Such was the seven-word media summary of the *Physical Activity Patterns of Australian Adults* report released by the AIHW a fortnight before the Sydney 2000 Olympic Games. The report was written by AIHW staff Dr Tim Armstrong (Project Leader) and Joanne Davies, in conjunction with Professor Adrian Baumann of the University of New South Wales.

The report shows that 88% of Australians aged 18–75 believe they can be healthier by being more active, and 92% believe their health could be improved by doing 30 minutes of moderate-intensity physical activity each day. Yet the average amount of time spent each week walking, and doing moderate and vigorous physical activity, has fallen in recent years. The decrease in vigorous activity was particularly marked, from an average of 91 minutes per person each week in 1997 to 65 minutes in 1999. There was also a fall in the proportion of Australians doing enough physical activity to provide a health benefit. The falls in activity were accompanied by a continuing high level of overweight and obesity in the community (44%).

*Physical Activity Patterns of Australian Adults* was launched at Parliament House by Robert de Castella, former world and Commonwealth marathon champion. Rob is also a former Director of the Australian Institute of Sport. He is currently Chair of HealthPact (the Health Promotions Board of the ACT) and Managing Director of SmartStart (Australia), an organisation that provides health, fitness and wellbeing strategies and monitoring services to young Australians.

Mr de Castella said that Australia’s hosting of the Olympic Games made it a good time for Australians to focus on being an active nation. ‘Our athletes and teams are well on track to bring in a record number of medals and quality performances. It is something that all Australians can and will be very proud of.

‘In contrast, what is happening at the other end of the population spectrum, the non-elite

Continued on page 3
At the end of another year, it’s timely to reflect on the Institute’s activities and achievements over the year that commenced with the now-forgotten concerns of the Y2K bug, through to the Olympics and beyond. We not only survived a year that threw us into the unknown, we survived the sporting fever brought on by the Olympics and the tourist influx and still managed to do some great work!

Staff numbers have grown to over 180 to fulfil contractual obligations with various client groups. Consequently, the AIHW negotiated to take over the additional space in its building to accommodate this increase. I am grateful for the cooperation of staff in working through a relatively difficult time until accommodation changes were finalised.

Following months of negotiation to ensure the best outcome for the staff and the Institute as a whole, we entered into our second certified agreement, which will see us through until 2002. The process was a good example of genuine consultation and resulted in an 89% acceptance rate by staff. I would take this opportunity to thank all those involved in the consultative process and all staff for their active contributions during the negotiation process.

Our web site has been redeveloped to enable the development of a flexible and client-focused infrastructure for delivery of an expanded range of information. The site conforms to the standards and guidelines of the Government Online initiative, which ensure that online privacy, security and accessibility requirements are met. Our newly improved web site can be found at www.aihw.gov.au.

Australia’s Health 2000, the seventh biennial health report, was published in June this year. The extremely successful ‘virtual’ launch was held as part of the Australia’s Health 2000 Conference organised by the Institute. Planning is now well under way for the report Australia’s Welfare to be launched late in 2001.

The Institute, as the WHO collaborating centre for the Western Pacific, has been beta-testing ICIDH-2 and is pleased that it has a place in the classification of Paralympic athletes. I am sure those of you with an interest in classification matters will find Sean Tweedy’s article in this issue of Access of great interest.

The Review of Commonwealth/State Service Provision was established by heads of government in 1993 to develop objective and consistent data on the performance of services central to the wellbeing of Australians. Reports are produced annually. The AIHW, through its national health, community services and housing agreements with State and Territory governments, will pass to the Steering Committee, on behalf of those jurisdictions, data that have been agreed for national reporting by the Institute for inclusion in those parts of the reports covering health and community services.

To ensure that the process operates effectively, the AIHW (with the strong support of the Board) and the Steering Committee have agreed on a set of business arrangements which clearly define the roles and responsibilities of
(99.99% of the country), should be of enormous concern to all Australians. It is something that we should not be proud of.

Physical inactivity ranks second only to tobacco smoking as a health risk factor. The flip side is that moderate activity has important benefits for physical and mental health. It reduces the risk of cardiovascular disease, diabetes, and many types of cancer, and can contribute to feelings of enthusiasm for life and a sense of wellbeing. It also reduces the risk of falls and injuries in the elderly.

‘And physical activity doesn’t have to cost a lot—when you look at the potential benefits, it’s hard to beat in terms of value for money.’

Mr de Castella said that physical activity campaigns and programs were needed that were specifically aimed at moving people through the stages of behaviour change (pre-contemplation, contemplation, planning, action and evaluation).

But he also warned that any awareness campaign ‘must be underpinned by the building, provision and promotion of quality infrastructure, both organisational and physical, and the development of appropriate policy and legislation that encourages behaviour change (such as mandating for levels of physical activity in schools).’

Report co-author Dr Tim Armstrong said that one of the pleasing findings in the report was that, over recent years, older Australians had not shown any decline in participation in sufficient physical activity. There was also no rise in their levels of inactivity.

‘Although participation in physical activity overall still tends to decline with age, people in the 60–75 age group, especially men, were more likely than average to participate in moderate physical activity. It is possible that at retirement—around 60 years of age—people have more time to do some physical activity’, he said.
Sports injury is common. Fortunately, the great majority of cases present little or no threat to life. Nevertheless, they cause considerable discomfort and disruption, and account for a substantial portion of the acute costs of injury, and perhaps a larger share of the long-term burden of injury (e.g. chronic consequences of acute joint injuries).

