

THE FUTURE OF AGED CARE IN AUSTRALIA

SEPTEMBER 2010

A public policy discussion paper prepared for
National Seniors Australia by Access Economics



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Publisher: National Seniors Australia ABN 89 050 523 003

FOREWORD

Providing for quality care in later life is a key concern of Australians as they age. In a survey of 801 Australians aged 50 and over conducted by National Seniors Australia earlier this year, 74% of respondents said aged care was an extremely important issue and 14% said aged care policies would influence who they voted for in the 2010 federal election. Australians want to know that they will be able to have affordable quality care in later life. Aged care is an integral and growing component of the healthcare system. It will be more pronounced with the ageing of our population. The current outlook is dominated by conflicting claims around the adequacy of funding levels for aged care, with providers reporting low returns, an exodus of qualified staff and difficulties maintaining infrastructure investment. According to Treasury, Australian government spending on aged care will more than double relative to national income between 2010 and 2050. National Seniors believes there is a need for decisive action including more innovative policy responses to ensure the provision of accessible and sustainable high quality care in the future. This would include consideration of alternate funding models and the integration of aged care within the broader health and hospital system. These are important public issues, requiring informed debate and policy planning. To that end, National Seniors commissioned a report from Access Economics on the future of aged care in Australia. The research approach included both a summary of evidence from the literature as well as results of an extensive quantitative survey to assess consumer preferences and needs for aged care in coming decades. The report covers current issues in aged care such as quality of care, infrastructure requirements and alternative models of funding.

What are some of the key messages to emerge from the research?

1. **The current system is not working well**, with quality of care perceived as declining over the last five years. As demand is growing rapidly, tinkering with the system is not a long-term answer.
2. **Significant investment in aged care is needed**, particularly for new facilities and in developing a skilled workforce to deliver age care. The current system is not sustainable without higher tax.
3. **We need to find new ways of financing aged care.** A survey of more than 3,200 seniors found that many people would be prepared to pay for high quality aged care, while wanting a safety net for those who cannot afford to pay.

The report has been reproduced here in full to help stimulate public debate about alternatives to the current model of aged care.

Michael O'Neill
Chief Executive

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Glossary

ABS	Australian Bureau of Statistics
ACAT	Aged Care Assessment Team
ACFI	Aged Care Funding Instrument
ACSAA	Aged Care Standards and Accreditation Agency
AIHW	Australian Institute of Health and Welfare
ASGC	Australian Standard Geographic Classification
ATSI	Aboriginal and Torres Strait Islander
CACP	Community Aged Care Package
CALD	culturally and linguistically diverse
DHS	Department of Human Services (Victorian Government)
DOHA	Department of Health and Ageing (Australian Government)
DWL	deadweight loss
EACH	Extended Aged Care at Home
EACH-D	Extended Aged Care at Home Dementia
EBA	Enterprise bargaining agreement
EN	enrolled nurse
HACC	Home and Community Care
HASA	healthy ageing savings account
LTCI	long term care insurance
NHHRC	National Health and Hospital Reform Commission
NNEG	no negative equity guarantee
RAC	residential aged care
RN	registered nurse

Executive Summary

Access Economics was commissioned by the National Seniors Productive Ageing Centre (NSPAC) to provide a discussion paper on the future of aged care services in Australia, focusing on infrastructure and care issues in the current system and alternative models of funding.

At June 2009, 80% of the 800,000 Australians receiving 'formal' (government-funded) aged care services accessed community care (mainly Home and Community Care services), 14% were in high care residential accommodation and 6% were in low care residential accommodation.

The aged care system is experiencing rapid demand growth due to demographic ageing, increases in income and expectations, and increasing prevalence of chronic disease. These factors have led to Treasury estimates that Australian Government spending on aged care will *more than double relative to national income* over the period of the Third Intergenerational Report (2010 to 2050).

There are serious supply constraints to the provision of informal (family) care, due to smaller family size, more single person households, and less willingness of younger generations to care for the frail aged relative to their parents and grandparents.

