Medical care of cardiovascular disease in Australia

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Medical care of cardiovascular disease in Australia

Anne-Marie Waters Tim Armstrong Susana Senes-Ferrari

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Preface

Despite great improvements in cardiovascular death rates in recent decades, the disease remains Australia's greatest health problem.

The disease kills almost 54,000 Australians each year, primarily as a result of coronary heart disease, stroke and peripheral vascular disease. Coronary heart disease and stroke alone claim a life every twelve minutes. The direct costs of health care, which include hospital, nursing home, medical and pharmaceutical costs, amounted to \$3.7 billion in 1993–94. Of particular concern are the consumption of health resources for the invasive management of heart disease, and the heavy burden of disability due to stroke. Also, far too many Australians remain at higher risk of cardiovascular disease through cigarette smoking, high blood pressure, high blood cholesterol, overweight and insufficient physical activity.

For reasons such as these, Australian Health Ministers made cardiovascular health one of five priority areas in the National Health Priority Areas program (the others are cancer control, injury prevention and control, mental health and diabetes mellitus). The Commonwealth Government also funded the Australian Institute of Health and Welfare to establish a national system to monitor cardiovascular disease, its risk factors and management. The system comprises the National Centre for Monitoring Cardiovascular Disease (based at the Institute), an Advisory Committee and Regional Collaboration Centres.

To date, the focus of national reporting on cardiovascular disease has been on prevention (risk factors) and mortality, with treatment receiving less attention. This report, prepared within the National Centre, documents current patterns of medical care using national databases and discusses the uses and limitations of the data sources for monitoring purposes. The report represents the first comprehensive assessment of national data for monitoring the medical management of cardiovascular disease in Australia.

Dr Richard Madden Director Australian Institute of Health and Welfare Dr Andrew Tonkin Chairman National Centre for Monitoring Cardiovascular Disease Advisory Committee

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Summary

This report presents information on the medical care of cardiovascular disease in Australia in two ways. First, it describes the data sources relevant to monitoring medical care and assesses the uses and limitations of each collection. Second, it gives information on the prevalence of cardiovascular conditions in the community, their care in general practice and in hospital, the use of drugs to treat these conditions, the costs associated with cardiovascular health care, and the size of the specialised medical labour force involved with cardiovascular disease.

Among the main findings of the report are the following:

Assessment of data sources

- Estimates of the prevalence of cardiovascular conditions in the community and related health actions are available from the National Health Survey 1995, however the information is self-reported and not medically verified.
- Information on the community use of prescription drugs and their cost is available from the Drug Utilization Sub-Committee Database but the condition for which the drug was prescribed is not recorded. The collection excludes over the counter drugs and drugs used in public hospitals.
- Information on use of medical services for cardiovascular disease and their cost is available from the Medicare claims database. However, claims for services to public patients in public hospitals and outpatient services in public hospitals are not included. As the database only covers about 75% of total services, figures derived from this source can be misleading. In addition, the underlying condition for which the service was provided is not recorded.
- Data on medical procedures provided to hospital admitted patients, their associated diagnosis and use of hospital resources are best obtained from the National Hospital Morbidity Database, subject to the accuracy of diagnostic coding. However, the system does not distinguish first admissions from readmissions or transfers so it is not possible to count patients individually. The lack of a unique patient identifier prevents linking to information on long term outcomes.
- An insight into the general practice management of cardiovascular conditions and patterns of prescribing cardiovascular drugs in general practice is given by the Survey of Morbidity and Treatment in General Practice in Australia 1990–91. A comparable continuous survey of morbidity in general practice began in 1998. The information relates only to problems managed at the recorded encounter and excludes any previous encounters, even for the same problem, and any other problems not treated at the encounter.
- Among other useful sources of information are the National Heart Foundation Cardiac Surgery Register and National Heart Foundation Coronary Angioplasty Register for cardiovascular procedures; the Disease Costs and Impact Study for health care costs; and the Medical Labour Force Survey for medical labour force related to cardiovascular conditions.

Information on medical care

- In 1995 over 2.8 million Australians suffered from a cardiovascular condition. Of these people, over 2 million had a cardiovascular condition in the two weeks preceding the interview. This represents 11% of men and 12% of women.
- Almost all people who had a recent cardiovascular condition took some health related action for the condition. Most commonly this action was visiting a doctor.
- Hypertension was the most common cardiovascular condition reported in 1995.
- Cardiovascular conditions were the second most common problems managed in general practice after respiratory conditions in 1990–91, accounting for 12% of the total. Of these, about half were hypertension problems.
- Eight per cent of all public acute and private hospital separations in Australia in 1995–96 were associated with a principal diagnosis of cardiovascular disease. Of these, 37% were due to coronary heart disease, 12% to cerebrovascular disease and 10% to heart failure.
- The average length of stay in hospital for a cardiovascular condition was 6.6 days, compared with 4.3 days on average for all conditions. Of cardiovascular conditions, cerebrovascular disease had the longest average length of stay (12.5 days).
- Common cardiovascular procedures in 1995–96 included diagnostic cardiac catheterisation, coronary artery bypass surgery, diagnostic ultrasound, percutaneous transluminal coronary angioplasty, intracoronary stent implant, cardiac pacemaker insertion and checks, electrophysiology studies, and cardiac stress tests.
- Cardiovascular services, mostly for diagnostic procedures and investigations, accounted for just over 1% (2.2 million services) of all Medicare and Department of Veterans' Affairs medical services in 1994–95.
- Benefits paid for cardiovascular medical services by Medicare and Department of Veterans' Affairs in 1994–95 totalled \$202 million, accounting for 3% of total benefits paid.
- About 17% of all prescriptions dispensed in the Australian community in 1994 were from the cardiovascular system group. This includes inotropic drugs, antiarrhythmics, nitrates, diuretics, beta blockers, calcium channel blockers, ACE inhibitors, other antihypertensives, and peripheral vasodilators.
- Antihypertensives were the drugs most frequently prescribed by general practitioners for cardiovascular conditions.
- Health care costs for cardiovascular disease totalled \$3,719 million in 1993–94, representing 12% of the total health care costs for all diseases. Coronary heart disease was the major contributor to cardiovascular health care costs, accounting for 25% of the total.