Agenda Item No: 6

# Cardiovascular Disease Prevention Strategy

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| To: | Adults and Health |
| Meeting Date: | 15 December 2022 |
| From: | Director of Public Health |
| Electoral division(s): | All |
| Key decision: | Yes |
| Forward Plan ref: | 2022/072 |
| Outcome: | The Committee is asked to review the draft Cambridgeshire and Peterborough Cardiovascular Disease Prevention Strategy |
| Recommendation: | The Adults and Health Committee is asked to support the following recommendations:<br>a) The high-level outcome ambitions<br>b) The focus upon behavioural and clinical risk factors identified in the Strategy<br>c) The planned interventions to mitigate the behavioural and clinical risks. |

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# 1. Background

1.1 Cardiovascular Disease (CVD) is a general term for conditions affecting the heart or blood vessels. It is associated with damage to many of the organs of the body including the brain and heart. It is one of main causes of death and disability through for example a heart attack or stroke. There are inequalities found in geographical areas and amongst certain groups. For example people living in more deprived areas of England are almost four times more likely to die prematurely from CVD. It is estimated that CVD is responsible for around 1 in 3 preventable deaths in men and 1 in 5 preventable deaths in women.

1.2 Preventing cardiovascular disease is a national, regional, and local system wide ambition The development of this CVD Prevention Strategy has been through collaborative working between Public Health and the Cambridgeshire and Peterborough Integrated Care Board clinical lead for CVD.

1.3 The NHS Long Term Plan (2) clearly acknowledges the importance of prevention and a reduction in health inequalities to the future of the NHS. It sets out what the NHS can do to tackle prevention through improved identification, treatment, and care. It also acknowledges the importance of upstream measures that tackle avoidable illness. Local government and the wider system are central to upstream prevention that influences health behaviours and socio-economic determinants of health.

1.4 CVD is embedded in key Cambridgeshire and Peterborough system wide strategies. It is one of Integrated Care System's (ICS) Strategies and sits alongside the CVD Treatment Strategy which together make up the ICS Five-year Strategy for Cardiovascular Disease (2021-2026)

1.5 It clearly supports the three overarching ambitions of the Joint Health and Well Being/Integrated Care System Strategy:

- Have better outcomes for our children
- Reduce Inequalities in deaths under 75 years
- Increase the number of years that people live in good health

1.6 It is also clearly linked to the HWB/ICS environment priority of "Create an environment to give people the opportunities to be as healthy as they can be" which has an initial focus upon child and adult obesity which is one of the greatest risks for CVD.

1.7 There are a number of national and local ambitions for preventing CVD and more specifically for associated risk factors (see 5 below)

NHS 5 Year Plan: The NHS will help prevent up to 150,000 heart attacks, strokes, and dementia cases over the next ten years.

Integrated Care System (ICS): CVD Strategy High Level Objectives

- 5% reduction in deaths from CVD
- 15% reduction in acute admissions with Heart Failure
- 10% reduction in death from CVD disease for PCNs in the worst quintile of death rates

1.8 The Joint HWB/ICS environment priority for addressing obesity has a number of proposed ambitions

- Reduce adult overweight/obesity levels to pre-COVID times by 2030
- Reduce inequalities in overweight/obesity
- Achieve a 10% increase in the number of adults who undertake 150 minutes of physical activity per week by 2030

Although the CVD focuses upon adult obesity, children who are overweight will incur greater risk of CVD through their life-course unless this is addressed , therefore the ambitions for childhood obesity are:

- Achieve a 5% decrease in childhood overweight/obesity by 2030
- Reduce childhood overweight/obesity to pre-pandemic levels by 2026
- Every child in school will meet the physical activity recommendations

1.9 A population health management approach is embedded into the approach for addressing the inequalities associated with CVD.

1.10 Appendix 1 has the cost benefit analysis that is included in the Strategy and provides the detail for each intervention in terms of impact on conditions and the cost benefits (Sheffield Tool). This is based on savings to the whole system. The cost benefits are mostly realised at 10 years, but they are substantial.

1.11 Appendix 2 provides an overview of what is currently in place, in development and planned to implement the Strategy. Although there has not been an overarching CVD Prevention Strategy across Cambridgeshire and Peterborough previously there is long history of interventions such as NHS Health Checks and Stop Smoking Services that have contributed towards the prevention of CVD. This Appendix details how we plan to develop many of these interventions, for both behavioural and risk factors along with new initiatives that will be complemented by the increased integration of all sectors across the system.

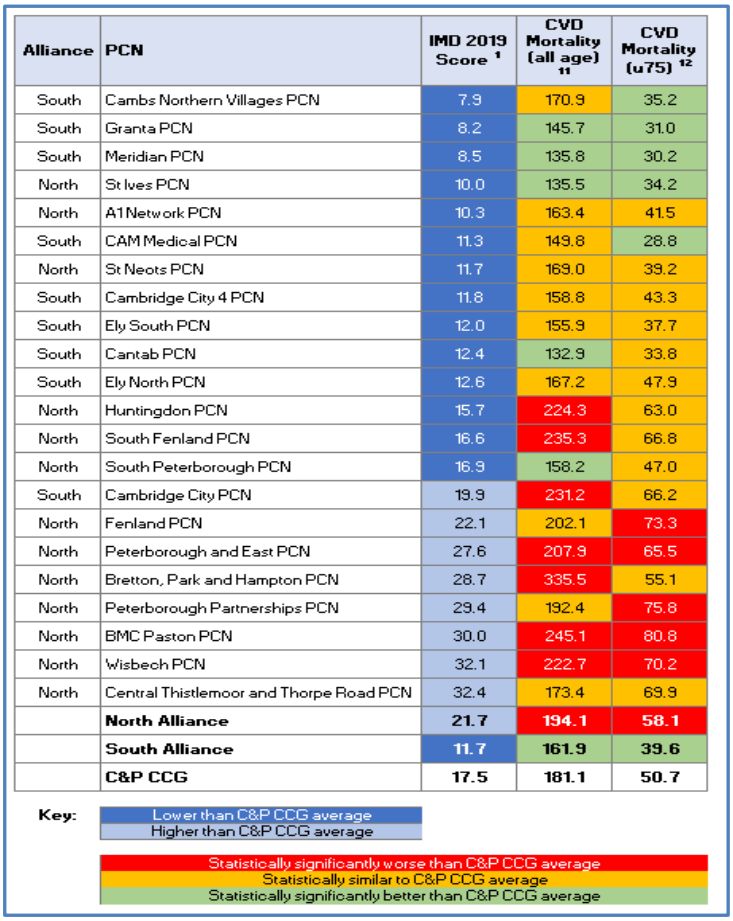
1.12 Appendix 3 is a summary of the Strategy presented in a PowerPoint format.

