



**North East and
North Cumbria**

Integrated Care Partnership :

21 June 2023

‘Developing an Information system for the North East and North Cumbria’



Prof Graham Evans
Executive Chief Digital and Information Officer/SIRO

North East and North Cumbria in numbers

3 million estimated resident population and the largest ICB in the country Census 2021

21% of the population aged 65 and over (England 18.6%) Census 2021

Nearly **1 in 3** live in the 'Core 20%' of the most deprived areas in England MHCLG

Circa **700,000** (55%) households are deprived in one more dimensions: housing, education, employment and health (Census 2021)

91% of the population are white British. (England 74%) Census 2021

79% rate their health as good or very good. (England 82%) Census 2021

Sources: 1 in 3 = 32% in most deprived area calculated from [IMD 2019 MHCLG](#) Open data. Population data from [Census 2021](#). ONS



Deprivation and life expectancy

Diseases that contribute most to the gap in life expectancy between most and the least deprived areas

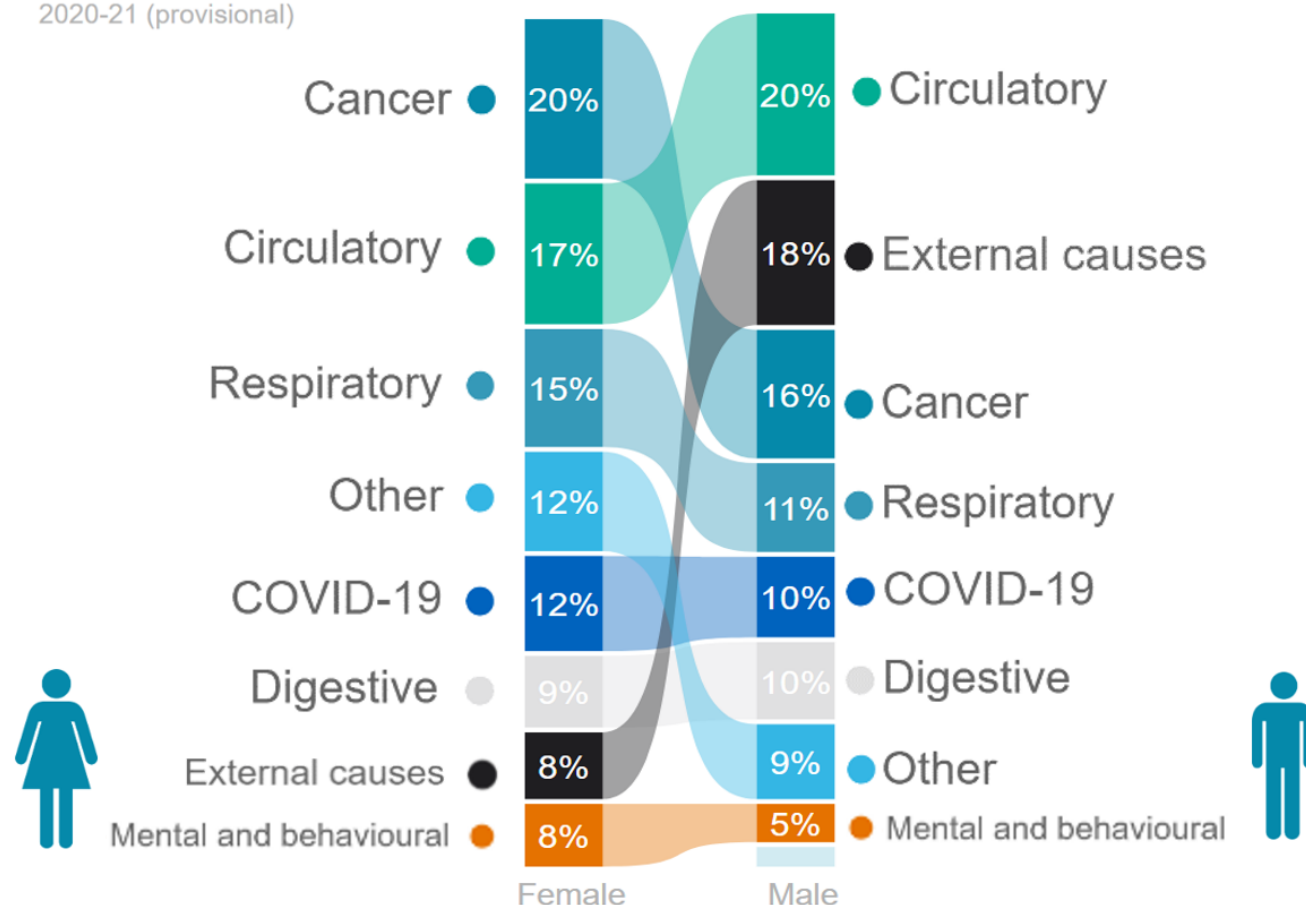
- The main three causes of death in women: Cancer, circulatory* and respiratory disease.
- In men, the main three are circulatory disease, external causes** and cancer.

*heart disease and stroke.

