

Chapter 1

Acute Coronary Syndrome in Perspective

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Introduction

Significant change in how and where cardiac care is delivered has occurred since the National Service Framework (NSF) for Coronary Heart Disease (CHD) was first published in 2000. The pace of change has been rapid in terms of both clinical advances and different service models for delivery of care. Cardiac nurses now move seamlessly across organisational boundaries, moving from a patient's home, to the GP practice and acute trust setting (DH, 2005a).

Front-line clinicians and other practitioners continue to champion the development of cardiac services, bringing innovation and excellence to service development and delivery as practices and technologies evolve and advance.

Much of the content of the NSF for CHD is as relevant now as it was in 2000, and will probably still be relevant in 2020. As progress continues and the achievements that have already been realised are built upon, it is important that nurses continue to develop their own underpinning knowledge and enthusiasm to continue to grow within cardiac nursing. Patient expectation and need, technology and working practices in cardiology are continually advancing, and many nurses are in a position to contribute to the discussions about quality of care through the National Quality Board, which oversees the setting of priorities for the service in the future. Lord Darzi's report *High Quality Care For All* provided reaffirmation of the importance of putting quality at the centre of what all healthcare professionals do and the need to look across the whole patient pathway (DH, 2008a).

The challenge of saving lives

Cardiovascular disease is the UK's biggest cause of premature death and CHD accounts for more than 110,000 deaths in England each year. In March

2000, when the NSF for CHD was published, the chapters focused on CHD patient pathways; since then three important documents have been published. In March 2005, a final chapter was added on arrhythmia and sudden cardiac death. This focused on the care of patients living with dysrhythmias and families in which a sudden cardiac death had occurred (DH, 2005b). In May 2006, national commissioning guidance was published on the care of adolescents and adults with congenital heart disease (DH, 2006), and in 2008 a report on the National Infarct Angioplasty Project was published (DH, 2008b). This document sets out the new national strategy to treat heart attacks using primary angioplasty, which represents a major breakthrough in terms of reducing mortality, speed of rehabilitation and readmission rates. Many specialist cardiac nurses contributed to these important pieces of work, and many will continue to make positive contributions in the forthcoming years (DH, 2009a).

In *The Coronary Heart Disease National Service Framework, progress report for 2008* (DH, 2009a), the initial aims are discussed. These were to reduce mortality from heart disease and stroke and related circulatory diseases in people under 75 by at least 40% by 2010; this was set out in the public health White Paper *Saving Lives: Our Healthier Nation* in 1999. It was based on the trend data available at the time, including international comparisons, and was seen as a significant challenge. However, since then, steady progress has been made and the target has been met, five years ahead of schedule. This was considered to be a major achievement, attributable to the shared efforts of those working in many parts of the healthcare system. The report identified a number of specific achievements, including the following.

- People suffering a heart attack are receiving either:
 - thrombolysis, more quickly than before; or
 - primary angioplasty services.
- Waiting times for cardiac surgery have dropped dramatically since the publication of the NSF for CHD and outcomes have improved. In April 2002, there were 7,558 people waiting for a coronary artery bypass graft and 4,364 of them had been waiting three months or more; by December 2008 this had fallen to 1,670 people waiting and only six people had been waiting longer than three months (DH, 2009a).
- In primary care, secondary prevention has improved and is attributable to the additional incentive of the Quality and Outcomes Framework, a performance management system for GPs that is supervised by primary care trusts (PCTs) (DH, 2009b).
- The prescription rate for cholesterol-reducing statins has more than doubled over the past three years, cutting mortality from CHD and the number of heart attacks each year.
- Smoking cessation has also made a major contribution. Smoking prevalence among adults dropped from 28% in 1998 to 21% in 2007 (DH, 2009a).

Despite these examples of very positive trends within the realms of “saving lives”, cardiovascular diseases (CVD) continue to exert a huge burden on

individuals and society, with CHD remaining the single most common cause of death in the UK and other developed countries (British Heart Foundation, 2008), accounting for 198,000 deaths each year. One in three deaths (35%) is from CVD. The main forms of CVD are CHD and stroke. About half (48%) of all deaths from CVD are from CHD.

Coronary heart disease is the most common cause of death in the UK. Around one in five deaths in men and one in seven in women are from the disease (BHF, 2008). CHD causes around 94,000 deaths in the UK each year. Other forms of heart disease cause more than 31,000 deaths in the UK each year, so in total there were just under 126,000 deaths from heart disease in the UK in 2006.

Cardiovascular disease is one of the main causes of premature death in the UK (death before the age of 75). Thirty percent of premature deaths in men and 22% of premature deaths in women were from CVD in 2006 (BHF, 2008). CVD was responsible for more than 53,000 premature deaths in the UK in 2006.

Cardiovascular disease deaths as a whole have steadily declined since the 1970s, with a reported 27% reduction in mortality from heart disease, stroke and related diseases in people aged less than 75 years of age since 1996 (DH, 2005c).

