Australian national health and welfare accounts

Concepts and data sources

The Australian Institute of Health and Welfare is Australia's national health and welfare statistics and information agency. The Institute's mission is to improve the health and well-being of Australians by informing community discussion and decision making through national leadership in developing and providing health and welfare statistics and information.

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Mr Tony Hynes.

Introduction

The aim of this paper is to outline, in broad terms:

- the concepts that underpin the compilation of national data on expenditure on health and welfare services in Australia, and
- the sources of data that are used in compiling those estimates.

In doing this, the Australian Institute of Health and Welfare (AIHW) is seeking to improve the general level of understanding of the different data sources used in deriving our estimates of expenditure on health and welfare services. This, in turn, could contribute to improvements in the timeliness, accuracy and relevance of the data.

In that context, we would welcome any comments about the concepts and data sources outlined in this paper. We would also welcome suggestions for improving the way sources are identified and described. These could be directed to:

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Background

The provision and funding of health and welfare services in Australia involves a complex maze of interactions between:

- the Commonwealth Government
- state and territory governments
- local governments
- non-government service providers
- health insurers
- individuals, and
- other non-government funding organisations.

The policies and processes adopted by each of these players and the way they interact have implications for the ability of health and welfare services providers to efficiently deliver the types of goods and services that make up Australia's health and welfare services systems. This, in turn, has impacts on Australia's level of economic activity.

It is important, therefore, that policy analysts and developers have an appreciation of the costs associated with providing the various goods and services that make up the health and welfare services systems.

As is the case with most advanced economies, information about expenditure on health and welfare services has, for many years, been identified in Australia's estimates of national expenditure. That information is compiled, in Australia's case, by the Australian Bureau of Statistics (ABS), using the System of National Accounts (SNA) framework.

As the complexity of the interactions within Australia's health delivery and financing systems increased in the early 1970s, it became apparent that the scope of the information collected under the SNA no longer gave the degree of precision about the way health care was financed that was needed to support the development of national and regional health policies. It was then decided that specific estimates of expenditure on health needed to be developed that would identify:

- overall level of expenditure on health services;
- expenditure on particular types of health services; and
- how those goods and services were funded.

The same background applies in respect of the development of estimates of expenditure on welfare services. Specific estimates of expenditure on welfare services commenced in Australia in the mid-1990s.

The AIHW has responsibility for producing estimates of expenditure on health and welfare services in Australia. While it does this on an annual basis, the analyses usually relate to periods more than 12 months prior to publication. This is largely the consequence of the range of data sources that is used in compiling and verifying the estimates.

Synopsis

The first part of the paper is a brief history of the development of health and welfare services expenditure data since the early 1970s. The second part examines the concepts that underpin the collection of national expenditure data and possible approaches to collecting and presenting health and welfare expenditure data. In particular, it analyses the SNA and examines the concept of satellite accounts, within the context of the SNA. It also looks at the way Australia currently presents its estimates of expenditure on health and welfare services using classification systems developed by the Organisation for Economic Cooperation and Development (OECD). The paper then provides an outline of data sources used in the estimation of expenditure on health and welfare services in Australia.

1 History of health and welfare services expenditure data development in Australia

Analysis of Australian health expenditure has come a long way from that which existed in 1970 to its present form. The development of the analysis of Australian welfare services expenditure, however, is more recent—it had its debut in 1995.

Health expenditure data development

Broad estimates of government and private expenditure on health have been compiled by the ABS in constructing the Australian National Accounts for many years. This enabled some estimation to be made of total expenditure by broad type of health care.

The preparation of more detailed estimates, by service type and source of funds has been undertaken by a number of different players at different times since the beginning of the 1970s. These include:

- Dr John Deeble (covering the period 1960–61 to 1966–67);
- Commonwealth Department of Health (from 1969–70 to 1980–81); and
- AIHW (covering the period 1981–82 to date).

Early development of the Australian health expenditure matrix

The first detailed breakdown of Australian health expenditure by service type and source of funds was undertaken by Dr John Deeble (Deeble 1970). He developed estimates of current and capital account expenditure on health for 1960–61, 1963–64 and 1966–67, together with estimates of output and unit costs for some major groups of health services. He used a sources of funds/type of service matrix approach in the presentation of his estimates.

Deeble's work, which was specifically targeted at Australia's health funding arrangements, complemented that being undertaken at the time by the World Health Organization (Abel-Smith 1969) for the presentation of internationally comparable estimates of national expenditure on health services.

Two major sources identified by Deeble in his work are no longer identified in estimates of expenditure by source of funds. These are:

- voluntary insurance; and
- charitables.

Voluntary insurance included commercial insurance companies as well as non-profit organisations, which were registered under the *National Health Act 1953* for the payment of Commonwealth benefits. The expenditure recorded against the voluntary insurance source was the contributions income paid by members of voluntary insurance organisations for particular types of inclusions in their health cover.

Funds raised by charitable bodies and miscellaneous sources covered all the receipts from non-government sources that were not related to the provision of particular health services or did not entitle the payer to specific benefits. Included also were proceeds from public appeals, social and charitable functions, and research grants from governments or private foundations overseas.

Commonwealth Department of Health

Deeble's matrix was adopted by the Commonwealth Department of Health (DOH) in its triennial estimates of health expenditure for Australia, which covered the period from 1969–70 to 1974–75.

Some of the private funding sources adopted by the DOH differed from Deeble's. For example, voluntary insurance identified the surpluses of the voluntary health insurance funds. Patient fees (called 'Recipients' in Deeble's work) included direct payment by patients and payments through workers' compensation and compulsory motor vehicle third party insurance schemes. 'Other' included donations, funds raised by charitable bodies and miscellaneous sources. The estimates produced by DOH were well in excess of the ABS estimates of expenditure on health. Expenditures on teaching and research were not included in the DOH matrix.

The Department of Health published time-series data for 1960–61, 1963–64, 1966–67 and 1969–70 for three broad areas of expenditure: 'Institutional care', 'Other medical care', and 'Public health services'. These were followed up with more detailed data for the same periods by Deeble in a project commissioned by the Hospitals and Health Services Commission (Deeble & Scott 1978). Deeble's analysis was of recurrent expenditure by area of expenditure but not dissected by source of funds.

In 1978 the Commonwealth, in a joint management review project funded by the Commonwealth Department of Health, the Public Service Board and the ABS, developed a method aimed at reconciling the output from the three major sources of data—ABS National Accounts, Deeble's estimates and the DOH data. The result was an annual analysis of the total costs of health care in Australia for 1974–75 to 1976–77 (Commonwealth of Australia 1978). The matrix produced by this project was broadly similar to its predecessors. A new feature was a reconciliation between the funds paid directly by individuals for health services and total expenditure by individuals on health care. This adjustment was, in effect, the surplus or deficit of individuals' contributions to private health insurance over total payments by the funds for health services in a year. This was important in enabling comparison between the matrix and the estimates of private consumption expenditure on health in the ABS National Accounts.

The joint management review recommended that the matrix of health care expenditure, as used in the national health accounts study, be adopted and maintained by the Commonwealth Department of Health. Consequently, a time-series covering 1974–75 to 1977–78 was published (Commonwealth Department of Health 1980). The major change from the preceding matrix presentations was that funding by health insurance funds now included only benefit payments from the funds for health services incurred by contributor units, plus the management expenses. This replaced contributions paid to the funds. The rationale for this was that expenditure on health for any one year should match, as closely as possible, the health services rendered in that year.

Recurrent expenditure was subsequently classified into five broad areas:

- institutional
- non-institutional
- preventive services
- administration
- research.

The former 'Public health services' category was split into a new category, 'Preventive services', and a sub-category of 'Non-institutional—Community health'. Preventive services included activities such as the encephalitis program, general quarantine, health education, drug education, and tuberculosis control. Community health services was made up of expenditure on community health, domiciliary nursing care benefit, home nursing subsidy and maternal and child care.

The compilation of health expenditure statistics was the responsibility of the Central Statistical Unit and the Health Expenditure and Financing Section of the Commonwealth Department of Health until 1985, when it was transferred to the incipient Australian Institute of Health.

Australian Institute of Health and Welfare

In the Australian Institute of Health's first publication, which covered the period 1979–80 to 1981–82 (Australian Institute of Health (AIH) 1986), the category title of 'Preventive services' was changed to 'Health promotion and illness prevention'. A second publication, covering 1970–71 to 1984–85, was published in 1988. The Institute also published its first health expenditure estimates in 1986.

In 1992, the responsibilities of the Institute were expanded to include research into welfare services and housing assistance. Its name was changed to the Australian Institute of Health and Welfare and it continued publication of the health expenditure estimates, the latest of which was published in September 2001 (Australian Institute of Health and Welfare (AIHW) 2002a).

While the annual matrices since 1974–75 have maintained their structure, there have been considerable changes in the data sources used. The first series of major changes followed the introduction of Medibank in 1975.

Medibank provided 'free' access to standard ward hospital care for all Australians and this was to be funded through cost-sharing agreements between the Commonwealth and each state in respect of the state's public hospitals. Under those agreements, the states provided cost and utilisation data to the Commonwealth for hospitals recognised for cost-sharing purposes. These data became an important source in developing estimates of expenditure on public hospitals.

Because of changes to the public hospital funding arrangements during the 1980s, the cost-sharing data became redundant so that a new source of hospital cost data was needed. From the latter half of the 1980s states and territories have provided hospital expenditure and revenue data directly to the AIHW for inclusion in its annual Australian Hospital Statistics series. This now provides the major source of estimates of gross expenditure on public hospitals.

Another major change followed the introduction of Medicare in 1984. Since then sophisticated payment and monitoring systems have operated in respect of medical services and these have provided the basic data used in estimating expenditure on medical services. Those systems continue to be used in estimating the relative shares of funding for medical services borne by the Commonwealth and other funding sources and in the shares of some expenditure on dental services and other professional services (optimetrical services).

Recent developments

State and territory estimates of health expenditure

From 1996–97 estimates of expenditure on health have been compiled on a state/territory basis. This involves the allocation of some types of national expenditures by state/territory using allocation factors derived from other, related data.

Adoption of the OECD's System of Health Accounts

A most important initiative has been the adoption by the AIHW of the classifications developed by the Organisation for Economic Cooperation and Development (OECD) for:

- health care activities (HC classification);
- providers (HP classification); and
- funders (HF classification).

These form part of the OECD's System of Health Accounts that was developed by the Directorate for Education, Employment, Labour and Social Affairs of the OECD and is outlined in a 2000 publication, *A System of Health Accounts*, that was prepared by Manfred Huber, an administrator with the Directorate. All Australian estimates of expenditure since 1998–99 have been coded to the OECD classifications.

Private health insurance subsidies and rebates

In 1997 the Commonwealth enacted the *Private Health Insurance Subsidy Act 1997*. This initially provided for an income-tested subsidy, known as the private health insurance incentive subsidy (PHIIS), to low-to-middle income earners with private health insurance cover. The legislation was later changed to provide a rebate of 30% to all Australians who had private health insurance cover.

Members of private health insurance funds pay contributions (premiums) to the funds in exchange for private health insurance cover. The primary purpose of those contributions is to enable the funds to pay benefits in respect of health expenditures incurred by the members. Therefore, the benefits and related administrative expenses that are paid out of the funds, using the contributions and other earnings of the funds (such as interest, dividends and rent received), are regarded as private health insurance funding of health expenditure.

Some adjustments are made by the funds to provide for outstanding claims at the end of each accounting period and to maintain a minimum level of reserves for prudential reasons. These adjustments are not regarded as health expenditure.

By paying its PHIIS and 30% rebate to the contributors, the Commonwealth Government effectively subsidises the activities that are financed by the private health insurance funds. This includes both the health activities (that is, benefits and management expenses) and the non-health activities expenditures (that is, adjustments to provisions and reserves).

Consequently, the AIHW regards the PHIIS and the 30% rebate as Commonwealth funding. It apportions that Commonwealth funding across the expenditure categories (private hospitals, medical services, etc.) in line with the levels of expenditure by the funds on those categories. For example, because just over half the expenditure of private health insurance funds is on benefits to private hospitals, just over half of the Commonwealth's expenditure on PHIIS and the 30% rebate is allocated to private hospital expenditure. Of course, only that part of the Commonwealth's expenditure that is related to health activities is included in the estimates of health expenditure.

The Commonwealth expenditure on PHIIS and the 30% rebate is then offset against the gross expenditure by private health insurance funds.

Welfare services expenditure data development

The AIHW undertook a comprehensive review of existing data sources for expenditure on welfare services in Australia in 1994 (AIHW: Pinyopusarerk & Gibson 1994). The first estimates of welfare services expenditure followed in 1995. Its analysis covered the period from 1987–88 to 1992–93. Data were for the public sector only, broken down into three areas of expenditure:

- family and child welfare services;

- aged and disabled welfare services;
- other welfare services.

The scope of the initial analysis was limited to expenditure by governments on welfare services. Therefore, spending on income support—for example, the old age pension, disability pension, sole parent pension, and housing and rental assistance—was not included.

Other areas of government expenditure with 'welfare services' flavour were also excluded from the estimates of expenditure on welfare services. These included nursing homes (later high-level residential aged care) and pre-schools. The former, following OECD definitions, are considered to be predominantly 'health' in nature. The latter are considered to have an 'education' purpose.

Subsequent issues of the welfare services expenditure bulletins expanded the data elements to include information on expenditure by the private sector—non-government community services organisations, clients and households (Australian Institute of Health and Welfare (AIHW) 1996).

From 1997–98, expenditure on services for older people was able to be split from services for people with disabilities. This was made possible when the Commonwealth Grants Commission developed separate assessment categories for concession items.

There has been a break in the series due to the change in government accounting systems in most jurisdictions from cash to accrual in 1998–99. The data for years before 1998–99 are not comparable to those from 1998–99 onward. There were also problems with data reliability because only some jurisdictions changed to the accrual system.

Regrettably, there is no OECD framework specifically covering welfare services expenditure. However there is a broader OECD framework for social expenditures, which covers areas such as employment, health, housing, social security and welfare. AIHW is moving to base its estimates on this framework in future years.

2 A conceptual framework for national health and welfare services accounts

Introduction

While national health and welfare services accounts are constructed and reported in the context of the broader national accounts framework, they involve some manipulation and re-ordering of the national accounts data. It is important, therefore, that we appreciate the concepts underlying the national accounts; the way they gather and report data; and their deficiencies when it comes to reporting on expenditure in specific areas of concern, like health and welfare services. These allow us to understand why there has been a move towards the development of specific satellite accounts in some areas, like health, tourism and the environment.

Box 1: Satellite accounts definition[1]

Satellite accounts or systems generally stress the need to expand the analytical capacity of national accounting for selected areas of social concern in a flexible manner, without overburdening or disrupting the central system.

Typically, satellite accounts or systems allow for:

(a) the provision of additional information on particular social concerns of a functional or cross-sector nature;

(b) the use of complementary or alternative concepts, including the use of complementary and alternative classifications and accounting frameworks, when needed to introduce additional dimensions to the conceptual framework of national accounts;

(c) extending coverage of costs and benefits of human activities;

(d) further analysis of data by means of relevant indicators and aggregates; and

(e) linkage of physical data sources and analysis to the monetary accounting system.

Satellite accounts allow us to restructure certain national accounts data and to make supplementary estimates to add to those national accounts data to make them more meaningful in analysing what is happening in a particular area of concern. Progress is being made internationally towards the implementation of national health satellite accounts, the first step towards this being the adoption of the OECD's internationally comparable System of Health Accounts.

[1] Inter-Secretariat Working Group 1993:498.

Australia's national accounts record economic activity in Australia over a financial year (that is, from 1 July to 30 June). The published accounts provide the most basic set of data on economic activity at the national level, although some data are provided at a state and territory level. Their objective is to show the value of production over the year and its composition.

The national accounts data are used by a wide range of people, including policy analysts, journalists, teachers and the general Australian public, as well as international organisations, to describe the structure of the national economy and to monitor its performance, along with that of its various sectors. The central calculation provided in the national accounts is the value of national economic output—the market value of all goods and services produced—and the components that make up that aggregate. Nevertheless, while these basic calculations are important, the uses of the national accounts go well beyond them.

Most uses of the national accounts are comparative by nature. For a country, comparisons are made of the size of economic output and its composition across time and across industries. Comparisons are also made with other countries. In order to achieve such comparisons, it is vital to standardise, as much as possible, with respect to:

- concepts used
- statistical definitions
- methods of data collection.

International standardisation of national accounts has been achieved to a considerable extent and any changes which could threaten this standardisation are understandably resisted.

Proposals are made from time to time to alter the national accounts, either with respect to their coverage, format or their conceptual basis. Such proposals often come from special-purpose users of the national accounts information or parts of it and they often make sense for the purposes of the particular users concerned. Nevertheless, given the central comparative function of the national accounts, proposals to alter the main body of the accounts, however sensible, may expect to meet with opposition from the statistical authorities. Changes to the coverage or format of the main body of the national accounts might ordinarily be expected to compromise their value for comparisons across time, across industries and across countries.

