

**Productive Ageing Centre** 

National Seniors

Australia

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# Working beyond 65 – what's realistic?

The influence of health on longer working lives

**January 2014** 





#### **Foreword**

Despite Australians living longer than ever before, the ageing of the population means that the burden of chronic illness in society is increasing. To cope with the fiscal challenges of an ageing population, Federal Governments have for many years encouraged longer working lives to assist people's self-sufficiency in retirement. However many people with a chronic illness are unable to participate in paid employment.

This study, *Working beyond 65 – what's realistic?*, authored by Deborah Schofield of University of Sydney and colleagues, uses longitudinal data from the Household, Income and Labour Dynamics in Australia (HILDA) project as well as data from the Survey of Disability, Ageing and Carers to investigate the employment participation of people with a chronic illness. In particular, they focus on people aged 65 years and above, which is beyond the traditional retirement age but when people increasingly face chronic illnesses. They find that for all of the most common chronic illnesses - arthritis and related disorders, hypertension, back problems, diabetes and heart disease – people are less likely to be working than those with no chronic illness. Household net worth and income are also investigated for people with a chronic illness compared who have no illness.

This report is published by the National Seniors Productive Ageing Centre following on from another study by the same authors *A widening gap: The benefits of delaying retirement* released in November 2013.

Dr Tim Adair Director National Seniors Productive Ageing Centre January 2014

# **About National Seniors Productive Ageing Centre**

National Seniors Australia (National Seniors) is a not-for-profit organisation that gives voice to issues that affect Australians aged 50 years and over. It is the largest membership organisation of its type in Australia with more than 200,000 members and is the fourth largest in the world.

National Seniors Productive Ageing Centre (NSPAC) is an initiative of National Seniors and the Australian Government. NSPAC's aim is to improve quality of life for people aged 50 and over by advancing knowledge and understanding of all aspects of productive ageing.

NSPAC's key objectives are to:

- Support quality consumer-oriented research informed by the experience of people aged 50 and over
- Inform government, business and the community on productive ageing across the life course
- Raise awareness of research findings that are useful for older people
- Be a leading centre for research, education and information on productive ageing in Australia.

For more information visit www.productiveageing.com.au or call 03 9650 6144.

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This report uses data from the Household, Income and Labour Dynamics in Australia (HILDA) survey. The HILDA Project was initiated and is funded by the Department of Social Services and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this paper, however, are those of the authors and should not be attributed to either Department of Social Services or the Melbourne Institute.

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# **Executive Summary**

#### **Purpose of this report**

Extending the working life of people in Australia beyond the traditional age of retirement (which is 65 years of age) has benefits for the individual and governments. The financial burden of an ageing population is reduced for governments while the individual can enjoy a higher standard of living and other benefits such as greater social interaction.

#### **Key findings**

The study examines the relationship between health and working beyond the age of 65 years.

Some of the findings confirmed our expectations:

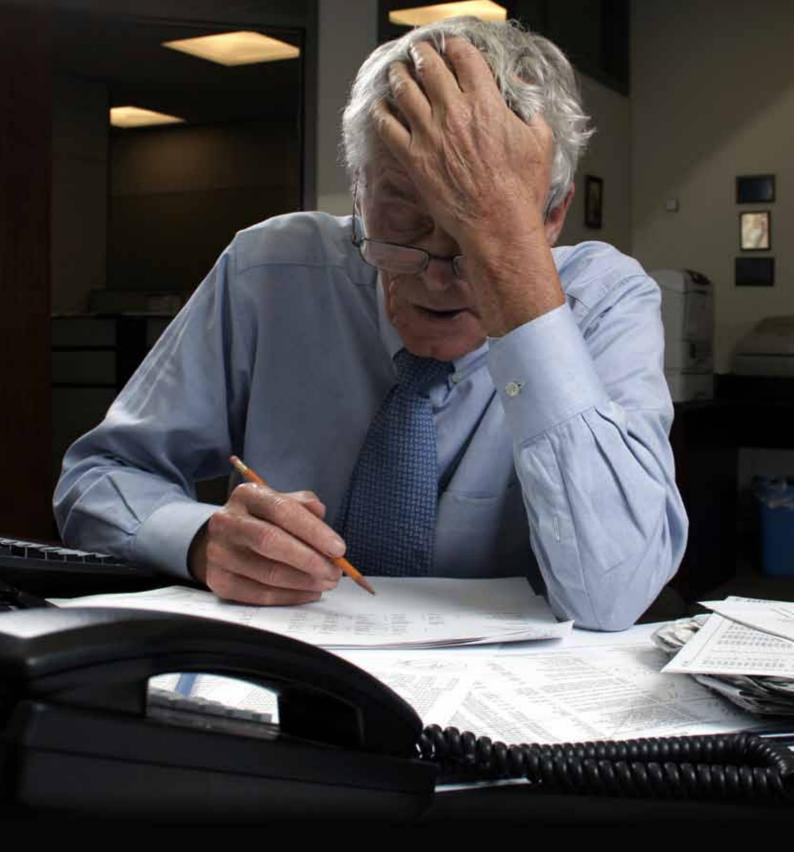
- People aged between 65 and 74 with a chronic health condition were less likely to be employed than those without a chronic health condition
- Of those with chronic health conditions, men aged between 65 and 69 were the most likely to be employed
- A high proportion of those working with a chronic health condition were earning less than \$500 per week.

