

INSIDE

Diabetes: Australian Facts 2002

Health and Welfare Expenditure Unit

On the sin-preventing properties of pilgrimages

Issue 11 September 2002

Minister launches Australia's Health 2002

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The highlight of 2002 for the AIHW (so far) was the launch and release of the flagship report *Australia's Health 2002* by the Minister for Health and Ageing, Senator Kay Patterson.

The event was held on 27 June at Parliament House, Canberra.

The report, tabled in Parliament later that day, is the eighth biennial health report produced by the Institute since its establishment as a Commonwealth statutory authority in 1987.

Senator Patterson described *Australia's Health* as 'the pre-eminent source of health and ageing data in Australia'.

These statistics are vital for everything from supporting policy debates, planning future health interventions, evaluating our investment in health care—even allocating funding to the States and Territories.

'They form a significant and eagerly-awaited resource for everyone with a professional interest in health and ageing issues in Australia.

'I know there is an enormous amount of work that goes into each of these volumes, and I congratulate everyone involved.'

The Minister acknowledged Australia's excellent health record by world standards:

'...the health of most Australians is comparatively very good and continues to improve...we are world leaders in areas like cancer and heart disease, both of which are National Health Priorities...As we enter a new millennium, this report shows that Australians can expect their health and wellbeing to improve even further, since death rates continue to fall, and access to treatment and other services is generally improving'.

Senator Patterson nominated Indigenous health, bowel cancer screening and better awareness of diabetes as key areas for continuing efforts to improve the health of Australians.

The most pressing of these is Indigenous health status, including much higher rates of hospitalisations and lower levels of access to health services than the general population.

I have already visited Indigenous communities in the Northern Territory and Queensland to learn and understand first-hand, and next week I will undertake similar visits in Western Australia.

These visits have impressed upon me the absolute importance of respecting the right of Aboriginal and Torres Strait Islander communities to determine their future, and that one of our primary

Continued on page 8 🕨



Happy *Australia's Health 2002* chapter coordinators gather around Health Minister Kay Patterson and AIHW Health Division Head Ching Choi. *From left*: Ching Choi, Paul Magnus, Paul Jelfs, Senator Patterson, Jenny Hargreaves, Mark Cooper-Stanbury and Stan Bennett. (Not pictured: John Harding) **Contents**

Cover story	1, 8
Minister launches Australia's	
Health 2002	
From the Director	2
Project reports	3
Diabetes: Australian Facts 2002	
World Health Organization Heads of Collaborating Centres for the Family of International Classifications—2002 Meeting	
The driving force	5
National Health Information Management Group	
National Community Services Information Management Group	
National Housing Data Agreement Management Group	
National Indigenous Housing Information Implementation Committee	
Soap Box	10, 19
On the sin-preventing properties of pilgrimages	
Spotlight	12
On Guy Marks	
From the inside	14
Health and Welfare Expenditure Unit	
Trust me	16, 17
Exposing a myth of the heart—Part 2	
Web insite	17
Facts, figures, and what's new	
Perent releases	20



The AIHW celebrated its fifteenth birthday on 1 July. All of us at the Institute believe we have much to celebrate.

The high level of activity in the days leading up to our birthday was testament to our corporate vitality. First, there was the launch, on 27 June, of *Australia's Health 2002*. On this important occasion, our Board Chair, Dr Sandra Hacker, described us in glowing terms, referring to our robust and growing health. The next day saw the release of *Australian Hospital Statistics 2000–01*, and the release of the Disability Unmet Needs study at the conclusion of the Disability and Community Services Ministers' Conference in Melbourne. The cooperation and hard work shown by so many work areas to achieve these and other outcomes resoundingly demonstrate our capacity and commitment.

The Board meeting of 27 June was the last for Ms Lyn Elliott, who has completed three years as staff-elected member of the Board. In responding to Dr Hacker's vote of thanks, Lyn said she wished to thank Board members for the privilege of representing staff and having the opportunity to work with an impressive group of committed people. Ms Justine Boland, who works in the Institute's Health Division in the Cardiovascular Disease, Diabetes and Risk Factor Monitoring Unit, is the incoming staff-elected Board member. I'd like to take this opportunity to extend my own thanks to Lyn, and to warmly welcome Justine in this valuable role.

I am pleased to announce that the new memorandum of understanding between the AIHW and the Department of Veterans' Affairs was signed on 19 August 2002. The MoU extends and strengthens the relationship between the two organisations for a further three years. I look forward to the outcomes of this successful partnership.

Institute representatives were invited to attend the recent Organisation for Economic Co-operation and Development (OECD) International Workshop on Ageing-related Diseases in Paris. Dr Diane Gibson, recently appointed as Head of the Institute's Welfare Division, and Dr Chris Stevenson, our burden of disease expert, joined me in contributing to the workshop's deliberations. One of the key presenters was Dr Lynelle Moon, an Institute Unit Head who is currently working at the OECD on the Ageing-related Diseases project.

As Head of the World Health Organization Collaborating Centre for the Family of International Classifications (WHO-FIC) in Australia, I am delighted that Australia will be hosting the 2002 WHO-FIC meeting. It will be held in Brisbane between 14 and 19 October. We at the Institute are keen to have it hosted on a partnership basis with other organisations whose work will be affected in some way by the decisions of this meeting.

The meeting will be launched at Parliament House in Brisbane at an opening reception sponsored by Queensland Health. Other contributing partners are the Australian Bureau of Statistics (ABS) and the National Centre for Classification in Health (NCCH). A planning committee of staff from the ABS, the NCCH and the AIHW is working hard on arrangements for the meeting. I look forward to reporting on it in the next edition of *Access*.

Richard Madden, Director, AIHW





Diabetes: Australian Facts 2002

The second half of this year will see the launch of *Diabetes: Australian Facts 2002*, the first report from the AIHW National Centre for Monitoring Diabetes to present available data across the spectrum of the disease—its levels in the population, the factors that contribute to it, and the treatment and preventive programs that aim to combat it.