Most sports injuries are musculoskeletal. Brain injuries, spinal cord injuries and other internal injuries are much less common but carry greater risk of death or other serious and long-lasting consequences.

The extent of sports injury is difficult to measure, for several reasons. First, there is not a very clear-cut distinction between ‘sport’ and other activities, such as play or recreation. Second, injury surveillance often depends on data collected about people who attend clinical services for treatment. Sports injuries are treated in a wide range of settings, including the scene of injury, at sports injury and sports medicine clinics, general practices, emergency departments and in hospitals. The number and diversity of the sites complicates surveillance.

As a step towards improving the situation, the Australian Sports Injury Taskforce convened the Australian Sports Injury Data Working Party in 1997. The Working Party, chaired by Dr Caroline Finch, consulted on information needs and priorities and produced the Australian Sports Injury Data Dictionary. The dictionary is a resource for organisations and researchers who want to undertake systematic collection of data on sports injuries, providing case definitions, data items and classifications. (The dictionary can be found on the web at http://www.esport.gov.au/partic/datadict.html)

Some sports injuries, particularly more severe cases and those requiring surgery, result in admission to a hospital. Until recently, the classifications used for admitted cases were very limited when it came to identifying and describing sports injury cases. Two coding changes are improving the potential for identifying such cases among all those admitted to hospital. These changes are a special external causes code (E889), added to the final Australian version of the 9th revision of the International Classification of Diseases (ICD-9-CM), and the classification of ‘activity when injured’ that is part of the 10th revision of the ICD. Associated with these changes has been the addition to the Australian ICD of a short list of types of sport, provided to give some insight into the sports in which admitted sports injury cases occur.

These are useful improvements, but the available data are still limited. For example, the hospital in-patient data for the first year in which the E889 category was available are difficult to interpret because some jurisdictions had only partly changed from previous non-standard coding practice. For this and other reasons it is not yet possible to identify meaningful national trends. These problems may resolve with experience and as the hospital data provided by State and Territory systems become more comparable.

Data on sports injury experience from sources such as this can only provide part of the information needed for sports safety. Information is needed to guide program planning and implementation. The former purpose needs information characterising distribution of injuries and injury risk. The latter tends to require data to monitor progress in implementation and changes in injury rates. Information requirements (and practicalities) differ for national or State programs and for local management of sports safety (e.g. in a club or a school). Attention to improving the match between the information available and the information needed is one of the concerns of SportSafe.
A study in 1999 of the oral health and access to dental care of young South Australian adults, randomly selected from the electoral roll, included questions on frequency of playing sport, among other indicators of general health behaviours.

In response to the question ‘How frequently do you usually exercise or play sport?’ 71.9% of the 1,265 young adults interviewed reported engaging in physical activity more than once a week. There were no significant differences by sex, with 78.5% of males and 76.3% of females reporting this frequency.

A lower proportion of government concession card-holders (72.5%) than non-card-holders (78.4%), those who do not speak English at home (71.0%) compared with English speakers (78.3%), and those earning less than $20,000 (74.2%) than higher earners (80.2%) were engaging in physical activity more than once a week (Chi sq < 0.05). Among current smokers, 73.2% engaged in sport or exercise more than once a week, while 79.3% of non-smokers did so.

In relation to dental visiting patterns, a higher percentage of those who exercised more frequently (47.9%) had visited for dental care in the previous 12 months than those who exercised less (39.2%). In addition, those who exercised less than once a week were more likely to usually visit for a problem rather than for a check-up (41.2%) than those who exercised more often (35.2%).

In the 20–24 age group, the more disadvantaged were less likely to engage in physical activity. A greater proportion of those who usually exercised less frequently reported that their last dental visit was more than 12 months ago, and that their usual reason for visiting was for a problem rather than for a check-up.
An overview of the ICIDH-2

The 1999 draft of the ICIDH-2 International Classification of Functioning and Disability was published by the World Health Organization and aims to ‘provide a unified and standard language and framework for the description of human functioning and disability’ (WHO 1999, p. 7).1 ‘ICIDH-2 organises information about health related experience according to three dimensions’ (WHO 1999, p. 11). These dimensions are named: Body Functions and Structures (B), which applies at the level of the body; Activities (A), which applies at the level of the person; and Participation (P), which applies at the society level. The classification also explicitly recognises the role of physical and social environmental factors in affecting disability outcomes (see Figure 1). All terms and dimensions have definitions, which are set out in Box 1.

Box 1: Definitions of Dimensions
ICIDH-2 (1999)

In the context of a Health Condition:

**Body Functions** are the physiological or psychological functions of body systems.

**Body Structures** are anatomical parts of the body such as organs, limbs and their components.

**Impairments** are problems in body function or structure such as a significant deviation or loss.

**Activity** is the performance of a task or action by an individual.

**Activity Limitations** are difficulties an individual may have in the performance of activities.

**Participation** is an individual’s involvement in life situations in relation to Health Conditions, Body Functions and Structure, Activities, and Environmental and Personal Factors.

**Participation Restrictions** are problems an individual may have in the manner or extent of involvement in life situations.

**Environmental Factors** make up the physical, social and attitudinal environment, in which people live and conduct their lives.

