

## Health information

This chapter sets out the Institute's achievements in health information for the year. An analysis of achievement against program budget targets is at Appendix 9, and more details on highlights for the year are included in the Highlights chapter earlier in this report.

The AIHW publishes a range of national health statistics and is active in improving that information. To draw the information together the Institute works with Commonwealth, State and Territory agencies, and with the Australian Bureau of Statistics (ABS). The National Health Information Agreement (NHIA) facilitates development and coordination of national health statistics.

Coordination links are maintained through informal and formal arrangements, including attendance at the Australian Health Ministers' Advisory Council (AHMAC), and membership of the National Health Information Management Group (NHIMG), the National Public Health Partnership Group (especially its National Public Health Information Working Group), the National Health Priorities Committee, various committees of the National Health and Medical Research Council (NHMRC) (the Institute is an observer at Council meetings) and the Australasian Association of Cancer Registries.

Management, advisory or steering committees, that include external experts and stakeholders, exist for a number of Institute projects.

A high proportion of the Institute's health statistics activities are conducted under the auspices of external bodies through agreements that establish specific work programs and provide funding for them. The Department of Health and Family Services (DHFS) is the main funder of such activities. A Memorandum of Understanding (MOU) between DHFS and the Institute, signed on 1 July 1997, has established agreed terms for this work. The MOU now encompasses the large body of work on public health information that was outsourced by DHFS's Public Health Division in early 1997.

Release of *Australia's Health 1998* on 25 June, and the accompanying Australia's Health Conference, have been a highlight of 1997-98. Following the initiative taken with the release of *Australia's Welfare 1997*, the Institute launched the report at a one-day conference attended by 300 people. Planning for *Australia's Health 2000* will commence soon and will draw on valuable feedback provided by participants.

*Australian Hospital Statistics 1996-97* was released on 29 June 1998. With this report the Institute reintroduced performance indicator reporting in its publication. As DHFS has decided to discontinue its annual *Australian*

*Casemix Report on Hospital Activity*, the AIHW's *Australian Hospital Statistics* is now the single source of information in hard copy form for public hospital activity. Both AIHW and DHFS will continue to provide access to detailed statistics from Internet sites.

The report *Cancer in Australia 1991-1994* was ready at year end for Ministerial release on 2 July 1998.

The National Death Index has improved in timeliness, to be within two months of the reference period for all States and Territories. The Institute's Health Ethics Committee approved access to the index for over 30 epidemiological studies for linkage purposes.

Collaborating Units contribute significantly to the Institute's health information output. Reports on the work of the National Perinatal Statistics Unit (University of New South Wales), the National Injury Surveillance Unit (Flinders University), the Dental Statistics and Research Unit (University of Adelaide), the Aboriginal and Torres Strait Islander Health and Welfare Information Unit (ABS, Darwin), and the General Practice Statistics and Classification Unit (University of Sydney) are incorporated into this section of the Annual Report.

The AIHW also contributes to the funding of the National Centre for Classification in Health's Brisbane office (at the Queensland University of Technology). A report on the Centre's activities is also included in this section.

## Health of populations

### **National Public Health Information Development Plan**

The Institute is preparing a National Public Health Information Development Plan under the auspices of the National Public Health Partnership (NPHP) and its National Public Health Information Working Group (NPHIWG). The main objectives of the Plan are to:

- outline a framework for public health information;
- identify gaps and deficiencies in available information on public health;
- develop strategies to maximise the use of existing information resources;
- identify specific public health information development for attention in the short and long term; and
- develop criteria for prioritising public health data collections.

This Plan will be considered by public health stakeholders at a workshop in September 1998 and a finalised Plan will be produced for consideration by the NPHP in December 1998.

### **Health of Australians living in rural and remote areas**

A set of indicators of rural health has been developed to identify differences in health status, lifestyle risk factors

and health care resources between populations of metropolitan, rural and remote Australia. These indicators will form the basis of a report on the health of Australians living in rural and remote areas to be released in the second half of 1998. A summary report on the public health aspects of Australians living in rural and remote areas was presented at the National Rural Public Health Forum held in Adelaide in October 1997 and has been published in *Australia's Health 1998*.

### **Burden of disease**

The Institute contributed to international efforts to develop and standardise summary measures of population health through preparation of a briefing paper for the Organisation for Economic Co-operation and Development (OECD) on health expectancies and burden of disease analysis using disability-adjusted life years (DALYs). The Institute also made a major contribution to a Commonwealth-sponsored workshop in November 1997 to examine and discuss the potential contribution of burden of disease analysis, and other approaches, to the use of health information to assist in planning and priority setting. The Institute, with support from the DHFS, will carry out a national burden of disease study and will play a lead role in coordinating Australian work on burden of disease analysis. A report of the study is to be published in the first half of 1999.

### **Aboriginal and Torres Strait Islander Health and Welfare information**

The Institute's role in the collection and analysis of Indigenous health and welfare information is the responsibility of the Aboriginal and Torres Strait Islander Health and Welfare Information Unit (ATSIHWIU). This AIHW Collaborating Unit is part of the National Centre for Aboriginal and Torres Strait Islander Statistics in the ABS, located in Darwin. It undertakes, and assists others to undertake, work in all areas of statistics and information concerned with the health and welfare of Aboriginal and Torres Strait Islander peoples. DHFS provides \$470,000 per annum to AIHW to assist the operation of the Unit. A new agreement was signed in 1997-98 to cover the Unit's operations until 30 June 2002.

The Unit's functions include analysis and reporting on Indigenous health and welfare statistics and the assessment and improvement of their quality. In addition, the Unit disseminates information to a wide range of users including Indigenous organisations, government agencies and research institutions, and provides some training and experience in health statistics to Aboriginal and Torres Strait Islander people. An important function of the Unit is its substantial contribution to the national leadership of

projects concerned with the advancement of Indigenous health and welfare information issues.