Past surveys indicate that for every diagnosed case of diabetes there is an undiagnosed case, suggesting that around one million Australians have the disease. The number of Australians with diabetes has trebled since 1981; the increase is mostly due to Type 2 diabetes (representing 85–90% of cases), which is potentially preventable. Diabetes is also twice as likely to be regarded as an associated cause of death rather than an underlying cause, highlighting the frequency and severity of medical complications arising from diabetes.

Diabetes—Australian Facts 2002 covers many aspects of this growing disease, beginning with lifestyle factors, such

as obesity, physical inactivity and poor diet, that are major modifiable risk factors for the development of diabetes. It also examines:

- other diabetes risk factors (those that contribute to the development of both the disease and its complications);
- Type 1 diabetes, Type 2 diabetes, gestational diabetes and their associated health burden;
- medical complications of diabetes such as heart disease, stroke, kidney failure and lower limb amputations, which are responsible for shortened life expectancy and reduced quality of life; and
- management and care of people with diabetes.

For further information, contact Justine Boland, AIHW, ph. 02 6244 1131 or e-mail justine.boland@aihw.gov.au



Project 2

World Health Organization Heads of Collaborating Centres for the Family of International Classifications—2002 Meeting

The 2002 meeting of Heads of World Health Organization Collaborating Centres for the Family of International Classifications is to be hosted by the Australian Collaborating Centre, the AIHW. The meeting is to be held in Brisbane between 14 and 19 October.

The Heads of Centres meet annually to advance work on endorsing and implementing International Classifications around the world with a view to securing consistent international data on the health of the populations of member countries. The program has a mix of plenary sessions for information sharing and decision making as well as sessions for committee work. The committees are the Update Reference Committee, the Mortality Reference Group, the Training and Credentialling Committee, the Electronic Tools Committee and the Family Development Committee.

The International Classification of Diseases (ICD) and the International Classification of Functioning, Disability and Health (ICF) are the reference members of the International Family and each of these classifications is the subject of sessions at the meeting. Classifications, such as the





International Classifications of the External Causes of Injury (ICECI) and the International Classifications of Interventions (ICI) are under consideration for the Family.

Australia, as the host nation, has one session in which to showcase relevant work. It is hoped that the Australian Statistician, Dennis Trewin, and the Head of the Australian Collaborating Centre, Richard Madden, will lead this session. The AIHW would like to thank its fellow sponsors, Queensland Health, the Australian Bureau of Statistics, and the National Centre for Classification in Health for their support of the meeting.



New! AIHW Bulletins

AIHW Bulletins are a quick and easily digested source of information and statistics on a range of issues in the health and community services fields.

The first bulletins in the series examine our aged care system and the changes that are occurring as a result of legislative changes in the late 1990s, and the impact of country of birth on Australians' health.

Bulletin no. 1

Ageing in place: before and after the 1997 aged care reforms

AIHW cat. no. AUS 26 \$10

Bulletin no. 2

Australian health inequalities: birthplace AIHW cat. no. AUS 27

\$10

For copies of these reports contact InfoAccess (formerly AusInfo), telephone 132 447 or use the order form on the fly sheet of this newsletter.



the driving force

National Health Information Management Group (NHIMG)

Communicating health information issues

In order to fulfil its responsibilities under the National Health Information Agreements, the NHIMG needs to be able to communicate on health information issues with agencies that are involved with collecting, analysing and disseminating health information. To this end, the NHIMG has established a number of links with such agencies. These include:

- Australian Health Ministers' Advisory Council (Chair)
- Australian Health Care Agreements Reference Group (Chair)
- Standards Australia IT14 committee (Victoria)
- National Health Information Standards Advisory Committee (Victoria)
- National Health Information Management Advisory Council (Deputy Chair)
- HealthConnect Stakeholder Reference Group (Secretariat)
- HealthConnect Business Architecture Working Group (Victoria)
- HealthConnect National Electronic Decision Support Taskforce (Northern Territory)

- National Health Performance Committee (Victoria)
- National Public Health Information Working Group (Western Australia)
- National Community Services Information Management Group (Tasmania, ABS, SA)
- Expert Group on Health Classifications (Victoria)
- National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (Queensland).

Some of these links are through joint membership and some through reporting arrangements. In addition, the NHIMG has observer status on some national committees, such as the HealthConnect stakeholders meeting.

An NHIMG meeting was held 8 August in Sydney and the next will be held 15 November in Canberra.

For further information, contact Catherine Sykes, AIHW, ph. 02 6244 1123 or e-mail catherine.sykes@aihw.gov.au

National Community Services Information Management Group (NCSIMG)

The inaugural National Community Services Information Agreement between Commonwealth, State and Territory jurisdictions with responsibility for community services, Centrelink, the Australian Bureau of Statistics and the Australian Institute of Health and Welfare commenced on 1 March 1997 for a period of five years. In anticipation of its approaching expiration, the National Community Services Information Management Group (NCSIMG) recommended to the Community Services Ministers' Advisory Council (CSMAC) that it be extended for a fixed period to enable it to be reviewed. The CSMAC has appointed a Review Steering Committee comprising senior officers drawn from New South Wales (Chair of the Committee), the Commonwealth, Victoria, Queensland and South Australia to undertake an extensive review of the National Community Services Information Agreement. The exercise will also involve the review of the NCSIMG. Draft terms of reference will be submitted to the October CSMAC meeting for endorsement.





Statistical Data Linkage in Community Services Data Collections

The NCSIMG-sponsored report *Statistical Data Linkage in Community Services Data Collections* has been endorsed by the CSMAC.

The NCSIMG will consider future directions and advise the CSMAC in 6–12 months, following full consultation and feedback on the report.

The report is available electronically at: www.aihw.gov.au/ committees/welfare/ncsimg/stat_data_linkage.pdf

The NCSIMG is keen for this report to be considered widely, and welcomes your passing this message to groups you think would be interested.