Policy planners thus need to prepare for a large expansion of residential aged care (RAC) places and community packages to ensure sufficient future supply. There is also a need to address regulatory issues which may compromise the quality of aged care. A framework for evaluating aged care based on measurable quality indicators is required, which links in to the current review of RAC accreditation by the Department of Health and Ageing (DoHA).

Workforce investments are critical to quality care, given the labour intensity of the aged care sector, with shortages already becoming apparent. RAC staff are projected to increase by around 14.1% by 2020 in contrast to a 56.8% increase in demand. Literature review suggests that the quality of care in RAC facilities has deteriorated in the past five years as the ratio of more qualified to less qualified staff has declined and as the ratio of residents to staff has increased. The evidence indicates that patients record greater satisfaction and better health outcomes on a number of clinical indicators when there are higher proportions of registered nurses (RNs). There is a need for improved wages and conditions to attract skilled staff, better training and advancement opportunities, and a more positive workplace culture. Quality advances in care may also be achieved through investment in information and assistive technologies and by giving higher priority to consumer directed care that meets individual needs e.g. appropriate services for culturally and linguistically diverse (CALD) Australians.

On the capital side, investment decisions are inhibited by regulation. Planning ratios would be better linked to the population aged 85+, which is growing much faster than the current planning benchmark – the population aged 70+. Moreover, evaluation of capital financing of high care shows average construction cost per bed to be \$40/bed-day, much higher than the current accommodation payment of around \$27/bed day. Private capital investment is not proceeding due to caps on what residents are allowed to pay, together with caps on Government subsidies. There is evidence from the US and UK aged care systems that reducing caps would increase competition within the sector, increase choice and improve quality. Current Australian 'minimum standards' are falling short of what consumers would prefer, based on discrete choice survey evidence.

Under the current system, the government pays for aged care through general tax revenue, which is used to subsidise the provision of selected services. Access is allocated based on an assessment of needs and the marginal cost to users is low or nil, which creates perverse incentives to over-use and under-value services.

Unless further tax revenue is raised, burgeoning costs threaten the sustainability of the current system. Some cost pressures may be relieved through productivity improvements, although the Productivity Commission concluded these are unlikely to be sufficient for sustainability. Solutions for the future are limited to raising taxes, accepting worse access and quality, or developing more innovative funding mechanisms. Four alternative models were reviewed that have been canvassed by the government at various points in time and are similar to models used or under consideration in other developed countries. Our review concluded that:

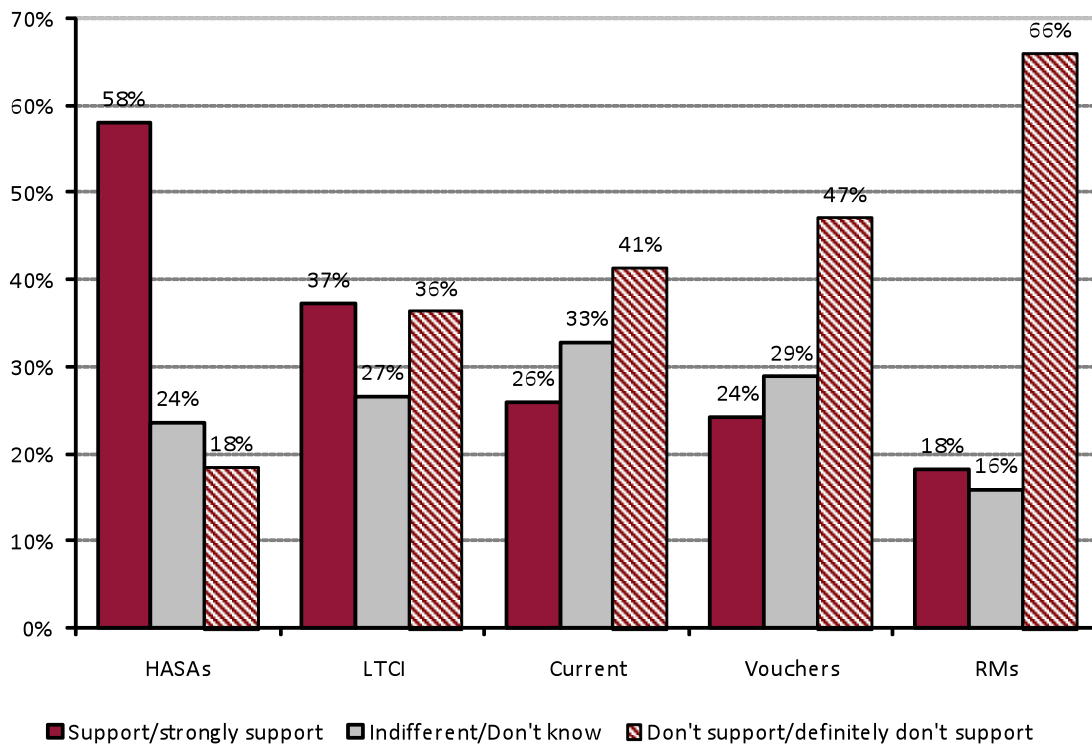
1. Funding the **current system** through tax revenue results in efficiency losses of about 29% and choice is limited. Although the current system aims for equity, there are some gaps and there is intergenerational inequity.
2. A **long term care insurance (LTCI)** system is more sustainable and efficient than a tax-funded system. Competition among providers should generate more choice for consumers, although less so in regional areas. The system could be made equitable by means-tested premiums but there is still intergenerational inequity.
3. Voluntary incentivised **healthy ageing savings accounts (HASAs)** are more sustainable and efficient than a tax-funded system. Private financing of consumption should result in more choice and better allocation decisions. The system could be made equitable using means-tested safety nets. There is also the advantage of intergenerational equity.
4. It is likely that that **reverse mortgages** could only continue to be used as a supplement to the current tax-based system or another more broad based funding system. They could thus marginally increase efficiency and sustainability, to the extent that they relieve some pressure on public funds. There is some improvement in equity because the wealthy contribute more to the cost of their aged care. Consumer choice is improved because people can remain in their own home for longer. However, there are a number of limitations of reverse mortgages as a 'system'.
5. A **voucher system** still relies on tax revenue so it is equal in sustainability and equity but there would be greater consumer choice relative to current in-kind provision. Vouchers may marginally improve efficiency through better allocation mechanisms.

To establish how Australians would prefer to pay for aged care in the future, a web-based survey was developed, piloted and fielded over February-March 2010. A total of 3,292 (70.2%) completed all compulsory questions. The survey over-sampled the over-50s since this was the main demographic of National Seniors members and the age group of most interest to NSPAC.

Respondents were asked about their preferences for each of the five options outlined above, including combination options. Of all respondents, 1,773 or 41% preferred an option that included a HASA, and 1,104 (25%) preferred an LTCI option, compared to 18% preferring current arrangements alone. Reverse mortgages were relatively unpopular.

Chart 4.3 shows responses to questions about each option individually, revealing the strongest support for HASAs (58%), followed by LTCI (37%), then the current system (26%), then vouchers (24%), with reverse mortgages last (18%). There was a consistent converse increase in the lack of support by option – only 18% did not support HASAs, increasing to a substantial 66% not supporting reverse mortgages.