ATSIHWIU staff develop and maintain effective networks and linkages with key groups concerned with Aboriginal and Torres Strait Islander health information. Foremost amongst these are links with Heads of Aboriginal Health Units (HAHU), the National Aboriginal Community-Controlled Health Organisations (NACCHO), and information groups such as NHIMG, the National Community Services Information Management Group (NCSIMG) and the Disability Data Reference and Advisory Group (DDRAG). Briefings and papers have also been supplied to:

- standing committees (including the House of Representatives Social Services Standing Committee, as part of their investigation into Aboriginal health);
- Ministerial advisory councils for Health and for Aboriginal Affairs; and
- a workshop held jointly by the Department of the Prime Minister and Cabinet, and the Reconciliation Council.

Links have also been established and maintained with health departments in all jurisdictions. Other links must be further developed, notably in the areas of welfare and community services, and with Torres Strait Islander authorities.

National reports on self-assessed health status and on overweight and obesity among Indigenous Australians were released during the year. As with all ATSIHWIU publications, plain language summaries of these reports were prepared and circulated widely. ATSIHWIU staff have also provided training in sources and use of health information for Indigenous students, Aboriginal health workers and other organisations.

ATSIHWIU has played a broad-ranging advising role across a number of areas in addition to its more tangible work program. Among other initiatives, staff of the Unit have worked with HAHU and other agencies to develop health performance indicators which were endorsed by Health Ministers in July 1997. ATSIHWIU has also assisted with the development of performance indicators appropriate to recording service provision and accountability of Aboriginal Medical Services, and participated in a steering committee for a project to identify baseline data and develop collection and reporting mechanisms for allocation and expenditure of funds for Indigenous health services.

### **Aboriginal and Torres Strait Islander Health Information Plan**

As a result of the high priority attached to Indigenous health information by the 1994 National Health

Information Development Forum, AHMAC commissioned ATSIHWIU to develop a National Plan for improving all aspects of Aboriginal and Torres Strait Islander Health information. *The Aboriginal and Torres Strait Islander Health Information Plan...This Time, Let's Make it Happen* was completed after several extensive rounds of consultation and feedback throughout Australia involving seminars and workshops in all States and Territories with governments and the community-controlled health sector. The Plan was endorsed by AHMAC and Health Ministers and has since been widely published and distributed. AHMAC asked the NHIMG to manage implementation of the Plan. NHIMG has established an Implementation Working Group, comprised of NHIMG members, HAHU and other relevant parties. ATSIHWIU has been nominated as the lead agency for many of the key recommendations of the Plan.

AIHW has lead responsibility for improving identification of Indigenous people in hospital, perinatal and cancer statistics. One of the Plan's recommendations is already being acted on by ATSIHWIU through a project funded by AHMAC to develop and evaluate a methodology for assessing the quality of Indigenous identification in hospitals. A preliminary report to AHMAC is expected in October 1998. Hospitals in several jurisdictions are participating.

### **Child and youth health monitoring**

An AIHW child and youth health monitoring project is being supported by funding from AHMAC and the Public Health Division of the DHFS following recommendations in the National Health Plan for Young Australians endorsed by AHMAC in 1996.

A framework for the project is being developed, with the child health component being the subject of a workshop run by the Institute in March 1998. Following the workshop, an expert advisory group was established to provide further advice to the Institute about the framework and on monitoring child health. The youth health component of the framework is currently under development.

An integrated child and youth health monitoring framework will be submitted to AHMAC in 1998-99.

### **Perinatal statistics**

The Institute's role in the collection and analysis of perinatal statistics is the responsibility of the AIHW National Perinatal Statistics Unit (NPSU), a Collaborating Unit of the Institute. Following a review in 1996-97, the Unit was transferred from the University of Sydney to the Faculty of Medicine at the University of New South Wales. The objectives of the Unit are to monitor and interpret

national perinatal mortality and morbidity, to provide a limited perinatal epidemiology service, and to conduct epidemiological research. The Unit's work is overseen by a strengthened Management Advisory Committee chaired by Richard Henry, Professor of Paediatrics at the University of New South Wales.

The NPSU collaborates with State and Territory health authorities and perinatal data groups and professional groups in developing national perinatal data systems. The NPSU works with a newly formed National Perinatal Data Development Committee to develop perinatal definitions for the *National Health Data Dictionary* and improve the quality of data recorded in the perinatal collections.

### **National perinatal mortality and morbidity**

*Australia's Mothers and Babies 1995*, the sixth report in the AIHW's Perinatal Series, was published using data from the State and Territory perinatal collections and registrations of perinatal deaths. The report provides national information on maternal characteristics such as age, parity (previous births, if any), country of birth and Aboriginality. It also provides information on the baby's birthweight and outcome, and on place of birth and length of stay in hospital.

This report drew particular attention to the continuing trend of shorter hospital stays of mothers after childbirth and the factors associated with short stays, the upward trend of the average age of mothers giving birth, and the differences in caesarean rates between insured and uninsured women. The report also noted the higher rates of low birthweight and perinatal mortality among infants born to Indigenous mothers, and among multiple births.

### **Register of pregnancies after assisted conception**

The national register of pregnancies after assisted conception contains data from all IVF centres performing in-vitro fertilisation, gamete intrafallopian transfer and related procedures in Australia and New Zealand. *Assisted Conception, Australia and New Zealand, 1996* was published jointly by NPSU and the Fertility Society of Australia. The register was partly funded by the Fertility Society of Australia and Serono Australia.

The report showed that slightly more than 1% of all Australian births followed assisted conception, that the proportion of treatment cycles in which microinjection techniques had been used to treat infertility had continued to increase, and that there was little change in the high incidence of multiple births after assisted conception. Pregnancy outcomes after the use of microinjection were similar to those for other IVF pregnancies.