Please send your comments to ncsimgsec@aihw.gov.au

For further information, contact Margaret Fisher at the AIHW, ph. 6244 1033 or e-mail margaret.fisher@aihw.gov.au

National Housing Data Agreement Management Group (NHDAMG)

In March 2002 the Housing Ministers' Advisory Council (HMAC) approved the National Housing Data Agreement (NHDA) work program for 2001–02 and 2002–03. The work program aligns with the requirements of the three schedules of work contained in the NHDA:

- National Minimum Data Set (Schedule 1)—continue development of a national housing data repository to contain data for public, community and private rental housing assistance, including survey data collected through the National Social Housing Surveys;
- National Performance Indicators (Schedule 2)—improve the quality and comparability of public rental housing indicator data, undertake the development and collection of Aboriginal Rental Housing Program data for the *Report on Government Service Provision*, improve data collection for community housing and undertake development of relevant national performance information for the other areas of Commonwealth–State Housing Agreement (CSHA) activity; and
- ^o National Data Definitions and Standards (Schedule 3) develop policy-relevant national standards across the CSHA areas, improve financial and cost information in public and community housing and develop national standards that are compatible with IT developments as well as production of Version 2 of the National Housing Assistance Data Dictionary.

The National Housing Data Development Committee manages these projects and reports to the Management Group.

Indigenous housing information priorities are being progressed jointly with the National Indigenous Housing Information Implementation Committee (NIHIIC), which operates under the Agreement on National Indigenous Housing Information (ANIHI). During 2001–02, the two management groups worked together to ensure data on the CSHA Aboriginal Rental Housing Program could be included in the 2002 *Report on Government Services*, one of the first targeted programs to be reported on in this document. A major area of joint work to be urgently addressed in 2002–03 is to improve data on Indigenous Australians accessing mainstream housing programs, such as public housing and private rent assistance.

In May 2002 the NHDAMG was invited to the Joint Meeting of the National Health and National Community Services Information Management Groups. This provided an opportunity to outline the two national housing data agreements. It also enabled discussion of areas of common interest between health, community services and housing information, with areas of potential for future joint work noted.





National Indigenous Housing Information Implementation Committee (NIHIIC)

The NIHIIC now reports directly to the Housing Ministers' Advisory Council (HMAC) Standing Committee on Indigenous Housing. Established during 2001–02, the Standing Committee is responsible for implementing the Housing Ministers' 10-year statement 'Building a better future: Indigenous housing to 2010'. Data development is one of the key areas to be implemented in the committee's work plan.

In November 2001 the Standing Committee endorsed the NIHIIC Indigenous Housing Information Management Strategy and Action Plan. This report contained six strategies:

- 1. national data leadership
- 2. developing a supportive national data infrastructure
- 3. improving the compatibility of Indigenous housing data across all relevant areas
- 4. providing expertise and technical support to policy and program development
- 5. developing national minimum data sets
- 6. developing and supporting the use of national data standards.

The strategy and action plan form an important first stage for the Standing Committee and the NIHIIC in developing national Indigenous housing administrative data.

Over the last 12 months the NIHIIC has provided data support and expertise to the Standing Committee including the conduct of a workshop in February 2002. The workshop's purpose was to specify a National Minimum Data Set that could be developed to monitor and evaluate the work of the Standing Committee, and to assist in meeting other national data reporting requirements. In addition, a joint Standing Committee – Aboriginal and Torres Strait Islander Commission workshop held in May 2002, was also attended by a number of NIHIIC members. This workshop was held to advance the development of a multi-measure approach to measuring Indigenous housing need (including the use of data sources) and to consider how this relates to ATSIC work. An issues paper will be prepared for the HMAC, which reports on the further development and validation of this approach.

Recognising the several areas of overlap between the two housing data agreements, the chairs of the NHDAMG and the NIHIIC are negotiating how best to work together to ensure expertise and skills are used effectively to advance related work around mainstream and targeted housing assistance. The development of joint approaches to defining and measuring need, the alignment of national reporting requirements, the use of common standards and a single data dictionary are the major areas currently identified.

Over the next six months, Alex Ackfun (General Manager, Aboriginal and Torres Strait Islander Housing, Housing Queensland) will be the Interim Chair of the NIHIIC as the currently nominated Chair, Jody Broun (Executive Director, Aboriginal Housing and Infrastructure Unit, Ministry of Housing, WA) will be working outside the area of Indigenous housing.

For further information on the NIHIIC, the NHDAMG or other housing information issues, contact David Wilson, AIHW, ph. 02 6244 1202 or e-mail david.wilson@aihw.gov.au

Minister launches Australia's Health 2002

Continued from page 1



Board Chair Sandra Hacker, Health Minister Kay Patterson, Director Richard Madden and Health Division Head Ching Choi celebrate the launch of *Australia's Health 2002*

roles as a government must be to ensure collaboration occurs between jurisdictions.

'As a government we recognise these disparities in health status, and have substantially increased funding for Aboriginal health in each Budget since taking office in 1996.

'By 2003–04, spending on Indigenous-specific health services and related activities will rise to more than \$257 million per annum—a real increase of 89% over the life of the Government so far.'

The Minister said Australia's results for bowel cancer survival had not been as promising as those for breast and cervical cancer, where national screening programs had been operating for some years.

'We are using the lessons learned from the successful breast and cervical cancer campaigns to develop a series of bowel cancer screening initiatives, to commence around the country at the end of the year.'

On the subject of diabetes Senator Patterson said that it was an 'extraordinary situation' that half of all Australians with diabetes were not aware they had the condition.

Efforts to redress the situation were occurring through the National Diabetes Strategy and the \$40 million National Integrated Diabetes Program, announced in 2001, aimed at helping general practitioners to improve diabetes prevention, diagnosis and management. AIHW Board Chair Dr Sandra Hacker pointed out that four days after the launch the AIHW would celebrate its fifteenth birthday, making it 'an adolescent as far as organisations go, but, hopefully, without that combination of uncertainty and "knowing it all" that parents often see in teenagers'.

She contrasted the first edition of Australia's Health (1988) with the 2002 edition.

"The 230-page *Australia's Health 1988* is a good read, but its appearance is "rudimentary" compared with the much bigger and better document being launched today.

'And while *Australia's Health 1988* has 23 statistical tables, *Australia's Health 2002* has 170.

