Data informed population health improvement

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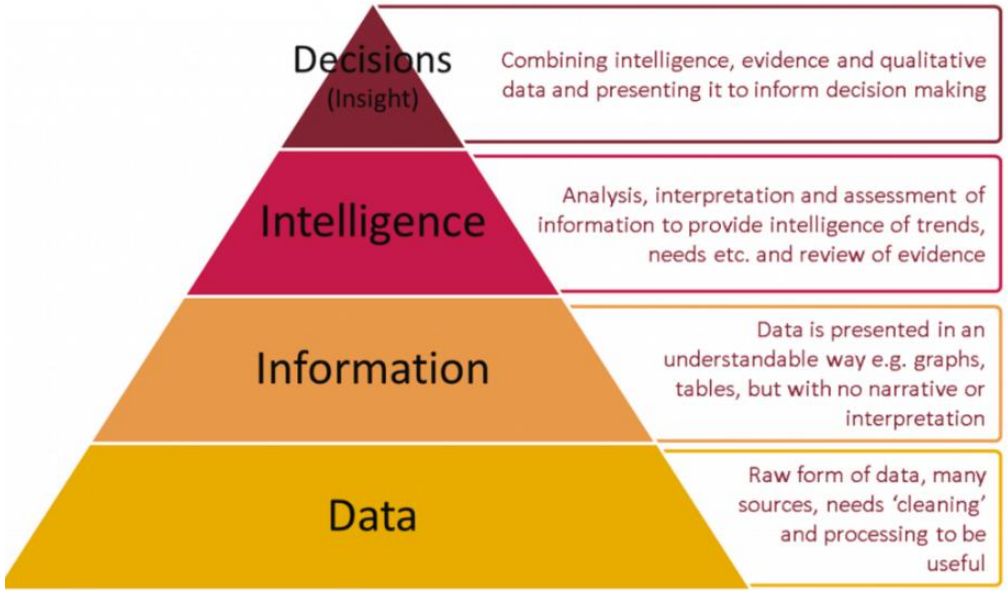
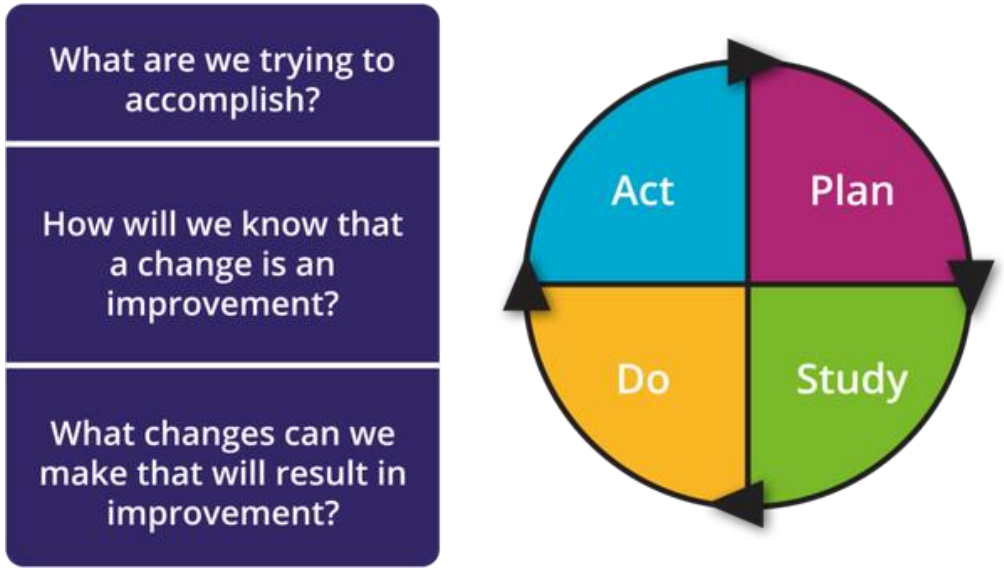
Data informed population health improvement

Is this new?

Partnership working

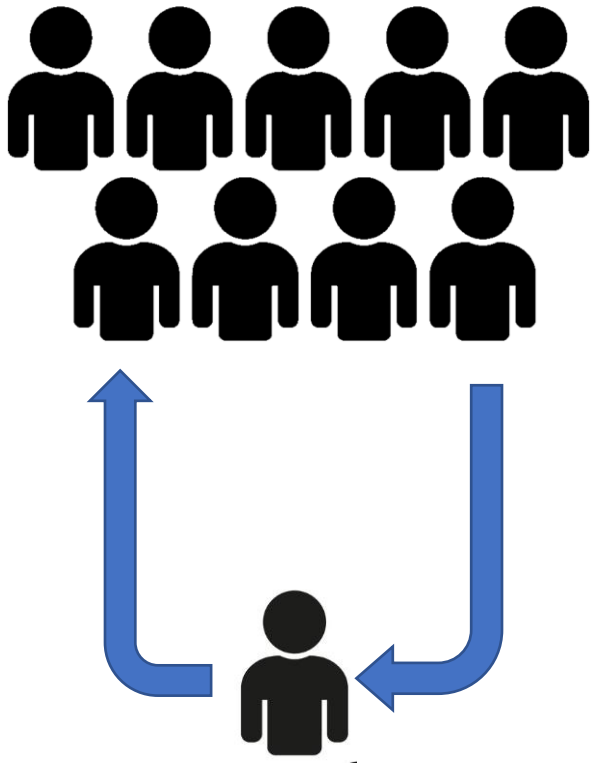


From data to decisions: Building blocks for population health intelligence systems - UK Health Security Agency (blog.gov.uk)



Quality improvement — Chelsea and Westminster Hospital NHS Foundation Trust (chelwest.nhs.uk)

Data informed population health improvement (2)



