



access

Seasons Greetings

Health Expenditure in Australia 2002–03

In 2002–03, health expenditure in Australia reached \$72.2 billion, or \$3,652 per person. This represented an 8.5% increase on 2001–02, or a rise of \$257 per person. As in previous years, the main drivers of increasing expenditure were hospitals, pharmaceuticals, and medical and dental services.

Among the major components of health expenditure, only pharmaceuticals has grown faster than health overall. Real expenditure on pharmaceuticals grew rapidly from 1997–98 to 2002–03 (averaging 11.6% a year, compared with 5.3% a year for total recurrent spending on health).

Most spending in health in 2002–03 was funded by governments (67.9%), with the Australian Government contributing \$33.4 billion, and state, territory and local governments \$15.6 billion. But the proportion of funding by governments was down somewhat from 68.3% in 2001–02.

Spending on health by Australians from their own pockets in 2002–03 was up by 5.6% in real terms on the previous year. Its real growth averaged 8.3% a year between 1997–98 and 2002–03, well above the growth in health expenditure overall. The largest components of out-of-pocket expenditure are pharmaceuticals (including over-the-counter drugs, vitamins and herbal remedies), dental services and aids and appliances.

Health expenditure was equivalent to 9.5% of gross domestic product (GDP) in 2002–03, and has been rising during the past decade—up from 8.2% in 1992–93 and from 9.3% on 2001–02. Our health-expenditure-to-GDP ratio is above the average for member countries of the Organisation for Economic Co-operation and Development (OECD) (8.4%)—we are well below the United States, about the same as Canada, and somewhat above New Zealand and the United Kingdom.

This information, and many other important statistics on the economics of health, can be found the latest issue of *Health Expenditure Australia*, which was released at the end of September 2004.

Each issue of *Health Expenditure Australia* is the result of a year-long effort by the AIHW's Health and Welfare Expenditure Unit to gather data from a very wide range of sources (such as health departments of the Australian, state, territory and local governments, the Health Insurance Commission, and the Australian Bureau of Statistics). This vast array of data must be assembled into the standard economic accounting framework that underlies the publication.

Recent issues of the publication have introduced some innovations, such as a detailed matrix that shows preliminary estimates for the latest year, broken down by area of expenditure and funding source, together with information about which figures are firm and which could be subject to greater revision. The latest publication also presents estimates of Australian health expenditure in accordance with the statistical framework required for our international reporting to the OECD.

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The proud authors (left to right): Rebecca Bennetts, Richard Webb, Eric Puno and Lindy Ingham.



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Welcome to the final edition of AIHW Access for 2004. During 2004 we welcomed a new Chair to our Board. You can read more about Peter Collins by turning to page 10.

An Agreement was signed on 6 October for the operation of the Institute's newest collaborating unit, the Public Health Information Development Unit (PHIDU), located at the University of Adelaide (see page 5). The Institute and PHIDU will collaborate to:

- collect, collate and analyse statistics relating to public health, and to initiate and undertake associated research studies; and
- promote research in geographical representation of population health data and any other public health research projects agreed by the parties from time to time.

Another new addition to the Institute is the Community Services Integration and Linkage Unit within the Welfare Division. This Unit, headed by Mr Ruel Abello, will be responsible for developing cross-program statistical information aimed at supporting whole-of-government approaches to policy issues. The Business and Information Management Division also created two additional units, the People Unit and the Finance and Commercial Services Unit.

As Institute staff numbers increase we have leased additional space in Trevor Pearcey House, a nearby building—it's a short walk across the car park. Staff of the Functioning and Disability Unit and the National Data Development and Standards Unit moved into the new building in October, and have reported very favourably on their new arrangements.

Earlier this year the Institute successfully replaced all existing PCs and desktop software with more up to date versions. At the same time, almost all servers were replaced with higher performance models.

An on-line searchable catalogue of a selection of available statistical data held by the Institute is now available on the Institute's web site. It will be known as the Catalogue of Holdings of AIHW Data, and will improve the accessibility of Institute data products, whilst continuing to ensure protection and security of our data.

The fully developed METeOR (Metadata Online Registry) including the re-engineered content, will be almost completed by the end of the year.

Some readers may be aware that we are revamping our website (www.aihw.gov.au). As well as providing a fresh new look, our main aim in redeveloping the site is to simplify the navigation process, to allow you, our clients and supporters, to find what you want more easily and more quickly. We hope you will like the new-look site, and, as always, we appreciate your feedback. Thank you to all those Access readers and website visitors who provided comments and suggestions on our current site when we asked you to respond to our products questionnaire. Watch for the new site early in 2005!

Another notable event in 2004 was the annual soccer match against the National Health and Medical Research Council (NHMRC) in mid-October. The game was hosted by the

Institute and played in good spirits, with AIHW running out 2–0 winners on this occasion. Players and spectators from both teams, as well as the referee (yours truly), thoroughly enjoyed the game, and were treated to a well-deserved barbeque lunch and refreshments afterwards.