'That doesn't mean that we have become verbose over the years. It means that there is a great deal more to write about in health, because a great deal more statistics are now available.

For this we can thank not only ourselves, but also our major partners—the Commonwealth Department of Health and Ageing, the Australian Bureau of Statistics, the State and Territory health departments, the Commonwealth Department of Family and Community Services, and a whole range of other government and non-government organisations.

'In short, things are a whole lot better now on the national health statistics front than they were 15 years ago.

Australia's Health 2002 describes a wide array of factors that affect demand and supply in health interventions and services, which, in turn, contribute to overall health expenditure.

Factors contributing to expenditure growth are many, and interact in complex ways. We need to understand this complexity and not rely on simplistic cliches such as "ageing is the cause of increasing health expenditures".

'Health policy-makers today have a highly complex task. Around 640,000 people are employed in the health sector, undertaking a myriad of functions through many different programs. There are many policy levers in health and resources are always limited. Making the right choices at the right time requires good data and information.

'We work to ensure that *Australia's Health*, together with other Institute publications, provides timely, relevant information that sets the big picture in health, and helps policy-makers and the community to make those wise choices.'

Dr Hacker paid tribute to the author team led, at first, by Geoff Sims (until February 2002), and then by Ching Choi, as well as referees and support staff.

In particular, she thanked the report's six chapter coordinators: Stan Bennett, Mark Cooper-Stanbury, John Harding, Jenny Hargreaves, Paul Jelfs and Paul Magnus.

Dr Hacker concluded by saying that 'a lot of soul' as well as hard work went into the report because its contributors 'had a great commitment to informing policy debates, and services and community debates, in health'. *Australia's Health 2002* is a wonderful achievement, not only for the AIHW and its partners, but also for Australia. I know that many other nations wish they had an equivalent.

Australia's Health 2002 attracted extensive media coverage, including television and radio news, talkback and 'drive time' radio, front page articles in the *Sydney Morning Herald* and *The Australian*, and full page spreads in other major newspapers.

Dr Sandra Hacker presents *Australia's Health 2002* to Minister Patterson—'A lot of soul went into this!'



Australia's Health 2002 is on sale for \$50 in Government Info Shops and ABS bookshops, and through InfoAccess (formerly AusInfo) mail order sales (phone 132 447).

The report is also available on the AIHW web site (www.aihw.gov.au).

How many beds were available in public acute hospitals between 1 July 2000 and 30 June 2001? What was the average length of stay in public and private hospitals in that year? How much did the average hospital stay cost the Australian community?

For answers to these questions, look out for *Australian Hospital Statistics 2000–01*. It includes statistics on the characteristics and hospital care of the six million people admitted to Australia's public and private hospitals, and for the first time, information on waiting times for elective surgery.

AIHW cat. no. HSE 2(\$32.50





On the sin-preventing properties of pilgrimages

BLEDDYN DAVIS

Never has more welfare been forgone by committing the eighth deadly sin, parochialism. Reforms of community and long-term care have been developed for long enough to provide argument and evidence of a quantity and nature practically undreamt of thirty years ago. So have been attempts to coordinate them better with overlapping and interdependent policy areas, and integrate them into the broader policy area to which community and long-term care belongs. Increasingly, our books and journals are becoming truly international in their content.

That is why Australia is a Mecca to devotees of community and long-term care reform. It is a leader among the handful of countries producing the most interesting ideas, policies and experience. (There is also the fact that it is such an exciting, beautiful and welcoming place to come.) Australia is as much a good natural experiment as one will find in our chaotic policy world. In your recent history, response to learning has been balanced with stability and consistency within eras, and substantial continuity between these eras balanced by adjustments to broader political values and assumptions. And Australian structures often make significant new models more visible than in some other countries; more likely to be described, reported on, evaluated. Your national databases are of high quality, and lend themselves to useful analytic work. The AIHW itself has made an important contribution to the ongoing improvement of data quality, consistency and usability. Your policy researchers and analysts seem to have been able to see the wood for the trees, are willing to write at all levels of generality, and risk stating their arguments with clarity and force. They have been willing to make broad and heroic judgments which have stood the test of experience.

Pilgrims like myself have a handful of goals.

• One is to understand the *logics that connect policy devices to consequences for stakeholders*. More fully, it is to understand how each significant policy instrument and model contributes to fairer, more effective and more efficiently-produced outcomes of value to our citizens as users, carers and taxpayers, and how these instruments and models interact in the production of those benefits. One might call the collation of these logics over the whole of community and long-term care its '*contingency theory of production*'.

- A second is to understand *how and why the instruments have developed into their present* form. What were the opportunities that were seized to start and continue the developmental process? What were the constraints that limited their development? What was the influence of logics external to the common logic about how to produce the fairest and most effective outcomes most efficiently? (For instance, the influence of the latent goals of auspicing agencies on program developments like Community Options projects.) How did these influences affect the degree to which what was developed reflect logics about how best to apply common principles to differences in contexts to achieve desired outcomes? The aim is also to feed a form of *contingency theory; here, a 'contingency theory of field development'*.
- A third is to extend the *repertoire of technical devices* known to us for development in our own contexts: adaptable tested measurement instruments built to reflect common needs and models as well as local contexts. Australia is important because things you have produced are having a key place in thinking about matching arrangements to contexts the world over. We realise that we have to adapt and build on them, rather than unthinkingly imitate. That improves not lessens their contribution.
- A fourth is to *use Australia's own policy critiques of things you do best to develop ideas for one's own country and elsewhere.*

Some examples might clarify what I mean.

ACATs

The ancestral Aged Care Assessment Teams (ACATs) developed to acquire key features in the logic of fair, effective and efficient care. They and their descendants bridged the assumptive worlds of those whose concerns are top-down and bottom-up: broad eligibility and targeting criteria in the pursuit of fairness and effectiveness for broad groups of stakeholders, and the 'fitting services around individuals' (as Mike Rungie put it in the late eighties). They had clear target groups and a dominant interventional purpose. They were increasingly to provide multidisciplinary assessment and to perform other core tasks of care management. They brought specialist skills associated with secondary settings outside the hospital walls. It was a model that fitted its context well; a context with many independent providers of many shapes and sizes in which the separation of assessment (and increasingly commissioning and monitoring) from provision was, on balance, better than their integration. (Different financing mechanisms, say capitation-with-premium-financed managed care spanning chronic and acute, health and social-whether or not SHMO-like and designed for a broad population, or PACE-like and targeted at those already in substantial need-are for a different world.)