The NPSU's Director was a member of two national working parties that completed extensive reviews of health

services for treating infertility by assisted reproductive technology and the requirements of related data systems. The NPSU developed an expanded computerised system to enable IVF units to report each treatment cycle, as well as pregnancies.

### **Dental statistics**

The Institute's role in dental statistics is the responsibility of its Dental Statistics and Research Unit (DSRU). This AIHW Collaborating Unit was established in 1988 at the University of Adelaide. The Unit aims to improve the oral health of Australians through the collection, analysis and reporting of statistics on the oral health of Australians, their access to dental care, the practice of dentistry in Australia and the dental labour force.

The Unit was reviewed by the AIHW in 1997, and was found to be doing an excellent job in delivering information on the dental status and dental needs of the Australian population. The Unit's contract with the AIHW has been renewed for a further 5 years. In addition to AIHW funding, DHFS contributes \$278,000 per annum to the Unit.

The Unit conducts a range of activities to provide information on oral health and access to dental care. These activities include coordinating and conducting surveys of oral disease prevalence in the community, evaluating strategies for the maintenance of oral health, and investigating access to and the comprehensiveness of dental care received by Australians. Over time these activities have documented changes in dental health and have produced data on access problems among disadvantaged adults to dental care in Australia.

### **Adult oral health**

During the year data from the 1995 and 1996 Adult Dental Programs Surveys were combined, analysed and published by DSRU. A further scientific paper was written and submitted for publication.

Efforts are under way to maintain the Adult Dental Programs Survey data collections in all States and Territories, with the next survey scheduled for 1999.

### **Child Dental Health Survey**

The Child Dental Health Survey is a national monitoring survey of Australian school children, which produces national and State and Territory reports on dental caries experience. The survey began in 1977 and has been a responsibility of the Unit since 1989. Data are collected at the time of dental care provision to children by the school dental services in each State and Territory. The Unit prepares, analyses and reports on these data.

The survey provides a reference point against which dental caries prevention and management programs in Australia may be assessed. In addition, the survey permits analysis of regional and social variation in oral health, and provides the basis for valuable additional research projects.

National, and State- and Territory-level reports have been published to maintain the time series on dental disease in Australian children. The national reports for 1994 and 1995 were published in 1997–98. Two scientific papers were published from these data, including one with a focus on Aboriginal and overseas-born children.

The survey was last revised 10 years ago, and a proposal to improve the quality of data has been discussed with stakeholders. Specific areas for improvement include social characteristics, linkage with service provision data, and linkage of individual data records over time.

### **Fluoride and dental caries in children**

This DSRU project, largely funded by the NHMRC, is examining the role of water fluoridation in the prevention of dental caries within the contemporary Australian child population. Identifying the relative contribution of fluoride from different sources to caries prevention will help optimise current strategies for the prevention of dental caries.

The current work program covers the consolidation and analysis of the incidence data on dental caries and analysis of the association of the incidence of caries and fluoride exposure. Nested studies updating exposure and other data began in late 1997. A scientific paper on risk prediction was published in 1997 and further papers based on incidence data are expected in 1998–99.

### **South Australian Dental Longitudinal Study**

The distribution and determinants of dental disease in a group of Australian adults in South Australia aged over 60 years are being assessed in this longitudinal study, which is supported by an NHMRC project grant. During 1996–97 DSRU collected five-year follow-up data from over 900 interviews and 600 clinical examinations. The current work program aims to assess five-year-old oral disease incidence and its social impact. Questionnaire data on dry mouth (a perception of reduced saliva flow) and xerostomia (low saliva flow) have been collected and correlated with resting saliva flow and medication history.

## **National Health Priority Areas**

The Institute monitors and reports on outcomes in the National Health Priority Areas (NHPA) of cardiovascular health, cancer control, injury prevention and control, mental health and diabetes mellitus.

A report on progress towards NHPA goals and targets, *First Report on National Health Priority Areas 1996*, was

released in 1997-98. This was followed by work on reports against targets for cancer control, and injury prevention control, submitted to Australian Health Ministers in accordance with the NHPA biennial reporting cycle. These two reports were scheduled for Ministerial release in July 1998.

### **National Cancer Statistics Clearing House**

The National Cancer Statistics Clearing House improved timeliness of published cancer incidence data to within 4 years of the reference period. To achieve this it was necessary to use modelling techniques to substitute for 1990-1994 individual year incidence data for one State. However, this situation will be resolved before the end of 1998, making it possible for the first time to release complete national data within 3 years of the reference period. Also for the first time, data were used to support a national breast cancer survival report in collaboration with the Australasian Association of Cancer Registries and the National Breast Cancer Centre. An increased number of researcher requests for access to cancer incidence data were granted over the year, a trend that is expected to continue.

### **Breast and cervical cancer screening**

From July 1997 the Institute became responsible for the development and reporting of indicators monitoring the national breast and cervical cancer screening programs. The Institute measures the effectiveness and coverage of the programs at a national level focusing on key outcome objectives for the programs: to reduce mortality and minimise morbidity from these cancers, to maximise efficiency of delivery of programs and to increase their equity. Regular reports from this new monitoring activity will commence in 1998-99.

### **Cardiovascular disease and diabetes monitoring**

Mortality trends are monitored biennially as part of the Institute's national monitoring system for cardiovascular disease and its impact. At the end of 1997-98 the report *Surveillance of Cardiovascular Mortality Australia, 1985-96* was close to publication. The report presents current trends in cardiovascular disease and its major components, and includes, for the first time, results for urban, rural and remote categories, and for the Indigenous population, in addition to State and Territory data.

The report *Medical Care for Cardiovascular Disease in Australia* has been rescheduled to include more recent data, and will now be released in 1998-99.

Standards for indicators of body fatness in adults have been completed and endorsed by the NHIMG, and will be included in Version 7 of the *National Health Data Dictionary*.

An expert committee developed the standards in conjunction with AIHW. Standards are now being developed for indicators of smoking, physical activity, high blood pressure and high total cholesterol (and other lipid risk markers), for use in epidemiological and health care settings.

