

The Health of Senior Australians and the Out-of-Pocket Healthcare Costs They Face

November 2012

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Australian Government

Department of Health and Ageing

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November 2012

Foreword

Cost of living pressures remain an ongoing issue for senior Australians. In 2011, the Productive Ageing Centre commissioned a report from Simon Kelly, which showed nearly three-quarters of a million older households (aged 50 years and over) are spending half their income on just three essential cost of living items (groceries; electricity & gas; and healthcare) on an average income of just over \$14,000 per year. These commodity items were shown to be rising at a rate considerably faster than inflation. In 2011, a further report by the Productive Ageing Centre showed that 65% of mature age people (aged 50-79) did not purchase health insurance because they simply could not afford it. Earlier this year, we also documented that a significant number of older Australians faced affordability barriers with regards to access to Pharmaceutical medicines.

This report, authored by researchers from the Australian National University, sought to examine the prevalence of chronic conditions among mature age people and how this relates to burdensome out-of-pocket health care costs. Results show that 570,000 people aged 55 years and over spend more than 10% of their income on health and about 250,000 spend over 20%.

On average older Australians spend \$353 per quarter on out-of-pocket health care costs. Worryingly, those with five or more chronic conditions spend \$882 per quarter which is almost 6 times as much as those with no chronic conditions. For those with many chronic conditions this burden is magnified as they tend to have lower incomes, and those with five or more chronic conditions are estimated to spend 16.3% of their incomes on health care costs, while those with no chronic conditions spend only 1.9% of their incomes.

As suggested in this report, there are numerous policy options to consider, including a wider safety net for those with multiple conditions or targeted programs for lower income earners with multiple conditions, similar to current DVA arrangements. But, as the authors point out, the only long run solution is to implement programs to prevent the prevalence of multiple chronic conditions.

The evidence of cost of living pressures facing mature age Australians is certainly mounting. The extent to which these pressures are impinging upon healthy and productive ageing will continue to be a topic of research for the Productive Ageing Centre over the coming year.

Dr Jeromey Temple
Director
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December 2012

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The Health of Senior Australians and the Out-of-Pocket Healthcare Costs they Face

Introduction

While the Australian Medicare arrangements provide strong protection for Australians against unmanageable health costs, as people age they are likely to have more chronic conditions leading to increasing costs of health care. In this report, we examine the costs faced by older Australians with chronic health conditions, and explore how many face extreme costs in relation to their incomes and the characteristics of the older Australians who face severe financial burdens due to their health care costs.

The results reported in this study are based on a survey of members of National Seniors Australia (NSA) which was undertaken in 2009. Questionnaires were mailed to a sample of 10,000 NSA members and 4,574 responded (a response rate of 45.7%). The survey collected information about general health, health conditions which had lasted more than 6 months, the amounts respondents had paid for health care in the last 3 months, and information on work, education and income. The survey was undertaken as part of the SCIPPS (Serious and Continuing Illness Policy and Practice Study) through the Menzies Centre for Health Policy.

Background

While Australia has had publicly funded health insurance through Medicare since 1984, and this scheme covers the majority of the community's health costs, there remain many out-of-pocket costs still faced by some patients (Doggett (2009), Jan et al (2012)). Private doctors and private hospitals bill patients above the insurance rebates, copayments are required for prescription pharmaceuticals, and there are many health items (non prescription pharmaceuticals, bandages, allied health services, equipment such walkers and wheelchairs, dental services, spectacles, hearing aids etc) for which people must pay out-of-pocket costs. While many of these items are covered by private health insurance there is still usually a requirement for a patient contribution. Overall out-of-pocket costs amounted 16.8% of total health expenditure in Australia in 2008-09 (AIHW (2010)).

Studies based on the Household Expenditure Survey of 2003-2004 identified those households which had high total out-of-pocket costs as including those headed by older Australians; those in the poorest income and wealth categories; those without private health insurance; those living in a more socio-economically disadvantaged area or living in a rural or remote area and those holding a concession card (Jones et al. (2008), NATSEM (2008)). Health expenses, including private health insurance, were estimated to constitute 4.7% of average household weekly expenditure across all households (including costs of private health insurance which comprise 1.7% of total household expenditure), with broadly speaking higher proportions of health expenditure in older households although patterns were not stable as shown in Table 1 below.

Table 1: Proportion of weekly household expenditure on medical care and health expenses by family type, all households, 2003-04

	Age of reference person in household					All ages
	Less than 35 years	35-49 years	50-64 years	65-74 years	75 years or older	
Single	2.21	5.19	5.1	3.53	7.21	
Couple only	2.66	5.48	6.56	5.26	8.31	
Couple with children	4.04	4.44	4.64			
Sole Parent						3.13
Other						1.94
Total						4.69

Source: NATSEM (2009)

In Australia 87.5% of total recurrent health expenditure can be attributed to the 12 major chronic disease groups (AIHW (2006)). Almost all older Australians have at least one long term condition and over 80% have three or more long term conditions (Australian Bureau of Statistics (2009)). The prevalence of chronic conditions is increasing in Australia (Goss (2008)) and internationally, with the greatest growth in the prevalence of people with multiple complex chronic diseases (Hwang et al. (2001); Paez et al. (2009)). Average health related expenditure has been shown by a recent review of studies (by Lehnert et al. (2011)) to be 3.3 times more for people with 3 conditions than for those with no conditions, and 3.6 times as much for people with 5 or more conditions than those with no chronic conditions.

These studies showing the costs of chronic disease and prevalence of multiple conditions, lead to concerns that those with many chronic conditions may face problems in paying for medical services. The Commonwealth Fund has estimated that 18% of the Australian adult population had not seen a doctor when they were sick or had not received recommended care due to cost, and 12% of Australians had not filled prescriptions or had skipped doses of prescribed medications due to cost (Schoen et al. (2010)).

