Dorset Systematic Approach to Population Health Management

Insights Actions Outcomes
Dorset Population Health Management & Health Inequalities

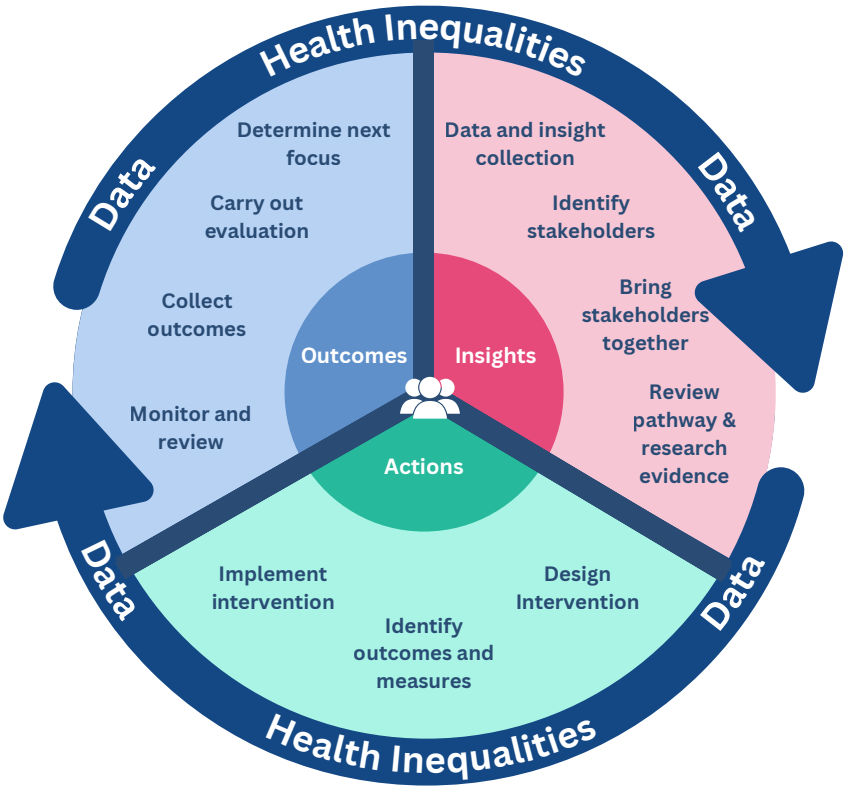
Case Study: Hypertension Optimisation

Karen Stratford
Population Health Strategic Lead – PHM

Introduction

This case study demonstrates how the Dorset Population Health Management and Health Inequalities Team have developed and applied a systematic approach to population health management (PHM) to rapidly improve hypertension optimisation. The learning from this work has enabled us to develop a blueprint to support the ICB Population Health ambitions, particularly in the context of Strategic Commissioning and Integrated Neighbourhood Teams.

Dorset Systematic Approach to PHM



Background

The Hypertension Optimisation Improvement Scheme is part of a wider commitment to CVD Prevention across Dorset system. As part of our value-based healthcare programme, CVD was identified as one of our three critical System Improvement Programmes to be delivered through Clinical Networks, where we wanted to accelerate the scale and pace of prevention. This included preventing people from developing problems, supporting people to live well and manage their condition once they have developed CVD, and optimising treatment, rehabilitation and care.

Why is Hypertension Optimisation a priority in Dorset?

Cardiovascular Disease (CVD) is a leading cause of morbidity, disability and health inequalities, and high blood pressure (BP), or hypertension, is a leading modifiable risk factor for heart and circulatory disease (heart attack and stroke). Treatment to lower BP is highly effective at preventing these serious events that are life changing for individuals and their families, and expensive in terms of NHS and social care costs (UCL Partners, Size of the Prize, 2025).

Data and Insights Collection

Analysis of the national CVD Prevent data (June 2023) showed that, whilst Dorset achievement against the national hypertension ambition (**CVDP007HYP: Patients with GP recorded hypertension, whose last blood pressure reading is to the appropriate treatment threshold, in the preceding 12 months**) followed a similar trajectory to that of England (2023/24), achievement was below the England average (Figure 1). Whilst progress had been on an upward trajectory, progress was starting to plateau and we continued to be some way off the target, with Dorset being one of the lowest performing ICBs in the country for this priority (Figure 2).