Looking forward to 2005, we will be welcoming 14 new graduates to our staff in January. The strong response to our graduate advertising campaign and the comments of the graduates have been most gratifying. The AIHW is a great place to work, and it's pleasing to see that view widely shared.

Finally, as 2004 draws to a close, may I extend my best wishes for the upcoming festive season, and may you and your families have a happy, healthy and safe new year.

Richard Madden, Director, AIHW.

Health Expenditure in Australia 2002–03

Continued from page 1

The AIHW's work in this field is guided by the Health Expenditure Advisory Committee (HEAC) which was established in late 2003 and includes representatives of Australian Government agencies (the Department of Health and Ageing, the Department of Veterans' Affairs, the Australian Bureau of Statistics, the Commonwealth Grants Commission and the Private Health Insurance Advisory Council) and each state and territory health department.

Major development projects on which HEAC is providing advice include enhancing our statistics on capital in the Australian health sector and improving the price indexes that we use to analyse health inflation and to estimate constant-price (or volume) estimates. The AIHW's Health and Welfare Expenditure Unit also has responsibility for international reporting of Australian health expenditures (for incorporation into the OECD's multi-country database). Another project on which HEAC is providing advice is implementing the OECD's System of Health Accounts more fully in Australia and adapting them to Australian institutional settings and terminologies.



Richard Webb, Lindy Ingham, Rebecca Bennetts, Eric Puno.

Rental housing assistance for renters aged 65 years and over

In 2001, about 12% of older Australians aged 65 years or over rented in the private rental market or public housing. This project focuses on the rental circumstances of older Australians and identifies issues that are emerging.

It addresses the housing and income profile of older Australians. It also examines the provision of housing assistance in the forms of rental rebates to public housing tenants and private rental assistance through Commonwealth Rent Assistance (CRA) payments. For each form of assistance, the characteristics of recipients and the dollar amount of assistance received are discussed and measured. The impact of CRA on housing affordability and aspects of public housing that improve the wellbeing and social participation of tenants are examined.

The major data sources for the project are the Census of Population and Housing, National Minimum Housing Assistance Data Set, Department of Family and Community Services 2002 Housing Data Set and the 2003 National Social Housing Survey (Public Housing).

Some highlights from the initial work are:

- Over the period 1991 to 2001 the proportion of older people (65 years and over) renting privately increased while the proportion of older people in public housing decreased.

- Older renters on low income face a range of housing-specific issues such as affordability and security of tenure.
- The income distribution shows that households with an older reference person are generally cash poor or on low income compared with younger households.
- In June 2002, over 1 million Centrelink clients were aged 65 years and over; this comprised nearly 32% of total Centrelink clients. For 96% of them, the age pension was the main income source.
- Nearly one in five older Centrelink clients received rental housing assistance, with 142,800 receiving CRA and 88,600 being in public housing at June 2002.
- Both older CRA recipients and older public housing tenants are over-represented in the recipients of the two forms of rental assistance. Older CRA recipients comprise 16% of total CRA recipients; while older public housing tenants represent 28% of total public housing tenants.

For further information, contact David Wilson on (02) 6244 1202 or email david.wilson@aihw.gov.au.

Exciting new features added to METeOR

After many challenges for AIHW staff and the software developers, the METadata Online Registry is now close to its final shape and readiness to be launched. There has been a growing sense of excitement as each new feature is added to the system. Recent additions have included a “shopping basket” that allows users to select data standards and publish them in their own custom-made data dictionary and a tool for tagging standards so that users will automatically receive an email if the standard has changed.

Members of each data working group will be able to access their own workspace on METeOR to develop and review their own data standards in private. These web pages will allow users to create their own data standards online from 2,000 existing components and then submit the assembled product electronically to the AIHW. Help buttons have been added on these pages to assist users with each step and another button even suggests an appropriate name for the standard!

Stay posted for news on METeOR demonstrations and training sessions during 2005!

The National e-Health Transition Authority and the AIHW

In July 2004, Health Ministers approved a proposal by the National Health Information Group and the Australian Health Information Council to establish a new entity that would carry forward important work on health information management and information and communication technologies (IM&ICT). The over-arching goal is to enhance and better exploit the national information base, in order to improve health services and health outcomes for Australians.

This new National e-Health Transition Authority (NEHTA) has responsibility for pursuing the following priority areas – Clinical Data Standards; Patient, Provider and Product Identification Standards; Patient, Provider and Product Directories; the Supply Chain; Consent Models; Secure Messaging and Information Transfer; and Technical Integration Standards.

Dr Ian Reinecke has been appointed Chief Executive Officer of NEHTA. AIHW has been closely involved in work over the past year to establish NEHTA and welcomes the new emphasis on health information.