## 2. Main Issues

2.1 Cambridgeshire and Peterborough (C&P) CVD Outcomes

Cardiovascular disease is one of the main causes of death for ICS registered patients, accounting for 5,343 deaths in 2016-18 (24.9% of all C&P deaths). Although overall the prevalence of CVD is lower than the national average, admissions related to coronary heart disease (were significantly higher in 2020/21 at 427 per 100,000 compared to 367 per 100,000 nationally. Figure 1 shows the differences across the Primary Care Networks in C & P for CVD mortality in all ages and under seventy-fives with deprivation score.
The five PCNs with under seventy-five mortality rates statistically significantly higher than C&P average are all found in Fenland and Peterborough.

**Figure 1:CVD in Primary Care Networks**



| Alliance | PCN | IMD 2019 Score [1] | CVD Mortality (all age) [11] | CVD Mortality (u75) [12] |
|---|---|---|---|---|
| South | Cambs Northern Villages PCN | 7.9 | 170.9 | 35.2 |
| South | Granta PCN | 8.2 | 145.7 | 31.0 |
| South | Meridian PCN | 8.5 | 135.8 | 30.2 |
| North | St Ives PCN | 10.0 | 135.5 | 34.2 |
| North | A1 Network PCN | 10.3 | 163.4 | 41.5 |
| South | CAM Medical PCN | 11.3 | 149.8 | 28.8 |
| North | St Neots PCN | 11.7 | 169.0 | 39.2 |
| South | Cambridge City 4 PCN | 11.8 | 158.8 | 43.3 |
| South | Ely South PCN | 12.0 | 155.9 | 37.7 |
| South | Cantab PCN | 12.4 | 132.9 | 33.8 |
| South | Ely North PCN | 12.6 | 167.2 | 47.9 |
| North | Huntingdon PCN | 15.7 | 224.3 | 63.0 |
| North | South Fenland PCN | 16.6 | 235.3 | 66.8 |
| North | South Peterborough PCN | 16.9 | 158.2 | 47.0 |
| South | Cambridge City PCN | 19.9 | 231.2 | 66.2 |
| North | Fenland PCN | 22.1 | 202.1 | 73.3 |
| North | Peterborough and East PCN | 27.6 | 207.9 | 65.5 |
| North | Bretton, Park and Hampton PCN | 28.7 | 335.5 | 55.1 |
| North | Peterborough Partnerships PCN | 29.4 | 192.4 | 75.8 |
| North | BMC Paston PCN | 30.0 | 245.1 | 80.8 |
| North | Wisbech PCN | 32.1 | 222.7 | 70.2 |
| North | Central Thistlemoor and Thorpe Road PCN | 32.4 | 173.4 | 69.9 |
| | **North Alliance** | **21.7** | **194.1** | **58.1** |
| | **South Alliance** | **11.7** | **161.9** | **39.6** |
| | **C&P CCG** | **17.5** | **181.1** | **50.7** |

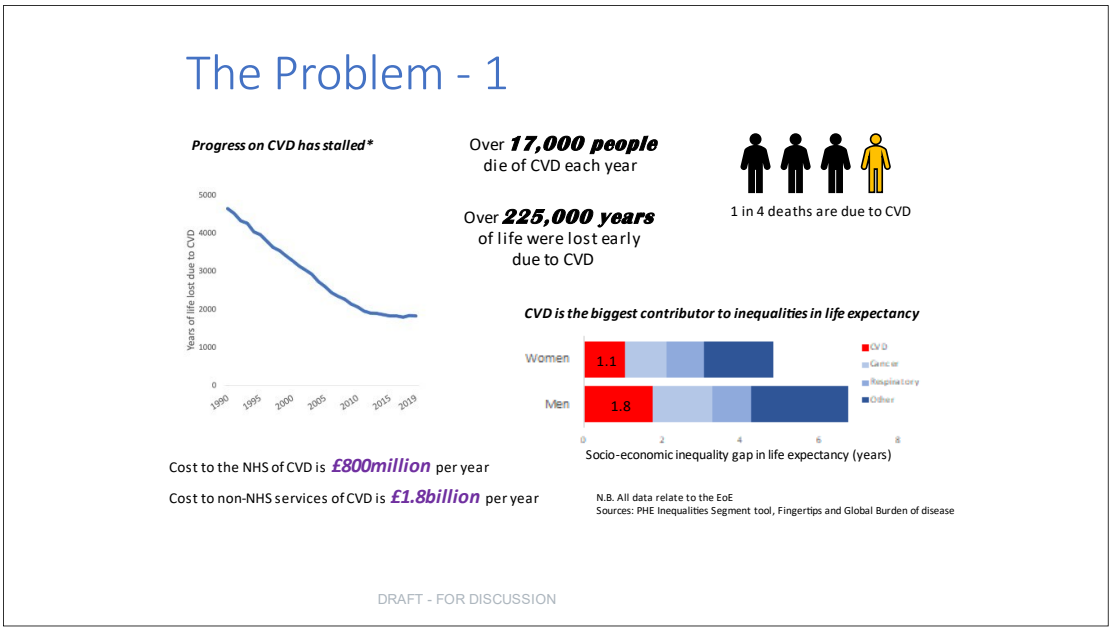


Although there is a strong association between CVD prevalence/mortality and deprivation other factors also contribute to inequalities. Data from national and specific studies have demonstrated that higher rates are found amongst certain ethnicities, especially Black and South Asian groups, those with a learning or physical disability and those with poor mental health. Understanding the drivers of these inequalities is limited by poor data and addressing them is challenging as they are the consequence of complex and different mixes of socio-economic deprivation, environmental (e.g. workplace) physiological, health related behaviours and access to services.