**external causes: deaths from injury, poisoning and suicide

The proportion each cause of death contributes to the gap in life expectancy between the least and most deprived areas (quintiles within North East and North Cumbria)

2020-21 (provisional)



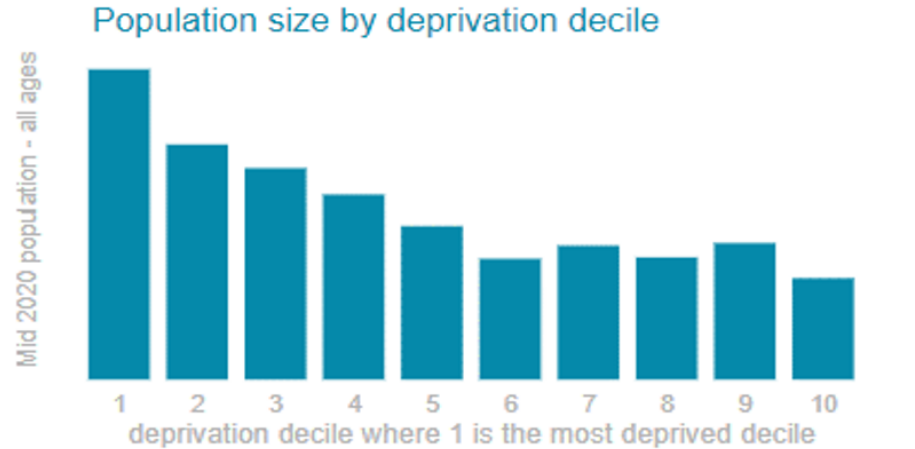
Regional determinants of health

Prevalence of risk factors for health

A vast majority of the North East and North Cumbria population live in the more deprived areas of England

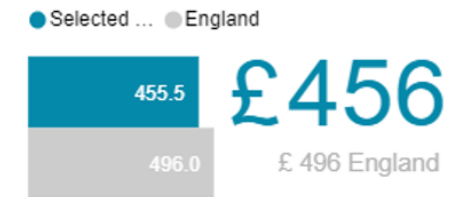
The area fares worse, for example, on employment, weekly earnings, fuel poverty and homelessness indicators compared to England.

Wider determinants of health: North East and North Cumbria



Average weekly earnings

| 2021



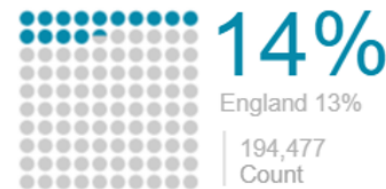
Percentage of people in employment

| 2021/22



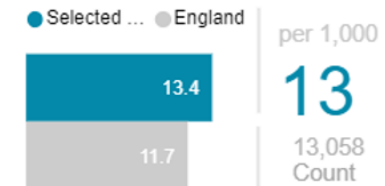
Fuel poverty (low income, high cost methodology)

| 2020



Homelessness - households owed a duty under the Homelessness Reduction Act

| 2021/22

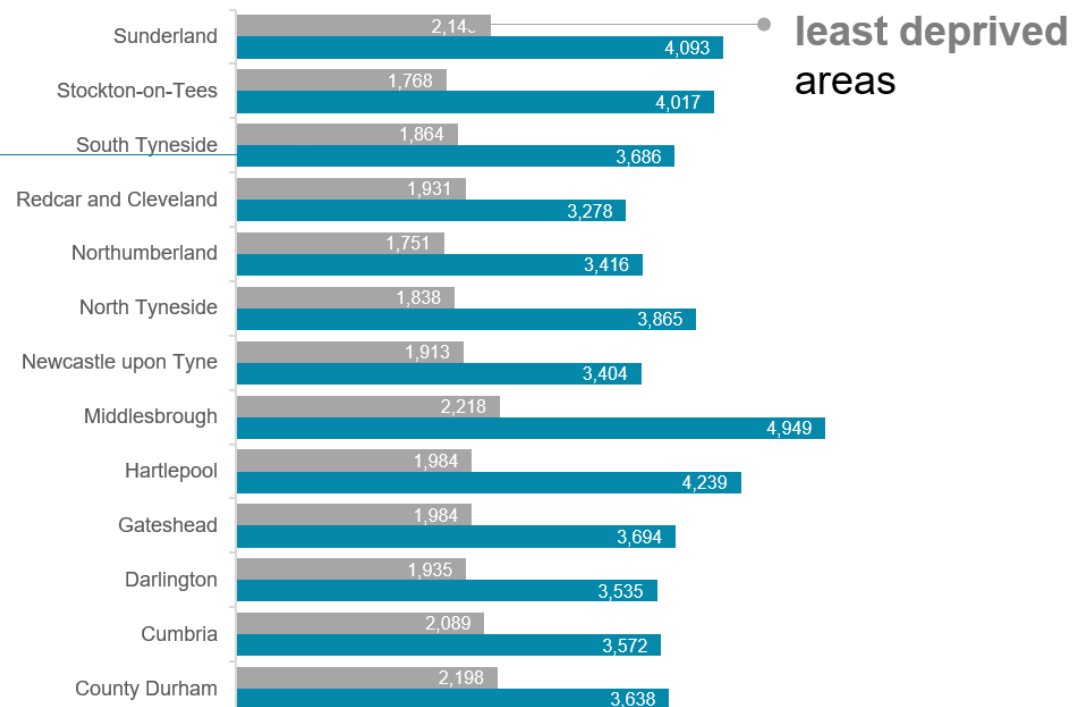


From: [Picture of Health](#). Sources: MHCLG Open data: [English Indices of Deprivation 2019 - LSOA Level](#), and [ONS mid year population 2020 by age](#). Contains public sector information licensed under the Open Government Licence v3.0. © Crown copyright 2020. ¹Deprived neighbourhoods are those lower super output areas (LSOAs) in the first two most deprived deciles of England.

