



National Strategy for an Ageing Australia

**An Older Australia, Challenges and
Opportunities for all**

The Hon Kevin Andrews MP, Minister for Ageing

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Opportunities for all**

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Prime Ministerial Statement

The ageing of the Australian population is something that will touch all facets of our personal and community lives. The challenges flowing from this inevitable demographic change will have significant implications for all sectors of our nation.

The National Strategy for an Ageing Australia has been developed to provide a coordinated national response to issues surrounding population ageing. It will serve as a strategic framework to underpin the Government's leadership role in encouraging the development of appropriate economic and social policies.

Good economic management and strategic long-term thinking have positioned Australia well to both meet the challenges and take advantage of the opportunities of an older Australia. Our retirement income system is sound. The reforms of our taxation system have provided a strong revenue base to support an ageing population. Our health reforms have enabled millions more Australians to take responsibility for their own health and medical care and eased the growing pressure on the public system.

While governments should play a leadership role in preparing the country for an older population, the responsibility for putting policies into action is of necessity broader. Business, community organisations and individuals must all play a part. Their choices regarding employment, retirement planning, attitudes, lifestyles and participation will all help mould the future shape of our society.

The National Strategy provides us with a long-term strategic framework while setting realistic directions for short to medium term action. We intend to use it as a blueprint for our actions and decisions with respect to population ageing.

My Government has always given priority to recognising the contributions of senior Australians. Policies that encourage and support the participation of older Australians in all aspects of our society will continue to be high on our agenda. Together we can ensure that the ageing of our population is a positive experience.



A handwritten signature in black ink that reads "John Howard". The signature is written in a cursive, flowing style.

John Howard

Message from the Minister for Ageing

I am pleased to introduce the next phase of the National Strategy for an Ageing Australia.

Over the next fifty years, Australia's population profile will undergo considerable changes, with a significant increase in the proportion of older Australians.



This is an enormous positive for our community, as Australia's older citizens have the greatest store of life experience and the wisdom that comes with those experiences.

At the same time, the ageing of our population requires governments of all levels to undertake a leadership and facilitative role, to ensure older Australians are able to lead healthy, active and fulfilling lives.

As the Prime Minister said in November last year:

'Australia's changing demographics is a matter of the highest national importance, economically and socially. It presents challenges but also opportunities.'

The new Federal portfolio of Ageing has been established to address these challenges and opportunities.

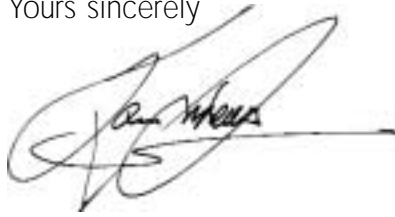
As the Minister for Ageing, I intend to celebrate the contribution of older Australians, while also recognising that older people deserve to be supported across all areas of their lives.

As a first step, I am delighted to announce the next phase in progressing the National Strategy for an Ageing Australia, by using this Strategy as a springboard to engage with the community on the issues of ageing.

Together, we have an opportunity to lay the foundations that will support older Australians in our community as we move through the remarkable demographic changes expected over the next decades.

I look forward to working with everyone with an interest in these issues to support older Australians in our communities.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Kevin Andrews', written over a horizontal line.

Kevin Andrews

Executive Summary

Australia's strong record of economic growth and sound economic fundamentals means that an older population is not expected to be a burden on the community. Our sound retirement incomes system, projected growth of superannuation assets and accumulation of private savings will ensure that adequate retirement incomes and quality health and aged care services will continue to be affordable in the future. Nevertheless, a broadly based strategic framework to address emerging issues associated with an ageing population is necessary to protect and enhance our position in this important policy area. Policies that support continued economic and social contributions by older people will be essential. Short to medium term action will be required by government(s), business, community organisations and individuals to improve outcomes.

The baby boomer generation will enter older age with different aspirations and expectations. They are likely to demand a greater range and higher quality services and experiment with ways of experiencing older age. The increasing resources, expectations and needs of future generations of older people will have implications for the business sector. Baby boomers will be the main driver of the increased number of people 65 years and over. Their numbers will increase the over 65 age group by 50 per cent over the next 10-15 years. Improved life expectancy will also see the numbers of people aged 80 years and over double during the next two decades.

We will see different patterns of disease and disability, technological advances, changes in family structures, and changes in national and personal wealth. Health and well being across the lifespan including older age will continue to be high priorities.

Financial planning and the need to raise awareness of the value of savings will be a key issue for greater numbers of Australians. People will require an adequate retirement income for a longer period of time. This highlights the importance of a better balance between the safety net of the age pension and the self provision possible through adequate superannuation and/or other savings. It will be important to have effective mechanisms in place to secure the billions of dollars accumulating to support retirement living. The centrality of home ownership to financial security particularly in older age will remain. In addition to financial planning it will

become increasingly important for people to plan how they spend their extended retirement period.

The workforce will age along with the population. The need for and value of better utilising skilled mature age workers will increase as the supply of younger workers declines. Ongoing engagement of mature age workers will be important to achieve sustained economic growth as the population ages. While targeted programs to encourage young skilled migrants to come to Australia may have some impact on the size of the workforce, increased large scale immigration is not the answer to Australia's ageing society. Attitudinal and structural forces will continue to impact on the willingness of employers to employ mature age workers, and the willingness and capacity of mature age workers to stay in the workforce.

Improved opportunities for ongoing training and professional development of mature age workers as well as more flexible working conditions to facilitate gradual transition from work to retirement will need to be accommodated as the workforce ages. Mature age workers displaced from the workforce will continue to need to be supported through the employment and income support systems.

Positive and informed attitudes to and by older Australians are fundamental to a successful ageing nation. Artificial and real barriers to older people's participation in economic and social life need to be removed. This will require a different mind set about new infrastructure eg. housing design, location and availability, transport services, communications technology, etc that is age friendly for all members of society. Some rethinking of the suitability of existing facilities to meet the changing needs of a greater number of older people will also be required.

An older Australia in the coming decades will be the best educated generation(s) in our history. There is likely to be continued interest in learning opportunities which if taken up will provide increased economic and social benefits to the community. A larger older population will also be available to use its skills to support the volunteer sector.

Family relationships will continue to be important to older people. People have the right to feel safe and secure in their homes and the community, the community also has a responsibility to ensure

that the potential for social isolation is kept to a minimum. Communication and understanding between all ages will continue to facilitate intergenerational harmony.

The health and aged care needs of older people will remain an important matter of community interest. Healthy ageing across the life course is a key element to continued good health. Diet, exercise, and smoking and drinking habits can influence outcomes along with biology and genetics, education, incomes and social status. As we live longer, we are likely to see an increasing proportion of people with neuro-degenerative disorders. Depression and overall mental health will also require ongoing attention. The health and aged care system as well as families, carers and the wider community will need to respond.

We should expect to see continued diversity in the health and functional capacity of older people. Not all old people are frail and ill. Only a relatively small percentage of people currently aged 70 years and over use government funded aged care services. However, the expectation of service choice and high quality, as well as integrated health and aged care services will continue for a larger and more discerning group of older people. The preference for the delivery of services within the home environment will remain and new approaches to improve coordinated care will be required. These services will require a skilled and professional workforce that is equipped to meet changing needs.

Research will underpin the National Strategy for an Ageing Australia and fine tune its implementation. We need to understand and reassess what is happening as the population ages. A good evidence base will support the policy and administrative decisions that will need to be made by a broad range of individuals and organisations.

Introduction

The Purpose of the National Strategy

Australia will experience an unprecedented ageing of the population in the first half of the twenty-first century. Significant changes will flow for all aspects of social and economic life, as the proportion of older people in the community increases. The sheer magnitude of the demographic change requires a pro-active approach in order to ensure quality of life for older people, harmony between the generations and positive outcomes for the whole population.

As the population ages there will be broad areas of change and a wide range of issues to be addressed. These include:

- an ageing workforce and the need for action as the supply of younger entrants drops dramatically but the demand for economic growth persists and competition in a global economy continues to increase;
- the need for adequate levels of, and sustainable sources of, retirement incomes to support retirement living;
- the need for positive individual and community attitudes to ageing;
- the need for age-friendly infrastructure and community support (including housing, transport and communications), to enable greater numbers of older Australians to participate in and remain connected to society;
- the importance of healthy ageing to enable a greater number of older people to remain healthy and independent for as long as possible; and
- a growing demand for accessible, appropriate and high quality health and aged care services.

The goal of the National Strategy for an Ageing Australia is to deliver the best outcomes for all Australians regardless of age. The National Strategy is a framework for our national response to the challenges and opportunities that an older Australia will present. It will be the vehicle for ongoing leadership by the Commonwealth Government in engaging the Australian community on this important issue.

The responsibility for meeting the challenges of population ageing lies not only with the Commonwealth Government but with other levels of government, with business, with communities and with individuals. Responsibility for action will vary with the issue and over time. The National Strategy is intended to provide a framework for action for all these groups as we seek to respond to the changes that population ageing will bring.

The National Strategy recognises the breadth and complexity of issues of an ageing society, and the importance of effective and coordinated action in making the necessary adjustments. It is designed to encourage organisations and people to continue to do the things they do best, and to be a framework to support cooperation between all elements of society.

The Principles Guiding the National Strategy

It is important for the nation to respond to the ageing of the population in line with sound principles to guide our attitudes and actions. The following principles reflect the fact that the Strategy is not just about older people, but about providing opportunities for, and removing barriers to, people's participation in society and access to services across their lifespan.

National Strategy Principles

- The ageing of the Australian population is a significant common element to be addressed by governments, business and the community.
 - All Australians, regardless of age, should have access to appropriate employment, training, learning, housing, transport, cultural and recreational opportunities and care services that are appropriate to their diverse needs, to enable them to optimise their quality of life over their entire lifespan.
 - Opportunities should exist for Australians to make a life-long contribution to society and the economy.
 - Both public and private contributions are required to meet the needs and aspirations of an older Australia.
 - Public programs should supplement rather than supplant the role of individuals, their families and communities.
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- A strong evidence base should inform the policy responses to population ageing.
- The delivery of services and pensions for our ageing population is affordable so long as we have a well managed economy and growth.

Developing the National Strategy

An extended process of consultation guided the development of the National Strategy. To provide an up-to-date information base for the Strategy, including community views, six discussion papers were prepared. These covered the key issues associated with demographic change and their impact on the community. The papers were widely distributed throughout the community and over 300 formal responses were received to inform the policy process.

Structure of the National Strategy

The impacts of population ageing will be far reaching. To best capture the key areas that will be affected, four themes were described in the Terms of Reference for the Strategy. These were:

- independence and self provision (includes employment for mature age workers);
- attitude, lifestyle and community support;
- healthy ageing; and
- world class care.

This National Strategy document presents a descriptive analysis of trends and issues arising in relation to each of the key areas. In each key area, the descriptive analysis is accompanied by a statement of goals, and a list of actions required to meet these goals. Given the need for action on many fronts by many different groups to achieve the goals, a list of who might have a role in achieving these goals has been included.

The actions detailed in the National Strategy are broad and intended to set directions for activity rather than describe specific activities that governments, businesses, communities and others could take. Many organisations will already be undertaking specific work in line with the directions in the National Strategy.

The strategic framework outlined in this document will be a guide for future policies, programs and activities in a wide range of areas.

Monitoring and Review of the National Strategy

To ensure that the National Strategy remains a dynamic document and a driving force for change, a structured monitoring and review process is to be established. There will be ongoing monitoring of progress in meeting the goals of the National Strategy, culminating every three years in a report to the Commonwealth Parliament. This report will be prepared by the Office for Older Australians and will include feedback from Commonwealth agencies, from Commonwealth/State/Territory councils and committees and from government/business and government/community forums.

While the National Strategy is intended to provide a framework for future action, it will be important that the directions set by the National Strategy are evaluated at regular intervals to ensure that they are appropriate in an ever-changing economic and social context. A review of the National Strategy will be undertaken every three years in conjunction with the progress monitoring process.

Ongoing research to inform and guide our responses to population ageing will be an important part of the monitoring and review process. Research will be required to guide policy development, set future priorities for action, identify best practice, identify barriers to change, evaluate the impact of policies, programs and services, and guide individual and social action. We will need a strong evidence base to understand not only how to mobilise our response to an ageing nation, but also how to adjust our responses as we move through the next fifty years.

An Ageing Australia

Demographic change

The profile of the Australian population is changing. Currently, the population aged 65 years and over is growing at around one fifth the rate of the population aged between 15 and 64. In twenty years time, the population aged over 65 is projected to be growing at three times the rate of the population aged between 15 and 64 years. Our population will be ageing and it will continue to age.

