



INTRODUCTION TO PUBLIC HEALTH

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COMPONENT 2: REPORT ON A HEALTH ISSUE

CORONARY HEART DISEASE

INTRODUCTION

Coronary heart disease (CHD) is a condition in which the coronary arteries become narrowed by fatty deposits, known as atheroma, restricting blood and oxygen supply to the heart muscle through a process called atherosclerosis (NHS, 2026a). It is also referred to as ischaemic heart disease or coronary artery disease. The most common symptoms are angina, chest pain or tightness that may radiate to the arms, neck or jaw, and breathlessness, though some people remain symptom-free until a heart attack occurs (NHS, 2026b). CHD is a leading cause of death worldwide, with cardiovascular disease responsible for an estimated 19.8 million deaths globally in 2022, around 32 percent of all deaths, most of which are due to heart attack and stroke (WHO, 2025). In the UK, approximately 1.9 million people are living with CHD in England, and cardiovascular disease accounts for one in four premature deaths under the age of 75 (BHF, 2026). This report examines how CHD is measured and monitored, controlled, its consequences for the community, and the support services required to meet the needs of those affected.

MAIN BODY

APPROACHES USED TO MEASURE AND MONITOR CHD

CHD is measured and monitored using both population-level and individual-level approaches. At population level, the World Health Organization tracks global indicators such as total deaths, prevalence and the proportion of deaths attributable to cardiovascular disease across countries, allowing comparison of disease burden and progress towards international prevention targets (WHO, 2025). In the UK, the British Heart Foundation compiles annual statistics drawing on Office for National Statistics mortality data, NHS hospital admissions and GP patient registers to monitor prevalence, deaths and regional inequalities across UK nations and English regions, providing policymakers and commissioners with the evidence needed to target resources effectively (BHF, 2026).

At individual level, monitoring relies on structured risk assessment and diagnostic testing. Primary care services use cardiovascular risk assessment tools and the NHS Health Check programme, offered to adults aged 40 to 74, to identify people at high risk before symptoms develop, and community pharmacies increasingly support case-finding for related risk factors such as high blood pressure through opportunistic blood pressure checks (NHS England, 2024). Diagnostic monitoring includes electrocardiograms to detect abnormal heart rhythms, blood tests for lipid profile, exercise stress testing and coronary angiography to visualise blockages directly. Blood pressure and cholesterol levels are also routinely monitored in primary care, since both are modifiable indicators of ongoing cardiovascular risk that can be tracked over successive appointments (NICE, 2023).

Monitoring also extends into ongoing surveillance once treatment begins, with NICE recommending repeat lipid profile measurement two to three months after starting statin treatment to assess response and guide any necessary dose changes (NICE, 2023). Regular review of adherence, side effects and residual symptoms allows clinicians to adjust treatment plans as a person's condition changes over time. Together, these population and individual-level approaches allow health systems to identify at-risk individuals earlier, evaluate the effectiveness of prevention strategies, and track the changing burden of CHD across the population over time.

HOW CHD IS CONTROLLED

Controlling CHD relies on a combination of lifestyle modification, pharmacological treatment and, where necessary, interventional procedures. Modifiable risk factors, including smoking, physical inactivity, poor diet, obesity, high blood pressure and diabetes, are targeted through structured lifestyle advice and community case-finding, since addressing these factors can substantially reduce cardiovascular risk and the associated demand on NHS services (NHS England, 2024). NICE recommends statin therapy for both primary and secondary prevention: high-intensity statins such as atorvastatin are used to achieve a target reduction in non-HDL cholesterol, and treatment should not be delayed once CHD or acute coronary syndrome is diagnosed (NICE, 2023).

Pharmacological control also includes antiplatelet therapy, beta blockers and ACE inhibitors, typically offered together following a heart attack to reduce the risk of further cardiac events and improve long-term survival. For more severe or unstable disease, interventional procedures such as percutaneous coronary intervention, which uses a stent to reopen a blocked artery, or coronary artery bypass graft surgery may be required to restore blood flow directly to the heart muscle (NICE, 2023). Blood pressure control, achieved through both medication and lifestyle change, remains a further key target given its close association with progression of coronary disease.

