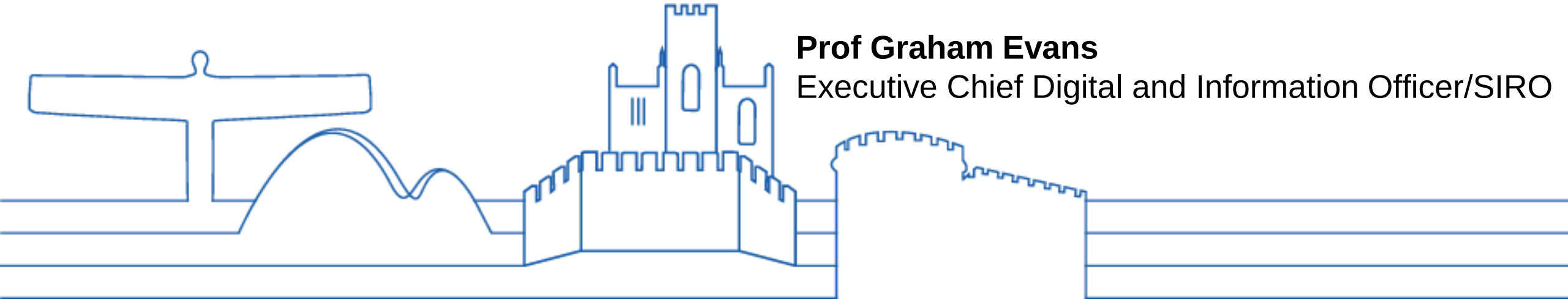
Integrated Care Partnership :

NHS
North East and
North Cumbria

21 June 2023

'Developing an Information system for the North East and North Cumbria'



Prof Graham Evans
Executive Chief Digital and Information Officer/SIRO

Regional perspective

NHS
North East and North Cumbria

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

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

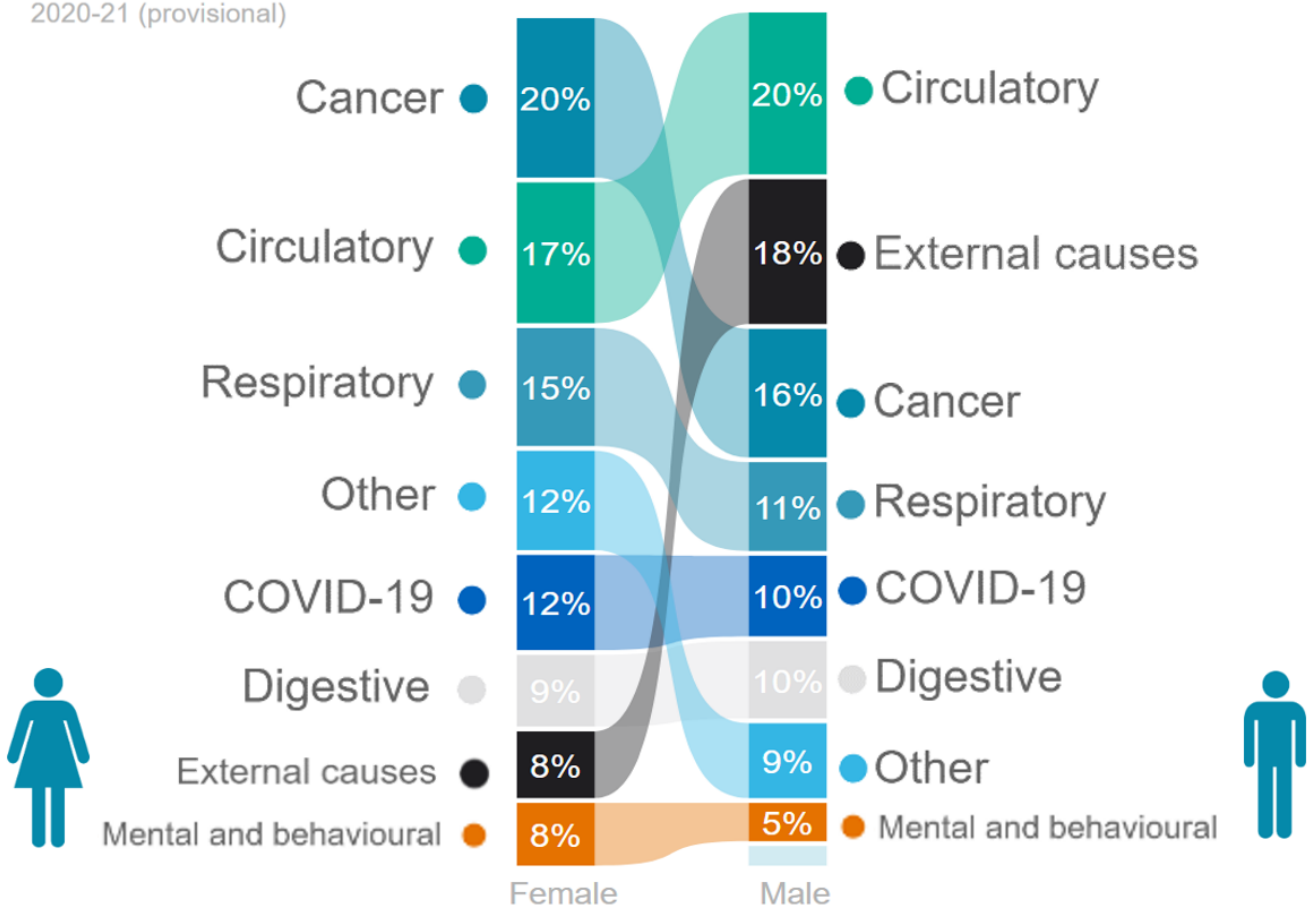
- The main three causes of death in women: Cancer, circulatory* and respiratory disease.
- In men, the main three are circulatory disease, external causes** and cancer.