Based on current projections:

- the proportion of the population aged over 65 years could rise from around 12 per cent today to 18 per cent by the year 2021, reaching 26 per cent by 2051;
- the proportion of the population aged between 15 and 64 years could fall from 67 per cent today to just over 65 per cent by the year 2021, and to just under 60 per cent by 2051;
- the proportion of the population aged between 0 and 14 years is expected to decline from around 20 per cent today to 16 per cent by 2021 and to 14 per cent by 2051; and
- the median age of the population is expected to rise from 35 years today to 46 years in 2051.¹

Based on these projections, in fifty years time, one quarter of the population (or 6.6 million people) could be aged 65 years and over. There will also be a much larger number and proportion of people aged 80 years and over. This group is projected to almost double in size over the next twenty years and to triple in size over the next fifty years to comprise over 9 per cent of the population or 2.3 million people.²

This ageing of the Australian population is the result of the sustained decline in the birth rate that followed the post Second World War baby boom, the immigration of working age people and increased longevity. Fertility rates in Australia have been declining since the end of the baby boom in 1965 and could remain at low levels, exacerbating population ageing. While migrants have tended to have a younger age profile than the rest of the population, they tend to age more rapidly than their

Australian born counterparts. The numbers of older Australians from culturally and linguistically diverse backgrounds is projected to make up nearly one quarter of the total Australian population by 2011.³ No realistic increase in immigration in the future would be able to alter the pattern of population ageing.

Australians now have one of the longest life expectancies in the world. An Australian girl born between 1997 and 1999 can expect to live on average, 82 years, and a boy born in the same period, can expect to live 76 years.⁴ Life expectancy is of course not uniform across population groups with some groups, such as Aboriginal and Torres Strait Islander people, having significantly lower life expectancy than the national average.

The increased longevity of the population is the result of improved living conditions and healthier lifestyles, as well as significant medical advances. During the first half of the Twentieth Century, increases in life expectancy were largely the result of rapid declines in infant and maternal mortality. Since the 1960s, the gains in life expectancy have been concentrated in the middle age and older populations as a result of declines in death rates, particularly from diseases of the circulatory system, such as heart disease and stroke. This has had the effect of increasing the proportion of the population reaching an advanced age - resulting in the ageing of the aged.

As the population as a whole ages, we can expect to see some variability in particular population sub groups. For example, while in 1999, women made up 69 per cent of the 85 years and over group, this is projected to fall to 59 per cent by 2052, based on the assumption that the current trend for men's life expectancy to improve more rapidly than women's will continue into the future.⁵ It is predicted that, with the exception of Western Australia, the populations based outside metropolitan areas will age more rapidly than the city populations.⁶ Older Australians from culturally and linguistically diverse backgrounds are expected to increase as a proportion of the older population.⁷ The number of people ageing with a long-term disability is also expected to increase in the near future.⁸ Veterans now comprise around 15 per cent of people over seventy. With many World War II veterans now reaching their eighties, this proportion is expected to decline significantly.⁹

Changes accompanying population ageing

Fifty years ago we could never have imagined that much of our workplace communications would be done via the Internet or that we would know the sequence of the human genome. We do not know what changes might occur over the next fifty years, but we can expect that they will change our lives as much as the changes of the last fifty years.

The ageing of the population will occur at the same time as ongoing social, economic and technological change. These other changes will affect the way in which we will need to respond as a nation to the growing proportion of older people. Changing patterns of disease and disability, technological advances, changes in family structures, changes in work patterns, and changes in national and personal wealth, are just some of the changes likely to influence our national response to population ageing. Social changes, such as the change in family structures can have an affect on retirement incomes, housing and other lifestyle issues, and on the balance of formal and informal care services. Given the number of baby boomers, the attributes of this generation will most likely redefine old age. The baby boomers will enter older age with different aspiration and expectations and on average greater financial means than previous generations.

Australia's changing demographics represent a change of historic proportions within our society. Australia has shown in the past that it has a great capacity to respond to change. We have been successful in reforming institutions where necessary to meet new needs whilst retaining the institutions and practices which continue to serve the best interests of the country. If as a nation we take early and strategic action to respond to population ageing now, we will be in a strong position to meet the challenges and make the most of the opportunities presented by an ageing Australia.

Retirement Incomes

A touch-stone of a civilised society is that it values and provides support for older people in recognition of their past and present contribution and respects their right to dignity as they live in old age. Adequate retirement income is essential, at least to alleviate poverty. The comfort and security of older people has always been intrinsically linked to the economic success of the community. Expectations of retirement income are changing at the same time as longevity is increasing.

Foundations of our retirement income system

Australia's retirement income system supports its older citizens through a mix of public pensions, superannuation and voluntary savings. This system is regarded by the World Bank as a model for other countries without an established retirement income system. The taxpayer funded age pension is means tested and is not linked to previous earnings. It is adjusted in response to movements in inflation and changes in Male Total Average Weekly Earnings. These six monthly adjustments ensure that increases in community living standards, as measured by changes in prices and wages, flow through to age pensioners. The Department of Veterans' Affairs pays a similar payment to veterans called a service pension, which is available five years earlier than the age pension.

Nearly 80 per cent of people of Age Pension age receive a Commonwealth income support payment. About 20 per cent of people of Age Pension age rely on their own resources to fully support themselves. About 6 per cent of people of Age Pension age are either employed or own their own business.¹⁰ The current cohort of people of Age Pension age also has a high level of home ownership.¹¹

Australia's superannuation system has assets of close to \$500 billion.¹² Projections indicate that these funds will continue to compound, resulting in steady growth in the size of the superannuation pool. There is a continuing debate regarding the operation of the current system including the present and projected level of superannuation savings, and the taxation treatment of contributions and earnings. However, over the past 20 years Australia has put in place a substantial foundation for increased

self provision (either in full or part) for a growing number of people through measures such as the compulsory superannuation guarantee paid by employers on behalf of their employees.

Financial Drivers

The current and future cohorts of retirees will continue to seek financial security as they age and have concerns about their ability to cover living costs which include food, transport, utilities, rates, repairs and maintenance to owner occupied housing or rental costs, communications and the costs of health and aged care services. These are basic concerns for people across the lifespan but can loom large for older people. There are also other reasonable expectations regarding sufficient income to support voluntary work, access recreation activities, travel and active participation in the life of the community in older age.

All this is happening in the context of increased life expectancy, which may mean longer periods of time spent in retirement by larger numbers of people. In some cases people may spend as many years in retirement as they did in paid employment. This raises a number of key issues for our retirement incomes system.

How will retirement living be funded over the longer term?

Most retirees are at present on fixed incomes fully or partly sourced from taxation revenues, or fully self funded. The continued flow of funds will be dependent on the taxation revenues, savings patterns as well as the earnings of superannuation funds and other investments over a long period of time. Growth in public and private revenues is dependent on the economic success of the country.

How much is enough?

Decisions on the future levels of public pensions and the capacity to collect taxation revenue to support payments will be a matter for ongoing consideration by Governments and be closely linked to acceptance by taxpayers. The performance of superannuation funds and other investments will be critical to successful financial outcomes. It is clear that regardless of future economic growth, Australia needs to at least maintain and desirably continue to move towards improving the balance in favour of increased self provision

in retirement incomes. While the age pension will remain as a modest but adequate safety net, there is a need to increase capacity to support the likely higher aspirations of a larger retired cohort. If the baby boomers don't provide for their retirement in sufficient numbers and still expect to have higher living standards than the present cohort of retirees, there will be increased pressure for higher public pensions.

How do we meet individual needs?

There is a diversity of people and experiences within the ageing population and this leads to different expectations about retirement and the timing of decisions to retire. Post retirement there is also a variety of choices people will make regarding how they spend their time and whether they will need to supplement their retirement income by part time work. Some people may choose to adopt a slow down approach in the period leading up to retirement. Mature age workers may be displaced from the workforce and find it difficult to find work in the same field or may have to settle for part time work. Early retirement is likely to continue to be an option, at least in the short term, but not one that is financially adequate for most people. Most early retirees whether through choice or forced redundancy, will face an even longer period of retirement. They will need an income source(s) to maintain a reasonable standard of living.

What about changing needs?

There has been some debate about the impact of the current retirement incomes system and the social security system on continuing participation in the workforce. Superannuation and social security rules should facilitate participation by mature age workers. Some examples of the current Government's moves in this direction are the increase in the superannuation contribution age limit to 70 years, legislating an increase in superannuation preservation age to 60 years and the Pension Bonus Scheme. The age limits mentioned, as well as others, may change over future decades in line with the support from the community for the abolition of compulsory retirement age and the changing age profile of the workforce. The proliferation of multiple superannuation entitlements for individuals with more than one employer and the subsequent need to keep track of entitlements is being examined in the Government's work on choice and

portability. Possible adjustments to the present retirement incomes system will need to be kept on the policy agenda as the population ages.

Securing the future

Current projections indicate that the proportion of pension outlays to Gross Domestic Product (GDP) is expected to grow by 1.6 percentage points to 4.6 per cent of GDP in 2050. This is one of the lowest rises, compared with the projected 3.4 percentage points average rise, to 10.8 per cent of GDP, for OECD member countries.¹³ The current projections take into account increases in payment levels and numbers of eligible retirees, but projections of expenses over longer periods of time are difficult. It is possible that refinements of the pension system will occur over the next fifty years. It will be important to maintain the basic structure of the current retirement incomes system and to make sure that it operates simply, efficiently and equitably over time. Pursuit of the goal of continuous improvement must, however, be balanced against the needs for stability and public confidence in the system.

Superannuation policies introduced in the 1990s have been directed at improving and diversifying the retirement income system to encourage greater self provision and less reliance on the public pension. Australia's superannuation policies are aimed at increasing the level of retirement incomes over time. These policies will enable greater choice and improved capacity to meet increasing retirement income expectations of a larger cohort of retirees. It is expected that the baby boomer generation will demand higher standards of living in retirement. The wage indexation of the age pension ensures that its value increases in real terms (that is, relative to consumer prices and increases in wages). Increases in private retirement incomes will require a significant level of private retirement savings. Many retirees over age pension age will have two sources of income - part pension and other private income.

Members of the baby boomer generation will start to retire from 2002 and are likely to have greater spending capacity on entering old age than the current generation. Research shows that the over 55 years olds account for 21 per cent of Australia's population, but are part of households that own 39 per cent of the nation's household wealth, and account for 25 per cent of all

disposable income.¹⁴ There is diversity in the spread of this wealth and not all the baby boomers will be wealthy as they grow older, or manage their savings or inherited wealth to maximise self provision and their total retirement income.

Improving capacity in our retirement income system

While the fundamentals of our retirement incomes system are sound, it would be prudent to continue to make improvements along the way as the population ages.

There are many issues that affect the capacity to save for retirement at the individual level. The accumulation of superannuation and other savings is linked to levels of earnings and duration of employment for the majority of people. For example late entrance to the workforce, and interrupted workforce participation patterns will impact on the capacity of some individuals to privately fund their retirement and achieve the standard of living they seek. These factors particularly impact on women. There will certainly be increases in superannuation savings across the population, but there will continue to be considerable numbers of people who will rely on some level of public pension to supplement their own retirement savings. It is expected that the proportion of people in receipt of the maximum rate of age pension will fall from the current two thirds of all Age Pensioners to one third by 2050.

Changing social attitudes have also seen an increasing trend towards delayed marriage and childbirth; and an incidence of second and subsequent marriages accompanied by extended social and financial obligations. These trends may affect the capacity to save for retirement and are likely to continue to do so in the future.

With the population ageing it will be important for the community to understand the value of saving throughout life in order to achieve a level of retirement income, adequate to their own needs. Across all age groups, the community needs to be better informed on financial planning matters. Promoting informed and positive attitudes and practices regarding home ownership and/or investment in income producing assets is important. The financial planning education process needs to begin as early as possible for future generations of retirees, preferably in schools. The financial advising/planning industry is beginning to recognise the value of

educating people on the need to save for retirement and is offering various products that deliver compounding returns over time. It is never too late or early to start saving to fund retirement income. Across all age groups, the community needs to be better informed on financial planning matters. The key message is that planning and commitment is required to set aside money in order to generate financial gains for later use.

Protecting the future

A key element in meeting future aspirations about retirement will be sound management and vigilant oversight of the growing pool of superannuation funds and maximisation of growth earnings. While there can never be guarantees of investment outcomes, well informed and soundly based financial management strategies can produce reasonable return and security of capital in the market place. Members of superannuation funds will need to be better educated about, and exercise more choices in, the management of their retirement savings. While the present level of funds and projections about their growth are positive, financial managers may need to address large outflows of funds from the system as larger numbers of people retire and draw down income to cover living costs. However, these outflows should be balanced by earnings on a larger asset base, with no decline in total assets under management projected.

As superannuation savings grow over the short to medium term, and the population ages, the performance and safety of the superannuation system will become more critical. Prudential oversight of the businesses managing the retirement savings of Australians will continue to be important.