A 2010 study of Australian adults also showed a strong relationship between financial stress and failure to purchase medical services and medicines, for example showing 28% of those under financial stress skipping medical tests or treatment compared to 16% of those with no financial stress (Menzies Centre for Health Policy and Nous Group (2009)). Consistent with these studies, Australians with chronic obstructive pulmonary disease (COPD) whose households experienced an out-of-pocket payment burden greater than 10% of household income were significantly more likely to report that they were unable to pay for basic living or medical expenses than those spending less than 10% of their income on their health costs.

While there have been some studies of costs of chronic illness undertaken in Australia for individual illnesses (Lapsley et al. (2002), Dewey et al. (2004), Gordon (2009)), there have been no studies on the impact of the number of chronic conditions on out-of-pocket costs in older individuals. Similarly, while there has been considerable discussion in the international literature of catastrophic out-of-pocket costs (Wagstaff and van Doorslear (2003), Xu et al. (2003)), there are few studies in Australia and those studies (Essue et al. (2011)) have also tended to be disease specific.

In this paper, we address the questions of how many senior Australians have chronic health conditions, how much senior Australians spend out-of-pocket on their health, and how this expenditure relates to their chronic conditions. Further, we look at those who expend very high proportions of their income on health as this is likely to generate financial stress for these people, and we examine how chronic conditions relate to this stress.

Methods

All the charts and tables which follow are based on the SCIPPS survey unless otherwise noted.

The sample

The study population included all members of National Seniors Australia, a nation-wide organization with 200,000 members aged over 50. This group is broadly representative of Australians in this age group although it is generally better educated and much more likely to hold private health insurance than the wider population.

A study questionnaire was mailed to a representative cross-section of 10,000 NSA members during mid 2009. The sample was stratified by age, rurality and State of residence. It was deliberately designed to over-represent older NSA members so that there would be a large enough sample of older people for later analysis. Response rates were higher for the older age groups (around 48%) relative to the younger age groups (around 39%) and were higher for women in the younger age groups and for men in the older age groups.

Questionnaire

The study questionnaire was a structured instrument that was adapted from one used previously (Essue et al. (2011)) and included questions on demographic information, self-reported chronic illness and disability, health service use and out-of-pocket spending, household economic circumstances and quality of life. The questions were drawn from existing validated tools¹. The study focused on the most common serious chronic diseases in Australia (Australian Bureau of Statistics (2009)) , including: cancer, heart disease, diabetes, arthritis and depression/anxiety.

¹ Questions were drawn from sources including: the Australian 45 and Up study [13], the Household, Income and Labour Dynamics in Australia survey [14], the Australian General Social Survey [15] and the Quality Metric Short Form Version 12 (SF-12) survey of health related quality of life (Ware et al. (1996))

Measurement of out-of-pocket spending

Respondents were asked to report their personal out-of-pocket expenses over the previous three months for five main categories of health related services, including medication, medical services, transport, home care, medical equipment and other expenses. Respondents reporting “Don’t know” to any category were omitted from calculations of total costs. The “Other health related expenses” category encompassed a variety of expenses, including physiotherapy, dental care and podiatry. As extreme expenses such as those for housing modifications (one respondent reported spending over \$20,000 in the previous quarter) and very expensive hearing aids had the potential to significantly influence estimates, observations with quarterly costs of \$5,000 or over were excluded when estimating costs (removing 26 observations or about 1% of observations reporting total expenditure).

Measurement of income

As the “value” of income to a household depends on the size of the household, income was adjusted for household size using the modified OECD equivalence scales to give “household equivalent income” by applying a scale of 1 to the first adult in a household, 0.5 to the second and later adults, and 0.3 to children (Australian Bureau of Statistics, 2011). This “equivalised” income allows us to compare the expenditure of the individual on their health with their notional share of the household income.

Measurement of financial burden

We measured financial burden as the proportion of equivalised household income expended on health related goods and services. Those who expended more than 10% were considered to face a moderate financial burden from health care costs, and those who expended more than 20% to face a severe financial burden. These percentages are necessarily somewhat arbitrary, and outlaying 10% of income on health costs may be much more “catastrophic” for low income earners than for a high income earners. For this reason, we report on people who expend more than both 10% and 20% of income on their health.

Analysis

The results shown in the analysis reported here were weighted to adjust totals to the State/age/sex structure of the Australian population and to align with the socio-economic structure of Australia (Australian Bureau of Statistics (2008)). The analysis, which describes their conditions, expenditure on health, how much of income is spent on health, the relationship between health conditions and health expenditure, and likelihood of facing health costs which comprise a large proportion of income, is undertaken in the form of tables and charts. More complex multivariate analysis is reported in McRae et al (2012).

Results

Is the NSA Population the same as the older Australian Population?

A comparison of the sample population (adjusted only for response rates) with the overall Australian older population is shown in Table A1 in the appendix. This shows that the two populations are much the same in terms of being retired or working, whether they live in a capital city or elsewhere. The sample population however is better educated than the Australian population overall (with roughly twice as many people with degrees), is much more likely to have private health insurance, and is much more likely to report that they have good health.

The sample population is also more likely to live in areas of high socio-economic status as measured by the ABS “SEIFA” index (ABS (2008)). Despite this, while definitive income comparisons are difficult, there appears little difference in the household incomes of the sample population and general population. For example, the estimated average equivalised income for the sample population aged 65 and over was \$584 per week, while that for the overall population in this age group was \$598 per week for 2009-10. Similarly, for people aged 55 and over, the estimate for the sample population was \$749 per week and for the overall population it was \$744 per week (ABS (2011)).

While these factors need to be considered in assessing the results below, and the actual levels of spending reported must be treated with some care, the patterns of who spends and does not spend, and the groups facing the greatest financial pressure due to health costs, are unlikely to be incorrectly identified.

What is the prevalence of chronic conditions?

As shown in Table 2 the most common chronic conditions among older Australians are high blood pressure and arthritis. The next group of conditions experienced by 15-20% of respondents are cancer, asthma/hayfever and depression/anxiety. It is important to note that while many people have experienced cancer of some form, only 5% have recent treatment experience. The results are broadly similar for the survey population and the older Australian population overall, with the main difference being in the higher levels of reporting of high blood pressure and the lower levels of reporting of arthritis in the sample population although these are still the most prevalent conditions.