Figure 1

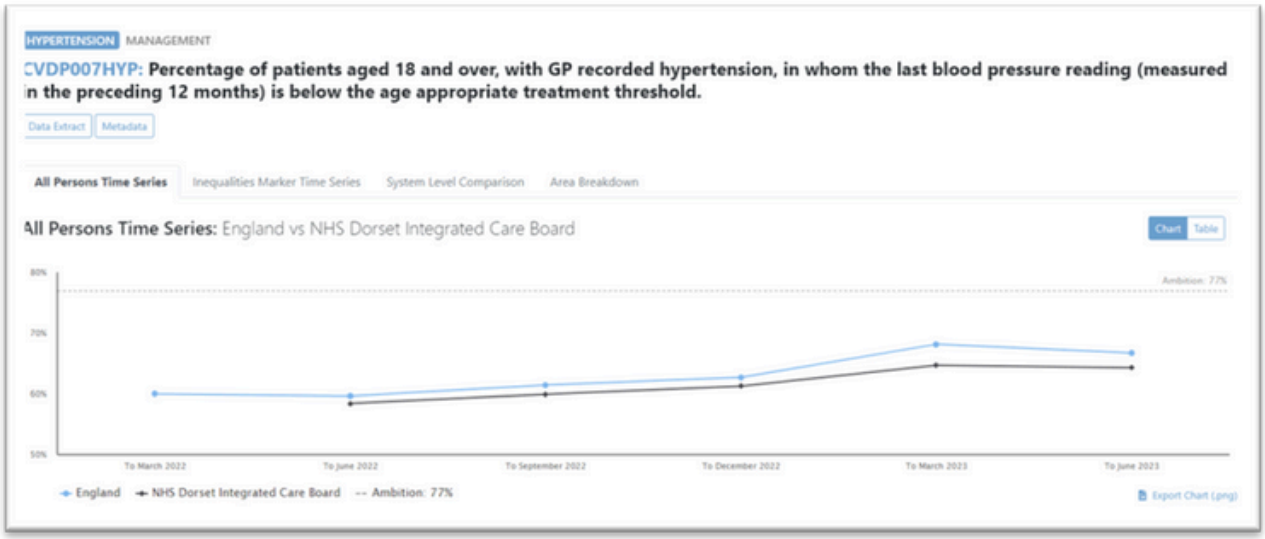
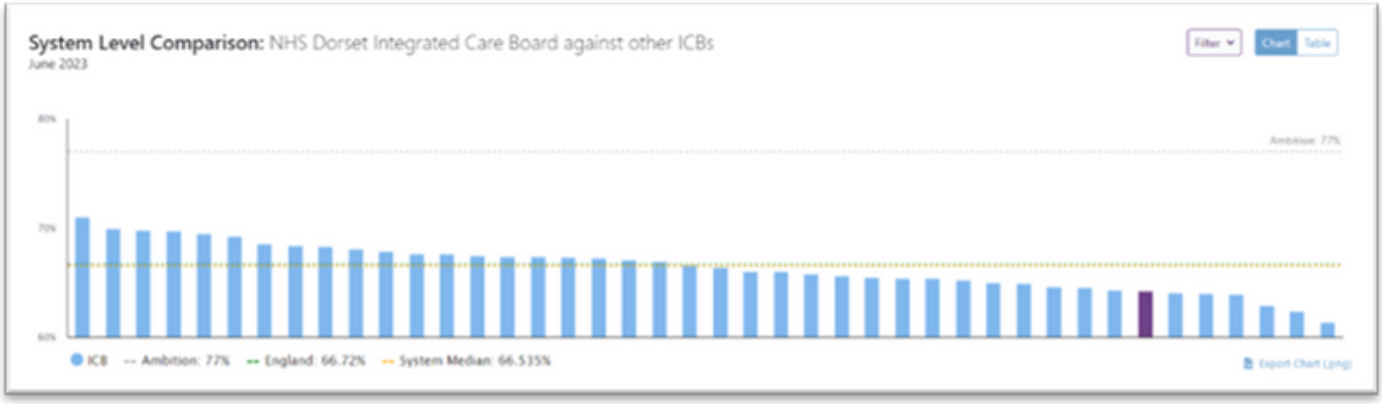
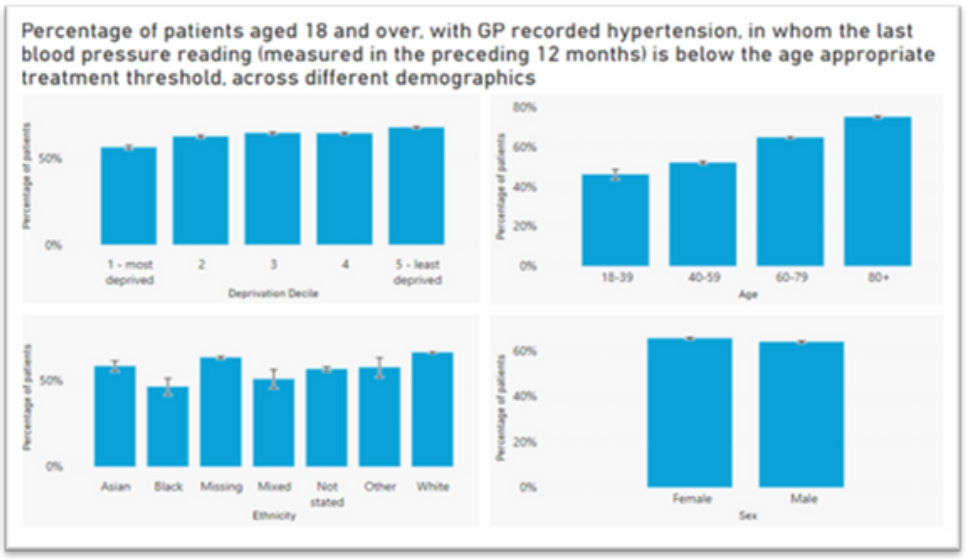