Many Australians will have the biggest amount of capital they have ever seen when they retire. Given that it is likely to be needed to last through a long period of retirement, sound individual management of this money will also be important. Annuities, allocated pensions and other products such as indexed payments, that support structured draw down of retirement savings, are well suited to extended periods of retirement.

The position over the longer term, particularly the likely behaviour of younger people as they grow older, is less clear and will need to be the subject of ongoing review. While the long-term position

of our retirement incomes system is difficult to predict, we have the right foundations for a safe and secure system for all older Australians. The key issues for the future continue to be generation of income over the lifespan, and sound financial planning through superannuation and other savings/investments. Given the long lead time required to change outcomes in this system, we will need to ensure that strategic decisions to improve the capacity of the system to deliver good individual and national outcomes, are not delayed.

Retirement Income System

Goal 1

A secure and sustainable retirement income.

Goal 2

A retirement income system providing an adequate retirement income for all older Australians, and supporting and encouraging individual contributions to retirement savings throughout working life.

Actions required to meet these goals include:

- Maintaining the value of the means tested aged pension, with adjustments being made in line with movements in cost of living and wages;
- Working towards ensuring that the social security, employment, taxation and health and aged care systems provide a consistent message about the desirability of, and support for, private savings as a major part of retirement income;
- Continuing to educate the community on the benefits of building their own resources through superannuation or other savings/investment options to support a higher standard of living in retirement; and
- Ensuring that information is available, and mechanisms are in place, to support skillful and secure management of retirement assets by individuals and by financial institutions over the longer term.

Who has a role in achieving these goals?

- * Australians of all ages
 - * Commonwealth Government
 - * Peak employer and employee organisations
 - * Private and public sector employers
 - * Peak superannuation and retirement planning bodies
 - * National representative/advocacy organisations such as the Association of Independent Retirees, Council on the Ageing, and the National Seniors Association.
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A Changing Workforce

Australia's predominant youth culture has led to a long held view that there will always be a new cohort of young people entering the workforce. These young people would come in at cheaper rates than the mature age workforce and would replace, or significantly exceed, those leaving the workforce. As a result of this belief, mature age workers have been progressively encouraged to retire early from paid employment and make way for the upcoming young workers. This view is now being challenged in Australia and around the world.

The OECD has been looking at other factors influencing retirement decisions by mature age workers.¹⁵ These include increasing demand for leisure as workers and societies become more affluent, public and private pension schemes with incentives for retirement and/or disincentives for employment, and deterioration of labour market conditions for mature age workers.

The challenges facing the paid workforce are outlined in this chapter, while those facing the volunteer workforce are covered in the Attitude, Lifestyle and Community Support chapter.

Workforce size and profile

Low fertility rates, if sustained, would result in fewer new entrants to the workforce in the future leading to an older workforce. While targeted programs to encourage young skilled migrants to come to Australia can increase the size of the workforce, the scale on which this would need to happen to have a desired effect would not be sustainable in terms of infrastructure and other requirements.

How will the workforce change?

Major research by Access Economics found that the supply of young workers is likely to fall dramatically in coming decades. It will fall from the current 170,000 new entrants to the workforce per annum, to only 125,000 new entrants for the entire decade of the 2020s.¹⁶ Should the current trend towards early retirement continue, the impact will begin to be felt from as early as 2002 when the first baby boomers turn 55. More pressure will come after 2010 when the number of people reaching 55 is the same

as the number of people turning 15. Thereafter the gap begins to widen with many more people turning 55 and possibly leaving the workforce than those turning 15 and possibly entering it.

Why would older people want to continue working?

The supply of mature age workers is likely to continue to grow. Most of these people will have faced different physical and mental pressures than previous generations. They can also expect to be in retirement for 20 or 30 years. Given that many of them would have entered the workforce at a later age, their continuing participation in the workforce will be an important factor in providing for their current and future economic and social needs.

The Access Economics research shows that three out of every five people who are made redundant do not wish to be made redundant; they wish to remain in the workforce.¹⁷ But after 45, which is the current benchmark being used to describe mature age workers, it has become very difficult for people to re-enter the workforce once they have left it. Unemployment is often psychologically and financially devastating for mature age people and for those who are dependent on them.

There may be additional linguistic or educational barriers to re-entering employment for some mature age workers. Due to low levels of English proficiency, low levels of post-secondary education and concentration in blue collar manufacturing occupations, there is a significant sub-group of mature age workers who may experience multiple barriers to re-entering the workforce following retrenchment.¹⁸

Productivity and Economic Growth

Labour and capital markets will need to respond to the effect of population ageing as productivity improvements are essential.

How can mature age workers contribute to economic growth?

With over one quarter of the population projected to be over the age of 65 in the next fifty years, the demographic effect could be a relative dampener on our growth potential and standards of living. To achieve sustained economic growth, there will have to be a continuation of current productivity growth and better utilisation of the skills and experiences of mature age workers. We

will need to increase the employment participation rate of people over 55 by keeping a larger percentage in the workforce. Appropriate utilisation of the increased supply of mature age workers can and will need to be a factor in economic growth.

For mature age workers to continue to be active in the workforce, there will need to be interplay between several sets of responsibilities: mature age workers will need to accept the challenge of keeping their skills up to date; employers will need to assist employees in these endeavours, where necessary; and employers will need to apply more positive attitudes and approaches to the continued employment of mature age workers. These mutual responsibilities will be especially important for workers with low literacy levels and those with limited access to, and familiarity with, technology.

Employees will also need to maintain good health to enable them to continue working. Keeping active and contributing to society and the economy will also help mature age workers age positively.

The OECD advocates action to remove early retirement incentives in the public and private sectors. Australia has moved to abolish compulsory retirement age in several jurisdictions and to outlaw age discrimination in workplace agreements. However, compulsory retirement ages do still exist in some vocations.

How can the business sector benefit?

Businesses would also benefit significantly from using mature age workers. International and Australian evidence suggests that mature age workers are highly productive, familiar with their organisation's products, its customer base history and the way in which the organisation's systems work. They are imbued with loyalty to the organisation and have a strong work ethic.¹⁹

There appear to be no barriers, in general, to mature age workers' capacity to continue working. Research has shown that productivity declines little with age; the quality of work is maintained and can be improved; corporate memory is a valuable commodity; the job turnover for younger workers is around 25 per cent; there is no observable difference in absenteeism between younger and mature age workers; and loyalty, work ethic and reliability is high for mature age workers.²⁰

Barriers to Capitalising on Increasing Mature Age Workforce

Ultimately market forces will drive the demand and costs of skilled mature age workers. However, there are other attitudinal and structural forces at work that will impact on the willingness of employers to employ mature age workers and on the willingness and capacity of mature age workers to continue to participate in the workforce. To overcome many of these forces will require a concerted effort over an extended period of time. Australia cannot afford not to remove barriers that inhibit ongoing participation in the workforce by skilled workers regardless of their age. Approaches include raising the community's awareness of the valuable contribution mature age workers can make; education and retraining; challenging the myths about ageing and learning and work; as well as specific practical initiatives targeted at improving the productivity of the mature age workforce.

Negative attitudes by employers and employees can produce artificial barriers to workforce participation and re-skilling of mature age workers. Progressive and successful business planning needs to take account of environmental factors including the anticipated ageing workforce. There are economic and social advantages in having a company workforce, which reflects at least in part, the customer base.

Community Awareness and Education

Mature age workers continue to encounter age discrimination in the workplace. This is despite the removal of formal retirement ages in many workplaces and the provisions in the *Workplace Relations Act 1996* that provide for the certification of family/age friendly working arrangements. Clearly, more needs to be done collaboratively to eliminate such discrimination from all sectors of the society.

Changing entrenched community attitudes and myths about mature age workers is a particular challenge to be addressed by all involved. There is a deep seated belief by some older people and the community in general that as one gets older there is a magical 'use-by date' when older people automatically cease to be productive members of society. Furthermore, some employers

believe that mature age workers are unable to keep up with continuing change in the workplace, that they are slower and less efficient than young workers, and that participation and training becomes less important as one ages. In contrast, many older people wish to continue contributing to society.

It is also important for the community to understand that the initiatives to promote and facilitate employment and training for mature age workers are not being taken in an environment that disadvantages younger workers. The employment market as a whole must be able to respond to current and future demands. Training is about skilling the whole workforce in order to address current and future needs. A culture of continuous learning and re-skilling may be fostered by employers and mature age workers acknowledging the need to keep their skills up to date. In addition, employers and governments will need to recognise and support the long-term contribution made by skilled mature age workers to economic growth. They will also need to support and encourage those workers with low initial education and training foundations.²¹

What can the business sector do?

The business sector has a clear role to play in changing negative attitudes and beliefs and encouraging positive action to accommodate changing workforce demographics. It is in their interest to do so now and, more importantly, in the future. Employers need to provide better opportunities for the ongoing training of their mature age workers and to encourage these workers to engage in the training opportunities. Mature age workers themselves also need to embrace the training opportunities provided as well as actively seek such opportunities. Some groups of mature age workers may have different learning needs from younger workers. However, the investment in training for mature age workers is as valuable, if not more so, compared with younger workers who are more likely to pursue other employment options in the short term.²²

Incentives

Most people who re-enter paid employment do so at an appropriate time through their own efforts or with minimal help.²³ Recognising that older people experience more difficulties in finding a job, it is important that we both seek to remove barriers to their employment and provide them with assistance if they choose to return to the workforce. The May 2001 Federal Budget initiative 'A Fair Go for Older Workers' is providing \$147 million to assist older jobless people by providing additional places in employment, disability, education, training and transitional programs.

As the supply of younger workers declines and the need to retain mature age workers increases, it can be expected that greater demands will be placed on employers to provide flexibility in approaches to working hours and arrangements. Demand for flexible or graduated work patterns is expected to increase as baby boomers reach the age when they begin to reassess and exercise a choice in balancing their work commitments and lifestyle pursuits.

As the workforce ages more rapidly there is also likely to be growing demand for work arrangements that support the transition process from work to retirement. Successful arrangements will be required to meet the needs of older people as they approach this critical phase in their life and also meet the emerging needs of employers to maintain and better utilise the talents of an ageing workforce. Consideration might need to be given to incentives that would give mature age workers greater choice to remain in the workforce. An existing example is the Pensioner Bonus Scheme which provides an incentive for older Australians to defer claiming the age pension and remain in the workforce for up to five more years.

A Changing Workforce

Goal 1

The removal of barriers to the continued participation of mature age workers in the workforce.

Goal 2

An employment system that recognises the importance of retaining mature age workers in light of the future predicted decline in new entrants to the workforce.

Actions required to meet these goals include:

- Raising the profile of the ageing of the workforce and the emerging shortage of younger workers;
 - Increasing recognition of the importance and benefits of training and participation in the workforce by mature age workers for future productivity and economic growth;
 - Changing the culture in the workplace, and in the wider community to the role and continued contributions of mature age workers;
 - Increasing the opportunities for ongoing training and professional development of mature age workers appropriate to their needs;
 - Establishing partnerships between employers and employment service providers to improve employment opportunities for mature age workers;
 - Removing barriers and providing opportunities for mature age workers to make a successful transition from paid work to retirement;
 - Promoting and facilitating life planning by individuals;
 - Removing incentives for early retirement; and
 - Supporting the income, career and job search needs of mature age workers displaced from the workforce while they seek to regain employment.
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Who has a role in achieving these goals?

- Commonwealth Government
 - State and Territory Governments
 - Peak employer and employee organisations
 - Training providers
 - Media
 - National representative/advocacy organisations, such as the Council on the Ageing and the National Seniors Association
 - Consumer organisations
 - Australians of all ages
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Attitude, Lifestyle and Community Support

Current and future generations of older people will certainly share a common goal of wanting to stay connected to the community and be valued for their past and present contributions to society and to the economy. They will also want to remain active and independent so that they can participate in family and community life. With increased longevity and successful approaches to healthy ageing it is likely that larger numbers of older people will continue to participate in the community to an extent that was not possible for earlier generations.

The capacity of older Australians to participate in and stay connected to society is affected by a range of factors. Appropriate housing, transport and technology for example, can assist older people to participate in society. Health technology can also extend years of healthy living and independence. Positive community attitudes to older people and the ageing process can influence the level of involvement of older people in society. The links that older people have with their family, their friends and the broader community affect both their contributions to the community and the support the community can provide to them.

Attitudes to Older Australians

Positive attitudes to older people are fundamental to social cohesion now and as the population age mix changes over the coming decades. The encouragement of positive attitudes by older Australians to the ageing process will also yield benefits to individuals and the wider community.

