Appendix 6 Estimation methods for state and territory expenditures

State and territory data

The state and territories provided responses to questionnaires seeking estimates of expenditure for the financial year 2001–02. This appendix covers the methods used to derive the Indigenous proportions for those estimates; including some notes provided by jurisdictions that accompanied data returns. Wherever possible, the AIHW grouped the state and territory data into its major expenditure categories for reporting health expenditure (see Table A1.2). In some instances the estimates originally provided by the states and territories were adjusted following discussions with the relevant jurisdiction(s).

Expenditure estimates for admitted patient services in acute-care hospitals and for emergency departments were derived using similar methods across all jurisdictions.

In the case of expenditure on public health, states and territories reported in terms of the core public health activities defined under the National Public Health Expenditure Project (NPHEP) (see Table A1.2).

Estimates of expenditure on community health services were also split into four types of community health expenditures (see Table A1.2).

Admitted patient costing methodology

The estimated expenditures on admitted patient services for Indigenous Australians were derived using information from both the state and territories and the Institute's hospital costing model (see Appendix 5 for details).

States and territories provided estimates of total expenditure on admitted patient services and on the estimated level of Indigenous under-identification applicable to those services. The final Indigenous/non-Indigenous proportions were derived, using the hospital costing model, for all patients in public hospitals and for public patients, only, in private hospitals. These were adjusted for under-identification and the resultant proportions were applied to the total expenditure on admitted patient services, which had been calculated using establishments data provided to the Institute as part of the Australian Hospital Statistics collection. A further adjustment of +5% was then added to the results. This final adjustment was to adjust for an assumed cost differential between Indigenous and non-Indigenous separations observed across all Diagnostic Related Groups (DRGs) (Appendix 5).

Emergency department methodology

Results from the emergency department survey (see Appendix 5) were used to derive Indigenous expenditure in emergency departments in states and territories. AIHW applied the proportions to jurisdictional estimates of total expenditure on emergency departments to calculate Indigenous expenditure.

Local government estimates

Local governments perform important functions delivering health services to communities they represent. Expenditure on these local government services is often funded by a combination of Australian Government, state and territory, and private funding, as well as funding by the local government authorities themselves.

Estimates of expenditure on health goods and services by local governments are uncertain and problematic. Estimates of expenditure by local governments rely heavily on the ABS public finance data (ABS 2003b), which do not consistently identify expenditures in sufficient detail to support estimates at anything but the broadest (health) level of detail.

The Indigenous share of health expenditure by local governments was estimated at 4.7%. Evidence from population surveys indicates that, where services are publicly funded, their use by Indigenous people tends to be higher than by non-Indigenous people (ABS 2002b).

New South Wales

Method for estimating Aboriginal and Torres Strait Islander expenditure

Three sets of expenditure estimates were provided by New South Wales Health (NSW Health). These were based on alternate assumptions of Indigenous under-identification in the data—low, medium or high. The estimates of expenditure based on medium-level under-identification were used in the report. This is similar to the method used in the second report (AIHW 2001). The medium estimates of Indigenous population were sourced from the Chief Health Officer's Report 2002 (NSW DoH 2002).

Admitted patient services

Estimated total expenditure on admitted patient services was derived from the New South Wales Inpatient Statistical Collection (ISC).

New South Wales estimated the Indigenous under-identification factor for admitted patient data to be used in the hospital cost model was 30%.

Non-admitted patient services

Estimated expenditure on non-admitted patient services is the sum of estimated expenditure on emergency departments and other non-admitted patient services.

Emergency departments

The estimated proportions for emergency department expenditure were derived using total expenditure data provided by NSW Health and the emergency department survey (see Appendix 5).

Other non-admitted patient services

Estimated expenditure on other non-admitted patient services included non-admitted outpatients and extended care provided by public acute-care hospitals.

The estimate of expenditure on other non-admitted patient services attributable to Aboriginal and Torres Strait Islander people was based on the Indigenous proportion of total separations, adjusted for under-identification. The Indigenous under-identification factor used in this process was the one reported by NSW Health for admitted patient services.

Public (psychiatric) hospitals

The estimated expenditure on public (psychiatric) hospitals was derived from New South Wales ISC.

Services for older people

Expenditure on services for older people was estimated from the New South Wales ISC.

Patient transport

Estimated expenditure on patient transport for Indigenous people was derived from two areas:

- New South Wales Ambulance Service; and
- the Isolated Patients Travel Assistance and Accommodation Scheme (IPTAAS).

The Indigenous proportion of expenditure on ambulance services was assumed to be similar to that of the cost-weighted hospital expenditures, after adjustment for under-identification. The estimated Indigenous proportion of IPTAAS was based on results from a 1998 survey; using the same method as in the second report (AIHW 2001).

Public health activities

Public health expenditure was reported using the nine NPHEP activity categories. In addition NSW Health estimated an additional category of expenditure—public health (nec)—that has been included as part of expenditure on other health services (nec).

For core public health activities, except breast cancer and cervical screening activities, the estimated Indigenous proportion of expenditure was determined using the Indigenous population proportion (1.9%) from the Chief Health Officer's Report 2002 (NSW DoH 2002).

For breast cancer screening the estimated Indigenous proportion of expenditure was based on data from NSW BreastScreen. The method used the annual average number of Indigenous women aged 50–69 screened during 2000–01 and 2001–02 combined to determine the proportion of screening tests performed in 2001–02 financial year that related to Indigenous women.

The Indigenous proportion of total expenditure reported for cervical screening was based on the proportion of Indigenous women in the New South Wales population within the target screening age group (20–69 years).

The estimated Indigenous expenditure on communicable disease control was derived using the proportion of New South Wales Aboriginal sexual health expenditure as a percentage of all expenditure on communicable disease control.

Community health services

Estimated expenditure on community health services is the sum of:

- dental services;
- community mental health;
- alcohol and other drug treatment; and
- other community health.

For the first three categories the Indigenous proportions of estimated expenditure were based on information taken from the Department of Health Reporting System (DOHRS).

Dental services

The Indigenous proportion of estimated expenditure on dental services was based on the proportion of oral health attendances recorded in DOHRS that related to Indigenous Australians. Two age categories were used:

- <18 years of age; and
- 18+.

Community mental health

The estimated Indigenous proportion of expenditure on community mental health was based on the proportion of community mental health occasions of service recorded in DOHRS that were identified as Aboriginal and Torres Strait Islander people.

Alcohol and other drug treatment

The Indigenous proportion of estimated expenditure was again based on occasions of service recorded in DOHRS. In this case, however, no information was available for 2001–02, so proportions for the 2002–03 were used.

Other community health

Estimated expenditure on other community health is made up of Indigenous-specific expenditures—such as Aboriginal Health Program and Aboriginal and Torres Strait Islander NGOs—and estimates of the Indigenous share of mainstream programs. The Indigenous share of expenditure on these mainstream programs was estimated using proportions identified in the previous report (AIHW 2001).

Health research

Estimates of expenditure on health research were calculated from two categories:

- research conducted in acute-care hospitals; and
- all other research.

They do not include expenditure on public health research, which is reported under expenditure on public health.

The estimated Indigenous proportion of expenditure on health research was based on the Indigenous population proportion (1.9%) from the Chief Health Officer's Report 2002 (NSW DoH 2002).