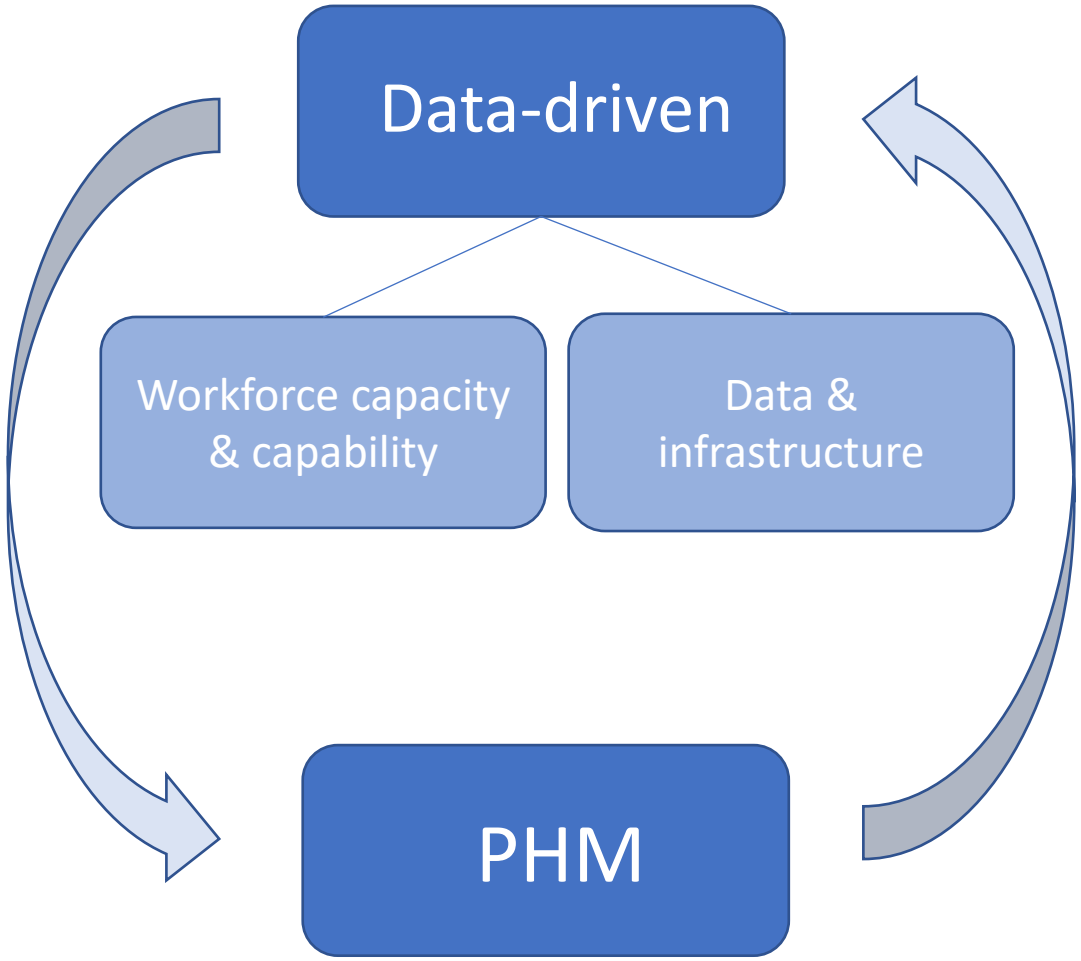
Population Health Management supports proactive targeted action

- Identifying high risk and rising risk groups
- An approach to support work to promote prevention and address health inequalities
- Predictive modelling
- Enabled through shared data, insight, and partnership working to support population health improvement

Data informed population health improvement

"Population health management (PHM) improves population health through data-driven planning and the delivery of proactive care to optimise health outcomes."

NHS England » Population health management



Local and national drivers on health and care data and intelligence

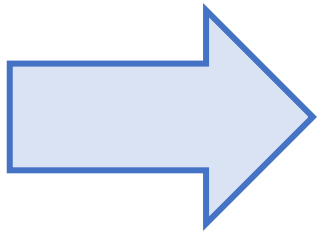
NHSx What Good Looks Like framework for digital transformation

Building and integrated care system intelligence function

Goldacre Review

National and subnational initiatives:

