HEART UK
THE CHOLESTEROL CHARITY

STATE OF THE NATION:
CARDIOVASCULAR DISEASE

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CONTENTS

LIST OF ABBREVIATIONS

Abbreviation	Explanation
AF	Atrial Fibrillation
BMA	British Medical Association
CCG	Clinical Commissioning Group
CRG	Clinical Reference Group
CVD	Cardiovascular disease
FH	Familial Hypercholesterolaemia
5YFV	Five Year Forward View
GP	General Practitioner
NCVIN	National Cardiovascular Intelligence Network
NICE	National Institute for Health and Care Excellence
NSC	National Screening Committee
NHSE	NHS England
POCT	Point of Care Testing
PSNC	Pharmaceutical Services Negotiating Committee
PHE	Public Health England
QOF	Quality and Outcomes Framework
RCGP	Royal College of General Practitioners
SCNs	Strategic Clinical Networks
STP	Sustainability and Transformation Plans

FOREWORD

The long-term funding plan for the health system in England provides an excellent opportunity for the Government and NHS England to once again prioritise cardiovascular disease (CVD) within decision-making circles and propose solutions in order to improve the country's CVD outcomes.

There is a danger, should CVD not be given the appropriate consideration by policymakers, that previous efforts in tackling the UK's biggest killer will be undone, which is already being evidenced, as recent statistics show that progress in reducing premature deaths (for under 75s) from coronary heart disease – the leading cause of heart attacks – is beginning to stall.[i] The consequences of not maintaining a healthy cholesterol level can be severe. Whilst high cholesterol does not usually cause any symptoms, it significantly increases a person's risk of serious health conditions including coronary heart disease, stroke, heart failure and peripheral artery disease.[ii]

As such, I am delighted to present this report from HEART UK, in which we explore what policy interventions in recent years have been effective in improving CVD outcomes and where opportunities have been missed to support meaningful change in the way we prevent, manage and care for CVD. In this report, we propose a series of recommendations which aim to change how we address CVD-related issues in this country.

The report covers policy directives and strategies at a national level, the impact and opportunities that come with NHS organisational restructuring, and the ever-growing role of care and health at the community level in delivering long-term health improvement outcomes.

The recommendations within this report are important calls to action for a wide variety of stakeholders, from those working at the highest levels of Government making decisions on NHS strategy, to those managing public health within local authorities.

These recommendations have been examined and refined following a roundtable discussion amongst high-level NHS England, Public Health England and parliamentary stakeholders. HEART UK recognises that the recommendations contained within this report won't be implemented overnight and that long-term improvement requires across-the-board collaboration. That is why we are proud to work with the Government, NHS England and Public Health England amongst others to achieve our common goal of improving CVD outcomes.

Together we can drive the improvements that are necessary to ensure people live healthy and fulfilling lives.

Jules Payne
Chief Executive
HEART UK

INTRODUCTION: TACKLING CARDIOVASCULAR DISEASE

Cardiovascular disease (CVD) is responsible for 26% of all deaths in the UK. This equates to approximately 160,000 deaths each year or an average of 435 people each day.[iii] At least 42,000 of these deaths occur prematurely.[iii]

Over the past twenty years, the Government in England has identified CVD as an urgent public health problem and has taken action to address its prevalence and poor patient outcomes. These efforts have resulted in a decline in CVD deaths.[iv] However, recent figures suggest progress in tackling England's dangerous relationship with CVD are stalling.

This report explores what policy interventions in recent years – at four different levels - have been effective at improving CVD outcomes and where opportunities have been missed to support meaningful change in the way we prevent, manage and care for CVD.

1. A NATIONAL PROBLEM REQUIRES NATIONAL ACTION

The CVD Outcomes Strategy (2013), and subsequent policy initiatives, highlighted areas to drive improvements in CVD prevention and treatment in England. While considerable progress has been made, the full implementation and delivery of programmes has stalled, in part due to the reorganisation of the NHS and funding pressures. With progress limited, the prioritisation of cholesterol management at a national level has fallen down the priority list.

2. SUSTAINING AND TRANSFORMING CVD OUTCOMES

The creation of 44 Sustainability and Transformation Plans (STP) in England provides the opportunity for areas throughout the country to implement transformative measures to address the burden of CVD in locality. An audit of all 44 plans shows the commitment to address CVD, which is the biggest cause of mortality in England, varies greatly and that most STPs do not have substantive plans in place to improve CVD outcomes.

3. RECOGNISING CVD AS A PUBLIC HEALTH ISSUE PRIORITY

The NHS Five Year Forward View Next Steps outlined a commitment to improving Health Checks uptake. However, long-term public spending pressures are having a profound impact upon the prevention agenda including the Health Check programme and is seriously impacting public health outcomes.

It is important to acknowledge that action has been undertaken by Public Health England (PHE) through the development of their *Action plan for cardiovascular disease prevention (2017-2018)*, which signposts PHE's key CVD prevention initiatives for a range of stakeholders – including clinicians and commissioners – to public health specialists.[v] In addition to this, NHS England has also aimed to deliver a programme of activity targeted at improving CVD prevention rates through *Getting serious about CVD prevention* which focuses on systematic approaches to improve the role of primary and secondary care prevention and to implement population-based approaches to health across the country.[vi] However, given ongoing funding pressures and issues related to workforce capacity, the ability of the NHS to deliver and implement these approaches to CVD prevention and management remains questionable.

4. THE ROLE OF COMMUNITY HEALTHCARE IN DELIVERING IMPROVED CVD OUTCOMES

The role of community-based healthcare professionals to improve CVD outcomes should not be underestimated. Community approaches to CVD prevention are attractive due to their ability to target all groups within a specific geographic area. If effective, they provide the opportunity to achieve widespread behavioural change and risk reduction. However, the support offered by national policymakers to GP practices and community pharmacies is variable and therefore further national policy action is required to improve CVD outcomes in England.

SUMMARY LIST OF REPORT RECOMMENDATIONS

Within this report, a series of recommendations have been put forward to help support Government, policymakers and health system leaders transform the CVD landscape in this country, improve the health and wellbeing of the population and ultimately save lives too often lost to CVD. It also highlights the impact of ensuring cholesterol management is given due prioritisation within the health system along with blood pressure and artrial fibrillation.

NATIONAL

- NHS England should make it compulsory for all CCGs to achieve local clinical consensus and establish an integrated pathway for the detection and management of raised cholesterol and CVD risk to ensure it is given equal priority with blood pressure and artrial fibrillation testing
- Local Government to re-prioritise the NHS Health Check programme, including guaranteed funding and an improved public awareness campaign on the value of participation
- The National Screening Committee to develop a national screening programme for familial hypercholesterolaemia (FH) with ring-fenced funding
- NHS England's National Clinical Directors programme must be retained in order to drive the transformation of services related to CVD and cholesterol management
- The NHS England long-term plan must ensure that CVD prevention and cholesterol management is rightly prioritised and that any proposed methods to improve outcomes in these areas have a clear implementation strategy

REGIONAL

- Local NHS commissioners to provide detailed plans of action on how their footprint will improve CVD outcomes, including targets by which to measure success

LOCAL

- A Government commitment that there will be no further cuts to public health funding

COMMUNITY

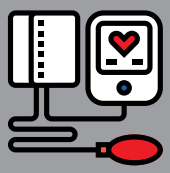
- NHS England to introduce targets or incentives to support the implementation of NICE guidance in CVD prevention and management
- NHS England to develop tailored communication plans to raise awareness of best practice in CVD prevention and management
- NHS England to re-categorise the NHS Health Check as a 'locally commissioned service' within the Community Pharmacy Contractual Framework
- The Government to commit to protecting community pharmacy funding
- Health Education England to deliver a detailed action plan to implement the recommendations outlined within the General Practice Nursing Workforce Development Plan to overcome practice nurse shortages

WHAT IS CARDIOVASCULAR DISEASE?

CVD is a general term that describes a family of diseases with a common set of risk factors that result from atherosclerosis (furring or stiffening of artery walls). This includes coronary heart disease, stroke and peripheral arterial disease.