Cardiac rehabilitation plays a central role in longer-term control, combining supervised exercise, education, medication review and psychological support delivered by a multidisciplinary team of nurses, physiotherapists and exercise physiologists; strong evidence shows it reduces mortality, reduces the risk of further cardiac events and prevents unplanned hospital admissions (NHS England, 2025). Commissioning standards emphasise that rehabilitation should begin promptly after diagnosis or hospital discharge and be tailored to the individual's risk factors and personal goals. Effective control of CHD therefore depends on sustained, coordinated management across primary, secondary and rehabilitative care rather than a single intervention delivered in isolation.

CONSEQUENCES OF CHD ON PEOPLE IN THE COMMUNITY

CHD has far-reaching consequences for individuals, families and the wider community. Physically, it can cause disabling symptoms such as breathlessness and fatigue that limit daily activity, and a heart attack can permanently damage heart muscle, sometimes leading to heart failure, reduced independence or long-term disability (NHS, 2026a). Psychologically, people living with CHD commonly experience anxiety, depression and fear of further cardiac events, and cardiac rehabilitation services are specifically designed to address this alongside physical recovery through structured psychological support and peer contact (NHS England, 2025).

The economic consequences are also considerable. A recent UK study estimated the societal cost of cardiovascular disease from a societal perspective, including direct healthcare costs, long-term care and medical devices alongside indirect costs such as lost productivity and informal caregiving, finding that the greatest direct costs arose from inpatient care and the greatest indirect costs from informal care provided by family members (Shih et al., 2025). This reflects the burden placed not only on the NHS but on unpaid carers within the community, who often take on substantial practical and emotional caregiving roles over long periods, sometimes alongside their own employment and family responsibilities.

At community level, CHD contributes to workforce absence, premature retirement and widening health inequalities, since rates of premature cardiovascular mortality are markedly higher in more deprived areas of England than the national average, reflecting unequal exposure to risk factors and access to preventive care (BHF, 2026). Families frequently need to adapt routines around medication schedules, hospital and rehabilitation appointments and lifestyle change, and the wider community is also affected through sustained demand on emergency and ambulance services.

HEALTH AND SOCIAL CARE SUPPORT SERVICES REQUIRED

Meeting the needs of people affected by CHD in the community requires coordinated health and social care support that extends well beyond hospital treatment. Cardiac rehabilitation services, delivered by multidisciplinary teams of nurses, physiotherapists, exercise physiologists and psychologists, are commissioned to provide structured recovery programmes combining exercise, education, medication review and psychological support, often delivered flexibly in community venues, GP practices or patients' own homes to improve accessibility (NHS England, 2025).

Primary care plays an ongoing role through GP-led medication review, blood pressure and cholesterol monitoring, and referral pathways for specialist review when symptoms change, while community pharmacy case-finding services help identify related risk factors such as hypertension before they cause further harm (NHS England, 2024). Diagnostic and monitoring pathways set out by NICE also ensure that people already diagnosed with CHD receive regular reassessment of their lipid levels and overall cardiovascular risk, so that treatment can be adjusted as their condition evolves (NICE, 2023).

For people with more complex or long-term needs, social care support may include practical assistance with daily living, support for family members providing informal care, and multidisciplinary case coordination to prevent unplanned hospital admissions and support safe discharge. Given that informal care represents one of the largest indirect costs associated with CHD, formal recognition and support of unpaid carers, including respite provision and carer assessments, is an important though sometimes overlooked part of community provision (Shih et al., 2025). Effective community support for CHD therefore depends on

integration between clinical cardiac services, primary care and social care, delivered in a coordinated way around the individual's ongoing needs.

CONCLUSION

This report has examined coronary heart disease, a leading cause of death and disability in the UK and worldwide, exploring how it is measured and monitored, controlled, its consequences for people in the community, and the support services required to meet those needs. Population and individual-level monitoring, from national statistics to risk assessment and diagnostic testing, underpins early identification and ongoing surveillance of the disease. Control depends on integrated lifestyle, pharmacological and interventional approaches, supported by cardiac rehabilitation. The consequences of CHD extend beyond the individual to families, informal carers and the wider community, with significant psychological and economic impact. Meeting these needs requires coordinated health and social care provision, spanning cardiac rehabilitation, primary care and social care support. As CHD remains a major public health challenge, sustained, joined-up services across the health and social care system remain essential to reducing its burden on individuals and the community.

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