## 2.2 Cost of CVD

The impact of CVD upon mortality and morbidity are great and these substantially affect the costs for the NHS and wider system.

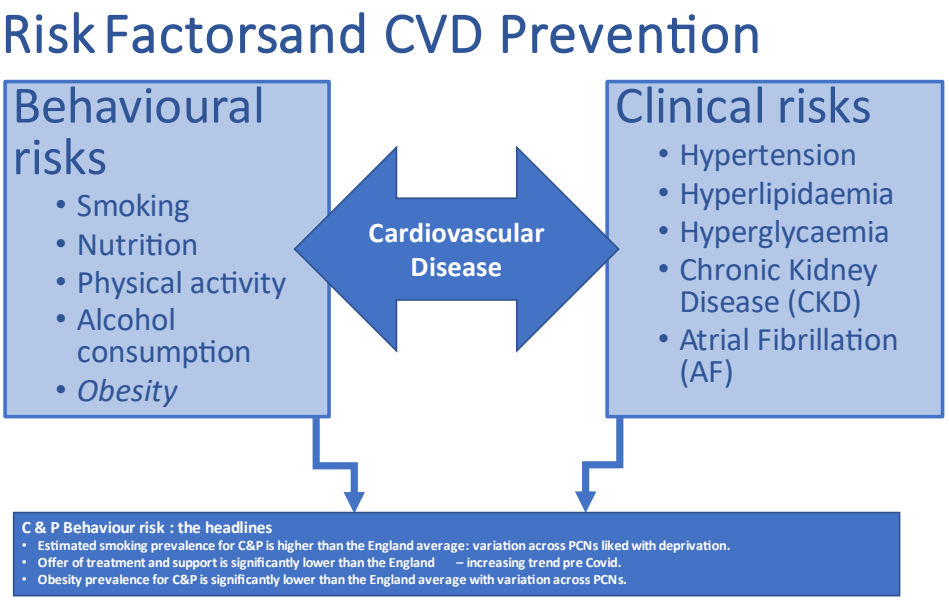
**Figure 2: The cost of CVD**




2.3 There are behavioural and clinical risk factors for CVD that as described above, are not found equally across the population. The most important risk factors are unhealthy diet, physical inactivity, tobacco use and the harmful use of alcohol. The effects of behavioural risk factors may show up as clinical risks: raised blood pressure (hypertension), raised blood sugar (diabetes), raised blood lipids (hyperlipidaemia), overweight and obesity.

2.4 Figure 3 describes how the Strategy is based on behavioural and clinical risk factors. In terms of primary prevention there is a large body of work that sits within the local authorities and focuses on behaviours and how they can be influenced. Clinical risk factors play a key role in CVD, it is well evidenced that their early identification followed by prompt action can have a significant effect on outcomes. Health behaviours also play an important role in the management of clinical risk factors and are a theme throughout the strategy, working synergistically with clinical interventions and supporting adherence to medications. Integral to the strategy is the use of data for identification, targeting and monitoring and the incorporation of emerging evidence-based digital solutions. Capturing the inequalities through the use of population health management approach will inform the implementation of the Strategy.

**Figure 3: CVD Prevention Strategy Conceptual Framework**




## 3. Impact of COVID-19

3.1 The Strategy is mindful of the negative impact that COVID-19 has had upon health outcomes and there is clear evidence that this burden is greater in more deprived and certain population groups who already experience poorer health outcomes. It especially adversely affected people with pre-existing conditions, including CVD. This was associated with a change in health behaviours and the ability to access health services. Nationally, evidence suggests that alcohol consumption increased in those who were already drinking more prior to lockdown, people were less active and there were increases in weight.

3.2 Local data on the impact of COVID-19 on behavioural risk factors is still emerging. The Active Lives survey suggests that physical activity has reduced in Peterborough and Fenland, whilst remaining relatively stable across the rest of the region. In Peterborough, only 54.7% of adults do the recommended 150 minutes of exercise weekly, compared to 62.4% in November 2019, and 35% of people are classed as inactive, compared to 28% prior to the pandemic . Across Cambridgeshire and Peterborough, lifestyle referral data has highlighted an increase in referrals for smoking cessation and weight management services since December 2020.