Satellite accounts provide an alternative. They offer a means of achieving purpose-oriented revisions of the national accounts while still preserving the standardised features of the main accounts. They do this by adding side calculations and/or supplementary information to the accounts, which address particular issues of interest, while leaving the main body of the national accounts intact. The System of National Accounts (SNA) approach is receptive to the use of satellite accounts (see Box 1, page 9).

In setting out a conceptual framework for the construction of satellite accounts, which are of value for understanding health and welfare issues, this chapter will

focus on broader conceptual problems with national accounting practice, especially as it relates to health and welfare issues. The normal framework of the national accounts buries these issues within other calculations, omits coverage of some important aspects of health and welfare issues, and fails to value the output of the health and community services sectors appropriately. As with all other output of the general government and not-for-profit part of these sectors, their outputs relating to health and welfare issues are valued at cost. Satellite accounts is one method of addressing at least some of these deficiencies.

The national accounts

The current set of international conventions for compiling national accounts and the reasons for them are set out in a comprehensive 1993 publication called the *System of National Accounts 1993* (Inter-Secretariat Working Group 1993). Australia has implemented this system and the major elements of Australia's national accounting practices are discussed in detail in the ABS's own concepts, sources and methods publication (Australian Bureau of Statistics (ABS) 2000).

Gross domestic product (GDP)

Prior to 1994–95 the ABS compiled estimates of GDP for Australia using three different approaches. These were the:

- income approach (GDP–I)
- expenditure approach (GDP–E)
- production approach (GDP–P).

While each of these measures of GDP should deliver the same estimate, because they were each derived from different data sources they usually resulted in three different estimates of GDP for Australia. In order to obtain a single estimate, the ABS averaged the I, E and P estimates to produce its GDP–A estimate.

From 1994–95 estimates of Australia's GDP have been integrated with annual balanced supply and use tables to ensure that the same estimate of GDP is obtained from the three approaches. Furthermore, in chain volume terms, GDP is derived using the expenditure and production approaches (Australian Bureau of Statistics (ABS) 2000:119). This has resulted in the elimination of statistical discrepancies from annual estimates, in either current price or chain volume terms.

Production boundaries

The 'production boundary' refers to the definition of the activities that constitute 'production', or alternatively, those that result in the production of 'output'. Obviously, this is an important issue for the national accounts because it defines which activities are to be included within the accounts and which are not. It is an especially important issue for the treatment of health and welfare issues.

According to the SNA the boundary 'includes all production actually destined for the market, whether for sale or barter' (Inter-Secretariat Working Group 1993:4, para. 1.20). In addition, the boundary includes all goods produced and consumed within households and non-profit institutions serving households (NPISHs), as goods can be switched between market and non-market use even after they have been produced, (Inter-Secretariat Working Group 1993:5, para. 1.22).

This raises the question of the treatment of services which are not produced for the market. The SNA production boundary excludes most services produced and consumed within households or NPISHs. So far as health and welfare issues are concerned, this point is very important.

The explanation for the different treatment of goods and services reflects the assumption that whereas goods such as farm produce 'can be switched between market and non-market use even after they have been produced', services cannot be. The words 'even after they have been produced' are largely irrelevant here. They refer to the fact that the consumption of services must generally be simultaneous with their production. Separation of production and consumption requires storage and services can generally be 'stored' only in the form of some kind of good. But this is true of all services, whether produced for the market or not and applies equally to those services included within the SNA production boundary as to those lying outside it.

The words 'can be switched between market and non-market use' are also unclear. Many services produced and consumed within the household can indeed be switched to and from market use. An obvious and well-recognised example is the services of private houses. Houses, or rooms within them, can obviously be switched between market and non-market use. But so can cleaning services, cooking services, lawn mowing services, the care of children, the care of aged and sick people, and so forth. Indeed, it is not even apparent why the possibility of being switched to market use should be the defining criterion for whether an activity occurring within the household should count as 'production'.

Even when activities occurring within the household are not readily capable of being marketed, they may be close substitutes for activities that are marketed. A good example is the services of household durable goods such as washing machines. The SNA treatment assumes that the washing machine is fully consumed at the time of purchase. This treatment leads to a multitude of anomalies. If the washing machine breaks down some years after purchase and the owner then sends washing out to a commercial laundry, GDP will rise.[2] If the householder subsequently marries the person doing the washing and it is then undertaken within the new household, GDP will fall again.

The major exception to the SNA treatment of services arises in the case of housing services. In this case a value is determined for the housing services consumed by all households, whether these services are purchased through the market or not. Where

[2] Net domestic product might not rise if the breakdown of the washing machine was appropriately treated as a loss of the household's capital stock.

they are not—as in the case of owner-occupied housing—the value of the housing services is imputed, based upon market rates for comparable housing. In this case the household implicitly purchases housing services from itself. Within the production approach to the calculation of GDP a hypothetical industry 'ownership of dwellings' is created. This industry earns non-zero value-added because its purchases of the intermediate goods, which contribute to the provision of housing services, need not exactly match the revenue from its imputed sales of housing services to households.

Once this amendment is made, preservation of the equality of the three approaches to the calculation of GDP requires that both the income approach and the expenditure approach also be amended accordingly. Under the income approach the 'ownership of dwellings' industry may earn non-zero operating surplus and under the expenditure approach the 'ownership of dwellings' industry invests in housing capital and households consume housing services, whether they occur through the market or not. It should be reiterated that if they do not, as in the case of owner-occupied housing, the expenditures involved are imputed, hypothetical transactions, not actual monetary or barter transactions that could be physically observed.

This exception to the SNA treatment of services provided within the household has become a matter of international convention. The reason for this convention is simply the practical importance of the matter. Under changing economic circumstances the stock of private housing does indeed switch between market and non-market activity. If non-marketed housing were excluded from the production boundary, large shifts in GDP sometimes would occur due to these shifts, while the true underlying production (and consumption) of housing services may not have been changing at all. Its composition between the marketed and non-marketed categories would have been changing. This would have affected GDP, but only because these shifts traverse the SNA production boundary.

The fact that the services of consumer durables such as washing machines and sewing machines are not treated similarly reflects the view that they are not likely to shift abruptly between market and non-market use, or that any such shifts would be relatively unimportant for the resulting GDP calculations. If this assumption did not hold, then the case for imputing the value of these services provided within the household or NPISHs would be just as strong as is the case with owner-occupied housing. Attempting to do this in a manner analogous to the housing stock would lead to clumsiness. Treating household durables as capital goods, analogous to the housing stock, would require expanding the production boundary to encompass hypothetical industries such as 'ownership of consumer durables' whose output would be services. The central problem is that the SNA conceptual framework does not recognise the reality of production within the household.

The conclusion cannot be avoided that the SNA production boundary reflects a considerable degree of arbitrariness. The exception made for owner-occupied housing serves to dramatise this fact. There is a strong reluctance within the SNA approach to include within the production boundary non-monetary transactions involving services, but the reasons given for this view are unconvincing.

> The inclusion of large non-monetary flows...in the accounts together with monetary flows can obscure what is happening on markets and reduce the analytical usefulness of the data. (Inter-Secretariat Working Group 1993:4)

It is unclear what this means. It seems to suggest that analysis of the market transactions, which the SNA emphasises, would be impeded by taking account of relevant non-market transactions. The reverse is surely the case. If we wished to analyse the market supply of rental housing, for example, the existence of a large stock of owner-occupied housing and analysis of the conditions under which some part of it might become available for rental housing would obviously be relevant. Ignoring such matters would detract from the understanding of the market for rental housing, not add to it.

> The location of the production boundary in the System is a compromise, but a deliberate one that takes account of the needs of most users...In labour force statistics economically active persons are defined as those engaged in productive activities as defined in the SNA. If the production boundary were extended to include the production of personal and domestic services by members of households for their own final consumption, all persons engaged in such activities would become self-employed, making unemployment virtually impossible by definition. (Inter-Secretariat Working Group 1993:5)

Far from implying that the SNA production boundary is appropriate, as is its apparent intention, this argument instead demonstrates that the concept of 'employment' would also benefit from critical review, simultaneously with the SNA production boundary. Persons involuntarily engaged in 'production of personal and domestic services...for their own [or other household members'] final consumption'[3] are clearly not unemployed in a strict sense. They are not idle and are producing things of obvious social value. To the extent that their engagement in these activities is involuntary, in that they would prefer market-oriented employment if only it were available, they are indeed underemployed. They are made to appear 'unemployed' only through the arbitrariness of the SNA production boundary.

The SNA document acknowledges that omission of household production of services means that its measure of production is not comprehensive:

> In practice the System does not record all outputs, however, because domestic and personal services produced and consumed by members of the same household are omitted. Subject to this one major exception, GDP is intended to be a comprehensive measure of the total gross value added produced by all resident institutional units. (Inter-Secretariat Working Group 1993:13)

Finally, it should be noted that the SNA framework is receptive to modifications to the production boundary being implemented within satellite accounts. Referring to these accounts the SNA document says:

> In other types of analysis, more emphasis is given to alternative concepts. For instance, the production boundary may be changed, generally by enlarging it. For example, the production of domestic services by members of the household

[3] The bracketed phrase '[or other household members']' is the author's insertion.

> for their own final consumption may be brought within the production boundary. (Inter-Secretariat Working Group 1993:51)

Sector classification

The SNA divides the resident institutional units that make up the total economy into five mutually exclusive sectors:

- non-financial corporations;
- financial corporations;
- general government;
- non-profit institutions serving households; and
- households.

The categories seem obvious, except for the implied treatment of non-profit institutions. This is an important feature of the SNA as it relates to health and welfare issues because of the large role played by non-profit institutions in delivering health and welfare services.

Most of the non-profit institutions (NPIs) existing within the economy are allocated to the four categories other than non-profit institutions serving households (NPISHs). For example, non-profit-making entities such as hospitals, schools and colleges which charge fees to cover their costs are included in the first category, non-financial corporations, on the grounds that they are 'engaged in market production'. Non-profit trade associations which are financed by subscriptions from profit-making corporations and whose role is to provide those profit-making entities with services such as market information or political representation are classified as either non-financial corporations or financial corporations, depending on the classification of the corporations they serve. Those NPIs controlled by governments or which are engaged in non-market production mainly financed by government are included in the general government sector. Finally, non-profit entities owned by households but which are not legally incorporated are included as part of the household sector (Table 1) (Inter-Secretariat Working Group 1993:87–90).

Table 1: Institutional units cross-classified by sector and type

	Sectors of the system				
Type of institutional unit	**Non-financial corporations sector**	**Financial corporations sector**	**General government sector**	**Households sector**	**NPISHs sector**
Corporations (including quasi-corporations)[a]	Non-financial corporations (including quasi-corporations)	Financial corporations (including quasi-corporations)	. .	. .	. .
Government units (including social security funds)	. .	. .	Government units (including social security funds)	. .	. .
Households	. .	. .	. .	Households	. .
Non-profit institutions (NPIs)	Non-financial market NPIs	Financial market NPIs	Non-market NPIs controlled and mainly financed by government units	. .	Non-market NPIs serving households[b] (NPISHs)

. . Not applicable.

(a) All quasi-corporations, whether owned by households, government units or non-resident institutional units, are grouped with corporations for purposes of sectoring.

(b) Except NPIs controlled and mainly financed by government units.

Source: Inter-Secretariat Working Group 1993.

The category NPISHs is essentially a residual one. It consists of those non-profit institutions which are involved in production of non-market goods for households alone (not financial or non-financial corporations and not government) and which are not controlled or financed primarily by government (Rudney & Anbheier 1996). It should not be expected that such a compromise-driven residual category is useful for analytical purposes but the SNA document does not adequately recognise the conceptual and practical awkwardness that its compromise entails. The division of sectors is justified in terms of the economic behaviour of the major sectoral entities: corporations, NPIs, governments and households.

> Corporations, NPIs, government units and households are intrinsically different from each other. Their economic objectives, functions and behaviour are also different. (Inter-Secretariat Working Group 1993:89)

The document goes on to explain the differences between the economic motivation and behaviour of corporations, governments, households and non-profit institutions.

> Thus, dividing the total economy into sectors enhances the usefulness of the accounts for purposes of economic analysis by grouping together institutional units with similar objectives and types of behaviour. (Inter-Secretariat Working Group 1993:90)

The logic of this argument is seemingly defeated by the manner in which NPIs are allocated, with the exception of NPISHs, to other sectors, whose economic behaviour is said to be different from that of the NPIs concerned. It also means that NPIs, which are directed to similar purposes, such as health and welfare, are split according to the seemingly arbitrary sectoral rules used within the SNA. There would seem to be a strong case for a satellite treatment of non-profit institutions which identifies them as a separate sector, including NPISHs, but also those NPIs currently scattered elsewhere within the SNA sectoral classification.

Purpose, industry and goods and services classifications

Purpose-oriented classifications typically relate to the expenditure approach to GDP measurement. These include:

- Classification of the Functions of Government
- Classification of Individual Consumption by Purpose
- Classification of the Purposes of Non-profit Institutions Serving Households
- Classification of Outlays of Producers by Purpose.

Industry-based classifications relate to the production approach. These include:

- Australia and New Zealand Standard Industrial Classification,
- International Standard Industrial Classification
- the establishment classification within the National Health Data Dictionary.

Goods and services classifications are a third category and include:

- Central Product Classification
- Australian and New Zealand Commodity Classification
- AIHW National Classification of Community Services.

Classification systems sometimes mix the purpose and industrial categories. An example is the ABS classification of the socioeconomic objective of research expenditures (Australian Bureau of Statistics (ABS) 1993)—an important matter for health and welfare issues. This is ostensibly a purpose-oriented classification but in it research expenditures are classified by industry. An arrangement of this kind would make sense within an industrial classification but not a purpose-oriented system. The discrepancy might reasonably be addressed in future revisions of this classification.

It is important to realise that the coverage of these classification systems does not necessarily coincide. An example is that pharmaceuticals are defined as a category on the expenditure side of the national accounts, where expenditure includes not only the purchase of the physical goods produced by the pharmaceutical manufacturing industry and imported pharmaceuticals, but also the services of the retail pharmacy industry. Thus if the pharmaceutical manufacturing component of manufacturing (a production side category) is compared with expenditure on pharmaceuticals (an expenditure category), the former will be much smaller.

Another example relates to health insurance. This is a major component of health expenditures within purpose-oriented classifications. In industrial classifications, private health insurance is included within the insurance industry. The question that arises is—how should the profits or losses of the health insurance industry be treated? The premiums paid to private insurers for health insurance normally exceed the expenditures on health made by the insurance companies on behalf of their clients. The surpluses earned by the health insurance companies may be interpreted as the difference between the mean payment of customers to the health insurance industry and the expected value of actual health costs. From an economic standpoint it is debatable whether these surpluses should be considered an expenditure on health.

On the one hand, this difference may be seen simply as a payment for reduced risk, indistinguishable from any other insurance payment intended to reduce overall risk, such as legal liability insurance. The fact that it is tied to health insurance is merely a reflection of the riskiness attached to the health component of total expenditures. In this interpretation, the surpluses of the health insurance industry are simply payments for reduction of the risk attaching to one particular component of total expenditures, having nothing intrinsically to do with health at all. On the other hand, it may be argued that these payments are a part of the cost to the consumer of obtaining the health services desired. These expenditures—the premiums paid by consumers—have two components: the expected value of health-related costs, and a premium which reflects the cost to the consumer arising from the uncertain nature of these costs. The fact that consumers are willing to pay these premiums reveals that the combined value of the services derived is at least as much as the value of the premiums paid.

The issue is thus whether the cost of uncertainty reduction associated with health expenditures should be considered an expenditure on 'health', or some other kind.

In the SNA the surplus of premiums paid for health insurance over expected claims incurred is estimated and included as a service charge paid by householders for insurance. Thus, they are included in the national accounts as expenditure on 'insurance' (Australian Bureau of Statistics (ABS) 2000:201).

Nevertheless, the example of health insurance illustrates a potential problem with purpose-oriented satellite accounts. They may tend to 'draw in' expenditures from related areas. In such cases there will be a tendency to overstate expenditures on the area concerned.

Purpose-oriented classifications sometimes present forms of expenditure in a somewhat unhelpful manner. An example is the Classification of the Functions of Government system, which has hitherto separated the welfare categories of 'income support' and 'people with special needs'. The problem has been that these categories are not clearly distinct. 'People with special needs' include the very old and the very young, as well as people affected by disabilities. In April 1997 a new Classification of the Functions of Government was announced, which created a new category 'social protection'. Within this, the categories of 'transfers' and 'payments in kind' are distinguished. The new classification has some continuity with the old in that 'transfers' tend to coincide with 'income support' and 'payments in kind' tends to coincide with 'people with special needs'. Nevertheless, the correspondence is not exact.

As with other satellite systems, which relate to only a part of the total economy, a satellite relating to health and welfare services will generally not satisfy the accounting identities that relate to the economy as a whole. For example, the value of health and welfare services identified on the production side will ordinarily not sum to the value of these activities identified on the expenditure side. Identities, which apply to the whole system, do not necessarily apply to purpose-oriented satellite accounts.

