2 Methodology

This section provides an overview of the methodology, which is summarised in Appendix B and described in detail in Mathers et al. (1998a).

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 private medical costs for private patients in public and private hospitals.

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 (included in estimates of hospital costs).

Nursing homes: includes nursing homes for the aged but not nursing 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, and for administration and other institutional and non-institutional health expenditure (see Appendix B for more details of these sectors).

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 $31,397 million. Recurrent expenditure on health care which has not yet been attributed to diseases ($2,744 million) includes community health services, public health programs (apart from three cancer public health programs), ambulance services, and medical aids and appliances. Capital expenditure ($1,833 million) is also excluded from the costings presented here.

Classification of diseases and injury

Diseases and injury have been classified according to the major chapter groupings of the International Classification of Diseases Ninth Revision (ICD-9) as shown in Appendix A. Disease group labels are abbreviated in the tables of this report. Apart from four subgroups for the final 'Other' category, these labels refer to entire ICD-9 chapters as indicated in Table A.1.

Treatment and prevention

The Disease Costs and Impact Study 1993–94 attempts to classify health system costs for each disease group into two categories: treatment and prevention. Treatment includes all health system activities relating to the diagnosis, treatment, rehabilitation and palliation for diseases, injuries and symptoms. Prevention includes all activities relating to the primary prevention of diseases, including screening for asymptomatic disease. It is important to note that prevention will include some activities within the medical, hospital and allied health sectors as well as the public health sector. Table 3 and Appendix C provide estimates of treatment costs only by ICD-9 chapter.

Data on health service activity do not always allow classification into treatment or prevention and the category 'Treatment and aftercare, unspecified disease' includes some prevention activity that cannot be distinguished from diagnostic activity (see Appendix A). In addition, the majority of public health and community health expenditure has not yet been included in the Disease Costs and Impact Study. As a result, estimates of health system expenditure for prevention should be interpreted with caution.

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. Potential years of life lost to age 75 are calculated by assuming that 75–x years of life are lost for a death at age x 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 cervix and prostate cancer 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. For example, this means that all pathology tests (apart from Pap smear and prostate specific antigen (PSA) test) are assumed to have the same average cost.