To overcome the deficiency of national data on medical and surgical care, the Institute collaborated with the National Heart Foundation to update its registers of cardiac surgery and angioplasty. Efforts to develop a national minimum dataset across both types of interventions continued during 1997-98. Efforts are also continuing to establish a national ambulance database that will provide data on pre-hospital emergency care in Australia.

In response to growing demands for a national survey of biomedical risk factors that included blood indices, the Institute convened a workshop of stakeholders, including public health professionals and researchers, in October 1997. Workshop participants, who represented a wide range of public health areas and expertise in population health surveys, endorsed the need for a national biomedical risk factor survey that includes a blood sample. The monitoring of cardiovascular disease, diabetes, nutrition and communicable diseases was seen as a priority. The National Public Health Partnership Group supports a national biomedical risk factor survey and a steering group, representing the major stakeholders, is developing a proposal.

The number of new cases and prevalence of acute rheumatic fever and rheumatic heart disease among the Indigenous population is being monitored using a register system based in the Northern Territory. The register will assist medical staff in the provision of treatment as well as supplying data on rates of compliance with appropriate treatment and health outcome data on the impact of intervention.

### **National Diabetes Register**

On 2 June 1998 the Minister for Health and Family Services announced that the Institute was the successful tenderer for the establishment and maintenance of a National Diabetes Register, as part of the National Diabetes Strategy. The register will record new cases of insulin treated diabetes mellitus. By capturing new insulin treated cases of diabetes mellitus it is expected that a reliable measure of the incidence of Type 1 diabetes (insulin dependent diabetes mellitus) can be established. The main sources of data for the register will be the National Diabetic Services Scheme (administered by Diabetes Australia) and the Australasian Paediatric Endocrine Group State-based databases. Subsequent ascertainment and validation will

be achieved via cross-checking with other data sources and invoking a range of quality assurance techniques such as record linkage and case-audit trails.

Over time, the register will enable accurate descriptors of the incidence of insulin dependent diabetes mellitus, and allow researchers access to a rich database to aid prevention and treatment of diabetes.

### **Injury surveillance**

Injury surveillance is the responsibility of the AIHW National Injury Surveillance Unit (NISU). From 1 July 1997 this Collaborating Unit became a program of the Research Centre for Injury Studies at the Flinders University of South Australia.

In previous years NISU was an externally located unit of the AIHW, and NISU's staff were employed by AIHW. Under the new arrangements with Flinders University the Institute funds the University to operate NISU as an identifiable activity of the Research Centre for Injury Studies, which is part of the School of Medicine. Flinders University is now responsible for staffing the NISU program. The agreement runs for 5 years and is renewable subject to favourable review in the fourth year. AIHW appropriation funds are supplemented by a grant from DHFS.

The 'new' NISU was officially launched at the University by Dr Andrew Southcott MP, Member for Boothby, on 3 October 1997.

NISU continues to undertake public health surveillance of injury at the national level to support injury prevention and control. It engages in all aspects of surveillance, and places special emphasis on analysis and dissemination of information, and on developing injury surveillance methods. The Unit also provides a national contact point for liaison and information-sharing on injury control, produces information resources and encourages training and research.

As the main national source of injury statistics and related information NISU holds national data sets relating to injury deaths and hospitalisations, and spinal cord injury admissions. These data provide the foundation for the routine statistical publications of the Unit. During the year the Unit produced injury surveillance data reports, four issues of the *Australian Injury Prevention Bulletin*, and specialised reports, including two issues of the *Injury Issues Monitor*. Input to the National Health Priority Areas biennial Injury report was provided as well as to *Australia's Health 1998*. Most Unit publications were published on the Internet as well as on paper.

The Unit also contributed to many other reports and publications, both external to the AIHW and internal, and

answered numerous information requests from a variety of sources. NISU personnel were invited to present injury data and related information and advice through conferences, seminars, and advisory bodies.

The set of data items and classifications for injury surveillance published as the *National Data Standards for Injury Surveillance* was revised during the year in consultation with injury surveillance and prevention personnel throughout Australia. Version 2.1 was published.

Operation of the national register of spinal cord injury (SCI) continued, in cooperation with all specialist spinal units in Australia. The 1995–96 version of the annual SCI report was released in October 1997 and the 1996–97 report in April 1998. A paper covering the statistical profile of SCI was presented as the lead paper at the International Medical Society of Paraplegia (IMSOP) (Australian Division) Conference in Adelaide in February 1998 and another paper was presented at the Third National Injury Conference in Melbourne, also in February. A related research paper on SCI from road crashes was also presented at the IMSOP conference.

Development of injury surveillance methods and data sources continued. The main aspects of this were:

- continuation of a project to investigate the practicability of obtaining quantitative national estimates of injury visits to emergency departments;
- continued participation in the development of a national coronial information system;
- assessment of the needs and opportunities for improved surveillance of burns and brain injury;
- contribution to a draft revised classification of external cause of injury; and
- assessment of the validity and reliability of certain injury indicators based on hospital separations data.

NISU continued to participate in and support a project to develop improved data on injury deaths, in collaboration with State and Territory coroners.

### **Other injury statistics projects**

A project was undertaken by NISU to help ensure that Spinal Cord Injury Register data are put to effective use. The size and dynamics of the spinal injured population are poorly defined, and have implications including service requirements and case costs. In a step towards clarifying these matters, linkage of SCI register data with the National Death Index was completed during the year to determine survival rates and SCI prevalence.

NISU published *Study of Injury in Five Cape York Communities* during the year. The report attracted

favourable comment, and projects in response to issues raised in the report are now in progress.

Flinders Institute of Public Policy and Management completed an annotated bibliography of literature relating to the evaluation of injury prevention strategies under an agreement with the Research Centre. A seminar based on the report was presented at the Third National Injury Conference in Melbourne in February 1998. Comments have been invited on the document, and a revised version will be published when these have been consolidated.

