The Association of Directors of Public Health

What Good Cardiovascular Disease Prevention Looks Like

Background

Over recent decades great strides have been taken in reducing premature deaths due to cardiovascular disease (CVD) in England. However, CVD remains a significant cause of disability, death, and health inequalities through conditions such as heart disease, strokes, kidney disease and dementia.

- Heart and circulatory diseases cause around a quarter (27%) of all deaths in the UK. This equates to more than 170,000 deaths a year.[i]
- 7.6 million people are living with heart and circulatory diseases in the UK, and an ageing and growing population could see these numbers rise further. As the population ages, many people will live with multiple long-term conditions.
- CVD is a key driver of health inequalities, accounting for a quarter of the life expectancy gap between rich and poor. Global Burden of Disease data shows that people living in the north of England have more years of life lost to CVD on average than in the south – an effect driven largely, but not wholly, by socioeconomic differences.[ii]
- Healthcare costs relating to heart and circulatory diseases are estimated to be £10 billion each year. CVD's cost to the UK economy is estimated to be £25 billion each year.[i]
- There are many different risk factors for developing CVD, the most common being high blood pressure (hypertension). Other common risk factors include diabetes, high cholesterol, smoking, obesity, unhealthy diet, and physical inactivity. Treatment of these risk factors reduces the risk of cardiovascular events; however late diagnosis of these conditions is common.[i]
- Identifying those at highest risk of CVDs and ensuring they receive appropriate treatment can prevent premature deaths.[iii]

This publication sets out our vision for effectively tackling CVD and its associated risk factors, and outlines principles on which good quality cardiovascular disease prevention programmes should be focused on. It is intended to serve as a guide and was developed collaboratively through the synthesis of existing evidence, examples of best practice, practitioners' experiences, and expert opinions.

Vision

We will build healthier communities with reduced inequalities by taking a system wide and systematic approach to reducing CVD risk factors and implementing evidence based clinical interventions to reduce the incidence and progression of CVD. This will contribute to the NHS Long Term Plan milestone for the NHS to help prevent up to 150,000 heart attacks, strokes, and dementia cases over the next 10 years.

Behaviours that influence cardiovascular health are often established early in life, making it essential to recognise the life course opportunities for CVD prevention. Establishing supportive environments that promote regular physical activity, access to nutritious foods, adequate sleep, and smoking cessation across the population is crucial. These systemic changes must be sustained throughout adulthood and into later

life to achieve lasting impact.[iv]

On cardiac rehabilitation, by 2028 the proportion of patients accessing cardiac rehabilitation will be amongst the best in Europe, with up to 85% of those eligible accessing care (NHS LTP).[v] CVD Prevention continues to be a priority for NHSE nationally as set out in the NHS 2024/25 priorities and planning guidance:

- Increase the percentage of patients with hypertension treated according to NICE guidance to 80% by March 2025.
- Increase the percentage of patients agenda 25-84 years with a CVD risk score greater than 20% on lipid lowering therapies to 65% by March 2025.
- Continue to address health inequalities and deliver on the Core20PLUS5 approach, for adults and children & young people.

Principles

Local system leadership

CVD exemplifies the importance of local integrated care, as prevention and management require collaboration across the public health and wider health system. Everyone has a role to play, given that individuals with CVD are likely to interact with multiple parts of the system throughout their lifetime.[vi] For example, local authorities play a key role in primary prevention, while the NHS leads on secondary and tertiary prevention.

Tackling CVD requires local system leadership by Integrated Care Systems (ICSs), including local authorities, to engage partners in delivering a system wide approach to the use of population health intelligence to plan and deliver services effectively, engage communities and maximise the use of community assets. This includes actions by local government and the NHS to address the wider determinants of health, behavioural risk factors and early detection of risk conditions for CVD. Many of these actions will also contribute to the prevention of other non-communicable diseases.

Leadership to develop a compelling local narrative and take a whole system approach with partners and the local community to tackle primary, secondary, and tertiary prevention of CVD and address inequalities will support the development of joint plans and alignment of actions and pathways between services as well as engage the population in knowing their numbers and acting.