Other findings were more surprising:

- Household net worth of those working was similar for those with or without a chronic health condition
- Many of those aged between 65 and 74 in poor health who were employed thought they would never be
  able to retire
- Having a university qualification did not influence the chances of employment
- The proportion of people (between 65 and 74) in full-time employment with chronic health conditions was similar for people without health conditions.

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# Working beyond 65 – what's realistic?

The influence of health on longer working lives

## Introduction

#### **Background**

In Australia, as in many developed countries, the population is ageing and there will be a significantly larger number of people who will retire in the near future. Most of these people will be relying on the government to provide them with financial support to maintain a reasonable standard of living.<sup>2</sup> While the number of retired people is growing, the number of people working is not changing or even declining.<sup>3</sup> It is estimated that for every person aged 65 years or over there are currently 5.2 people of working age. By around 2045, it is estimated that there will only be 2.4 people of working age for every person aged 65 or over.<sup>4</sup>

The changing proportion of workers to people who are retired results in an increased demand for government spending on aged pensions, aged care, and aged health services, at the same time, there is a relatively smaller pool of government money to pay for these services.<sup>5</sup> The Australian Government is well aware of this issue and it is encouraging people to become more self-sufficient in retirement<sup>6</sup> and it is promoting working past the traditional age of retirement.<sup>7,8</sup> The Government policies to encourage people to work longer include:

- Increasing the eligibility age for the Age Pension to 67 years by 2023
- Providing financial bonuses for working past the pension eligibility age
- Introducing the Transition-to-Retirement policy, where a person's income doesn't decrease because they reduce their hours of work while drawing on their superannuation benefits.

The effect of these policies (and the effect of the Global Financial Crisis on superannuation balances) has resulted in a considerable number of people working beyond the traditional retirement age, which in Australia is 65 years of age. The Australian Bureau of Statistics has reported that about 200,000 workers were aged between 65 and 69 in 2010.9 This represents 25% of the population in this age group. There were also about 60,000 workers aged 70 and over, 6% of this age group.

<sup>&</sup>lt;sup>2</sup> Commonwealth of Australia (2007). Intergenerational Report 2007-08. Canberra, Department of The Treasury.

<sup>&</sup>lt;sup>3</sup> Australian Government (2004). Australia's demographic challenges. Canberra, Commonwealth of Australia.

<sup>&</sup>lt;sup>4</sup> Productivity Commission (2005). Economic Implications of an Ageing Australia. Research Report. Productivity Commission. Canberra, Canberra, Australian Government.

<sup>5</sup> Ibid

<sup>&</sup>lt;sup>6</sup> The best example of self-sufficiency policy was the introduction of compulsory retirement saving through the Superannuation Guarantee and the recent legislation to increase it gradually to 12%.

<sup>&</sup>lt;sup>7</sup> Australian Government (2004). Australia's demographic challenges. Canberra, Commonwealth of Australia.

<sup>8</sup> Productivity Commission (2005). Economic Implications of an Ageing Australia. Research Report. Productivity Commission. Canberra, Canberra, Australian Government.

<sup>&</sup>lt;sup>9</sup> Australian Bureau of Statistics (2011). Retirement and retirement intentions, Australia. Canberra, ABS.

Personal financial gains are often presented as benefits for remaining in the workforce. <sup>10</sup> However, as people age, they are more likely to have poorer health and research has shown that this can be a key obstacle to them continuing in the workforce. A recent report found that about 660,000 people aged between 45 and 64 years were not working because of ill health. <sup>11</sup> Many other studies have measured the amount of personal income that is lost when people retire because of ill health. The weekly income and savings of this group is as much as 80% lower than for those people who remain in the workforce. <sup>12,13</sup> Other research has shown the financial impact of living with a chronic health condition. Medical costs, the costs for equipment and aids, loss of income and loss of savings all affect people with a chronic health condition. It is accepted that older people in poor health have among the lowest living standards in Australia. While these people would benefit the most from being in the workforce, they may not be able to remain working.

#### **Purpose**

This study examines the relationship between health and continuing to work past the age of 65. It also looks at the relationship between health and the net worth of people who are working past the age of 65.