Although NEHTA's responsibilities cover technical aspects of health information management, it is clear that its work will intersect with data standards activities. AIHW is committed to the 'create once, use often' principle. This means ensuring that data that is needed for both clinical care and for downstream analysis only needs to be captured once, in a form that is appropriate for both purposes.

To ensure expertise is shared, the AIHW Director is a member of the NEHTA Advisory Committee. Dr Ching Choi, as Chair of the Health Data Standards Committee, is also a member.

Improved information across the health sector offers great opportunities to inform patient diagnosis, treatment and care. As well, in time, it will provide a much stronger base for the statistical and analytical work. The AIHW wishes NEHTA well and looks forward to strong collaboration.

New collaborating unit

The AIHW's collaborating network has been extended by the addition of the Public Health Information Development Unit (PHIDU) at the University of Adelaide. PHIDU is the third collaborating unit based in Adelaide along with the Dental Statistics and Research Unit, also at the University of Adelaide, and the National Injury Surveillance Unit, at Flinders University.

PHIDU was established in May 1999 by the Department of Health and Ageing 'to assist in the development of public health data, data systems and indicators'. It also works with the South Australian Department of Health.

PHIDU is committed to the development of public health information infrastructure in Australia, and will work with the AIHW to promote a better understanding of the extent of health inequalities deriving from socioeconomic inequalities. PHIDU aims to present data in ways that are useful to support policy development and strategic planning. PHIDU has a special interest in geographic representation of data. A notable

contribution in this area has been the *Social Health Atlas of Australia* series, a compilation of a wide range of socioeconomic and health indicators that are available at a small-area level.

PHIDU has also published:

- *A Social Health Atlas of Young South Australians* (2 editions)
- *A Social Health Atlas of South Australia* (3 editions)
- *Inequality in South Australia—Volume 1: The Evidence* (South Australia Department of Health).

These and other publications are available online at PHIDU's web site: <<http://www.publichealth.gov.au>>.

PHIDU staff have expertise in demography and statistics, and epidemiology and health survey design and methodologies and mapping techniques.



AIHW Director Richard Madden & Adelaide University Deputy Vice Chancellor Neville Marsh at the signing of the PHIDU MoU

The Functioning and Disability Unit (FDU)

The AIHW's Functioning and Disability Unit (FDU) has certainly travelled a long way since its beginning in 1992, including a recent World Health Organization meeting in Iceland (see ICF article).

Back then, it was known as the Disability Services Unit and sprang into life when the then Australian Institute of Health expanded to include welfare work and became the AIHW.

As Ros Madden, Head of FDU, says, very little work on disability statistics was being undertaken at that time in Australia.

'We had no national data on disability support services. There were key disability surveys that the Australian Bureau of Statistics carried out, but these were not being used in any significant way, and people were lamenting the lack of data when in fact there was a rich but under-utilised resource.

'For example, when we were approached back then by people who wanted to know how many Australians had an intellectual disability, we didn't feel able to give them the answer until we had worked and consulted on definitions and then done the necessary analysis.'

One of FDU's first priorities was to progress with much-needed disability prevalence and trends work, with results published in *Disability Prevalence and Trends* reports and the biennial *Australia's Welfare*.

In 1993 FDU became involved in the development of the Commonwealth/State Disability Agreement Minimum Data Set collection (now Commonwealth State/Territory Disability Agreement Minimum Data Set or CSTDA MDS).

The CSTDA MDS continues to evolve, with the latest *Disability Support Services 2002-03* publication moving away from single-day 'snapshot' data to reporting on a full six months worth of data. The report also contains new information on carers of people accessing CSTDA services.

Now, in 2004, FDU is national custodian of two other major data sets in addition to the CSTDA MDS—the Alcohol and Other Drug Treatment Services National Minimum Data Set (AODTS NMDS) and the very new Medical Indemnity National Collection (MINC).

'The AODTS NMDS is a very important national collection', Ros says, 'as it gives the nation and senior policy makers information useful for monitoring and evaluating key objectives of the National Drug Strategy. It provides information on the demographics of clients who use these services, the treatments they receive and the agencies that provide the services'.

The idea of developing MINC came about as a consequence of a Ministerial Summit on Medical Indemnity in 2002, where the possibility of a national data collection on medical indemnity was first broached. Responsibility for coordinating its establishment was handed to the AIHW, in partnership with a national group from all health departments.

MINC provides information on medical indemnity claims against the public sector which are handled by state authorities. The first report is now complete and due for public release in December.

FDU is currently in discussions with the Australian Prudential Regulation Authority and the Department of Health and Ageing so that in future a full national report on medical indemnity negligence claims across public and private sectors can be produced.

FDU staff

FDU staff have an interesting and impressive array of qualifications. Undergraduate and post-graduate qualifications range over diverse fields including science, physiotherapy, statistics, psychology, demography, genetics, biological anthropology, numerical analysis and international health.