Table 2: *Estimated percentage of sample population with specified conditions compared to ABS estimates*

Condition	Percentage reporting condition	Percentage of older Australian Population [§]
Cancer	17.9	5.0
Cancer (treated within last 3 months)	4.7	5.0
Heart disease	12.3	17.7
High blood pressure	43.1	29.8
Diabetes	12.8	12.1
Stroke	3.2	4.0
Asthma/ hay fever	18.2	9.6
Emphysema/ Bronchitis	3.4	5.2
Arthritis	32.2	43.4
Osteoporosis	9.3	12.0
Depression/Anxiety	15.3	11.8

§ Source: ABS (2006)

Overall, it is estimated that 82.2% of older Australians have at least one of these chronic conditions, with 55.8% having more than one condition. These numbers are somewhat below those found by ABS because this study deals only with the relatively major conditions described in the attachment, while ABS addresses many more conditions and uses a much finer set of categories. For example, ABS includes hearing and vision conditions which are prevalent among older Australians so many in the sample population would report more conditions to ABS than reported in this study.

As would be expected, Figure 1 shows that even among Australians aged over 50 years, the oldest group has more chronic conditions than the youngest group with 93% of those aged over 75 having at least one chronic condition, while for those aged 50-64 there are 77% with at least one chronic condition. Figure 2 shows that women are more likely to have high numbers of chronic conditions than men. This is at least in part because women tend to live longer than men and older people tend to have more chronic conditions.

Figure 1: Percentage in each age group with a given number of chronic conditions

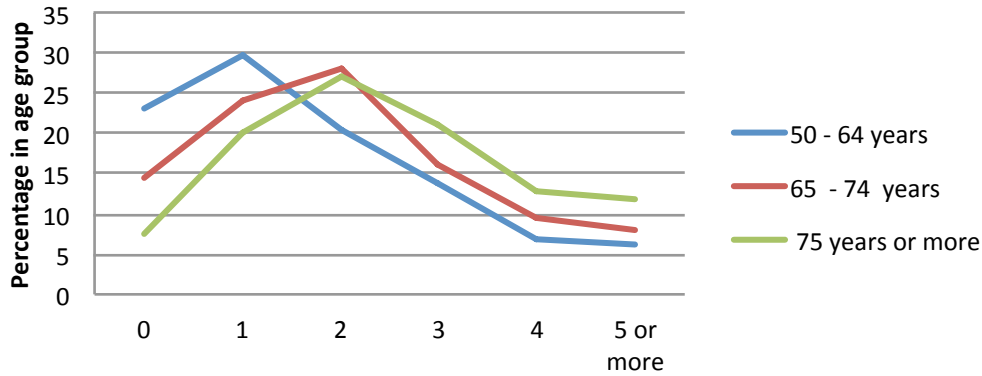
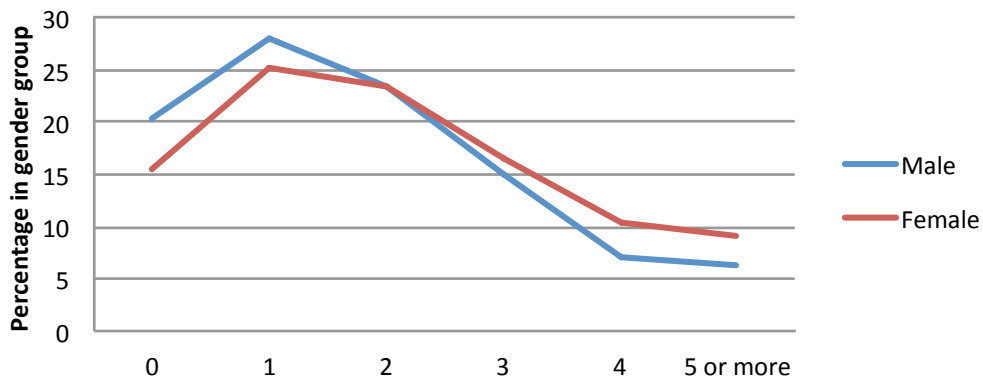


Figure 2: Percentage by gender with a given number of chronic conditions



How much do older Australians spend on their health?

The average out-of-pocket expenditure on health care over the previous three months was \$353 (Table 3), with a median expenditure of \$150 as many respondents have quite small expenditures and a small number have very large expenditures. As noted earlier expenditure is limited to \$5,000 per quarter in this analysis, but even \$5,000 per quarter is a very high level of expenditure if considered in the annual context.

Table 3: Mean out-of-pocket expenditure by expenditure category †

	Mean Total Expenditure (\$ per quarter)	Proportion reporting some expenditure in previous quarter
Medication	\$132	73.0%
Medical services	\$117	56.4%
Transport	\$12	19.1%
Home care	\$5	5.3%
Medical equipment	\$37	7.3%
Other expenses	\$50	10.9%
Total expenses	\$353	

† Note that these do not add due to differential non-response to different categories

Medication and medical services expenses stand out as the major costs, but substantial costs also apply for equipment and other expenses. As only around 10% report expenditure on equipment or other expenses, those who do expend money on these items have quite high expenditure.

The relation between average total expenditure on health goods and services and numbers of chronic conditions and particular chronic conditions is shown in Figures 3 and 4. There is a clear and steady increase in costs with increasing numbers of conditions. Estimated average total expenditure is nearly \$900 per quarter for those with 5 or more conditions.