Ong, R. (2009). "Self-provision in retirement: Quantitative evidence on older Australians' expectations and experiences." Australasian Journal on Ageing 28(1): 22-27.

<sup>&</sup>lt;sup>11</sup> Schofield, D., R. Shrestha, et al. (2008). "Chronic disease and labour force participation among older Australians." Medical Journal of Australia 189: 447-450.

<sup>12</sup> Schofield, D., S. Kelly, et al. (2010). "Long term financial impacts of CVD: Living standards in retirement." International Journal of Cardiology 155(3): 406-408.

<sup>&</sup>lt;sup>13</sup> Schofield, D., R. Shrestha, et al. (2011). "Economic Impacts of Illness in Older Workers: Quantifying the impact of illness on income, tax revenue and government spending." BMC Public Health 11:418.

#### **Data and Method**

#### **Data collection**

The results in this report are based on data obtained from Wave 10 (2010) of the Household, Income and Labour Dynamics in Australia (HILDA) Survey and the 2009 Survey of Disability, Ageing and Carers (SDAC). The HILDA Survey is a longitudinal survey where the same households have been questioned every year since 2001. At the time of writing, Wave 10 contained the most recent data available, which was collected in 2010.

The results collected during the 2009 SDAC were the source of the information for specific health conditions discussed in this report. The SDAC is a survey conducted on a regular basis by the Australian Bureau of Statistics. It collects detailed information from people throughout Australia that is related to their long-term health and their employment. The 2009 SDAC data was weighted by age and sex to represent the whole Australian population in 2009. The chronic health conditions of people were classified according to the International Classification of Disease-10 (ICD-10) health coding system.

#### **Participants**

There were 1,025 people aged between 65 and 74 who answered questions in Wave 10 of the HILDA Survey. Information collected from people included personal characteristics (including age, sex and health), employment, education, income, and employment characteristics (such as employed full-time or part-time) and experiences (such as intentions to retire). The results represent people living in private dwellings in various parts of Australia. The study focuses on people aged between 65 and 74 who were working and had a chronic health condition in 2010<sup>15</sup> as well as the characteristics of their employment (such as employed full-time or part-time). Information was collected on family status (couple only, couple with children, single person, single with children), education, income received from all sources at age 64<sup>16</sup>, income received from employment (salary and wages), the hours worked, occupation and the age that they expected to retire.

### **Method of analysis**

A number of different statistical methods were used to analyse the results. An initial analysis was made to assess the health and employment characteristics of those aged between 65 and 74. A statistical model (logistic regression model), which took into consideration the person's age, sex and education, was used to compare the likelihood of employment between those who had a chronic health condition and those who did not.

Descriptive analysis was used on the results from the 2009 SDAC to identify the most common health conditions in people between 65 and 74 years and whether those people were working in 2009. This analysis compared people with and without a chronic health condition and whether they were employed on a part-time or full-time basis, their occupation, their weekly wages or salary, their household net worth (total assets minus total debt), and the age that they expected to retire.

<sup>&</sup>lt;sup>14</sup> Australian Bureau of Statistics (2004). Information Paper - Basic Confidentialised Unit Record File: Survey of Disability, Ageing and Carers 2003 (reissue) Canberra, ABS.

<sup>&</sup>lt;sup>15</sup> This information was based on people's self-reported health status when they were asked the following question: "do you have any long-term health condition, impairment or disability (such as these) that restricts you in your everyday activities, and has lasted or is likely to last, for six months or more?"

<sup>&</sup>lt;sup>16</sup> Using the longitudinal information collected by the HILDA survey the income quartile at age 64 was assessed. There was no record of the income of people aged 74 in 2010 (this group was aged 64 in 2000) because collection of results for the HILDA survey started in 2001. The analysis of the results only included those aged between 65 and 73 in 2010.

Logistic regression models were also used on the results from HILDA. These models compared whether people with and without a chronic health condition were likely to be employed full-time, whether they received \$500 or less per week in wages or salaries and whether they had retirement plans. Those without a chronic health condition were used as the reference group. The models were adjusted to take into account a person's age, sex and education. A regression model was also used to assess the difference in household net worth between those with and without a chronic health condition. This model was also adjusted to take into account a person's age, sex, education and family type (such as couple only, couple with children, single person, single with children).

# **Findings**

#### **Employed people with a chronic health condition**

There were 1.3 million people aged 65 to 74 in 2010. Of these, half (51% or 668,000) had a chronic health condition and 16% were employed.

Of those with a chronic health condition only one in eight (13%) were employed, whereas one in five (20%) of those without a chronic health condition were employed. Results using a statistical model (logistic regression model) show that the odds of people with a chronic health condition being employed were 0.6 when compared to those without a chronic health condition (the reference group).<sup>17</sup> In other words, people aged between 65 and 74 years in good health had almost twice the chance of being employed than those with a chronic health condition (Table 1).