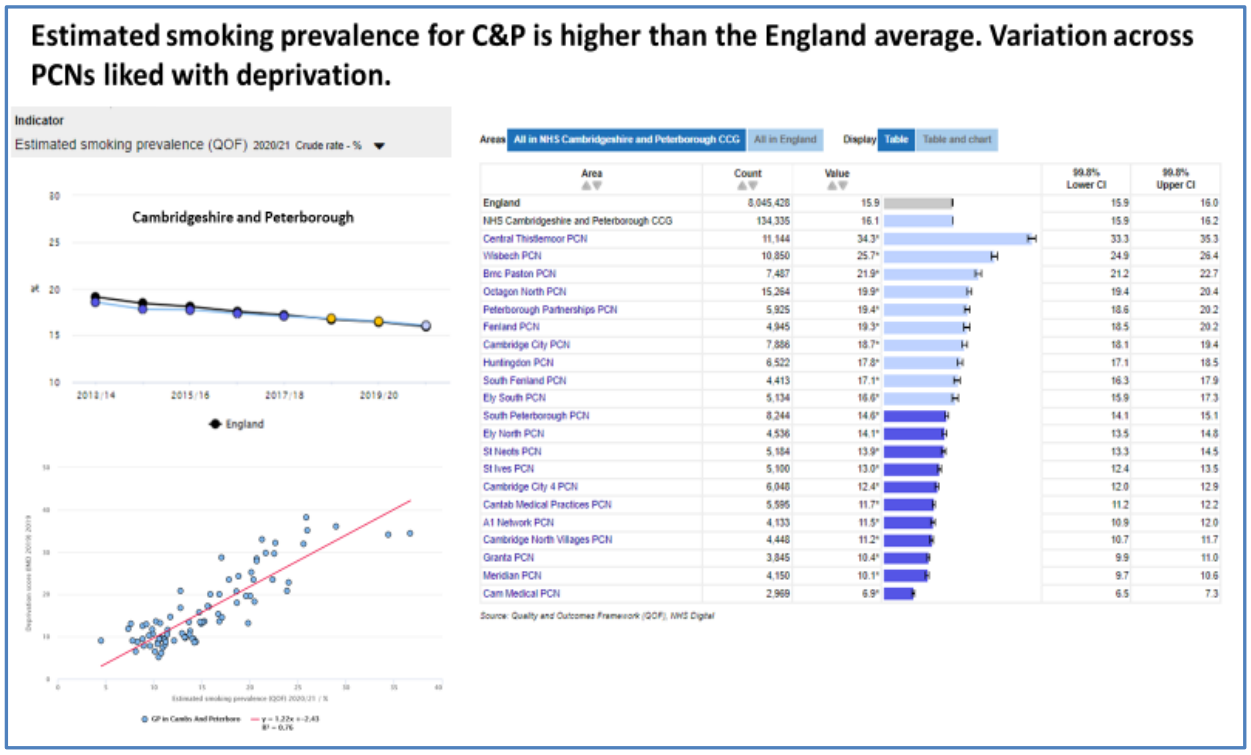
3.3 There were consequences for both the demand and provision of healthcare services; with an estimated twenty-three million fewer GP consultations in 2020 compared to 2019. The change in activity in General Practice impacted upon the management of existing long-term conditions, limited the diagnosis and treatment of new chronic conditions and reduced referral to secondary care. The pandemic affected the Local Authority commissioned NHS Health Checks when their numbers also fell dramatically.

# 4. Behavioural Risk Factors

4.1 There has been some progress in addressing behavioural risk factors in recent years but there are concerns about ongoing high rates that have been exacerbated by the COVID-19 pandemic. Smoking rates have dropped but there still significant inequalities linked to routine and manual workers along with high rates of women who continue to smoke during pregnancy. There are still significant proportions of the population who are physically inactive and often have an unhealthy diet which play out in the high rates of overweight and obesity amongst the child and adult population. There has also been an increase in levels of alcohol use which has been strongly associated with the pandemic.

4.2 The Strategy describes the variation across C & P in terms of behavioural risk factors . For example Figure 4 presents smoking rates across the Primary Care Networks (PCN) and the link with deprivation.

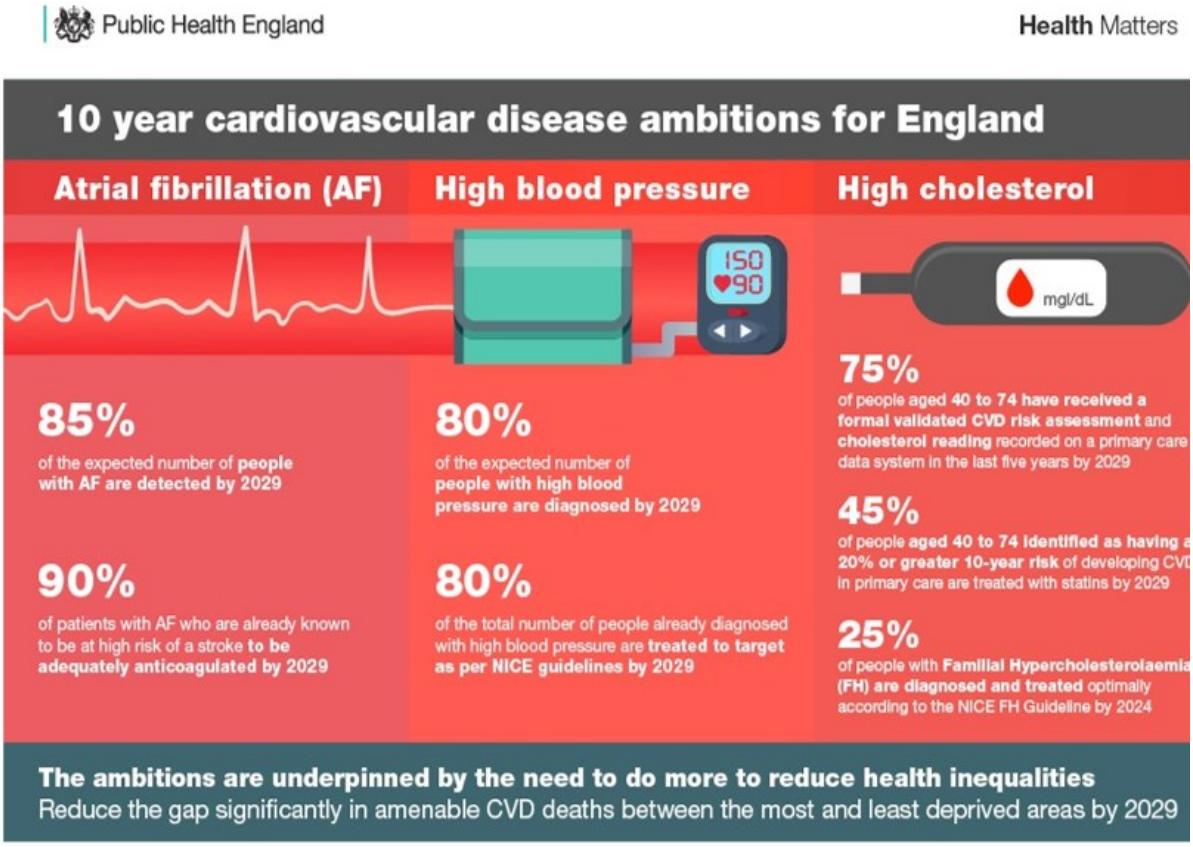
**Figure 4: PCN Smoking Prevalence**




# 5. Clinical Risk Factors

5.1 There are five clinical risk factors in the strategy, but the priority area is hypertension. This prioritisation was following engagement and assessment of risk with clinicians. Central to addressing the clinical risk factors is early identification and ongoing management of treatment. The NHS has a number of what is termed treatment to target ambitions relating to these targets. This means that each risk factor has a target benchmark to reach e.g. a defined low blood pressure. Alongside this is the system target of the proportion of people being treated who reach the desired benchmark. Figure 5 indicates the Treatment to Target ambitions for some of the clinical risk factors identified by Public Health England that need to be met to have substantial impact on CVD rates. These have been adopted nationally by the NHS.