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1 The ICIDH-2 is still in draft form, with the final version due to be published in 2001. This article is based on the most recent version, the Beta-2 Draft.
Disability arises when any or all of the negative outcomes occur—impairment, activity limitation and/or participation restriction—when they are associated with a related ‘health condition’. ²

The draft ICIDH-2 is careful to emphasise that the relationships among these dimensions and health conditions are not linear and directly causal, but interconnected in complex ways.

In summary, two of the specific aims of the ICIDH-2 are to ‘provide a scientific basis for understanding and studying the functional states associated with health conditions... [and] establish a common language for describing functional states associated with health conditions in order to improve communications between health care workers, other sectors, and people with disabilities’ (WHO 1999, p. 9).

In fulfilling these aims, a wide range of stakeholders have indicated potential uses for the ICIDH-2 (AIHW 1994), including:

- use by people with disabilities to indicate the level of need for services;
- use by providers of support services to provide supports appropriate to the needs and abilities of services users, to prioritise the use of resources, and to compare the resources and successes of their service with those of other services;
- use by funders and planners of broad disability programs to assess the relative need for resources among groups of people with differing disability types and service needs, and to identify unmet needs;
- use by administrators of legislation who may require broad definitions of disability to protect people who may be disadvantaged by exclusion;
- use by people responsible for income security policy, including the social security and compensation fields, who may require definitions and measures which clearly define the criteria for, and limit the number of people included in, their programs;
- use by clinicians and health professionals, whose need may be to gauge the nature and severity of disability precisely in order to devise the most appropriate intervention, or to compare the efficacy of various treatments;
- use by national and international statisticians to be able to compare data across service types and across national and international boundaries.

2 A health condition may be a disease (acute or chronic), disorder, injury or trauma, or reflect other health-related states such as pregnancy, ageing, stress, congenital anomaly or genetic predisposition’ (WHO 1999). Health conditions are classified by WHO in the International Classification of Diseases, 10th Revision (ICD-10). The ICD and ICIDH-2 are the two main members of the WHO family of health-related classifications.
Potential applications for the ICIDH-2 in Paralympic sports

One area of application that has received little attention to date is the use of the ICIDH-2 in Paralympic sport. There are several ways in which it could be used to enhance disability sports.

1 Eligibility—diagnostic eligibility

All athletes who compete at the Paralympic Games will be affiliated with at least one international sports organisation (see Table 1).

Each of these organisations has its own documents describing diagnostic eligibility and in many cases the language used is not standardised or contemporary. This can lead to confusion for athletes, coaches and administrators in disability sport. One approach to solving such problems could be to draft a single document that uses the ICIDH-2 terms and dimensions to describe eligibility for Paralympic sports. Because the ICIDH-2 definitions have been developed and tested by international collaborating centres and working groups from a wide range of professional backgrounds, the clarity and effectiveness of the criteria could be enhanced.

2 Eligibility—minimal disability

Not all athletes who meet the diagnostic criteria are eligible to compete in the Paralympics. Each of the associations also requires that athletes meet what are commonly known as ‘minimal disability’ criteria. In basic terms, these criteria aim to ensure that the Paralympics and other special, segregated competitions are preserved for those who have a significant disability that prevents them from competing fairly against people who don’t have a disability. For example, to be eligible for competition as an amputee, an athlete must be missing at least one major joint in a limb (i.e. shoulder, elbow, wrist, hip, knee, ankle) or, in cases where the amputation is through the joint, no functional movement must remain at that joint.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Sports Federation for Persons People with Mental Handicap (INAS-FMH)</td>
<td>People with an intellectual disability</td>
</tr>
<tr>
<td>Cerebral Palsy—International Sport and Recreation Association (CP-ISRA)</td>
<td>People with cerebral palsy, acquired brain injury and stroke</td>
</tr>
<tr>
<td>International Stoke Mandeville Wheelchair Sports Federation (ISMWSF)</td>
<td>People with spinal cord injuries (including spina bifida and polio)</td>
</tr>
<tr>
<td>International Blind Sports Association (IBSA)</td>
<td>People with vision impairment</td>
</tr>
<tr>
<td>International Sports Organisation for the Disabled (ISOD)</td>
<td>Amputees (including dysmelia) and Les Autres athletes (people with locomotor disabilities not described in the other groups, such as multiple sclerosis, muscular dystrophies, dwarfs and arthrogryposis)</td>
</tr>
</tbody>
</table>
The minimal disability concept has two distinct but related aspects that should be considered. The first is the underpinning philosophy. Currently, there is not a single, universally accepted statement that explains the purpose of minimal disability criteria—several of the organisations identified do not have any stated philosophy at all. Development of such a statement, couched in the language of the ICIDH-2, would greatly enhance the transparency and understanding of disability sports.

The second consideration is the criteria themselves. While there is a need to have a diverse array of criteria in order to take account of the wide range of disabilities catered for in Paralympic sport, there is a range of codes and language within the ICIDH-2 that would ensure a greater degree of uniformity in how they are expressed.

3 Classification

Placing athletes into separate classes in order to ensure fair competition, otherwise known as classification, has long been accepted practice in all forms of sport. Boxers and wrestlers compete in different weight divisions, masters and junior sport separate athletes by chronological age, golfers are grouped according to performance, males and females have separate competitions in most sports, and, in sailing, fair competition is ensured by having sailors compete in the same class of boat.