Ros Madden was appointed inaugural head of the then Disability Services Unit at the Australian Institute of Health and Welfare in late 1992. To this position she brought her experience in research, statistics and data development in a range of social policy areas—principally in the government sector, but also in the non-government sector and as a consultant. Ros has lived and worked in London, Sydney, Darwin and Canberra.

Xingyan Wen joined the Institute in 1993. Wen is the Unit's senior analyst and has, among many other things, most recently been focusing on the series of reports on prevalence of disability in Australia, and the 2002 study on unmet need for disability services. Wen enjoys watching movies with his family and singing Chinese folk songs with friends.

The International Classification of Functioning, Disability and Health (ICF)

People's health is increasingly conceptualised in terms of their quality of life, what activities they can do, in what areas of life they are able to participate as they wish, and what long-term supports they need for community life.

'Disability and functioning is now recognised as a multi-dimensional experience for the person involved, felt at the physical and social level', says Ros Madden of FDU, 'and it's hugely influenced by the environment around them'.

This thinking is embodied in the work undertaken by AIHW in helping to develop the World Health Organization's International Classification of Functioning Disability and Health (WHO ICF), which provides a common framework and language to support the development of better policies and services to meet the needs of people with a disability.

'With the Institute's role as the Australian Collaborating Centre for the ICF, FDU is constantly involved in providing education and information about the ICF, not only in Australia, but in the Asia-Pacific region', says Ros.

'We are also increasingly focusing on work on ICF applications and implementations, with ICF-based data items present in our disability services and medical

indemnity data collections, and in the recently published *National Community Services Data Dictionary*.'

FDU is pursuing potential applications of the ICF in health information systems, with exploratory work being carried out on functional outcomes modules—summary profiles of people's functioning—which can be used at different points in the health system.

'The recent meeting in Reykjavik of all the WHO Collaborating Centres for the Family of International Classifications worldwide, was an incredibly valuable experience, to present information and stimulate discussion in this area.'

And, says Ros, although quite a distance to travel, forums such as these go a long way to closing the gap on what is happening in other parts of the world in relation to disability and functioning.

'Although our work throughout the Unit is varied and constantly changing, one major role is obvious through all that we do—that is to improve the quality, relevance and consistency of information about functioning and disability through wider use of health information standards such as the ICF.'

Sally Bullock joined the Functioning and Disability Unit as a graduate in early 2003. She is involved in data development work relating to the ICF and is a data analyst for MINC. In her spare time, Sally enjoys running, reading and regular trips to Melbourne.

Phil Anderson originally trained as a population geneticist before becoming a consultant statistician. He started working at AIHW in 1994 and worked in Indigenous health statistics and with the *National Survey of Lead in Children* before joining FDU. Phil is currently the senior analyst for the CSTDA NMDS collection and acts as manager of the CSTDA Data Agency. Outside of work Phil enjoys family life, bushwalking and touch football, as well as being involved in a number of musical projects and community groups.

Carey Sebbens joined the Institute 11 months ago as an administrative support officer working for the Functioning

and Disability Unit. Carey has a background in children's services in both the Australian Capital Territory and New South Wales, and a passion for ensuring equality and inclusiveness for people with a disability in all facets of life. Carey's biggest job in life is being an advocate for her young son who has an intellectual disability.

Louise York joined AIHW in 1995, working for more than two years in the area of child care and child welfare statistics. Since joining the Functioning and Disability Unit in 1997, Louise has most recently worked on the *Children with Disabilities in Australia* report, as coordinator for the AODTS NMDS and on a project to review national data collections relating to coexisting substance use and mental health disorders. Louise devotes her spare time to her young son, family and friends.



FDU staff, past, present and future(?) (Left to right): Sally Bullock, Zhenfeng Li, Ros Madden, Phil Anderson, Carey Sebbens, Tim Beard, Nicola Fortune (and 2 week old Rita), Louise York, Catherine Sykes (kneeling), Emily Richardson, Chrysanthe Psychogios, Samantha Bricknell and Xingyan Wen

Tim Beard has been working in the Functioning and Disability Unit since early 2001, when he joined AIHW as a graduate. Tim has worked on a variety of projects within the Unit—the major one being the disability support services collection (CSTDA NMDS). Tim's main duties with the project include data analysis, report writing, and liaising with various jurisdictional representatives. Outside of work Tim enjoys running, rugby league, trivia and spending time with his young family.

Catherine Sykes joined AIHW in 1998 and worked on the development of the WHO ICF. She is currently working on data development in the field of disability as well as contributing to the Institute's work as the WHO Collaborating Centre for the Family of International Classifications in Australia. Catherine has a keen interest in the arts and is a volunteer guide at the National Gallery.