Other health services (nec)

Estimated expenditure on other health services (nec) is comprised of estimated expenditure on:

- aids and appliances; and
- public health (nec).

The estimated Indigenous proportion for expenditure on aids and appliances was calculated using the proportions from the previous report (AIHW 2001). The Indigenous proportion of expenditure on public health (nec) was based on the population proportion (NSW DoH 2002).

Other explanatory notes

Expenditure estimates have been complied using accrual accounting methods.

Victoria

Methods for estimating Aboriginal and Torres Strait Islander expenditure

The Victorian Department of Human Services (DHS) provided expenditure data for inclusion in this report. In some instances these were adjusted following discussions with DHS. It also provided advice regarding the level of Indigenous under identification in respect of admitted patient services.

Admitted patient services

The estimates of admitted patient services for Aboriginal and Torres Strait Islander people were informed by an analysis of the Victorian Admitted Episodes Dataset (VAED).

Victoria estimated the under-identification factor for admitted patient data to be used in the hospital cost model was 25%.

Estimated expenditure on admitted patient services includes expenditure on public (psychiatric) hospitals.

Non-admitted patient services

Estimated expenditure on non-admitted patient services is the sum of estimated expenditure on emergency departments and other non-admitted patient services.

Emergency departments

The estimated proportions for emergency department expenditure were derived using total expenditure data provided by DHS and the emergency department survey (Appendix 5).

Other non-admitted patient services

The estimated expenditure on other non-admitted patient services for Aboriginal and Torres Strait Islander people is made up of expenditure on some identified Indigenous-specific acute-care programs and a proportion of the mainstream expenditure. The proportion used to allocate mainstream expenditure was derived from the Victorian Ambulatory Classification System (VACS). This proportion was based on the Group A outpatients service utilisation data produced by VACS. This method of allocation relies on an untested assumption of consistent service usage and the results should be treated with some caution.

Services for older people

Estimated expenditure on services for older people is the sum of some identified Indigenous-specific expenditure and an estimate of the Indigenous share of mainstream expenditure. The estimated mainstream expenditure includes aged residential care and aged care assessment, the estimated proportion of the Indigenous expenditure was derived from the number of Indigenous clients in residential aged care.

Patient transport

Estimated expenditure on patient transport was derived as a proportion from a number of program areas. These include expenditure on:

- emergency and non-emergency patient transport services;
- training and development of ambulance crews; and
- other ambulance expenditure.

The Indigenous share of estimated expenditure on emergency and non-emergency patient transport was the identified proportion of Indigenous patients in the VAED. The proportion applied in respect of other patient transport expenditures was the Indigenous population proportion.

Public health activities

Public health expenditure was reported using the NPHEP activity categories. In addition DHS reported an expenditure category public health (nec), which has been included as expenditure on other health services (nec).

The DHS output group total expenditure for each public health activity does not necessarily concur with the expenditure on that core public health activity reported by the NPHEP. This is because different methods used to gather and collate the expenditure data used in the two projects. While at the aggregate level there is only a small difference in the estimates of expenditure, there are some large differences in relation to individual activities—such as health promotion and immunisation. These estimates, at the activity level, should be treated with caution as there is the possibility of some misallocation of expenditures at that level.

The methods used to estimate the Indigenous shares of expenditure on communicable disease control; selected health promotion; organised immunisation; breast cancer screening; and cervical screening activities are outlined below. Estimates in respect of other public health activities were based on the Indigenous proportion of the state's total population.

Communicable disease control

Total estimated expenditure on communicable disease control was based on the addition of Indigenous-specific expenditures to a proportion of mainstream expenditure. The identified Indigenous specific expenditure was through the Victorian Aboriginal Health Service Cooperative (VAHS). The proportion of mainstream expenditure was derived from the Indigenous proportion of infectious diseases notification.

Selected health promotion

Estimated expenditure on selected health promotion was based on identified Indigenous expenditure and a proportion of mainstream expenditure. The Identified expenditure was through Koori Health Promotion and the proportion of mainstream expenditure was based on the Indigenous population proportion.

Organised immunisation

The Indigenous proportion of estimated expenditure on organised immunisation was derived from a proportion of mainstream expenditure, using a combination of the Indigenous population proportion and the proportion of Australian Childhood Immunisation Register (ACIR) units of vaccine used in 2002 that related to Indigenous children.

Breast cancer screening

Estimated Indigenous expenditure on breast cancer screening was derived from the number of Indigenous women in the target screening age group (50–69 years of age).

Cervical screening

The Indigenous proportion of estimated expenditure on cervical screening was derived from the proportion of Indigenous women in the target screening age group (20–69 years of age).

Community health services

Estimated expenditure on community health services is the sum of expenditure on:

- dental services;
- community mental health;
- alcohol and other drug treatment services; and
- other community health.

Dental services

The estimated Indigenous proportion of total expenditure on dental services was based on the number of Indigenous patients treated in the community dental program and the school dental program.

Community mental health

Estimated Indigenous expenditure on community mental health is the sum of identified Indigenous-specific expenditure and a proportion of mainstream expenditure. The identified Indigenous-specific expenditure relates to Indigenous clients in clinical community care. The same proportion has been used to allocate a proportion of mainstream expenditure.

Alcohol and other drug treatment

Estimated Indigenous expenditure on alcohol and other drug treatment was based on identified expenditure on the Koori Drug and Alcohol Program.

Other community health

Estimated Indigenous expenditure on other community health was a combination of identified Indigenous-specific expenditures and a proportion of the expenditure on mainstream programs. The Indigenous-specific expenditure was on:

- Community health care; and
- Koori Maternal and Child Health.

In addition proportions of expenditures on:

- School Nursing; and
- service system development

were included in the estimate of Indigenous expenditure on other community health.

Health research

The estimated Indigenous share of expenditure on health research was calculated using the Indigenous proportion of the Victorian population.

Other health services (nec)

Estimated expenditure on other health services (nec) has been grouped in this category; the two areas included are aids and appliances and other public health (nec). The estimated Indigenous proportion of state government expenditure on aids and appliances was calculated using the adjusted admitted patient separations from the VAED (see Admitted patient services above). The estimated Indigenous proportion of other public health (nec) was identified Indigenous-specific expenditures.

Other explanatory notes

Expenditure estimates for this project were based on accrual accounting.

Queensland

Method for estimating Aboriginal and Torres Strait Islander expenditure

Queensland Health Department provided the estimates of expenditure reported in this section of the report. The methods used in deriving the estimated Indigenous proportion of expenditure and adjustments made to the raw data are outlined below.

The total expenditure reported in each category is that previously reported by Treasury to the Australian Bureau of Statistics using the standard GPC, except for public health where the classifications and amounts reported under the NPHEP have been used. Where possible, the determination of the Indigenous fraction of expenditure in a category was estimated from the fraction of 'activity' (e.g. hospital episodes of care) for Indigenous clients within that category.

Admitted patient services

Estimates of total expenditure was provided by Queensland Health, which also advised that the under-identification factor for admitted patient data to be applied in modelling hospital costs was 20%.