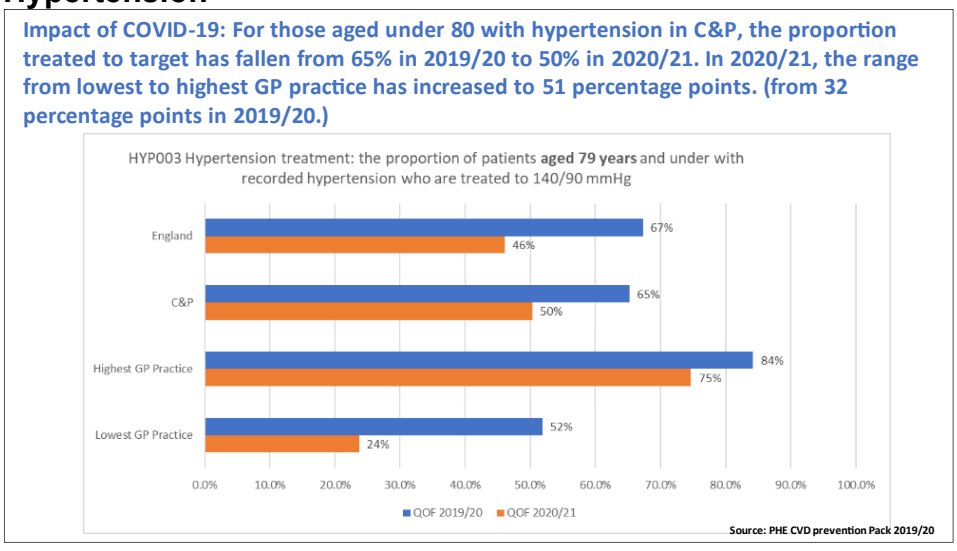
**Figure 5: Treatment to Target Ambitions**




**Source: Public Health England. Health Matters: Preventing Cardiovascular Disease, 2019**

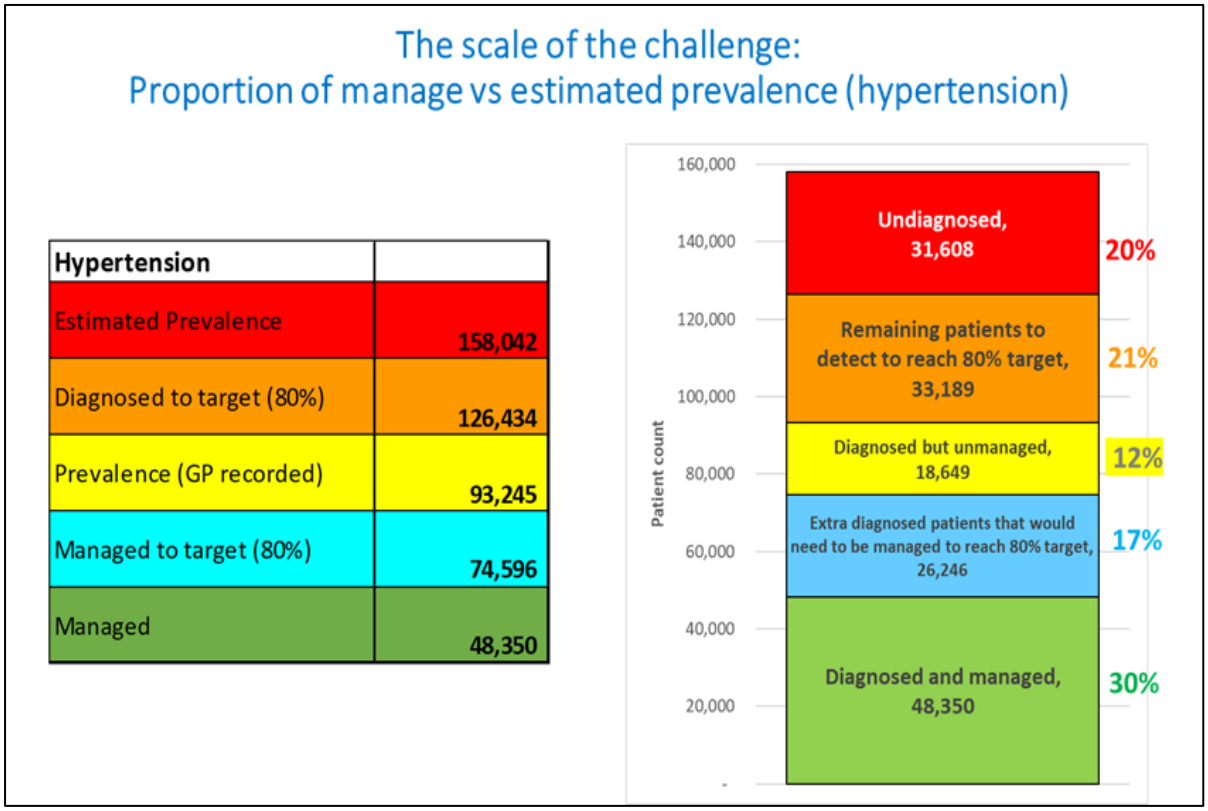
5.2 The challenge for clinical risk factors is improving their identification and management. This was affected acutely during the pandemic when patients could not easily access their GPs. Each of the risk factors were analysed for the Strategy to secure information on identification and treatment rates. The example in Figure 6 is for hypertension and describes the identification and treatment challenges which are similar for all the clinical risk factors.