Samantha Bricknell came to AIHW just over three years ago after fulfilling a long-held ambition to study the ecology of primates in some exotic location (in this case, gibbons in central Borneo). Her work card for the next 12 months includes managing MINC, completing reports on children with disabilities in Australia, and the prevalence of incontinence, as well as revisiting indicators of Australia's welfare.

Zhenfeng Li has been working as a data analyst in FDU for the past year. He is analysing disability and its relationship to health conditions and other factors, and assisting with the CSTDA NMDS. Zhenfeng arrived in Australia after a year working in Italy and enjoys Canberra with his family.

Chrysanthe Psychogios has been with FDU since 1999. During this time, she has been involved with a variety of data collections, including the National Information Management System for open employment services for people with disabilities, the CSTDA NMDS and its redevelopment, and MINC. Most recently, Chrysanthe has been working with Louise York on the AODTS NMDS. Chrysanthe coaches softball in her spare time.

the drivingforce

National Community Services Information Management Group

The National Community Services Information Management Group (NCSIMG) held its first meeting (in August 2004) under the leadership of Ms Linda Apelt. Linda, who as Director-General of the Queensland Department of Communities and Disability Services Queensland, is a member of the Community Services Ministers' Advisory Council (CSMAC) and was chosen by that group to Chair the NCSIMG. Linda has been a member of the AIHW Board since 1999.

The work program of the NCSIMG has been driven by the CSMAC-endorsed National Community Services Information Development Plan 1999. Key priorities in that Plan have been acted upon. NCSIMG, at its December 2004 meeting, will be developing its next strategic plan. Commonwealth, state and territory government agencies and national groups

in the community services and disability services sectors have been invited to send their views regarding national information needs to inform the preparation of the strategic plan. The work plans of the NCSIMG data working groups, as well as the work plans of all other groups covered by the NCSIA, will be taken into account in that exercise.

The strategic plan, subject to CSMAC endorsement, will be used to guide the future NCSIMG work program.

For further information on NCSIMG or its strategic plan, please contact Margaret Fisher on email margaret.fisher@aihw.gov.au.

Statistical Information Management Committee

The Statistical Information Management Committee (SIMC), under the leadership of the Chair, Dr Ric Marshall, held a planning day on 25 August 2004. The planning day developed the SIMC work program for 2004-05 and 2005-06 and formulated the SIMC bids for project funding from the Australian Health Ministers' Advisory Committee (AHMAC) 2005-06 cost-shared budget. Dr Penny Gregory acted as facilitator for the planning day.

The SIMC took as its starting point the National Health Information Development Priorities (NHIDP) developed by its predecessor, the National Health Information Management Group, in 2002. A number of the priority areas in the NHIDP were identified as now being the responsibility of committees advising the National Health Information Group (NHIG) on specific aspects of health, such as the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data and the National Public Health Information Working Group.

The SIMC found it useful to articulate its particular role within the new health information governance arrangements as being the authoritative body for national health statistical information in Australia, a body that AHMAC relies on to ensure that information is nationally consistent and

compliant with NHIG standards. In addition to its specific roles in relation to the development of national statistical information sets, the SIMC also noted that it has a broader role in keeping abreast of, and providing guidance and advice on the statistical implications of new developments in the health system. SIMC also concluded that all AHMAC initiatives which are concerned with the development of statistics on health should come under its auspices.

The SIMC formulated 19 projects to be undertaken during 2004-05 and 2005-06, consistent with its role in national health information. These included the development of a framework for assessing the statistical impact of the electronic health register, development of a national framework for statistical data linkage and development of a national minimum data set for public sector health finance. A number of projects are dependent on funding from the AHMAC 2005-06 cost-shared budget.

For more information please contact the Secretary, Margaret Blood, on (02) 6244 1123 or email margaret.blood@aihw.gov.au.



on the Hon. Peter Collins AM QC

The AIHW's new Board Chair brings 22 years of service in the New South Wales Parliament to his new post, including a term as Minister for Health in the early years of the Greiner Government and, previously, a stint as Shadow Minister for Health.

There was no hesitation on the part of the Hon. Peter Collins AM QC in taking on his latest role, one that will undoubtedly draw on his top-level experience in the health sector—though perhaps not as tough a job as managing the biggest operational health budget in Australia for the largest service provider in the country.

'My time as New South Wales Health Minister was without doubt my biggest professional challenge. Health—and I'm sure Tony Abbott would be the first to agree—is about as tough as it gets because it is literally the life and death portfolio, and if you get it wrong the consequences are quite devastating.'

Peter is delighted that his latest challenge lies with the Institute, an organisation he held in high regard prior to becoming one of its newest recruits.

'The Institute really is the chief information broker when it comes to trends in health and welfare. It has an ability to look over the horizon at emerging issues, to a far greater extent than any other body that I know of.'