**Table 1:** Employment of people aged between 65 and 74 years with and without health issues, 2010

Health status	Number of people (n)	% Employed	Odds ratio of being employed	95% CI
Without a chronic health condition	519	20	1.0	
With a chronic health condition	506	13	0.61	0.40-0.93

Source: HILDA Wave 10

n= number of people who responded

Odds of being employed= ratio from logistic regression analysis

CI= confidence interval

The age of people who have a chronic health condition, their sex and income at age 64 has an effect on their employment when they are aged between 65 and 74 years (Table 2). While almost one in five (18%) of people aged between 65 and 69 were employed, a much lower proportion (6%) of those aged between 70 and 74 were employed (Table 2). The odds of a person aged between 70 and 74 with a long-term condition being employed are 0.27 times that of those aged between 65 and 69. Men (19% employed) have almost three times (2.89) the chance of being employed when compared to women (7% employed).

For those with a health condition, aged between 65 and 74, having a university level qualification does not seem to make much difference as to whether people are employed or not. One in eight (almost 13%) of people, with or without a university qualification, are employed.

<sup>&</sup>lt;sup>17</sup> The estimate is based on a logistic regression model that compared the likelihood of being employed between those who had a chronic health condition and those who did not, adjusting for age, sex and level of education.

**Table 2:** Characteristics of those employed aged between 65 And 74 with a chronic health condition, 2010

	Number of people (n)	Proportion employed (%)	Odds of being employed	95% CI
Age Group				
65–69	281	18	1.0	
70–74	225	6	0.27	0.13-0.55
Sex				
Female	267	7	1.0	
Male	239	19	2.89	1.53-5.45
Qualification				
University	285	13	1.0	
Non-university	121	12	1.08	0.54-2.13
Income Quartile*				
Q4 (highest)	81	34	1.0	
Q3	151	13	0.37	0.15-0.93
Q2	250	8	0.28	0.11-0.67
Q1 (lowest)	22	30	0.69	0.13-3.74

<sup>\*</sup>Those aged 74 in 2010 were not included because of data limitations.

Source: HILDA Wave 10

n= number of people who responded

Odds of being employed= ratio from logistic regression analysis

CI= confidence interval

The findings that people with chronic health conditions who work beyond 65 were more likely to be males between the ages of 65 and 69 years are in line with expectations and some studies. <sup>18,19</sup> On the other hand, these other studies have suggested a link between education level and working past 65 years, although this conclusion was not supported for people with a chronic health condition.

People on low or high incomes, at 64 years with a chronic health condition, were most likely to work past retirement age. Of those people with a chronic health condition who had the lowest personal income (with disposable income in the bottom 25%; the first quartile, Q1) at age 64, 30% were employed between the ages of 65 and 73.20 Eight per cent of people from the second quartile (Q2) at age 64 were employed, 13% from the third quartile (Q3) and 34% from the fourth quartile (Q4).

Heady, B., J. Freebairn, et al. (2007). Mature Age Employment: Who Works, Who Does Not, and Why? Policy Options For Increased Employment. Canberra, Australian Government Department of Employment and Workplace Relations.

<sup>&</sup>lt;sup>19</sup> McDonald, P. (2011). Employment at older ages in Australia: determinants and trends. Older workers: research readings. T. Griffin and F. Beddie. Adelaide, National Centre for Vocational Education Research.

<sup>&</sup>lt;sup>20</sup> There was no HILDA income data for people aged 74 in Wave 10 when they were 64 years old (i.e. in 1999) because the HILDA survey began data collection in 2001. Therefore, only people aged 65 to 73 in Wave 10 were included in this analysis.

#### Chronic health conditions in people aged between 65 and 74

The most common health conditions in people aged between 65 and 74 and the proportion of people with these conditions is shown in Table 3. The most common conditions in people aged between 65 and 74 are arthritis and related disorders, affecting 17% of this group. The second most common health condition is hypertension, affecting 12% of people aged between 65 and 74.

As well as being the most common health condition experienced by people aged between 65 and 74, arthritis has a major impact on participation in the workforce. People with arthritis were twice as likely to be out of the workforce than those people with no health condition. Similarly, those with heart disease, back problems and diabetes were also twice as likely to be out of the workforce than those people with no health condition. Fortunately, people with hypertension only had a marginally higher chance of being out of the workforce compared with people without any chronic health conditions.