## **Institutional health**

### **Australian hospital statistics**

*Australian Hospital Statistics 1996-97* was published within a year of the data reference period, as for 1995-96, and is now the routine annual summary report of the activities and resources of Australian hospitals. The report included expanded and improved analyses, for example on hospitalisations associated with the five National Health Priority Areas. It also continued its dual focus on diagnosis and procedure information reported using the ICD-9-CM classification, and on the Australian National Diagnosis Related Group classification. Extended tables of data were made available on the Internet.

Improvements to the National Hospital Morbidity Database and dissemination of national hospital morbidity statistics continued. For the first time, the Database incorporated data from all public psychiatric hospitals in Australia in addition to the data from other hospitals that had previously been included. Following resolution in 1996-97 of previous problems with timeliness, an increased emphasis was placed on improving data quality. This was accomplished through changed practices at the Institute and improved communication with data providers in State and Territory health authorities.

The Australian Hospital Statistics Advisory Committee is being established, with the endorsement of NHIMG. This group includes representatives of data providers and other external stakeholders, and will help to develop the annual national hospital statistics report to meet the needs of data users more closely.

DHFS has discontinued its *Australian Casemix Report on Hospital Activity*, leaving *Australian Hospital Statistics* as the single hard copy means of routine dissemination of national hospital morbidity data. The Institute and DHFS have agreed to work in a coordinated manner in the compilation of their future national hospital morbidity databases, to ensure that they are as equivalent as possible. It is expected that this will also reduce duplication of the effort required of data providers.

The Institute participated in the National Committee for Implementation of ICD-10-AM in Australian Hospitals, the

Impact Assessment Sub-Committee and the ICD-9-CM/ICD-10-AM dual coding study. The staggered implementation of the new classification, by four jurisdictions in 1998 and the remaining four in 1999, will mean that the Institute will need to map ICD-9-CM data to ICD-10-AM for the affected reference year.

The 1995–96 hospital morbidity data were used for an analysis of adverse events in hospitals. The results were presented at the Australian Medical Association's National Summit on Quality and Efficiency in Medicine in October 1997. The study indicated some areas for improvement in the data for this purpose, but the results were useful in indicating the risk of adverse events in Australian hospitals (4–5% of admissions associated with adverse events) in the context of the wide variety of information available from the collection.

A streamlined system for ad hoc requests for data has been established. The service is now more responsive to the wide range of requestors and data have been provided in a more timely and accurate manner.

### **Waiting times for elective surgery**

Final data for 1995–96 waiting times were collected from the States and Territories and a database prepared. A national summary was published in *Australia's Health 1998*. Data were also collected for 1996–97 in conjunction with data provided for the National Hospital Morbidity Database. The waiting times data collection is still hampered by inconsistent data definitions and collection practices among the States and Territories.

### **Public hospital performance**

The annual report of hospital establishments data released in *Australian Hospital Statistics 1996–97* included data on hospital expenditure, resources and activity. In addition, information on hospital performance indicators, which integrates data from both establishments and morbidity databases, was included for the first time in the 1996–97 publication. The National Health Ministers' Benchmarking Working Group originally developed these indicators, which in previous reference years have been published by the Working Group and in the Council of Australian Governments (COAG) *Report on Government Services*. The Institute has developed the hospital 'peer groups' classification comprising hospitals that are similar in size and complexity of service delivery.

### **Perinatal outcome in hospitals with neonatal intensive care units**

The NPSU monitors outcomes related to perinatal health services. The Australian and New Zealand Neonatal Network was established in 1994 to improve the care of

high-risk newborn infants and their families through collaborative audit and research. The pharmaceutical company Abbott Australasia Pty Ltd funds this project.

### **Institutional health service collection developments**

The Institute convened the National Health Data Committee's Organisational Units Working Group. This group is investigating the feasibility of reporting health service data against service types within the range of the establishment types that are currently used in the National Public Hospitals Establishments Database and elsewhere. Recommendations will be forwarded to NHIMG for endorsement. The outcomes from the work program of this group will ensure data reported are comparable despite different administrative arrangements.

The development of links between collections will be a continuing theme for health services statistics. At present the hospital establishments data are linked to the patient morbidity data, and this is an essential element in the hospital performance analysis such as the cost per casemix-adjusted separation. Consideration is currently being given to the links between the hospital establishments data and the institutional mental health data to be gathered under the National Minimum Data Set (NMDS) for Institutional Mental Health Services, for which 1997-98 is the initial year of implementation. The Institute will continue to work toward developing consistency and sustainability of a broad range of health services collections.

## **Community health**

### **National Survey of Mental Health Services**

The Institute conducted the fifth annual cycle of the National Survey of Mental Health Services, for the 1996-97 reporting period, in consultation with the National Mental Health Information Strategy Committee. The survey includes indicators for monitoring the progress of service reforms under the National Mental Health Plan. An important aspect of the Plan is to assess the closure of the specialised psychiatric hospital services and the increased delivery of services in the community. Information compiled from the survey was released to the Commonwealth in June and will be published in DHFS's annual *National Mental Health Report*.

### **National Minimum Data Set for Mental Health Care**

The Institute undertook the development of a NMDS for community mental health care during 1997. Development of data collection on community mental health will be a feature of the second National Mental Health Strategy (1998-2002) recently endorsed by Health Ministers.

### **Scoping Study of Older People and Mental Health**

The Scoping Study of Older People and Mental Health examines how health care delivery in the residential and community care systems for the aged can be improved in order to:

- meet the accommodation, care and treatment needs of older people who have complex mental health disorders; and
- provide support for their carers.

The Institute commenced work in October 1997 on developing the data collection component of the study. The Institute is investigating available data sources and will make recommendations for data development in support of information required for policy development, service planning and improvements in the quality of care for older people with complex mental health disorders.