- Federated Data Platform
- Secure Data Environments

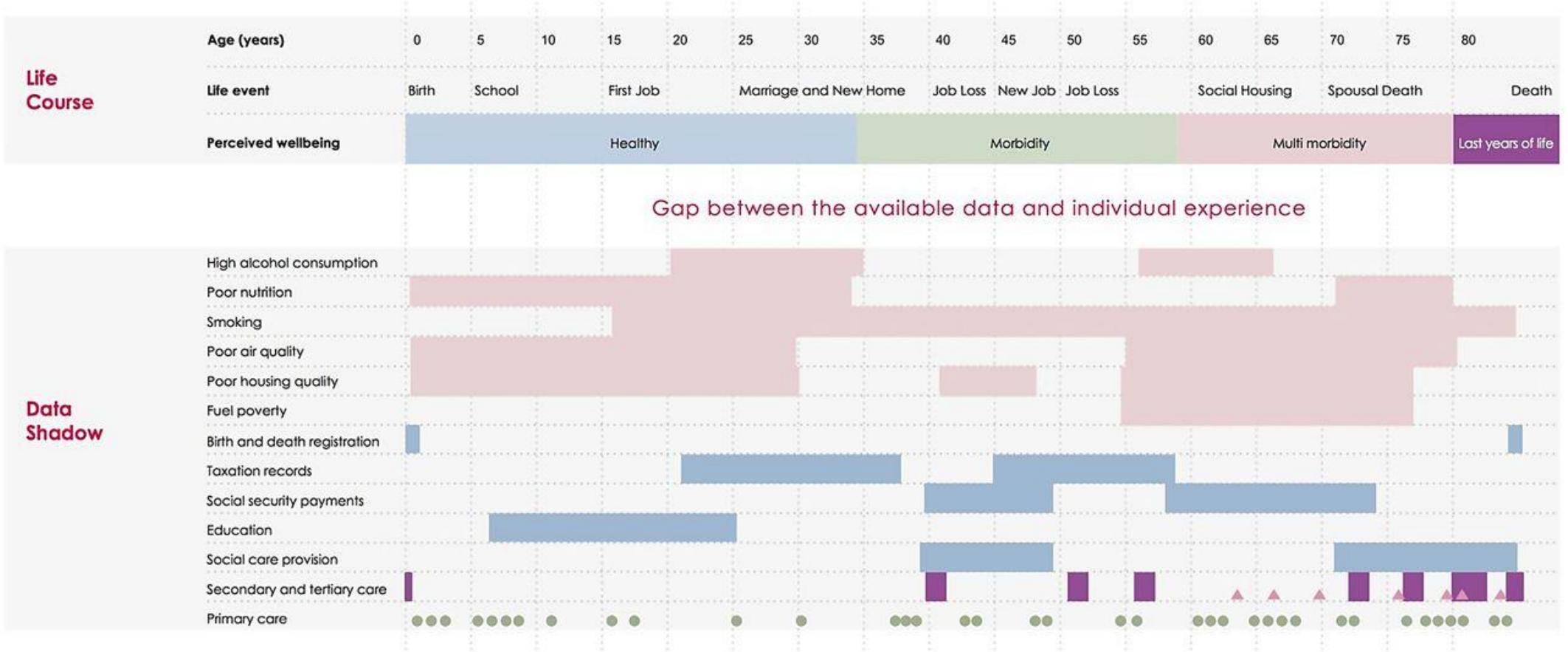


ICS intelligence function: A multi-disciplinary team drawing on available expertise and skills across the system to address priority issues

ICS-wide population health intelligence linked data platform

Drive towards **greater join up across sectors and across health and care systems**

Comparison between the individual experience and the data shadow: We map the life course of a hypothetical individual, showing age in 5-year increments, important personal events and their personal perception of health.



Sarah R Deeny, and Adam Steventon BMJ Qual Saf 2015;24:505-515

BMJ Quality & Safety

Some examples of the use of linked data

In Scotland, linkage of data from the Pupil Census, NHS primary dental care and hospital discharges and from the National Dental Inspection Programme showed that school age looked after children were more likely to receive urgent dental treatment at 5 years of age, less likely to attend a dentist regularly and more likely to have teeth extracted under general anaesthetic (1)

Analysis of linked electronic health records in Kent showed per capita health and social care costs were 35% higher in the most deprived areas of the county (2)

Data from the Wales Health Survey data, A&E attendances, hospital admissions, Welsh Demographic Service and police-recorded crime data were anonymously linked within the Secure Anonymised Linkage (SAIL) Databank. Analysis showed that change in outlet density was associated with change in alcohol-related harms (3)

(1) Inequalities in the dental health needs and access to dental services among looked after children in Scotland: a population data linkage study | Archives of Disease in Childhood (bmj.com)
(2) Social gradients in health and social care costs: Analysis of linked electronic health records in Kent, UK – ScienceDirect
(3) Scientific summary - Change in alcohol outlet density and alcohol-related harm to population health (CHALICE): a comprehensive record-linked database study in Wales - NCBI Bookshelf (nih.gov)

Engaging the public on how their health and care data should be used

Source: Quick Guide to explaining how patient data is used Understanding Patient Data [Understanding Patient Data]

NHS England Sept 2023 News Public asked to share future use of health data by the NHS [NHS England » Public asked to shape future use of health data by the NHS]

Members of the public will be asked to help shape how the NHS uses their health data to improve patient care, as part a series of major events next year.

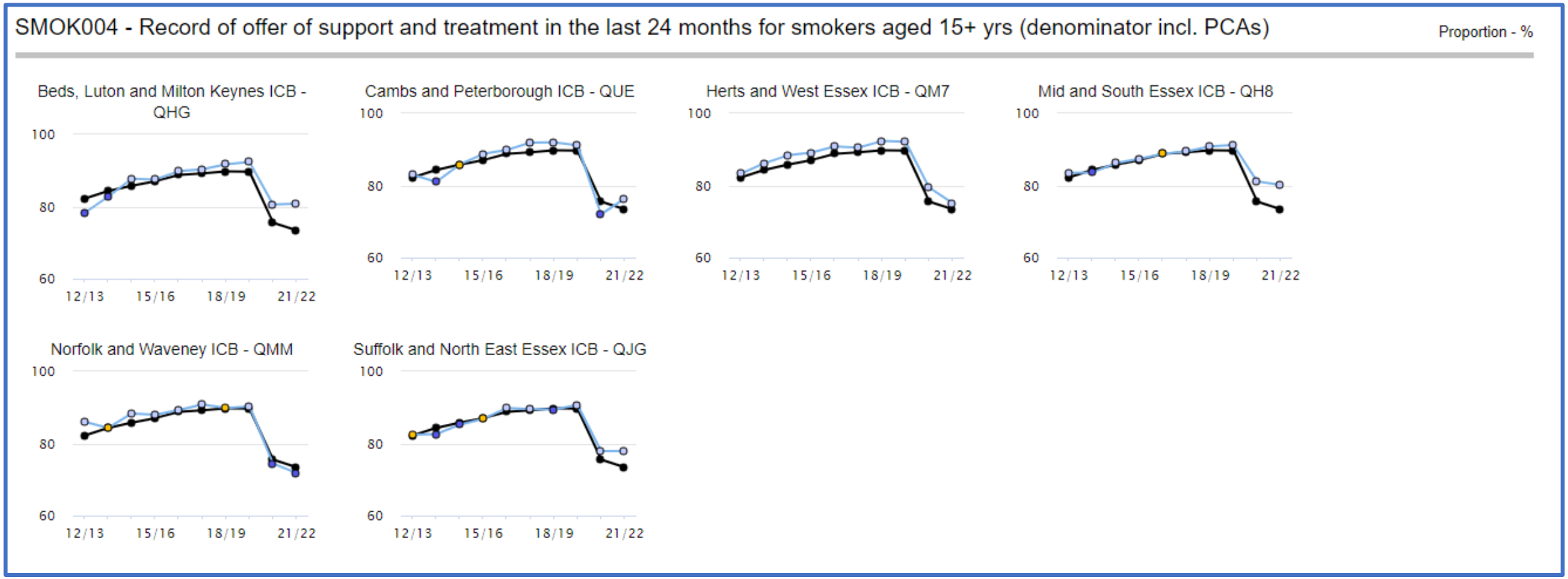
The events, starting in the new year and continuing until March 2025, will gather public views on digital and data transformation in the NHS.