Table 3: Top 5 chronic health conditions in people aged between 65 and 74, 2009

Condition	Number of people (n)	Population	Proportion with this condition (%)	Odds ratio of being out of the workforce*
Arthritis and related disorders	846	262,400	17	1.85 (1.40–2.46)
Hypertension	564	181,200	12	1.44 (1.07–1.93)
Back problems	440	140,900	9	2.46 (1.74–3.49)
Diabetes	252	84,500	5	1.88 (1.24–2.84)
Heart disease	195	63,500	4	2.29 (1.12–4.67)

<sup>\*</sup> compared to people with no health conditions

Source: ABS 2009 Survey of Disability, Ageing and Carers

Arthritis and musculoskeletal conditions such as back problems, diabetes, and cardiovascular health (which includes heart disease) are all listed as 'National Health Priority Areas' by the Australian Government because these diseases and conditions contribute considerably to the burden of illness and injury in Australia.<sup>21</sup> Many studies have shown the impact that these conditions have on participation in the workforce and the costs to Australian society.<sup>22,23,24</sup>

#### The impact of arthritis on employment

When compared to many other chronic diseases (such as asthma, depression, chronic obstructive pulmonary disease, osteoporosis, diabetes, stroke and coronary heart disease), arthritis is the largest contributor to the loss of full-time employment. Access Economics estimated that the cost of lost earnings as a result of arthritis was almost twice that of the direct health costs of the condition in Australia.

<sup>&</sup>lt;sup>21</sup> Australian Institute of Health and Welfare. (2012). "National health priority areas." Retrieved 01/12/2012, 2012, from http://www.aihw.gov.au/national-health-priority-areas/

<sup>&</sup>lt;sup>22</sup> Schofield, D., E. Callander, et al. (2011). "Labour force participation and the influence of having back problems on income poverty in Australia "Spine 37(13): 1156-1163.

<sup>&</sup>lt;sup>23</sup> Schofield, D., E. Callander, et al. (2012). "Labour force participation and the influence of having CVD on income poverty of older workers." International Journal of Cardiology 156(1): 80-83.

<sup>&</sup>lt;sup>24</sup> Schofield, D., R. Shrestha, et al. (2008). "Chronic disease and labour force participation among older Australians." Medical Journal of Australia 189: 447-450.

<sup>&</sup>lt;sup>25</sup> Australian Institute of Health and Welfare (2009). Chronic disease and participation in work. Canberra, AlHW.

Other studies have estimated that the indirect costs from work disability, work absenteeism and lost earnings account for up to 80% of the total costs of arthritis.<sup>27,28</sup>

#### The impact of diabetes on employment

In Australia (and internationally), diabetes also has a significant impact on the ability of people, particularly older workers, <sup>29</sup> to participate in the workforce. <sup>30,31</sup> With the increase in the occurrence of diabetes around the world, particularly among the older age groups, the impact of this disease on participation in the workforce is likely to become more significant. <sup>32</sup>

#### The impact of back problems on employment

Results of studies from around the world show that back problems are a major source of disability. These problems can lead to a decrease in people participating in the workforce because of retirement and absenteeism.<sup>33</sup> Most of the studies that measure the indirect costs of back problems focus on sick leave, absence from work, inactivity or workers compensation. These issues represent the main cost of back problems that affect the workplace.<sup>34,35</sup>

#### The impact of cardiovascular disease on employment

In Australia in 2009, the combined national impact of cardiovascular disease, (measured as the loss of participation in the workforce by 45 to 64 year olds) was equal to \$1.1 billion in lost income, \$225 million in lost income tax revenue, \$85 million in additional government benefit payments and \$748 million in lost Gross Domestic Product (GDP).<sup>36</sup>

#### Managing chronic disease conditions to increase participation in the workforce

The wider literature tells us that conditions most commonly suffered by people in the 65 to 74 year age group have been identified as key work limiters among younger workers. However, to date there is little recognition of the impact these conditions are also having on workers over the age of 65 who remain in the workforce.

<sup>&</sup>lt;sup>26</sup> Access Economics (2005). Arthritis - the bottom line: The economic impact of arthritis in Australia, Arthritis Australia.

<sup>&</sup>lt;sup>27</sup> Li, X., M. Gignac, et al. (2006). "The indirect costs of arthritis resulting from unemployment, reduced performance, and occupational changes while at work." Medical Care 44(4): 304.

<sup>&</sup>lt;sup>28</sup> Puolakka, K., H. Kautiainen, et al. (2006). "Monetary value of lost productivity over a five year follow up in early rheumatoid arthritis estimated on the basis of official register data on patients' sickness absence and gross income: experience from the FIN-RACo trial." Ann Rheum Dis 65(7): 899-904.

<sup>&</sup>lt;sup>29</sup> Julius, U., P. Gross, et al. (1993). "Work absenteeism in thype 2 diabetes mellitus: results of the prospective Diabetes Intervention Study." Diatete & Metabolisme (Paris) 19: 202-206.