Work in the first stage of the study has identified relevant data elements across a broad range of collections at the Institute and elsewhere that are available for analyses of mental health care delivery for older people. Reporting has included recommendations on the validity of comparing (and, where feasible, linking) collections, and recommendations for data development. The second stage of the study, to be completed in the latter half of 1998, will provide an analysis of available data on service delivery and utilisation in the mental health care of the target group.

The study has been funded under an MOU with the Office for the Aged, DHFS, as part of the management of the National Action Plan for Dementia Care under the auspices of the AHMAC National Mental Health Working Group.

### **National Minimum Data Set for Alcohol and Other Drug Treatment Services**

The Institute is managing the development of a National Minimum Data Set (NMDS) for alcohol and other drug treatment services in collaboration with the National Drug and Alcohol Research Centre, University of New South Wales. The NMDS will collect information annually across all jurisdictions on service delivery resources, service activity and on the clients of treatment services. The data will be used by governments, health professionals and researchers to monitor and evaluate service provision, assist in the development of appropriate service mix and to identify broad patterns of service use by clients.

An NMDS project outline was submitted to the National Drug Strategy Intergovernmental Committee in March 1998. The work will lead to recommendations to the National Health Data Committee and NHIMG for endorsement of data definitions and agreement on a

collection methodology by the end of the 1998 calendar year.

### **General practice—the BEACH program**

The AIHW and the Family Medicine Research Unit at the University of Sydney have established a new AIHW Collaborating Unit—the General Practice Statistics and Classification Unit (GPSCU). The primary responsibility of the GPSCU is to fill a national void in information about the activities of general practice. To this end the Unit is conducting a program of continuous data collection in general practice through a rolling nationwide survey of randomly selected general practitioners. The program is called BEACH (Bettering the Evaluation and Care of Health).

The Institute's aims in establishing this collection are to:

- establish an ongoing database of GP–patient encounter information;
- provide a reliable and valid data collection process for general practice that is responsive to the changing needs of information users;
- establish a process that will assist in determining the needs of GPs and their patients; and
- assess patient-based risk factors and aspects of health, and the relationship these factors have with health service activity.

As well, the survey will provide detailed data on the prescribing practices of GPs and the tests they order.

The BEACH program is being supported by a consortium of government bodies and the pharmaceutical industry. Current members of the consortium are DHFS, Astra Pharmaceuticals, the National Occupational Health and Safety Commission, Roche Products and the Department of Veterans' Affairs.

GP recruitment to the BEACH survey began in March 1998, with the first week of recording in the week beginning 30 March 1998. By 30 June, GP recruitment and data collection were well established.

While the first analysis of a full year's data will not be available until mid-1999, interim reports will be available late in 1998.

### **Longitudinal Study of Dentists Practice Activity**

This is a five-yearly longitudinal study by the DSRU. The first wave was collected in 1983–84, the second wave in 1988–89 and the third wave in 1993–94. The results from this study have provided information on dental practice and the dental labour force. Recent analysis has focused on trends in service provision. Two scientific papers were published in 1997–98 and a further paper submitted for publication.

As a preliminary activity to the fourth wave, a separate Study of Dental Services, funded by the Australian Dental Research Fund, was conducted during 1997–98. This study investigated factors influencing service provision and collected data on dentist, practice and patient characteristics, as well as provision of services.

Preparation is under way for the fourth wave of data collection in 1998. Preparation has included the testing of numerous additions to the data collected, especially in the areas of patient characteristics and dentists' clinical decision making. The fourth wave data collection is being funded by NHMRC.

#### **Evaluation of adult access to dental care**

The objective of this work, undertaken by DSRU, is to examine social inequality in self-reported oral health and access to services in Australia. It has involved a series of analyses of access to dental care among special target groups—migrants, rural and remote dwellers, and Indigenous people—using the combined data available from the National Dental Telephone Interview Surveys 1994 through to 1996. This has resulted in three reports currently under review for publication. DSRU is planning for the 1999 National Dental Telephone Interview Survey, which will update data on access to dental care.

#### **Evaluation of public dental services**

Two contracts were awarded to the DSRU to evaluate aspects of public dental services. The Unit is evaluating the impact of the introduction of co-payments in public dental services for the Victorian Department of Human Services. This work will continue through to 2000. The Unit also completed a school dental service review and analysis of service options for the Health Department of Western Australia in early 1998.

## **Health resources**

### **Health labour force**

The AIHW publishes statistics and labour force analyses for medical, nursing, pharmacy, and dental labour forces. New tri-annual collections during 1998 were organised for the occupational therapy and physiotherapy professions.

The Institute's Director is a member of the Australian Medical Workforce Advisory Committee (AMWAC) and the Institute is funded by AHMAC to provide technical support to the committee. In 1997–98 the Institute and AMWAC jointly published *Profile of New Zealand Medical Graduates Practising in Australia* and *Characteristics of Students Entering Australian Medical Schools 1989 to 1997*. The Institute also prepared data for AMWAC to support working parties examining future workforce requirements for paediatric medicine, intensive care, radiation oncology, cardiology, orthopaedic surgery and dermatology.

The national dental labour force data collection has proceeded for dental practitioners, dental hygienists and dental therapists. Reports on dental practitioners, dental hygienists and dental therapists were published in 1997-98.

Pilot testing of an international collaborative dental hygiene study was conducted in the first quarter of 1998. This study is being conducted in association with the Karolinska Institute in Stockholm and involves the collection of social characteristics, health factors and practice activities of dental hygienists in Australia and Sweden. The main collection is being conducted during 1998.

### **Health expenditure**

There were two releases of data on health services expenditure during the year. The first, covering the period between 1989-90 and 1995-96 was released in July 1997 and the second, which provided detailed expenditure data for 1995-96 and estimates for 1996-97, was released in April 1998.