Financing classifications

With the release of the 1999–00 government financial estimates the ABS moved from reporting government financial statistics (GFS) on a cash basis—largely following the previous SNA and the International Monetary Fund (IMF) standards—to an accrual accounting basis. The conceptual basis of the new reporting format complies with both changes resulting from the adoption of the SNA93 and the IMF's revised *Manual on Government Finance Statistics*, released in 2001.

Whereas there were significant differences between the old GFS and the SNA, the current GFS is based on a new conceptual framework that is derived from the SNA. The GFS and SNA93 use the same concepts and definitions to the greatest extent possible and, where different concepts have to be used, the relationships between the two are known so that it is possible to link one with the other.

The central feature of the GFS conceptual framework is that it is based on stocks and flows. Stocks are classified into assets and liabilities, while flows are classified into transaction flows, revaluations and other changes in the volume of assets.

Typically, transaction flows are those types of interactions that would usually be regarded as revenues and expenses in an operating statement of an enterprise (for example, revenue from sales of goods and services, salary and wage expenses, depreciation expenses and other expenses). Revaluations and other changes in the volume of assets are interactions that also have an effect on the value of stocks, but which do not involve transactions.

In an accrual system, such as the GFS, there is a relationship between stocks and flows, in that stocks, which are measured at a point in time, can only change through the cumulative effect of flows. Thus, the value of stocks on hand at the end of an accounting period is the sum of the value of stocks on hand at the beginning of the period and the flows that occurred during the period.

While the basic structure of the GFS and its major focus is on the nature of the flows that occur and their impact on stocks, effort is also taken by the ABS to allocate transactions on the basis of their purpose. The structure of the purpose classification used is identical to the government purpose classification (GPC) used under the previous cash-based reporting system (Table 2). The GPC itself is a derivative of the Classification of the Functions of Government.

In the case of expenditure on health and welfare, the relevant categories of the GPC are those classified as GPC25xx and GPC26xx.

Table 2: Government purpose classifications for Australia

Group	Description
25	Health
251	Acute care institutions
2511	Designated psychiatric units
2512	Nursing home type patients
2513	Other admitted patients
2514	Non-admitted patient services in acute care institutions
2519	Acute care institutions (temporary dump)
252	Mental health institutions
2520	Mental health institutions
253	Nursing homes for the aged
2530	Nursing homes for the aged
254	Community health services
2541	Community health services (excluding community mental health)
2542	Community mental health
2543	Patient transport
255	Public health services
2550	Public health services
256	Pharmaceuticals, medical aids and appliances
2560	Pharmaceuticals, medical aids and appliances
257	Health research
2571	Health research in acute care institutions
2579	Other health research
259	Health administration not elsewhere classified
2590	Health administration not elsewhere classified
26	Social security and welfare
261	Social security
262	Welfare services
2621	Family and child welfare services
2622	Welfare services for the aged
2623	Welfare services for people with a disability
2629	Welfare services not elsewhere classified

The problem of output valuation

In addition to the issue of the production boundary, a major problem arises within the boundary itself. For those goods or services which fall within the SNA production boundary but which are not supplied to the market, how are their outputs to be valued? This is a severe problem for the valuation of all government output and all output of non-profit organisations. It is especially important for the health and welfare sectors. The SNA approach is to value these outputs at cost. It is therefore impossible to use the SNA approach, so constructed, to analyse the productivity of the government or non-profit sectors. This would involve studying

the relationship between their outputs and their inputs. When their outputs are measured in terms of their inputs, productivity has no meaning.

This problem is conceptually distinct from the definition of the production boundary, discussed above, but the distinction is in some cases unimportant. As described, goods and services provided by government and non-profit organisations are included in the SNA production boundary, but are valued at cost. The problem is most severe when, as in the case of volunteers working in non-profit organisations, their services are provided with no explicit market cost. Their labour input is then valued at zero. Including them within the production boundary therefore achieves essentially nothing. This example is important in the health and welfare area because volunteers working in non-profit organisations contribute important services, for example to aged people and those with disabilities. In the national accounts their output is valued at its market cost, zero.

It is obvious that this treatment is a compromise, implemented for the pragmatic reason that attempting to measure the output of these non-marketed services is dauntingly difficult. But at a conceptual level it is clear what would be desirable. The output of the government and non-profit sectors should be valued on terms as consistent as possible with the way marketed goods and services are valued. In recent years there has been considerable progress in this area, including research in a new field known as 'contingent valuation'. The central idea of this literature is that in many circumstances either price or quantity is unobserved because of a missing market. In these situations, partially observed choices, combined with the restrictions imposed on the choice, may 'reveal the missing component of the trade-off inherent in every economically meaningful choice' (Smith 1996).

Examples of the application of this class of methods are the use of travel costs to infer the value of recreational facilities, 'hedonic prices' and household production models. Travel cost methods, and similar approaches, use observed quantities to estimate prices. Hedonic price methods use observed prices to estimate quantities and household production models use observed quantities (and possibly prices) of inputs and use this information to infer quantities (and possibly prices) of outputs. Parts of the contingent valuation literature draw upon a variety of research techniques drawn from experimental economics, market simulations and cognitive psychology.

In the case of volunteer services, their input could be valued at either:

- opportunity cost—the value of goods and services forgone as a result of their use in this form, or
- the value of the services freed up as a result of their work.

On purely practical grounds, the second seems more feasible because the opportunity cost may take the form of leisure without an explicit market valuation. It also has the conceptual advantage of measuring a benefit, rather than a cost, as in the first case.

This area of research is challenging, but it is realistic to expect genuine results from it. Internationally, there is great interest and some progress in developing genuine

output measures for government. Several European governments have made impressive progress. The Swedish statistical agency has for several years been placing valuations on all parts of Swedish government output, even including defence, which is notoriously difficult to evaluate. Accounting for qualitative changes remains a problem with this field of work. The Swedish work covers all segments of public sector activity, but concentrates on non-profit activities. Public utilities such as railroads and telecommunications were excluded because the national accounts already covered their outputs. In Australia the ABS has been actively developing and implementing output measures for government in recent years.

Tax expenditures

The Australian Treasury issues a Tax Expenditures Statement which classifies financial benefits derived by individuals and businesses from taxation concessions of various kinds. Health is one of the categories of such benefits, which it identifies. The concessions concerned generally relate to tax exemptions, tax deductions, tax rebates or reduced tax rates. They 'lower the tax burden by either reducing or delaying the collection of taxation revenue' (Department of the Treasury 1997:1).

The method of estimating the revenue forgone essentially assumes that if tax was payable at non-concessionary rates, the economic agents concerned would not change their behaviour. For example, a major category is fringe benefits tax exemption for benefits provided by public hospitals to employees (item H6). It is assumed, in calculating the value of the concession, that in its absence the magnitude of this component of the potential tax base would be the same as its (observed) size in the presence of the concession. The analytical problem, in calculating the true amount of revenue forgone in such cases, is to determine what would have happened in the hypothetical, unobserved situation where the concession was not available. The United States Treasury has used general equilibrium models in such circumstances to estimate the counterfactual values of these revenues forgone. The assumption that it would have been the same as its value in the presence of the concession almost certainly overstates its value.

Some of the items identified as 'health-related' in the Treasury document seem dubious. For example, item H2 'Exemption from Medicare levy for residents with taxable income below a threshold' does not seem to be a health-related expenditure, but rather one of general income support. Household expenditures on health-related matters are significantly affected by this item only in so far as it affects their total income because the price of medical services, as faced by households, is unaffected by it.[4] Similarly, item H8, a negative concession, 'Penalty rate of excise levied on leaded petrol', is considered 'health-related', but taxes on tobacco products are not listed. In general, the classification 'health-related' misses the interrelations between health, social security and welfare.

[4] In the terminology of microeconomic theory, this exemption induces income effects but not substitution effects.

GDP and welfare

Finally, our discussion of GDP and its measurement concludes with a brief summary of its relation to economic welfare.

Omission of non-marketed activities

Most services provided within households are excluded from the calculation of GDP. But this is an important omission because when these economic activities move into the market sector and back again, GDP changes. But this change in the measured value of national output has little or no welfare relevance. Bringing these household production activities into the calculation of GDP would seem to be the only systematic way to remedy this problem, but it will not be easy.

Depreciation of manufactured and natural capital

As noted above, GDP fails to account for the depreciation of either manufactured or natural capital. If a measure of sustainable welfare is desired, the degree to which current output is obtained at the expense of future output through depreciation of the capital stock should be considered. This leads to the more welfare-relevant concept of net domestic product (NDP). The application of this concept within the health and welfare area is clearly desirable.

Prices of marketed activities and policy-induced market distortions

In the calculation of GDP, those outputs that do enter the market system are valued at market prices. But market prices are distorted by tax and other policy interventions, which cause these prices faced by domestic producers and consumers to differ from their true social opportunity costs. A simple example is a tariff on imports of a pharmaceutical product. The domestic price of this imported commodity includes the tax, which must be paid at the border. But the tax is not a true social opportunity cost. It is merely a transfer from the purchaser of the good to the domestic government. The social cost of the good (its shadow price) is the landed import price (cif) excluding the tariff.

If domestic production of this same pharmaceutical product now occurs, how should that production be valued? The calculation of GDP uses its (tariff-inclusive) domestic market price. But the effect of producing another unit of this good is to displace one unit of imports, the social value of which is the cif price, excluding the tariff, not the domestic price. Consequently, GDP overvalues import-replacing domestic production, to an extent, which depends on the magnitude of the tariffs applying to their imported substitutes.

Prices of non-marketed activities

Obviously, when goods or services do not enter the market at all, the problem of valuation is more severe. In the case of the output of government and non-profit institutions, the solution is to evaluate them at cost. It is universally recognised that this is at best a rough proxy for the value of the output and that its use makes the

study of productivity within the government and NPI sectors virtually impossible. Progress is now being made to remedy this deficiency in the measurement of national income.

Prices of marketed activities and external non-marketed effects

Finally, it must be noted that when production for the market involves effects on other agents that do not operate through the market—externalities—the market signals that guide the producers and are used in the calculation of national income no longer measure the true value of the outputs produced. An example is production of a manufactured good, which produces health-affecting pollution. The true value of the output produced is its market value minus the social cost of the pollution produced. If these social costs were fully reflected in reduced marketed output elsewhere in the economic system, GDP would contain an indirect allowance for them. But in general, we expect GDP to understate the true social costs of such external effects.

In the health area, realistic market prices exist for pharmaceuticals, dental services, and other professional services such as physiotherapy and private hospital services. There is frequently the complication that the consumer is not buying the service directly but is first buying health insurance and then the insurer negotiates a price for the services supplied. However, there are still market prices available and these prices can be used to place a value on equivalent publicly provided services.

The above deficiencies in the concept and application of GDP are real, but we should not conclude from this that it lacks welfare relevance. Studies at the World Bank and elsewhere have shown that GDP is highly correlated, over time and across countries, with variables that have clear welfare relevance. These include measures of poverty incidence and health indicators such as life expectancy and infant mortality rates. While our discussion has focused on the areas of economic activity that GDP does not cover, the fact remains that what it does cover includes the bulk of what is relevant for economic welfare. The problems with GDP measurement should not be disregarded but GDP retains considerable welfare relevance in spite of them.

Satellite accounts

Satellite accounts are appendages to the main body of the national accounts. They are linked to the main accounts in that they receive information from them. In general, the flow of information is only one way (Figure 1). Calculations made within satellites generally do not feed back into the main body of the accounts. Satellite accounts may attempt to do any or all of three types of things:

- rearrange the main accounts information;
- extend the main accounts information; and/or
- revalue the main accounts information.

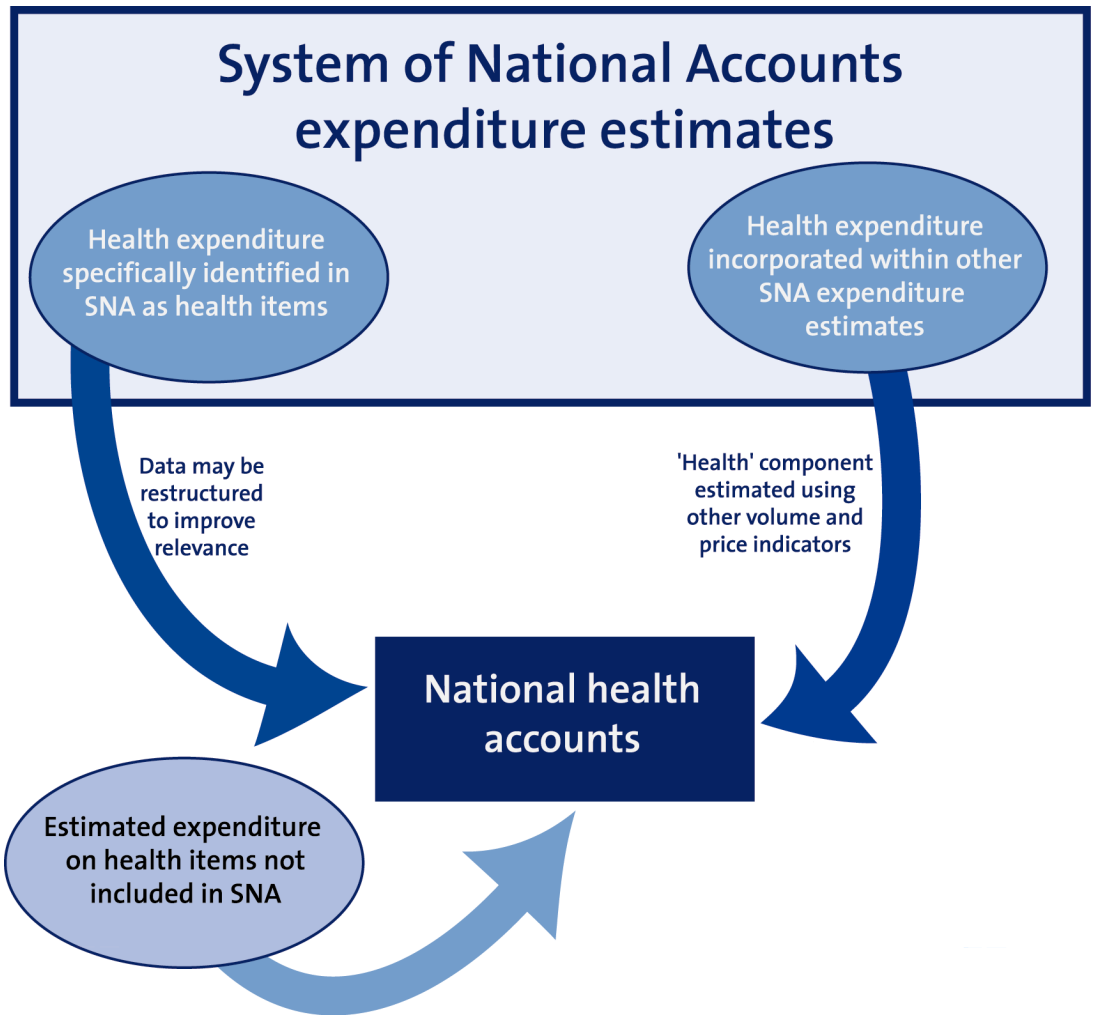


Figure 1: Construction of national health accounts

In this section we will discuss each of these functions of satellite accounts, illustrating each with an example outside the health and welfare area—land conservation. This illustration may be helpful to some readers used to thinking of health and welfare issues in particular ways by suggesting, through analogy, additional ways of viewing the relationship between health and welfare matters and the national accounts.

Rearrangement of main accounts information

This first type of satellite brings together information that is otherwise scattered within the accounts. Collecting and reprocessing this information makes special purpose analysis of data related to a particular set of issues feasible where it would otherwise not be. The essence of this type of work is that information is being disaggregated and reprocessed without altering the aggregates of the national accounts. The compilation and re-classification of health- and welfare-related

expenditures are examples of this role. Although it is related only to a particular component of GDP, it may be seen as a modification of the expenditure approach to the calculation of GDP.

Box 2: Land conservation analogy

Many groups are involved in devoting resources to land conservation and land reclamation. These include governments, local, state and federal, and quasi-governmental agencies such as the Murray–Darling Basin Commission. Voluntary organisations such as Landcare are also involved. Finally, farmers and other landowners also devote resources to attempts to prevent soil erosion and salination and to reclaim land that is already degraded. Classifying and comparing these expenditures is a rearrangement of expenditures already included in the expenditure approach to GDP measurement. But in the standard accounts it is quite impossible to isolate expenditures related specifically to this matter. Doing so is useful by making it possible to monitor who is spending resources in this area and how much. A satellite account would be used to present this information.

Extension of main accounts information

Within the national accounts, extensions of the SNA production boundary, calculations of productivity, and so forth, are not considered. They can be considered in satellite accounts. Extension of the SNA production boundary could be accomplished in a satellite by explicitly allowing for production of services within the household. Since doing this type of work on a comprehensive basis would be a vast undertaking it would clearly be best for special-purpose users of the accounts to focus on a particular set of household production activities—such as those involving health and welfare. Meaningful application of these concepts would of course require addressing the problem of valuation. This also applies to calculations of productivity. As noted above, when output is measured in terms of inputs, productivity has no meaning.