Using NHS data to improve healthcare

Professor Sir Chris Whitty writes for The Times on how using data effectively and safely can improve patient care and bolster research

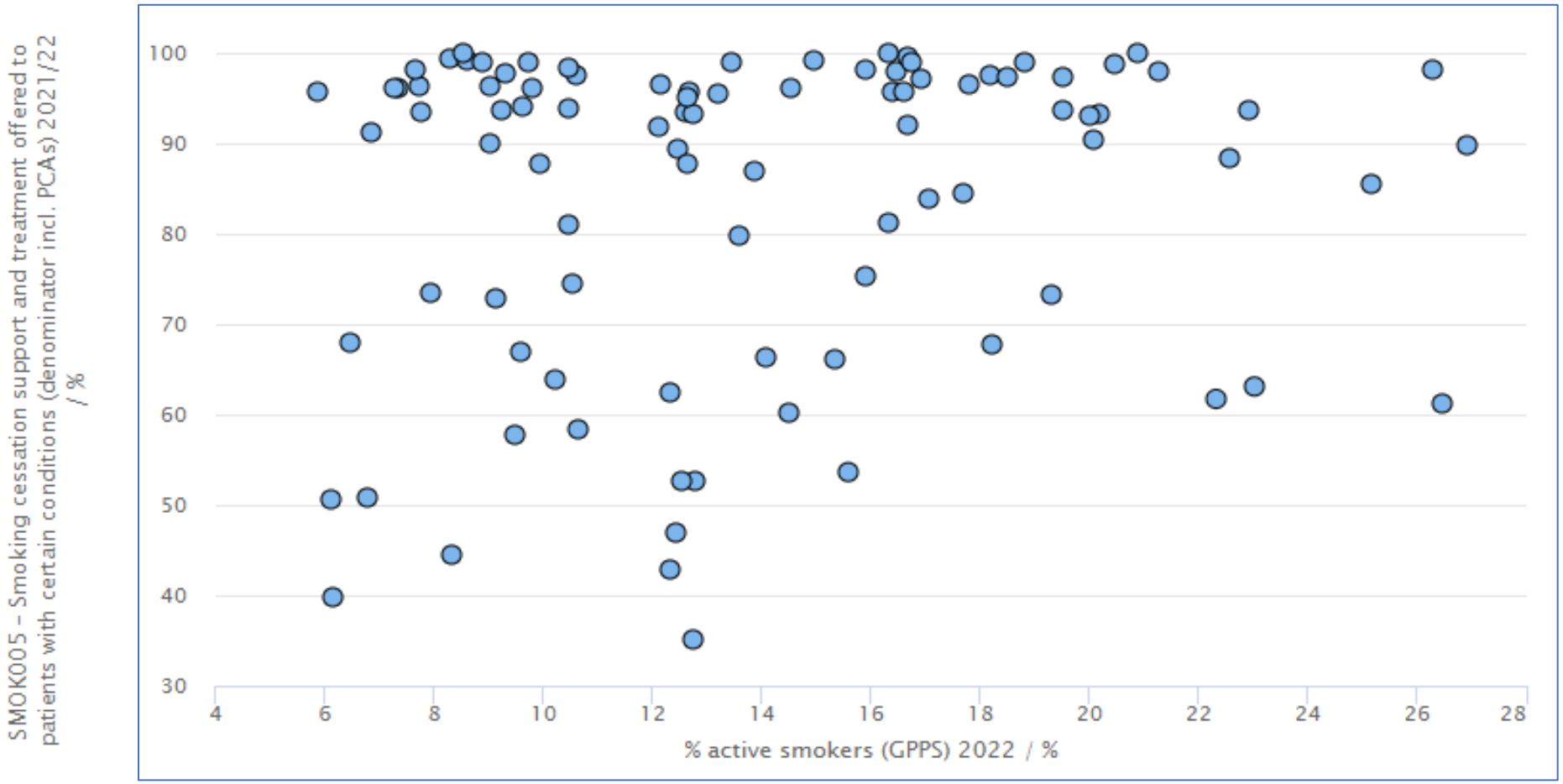
Source: DHSC Authored article Sept 2023 [Using NHS data to improve healthcare - GOV.UK (www.gov.uk)]

Adding to the already rich range of population health data



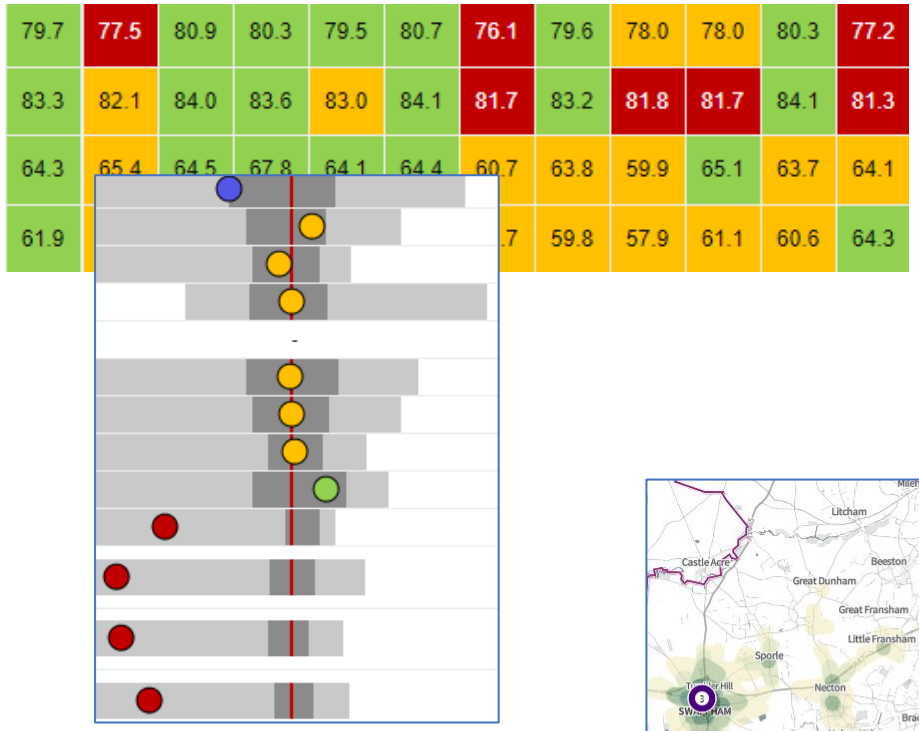
Source: OHID National General Practice Profiles [National General Practice Profiles - Data - OHID (phe.org.uk)]