*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)



OHID Segment tool Jan 2023. Available via Picture of Health North East and Yorkshire 2023

Regional determinants of health

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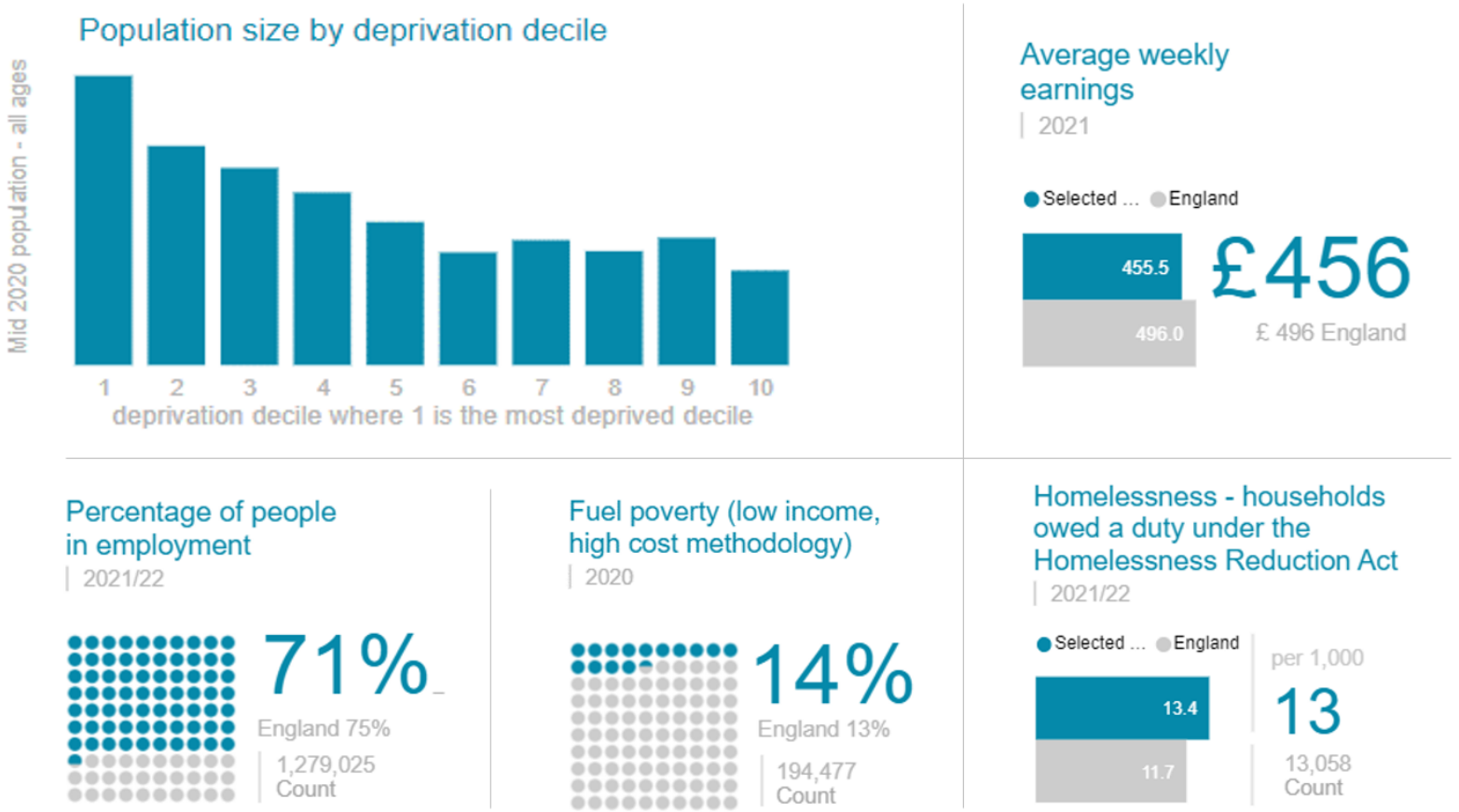
North East and North Cumbria

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



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. [1] Deprived neighbourhoods are those lower super output areas (LSOAs) in the first two most deprived deciles of England.