Non-admitted patient services

The total estimated expenditure on non-admitted patient service was estimated by Queensland Health. There were no centrally collected details of outpatient or emergency department attendances, by Indigenous status, in Queensland. Hence, no split of expenditure between emergency departments and other non-admitted patient services was possible. The Indigenous proportion of the expenditure on non-admitted patient services was derived using results from the emergency department survey (Appendix 5).

Public (psychiatric) hospitals

The Indigenous proportion of the estimated expenditure was based on the Indigenous fraction of separations (from both designated public (psychiatric) hospitals and acute hospitals), adjusted for Indigenous under-identification.

Services for older people

Estimated Indigenous expenditure on services for older people was derived from the overall fraction of Indigenous clients in all State-run nursing homes. No adjustment has been made for the under-identification of Indigenous clients.

Patient transport

The estimated Indigenous expenditure was calculated from the Indigenous proportion of admitted patient episodes requiring transfer to another facility.

Public health activities

Public health expenditure has been reported using the NPHEP categories, public health (nec) is included in the estimates for 'other health services (nec)'.

For activities other than breast cancer, cervical screening and organised immunisation, the Indigenous share of expenditure was estimated by adding identified Indigenous-specific expenditures to a proportion of mainstream expenditure.

In the case of breast cancer screening the Indigenous proportion of the Queensland female population aged 50–69 years was used to allocate the expenditure; and in the case of cervical screening it was the Indigenous proportion of the female population aged 20–69 that was used.

The Indigenous proportion of organised immunisation was calculated by adding identified Indigenous-specific expenditure to an estimate of mainstream expenditures based on the Indigenous population proportion for the target age groups in the immunisation schedules for children and adolescents.

Community health services

Estimated expenditure on community health services is the sum of expenditure on:

- dental services;
- community mental health; and
- other community health.

The total estimate was derived from two sources (see notes on dental services) hence these should be treated with care. Queensland was unable to provide estimates of expenditure on alcohol and other drug treatment services.

The overall Indigenous proportion (8.3%) was calculated excluding expenditure on dental services.

Dental services

Two distinct state government dental programs were identified, one targeting children aged 5–15 years, the other targeting adults. The Indigenous proportion of children aged 5–15 was used in estimating expenditure on the former; and broad utilisation rates were used for the latter.

Community mental health

The Indigenous proportion of estimated expenditure was derived from the Community Mental Health data collections with a 20% under-identification factor applied (see Admitted patient services, above).

Other community health

Estimated expenditure other community health was calculated as the difference between expenditure on identified programs (dental services and community mental health) and total community health expenditure. The total community health expenditure was calculated from the sum of Indigenous-specific expenditure and a proportion of the remaining expenditure derived using the Indigenous proportion of expenditure on non-admitted patient services.

Health research

The estimated Indigenous proportion of expenditure was based on the Indigenous population proportion.

Health administration (nec)

Indigenous health administration expenditure was derived using the same method as in the last report (AIHW 2001). The estimate was based on an average of the Indigenous proportion of the Queensland population (3.5%) and the calculated Indigenous share of expenditure on programs administered by Queensland DOH (6.0%).

Other health services (nec)

Estimated expenditure on other health services (nec) is the sum of expenditure on:

- aids and appliances; and
- other public health (nec).

The estimate of expenditure on aids and appliances for Indigenous people was derived by applying the Indigenous fraction of total weighted hospital separations, after adjustment for Indigenous under-identification. The estimated expenditure on other public health (nec) for Aboriginal and Torres Strait Islander people was derived using the overall public health proportion (see above).

Other explanatory notes

Queensland Health reports on an accrual basis.

Western Australia

Methodology for estimating Aboriginal and Torres Strait Islander expenditure

The Western Australian Department of Health (DOH) provided estimates of expenditure for Indigenous Australians and non-Indigenous people. It also provided advice regarding the level of Indigenous under-identification in respect of admitted patient services.

The methods used in developing the estimates of expenditure and the related Indigenous/non-Indigenous splits are, essentially, adaptations of the method used in the previous study (AIHW 2001).

The major data sources used by the Western Australian DOH in developing its estimates were:

- DOH administrative data; and

- DOH's Treasury Budget Statements (TBS) submission.

These data were adjusted to report outcomes for the 2001–02 financial year. The population data were from the 2001 Commonwealth Census.

For many areas of expenditure the calculation of the Aboriginal and Torres Strait Islander components were calculated using utilisation statistics—such as hospital morbidity data. Where these were not available, a number of surrogate indicators were used, including Indigenous population proportions.

Admitted patient services

Western Australia provided estimated total expenditure on admitted patient services.

Western Australia estimated the under-identification factor for admitted patient data to be used in the hospital cost model was 6%.

Non-admitted patient services

The estimated expenditure on non-admitted patient services is the sum of expenditure on other non-admitted patient services and emergency departments.

Emergency departments

The estimated proportions for emergency department expenditure were calculated using total expenditure data provided by DOH and the emergency department survey (see Appendix 5).

Other non-admitted patient services

The estimates of expenditure on health for Indigenous people for these services were based on Indigenous/non-Indigenous proportions of utilisation rates in the larger emergency departments in the State.

Public (psychiatric) hospitals

The majority of the cost is attributed and identified through mental health weighted hospital separations, the balance of the cost allocation was based on the Western Australian Indigenous population proportion.

Services for older people

The estimated Indigenous expenditure was derived according to population proportions, then adjusted for identified specific utilisation by Indigenous residents (the estimate includes some Home and Community Care Services).

Patient transport

This estimated expenditure was based on Country Health Services data and the Indigenous share was calculated using population data.

Public health activities

Public health expenditure has been reported using the nine NPHEP activity categories. DOH also reported expenditure on a tenth category, public health (nec). It is reported as part of estimated expenditure on 'other health services (nec)'.

Estimated expenditure on public health activities differ from the figures reported in the NPHEP Report due to differences in treatment of some core public health activities which

are run out of separate Statutory Authorities in the State and are not included in the NPHEP estimates.

Expenditure estimates in the community and public health area are not solely based on Indigenous client services information so should be treated with care.

In all of the nine public health activities a two stage method was used to calculate the Indigenous shares of expenditure. Initially expenditure was calculated according to the population proportion, these data were then adjusted for identified specific utilisation by Indigenous residents, where this could be determined.

Community health services

Estimated expenditure on community health services was calculated using utilisation data where data were available and the Indigenous population proportion when no administrative data could be obtained.

Dental services include only school dental services.

Expenditure on other community health is largely made up of expenditure incurred by the Office of Aboriginal Health.

Health research (nec)

Estimated expenditure on health research was identified from data used for the *Australian Hospital Statistics* collection. The Indigenous proportions were identified using population data. Included in the research expenditure estimates is a non-quantifiable teaching component.

Health administration (nec)

Indigenous health administration expenditure was derived using the same method as in the last report (AIHW 2001). The estimate was based on an average of the Indigenous proportion of the Western Australian population (3.5%) and the calculated Indigenous share of expenditure on programs administered by DOH (9.9%).

Other health services (nec)

Estimated expenditure by the Western Australian State Government on other health services (nec) includes expenditure on categories—such as health research, health administration (nec) and patient services—that cannot be clearly linked to other identified expenditures in these categories.

