2 Methodology

This section provides an overview of the methodology, which is summarised in Appendix B and described in detail in Mathers et al. (1998b). Cardiovascular diseases and diabetes have been classified according to the International Classification of Diseases Ninth Revision (ICD-9), as shown in Appendix A.

Data sources

Total recurrent health expenditures for 1993–94, as estimated by the Australian Institute of Health and Welfare (1996a), are apportioned by sector using hospital morbidity and casemix data for 1993–94, Medicare and Pharmaceutical Benefits Scheme data for 1993–94, the Survey of Morbidity and Treatment in General Practice 1990–91, and the Australian Bureau of Statistics' National Health Survey 1989–90.

Health sectors

The following sectors of expenditure are included in the disease cost estimates:

Hospital inpatients: inpatient (admitted patient) costs for public hospitals (including public psychiatric hospitals), repatriation (veterans') hospitals and private hospitals. Also included are medical costs for private patients in public and private hospitals (these are included with medical services expenditure in the AIHW health expenditure bulletins).

Hospital non-inpatients: hospital outpatient services and casualty / accident and emergency services.

Medical services: total costs of all private medical services except those to hospital inpatients (medical services for private patients in hospital are included under hospital inpatients). This sector includes consultations with general practitioners and specialists as well as pathology tests and screening and diagnostic imaging services. It includes services to veterans.

Pharmaceuticals: includes costs of prescription drugs (whether listed in the Pharmaecutical Benefits Scheme or not) and non-prescription (over-the-counter) medicines apart from those dispensed in hospitals and included in estimates of hospital costs.

Nursing homes: includes nursing homes for the aged but not residential homes for the young disabled (considered a welfare rather than health expenditure).

Dental and allied health services: includes costs of visits to allied health practitioners excluding pharmacists but including dentists, apart from allied health services provided by hospitals.

Other: includes expenditure for certain cancer prevention programs (national screening programs for breast and cervix cancer, and lung and skin cancer prevention programs), for health and medical research, for home blood glucose testing

equipment and supplies and for administration and other institutional and non-institutional health expenditure (see Appendix B for more details of these sectors). Note that the expenditure for cancer prevention programs is included entirely in the estimates of the health system costs of cancer and does not affect the estimates for cardiovascular diseases or diabetes.

Total recurrent health expenditure in 1993–94 was $34,141 million (AIHW 1996a). The sectors listed above accounted for 92% of total recurrent health expenditure, or $31,436 million. Recurrent expenditure on health care which has not yet been attributed to diseases ($2,704 million) includes community health services, public health programs (apart from three cancer public health programs), ambulance services, and medical aids and appliances (with the exception of equipment and supplies for home glucose testing by diabetics). Capital expenditure ($1,833 million) is also excluded from the costings presented here.

Disease impact

This report also contains data for each disease group on the number of deaths and potential years of life lost to age 75 in 1994. Deaths data are derived from the AIHW Mortality Database and classified using the underlying cause of death as coded by the Australian Bureau of Statistics from information provided on death certificates (and in some cases coronial findings). Potential years of life lost to age 75 are calculated by subtracting age at death from 75, for deaths at ages less than 75 years.

Limitations

It must be emphasised that the disease cost estimates reported here are based on attribution of total health expenditures based on available information on the mix of diseases treated and the costs of treatment. For medical and allied health services, and to some extent for drugs, utilisation data relate to 1989–90 or 1990–91 and so costs reported for these sectors will not reflect changes in clinical practice or disease patterns between then and 1993–94. The only exceptions to this are for pathology screening tests for high blood cholesterol, where 1993–94 Medicare data were used. Also, costs of specialist medical services are estimated using 1990–91 data on referral patterns by GPs and costed at the average cost within specialist type. This means, for example, that all pathology tests (apart from cholesterol tests) are assumed to have the same average cost.