Current community perceptions of older people still suffer from stereotypes formed in earlier times. The options open to older people then were more limited, and their expected lifespan and health a lot lower, than they are today and certainly than they will be in the future. Current attitudes to older people are not always positive or supportive and bear little relationship to the diversity of lifestyles and contributions of older people. The media often portray older people in stereotypical or negative ways and frequently show them to be frail and defenceless.

Older people in the workforce often experience negative attitudes in relation to their capacity and willingness to adapt to change.

Younger people are often unaware of the actual contributions made by older people and their knowledge and experience is not always seen as relevant because of the perceived immense differences in their lives.

Negative, or at the very least uninformed attitudes, can act as barriers to people's lifestyles, their capacity to participate in society, and in their quality of life and health. Older people, just like people of a younger age, are all individuals, they have varying capacities and abilities to adapt to change and use their talents and skills to contribute to the economy and the community.

Despite these sometimes negative or uninformed attitudes, there is plenty of good will and respect for older people in the Australian community. An increasing number of people are showing what it means to grow older and continue to make a positive contribution to the community. This contribution is being made through paid or voluntary work or social, cultural, educational and recreational avenues. Widespread understanding of what is happening as the population ages will be important for harmony between the generations.

It will also be important that older people have a better understanding of the new possibilities for their ongoing productive participation in the economic and social life of the community. The perceptions of age and what is considered old are changing. We will increasingly distinguish between the young old and the old old.

The growing size of the older cohort will increase their influence on public policy and other aspects of community decision-making processes. The whole population will need to work together to establish the right balance between competing needs. This process will require adjustments in thinking and policies, not only to accommodate the needs of an older population but also to continue to draw on their skills, experience and talents. If we are successful in this process the nation will have a bigger pool of human resources to draw upon in coming decades than ever before.

The Lifestyles of Older People

With people living longer, the period after retirement from paid work is becoming longer, and for many people, more active. They have more time for education, recreation, cultural pursuits and voluntary work. People will expect more from retirement and will be looking to have quality lifestyles wherever possible. The baby boomers will lead this trend and some will have the wealth to make it happen. Older people will continue to seek appropriate access to services to support their day to day living needs as well as other activities.

There are a number of elements that affect the lifestyles of older people. Obvious elements include housing, transport and the ability to use common forms of technology. But there is a range of other elements, such as access to health and aged care services, access and capacity to participate in recreation, tourism and leisure activities as well as ongoing learning, that affect older people's quality of life and their involvement in society.

Individual, community, government and business resources and services are available to support the lifestyle needs of older Australians. Much of this 'infrastructure' is designed and operated without particular attention to the different needs of people as they age. Our houses, buildings, roads, buses, trains, ferries, planes, communications, shopping centres, entertainment venues, public spaces, hospitals and other health and care facilities will need to be looked at critically as the population ages. It will be important to ensure that they are appropriately designed for use by all people, including older people. Rising consumer expectations of life in retirement and of service quality, combined with the increasing personal wealth of older people, are likely to drive this reconsideration of the infrastructure that supports our lifestyles.

How will housing need to change?

Housing is an essential requirement for people of all ages. Safe and secure housing is particularly important for older people, and access by all older Australians to housing (private and public) that is affordable, accessible and suitable for their needs will be a priority as the population ages.

Home ownership is very high among older Australians, with outright ownership by far the most common tenure type for

Australians aged 65 years and over.²⁴ The benefits of this to older people include lower housing costs, security of tenure, and having an asset that may be realised for consumption.

Different life cycle stages correspond broadly to different living arrangements and can affect the type of housing that people require as they grow older. For example there may be fewer or no children at home, declining health or onset of disabilities or the death of a partner, a greater desire to be closer to friends and families and an increased need for ready access to facilities. These changes can lead to older people looking for housing which is smaller, safer, more secure, and in closer proximity to services, transport and family.

While the changing age profile alone will affect the type of housing required, there are other trends in marriage, family and work patterns and living arrangements in Australia that will also impact on the housing people will need and want in older age. There is a trend for example, for individuals to move between a greater number of households than in the past and for this to continue into later life.²⁵ People in their 50s and 60s appear to be moving more often than earlier generations as a result of downsizing housing and lifestyle options.²⁶

These changes are likely to lead to changes in the types of housing that older people will seek in retirement. We might see a growing demand for single unit accommodation suited to older people. We might also see changes in the demand for public housing (as a result of higher divorce rates) and maybe changes in home ownership patterns in the future. In the private rental market we might see greater pressure for improved security of tenure as people seek to retain links with local services and communities.

Consumers, industry and governments will certainly need to give greater attention to housing design which is suitable to older people - whether it be housing specifically for older people or housing which meets the changing needs of people as they age. The ability of the structure and design of housing to be adapted to support peoples' varying levels of independence will provide future cohorts of older people with more options to remain in their own homes and communities.

How will transport needs change?

Transport is important for enabling access to services, family, friends and it supports greater social interaction. Current transport options include car, public transport, and private transport provided by business or community organisations. Car ownership in the community is very high, with 95 per cent of couple households (with or without children) owning one or more registered motor vehicles.²⁷ However, there are groups within the community where car ownership levels are much lower and therefore the need for public transport is greater. Over 40 per cent of lone person households 65 years and over, for example, do not own a motor vehicle.²⁸

It is likely that the main impact on transport infrastructure will be an increase in the number of older people driving, or needing to use general public transport or specific transport to get them to the doctor or other service. Our transport system will need to be managed to ensure that it meets the range of diverse needs that older people will have. Not all older people have disabilities, but some need a little extra consideration to cater for their varied needs. The costs of transport, including car registration costs, public transport costs and even taxi fares will continue to influence transport options and usage.

The issue of fitness to drive a motor vehicle will continue to be an important matter for both the individual and the community. Licensing authorities will need to continue to exercise sensitivity and care in this area. There will also need to be greater consideration of older drivers in road and car design.

There are likely to be larger numbers of older people using public transport as their main form of transport. Issues such as the price of fares, the scheduling of services, and the design of buses and trains will be important to the suitability of services to older people. The availability of transport services, whether public or private will continue to be a key issue for older people in rural and remote areas of Australia. For these people, lack of adequate transport can pose major barriers to participation in the community and to the accessing of necessary services.

With the spending by older consumers expected to grow by 61 per cent over the next 10 years across the board, businesses will need to recognise and respond to different patterns of demand for

goods and services by this growing group.²⁹ One service that older people might be looking for is transport - and opportunities certainly exist for individual businesses or groups of businesses, such as those located in shopping malls to consider the benefits to their businesses of providing free or subsidised transport to retail or service centres.

What will be the communication and technology issues for older people?

Communication and information technology can be expected to change significantly over the next fifty years. Online technologies, especially from the home (and many of which we cannot even begin to imagine) are going to be paramount to servicing and improving the quality of life of older Australians. Ready access to information, the capacity to access and receive services, including health services, without needing to leave the home, the ability to communicate with people all over the world and the potential for learning and education, are just some of the ways in which new technology will be able to enrich the lives of older people and support their ongoing participation in society.

Ensuring that older Australians are able to benefit from the advances in communication and information technology is an important national objective. Older people are clearly an important target group when it comes to addressing the digital divide in the new Information Economy. In the short term, there will need to be a concerted effort to impart to older Australians the value and benefit (in terms of saved money, time and physical effort and better personal security) of utilising online information and services, particularly from the home, or a public access facility.

As well as encouraging uptake of new technologies, it will also be important that attention is given to ensuring that older people have access to new online technology. Older people will also need the skills and confidence to use the new technology, and education and training opportunities will therefore be essential. Content and presentation for older people in online information and services is also an important issue requiring further attention if older Australians are going to embrace and benefit from these services.

Notwithstanding increases in average disability-free years, increasing numbers of older people are likely to mean increasing numbers of people with age-related sensory and mobility loss. We

are also going to see an increase in the proportion of older people who are from culturally and linguistically diverse backgrounds, and in the proportion of older people who are ageing with a long-standing disability. It will therefore be critical that information, including online information and services, is available in a variety of formats and languages. The mass media will also need to give increased consideration to the needs and interests of an ageing population.

Just as information and communications technology is rapidly changing, so too is technology generally. Older people will have the time and the ability to learn the new technologies and they are already doing this in greater numbers. But we will need to make sure that older people are not excluded from the use of new technology through lack of access, lack of understanding of how to use the technology, or fear of using it. The design and delivery of new technology, including online information and services, will need to consider the functional and cognitive abilities of many more older users. Business is also going to have to recognise that if they wish to be successful in the growing 'silver' market they will need to make sure that their technology is understood by and can be used by older consumers.

Arguably, an ageing population will be much more reliant on technological and telecommunications solutions to deliver the services that older people will need and expect. The potential costs associated with meeting these needs and expectations, and the individual versus collective responsibility for meeting these costs, will need to be considered as the population ages and technology continues to change. Clearly the way in which technology, particularly information and communication technology, evolves over the next five decades will influence costs outcomes. For example, if in the future all online communication and information is via a single piece of hardware then the need for different or specialised pieces of equipment to provide particular services for older people might not be necessary. While technology will be useful for older people as a source of communication and information, it will be important that they maintain face to face contact and do not become socially isolated.

Why will access to education and lifelong learning be important?

The concept of 'lifelong learning' implies continuous learning throughout life in both formal and informal learning environments. It is increasingly seen as an important factor that can contribute to economic and social wellbeing. Demand for ongoing education services for a larger, and in many cases already well educated, retired population can be expected to increase over the next decades.

Analysis by Access Economics suggests that stable population numbers for young people will result in demand for education services for this age group being relatively stable over the next decades, whereas demand for education services among older age groups can be expected to increase over the next decades. The education needs of the youth population will need to continue to be a high priority. However, there will also be a need for greater emphasis on lifelong learning to enhance workforce skills. This will improve overall national productivity to better meet the needs of an ageing population. If, as projected by Access Economics, the youth population is relatively static over this period the easing of upwards growth pressure on schools and tertiary training institutions may create opportunities to free some resources towards adult learning without an overall increase in resources for education purposes.

What will population ageing mean for tourism, recreation and leisure activities?

The current generation of retirees has already shown us their capacity and interest in both domestic and international travel. Other recreational and cultural pursuits are also high on the "to do when I retire list" for the majority of the population. This form of activity is good for the healthy ageing process and adds to the overall wellbeing of the community. There is also significant economic gain to the nation generated by the relevant industries.

The industries involved in the provision of these sorts of services will certainly need to consider the impact of a growing older population on the types of services that will be sought. In the travel industry for example, we would expect to see travel agents and airlines starting to pitch to different market demographics, with fewer backpackers, and more travellers willing to pay a little extra for creature comforts.

Community Contribution and Support

For many older people, quality of life is determined by the strength of their family relationships, the links they have with the broader community, and the extent to which they feel they are valued and respected members of society. With the population ageing, we as a nation will need to recognise the importance of these factors for the wellbeing of older people. We will also need to recognise that continuing social changes will have an impact on some of the traditional support networks available to older people. For example, family relationships are changing through a combination of social factors that include rising divorce rates, people remaining single, never having children, higher mobility and greater geographic spread of family members. The demands of working lives and modern living have also meant that people's links with the broader community might be fewer than in the past.

There is a range of life-changing events, such as retirement from work, death of a partner or taking on a caring role for another person, that can arise as we age. If older people's links with their family or broader community are weak, these life changing events can result in older people becoming isolated or requiring higher levels of formal support than otherwise would be the case. With the ageing of the population, there will be issues for governments, communities and individuals to ensure that older people requiring greater support, do not become marginalised by their communities, or become victims of abuse or suicide.

Personal safety - both in the home and out in the community - is an important issue for older people. One of the challenges for the future will be ensuring that we have policies and programs that effectively target those situations in which older people are vulnerable, such as in high crime neighbourhoods and/or in relation to specific types of crime. We will also need policies that target situations in which older people are experiencing a fear of crime to the level where it actually limits their quality of life and results in social isolation.

As a nation we will also need to look at the potential to enrich communities by using the accumulated 'social capital' that is embedded in a larger older population. Social capital is a new term used to describe the age-old concept of social glue. It relates to how engagement in society by its members leads to trust and

cooperation for mutual benefit. It will be important that as a society we recognise and value the wealth of experience of the older population. For those older people who wish to remain or become engaged in working to help and support others in the community, appropriate opportunities and supports will be important. Other members of society who wish to help a growing group of older people should also be encouraged and recognised for their contribution to creating a better society.

Attitude, Lifestyle and Community Support

Goal 1

Society has a positive image of older Australians, appreciates their diversity and recognises the many roles and contributions they continue to make to the economy and the community.

Goal 2

That public, private and community infrastructure is available to support older Australians and their participation in society.