Relative support for each option



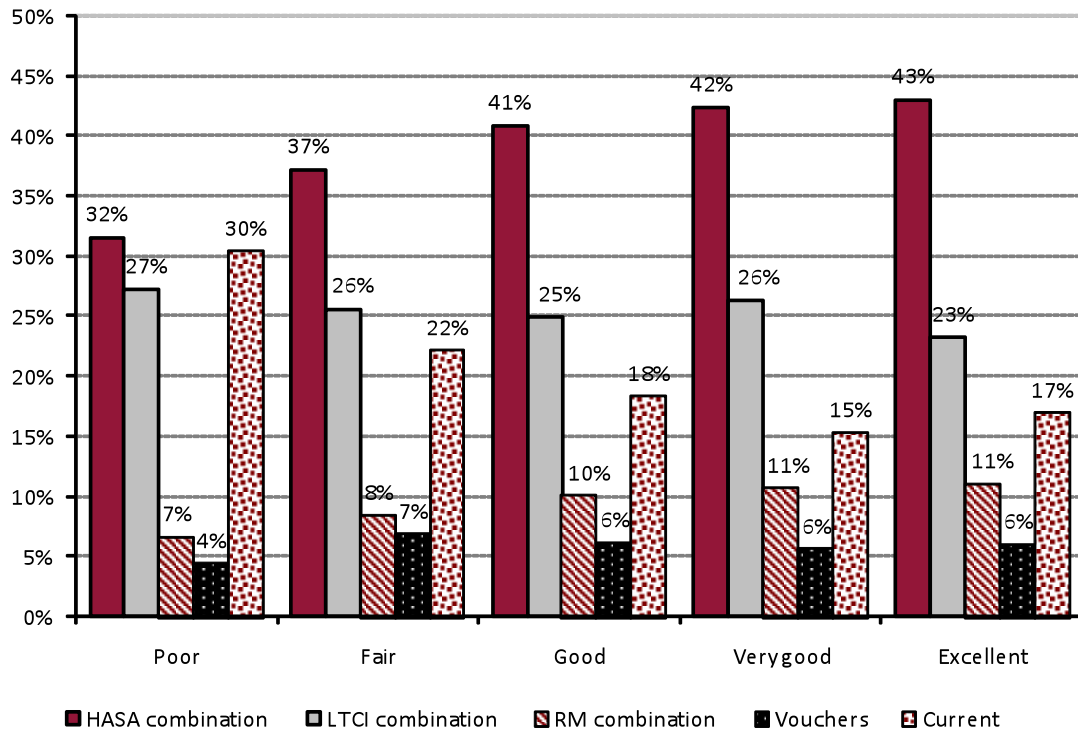
All age-gender groups had HASAs as their most supported option and they were also the most popular policy across different income and wealth groups (Chart 4.2).

Unsurprisingly, for people in the lowest income and wealth quintiles there was slightly more indifference between the current tax funded system and a largely self-funded savings system, since these groups would be most reliant on the government safety net with HASAs (Charts 4.4 & 4.5).

Some respondent characteristics did not affect preferences – notably marital/family status, education level and people with different accommodation arrangements. HASA combinations were the clear winners across all these respondent groups.

There was a strong relationship between health status and preference (Chart 4.12). Again, although HASA combinations were the clear favourite across all health status groups, preference for HASA combinations increased steadily with advantage – from 32% among those with poor health to 43% for those in excellent health, while preference for current arrangements declined as health improved. These findings are likely to reflect socioeconomic disadvantage, due to the strong correlation between health status preferences and income/wealth, after controlling for age.

Comparison of preferences by health status (% total)



Finally, respondents were asked to rank each alternative option relative to the current system based on perceptions of sustainability, equity and choice.

- Only HASAs were ranked better/much better than the current system on all three criteria – 59% viewing HASAs as more sustainable, 46% as more equitable and 57% as offering greater choice.
- Care insurance was perceived to be better/much better in terms of sustainability (44%) and choice (48%), but 70% of respondents were indifferent or thought LTCI may be worse than the current system on equity grounds.
- Reverse mortgages were perceived to be worse/much worse on all three criteria relative to the current system, while vouchers were viewed as indifferent on equity and choice but worse in terms of sustainability.

The survey findings and literature evidence suggest there is a pressing need to reform the current system of aged care financing and instigate more sustainable and equitable options that provide Australians with greater choice and quality for their future aged care.

1 Introduction

Access Economics was commissioned by the National Seniors Productive Ageing Centre (NSPAC) to provide a discussion paper on the future of aged care services in Australia, focusing on infrastructure and care issues in the current system and alternative models of aged care funding. The research approach includes both a summary of evidence from the literature as well as the results of an extensive quantitative survey to assess consumer preferences and needs for aged care in coming decades.