The proportion of active smokers in a practice population compared to the proportion of patients who smoke and have certain health conditions, data for one ICB shown as an example

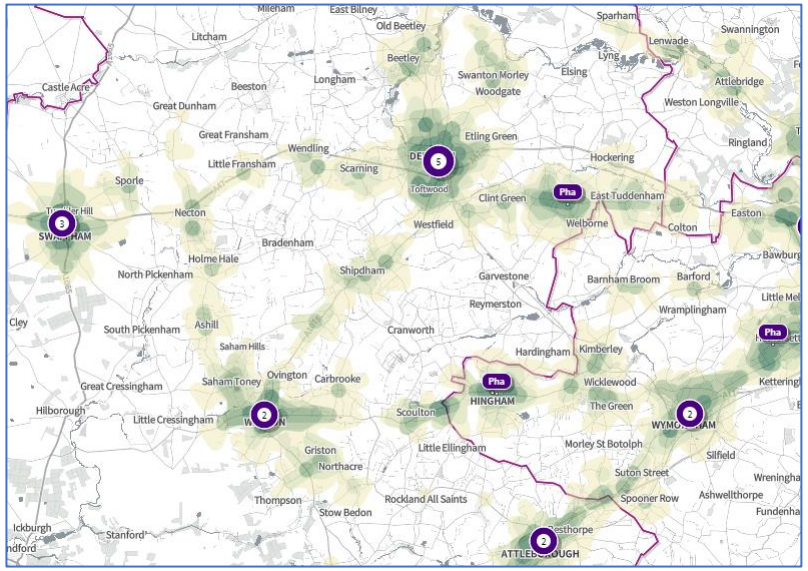


Source: OHID National General Practice Profiles [National General Practice Profiles - Data - OHID (phe.org.uk)]

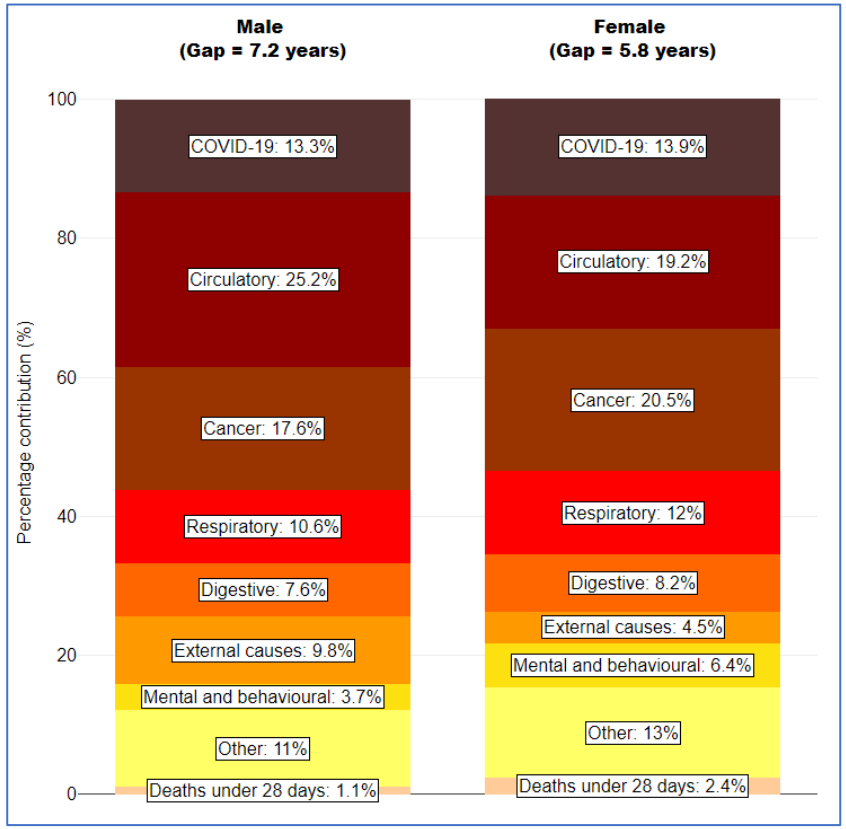
Examples of other OHID population health data platforms



OHID Fingertips data platform
[Public health profiles - OHID (phe.org.uk)]



DHSC (OHID) SHAPE Place Atlas [SHAPE Place (shapeatlas.net)]



OHID Segment Tool one of the health inequality resources
[Segment Tool (phe.gov.uk)]

For more details, please visit the OHID (LKIS) market stall

Opportunities

- Data and intelligence developments
  - Looking to enrich with non-NHS datasets and perspectives
  - Value of analytics, qualitative insight, evidence and evaluation

- Partnership working
  - Integrated care systems development
  - Wider workforce involvement
  - Supporting embedding public health principles and expertise

Population health management | Deloitte UK

Questions to help answering

How can we evaluate the impact of services and approaches?

How can we make the best use of available resources?

What will be our future population needs and priorities?