ICSs provide opportunities for joint commissioning for CVD prevention by local government and the NHS. Leadership is needed at all levels within a local system to ensure effective action is taken. CVD networks can support leadership and sharing of good practice across systems.

Health inequalities

CVD is a leading cause of morbidity, disability, and health inequalities. The Covid-19 pandemic has added to the urgency of tackling CVD because CVD significantly increases the risk of severe disease and death from Covid-19. Given the strong link between CVD and health inequalities, tackling CVD will be a priority in most local areas. The scale of post-pandemic health inequalities calls for an ambitious, co-ordinated cross-government policy for reducing these inequalities. Tackling CVD needs to be at the heart of this policy as it is a leading contributor to health inequalities.[vi]

Any approach to prevent CVD must also address the fact that 40% of amenable CVD deaths occur in the three most deprived deciles.[vii] Health equity audits can be used to develop universal programmes, such as the NHS Health Check, to tackle inequalities and to identify needs for targeted services. Targeted approaches are needed for groups with a higher incidence of CVD including those with severe mental illness and those of South Asian and African Caribbean ethnicity. Annual health checks for people with severe mental illness or learning disabilities are effective in identifying risk factors and making earlier diagnosis of CVD.

There are many opportunities to reduce inequalities by acting on risk factors throughout the life course from the antenatal period onwards. Given the greater incidence, and at an earlier age, of CVD in deprived populations and some ethnic groups there are opportunities to target these groups earlier in the life course.

Smoking

Smoking is a key modifiable risk factor for CVD, and it is crucial that efforts to address CVD place greater emphasis on tobacco control. While ADPH has published a separate 'Local Tobacco Control' What Good Looks Like paper, stronger links between this work and the CVD agenda are essential to ensure a more comprehensive approach to tackling CVD and addressing associated health inequalities.

Initiatives such as the Smokefree Generation and broader tobacco control measures play a pivotal role in reducing smoking prevalence and, in turn, the burden of CVD. The recent passing of the new Tobacco and Vapes Bill in Parliament marks a significant step forward, granting the Government powers to extend the indoor smoking ban to specific outdoor spaces and to implement bans on vape advertising and sponsorship. Additionally, the extra funding pledged for stop smoking services is welcomed by Directors of Public Health and their teams, who are ready to work with the Government, local authorities, the NHS and local communities, to support those who want to quit and to ensure the effective implementation of new legislation.

Other healthy behaviours

As well as smoking, it is vital to ensure the population is supported to make healthy choices throughout the life course to prevent CVD. For example, excessive alcohol consumption is linked to hypertension[viii], while healthy weight remains an important factor in the prevention of CVD. In the UK, approximately 31,000 heart and circulatory deaths each year are attributed to excess weight and obesity.[ix]

To address this, a comprehensive approach should include accessible services, community-based interventions, and primary prevention initiatives that empower individuals to make healthier choices. Additionally, policies that protect children – such as restrictions on junk food advertising, school-based nutrition programmes, and measures to reduce childhood obesity – are essential to fostering lifelong healthy behaviours and reducing future CVD risk.

Co-production

There is a need to work closely with local communities to co-produce innovative approaches to CVD awareness and prevention. While there is understanding of which interventions are effective, the challenge has been in effectively implementing and sustaining them at the community level. To make a real impact, we recommend a shift away from the traditional 'done for' approach, and instead adopt a 'done with' approach, collaborating directly with communities to address CVD prevention in a more inclusive and sustainable way. There is more about co-production in the 2023 Torbay annual report on cardiovascular health: Promoting heart healthy communities - Torbay Council.