Sometimes Brits refer to ACATs as if they were everywhere the same; an Australian model uniformly applied. You point out that ACATs vary greatly, within as well as between States. But all of the purposes-the development of the two forms of contingency theory, the description and analysis of technical devices as a basis for begetting descendants elsewhere, and building on Australian policy critiqueswould be best served by focusing on variations between ACATs. How do differences in structure and practice influence outcomes? What are the reasons for the variations in structure and practice? How were opportunities seized? What were the constraints that limited their development? In other words, to make best use of your experience, we need to know the ways in which the variations reflected the optimal application of common principles to differences in contexts, the nature of the contextual features and accidents which limited that, and the influence of logics external to the common logic about how to produce the fairest and most effective outcomes most efficiently.

The ACATs occupy an important space. But other innovative models were from their origins still more clearly designed around matching resources to individual needs: Community Options and its descendants, most notably community aged care packages and more recently the external aged care at home program. The gestalt switch from assuming relative uniformity in user needs and wishes to recognising that individual diversity is crucial for equity, effectiveness and efficiency is everywhere an indicator of

Professor Bleddyn Davies PSSRII



London School of Economics and the Universities of Kent and Manchester

the adjustment to social change and the ideals of the new community care. It is true that the models have been financed as the accidental result of under-spending Commonwealth allocations to States. However, the fact that they are developed under the auspices and with the accountability of coherent programs makes them both identifiable, and the objects of evidence-based evaluation. That is a great help if an important goal is to discover and test logics suggesting the best arrangements, given differences in goals and user groups.

And who can question the potential contribution of the coordinated care trials at a time when policy thinking so emphasises the interdependence for many in the achievement of health and social care goals, when technical change and the nature of risks and opportunities are redefining the latter to overlap more with the former, and when primary care is increasingly seen as the locus of coordinating activity?

This illustrative list does not mention some of the models for field delivery and coordination of greatest importance. Newer ones reflect new learning, new contexts, and new priorities. For these reasons, they deserve more attention not less.

Models and devices for performing core functions at national and higher sub-national levels

The types of contingency theory outlined earlier must be multi-level. The argument must be developed for each of the functions performed at each of the multiple levels discussed in literatures on systems and organisational change, as well as for the influence of the structures and achievements in function performance on each level on those of other levels. I suspect that there are common patterns in the leading

Continued on page 19 **b**





Guy Marks has devoted his whole professional life to respiratory medicine. Hence, he was very pleased to be appointed Director of the AIHW's newest Collaborating Unit, the Australian Centre for Asthma Monitoring (ACAM) in Sydney.

'It fits very well with my area of expertise and the direction in which I want my research to go,' Guy said. 'ACAM presents me with a unique opportunity to report and analyse asthma monitoring data.'

To his Institute role Guy brings his expertise as Practitioner Fellow and Research Team Leader at the Institute of Respiratory Medicine (based at Royal Prince Alfred Hospital) and Senior Staff Specialist Physician and Director of the Liverpool Hospital Department of Respiratory Medicine.

Although he now wears several 'hats', Guy has always had a clear idea of where he wanted his professional path to lead him. Striking his own path rather than following 'popular' trends has also helped him to achieve his research goals. Guy studied medicine at the University of New South Wales, devoting an extra year to completing a Bachelor of Medical Science degree.

'This was quite a common thing to do for medical students interested in extending their experience in science. However, I was the first person at the UNSW to do it in the field of community medicine.'

Guy based his BMedSc medical project on research on the health and social status of elderly people in the municipality of South Sydney.

on Guy Marks

'It was an unusual step in 1978, as normally students did biomedical and laboratory research. But I had a particular interest in public health.

'I then spent three years as a resident medical officer in various Newcastle hospitals, and 12 months on a working holiday in the UK (where I certainly did more work than holiday). On returning to Australia I spent the next several years training as a respiratory physician, because I wanted to do specialist medicine, and respiratory medicine had the closest alignment to public health.'

Guy undertook some research as part of his physician training, and went on to complete a PhD in assessment of exposures and outcomes in asthma at the University of Sydney. Guy attributes his interest in research to the two people who had a major influence on his professional development: his mentor at the University of NSW, Professor Ian Webster (a pioneer in the teaching of community medicine in Australia); and the late Professor Ann Woolcock, Guy's PhD supervisor.

'Professor Woolcock guided my research in a range of clinical and epidemiological studies in the field of asthma and allergy,' Guy explained.

After being awarded his PhD in 1993, Guy returned to the UK on two travelling fellowships—one from the Asthma Foundation of NSW and the other from the Royal Australasian College of Physicians (the Cottrell Fellowship)—to undertake postdoctoral research with Professor Peter Burney, an expert in epidemiology and asthma. He spent two years working on asthma and respiratory disease epidemiological projects at the Department of Public Health Medicine at St. Thomas's Hospital in London.

'One of the highlights of my stay in London was the opportunity to work with the then Office of Population Censuses and Surveys in the Medical Statistics Section. I worked on reporting trends in respiratory disease in the UK in the twentieth century—our analysis of long-term data revealed previously unsuspected trends, such as a decline in the risk of death from COPD [chronic obstructive pulmonary disease] in England and Wales.' Towards the end of his second stay in London, Guy resumed his career as a respiratory physician, in the capacity of consultant physician at London Charing Cross Hospital. On his return to Australia in 1994 he was appointed Head of Respiratory Medicine at Liverpool Hospital, and has worked there ever since. He also retained his links with Professor Woolcock and the Institute of Respiratory Medicine. In fact, he has been a half-time research fellow there since 1997, pursuing his research interests in asthma and its causes, management and treatment, particularly from a public health perspective.