Regional Pandemic impact

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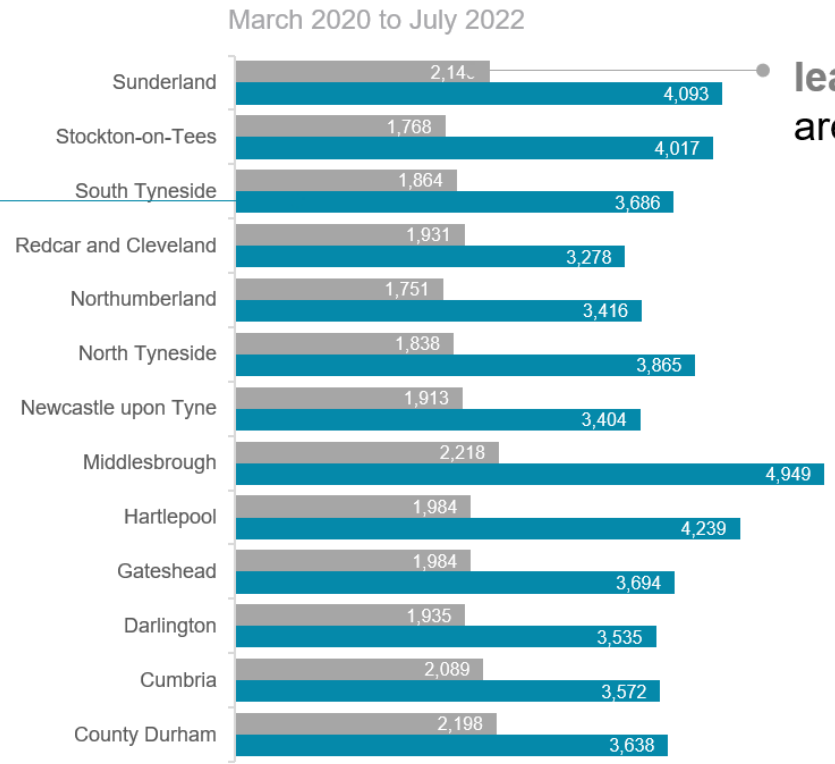
Pandemic impact: Disparities in death rates between the least and most deprived neighbourhoods within local authorities

Death rates in the **most deprived** areas are around twice as high compared to the least deprived neighbourhoods[1]



The chart describes cumulative age-standardised mortality rate per 100,000 population, for deaths in North East local authorities and Cumbria[2], 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

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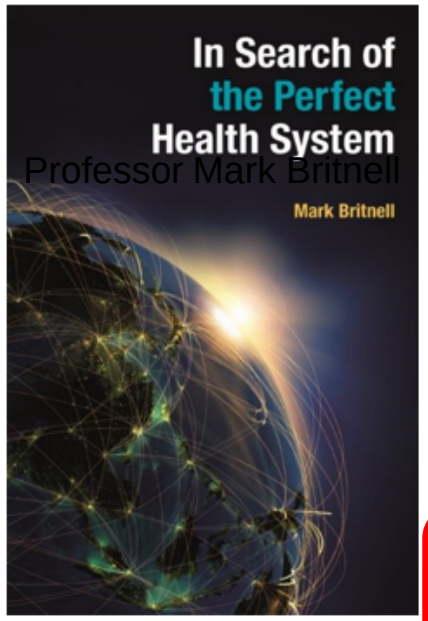
High performing integrated care systems have...



Professor Mark Britnell

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

Ref: Professor Mark Britnell - KPMG

Our strategic alignment – key steps

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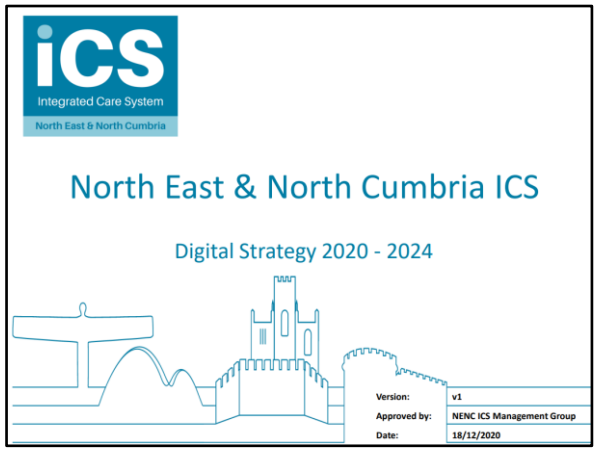
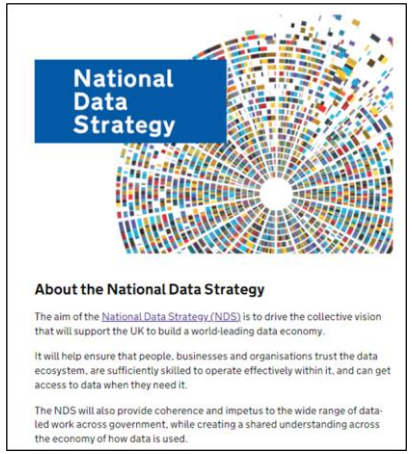
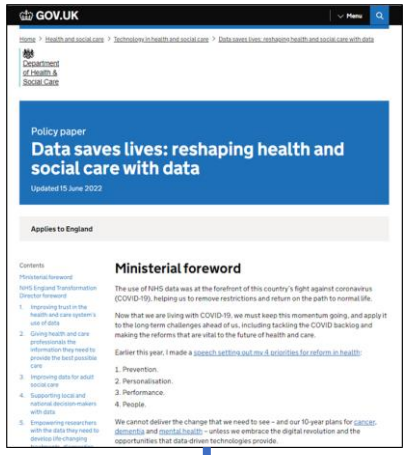
True North