'Since my appointment, I've spent a bit of time at the Institute getting to know people, getting to know the key players, hearing what they do and really understanding the passion they have for their work. As an organisation, it's made up of top calibre people and I'm overwhelmed at the depth and breadth of specialised knowledge across the two, often overlapping, fields of health and welfare.'

Still in the early days of his three-year term, Peter has no plans to unsettle what he sees as a smooth-sailing ship.

'It's not for me to come in with a different agenda. My role is not to come in and try to impose some kind of personal stamp on an organisation which appears to be functioning exceptionally well. The crucial thing for me is to get up to speed with what the Institute provides and then to make constructive suggestions on where we might go in the future.'

'I think it needs to be acknowledged that the Institute is still in its infancy, that it's still to most Australians an unknown quantity. But I think that will certainly change with the authoritative information that the Institute provides.'

While he was New South Wales Health Minister, Peter oversaw the complete restructuring of the health department and the largest single capital works program ever seen in that state.

'That program is only just being completed, and included the building of new hospitals and a complete upgrade of several other major hospitals around Sydney and New South Wales.'

'Another area of particular interest for me was Aboriginal health, where I found it necessary to quarantine funds for Aboriginal health so that these were not dissipated in other areas.'

In addition to heading the Health Ministry, Peter held no less than a further five portfolios over the seven years of the Greiner Government, including Attorney-General, Treasurer, Arts, Consumer Affairs and State Development. His roles as Attorney-General and Treasurer exposed him to a number of welfare-related issues.

'As Attorney-General, one of my major undertakings was to implement the report on Aboriginal Deaths in Custody. I also set up major initiatives in the area of juvenile justice.'

Before entering parliament, Peter pursued a number of other career passions in the areas of journalism and law, for which the seeds were sown during his student days at the University of Sydney. After graduating with Arts and Law degrees in 1972, he was awarded an ABC TV traineeship in public affairs television, working on the programs *Four Corners*, *Monday Conference* and *This Day Tonight* over a three-year period.

After leaving the ABC, Peter set up his own communications business, Assignment Pty Ltd, which provided media training advice to clients, a business he kept going when he was admitted to the New South Wales Bar in 1978 and through his three years of practice as barrister-at-law at Edmund Barton Chambers in Sydney. Both roles made way for Peter's election to Parliament in 1981, though he reached his legal ambition of being appointed a Queen's Counsel 10 years later, during his term as New South Wales Attorney-General.

Since retiring from politics in 2003, Peter has certainly not shied away from public life. In addition to his latest role as the Institute's Board Chair, this year he was also appointed to the Cancer Council of New South Wales and took on the position of part-time Fleet Legal Officer of the Royal Australian Navy. He has also been a member of the Australian National Maritime Museum Foundation since 2001.

The health-related interests are obviously no coincidence, and neither are those with an evidently nautical flavour—Peter has been a member of the Naval Reserve for nearly three decades.

He also served for five years as a commando officer in the Army Reserve while at university, during which time he qualified as a military parachutist. Peter maintains close ties with the First Commando Regiment to this day, and has been asked to be editor-in-chief of a book covering the 50-year history of the commandos in Australia.

'I'm working on that now and I would hope to be able to launch that book in 2005. I've remained closely connected with the commando regiment and served as the honorary Colonel from 1995 to 2000, and will remain very closely involved with them writing their history.'

A second book, a wartime biography, is also underway for Peter at the moment, but remains under wraps for now.

Peter was awarded Membership of the Order of Australia in the 2004 Australia Day Honours List for his contribution throughout what has clearly been, and remains, a highly active public life.

When time allows, Peter escapes Sydney, where he lives with his wife Jennine, to the peaceful seclusion of the couple's cottage in country New South Wales, near Bathurst.

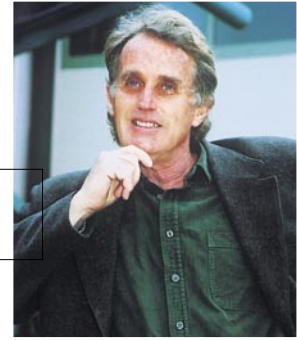
'We have half an acre there among rolling hills and pasture. It's really quite beautiful and a great way to spend any spare time we've got!'



The Hon. Peter Collins chairing his first AIHW Board meeting.



*Dr Paul Magnus,
AIHW Medical Adviser*



Australian hospital statistics: what can they tell us about our health status?

Part 2: some uses to admit?

Recapping: quite a few issues of *Access* ago...

I wrote in Issue 15 of *Access*, part 1 of a two-part article asking whether hospital statistics may help to tell us about Australia's levels of health, or our health status.

The earlier piece explained that there was a wealth of hospital data that could be put to many good uses. It then asked whether one of these uses could be to obtain measures of incidence—the rate at which people are actually getting diseases and health problems each year. Why would this be useful? To give just one example, we may know that the mortality rate of a disease is declining. But if we don't know the incidence rate, we won't know whether the decline is due to better treatment of the disease, whether less people are getting it in the first place, or both.