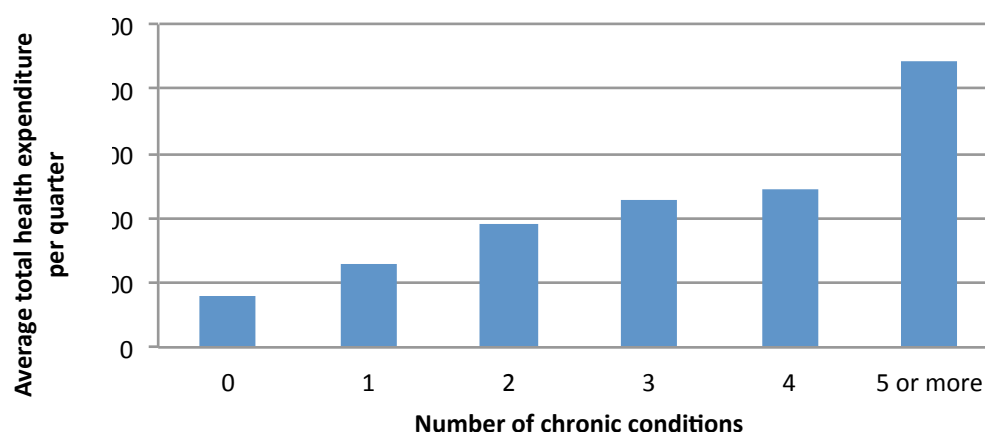
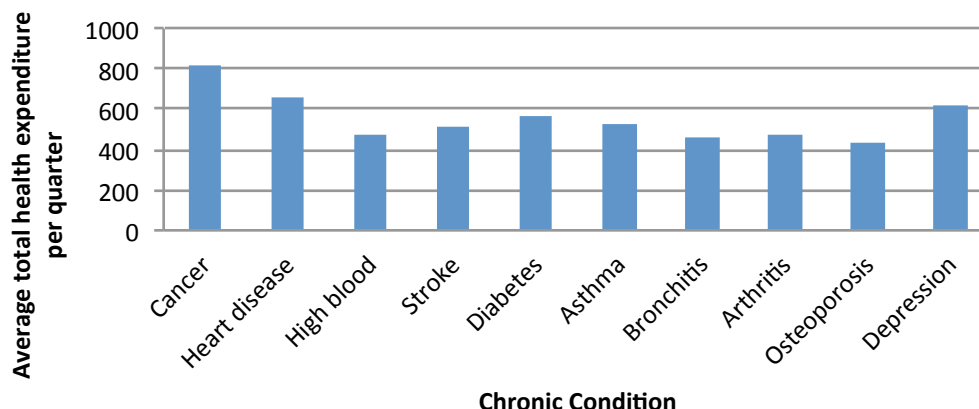
Figure 3: Average health expenditure per quarter by number of chronic conditions

Figure 4 shows the average quarterly expenditure by people with particular conditions. Of course people with any of these conditions may have other conditions too, so while the Figure shows for example, that people with diabetes spent on average nearly \$600 in the previous quarter on health good and services, this is not due only to their diabetes but also to any other conditions which they may have. While there are interesting patterns in Figure 4, care is needed in interpreting it as the estimates are based on relatively small samples for some conditions. Using formal statistical tests we see the differences between cancer (being the highest cost) and high blood pressure and arthritis (being low cost and based on large numbers of respondents) are significant, but no other differences are statistically significant.

Figures 3 and 4 show that the numbers of conditions not only have much clearer effects but also have greater effects than any particular conditions.

Figure 4: Average health expenditure per quarter by chronic condition



How much of income is spent on health?

The impact of health expenditure on households is explored by looking at the proportion of their income spent on health related goods and services. The estimated overall percentage of income spent on health is 4.8%. While this is somewhat below the averages shown in Table 1 for people aged over 50, as the estimates in Table 1 include private health insurance costs and most of the survey respondents hold private health insurance, this is not unreasonable.

Table 4: Income and expenditure by number of chronic diseases ever reported

No of conditions diagnosed	Average equivalent income (\$'000 pa)	Average total health expenditure (\$ per quarter)	Average percent of income spent on health†
0	47	156	1.9%
1	43	260	2.9 %
2	40	381	5.0 %
3	42	459	6.7%
4	35	492	6.4 %
5 or more	33	882	16.3 %
Overall averages	42	353	4.8 %

† Calculated by assuming quarterly income is 25% of annual income

Table 4 shows a very strong pattern of increasing expenditure with increasing numbers of conditions as shown earlier, but also shows a clear pattern of declining equivalent income with more conditions. This study cannot address the cause and effect relationships between numbers of conditions and income (does being poor make people sicker, or does being sick make people poorer) and there is a significant literature on this. The recent report from Catholic Health Australia and NATSEM² argues strongly that it is low income and education which make people sicker and leads to major costs on the health system.

Regardless of the causal pathway, Table 4 makes clear that those with more chronic conditions have lower incomes, higher health costs, and as a consequence they expend a much greater proportion of their income on their health. An estimated average of 16.3% of income is expended on income by those with 5 or more of the chronic conditions incorporated in this study.

² <http://www.cha.org.au/images/CHA-NATSEM%20Cost%20of%20Inaction.pdf>

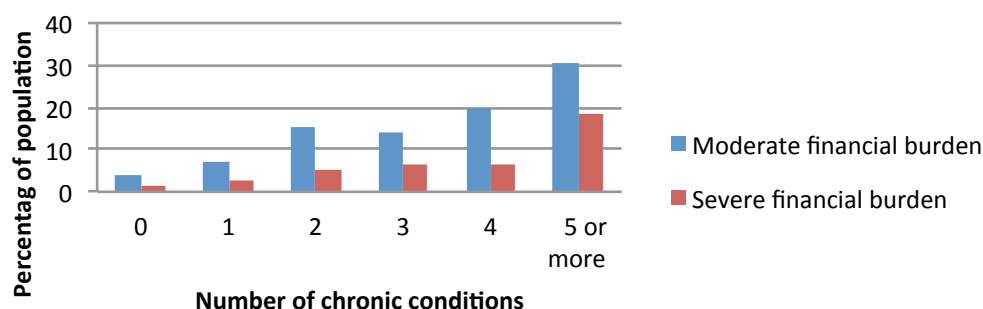
Who faces the greatest financial burden of out-of-pocket costs?