Figure 2



Further analysis of the national CVD Prevent data (Figure 3) also showed significant variation in those treated to target across three protected characteristic groups (age, sex and ethnicity), and for people experiencing deprivation (inclusion group).

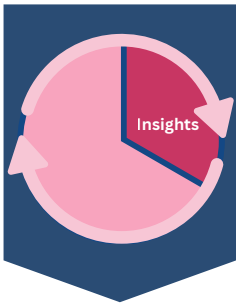
Figure 3 – CVD Prevent, Dorset ICB, October 2023 to December 2023

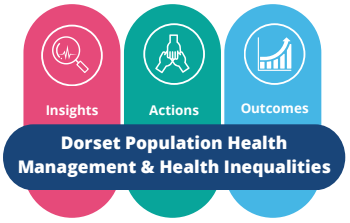


Developing local data insights

A limitation of the national CVD Prevent data is the time lag in publication. To overcome this, a local CVD Prevent dashboard was developed using the innovative Dorset Intelligence and Insights Service (DiiS). This provided live data to:

- Pro-actively identify and segment patients with hypertension to improve service delivery
- Track progress over time for hypertension optimisation target groups: target met, target not known, and target missed
- Track progress over time on hypertension optimisation health inequalities for age, sex and ethnicity protected characteristics, and for deprivation
- Inform service design and support the development of system approaches

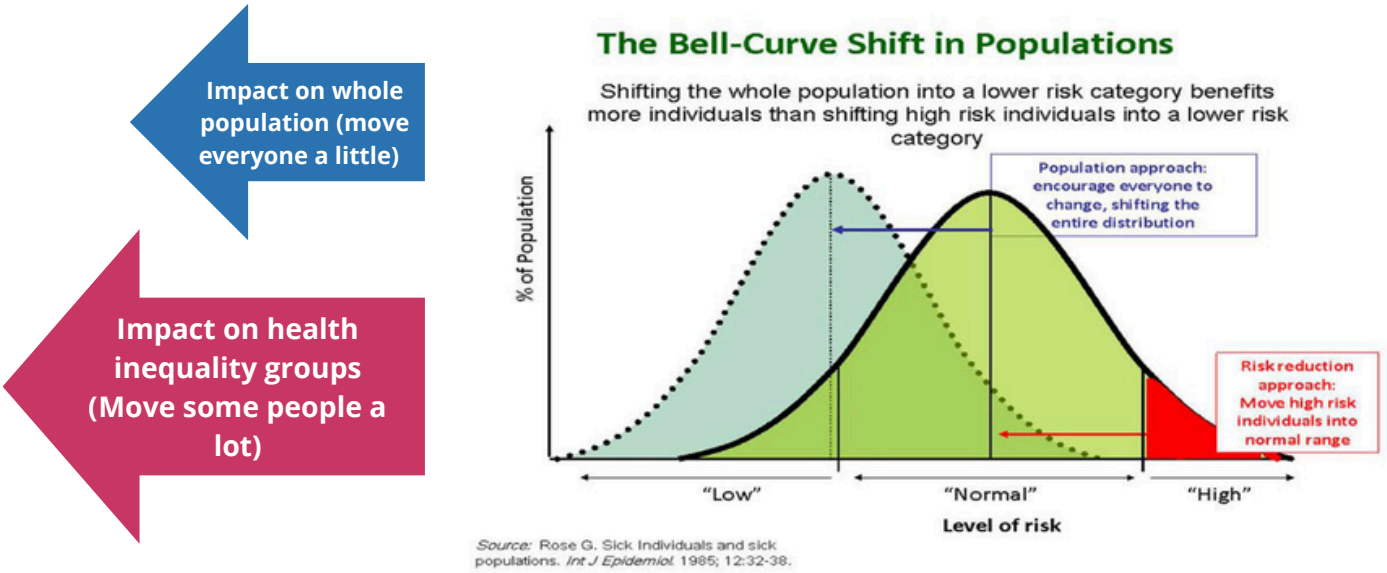




Bringing stakeholders together

Hypertension management is routinely delivered across primary care services in Dorset. Through the Clinical Commission Local Improvement Programme (CCLIP), we were able to expand and scale our hypertension optimisation improvement work. A Dorset CVD Prevent Delivery Group (now evolved into a wider '**Prevention System Working Group**') was established to support cross system partnership working and help shape our approach. The aim of the scheme for 2024/25 was to support PCNs to do the enabling work needed to:
(i) rapidly accelerate routine hypertension optimisation for the whole population, and
(ii) improve equitable access, experience and outcomes through an enhanced targeted offer for groups experiencing inequalities.
This goal to improve overall population health while specifically targeting those facing the greatest health challenges is reflected here:

Figure 4: Intended outcome: Improving optimisation of whole hypertensive population and narrowing the gap for health inequality groups



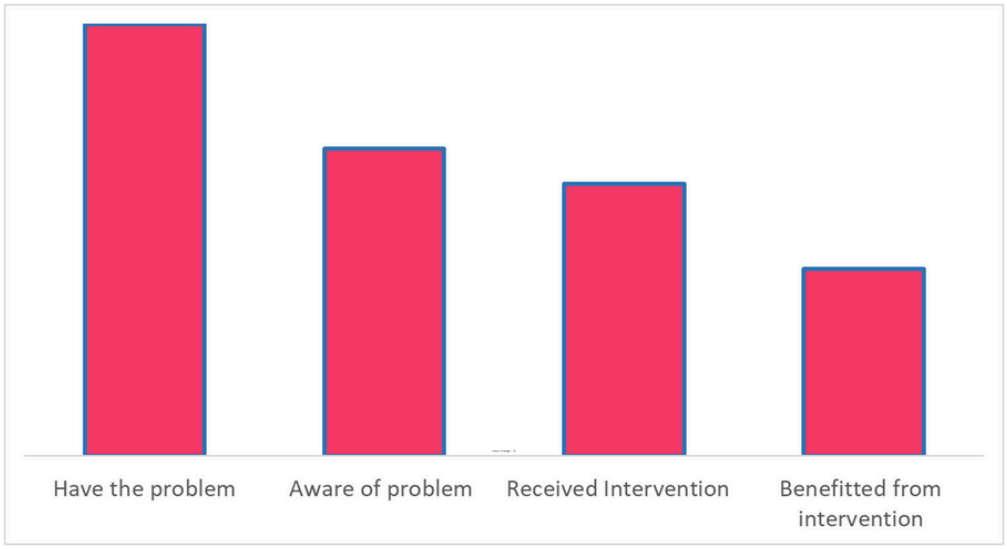
What good looks like

The hypertension improvement scheme recognises that organisations working together is essential to ensure that people are supported, according to their personalised care needs, to achieve optimal hypertension. Partners across health commissioners and providers, voluntary and community sector, public health department, local authorities and communities all played a key role in developing the approach. Working together through the Dorset CVD Delivery Group, the local improvement scheme was developed based on evidence of what good looks like.

Understanding the size and scale of the problem

The adoption of a Population Health Management (PHM) approach is a core enabler for systematically tackling the direct and indirect causes of poor health outcomes. Our Hypertension Improvement Scheme is underpinned by the Implementation Decay Model (Bentley, 2019), which provides an evidence-based tool for the development of a systematic PHM approach. Figure 5 shows the reduction of people benefiting at each potential intervention point.

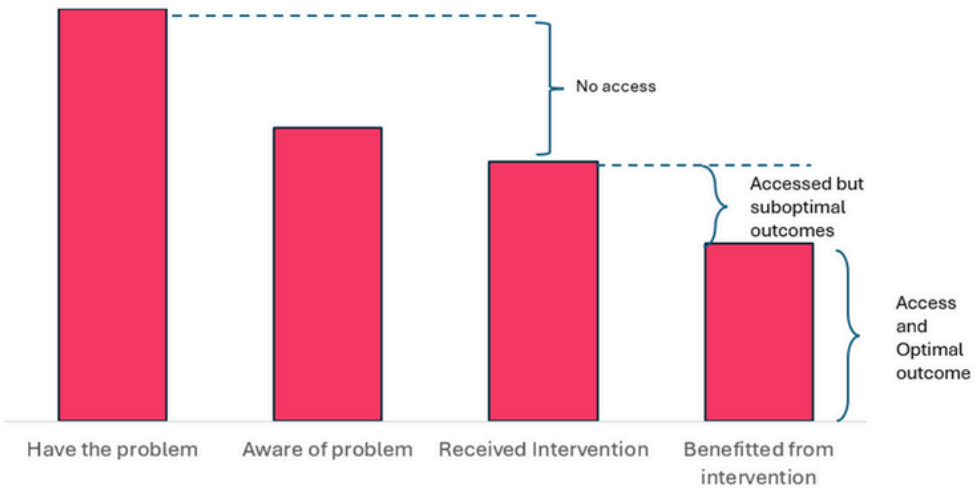
Figure 5



Bentley (2016)

Figure 6 (below) shows components of unmet need for hypertension in Dorset in terms of access and outcomes from care.