December 2020





December 2022

National data direction

- What good looks like
- Digital inequalities

Sets strategic priorities

Digital and data chapter input

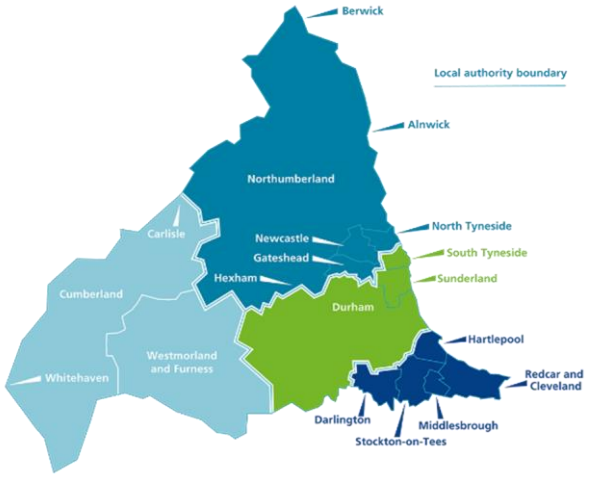
Key points *– Data driven decisions, DD&T workforce etc.*

Refresh June 2023

ICS
Integrated Care System
North East & North Cumbria

5 year joint Forward plan

The golden thread…



- ❑ 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

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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True North

Ambitions ICB/ICS….

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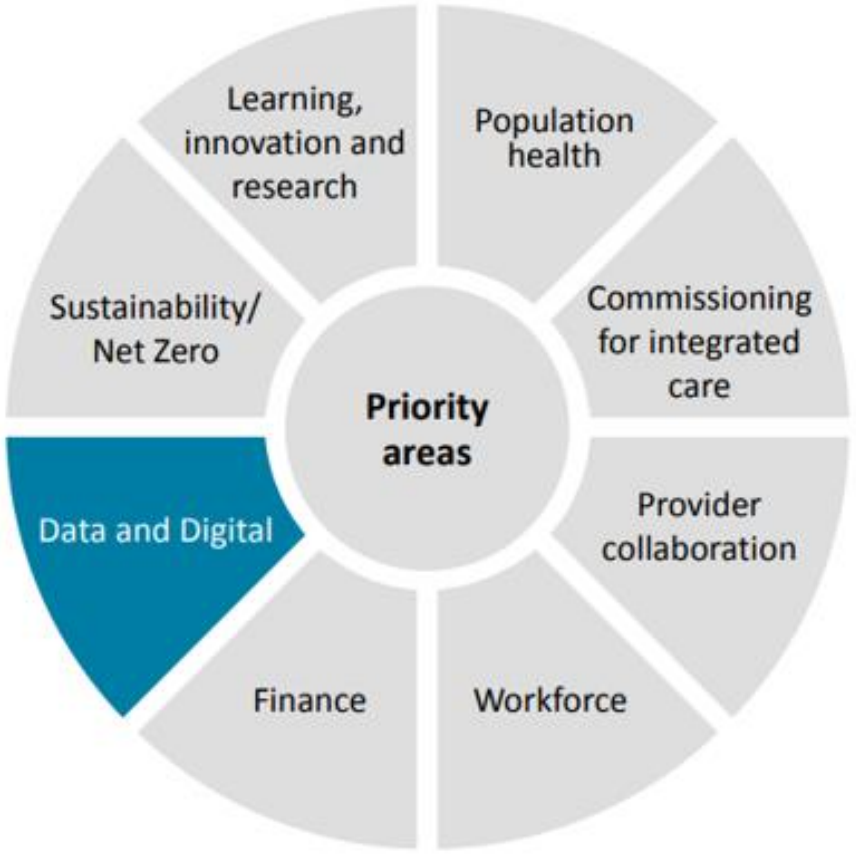
Essentials Connecting Empowering Improving Learning

