able to use own device at home**
- Upgraded digital telephony systems for GPs **improving access**



### Plans to deliver: PHM

**National PHM Development Programme** - number of PHM support opportunities at both PCN and Place level progressing across NENC including South ICP, Northumberland and County Durham to continue to build on the work that was started by the national programme.



### Opportunities

- Remote Monitoring
- Self Care/signposting
- Work with wider Primary Care practitioners
- Telephony



**Innovations CDRC** - digital resources developed by clinicians in the North East of England, working on existing clinical IT systems (SystemOne & EMIS) quality assured by NECS - **saving clinical time and reducing costs, improving quality and safety for patients, flexible implementation and compliant with data sharing agreements, providing clinical teams with real time data and improving practice**



### Governance: Operational emergency response group

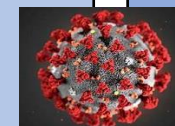
stood up to inform and co-ordinate the regional digital response across primary care ensured;

- *A common voice for primary care*
- *Strength of leadership and partnership working*
- *Pooled resources for the benefit of all*
- *Collaborative approach to issue resolution*



### Concerns/Risks

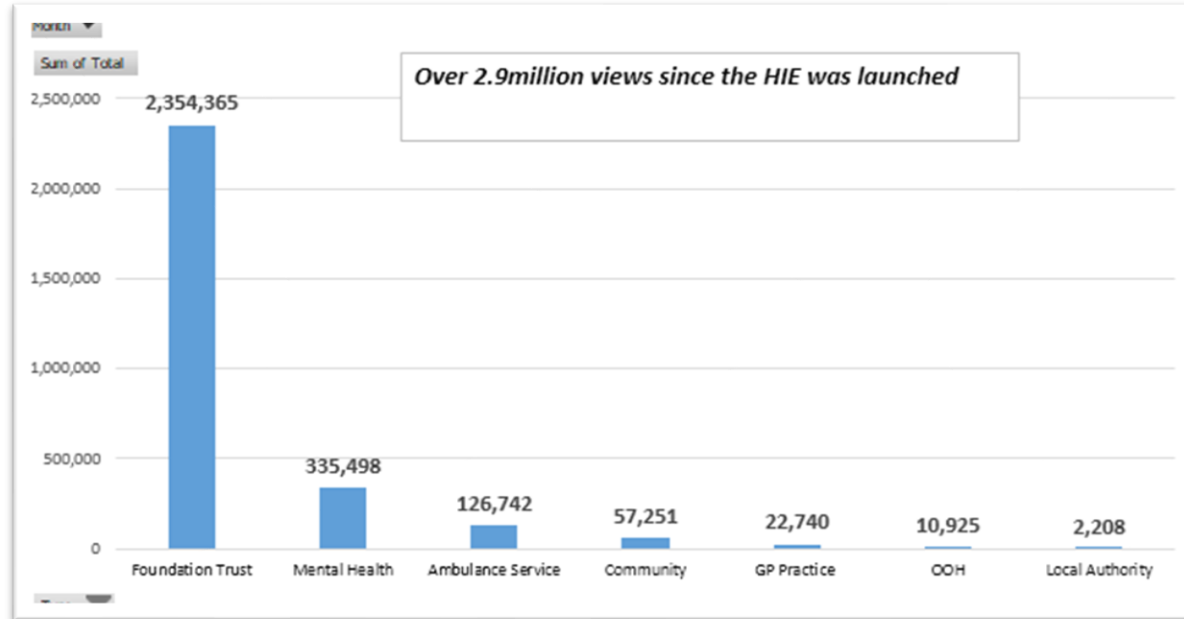
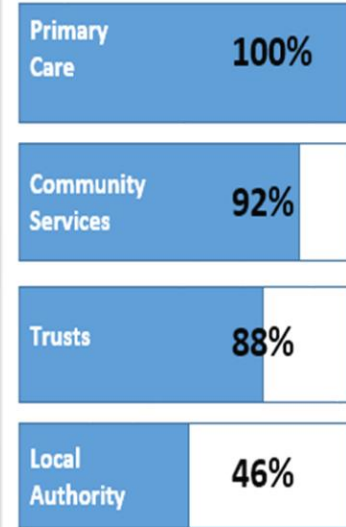
- Capacity in all areas of the system
- Digital inclusion
- Performance of key systems (EMIS)