<sup>&</sup>lt;sup>30</sup> Tunceli, K., C. Bradley, J, et al. (2005). "The impact of diabetes on employment and work productivity." Diabetes Care 28(11): 2662-2667.

<sup>&</sup>lt;sup>31</sup> Access Economics (2008). The growing cost of obesity in 2008: three years on. Canberra, Diabetes Australia.

<sup>&</sup>lt;sup>32</sup> Tunceli, K., C. Bradley, J, et al. (2005). "The impact of diabetes on employment and work productivity." Diabetes Care 28(11): 2662-2667.

<sup>&</sup>lt;sup>33</sup> Maniadakis, N. and A. Gray (2000). "The economic burden of back pain in the UK." Pain 84(1): 95-103.

<sup>&</sup>lt;sup>34</sup> Maniadakis, N. and A. Gray (2000). "The economic burden of back pain in the UK." Pain 84(1): 95-103.

<sup>&</sup>lt;sup>35</sup> Dagenais, S., J. Caro, et al. (2008). "A systematic review of low back pain cost of illness studies in the United States and internationally." The Spine Journal 8(1): 8.

<sup>36</sup> Schofield, D., R. Shrestha, et al. (2013). "The personal and national costs of CVD: impacts on income, taxes, benefits and GDP due to lost labour force participation." International Journal of Cardiology 166(1): 68-71

Investment in preventative health measures is seen as one way of overcoming the damaging influence that ill health has on participation in the workforce.<sup>37</sup> Managing arthritis has been shown to be effective in dealing with the impact on workforce participation.<sup>38,39</sup> Some studies have shown that certain types of arthritic treatments result in an increase in workforce participation.<sup>40,41</sup> Other studies found that modifying work-related factors, such as self-employment, workstation modification, and commuting difficulty, could increase the participation of arthritis sufferers in the workforce.<sup>42</sup>

Similarly, the proper management of back problems is seen as one way of overcoming the damaging effects that the condition has on participation in the workforce.<sup>43</sup> Treatments, exercise, continuing daily activities and avoiding bed rest, have been shown to be effective.<sup>44,45,46,47</sup>

Several studies have shown that interventions to prevent or delay the development of diabetes in people who are at high risk are effective in keeping this group in the workforce.<sup>48,49,50</sup>

One recent study showed that lifestyle changes and treatment with the drug, metformin, increased the participation of older people in the workforce and in turn decreased the amount of income lost.<sup>51</sup>

There are many effective prevention options for reducing cardiovascular disease. These include giving aspirin to people at high risk, controlling pre-diabetes, reducing and controlling weight, lowering blood pressure in people with diabetes and lowering 'bad' cholesterol (low-density lipoprotein or LDL) in people who already have heart disease.<sup>52</sup>

#### <sup>37</sup> Australian Government (2006). A Plan to Simplify and Streamline Superannuation.

- 38 Bloom, D. E., D. Canning, et al. (2003). "Longevity and life-cycle savings." The Scandinavian Journal of Economics 105(3): 319-
- <sup>39</sup> Productivity Commission (2005). Economic Implications of an Ageing Australia. Research Report. Productivity Commission. Canberra. Canberra, Australian Government.
- <sup>40</sup> Yelin, E., P. Katz, et al. (2001). "Impact of etanercept (Enbrel®) on health care use and employment in early RA." Arthritis & Rheumatism 44(Supplement 9): 152.
- <sup>41</sup> Puolakka, K., H. Kautiainen, et al. (2004). "Impact of initial aggressive drug treatment with a combination of disease-modifying antirheumatic drugs on the development of work disability in early rheumatoid arthritis: a five-year randomized followup trial." Arthritis Rheum 50(1): 55-62.
- <sup>42</sup> Lacaille, D., S. Sheps, et al. (2004). "Identification of Modifiable Work-Related Factors That Influence the Risk of Work Disability in Rheumatoid Arthritis." Arthritis & Rheumatism 51(5): 843-852.
- 43 Buchbinder, R., D. Jolley, et al. (2001). "Breaking the back of back pain" Medical Journal of Australia 175(5 Nov): 456-457.
- <sup>44</sup> Maher, C. G. (2000). "A systematic review of workplace interventions to prevent low back pain." Australian Journal of Physiotherapy 46: 259-269.
- <sup>45</sup> Waddell, G., G. Feder, et al. (1997). "Systematic reviews of bed rest and advice to stay active for acute low back pain." British Journal of General Practice 47: 647-652.
- <sup>46</sup> Abenhaim, L., M. Rossignol, et al. (2000). "The role of activity in the theraputic management of low back pain: Report of the International Paris Task Force on Back Pain." Spine 25(S4): S1-S33.
- <sup>47</sup> Waddell, G. and W. Burton (2001). "Occupational health guidelines for the management of low back pain at work: evidence review." Occupational Medicine 51(2): 124-135.
- <sup>48</sup> Gillies, C. L., K. R. Abrams, et al. (2007). "Pharmacological and lifestyle interventions to prevent or delay type 2 diabetes in people with impaired glucose tolerance: systematic review and meta-analysis." British Medical Journal 334(7588): 299.
- <sup>49</sup> Colagiuri, S. and A. E. Walker (2008). "Using an economic model of diabetes to evaluate prevention and care strategies in Australia." Health Affairs 27(1): 256-268.
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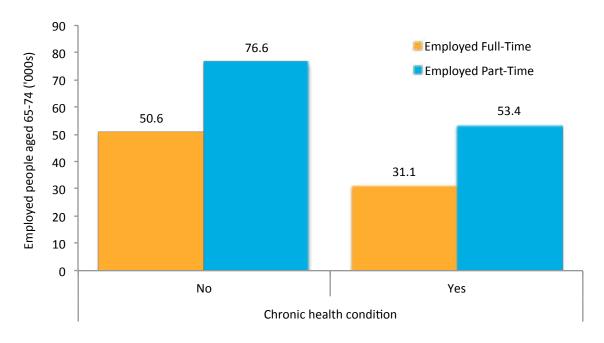
The value of chronic disease intervention to increase the participation of younger workers (aged under 65 years) in the workforce is often highlighted. As well as the benefits to workers under 65, preventative or treatment-based health interventions could contribute to maintaining and possibly increasing the participation rate of people over the age of 65 in the workforce. The health interventions could help overcome the limitations (caused by health issues) placed on this group of people to participate in the workforce.