I have been able to attract funding support through grants and fellowships from a number of agencies, including the National Health Medical Research Council, which have enabled me to complete a number of significant projects.

'Among them was a study on thunderstorm-related asthma, which sounds unusual, but is common in some regions of Australia, as our study showed. The project also described the way in which thunderstorms can massively increase allergen exposure and produce asthma attacks in a lot of people.

'A major project we are working on the moment is the Childhood Asthma Prevention Study, a randomised control trial of interventions for preventing asthma in young children. It is an internationally significant study, with the potential to provide high-quality data to inform public health practice in relation to asthma.'

Research in tuberculosis and COPD is Guy's other major area of expertise. He published a historical cohort study reporting the risk of tuberculosis among refugees who arrived in NSW in the 1980s and 1990s. The study emphasised the limitations of active case finding as a disease management tool and the benefits of passive case finding. Guy is one of the senior participants in the Cooperative Research Centre for Asthma, based at the Institute of Respiratory Medicine—a Commonwealth Government initiative which enables collaboration in asthma research directed towards outcomes with social and economic benefits for Australia. He also publishes extensively, and teaches postgraduate and undergraduate students at the University of Sydney and the University of NSW.

Guy's incredibly full schedule leaves little time for his other interests: 'I still try to keep an eye on politics and current affairs, but my sporting activities consist of walking and watching sport. Looking after my three daughters also helps to keep me active.'

What are Guy's major expectations from the collaboration with the Institute?

'I hope that our work will result in valuable insights into the current situation with asthma in Australia—valuable both for informing public policy and generating hypotheses for research. Another very important long-term benefit is that I expect the collaboration to develop the expertise of a group of epidemiologists in the respiratory field.'



Health and Welfare Expenditure Unit

Which is the oldest Unit in the AIHW? Which Unit produced the Institute's first published output? The answer, in both cases, is the Health and Welfare Expenditure Unit in the Economics and Business Services Division.

In 1985 the staff of the Health Expenditure and Financing Section of the Commonwealth Department of Health were seconded to the embryonic Australian Institute of Health (AIH) to form the nucleus of its Canberra operations in Bennett House, Acton. In October that year the AIH released its first publication—*Australian Health Expenditure: 1979–80 to 1981–82.*

That this was the first AIH report says something about the importance of the subject matter. But why is it so important to measure expenditure on health and welfare? Because measures of expenditure are at the very heart of any performance assessment of the health and welfare systems.

The basic purpose of health or welfare services is to achieve outputs and outcomes that are measured in terms of the health status and wellbeing of the community. However, we first need to understand and measure the resources spent in delivering the outputs, which in turn lead to the targeted outcomes.

In the case of health and welfare services, those resources include the time and skills of those people who work in the area, the equipment and buildings used, even the food and other supplies used by clients. Because the nature of such inputs is so varied, there needs to be some common measure that can be applied in order to sum them—that common measure is expenditure. For example, you can't simply add the time spent by doctors and nurses in treating a patient to the drugs and other inputs used in that treatment and arrive at any sensible measure of the inputs. But you can do this if you first convert the inputs to measures of expenditure. Different mixtures of those resources will result in different levels of expenditure and these can be compared with the resultant outcomes in measuring efficiency of the treatment.

The Institute's Health and Welfare Expenditure Unit produces estimates of expenditure on health and welfare services each year. These show that over \$60 billion, or about 9% of GDP, is expended on health and welfare services in a year in Australia. These estimates are used widely throughout Australia, and internationally, as the authoritative source of data on health and welfare services expenditure.

Our projects include estimates of health services expenditure, welfare services expenditure, public health expenditure and expenditure on health services for Aboriginal and Torres Strait Islander people.

Data are obtained from many sources including Commonwealth departments, State and Territory departments, local government authorities, the Private Health Insurance Administration Council, the Australian Bureau of Statistics, the Commonwealth Grants Commission, the Health Insurance Commission and other statutory and non-statutory bodies.

The Unit publishes, on an annual basis, the *Health Expenditure Australia, Welfare Expenditure Australia* and *National Public Health Expenditure* series of publications. It has also had the major responsibility for producing two reports on expenditure on health services for Aboriginal and Torres Strait Islander people. These covered the financial years 1995–96 and 1998–99.

Internationally, the Unit provides data to the Organisation for Economic Co-operation and Development (OECD) on Australia's health and welfare services expenditure, as well as on expenditure by governments on social security and housing services.

The highly productive team that produces all this output comprises:

- Tony Hynes, who has headed the Unit since 1 July 2001. Prior to that Tony was responsible for the development of the health expenditure database and for the production of the Institute's annual estimates of health expenditure in Australia.
- Maneerat Pinyopusarerk—one of the longest serving Institute employees, having been with the AIHW since 1988. She initially worked on health expenditure. When welfare research was added to the Institute's functions, she moved on to work on welfare services expenditure. Maneerat is considered to be one of the pioneers in this area.

- Lindy Ingham—a relatively recent member of the team. Lindy, who came to us from the ABS late in 2001, hit the ground running. She was largely responsible for the Unit's contribution to *Australia's Health 2002* and is very quickly taking up the mantle as the Institute's expert on health expenditure. Lindy's experience while with her former employer, ranged from national accounts to social conditions statistics. She brings to the Unit much valued expertise in the development, interpretation and application of national accounting standards.
- Richard Webb, who has been with the Unit for seven years. Richard has worked on both health and welfare expenditure, in particular Aboriginal and Torres Strait Islander health expenditure and international health and social expenditure. He manages the Unit's Internet portal, including the development of data cubes on expenditure.
- Angelique Jerga and Lucy Tylman, who have developed into a fine two-woman relay team in the Unit's work on the National Public Health Expenditure Project. Angelique's actuarial qualifications made her an ideal candidate to take up the baton in assisting John Goss on the initial stages of this groundbreaking project. She put in a very solid run before making an unorthodox high aerial pass of the baton when she took off for an intrepid adventure through Asia and Europe. Lucy-her previous publication experience enabling her to make a low swoop into the Institute via the temporary employment register-retrieved the baton before impact just in time to take the project's first two reports over the finishing line to publication. Both State of Play of Expenditure on Public Health by Australian Governments, and National Public Health Expenditure Report 1998–99 have been acclaimed by public health experts. Angelique returned to the Institute briefly, taking over from Lucy who departed for a contract elsewhere, then made a smooth pass to the returning Lucy before setting off on an excursion to South-East Asia. Both are now back at the Institute for completion of the project's upcoming report, the National Public Health Expenditure Report 1999-00.