Actions required to meet these goals include:

- Encouraging governments, businesses, the media and communities to promote and support more positive images and attitudes to ageing and older people;
 - Promote better communication and understanding between older and younger people;
 - Increasing the focus on older Australians and an ageing population in public policy development;
 - Encouraging business, service providers and the community to recognise the skills, knowledge and capacity that older Australians can bring to the paid employment and volunteer sectors;
 - Improving access for all older Australians to affordable accommodation through financial or other assistance;
 - Exploring options that enable older people to maintain their accommodation in accord with their needs, or enable them to move to accommodation which better suits their needs;
 - Improving consumer and housing, design and building industry awareness of housing options for older people, and encouraging innovative housing designs;
 - Increasing the availability of access to transport options that meet older people's needs in terms of timeliness, safety, cost, design and flexibility;
 - Increasing the focus in road and vehicle designs on the needs of older drivers;
-

- Encouraging business, communities and local government to meet the gaps in transport requirements of older people with flexible, innovative models;
- Providing safe access to services and facilities through good design of public spaces and the built environment;
- Ensuring that older Australians are able to stay connected to society through various communication avenues, and are able to access information, including online information and services, in formats which are appropriate to their needs and skills;
- Encouraging the design of user-friendly and standardised technology, and providing opportunities for education and training to assist older people to understand and use new technology, including online information and services;
- Ensuring that there are appropriate opportunities that support lifelong learning and enhance the skills and interests of a larger group of older people;
- Encouraging business to respond to the increasing market of older Australians, through the provision of appropriate choices in both products and services; and
- Understanding better the way social capital operates and benefits Australian communities.

Who has a role in achieving these goals?

- Commonwealth Government
 - State and Territory and local Governments
 - Industry sectors such as housing, transport, tourism etc
 - Individual business and cooperatives
 - Educational institutions
 - Media/advertising industry
 - Social researchers
 - Health care professionals
 - Consumer and not-for-profit organisations
 - Australians of all ages
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Health Throughout Life - Healthy Ageing

If we are to achieve healthy ageing of the Australian population, it will be important that as a nation we optimise opportunities for people to have physical, social and mental wellbeing throughout their lives. These benefits work both ways - healthy ageing both facilitates and is facilitated by active participation in life. There are clear benefits for individuals, for society and for the economy in having people spend as much of their lives as possible in good health. Reducing the incidence of preventable diseases, delaying the onset of conditions associated with ageing, and effectively managing those illnesses which do occur, are all important for minimising the length and impact of ill health on our lives.

Achieving healthy ageing of the population presents a series of challenges for governments, businesses, care professionals, communities and individuals. It requires action on a wide range of fronts, from social and economic policy, through to coordinated and strategic chronic disease prevention and control, and changes in individual dietary and other lifestyle factors. It also requires action across a person's lifespan, as early life factors as well as the accumulation of health risks throughout an individual's life, combine to affect the risk of experiencing ill health in later life. Through life choices, individuals can play an active part in determining much of how they age, particularly in terms of preventable disease.

Factors affecting healthy ageing

There is a wide range of factors that affect the incidence and severity of illness, injury and disability in the population. In fact health and illness at the personal, local and national level result from a complex interplay of biology and genetics, education, incomes and social status, social supports, physical environment, personal and mental health practices, lifestyle choices and access to health services.

Genetic factors play an important role in human health and disease. An individual's genetic make-up affects how the human body responds to environmental factors, and genetic factors can contribute to diseases in different ways and at different levels.

While our biology and genetics are important, social and economic factors are also important determinants of health.

Differences in employment status, education and income for example are all associated with differences in health status. This applies even into old age with older Australians living on low incomes experiencing poorer health and being more likely to suffer disability and serious chronic illness. Access to safe and suitable housing and transport, as well as opportunities for people to participate and be connected with society, are important for people's health throughout life.

People's lifestyles and health behaviours certainly impact on their health, particularly in terms of preventable disease. Diet, exercise, and addictive behaviours are just some of the factors that influence health. Physical inactivity for example is a major determinant of ill health, and the effects of physical activity on reducing the risk of mortality from all causes are well documented for people at all life stages.³⁰ Attitudes and knowledge about specific health issues also influence people's health and their health related behaviours. In turn people's social and economic circumstances influence their lifestyles, health behaviours and attitudes and knowledge about health issues.

Key causes of ill health

The leading causes of ill health and disability in the Australian population are chronic non-communicable, preventable diseases that relate to the known common risk factors of smoking, nutrition (especially obesity), alcohol consumption, lack of physical activity, high blood pressure and high cholesterol. Currently over 70 per cent of the burden of illness and injury experienced by the Australian population is associated with the national health priority areas of cardiovascular disease, cancers, injuries, mental health problems, diabetes mellitus and asthma.³¹

Disease burden increases with increasing age. Evidence indicates that there are significant increases in the prevalence of a number of chronic diseases in the 45-64 year age group.³² Patterns of disease burden also change over the life course. In Australians aged 65 years and over, cardiovascular diseases and cancers together account for over 60 per cent of the disease burden.³³ These diseases, combined with respiratory illness, are the major causes of death for both men and women aged 65 years and over.³⁴ Sensory loss, musculo-skeletal conditions, falls, and conditions associated with brain ageing also affect the health of

people as they age.³⁵

There are differences in disease prevalence and health status between different groups within the Australian population. The health of populations living in rural and remote areas of Australia is worse than of those living in capital cities and other metropolitan areas.³⁶ The health status of Aboriginal and Torres Strait Islander people is significantly worse than for the Australian population in general. Indigenous Australians have higher rates of premature death from diseases of the circulatory system, cancer and external causes such as accidents, poisoning and violence.³⁷ Due to the high level of risk factors present in Indigenous communities, such as obesity, smoking, alcohol and environmental health issues, the onset of chronic disease and ill health tends to occur earlier in these communities.³⁸ Socioeconomic disadvantage is also associated with poorer health including higher rates of premature death and increased likelihood of engaging in high risk activities which contribute to ill health.³⁹

The health of future generations of older people will be influenced by their health prior to reaching old age. The current causes of ill health are likely to continue to have an effect on the health status of future generations. We will also need to be aware of conditions, that might be increasing in incidence in the community. Diabetes for example is increasing in incidence in Australia.⁴⁰ Mental illness, especially depression, is projected to emerge as a major contributor to disease burden worldwide.⁴¹ The health of future generations will also be influenced by the prevalence of the various risk factors for ill health. The fact that almost one quarter of Australian children and adolescents are now either overweight or obese, for example, is clearly an issue of concern for the healthy ageing of future generations.⁴²

Achieving healthy ageing of the Australian population

Given the myriad of factors that affect our health throughout life, there are many different actions by many different parties that can influence the health of individuals, of particular groups within the population, and of the population as a whole. The Commonwealth Government, State and Territory Governments, local governments, businesses, community organisations, communities, care professionals, and individuals are all currently engaged in activities which affect health - some directly and some indirectly. Actions for

example that affect access to suitable housing, transport, communications and recreational opportunities, can all have an affect on healthy ageing.

Australia has sound economic and social structures to support healthy ageing of the population. Australia also has a strong population health infrastructure to promote and support health throughout life. With more people living for a longer period and with older people making up a greater proportion of the population, it will be important for older individuals and for our society and economy to have older people spend as much of their old age as possible in good health. We are also going to need healthy younger people to help drive the economy and to move into old age with good health. While Australia has the right fundamentals to achieve these goals, there a number of actions we could take to improve the opportunities for healthy ageing for all Australians.

Why will sound social and economic conditions be important?

Sound social and economic conditions will be required to optimise opportunities for physical, social and mental health throughout life. Many of the actions that have been identified earlier in this National Strategy will help ensure that we have a strong economy, along with financial and social infrastructure that supports healthy ageing. We will also need to reduce the inequalities in health status in our population so that all Australians have the opportunity for good health throughout life. Australia already has in place mechanisms to provide a strong evidence base for the development of effective policies aimed at reducing health inequalities.

Why will healthy ageing research be important?

Having sound research to drive the healthy ageing evidence base to understand what works and why will become increasingly important as the population ages. Research is required to improve our understanding of the process of ageing across the lifespan, the barriers to, and opportunities for, healthy ageing, and the actions we should be taking to support health throughout life. Research is also important to support government policy and program managers, service and provider organisations, advocacy organisations, consumers and the wider community to realise the

potential of healthy ageing. While some research on healthy ageing is being undertaken across Australia, what is lacking is a well coordinated, targeted national effort that can mobilise capable researchers and research organisations to build the evidence base on healthy ageing.

Why should we give priority to the key causes of ill health and disease?

With a small number of conditions responsible for close to three-quarters of the total disease burden in Australia, a continued focus on these health priority areas will be vital if we are to have healthy ageing of the Australian population. In recognition of the fact that many of these conditions share common risk factors we will also need to ensure that we have continued efforts to reduce these risk factors through actions which help change lifestyles and health related behaviours. The four behavioural risk factors of smoking, poor nutrition, alcohol and inadequate physical activity for example are significant contributors to the burden of disease in Australia, including all of the national health priority areas. We need to continue to have a range of strategies in place to tackle these risk factors as well as the other non-disease causes of ill health and disability. We also need all Australians to be personally responsible for their continued good health throughout life.

What will we need to do to provide a more coordinated and strategic approach to healthy ageing?

While Australia has many outstanding initiatives focussed on specific diseases or risk factors, a more coordinated and strategic approach to the prevention and control of chronic diseases could improve our efforts to support health throughout life as the population ages.

Many of the single disease or risk factor programs actually involve the same population groups, settings or the same service providers. We could deliver more efficient and potentially more effective health supporting and promoting programs if we were to develop more integrated approaches to the management of diseases and common risk factors. General Practitioners for example see many patients who present with one or more of the key behavioural risk factors for chronic disease of smoking, poor diet, alcohol misuse, and inadequate physical activity. In recognition of this fact, and in

an important first step towards a more coordinated approach to healthy ageing, a framework has been developed to provide a system wide approach to supporting general practitioners in the management of these four behavioural risk factors in their patients. Future work in other settings and with particular population groups will hopefully produce important health gains for the community.

A more strategic and coordinated approach to healthy ageing will also require greater recognition of the need for action outside as well as within the health system. This is about good public policy and about new directions and partnerships with businesses and communities. In the case of obesity for example, new directions and partnerships could be developed with the transport sector, town planners, local government, the sport and recreation sector, private health insurers, local communities and the media to help foster social norms of active living.

A comprehensive approach to supporting and promoting health throughout life will also require effective action across the continuum of care. Prevention and management of ill health are complementary not competing strategies. Important moves have already been made to increase the involvement of the primary care sector in preventive health care services as well as to support primary care practitioners in the early detection and management of conditions such as diabetes and asthma. Further promotion and facilitation of the role of the primary care sector in both disease prevention and management will be important. The return to high levels of private health insurance has also meant that the health insurers are seeking to enhance their capacity to meet members' expectations and needs for achieving healthy outcomes. It is expected that the private sector will respond by moving to provide more holistic health products, and in doing so, complement the services that are being provided in the public sector.

Why do we need healthy ageing action across the life cycle?

There is growing recognition of the importance of taking a 'lifecourse' approach in the development of comprehensive strategies to prevent chronic disease. This lifecourse approach recognises the importance of the impact of early life risk factors (*in utero* and early childhood) as well as the accumulation of health risks throughout an individual's life, and how these combine to affect the risk of experiencing chronic disease in later life.⁴³

This approach emphasises that the most benefit in one age group can be derived from interventions in an earlier age group, and that intervening at one life stage or during one health episode is not enough for prolonged improvement of health outcomes. The lifecourse approach also emphasises that there are biological and social 'critical periods' where action should be taken to avoid or reduce an individual's exposure to risk factors.

In working to achieve healthy ageing of current and future generations, we will need to identify ways in which we can ensure that we adopt some of the principles behind the lifecourse approach to chronic disease development. We will need to ensure that our national population health strategies and actions to address the national health priority areas give consideration to actions to prevent the development of chronic disease across the lifespan. It will also be important to concentrate activity during the periods of people's lives that are critical for disease development. With the disease burden attributable to chronic disease increasing from age 45 onwards, and with an estimated 80 per cent of health problems associated with old age able to be prevented or postponed primarily through lifestyle changes,⁴⁴ there are likely to be benefits from preventive interventions in the 50 - 74 year age group. Such actions could reduce the incidence of chronic disease, and limit the resultant disability. It also has the potential to reduce the burden of disease in the over 75 age group. As well as looking to reduce or prevent the effects of chronic disease across the lifespan, attention also needs to be given to non-disease factors that can lead to disability in older age. Reducing noise induced hearing loss is just one example.

How do we achieve healthy ageing of the aged?

While action will be needed as the population ages, to reduce the number of people entering old age with chronic disease, it will also be important that greater recognition is given to the healthy ageing of older people. The challenges include maintaining and improving the functional abilities of older people, helping them to live independently in the community, and raising their quality of life.