Other explanatory notes

Western Australian estimates were prepared using accrual accounting.

South Australia

Methodology for estimating Aboriginal and Torres Strait Islander expenditure

The South Australian Department of Health (DOH) provided estimates of expenditure for Indigenous and non-Indigenous people. The Department also provided advice on the level of under-identification to be used in the admitted patient costing model.

Estimated expenditure on Aboriginal and Torres Strait Islander's was in almost all cases calculated by DOH using one of the following methods:

- As a proportion of total expenditure using the identified Indigenous proportion clients; or
- The addition of DOH identified specific expenditure and a proportion of mainstream expenditure.

Admitted patient services

DOH provide the estimated total expenditure on admitted patient services and advised that the under-identification factor for admitted patient data to be used in the hospital cost model was zero.

Non-admitted patient services

Estimated expenditure on non-admitted patient services is the sum of expenditure on other non-admitted patient services and emergency departments.

Emergency departments

The estimated proportions for emergency department expenditure was derived using total expenditure data provided by DOH and the emergency department survey (Appendix 5).

Other non-admitted patient services

The estimated expenditure on other non-admitted patient services was calculated from Aboriginal and Torres Strait Islander patient data collected from hospitals.

Public (psychiatric) hospitals

Estimated expenditure was calculated from the proportion of Indigenous people in public (psychiatric) hospitals.

Services for older people

The estimated expenditure was derived from the Indigenous proportion of people in state-run services for older people.

Patient transport

The estimated Indigenous expenditure on patient transport was based on identified Indigenous-specific expenditure, plus a proportion of mainstream expenditure.

Public health activities

Public health expenditure has been reported using the nine NPHEP activity categories.

For each activity, identified Indigenous-specific expenditure was added to a proportion of mainstream expenditure.

Community health services

For all community health services in South Australia estimated Indigenous expenditure was calculated separately for each program using the same method. Indigenous-specific expenditures were identified and added to a proportion of the estimated expenditure for each mainstream service.

Health research

Estimated expenditure on health research includes all expenditure on health research not defined as public health research. Indigenous-specific expenditures were identified and added to a proportion of the estimated expenditure for each mainstream service.

Health administration (nec)

Expenditure on health administration (nec) includes administration expenditure not reported within public health. Estimated Indigenous expenditure on health administration (nec) was calculated by adding expenditure on Indigenous-specific programs to a proportion of mainstream expenditure.

Other explanatory notes

South Australian expenditures were prepared using a cash accounting basis and do not include depreciation.

Tasmania

Two sets of estimates of state government expenditure on health for Aboriginal and Torres Strait Islander people were provided by the Tasmanian Department of Health and Human Services (DHHS) for this report. The first simply derived Indigenous expenditure estimates according to the Indigenous population share. That method made no attempt to differentiate between the level of usage of specific health goods and services by Indigenous and non-Indigenous Tasmanians. The second set of estimates, which forms the basis of the estimates in this report, used information derived from a number of data systems or surveys that had made some attempt to capture the Indigenous status of clients. Still there appeared to be a high level of uncertainty regarding the Aboriginal and Torres Strait Islander identification within those data collections. Accordingly, caution is urged in the interpretation of these estimates.

Admitted patient services

Total admitted patient expenditure was estimated from total acute-care institutional expenditure using the inpatient fraction (Ifrac) of 72% identified in the Australian Hospital Statistics establishments data for Tasmania in 2001–02 (AIHW 2003a).

An Indigenous proportion of total estimated expenditure was derived using both the Tasmanian provided estimates and those derived from the AIHW hospital costing model (Appendix 5). Tasmania provided the total estimated expenditure on admitted patient services and advice on the under-identification factor should be used in the hospital cost model as it relates to Tasmania. The Tasmanian Department of Health and Human Services Aboriginal Health and Wellbeing Steering Committee advised that no adjustment should be made for Indigenous under-identification in the admitted patient data for Tasmania. The final proportions (Indigenous/non-Indigenous) derived from the hospital costing model for public hospitals and public patients in private hospitals were applied to total reported expenditure on admitted patient services.

Consequently, the estimates of expenditure on hospital services for Aboriginal and Torres Strait Islander people in Tasmania in 2001–02 are considered to be of quite low quality and should be treated with extreme caution. Indigenous Australians, who represent 3.7% of the state's population, accounted for 1.9% of all separations from public hospitals. The

Tasmanian Department of Health and Human Services Aboriginal Health and Wellbeing Steering Committee advised that hospital separations should be used in an un-manipulated form. The Steering Committee supported the redistribution of the 'non-stated' responses in line with the ratio of identified Indigenous and non-Indigenous hospital separations. That, in turn, increased the Indigenous proportion of those separations to 2.05%.

Non-admitted patient services

The estimated expenditure on non-admitted patient services was based on acute-care hospital expenditure, less estimated expenditure on admitted patient services (1–Ifrac=0.28). The estimated Indigenous proportion was calculated applying the results from the emergency department survey (see Appendix 5).

Emergency departments

The estimated proportions for emergency department expenditure were derived using total expenditure data provided by DHHS and the emergency department survey (see Appendix 5).

Other non-admitted patient services

Estimated total expenditure on other non-admitted patient services was calculated from the total non-admitted patient services expenditure less emergency department expenditure. The estimated Indigenous proportion was derived using results from the emergency department survey (see Appendix 5).

Public (psychiatric) hospitals

Estimated expenditure was calculated from public psychiatric hospital cost centres that could be identified. These include:

- the Roy Fagan Centre;
- Mistral Place; and
- the Derwent Valley Community Centre.

Estimated Indigenous expenditure was calculated using the same proportion as applied to community mental health. Tasmania noted that community mental health data had a high incidence of the response 'Indigenous – not further defined', hence estimates should be treated with caution.

Patient transport

Tasmanian Ambulance Services and hospital patient transport were used to derive estimated expenditure on patient transport. No data on Indigenous use of Ambulance Services was available; therefore, the average public hospital proportion of Indigenous patients was used.

Where patient transport expenditure data was collected from hospitals, the hospital proportions of Indigenous patients was used to derive estimated expenditure.

Public health activities

Public health expenditure has been reported using the nine NPHEP categories, in addition DHHS reported an additional category other public health (nec), which has been included as expenditure in other health services (nec).

For all public health activities except breast cancer screening and cervical screening, the Indigenous expenditure was calculated using the Indigenous population proportion.

Estimated Indigenous expenditure on Breast cancer screening was calculated using the proportion of Indigenous women in the target screening age group (50–69).

Estimated Indigenous expenditure on cervical screening was derived using the proportion of Indigenous women in the target screening age group (20–69).

Community health services

Estimated expenditure on community health services is the sum of:

- dental services;
- community mental health;
- alcohol and other drug treatment; and
- other community health.

Dental services

Estimated expenditure on dental services includes:

- Adult Oral Health Services;
- Prosthetic Oral Health Services;
- Children's Oral Health Services; and
- Administration.

Estimated Indigenous expenditure was calculated using the Indigenous population proportion.

Community mental health

The community mental health expenditure estimate was calculated from numerous cost centres. Tasmania reported that data collection for these programs often has a high incidence of the response 'Indigenous – not further defined', hence estimates should be treated with caution.