Figure 6



The model also shows that there are inequalities at every stage of CVD Prevention (Figure 7), from an individual recognising that they are at risk of CVD, to them being able to sustain an optimal treatment plan

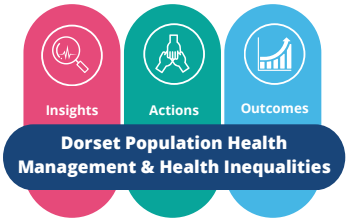
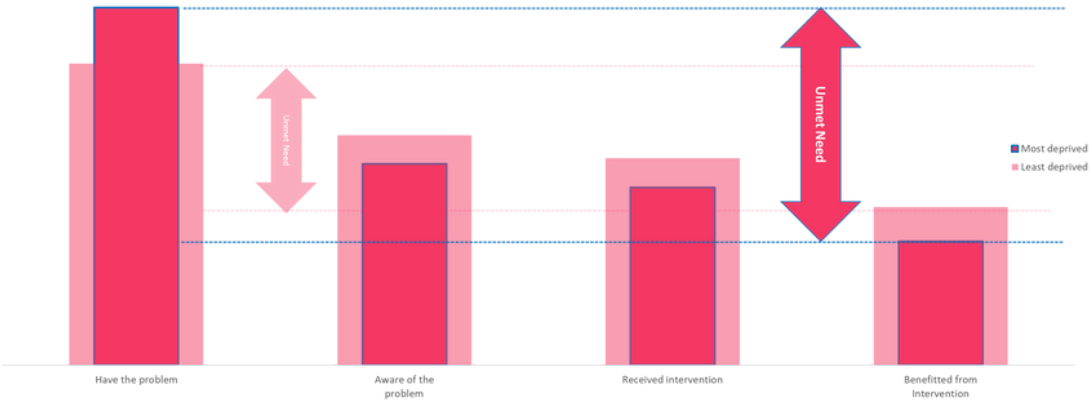


Figure 7



Evidence of what works

We undertook a systematic review of evidence-based action to improve hypertension management in primary care. Figure 8 provides a summary.