In March 1998 the Institute and the National Centre for Epidemiology and Population Health (NCEPH) completed a joint project aimed at collecting and analysing data on the utilisation and cost of health services provided to Indigenous Australians. The report, *Expenditures on Health Services for Aboriginal and Torres Strait Islander People*, provides the most comprehensive and detailed picture of expenditure in this area. Overall, \$1.08 is spent on health services for an Indigenous person for each \$1.00 spent on a non-Indigenous person.

Work continued during 1997-98 on developing comparable information on health services expenditure by State and on the development of a system of satellite accounts for health and welfare to supplement the current national account estimates.

A new project commenced during the year will develop systems to enable the collection and analysis of data on public health services expenditure. As well as providing a comprehensive picture of expenditure, this project aims to identify any data inadequacies and recommend on ways to collect nationally consistent data.

### **Disease costing**

The Disease Costs and Impact Study has estimated the direct costs of health services in 1993-94 attributable to a comprehensive range of diseases and injury. The methodology used for these costings has been revised and extended to include health sectors accounting for over 90% of recurrent health expenditure. The revised methodology has also been used to carry out a comprehensive accounting of disease costs across all chapters of the WHO

ICD-9 Classification of Diseases for the year 1993–94. These results and the methodology employed will be published in two AIHW reports in early 1998–99.

## **Health information infrastructure and services**

### **Classification in health**

Classification and coding in health in Australia is the responsibility of the National Centre for Classification in Health (NCCH) which is based at the University of Sydney, with other offices in Brisbane and Melbourne (the latter being new for 1997–98). AIHW has a collaborative relationship with NCCH and contributes to the funding of the NCCH Brisbane office.

The Centre as a whole had a productive year with the publication of the Australian Modification of the WHO International Classification of Diseases version 10 (ICD-10-AM). The five volume set, launched in April 1998, contains, in addition to the modification of ICD-10, a new Australian procedure classification based on the Medicare Benefits Schedule (MBS-Extended or MBS-E) and the Australian Coding Standards. The new classification will be introduced in hospitals in New South Wales, Victoria, Northern Territory and the Australian Capital Territory in July 1998 and the remaining States in July 1999. New Zealand will adopt the classification in late 1998 – early 1999. The ABS plans to use the WHO ICD-10 for cause of death classification from January 1999.

In producing ICD-10-AM, staff at NCCH sites at the University of Sydney and Queensland University of Technology have worked closely with the AIHW in its role as a WHO Collaborating Centre for Classification of Diseases. At the meeting of Heads of Collaborating Centres in Copenhagen in October 1997 a number of Australian recommendations were accepted by WHO for the first update of ICD-10 for international usage. Mechanisms for updating ICD-10 for morbidity and mortality reporting purposes were agreed at that meeting and Australian representatives nominated.

Another initiative has been the development of the Quality Division of NCCH at the School of Public Health, La Trobe University. This Division was launched in January 1998 with the release of the Australian Coding Benchmark Audit, an audit method developed by NCCH to allow hospitals to compare coding audit results and contribute to Australian data for benchmarking purposes.

The Brisbane-based arm of the NCCH located at the Queensland University of Technology deals primarily with mortality coding issues, relationships with the ABS and training in health classification systems in the countries of the Western Pacific.

A principal responsibility for the year has been to educate users of ICD-10 (ICD-10-AM). The Unit is working with the

ABS Cause of Death National Project Centre on an education strategy, which includes programs for trainers, clinical coders, clinicians, and other users of the classifications such as epidemiologists and administrators. In addition, NCCH Brisbane has been involved in a series of ICD-10 'train the trainer' sessions for coders in South East Asia, conducted under contract to WHO. A number of WHO Fellows have also been placed at NCCH Brisbane to learn about ICD-10 and related health information systems in Australia.

In late 1997 NCCH Brisbane was funded by the South East Asia regional office of WHO to prepare and present a short course aimed at improving the collection, management and use of health data to medical record technicians in the region. Visits to several countries by the project manager to view local health information systems, and visits to NCCH by technical advisers to WHO, have occurred. The first 'train the trainer' session, attended by 10 students, was held in June 1998. It is hoped that the course will eventually be self-sustaining in the Asian countries in which it is piloted.

NCCH Brisbane has supervised a number of student research projects in the area of mortality data quality and plans further work in this area. In particular, an analysis is under way on the effects of the introduction by the ABS of automated cause of death coding software from the US National Centre for Health Statistics.

### **National health record linkage**

In late 1996 AHMAC endorsed a proposal for the Institute to adopt a leading national role in health record linkage for statistical and research purposes. In implementing this mandate the Institute is planning a collaborative project with the University of Western Australia and the Health Department of WA using the WA Linked Database as the source of linkage data. The project will also require access to Medicare and Pharmaceutical Benefits data from the Health Insurance Commission in a form suitable for record linkage.

### **Population database**

An AIHW population database was established in 1997-98, to be a repository for Australian population estimates and projections. All Institute staff have access to this database and demographic advice, to ensure use of uniform population datasets in health- and welfare-related analyses.

### **International collaborations**

The Institute is responsible for supplying Australian health data and health-related data to a number of international organisations, including the Organisation for Economic

Co-operation and Development (OECD) and WHO. Australian statistics for indicators in the OECD health database were updated during 1997-98. Health statistics compiled by the OECD on its member countries were also made available for analysis within the Institute, and to outside researchers and policy makers.

### **Information services to Public Health Division, DHFS**

An AIHW outposted unit (Public Health Data and Information Services Unit) was established in the Public Health Division of DHFS in July 1997. The Unit provides a range of statistical and information support services to the Division. Achievements during the year included:

- establishment of a 'help-desk' access point for assistance with public health data and information services, including planning, analysis and reporting of public health and related information activities;
- enhanced coordination of information activities within and outside the Public Health Division, including liaison with subject areas of the Institute;
- conceptual development of an information management framework for the Public Health Division;
- commencement of the 1998 National Drug Strategy Household Survey, being managed by the Institute. Survey findings will be reported during 1998-99.