In the area of environmental economics, great interest has been generated by the idea of valuing the stock of natural capital. When the value of the stock changes during the production process, this can be allowed for in calculations of 'green net domestic product' which are analogous to present calculations of net domestic product in which allowance is made for the depreciation of physical capital during production. In the area of education, the value of human capital could be treated in an analogous manner. In the health area treating the stock of health of the population as an asset would seem to be analogous as well. 'Health' might be interpreted broadly at a conceptual level here, but initial applications of this idea would presumably need to limit its scope severely to make the task manageable. It would seem feasible to consider the presentation of data on health within an NDP perspective by taking account of the consumption of fixed physical capital. Valuing the stock of health capital is beyond reach at present.

The valuation of the change in the stock of an asset is different from the valuation of the flow of services from that asset that may have been enjoyed during the year. For example, suppose the value of the stock of 'health' in the population was the same at the end of the year as at the beginning. That is, there was no change in its value. That would not mean that the outputs of the health system had not delivered a flow of

health benefits during the year. This flow of benefits consists of the difference between the flow of health outcomes enjoyed during the year and what they would have been if the health system outputs had not been delivered. The value of outputs from the health system is thus the value of the improved health outcomes enjoyed during the year—to the extent that they can be attributed to the outputs of the health system—plus (or minus) the increase (reduction) in the value of the stock of health at the end of the year, to the extent that they can be attributed to the outputs of the health system.

Box 3: Land conservation analogy

The change in the economic value of the nation's stock of land is a useful measure.

Is agricultural output being maintained at the expense of 'mining' the land – depleting its productivity unsustainably? If so, what is the cost to the nation of doing this? One measure of this annual cost is what it would cost to restore the productivity of the land as it exists at the end of the year to the level of productivity it had at the beginning of the year. This cost would be a debit item in the calculation of 'green NDP'. Conversely, if the productivity of the land was raised during the year, as for example by land reclamation plus repair of previous degradation exceeding new land degradation, the increased net value of the asset would be a net positive item in green NDP. These calculations would take place in a satellite account.

The seminal contribution to this direction of economic thought was by Grossman (1972) and Muurinen (1982). The central concept is that health is a durable capital good, which is inherited from previous periods but depreciates over time. Investments in health are activities in which medical services and other inputs are used to offset in part the natural deterioration of the 'health' asset. Medical services (outputs) are demanded not for themselves but for their contributions to 'health' outcomes. Health is, therefore, treated in a way quite analogous to 'natural capital' in the earlier discussion.

Revaluation of main accounts information

The rules for evaluating outputs or inputs, as used within the main body of the accounts, may not be appropriate in general, or for the purposes of particular users. The valuation of government and non-profit organisation output, discussed above, is a good example. In principle, application of these developments towards valuing government output would be internal to the main body of the national accounts. That is, they need not be relegated to satellite accounts because they relate to the central issue to which the national accounts are addressed—the economic value of national output. However, because their initial use would be experimental they would presumably be located in satellite accounts until the methods involved became more standardised. They would operate primarily through the production approach to GDP measurement but would have counterpart implications for the income and expenditure approaches also, in order to preserve accounting identities.

Adoption of the SNA does not exclude attempts to evaluate government outputs within the national accounts but favours output measures because outcomes depend on many things other than the output of the government. In the health area, general living standards contribute to health outcomes as well as the outputs of the health

system. Health examples of output measures used in the Swedish study include numbers of patients admitted, numbers of outpatient visits, numbers of bed days for in-patients, and so forth. It should be noted that these examples fail to measure activities such as research, health education and health promotion. Anomalies could arise from the mechanical application of these methods. For example, if a patient were to become infected with a new illness while in hospital and had to be involuntarily re-admitted after discharge, measured hospital output could increase even though health outcomes may have been worsened.

Box 4: Land conservation analogy

How should we value the conservation efforts of local, state and federal governments?

At present they are evaluated at cost. If we were to value the outputs of these agencies differently, we would need to ask what is the value of upgrading a kilometre of rural road to protect the road apron against erosion. Similarly, we would want to determine the value of a square kilometre of land protected by contour cultivation by farmers, presumably in terms of its contribution to reducing the cost of soil erosion. Likewise, the value of contour rows of tree plantings established by a voluntary group such as Landcare would be valued, as it ideally should be in that it is a legitimate part of the nation's economic output.

In the Swedish work, the measures used generally relate to outputs, but in some cases outcomes are used as well. For example, the output of the police system is measured by reference to both 'patrol hours' and 'crimes solved'. The former is an output and the latter an outcome. Such cases are, in general, explicit compromises, justified largely by availability of data.

Some use of outcome measures is probably desirable. An example is the probability of surviving a heart attack as an output of emergency care. The principal role for the study of outcomes in the valuation process would be to provide an anchor for the valuation of outputs. In the absence of a useable market valuation, the principle, which should guide the valuation of outputs, is their marginal contribution to the achievement of desired health outcomes. The practical application of this principle is of course very difficult.

3 Australia's approach to national health and welfare services accounts—OECD classification systems

Australia has traditionally reported expenditure on health and welfare services in terms of the broad types of services provided (for example, hospital care, medical services, pharmaceuticals) and the source of funding (for example, Commonwealth, state/territory). Since 1998–99, the AIHW has begun to classify health expenditure in terms of the OECD's three-faceted System of Health Accounts (SHA) categories (OECD 2000). These include the service provider 'industry' as well as the functional and funding aspects that already exist in Australia's reporting system. We are also looking at some restructure of our reporting on welfare services expenditure to show more fully the flows between the various players. This will enable us to report using a similar three-faceted approach, which shows who provides the services that are funded.

System of Health Accounts

The primary international reporting requirement for Australia, so far as health expenditure is concerned, is through the OECD. In order to enable it to comply with that requirement, AIHW has, to the greatest extent possible, structured its collection of health expenditure estimates in line with the OECD's International Classification for Health Accounts (ICHA).

The OECD's SHA is built around three aspects of health expenditure:

- function (ICHA–HC)
- provider (ICHA–HP)
- funding sources (ICHA–HF).

Although not itself a fully-fledged system of satellite accounts, the SHA provides many of the initial building blocks that will be useful in the future development of health satellite accounts for Australia.

The SHA was developed by the OECD to:

- provide internationally comparable tables of health expenditure;
- define boundaries for health care that are internationally consistent; and
- provide a framework for economic analyses of health care systems that are consistent with national accounting rules.

The way estimates are recorded in Australia involves a combination of its traditional two-axis matrix (areas of expenditure by sources of funds) and the three-faceted ICHA. All these addresses are recorded against each input into the database, which makes it possible to produce tables identifying:

- the sector that ultimately provides the funding for expenditure;
- the provider type involved; and
- the sector incurring the final expenditure.

The functional aspect of the SHA (ICHA–HC)

The functions of health care used in the SHA refer to the final consumption of goods and services in undertaking health and health-related functions aimed at achieving a defined set of goals, namely:

- promoting health and preventing disease;
- curing illness and reducing premature mortality;
- caring for people affected by chronic illness who require nursing care;
- caring for people with health-related impairment and disability who require nursing care;
- assisting terminally ill patients;
- providing and administering public health programs; and
- providing and administering health programs, health insurance and other funding arrangements.

The types of functions covered by the SHA include not only direct health activities such as treatment in hospital, doctors' visits or vaccination campaigns, but also the supporting activities that are involved in the production and provision of these direct services (Table 3). These include the various clerical/administrative tasks and technical and other supportive activities that support the provision of direct services. Such support services are often provided in-house, as is the case in respect of many hospital-based support services, which include food, cleaning and laundry services provided by hospital staff. These services may also be bought-in services, for example where a health service provider uses a commercial laundry service to provide laundry services.

The ICHA–HC classifications broadly map to the SNA93 Classification of the Functions of Government and the Classification of Individual Consumption by Purpose (see Appendix Table A1 on page 66). Within the ICHA–HC, the OECD has also tried to cross-classify many of its categories with other international classification systems. An example of this is the cross-classification with the World Health Organization's *essential public health services* classifications (see Appendix Table A2 on page 68).

Table 3: ICHA–HC functional classification of health care

ICHA code	Functions of health care
HC.1–HC.5	Personal health care services and goods
HC.1	Services of curative care
HC.2	Services of rehabilitative care
HC.3	Services of long-term nursing care
HC.4	Ancillary services to health care
HC.5	Medical goods dispensed to outpatients
HC.6–HC.7	Collective health care services
HC.6	Prevention and public health services
HC.7	Health administration and health insurance
HC.R	Health-related functions
HC.R.1	Capital formation
HC.R.2	Education and training of health personnel
HC.R.3	Research and development
HC.R.4	Food, hygiene and drinking water control
HC.R.5	Environmental health
HC.R.6	Administration and provision of social services in kind to assist living with disease and impairment
HC.R.7	Administration and provision of health-related cash benefits

Source: OECD 2000.

Within the functional classifications HC.1 to HC.3, expenditures are categorised into four modes of production:

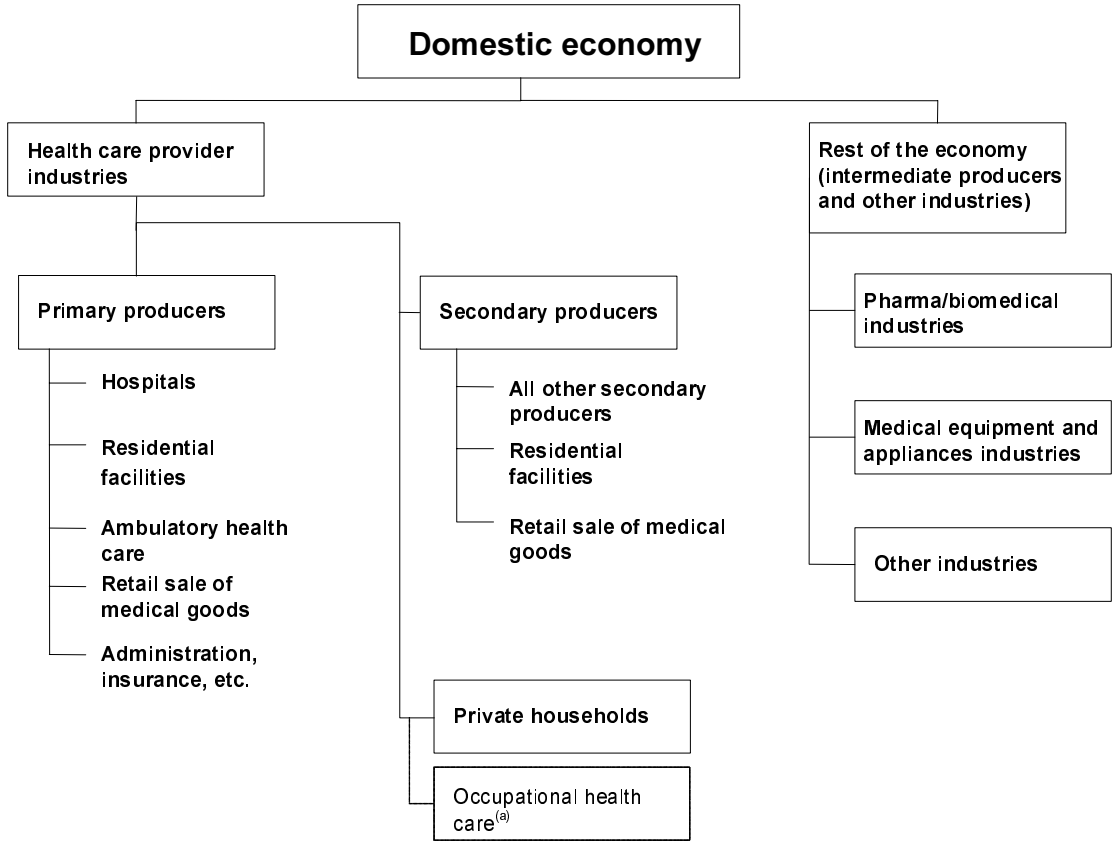
- in-patient care
- day care
- outpatient care
- home care.

The SHA's in-patient care category is roughly equivalent to Australia's admitted patient care category, but excludes care provided to admitted day-only patients. Day care refers to admitted patient care for day-only patients. Outpatient care, in the SHA context, relates to any activity, within the functional classifications HC.1–HC.3, that does not involve the formal admission and discharge of a patient with its associated administrative paperwork and statistics. This includes any medical, dental and other professional services provided to patients who are not admitted to a hospital. In theory, home care should include any health services provided to patients in their own home. In practice, Australia would include such things as doctors' home visits and obstetric services delivered in the home within the 'outpatient care' mode. Home care, in Australia, has been limited to home visits by nursing services. A detailed breakdown of the ICHA–HC classifications can be found in the OECD's publication on the System of Health Accounts (OECD 2000).

Providers of health care services (ICHA–HP)

The ICHA–HP classification was developed by the OECD from the International Standard Industrial Classification (see Appendix Table A3, page 70). It identifies providers in terms of:

- primary providers—producers of health services whose primary activity is health care services; and
- secondary providers—producers of health services whose health care activities are secondary to their primary activity, which is non-health (Figure 2).



(a) Occupational health care is not included in Australia's estimates of health expenditure.

Source: OECD 2000:52.

Figure 2: Health care providers within the economy

Under this classification system, residential care facilities can appear as either primary or secondary producers, depending on whether the major activity of the particular facility is the provision of care to highly dependent patients or less dependent residents.

Funders of health care services (ICHA–HF)

The financing of health care services is presented in the SHA as the ultimate source of funding for health services. For example, who funds health services that are paid for by individuals who, in turn, receive a related transfer payment from the central government? The SHA shows the funding as a central government funding source for the part covered by the transfer and private households for what is not covered (Table 1, page 16).

Table 4: ICHA–HF classification of sources of funding

ICHA code	Funding sources
HF.1	General government
HF.1.1	General government excluding social security funds
HF.1.1.1	Central government
HF.1.1.2	State/provincial government
HF.1.1.3	Local/municipal government
HF.1.2	Social security funds
HF.2	Private sector
HF.2.1	Private social insurance
HF.2.2	Private insurance (other than social insurance)
HF.2.3	Private households
HF.2.4	Non-profit institutions serving households (other than social insurance)
HF.2.5	Corporations (other than health insurance
HF.3	Rest of the world

Source: OECD 2000.

The main drawback of the OECD's SHA, at least as it has been applied in Australia, is that it does not provide for a sectoral split of the actual incidence of expenditure—particularly in relation to hospital care. This can, however, be achieved in Australia's case, because expenditure on public hospitals is separated from expenditure on private hospitals.

Social expenditures (SOCX) database

The OECD's social expenditures (SOCX) database contains estimates of government expenditure in 13 categories of social expenditure (Table 5). This database is in its early stages of development. Social expenditure in the SOCX database includes expenditure on health services derived from OECD's health database, which is based on the SHA.

Table 5: Categories of social expenditure used in the OECD's Social Expenditures 2000

SOCX code	Measure	SOCX code	Measure
1	OLD AGE CASH BENEFITS	8	FAMILY SERVICES
1.1	Old age pension	8.1	Formal day care
1.2	Old age civil servant pension	8.2	Personal services
1.3	Veterans' service pension	8.3	Household services
1.4	Old age other cash benefits	8.4	Family other benefits-in-kind
1.5	Early retirement pension	9	ACTIVE LABOUR MARKET PROGRAMS
2	DISABILITY CASH BENEFITS	9.1	Labour market training
2.1	Disability pension	9.2	Youth measures
2.2	Disabled civil servant pension	9.3	Subsidised employment
2.3	Disabled child pension	9.4	Employment measures for disabled
2.4	Disabled veterans' pension	9.5	Employment service and administration
2.5	Disability other cash benefits	10	UNEMPLOYMENT
3	OCCUPATIONAL INJURY AND DISEASE	10.1	Unemployment compensation
4	SICKNESS BENEFITS	10.2	Early retirement for labour market reasons
5	SERVICES FOR ELDERLY AND DISABLED PEOPLE	10.3	Severance pay
5.1	Residential care	11	HEALTH
5.2	Home-help services	12	HOUSING BENEFITS
5.3	Day care and rehabilitation services	13	OTHER CONTINGENCIES
5.4	Other benefits-in-kind	13.1	Low income
6	SURVIVORS	13.2	Indigenous persons
6.1	Survivor pension	13.3	Miscellaneous
6.2	Survivor civil servant pension	13.4	Immigrants/refugees
6.3	Survivor benefits-in-kind		
6.4	Survivor other cash benefits		
7	FAMILY CASH BENEFIT		
7.1	Family allowances for children		
7.2	Family support benefits		
7.3	Benefits for other dependants		
7.4	Loan parent cash benefits		
7.5	Family other cash benefits		
7.6	Maternity and parental leave		

Source: OECD 2003.