CAUSES OF CVD

Whilst the exact cause of CVD is not yet known, there are a number of significant risk factors which contribute to a person's risk of being diagnosed:



High blood pressure (also known as hypertension, is an important risk factor for stroke)

Smoking and other tobacco use (which can damage and narrow blood vessels)

High cholesterol (which can cause blood vessels to narrow and increase the risk of developing a blood clot)

Diabetes (a condition that causes a person's blood sugar glucose level to become too high)

Obesity (which increases the risk of developing diabetes and/or high blood pressure)

Genetics (inherited conditions such as familial hypercholesterolaemia can cause high cholesterol)

CHAPTER 1:
A NATIONAL PROBLEM REQUIRES NATIONAL ACTION

In March 2013, the Department of Health (DH) published the Cardiovascular Disease Outcomes Strategy (CVD OS).[vii] The Strategy was published to set out recommendations as to how the UK's "relatively poor mortality rates" as a result of CVD could be addressed, with an emphasis on improving the quality of life and experience of care.[viii]

Whilst the CVD OS' recommendations were largely aimed at local authorities and NHS commissioners, it acknowledged that the responsibility for improving CVD outcomes also fell within the remit of the DH, and therefore pledged to carry out sustained and coordinated action across all relevant stakeholders to prevent the disease.[ix]

The recommendations put forward centred around two key themes: improving prevention, early diagnosis and risk management of CVD; and designing and delivering care differently. This chapter assesses the recommendations put forward in the CVD OS and evaluates the effectiveness – or lack of – their implementation and the consequences for CVD outcomes.

IMPROVING PREVENTION, EARLY DIAGNOSIS AND RISK MANAGEMENT OF CVD

The NHS Health Check programme is an impactful way of driving prevention and early diagnosis of CVD

The CVD OS called for the increased uptake of the NHS Health Check programme, in collaboration with Public Health England and Local Authorities.[x]

The NHS Health Check programme commenced in 2009. A first of its kind programme, the NHS health check aimed to: identify risk factors in patients across a range of health conditions; and support the introduction of preventative measures to delay the onset and/or identify CVD. CVD features as one of the priority conditions in the NHS Health Check assessment.

The programme is available to those aged 40-74 and consists of a simple assessment, often conducted by a nurse or healthcare assistant in a community setting. The NHS Health Check collects details about a patient's lifestyle factors and family history, before taking measurements of height, weight, blood pressure and a blood sample. Following the outcome of the assessment, patients will receive one or a combination of the following to help manage their prognosis:

ADVICE (for example, on how to improve their diet to avoid CVD developing)

MEDICATION (for example, a prescription of treatment to lower blood pressure or cholesterol)

REFERRAL (for example, to see a specialist if a condition has been established).

A national evaluation of the NHS Health Check programme was published to mark its first five years in operation (2009-2013). The report indicated that it had been effective in identifying people at risk of developing CVD.[xi] For example, 1 in 20 Health Check assessments diagnosed high cholesterol levels – one of the most critical risk factors in CVD – and thus prompted the prescription of statins.[xii] Statins are a treatment recommended by the National Institute for Health and Care Excellence (NICE) for prescribing to individuals at a high risk of developing CVD within the next ten years, as a means of lowering their cholesterol.[v]

Through the NHS Health Check programme (and subsequent adherence to NICE guidance), it was estimated that the NHS Health Check was responsible for preventing approximately 2,500 cases of major CVD events, including stroke and heart attacks, over the first five years of its implementation.[xiv]

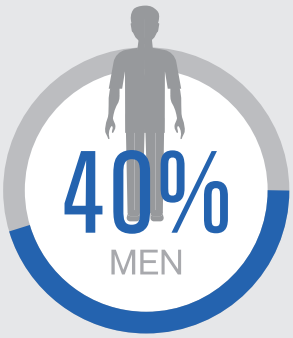
However, while the NHS Health Check has proven enormously valuable in identifying CVD, there are real challenges around its uptake. Only 48% of all people eligible for an NHS Health Check have gone on to attend their appointment when invited.[vi] Some areas report Health Check uptake of the eligible population is at staggeringly low levels, including Devon (0.1%) and Bournemouth (0.3%).[xvi] [xvii] This means that a considerable proportion of local populations who are eligible for an NHS Health Check are needlessly missing out on the opportunity to have their health status, including the likelihood of CVD, assessed. This leaves them vulnerable to receiving a CVD diagnosis at a later stage when it is harder to manage or reverse.

Given the NHS Health Check has been accredited with preventing major CVD events, HEART UK is of the view that it is paramount that safeguarding measures and appropriate funding are introduced to enable its delivery and improve public participation. Further analysis on the impact of funding on CVD is covered in full detail in chapter five.

CASE STUDY – CAMDEN AND ISLINGTON: TARGETING HIGH-RISK GROUPS

CONTEXT

In 2011, CVD was identified as responsible for a considerable life expectancy gap in the London borough of Islington compared to the English average (over 20% for women and almost 40% for men against the English average).[xviii] In response, Camden and Islington Council's Public Health department launched a programme to target groups at a high-risk of developing CVD to address this gap and improve CVD outcomes in the area.



AVERAGE LIFE EXPECTANCY GAP IN LONDON BOROUGH OF ISLINGTON, 2011

The following were identified as contributing to Islington's high rates of CVD:

Late diagnosis: In 2010/11, there were an estimated 40,000 undiagnosed cases of CVD-related conditions in Islington, including hypertension, diabetes, coronary heart disease and chronic kidney disease.[xix] Late diagnosis results in heightened likelihood of premature mortality.

Variable engagement and experience of health care: People with a high risk of CVD from ethnic minority groups were found to be less likely to have received a CVD assessment than their white counterparts.[xx] Alongside this, people with learning difficulties were less likely to report symptoms of CVD compared to other groups[iv], and were less likely to receive checks for blood pressure or cholesterol compared to the general population, thus reducing the likelihood of identifying certain risk factors for CVD.[xxi xxii]

Differences in the prevalence of risk factors: Obesity and smoking contributed to at least 45% more diagnosed long-term conditions in the most deprived parts of Islington compared to the most affluent in 2011.[xxiii]

PROGRAMME

In order to improve CVD outcomes in the area, the eligibility criteria for the NHS Health Check programme was extended to cover individuals aged 35-39 years old. An active steering group was set up to support the programme's implementation, which consisted of local commissioners, primary care representatives, pharmacies, medical unions, patients and a consultant biochemist.

Local GPs were also asked to focus on delivering checks to people with high CVD risk. Pharmacy and community groups were instructed to prioritise the delivery of the NHS Health Check to Islington residents who were not registered with a GP, or who were registered but did not access primary health care on a regular basis.

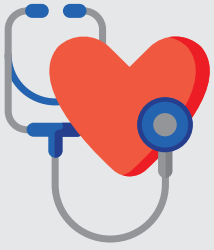
Camden and Islington Council also brought together a combination of static (pharmacy) and flexible (community) units in areas of high density of target and/or vulnerable groups to maximise the uptake of checks. Good local relationships with community, voluntary and social care sectors allowed for engagement with the public in easily accessible venues such as community centres, local markets, places of worship and housing estates, to make health services as available for the community as possible.

Technology also played a crucial role. The local authority developed improvements in point of care testing (POCT) technology. POCT allows for the NHS Health Check to be conducted in both clinical and non-clinical environments and reduces the need for multiple visits or repeat appointments.

OUTCOME

Uptake in the delivery of the NHS Health Check increased in both primary care and community settings following the introduction of the measures outlined above. Of those participating in the programme, 3% were identified as having a high CVD risk and therefore referred for appropriate treatment and care.[xxiii] The targeting of minority groups in the community was also successful and the programme increased the number of those receiving a Health Check in deprived areas by 7%.[xxiii]

3% IDENTIFIED
HIGH CVD RISK



7% INCREASE
HEALTH CHECKS

Diagnosis of cardiac conditions remains a challenge

Familial hypercholesterolemia (FH) is an inherited genetic disorder characterised by high cholesterol levels. The CVD OS put forward an action plan to better identify patients with FH to address low diagnosis levels; only 15% of an estimated 120,000 cases of FH in England have been diagnosed.[xxiv] If left untreated, FH can result in sudden cardiac death.

The DH proposed in the CVD OS that the National Clinical Director for Cardiovascular Disease Prevention should be tasked to work in cooperation with relevant stakeholders to develop and disseminate good practice in relation to identifying FH. This included a recommendation to introduce a national cascade testing programme, which would enable testing of those with a genetic family history of FH to identify whether they have the condition and therefore require treatment to manage it.

The National Screening Committee (NSC) advises ministers and the NHS in all four UK countries on which health conditions should be screened for nationally and how to implement such practices. To date, a screening programme for FH has not been implemented.[xxv]

HEART UK understands that if the 100,000 people with undiagnosed FH in the UK were diagnosed and consequently treated, this could prevent 2,600 premature heart attacks in adults before they reach 60 years of age.[xxvi] There are significant economic savings to be found also; if 50% of patients with FH were diagnosed and treated effectively and early, it is estimated the NHS could save up to £1.7 million per year. [xxvii]

Improving the early diagnosis of FH will save lives and break generational cycles of premature heart disease and death. HEART UK urge the NSC to recognise the benefit of implementing a universal screening programme and reverse their previous negative recommendation.