Alcohol and other drug treatment

Estimated expenditure on alcohol and other drug treatment included expenditure on:

- Alcohol and Drug Services Detoxification Unit;
- Rehabilitation programs; and
- Administration.

Where data on Indigenous status was available the proportion of clients was used to derive expenditure. When no data was available the Tasmanian Indigenous population proportion was used to estimate expenditure.

Other community health

Estimated expenditure on other community health included a wide range of program areas. Where data on Indigenous status was available it has been used to inform the estimated Indigenous/Non-Indigenous split of cost centre expenditure. Where no data on Indigenous status was available the Indigenous population proportion was applied.

Health administration (nec)

Estimated expenditure on health administration represents a proportion of the departmental overheads. The expenditure included as part of these overheads represents 84% of the

departmental total and the dollar amounts listed in this category were therefore discounted to this level before applying the average Indigenous percent from all data collection areas. For two cost-centres within this expenditure category, the State's Indigenous population proportion was applied to determine Indigenous expenditure.

Other health services (nec)

Estimated expenditure on 'public health (nec)' was reported in this category. The estimated Indigenous expenditure was calculated by adding identified Indigenous-specific expenditure to a proportion of mainstream expenditure

Other explanatory notes

Tasmania expenditures were prepared using a cash accounting basis.

Australian Capital Territory

Methodology for estimating Aboriginal and Torres Strait Islander expenditure

ACT Health provided the expenditure estimates for Indigenous and non-Indigenous people for inclusion in the report. ACT Health also provided advice on the level of under-identification to be applied for the hospital cost modelling in respect of admitted patient services.

Acute-care hospitals

The acute-care hospital expenditures have not been adjusted to reflect that an estimated 22% of separations and 12% of emergency department presentations in the ACT public hospitals relate to non-ACT residents. This is thought to have a profound effect on the estimates of per-person expenditures.

Admitted patient services

ACT Health provided estimated total expenditure on admitted patient services and estimated the under-identification factor for admitted patient data to be used in the hospital cost model was 30% (this was similar to the NSW under-identification factor).

Non-admitted patient services

Not all expenditure on non-admitted patient services can be reported for the ACT in this category.

A proportion of estimated expenditure in emergency departments has been reported in this category. The estimated proportions for emergency department expenditure were derived using total expenditure data provided by ACT Health and the emergency department survey (see Appendix 5).

Expenditure on 'other non-admitted patient services' cannot be separated from other community health expenditure. This expenditure is included in the category of other community health expenditure.

Patient transport

The ACT Ambulance Service and The Canberra Hospital (TCH) transport service provided data for total expenditure on patient transport. The Indigenous/Non-Indigenous proportions have been derived from the Emergency Department information System (EDIS) database, using the mode of arrival at hospital to determine costs.

Public health activities

Public health expenditure has been reported using the nine NPHEP categories.

For all public health activities except breast cancer screening and cervical screening, Indigenous expenditure was calculated using the Indigenous proportion of the Australian Capital Territory population.

Estimated expenditure on breast cancer screening was calculated from the breast screening database. The proportion Indigenous expenditure was determined by the proportion of Indigenous women in the target screening age groups (50–69).

Estimated Indigenous expenditure on cervical screening was derived using the number of Indigenous women in the target screening age group (20–69).

Community health services

Estimated expenditure on community health services is the sum of:

- dental services;
- community mental health;
- alcohol and other drug treatment and
- other community health.

Dental services

Indigenous expenditure on dental services was calculated using the Indigenous population proportion.

Community mental health

Estimated expenditure on community mental health was calculated from two areas, ACT mental health and community organisations. Estimated Indigenous expenditure was derived from data held in the Client Care Information System (CCIS) at ACT Health and the National Minium Data Set (NMDS) for community organisations.

Alcohol and other drug treatment

The estimated expenditure on alcohol and other drug treatment was calculated from adding a proportion of mainstream expenditure to identified Indigenous specific expenditure.

The proportion of mainstream expenditure allocated to Indigenous people was derived from ACT Health's Client Care Information Systems (CCSI) and the National Minimum Data Set (NMDS) of community organisations.

The Specific Indigenous expenditure was calculated from three data sources:

- ACT Health;
- community organisations and
- the Gugan Gulwan Indigenous youth centre.

Other community health

Expenditure from ACT Health on other community health includes:

- Intergraded health care;
- Rehabilitation;
- General practice;
- Correctional health;
- Clinical effectiveness;
- Children, youth and women's health; and
- other.

Community organisation expenditure includes:

- Winnunga Nimmityjah Aboriginal health Service;
- Innovative Health –homeless youth (ISHY);
- Community Health Support Program;
- Family Planning; and
- other.

Specific Indigenous expenditure occurred at the Winnunga Nimmityjah Aboriginal health Service. Estimated Indigenous expenditure for ACT Health programs where possible was derived from the CCSI. For all other areas the Territories Indigenous population proportion was used.

Other non-admitted patient services are included in this category of community health.

Health research

Estimated expenditure on Indigenous health was calculated using the Indigenous population proportion.

Health administration (nec)

Health administration has been apportioned across all expenditure categories in accordance with the Commonwealth Grants Commission advice.

Other health services (nec)

Estimated expenditure on aids and appliances was reported in this category. Estimated expenditure on Indigenous people was calculated using the Indigenous proportion of hospital separations from *Australian hospital statistics 2001–02* (AIHW 2003a:136).

Other explanatory notes

ACT Health reported expenditure on an accrual basis.

Northern Territory

Methodology for estimating Aboriginal and Torres Strait Islander expenditure

The Northern Territory Department of Health and Community Services (DHCS) provided expenditure estimates for this section of the report. The methodology for estimating the Indigenous expenditure and proportion is described below.

During 2002, DHCS reviewed and updated its Aboriginal and Torres Strait Islander expenditure methodology. The review explored new information systems in place and new data now available to inform the revised methodology.

Program areas were provided with a list of 2001–02 cost-centre codes and asked to identify all information systems that supported the provision of health services. Programs supported by information systems provided their most recent financial year utilisation statistics. Programs not supported by actual data provided information based on current service utilisation. Where service utilisation was unknown, programs applied the ABS census data for their respective community or district. Territory-wide services applied ABS population data for the Northern Territory.

Consequently, the methodology used by the DHCS to determine Aboriginal and Torres Strait Islander health expenditure remains a combination of actual administration data and estimates of utilisation rates based on population data.

Admitted patient services

Northern Territory advised that no under-identification adjustment was required to admitted patient data for AIHW's cost model.

Public hospitals in the Northern Territory spend a significant amount of resources on non-hospital activities, such as affiliated facility support to:

- Menzies School of Health Research (MSHR);
- Detoxification Unit; Centre for Disease Control;
- remote visits;
- interpreter services;
- Batchelor College,
- Red Cross Services;
- prisons, and
- staff accommodation.

In addition higher infrastructure costs combined with the additional costs associated with remoteness, small population size, and the burden of disease experienced by Indigenous patients, all combine to make the cost of providing hospital services in the Northern Territory expensive.

All estimates of doctor's salaries in acute-care institutions are included in estimates of expenditure on admitted patient services.

Non-admitted patient services

Estimated expenditure on non admitted patient services is the sum of other non-admitted patient service expenditure and emergency department expenditure.