Digitise **Connect** **Transform**



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

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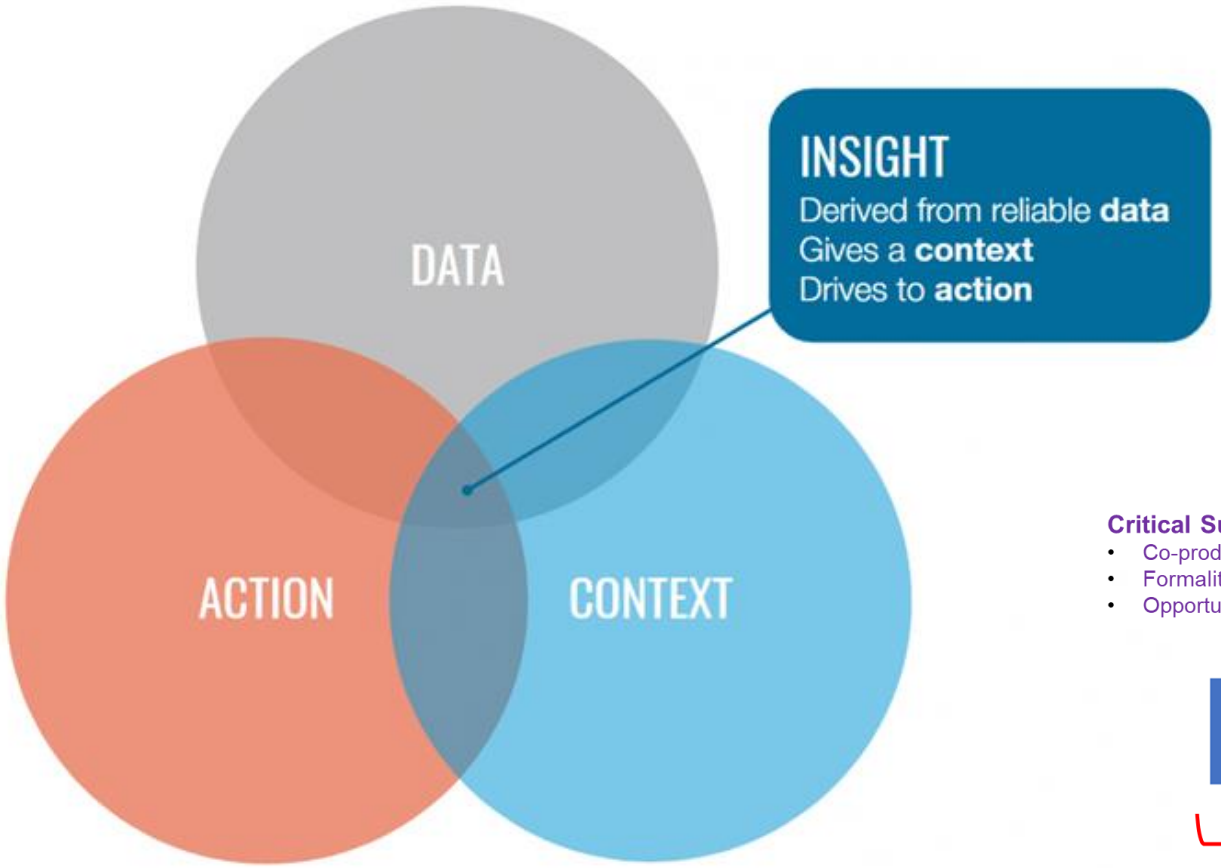
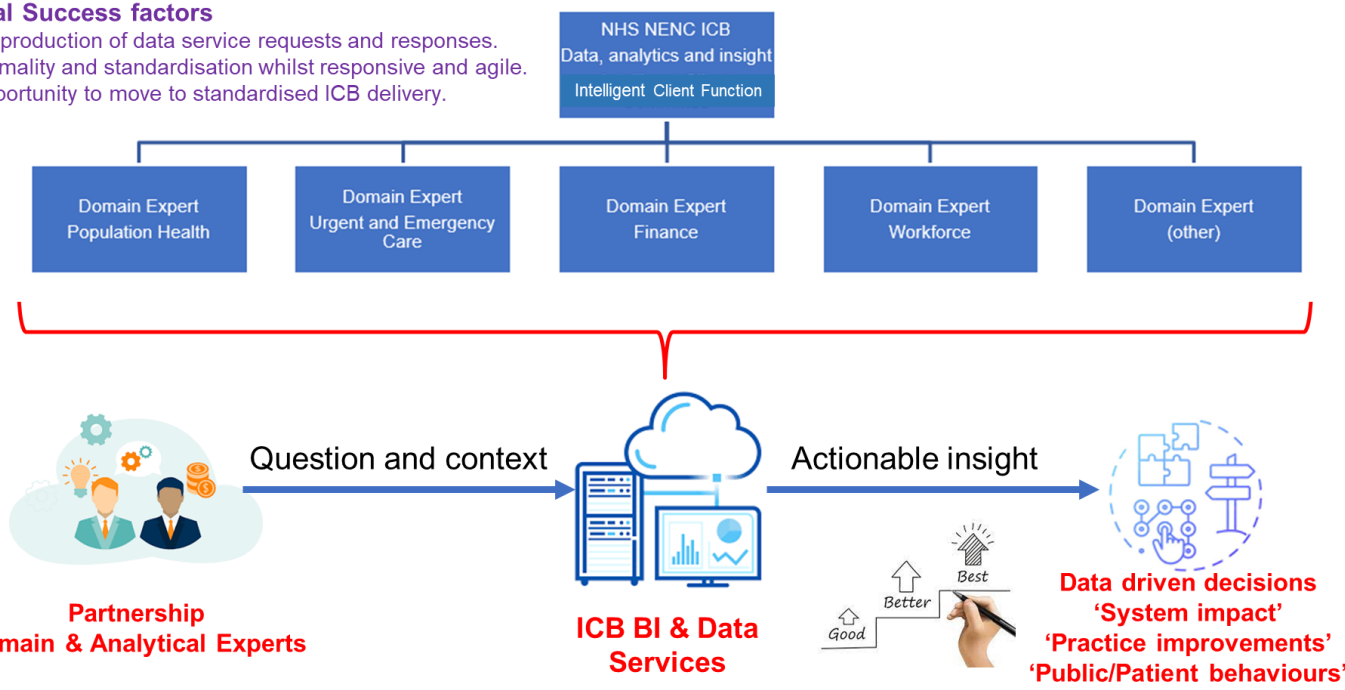