DESIGNING AND DELIVERING CARE DIFFERENTLY

Managing CVD as a single family of diseases

CVD represents a single family of diseases and conditions which are linked by common risk factors (e.g. diabetes, high blood pressure).

Patients suffering from one form of CVD are more likely to suffer from another CVD condition in the future than those that do not have any of the conditions within this disease family. Instead of being managed as one disease, patients often receive care for their various conditions from multiple teams, the delivery of which is often convoluted and disjointed. The CVD OS sought to overcome this through developing and evaluating "service models to manage CVD as a family of diseases, in the community and in hospital".[xxviii]

Many Sustainability and Transformation Plans (STPs)[1] have declared improved health population outcomes across their areas as a key metric to demonstrate progress in improving their population's health. When it comes to improving CVD outcomes in the local community, 33 of the 44 STPs have highlighted the reinvention of CVD pathways in the community as an important means to improving premature CVD mortality rates. There is a growing recognition that treating CVD conditions in their totality, rather than as separate and isolated diagnoses, can deliver better continuity of care for patients.

Utilising data better to support shared learning and best practice

The key to improving CVD outcomes, like many diseases, is prevention and early detection. Access to high quality patient data is crucial to improving medical research to identify effective methods of treatment for CVD patients, and to support better prevention and early detection measures.

[1]Sustainability and transformation plans (STPs) were announced in NHS planning guidance published in December 2015. NHS organisations and local authorities in different parts of England have come together to develop 'place-based plans' for the future of health and care services in their area.

The CVD OS proposed two key actions to support improved prevention and risk management. Firstly, a commitment to improve the availability of benchmarked data on CVD risk factors. It was envisaged that improved datasets would allow CCGs to compare their ways of working with other areas, and therefore identify the best performing sites from which they could adopt practices from. This would enable a broader reach of effective prevention and early detection of CVD.

Alongside this, the CVD OS sought to utilise the NHS Commissioning Board (now NHS England) and Public Health England to establish a National Cardiovascular Intelligence Network (NCVIN). This would improve the use of information to drive improvements in care and bring together epidemiologists, analysts, clinicians and patient representatives. The NCVIN, working with the Health and Social Care Information Centre (now known as NHS Digital), also aimed to bring together existing CVD data and identify how best to use it.

In 2014, this recommendation came to life. NCVIN published its first cardiovascular disease profiles for each of the clinical commissioning groups in England.[xxix] These profiles are useful for informing local level commissioner conversations on opportunities to improve prevention, detection and management of CVD across a CCG area, and to tackle variation. These profiles support the NHS RightCare approach of 'Where to Look' or where to prioritise CVD activity.[ixxx]

NHS RightCare has also developed a 'Cardiovascular Disease Prevention Pathway' which is an evidence-based pathway developed in collaboration with NHS England's National Clinical Directors, Public Health England, relevant Royal Colleges, NICE and other stakeholders. The pathway aims to provide "local health economies" with a national case for change, a best practice pathway and case studies for risk detection and management of CVD in primary care. [xxxi]

Protecting incentives to improve CVD outcomes

The NHS Commissioning Board (the predecessor of NHS England) pledged to work with stakeholders to identify how best to incentivise and support primary care providers consistently to ensure that people with or at risk of CVD were treated in a timely and effective manner. This included the Department of Health asking NICE to review the relevant Quality and Outcomes Framework (QOF) indicators.

The QOF is an annual reward and incentive programme detailing GP practices' achievement results. The QOF rewards practices for the provision of quality care and helps standardise improvement in the delivery of primary medical services. Introduced as part of the GP contract in 2004, QOF indicators created a direct link between a surgery's income and the need to meet care targets related to CVD including heart disease, diabetes and smoking.

Calls to replace QOF indicators first emerged in 2015, when the Royal College of General Practitioners (RCGP) said a replacement was required to allow "GPs to focus on providing the best possible holistic care". In 2017, the British Medical Association (BMA) supported the removal of QOF to reduce bureaucratic pressures upon GPs and free up their clinical time.[xxxii]

NHS England's (NHSE) 'Next Steps on the Five Year Forward View' (March 2017) stated that the NHS believe that the use of detailed indicators, such as QOF, has "run its course".[xxxiii] The document called the collection of QOF a "tick-box exercise" and pledged to work with stakeholders to find a successor to QOF. It claimed ending QOF would allow for the reinvestment of £700 million a year into "improved patient access, professionally-led quality improvement, greater population health management, and patients' supported self-management, to reduce avoidable demand in secondary care".[xxxiv]

The GP contract for 2018/19 agreed a number of changes to the framework, including an increase in the value of the QOF point.[xxxv] However, cholesterol continues to go unrepresented. [xxxvi] The 'Next Steps on the Five Year Forward View' document indicated that a successor would be developed.[xxxvii] However, given that QOF has been renewed for another year, it is likely that this replacement is still in draft form and unlikely to be implemented in the near future.

Recent data from NHSE shows a fall in the number of practices submitting QOF data. A NCVIN report states that some of the QOF indicators with the greatest fall in achievement are "directly related to the public health prevention agenda".[xxxviii] As such, GP-level data on measures being taken to address CVD risk factors is not being collected uniformly across England.

The NHS must work with GPs and membership bodies to find a solution to ensure that patient data is being collected and that there is not a negative impact on patient outcomes as a result of data collection gaps. Data collected through QOF indicators are crucial markers of population health and patient management, and when a new QOF system is implemented cholesterol indicators must be a key feature going forward.

A NATIONAL FOCUS

Prioritisation within the long-term plan for the health system

In March 2018, the Government announced increases in NHS funding over the coming years and asked the health system to create a long term plan for how this additional resource will be used in the future. Amongst the Government's priorities for this plan, Prime Minister Theresa May, stated that there must be a focus on the prevention of "ill health, so people live longer, healthier lives".[xxxix]

Following the announcement, Simon Stevens, Chief Executive of NHS England also set out his priorities for the plan. Stating that there would be a "new focus around cardiovascular disease" and that the health system has "ground to catch up".[xl] This focus on CVD is exemplified through the creation of a number of working groups covering the priorities set out by the Government, one of these groups will focus on cardiovascular and respiratory diseases and another on prevention and personal responsibility.

Through these working groups, there is the vehicle to feed into the long term plan through illustrating the benefits of improved CVD prevention programmes and cholesterol management. These are two areas which contribute significantly to the poor health of the UK and must be rightly prioritised by the NHS through their long term plan.

A national strategy requires national leadership

With widespread changes expected in line with the NHS long term plan, there is a requirement that within the area of CVD and cholesterol management, national leadership through NHS England's National Clinical Director (NCD) programme is maintained.

The NCDs are crucial to improving outcomes in health and they provide important clinical advice and leadership to drive the transformation of services, identify and deliver corporate clinical priorities, support the commissioning of services and provide parliamentary accountability.

In order to drive improvements in CVD care, NCD leadership in the areas of Cardiovascular Disease Prevention and Heart Disease must be retained. Through their leadership there is the opportunity to ensure that CVD and cholesterol management is sufficiently prioritised within the health system.

Assessing the progress of the CVD Outcomes Strategy

HEART UK has analysed progress against each commitment directly outlined in the CVD OS, it demonstrates that progress against the delivery of the recommendations has been mixed.