**Figure 6: COVID-19 Challenges for the Identification and Management of Hypertension**



Further granular analysis of hypertension clearly shows the areas for action. In Figure 7 the percentages have been converted into actual population figures, illustrating the number of patients requiring diagnosis and optimal treatment to reach national targets.

**Figure 7: The Hypertension Challenge**

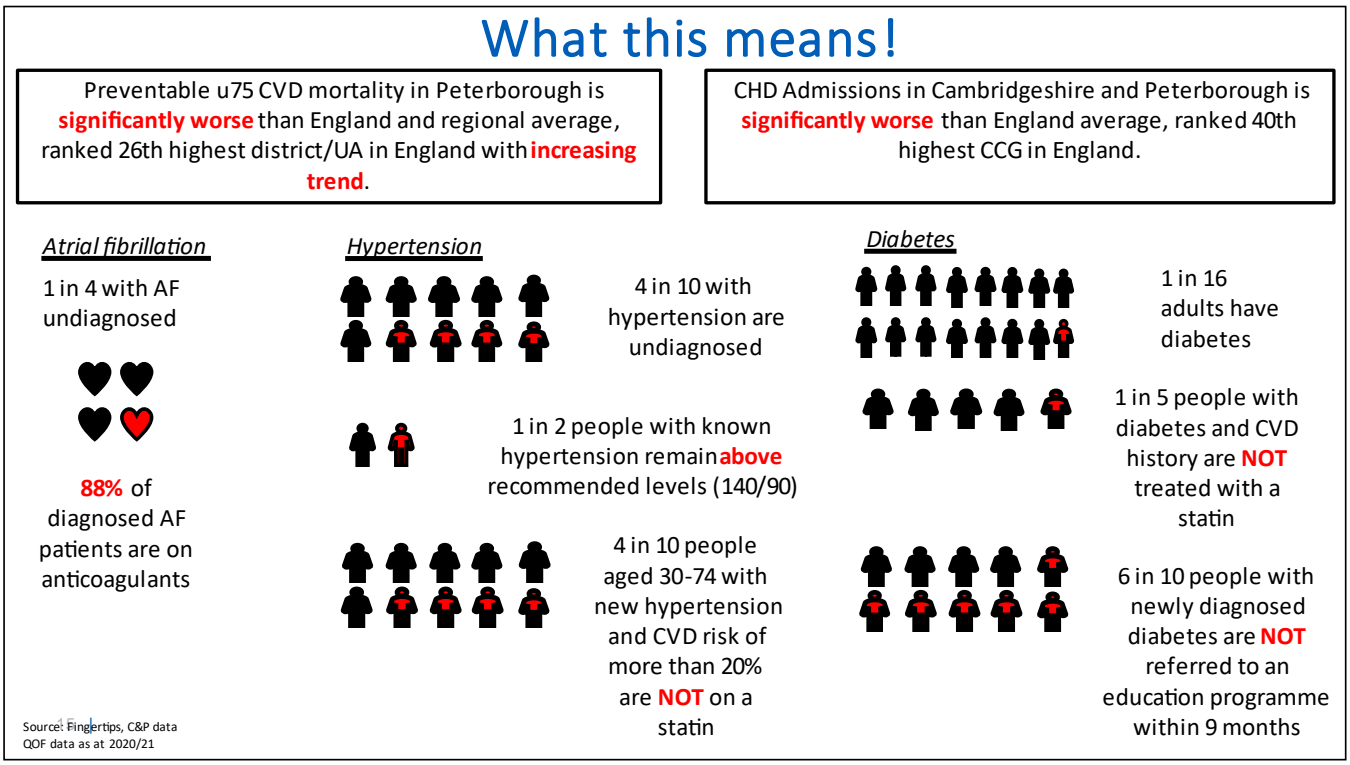



5.3 The data above tells us that in Cambridgeshire and Peterborough, based on data up to March 2021, there is an estimated **158,000 people living with hypertension**, however, only about **41% are diagnosed**. To reach the national target of 80%, we would need to detect another 33,189 through screening.

Only about **one in three adults with hypertension is well managed** (48,350) i.e. in whom the last blood pressure (BP) reading within the preceding 12 months met the benchmark objective, ≤140/90 mmHg (or ≤150/90 mmHg in over 80s). About **another third is diagnosed but unmanaged** (or do not meet the expected BP reading). An extra 17% of diagnosed people are required to be properly followed up to reach the national target of 80% which is an extra 26,246 adults that require managing. In terms of cost benefits by combining the saving to the NHS and social care with the monetary benefit of quality adjusted life years gained (at £60,000/QALY), the overall saving would be £43,342,643 or £3.2 per £1 spent at 10 years.

5.4 Figure 8 is a summary of the impact on the population of low levels of identification and effective management of treatment of hypertension and other risk factors.