Total estimated expenditure in this category is understated, as some of the services were not costed directly to either emergency departments or other non-admitted patient services, for example, doctor's salaries (see above).

Emergency departments

The estimated proportions for emergency department expenditure were derived using total expenditure data provided by DHCS and the emergency department survey (see Appendix 5).

Other non-admitted patient services

Utilisation data was used to derive estimated Indigenous and non-Indigenous shares of estimated expenditure.

Patient transport

Estimated expenditure was based on utilisation data from the Northern Territory Patient Travel Scheme (PATS).

Public health activities

Public health expenditure has been reported using the nine NPHEP categories; in addition public health (nec) was included under expenditure on 'other health services (nec)'.

Public Health services are currently not fully supported by an information system. The program areas of cervical cancer screening, breast cancer screening, communicable disease control, immunisations and environmental health currently record utilisation information in stand-alone information systems located in their respective areas. However, the majority of information is not currently supported by an Indigenous identifier.

Consequently, the Indigenous ratios for public health services are a mix of utilisation data—actual and determined—and population data. The relevant program managers provided the Indigenous ratio by district. Where actual data were available these were used to inform the ratios; otherwise the methodology was based on the known utilisation of services by the indigenous population in particular districts. However, where a service not targeted at the Indigenous population but provided to all Territorians was identified, and utilisation was unknown, then the population data for the relevant district was applied. If the service or program was provided territory wide, then the population data was applied.

Relatively unique circumstances exist in the Northern Territory, where public health programs are often delivered by health centre workers due to a relative lack of more specialised resources in rural and remote areas. Hence, the delivery of public health programs is often undertaken by health centre workers, including district medical officers, community health nurses, and Indigenous health workers who support these generalist community health teams (AIHW 2004c).

Community health services

Estimated expenditure on community health services is the sum of:

- dental services;
- community mental health;
- alcohol and other drug treatment; and
- other community health.

Dental services

The estimated expenditure on dental services was derived from utilisation data and population data.

Community mental health

A combination of utilisation data and population data was used to derive estimated expenditure on community mental health. In addition a weight factor was used to cover the travel costs associated with services to remote and very remote communities.

Alcohol and other drug treatment

The estimated expenditure on alcohol and other drug treatment was based on utilisation data and population data.

Other community health

Other community health services in the Northern Territory included the provision of both urban and remote primary health care services. In urban areas, utilisation data formed the basis of primary health care service expenditure estimates. In remote areas, a combination of utilisation data, estimates and population data was applied.

Health research

Health research in the Northern Territory is funded by DHCS. The estimated expenditure was split between departmental research and a grant to the Menzies School of Health Research for research and core activities. The division of funding between the department and the school provides the ratio for estimated Indigenous and non-Indigenous expenditure.

Health administration (nec)

Estimated expenditure on health administration has been allocated across all program areas. The expenditure was apportioned according to staffing numbers in each area.

Other health services (nec)

Estimated expenditure on two areas, pharmaceuticals and other public health (nec) have been grouped in this category. The expenditure estimates on these areas were based on utilisation data.

Other explanatory notes

Northern Territory data for 2001–02 was prepared on a cash basis and does not include depreciation.

Appendix 7 Non-government expenditure

Introduction

Definition

The non-government expenditure included in this report relates to expenditures incurred by non-government service providers. In the case of expenditure on medical services and PBS pharmaceuticals it only includes the non-benefit part of the expenditure. For expenditure on all other non-government provided services it includes total expenditure. For example, total expenditure on private hospitals is included as non-government expenditure, even though some of it is assumed to have been indirectly funded by the Australian Government through its 30% rebate on private health insurance contributions. Similarly, purchases of private hospital services by state and territory governments is regarded as government funding of non-government expenditure.

Non-government funding, on the other hand, includes the non-government funding share of all health expenditures, irrespective of whether the related services were provided by government or non-government providers. For example, fees paid by private patients in public hospitals is regarded as non-government funding of expenditure incurred by state and/or territory governments.

Limitations

Estimates of non-government expenditure on health goods and services are problematic. For example, the provision of goods and services by non-government sector providers, such as private hospital services, dental and other professional services, and non-benefit pharmaceuticals are not usually accompanied by any requirement that the levels of use by Indigenous people are identified.

Consequently, data supporting the estimates of many non-government expenditures in respect of Indigenous people is limited. The major exceptions are estimates of co-payments under Medicare and the PBS.

Where possible estimates have been derived from a variety of sources containing Indigenous data; where no such data exists proxy data has been used to model and estimate expenditure. This paucity of supporting data for some of the estimates reported would indicate that care should be exercised when drawing inferences from them.

Data sources

The major sources of non-government funding for health goods and services are:

- Individuals;

- private health insurance;
- providers of compulsory third party motor vehicle insurance cover; and
- providers of workers compensation insurance cover.

The Indigenous proportions of funding provided by these sources, particularly in relation to non-government provided health goods and services, have been calculated using data from the following sources:

- The proportion of Indigenous people with private health insurance as a proportion of all people with private health insurance was applied to funding by private health insurance organisations. This proportion was derived by the AIHW from the National Health Survey (NHS) (ABS 2002b). The NHS data excluded people living in remote areas and those under eighteen years of age.
- The Household Expenditure Survey (HES) (ABS 2000) was used in combination with other Indigenous population characteristics (ABS 2003c) to estimate funding by individuals, compulsory third party motor vehicle insurance payments and workers compensation insurance payments.
- Estimates of Indigenous expenditure have also been derived from a number of other sources. These include:
  - the AIHW's health expenditure database;
  - Medical Benefits Scheme (MBS) and Pharmaceutical Benefits Scheme (PBS) modelling for the Australian Government expenditure;
  - Australian Bureau of Statistics (ABS) survey of private hospitals;
  - ABS estimates of household final consumption expenditure; and
  - other Indigenous population characteristics from Australian Bureau of Statistics data (ABS 2003a).

Methodology

The four major areas of non-government expenditure are detailed below; other areas were derived using similar methods.

Medical services

Estimated expenditure on medical services was calculated from the sum of two components:

- Medicare items; and
- other medical services.

Medicare benefit items that required a co-payment were estimated from two sources: the HES (ABS 2000) and the NHS (ABS 2002b). Data from the HES (ABS 2000) and on Indigenous households' income (ABS 2003c) was used to estimate the Medicare co-payment portion. The Indigenous proportion of all privately insured people was used to estimate the split of private health insurance payments for medical services.

Medical services that did not attract benefits under Medicare were limited to compensable services. The Indigenous proportion of these was estimated using data from the HES (ABS 2000) combined with data on the characteristics of the Indigenous population (ABS 2003c).

Pharmaceuticals

Estimated non-government expenditure on pharmaceuticals has two components:

- benefit-paid pharmaceuticals; and
- non-benefit pharmaceuticals.

Benefit-paid pharmaceuticals include only those prescribed items that actually attracted benefits under either the PBS or the RPBS. The non-benefit pharmaceuticals included expenditure on:

- items listed on the PBS or RPBS for which the total costs are equal to or less than the patient co-payment;
- prescribed medicines dispensed through private prescription; and
- over-the-counter medicines and similar preparations purchased from retail chemists, supermarkets and convenience stores.