Critical Success factors

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



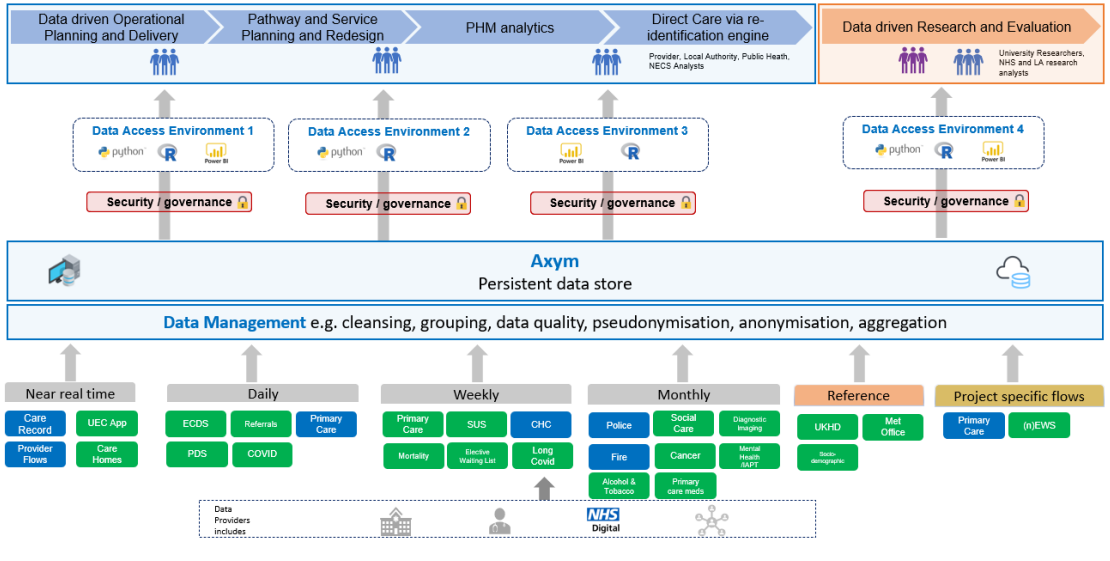
Digital technology infrastructure: key principles

NHS North East and North Cumbria

- 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

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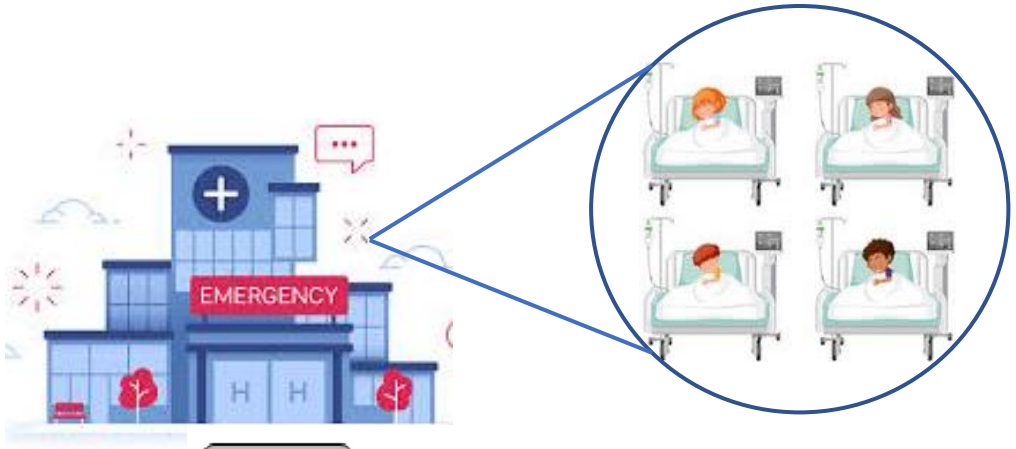

ED Patient Arrived

Triage Patient

Wait in Reception

Treat Patient

Admit or Discharge Patient

Patient Discharged

Patient Admitted

Predictive Analysis

Predictive Analysis

Predictive Analysis

data

data

System-wide data driven decisions

Leverage installed digital and data assets wherever possible.