How can we work across settings to support people to remain well?

How can we ensure services are reaching those who could benefit the most from them?

Who is not represented in NHS datasets?

Who is at an increased risk of worse health outcomes?

System

Place

Neighbourhood

Individual

Office for Health Improvement and Disparities

[Population Health Management - Suffolk & North East Essex Integrated Care System (sneeics.org.uk)](#)
[Population Health Management - Bedfordshire, Luton and Milton Keynes Integrated Care System (blmkhealthandcarepartnership.org)](#)

Example projects

Norfolk and Waveney

- Providing proactive population health and care

Mid and South Essex

- Improving Cardiovascular Disease management

Hertfordshire and West Essex

- Supporting Integrated Neighbourhood Teams to take a PHM approach

Improving lives together
Norfolk and Waveney Integrated Care System

NHS
Norfolk and Waveney

Population Health Management in Norfolk and Waveney

Protect-NoW

Proactive Population Health and Care for Norfolk and Waveney

Suzanne Meredith

Associate Director Population Health management, Norfolk and Waveney ICB

Deputy Director of Public Health, Norfolk County Council

27th October 2023

Norfolk County Council

Improving lives **together**

Norfolk and Waveney Integrated Care System

NHS

Norfolk and Waveney

Norfolk and Waveney Population

Population

1,033,000 residents

1 in 5 are over **65**

1 in 20 are under **5**

The population is generally **older** than the England population.

Norfolk and Waveney population is expected to **grow** by about **110,000** people between 2020 and 2040, the **largest growth** is expected in the **older** age bands.

Norfolk and Waveney is **less ethnically diverse** than England, about **9%** are non-white British compared to **21%** in England.

Deprivation

Almost **164,000** people live in communities that are in the

20% most deprived in England.

The most deprived communities are in the urban areas of Great Yarmouth, King's Lynn, Lowestoft, Norwich and Thetford.

But there are also pockets of deprivation in rural areas too.

Births

Births are declining

In 2019 there were about **9,100 births**.

The **rate of births** to mothers aged 15-44 is **lower** compared to England.

Deaths

There were about **12,700 deaths** in 2020.

All cause mortality rates are **lower** than England

Leading causes of **death for males and females**;

- Dementia and Alzheimer's
- Heart Disease
- COVID-19
- Stroke and Lung Cancer

Life and Healthy Life Expectancy

Life expectancy is almost **80 years for males** and **84 years for females**, slightly **higher** than England average.

The **gap in life expectancy** between the most deprived and least deprived areas is over **8 years for males** and over **6 years for females**.

Deaths from **circulatory diseases, cancer and respiratory diseases** contribute most to this life expectancy gap.

Healthy life expectancy is about **62.7 years for males** and **62.4 years for females** **lower** than England and has decreased over the last few years.

This means that people spend in ill health is getting longer and is **17.4 years for males** and **21.7 years for females**.

Norfolk County Council

[Norfolk Insight - Demographics and Statistics - Data Observatory]

Protect NoW

Protect-NoW

Proactive Population Health and Care for Norfolk and Waveney

Protect NoW aims to provide **proactive** population health and care across Norfolk & Waveney:

- **Clinically and Data led**: using data sources that enable us to quickly identify individuals with health risks
- **Prevention**: we focus on individuals that have reversible risks
- Inequalities: we aim to **tackle inequalities** by focussing on areas of high deprivation / poor health outcomes / specific groups that have had low engagement with services

Protect NoW Projects: How do they work?

Uses primary care data to identify large numbers of patients with specific risks to their health:

- Engages with them to offer targeted support and intervention to PREVENT ill health and future disease
- Data 'sorting' means we can focus our efforts in geographical areas of high deprivation / poor health outcomes as well as support specific patient groups that have previously had low engagement with health services
- Through patient letter mailouts, group texting and telephone call follow up from our 'virtual support team' we can engage with large numbers of patients 'at scale'
- Helps us standardise access to health and care services and engage with those most in need of intervention and support
- Protect Now team comprises virtual support team, primary care / GPs and specialists from across the health and care system – providing strategic planning and additional operational capacity.

Protect Now supports the delivery, of clinically-led projects that reduce unwarranted variation and health inequalities

Covid Vaccination Uptake

Aim: Increase vaccine uptake and gain insight into hesitancy.

Scope: To reach out to all patients considered at risk, immunosuppressed and housebound and book them in for the vaccination within various sites across N&W. (Partnership with NHSE, NCC, QEH, NNUH, JPAGET, GP Practices, PSL)

Flu Vaccination

Aim: Increase flu vaccination uptake and support to book

Scope: 3,000 most at-risk patients not vaccinated against flu in the preceding 12 months.

(Partnership with PSL & GP Practices)

Reducing avoidable admissions

Priority Patient Review

Aim: Reduce hospital admissions through primary care risk alerts relating to six biomedical markers – review, action and follow up.

Scope: 33 Practices across N&W, 12 month Pilot project.
(Partnership with PSL & GP Practices)

Diabetes prevention

Aim: Increase referrals into National Diabetes Prevention Programme to prevent / reverse type 2 diabetes and address clinical variation.

Scope: 43,000 people in N&W with pre-diabetes / HBA1c of 42 – 47 in the last 24 months. Initial cohort circa 15,000 of in areas of highest deprivation.
(Partnership with PSL, Reed Health, GP Practices)

Improving Access Psychological Therapies (IAPT)

Aim: Increase referrals to Wellbeing Service and address clinical variation.

Scope: 8,000 Patients prescribed medication for depression / anxiety but not accessing IAPT. Focus on Practices with the biggest 'gap to ambition'.

(Partnership with Wellbeing, NSFT & PSL)

Health checks

Aim: Encourage patients who are overdue their health check, to take up the offer.

Scope: Aged 40 – 74, significantly overdue their health check. Focus on Practices with the biggest 'gap to ambition'.

(Partnership with NCC)

Pain management

Aim: Triage and prioritise waiting patients by acuity.

