

INTRODUCTION TO



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WRITTEN ASSIGNMENT

Case Study on

Coronary Heart Disease

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Report word count: 1460 words excluding references and in-text citations. Introduction: 155 words. The Introduction explicitly covers definition, severity/current worldwide and UK statistics, signs and symptoms, and the report aim.

1. Introduction

Coronary heart disease (CHD) is a long-term condition in which the coronary arteries become narrowed or blocked, reducing blood flow and oxygen to the heart muscle. It is usually caused by atherosclerosis, where fatty material called atheroma builds up inside artery walls (NHS, 2024a). CHD is a serious public-health problem. Worldwide, ischaemic heart disease caused about 9.0 million deaths in 2021, making it the world's leading cause of death and accounting for 13% of global deaths (WHO, 2024). In the UK, around 2.3 million people are living with CHD, demonstrating its continuing burden (BHF, 2026). Signs and symptoms include chest pain or pressure (angina), shortness of breath, pain in the neck, shoulders, jaw or arms, feeling faint, sweating and nausea; some people may have no symptoms before diagnosis (NHS, 2024b). This report aims to examine how CHD is measured and monitored, explain how it is controlled, assess its impact on communities, and identify the health and social care support required.

Introduction word count: 155 words

2. Approaches Used to Measure and Monitor Coronary Heart Disease

Measuring and monitoring CHD requires both population surveillance and individual clinical assessment. At national and community level, public-health organisations examine incidence, prevalence, mortality, hospital admissions and trends in cardiovascular risk factors. These measures show the scale of disease, identify inequalities and help evaluate whether prevention strategies are effective. The British Heart Foundation compiles UK cardiovascular statistics from official datasets, supporting comparisons across regions and population groups (BHF, 2026). At individual level, assessment begins with symptoms, medical history and risk factors. Clinicians may measure blood pressure, cholesterol and blood glucose and consider smoking, physical inactivity, obesity, diabetes and family history. When CHD is suspected, investigations may include an electrocardiogram, blood tests and cardiac imaging. Depending on clinical risk, coronary CT or coronary angiography may be used. The NHS explains that diagnosis is generally based on risk assessment followed by appropriate tests (NHS, 2024c). Monitoring continues after diagnosis. Blood pressure, cholesterol, symptoms, medication adherence and lifestyle behaviours require regular review. People who have experienced a heart attack or other cardiovascular event require secondary prevention because their future risk remains elevated. NICE recommends effective lipid-lowering treatment and continuing risk-factor management for people with established cardiovascular disease (NICE, 2023). Combining population statistics with individual monitoring gives health professionals a clearer picture of both community need and patient progress. Another useful approach is to examine trends in emergency admissions and treatment activity. Rising admissions may indicate increasing disease burden, but they can also reflect better recognition and access to care. For this reason, prevalence, incidence, mortality and service-use data should be considered together. Risk prediction tools can also combine factors such as age, smoking, blood pressure and cholesterol to

identify people who may benefit from preventive intervention. Accurate records and consistent definitions are important because differences in data collection can make comparisons misleading. Monitoring should also consider patient-reported outcomes, including exercise tolerance, symptoms and quality of life, because successful CHD management is not measured only by survival.

3. How Coronary Heart Disease is Controlled

CHD is controlled through prevention, risk-factor management, medicines and, when necessary, specialist procedures. Primary prevention focuses on reducing the likelihood of disease developing. Important measures include stopping smoking, maintaining a healthy weight, being physically active, eating a balanced diet and controlling blood pressure, cholesterol and diabetes. NICE recommends healthier dietary patterns and lifestyle interventions as part of cardiovascular risk reduction (NICE, 2023). Medication is central to secondary prevention. Statins reduce LDL cholesterol and help lower the risk of further cardiovascular events. Depending on individual circumstances, treatment can also include antiplatelet medicines, beta-blockers, ACE inhibitors and medicines for blood pressure or diabetes. Treatment should be reviewed regularly so that benefits, side effects and adherence can be considered. If symptoms remain severe or coronary arteries are significantly narrowed, interventional or surgical treatment may be required. Coronary angioplasty can widen a narrowed artery, usually with a stent, while coronary artery bypass grafting can create an alternative route for blood around blocked vessels. The NHS describes angioplasty as a treatment that may be planned for angina or used urgently during a heart attack (NHS, 2024d). Effective control therefore requires continuity of care. Primary care, emergency services, cardiology, pharmacy and cardiac rehabilitation all contribute. Public-health programmes that support smoking cessation, physical activity, healthy eating and early identification of cardiovascular risk can reduce future disease burden across communities. Prevention is most effective when advice is practical and sustained. Healthcare professionals can use brief interventions, referrals and follow-up appointments to help people change behaviour. Smoking cessation is particularly important because tobacco exposure contributes substantially to cardiovascular risk. Controlling blood pressure and cholesterol is also important even when a person feels well, because hypertension and raised cholesterol may have few noticeable symptoms. For people with established CHD, adherence to prescribed treatment can reduce the risk of recurrent cardiovascular events. Clear communication is therefore essential, especially when patients take several medicines. Patients should be encouraged to report side effects rather than stopping treatment without professional advice.