Evidence based approach

- Plans informed by population health intelligence to identify needs and priorities are crucial. These plans should be implemented across an ICS to identify strategic priorities, as well as at the Primary Care Network and practice level to target specific actions. This approach will also help address variation within and between populations.
- A systematic population-based approach to prevention, using evidence-based interventions at scale, will enable the identification of all those eligible for testing or treatment, provide appropriate interventions, and contribute to reducing inequalities.
- Behavioural science and local insights should be leveraged to engage both professionals and the population in CVD prevention.
- Improving the detection and management of the high-risk conditions will require new models and pathways in primary care and the community. This includes systematic case finding of under-treated individuals, pharmacist or nurse-led treatment optimisation, and community-led initiatives to increase access to blood pressure testing, helping individuals know, understand and act on on their numbers.
- Quality improvement should be embedded within the programme and underpinned by routine data collection and analysis to support continuous development, improve delivery outcomes, meet CVD prevention ambitions, and reduce variations.
- A health and wellbeing strategy should create an environment that supports healthy choices on smoking, diet, weight management, physical activity, and alcohol consumption. Health and care services should also embed the Making Every Contact Count approach.
- A Health in All Policies approach should be adopted to ensure that community assets and services promote and support healthy lifestyles.

Key features of what good looks like

NICE has identified a range of interventions that can be delivered at a population and individual level as part of a system wide approach to addressing CVD.

- **Make a healthy diet the easy choice**: work to continue to reduce the salt and saturated fat content of food consumed inside and outside the home.[x]
- **Improve air quality**: by taking action to reduce emissions.[xi]
- **Make physical activity the easy choice**: by developing an environment which encourages active travel and physical activity in public spaces.
- **Identify and assess people for their risk of CVD**: the NHS Health Check programme provides a crucial mechanism for identifying people 40-74 years at risk of CVD, helping people to reduce their risk of developing CVD and the early detection of disease. Effective strategies for assessing the risk of developing type 2 diabetes allows referral to the NHS Diabetes Prevention Programme.[xii]
- **Support individuals at risk of CVD to make behaviour changes**: becoming more active, maintaining a healthy weight, safe levels of drinking and stopping smoking will help individuals to reduce their risk. The term CVD often leads to thinking in terms of individual treatment and interventions. However it is crucial to emphasise that population-level solutions lie further upstream, focusing on prevention and broader public health measures. This should be underscored strongly while still acknowledging the importance of treatment, secondary

prevention and rehabilitation.

- **Optimise clinical treatment**: health outcomes can be improved if people at risk of CVD and those diagnosed with disease receive optimal clinical treatment, such as addressing hypertension in adults[xiii] and atrial fibrillation.[xiv]
- **Collaboration**: it is very important to work closely with primary care colleagues in CVD prevention. This partnership extends beyond NHS health checks and includes Making Every Contact Count Initiatives and health promotion efforts, which are essential components of a comprehensive approach to reducing CVD risk.

Measuring our achievements

Measurement is key to the 'Plan-Do-Study-Act' improvement cycle[xv] – allowing systems to understand where work may be needed and review the success of any changes. There is a multitude of national indicators and other sources available at the local level that can be used to monitor local progress in CVD prevention.

NHS RightCare Where to Look Packs provide summary data across all main health areas such as for strokes and identifies variations in detection and management of CVD risk factors. Where national indicators do not exist, local audit against quality standards can provide additional insight.[xvi] CVDPREVENT, a national primary care audit, provides real time data to track progress and inform local action to improve detection and treatment of high risk conditions for CVD.

Mapping the local system can help to identify useful measurements, and baseline assessment tools may highlight areas for attention.[xvi] Areas may wish to consider measurements within a structure, process and outcome model. An example of how indicators, quality standards, and other datasets from a range of sources could align with this model is shown below:

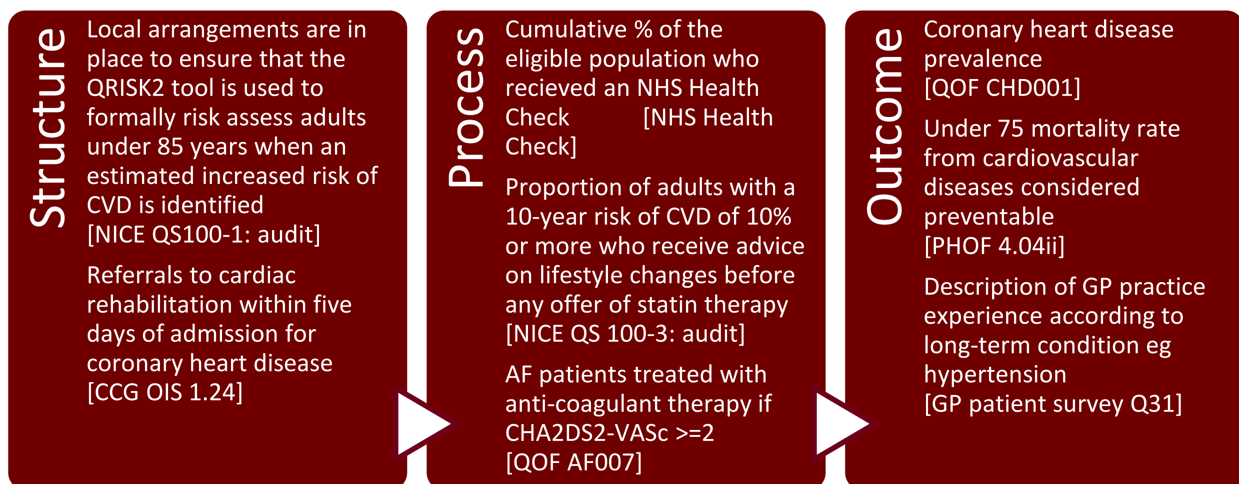

Figure 1. Example of alignment with model, from ADPH and PHE, What Good Cardiovascular Disease Prevention Looks Like, 2019

Regardless of which measures are chosen locally, where possible it is useful to consider:

- How are they changing over time? Could a statistical process control (SPC) chart be drawn?[xvii]
- How do they compare to other areas? Consider using 'nearest neighbours' which can be

automatically compared for indicators shown in OHID's Fingertips Public Health Profiles.

- Do they reveal any inequalities? Of particular relevance to CVD prevention are inequalities by deprivation, gender, ethnicity, or the presence/absence of serious mental illness.

Resources

- NICE recommendations for policy: A national framework for action for preventing CVD. While developed some time ago, this guidance remains a strong foundation for evidence-based interventions. Its recommendations on tackling risk factors at population level – through policies, community action, and targeted healthcare measures – should continue to inform local and national strategies. There is a need to consider how evolving evidence, new technologies and integrated care models can enhance and build on these principles.
- All Our Health: CVD Prevention – an e-learning module providing bite-sized sessions for all health and care professionals.
- Optimal value pathway for CVD Prevention – produced by NHS Right Care for CVD risk detection and management in primary care.
- Size of the Prize infographics – illustrate the potential cardiovascular events that could be avoided and the money saved by optimising the management of high blood pressure at the ICB level.
- UCL Partners CVD resources – a range of digital tools to support both staff and patients.
- NICE recommendations for practice – recommendations for regional CVD prevention programmes.
- Prevention of cardiovascular disease at a population level provides modelling strategies for primary prevention of CVD in different populations.
- CVD self-assessment tool for assessment of local position in relation to the NICE guidance on prevention of CVD.
- NICE into practice guide includes two practical resources to help improve the quality of care and services and support the implementation of evidence-based guidance into practice.

About ADPH

The Association of Directors of Public Health (ADPH) is the representative body for Directors of Public Health (DsPH) in the UK. It represents the professional views of all DsPH as the local leaders for the nation's health.

The Association has a heritage dating back over 160 years and is a collaborative organisation, working in partnership with others to strengthen the voice for public health. It seeks to improve and protect the health of the population through collating and presenting the views of DsPH; advising on public health policy and legislation at a local, regional, national and international level; facilitating a support network for DsPH; and providing opportunities for DsPH to develop professional practice.

About What Good Looks Like

The What Good Looks Like (WGLL) programme aims to facilitate the collective efforts of local organisations and wider society (the system) towards improvements in their population health outcomes. This publication represents the practical translation of the core guiding principles of the Quality Framework for the Public Health system and features of what good quality cardiovascular disease prevention programme looks like in any defined place. It was developed collaboratively through the synthesis of existing evidence, examples of best practice, practitioners' experiences, and consensus expert opinions. It is intended to serve as a guide and will be iterative with regular reviews and updates when new evidence and insights emerge.

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