Scope: Patients waiting more than 20 weeks for a first outpatient appointment in West Norfolk.
(Partnership with QEH)

Cervical screening

Aim: Increase cervical screening in eligible women with no recorded cervical screening or none in last 3-5 years and gain insight into reasons for missed appointments / encourage to re-book.

Scope: 25,000 + over two years across N&W – most at risk (2,500) through smoking and lifestyle identified.
(Partnership with PSL, GP Practices)

Long Covid clinic design

Aim: Gain insight from those with lived experience of Long Covid to inform design of service specification for commissioning Long Covid clinics from community provider.

Scope: 13,500 people across N&W 12+ weeks after confirmed Covid 19 infection.

(Partnership with PSL, GP Practices)

Cataracts waiting list

Aim: To reduce back log and inequalities in the cataract's surgery waiting list at the NNUH (70+weeks).

Scope: Offer patients the surgery in commissioned providers by the CCG (legacy).
(Partnership with NNUH)

Housebound vaccination

Aim: Support GP Practices Covid vaccination rollout to housebound patients.

Scope: GP Practices provided a list of patients identified in their system as Housebound, the VST contacted these patients to confirm their status and if they wanted to get the vaccine.
(Partnership with GP Practices)

Cold homes

Aim: Identify vulnerable residents living with chronic respiratory conditions, who may also be eligible for financial support from the Household Support Fund, but unaware of their eligibility.

Scope: VST to call these patients and refer them to their registered Borough Council, for financial aid if needed.
(Partnership with GYBC/PSL and ESBC)

Ongoing Projects

Project Title	Project Description
NHS Digital Weight Management Programme	To contact up to 31,000 adults across Norfolk & Waveney living with obesity who also have diabetes, high blood pressure, or both, to enable their access to support to manage their weight and improve their health.
Proactive Falls Prevention	Working with Norfolk County Council and health and VCSE providers to contact individuals that data suggests are likely to experience falls, to offer preventative services: home adaptations, mobility and exercise, social isolation and loneliness support and NHS assessments.

Using Population Health Management to Improve CVD Management in Thurrock

Emma Sanford
Strategic Lead Public Health

Dr Jo Broadbent
Director of Public Health

Dr Manjeet Sharma
Clinical Alliance Director - Thurrock
GP Partner Orsett Surgery

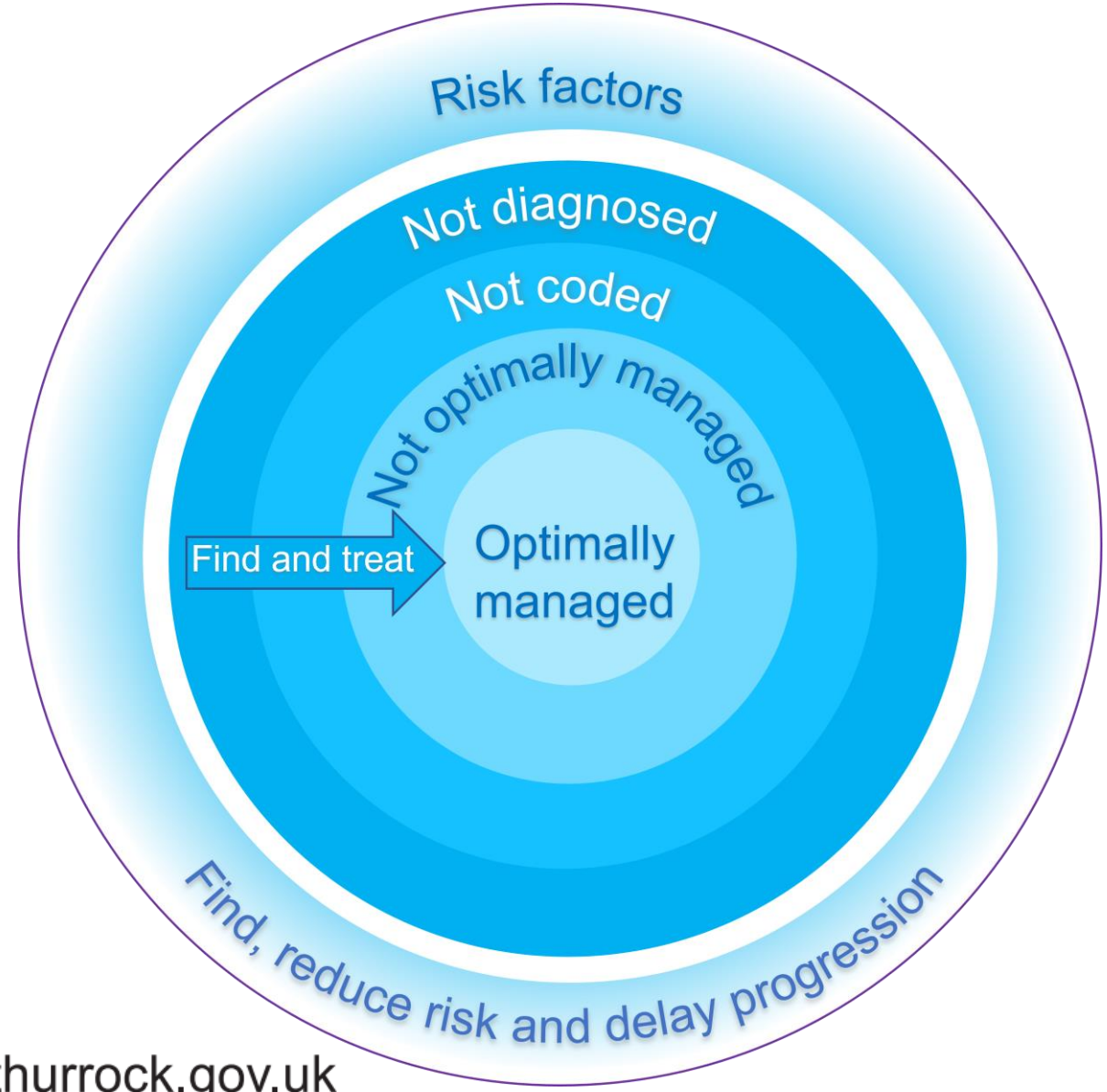
27 October 2023

Overview

- Thurrock has been on a journey to improve CVD management and outcomes since 2016. In 2014/5, a large proportion of Thurrock practices had CVD quality measures (QoF) below England average.
- Thurrock Council Public Health team co-produced with GP practices a systematic, data-led population-based approach to reducing CVD risk and disease in primary care, using Population Health Management principles.
- This has resulted in 2021/22 in Thurrock having some of the best QoF results in England for a range of CVD quality measures including: hypertension management; heart failure management; and recording of smoking status.
- This has been achieved against a background of Thurrock having the third highest list size per GP in England (2022, Nuffield Trust data).