Different data sources and methods were used in respect of the two types of expenditure on pharmaceuticals. Different methods were also used in relation to particular sources of funding.

For benefit-paid pharmaceuticals, the estimated Indigenous share of this expenditure was calculated using the Indigenous to non-Indigenous ratio from the PBS benefits expenditure estimates.

The other pharmaceuticals expenditure was estimated from private health insurance contributions, workers compensation insurance, compulsory motor vehicle third party insurance and private expenditure. The Indigenous proportion of people with private health insurance was used to split the funding by private health insurance organisations. The splits for funding by injury compensation insurers (workers compensation and compulsory third party motor vehicle) and private out-of-pocket funding were derived from the HES (ABS 2000) and Indigenous population characteristics (ABS 2003c).

Dental services

Estimated non-government expenditure on dental service has two components:

- dental services that attracted a benefit under Medicare; and
- mainstream dental services.

Expenditure on dental services through Medicare is limited to a small group of items in the Schedule that are identified as dental procedures. Almost all (more than 99%) of estimated dental services expenditure was through the second component, which essentially relates to private dental procedures in dentists' surgeries.

The co-payments on Medicare dental services were estimated using the derived Indigenous and non-Indigenous proportions of MBS benefit paid items.

Funding of dental services by individuals (fees paid); compulsory third party motor vehicle insurance providers; and workers compensation insurers was estimated from the HES (ABS 2000) and Indigenous population characteristics (ABS 2003c).

The split of funding by private health insurance organisations was calculated using the Indigenous proportion of people with private health insurance cover.

Private acute-care hospitals

All estimated expenditure on private hospitals was assumed to have been incurred by the non-government sector. The estimates of expenditure were derived from the ABS private health establishments survey (ABS 2003d). Most of the funding for private hospitals also came from non-government sources—mostly through private health insurance benefits.

Although some of the private hospitals included in the ABS survey might well be classified as stand-alone psychiatric hospitals, no distinction has been made in the estimates of private (psychiatric) hospitals and private (non-psychiatric) hospitals.

Given that the bulk of funding for private hospitals came from private health insurance sources, the estimated Indigenous expenditure on private hospitals was calculated using the Indigenous proportion of people with private health insurance cover.

Appendix 8 Estimation of health-related welfare expenditure

Introduction

An experimental chapter on the expenditure on health-related welfare services for Aboriginal and Torres Strait Islander people has been included in this report (Chapter 8).

The three areas of health-related welfare services examined were:

- services for the aged;
- services for people with a disability; and
- services provided through Aboriginal Community Controlled Health Services (ACCHS).

Data covering the Indigenous status of clients of these health-related welfare services were not always available, or collected in a consistent manner. Where noted, adjustments were made to the data to correct for under- or over-identification of Indigenous Australians in the underlying data. Generally, however, where the data provided to support these estimates included missing or non-responses to the Indigenous identification questions, these were excluded from the estimation processes.

It is also important to recognise that these estimates of health-related welfare expenditures represent expenditure on the met need for such services. The inability of estimates of expenditure to reflect the total need for health-related welfare services was highlighted in the Grants Commission's *Report on Indigenous Funding 2001* (CGC 2001). A further examination and discussion of issues related to unmet need is in *Unmet need for disability services: effectiveness of funding and remaining shortfalls* (AIHW 2002).

Health-related welfare services for older people

Although this part of the report addresses the estimates of expenditure on health-related welfare services for older people it is sometimes impossible to separate these out from expenditures on similar types of services provided to younger people with disabilities. This is particularly the case in respect of Australian Government and non-government funding for services provided in residential care facilities.

The expenditure estimates exclude administration expenses related to state and territory government nursing homes, which are considered to be 'health' expenditures; and their expenditure on transport and other core concessions for older people. Nor do they include expenditure by the Australian Government on high-level residential care services for older people, which is also regarded as a 'health' expenditure.

Apart from the expenditures on services in residential care facilities, which are apportioned between 'health' and 'welfare' expenditure categories according to the care needs of the care recipients, most welfare services that are directed at both older people and people with disabilities are allocated on the basis of the recipients' ages. In the case of services for Aboriginal and Torres Strait Islander people a minimum age of 50 years is used to determine

which of these types of expenditures relate to older people. In the case of non-Indigenous people, the minimum age is 70 years. These are based on the broad aged-based planning criteria used in accessing need for services for older people. Of course, younger people with disabilities often access services that have been provided primarily for older people if an Aged Care Assessment Team determines that such services are the best means of meeting the specific care needs of those people.

Home and Community Care (HACC)

The Home and Community Care (HACC) program provides a range of community-based support such as home nursing, personal care, respite, domestic assistance, meals, transport and home modification (AIHW 2003d). HACC services are directed towards assisting older and frail people with moderate, severe or profound disabilities, younger people with moderate, severe or profound disabilities and the carers of such people. One objective of HACC services has been to prevent premature or inappropriate early admissions to long-term residential care and to promote independence.

Estimated expenditure on HACC services for older people (high-level residential aged care) was calculated using three data sources:

- HACC client characteristics from HACC Minimum Data Set (MDS);
- HACC expenditure by the Australian Government and state and territory governments (DoHA unpublished data); and
- HACC expenditure recurrent-capital split from Department of Finance Budget outcomes.

Apparent discrepancies existed between the HACC MDS Indigenous client population aged 65 and over and the Indigenous population of the same age group for New South Wales and Victoria. In New South Wales, the number of Indigenous clients reported in the HACC MDS statistics was almost twice the total Indigenous population number in that age group. In Victoria, the number of Indigenous clients was 16% more than the total population. (A discussion of this issue can be found in AIHW 2004a:37.) For these two states the number of Indigenous HACC clients was estimated using a combination of HACC MDS data and population data from the other states and territories.

In estimating expenditure on HACC, it was assumed that the cost of providing services to people in remote and very remote areas was, on average, 25% higher than similar services provided in more accessible areas. This weighting was used by the Commonwealth Grants Commission in their calculation of measures of relative need for each type of service (CGC 2003).

Flexible care services

Through the Aboriginal and Torres Strait Islander Aged Care Strategy the DoHA provided funding for a number of flexible aged care services. These offered a mix of aged care assistance, consisting of residential care and Community Aged Care Packages. Many of the services were established in remote areas where no aged care services were previously available.

Flexible care services were jointly funded by both the Australian Government and state and territory governments. State and territory health departments advised that almost all state funding for flexible care services was for health purposes, hence their funding was classified

as health expenditure. The expenditure reported on low-level flexible care services by the Australian Government was treated as health-related welfare expenditure.

Estimates of expenditure on low-level flexible care places and community care provided by Aboriginal and Torres Strait Islander flexible care services was provided by the DoHA. A small component of expenditure was related to Aboriginal and Torres Strait Islander flexible services model grants.

Multipurpose services

Multipurpose services provided a range of services for both Indigenous and non-Indigenous people, mostly via services in rural and remote communities (AIHW 2003d). These were a joint initiative of the Australian Government and state and territory governments (DoHA 2002). There were a small number of services specifically targeted to Indigenous Australians, established under the National Aboriginal and Torres Strait Islander Aged Care Strategy.