Conclusions

As regards the broad national estimates of economic activity, Australia follows the internationally agreed SNA approach to the presentation of its national accounts. This has the advantage of international standardisation but the disadvantage that some features of the SNA are found to be problematic. This is especially true in the health and welfare area. Satellite accounts—purpose-oriented additions to the

national accounts—provide a means of adding to or revising the information contained in the national accounts while still preserving the standardised features of the main accounts. The SNA approach is receptive to the use of satellite accounts in this way. Satellite accounts are already under development within Australia in other areas such as tourism and natural resource depletion and promise to be useful in the health and welfare area.

The preceding discussion of satellite accounts has been centred around the rearrangement, extension and revaluation of main accounts information.

The objective of this discussion is not to describe in detail how satellite accounts will be applied in the health and welfare area. Rather, the objective has been to set out a conceptual framework that may be helpful in thinking about the detailed application of these ideas in specific health and welfare contexts.

In the meantime, the AIHW has begun organising its estimates of expenditure into the OECD's SHA categories for health care functions, providers and funding sources. This has required some additional manipulation of reported data to develop appropriate splits into the SHA categories and is seen as a helpful first step in the evolution of health satellite accounts for Australia.

Much work still needs to be done on identifying final and intermediate consumption before useful input–output tables, that are integral to the production of full satellite accounts, can be developed from the SHA. As far as welfare services expenditure is concerned the AIHW continues to use the government purpose classifications to allocate expenditure to the various welfare services categories.

4 Data sources

Data sources used in the compilation of estimates of expenditure on health and welfare services are extensive. They include a mixture of data provided by government departments as a result of specific requests by AIHW, published data produced by departments and agencies involved in the provision and/or financing of health and welfare services, financial data collected by the ABS as part of its national accounts collections and data collected by the Commonwealth Grants Commission in its fiscal equalisation assessment processes.

Estimates of expenditure on health involve a much wider range of data sources than do the welfare services expenditure estimates. This is because of the more extensive involvement of the non-government sector in the provision and financing of health goods and services. Most expenditure on welfare services is undertaken and/or financed by governments, so most data used in the estimation of expenditure on welfare services come from the ABS's government financial statistics (GFS). The GFS is used to measure the financial transactions of governments comprising spending, lending, taxing and borrowing activities.

Framework for reporting health and welfare services expenditure

The AIHW's reporting of expenditure by governments on both health and welfare services in Australia broadly follows the classifications used in the GFS.

Transactions recorded in the GFS are classified using a variety of transaction classifications. The ones that are of relevance in estimating expenditure on health and welfare services are the government purpose classification (GPC) and the economic type framework.

The GPC is grouped according to type of government function or purpose and has a hierarchical structure (Table 6).

Table 6: Comparison of GPC and AIHW health services categories

GPC	AIHW expenditure classifications
GPC251—Acute care institutions[a]	Public (non-psychiatric) hospitals
	Repatriation hospitals[b]
	Private hospitals
GPC254—Community health services[c]	Medical services
	Dental services
	Other professional services
GPC2543—Patient transport	Ambulance
GPC2550—Public health services	Health promotion and illness prevention
GPC2560—Medicines, aids and appliances	Benefit-paid pharmaceuticals
	All other pharmaceuticals
	Aids and appliances
GPC2590—Administration, not elsewhere classified	Health administration
	Health insurance administration
GPC2621—Family and child welfare services	Family and child welfare services
GPC2622—Welfare services for the aged	Welfare services for the aged
GPC2623—Welfare services for people with disabilities	Welfare services for people with disabilities
GPC2629—Other welfare services	Other welfare services

(a) GPC data at the four-digit level further refine expenditure on acute care institutions.

(b) Expenditure on repatriation hospitals has not been compiled since 1998.

(c) Excludes GPC2543—Patient transport.

There are seven broad transaction types within the economic type framework. These are those recorded in the:

- operating statement
- cash flow statement
- reconciliation statement
- supplementary statement
- intra-unit transfers other than revaluations, and accrued transactions
- revaluations and other changes in the volume of assets, and
- balance sheet.

Transactions recorded within the operating statement are used by the AIHW in developing or verifying its estimates of recurrent expenditure by governments, particularly on welfare services. Capital expenditure is estimated and/or verified using data from the cash flow statement and the balance sheet.

Health expenditure data sources

The main sources of data used in developing estimates of expenditure on health by government and non-government funding sources are listed in Table 7.

Table 7: Data sources for estimating health services expenditure 1998–99

Area	Commonwealth Government	State/territory and local governments	Health insurance funds	Individuals	Other non-government sources
Public (non-psychiatric) hospitals	DHA annual report; DVA annual statistics	State and territory health departments and Australian hospital statistics	Data provided by Private Health Insurance Administration Council	Australian hospital statistics revenue data	Australian hospital statistics revenue data; data provided by workers' compensation and motor vehicle third party insurers
Private hospitals	DHA annual report; DVA annual report	. .	Data provided by Private Health Insurance Administration Council	Calculated from data provided by the ABS private health establishments survey	Data provided by workers' compensation and motor vehicle third party insurers
Public psychiatric hospitals	DHA and AIHW national mental health report; DVA annual statistics	State and territory health departments and Australian hospital statistics	. .	Australian hospital statistics revenue data	Australian hospital statistics revenue data
High-level residential aged care	DHA residential care data; DVA annual statistics	State and territory health departments and ABS public finance (local government expenditure)	. .	DHA residential care data	. .
Ambulance	ABS public finance; DVA annual statistics	State and territory health departments and ABS public finance	Data provided by Private Health Insurance Administration Council	State and territory health departments revenue data	Data provided by workers' compensation and motor vehicle third party insurers
Medical services	DHA Medicare statistics; DHA annual report; DVA annual statistics	. .	Data provided by Private Health Insurance Administration Council	DHA Medicare statistics; ABS household final consumption expenditure on doctors and other health professionals	Data provided by workers' compensation and motor vehicle third party insurers
Dental services	DVA annual report; DHA Medicare statistics	State and territory health departments	Data provided by Private Health Insurance Administration Council	DHA Medicare statistics (dental items); ABS household final consumption expenditure on dentists	Data provided by workers' compensation and motor vehicle third party insurers
Other professional	DVA annual report; DHA Medicare statistics (optometry items)	ABS public finance	Data provided by Private Health Insurance Administration Council	DHA Medicare statistics (optometry items); ABS household final consumption expenditure on doctors and other health professionals	Data provided by workers' compensation and motor vehicle third party insurers
Community health services	DVA annual report; DHA Medicare statistics	State and Territory health departments and ABS public finance	Data provided by Private Health Insurance Administration Council	State and territory health departments and ABS public finance	Data provided by workers' compensation and motor vehicle third party insurers

(continued)

Table 8 (continued): Data sources for estimating health services expenditure 1998–99

Area	Commonwealth Government	State/territory and local governments	Health insurance funds	Individuals	Other non-government sources
Health promotion and illness prevention	DHA annual report	State and territory health departments and ABS public finance	Data provided by Private Health Insurance Administration Council	State and territory health departments and ABS public finance	. .
Pharmaceutical: benefits paid items	DHA Analysis Section Pharmaceutical Benefits Branch; DVA annual statistics	. .	. .	DHA Analysis Section Pharmaceutical Benefits Branch; DVA annual statistics	. .
Pharmaceutical: all other items	DHA annual report	State and territory health departments and ABS public finance	Data provided by Private Health Insurance Administration Council	Estimated using *Pharmacy 2000* market survey data and ABS estimates of household final consumption expenditure on medicines, aids and appliances	Data provided by workers' compensation and motor vehicle third party insurers
Aids and appliances	DHA annual report; DVA annual statistics	State and territory health departments and ABS public finance	Data provided by Private Health Insurance Administration Council	Estimated using *Pharmacy 2000* market survey data and ABS estimates of household final consumption expenditure on medicines, aids and appliances	Data provided by workers' compensation and motor vehicle third party insurers
Administration	DHA annual report; DVA annual statistics	ABS public finance; state and territory health departments and ABS public finance	Data provided by Private Health Insurance Administration Council	. .	. .
Research	ABS research publications	ABS research publications	. .	. .	ABS research publications
Capital	ABS government finance statistics	ABS government finance statistics	. .	. .	ABS unpublished data; ABS private health establishments survey data
Capital consumption	Calculated from ABS government finance statistics (unpublished data)	Calculated from ABS government finance statistics (unpublished data)	. .	. .	. .

. . Not applicable.

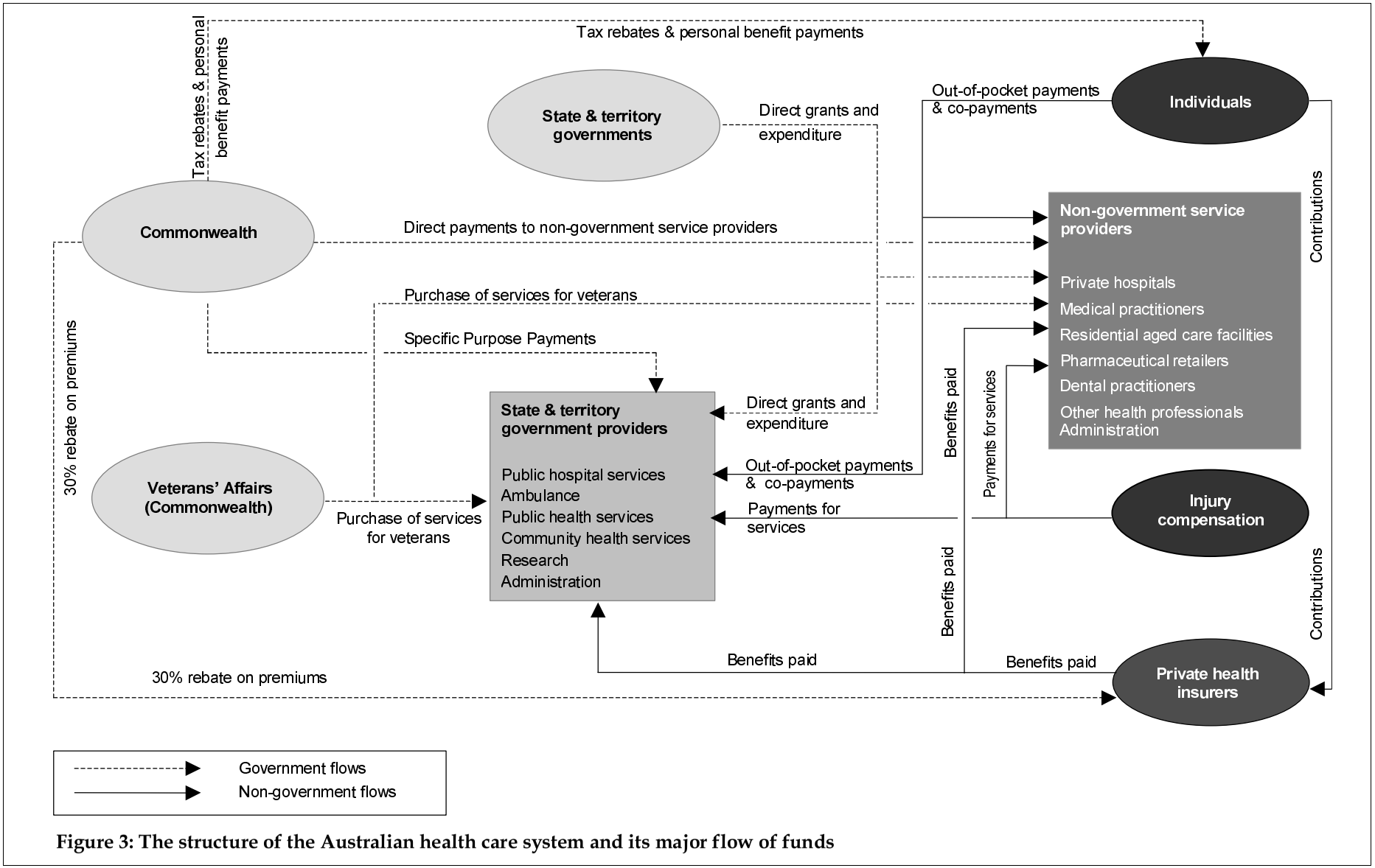


Figure 3: The structure of the Australian health care system and its major flow of funds

These data sources provide information about flows of funding in respect of the various types of health goods and services that make up the overall health system in Australia (Figure 3).

Government funding

Government funding of health services is made up of funding by the:

- Commonwealth
- state and territory governments and
- local governments.

Commonwealth Government

Much of the data supporting estimates of expenditure by the Commonwealth Government come from the annual reports of the major department responsible for health and from data supplied by the Department of Veterans' Affairs.

State and territory governments

Data sources to support estimates of expenditure by state and territory governments are a mixture of GFS data and information provided by the state and territory governments.

Prior to 1998–99, the AIHW used GFS data for some types of expenditure—in particular pharmaceuticals, aids and appliances, most dental services, health administration, patient transport (ambulance), public health and community health services. It used data provided by state and territory governments to estimate expenditure on nursing homes (high-level residential aged care) and some dental services. It used Australian hospital statistics data to support estimates of expenditure on public hospitals.

In 1998–99, state and territory departments responsible for health services provided very detailed data on expenditures and revenues for inclusion in the national study on expenditure on health services for Aboriginal and Torres Strait Islander people. That identified total expenditure on particular state/territory provided health services. These included:

- public health
- community health
- dental services
- health administration
- patient transport (ambulance) and
- nursing homes (high-level residential aged care).

In subsequent years, states and territories have been asked to supply similar break-downs of expenditure and revenue to those provided for the Aboriginal and Torres Strait Islander people health study. Most states and territories have been able to comply with those requests.

Local governments

The main source for estimates of expenditure on health services by local governments has been the GFS.

The 1998–99 study into expenditure on health services for Aboriginal and Torres Strait Islander people indicated quite serious deficiencies in the GFS estimates of expenditure by local governments, particularly in relation to the identification of particular types of health services. For example, in New South Wales all expenditure on health services by local governments has been classified to 'health administration', whereas the New South Wales State Grants Commission is able to identify expenditure on a number of different health services by local governments.

The AIHW is examining the possibility of going directly to the various states' grants commissions and departments of local government for more information on expenditure and revenue of local governments.

Non-government funding

Non-government funding for health services is provided by:

- health insurance funds
- individuals
- other non-government funding sources.

The non-government sector plays important roles as both funder and provider of health services. The sources for data on non-government funding of most health expenditure are similar.

Health insurance funds

Data on the funding by health insurance funds are obtained from the Private Health Insurance Administration Council. Since 1995–96, the Council has provided quarterly data on disk. This includes details of membership and coverage as well as benefits paid. The benefits paid data are allocated by area of expenditure, which closely matches the AIHW classifications.

Private health insurance funds are operated by health benefits organisations registered under the *National Health Act 1953*. At 30 June 2002 there were 44 registered health benefits organisations operating in Australia. Twenty-nine of these were organisations with membership available to the general public and 15 were restricted membership organisations. Thirty-eight of these organisations operated on a 'not-for-profit' basis.

Individuals

Expenditure by individuals refers to payments made by or on behalf of users of health services other than payments made by third party payers (for example, private health insurers or workers' compensation insurers). They include only those parts of expenditure that are actually borne by individuals.

Contributions by or on behalf of individuals in the form of premiums to health insurance funds or motor vehicle third party and workers' compensation insurers are not included as health services expenditure. They are regarded as having, primarily, an insurance purpose.[5]

Estimates of funding of expenditure by individuals for most types of health services are derived by subtraction. This involves subtracting aggregate expenditure by the government sector and other known non-government sources—such as health insurance funds and workers' compensation insurers—from estimates of the total operating costs of the services involved. The major exceptions to this rule are private hospitals and high-level residential aged care (see below for details).

Other

Workers' compensation and third party insurance providers

Data on expenditure by workers' compensation and compulsory motor vehicle third party insurers on health services are obtained from the coordinating body in each state and territory (Table 9).

The data from some providers are not disaggregated according to the AIHW classifications and hence estimates are made for the states concerned, assuming that they have similar breakdown of expenditure as states that provided a full breakdown by area. In the case of the Australian Capital Territory, there is only one organisation providing compulsory motor vehicle third party insurance cover. Therefore, an estimate is made for the that state, based on population and the level of expenditure throughout the rest of the states and the Northern Territory.

[5] The cost of health services purchased out of the contributions income is included in the estimates of health expenditure in the year in which the related benefits are paid by the fund(s).

Table 9: Major compulsory motor vehicle third party and workers' compensation insurance data providers

State	Third party insurers	Workers' compensation insurers
NSW	Motor Accidents Authority	WorkCover Authority
Vic	Transport Accident Commission	WorkCover Authority
Qld	SUNCORP	WorkCover Authority
WA	Insurance Commission of Western Australia	WorkCover Authority
SA	State Government Insurance Commission	WorkCover Authority
Tas	Motor Accidents Insurance Board	Workplace Standards Authority
NT	Territory Insurance Office	Work Health Authority
ACT	. .	Comcare

. . Not applicable.

Other non-government (nec)

The funding source 'other non-government (nec)' includes the funding of health services out of income sources, such as receipts from staff for meals and accommodation provided by both government and non-government health service providers, donations and bequests from private sources, as well as interest earned by non-government service providers.