Pandemic impact: Disparities in death rates between the least and most deprived neighbourhoods within local authorities

March 2020 to July 2022

Death rates in the **most deprived** areas are around twice as high compared to the least deprived neighbourhoods¹



The chart describes cumulative age-standardised mortality rate per 100,000 population, for deaths in North East local authorities and Cumbria², by deprivation quintiles each local authority, all persons, all ages, March 2020 to July 2022

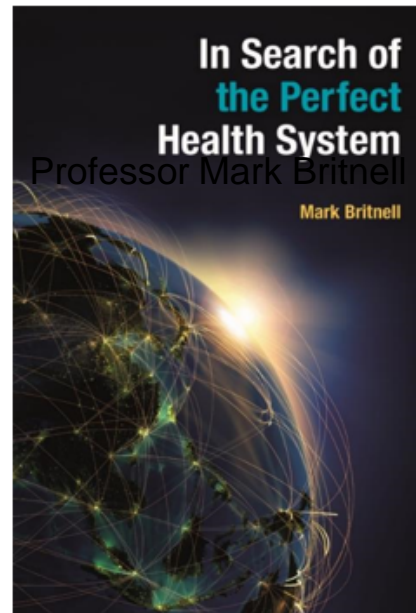
Source: [COVID-19 Health Inequalities Monitoring for England \(CHIME\) tool](#) [15 November 2022]. All cause deaths, including COVID-19 deaths. Based on provisional mortality data, and may be subject to revision ¹ Neighbourhoods refer to lower super output areas divided into quintiles within a local authority – which is different to the quintiles within England (the Core 20) . For example in Middlesbrough over half of LSOAs in the area are within the England's most deprived quintile, a much higher proportion than the 20% when comparing within area quintiles. ² North Cumbria values unavailable.

A system cannot be integrated without digital capability

North East and
North Cumbria



High performing integrated care systems have...



1

A clear focus on quality with recognised quality management systems in place

2

Multi-professional teams across health and social care working to agreed protocols and pathways

3

Aligned financial incentives, usually bundled payments and capitation

4

A digital infrastructure that supports care pathways and measures and monitors in near real time

5

Rigorous guidelines that enhance compliance, recording and reflection. A self improving, intelligent system.

6

Accountability for performance across and within organisations. Shared risk.

7

Defined populations with active participation of patients. A deeply collaborative culture.

8

New clinician-management partnerships that bring the best from both and don't confuse committees with action

9

A clear vision, Target Operating Model, levels of delegation and accountability.

10

A workforce designed to enhance integration for the patient and not just the clinical team or organisation

Digital Infrastructure

- Digital
- Data
- Technology

Our strategic alignment – key steps



North East and North Cumbria



True North

ICS
Integrated Care System
North East & North Cumbria

North East & North Cumbria ICS
Digital Strategy 2020 - 2024

Version: v1
Approved by: NENC ICS Management Group
Date: 18/12/2020

December 2020

National Data Strategy

About the National Data Strategy

The aim of the National Data Strategy (NDS) is to drive the collective vision that will support the UK to build a world-leading data economy.

It will help ensure that people, businesses and organisations trust the data ecosystem, are sufficiently skilled to operate effectively within it, and can get access to data when they need it.

The NDS will also provide coherence and impetus to the wide range of data-led work across government, while creating a shared understanding across the economy of how data is used.

GOV.UK

Health and social care > Information, health and social care > Data saves lives: reshaping health and social care with data

Policy paper
Data saves lives: reshaping health and social care with data
Updated 15 June 2022

Applies to England

Ministerial foreword

The use of NHS data was at the forefront of this country's fight against coronavirus (COVID-19), helping us to remove restrictions and return on the path to normal life.

Now that we are living with COVID-19, we must keep this momentum going, and apply it to the long-term challenges ahead of us, including tackling the COVID backlog and making the reforms that are vital to the future of health and care.

Earlier this year, I made a [speech setting out my 4 priorities for reform in health](#):

1. Prevention.
2. Personalisation.
3. Performance.
4. People.

We cannot deliver the change that we need to see – and our 10 year plans for [cancer, dementia and mental health](#) – unless we embrace the digital revolution and the opportunities that data-driven technologies provide.

North East North Cumbria Health & Care Partnership

Better health & wellbeing for all

A plan to improve health and care in the North East and North Cumbria

December 2022

ICS
Integrated Care System
North East & North Cumbria

Digital data and technology strategy 2023 - 2025

Version: v1
Approved by: NENC ICS Management Group
Date: 18/12/2020

Refresh June 2023

National data direction

- What good looks like
- Digital inequalities

Sets strategic priorities

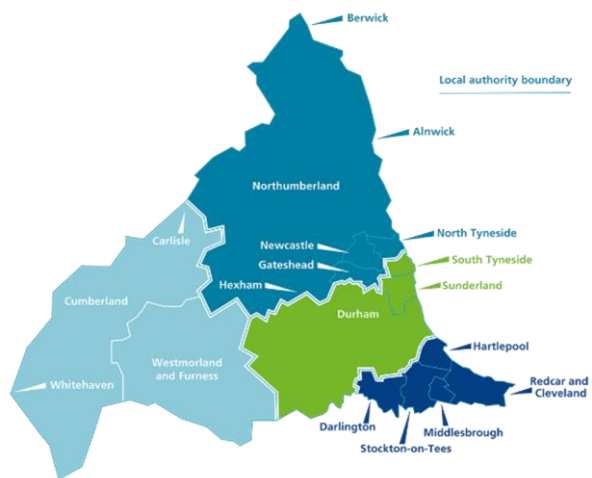
Digital and data chapter input

Key points – Data driven decisions, DD&T workforce etc.