The Health and Welfare Expenditure Unit (left to right): Lindy Ingham, Richard Webb, Tony Hynes (above), Maneerat Pinyopusarerk, Lucy Tylman, Angelique Jerga.



Exposing a myth of the heart Part II: The real contribution of the major risk factors to the coronary epidemics—at least 75%, not at most 50%

Recapping Part I...

Welcome to more of the saga about a big myth. In the previous issue of *Access* (May 2002), I introduced the epidemic of coronary heart disease and its major risk factors. I wrote mostly about high blood cholesterol, high blood pressure and cigarette smoking, but also about physical inactivity and obesity. I explained that, unlike virtually all the other candidates, these meet the public health test as true risk factors. They are causal, they are common and they are correctable through broad public health measures.

I also introduced the long-used 'only 50%' myth. This plays down the contribution of the major factors by claiming that they explain at most 50% of coronary heart disease (CHD). And, of course, it plays up the need to keep searching for 'new' or 'emerging' risk factors.

Well, what then is the real contribution of the major risk factors? That's what I'll examine in this issue. It is conservatively estimated we could reduce CHD by at least 75% if we could eliminate those factors.

When does a factor become a risk factor?

Let us first look again briefly at blood cholesterol, blood pressure and smoking. For cholesterol and blood pressure, the lowest risk levels are about 4 mmol/L or lower and 70 mm Hg or lower (diastolic), respectively. This comes from numerous population studies that include countries with very low rates of CHD. We also know that the risk of CHD increases steadily as the levels of blood pressure and cholesterol increase.

Population studies and clinical trials show that, for example, a long-term change of 0.6 mmol/L in cholesterol level among middle-aged men corresponds to a change in CHD risk of at least 25%. Likewise, there is a 21% change in risk for every 5 mm Hg change in diastolic BP. But there is no magic threshold from 'no risk' to 'risk'. (Smoking is, of course, more all-or-none, increasing the risk of CHD death by an average 70%, but even here the risk increases with the amount smoked.) What's more, in a given person, the factors do not act in a separate all-or-nothing way. They interact in their various combinations and magnify each other's effects to produce a total CHD risk.

So if there is no real threshold of risk with variables like blood pressure and cholesterol, what's a 'risk factor'? To put the risk factor concept into operation, we have to choose some level, preferably an optimal level, as a cutpoint to define the factor. Below the cut-point a person is defined as 'low risk' and 'doesn't have' the factor. Above it, they 'have' the factor and are 'at risk'. A couple of decades ago, for example, people whose cholesterol level was 6.5 or more, or whose blood pressure was 160/95 or more, were said to have the risk factors of 'high cholesterol' or 'high blood pressure'. Below that, their levels were 'normal' or at most 'borderline'.

This two-way splitting is clearly artificial when the factors have a continuous relationship with risk. But it is still how doctors in the clinical setting tend to decide whether someone 'has' or 'hasn't' got a risk factor. (They're now being encouraged to take account of a person's total risk rather than just counting risk factors. But that's another story.)

Note that I said the cut-point should preferably be at an optimal level. Only then can we gauge the real impact of a risk factor and the scope for prevention that it offers. Conversely, the higher the cut-point we choose, the more we will underestimate that scope.

How do we assess a risk factor's contribution?

So what do we mean by the 'contribution' of a particular risk factor to a disease, now that we've defined the factor? This refers to its contribution to population levels of the disease—the proportion of disease cases that we can attribute to the risk factor, the proportion of cases that *wouldn't* occur if we eliminated that factor.

For an individual risk factor, we can make reasonably confident estimates along those lines, provided, of course, that we are also very confident of the science used to establish the risk factor. It depends first on the proportion of people in whom the risk factor occurs (its frequency). Then there is the strength of the risk among those who have it, relative to those who don't (the relative risk). The result is a combination of extent and severity. Using this information, we can calculate what is known as a population attributable fraction, such as that 85% or more lung cancer cases can be attributed to cigarette smoking.

The individual percentage contributions to CHD of factors such as high cholesterol, high blood pressure and smoking have been estimated many times from various studies. But it's quite another matter to estimate their *combined* impact, because they don't act independently. This means that their individual contributions can't simply be added.

There is a way around this, though. In the population being studied, we can mark out a low-risk group of people with no risk factors, so defined. Then we can compare that group's disease rates, in this case CHD rates, with those of the rest—the bigger group of people with one or more of the risk factors. From this we can estimate the percentage of all CHD cases, the excess cases, that can be attributed to the risk factors collectively. Approaches along these lines have been taken in major analyses of large population studies going back at least to the mid-1970s.

This one-or-more risk factor approach will tend to weaken the estimated impact of the risk factors because it leads to risk misclassification at the margins. But it does divide a population into a generally higher risk group 'with' the factors and a generally lower risk group 'without' them. And if we're going to use concepts such as 'the risk factors', this is the only way to assess their combined impact—and also to test the 'only 50%' mantra.

The size of the contribution

One of the first indications of the power of the major coronary risk factors came from a 1975 study by Michael Marmot and Warren Winkelstein, writing in the American Journal of Epidemiology. They summarised the pooled results of a 10-year follow-up of eight major US population studies. Risk factors were defined as a cholesterol of 6.5 or more, a diastolic blood pressure of 90 or more, or any current use of cigarettes. From the data they presented, the rates of CHD could be estimated for the group of people with none of the risk factors. If these rates had applied to the entire study population, there would have been twothirds less CHD cases in total than actually occurred. In other words, just these three risk factors alone could explain two-thirds of CHD. And note that the factors were defined by cut-points that we now know were way above optimal levels of 4 or less for cholesterol and 70 or less for diastolic blood pressure.