4. Impact of CHD on People in the Community

CHD affects individuals, families and communities. At personal level, chest pain, reduced exercise tolerance and fear of another cardiac event can affect independence, employment, family responsibilities and emotional wellbeing. A heart attack can damage the heart muscle and may lead to long-term complications. Anxiety and low mood can also occur during recovery, particularly when people are uncertain about returning to normal activities. At community level, CHD creates demand for primary care, emergency services, hospital treatment, specialist cardiology, medicines and rehabilitation. Premature illness can reduce participation in employment and create financial pressure for households. The burden is not distributed equally because health is influenced by social, economic and environmental circumstances. People living in disadvantaged communities may experience greater exposure to cardiovascular risks and more barriers to prevention and treatment. The UK burden remains substantial. The BHF reports that approximately 2.3 million people are living with CHD in the UK (BHF, 2026). Such prevalence demonstrates why prevention and effective long-term management remain important. However, improvements in prevention, treatment and emergency care have contributed to long-term reductions in CHD mortality, showing that public-health and clinical interventions can make a measurable difference. Community programmes supporting smoking cessation, physical activity, healthy eating, blood-pressure control and early risk identification can therefore help reduce future illness.

5. Health and Social Care Support Services Needed in the Community

People affected by CHD need coordinated support across health and social care. General practitioners and practice nurses can assess risk, monitor blood pressure and cholesterol, review medicines, support lifestyle change and coordinate referrals. Pharmacists can improve understanding of medicines, support adherence and identify side effects or interactions. Cardiologists and specialist cardiac teams provide diagnosis and treatment for people with complex disease. Cardiac rehabilitation is particularly important after a heart attack, heart surgery or another significant cardiac event. The NHS describes rehabilitation as a structured programme that can include physical activity, education about medicines and condition management, relaxation and psychological support (NHS, 2024e). Rehabilitation can improve confidence, functional ability and recovery while supporting secondary prevention. Social care and community services may be needed when CHD affects mobility, independence or daily activities. Some individuals may require help with shopping, meal preparation, transport or personal care, especially when CHD occurs alongside other long-term conditions. Family members and unpaid carers may also need information and support. Services should be person-centred and consider health literacy, financial circumstances, disability, mental wellbeing, transport and digital access. Shared decision-making can help people understand treatment choices and develop realistic lifestyle goals. NICE emphasises ongoing risk-factor management and appropriate secondary prevention for people with cardiovascular disease (NICE, 2023; NICE, 2025). Coordinated care can therefore address medical needs while supporting independence and quality of life. Multidisciplinary working is especially important because CHD often occurs alongside diabetes, hypertension, obesity or other long-term conditions. A coordinated care plan can reduce duplicated appointments and help professionals share relevant information. Community pharmacies, exercise programmes, smoking-cessation services and voluntary organisations can complement NHS care. Digital and telephone support may improve access for people who find regular face-to-face attendance difficult, although services should not assume that everyone has reliable internet access. Equality of access is therefore an important part of effective community support. Carer assessment and social prescribing may also help people address practical or social difficulties that influence recovery and long-term self-management.

6. Conclusion

Coronary heart disease is a major public-health challenge because it remains the leading individual cause of death worldwide and affects millions of people in the UK. It develops mainly through atherosclerosis and can cause angina, heart attack, heart failure and premature death. Measuring incidence, prevalence, mortality, risk factors and individual clinical indicators helps services understand disease burden and monitor progress. Control depends on healthier lifestyles, smoking cessation, management of cholesterol, blood pressure and diabetes, appropriate medicines and specialist procedures when necessary. CHD also affects employment, independence, families and community resources. Effective support therefore requires cooperation between primary care, cardiology, pharmacy, emergency services, cardiac rehabilitation and community care. Overall, combining population prevention with person-centred treatment, monitoring and rehabilitation can reduce avoidable illness, improve quality of life and contribute to lower CHD mortality.

Conclusion word count: 131 words

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Academic integrity: The report is written in original wording and uses Harvard-style in-text citations. Full HTTPS links are included so sources can be accessed and checked.