Data sources for particular types of health expenditure

The present analyses of expenditure on health by 'areas of expenditure' combines two concepts:

- service provider type; and
- service type.

Expenditure on hospitals is typical of an example of expenditures classified according to the type of service provider. Public (non-psychiatric) hospitals, for example, provide a range of services including services for admitted patients, community health services, public health services and other non-admitted patient services. These are all included in the estimates of expenditure on public (non-psychiatric) hospitals.

Public (non-psychiatric) hospitals

The term 'Public (non-psychiatric) hospitals' is used to identify those hospitals—previously termed 'Recognised public hospitals'—operated by, or on behalf of, state and territory governments to provide general hospital services. This class of hospital does not include stand-alone public (psychiatric) hospitals, the primary purpose of which is to provide admitted patient services to patients suffering from mental illness.

'Recognised public hospitals' was the term used in 1975 to identify those hospitals whose approved operating costs would be shared between the Commonwealth and the states and territories. That term continued on after the introduction of Medicare, because the hospitals were recognised for the purposes of the Medicare funding agreements between the Commonwealth and the states and territories.

The Commonwealth and state/territory governments purchase most public (non-psychiatric) hospital services in Australia. The related expenditure is, therefore, regarded as government final consumption expenditure. Individuals and organisations who purchase services from public (non-psychiatric) hospitals (for example, workers' compensation and motor vehicle third party insurers and private patients) are charged subsidised fees at levels that have been agreed between the Commonwealth and state/territory governments. Those fees do not necessarily reflect the full cost of providing the hospital service. Therefore, whereas the revenue generated by the fees charged in private hospitals is considered to reflect total expenditure on private hospitals, in the case of recognised public hospitals, the sum of the expenditure on the inputs used to provide the services is counted as total expenditure.

Because the state and territory governments have the major responsibility for this type of facility, the key information used in calculating total expenditure on public (non-psychiatric) hospitals is the gross operating costs (GOC) of the institutions. Gross operating costs is considered to be expenditure that is initially incurred by the state and territory governments (subsequently parts of that expenditure are funded by other funding sources).

Commonwealth Government expenditure

While the state and territory governments have always had the major responsibility for the provision of public hospital services, since 1975 funding for public hospitals has been shared between the Commonwealth Government and the eight state and territory governments. This is because of the Commonwealth's requirement that 'free' access be provided to hospital care for all citizens who elect to be treated by public (non-psychiatric) hospitals.

Section 96 of the Australian Constitution provides that:

> During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

This provision has been used extensively in the funding of public hospital services since 1975 because the states and territories provide the services necessary for the Commonwealth to implement its 'universal access' policy.

Consequently, the majority of funding provided by the Commonwealth in respect of public (non-psychiatric) hospitals is in the form of specific purpose payments made under section 96.

Department of Veterans' Affairs

Another important form of Commonwealth funding for public hospitals is payments by the Department of Veterans' Affairs (DVA) for the purchase of services for eligible veterans and their dependants.

The DVA purchases public hospital accommodation and treatment for eligible veterans and their dependants.

There are three forms of outlays that are included under DVA expenditure on public (non-psychiatric) hospitals. These are:

- specific purpose payments for the transfer of repatriation general hospitals;
- payments made under agreements between the DVA and particular state health authorities with respect to the provision of 'free' accommodation and care to eligible veterans and their dependants in public hospitals; and
- payments made by the DVA through the Health Insurance Commission to individual public (non-psychiatric) hospitals to cover charges raised by those hospitals in respect of eligible veterans and their dependants.

The treatment of each of these DVA payment categories in estimating expenditure on public hospitals differs because of the way they pass from DVA to the states and territories concerned.

Hospital revenues are reported in the Australian hospital statistics (AHS) on an 'establishment' basis and in most jurisdictions the first two categories are not identified as hospital revenues in the statistics. This is because they flow directly from the DVA to the state/territory government and not to the establishment concerned. The first category, being a specific purpose payment, is separately identified so that a balance can be struck with the data in the annual budget paper final budget outcome. That funding is treated in the same way as other section 96 payments (that is, it is deducted from the GOC at the state/territory level when calculating the net expenditure by the states and territories).

The second category is related to the DVA's purchase of 'free' hospital accommodation and care for veterans and their dependants in public hospitals. While these payments, too, are made directly to the state health authorities and not to the institutions, some jurisdictions include them as hospital revenue in their AHS establishments data. Where they are not included as hospital revenue in the AHS, they are deducted from the GOC in the calculation of net expenditure by the states and territories. Where they are included in the AHS, they are deducted from the estimate of expenditure by 'Individuals'. These payments are subject to agreements between the Commonwealth and most States but are regarded by both the Department of Finance and the ABS as payments for the purchase of services.

The last category relates to payments made directly to the institutions and are included in the AHS revenue reported for the individual hospitals. They are deducted from the estimate of expenditure by 'Individuals' because they are payments made by the Commonwealth in respect of individual patients.

Commonwealth Government (non-DVA)

As mentioned earlier, most expenditure included in this category is in the form of specific purpose payments to the states and territories. These are administered under various programs by the Commonwealth department at the time responsible for health care and health services.

Since the introduction of Medicare, there have been substantial changes in the types of payments that have been included under this category of Commonwealth expenditure. These have at different times included:

- Medicare grants
- general revenue health grants
- hospital waiting lists
- hospital funding grants
- Medicare base grant
- other Medicare
- highly specialised drugs (section 100)
- medical specialty centres
- public hospital running costs
- Medicare-related payments
- health services funding grants.

It should be noted that specific purpose payments for highly specialised drugs are regarded by the ABS as grants in respect of 'Pharmaceuticals, medical aids and appliances' (GPC2560). The AIHW treats these specific purpose payments as expenditure on public hospitals.

Since 1997, additional Commonwealth expenditure, in the form of subsidies and rebates, has been allocated by the AIHW to expenditure on public (non-psychiatric) hospitals (see 'Private health insurance subsidies and rebates' on page 7 for details).

State and local government

State and local government expenditure on public (non-psychiatric) hospitals is essentially that part of the GOC that is funded by state and territory governments out of their own fiscal resources. This is calculated by deducting revenue from all sources, as well as grants and other payments from the Commonwealth Government, from the GOC.

Gross operating costs (GOC)

In most instances, expenditure data collected through the AHS collection provides the estimates of GOC of public (non-psychiatric) hospitals. The AIHW produces or uses other estimates of GOC only when reliable data from the AHS are not available. These must be updated or replaced when the AHS data become available or after discussion with the relevant states and/or territories. In such exceptional cases, the

estimating method(s) used will vary from state to state and from one year to another. These must always be fully documented.

The GOC of public (non-psychiatric) hospitals is total operating expenditure of the hospitals, irrespective of how it is funded.

Because of inconsistencies between the accounting methods undertaken by hospitals (some employ accrual accounting and others report on a cash basis) depreciation expenses have been consistently excluded from the estimates of GOC. (A broad estimate of capital consumption, covering all health services of governments, is later added using estimates produced by the ABS.)

Total revenue

This is usually the total amount receivable by public (non-psychiatric) hospitals reported in the AHS data. It does not include any payments and subsidies from state and territory governments. It includes:

- revenue from patients for accommodation and treatment provided in hospital including payments made by:
    1. individual patients
    2. health insurance funds
    3. the DVA (payments to individual hospitals made through the Health Insurance Commission only)
    4. workers' compensation insurers;
    5. compulsory motor vehicle third party insurers;
- revenue in respect of other (non-hospital) health services provided by hospitals;
- revenue in respect of non-health services provided by hospitals;
- interest and other revenues receivable by hospitals and associated organisations.

The data should equal the revenue data collected through the AHS collections in respect of hospitals classified as R1.1. Where, for some reason, the AHS data are not able to be used, clear documentation of the sources, magnitude of the differences and, where possible, reasons for the differences should be provided.

Private hospitals

Estimates of expenditure on private hospitals are derived from the ABS Private Health Establishments Survey, which is conducted each year and released after the end of the ensuing financial year. The ABS survey presents estimates of both revenue and expenditure. The revenue is broken down into patient fee revenue and other revenue and the expenditure data into various types of operating expenses and outlays on capital.

The AIHW's expenditure estimates aim to show total expenditure by all funding sources on health goods and services. Therefore, the data that are used to compile those estimates in respect of private hospitals may vary from one year to another depending on whether the survey shows an overall surplus or deficit of revenue over

expenditure. In a year when total revenue exceeds expenses and capital outlays, the revenue is used to represent total expenditure. In a year when the combined total of expenses and capital outlays is greater than total revenue, estimated expenditure is equal to expenses plus capital outlays.

Private hospitals are not split between psychiatric and non-psychiatric hospitals.

Government funding

The major expenditure by governments on private hospitals is by the Commonwealth Government and this is through the allocation of the private health insurance incentives scheme and 30% rebate under the *Private Health Insurance Incentives Act 1997*.

Non-government funding

Total funding for private hospitals is the total revenue identified by the ABS survey.

Private health insurance

Data on benefits paid in respect of private hospital treatment is obtained from the Private Health Insurance Administration Council.

Individuals

The patient fee revenue is initially all allocated to expenditure by individuals. The benefits paid by private health insurance (including the allocation of the rebate) and payments by workers' compensation and compulsory motor vehicle third party insurers are later deducted from the estimated expenditure by individuals. This results in net funding by individuals.

Other

This is the sum of payments by workers' compensation and compulsory motor vehicle third party insurers for private hospital services. It does not include any part of any elements to cover future health costs that might be included in any lumpsum payments awarded as a result of an injury arising from an incident covered by claims under workers' compensation or compulsory motor vehicle third party insurance.

Public (psychiatric) hospitals

Expenditure on public (psychiatric) hospitals refers to services provided in stand-alone psychiatric hospitals operated by or on behalf of state and territory governments.

Like the public (non-psychiatric) hospitals, public (psychiatric) hospitals are largely a responsibility of the state governments.

Between 1990–91 and 1994–95, most of the base data used in compiling expenditure in this area came from the various reports of the National Mental Health Strategy. This may be revised when the older AHS data have been further analysed. Since

1995–96 data collected for the AHS series were used. Expenditure and revenue in respect of establishments classified in the AHS as R2.1 are included.

Commonwealth Government

Department of Veterans' Affairs

Expenditure by the DVA relates to payments made to individual establishments for accommodation and treatment of eligible veterans and their dependants in public psychiatric hospitals. The information used is provided by the DVA as part of its summary spreadsheet each year.

Commonwealth Government (non-DVA)

There is no expenditure estimated for the Commonwealth, other than that provided by the DVA.

The funding provided under the National Mental Health Strategy is targeted at assisting states and territories in restructuring their services in a way that reduces the emphasis on stand-alone psychiatric institutions. The payments to the states under the National Mental Health Strategy are, therefore, counted as expenditure on community health services and not expenditure on public psychiatric hospitals.

State and local government

State and local government expenditure is, essentially, the net operating expenditure of public psychiatric hospitals. This is calculated by deducting all types of other revenue from the gross operating costs.

Gross operating costs (GOC)

The GOC is the total operating expenditure of stand-alone public psychiatric hospitals, irrespective of how that expenditure is funded. These data were previously collected as part of the National Mental Health Strategy. In recent years it has been possible to use the expenditure data from the AHS database that relate to stand-alone psychiatric hospitals (R2.1).

Total revenue

This is total amount receivable by public psychiatric hospitals from all sources, other than payments and subsidies from state and territory governments. Wherever possible, institution-level revenue data collected through the National Mental Health Strategy surveys or the AHS are used.

The institution-level revenue data includes:

- fees received for accommodation and treatment provided in stand-alone public psychiatric hospitals, including payments made by:
  - individual patients
  - the DVA, in the form of payments to individual hospitals made through the Health Insurance Commission

  - compulsory motor vehicle third party insurance payments;
- revenue that is directly receivable by the institutions in respect of other health services provided by public psychiatric hospitals;
- revenue that is directly receivable by the institutions in respect of non-health services provided by public psychiatric hospitals;
- interest or other revenues receivable by public psychiatric hospitals and associated organisations.

High-level residential aged care

Most expenditure on high-level residential aged care is funded by the Commonwealth Government, through the Department of Health and Ageing. It usually takes the form of benefits paid in respect of patients and subsidies and other payments made to institutions for the provision of care to patients.

Commonwealth Government

Department of Veterans' Affairs

Expenditure by the DVA relates to payments for accommodation and treatment of eligible veterans and their dependants in high-level residential aged care. The information used is provided by the DVA as part of its summary spreadsheet each year.

Commonwealth Government (non-DVA)

This is the largest single source of funding for high-level residential aged care in any year. The basic data used in the compilation of funding by this source are derived from annual data provided by the Department of Health and Ageing. Subsidies paid in respect of residents in resident classification scale categories 1–4 are regarded as being for a 'health' purpose; subsidies paid in respect of residents in categories 5–8 are considered to have a 'welfare services' purpose. Only the former are included in the estimates of health expenditure.

State and local government

The role of other government organisations (state and territory governments' nursing homes) has been diminishing since the early 1990s. The data used are, essentially, the net operating expenditures for nursing homes that are operated by, or on behalf of, state and territory governments.

Data for inclusion in the matrix are obtained from state and territory health authorities each year.

Ambulance services

Expenditure recorded under 'ambulance services' includes patient transport and treatment of an emergency or stabilising nature normally provided by ambulance

services. It also includes, in some years, payments made for the transport and accommodation of people accompanying patients who are hospitalised away from home—particularly people from remote rural areas.

Another service whose expenditure is recorded here is the Royal Flying Doctor Service (RFDS). However, the scope of the services provided by the RFDS is much wider than simply patient transport and emergency care. The RFDS provides medical services to people in isolated and remote areas as well as services of a 'non-health' nature (for example, radio telephony, education). It is assumed that the grant-in-aid provided by the Department of Health and Ageing is for the health services provided by the RFDS. Consequently, the total amount is allocated to ambulance services in the estimates.

Commonwealth Government

Department of Veterans' Affairs

These are expenditures that have been classified by the DVA as 'Travel for treatment'. They are provided by the department in its annual report to the Institute.

Commonwealth Government (Non-DVA)

The only expenditures that are recorded here are the grants-in-aid to the RFDS and the allocation of that part of the subsidies and rebates under the *Private Health Insurance Subsidy Act 1997* that is estimated to relate to benefits in respect of ambulance services.

State and local government

The data used here prior to 1998–99 were the ABS estimates of gross recurrent expenditure on ambulance services. Because there are no specific purpose payments or Commonwealth Government outlays identified that relate to ambulance services, the gross recurrent expenditure by the state/territory on patient transport and the net recurrent expenditure were identical.

Since 1998–99, most state and territory health departments have provided expenditure and revenue data directly to the AIHW for entry into the health expenditure database.

Medical services

Most medical services in Australia are funded under Medicare. The only private medical services not covered by Medicare are those provided to non-eligible persons and services that are subject to claims under motor vehicle third party insurance and workers' compensation insurance. Also excluded are services of a medical nature that are provided for reasons other than the treatment of a medical condition (for example, examinations for the purpose of establishing eligibility for insurance cover).

Expenditure associated with any medical services provided to 'hospital patients'[6] in public (non-psychiatric) hospitals is included in the operating costs of the hospitals. These are not included as expenditure on medical services but as expenditure on hospital services. However, medical services provided to 'private patients'[7] in public (non-psychiatric) hospitals and which are claimable under Medicare are included as expenditure on medical services. The same applies to 'compensable patients'[8] in public (non-psychiatric) hospitals.

All medical services provided to patients in private hospitals are included as expenditure on medical services.

Commonwealth Government

Department of Veterans' Affairs

Expenditures included here relate to services classified by the DVA as local medical officer consultations, specialist consultations, local medical officer and specialist services and medical examinations.

Commonwealth Government (non-DVA)

The bulk of expenditure on medical services by the Commonwealth Government from sources other than the DVA (over 96%) is in the form of Medicare benefits. The data supporting the state and territory dissections of these estimates come directly from the Medicare statistics published by the Department of Health and Ageing.

The types of services covered by Medicare medical expenditure estimates include all services for which Medicare benefits are payable, except optimetrical services and certain dental procedures in hospitals. They include all diagnostic services (radiology and pathology) for which Medicare benefits are payable.

The balance of the medical expenditure by the Commonwealth (non-DVA) is in the form of grants and other payments by the Department of Health and Ageing. These include:

- Aboriginal and Torres Strait Islander Health Service specialist services
- grants to services providers—Health Program Grants
- grants for provision of health services
- support for training and evaluation
- alternative general practice funding arrangements
- financial assistance for life saving medical treatment.

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[6] 'Hospital patient' refers to an admitted patient who elects to be treated by medical practitioners engaged by the hospital.

[7] 'Private patient' refers to an admitted patient who elects to be treated by particular medical practitioners chosen by the patient or a person acting on his/her behalf.

[8] 'Compensable patient' refers to an admitted patient whose hospital treatment costs are eligible to be met by an award under workers' compensation or compulsory motor vehicle third party insurance.

Dental services

Commonwealth Government

Department of Veterans' Affairs

Expenditure data shown here are for services classified by the DVA as dental services.