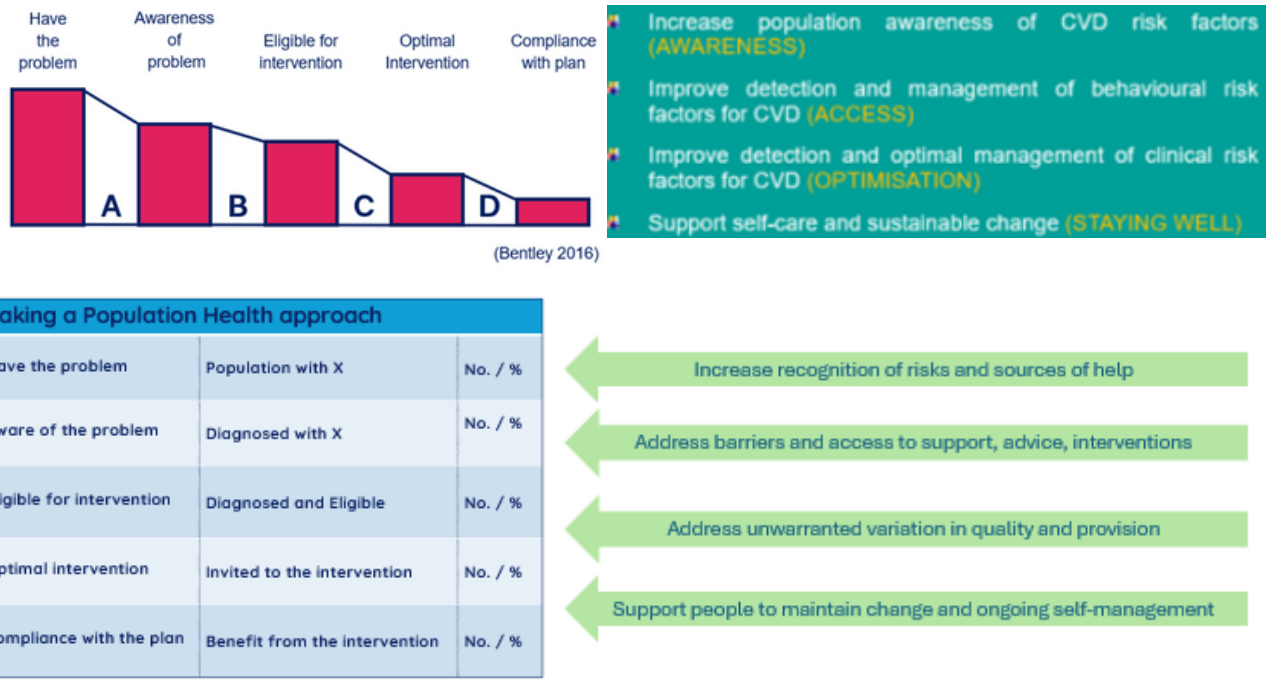
Figure 8

System Level Actions	Improve Access and Engagement	Improve Outcomes
✓ **Prioritise** hypertension as part of local CVD prevention strategies, with dedicated **leadership** and resources [1][3][4]	✓ Provide **flexible appointment options** like evening/weekend clinics for working patients [1]	✓ Implement **evidence-based** clinical and non-clinical treatment protocols and decision support tools in clinical systems [1][5]
✓ Use **data** to identify and address **unwarranted variations** in detection and management [3][4]	✓ Use **digital tools** like home blood pressure monitoring and virtual consultations to increase engagement [2][5]	✓ Offer regular medication reviews and **support for adherence**, considering cultural beliefs [2][5]
✓ **Incentivise and support** primary care networks to deliver enhanced hypertension services [1][4]	✓ Utilise **community health workers**, link workers, and peer supporters from local communities [1][4]	✓ Embed **lifestyle interventions** through **social prescribing** and **health coaching** [4]

Developing a systematic approach

Using the insights and evidence base developed in the first part of our systematic approach we were able to consider where there were opportunities to intervene and what would be most effective. This is illustrated in Figure 9.

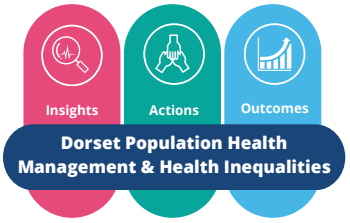
Figure 9



Designing Interventions

Using this model, we are able systematically address implementation decay through intervention design. At each prevention intervention point there is opportunity to increase the overall population benefiting and reduce the inequality gap by targeting unmet need (ie people not accessing the service and people not benefiting). The model helps systematically addressing unmet need by building in evidence-based action at key intervention points in the service designed. That is, interventions to:

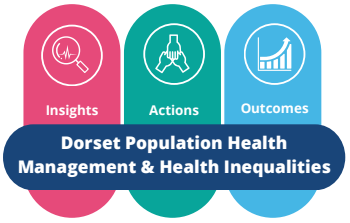
- **Increase awareness and understanding - A**
- **Improve access and uptake through evidence-based action - B**
- **Improve optimal clinical management through evidence-based action - C**
- **Improve and sustain self-management and lifestyle behaviour change - D**



The initial focus of our improvement approach in the 2024-5 CCLIP scheme was on those with diagnosed hypertension, not accessing optimal treatment, and those not benefiting from optimal hypertension treatment. The improvement programme has supported Primary Care Networks (PCNs) to develop and implement enhanced hypertension management improvement plans, with the aim of strengthening a sustainable hybrid model of care. A hybrid model of care is one that fully empowers and involves the patient or citizen (extending the workforce) enabled by a digital platform.

PCNs have been supported to take a different approach to **improving access** and **improving clinical optimisation** through evidence-based action. The model of care includes:

- Data driven insights
- Expansion of digital home blood pressure management
- Integration of additional roles, such as Pharmacists, Health Coaches and Social Prescribers, Digital Care Co-ordinators
- Support for self-management, lifestyle and behaviour change
- Development of enhanced and culturally sensitive offers to reduce variation



What worked well

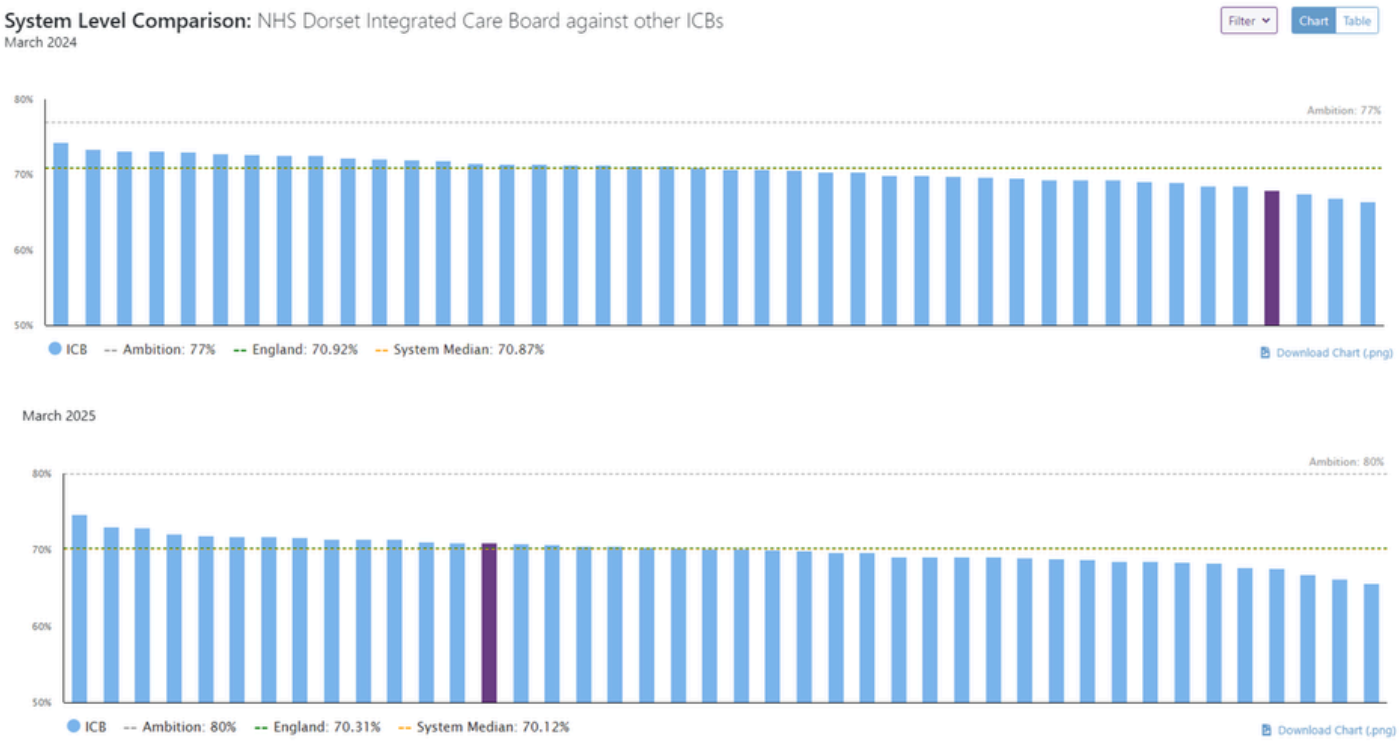
Through evaluation and feedback, we were able to see what works well in respect of interventions to improve:

- Awareness (eg community events, workforce training, text messaging campaigns)
- Access (eg BP@Home, opportunistic BP monitoring, Outreach, appointment times)
- Clinical Optimisation (eg MDT approach, improving pathway and processes)
- Sustaining behaviour change (eg interventions tailored to need, non-clinical support

Achievement

Figure 10 shows progress made for the whole known hypertensive population through a system level comparison of NHS Dorset against other ICBs between March 2023 and March 2024).

Figure 10



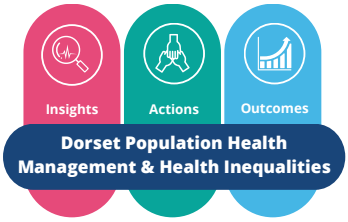
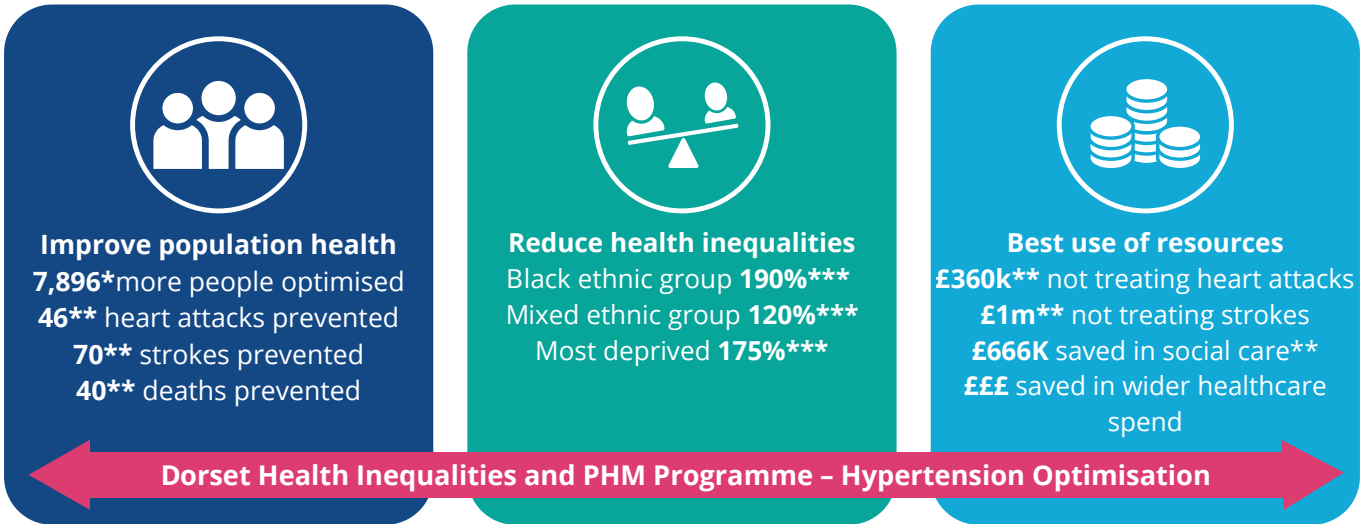


Figure 11 provides a summary of impact for whole population, inequality groups and use of resources between March 2023 and March 2024