While individual situations obviously vary significantly, in general, out-of-pocket health costs of 5% of income would probably not be a major burden unless the person was on an extremely low income. On the other hand, out-of-pocket health costs of over 20% are likely to be a very major burden unless the person is on a very high income. The literature (see for example Atabuga (2011)) is also unable to prescribe clearly the levels of expenditure which define a severe burden, although the literature on developing countries tends to use 10% as a “catastrophic” cost for people living with marginal incomes.

For the purposes of this study, we have considered health expenditure of 10% of equivalised income as a moderate financial burden and health expenditure of 20% as a severe financial burden, although there is no scientific basis for these numbers. Overall 11.8% of the population are estimated to face moderate financial burden due to their health costs, and 5.1% to face a severe financial burden.

Figure 5 shows the proportions of the study population with different numbers of chronic conditions who faced moderate or severe financial burdens from their health care costs. The patterns are as would be expected with the percentages with moderate or severe burden generally increasing with numbers of conditions, and with the percentage with severe financial burden less than that with moderate burden.

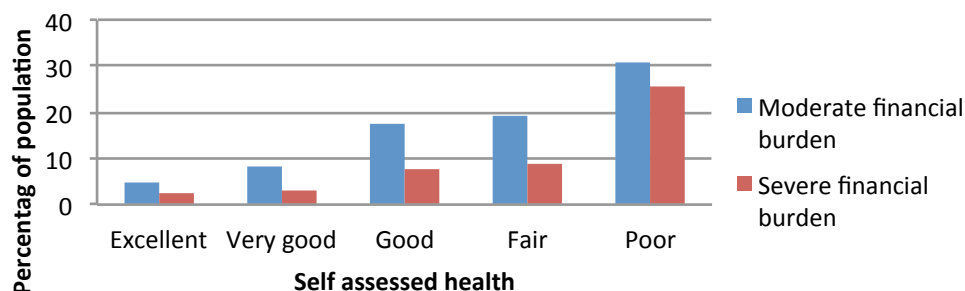
Figure 5: Percentage of population with moderate or severe financial burden by number of chronic conditions



From Figure 5, it is clear that those with many chronic conditions are greatly (and indeed statistically significantly) more likely to face moderate or severe financial burden than those with 4 or fewer conditions, and the estimated proportions of those with 5 or more conditions facing financial burdens (30.5% and 18.6%) comprise a large proportion of this group.

An alternate way to look at the level of illness is to examine the self-reported health of the patients. Figure 6 shows the levels of those facing financial burden from their health care costs for those reporting different levels of health. The patterns again are similar, with again almost a third of those with poorest self rated health experience a moderate financial burden, with a quarter of those with poorest health experiencing severe financial burden, but over a quarter of those with poor health facing a severe financial burden. Care is needed with this estimate too as it is based on a small sample.

Figure 6: Percentage of population with moderate or severe financial burden by self assessed health



McRae et al. (2012) have undertaken a more detailed multivariate analysis of the percent of the population facing severe financial burdens and have found that number of health conditions or general health assessment is the most important factor, but that gender (women spend less), age, region and education are all also relevant although the patterns are not all clear. Income is clearly relevant to the proportion facing a high burden of disease as the burden of any level of expenditure will be higher for those on lower incomes. Figures 7 to 10 show the proportions facing financial burden in relation to these factors.

Figure 7: Percentage of population with moderate or severe financial burden by gender

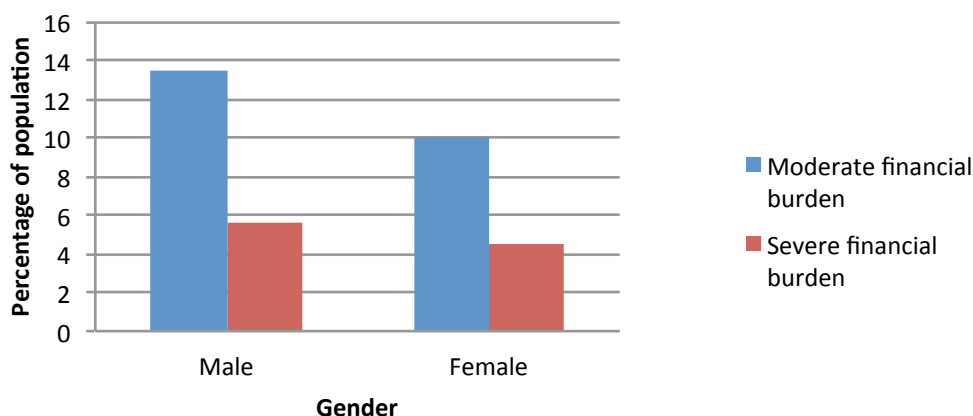


Figure 8: Percentage of population with moderate or severe financial burden by age group