Since the first Stoke Mandeville Games for Paralysed Individuals were held in England in 1948, administrators and officials have recognised the need for the development of a system that ensures fair competition among people with disabilities. For instance, it would obviously be unreasonable to expect quadriplegic athletes to successfully compete against paraplegic athletes. This principle seems simple enough, but its application is considerably more challenging.

The classification process varies from sport to sport and across disability groups. It is continually being revised and has been the topic of considerable debate. It is therefore impossible to give a comprehensive account of the potential utility of the ICIDH-2 in this regard. It is possible, however, to point out that, as in the areas of diagnostic and minimal disability criteria, there is considerable variation in the language used to describe the systems and the detail in which various systems are documented. The ICIDH-2 undoubtedly has an important role to play in standardising these systems, thereby improving their clarity and effectiveness.

References


Promoting health is more than just a day’s work for the recently-appointed Head of the AIHW’s Health Registers and Cancer Monitoring Unit, John Harding.

Formerly Head of the Institute’s Labour Force Unit, John said his foray into the world of health statistics and information came in 1982, when he was introduced as the new Chief Statistics Officer for the Capital Territory Health Commission. Territory Health’s Chairman at the time, Dr Ken Doust, remarked: ‘I wondered who the new bloke was who looked like he could do with a feed!’

John’s physical appearance back then was the outcome of a decade of distance running—from track and cross country through to marathons. It was for this achievement, and his 30-year involvement in coaching runners and organising running events in Canberra, Sydney and Papua New Guinea, that John was selected as a community torch bearer in the recent Olympic torch relay. He ran 500 metres downhill in the suburb of Farrer, cheered on by a good crowd which included many AIHW staff members.

‘Health statistics seems to be an attractive field of interest for runners,’ John said. ‘At the Institute there are five of us who are members of North Canberra Athletics Club—Geoff Sims, Kathy Southgate, Tim Armstrong, Trent Harlow and myself.

‘A strong interest in health and fitness for myself, my family and for runners I have coached does tend to fire a voracious appetite for health information.’

It is this thirst for knowledge that has led John to the helm of the Health Registers and Cancer Monitoring Unit—recently vacated by Paul Jelfs (now the Institute’s outposted officer at the Department of Veterans’ Affairs). However, Paul will retain a part-time role as senior epidemiology adviser to the Unit.
It’s an exciting time to take over as the Unit is at the forefront of new analysis of health data in cancer survival and multiple causes of deaths,’ John said.

‘During the next 12 months we’ll also see the first statistical results from the National Diabetes register, and data development for a national bowel screening project being undertaken by the Department of Health and Aged Care.’

‘Staff in the Unit are enthusiastic about the prospects for some ground-breaking findings in these areas.’

John’s role as chief statistician at the Capital Territory Health Commission in the early eighties was his first ‘big break’ into the world of health and health statistics.

‘Moving to Territory Health after nine years at the Australian Bureau of Statistics, and the PNG Bureau of Statistics—where I worked in mainly social statistics—proved to be a profoundly enjoyable experience,’ he said.

‘Instead of being a little cog in a big machine cranking out numbers, I was the chief statistician working across many fields of health information—producing system-wide management reports, hospital morbidity publications, and contributing to the Institute’s early data development activities.

‘I also designed and ran community health status surveys, and provided advice to allied health managers doing their own workplace surveys.’

John first started work at the Institute in 1992, after almost six years at Territory Health and a three year stint in the ACT Treasury working on economic and social statistics.

He found after several years of producing labour force reports and contributing to national health workforce planning committees, that major advances were achieved in the depth and breadth of analysis in the Institute’s publications.

‘I remember that when Dr Michael Wooldridge (then opposition spokesman on health) visited the Institute in 1995 he expressed a strong, personal interest in health workforce statistics,’ John said.

‘It has been very satisfying since 1996 to see many workforce initiatives by the government that should produce very positive outcomes in both the short and long term.’

With his impressive marathon and track and field days behind him, John has turned to orienteering which he now enjoys with his wife and three children—two of whom are national age champions. He includes competing in New Zealand this year in the World Masters Orienteering Championships and the World Rogaining Championships amongst his sporting highlights. The 24-hour event—in which he and wife Carol covered about 65 kms as a team—was set in spectacular mountainous country in the Southern Alps.

As for his new role at the Institute, John is happy to continue to produce health statistics for researchers, policy makers, planners and public health officials.

‘Producing statistics that can make a difference in the long term to the health of Australians—while working with dedicated people enthusiastic about their jobs—is close to utopia for a statistician.’
This column is aptly named, given the energy expended by NCSIMG members and participants on the Steering Groups in driving projects sponsored by the Group.

The Aboriginal and Torres Strait Islander Health and Welfare Information Unit (ATSIHWIU), a joint collaborating unit of the AIHW and the Australian Bureau of Statistics, has been commissioned by the NCSIMG to develop principles and standards for community services Indigenous population data. This important work will complement that of the National Health Information Management Group which led to the report *The Aboriginal and Torres Strait Islander Health Information Plan—This Time, Let’s Make it Happen* …

To ensure that as many interested parties as possible can contribute to the project, the ATSIHWIU held a successful workshop in Canberra on 6 October. Participants, representing a large number of non-government organisations (NGO) and Territory, State and Commonwealth jurisdictions, were enthusiastic in putting forward suggestions to be built into the next-to-final draft of the report which will be discussed at the December NCSIMG meeting before the finalised version is submitted to the Community Services Ministers’ Advisory Council in early 2001.