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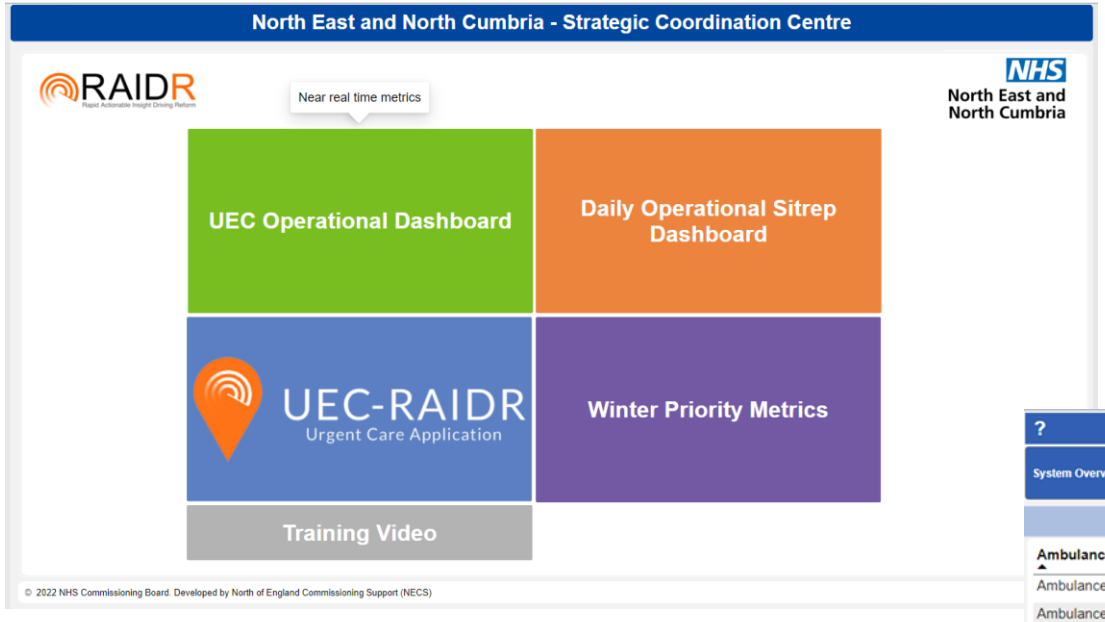