ICS
Integrated Care System
North East & North Cumbria

5 year joint Forward plan

The golden thread...



Our Themes

Our Strategy focusses on five key interlinked Themes to deliver our Vision...



- Essentials
- Connecting
- Empowering
- Improving
- Learning

Enablers

Better health & wellbeing for all...

Our integrated care strategy for the North East and North Cumbria






Our four key goals...

 Longer & healthier lives Reducing the gap between how long people live in the North East and North Cumbria compared to the rest of England	 Fairer outcomes for all As not everyone has the same opportunities to be healthy because of where they live, their income, education and employment	 Better health & care services Not just high-quality services but the same quality no matter where you live and who you are	 Giving children and young people the best start in life Enabling them to thrive, have great futures and improve lives for generations to come
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Our supporting goals...

 Reduce the gap in life expectancy for people in the most excluded groups	 Halve the difference in the suicide rate in our region compared to England	 Reduce smoking rates from 13% of adults in 2020 to 5% or below by 2030	 Increase the number of children, young people and adults with a healthy weight
 Reduce alcohol related admissions to hospital by 20%	 Reduce drug related deaths by at least 15% by 2030	 Reduce social isolation, especially for older and vulnerable people	 Increase the percentage of cancers diagnosed at the early stages

We will do this by...

 Supporting and growing our workforce	 Harnessing new technology and making best use of data	 Making the best use of our resources	 Being England's greenest region by 2030	 Listening to and involving our communities
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North East and North Cumbria



True North

North East North Cumbria Health & Care Partnership

Better health & wellbeing for all

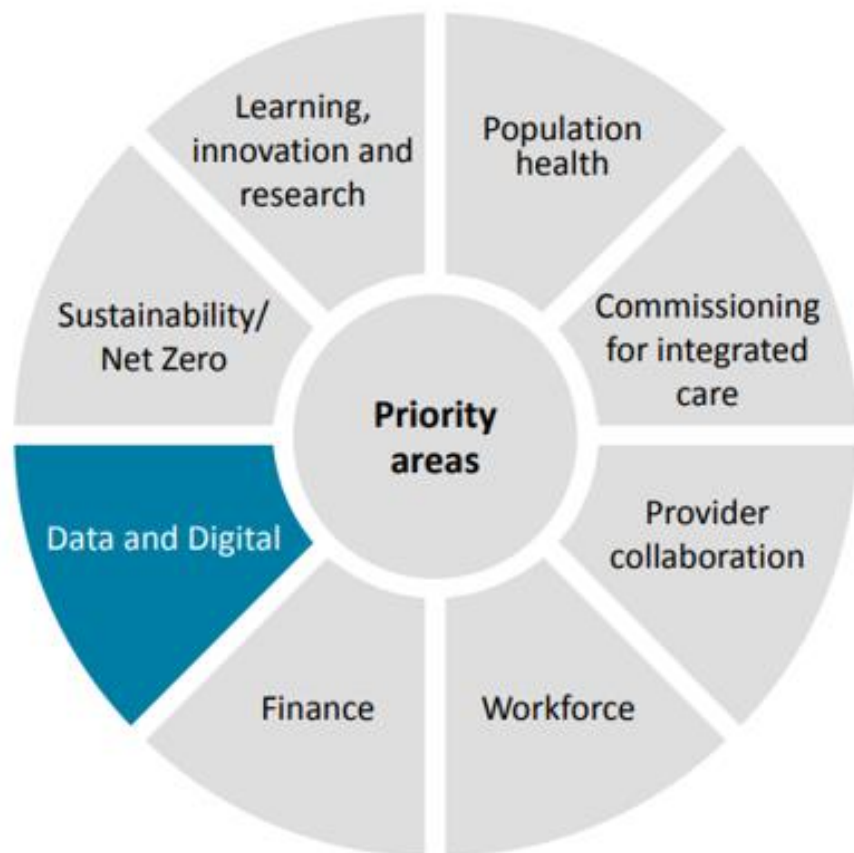
A plan to improve health and care in the North East and North Cumbria



Ambitions ICB/ICS....