In association with the development of the principles, the Unit is examining how Indigenous data are collected in the Supported Accommodation Assistance Program, Child Protection and, with financial assistance from National Disability Administrators, disability services data collections.

The Steering Committee responsible for the scoping study of family support services has sent its final draft report to NCSIMG members for their comment and consideration of the recommendations it contains. The complex nature of family support services has made the project a challenging one, but Steering Committee members are pleased with the report. This is expected to be the first phase of work in this area of community services data.

The third NCSIMG project now close to completion is the development of a minimum data set for juvenile justice. The Institute has done this work at the request of the Australasian Juvenile Justice Administrators and the NCSIMG, with the final report now ready for consideration and endorsement by both groups.

To meet its commitment to keep in touch with community needs for community services information, the NCSIMG hosted a meeting, in August this year, of Sydney-based non-government organisations. The meeting was very well attended, and the NGO participants made the most of the opportunity to share their views.

For further information, contact Margaret Fisher, AIHW, ph. (02) 6244 1033 or e-mail: margaret.fisher@aihw.gov.au
The Institute has launched its new web site, albeit quietly, and the feedback we have received so far has been great! Thanks to all of you who put forward suggestions for improvement and change.

Have you had a chance to look at the new site yet?

If so, you will see that we have taken a different approach to presenting information on the Institute’s work.

We have joined the web bandwagon and developed the ‘portal’ concept. A portal is ‘webspeak’ for a gateway to a variety of information in a variety of formats, grouped together to be accessible through a single access point. Many of our staff are now preparing and contributing material to our subject portals, and we’ll continue to develop them to cover the type of information you want to see. Let us know what you think, and tell us what else we might include. There are e-mail links on each of the portals for your input, as well as the general feedback button on every page of the site.

The future prospects for the web site are also very exciting. Over the next few months we will be:

• adding more content;
• adding some interactivity to allow you to generate your own tables from some of our data sets;
• continuing to keep you up-to-date with the latest numbers, trends and report findings;
• hosting some discussion groups on various topics; and
• investigating better ways of notifying you of new releases and changes to the site.

Our web site offers real opportunities to provide a dynamic service to our clients, so if there is something that you would particularly like to see there let us know and we will see what we can do.

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

National Health Information Management Group (NHIMG)

The last edition of Access advised of a ‘watch this space’ regarding appointment of the new Chair of the NHIMG. The Management Group is delighted that the Australian Health Ministers’ Advisory Council has appointed Mr Mick Reid, Director-General of the New South Wales Department of Health. Mick has chaired his first meeting of the NHIMG and members are looking forward to working under his guidance on national health information projects.

The Australian Health Ministers’ Advisory Committee has established the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID) to provide broad strategic advice to the NHIMG on the improvement of the quality and availability of data and information on Aboriginal and Torres Strait Islander health and health service delivery. The Advisory group will also draw together the range of existing activities already under way into a coordinated and strategic process.

This new group will supersede the National Indigenous Health Information Plan Implementation Working Group (NIHIP IWG) and the Aboriginal and Torres Strait Islander Health and Welfare Information Unit Advisory Committee (ATSIHWIU AC) which previously advised the Australian Bureau of Statistics and the Institute on their joint work program on Indigenous statistics.

More news on NHIMG activities in the next issue.

For further information, contact Catherine Sykes, AIHW, ph. (02) 6244 1123 or e-mail: catherine.sykes@aihw.gov.au
It is the year 2050. ‘We’ve almost reached perfection’, triumphs Lib Setag III. As the newly elected world president, Lib is launching a global program called Supreme Level of Body Stillness. The program is by now within the reach of most people in the world. Its centrepiece is the automatic home. Chair escalators run from the self-driving car in the garage to a self-opening front door and then throughout the house. All doors, lights, cupboards, phones and computer-TVs are voice activated. The fridge, stove and microwave are one unit that prepares, cooks and serves meals. Lawns are self-weeding and mowing. Garbage puts itself outside for collection. Floors and carpets clean themselves. Toilets have a vacuum assistance option. Children ride from the front door to school and back on programmed vehicles with armed guards. There’s work on transducers that will harness the energy from blinking, breathing, snoring and other bodily functions and feed it back to save physical effort even further. ‘The SLOBs program sets a new standard for a world grown wealthy’, ends Setag.

Is this so fanciful? Consider the proverbial visitor from outer space, sent to Earth today to find out what we are all on about. Over just a few weeks, the visitor takes in the scene, looks at film records of the twentieth century and reports back. ‘These creatures think and do many conflicting things. They seem to disagree with each other about what they mean by democracy, freedom, rights and responsibilities. But we only have to look at what they actually do to see that they all agree on one supreme aim: to minimise the movement of muscle.

‘They’ve been heading this way for a long time. In the rich cities they’re addicted to cars and more cars; to mobile telephones; to push-button devices that operate car doors, garage doors and TVs; and to escalators and ride-on lawn mowers. They’re a hoot when they spend 10 minutes looking for a car parking space that saves them a 1-minute walk.