Healthy ageing action clearly delivers the most benefits if it occurs throughout life. However, it is usually possible to make improvements to people's health and wellbeing regardless of age or physical condition. Some form of exercise by older people for

example can help improve cardio-respiratory fitness as well as improving strength, balance and endurance. This can reduce the risk of falls, improve people's mental health and enhance their capacity to participate in various social activities. A more active lifestyle can in fact help prevent many of the negative effects ageing has on functional ability and health. Evidence indicates that perhaps as much as half of the functional decline associated with ageing is the result of disuse and can be reversed by exercise aimed at increasing the fitness of older people.⁴⁵ Improving nutrition, maintaining (or regaining) continence and managing incontinence, early detection and management of sensory loss, and reducing risk of medication misadventure are just some of the other things that can enhance healthy ageing. Recognition of the link between chronic illness/disability and depression also requires early detection and intervention to support healthy ageing of the aged.

Supporting and encouraging better health in older age, as with healthy ageing across the lifespan, require action on a number of different fronts. Action will need to be taken by a wide range of stakeholders in many of the areas discussed in the 'Attitudes, Lifestyle and Community Support' section of the National Strategy. Access to appropriate transport for example will be important to enable older Australians to shop for food, visit friends, go to the movies or visit the doctor or pharmacy. The availability of population health activities that are inclusive of older people will also be important. These activities will need to focus on preservation of function and quality of life as well as prevention of disease, and need to recognise the diversity of older people's experience of health and ageing, and target information about healthy ageing accordingly. Raised awareness amongst older people, and their formal and informal carers, of the benefits of engaging in healthy ageing activities into old age will also be a goal.

Health Throughout Life - Healthy Ageing

Goal 1

All Australians have the opportunity to maximise their physical, social and mental health throughout life.

Goal 2

Population health strategies promote and support healthy ageing across the lifespan.

Goal 3

Information, research and health care infrastructure is available to support the healthy ageing of the Australian population.

Actions required to meet these goals include:

- Delivering social and economic conditions which optimise opportunities for physical, social and mental well being throughout life;
 - Developing a solid research base to inform and drive healthy ageing;
 - Strengthening the role of prevention in the health care system;
 - Continuing to give priority to the prevention, early detection and management of the key causes of ill health and disability in the Australian population;
 - Developing a more coordinated, strategic and lifelong approach to disease and disability prevention and management;
 - Encouraging the development of population health strategies which are inclusive of older people;
 - Raising awareness amongst older people and their formal and informal carers, of the benefits of health promoting behaviours to health and functional capacity;
 - Developing a well-structured and distributed health care workforce that has the skills and capacity to support healthy ageing;
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- Providing information that enables people to make informed decisions and encouraging individuals to take informed actions to maintain or improve their health; and
- Providing opportunities for community and consumer involvement and more local level action to support and promote healthy ageing.

Who has a role in achieving these goals?

- Commonwealth Government
 - State and Territory Governments
 - Local Governments
 - Researchers
 - Health and aged care practitioners and their representative and professional bodies
 - Care providers
 - Health promoting businesses and organisations
 - Educational institutions
 - Community organisations
 - Communities
 - Australians of all ages
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World Class Care

While there are many initiatives in place to promote and support good health throughout life, it is also important that when care services are required they are accessible, appropriate and of high quality. Australia has a world class care system that is in a strong position to respond to the ageing of the Australian population. This is not to say however, that demographic changes, combined with changes in patterns of morbidity, in consumer expectations, in technology and a range of other factors, will not require a series of strategic responses across all sectors of the care system.

What will be the drivers of change for our care system?

Changing demographics

People aged 65 years and older tend to use hospitals more frequently and for longer periods than younger people. They also tend to make more visits to doctors, consume more medication and make more visits to allied or other health professionals.⁴⁶ With the proportion of the population aged 65+ projected to double over the next fifty years (to one quarter of the population), and the proportion aged 80+ expected to increase three fold (to almost one tenth of the population),⁴⁷ the overall demand for health and aged care services is projected to increase.

The extent and nature of the change in demand for health and aged care services cannot be predicted on the basis of changing demographics alone. There are a number of factors that will affect the overall level of service demand, the types of services required, the way the services will need to be delivered, who will deliver the services, who will pay for the services, and where the services will be delivered.

Future patterns of health and disease

The future patterns of disease and disability will greatly influence the characteristics of health and aged services over the next five decades. While life expectancy in Australia is increasing, there is some debate about the extent to which the additional years lived will be free from ill-health and disability. One view is that as the incidence of disease is delayed to older ages, ill-health and disability will occur for a shorter period of a person's life.⁴⁸ An

opposite hypothesis is that while life spans have increased, chronic illness and disability may also have increased, resulting in longer periods of life spent in ill health.⁴⁹ There is also a view that any gains from preventing illness or death from one type of disease are reduced or cancelled by increased illness or death from other diseases.⁵⁰ While the jury is still out on this issue, it is clear that the causes of ill-health, the length of time that older Australians spend in ill-health, and the effect of ill-health on the capacity for independent living, will affect the demand for health and aged care services. There is also evidence that the number of years of healthy living is increasing.

As discussed in the Healthy Ageing section of this National Strategy, cardiovascular disease, cancer and respiratory illness are currently the major causes of poor health and/or death in older people. These systemic disorders, particularly cardiovascular disease,⁵¹ are declining in incidence in younger people and are causing disability and death at later ages in older people.

Even with these trends and good healthy ageing strategies we can expect to continue to see a significant number of older people managing chronic conditions such as diabetes and heart disease. In many cases people will be managing more than one such condition. Co-morbidity (the existence of more than one health condition) is expected to increase with increasing life expectancy.⁵² Co-morbidity often results in a significant reduction in quality of life and can result in social isolation. Physical impairment resulting from chronic illness is also an important risk factor for mental disorders and depression in older people.

Increasing age brings with it an increasing risk of disability and loss of independence. The main disabling conditions of those aged 65 and over are related to physical conditions including arthritis, problems relating to the circulatory system, and other musculoskeletal conditions.⁵³ Depression can also be a disabling condition, particularly for those in residential aged care who may experience twice the level of depressive symptoms as those living in the community. Technological advances are tackling many of these disabling conditions more effectively and we can expect this to continue with future advances.

While the proportion of older people with a disability will affect the demand for support services, more significant is the proportion of people with a level of disability that sometimes or always

requires assistance with self-care, mobility or communication. This proportion increases from less than 10 per cent in those aged under 70, to more than 50 per cent in those aged 85 years or more.⁵⁴

A key contributor to the increase in severe disability experienced by those over 80 is neurological conditions, which result in disorders of memory, cognition, behaviour, motor and sensory functioning, mobility and balance.⁵⁵ These neurodegenerative diseases are often slowly progressive and they have not so far been amenable to prevention or delayed onset as have other disorders such as heart attacks and stroke. While there is no strong evidence that the incidence of these diseases is changing,⁵⁶ their prevalence is rising rapidly with more people living longer.⁵⁷ We can expect the systemic disorders to be overtaken by neurodegenerative diseases as the major cause of death in older people during the coming decades⁵⁸ and also as the major cause of severe disability.⁵⁹

But we must also recognise that there is great diversity in the health and functional capacity of older people and that not all old people are frail and ill. Currently, of the 21 per cent of people aged 70 years and over who use government funded aged care services, only 8 per cent are in residential aged care.⁶⁰ Of this group, less than one-fifth is classified at the highest level of resident dependency.⁶¹

Changing technology and healthy ageing

Predictions of future disease and disability patterns are of course made within our current knowledge of disease causation and progression, the limits of current medical technology and the current measures of the social, economic and behavioural determinants of the health status of future generations. Changes in any of these factors over the next five decades could have a major impact on the causes of ill-health and disability, how we treat certain diseases and what care services are required. A cure for dementia or stroke, for example, would have major ramifications for the care system. We already have evidence of treatments and procedures that have had a significant impact on older people's independence and functionality, such as cataract operations, hip replacements and heart bypass operations.

Advances in communication and information technology can also be expected to change patient care and service delivery, and shift the boundaries between hospital, primary and community care. The opportunity for older people to be provided with 24-hour access to a variety of assistance in their own home through electronic interfaces with health carers and practitioners is a future possibility.

Changing consumer expectations and resources

The potential for people to live longer and to live healthier for longer will raise expectations about older people's lifestyles and what may be possible. The desire of older people for independence, quality of life, control over personal matters, and the opportunity to continue to contribute and participate in society will continue to drive expectations. It can also be anticipated, that as the 'baby boomers' age, there will be a stronger voicing of such expectations.

What older people will expect from the health and aged care system is also likely to change over time. There is likely to be continued growth in demand for service choice, for high quality services, and for timely availability of services. There may be high expectations that services will be available to support independence and restore function following an acute episode. We might also expect an ageing 'baby boomer' generation to want to play a more pro-active role in the organisation and coordination of their care services, leading to a greater demand for information about care services and for the coordination of these services.

The potentially larger personal finances of future generations of older people arising from growing national wealth, increased retirement savings and changing attitudes to saving funds for inheritance, as well as access to private health insurance, may result in more older people wanting to purchase the care that they want, at the level and quality they desire. Social changes, particularly those relating to family structure and female workforce participation, will also affect how the health and aged care system might need to respond to population ageing. The potentially reduced availability of informal carers for example, may impact on the demand for both publicly and privately funded care services.

What might the care system of the future look like?

We can expect to see continued demand for residential aged care and supported accommodation services. While the number of people living in aged care homes will increase as the population ages, the proportion of older people living in aged care homes is projected to remain at 8 per cent until 2021.⁶² Of the people requiring residential aged care services we might see an increasing proportion of residents with neuro-degenerative disorders, as these disorders increase in prevalence, and people with other high care needs remain in the community. We might also see benefits of more flexible care arrangements in other sectors, such as the hospital sector, enabling older people in aged care homes to receive all of their care services within the home.

We can expect to see demand for care services in the home increase. We might see care being provided to increasing numbers of older people with higher level needs as a result of consumer expectations and advances in communications and other technology, as well as an increase in demand for lower level care services. We might also see consumer pressure driving service quality and integration. Social and economic factors will certainly influence who will deliver different types and levels of community care, and who might pay for this care. It will certainly be important that this sector has the structure and funding to successfully meet future demand.

The first, and in many cases only, interaction that older people have with the care system, is with the general practitioners, nurses, pharmacists, physiotherapists and other allied health professionals who provide services in the primary care sector. As the population ages we would expect this sector to become increasingly important to the effective functioning of the Australian health care system. The primary care sector is likely to play an ever-expanding role in supporting healthy ageing, as well as in the early diagnosis, management and treatment of ill-health in older people. General Practitioners, in particular, are likely to continue to be seen by older people as an important contact and coordination point for their interactions with the care system. Consumer expectations and changes across the care system may result in primary care providers having a clearer role and better links with the providers

of community and hospital services in the future. There might also be different roles for different professionals within the sector, emerging markets for allied health professionals who have previously focussed on the young, and an expanded role for private health insurance.

While developments in community and primary care could be expected to minimise the need for hospital care of the elderly, population ageing will still see larger proportions of the hospital caseload made up of older Australians. In the hospital sector we could expect to see older people constituting an increasing proportion of in-patient episodes. Accompanying this we would expect to see more people with neuro-degenerative disorders or complex co-morbidities requiring hospital services. There is likely to be a growing need for services to treat the sudden onset of acute illness in older people associated with falls, strokes etc. People will come out of hospital with the capacity to get better and it will be important that the health system has a strong focus on restorative and preventative measures. The demand for rehabilitation and other services following an acute episode will certainly increase. In response to these trends we might for example, have a hospital sector that plays a greater role in preventing acute admissions to hospitals and delivers more of its services in the community.

Enhancing our world class care system

What will need to be done to ensure that our care system remains world class in the face of population ageing and other changes?

There is a range of system-wide changes that could be made to improve the outcomes that the care system delivers for older people. Some of these changes are already underway but the speed of implementation and reach of the changes will need to be extended. For example, considerable attention has been given to strengthening Medicare to support more integrated health care for Australians with chronic and complex conditions in the primary care sector. Better coordination and integration of services in the other sectors and across sectors of the care system would deliver considerable benefits to the many older people with multiple complex diseases. There is also likely to be a need to redefine some of the who, how and where of care delivery.

Why will challenging the myths around ageing and disease be important?

A key challenge in achieving quality outcomes for older people involves tackling the myths, views and practices associated with ageing and ill-health that exist amongst health professionals, the population at large, and older people themselves. Seeing an illness only as a natural result of ageing rather than an illness in its own right, can affect the diagnosis, treatment and management of that illness. This can occur in relation to conditions such as sensory loss and musculoskeletal disorders that affect general quality of life and independence, as well as more serious conditions where lack of timely detection or appropriate treatment, or even pain management, can lead to avoidable morbidity or even mortality.