However, Part 1 also discussed some obstacles to using hospital statistics to measure the population's health status. For example, only some conditions ever get to the attention of hospitals and there can be variations over time and between hospitals in the types and severity of the cases they will admit. What's more, the hospital records are separation based and not patient based. This means that if we want to count the number of people admitted to a hospital for a certain condition over a 12-month period, to avoid double counting we would need extra facts to sort out which separations represented multiple admissions for the same person and which represented only one. And likewise if we wanted to pick out 'new events' or 'first events' so we could measure the incidence of some disorders, we would need even more facts.

So I suggested we explore the following questions in Part 2:

- For which health problems might we use hospital statistics to decide their incidence, and why?
- Can we overcome the obstacles posed by separation-based records in our efforts to obtain counts of people with onset events, or of the new events themselves?
- How are hospital statistics used in other ways to shed light on our overall health status?

Exploring some questions

Let's examine some of these issues. And I stress that this discussion is confined mainly to the question of measuring incidence and doesn't cover the many other potential uses of hospital statistics that people have written about.

The first main challenge is to consider those conditions for which hospital statistics may be useful in deciding their incidence. The second is to avoid double counting the cases if that is at all possible.

The following questions may help:

- Which conditions always involve hospitalisation when they occur?
- Which conditions, when they occur, always involve hospitalisation **or** some other event(s) that we can reliably measure?
- In trying to avoid double counting, how do we take account of multiple admissions and of transfers?

Perhaps the only 'conditions' that always involve hospitalisation when they occur are those that define themselves by operations. These could include:

- amputations
- removal of organs such as a kidney, spleen or uterus
- permanent colostomies and
- appendectomy.

There are many more operations that could be included, such as hip replacements. Except for appendectomy defining appendicitis, none of these operations defines a single, identifiable condition, of course, but there can be a range of reasons for wanting to know the relevant incidence rates.

The other group—involving either hospital or some other reliably measured event—is essentially those events that are always medical emergencies. The person is either taken pretty promptly to hospital or may sadly die before getting

there. The group will include:

- heart attack (acute myocardial infarction: AMI)
- acute pancreatitis (inflammation of the pancreas)
- dissecting aortic aneurysm (leaking of blood from a diseased major artery, the aorta)
- bleeding ectopic pregnancy (foetus growing outside the uterus)
- acute bowel obstructions (many causes) and
- major injuries.

Let me stress that this list is speculative and partial. To present a long and considered list would need extensive consultation with experts from a wide range of medical areas. The aim here was to suggest health problems that may be candidates, either 'conditions' that can only occur in hospital—such as major surgical procedures—or life-threatening emergencies.

But even if this proved to be a good candidate list, can we overcome the problem of double counting for single health 'events'? The Institute has put some effort into this matter.

An example

In its publication *Epidemic of Coronary Heart Disease and its Treatment in Australia* the Institute took the following steps in order to estimate the national incidence of what it called 'major acute coronary events', effectively the incidence of heart attack. First it counted all 'non-fatal' hospital admissions for heart attack. This comprised all cases where a person was discharged alive with a principal diagnosis of AMI. Second it used death certificate information to find all cases recorded as death from coronary heart disease and added these to the non-fatal number. These deaths may have occurred in hospital, more likely after discharge or most likely before reaching hospital during the initial minutes or hours of the attack. Before examining the question of double counting, these non-fatal plus fatal cases are the first cut in estimating cases of heart attack.

Double counting could occur if a case was not a first admission for the AMI but a readmission for follow-up tests, or if a case was transferred to another hospital and therefore appeared twice in records. It was assumed that this first admission for an AMI would last at least three days or, if it didn't, this was because the person died within that time or was transferred to another hospital. The risk of counting follow-up admissions was reduced by excluding cases where the records showed that the stay was less than three days and the person had not been transferred to another hospital.

Using this approach, the Institute arrived at its estimate. But it still wasn't able to rule out another source of double counting: what if an admission were for a recurrent attack and not a first-ever case? A person unlucky enough to have three 'fresh' attacks in the one year, each involving more than two days in hospital, would be indistinguishable from three people each having one attack. In its publication the Institute concluded that 'the definition of incidence used here does not

specifically refer to new cases and so is an overestimate of the true incidence'. In other words, while it is possible to count cases of AMI, it is not possible to count precisely the number of people involved. We can still see that this particular exercise generated very useful information, but at great pains.

Other emergencies, such as pancreatitis and stroke, could all be subject to recurrence too, even if this is more in theory in some cases than others.