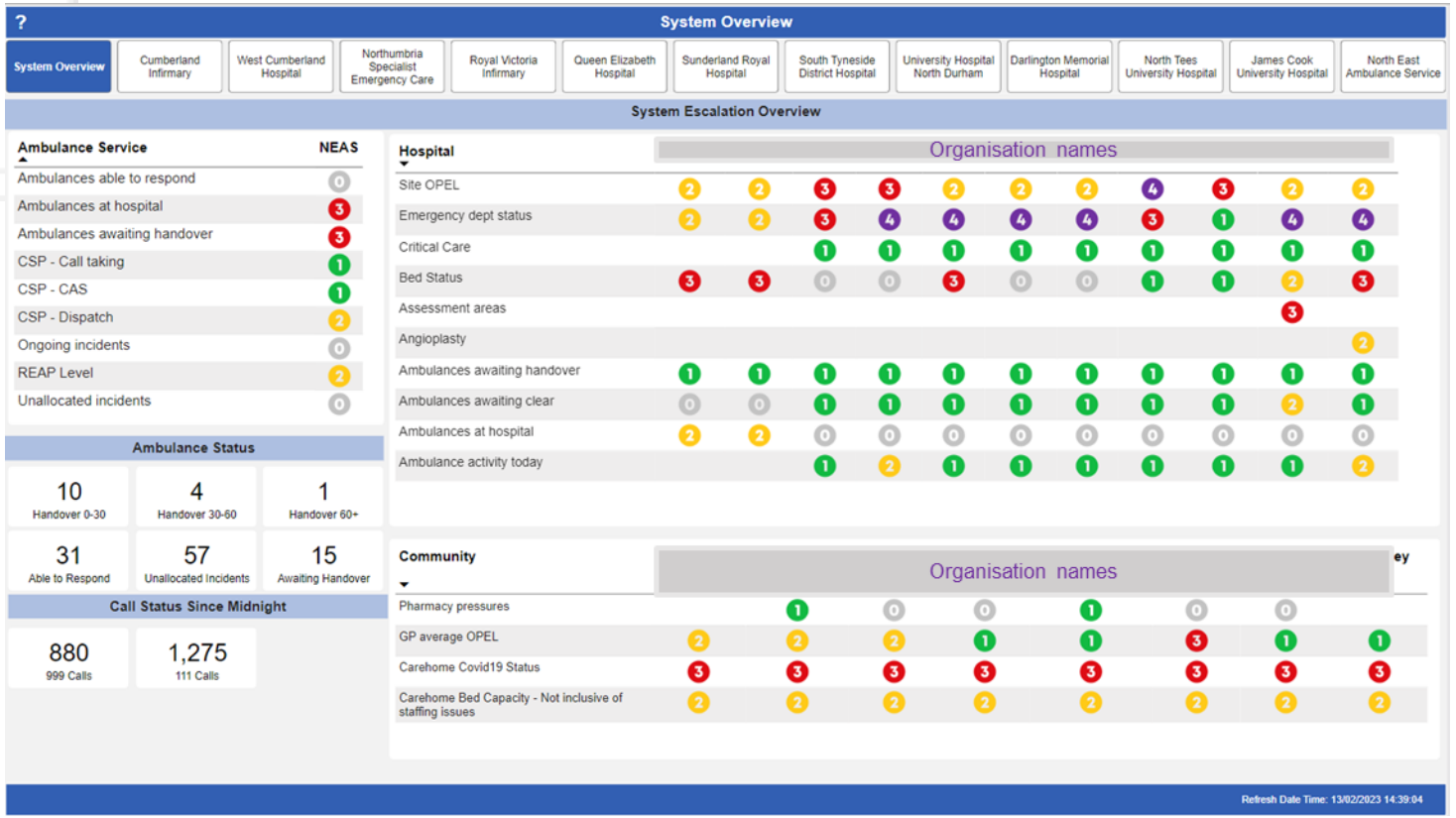

Same tools…..

Different views (System/Organisation)

Single version of the truth

Patient and population centred system transformation

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GNCR (HIE/PEP)

NHS App

Digital Maternity

frailty icare

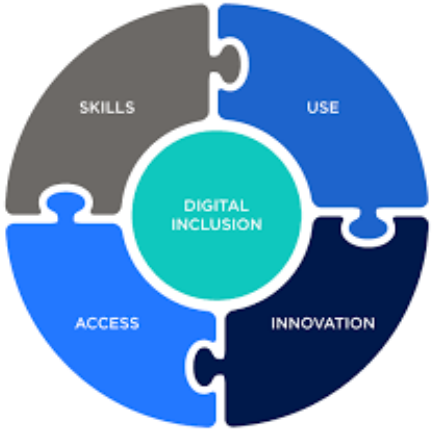
Aging well/Anticipatory care

Patient and Population Centric

Digital Social Care

NHS
GP IT futures

northern cancer alliance



Digital Inclusion

Cyber Security
Protect/Respond

Digital Diagnostics

Digitise, connect, transform

We will develop our people skills and capabilities

NHS North East and North Cumbria

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.

skills development network

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*

Shuri Network

Ambition for the ‘near’ future – Public transparency

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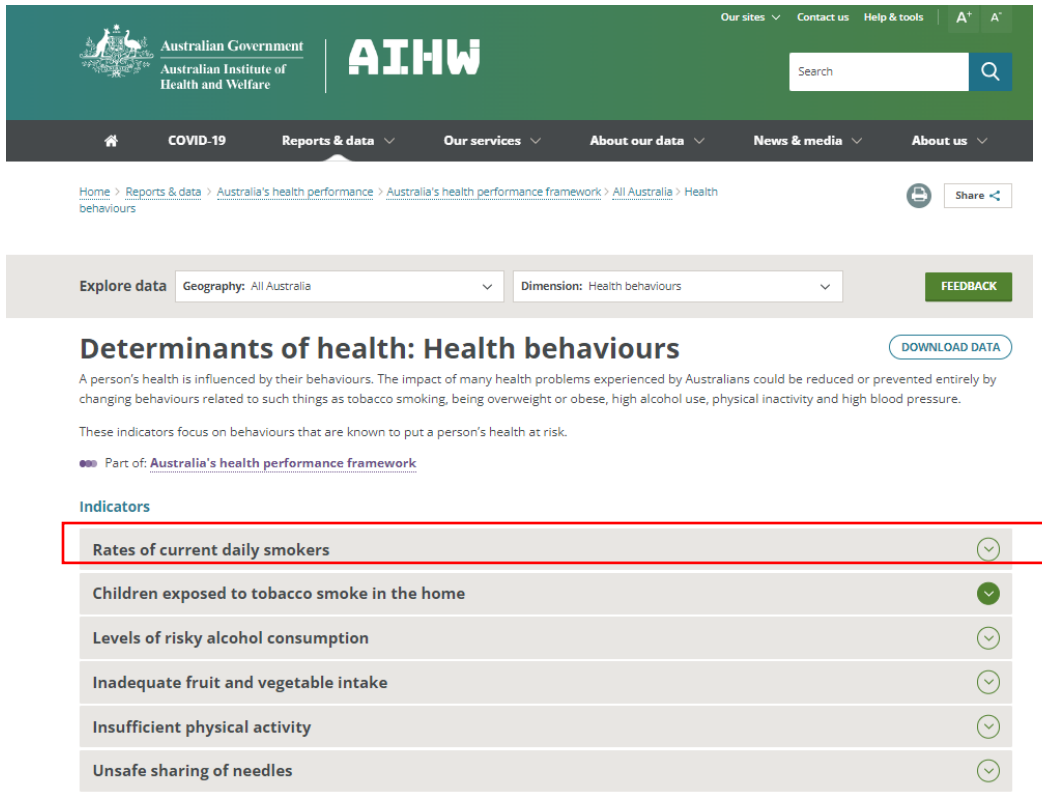

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#DataSavesLives