#### Part-time and full-time employment of people aged between 65 and 74

While having a chronic health condition did affect the chance of employment for people aged between 65 and 74 years, it did not affect the chances of being employed part-time when compared to full-time employment. The ratio of people who were employed full-time to those employed part-time was similar for those with and without chronic health conditions (approximately 40:60). Of the 84,500 people aged between 65 and 74 with a chronic health condition (equivalent to 64 respondents) who were employed, 31,000 (37%) were in full-time employment and 53,000 (63%) were in part-time employment (Figure 1).

In these groups, 40% of people were employed as managers/professionals and 33% were employed as a tradesperson or a labourer (data not shown). These percentages were similar to those for people who did not have a chronic condition, although the small number of people in the sample for each profession limited the analysis.

Figure 1: Full-time or part-time employment status of those aged between 65 and 74 by health status, 2010



Source: HILDA Wave 10

#### Net worth, income and retirement

People with chronic health conditions can gain many benefits from working beyond the traditional retirement age. Studies have shown that people in poor health are disproportionally financially disadvantaged when compared to those in good health. Chronic health conditions often cause large financial burdens on people because of the costs of medical treatment and the potential loss of income. <sup>53,54</sup> Participating in the workforce, when possible, provides financial assistance and a way of achieving a better standard of living to people with chronic health conditions.

The household net worth (value of assets minus debt) generally increases with age until people retire. It is expected that people aged between 65 and 74 are, on average, among the wealthiest Australian households. The typical household net worth of people in this age group is more than \$1 million. People who had a chronic health condition and were employed had a median value of household net worth of \$1.1 million while those without a chronic health condition and were employed had a net worth of \$1.2 million (Table 4). After adjusting for the age, sex, level of education and family type (couple only, couple with children, single person, single with children), there is no statistical difference in the value of household net worth between employed people with and without a chronic health condition.

**Table 4:** Difference in value of net worth among people employed full-time or part-time, aged between 65 and 74, 2010

Health status	Number of people (n)	Mean household net worth (\$)	Difference in net worth (%)	95% CI
With a chronic health condition	519	1,090,000	_	
Without a chronic health condition	506	1,197,000	10	(-38 to 66)

Source: HILDA Wave 10
Cl= confidence interval

On the surface, this finding of wealth equality appears to be an encouraging outcome. However, people with poor health need a higher income to achieve the same standard of living as those with good health because of the costs of medical treatment, support services and medication. <sup>55</sup> It has been argued that these costs should be taken into consideration when comparing incomes and wealth. <sup>56</sup> This means people with long-term health conditions need more financial assets. So while older workers in poor health may have a similar net worth as those without a health condition, they may not be able to enjoy the same standard of living.

<sup>&</sup>lt;sup>53</sup> Schofield, D., R. Shrestha, et al. (2011). "Economic Impacts of Illness in Older Workers: Quantifying the impact of illness on income, tax revenue and government spending." BMC Public Health 11(418).