Recommendation	Analysis	Progress
A NCVIN should be established to improve the use of information to drive improvements.[xli]	The NCVIN was established in 2014 in order to put intelligence on cardiovascular disease prevention and treatment into practice. NCVIN has produced resources to assist health professionals in making decisions about local services, including CVD Primary Care Intelligence Packs, which are useful resources for CCGs to identify areas for improvement.	Achieved
NHS England will develop new tools to support case finding in primary care and provide support to GP practices that have low CVD detection rates.[xlii]	Strategic Clinical Networks (SCNs) prioritised CVD as one of their key intervention areas and continue to work closely with CCGs to improve detection rates. SCNs provide key support to local CCGs by providing clinical advice and support to commissioners in reviewing CVD services across their network. SCNs also look to reduce unnecessary variations in models of care and work with regional and national CVD forums.	Achieved
NHS IQ will work with Public Health England, local authorities and the NHS to support the successful implementation of the NHS Health Check programme.[xliii]	Whilst uptake in NHS Health Check has generally improved since 2013, many local authorities struggle to provide sufficient access leading to geographical variation in uptake. The NHS Next Steps on the Five Year Forward View document acknowledges low uptake and outlines a commitment to improve coverage of the NHS Health Check programme by working with CCGs to cover "an additional 13 million people to identify and implement optimal value CVD interventions.[i]	Mixed
NHS England will incentivise and support primary care to provide good management of people with or at risk of CVD.[xlv]	QOF indicators have been included in the GP contract from 2017/18. The Next Steps on the Five Year Forward View document stated that the NHS will introduce an incentive scheme to replace QOF.[i] However, a position on what this QOF replacement will consist of is yet to be established.	Mixed
Public Health England (PHE), NHS England and NHS Digital will make benchmarked CVD risk factor data available.[i]	Good progress has been made on making benchmarked data available on CVD risk factors through NCVIN and the publishing of NHS Health Check uptake data on a quarterly basis. However, the removal of CVD indicators from QOF risks reducing the effectiveness of data collection across the NHS.	Mixed
NHS England will improve processes for identifying inherited cardiac conditions and spread good practice in relation to FH.[xlviii]	The introduction of a national cascade programme was recommended to improve the identification of inherited cardiac conditions. However, this is yet to be implemented. Any national programme for identifying inherited cardiac conditions will require allocated funding to support its successful delivery.	No action

HEART UK calls to action:

- **NHS England should make it compulsory for all CCGs to achieve local clinical consensus and establish an integrated pathway for the detection and management of raised cholesterol and CVD risk to ensure it is given equal priority with blood pressure and atrial fibrillation testing**
- **Local Government to re-prioritise the NHS Health Check programme, including guaranteed funding and an improved public awareness campaign on the value of participation**
- **The National Screening Committee to develop a national programme for Familial hypercholesterolaemia with ring-fenced funding**
- **NHS England's National Clinical Directors programme must be retained in order to drive the transformation of services related to CVD and cholesterol management**
- **The NHS England long term plan must ensure that CVD prevention and cholesterol management is rightly prioritised and that any proposed methods to improve outcomes in these areas have a clear implementation strategy**

CHAPTER 2:
SUSTAINING AND TRANSFORMING CVD OUTCOMES

A NATIONAL HEALTH SOLUTION TO REGIONAL HEALTH PROBLEMS

In December 2015, NHS England announced the creation of Sustainability and Transformation Plans (STPs). STPs were established to bring together local leaders in health, local government and patient representation to plan how services could evolve and become sustainable between 2016 and 2021.[xlix]

The emergence of STPs created a new funding environment for NHS providers that aimed to achieve collaboration over competition. To secure funding, providers would have to demonstrate co-working with other providers, commissioners, the public and local authorities to create plans addressing the three gaps identified within the NHS Five Year Forward View (5YFV):[l]

HEALTH AND WELLBEING
CARE AND QUALITY
FINANCE AND EFFICIENCY

As a result, proposals across 44 'footprints' in England were developed. Plans were initially published in draft form in June 2016 and finalised in November 2016.

The Five Year Forward View (5YFV) and more recently, the Next Steps on the Five Year Forward View, highlighted the prevention of CVD as a key priority area for improvement, in order to deliver a long-term sustainable healthcare system and healthy population.[li] The 'Next Steps on the Five Year Forward View' document noted that CVD is "highly preventable through proven treatments for high-risk conditions, [as] recommended in NICE Guidance".[lii] However, it also stated that CVD continues to remain the second highest cause of premature death in England.[liii]

The Next Steps on the Five Year Forward View also outlined a firm commitment that Public Health England would work with STPs and NHS England, including the RightCare programme, to support the implementation of measures to prevent CVD on a wide scale.[2] In September 2017, Public Health England and NHS England announced that they had approached all 44 STPs to identify opportunities to improve CVD prevention.[liv]

More recently, a joint initiative between NHS England and Public Health England, called 'The Size of the Prize for STPs', aims to deliver at-scale improvement in the secondary prevention of CVD.[lv] The 'Size of the Prize' provides a one-page graphic for each STP and shows the prevalence of undiagnosed high blood pressure or atrial fibrillation (AF) in their population area. This initiative illustrates the scale of the opportunity within each STP area. The new relationships in STPs between NHS and Local Authorities will offer the NHS the possibility to prioritise CVD through pathway redesign at scale, mobilising community interest and increasing access to routine testing. Therefore, an assessment of STPs is required in order to identify those that have set out plans to improve their CVD outcomes.[lvi]

HEART UK has analysed each STP plan in turn, reviewing their proposals for tackling CVD. A brief overview of all 44 plans can be found below.

A REVIEW OF REGIONAL HEALTH PRIORITIES

LONDON

1. North London

North London's STP states a commitment to establishing four workstreams which will in turn develop a cardiovascular clinical pathway. However, the STP document does not establish what the final pathway will look like or how they intend to deliver it.[lvii]

2. South East London

Seizing upon the cardiovascular focus within the 5YFV, the South East London STP is seeking to collaborate with the 'Healthier London Partnership'[ii] to share good practice and maximise opportunities for "whole system approaches to improve the prevention, detection and management of high blood pressure". As discussed in the previous chapter, improving the prevention and early identification of CVD has a significant impact on overarching CVD outcomes.[lviii]

3. East London

The East London STP outlines a commitment to develop new pathways - which stretch across primary, secondary and tertiary care - to improve the prevention, identification and treatment of CVD within their geographical remit. The plan notes that a primary prevention service would focus on reducing cholesterol levels and smoking, two key risk factors of CVD.[xi]

4. South West London

Delivering high performing and effective CVD services is highlighted as a specific priority by the South West London STP, who indicate they will work "to improve value, reduce variation and address issues with referrals". They also outline plans to evaluate London-based STPs to identify the most effective and high performing services.[xii]

5. North West London

The North West London STP specifically outlines a recommendation to improve CVD outcomes through the use of diabetes multifactorial risk reduction, which can reduce CVD by as much as 75 percent.[lxi 4] The STP states that this would contribute to "a reduction in diabetes-related cardiovascular events of 2,806 per year across North West London averaged over a five-year period".[lxii]

[2]The NHS RightCare programme is a national NHS England supported programme committed to improving Clinical Commissioning Group (CCG) understanding of their performance and addressing unwarranted variation.

[3]The Healthier London Partnership is an initiative bringing together London based CCGs to deliver better health and care for all Londoners.

[4]The diabetes multifactorial risk reduction programme is a treatment programme designed to reduce CVD risk factors in patients with type 2 diabetes.

THE NORTH

6. Cheshire and Merseyside

The Cheshire and Merseyside STP does not go into significant detail outlining their plans to tackle CVD. However, the STP plan does state that they have developed key strategic programmes which aim to provide advice and guidance on how they tackle key issues across the STP footprint. These include improving the health of their population and improving the quality of care in hospital settings. These are supported by eight clinical programmes looking to improve the way they deliver care across several conditions, including CVD.[lxiii]

7. Durham, Darlington, Teesside, Hambleton, Richmondshire and Whitby

Developing a four-year comprehensive prevention programme for long-term conditions is identified as a key priority for this STP footprint, with CVD highlighted as a key area for change. However, there is no further detail on what this prevention programme might look like in practice.[lxiv]

8. Greater Manchester

The Greater Manchester STP recognises improving population health as a key component to delivering a sustainable healthcare system for future generations. To achieve this, the STP will dedicate specific programmes to tackle the future burden of CVD by enabling Greater Manchester residents to self-manage their health better, and to support prescribers and pharmacies to identify and treat CVD risk factors.[lxv]

9. Humber, Coast and Vale

This STP recognises the need to take steps to "identify cardiovascular disease early on" and indicates that prevention programmes are already being rolled out. However, it provides no clarity or demonstration of what these programmes consist of.[lxvi]

10. Lancashire and South Cumbria

Though not specifically mentioning CVD, this plan states that action needs to be taken to reduce the number of people dying from coronary heart disease, a specific form of CVD.[lxvii]

11. Northumberland, Tyne and Wear and North Durham

Excessive premature mortality related to CVD is noted within the STP alongside a commitment to utilising NHS RightCare resources to transform their CVD prevention pathway.[lxviii]

12. South Yorkshire and Bassetlaw's commitment to deliver CVD prevention

Whilst many STP mentions of CVD are minimal and where present are mostly illustrative rather than pragmatic, as noted in our audit based on publicly available documents, there are a few plans that set out in detail how they will deliver the expectations of CVD prevention and diagnosis outlined in the 5YFV and accompanying Next Steps document.