Data and digital - ambitions for the future

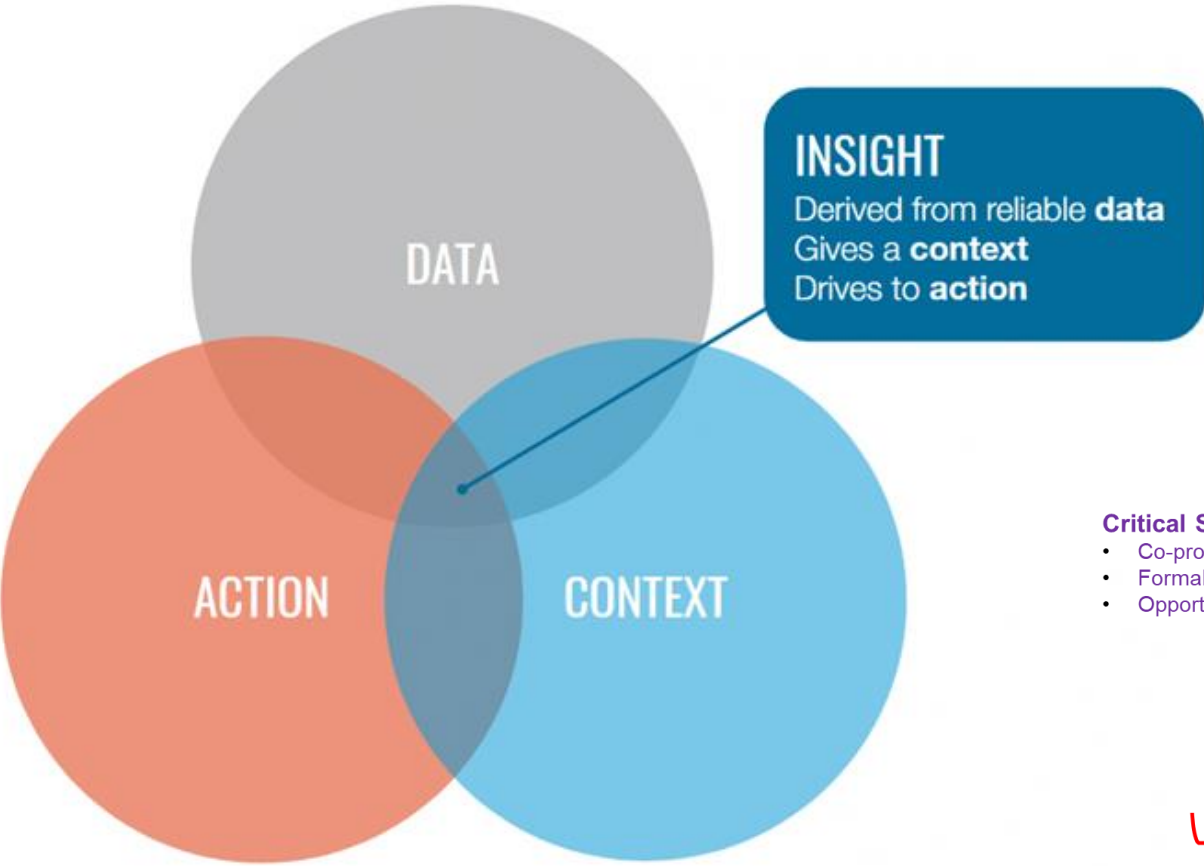


- The NENC ICS will build on the excellent interoperability and access provided by the existing digital solutions in health and explore how these can be made **accessible to all partners** in the footprint
- The NENC ICS will **underpin all decisions with robust data evidence** through developing a greater analytics capacity, leveraging existing capabilities, and ensuring the generated insights flow into the decision making process
- The system will build up its population analysis and behaviour predictive capabilities to better inform the design of health and social initiatives to drive improved outcomes for the population
- The NENC ICS will develop a strong pipeline of **digital and analytics capacity** through supporting upskilling and recruitment, in collaboration with business, academia and system partners
- The system will **raise the digital maturity** of all providers and system partners, to ensure interoperability of functions is maximised
- The NENC ICS will become a 'trailblazer' system for digital services, including for enabling digital access to citizens for all services
- By **improving the digital adoption in the population** and enabling access to digital services, NENC ICS will empower residents to take ownership over their own health

Extracting actionable insights from digital data

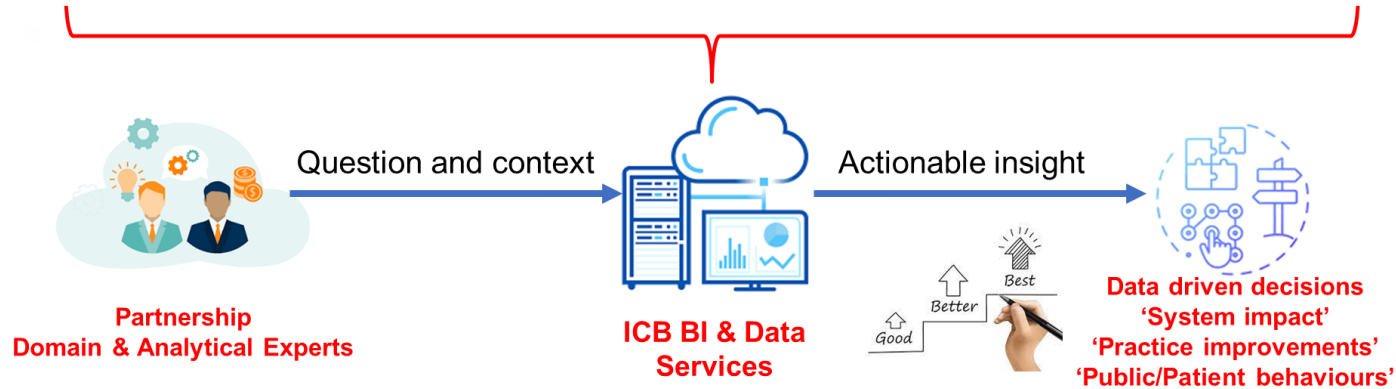
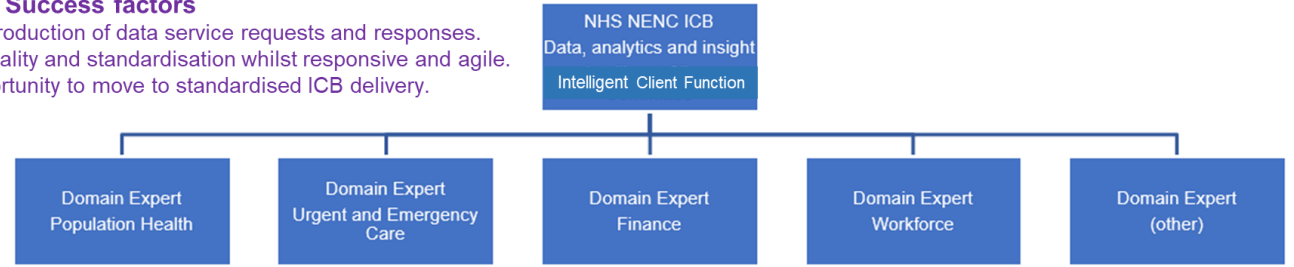