The report provides:

- in the remainder of this chapter, a brief overview of the current aged care system including residential and community care elements;
- in chapter 2, a summary of the issues in aged care in Australia from a consumer's perspective including consumer needs/preferences, care quality and infrastructure (facilities and workforce);
- in chapter 3, a discussion of a suite of alternative models of aged care financing drawn from international experience;
- in chapter 4, consumer preferences for each of the models in Australia, based on new survey evidence; and
- in chapter 5, comparisons and conclusions about the best next steps for the future.

1.1 The aged care system

As people age and develop age-related conditions, they need an increasing amount of assistance with personal and domestic activities. The aged care system is predominantly funded by the Commonwealth Government, although other levels of government and individuals receiving care make some contributions. The system comprises two broad types of care, community care and residential aged care (RAC). At June 2009, four out of five people accessing formal aged care did so through community care (Table 1.1). Most high level care is provided in RAC facilities (RAC high level compared with EACH and EACH-D) while lower levels of care are provided at home.

Table 1.1: Number of older people accessing formal care at 30 June 2009

Formal care	Number	% total
RAC	158,863	19.7
Low level	43,950	5.5
High level	114,913	14.3
Community Care	645,833	80.3
Home and Community Care (HACC)	595,056	73.9
Community Aged Care Package (CACCP)	42,694	5.3
Extended Aged Care in the Home (EACH)	5,515	0.7
Extended Aged Care in the Home – Dementia (EACH-D)	2,568	0.3
Total	804,696	100.0%

Source: DOHA (2009b).

1.1.1 Residential care

Residential care is provided at an aged care facility by paid formal carers. It is for people for whom community care is not feasible, often because health care requirements are high or access to informal care is limited. Residential care provides accommodation, living services (e.g. cleaning, laundry, meals) and assistance with personal tasks (dressing, eating, and bathing). Residents usually have access to allied health and nursing care as required (FaHCSIA, 2009). There are two classes of residential care:

- low level care, with limited access to nursing staff; and
- high level care, for those who require full-time supervised health care.

Funding is provided through the Aged Care Funding Instrument (ACFI). Residents receive a subsidy, paid directly to the RAC provider, based on the extent of their care needs (DoHA, 2009a). Although mainly funded by the Commonwealth Government, RAC facilities are mostly operated by private accredited providers. At June 2008 private organisations owned 88.7% of RAC facilities with most providers being not-for-profit organisations – religious, community based and charitable organisations (Table 1.2).

Table 1.2: Number of facilities (%) by organisation type at 30 June 2008

Organisation type	Number	%
Private not for profit	1,722	60.8%
Religious	807	28.5%
Community based	476	16.8%
Charitable	439	15.5%
Private for profit	789	27.9%
Government	319	11.3%
Local government	65	2.3%
State government	254	9.0%
Total	2,830	100.0%

Source: AIHW (2009a).

1.1.2 Community care

Community care is provided in a person's own home. It is primarily provided by informal carers with varying amounts of support from formal care services. The majority of formal care is accessed through the following government programs.

- HACC is the largest program, providing care to 74% of formal care recipients (Table 1.1). Services provided include transport, nursing, home maintenance, counselling and personal care (DoHA, 2009c).
- CACP targets older people living in the community with care needs equivalent to a low level RAC. A range of support services are provided, such as personal care, domestic assistance and social support, transport to appointments, food services and gardening. An ACAT approval is required before services can be obtained (DoHA, 2009d).
- EACH and EACH-D — EACH targets older people living at home with care needs equivalent to high level RAC. ACAT approval is required to receive services. In addition to the services offered by CACP, an EACH client may be able to receive nursing care, allied health care and rehabilitation services (DoHA, 2009e). EACH-D extends the EACH

package with service approaches and strategies to meet the specific needs of care recipients with dementia (DoHA, 2009f).

Community care recipients are also eligible for periods of respite care, which can either be provided by formal carers in the person’s home or in a RAC facility.