"We want to deliver a step change in investment in and delivery of prevention across South Yorkshire and Bassetlaw in order to improve our population's health and reduce the growth in demand for health and care services over the next five to ten years."[lxix]

South Yorkshire and Bassetlaw STP has identified a pressing need to improve CVD outcomes, after their own analysis showed that whilst life expectancy in the region was increasing, healthy life expectancy was not.[5] Having evaluated the existing level of health and social care services, the STP determined that they were not meeting the local population's health needs, delivering prevention or reducing health inequalities. As such, CVD was identified, alongside cancer, as the main cause of preventable death in the region and the STP sought to commit to a "radical upgrade in preventing ill health by increasing the size of our shared resource on prevention".[lxx]

The STP calculated that by delivering effective prevention measures in CVD alone, 5,500 early deaths from CVD could be avoided. Alongside the human cost, it was also estimated that preventing CVD could free up to £58 million which would otherwise be assigned to treating CVD patients.

What do they intend to do?

South Yorkshire and Bassetlaw STP are aiming to improve and control awareness of the population's blood pressure and reduce the population risk of type 2 diabetes by introducing new models of care and increasing primary care identification of CVD in at risk populations. This early identification process will allow for timely management of care in community settings, including community hubs, pharmacists and GP Practices.[lxxi]

13. West, North and East Cumbria

Through the use of NHS RightCare's local benchmarking tools, this STP identified itself as having high premature mortality rates for circulatory and respiratory conditions. To counteract this, West, North and East Cumbria STP set out an objective to reduce premature mortality rates to the average of the STP's most similar CCG areas by 2020/21.[lxxii]

14. West Yorkshire and Harrogate

All West Yorkshire authorities have significantly worse rates for CVD mortality in under 75s when compared to the rest of England.[lxiii] In response to this, the West Yorkshire and Harrogate STP has set out an aspiration to reduce cardiovascular events by 10% by 2020/21.[lxiv] Within the Bradford District and Crave area, this will mean a reduction in cardiovascular events for 600 people.[lxxv] To do this, the STP maintains it will focus on prevention and early intervention at the first point of contact.[lxxvi]

THE SOUTH

15. Surrey and Heartlands detailed plan for driving improvements in CVD care

Surrey and Heartlands STP provided extensive details in their footprint plans on how they intend to improve their CVD outcomes. The STP noted that CVD, like in other STPs, is a leading cause of morbidity within their region and a significant burden on health services and the economy.

"[Two thirds] of deaths could be avoided through improved prevention, earlier detection of factors such as hypertension and diabetes, and better treatment in primary care."[lxxvii]

To address this, the STP has proposed a number of projects, including:

- Developing innovative new outreach methods and increasing case finding to primary care to identify at risk populations, which will improve control and awareness of the population's blood pressure.
- Establishing a Surrey and Heartlands cardiovascular operating model to deliver a "best in class cardiology service across the footprint".[lxxviii]

[5]Life expectancy is the average number of years that an individual is expected to live based on current mortality rates. Healthy life expectancy is the average number of years that an individual is expected to live in a state of self-assessed good or very good health, based on current mortality rates and prevalence of good or very good health.

The STP included a roadmap within their plan which outlines key milestones from 2016-2020/21 for the implementation of the above objectives. Despite the clear framework for change, the STP has also identified a number of risks which may hinder implementation, including a shortage of skills and/or workforce to deliver specialist and community care, and concerns that the proposed CVD model will not be agreed by all stakeholders, thwarting its execution.

However, that the STP has highlighted potential risks to change exemplifies the considerable thought that has been allocated to driving real improvements in their CVD outcomes and a willingness to overcome these barriers to deliver change for the community.[lxxix]

16. Somerset

This STP intends to focus on the prevention agenda to "develop a sustainable system". An increasing gap between life expectancy and healthy life expectancy, and in health inequalities, within the region is cited.[lxxx] To address this, the STP intends to shift from a "demand driven system to a prevention system", where it will align its priorities to the most prevalent burdens of disease, including CVD.[lxxxi]

17. Gloucestershire

The STP notes that the major causes of death in the region are linked to CVD, which is the second most common cause of mortality, accounting for 26.8% of deaths.[lxxxii] Despite the significant number of CVD deaths in the region, there appears to be no clear plan to improve CVD outcomes. However, the STP states that through engagement with their Specialised Commissioning team, they have identified important opportunities for improvements in their cardiovascular pathway. These opportunities have yet to be made publicly available.[lxxxiii]

18. Dorset

Dorset STP has identified that the effective prevention of CVD will have significant economic benefits for the region. The STP is one of few to note the importance of secondary prevention to ensure that health and care practitioners provide timely and high-quality support for their region's population to consistently control their blood pressure and cholesterol. This, the STP states, will help to address variations in health and wellbeing outcomes across the STP area.[lxxxiv]

19. Cornwall and the Isles of Scilly

CVD is highlighted as one of the STP's priority intervention pathways. By 2020/21, the STP aims to have established a cross-community/provider pathway of care that will "maximise the health" of the population.[lxxxv] These pathways will have a distinct focus on best clinical practice, reducing variation and offering "good value for money" for commissioners.[lxxxvi] By developing this pathway, they hope to reduce variation, improve patient outcomes and drive improvements in reducing the prevalence of key public health problems such as smoking, obesity and diabetes.[lxxxvii]

20. Buckinghamshire, Oxfordshire and Berkshire West

The impact of yearly costs driven by major long-term conditions, such as CVD as a result of physical inactivity, is highlighted by the STP, illustrating the potential for savings of £430,000 on an annual basis. The STP has allocated £12 million to support the implementation of transformation schemes to improve CVD outcomes between 2017/18 and 2020/21, with £2 million allocated for local CVD prevention work.[lxxxviii]

21. Devon

Whilst not particularly mentioning CVD as a key priority area, the STP has highlighted coronary heart disease and cerebrovascular disease as main areas for action. The plan outlines a commitment to develop plans to help their local population adopt healthy lifestyles, as well as examining the social, economic, environmental and cultural factors affecting their health.[lxxxix]

MIDLANDS AND EAST

22. Bedfordshire, Luton and Milton Keynes

This STP notes that the need for changes to their service provision is due to "four big killers", of which CVD is highlighted. However, there is no mention within the plan of how they will specifically address the burden of CVD in their local population.[xc]

23. The Black Country

The Black Country's plan states that they intend to focus on clinical areas with a "particular challenge or opportunity", including CVD.[xci] The STP notes that their Clinical Reference Group (CRG)[vi] has reviewed RightCare evidence to determine the model of service delivery best placed to optimise patient outcomes, the quality of care, and efficiency. Within the evidence pack, CVD is highlighted as a significant opportunity.[xcii]

24. Birmingham and Solihull

The STP highlights the worrying statistic that within the STP's region, preventable mortality rates for the under 75's from CVD are 67.7 per 100,000, compared to a national average of 49.2 per 100,000.[xciii] However, there is no further mention of CVD beyond this within the plan or a commitment to reforming their care pathway.[xciv]

25. Cambridgeshire and Peterborough

The Cambridgeshire and Peterborough STP has a mixed demography, whereby Cambridgeshire has a higher rate of premature deaths from CVD than the national average, while for Peterborough the reverse is true.[xcv] The plan proposes to improve the diagnosis of and treatment for CVD by maximising the opportunities for lifestyle interventions through NHS Health Checks. The STP also commits to develop a programme of improvement projects, each of which will report to a group or board in the STP's structure, with CVD falling under the category and supervision of the primary care group which has a focus on delivering improved outcomes for long-term conditions, such as CVD.[xcvi]

26. Derbyshire

Whilst not specifically mentioning CVD, the Derbyshire STP plan provides a commitment to improving early diagnosis and intervention to improve outcomes and avoid unwarranted variation in conditions related to CVD, such as coronary heart disease and diabetes. However, in a similar vein to other STPs, there is no clear outline for how this will be achieved.[xcvii]

27. Herefordshire and Worcestershire

This STP notes that the mortality rate for conditions related to CVD are "slightly higher than expected" in Herefordshire, whereas in Worcestershire, premature mortality is "amongst the worst or actually is the worst for its comparator group" of CCGs. Despite this acknowledgement, there is not a clear plan of action for how they will reduce their mortality rates.[xcviii]

28. Leicester, Leicestershire and Rutland

A commitment to reduce their premature CVD mortality rate across the STP footprint is cited, through early detection programmes and preventative public health strategies. The STP proposes to establish a "complete cardiovascular centre" and call upon care in the community resources to reduce the capacity burden of CVD on the STP.[xcix]