<sup>&</sup>lt;sup>54</sup> Zaidi, A. and T. Burchardt (2005). "Comparing incomes when needs differ: Equivalization for the extra costs of disability in the U.K." Review of Income and Wealth 51(1): 89-114.

<sup>&</sup>lt;sup>55</sup> Burchardt, T. and A. Zaidi (2008). Disabled children, poverty and extra costs. Why money matters: Family income, povetry and childrens lives. J. Strelitz and R. Lister. London, Save the Children.

<sup>&</sup>lt;sup>56</sup> Zaidi, A. and T. Burchardt (2005). "Comparing incomes when needs differ: Equivalization for the extra costs of disability in the U.K." Review of Income and Wealth 51(1): 89-114.

While the net worth between people with long-term health conditions and those with a long-term health condition may be very similar, the income from a wage or salary between these two groups differed. Of those with a chronic health condition who were employed, 80% earned \$500 or less per week and only 2% earned more than \$1,500 per week. This contrasts significantly with the earnings of those without a health condition. Fifty-four per cent of this group of people earned less than \$500 per week and 12% earned more than \$1,500 per week (Figure 2).

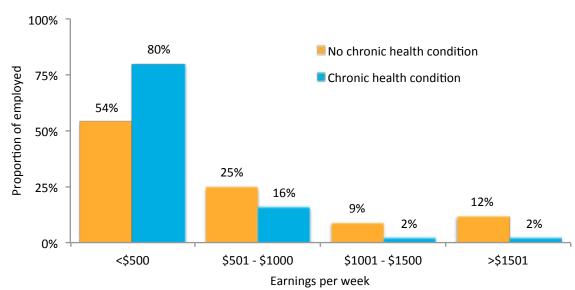


Figure 2: Weekly earnings of people who were employed and aged between 65 and 74, 2010

Source: HILDA Wave 10

The high proportion of earners on low incomes may be influencing the retirement intentions of the two groups. Half of the people with a chronic health condition (49%) stated that they had no plans to retire compared to one-quarter (23%) of people without a chronic health condition.

Research suggests there are two groups of people who work beyond the traditional retirement age: (1) those who continue working because they enjoy it but do not need the money; and (2) those who would like to retire but continue working because they need the money.<sup>57</sup> Given that most of those working past the traditional retirement age were earning very low incomes and had no plans to retire, it may be that they cannot retire because of financial reasons.

Older workers with a chronic health condition were more likely to earn a salary or wage of \$500 or less per week than those without a chronic health condition. For those who may be working because of financial reasons, the small amount they receive in salary or wages may not be enough to allow them to retire. While older workers with a chronic health condition have a similar amount of wealth as those without a chronic health condition, this may not be enough to support their retirement because their illness may add to their cost of living. The translation of earnings into savings is a potential area for further study.

<sup>&</sup>lt;sup>57</sup> Hamilton, M. and C. Hamilton (2006). Baby Boomers and Retirement: Dreams, fears and anxieties. Discussion Paper Number 89. Canberra, The Australia Institute.

#### **Conclusion**

Extending the working life of Australians past the traditional retirement age has benefits for the individual and governments. The financial burden of an ageing population is reduced for governments while the individual can enjoy a higher standard of living and other benefits. Not being employed is associated with deterioration in the health of people, particularly their mental health.<sup>58,59</sup> Participation in the workforce provides a means of social interaction, which has been shown to have health benefits.<sup>60</sup>

People aged between 65 and 74 with a chronic health condition were less likely to be employed than those without a chronic health condition. Males, aged between 65 and 69 were the most likely of those with chronic conditions to be employed. Having a university qualification did not affect the chances of employment for those with a chronic health condition. The proportion of 65 to 74 year olds with chronic health conditions who were working full-time was similar to those without chronic health issues. While the household net worth of those with and without chronic health conditions was similar, there was a higher proportion of people with a chronic health condition that earned less than \$500 per week. Many of these people thought they would never be able to retire. For people who may be working because of financial reasons, the small amount they earn from working may not be enough to allow them to retire. While older workers with a chronic health condition have a similar amount of wealth as older workers without a chronic health condition, this may not be enough to support their retirement because their illness may add to their cost of living. The generation of income from savings is a potential area for further study.

<sup>&</sup>lt;sup>58</sup> Greatz (1993). "Health consequences of employment and unemployment: longitudinal evidence for young men and women." Soc Sci Med 36: 715-724.

<sup>&</sup>lt;sup>59</sup> Morrell, S., R. Taylor, et al. (1994). "A cohort study of unemployment as a cause of psychological disturbance in Australian youth." Soc Sci Med 38: 1553-1564.

<sup>60</sup> Lynch, E. B., Z. Butt, et al. (2008). "A qualitative study of quality of life after stroke: The importance of social relationships." Journal of Rehabilitation Medicine 40: 518-523.



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