They let their children move a bit, but less and less than in earlier decades. That’s because they see so many dangers if the kids roam, go to parks, or risk hurting themselves by climbing trees or running about too much.

‘And the earthlings do have an activity which involves a lot of movement. It’s called sport. Among adults it’s done by a select group called sports people. Some of them, if their sport is popular, can earn a great deal of money, along with the companies that sponsor them. As to the rest of the population, the vast bulk loves to watch sport on TV but never plays it.

People are more physically active in the bush areas, with farm work. But they’re working to fix that with more mechanisation. In poor countries most people have no choice but to labour. But that will change as they gain prosperity.

‘So, as the world gets wealthier, the typical adult earthling is becoming more and more still. That’s their goal and they’re getting there. Mission accomplished, so please beam me back.’

Is this all bad? Well, it depends on your perspective. In many ways these developments are perfectly reasonable and mechanisation is a great thing. I think it is a bit precious to see our present sloth as some kind of new moral weakness. How many of us would do exhausting, repetitive and even dangerous work for a living if we had an easier choice not to? There is probably a limit to the character building properties of the physical toil that marks many people in poor countries. Did our parents or grandparents walk miles to school because they were noble or consciously wanted to ‘do exercise’, or because that’s simply the way life was? Did they disdain the TV so they could play outside, or was it because they had no TV?

Humans have probably always spared physical effort when we had the chance. If our immediate world carries a constant threat of our being physically attacked, we need to save our energy for when we most need it. If the elements are hard, food is scarce or takes a strenuous effort to get, we need to conserve the energy we have on
board. We follow these rules instinctively. There probably hasn’t been much jogging or callisthenics among pre-industrial societies.

And even when conditions are not like that, as for virtually all Australians now, mechanisation can free our time for more recreation and intellectual or spiritual pursuits. (That’s the theory anyway; whether it’s working is a major question for another day.) After all, it’s our big brains that make us unique and superior among animals, by our own acclaim.

But, as we all know, there are huge downsides to this growing physical inertia. Take body fatness as a prominent case. If we don’t use up all the energy we take in through food and drink, we store the excess as fat. If this imbalance is widespread and gets progressively worse over time, we grow fatter and fatter as a society. This adds a raft of excess health risks for conditions such as heart disease and adult onset diabetes. And we know that countries all around the world are indeed getting much fatter. In Australia over half of our adults are overweight and close to four in ten of these are obese. In 1995 the average Australian adult was over 4kg heavier than their counterpart only fifteen years earlier.

So, which is the bigger problem for an overweight person here in Australia or in similar countries—too much energy in or too little out? For a typical individual who is overweight this is mostly an impossible riddle. Do we accept that the individual is sedentary and decide that they eat and drink ‘too much’? Or is it a case of ‘too little’ movement and exercise, given the dietary intake? It depends on the point of reference and there is no sensible way to set it for an individual.

Luckily, we can get clues to which is generally the more important factor by trying to explain why populations have grown fatter in recent times. Are we tending to eat more and more over the years, using up less and less physical energy, both, or what? This is what British researchers explored. In 1995 Andrew Prentice and Susan Jebb published work on the doubling of British rates of obesity over the preceding decade. Using data on food, drink and snacks consumed in and out of the home, they looked for trends in per capita energy intake since 1970. Many would have expected them to find a rise in intake, to match the trends in bodyweight. In fact, they found a 20% fall over the period. If we accept that these two trends are real, the only way they can be reconciled is if the physical energy expenditure had fallen even more than energy intake. (Another way of looking at this is that perhaps we ‘automatically’ reduce our energy intake as the demand falls, but not enough to avoid weight gain.)

Using circumstantial evidence, Prentice and Jebb went on to show that the rise in obesity was paralleled by a doubling of the time spent watching TV since the 1960s. It was also in line with the growth in the number of cars per household. And they showed that the lower a person was in social rank the more likely they were to be obese, and to spend more time watching TV than the rank above them. Considered in isolation, each of these findings is just an association. But together they suggest a pattern that tells a story. Also, no such associations were found for dietary factors such as daily energy intake or, in the case of social class, the percentage that fat contributed to that intake.

So if this is a guide to population trends in bodyweight here in Australia and elsewhere in the world (and I’ll wager that it is) the main cause is probably not how much or what we eat. It’s our increasing mechanisation and how little we are now moving our bodies throughout the day. This suggests that the world has a moving dilemma. It is on a collision course between its mission to save personal energy and the long-term health effects that this will bring.

If this is true, what can we do about it and what are our chances of success? That will be my subject in the next issue of Access.

Dr Paul Magnus, AIHW Medical Advisor
The heart (and brain)

The Unit monitors and reports on disease outcomes, medical treatment and care, and risk factors linked with cardiovascular health. The latter include risk factors such as smoking and obesity the impact of which goes far beyond cardiovascular disease alone.

Picking up trends over time and keeping an eye on high-risk population groups are of special interest.

The Unit is funded by the Commonwealth Department of Health and Aged Care and supported by an Advisory Committee chaired by Professor Andrew Tonkin, Director of Health, Medical and Scientific Affairs for the National Heart Foundation of Australia. The Committee includes representatives from Commonwealth and State and Territory health departments, medical colleges and universities, as well as experts in Aboriginal health, stroke and diabetes.