**Figure 8: Impact on Population of low levels of identification and management of treatment**



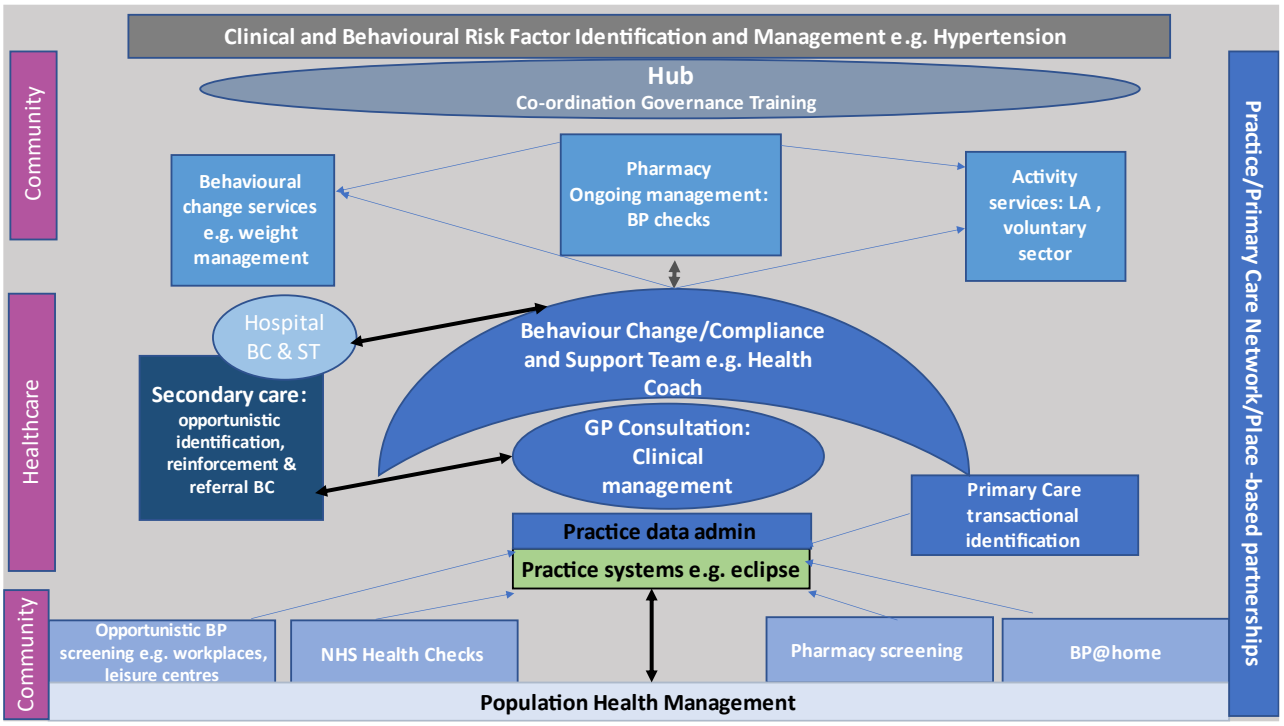

# 6. Strategy Implementation

6.1 The Strategy includes the existing and planned actions to deliver the Strategy. This includes primary prevention interventions where the focus is upon health behaviours and interventions that focus upon mitigating the clinical risks for CVD through early identification and improved treatment approaches e.g. digital. This could also include behaviour change support treatment adherence. Appendix 2 summarises the existing and planned /recommended interventions that require adoption and development. Where we know the risks of CVD associated morbidity or mortality are higher the geographical aeras and groups will be targeted to identify local inequalities and what additional intervention efforts are required.

6.2 The Strategy recommends an overarching delivery model that is focused upon integrating different services across the system to ensure they are deployed most efficiently and effectively across the system. There is a focus on primary care but not exclusively. The key workforces are the behaviour change services, which are currently commissioned by different organisations. It is recommended that these are integrated and deployed primarily across primary care but also secondary care where appropriate e.g. Maternity Services for addressing smoking in pregnancy. It could also include opportunistic screening at workplaces or leisure services. This workforce would not only encourage people to get screened but then support them through behaviour changes including engaging them with new medicine regimens, working with community pharmacists.

6.3 The extraction of data from GP practice systems is vital to identify those who have had risk factors already identified, but not followed up or had for example a poor lifestyle documented . Data extraction could be at practice level, but PCN level would be more efficient. Figure 9 is the system wide vision which captures all the potential elements that would be included in the model. Some of this could be achieved through working together as a system with minimal investment but funding is required to establish the co-ordination of the changes in the system, for additional data extraction support and ensuring that workforces and pathways are aligned and synchronized.

**Figure 9: Proposed Delivery Model for the CVD Prevention Strategy**




# 7. Taking the Strategy Forward

7.1 The Strategy has been presented to a wide variety of ICS boards and groups along with engagement in of clinicians and managers in its development. It will however require final sign off before becoming formally part of the wider ICS Strategy.

However the following actions of which some build on existing work and others are new, have been prioritised and are already being taken forward. They will where appropriate, seek to identify level of need in high-risk areas and groups to inform understanding of issues and barriers which will contribute to the development of targeted/ appropriate interventions.

- Increasing NHS Health Checks: Local Authority funding has been allocated to address the pandemic backlog. This is an example where activity will be targeted at areas and groups which have higher risks.

- Pregnant Smokers: Local Authority funding is also being used to target pregnant smokers with an incentives-based intervention. This is a pilot but there is good evidence that incentives are an effective method of engaging pregnant smokers in stopping smoking. (NICE NG 209 November 20)
- Community Primary Prevention : Local Authority funding is being used to run a number of pilot projects in schools and communities to inform ongoing commissioning of primary prevention interventions in the community.
- Weight Management Services: The Local Authorities and Integrated Care Board are commissioning additional weight management services.
- A Learning Disability Strategy is being developed by the local authority that will address the prevention, identification, and management of CVD.
- Obesity: Additional Local Authority funding is being used increase obesity identification in GP practices using digital approaches.
- Overall co-ordination: The Local Authorities have allocated funding to increase prevention in primary care. This will partly be used to fund digital obesity identification but also co-ordination of the delivery model.
- Behavioural Insights Research: The Local Authorities are funding behavioural insight research to inform ongoing prevention interventions.
- Blood Pressure Monitoring: Increasing uptake of BP@Home scheme, NHS funded.
- Blood Pressure Optimisation: Awaiting results of funding application to the NHS
- Diabetes Prevention Programme: National ongoing NHS funded Programme
- Primary Care Diabetes Management: Diabetes Local Enhanced Service (Contract)
- Lipid Management Pathways: EoE Academic Health Science Network bid for funding awaited. Also funding for Familial Hypercholesteremia identification and management is being sought. (Inherited condition characterised by high levels of cholesterol in the blood)
- Prescribing Improvements: e.g. Increased use of Direct-acting Oral Anticoagulants (DOACs) that are more effective and cost effective.

# 8. Alignment with corporate priorities

8.1 Environment and Sustainability

The following bullet points set out details of implications identified by officers:

- All spending and investment decisions associated with implementing this Strategy will consider net carbon emissions with environmental criteria will have the same weighting as social and financial criteria.