Commonwealth Government (non-DVA)

The majority of this expenditure in the late 1990s was for specific purpose payments under the Commonwealth dental scheme. There are also benefits paid under Medicare for 'dental' services listed in the Medicare Benefits Schedule.

Since 1997 the major expenditure by the Commonwealth has been through the distribution of its payments under the private health insurance incentives scheme and the 30% rebate on premiums to holders of private health insurance cover.

State and local government

Up to and including 1994–95, estimates of gross state and local government expenditure on dental services were taken from the ABS public finance data. However, from 1995–96 the ABS no longer provides a separate estimate for dental services—it is amalgamated with community health services. In 1995–96 estimates were calculated for New South Wales, Victoria, Western Australia, South Australia and the Northern Territory. Data for Queensland ($90.7 million), Tasmania ($11.9 million) and the Australian Capital Territory ($3.0 million) were taken directly from Tables A4.16, A4.17 and A4.18, respectively, of the report *Expenditures on Health Services for Aboriginal and Torres Strait Islander People*. These data seem to be out of line with ABS expenditure data for previous years.

The calculation of estimates for the former group of states was based on expenditure and growth rates existing prior to 1995–96. If the same formulae had been applied to Queensland and Tasmania, the estimates for them would have been $16.8 million and $4.7 million, respectively.

Other professional services

This type of expenditure relates to services provided by optometrists, audiologists, physiotherapists, and other paramedical professionals.

Commonwealth Government

Department of Veterans' Affairs

Expenditure by the DVA refers to services classified by the department as 'Other allied health services'. Data are provided by the department on its summary spreadsheet.

Commonwealth Government (non-DVA)

Expenditure entered into this part of the matrix relates, essentially, to medical benefits paid for optimetrical services plus the cost of audiological services provided by Hearing Services Australia.

In 1998–99 states and territories were required to provide estimates of their total expenditure on designated health services (including community health services) to the AIHW for inclusion in its estimates of expenditure on health services for Aboriginal and Torres Strait Islander people. Those estimates were used in the 1998–99 expenditure estimates of the AIHW.

Health promotion and illness prevention

Expenditure on health promotion and illness prevention is also classified as expenditure on public health services. In many situations it is difficult to isolate health promotion and illness prevention aspects of particular health services from community health aspects. Therefore, in the published data these two matrix rows have usually been combined.

Commonwealth Government

Commonwealth Government (non-DVA)

The major expenditure programs of the Commonwealth Government on health promotion and illness prevention are in the form of specific purpose payments to the states and territories. These payments are for:

- youth health services
- magnetic resonance imaging (current only)
- other health
- BreastScreen Australia
- funds to combat AIDS
- drug and alcohol programs
- national childhood immunisation
- cervical cancer screening.

State and local government

This is, essentially, the ABS public finance estimate of gross state and local governments' expenditure on public health minus the payments to the states in the form of specific purpose payments mentioned above in respect of Commonwealth Government (non-DVA) expenditure.

Welfare services expenditure data sources

Most of the emphasis in the reporting of expenditure on welfare services concentrates on those services that are financed by governments. Therefore, the sources of data that report government funding form the major component of the data sources for welfare services expenditure.

Government funding

Estimates of expenditure according to the four welfare services categories are applied only for the Commonwealth Government and state and territory governments (Table 10).

Table 10: Data sources estimating government welfare services expenditure

Area	Commonwealth Government	State and territory governments	Local governments
Family and child	FaCS annual report; DIMA unpublished data; Department of Finance	Commonwealth Grants Commission; ABS public finance; Department of Finance; state/territory departments	ABS public finance; Department of Finance
Welfare services for the aged	DHA annual report and unpublished data; Department of Finance	Commonwealth Grants Commission; ABS public finance; Department of Finance; state/territory departments	ABS public finance; Department of Finance
Welfare services for people with a disability	FaCS annual report and unpublished data; DHA annual report and unpublished data; Department of Finance	Commonwealth Grants Commission; ABS public finance; Department of Finance; state/territory departments	ABS public finance; Department of Finance
Other welfare services	FaCS annual report; DVA unpublished data; DIMA unpublished data; Department of Finance	Commonwealth Grants Commission; ABS public finance; Department of Finance; state/territory departments	ABS public finance; Department of Finance

The only identified data source for expenditure on welfare services by local governments is the ABS public finance section's government finance statistics. To date these data have been problematic because of inconsistencies in the way local government expenditures have been coded to government purpose classifications (GPCs). The major emphasis of the ABS has been to address problems of reliability at the economic type framework level. Consequently, coding of local government expenditure to GPCs is unreliable.

While the ABS is reasonably content with the reliability of the GPC coding at the two-digit level for both Commonwealth and state/territory expenditures, it is aware of substantial problems, particularly at the four-digit level. Unfortunately, it is at the four-digit level that welfare services expenditure is separated from other social welfare expenditure. In the case of the coding of expenditures by local governments, even the two-digit coding has problems. In some jurisdictions, most local government expenditure is coded to 'administration', even though that expenditure might involve significant outlays on both health and welfare services.

Data on state and territory government funding are mainly based on data compiled by the Commonwealth Grants Commission. Data on concession expenditure classified to welfare services by state and territory governments are obtained directly from state and territory departments that provide the concessions.

Family and child services

The Commonwealth Government is mainly responsible for 'child care' services while the state and territory governments are responsible for 'child welfare' services. Expenditure on Supported Accommodation Assistance Program (SAAP) for families, children and youth is included in this category.

Commonwealth Government

The main data source for Commonwealth Government expenditure data is the Department of Family and Community Services (FaCS) annual report.

Reported expenditure on Output Group No. 1—'Stronger families'—is the primary source. This output group also includes some expenditures that are classified to the AIHW category 'Other welfare services' and others, which are in the form of social security payments and are not included in the estimates of expenditure on welfare services.

The expenditure items from Output Group No. 1 that are included as expenditure on family and child services include:

- child care cash rebates
- payment for delivery of child care subsidies
- child care assistance
- other services for families with children
- child care for sole parents undergoing training
- child care capital loans
- youth homelessness pilot.

In addition transfers to different levels of government are estimated using grants data from budget papers as follows:

- The final budget outcome statement is used to source direct grants from the Commonwealth to state and local governments. The grants concerned are for:
  1. Children's Service Program
  2. unattached humanitarian minors
  3. SAAP for family.[9]
- The AIHW estimates grants to local governments passed through state and territory governments. Because these are no longer identified in the final budget outcome statement, the AIHW uses historical splits to estimate the proportion of

[9] SAAP for family is estimated from unpublished AIHW SAAP client profiles.

the specific purpose payments to a particular state government that are on-passed to local governments.[10]

- The FaCS annual report provides data on total grants and on payments to individuals in the form of child care cash rebates. These data are used to estimate the value of grants to non-government organisations, which are, essentially, residuals.

Another transfer payment to state and territory governments is 'Extension of fringe benefits', which is also administered by FaCS. Under this arrangement, the Commonwealth Government agrees to pay states and territories for extending eligibility for core concessions to all pensioner concession card holders. The core concessions are:

- energy charges
- municipal and water rates
- public transport
- motor vehicle registration.

Extension of fringe benefits is allocated to the four AIHW welfare services categories based on the type of social security payment received by the person to whom the fringe benefit is extended. Some of these include payments to families with children and youth. Therefore, part of the extension of fringe benefits paid to families with children and youth is included in the estimate of expenditure on family and child services.

State and territory governments

The main source of data on recurrent expenditure by state and territory governments is the Commonwealth Grants Commission's reports on general revenue grant relativities.

The Commission has three assessment categories (ACAT) of welfare services:

- family and child welfare services—ACAT4535
- aged and disabled welfare services—ACAT4545
- other welfare services—ACAT4555.

Under ACAT4535 the Commission shows gross expenditures by the states and territories. The AIHW estimates net funding by the states and territories by subtracting its estimates of transfer payments by the Commonwealth.

Capital expenditure is obtained from ABS government finance statistics.

Welfare services for older people

Home and community care (HACC) is provided to older people as well as for younger people with disabilities. HACC expenditure is split into services for older

[10] The budget papers for 1992–93—the last year that on-passed grants were identified—are used to estimate these amounts.

people and services for people with disabilities based on users' characteristics, reported by the Department of Health and Ageing.

Commonwealth Government

Data on total funding by the Commonwealth come from the Department of Health and Ageing annual report. For 2000–01, expenses under Output Group 3—'Enhanced quality of life for older Australians'—are used to estimate expenditure on welfare services for older people.

Data on grants to state and territory governments and on direct grants to local governments are taken from the final budget outcome. Estimates of on-passed grants to local governments are derived by the AIHW in the same way as for the 'Family and child welfare services' category. The total grants data are obtained from the Department of Health and Ageing annual report and these are used to derive estimates of grants to non-government community services organisations by subtracting grants to state and territory governments, and grants to local governments.

Grants related to the extension of fringe benefits to older people are derived in the same manner as for family and child services.

State and territory governments

Again, the source of data is the Commonwealth Grants Commission. It publishes estimates of gross funding for the combined category 'Aged and disabled welfare services'. The AIHW splits these data into its two welfare services categories:

- welfare services for older people
- welfare services for people with disabilities (see below).

The HACC expenditure data by state and territory are from the Department of Health and Ageing.

Welfare services for people with disabilities

Commonwealth Government

Total program funding comes from the FaCS annual report. For 2000–01, it is Output Group 3.2—'Support for people with a disability'.[11]

Added to this is an estimate of HACC expenditure for the services provided to people with disabilities. The HACC expenditure data are from the Department of Health and Ageing Outcome 3.

Also included is an estimate of grants for the extension of fringe benefits to people with disabilities.

[11] That is, ex-gratia payments made in 2000–01 to young disability support pension recipients whose payments were unintentionally limited by the youth allowance legislation, because it is regarded as income support and not a welfare services payment.

State and territory governments

Net funding by state and territory governments is estimated by the AIHW using Commonwealth Grants Commission data for the ACAT4545 category (see above).

Other welfare services

Other welfare services include expenditure on:

- emergency relief
- supported accommodation for people other than family and youth
- Australian Institute of Family Studies
- marriage counselling
- welfare services for Aboriginal and Torres Strait Islander people and migrants
- funeral expenses.

Commonwealth Government

The main data sources are:

- FaCS (part of Output Group No. 1)
- Department of Immigration and Multicultural Affairs
- Department of Veterans' Affairs
- Department of Finance.

All data, except those published in the FaCS annual report, are unpublished. These are provided by these departments upon request. Each expenditure item is identified according to whether it is:

- direct expenditure by the department
- a grant to a state or territory government
- a grant to local governments
- a grant to non-government organisations.

Also included is part of the extension of fringe benefits paid to social security card holders who are in the 'Other welfare services' population target group.

State and territory governments

Data are based on the Commonwealth Grants Commission ACAT4555 (see 'Family and child services', page 57). Whereas all SAAP expenditure is classified to this category, the AIHW splits the items into SAAP for family and child welfare and SAAP for people other than family and child. Hence, expenditure on other welfare services estimated by the AIHW is lower than the estimates by the Commission.

Non-government funding

The non-government sector comprises:

- non-government community services organisations (both for-profit and not-for-profit), and
- households/clients of welfare services.

Comprehensive surveys of the community services industry were undertaken by the ABS in 1995–96 (ABS 1997) and in 1999–00 (ABS 2001). Prior to that, the Industry Commission had undertaken a study into charitable organisations covering two years, 1992–93 and 1993–94 (Industry Commission 1995).

The Industry Commission's study included only those not-for-profit organisations that received grants from governments. The ABS Community Services Industry Survey included both for-profit and not-for-profit organisations.

The ABS Survey had the following objectives:

- provide baseline data necessary to understand the nature of the community services industry;
- identify the relative contributions of the for-profit and not-for-profit sectors;
- identify the sources and application of funds by community services providers;
- enable comparison with other industries;
- provide benchmarks for measuring change over time.

The scope and coverage of the survey was all employing organisations, both public and private (for-profit and not-for-profit), mainly engaged in community services or undertaking significant community services activity. The Australia and New Zealand Standard Industrial Classification (ANZSIC) was used to identify the organisations to be covered in the survey (Table 11).

Table 11: ANZSIC classifications used for the Community Services Industry Survey, 1999–00

ANZSIC code	ANZSIC classification
ANZSIC subdivision 87	
8710	Child Care Services
8721	Accommodation for the Aged
8722	Residential Care Services—Other
8729	Non-residential Care Services—Other
ANZSIC subdivision 86	
8613	Nursing Homes
ANZSIC subdivision 84	
8410	Preschool Education
ANZSIC subdivision 78	
7861	Employment Placement Services—Part[(a)]
ANZSIC subdivision 96	
9629	Interest Groups not elsewhere classified[(b)]

(a) Only organisations supporting disabled persons.

(b) Only organisations involved in the provision of community services advocacy services

Source: ABS 2001.

In addition, Commonwealth and state government departments and local government authorities were surveyed. The ABS's Australian Business Register was used as the framework for the survey and the statistical unit was the management unit.

Data collected were:

- employment
- gross income and expenses
- estimated value of goods and services received in kind
- assets and liabilities
- capital expenditure
- technology
- service activities.

Because the 1995–96 Community Services Industry Survey had included only employing businesses, it did not include child care services provided by family day care. However, in the 1999–00 survey the scope was expanded to include such services.

The Institute, in its estimation of expenditure, has generally adopted the methods that had been used by the Industry Commission for some areas of expenditure and applied the findings from the Survey in estimating the funding by clients and by non-government community services organisations (NGCSOs) for low-level residential care. The AIHW also uses the financial statements of some of these organisations to derive and verify its estimates of expenditure/contribution by the not-for-profit NGCSOs.

Beside the two ABS community services industry surveys and the Industry Commission study mentioned above, the AIHW also used the ABS publication *Child Care Australia* (Table 12) for developing estimates of income derived from client fees by child care service providers.

Table 12: Data sources for estimates of contribution by NGCSOs and clients

Area	Not-for-profit NGCSOs	For-profit NGCSOs	Clients
Child care	ABS cat. no. 4402.0		
ABS unpublished child care fees component of the Consumer Price Index	ABS cat. no. 4402.0		
ABS unpublished child care fees component of the Consumer Price Index	ABS cat. no. 4402.0		
FaCS fact sheet			
Hostel care	ABS cat. no. 8696.0	ABS cat. no. 8696.0	ABS cat. no. 8696.0
Multi-service organisations (large)	Organisations' financial statements		Organisations' financial statements
Disability services	Organisations' financial statements		Organisations' financial statements
Other multi-service organisation (medium and small)	Estimated by AIHW	ABS cat. no. 8696.0	Estimated by AIHW

Tax expenditures

Governments can use tax expenditures to allocate or induce resources to different activities in much the same way that they can use direct expenditure. However, it is easier to estimate the cost of spending programs than to estimate the revenue forgone as a result of concessional tax treatment. Many probable tax expenditures go uncosted due to lack of data and conceptual difficulties in choosing a suitable benchmark (see 'Tax expenditures' on page 22 for some discussion of conceptual issues).

The main source of data on tax expenditures is the annual Tax Expenditures Statement.

Although some tax expenditures are difficult to measure, failure to take account of them may understate the level of public sector support for particular health and community services. This is more the case in the community services sector where aggregate tax expenditures amount to 6.1% of total expenditure (Australian Institute of Health and Welfare (AIHW) 2002a). Furthermore, this figure is likely to be an understatement of the actual ratio as many tax expenditures with a welfare purpose are uncosted. In terms of health, the ratio is much lower at 1–2%, though recent changes in government support for private health insurance have increased this.

Tax expenditures with a health purpose

Data on tax expenditures with a health purpose are more readily available than data for community services. Treasury identifies 11 tax expenditure measures with a specific health purpose in its most recent Tax Expenditures Statement. While these are listed below, not all are used by the AIHW in developing its estimates of expenditure on health and welfare services. Following each item's description is the year in which it was introduced and its index allocated by Treasury.

- medical expenses rebate, pre-1985 (A27);
- exemption from Medicare levy for residents with a taxable income below a threshold, pre-1985 (A28);
- Medicare levy exemptions for non-residents, repatriation beneficiaries, foreign government representatives, and residents who meet certain criteria, 1985 (A29);
- income-tested tax offset for private health insurance, 1997 (A30);
- 30% rebate for expenditure on private health insurance, 1999 (A31);
- Medicare levy surcharge, 1998 (A32);
- exemption of income of public hospitals and hospitals operated by a society or association other than for gain or profit to its individual members, pre-1985 (D2);
- exemption of income of registered hospital, medical and health benefits funds provided they are not operated for the gain or profit of their individual members, pre-1985 (D1);
- fringe benefits tax exemption for benefits provided by public hospitals to employees, and benefits provided to employees of public hospitals if they are

employed by a state or territory health authority rather than the institution itself, 1986 (C8);

- fringe benefits tax exemption for travel costs of employees and their families in foreign countries to obtain medical treatment, 1986 (C9);
- penalty rate of excise levied on leaded petrol, 1994 (E1);
- penalty rate of excise levied on cigarettes with less than 0.8 grams of tobacco, 1999 (E2);
- capital gains tax exemption for payments under the General Practice Rural Incentives Program, 1994 (D33).