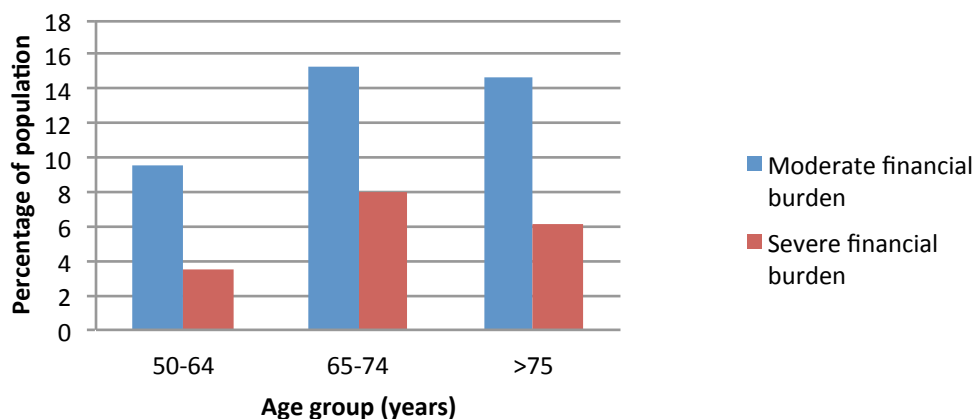
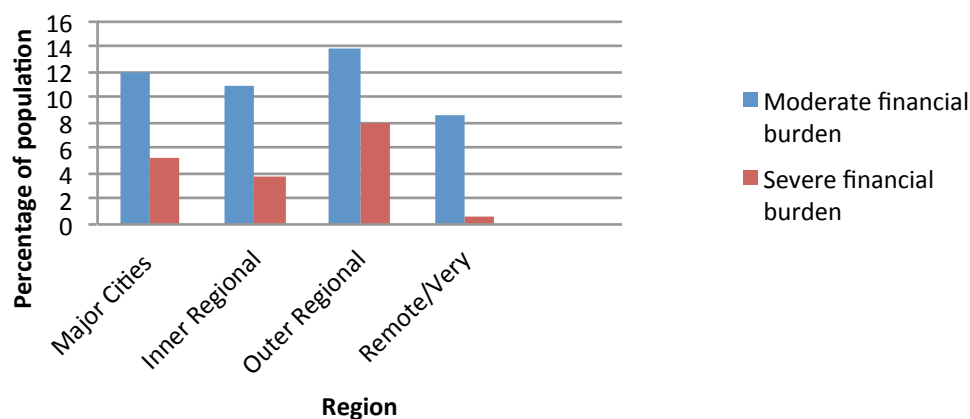
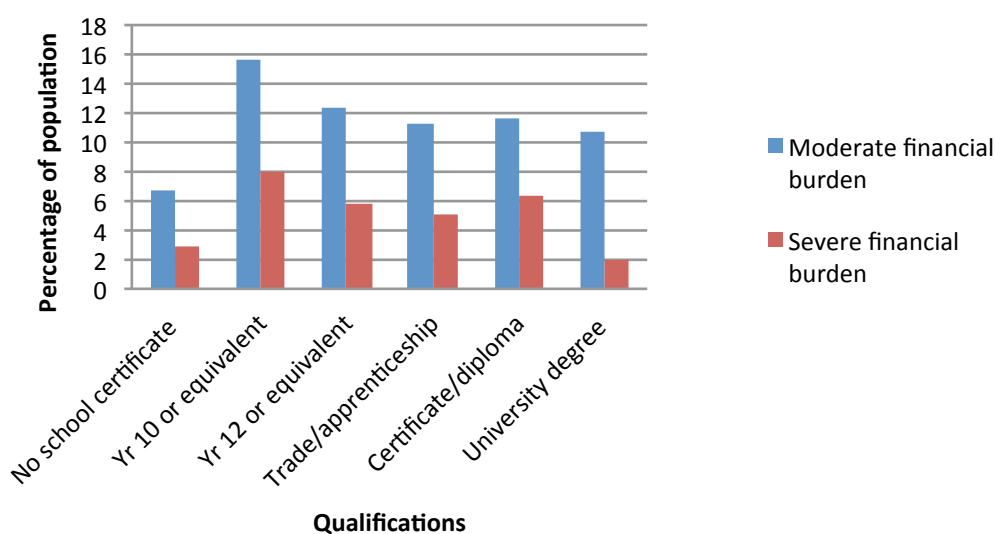
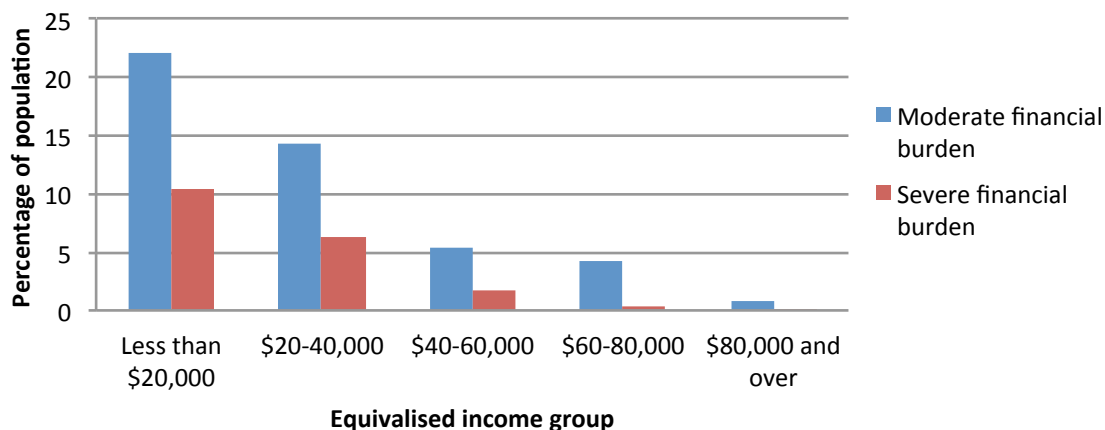


Figure 9: Percentage of population with moderate or severe financial burden by region**Figure 10:** Percentage of population with moderate or severe financial burden by qualifications

Interestingly, while Figures 8-10 show that there are differences in the financial burdens faced depending on the education, age and region of the population, there are no clear patterns in these differences. It appears the burden goes up with age to a point and then goes down again. This is also the pattern of actual expenditure by age, suggesting that the very old are either charged less (e.g. more bulk billing) or the nature of their conditions generates less costs. In fact, if we look at median rather than mean expenditures, they also decline from the 50-64 years age group to the 65-74 years age group. The major cities and inner regional areas face very similar financial burden, the outer regional areas a higher burden and remote areas the least burden. This result presumably arises as people living in remote areas have the least access to services, and hence are likely to have relatively low levels of expenditure. The least educated group had the lowest likelihood of experiencing substantial financial burden due to health costs. Despite having the lowest average incomes, they also had the lowest average out-of-pocket expenditures of \$245 per quarter.