Figure 11

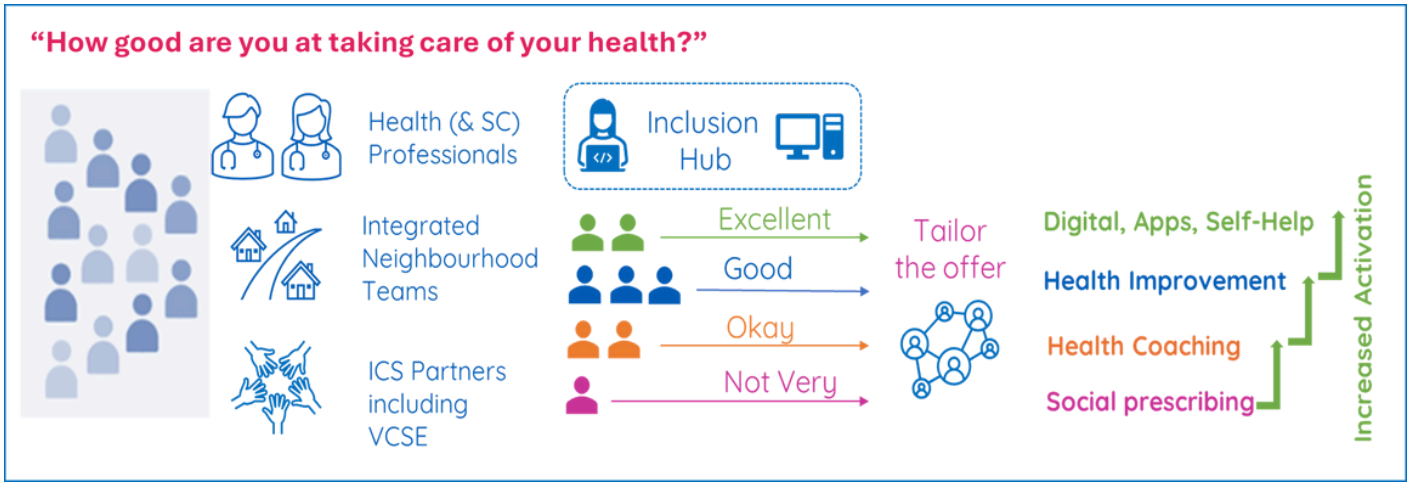


*DiiS to March 2025
** Source: Size of the Prize for high blood pressure – modelled on Dorset Activity delivered in 2024/25 (based on 7896 patients optimised)
**Stroke costs to social care are given for the 1st year following stroke only
*** Source: CVD Prevent to March 2024 – March 2025 improvement relative to the whole population with hypertension

Next Steps for the 2025-6 scheme:

- **Developing a full end-to-end Model of Care**
- Building on the improvement work undertaken through the 2024-5 (focused on improving access and clinical optimisation), we are now supporting PCNs to embed evidence-based action / interventions across all stages of the pathway: From **detection** to **access** to **optimisation** to **sustained behaviour change**. Improvement work in Year 2 (2025-26) is focusing on developing the detection (who has the problem) and sustained lifestyle behaviour change into the Model of Care (MoC). This includes embedding behaviour change interventions and testing out the use of patient activation – using a 'one question' approach - to support tailored, differential support offers. We want to take the learning from this work to inform our wider prevention at scale work (see Figure 12)

Figure 12



Further develop evaluation of impact

- We are also supporting PCNs to use impact tools to identify benefits to practice / PCN (eg cost savings / QOF income / efficiency / patients outcomes etc, and support transition planning into BAU. We want to further develop impact evaluation through our DiiS platform, including systematic embedding of the one question patient activation measure.

Further develop patient engagement

- We want to further develop our understanding of patient experience, especially in underserved communities (eg protected characteristic groups and inclusion groups). Through the improvement scheme, PCNs are developing and delivering data driven and evidenced-based actions plans in collaboration with patients and relevant stakeholders. We are developing our understanding of the link between staff and patient treatment and want to use patient experience data to influence the wider system. For example, developing workforce training and development to build capability across the system to understand and adopt PHM approaches.

Author:
Karen Stratford
(Population Health Strategic Lead – PHM)

References & Links

Size of the Prize for high blood pressure

Regional & ICS Insights CVDPREVENT

Bell Curve Shift in Populations, Rose, G. (1985)

Implementation Decay Model, Bentley (2019)

Hypertension pages, DiiS. March 2025

[1] Tackling high blood pressure, From evidence into action, Public Health England (2014)

[2] *Reducing high blood pressure health inequalities*, Health Innovation West of England

[3] *High blood pressure: Plan and deliver effective services and treatment*, Public Health England (2014)

[4] *Under control: why getting to grips with blood pressure is a win-win intervention for healthcare systems*, NHS England (2023)

[5] *Blood Pressure Optimisation Programme*, UCL Partners. Accessed August, 2025