An even more authoritative analysis, though, came in 1986. Jeremiah Stamler and colleagues published their six-year follow-up of 356,222 men aged 35 to 57 at entry into the study. They used the same above-optimal cut-point for blood pressure as Marmot and Winkelstein had, but a lower one of 4.7 or above for cholesterol. Dividing this huge population into 20 sub-groups of increasing risk factor levels, they found a *13-fold gradient* in CHD death rates from lowest to highest.

And if the rate of Stamler's low-risk group had applied to the entire study population, there would have been 75% less coronary deaths. In fact, almost half of the events could be attributed to one risk factor alone, namely an above-optimal cholesterol level. And if they added a history of diabetes and used a more optimal cut-point of 76 for diastolic blood pressure, 87% of the CHD deaths could be explained by the risk factors so defined.

These findings were strongly confirmed and extended through 12- and 16-year follow-ups of the same population published in 1992 and 1996, but with the addition of other large male and female study populations.

Other studies tell the same story. For example, there is an unpublished analysis by Michael Marmot and colleagues of the original Whitehall I group of 17,000 middle-aged male civil servants in Britain. They constructed a low-risk group of never-smokers whose blood pressure and blood cholesterol were each in the lowest fifth of the distribution. They found that if the average CHD mortality rate of the Whitehall I population could have been reduced to that of the low-risk group, about two-thirds of the CHD deaths might have been avoided. (This finding will assume even more significance in Part III,when I discuss how the Whitehall study's results have been misinterpreted in support of the 'only 50%' myth.)

Continued on page 18 🕨



Dr Paul Magnus, AIHW Medical Adviser



Facts, figures, and what's new

The AIHW web site is growing rapidly—from its small beginnings in 1997, it now includes over 20 subject portals conveying information on the Institute's work as well as links to other relevant material and sites. We have nearly 250 publications available free (in full text) on the site and we're adding about 85 new titles every year.

Every day our site attracts more than 1,800 visitors. In March, we recorded over 5,000 visits to our data cubes on disabilities, hospital diagnoses, cancer and general practice activity.

We recently added a new subject portal on rural health and we plan to expand its content over the coming year. We frequently receive requests for information on mortality, so watch out for our new Mortality portal, coming soon. It will include an overview of Australian mortality statistics and some summary tables, which we hope will answer some of your questions. Soon, too, our web site will offer you the opportunity to join our new publications mailing list. We'll send you an e-mail and a press release whenever we release a new publication in the category that interests you. Watch out for this service in the coming weeks!



Illustration by David Pope



Exposing a myth of the heart

Then there is complementary evidence from studies of Harvard University alumni and of US nurses, neither of which dealt directly with all the three major risk factors. The Harvard study was of over 10,000 middle-aged to elderly men followed for nine years. An estimated 58% of coronary deaths could be attributed to cigarette smoking, physician-diagnosed high blood pressure, sedentary living or a history of early parental death. Cholesterol was not included. The report from the Nurses Health Study was a 14-year follow-up of over 84,000 women who were aged 34 to 59 in 1980. It found that 82% of CHD incidence could be explained by cigarette smoking, physical inactivity, overweight or being in the less favourable 60% of the population on a diet score. This all presents a coherent picture of a very large contribution of the established risk factors to the CHD epidemic. It is especially impressive considering that none of the studies covered all the major risk factors. And none used uniformly optimal cut-points for them.

As I said, at least 75%, not at most 50%.

Sorry for the dry discussion today. In the next and final instalment, I hope to be a little livelier. I'll dissect the origin and validity of the 'only 50%' claim and the implications of refuting it.

This article draws on a paper in the December 10/21 2001 issue of the Archives of Internal Medicine, by Magnus P and Beaglehole R, entitled 'The real contribution of the major risk factors to the coronary epidemics: time to end the "only 50% myth" ', pages 2657 to 2660. (www.archinternmed.com) Copyrighted 2001, American Medical Association.





Continued from page 11

On the sin-preventing properties of pilgrimages

countries. But, again, differences between and within countries are, in important ways, more revealing than the similarities: everyone wants to see—and sees—similarities; perhaps fewer see the differences and their implications.

Australia was among the first to develop national databases, tools for setting frameworks for planning supply, quality improvement strategies around outcomes standards, payment systems, and reimbursement; and linking them together in a way that reinforces the benefits of each, and countervails dis-beneficial side-effects. More than that, the intellectual contributions in these have been particularly distinguished. They are well known internationally. They deserve to be still better known, and to be discussed more deeply in the context of other countries.

Targeting and utilisation critiques

Australia has much more than its fair share of policy analysts of acuity and vision. The Australian discussions of utilisation and targeting policy are a good example because they compensate for lacunae elsewhere. During the last 20 years, we in the UK have improved the performance of our community care system to a much greater degree than I, at any rate, had dreamed to be possible; and the pressure that our national government is exerting to achieve still more (and the resources being allocated) is greater than ever. However, the improvement has been overwhelmingly in the achievement of one goal: making it unnecessary for persons to enter institutions for long-term care when that is undesired and inappropriate. Academic critiques during the late seventies and eighties pressed for purposive targeting, and pointed to a variety of purposes near to the hearts of users and carers. Policy agencies defined fewer, and in practice treated most of those as aspects of that one general goal. Evidence showed remarkable consistency in rating purposive targeting the top priority among authorities and levels within authorities. But the policy analysts have been concerned about the benefits forgone by others. Australian argument can help to provide foundations for a more balanced approach.

To sum up...

So we visit you not only because we love you. We also need you for very practical reasons. Mecca can expect more and more pilgrims. Australian development will increasingly influence analysis and policy-making in other countries.

Did you know that Australian governments committed \$519 million extra funding to disability services over 2000–01 and 2001–02, in recognition of unmet needs in the community?

Unmet Needs for Disability Services reports the findings of a study on the effectiveness of this funding, particularly in providing additional services, and on the level of unmet need that remains in the community.

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