8.2 Health and Care

The following bullet points set out details of implications identified by officers:

- Health is central to this paper and the implications of the Strategy for health are embedded throughout the paper

8.3 Places and Communities

The following bullet points set out details of implications identified by officers:

- Delivering the Strategy will include the adoption when appropriate a place-based approach that fully involves local communities

8.4 Children and Young People

- The report above sets out the implications for this priority in 1.8

8.5 Transport

The following bullet points set out details of implications identified by officers:

- The Prevention of Cardiovascular Disease includes mitigating the behavioural risk factors which includes promoting encouraging residents to make use of active travel.

# 9. Significant Implications

9.1 Resource Implications

- The report above sets out details of significant implications in Appendix 1

9.2 Procurement/Contractual/Council Contract Procedure Rules Implications

The following bullet points set out details of significant implications identified by officers:

- Any procurements undertaken in relation to this Strategy will be undertaken with the support and approval of the Procurement team and conform to Contract Procedure Rules

9.3 Statutory, Legal and Risk Implications

The following bullet points set out details of significant implications identified by officers:

- Any implications for procurement/contractual/Council contract procedure rules in relation to the Strategy will be considered with the appropriate officers from these Departments and where necessary presented to the Adult and Health Committee before proceeding

9.4 Equality and Diversity Implications

- The report above sets out details of significant implications in 1.8, 2.1, 3, 4.1, 5.1.6.2

9.5 Engagement and Communications Implications

The following bullet point sets out details of significant implications identified by officers:

- Any equality and diversity implications affecting engagement and communications will be identified before any service developments are implemented and promoted

9.6 Localism and Local Member Involvement

The following bullet point sets out details of significant implications identified by officers:

- We will work with local members to make them aware of the implementation of the Strategy asking them to promote the prevention messages with individuals and communities.

9.7 Public Health Implications

The following bullet point sets out details of significant implications identified by officers:

- The CVD Prevention Strategy is key Public Health Strategy which if fully implemented will substantially reduce the associated morbidity and mortality along with any health inequalities.

9.8 Environment and Climate Change Implications on Priority Areas

9.8.1 Implication 1: Energy efficient, low carbon buildings.
Neutral:
Explanation: The Strategy does address building issues

9.8.2 Implication 2: Low carbon transport.
Positive
Explanation: Increasing physical activity is an ambition of the Strategy and that would include promoting active travel and local planning policies

9.8.3 Implication 3: Green spaces, peatland, afforestation, habitats, and land management.
Positive

Explanation: Increasing physical activity is an ambition of the Strategy and that would include promoting the use of green spaces where people can be active

9.8.4 Implication 4: Waste Management and Tackling Plastic Pollution.
Neutral
Explanation: The Strategy does not address either of these issues

9.8.5 Implication 5: Water use, availability, and management:
Neutral:
Explanation: The Strategy does not address any of these issues

9.8.6 Implication 6: Air Pollution.
Positive
Explanation: Increasing physical activity is an ambition of the Strategy and that would include promoting active travel and local planning policies

9.8.7 Implication 7: Resilience of our services and infrastructure and supporting vulnerable people to cope with climate change.
Neutral
Explanation: This is not addressed in the Strategy

Have the resource implications been cleared by Finance? **Yes**
Name of Financial Officer: **Justine Hartley**

Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the Head of Procurement? **Yes**
Name of Officer: **Clare Ellis**

Has the impact on statutory, legal and risk implications been cleared by the Council's Monitoring Officer or Pathfinder Legal? **Yes**
Name of Legal Officer: **Fiona McMillan**

Have the equality and diversity implications been cleared by your EqIA Super User?
**Yes. Comment:** this will have positive benefits for BAME and people with disabilities.
Name of Officer: **Jyoti Atri**

Have any engagement and communication implications been cleared by Communications?
**Yes**
Name of Officer: **Matthew Hall**

Have any localism and Local Member involvement issues been cleared by your Service Contact? **Yes**
Name of Officer: **Jyoti Atri**

Have any Public Health implications been cleared by Public Health?
**Yes**

Name of Officer: **Jyoti Atri**

If a Key decision, have any Environment and Climate Change implications been cleared by the Climate Change Officer?
Yes or No
Name of Officer:

## 10. Source documents

10.1 Office for Health Improvement & Disparities Fingertips (OHID)
Public Health Outcomes Framework - OHID (phe.org.uk)


Public Health England. Public Health Profiles [Internet]. 2021 [cited 2021 Sep 21]. Available from: https://fingertips.phe.org.uk

Public Health England. Public Health Profiles [Internet]. 2021 [cited 2021 Sep 21]. Available from: https://fingertips.phe.org.uk

Cambridgeshire and Peterborough CCG. Cambridgeshire and Peterborough Health Inequalities Strategy 2020 [Internet]. 2020 [cited 2022 Nov 7]. Available from: file:///C:/Temp/tk547/Downloads/03.2a%20-%20Updated%20Health%20inequalities%20startegy%20v2.1.pdf

The NHS Long Term Plan [Internet]. 2019. Available from: www.longtermplan.nhs.uk

Health matters: preventing cardiovascular disease [Internet]. Public Health England. 2019 [cited 2021 Sep 27]. Available from: https://www.gov.uk/government/publications/health-matters-preventing-cardiovascular-disease/health-matters-preventing-cardiovascular-disease

University of Sheffield. CVD Prevention Return on Investment Tool [Internet]. 2021 [cited 2021 Oct 26]. Available from: CVD Prevention Return on Investment Tool

NICE. Cardiovascular disease: risk assessment and reduction, including lipid modification [Internet]. 2016. Available from: https://www.nice.org.uk/guidance/cg181/chapter/1-

Kings Fund The health of people for ethnic minority groups in England 2021 The health of people from ethnic minority groups in England | The King's Fund (kingsfund.org.uk)

Public Health England Health Inequalities : Cardiovascular Diseases 2019 Health Matters: Ambitions to tackle persisting inequalities in cardiovascular disease - UK Health Security Agency (blog.gov.uk)


A full list of resources used in the Strategy are in the full Strategy document.