29. Lincolnshire

Much like other STP plans, premature CVD mortality rates are highlighted as a challenge in the Lincolnshire STP. An objective to tackle childhood obesity rates is outlined. This aims to reduce the likelihood of obese children becoming obese adults with health problems such as CVD.[c]

30. Norfolk and Waveney

A key workstream of the Norfolk and Waveney STP is to improve the prevention, detection and management of major chronic illnesses that affect the STP footprint population, such as diabetes, coronary heart disease and hypertension. While there are no clearly outlined plans in the STP document as to how this will be achieved, the report does state that the benefit of some prevention schemes may not be realised until after 2020/21.[ci]

31. Northamptonshire

Outlining a notion to develop a "progressive model of care in the community"[cii], the STP highlights improving CVD as one of its key priority areas. To address the issues related to CVD, they aim to take forward evidence from NHS RightCare packs and identify a number of conditions related to CVD, such as heart failure and stroke, whereby they can make improvements to reduce unnecessary hospital admissions.[ciii]

32. Nottingham and Nottinghamshire

Like a number of other STP plans, such as Leicestershire and Lincoln, Nottingham and Nottinghamshire's STP notes that under-75 preventable mortality rates are below the national average. The STP plan acknowledges that more can be done to address the burden of CVD through the provision of more consistent access to high quality primary and community care.[ciii]

33. Shropshire and Telford & Wrekin

This STP notes that "60% of early death under 75 years are due to preventable cardiovascular diseases, cancers and respiratory diseases", which also estimates that a total of 260,000 adults across the footprint are at a higher risk of CVD due to obesity.[ciii] To combat this, the STP has proposed a "Partnership Prevention Programme" to bring about population-level behaviour change through a suite of prevention activities that will aim to reduce the burden of ill health and disease within the STP footprint. This will include the introduction of a system-wide prevention programme, proactively identifying health risks and connecting people to the right level of support in the community. As a result, it is thought that it will improve population level health and well-being in Shropshire.[cvi]

DOES THE NATIONAL SOLUTION TO REGIONAL HEALTH WORK FOR CVD?

Despite the supposed prioritisation of CVD in STP footprints, as outlined in the NHS Five Year Forward View and Next Steps documents, nearly a quarter of STP plans contain no mention of CVD within their proposals:

No mention of CVD within the following STPs

1. Bath and North-East Somerset, Swindon and Wiltshire
2. Bristol, North Somerset and South Gloucestershire
3. Coventry and Warwickshire
4. Frimley Health and Care
5. Hampshire and Isle of Wight
6. Hertfordshire and West Essex
7. Kent and Medway
8. Mid and South Essex
9. Staffordshire and Stoke-on-Trent
10. Suffolk and North-East Essex
11. Sussex and East Surrey

Analysis of all 44 STP plans by HEART UK shows that CVD is recognised as a critical health condition whereby there is significant room for improvement in terms of prevention, diagnosis and treatment. However, whilst a significant number of STPs have identified the prevention of CVD as a priority area for reform, there is an overwhelming a lack of developed plans to address and improve CVD outcomes, or how these will be implemented and operationalised.

One of the most disappointing lack of mentions within STP plans is the role of cholesterol management in improving CVD outcomes. The STPs present place-based opportunities to make system-wide improvements to prevent CVD. Establishing a commitment in their initial plans will ensure that STPs will affect real change in the management of cholesterol within their footprint.

IMPROVING THE PREVENTION AND DETECTION OF CVD WILL REQUIRE SYSTEM LEADERSHIP

Recognising the importance of addressing CVD at an STP level, Public Health England has developed 'Local health and care planning: menu of preventative interventions' guidance, which has been designed to upskill those involved in the commissioning and health planning of STPs.[cvii] This menu outlines how evidence-based preventative public health interventions can help to improve the health of the population and reduce health and care service demand in the short- to medium-term. CVD is given prominence within the menu, which outlines steps that can be taken to improve management of the CVD and raised cholesterol. The implementation and uptake of this menu must be widespread in order to avoid variation and assist STPs to meet their aims of earlier identification and management of CVD.

HEART UK calls to action:

Local NHS commissioners to provide detailed plans of action on how their footprint will improve CVD outcomes, including targets by which to measure success

CHAPTER 3:
RECOGNISING CVD AS A PUBLIC HEALTH PRIORITY

PUBLIC HEALTH SPENDING IS ON THE DECLINE

The 2012 Health and Social Care Act set out changes to the public health system, including new responsibilities and funding for local authorities. The changes were expected to ensure that these local authorities take a greater role in improving health and reducing inequalities.[cviii] In 2013, Secretary of State for Health, Jeremy Hunt, and Public Health England Chief Executive, Duncan Selbie, wrote in a letter to local authorities that "the money you receive will allow you to transform the lives of local people through the commissioning of a wide range of innovative services."[cix]

In the current system, local authorities are supported by the executive agency Public Health England and the Public Health Outcomes Framework. The NHS also has a legal duty to improve health inequalities.

At a local level, the Act gives local authorities responsibility for improving the health of their local populations. The Act says that local authorities must employ a Director of Public Health, and they will be supported by a new ring-fenced budget. The Act requires directors of public health to publish annual reports that track progress.

The transfer of public health spending initially presented an opportunity for local authorities to make real progress in improving CVD outcomes. However, a lack of funding from Government has resulted in local authorities being unable to work closely with their population to raise awareness, encourage behaviour change and conduct risk assessment amongst communities with a high CVD risk.

In 2013, when local authorities were first given responsibility for public health, the initial grant was seen as a generous step in the right direction to enable public health to be overseen at a local level. However, this grant has decreased year on year. In 2015, £200 million was cut from the public health budget by the Treasury and this trend has continued.[cx]

IN 2015 £200 MILLION CUT FROM THE PUBLIC HEALTH BUDGET BY THE TREASURY

Local authorities' public health allocations per head:[cxi]

Year	2015-16	2016-17	2017-18
Allocation per head	**£63**	**£62**	**£59**

The last Government announcement on public health spending confirmed that local authority funding for public health would be reduced by an average of 3.9% in real terms per annum until 2020.[cxiii] This equates to a reduction in cash terms of 9.6% over the same period.[cxiii]

There is also widespread geographical variation in terms of the provision of public health expenditure per head. This is notably evident in the public health allocations for 2017/18, which reveal that the City of London allocated a budget of £187 per head, compared to areas such as East Riding of Yorkshire, which ringfenced £34 per head.[cxiv]

SPENDING ON PUBLIC HEALTH OFFERS LONG-TERM FINANCIAL GAIN

Spending less on public health is likely to lead to future financial difficulties for the NHS. Prevention, it is said, is often the best cure. Investing in public health is a pragmatic preventive procedure. It is estimated that per year in the UK obesity costs the NHS £5.1 billion, smoking costs £3.3 billion, alcohol costs £3.5 billion and physical inactivity costs £0.9 billion.[cxv] These key influencers on the NHS budget are challenges which can be mitigated through investment in public health.

Evidence shows that local public health interventions are cost-saving and offer substantial returns on investment. Cuts to public health therefore present a false economy which is likely to generate billions of pounds of additional costs to the health service and wider economy. Recent analysis shows that for every £1 spent, the monetary value of the benefit from such interventions is estimated to be around £14.[cxvi]

As the NHS and wider healthcare system moves towards capitated budgets through Integrated Care Organisations, focussing on prevention is a key aspect to deliver efficiencies within that set budget. However, place-based systems of care like STPs need to be resourced to drive this agenda.

HEART UK calls to action:

A Government commitment that there will be no further cuts to public health funding

CHAPTER 4:
THE ROLE OF COMMUNITY HEALTHCARE IN DELIVERING IMPROVED CVD OUTCOMES

The role of community-based healthcare professionals in improving CVD outcomes should not be underestimated. Community approaches to CVD prevention are attractive due to their ability to target all groups within a local population. If effective, they provide the opportunity to achieve widespread behavioural change and risk reduction.[cxvii]

This section of the report examines the role of three specific types of healthcare professionals in community care - community pharmacists, practice nurses and general practitioners (GPs) – and offers recommendations as to how their reach and contribution to addressing CVD in England could be enhanced.