North East and North Cumbria



Critical Success factors

- Co-production of data service requests and responses.
- Formality and standardisation whilst responsive and agile.
- Opportunity to move to standardised ICB delivery.

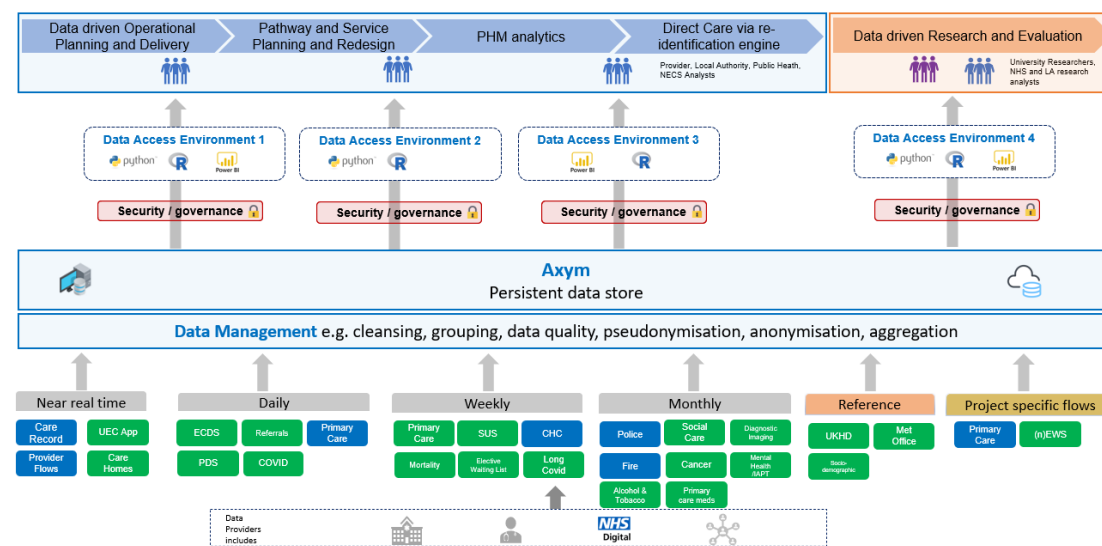


Digital technology infrastructure: key principles

- Technology is an **investment** not a cost.
- Provider digital maturity is essential and a rate determinant (level up).
- Leverage installed digital and data assets wherever possible.
- An integrated care system is as strong as its weakest links.

How does this work in practice?