The people

Dr Stan Bennett has headed the Unit since its inception in 1996. He has a background in mathematical statistics, epidemiology and population health and experience in statistical, research and policy agencies.

The two project teams within the Unit focus on prevention and risk factors and on the medical aspects of cardiovascular disease.

Dr Tim Armstrong, who leads the risk factor team, has a background in population genetics, and has been with the Unit since it commenced. Team members include Joanne Davies, a psychologist by training, and Trent Harlow, a former biologist (and one of Australia’s top long distance runners).

The team that monitors medical care and disease outcomes is led by Sushma Mathur, a mathematical statistician who has produced numerous reports in the cardiovascular disease field. Team members include Gabrielle Hodgson, Jackie Grau, Susana Senes, and Dr Indra Gajanayake (who is currently participating in the Australian Public Service’s Senior Women in Management Program).

The Unit also draws on the expertise of the AIHW’s Medical Adviser, Dr Paul Magnus. Paul was previously Medical Director of the National Heart Foundation.

The flagships

The Unit’s flagship publication is Heart, Stroke and Vascular Diseases, a biennial report jointly produced with the National Heart Foundation. The report presents the latest facts and figures on the effects of cardiovascular disease on Australians. It contains a wealth of user-friendly information on patterns of cardiovascular health and illness, risk factor levels, treatment and management, and health care costs.

The next edition has a focus on physical activity, and will be released during Heart Week in May 2001.

The other flagship of the Unit is its on-line National Cardiovascular Disease Database, accessible through the Institute’s web site (http://www.aihw.gov.au).

The database is very much the brainchild of Sushma Mathur, and provides researchers, policy makers and health professionals with easy and timely access to the latest available data held by the Unit. The database is continually updated.

Prevention and risk factors

The Unit tracks changes in the prevalence of key disease risk factors such as smoking, high blood cholesterol, high blood pressure, physical inactivity, poor nutrition, overweight and diabetes. A highlight during 2000 was the release of the Physical Activity Patterns of Australian Adults report (see the front page of this issue of AIHW Access).
The report provides recent prevalence rates and trends on the awareness of physical activity campaigns such as Active Australia, participation in physical activity, and intentions to become more physically active.

Unit staff are contributing to the development of data standards for the measurement of blood lipid levels and blood pressure in population surveys. This is to ensure uniformity in the way these data are collected and interpreted, and to complement already-existing standards for overweight and obesity, smoking and physical activity.

Staff are also helping to plan a national survey of biomedical risk factors that will include blood sampling.

A report on recent trends in the apparent consumption of nutrients is being prepared with the Australia New Zealand Food Authority. Tim Armstrong is a member of two peak bodies which deal with the nutritional and physical activity prevention aspects of chronic disease—the Strategic Intergovernmental Nutrition Alliance and the Strategic Intergovernmental Forum on Physical Activity and Health.

Other activities in the prevention and risk factor area include an analysis of national survey data to help determine the nature of links between cardiovascular disease risk factors, socioeconomic and psychosocial factors, and cardiovascular mortality.

**Treatment and care**

Registers of cardiac surgery and percutaneous transluminal coronary angioplasty (PTCA) procedures performed in Australia are maintained by the Unit, in collaboration with the National Heart Foundation.

Each year cardiac surgeons and cardiologists provide the Unit with annual returns that enable patterns and trends in cardiac procedures to be monitored nationally. More than 60 hospitals across Australia participate in each register. The reports Cardiac Surgery in Australia 1998 and Coronary Angioplasty in Australia 1998 will be published shortly.

The possibility of a national, patient-based, cardiac procedures database is being discussed with representatives of cardiac surgeons, cardiologists, the National Heart Foundation and the Department of Health and Aged Care. The database would provide comprehensive, reliable, risk-adjusted, real-time data on cardiac surgery procedures and cardiology interventions. It has the potential to be a unique source of longitudinal data on cardiac patients and to help improve the quality and safety of patient care.

Efforts to establish a national ambulance database, working through the Australian Resuscitation Council, have been unsuccessful.

The Unit is working with the GP Statistics and Classification Unit at the University of Sydney to produce a snapshot of general practice care of cardiovascular conditions and some related risk behaviours. These data, to be released early next year, represent a baseline against which future patterns in general practice can be compared, and, together with other information, will help to interpret trends in cardiovascular disease prevalence and incidence. These data may also be useful in the development of guidelines for general practice care of patients with cardiovascular conditions and will help to guide the allocation of resources to improve practice.

**Disease incidence and mortality**

Another key task for the Unit is monitoring disease incidence and mortality.

National mortality data, based on death certificates, are used to produce national cardiovascular disease mortality surveillance reports, and to provide data for the National Cardiovascular Disease Database.
The reports and the database both include trend information for the major cardiovascular diseases, and information on geographical differentials and data for Aboriginal and Torres Strait Islander people.

Monitoring national cardiovascular disease incidence is a very difficult if not Herculean task, owing to the high cost of running specific disease registers, the varying reliability of administrative data, and complex definitional issues. Through collaboration with researchers at the Universities of Newcastle and Western Australia, however, and Queensland Health, a valid, reliable and sustainable method may be a little closer. The Unit will soon publish a report that examines the feasibility of monitoring the incidence of selected diseases using existing national data sets.