Other examples (briefly)

Finally, I raised the question of whether hospital statistics could be used in other ways (meaning besides trying to estimate incidence) which give a perspective on overall health status. One area is that of so-called health differentials—differences in health between different groups, such as Australian born compared with overseas born, the well-off compared with the poorly-off, and so forth. Simply comparing separations for these groups may help reflect their comparative incidence or prevalence of disease, though indirectly. Another area may be comparative disease severity; for example, children who have asthma are much more likely to be admitted to hospital for an attack than adults with asthma. Approaches like these have been used along with others in the Institute's publications.

We still have to be careful, though, which health-related areas we choose for such comparisons. Say we choose separations for AMI, for example, to reflect on the relative incidence of different socioeconomic groups. We are making the reasonable assumption that these groups are equally likely to be hospitalised once they have such an acute life-threatening event, and the more debatable assumption that they will have the same kind of course for the same severity of illness. But if we were thinking of comparing rates of different treatment types between various socioeconomic groups, such as procedures like bypass surgery or angioplasty, we would have to bear in mind that these are discretionary approaches and overseas studies suggest that better-off social groups are more likely to receive them.

Conclusion: keeping open the door

This brief article and its predecessor may seem more like a tour of troubles than a poem of possibilities. In trying to explore the present potential of hospital statistics to measure incidence, the outlook may seem limited and perhaps too hard. But I hope I've identified a few possible candidates and illustrated how we might deal with some of the challenges. If each patient were uniquely identified throughout our health system, the analytical difficulties posed by multiple admissions would be solved along with many others, and the door to good statistics would open further.

Postscript: my thanks again to Jenny Hargreaves for her guidance on this topic.

**we need to
continue
research
with decision
makers to find
better ways
to present our
data and the
implications
of alternative
decisions**



Hospital and residential aged care data: perchance to link...

Rose Karmel, Community Services Intergration and Linkage Unit, AIHW

In 2001–02, for people aged 65 years and over, there were 1 million hospital episodes involving at least an overnight stay. It is estimated that around 11% of these hospital episodes involved people who then entered a residential aged care service, either as an admission directly following the hospital episode, or as a permanent resident returning to their residential care.

The interface between acute hospital care and residential aged care has long been recognised as an important issue in aged care services research. A single national data set containing information on service provision in both sectors is not currently available. However, linking established national data sets for hospital episodes and residential aged care would provide a tool for investigating the relationship between the two sectors. Since neither name nor a common unique person identifier is available on both national data sets, the Institute developed a strategy to match related hospital episodes and residential aged care entries (or re-entries) for individuals using date of birth, sex, region of usual residence, and hospital episode and residential aged care event dates.

The efficacy of this no-name no-identifier strategy has been investigated using statistical theory. In particular, looking at a range of matching rules, Institute analysts considered the likelihood of matching a hospital separation to a residential aged care entry just because a person leaving hospital on a particular day had the same date of birth as someone else entering residential aged care on the same day. Using this approach, we estimated the expected number of chance matches among all achieved matches, thereby allowing us to examine why and under what circumstances such a no-name strategy would be useful.

As expected intuitively, the size of the population within which matching is taking place is a major factor affecting the likelihood of chance matches, with the false match rate increasing linearly with population size. Therefore, by linking within small geographic regions the number of chance matches can be kept to such a level that results for many types of analyses would not be affected by their presence.

A range of linkage rules can be used, with choice affecting the overall reliability of the linkage strategy. Using a two-rule strategy within postcode-based groups—which nationally average fewer than 6,000 people aged over 65—on average results in fewer than two incorrect matches per 1,000 links identified between people leaving hospital and those entering or returning to residential care.

Results show that the AIHW no-name linkage strategy results in acceptably low numbers of false matches when linkage is based on small regions, and so can be used to derive a national data set useful for investigating the hospital/aged care interface. In addition, although the linkage strategy has been developed for linking hospital separations to residential aged care entries, it could be used in any situation where similar data are available; that is, date of birth, sex, region and event dates.

The above discussion considers only those matches which are made by chance. When linking records four outcomes are possible: a true link, no link, a false link (false positive) and a missed link (false negative). Our work suggests that when using the AIHW linkage strategy there are likely to be more missed matches than false matches. As a result, the no-name strategy is recommended for analysis of characteristics of people (including their treatment) moving

between the two types of care, but not as a source of information for the size of client flows. The issue of missed matches cannot be examined using statistical theory, but can only be investigated by comparing results from the final matching strategy with those from a rigorous name-based matching system. A project which compares links achieved through the AIHW linkage strategy with those obtained using a name-based strategy is currently under way in collaboration with the Western Australia Department of Health.

Publications

AIHW (Australian Institute of Health and Welfare) 2003. Interface between hospital and residential aged care: feasibility study on linking hospital morbidity and residential aged care data. AIHW cat. no. AGE 31. Canberra: AIHW.

Karmel R 2004. Linking hospital morbidity and residential aged care data: examining matching due to chance. AIHW cat. no. AGE 40. Canberra: AIHW.

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