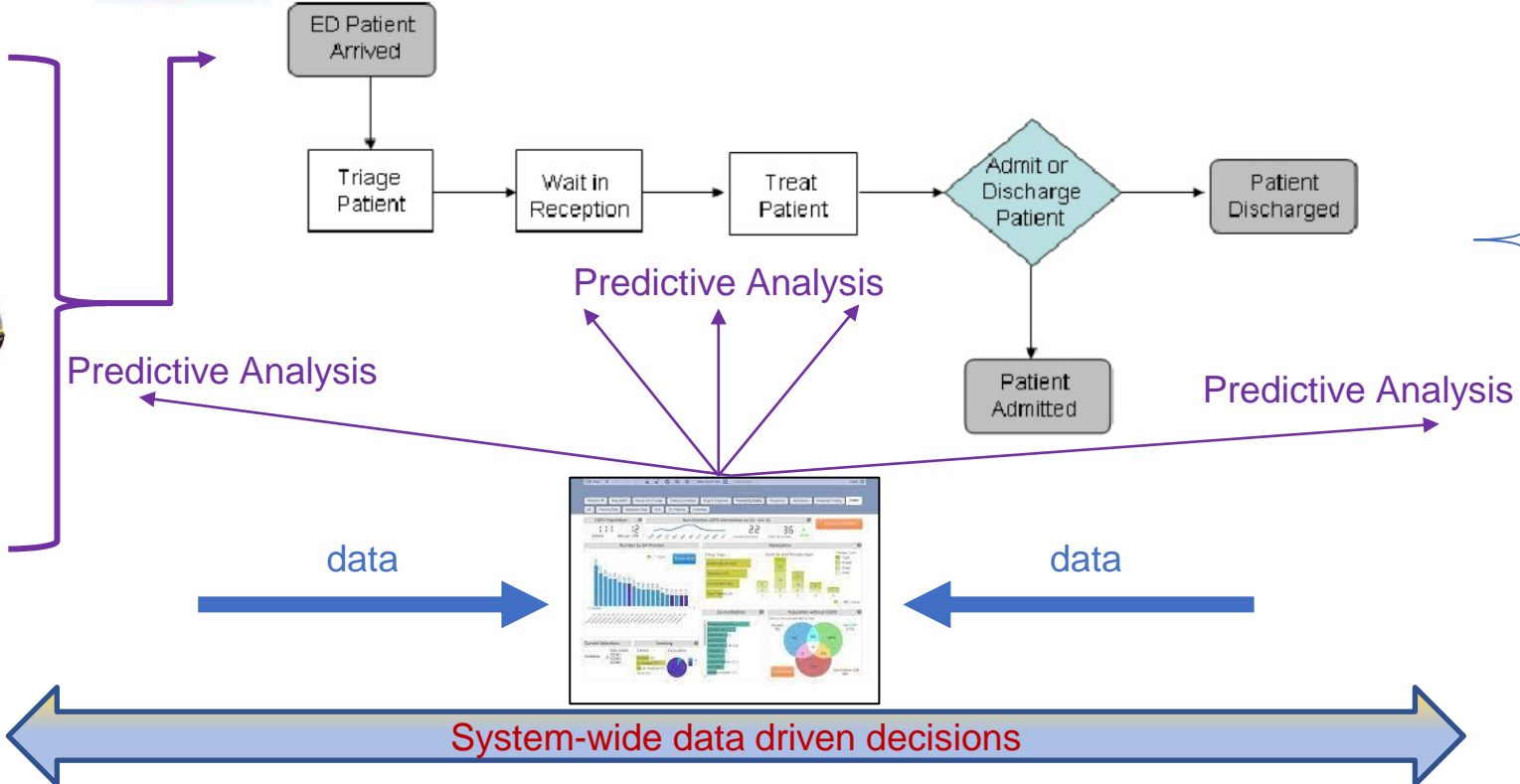
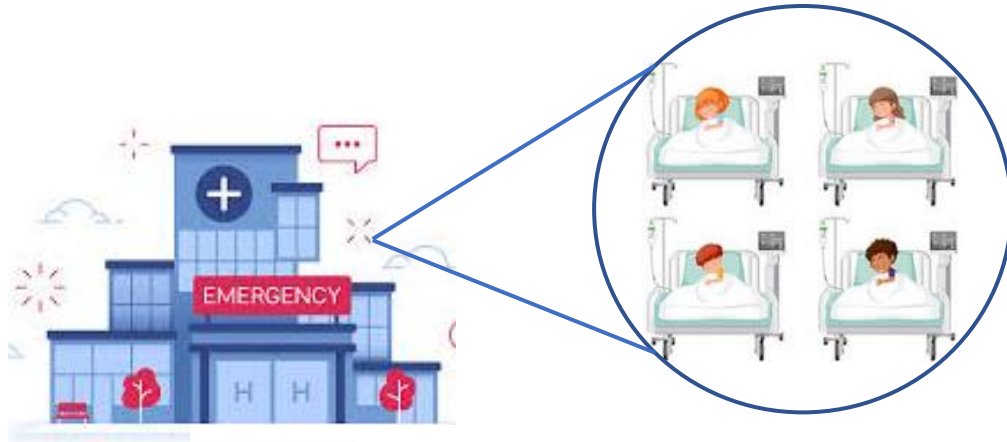
Infrastructure building blocks



System Coordination and oversight




North East and North Cumbria



Leverage installed digital and data assets wherever possible.

North East and North Cumbria


North East and North Cumbria - Strategic Coordination Centre



Near real time metrics

UEC Operational Dashboard

Daily Operational Sitrep Dashboard



UEC-RAIDR
Urgent Care Application

Winter Priority Metrics

Training Video

NHS North East and North Cumbria

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System Overview

System Escalation Overview

Ambulance Service	NEAS	Hospital	Organisation names											
Ambulances able to respond	0	Site OPEL	2	2	3	3	2	2	2	4	3	2	2	
Ambulances at hospital	3	Emergency dept status	2	2	3	4	4	4	3	1	4	4		
Ambulances awaiting handover	3	Critical Care			1	1	1	1	1	1	1	1		
CSP - Call taking	1	Bed Status	3	3	0	0	3	0	0	1	1	2	3	
CSP - CAS	1	Assessment areas										3		
CSP - Dispatch	2	Angioplasty										2		
Ongoing incidents	0	Ambulances awaiting handover	1	1	1	1	1	1	1	1	1	1	1	
REAP Level	2	Ambulances awaiting clear	0	0	1	1	1	1	1	1	1	2	1	
Unallocated incidents	0	Ambulances at hospital	2	2	0	0	0	0	0	0	0	0	0	
		Ambulance activity today			1	2	1	1	1	1	1	1	2	

Ambulance Status		
10	4	1
Handover 0-30	Handover 30-60	Handover 60+

31	57	15
Able to Respond	Unallocated Incidents	Awaiting Handover

Call Status Since Midnight	
880	1,275
999 Calls	111 Calls

Community	Organisation names											
Pharmacy pressures			1	0	0	1	0	0				
GP average OPEL	2	2	2	1	1	3	1	1				
Carehome Covid19 Status	3	3	3	3	3	3	3	3	3	3	3	3
Carehome Bed Capacity - Not inclusive of staffing issues	2	2	2	2	2	2	2	2	2	2	2	2

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Same tools.....