The only tax expenditures that have been used in calculating the redistribution of expenditures between the Commonwealth Government and individuals is the medical expense rebate (A27). Since 1997 the AIHW has also used the income-tested tax offset for private health insurance (A30) and the 30% rebate for expenditure on private health insurance (A31) to redistribute expenditure between the Commonwealth and health insurance funds.

Tax expenditures with a welfare services purpose

There are limited data on tax expenditures with a welfare services purpose. Data used in calculating expenditures draw upon the Tax Expenditures Statement and the Industry Commission's report on charitable organisations in Australia (Industry Commission 1995). Treasury identifies eight Commonwealth tax expenditure items applying to community services—three are income tax measures, the remainder are fringe benefits tax exemptions. The items are:

- deductibility of donations to charitable institutions;
- deductibility of expenses incurred for entertaining disadvantaged members of the public, 1985 (D92);
- income tax exemption for religious, scientific, charitable or public educational institutions, pre-1985 (D3);
- fringe benefits tax exemption for the provision of recreational or child care facilities on an employer's premises, 1986 (C11);
- fringe benefits tax exemption for employer contributions to guarantee places for employees' children in certain childcare centres, 1986 (C12);
- fringe benefits tax exemption for benefits provided by public benevolent institutions, excluding public hospitals, to employees, 1986 (C13);
- fringe benefits tax exemption for accommodation, fuel and meals for live-in employees caring for the elderly or disadvantaged, 1986 (C14);
- fringe benefits tax exemption for employer-provided property and facilities for immediate relief of employees and their families in times of emergency, 1986 (C15).

Of the eight identified tax expenditures, only one was costed by Treasury—fringe benefits tax exemption for benefits provided by public benevolent institutions to

employees. The Tax Expenditures Statement estimated the cost of this tax expenditure to be $70 million in 1993–94, rising to $210 million in 1999–00.

Appendix

Table A1: Cross-classification of ICHA–HC[a], COFOG[b] and COICOP[c]

	Functions of medical care			COFOG	COICOP
HC.1	**Services of curative care**				
	HC.1.1	In-patient curative care		07.3	06.30
	HC.1.2	Day cases of curative care		07.3	06.30
	HC.1.3	Outpatient curative care		07.2	06.2
		HC.1.3.1	Basic medical and diagnostic services	07.2.1	06.2.1
		HC.1.3.2	Medical mental health and substance abuse therapy	07.2.2	06.2.1
		HC.1.3.3	Ambulatory surgical procedures	07.2.2	06.2.1
		HC.1.3.4	Outpatient dental care	07.2.3	06.2.2
		HC.1.3.5	All other specialised medical services	07.2.2	06.2.1
		HC.1.3.9	All other outpatient curative care	07.2.3	06.2.2
	HC.1.4	Services of curative home care		07.2	06.1.2
HC.2	**Services of rehabilitative care**				
	HC.2.1	In-patient rehabilitative care		07.3	06.30
	HC.2.2	Day cases of rehabilitative care		07.3	06.30
	HC.2.3	Outpatient rehabilitative care		07.2.4, 07.2.1	06.2.3
	HC.2.4	Services of rehabilitative home care		07.2.4	06.2.3
HC.3	**Services of long-term nursing care**				
	HC.3.1	In-patient long-term nursing care		07.1.2	06.1.1
		HC.3.1.1	In-patient long-term nursing care for dependent elderly patients		
		HC.3.1.2	In-patient long-term nursing care for mental health and substance abuse patients		
		HC.3.1.3	All other in-patient long-term nursing care		
	HC.3.2	Day cases of long-term nursing care		07.1.3	06.1.3
		HC.3.2.1	Day cases of long-term nursing care for dependent elderly patients		
		HC.3.2.2	All other day cases of long-term nursing care		
	HC.3.3	Long-term nursing care: home care		07.1.3	06.1.2
		HC.3.3.1	Long-term nursing care: home care for dependent elderly patients		
		HC.3.3.2	Long-term nursing care: all other home care		
HC.4	**Ancillary services to medical care**				
	HC.4.1	Clinical laboratory		07.2.4	06.2.3
	HC.4.2	Diagnostic imaging		07.2.4	06.2.3
	HC.4.3	Patient transport and emergency rescue		07.2.4	06.2.3
	HC.4.9	All other miscellaneous ancillary services		07.2.4	06.2.3

(continued)

Table A1 (continued): Cross-classification of ICHA-HC[a], COFOG[b] and COICOP[c]

	Functions of medical care			COFOG	COICOP
HC.5	**Dispensing medical goods to outpatients**				
	HC.5.1	Pharmaceuticals			
		HC.5.1.1	Prescribed medicines	07.1.2	06.1.1
		HC.5.1.2	Over-the-counter medicines	07.1.2	—
	HC.5.2	Therapeutic appliances and medical equipment		07.1.3	06.1.3
		HC.5.2.1	Glasses and other vision products	07.1.3	06.1.3
		HC.5.2.2	Orthopaedic appliances and other prosthetics	07.1.3	06.1.3
		HC.5.2.3	Hearing aids	07.1.3	06.1.3
		HC.5.2.4	Medico-technical devices, including wheelchairs	07.1.3	06.1.3
		HC.5.2.9	All other miscellaneous medical goods	07.1.3	06.1.2
HC.6	**Prevention and public health services**				
	HC.6.1	Maternal and child health; family planning and counselling			
	HC.6.2	School health services		07.4.0	
	HC.6.3	Prevention of communicable disease		07.4.0	
	HC.6.4	Prevention of non-communicable disease		07.4.0	
	HC.6.4	Occupational health care		—	
	HC.6.9	All other miscellaneous collective health services		07.6.0, 07.4.0	
HC.7	**Health program administration and health insurance**				
	HC.7.1	Health program administration and health insurance: public		07.6.0	
	HC.7.2	Health program administration and health insurance: private			
		HC.7.2.1	Health program administration and health insurance: social insurance	—	
		HC.7.2.2	Health program administration and health insurance: all other private		12.5.3

(a) International Classification for Health Accounts—function.

(b) Classification of the Functions of Government.

(c) Classification of Individual Consumption by Purpose.

Source: OECD 2000.

Table A2: Cross-classification of EPHFs[a], ICHA–HC[b], and COFOG[c]

EPHF	Description	ICHA–HC	COFOG code
1	**Prevention, surveillance and control of communicable and non-communicable diseases**		
	Immunisation	6.3.1	07.4
	Disease outbreak control	6.3.1	07.4
	Disease surveillance	cross-funct. (6. and 7.)	cross-funct. (07.4 and 07.6)
	Prevention of injury	5.4 (and cross-funct.)	07.4 (and cross-funct.)
2	**Monitoring the health situation**		
	Monitoring of morbidity and mortality	cross-funct. (6. and 7.)	cross-funct. (07.4 and 07.6)
	Evaluation of the effectiveness of promotion, prevention and services programs	cross-funct. (6. and 7.)	cross-funct. (0.7.4 and 0.7.6)
	Assessment of the effectiveness of public health functions	6. and 7.	0.7.4 and 0.7.6
	Assessment of population needs and risks to determine which subgroups require service	cross-funct. (6. and 7.)	cross-funct. (0.7.4 and 0.7.6)
3	**Health promotion**		
	Promotion of community involvement in health	6.9 and 7.	0.7.4 and 0.7.6
	Provision of information and education for health and life skill enhancement in school, home, work and community settings	cross-functional (6. and 7.)	cross-funct. (0.7.4 and 0.7.6)
	Maintenance of linkages with politicians, other sectors and the community in support of health promotion and public health advocacy	strategic aspect	strategic aspect
4	**Occupational health**	(6.4)	—
	Setting occupational health and safety standards	7.	07.6.0
5	**Protecting the environment**		
	Production and protection of, and access to, safe water	(R.4)	06.3.0
	Control of food quality and safety	R.4	cross-funct. (04; 07.04.0)
	Provision of adequate drainage, sewerage and solid waste disposal services	R.4	05.1 and 05.2
	Control of hazardous substances and wastes	—	05.1 and 05.2
	Provision of adequate vector control measures	5.3.1	07.04.0
	Ensure protection of water and soil resources	(R.5)	(05.3, 05.4 and 05.6)
	Ensure environmental health aspects are addressed in development policies, plans, programs and projects	strategic aspect	strategic aspect
	Prevention and control of atmospheric pollution	(R.5)	05.3
	Ensure adequate prevention and promote environmental services	strategic aspect	strategic aspect
	Ensure adequate inspection, monitoring and control of environmental hazards	strategic aspect	strategic aspect
	Controlling radiation	R.5	05.3

(continued)

Table A2 (continued): Cross-classification of EPHFs[a], ICHA–HC[b], and COFOG[c]

EPHF	Description	ICHA–HC	COFOG code
6	**Public health legislation and regulations**		
	Review, formulate and enact health legislation, regulations and administrative procedures	6.	07.6.0
	Ensure adequate legislation to protect environmental health	cross-funct. (1. – 4.)	cross-funct.
	Health inspection and licensing	6.	07.6.0
	Enforcement of health legislation, regulations and administrative procedures	cross-sectoral	cross-sectoral
7	**Public health management**		
	Ensuring health policy, planning and management	6.1.1 (and cross-sectoral)	07.6.0 (and cross-sectoral)
	Use of scientific evidence in the formulation and implementation of public health policy	strategic aspect	strategic aspect
	Public health and health systems research	R.3	07.4.0
	International collaboration and cooperation in health	6.1 (and cross-sectoral)	01.2 (and cross-sectoral)
8	**Specific public health services**		
	School health services	5.2	07.4.0
	Emergency disaster services	—	03.2.0 and 03.6.0
	Public health laboratory services	5.3.1	07.4.0
9	**Personal health care for vulnerable and high-risk populations**		
	Maternal health care and family planning	5.1	07.4.0 and 10.4.0
	Infant and child care	5.1.1	07.4.0

(a) Essential public health services (WHO)

(b) International Classification for Health Accounts—function.

(c) Classification of the Functions of Government.

Source: OECD 2000.

Table A3: Cross-classification of ICHA–HP[a] with ISIC[b] classes

ICHA-HP code			Description	ISIC class
HP.1	**Hospitals**			
	HP.1.1		General hospitals	8511
	HP.1.2		Mental health and substance abuse hospitals	8511
	HP.1.3		Specialty (other than mental health and substance abuse) hospitals	8511
HP.2	**Nursing and residential care facilities**			
	HP.2.1		Nursing care facilities	8519/8531
	HP.2.2		Residential mental retardation, mental health and substance abuse facilities	8519/8531
	HP.2.3		Community care facilities for the elderly	8519/8531
	HP.2.9		All other residential care facilities	8519/8531
HP.3	**Ambulatory health care**			
	HP.3.1		Offices of physicians	8512
	HP.3.2		Offices of dentists	8512
	HP.3.3		Offices of paramedical practitioners	8519
	HP.3.4		Out-patient care centres	8519
		HP.3.4.1	Family planning centres	8519
		HP.3.4.2	Outpatient mental health and substance abuse centres	8519
		HP.3.4.3	Free-standing ambulatory surgery centres	8519
		HP.3.4.4	Dialysis care centres	8519
		HP.3.4.9	All other outpatient community and other integrated care centres	8519/8531
	HP.3.5		Medical and diagnostic laboratories	8519
	HP.3.6		Home health care services	8519/8531
	HP.3.9		All other ambulatory health care	8519
		HP.3.9.1	Ambulance services	8519
		HP.3.9.2	Blood and organ banks	8519
		HP.3.9.9	All other ambulatory health care services	8519
HP.4	**Retail sale and other providers of medical goods**			
	HP.4.1		Dispensing chemists	5231
	HP.4.2		Retail sale and other suppliers of optical glasses and other vision products	5239
	HP.4.3		Retail sale and other suppliers of hearing aids	5239
	HP.4.9		All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods	5231/5239
HP.5	**Provision and administration of public health programs**			
HP.6	**Health administration and insurance**			
	HP.6.1		Government administration of health	7512
	HP.6.2		Social security funds	7530
	HP.6.3		Other social insurance	—
	HP.6.4		Other (private) insurance	6603
	HP.6.9		All other health administration	—
HP.9	**All other industries (rest of the economy)**			

(a) International Classification for Health Accounts—function.

(b) International Standard Industrial Classification.

Source: OECD 2000.

Abbreviations

ABS	Australian Bureau of Statistics
ACAT	assessment category
AHS	Australian hospital statistics
AIHW	Australian Institute of Health and Welfare
ANZSIC	Australia and New Zealand Standard Industrial Classification
COFOG	Classification of the Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CSIS	Community Services Industry Survey
DHA	Department of Health and Ageing
DIMA	Department of Immigration and Multicultural Affairs
DOH	Commonwealth Department of Health
DVA	Department of Veterans' Affairs
FaCS	Department of Family and Community Services
GDP	gross domestic product
GFS	government financial statistics
GOC	gross operating costs
GPC	government purpose classification
HACC	Home and Community Care
ICHA	International Classification for Health Accounts
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
NDP	net domestic product
NGCSO	non-government community services organisation
NPI	non-profit institution
NPISH	non-profit institutions serving households
OECD	Organisation for Economic Cooperation and Development
PHIIS	private health insurance incentives scheme
RFDS	Royal Flying Doctor Service
SAAP	Supported Accommodation Assistance Program
SHA	System of Health Accounts
SNA	System of National Accounts
SNA93	System of National Accounts 1993
SOCX	social expenditures
WHO	World Health Organization

Glossary

Capital expenditure: outlays incurred during a period on the acquisition or enhancement of an asset. This includes new and second-hand fixed assets (for example, building, information technology), increase in stocks, lands and intangible assets (for example, patents and copyrights), capital transfer payments, and net advances which are acquisition of financial assets (for example, shares and equities).

Capital goods: goods at most only partially consumed during the production process.

Constant prices: device used to adjust the calculation of expenditure to remove the effect of inflation. Constant prices are usually expressed in terms of the average prices applying in a reference year and are used to calculate real growth in expenditure over time.

Current prices: prices that apply in the year in which expenditure is incurred.

Deflators: track movements in prices (usually of inputs) and are used to derive expenditures in constant prices.

Expenditure by individuals: refers to payments made by or on behalf of users of health services other than payments made by third party payers (for example, private health insurers or workers' compensation insurers). They include only those parts of expenditure that are actually borne by individuals.

Externalities: non-valued costs and/or benefits that are incidental to the production, sale and/or consumption of goods and/or services. They lack the usual price signals that guide producers and consumers and which are used in the calculation of national income.

Gross domestic product (GDP): a statistic commonly used to indicate changes in national wealth during a period. GDP is the total market value of goods and services produced within a given period after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital (depreciation).

Gross national product (GNP): in Australia the income received by Australian residents, whether it derives from production in Australia or production abroad.

Health insurance funds' expenditure: this is net expenditure on health services paid out of health insurance funds operated by registered health benefits organisations.

Intermediate goods: goods consumed entirely during the production process.

Labour force: the labour force includes people who are employed and people who are unemployed (not employed and actively looking for work).

Leisure: an activity that cannot be traded or delegated to another person.

National accounts: a record of economic activity in an economy over a given period.

Net domestic product (NDP): a national accounting statistic derived by deducting allowances for the consumption of fixed capital (depreciation) from the estimate of GDP.

Nominal growth in expenditure: calculation of growth in expenditure using current prices. This does not enable meaningful comparisons to be made between expenditures in different years, because of differences in the purchasing power of the currency in different years.

Nursing homes: establishments that provide long-term care involving regular basic nursing care to chronically ill, frail, disabled or convalescing people or senile in-patients.

Opportunity cost: the value of the best alternative forgone by devoting resources to a particular economic activity.

Organisation for Economic Cooperation and Development (OECD): an organisation of developed economies, including Australia.

People with special needs: includes the very old and the very young, as well as people affected by disabilities.

Private hospitals: privately owned and operated health institutions that provide in-patient and/or out-patient services to patients. Patients are charged fees for accommodation and other services provided by the hospitals and by treating medical and paramedical practitioners. Includes private free-standing day hospitals.

Production boundary: the definition of the activities that result in the production of output.

Public (non-psychiatric) hospitals: hospitals controlled by state or territory governments, offering free diagnostic services, treatment, care and accommodation to all who need it.

Public (psychiatric) hospitals: hospitals controlled by state or territory governments that are devoted primarily to the treatment and care of in-patients with psychiatric disorders.

Real growth in expenditure: calculation of growth in expenditure after adjustment to remove the effects of inflation. This enables meaningful comparisons to be made between expenditures in different years.

Recurrent expenditure: expenditure on goods and services that are used up during the year (for example, salaries expense is expenditure used up in providing labour). It may be contrasted with capital expenditure, such as expenditure on hospital buildings and large-scale diagnostic equipment, the useful life of which extends over a number of years.

Satellite accounts: a means of achieving purpose-oriented revisions of the national accounts while still preserving the standardised features of the main accounts.

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