THE ROLE OF GENERAL PRACTITIONERS IN SUPPORTING IMPROVED CVD OUTCOMES

A host of guidelines, set out by NICE, outline best practice prevention and management of CVD. Guidelines for CVD are designed to help GPs identify those who are at a high risk of CVD and describes lifestyle behaviours and treatment options that can help reduce the onset of CVD or help manage it if already developed.[cxviii]

However, adherence to the advice and best practice outlined in the guidelines is patchy and inconsistent, jeopardising the quality and standard of care patients experience. The latest guidelines advise HCPs to recommend patients initiate statin treatment if they have a greater than 10% risk of developing CVD.[cxix] HEART UK research has found that the majority of GPs comply with this advice, with 74% stating they "always" or "almost always" advised patients to participate in statin therapy for the primary prevention of CVD, with the remaining 26% responding "sometimes".[cxx]

This is likely linked to GP confidence in the therapy, with 95% of practitioners stating they have access to the necessary information to discuss the risks and benefits of starting the treatment with patients.[cxxi] This is increasingly important as our poll suggests 99% of patients raise concerns when statin therapy is proposed.[cxxii]

While there is widespread observance of the recommendation to prescribe statin therapy to patients at risk of CVD, other areas of the available guidance are not applied consistently. When a GP identifies someone at high risk of CVD, the guidelines state that GPs should initiate lipid-modification therapy which may involve additional care to the prescribing of statins.[cxxiii]

Lipid is the medical terminology for blood fats. When a patient is identified as requiring lipid lowering treatments, such as statins, this should be supplemented by careful monitoring to examine the patient's response to the prescribed treatment. NICE guidance states that these patients should be routinely monitored for the adverse effects of lipid-modification therapy.[cxxiv] However, the capacity of GPs to effectively monitor at regular intervals is variable. Almost a quarter (24%) of GPs who responded to HEART UK's survey outlined that they only occasionally monitor a patient's response to prescribed lipid lowering treatment.[cxxv]

Furthermore, appropriate levels of referral to lipid clinics are worrying low. Lipid clinics provide specialist support to people with raised blood fats (cholesterol and triglycerides). The majority of lipid clinics are hosted in hospital outpatient departments and are run by a specialist, typically lipidologists, cardiologists or clinical biochemists. These specialist clinics play an important role in delivering the necessary care required for those at high-risk of CVD.

When asked whether they refer patients who do not achieve target lipid levels following treatment interventions to lipid clinics within their locality, only 2% of GPs said they abided by this "always", with a further 14% saying "almost always".[cxxvi] Worryingly, 44% of GPs say they "hardly ever" or "never" refer patients to lipid clinics. Current NICE guidance related to lipid modification CVD prevention notes that specialist advice should be sought for patients, such as referral to a lipid clinic, when a patient's triglyceride concentration remains elevated post-treatment which can significantly increase a patient's CVD risk.[cxxvii]

Guidelines aside, knowledge and awareness of the tools and support that exist to drive improved patient care and experience is poor and perhaps indicative of why guidelines are not always implemented in full. NHS RightCare was established in 2009 to ensure that patients in England receive access to the "best possible care" which is delivered as "efficiently as possible".[cxxviii] The NHS RightCare implementation team advise local health economies to make the best use of their resources, understand their performance and reduce unwarranted variation.[cxxix] The RightCare package includes a CVD prevention pathway guide.[cxxx] Whilst it is primarily aimed at local health economy decisions makers, the contents could help GPs.

However, GPs' awareness of the RightCare pathway for CVD prevention is painstakingly low, and its application even more so. HEART UK research suggests only 12% of GPs utilise the pathway and only 1% frequently so. This lack of synergy between the centre (RightCare is an NHS England-led initiative) and the frontline prohibits the success of the programme, which is a key priority noted in Public Health England's 2017/18 action plan for CVD prevention, published in 2017.[cxxxi]

Finally, as discussed previously in the report, general practice is the main delivery mechanism for the NHS Health Check programme. Financial and footfall pressures are compromising the ability of GP surgeries to deliver the programme, with nearly a third of surgeries claiming they do not have the necessary capacity to provide all eligible members of their patient population with a Health Check.[cxxxii]

In terms of the procedure itself, there is variability in what is included in the NHS Health Check programme as a default, including a cholesterol test and the measurement of a patient's blood pressure. This is a statutory legislative requirement, GPs who do not conduct a full NHS Health Check are not adhering to their legal duty. However, when GPs were asked if their NHS Health Checks included a cholesterol programme, replies were inconsistent. While 78% said they "always" included cholesterol testing, 22% of responses varied from "sometimes" to "never".[cxxxiii] This is mirrored in the findings around whether the NHS Health Check includes a full lipid profile, with only 63% of GPs confirming their practice includes this as standard.[cxxxiv]

To ensure GPs can deliver optimal care for their patients from a CVD perspective, more must be done to lift guidance into standard practice. This could be supported, for example, by mandating that patients must be routinely monitored for the adverse effects of lipid-modification therapy and would help support the application of the guidance. Additionally, incentivising the referral of patients to lipid clinics who do not achieve target lipid levels following treatment interventions would help ensure patients receive optimal care from specialist services to help better prevent and manage CVD.

Furthermore, policymakers should deliver targeted communications to GPs to raise awareness of guidance and demonstrate existing materials that can help them deliver CVD care to patients. NICE have a field team who work with a range of stakeholders to put guidance into practice but it is impossible for them to encompass GPs in their entirety. It is therefore important this interaction is accompanied by a wider coordinated outreach that maximises the exposure of guidelines, which are tailored to support GPs.

This communication may be conducted by encouraging GPs to utilise NICE's CVD prevention audit and decision aid tool. This tool has been developed in collaboration with Public Health England and NHS England, third-sector partners and aims to identify people with one or more of the 6 high-risk conditions undiagnosed or sub optimally managed, putting them at increased risk of CVD.[cxxxv]

THE ROLE OF COMMUNITY PHARMACY IN SUPPORTING IMPROVED CVD OUTCOMES

Approximately 1.6 million people visit a pharmacy in England every day.[cxxxvi] Public awareness of the full scope of services and and the support that community pharmacies can offer is limited; they are often perceived as purely experts in prescribing and advising on minor ailments. Their offer as wider healthcare experts, who can meaningfully support the prevention and management of chronic conditions, including CVD, is overlooked. As such, the services they offer are underutilised to the detriment of patients, the NHS and wider society.[cxxxvii]

One of the most powerful ways community pharmacy can drive improved CVD outcomes is through delivering the NHS Health Check programme. Almost a third (29%) of GPs surveyed by HEART UK do not believe their surgery has the necessary capacity to provide the NHS Health Check to all those who are eligible.[cxxxviii] Transferring greater levels of the NHS Health

Check programme into community pharmacy would alleviate pressure from GP surgeries, freeing up their capacity to address other clinical duties.

CVD is most prevalent in areas of deprivation and is a significant contributor to health inequalities throughout the country.[cxxxix] In England, over 99% of those in areas of the highest deprivation are within walking distance of a pharmacy.[cxl] The accessibility of community pharmacies means they could therefore be an effective vehicle to reach at risk members of the population and drive improved prevention or management of CVD.

Alongside having the ability to reduce pressures on other parts of the healthcare system and to reach hard-to-reach communities, there is an economic argument to be made for investing and expanding the reach of community pharmacies. Detailed analysis presented by the Pharmaceutical Services Negotiating Committee (PSNC) in response to proposals in 2015 to reduce community pharmacy funding by £170m estimated that they saved approximately £3bn for the NHS and other public-sector bodies.[cxli cxlii]

The role of community pharmacy in delivering and enabling existing NHS initiatives also requires that they be protected from further cuts. Public Health England recently confirmed that the NHS will play a key role in ensuring more patients receive proven treatments to manage their CVD[cxliii], of which pharmacists will play a heightened role. This work is already underway in a number of areas, including West Hampshire where pharmacist-run anticoagulation services have resulted in an estimated 52 strokes being averted in 20 months.[cxliv] In the local authority area of Lambeth and Southwark, pharmacists were commissioned to manage blood pressure and AF, which prevented an estimated 45 strokes over a 15-month period.[cxliv]

To address England's longstanding challenges with CVD, there needs to be a perception overhaul on the offer and value of community pharmacy. Firstly, there needs to be a concerted effort to improve public awareness of the support community pharmacy can offer, so that their full utility is realised.

Understanding of the role community pharmacies can play in improving the health of local populations is not just limited to the general public. Commissioners too often overlook the unique offer of community pharmacies in managing chronic conditions, like CVD, in turn denying them the necessary funding and bandwidth to maximise the care they can deliver. NHS England's Community Pharmacy Contractual Framework consists of three levels of services: essential services; advanced services; and enhanced and locally commissioned services. Pharmacy owners are required to provide essential services such as medicine dispensing and signposting but have the option of choosing whether to provide advanced and locally commissioned services. Reclassifying the NHS Health Check programme as an enhanced and locally commissioned service would provide the opportunity to deliver the service to a larger eligible population, making it more routinely available within a community setting.