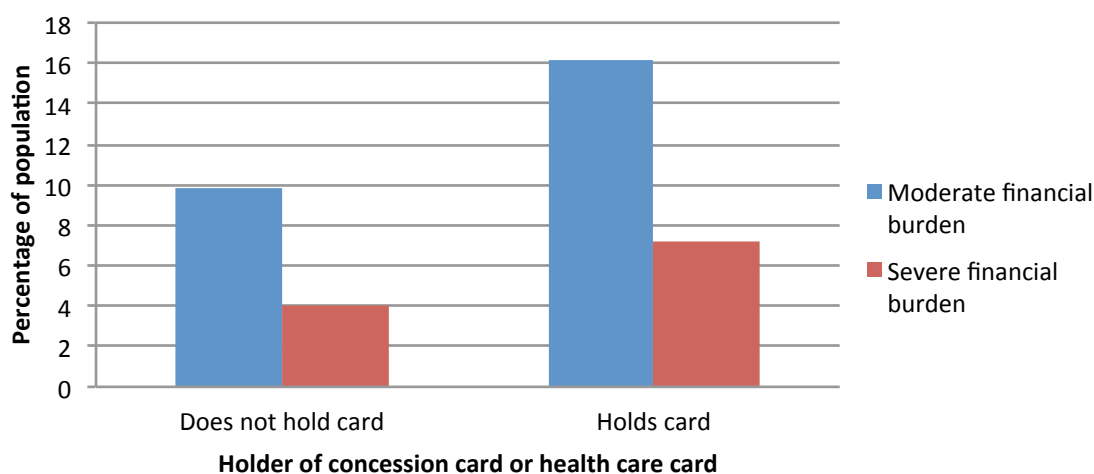
Figure 11: Percentage of population with moderate or severe financial burden by income



The income patterns are as would be expected, both in terms of low income being associated with poor health, and with the measures of burden being in part determined by income. The effect is however very strong, with 22% of those in the lowest income group likely to face a moderate financial burden, and 10% a severe burden. This effect is caused more by changes in income in the denominator of the calculation of burden than in the changes in expenditure in the numerator.

An alternative perspective of income is to examine the holding of “concession cards” (Figure 12). There are a range of different cards including pensioner cards, health care cards, Commonwealth seniors health cards, and cards issued by the Department of Veterans Affairs which entitle patients to certain concessions for defined medical goods and services (see Jones et al (2008) for a list of cards). Generally cards are held by lower income people, so following Figure 11 it would be expected that the financial burden of health care cost would be greater for those holding cards as indeed the case. This is also consistent with the findings of Jones et al (2008) that overall found no significant difference between the total out-of-pocket health expenditures of card holders and non-card-holders, while the card holders are on average of lower income.

Figure 12: Percentage of population with moderate or severe financial burden by holding of a concession card or health care card



Discussion

Older Australians expended on average \$353 per quarter on health related goods and services with median expenditure of \$150 per quarter. Although these averages are substantial they are not necessarily unmanageable. On the other hand, as noted by Jan et al (2012) particular patient populations can face major financial burdens due to high out of pocket costs. A small proportion of older Australians are shown in this analysis to spend much of their income on their health costs – 11.8% of them spend over 10% of their equivalised income on health costs, and 5.1% spend over 20%. Applying these estimated percentages to the population aged 55 years and over shows around 570,000 people would be expending more than 10% of their income on health, and around 250,000 expending more than 20%. These are large groups of people facing very substantial financial burdens due to their health costs.

The next question is whether these people can be identified as particular groups, and consistent with international studies (Lehnert et al. (2011)), this study of older Australians shows much higher health care costs are paid by those older individuals with multiple chronic conditions (estimated at \$882 in the previous quarter for those with 5 or more conditions) and that those with multiple conditions spend many times more out-of-pocket than those with few or no conditions. Using a measure of self assessed health to reflect good or poor health rather than the count of chronic conditions also shows large differences in costs.

While the examination of other variables in Figures 7-10 shows other categories of people who are likely to face moderate or severe financial burdens (most clearly men), none of these differences are nearly as severe as those related to the number of chronic conditions faced. This leads to the view that additional conditions add to numbers of doctors visits, pharmaceuticals and other equipment and services needed, and hence to costs.

People with lower incomes are also much more likely than those on higher incomes to face moderate or severe financial burdens (Figure 11) despite the formal role of health care cards and concession cards in charging for pharmaceutical services and the informal role of these cards in charging for medical services. Concession card holders on average have more chronic conditions than non-card-holders (2.3 conditions compared to 1.6 conditions on average) but on average spend a similar amount on health, meaning that they do pay less “per condition”. This suggests that the possession of a card does reduce costs. However, as shown in Figure 12 those with health care cards are more likely to face moderate or severe financial burdens than those without cards, which is caused not by total costs but by the fact that on average they have lower incomes.

Within some parts of the Australian health care system, it has been argued that copayments should be used to minimise overuse of services (Doran E et al.(2005)). However, higher costs of health care are faced by those with the greatest number of chronic diseases who on average also have lower incomes (Table 4), suggesting that increasing financial barriers would further disadvantage those who are already the most needy.

The clear implication is that those with more chronic conditions face a greater financial burden from their health care costs than other older Australians, and those on low incomes similarly face greater burdens, with these two factors compounding. The means to address this situation are complex. Clearly, the possession of a health care card or concession card does reduce costs for addressing a single condition, but as card holders tend to have more conditions this is not of itself enough to bring the financial burden down to the level of the non-card holders. In the long term, the best solution is the prevention of chronic disease and therefore the prevention

of the need to use health services, particularly among those with lower incomes. In the short term, even the medical and pharmaceutical safety nets and the free public hospitals do not solve the problem of costs aggregating with increasing numbers of conditions.

While stronger medical and pharmaceutical safety nets (or possibly a combined safety net) would assist patients in managing costs, it should be noted that costs of equipment (principally hearing aids, spectacles, CPAP machines (for people with sleep apnoea) and oxygen/oxygen machines) and costs of “other” services (mainly house modifications, dental services, allied health services and hospital costs for private patients) are also significant for some people. Some of these pieces of equipment and services are supported by private health insurance or by State governments for some people while others must be purchased entirely by the patient using them.