# ICS – GNCR Overview – August 21

Hosted by NuTH

## HIE – Deployment Progress against Milestones



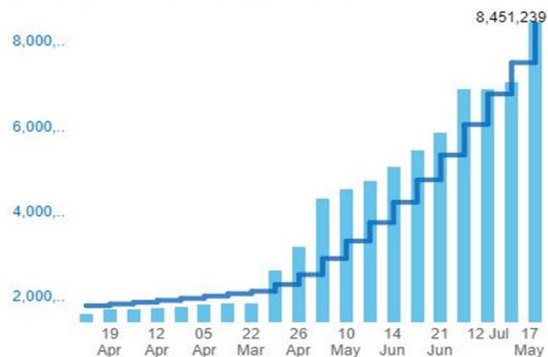
## HIE Pipeline 2021/22

- ✓ Implement remaining Trusts, Community Services and Local Authorities
- ✓ Provide Capability to share Advance Care planning documentation
- ✓ GP Connect Available 2022, which will bring structured data from TPP
- ✓ Deploy Upgrade to provide more functionality & Improvements
- ✓ Provide a Solution to Share Medications from Secondary Care
- ✓ Provide Capability to share Special Patient Notes / Risks and Alerts
- ✓ Provide Capability to On-Board South Cumbria Practices
- ✓ Define Process to On-Board NENC Care Homes and Hospices

## Uptake of NHS App in England

8,451,239 NHS App registrations

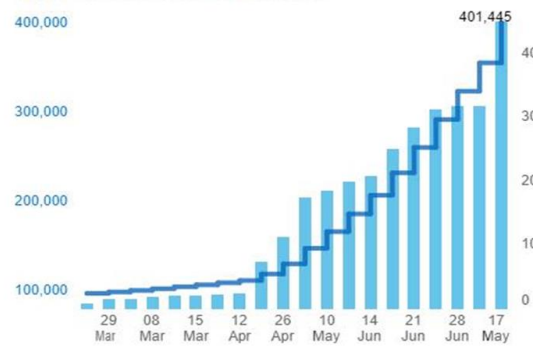
Running total and new registrations



## Uptake of NHS App in NENC

401,445 NHS App registrations

Running total and new registrations

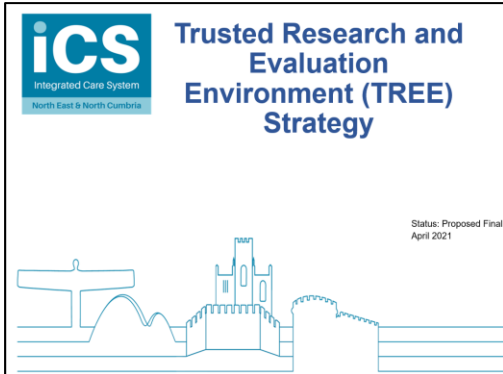


Coming Soon.....





# Trusted Research and Evaluation Environment



**ICS** **TREE Vision**

The Trusted Research and Evaluation Environment (TREE) is a fundamental component of the North East and North Cumbria Digital Strategy aiming to:

*Enable joint collaborations between our academic, health and care sectors, using a governed process and a safe and trustworthy data platform, to help improve the health, wellbeing and prosperity of the North East and North Cumbria*

Achieving the vision will require partnership working and leadership from across our health, care and academic sectors

*Safely enabling data to improve and save lives in the NENC*

Great North Care Record

**ICS** **TREE Overview**

**Dedicated governance** reviews the same outcomes and priorities of each TREE and project before approval. There is transparency on outcomes for organisations, governance and public. The project agreement defines and assures what happens to the data when the project ends. Authorised users can only access assigned projects. Access is only by an approved remote connection via a secure laptop or pc.