Key aspects of the 1998 National Drug Strategy Household Survey include:

- The survey is being conducted under the auspices of the AIHW Ethics Committee.
- The Unit is managing the contract with Roy Morgan Research to conduct the fieldwork for the survey.
- The Institute is to be the repository for the identifiable unit record file resulting from the survey, and will be publishing key reports.
- A non-identifiable, public-use dataset will be available through the Social Science Data Archives at the ANU. This dataset will have fields modified to ensure confidentiality of the respondents.

## **Evaluation**

Release of *Australia's Health 1998* on 25 June, and the accompanying Australia's Health Conference provided a good opportunity for feedback and assessment of the Institute's health statistics work. A broad-based attendance at the conference and keen media interest and reporting throughout the day and beyond gave an indication that the report was well received. Planning for *Australia's Health 2000* is to commence soon and will draw on this valuable feedback.

Timeliness of release of regular health statistics outputs continued to be a focus of attention in 1997-98. Although late supply of data continues to put pressure on deadlines,

the Institute has for the second time released *Australian Hospital Statistics* within 12 months of the end of the reference year. With reporting on hospitals now up to date the Institute has reintroduced performance indicator reporting in its publication. In recent years performance indicators have appeared in reports by the National Health Ministers' Benchmarking Reporting Group or the COAG *Report on Government Services*. The range of performance indicator material remains deficient, however. As noted in the COAG report for 1998, indicators of quality of care provided by hospitals are lacking.

The report *Cancer in Australia 1991-1994*, ready at end year for Ministerial release on 2 July, has improved timeliness of important cancer monitoring information but has not yet reached the target of release within 36 months of the reference period.

The National Death Index improved in timeliness, to be within two months of the reference period for all States and Territories. New approaches were developed to deal with name variations, via the establishment of an alternative names database. Progress with data linkage, a new project for AHMAC, was slowed by the need to commit resources to preparation for commencement of a new Diabetes Register on 1 September 1998

An MOU for provision of public health information services, signed in April 1997 with the Public Health Division of DHFS, stretched the Health Division's resources considerably during 1997-98. The task of recruiting the skilled staff needed for monitoring in a range of fields relevant to public health and for new data development was more difficult than anticipated. By the end of the year work on all activities covered by the MOU was well established. However, the Department decided to withdraw one activity from the arrangement, national nutrition monitoring, advising the Institute that it would proceed to contract the work elsewhere. Indications from the experience of implementing the public health information services are that the need to attract suitable staff will be a constraint on the Institute's capacity for growth.

An agency-wide MOU, signed with DHFS on 1 July 1997, provides a framework for simplified agreements for outsourcing specific information activities from the Department and simplified contract administration. However, not all agreements that have been negotiated subsequent to the signing of the MOU have been specified in terms of the simplified project schedule that it envisaged. Payment arrangements have likewise continued to resemble a system associated with separate contracts. Greater security of contracting for the life of the agreement (3 years) has, however, provided a tangible benefit to the Institute.

For its monitoring of several aspects of population health the Institute perceives the need for national biomedical risk factor information. A workshop conducted during the year has identified priorities and some issues. The Institute will continue to give priority to development of its proposal to conduct a survey and in particular to seek a funding source.

NPSU maintained its active collaboration with State and Territory perinatal data groups and with all IVF units and neonatal intensive care units in Australia and New Zealand. Other opportunities for collaboration with professional and hospital groups are being pursued in NPSU's new environment. The reports on Australia's mothers and babies and assisted conception have enabled considerable publicity of issues concerning reproductive and perinatal health services and outcomes.

NPSU's move to the University of New South Wales has required extensive changes to the Unit's computing system and programming, eventually resulting in more efficient and timely production of reports. The appointment of Dr Elizabeth Sullivan to the new position of Deputy Director in May 1998 will enhance the Unit's capability to extend the range of national reproductive and perinatal health data systems.

The first year of operation of NISU as a program of the Research Centre for Injury Studies was generally satisfactory. Adaptation to university administrative systems took time and effort, but was achieved successfully. The chief source of problems was the difficulty experienced in filling some of the positions in the new Unit. Despite energetic recruitment efforts, one key position was vacant for the whole year and another for 10 months of the year. The very small pool of people with appropriate qualifications and experience appears to be the main reason for the difficulty. However, with strengthened teamwork amongst the available staff, the list of delivered outputs did not vary substantially from the plan.

All planned injury surveillance reports were produced, though later than planned due mainly to the reduced complement of staff. Dissemination of injury information on paper and through the Internet continued as planned. Slippage occurred in several other projects. Most were complete or almost complete at the end of the year, though not yet published. The project concerned with the assessment of needs and opportunities for improved surveillance of brain injury made less progress than expected, which reflects the nature of the brain injury field, and will need to be continued next year at a lower intensity to realise the planned deliverable.

The work and functioning of the DSRU were formally evaluated as part of an external review conducted during 1997. The review panel congratulated the Unit on its

excellent record in the development and production of dental statistics. The panel noted that the Unit had produced a high quality and valuable range of published work on dental statistics and was helpful in providing expert advice to external requests.

The external review recommended that consideration be given to the establishment of a Dental Research Centre with the Unit operating within it so that a wider range of oral epidemiological activities could be pursued. The proposed National Adult Dental Survey 1999, the first of a rolling series of national oral epidemiological studies is the most prominent of these activities. Considerable emphasis is also being placed on adult oral health and access to dental care in an effort to provide information relevant to policy development in dental services to disadvantaged Australians.

Within existing activities there is a need to improve the quality of child dental health statistics and the contribution of these statistics to the evaluation of outcomes of school dental services. Greater collaboration with the Health Labour Force Unit of the AIHW is required in the collection and analysis of dental labour force data. DSRU will place greater emphasis on the range of dental occupational groups covered, and on research on supply and requirements within the dental labour force.