Under-diagnosis of depression in older people is well documented and is associated with an increased risk of subsequent onset of disability in activities of daily living.⁶³ It is also associated with Australian men aged 80 years and over having the third highest age specific suicide rate after men in their twenties and thirties.⁶⁴ The existence of co-morbidities in older people can further complicate the ageing illness relationship and the type of care older people receive. The finding that frail elderly patients admitted to hospital with the diagnosis of acopia (or inability to cope), had on average eight medical diagnoses is symptomatic of a problem that will need addressing as our population ages.⁶⁵

The use of age rather than physiological condition as a primary determinant of the type and level of care to be provided also needs to be challenged. Basing treatment decisions primarily on age fails to recognise the considerable diversity among older people in health and functional status, and in capacity to benefit from therapeutic interventions. Older people have the capacity to recover from illnesses and regain functionality and independence provided they are given sufficient time in which to do so. A recent Canadian study, for example, has found that healthy people aged 80 years and older can benefit significantly from joint replacements and may do as well postoperatively as younger patients. They found that age alone is not a factor that affects the outcome.⁶⁶

Why improve the research base for the care of older people?

With more people living for a longer period, it is important that we have a good understanding of ill-health and disease in the elderly. Improving our understanding of the biological processes of ageing will be important for the possible prevention or reversal of age-associated disease and disability. We also need to improve our understanding of the interaction of complex sets of disorders, and co-morbidities in older people, and ensure that clinical care pathways and best practice guidelines are available for treatment of people with multiple diseases.

More research into the causes and potential treatments for the major causes of significant disability, namely musculoskeletal disease and neuro-degenerative disorders should also be a priority. If we are to move away from age being a proxy for biological fitness, we will need a better recognition of the diversity of health status in older people and a better understanding of the actual physiological indicators that do influence outcomes from medical treatments. Adequate representation of older people in clinical trials of medications and medical interventions for the prevention or treatment of diseases that are likely to affect them, needs to be encouraged by the regulators and funders of care products and services. Attention by researchers to improving our understanding of the systems of care that deliver the best outcomes for older people, and the subjective experiences and values of older people regarding their health and their health care, would also deliver benefits to older people.

What structures will need to be in place to support our care system as the population ages?

Good service planning mechanisms, an appropriately sized, distributed and trained workforce, suitable systems for supporting quality, and adequate information technology supports will be important if our health and aged care system is to effectively care for a growing number of older people.

Service planning

In order to determine service supply as the population ages, governments and service providers will require a good understanding of future service needs. The continued collection and

application of reliable data on factors influencing service need (such as life expectancy, disease patterns, levels of disability and geographical distribution of older people), as well as data on patterns of service use by older people, will help support service planning. Greater attention to data comparability and linking will be important as will service planning that recognises care needs at the local level. Increased involvement of communities and consumers in service design and planning will also assist in decision making on service supply.

It will be important that there is a good match between service demand and supply across the care sectors to ensure that people receive the right type of care for their needs. For example, access to good primary care services is important for managing older people's chronic health conditions in the community and delaying or preventing them from needing to enter hospital or an aged care home. Future planning in particular service sectors should give greater consideration to the effect of changing service levels in one sector, for example, the acute sector, on the demand for services in other sectors such as primary, community and residential aged care.

Quality improvement

Ensuring the quality of our health and aged care service is now a central rather than discretionary focus of our health and aged care system. The introduction of uniform care standards across the aged care system, and the establishment of the Australian Council on Quality and Safety in Health Care, are just two of the initiatives that have been implemented in response to factors such as the growing consumer expectations of service quality, and the increasingly complex systems within which health and aged care are delivered.

Consumer expectations of quality will continue to drive reform, particularly as the 'baby boomers' reach old age. Quality services will be demanded whether the service is provided or funded publicly or privately and consumers are likely to look to government, through their application of quality requirements, to provide some useful market signals to assist them in their choice of services. The granting of three-year accreditation and building certification in the residential aged care sector, provide useful market signals for consumers in this sector.

Health and aged care information

An ageing population has much to gain from the harnessing of advances in information technology in the health and aged care system. Information technology has a crucial role to play in quality improvement through the management of information on care standards, complaints and consumer rights. It also has the potential to improve the management of patient care by improving the flow and linking of individual patient information.

Comprehensive, accurate and timely information on available health and aged care services will increasingly be sought by older people and their carers as they seek to manage their emerging care needs. The establishment of Carelink Centres across the country is a major step in improving local level information on services. There may also be a demand for accessible information to assist older consumers in the areas of the care sector where there is significant choice, such as non-prescription pharmaceuticals and private health insurance. Information on options for healthy ageing will also be important. Older consumers will increasingly seek information on diseases and treatment options. It will be vital to ensure that the information they use to inform their decisions is of high quality and caters for older Australians from a diverse range of backgrounds.

The Health and aged care workforce

An appropriately sized, distributed and trained health and aged care workforce will be needed to provide the range of services that our ageing population will require. Adequate numbers of all types of care professionals will be needed to care for the growing population of older people. However, it will be particularly important that there are sufficient numbers of those care professionals who specifically care for the elderly. Governments, service providers and professional organisations have the challenge of improving the attractiveness of the aged care sector for care professionals as well as addressing training, career progression and other issues. While the current aged care workforce shortages are in nursing and geriatrics, there are likely to be other care providers, such as specialists in rehabilitation medicine, who will be required in greater numbers as the population ages. Good workplace planning processes and early attention to future shortages will be important.

All members of the care workforce will require the knowledge and skills to deliver care to the growing population of older people. The management of multiple complex conditions, mental health issues and neuro-degenerative disorders will be a training priority. Members of the care workforce will also need to be able to spend adequate time with their elderly patients to effectively manage chronic diseases and assist in care coordination.

Changing demographics, technology and other factors will change patterns of service delivery that in turn will require variations in the skills required by care professionals and the relationships between different groups of care workers. We might for example see geriatricians working in new ways with other procedural specialists in the care of older people, and we might see General Practitioners, nurses and pharmacists playing different roles as they work together in the management of chronic disease.

How will service delivery need to change as the population ages?

Population ageing will certainly affect the overall level of demand for services. It is also likely to affect the demand for particular services, such as community care services and dementia specific services, and therefore the overall mix of services required. In some cases there may be good policy reasons for government to give a greater proportion of resources or focus reform activity on particular sectors. The strengthening of the primary care sector for example could deliver improved health outcomes through the better prevention and management of disease, and the potential reduction in demand for community care and hospital services.

There will also be a need to consider changes to the way services are delivered, how they are linked together and where they are provided. While considerable attention is already being given to these issues, meeting the needs of a growing group of older people will drive further change. Better coordination of care provided to people within each sector and across sectors will be important.

As people age they are more likely to need care from a number of different services and providers. Improved communication and cooperation between providers in different sectors, the availability of services to help manage individual care, and the availability of suitable information to support people in coordinating their own

care are just some of the ways that care coordination could be enhanced. Better coordination of access to different services, through for example a common assessment process for a wide range of services, would also greatly benefit older people.

For the oldest Australians with multiple complications and co-morbidities, models of care will be required at the local level to ensure quality, integrated care. Better links between health and aged care services will be particularly important. If for example community care and step-down care, including rehabilitation, were built into an inter-related care system, then following hospitalisation, some older people might only need to access high level care on a short term rather than permanent basis. Better resourcing and linking of existing core health services such as hospital based geriatric medicine and rehabilitation services, community care services and General Practitioner services would be another way of better integrating care for older people with chronic conditions who wish to remain living in the community.

It will be important in working towards better service integration that we do not allow population ageing to drive haphazard development of new services at the interfaces between care sectors. Reform options should look at how existing systems and programs might be better organised or differently funded to support integration of care and also how this might occur at the local level as well as at state and national levels.

While there will always need to be a focus on prevention and cure, with an ageing population more attention will need to be given in service design and delivery to the restoration of function and the maintenance of quality of life and independence. Better discharge planning will be required to ensure that older people receive appropriate post acute care. Inadequate discharge planning and coordination can mean that older people are discharged without having appropriate support in the community or are placed unnecessarily in residential care or end up being quickly readmitted to hospital. Access to suitable rehabilitation and step down services is also important to support restoration of function and avoid unnecessary entry to residential care.

An ageing population will challenge governments and service providers to reconsider where some services can be best provided. We are already seeing high levels of care previously provided only in aged care homes now being provided on a trial basis in

people's homes. We are also seeing hospitals playing a greater role in the delivery of services that prevent unnecessary admission, and in providing hospital type services to people in their own homes. Rehabilitation and palliative care might be other forms of care that could be provided in a wider range of settings than currently occurs. It will be important to ensure however that strategies that de-institutionalise care are accompanied by the development and enabling of suitable services in the community.

Why will meeting the diverse needs of older Australians be important?

It is hoped that action taken in the future to enhance our world class care system will deliver benefits to all older Australians regardless of their health status, culture, language, geographical location or socioeconomic circumstances. However, it is recognised that there is considerable diversity amongst older people and considerable diversity in the type and nature of care services that they need. There are groups of older Australians who face particular barriers to obtaining the levels and types of care services they require. These include older people in rural and remote areas, older indigenous Australians, older people from culturally and linguistically diverse backgrounds, and people ageing with a long-standing disability. Another group is the veteran community, and while their care needs are currently well met, it will be important to ensure that these services adapt to their changing needs as they grow older.

As the population ages it will be important that these older Australians can access suitable health and aged care services. Mainstream services and programs will need to have the capacity and flexibility to provide services to a diverse older population. It will also be important that specific arrangements or separate initiatives are provided that ensure services meet the needs of groups with specific health or cultural needs, and that they are available to older Australians in all geographic regions. This may require service delivery arrangements that are flexible, innovative and involve local communities. Such initiatives will be particularly important for meeting the needs of Aboriginal and Torres Strait Islander people, and people in rural and remote areas.

Where strategies and programs have been developed to respond to the particular health and aged care needs of groups in our society, such as people in rural and remote communities, it will be important that appropriate priority is given in service planning and delivery to the older members of these communities.

Why will it be important to continue to support carers?

The informal carers of older people, including family, friends and neighbours, are a key foundation of Australia's care system, providing care and support to about three-quarters of frail aged and dependent persons in need of care in the home. In recognition of the valuable contribution made by carers, and of the significant physical, emotional and mental demands of the caring role, a variety of support services have been established, including Carer Respite Centres and Carer Resource Centres. The importance of carers to the effective functioning of Australia's care system can be expected to increase as the population ages and the demand and capacity for the provision of care in the community increases. But we might also see a decline in the number of people able or prepared to undertake a carer role as a result of higher rates of divorce, fewer children and higher rates of female workforce participation. Governments and service providers will need to continue to work in partnership with carers to ensure that the role and needs of carers remain a key priority in the planning, design and delivery of services to older people in the community.

Maintaining a sustainable and affordable care system

Population ageing is often discussed in terms of its threat to the sustainability of national health and aged care systems. Evidence indicates that the costs solely associated with population ageing have not been the major contributor in the past to growth in Australian real health expenditure.⁶⁷ The rising use of more expensive drugs and technology and higher consumer expectations of the level and type of services provided have been major contributors to rising health expenditure.

The effects of population ageing on health and aged care costs will need to be monitored closely in the future to ensure programs are sustainable. Governments at all levels will need to continue to manage cost drivers and work with the health and aged care

industry to enhance the efficiency and effectiveness of the sector. They will also need to influence future demand for services through for example investment in healthy ageing strategies and the development of a strong, well integrated primary and community care sector. The ongoing use of key levers for system improvement and change such as Medicare and the Australian Health Care Agreements will be essential. Extra effort might also be required to develop more cross jurisdictional approaches to managing care costs into the future, with a greater sharing of information, research and innovations in service design and delivery.

Government revenue will continue to be the primary source of funding for the health and aged care system. Access to services on the basis of need, and regardless of income, will remain as a cornerstone of our care system. The balance between private and public provision contributions to care costs could change over the next five decades in response to changing social views on what the overall community responsibility for the funding of care services should be. We might also see changing community attitudes to what types of care should be funded from government revenue. More older people might choose to purchase care that is different from or additional to that which is publicly funded. Maintaining strong and viable public and private care systems will be vital for delivering consumer choice and maintaining a sustainable care system.

World Class Care

Goal 1

A care system that has an appropriate focus on the health and care needs of older Australians and adequate infrastructure to meet these needs.

Goal 2

A care system that provides services to older people that are affordable, accessible, appropriate and of high quality.

Goal 3

A care system that provides integrated and coordinated access, assistance and information for older Australians with multiple and significant and diverse care needs.

Goal 4

A sustainable care system that has a balance between public and private funding and provides choice of care for older people.