Finally, at a time of unprecedented financial challenges in the NHS, the pursuit of short-sighted efficiency savings, such as reducing community pharmacy spend, can have hugely damaging implications elsewhere. Instead, community pharmacies must be recognised by the Government as a lever to support the NHS agenda in satisfying its dual priorities of delivering improved patient care and financial sustainability.

However, the importance of pharmacists has been recognised by NHS England, as pharmacy services are also being provided within the GP setting. Following a pilot programme, which involved 491 pharmacists working in general practice, the General Practice Forward View committed over £100 million to support an extra 1,500 clinical pharmacists to work in general practice by 2020/21.[cxlv] These clinical pharmacists work as part of the general practice team through offering day-to-day medicine advice and clinical expertise, including assisting patients to effectively manage long-term conditions in order to prevent CVD.

THE ROLE OF PRACTICE NURSES IN SUPPORTING IMPROVED CVD OUTCOMES

The practice nursing workforce of today is the most highly skilled it has ever been. They provide essential care to their local populations and have become clinical leaders in a range of areas associated with primary care, including CVD.

Whilst traditionally the domain of general practitioners, competing pressures which demand higher levels of clinical expertise mean practice nurses have become much more involved in delivering the NHS Health Check programme. This has been welcomed by many as a more efficient use of both time and financial resource which still delivers optimal patient care and experience.[cxlvii] Alongside conducting the Health Check itself, practice nurses play an intrinsic role in any follow up, informing referrals to services that can help patients maintain lifestyle changes to reduce their CVD risk.

However, the capacity of practice nurses is being stretched. The practice nursing vacancy rate is estimated at 9.5%, making it very difficult for nurses to deliver optimal patient care.[cxlvii] Protecting the capacity and numbers of the practice nursing workforce is fundamental to the long-term ability of the NHS to rollout the NHS Health Check programme, which will curtail NHS England's ambition to reduce premature deaths as a result of CVD.

HEART UK calls to action:

- **NHS England to develop tailored communication plans to raise awareness of best practice in CVD prevention and management**
- **NHS England to re-categorise the NHS Health Check as a 'locally commissioned service' within the Community Pharmacy Contractual Framework**
- **The Government to commit to protect community pharmacy funding**
- **Health Education England to deliver a detailed action plan to implement the recommendations outlined within the General Practice Nursing Workforce Development Plan, to overcome practice nurse shortages**

CONCLUSION: LOOKING TO THE FUTURE

HEART UK is pragmatic about the speed with which the recommendations contained within this report can be implemented, yet views their implementation as essential to improve the prevention, identification and management of CVD. This report's primary focus is on ensuring that cholesterol management and, more widely, CVD is recognised as a priority to the same extent as it has been previously. Whilst significant efforts have been made in addressing CVD in England through bold initiatives such as the original CVD Outcomes Strategy to PHE's Size of the Prize there needs to be a firm commitment from policymakers that those with the responsibility for implementation are afforded the capacity and resources they require to make lasting long-term change. This will drive improvements in CVD prevention, identification and management.

However, all tiers of the UK's health system must take responsibility for improving CVD care. From those in the Department of Health and Social Care to general practitioners delivering care in their local community. By driving whole-system responsibility, ensuring joined-up working and implementing clear pathways of care for those most at risk of developing CVD there is a significant opportunity to make improvements in CVD and cholesterol management.

APPENDIX 1: SUMMARY OF ROUNDTABLE DISCUSSION

In June 2018, HEART UK held a roundtable discussion entitled, Protecting and prioritising the health of the public, which brought together high-level policymakers and stakeholders involved in CVD care and treatment across the country.

The objective of HEART UK's roundtable discussion was to stress test the recommendations set out in this report, which explores how national policies affect CVD outcomes and what can be done to improve outcomes across the system. The following is a summary of the roundtable discussion.

Why has the management of cholesterol fallen off the national health agenda?

The NHS has been under sustained financial pressure over recent years and as such has had to choose its priorities selectively. Unfortunately, CVD and cholesterol did not feature in this.

Controversy around statins and the NHS Health Check in the press has caused a lot of uncertainty in people's minds about the importance of cholesterol management.

What can be done to support the policy prioritisation of cholesterol?

The communication of statins' benefits needs to be improved.

It must be highlighted that cholesterol, blood pressure, diabetes and obesity, all risk factors for CVD, are also risk factors for cognitive decline, dementia and cancer. Prevention will have benefits in not just one disease area but across multiple.

Highlight the Commonwealth Fund report comparing health systems of eleven high income countries. The UK ranks first or second in almost every indicator except outcomes. This is largely driven by disease specific outcomes for CVD and Cancer, where we rank 10th, only ahead of the US. The Secretary of State for Health and Social Care is interested in improving that standing.

What can be done at a national level to support the prioritisation of NHS Health Checks?

PHE are undertaking a National Health Check data extract, this will be the first time that national data on the implementation of Health Checks, the recording of cholesterol and follow-up medication will be analysed.

Address the sense amongst an element of GPs that the profession is over-diagnosing and over-treating high cholesterol.

How can policymakers better support STPs to deliver improved CVD outcomes?

The 5YFV embedded the RightCare approach which helps local health economies self-select what their population needs them to prioritise most using the lens of variation. There are 800 RightCare transformation programmes in England currently and CVD is chosen second most often – well over 100 programmes.

For service transformation to take place, policymakers must demonstrate a logistical system-based model showing people how to move from the current model to the next one.

PHE have commissioned a 'return-on-investment' tool. The tool will allow commissioners or local advocates to look at a range of cardiovascular risks, including high cholesterol, and then by inputting local or national data it will display the cost-benefit information, mortality rates improvement and cardiovascular event reduction that could be achieved through investment in prevention.

From PHE's NHS Health Check data extraction they will look to produce dashboards at a local authority or CCG level which will show how the areas are doing across a range of measures relating to the NHS Health Check.

Share league tables which highlight how GP surgeries compare with their counterparts against criteria aligned with their priorities is an effective way to drive improvement.

Should NHS England introduce targets or incentives to support the implementation of NICE CVD guidance?

The removal of cholesterol from QOF did negatively impact the prioritisation of cholesterol.

Education of the public to understand their risks and take preventative action themselves will eventually solve the problem. It will never be solved solely through the use of GPs or supporting primary care colleagues.

QOF focusses on incentivising individual clinicians and practices rather than incentivising them to take a system approach to improving services. Current discussions are looking at retaining an element of incentives that are aimed at individual clinicians and practices, but also new network incentives aimed at encouraging a system approach and cooperation between groups of practices to deliver improvement.

Does the current classification of the NHS Health Check within the Community Pharmacy Contractual Framework hinder uptake?

There is no way to join up the system between what the pharmacists are doing and general practice. It would be beneficial if we could find a way to share that information with colleagues in general practice to inform conversations on their care in other settings.

Due to the lack of a joined-up system between pharmacists and general practice, some areas do not commission pharmacists to deliver health checks. This is a decision they have taken in view of their interpretation of the duty to screen as a duty to treat. Due to workforce pressures within general practice they would be unable to treat all those screened in pharmacies.

One of the challenges in delivering the health check in these areas is the rate the local population is growing. Just this year alone one area has around 4000 more people eligible to add to their list of around 73,000 people while the budget remains the same. Funding and capacity can therefore be a challenge.

Is there enough capacity within the general practice workforce to deliver the NHS Health Check and subsequently improve CVD outcomes?

There are huge pressures in general practice and GPs are becoming overwhelmed. There is an opportunity to train the nursing team to prescribe statins. It is essential to utilise the primary care team more effectively to provide capacity.

GPs in general do not have time to communicate all the required information to patients effectively, especially around statins which have been the source of much misinformation.

What role can community pharmacists play in delivering improved CVD outcomes?

Community pharmacists can help reiterate these messages around non-pharmacological and pharmacological treatment regularly and positively.

However, to do so, community pharmacists must be better linked into the system, seeing themselves as part of a network of healthcare professionals who are all communicating the same message.

Pharmacists are also under immense pressure, but there is a real desire for them to start using their clinical skills in a way that is more joined up with colleagues across primary care and secondary care.

Practice based pharmacists are having a real impact through relieving GPs of prescribing duties and freeing up capacity. Pharmacists are better placed to prescribe pharmacological treatment.

Due to the crisis within primary care at the moment, GPs are willing to consider new models of care which will alleviate pressures on themselves. Community pharmacists are central to making this happen.

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