Interestingly, UK morbidity data suggest that CHD prevalence is, in fact, increasing, and this seems to be particularly marked in people aged 75 years or more. A recent analysis by Majeed and Aylin (2005) suggests that by 2031:

- the number of cases of CHD will rise by 44% (to 3,190,000) and hospital admissions related to CHD will increase by 32% to 265,000
- the number of people with heart failure will rise by 54% (to 1,303,000) and hospital admissions will increase by 55% to 124,000
- the number of people with atrial fibrillation will rise by 46% (to 1,093,000) and hospital admissions will increase by 39% to 85,000.

While great progress has been made in moving cardiovascular care from tertiary prevention to secondary prevention, health plans must continue to drive CHD care further along the continuum towards primary prevention of CVD. CVD risk factors should be managed not only after a coronary event has occurred, but also before the onset of such an event. Ideally, healthy lifestyles should be promoted with all patients so that risk factors for CVD never develop. In this way, the future may well see CVD care moving from the inpatient setting to the outpatient setting.

The scope of this book

The acute coronary syndromes (ACS) represent the unstable phase of CHD and encompass a range of conditions that result in myocardial ischaemia or infarction. Despite advances in the knowledge of disease processes and

improved pharmacological and interventional therapies, ACS continues to have significance for practitioners working across the spectrum of primary, secondary and tertiary care arenas (DH, 2009a).

Virtually every pathological process affecting the heart can lead to a critical cardiac event, and commonly sudden death within the community and within the hospital setting, therefore a good understanding of cardiac events and their immediate management is essential in optimising patient health and reducing mortality and morbidity. Through a structured approach of assessment, initiating investigations, treatment and delivering appropriate care, within the community and hospital setting, potentially life-threatening cardiac events can be identified. This will enable medical attention to be delivered in these situations, and ensure the most appropriate evidence-based care and treatment strategies are adopted (Humphreys, 2009).

Through a structured and focused approach this text offers a practical guide to nursing the cardiac patient; it addresses the management of cardiac patients within both community and hospital settings. It has relevance to nurses working across the nursing milieu, and will help to develop a comprehensive understanding of the contemporary evidence-based practice and principles underlying the care and management of the cardiac patient (Figure 1.1).

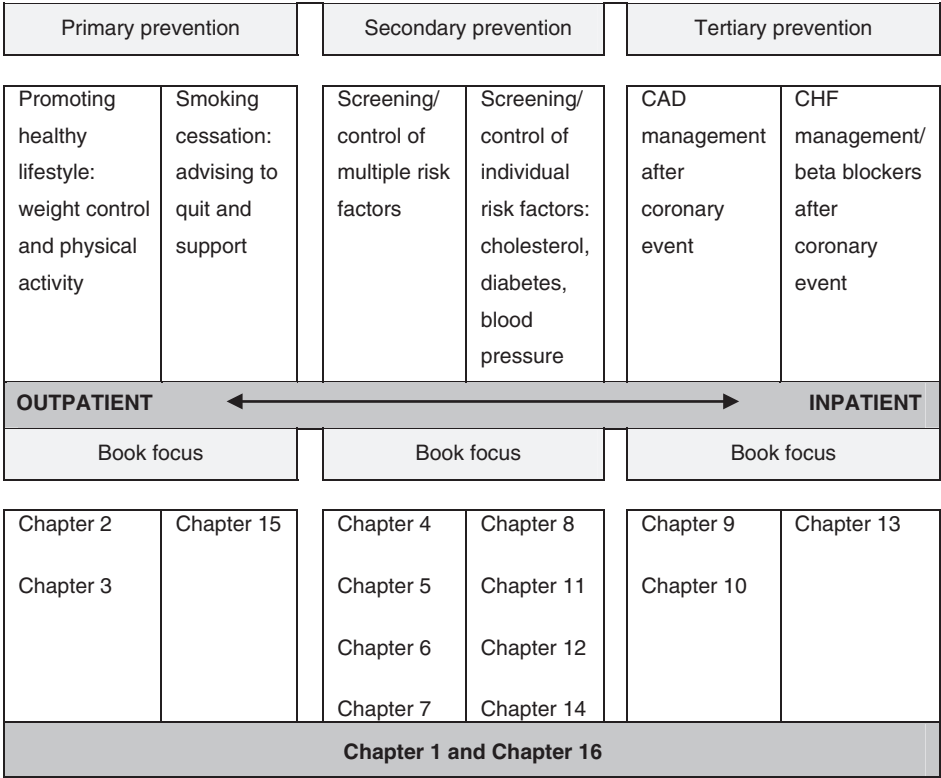


Figure 1.1 The cardiovascular disease continuum.

As cardiac events have huge significance for all practitioners, this book will prove to be a practical resource for many nurses working within both general and specialist emergency/cardiac hospital settings. It will also have relevance for primary care workers wishing to develop their knowledge within all aspects of cardiac care, and as such will appeal to paramedics and other healthcare professionals working within general practice.

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