Thurrock performance on CVD management metrics vs England

Systematic, data-led population based approach to reducing CVD risk and disease



Risk factors
- Targeted stop smoking
- Targeted weight management
- Increased physical activity

Not diagnosed
- Hypertension and AF detection programme
- Funded BP checking in general practice waiting areas
- Trained volunteers in community to check BP
- NHS Health Checks

Not coded
- Cross referenced register and other data e.g. treatment
- Followed up patients with history of high BP

Not optimally managed
- Funded to achieve above QOF threshold (up to 100%)
  - Emphasis on those previously excluded
  - Annual change of focus depending on evidence and performance
  - Payments higher than QOF to reflect difficult to reach groups
  - Payments weighted towards actions of higher benefit
- Provided frequent feedback and support to progress at practice, PCN and Alliance level
  - Practice / PCN visits
  - PracticepProfile cards
  - Support to develop interventions

Next steps
- Co-design case finding strategy with partners (systematic and opportunistic)
- Continue to focus on reducing risk
- Systematic evidence-based practice over a prolonged period

Learning from the project

1. Resourcing activity above the QOF threshold (performance up to QOF 100% on CVD indicators):
   - Allowed primary care commitment
   - Focused on harder to reach and more marginalised groups

2. Current focus is on medium-risk cohort as a preventative strategy:
   - Early findings from GPs are that some patients are at higher risk than their data and clinical records indicated eg additional conditions were opportunistically diagnosed

3. Impact on general practice:
   - Despite initial increase in demand on practices, benefit of the approach recognised and continued
   - Additional ARRS roles key to being able to deliver more holistic care

4. Co-production between public health, primary care and CCG/Alliance fundamental:
   - Building trust requires an investment of time
   - Allowed the model to be data and clinically-led, but with a sufficiently flexible approach that allowed change of focus eg Thurrock's shift from management to detection in 23/24
   - But funding streams for joint working have been a challenge

For further details -

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Clinical Alliance Director - Thurrock
GP Partner Orsett Surgery

Thurrock Annual Public Health Reports –
2016 Report - Outlines the challenge
2022 - Outlines action taken to improve CVD outcomes

Tilbury Chadwell
Primary Care Network

Grays
Primary Care Network

Stanford Le Hope and Corringham
Primary Care Network

Aveley, South Ockendon and Purfleet
Primary Care Network

Hertfordshire and West Essex

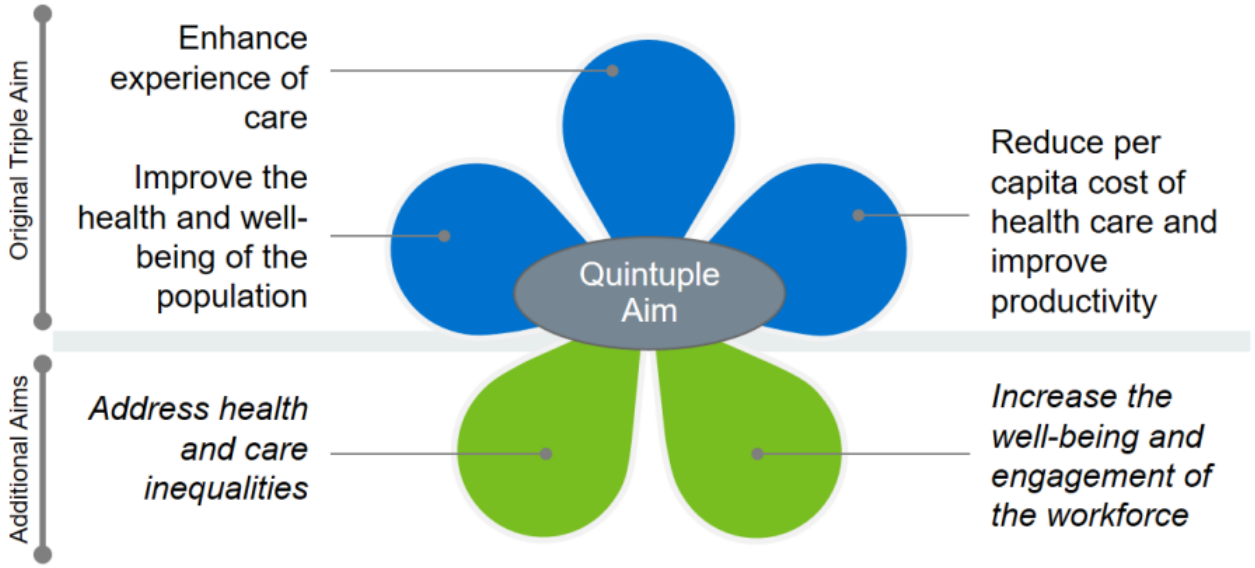
Supporting Integrated Neighbourhood Teams to take a PHM approach

Sam Williamson, Associate Medical Director and co-lead for PHM, Hertfordshire and West Essex ICB

On behalf of the ICB PHM team

Discussion

Considerations on realising the benefits



- The impact on health inequalities
- Risk stratification and the prevention paradox
- Evidence use and generation
- Meaningful coproduction
- Developing and maintaining momentum, including advanced analytics and addressing the wider determinants of health
- Workforce
- Research