For project approval the data management arrangements, including legal basis for use, is agreed with the health and care providers as data controllers.

a. Each approved project has secure dedicated space within the TREE platform. b. Data cannot be removed without authorisation. c. Approved analytics software is provided in the TREE and projects can securely add bespoke algorithms. d. Data is security checked and cleansed in a secure area before being made available to the TREE project.

b Data can be bespoke (one-off) or from a regional regular flow and can include external sources such as ONS or meteorological.

Data is typically anonymised or pseudonymised. The use of patient identifiable data will be reviewed for applicable future projects ensuring the right governance.

Data from different organisations and sectors can be linked.

Trusted Research and Evaluation Environment

Common governance, Common platform, Common data platform, Common process, Common purpose.

**ICS** **TREE Development Roadmap**

We will design for the future so applications can be accommodated as they are prioritised






**0-6 months:** Strategy approved, TREE funding and business model confirmed, TREE technical specifications confirmed, TREE movement technical specifications confirmed.

**6-12 months:** 35 breakthrough projects agreed, Initial loading confirmed, Flag projects start, Initial public engagement & governance and design, Review regular data flow status (PHM programme), Review subsector hearing arrangements, Review additional data sources (eg voluntary sector), Review services and GRAS procedures, Review of readiness of future applications of TREE (Digital Academy).

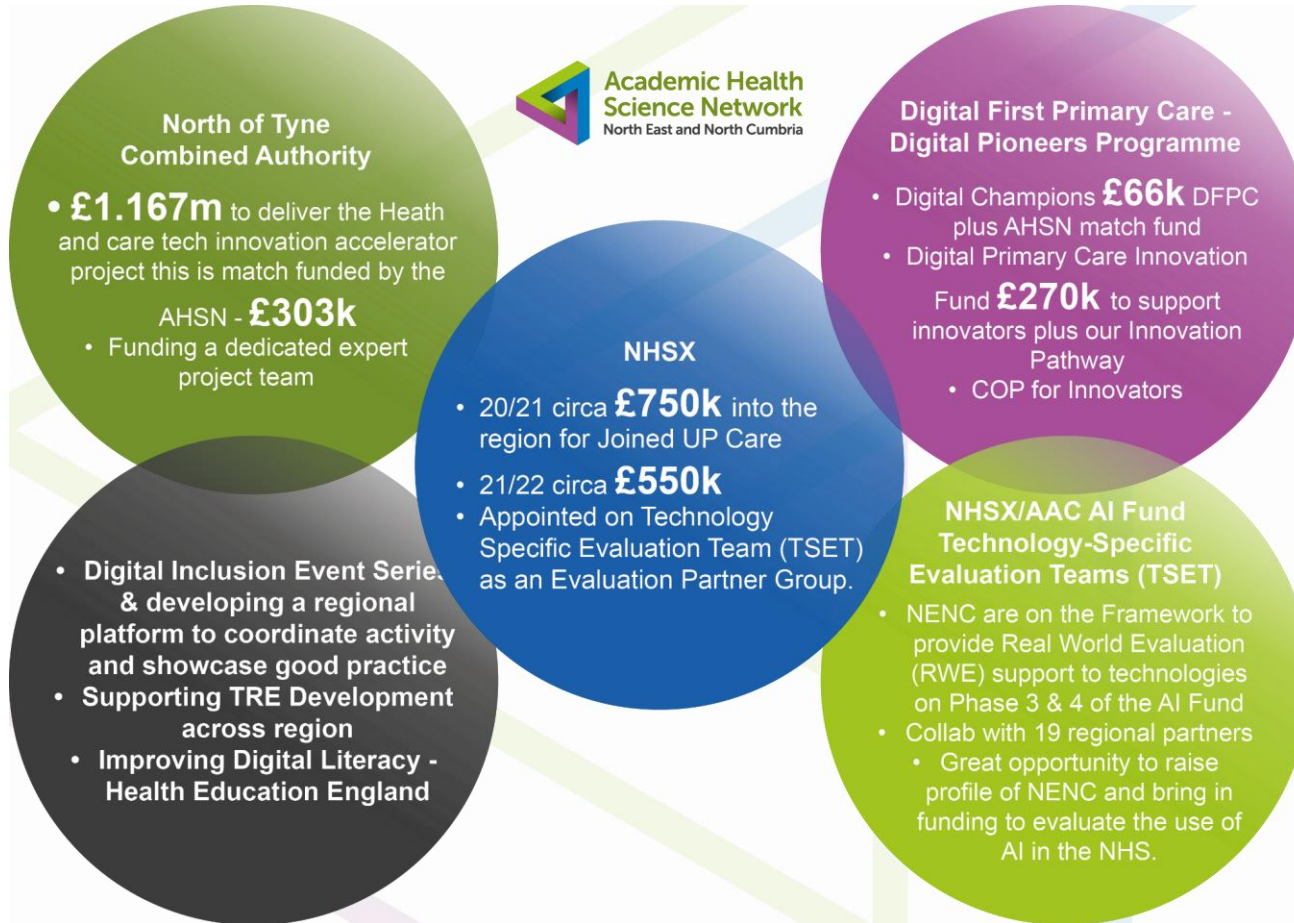
**12-24 months:** Initial partnership agreements in place, Assistance and expert groups in place, Substantial hosting process initiated, TREE Inclusion review.