Different views (System/Organisation)

Single version of the truth

Patient and population centred system transformation



North East and North Cumbria



GNCR (HIE/PEP)



NHS App



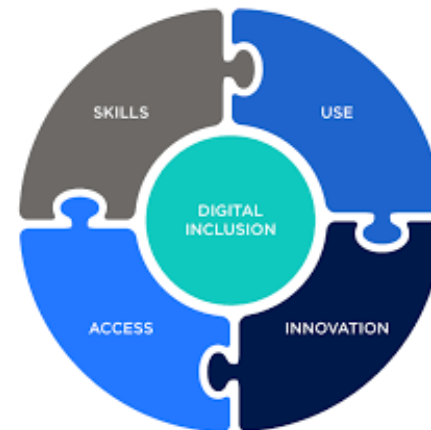
Digital Maternity



Patient and Population Centric



Aging well/Anticipatory care



Digital Inclusion



Cyber Security
Protect/Respond



Digital Diagnostics

Digitise, connect, transform

We will develop our people skills and capabilities

Digital and data services are fast becoming mission critical.

All health and care staff need a basic level of digital, data and analytics skill and capabilities.

Increased digital and data skills will aid increased “user” self-sufficiency.

In the NENC we have;

- established an **Informatics Skills Development Network (ISDN)**,
- created an accredited analytics learning programme (ALP)
- announced the ***Shuri Network and Fellowship programme***

NHS

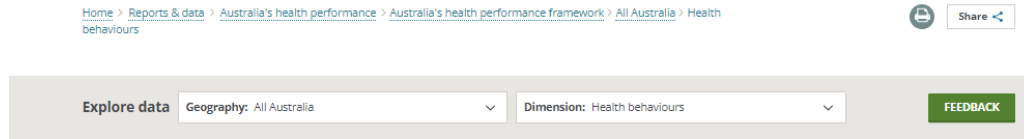
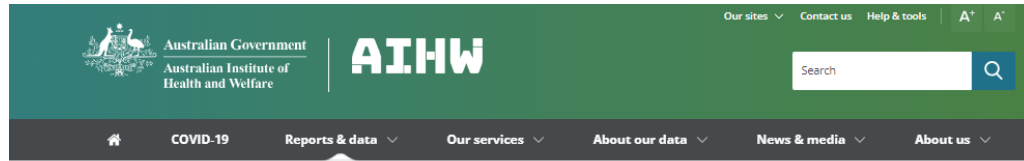
North East and
North Cumbria



skills
development
network



Ambition for the 'near' future – Public transparency



Determinants of health: Health behaviours

[DOWNLOAD DATA](#)

A person's health is influenced by their behaviours. The impact of many health problems experienced by Australians could be reduced or prevented entirely by changing behaviours related to such things as tobacco smoking, being overweight or obese, high alcohol use, physical inactivity and high blood pressure.

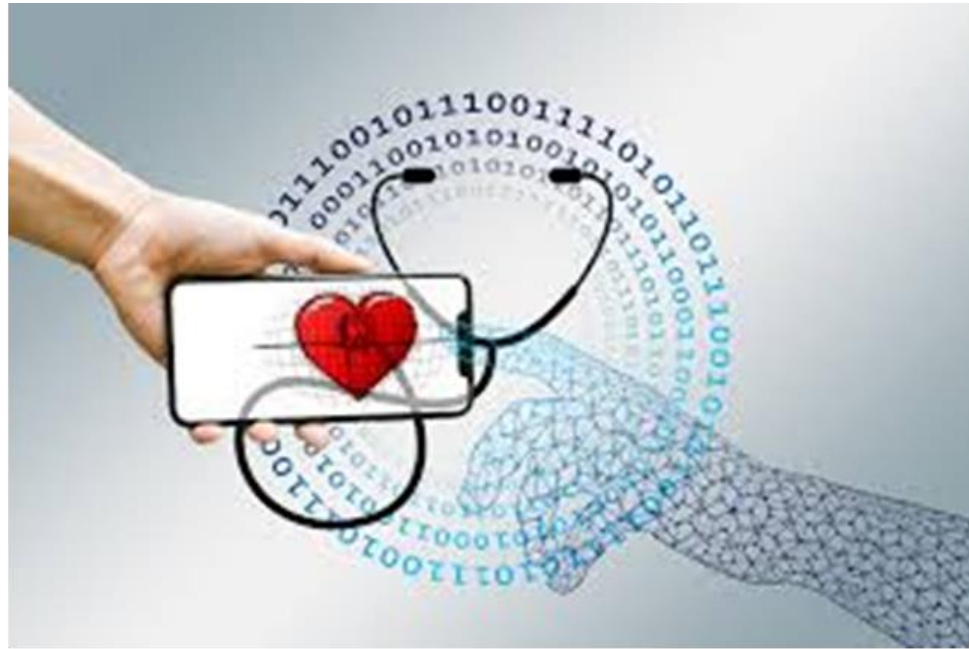
These indicators focus on behaviours that are known to put a person's health at risk.

Part of: [Australia's health performance framework](#)

Indicators

- Rates of current daily smokers** (selected)
- Children exposed to tobacco smoke in the home
- Levels of risky alcohol consumption
- Inadequate fruit and vegetable intake
- Insufficient physical activity
- Unsafe sharing of needles





#DataSavesLives