Actions required to meet these goals include:

- Expanding the evidence base for the care of older people;
 - Improving service planning and resource allocation across care sectors and levels of government to ensure that older people have access to the right type and level of care;
 - Harnessing the advances in medical and information technology and reforms in health and aged care service delivery to improve management and coordination of care for older people;
 - Developing an appropriately sized, distributed and trained workforce to meet the diverse care needs of an ageing population;
 - Providing information that enables older people and their carers to make informed choices about their care, and increasing opportunities for older people to be involved in decisions regarding the design and delivery of care services;
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- Removing the barriers and recognising the opportunities for coordination of care within and across sectors of the care system;
- Encouraging innovation in the method and location of care delivery to maximise health outcomes for older people;
- Continuing to recognise and support the carers of older people and removing the barriers to performance of the carer role;
- Providing adequate resources, infrastructure and flexibility in the care system to meet the care needs of those older Australians who face particular barriers to obtaining appropriate levels and types of services;
- Implementing strategies that manage cost drivers, improve the effectiveness and efficiency of resource use across the care system and manage future demand for care services; and
- Maintaining an appropriate mix of community and individual responsibility for the cost of care services to ensure care choice and access to services for all.

Who has a role in achieving these goals?

- Commonwealth Government
 - State and Territory Governments
 - Committees, Councils, Partnerships etc involved in care system regulation, development and reform
 - Health and aged care professionals and their representative and professional bodies
 - Service providers
 - Consumer organisations
 - Carer organisations
 - Organisations representing special needs groups
 - Educational institutions
 - Medical, clinical, health system researchers
 - Pharmaceutical and medical device manufacturers
 - Private health insurance industry
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Appendix 1

Terms of Reference for the National Strategy

The Terms of Reference for the National Strategy are to:

1. Promote and inform a consideration by the Australian community of the likely impacts of, and possible responses to, population ageing;
 2. Consider the impacts of, and potential policy responses to, ageing under four major themes:
 - Independence and Self Provision;
 - World Class Care;
 - Healthy Ageing; and
 - Attitude, Lifestyle and Community Support.
 3. Address key issues raised by the community in each of the major themes; and
 4. Advise the Government on short, medium and long-term policy responses to population ageing as part of a coordinated national framework.
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Appendix 2

Membership of Reference and Advisory Groups

1. Ministerial Reference Group

Minister for Ageing (Chair)

Minister for Health and Ageing

Minister for Family and Community Services and Minister Assisting the Prime Minister on the Status of Women

Assistant Treasurer

Minister for Veterans' Affairs

2. Business Mature Age Workforce Advisory Group

Mr Graeme John
Managing Director
Australia Post

Dr Maurice Newman
Chairman
Australian Stock Exchange
Executive Chairman
Deutsche Bank Asia Pacific

Mr John Studdy
Chairman
Network Ten

Mr John Pascoe
Chairman, George Weston
Managing Director
Insurance and Financial Services
Phillips Fox Lawyers;
Chairman, Centrelink

Mr Jean-Georges Malcor
Managing Director
ADI Limited

Dr Ken Moss
Director
National Australia Bank
Chairman, Boral Limited

Mr Roger Corbett
Chief Executive Officer
Woolworths Limited

3. National Strategy Expert Advisory Group

Ms Mary Murnane (Chair)
Deputy Secretary
Department of Health and Ageing

Mr Greg Cutbush
Principal Analyst
ACIL Consulting Pty Ltd

Professor John McCallum
Dean, College of Social and Health Sciences
University of Western Sydney

Professor Tony Broe
Director, Program of Community Health and Aged Care
Prince of Wales Hospital

Mr Michael Warby
Consultant

Members of the Expert Advisory Group were appointed as individuals with particular expertise rather than as representatives of their organisations.

Appendix 3

Discussion Papers for the National Strategy

1. Background Paper (April 1999)
 2. Healthy Ageing Discussion Paper (October 1999)
 3. Independence and Self Provision Discussion Paper (November 1999)
 4. Employment for Mature Age Workers Issues Paper (November 1999)
 5. World Class Care Discussion Paper (April 2000)
 6. Attitude, Lifestyle and Community Support Discussion Paper (September 2000)
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References

- ¹ Australian Bureau of Statistics (2001) *Australian Social Trends 2001* Catalogue No. 4102, p2 (projection series II)
 - ² Australian Bureau of Statistics (2001) *ibid*, p2
 - ³ Australian Institute of Health and Welfare (2001) *Projections of older immigrants: people from culturally and linguistically diverse backgrounds, 1996-2026, Australia* p7
 - ⁴ Australian Bureau of Statistics (2001) *ibid*, p9
 - ⁵ Australian Bureau of Statistics (2001) *ibid*, p28
 - ⁶ Australian Bureau of Statistics (2001) *ibid*, p31
 - ⁷ Department of Health and Aged Care Annual Report 1999-2000
 - ⁸ Gething L (1999) *We're Growing Old Too: Quality of life and service provision issues for people with long standing disabilities who are ageing*, Community Disability and Ageing Program, The University of Sydney
 - ⁹ Figures provided by the Department of Veterans' Affairs
 - ¹⁰ Department of Family and Community Services Annual Report 2000-01 (unpublished as at 30/7/2001)
 - ¹¹ Department of Family and Community Services *ibid*
 - ¹² Australian Prudential Regulation Authority Bulletin - March Quarter 2001
 - ¹³ OECD Economic Outlook Series (2001) *Fiscal Implications of Ageing: Projections of Age-Related Spending*, p11
 - ¹⁴ Commonwealth Department of Health and Aged Care (2001) *Population Ageing and the Economy, Research by Access Economics*, Canberra, p54
 - ¹⁵ OECD Economic Outlook, No.63, June 1998: 179-192
 - ¹⁶ Commonwealth Department of Health and Aged Care (2001) *op cit*, p4
 - ¹⁷ Commonwealth Department of Health and Aged Care (2001) *ibid*, p31-32
-

- ¹⁸ Birrell, Jupp, *Welfare Patterns among migrants* (2000) Centre for Immigration and Multicultural Studies, Australian National University
- ¹⁹ See Kern A (1990) *Productive Ageing: The Health Policy Implementation of Continued Employment for the Elderly* Report for the World Health Organisation; Sternberg M, Donald K, Najman J, Sherman H (1994) *Attitudes of Employees and Employers Towards Older Workers in a Climate of Anti-discrimination*, p34
- ²⁰ Kern A (1990) op cit
- ²¹ Johnson P (1999) 'Ageing in the twenty first century: implications for public policy' in Productivity Commission - Melbourne Institute, *Policy Implications of the Ageing of Australia's Population*; (Conference Proceedings)
- ²² OECD Social Policy Study No. 20 (1996) *Ageing in OECD Countries, A Critical Challenge*, Paris, p36
- ²³ Commonwealth Department of Health and Aged Care (2001) op cit, p*xix*
- ²⁴ Australian Bureau of Statistics (2001) op cit, p180
- ²⁵ Australian Bureau of Statistics (2001) *ibid*, p51
- ²⁶ Hugo G (2001) 'Migration in Later Life in Australia: Recent Trends and Implications', Adelaide University
- ²⁷ Australian Bureau of Statistics (2001) op cit, p182
- ²⁸ Australian Bureau of Statistics (2001) *ibid*, p184
- ²⁹ Commonwealth Department of Health and Aged Care (2001) op cit, p50
- ³⁰ Mensink GBM, Ziese T & Kok FJ (1999) Benefits of leisure-time physical activity on the cardiovascular risk profile at older age, *International Journal of Epidemiology* 28: 659-666
- ³¹ Australian Institute of Health and Welfare (2000) *Australia's Health 2000: The seventh biennial report of the Australian Institute of Health and Welfare*, Canberra
- ³² Mathers C, Voss T, & Stevenson C (1999) *The burden of disease and injury in Australia*, Australian Institute of Health and Welfare, Canberra
- ³³ Mathers et al (1999) *ibid*
-

- ³⁴ Australian Institute of Health and Welfare (2000) op cit, p201
- ³⁵ Australian Institute of Health and Welfare (2000) ibid, p201
- ³⁶ Glover J, Harris K, Tennant S (1999) *A social health atlas of Australia*, 2nd ed. Public Health Information Unit, Adelaide
- ³⁷ Australian Institute of Health and Welfare (2000) op cit, p209
- ³⁸ Australian Institute of Health and Welfare (2000) op cit, p215-218
- ³⁹ Turrell G, Oldenburg B, McGuffog I, Dent R (1999) *Socioeconomic determinants of health: towards a national research program and a policy intervention agenda*, Queensland University of Technology, in association with the Health Inequalities Research Collaboration
- ⁴⁰ De Looper M, & Bhatia K (1998) *International Health - how Australia compares*, Australian Institute of Health and Welfare, Canberra
- ⁴¹ Murray CJL and Lopez AD (1996) *The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020*, Harvard School of Public Health, Boston
- ⁴² Booth M (2001) Preventing overweight and obese children and adolescents, *The Australian Health Consumer*, 2: 18-19
- ⁴³ Kuh D, & Ben-Schlomo Y (eds) (1997) *A Life Course Approach to Chronic Disease Epidemiology*, Oxford University Press, Oxford
- ⁴⁴ Gingold R (1993) Prevention of health problems in later life, *Medical Journal of Australia* 159: 682-690
- ⁴⁵ National Health and Medical Research Council (1994) Series on clinical management problems in the elderly No.2, *Exercise and the older person*
- ⁴⁶ Cooper C, & Hagan P (1999) *The Ageing Australian Population and Future Health Care Costs: 1996 - 2051*, Occasional Paper, New Series No. 7, Commonwealth Department of Health and Aged Care, Canberra
- ⁴⁷ Australian Bureau of Statistics (2001) op cit, p2
- ⁴⁸ Fries JF (1989) The compression of morbidity: Near or far? *Milbank Quarterly*, 67: 208-232
-

- ⁴⁹ Mathers C (1999) International trends in health expectancies: do they provide evidence for expansion or compression of morbidity? *Compression of Morbidity Workshop Papers, Occasional Papers Series No. 4*, Department of Health and Aged Care, Canberra, pp 33-55
- ⁵⁰ McCallum J (1999) The New morbidity picture: substitution verses compression? *Compression of Morbidity Workshop Papers, Occasional Papers Series No. 4*, Department of Health and Aged Care, Canberra, pp 57-68
- ⁵¹ Beaglehole R (1990) International trends in coronary artery disease mortality, morbidity and risk factors, *Epidemiological Review* 12: 1-15
- ⁵² McCallum J (1999) op cit
- ⁵³ Australian Institute of Health and Welfare (2000) op cit, p201
- ⁵⁴ Australian Institute of Health and Welfare (2000) op cit, p200
- ⁵⁵ Creasey H (1999) Compression of morbidity: evidence in relation to the age of onset of neurological disorders, *Compression of Morbidity Workshop Papers, Occasional Papers Series No. 4*, Department of Health and Aged Care, Canberra, pp 69-77
- ⁵⁶ Creasey H (1999) ibid
- ⁵⁷ Wait LM, Broe GA, Creasey H, Grayson DA, Cullen JS, O'Toole BI, Edelbrock D, Dobson M (1997) Neurodegenerative and other chronic disorders among people aged 75 years and over in the community, *Medical Journal of Australia* 167(8): 429-432
- ⁵⁸ Lillienfeld DE and Perl DP (1993) Projected neurodegenerative disease mortality in the United States, 1990- 2040, *Neuroepidemiology* 12: 219-228
- ⁵⁹ Creasey H, Waite LM, Grayson DA, Bennet HP, Dent O, Broe GA (2001) The Impact of neurodegenerative disorders on ageing: an overview of the Sydney Older Persons Study, *Australasian Journal on Ageing* 20(1): 10-16
- ⁶⁰ Department of Health and Aged Care (2001) ibid, p5
- ⁶¹ Figure provided by the Department of Health and Aged Care
- ⁶² Figure provided by the Department of Health and Aged Care

- ⁶³ Bruce ML, Seeman TE, Merrill SS, & Blazer DG (1994) The impact of depressive symptomology on physical disability: MacArthur studies of successful ageing, *American Journal of Public Health*, 84: 1796-1799
- ⁶⁴ Australian Institute of Health and Welfare (2000) op cit, p80
- ⁶⁵ Obeid JL, & Ogle SJ (2000) Acopia: a Useful Term or Not? *Australasian Journal on Ageing* 19(4): 195-198
- ⁶⁶ Jones CA, Voaklander DC, Johnston DWC, & Suarez-Almazor ME (2001) The Effect of Age on Pain, Function and Quality of life After Total Hip and Knee Arthroplasty, *Archives of Internal Medicine* 161: 454-460
- ⁶⁷ Australian Institute of Health and Welfare (1998) *Australia's health 1998: the sixth biennial health report of the Australian Institute of Health and Welfare*, Canberra, AGPS