- The Trusted Research and Evaluation Environment (TREE) will provide health, care and academic staff (time limited and secure) access to data for research and innovation projects
- Axiom is a data system which will provide access to a wide variety of health, care and other data to health and care staff for planning, for redesign, for operational reporting, for PHM etc.
- Axiom and TREE will work in an integrated manner and provide a significant regional opportunity to maximise the benefits to health and care services, to drive PHM and to conduct leading edge research
- Both initiatives use our installed base: resources, specialist skills and talent; regional governance (PHM, digital); infrastructure
- TREE SRO profile developed – consideration of suitable candidate (*share with collaborative*).
  - To be discussed at ICS Management Group in September

# ICS – Digital Diagnostics programmes

Project	2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>LIMS Interoperability</b> <ul style="list-style-type: none"> <li>5-Trusts (Common platform)</li> <li>Northumbria</li> <li>Gateshead, Sunderland &amp; South Tyneside (Existing)</li> </ul> 					<p><b>Key headline</b> Digital bids submitted to support interoperability</p> <p>Project procurement commenced</p>							
<b>Digital Pathology</b> <ul style="list-style-type: none"> <li>Enabling Trusts to digitally scan and view ✓</li> <li>Enabling technical capability for image sharing</li> <li>Additional scanners procurement (NPIC)</li> <li>Reporting solution procurement (NPIC)</li> <li>Reporting solution roll out</li> </ul> 					<p><b>Key headlines</b></p> <ul style="list-style-type: none"> <li>Hosted by NTHFT – Common diagnostic network infrastructure*</li> <li>3 x Trusts technically capable to share images</li> <li>All Trusts to be technically Live by end of Q4</li> <li>Additional scanning capability currently being procured to enable 50% capacity across region</li> </ul>							
<b>Digital Radiology</b> <ul style="list-style-type: none"> <li>Solution design and development</li> <li>Technical infrastructure build</li> <li>Sunderland and South Tyneside connectivity</li> <li>Complete Proof of Concept and sign off</li> <li>Roll out to non PoC Trusts</li> </ul> 					<p><b>Key headlines</b></p> <ul style="list-style-type: none"> <li>Hosted by NTHFT – Common diagnostic network infrastructure*</li> <li>Solution agreed by Trusts and being developed ready for testing in early Sept</li> <li>Proof of Concept to run with 3xTrusts until December</li> <li>Trust downstream systems to be included in testing extending PoC timescales</li> </ul>							
<b>Digital Haematology</b> 					<p><b>Key headlines</b></p> <ul style="list-style-type: none"> <li>Deployment of CellaVision analysers completed on time</li> <li>Remote review software being installed across the region to allow collaborative working</li> <li>User group established for operational support going forward, with attendance by Siemens</li> </ul>							
<b>iRefer – Gatedhed</b> funding TBC 2022 onwards 					<p><b>Key headlines</b></p> <ul style="list-style-type: none"> <li>Feasibility and benefits baselining work started</li> <li>Engagement and ICE upgrades scheduling under way</li> </ul>							
<b>Digital Endoscopy TBC</b>					<p><b>Key headlines</b></p> <ul style="list-style-type: none"> <li>Endo group working to establish network structure</li> <li>Undertaking demand and capacity analysis</li> </ul>							