Did you know that the prevalence of rheumatic heart disease among Aboriginal and Torres Strait Islander people is one of the highest in the world? To monitor the situation, the Unit has supported Northern Territory Health Services to establish a computerised register of people with known or suspected rheumatic fever and rheumatic heart disease. The register helps to coordinate treatment and provides annual estimates of the incidence and prevalence of acute rheumatic fever and rheumatic heart disease among Indigenous people in the Top End.

The Unit has recently investigated diabetes-related mortality and morbidity—diabetes is a known risk factor for cardiovascular disease and results in significant illness, disability and mortality. The resulting report, *Diabetes as a Cause of Death, Australia, 1997 and 1998*, will be released in December 2000. The report examines the contribution that diabetes makes to all-cause mortality, and clearly shows the strong association between diabetes and cardiovascular disease.

International links

The Unit has been working closely with the Organisation for Economic Co-operation and Development (OECD) on international studies of the treatment, costs, and outcomes related to coronary heart disease and stroke across OECD countries. The aim of these studies is to determine the impact of different economic incentives, regulatory environments and health care policies on medical practice patterns, and the consequences of these differences on outcomes and expenditure.

The Australian monitoring system for cardiovascular disease is internationally acclaimed. Consequently the Unit is often invited to present details of the Australian system at international forums and symposiums. A recent example was an address on Global Issues in Monitoring Cardiovascular Disease, at the First International Conference on Women, Heart Disease and Stroke, held in Victoria, BC, Canada. The system has also been used by the World Health Organization as a basis for developing guidelines for the Western Pacific Region.

‘The Australian monitoring system for cardiovascular disease and risk factors is internationally acclaimed as one of the best coordinated and advanced in the world.’
Custody of AIHW data

The security of data held by the AIHW has been of the highest importance since the Institute was established. That security has a legislative base (section 29 of the Australian Institute of Health and Welfare Act 1987, which prohibits disclosure or communication of information held under the Act even to a court of law), as well as policies and guidelines endorsed by the Institute’s Board to cover the handling, use and storage of data. As a Commonwealth authority, the Institute is also subject to the provisions of the Privacy Act 1988. (A copy of the AIHW Act is contained in the Institute’s Annual Report, available on our web site at www.aihw.gov.au.)

One of the Institute’s legislated functions, subject to the confidentiality provisions of the AIHW Act, is to enable ‘researchers to have access to health-related information and statistics held by the Institute’. Section 16(1) of the Act requires the Institute to appoint a Health Ethics Committee whose major responsibility is to form an opinion as to the acceptability or otherwise, on ethical grounds, of the health-related activities of the Institute or bodies with which the Institute is associated. The Ethics Committee has developed guidelines, endorsed by the Board, for the preparation of submissions for ethical clearance. These guidelines (also available on the web site) provide assistance to researchers seeking to access Institute health data for approved research purposes, and define the mandatory steps to be taken to ensure confidentiality of data.

Following a comprehensive review of privacy practices by the Institute’s Board, Datahound, a central corporate register of AIHW data holdings, was developed to support a standardised approach to the management of these holdings. Staff at Unit Head level have responsibility for particular data sets, including ensuring compliance with any security and confidentiality requirements. To acknowledge the key role of Data Custodians, the Institute’s Director has formally delegated responsibility for the custody of data holdings to them.

During the year, the Board endorsed guidelines which cover custodianship of AIHW data. Development of the guidelines involved a comprehensive process to which staff, Ethics Committee members and the Board contributed.

The Board has requested regular monitoring of Institute processes to ensure the confidentiality of AIHW data.

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Recent releases

August
Morbidity of Vietnam Veterans: Suicide in Vietnam Veterans’ Children (Supplementary Report 1) (Cat. No. PHE 25) FREE
Optometrist Labour Force 1999 (Cat. No. HWL 17) $16.00
Physical Activity Patterns of Australian Adults (Cat. No. CVD 10) $20.00

September
BreastScreen Australia Achievement Report 1997 and 1998 (Cat. No. CAN 8) $20.00
Cervical Screening in Australia 1997–1998 (Cat. No. CAN 9) $20.00
Nursing Labour Force 1999 (Internet only) (Cat. No. HWL 18) FREE

October
Accompanying Children Special Collection SAAP (Cat. No HOU 39) $10.50
Australian Institute of Health and Welfare Annual Report 1999–00 (Cat. No. AUS 20) FREE
Integrating Indicators: Theory and Practice in the Disability Services Field (Cat. No. DIS 17) $19.00
SAAP NDCA Annual Report 1998-99 Australian Capital Territory (Cat. No. HOU 47) $10.50
SAAP NDCA Annual Report 1998-99 New South Wales (Cat. No. HOU 44) $10.50
SAAP NDCA Annual Report 1998-99 Northern Territory (Cat. No. HOU 45) $10.50
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SAAP NDCA Annual Report 1998-99 Victoria (Cat. No. HOU 41) $10.50
SAAP NDCA Annual Report 1998-99 Western Australia (Cat. No. HOU 46) $10.50

November
Cancer in Australia 1997 (Cat. No. CAN 10) $23.50
Diabetes as a Cause of Death, Australia, 1997 and 1998 (Cat. No. CVD 12) $15.00
Disability Support Services Provided under the Commonwealth/State Disability Agreement: National Data 1999 (Cat. No. DIS 18) $17.00
National Community Services Data Dictionary V.2 (Cat. No. HWI 27) $30.00
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