The estimated expenditure covers Australian Government low-level care places in Multipurpose services (MPS) and CACP services administered by MPSs. State and territory health departments advised that their expenditures on MPSs was treated as health expenditure.

The Indigenous share of this included expenditure on Indigenous-specific low-level care places in MPSs, and an estimate of their share of the remaining expenditure on low-level care places in mainstream MPSs. Information on the Indigenous use these mainstream MPSs was not available, therefore expenditure was apportioned using the proportions applicable in respect of expenditure on low-level residential aged care for Indigenous and non-Indigenous people.

Community Aged Care Packages (CACP)

Community Aged Care Packages (CACPs) provided home-based service packages that enable older frail people who require low-level care to remain in their own homes. The packages provide an alternative to care in low-level residential aged care facilities for people who wish to, and can safely, be cared for in their own homes.

The two data sources were used to estimate CACP expenditure on Aboriginal and Torres Strait Islander people, there were:

- client characteristics from Aged Community Care Management Information System (ACCMIS) database; and
- CACP unpublished expenditure data from DoHA.

Expenditure was apportioned according to the client characteristics from the ACCMIS database. It was assumed that, on average, the cost of providing CACP services to Indigenous and non-Indigenous people in remote and very remote areas was 25% higher than those provided in more accessible areas. This weighting was used by the Commonwealth Grants Commission in their calculation of measures of relative need for each type of service (CGC 2003).

Low-level residential aged care

People in residential care facilities attracting residential aged care subsidy are categorised according to the level of care they require and receive—not whether they are aged or non-aged residents.

There are eight such categories of care need and, for the purposes of allocating expenditure, the four highest levels of care are regarded as health services for older people (high-level residential aged care) and the remaining four (low-level residential aged care services) as welfare services.

This difference in the relative importance of the residential aged care subsidy in expenditure on health-related services is partially addressed by some Indigenous specific expenditures on residential services operating under the Aboriginal and Torres Straight Islander Aged Care Strategy (ABS & AIHW 2003). The difference is also partially explained by older Indigenous people having a preference to remain within their community (DoHA 2002).

Data on residential care subsidies and number of clients are from Aged Community Care Management Information System (ACCMIS) database (see Appendix 4 for details).

Other

The other category includes a number of smaller programs and grants administered by the DoHA. The allocation of expenditure to Indigenous people through these other programs was based on the proportion of Indigenous expenditure through the other identified programs for older people.

Health-related welfare services for people with a disability

Estimated expenditure on welfare services for people with a disability includes Australian Government administrative costs, but excludes state and territory administrative costs. The estimates also exclude concessions by state and territory governments and high-level residential aged care expenditures, which are considered to be health expenditures.

Commonwealth/State Disability Agreement funded services

Estimated health-related welfare expenditure through six service types were provided through the Commonwealth/State Disability Agreements (CSDA) (Table A8.1).

Table A8.1: Description of Commonwealth/State Disability services, 2001–02.

Service	Description
Accommodation	Accommodation support provides accommodation to people with a disability or assistance for the person with a disability to remain within the existing location.
Community support	Community support services provide the support required for an individual to reside in a non-institutional setting. Examples of these services include counselling, case management and therapy.
Respite	Respite care is also available to provide a short-term break to individuals who provide care to a person with a disability, while providing the disabled person with a positive environment (AIHW 2003b).
Community access	Community access programs provide services that give opportunities for individuals with a disability to enhance their social independence by accessing the services and facilities that are generally available in the community.
Employment	The employment program provides assistance in gaining and retaining employment for people with a disability.
Other	The Other category includes a range of smaller services such as advocacy, staff training and development and other support services that are not included in those described above.

Source: AIHW 2003b.

Client characteristics, obtained from the 2002 CSDA minimum data set, were the principal source for determining the Indigenous proportions of expenditures on accommodation, community support, respite, community access and employment programs. The CSDA data were collected on a single 'snapshot' day. The data included a significant number of 'not stated' responses, which exceeded the reported number of Indigenous consumers. 'Not stated' data were removed from the sample when allocating expenditures to services for Indigenous people and for other consumers. For this reason these expenditure estimates have to be regarded with caution. A newly developed collection was implemented in late 2002 and it is expected that future data from this collection will give a better picture of the services and their users over a full year.

Three data sources were used to estimate expenditure on Commonwealth/State Disability Agreement (CSDA) services. These include:

- Expenditure on these services from SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) (SCRCSSP 2003);
- Client characteristics from Commonwealth/State Disability Agreement Minimum Data Set (CSDA MDS); and
- Australian Government administration expenditure estimated by AIHW based on information in the Department of Family and Community Services (FaCS) annual report (FaCS 2002).

The allocation of expenditure estimates between Indigenous and non-Indigenous people was based on client characteristics from CSDA Minimum Data Set (MDS).

It was assumed that the provision of these services was higher in remote and very remote areas. Therefore a cost weight of 50% was applied in respect of services provided in such areas. This was the weighting used by the Commonwealth Grants Commission in calculating measures of relative need for each type of service (CGC 2003).

The proportion of Indigenous use in the 'other' category was determined from the overall average of the other services for people with disabilities for which data were collected.

Other services

Home and Community Care (HACC)

A similar method of calculating expenditure on HACC services for Indigenous people with a disability was used to that used to estimate HACC services for older people. The difference was the age groups for people with a disability, these were:

- Indigenous age group less than or equal to 50 years of age; and
- non-Indigenous less than or equal to 65 years of age.

Commonwealth Rehabilitation Services (CRS)

Estimated Indigenous expenditure was calculated from two data sources:

- Expenditure on CRS for Indigenous People from FaCS (unpublished data); and
- Total expenditure on CRS from FaCS 2001–02 annual report.

Low-level residential aged care

Estimated expenditure includes low-level residential aged care services for people with a disability.

Estimated expenditure on residential aged care for Indigenous people was based on data on residential care subsidies and client characteristics from Aged Community Care Management Information System (ACCMIS) database. A detailed explanation of the method for estimating this expenditure is included in Appendix 4.

Health-related welfare services through Aboriginal Community Controlled Health Services

Service Activity Reports (SAR) completed by ACCHSs include information on the full-time equivalent staff employed in different occupations and the service location (reclassified to the Australian Standard Geographic Classification (ASGC) Remoteness Areas Classification). The occupation classifications were used to split expenditure between health and health-related welfare services. For some occupations, such as nurses or dentists, all of the services are assumed to have been health services. Whereas for other occupations, such as environmental health workers or drivers, an estimate was made of the proportion of services of a health- or health-related nature based on advice from OATSIH's Workforce, Policy and Planning Section on the likely mix of work undertaken by such staff. On the basis of these analyses, the costs of management and support staff were apportioned between health and health-related services.

Information on the average salaries paid to staff of ACCHS was included in a report by Econtech on costing models for ACCHS (DoHA 2004b). These data indicated variations in salary costs of different occupations by Remoteness Areas, which have been incorporated in our analysis.

The results of the analysis suggested that 7.6% of expenditure in ACCHSs was on health-related welfare services. SAR reporting also provided an indication of the use of ACCHS services by non-Indigenous people—89.1% of services were assumed to be provided to Indigenous people.