# ICS – AHSN Digital programmes



## Example project – Remote ECG Pathway



# ICS – HealthCall



## Health Call

- **Digital skills and knowledge** reinvested back into the region
- **Profits reinvested** back into the region
- **Listed on Digital First** framework
- **Shortlisted for two awards** – Nursing Times and AHSN Supplier in Excellence
- **£1m invested in regional licence** – saved over £8m in digital care homes project in CDDFT alone

## Care homes section

- **Digital Care Homes** all 115 care homes in County Durham and Darlington
- **Being rolled out in a further 296 care homes** in South Tees, Gateshead and South Tyneside
- **4000 residents and 1300 referrals** each month in CDD alone

## Primary care

- **BP @ Home remote monitoring** launched
- **Respiratory pathways** allowing remote monitoring of COPD and asthma patients

## Community

- **INR self-testing** 703 patients saving 12,000 appointments
- **70% of patients improved time** in therapeutic range = less strokes and pulmonary embolism
- **Average of 1,200 wound care images** shared every month with district nurses

## NHS trusts

- **185K staff booked covid vaccines**
- **500 MSK self-referrals per month** – that's 6000 patients who have avoided going to their GP
- **First mental health pathways** developed
- **500,000 Friends and Family Tests** submitted electronically
- **Digital Outpatients Portal** developed



# ICS/ICB design framework – digital..



# What Good Looks Like (WGLL)

## What is the WGLL framework?

WGLL is directed at all NHS leaders, as they work with their system partners, and sets out what good looks like at both a **system** and **organisation** level. It describes how arrangements across a whole ICS, including all its constituent organisations can support success.

WGLL is included in both the [ICS design framework](#) and the [NHS Operational Planning and Contracting Guidance](#), reflecting the expectation that the standards in the WGLL framework will be used to accelerate digital and data transformation.

The WGLL framework has 7 success measures:

1. Well led
2. Ensure smart foundations
3. Safe practice
4. Support people
5. Empower citizens
6. Improve care
7. Healthy populations



The 7 success measures of What Good Looks Like

This template has been adapted for use by the North East and North Cumbria ICS, from a draft shared with Chief Information Officers, which was compiled from: <https://www.nhsx.nhs.uk/digitise-connect-transform/what-good-looks-like/what-good-looks-like-publication/> on 31st August 2018.

NHS Provider Trusts can use the 'provider data tab', ICSs use the ICS data tab, to enter a self assessment score of 0-5. The following scoring is suggested:

- 0 – Don't know
- 1 – Disagree completely
- 2 – Somewhat disagree
- 3 – Neither agree or disagree
- 4 – Somewhat agree
- 5 – Agree completely