The means of addressing such a wide range of health needs within the Australian health care system is always going to be difficult. There are some targeted programs already in place (e.g. State Governments also provide dental and allied health services and a defined range (varying from State to State) of other services and equipment for targeted groups of people). The Commonwealth also supports basic hearing aids and spectacles for some groups and there are moves within the Commonwealth government to increase support for dental services. The Department of Veterans’ Affairs (DVA) provides significant support across a broad range of areas for service veterans.

While development of a broad safety net for people with chronic conditions would be complex, a more targeted approach may be manageable, and like Jan et al (2012) this suggests the need for both broad brush and targeted support measures. The SCIPPS survey estimates that around 120,000 older Australians have an equivalised income of less than \$20,000 per annum and have 5 or more of the major chronic conditions examined in this study. This group could be given access to services and support similar to that offered to the veterans which covers a wide range of services and supports, and indeed DVA has a network which provides a degree of co-ordination of care as well as wide ranging services. While it may not be appropriate to provide all the services provided to veterans to the older Australians facing severe financial burdens of care, the approach and structure of the veterans system may provide a useful model. Indeed, the DVA treatment population in 2012 is estimated at 230,000 people and this is expected to decline to around 140,000 people by 2021, so it may even be possible for the DVA system to be expanded to a clearly targeted group with a high level needs such as those with low incomes and high health needs.

Limitations of the Study

The main limitations of this study are the possible “selection” biases, as the NSA based sample population is better educated than the whole aged population although their health conditions broadly reflect those of the wider population, and that those who responded to the income and expenditure questions may also be biased due to unmeasured (and unmeasurable) factors.

The sample population is also biased in that it has a more people with private health insurance, potentially leading to greater use of private hospitals in preference to public hospitals, with associated out of pocket costs. Nevertheless we have a reasonably large sample, weighted to reflect population age, sex, socio-economic and geographic structures, with plausible and relevant results. Another limitation is that the expenditure data is based on recall, and perhaps more importantly a relatively short recall period leading to high variability for conditions which have less frequent but expensive events.

Both the Australian Medical and Pharmaceutical Benefits Schemes include safety nets which limit total out-of-pocket expenditure on goods and services covered by these schemes by a family over a calendar year. Measures of medical and pharmaceutical costs may be minimally overstated as the survey was conducted in the third quarter of the year and many people reach the thresholds late in the year.

Conclusions

Older Australians expended on average \$353 per quarter on health related goods and services with median expenditure of \$150 per quarter. Those with 5 or more chronic conditions were estimated to expend \$882 per quarter on average. The likelihood of facing a substantial financial burden was higher for each additional chronic disease experienced, and estimated to be roughly ten times as high for those with 5 or more chronic conditions than for those with no chronic conditions. This has significant implications for older Australians, with over 80% of respondents in this study having at least one chronic disease and 56% having more than one condition.

This study has provided some indicative estimates of the out-of-pocket costs of health care paid directly by older Australians. It is clear that for sicker older Australians, even with the protection of Medicare, costs can be significant and are associated with a substantial financial burden. As noted in other studies (Kemp et al. (2010), Schoen et al. (2010)) such financial burdens can themselves lead to reduced use of medical services and hence overall poorer health.

The main conclusion of this study is that there are substantial levels of financial burden for those with multiple chronic health conditions. The combination of complex comorbidity, the costs of these conditions, and low incomes can create a “perfect storm” that affects those with the least resources to deal with it. Taking the broader picture, the possible solutions include introductions of a form of wider safety net which addresses costs for those with multiple conditions, introduction of a highly targeted program to provide those on low incomes and with high health care needs with access to services comparable with the current DVA arrangements, and provision of more targeted programs for particular needs. In the longer term the only solution is greater endeavours to prevent chronic disease which will reduce the prevalence of multiple chronic conditions.

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Appendix

Table A1: Demographic characteristics of the study population and the Australian general population in comparable age groups

	Percentage of responses (weighted for response rates only)	Percentage of Australian Population
Education[†]		
Total with no post-school qualifications	44.2	63.5
Total certificate/diploma	34.7	24.8
University degree or higher	21.1	11.8
Occupation status[‡]		
Retired (fully or partially)	51.3	45.1
Working (full-time or part-time)	37.2	42.1
Other	11.5	12.8
Private Health Insurance*		
Yes	80.9	56.5
No	19.1	43.5
Living area**		
Major cities	62.1	66.0
Inner regional Australia	24.1	22.1
Outer regional Australia	11.6	10.1
Remote Australia	1.8	1.3
Very remote Australia	0.4	0.5
Self assessed health (comparison group aged 65 or over) [§]		
Excellent/very good	53.3	36
Good	32.5	32
Fair/poor	14.2	33

Note: Population age groups 50 and over or 55 and over depending on the publication from which they are drawn,

[†] Source: ABS (2007)

[‡] Sources: ABS (2009)

* Source: PHIAC (2009)

** Source: ABS (2007a)

[§] Source: ABS (2006)

Table A2: *Socio-economic status of areas of residence of the study population*

	Percentage of responses (weighted estimates)	Percent of population aged 50 or over
SEIFA decile[†]		
First decile (lowest socio-economic status)	3.0	4.7
Second decile	4.9	7.0
Third decile	6.4	6.7
Fourth decile	7.0	8.3
Fifth decile	7.7	8.3
Sixth decile	12.2	11.4
Seventh decile	13.1	11.9
Eighth decile	14.1	12.8
Nineth decile	16.0	14.1
Tenth decile (highest socio-economic status)	15.7	14.9

Note that the distributions shown here are for deciles of postcodes (i.e. the first decile includes the 10% of postcodes with lowest Socio-economic status scores). The figures shown above indicate that there is a clear pattern of over-representation of the survey respondents in higher socio-economic deciles although the difference are not large.

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