# WGLL success measures (System)

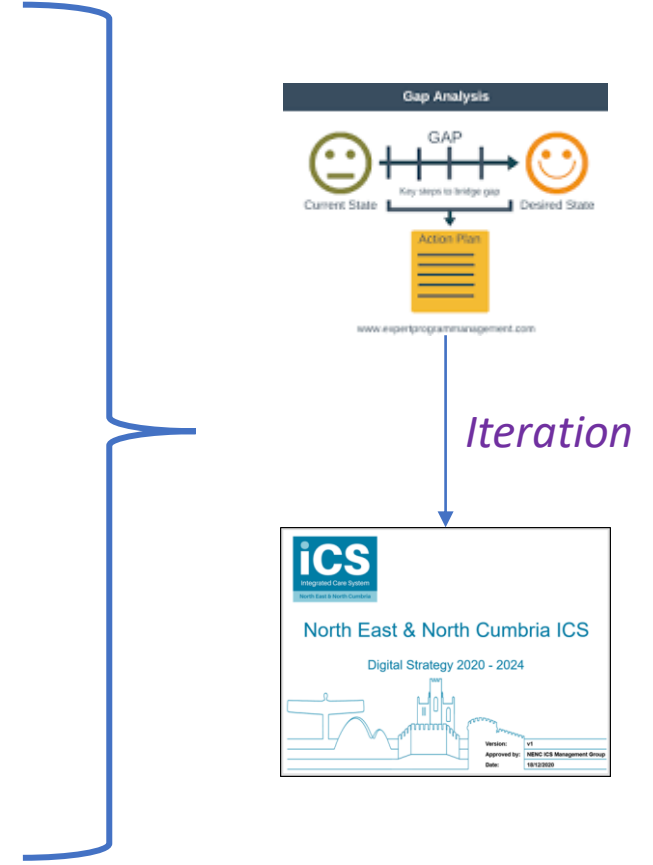
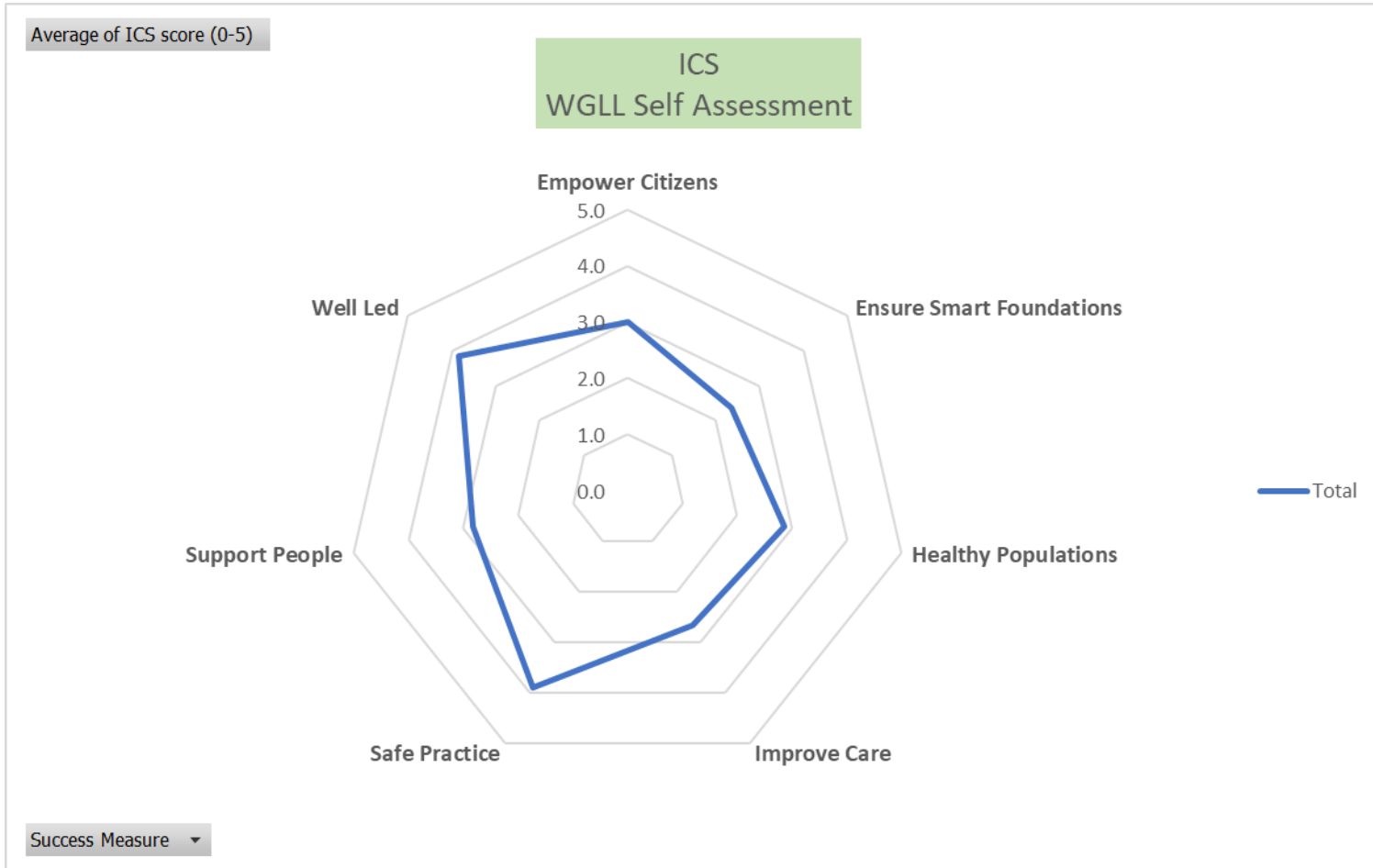
Score 0 - 5

		Your ICS has a clear strategy for digital transformation and collaboration. Leaders across the ICS collectively own and drive the digital transformation journey, placing citizens and frontline perspectives at the centre. All leaders promote digitally enabled transformation to efficiently deliver safe, high quality care.		
		Digital, data and infrastructure operating environments are reliable, modern, secure, sustainable and resilient. All organisations across the ICS maintain standards for safe care, as set out by the Digital Technology Assessment Criteria for health and social care (DTAC). They routinely review system-wide security, sustainability and resilience.		
W	Er	Organisations across the ICS maintain standards for safe care, as set out by the Digital Technology Assessment Criteria for health and social care (DTAC). They routinely review system-wide security, sustainability and resilience.	2	
W	Er	have a system-wide plan for maintaining robust cyber security, including development of centralised capabilities to provide support across all organisations	3	
W	Er	establish a process for managing the cyber risk with mitigation plans, investment and progress regularly reviewed at ICS level	1	
W	Er	have an adequately resourced ICS-level cyber security function, including a senior information responsible officer (SIRO) and data protection officer (DPO)	4	
W	Er	ensure that you fully use national cyber services provided by NHS Digital	1	
W	Er	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	2	
W	Er	have an adequately resourced clinical safety function, including a named CSO, to oversee ICS-wide		
Safe		Citizens are at the centre of service design and have access to a standard set of digital services that suit all literacy and digital inclusion needs. Citizens can access and contribute to their healthcare information, taking an active role in their health and well-being.	4	
Safe	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	1	
Safe	Empower Citizens	make consistent, ICS-wide use of national tools and services (NHS.uk, NHS login and the NHS App),		
Su	E	Your ICS uses data to design and deliver improvements to population health and wellbeing, making best use of collective resources. Insights from data are used to improve outcomes and address health inequalities.	1	
Su	E	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	2	
Su	E	use data and analytics to redesign care pathways and promote wellbeing, prevention and independence (for example, identifying patients for whom remote monitoring is appropriate)	3	
Su	E	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	4	
Su	E	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	5	
Su	E	make data available to support clinical trials, real-world evidencing and AI tool development	5	
Su	E	drive ICS digital and data innovation through collaborations with academia, industry and other partners	5	

For illustrative purposes only

# WGLL success measures (System)

For illustrative purposes only



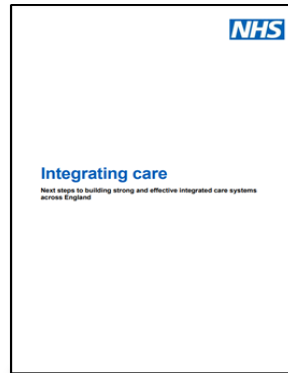


# Strategy is delivery

## □ Digital dependency

- *Unintended consequences*
  - *Cyber-threat....*
  - *Digital exclusion*

- ICS Next steps
- ICS Design Framework
- Planning guidance
- What Good Looks Like (WGLL)



- *Digital is not an option, but a **necessity***

# Digital Care Programme – Strategy



## Questions

1. Do you consider digital to be critical to the future transformation of health and care in our region (Y/N)?
2. Do you agree with our strategic approach (Y/N)?
3. Have we captured the key strategic themes (Y/N)?
4. Does our strategic animation describe our ambition in an understandable way (Y/N)?

**\*\*Please use the 'Menti link'**

Thank you for your time

Questions?