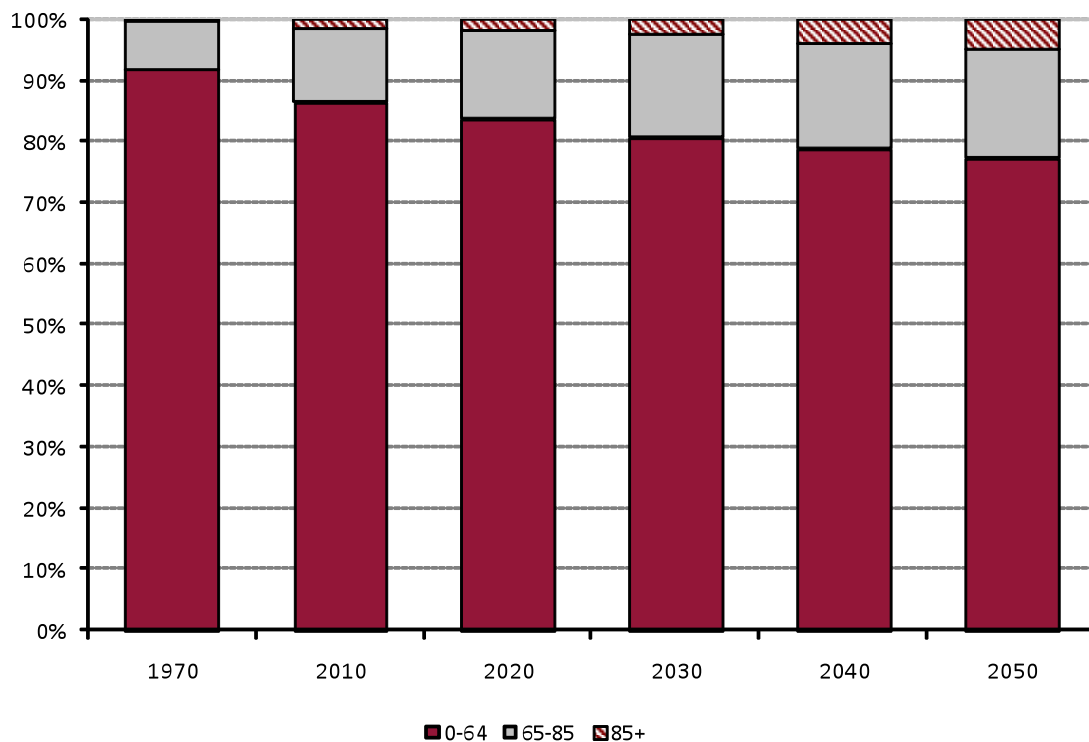
1.2 Demand for aged care services in the future

Australia’s ageing population will place substantial pressure on the aged care system in the future. Not only will there be a greater number of people needing aged care but they will represent a greater proportion of the population. Shifting social preferences and the changing pattern of disease are also expected to alter the relative demand for different types of aged care.

1.2.1 Demographic ageing

Declining fertility rates, higher life expectancy and population growth have resulted in an increase in both the number and proportion of the population who will need access to care. By 2050 the number of people aged 65–84 is expected to more than double and the number of people aged over 85 to quadruple (Treasury, 2010). The proportion of the population aged over 65 is expected to increase from 8.3% of the population in 1970 to 13.5% in 2010 to 22.7% in 2050 (Chart 1.1). The proportion of people aged over 85 will more than double, increasing from 1.8% in 2010 to reach 5.1% by 2050.

Chart 1.1: Proportion of the Australian population in different age groups



Source: Treasury (2010).

The ageing of the population will have substantial implications for the Australian Government's fiscal balance. While today there are five people of working age to support each older person by 2050 there will be less than three working age people to support each older person (Treasury, 2010). Consequently, it is expected that aged care expenditure will grow from 0.8% of GDP in 2009-10 to 1.8% of GDP in 2049-50 (Chart 1.2).

1.2.2 Income and expectations

These projections are based on population trends, which assume that current behaviour continues. However, health and aged care services have a high *income elasticity of demand*: this means that, as our incomes increase, we will be prepared to spend relatively more of our income on these services.

Over time, our expectations to live longer and healthier lives have increased, and so far technology has supported this. However, although new technology may be cost-effective (since we place a high value on healthy life), it is often more expensive than the old technology (new generation targeted pharmacotherapies, for example).

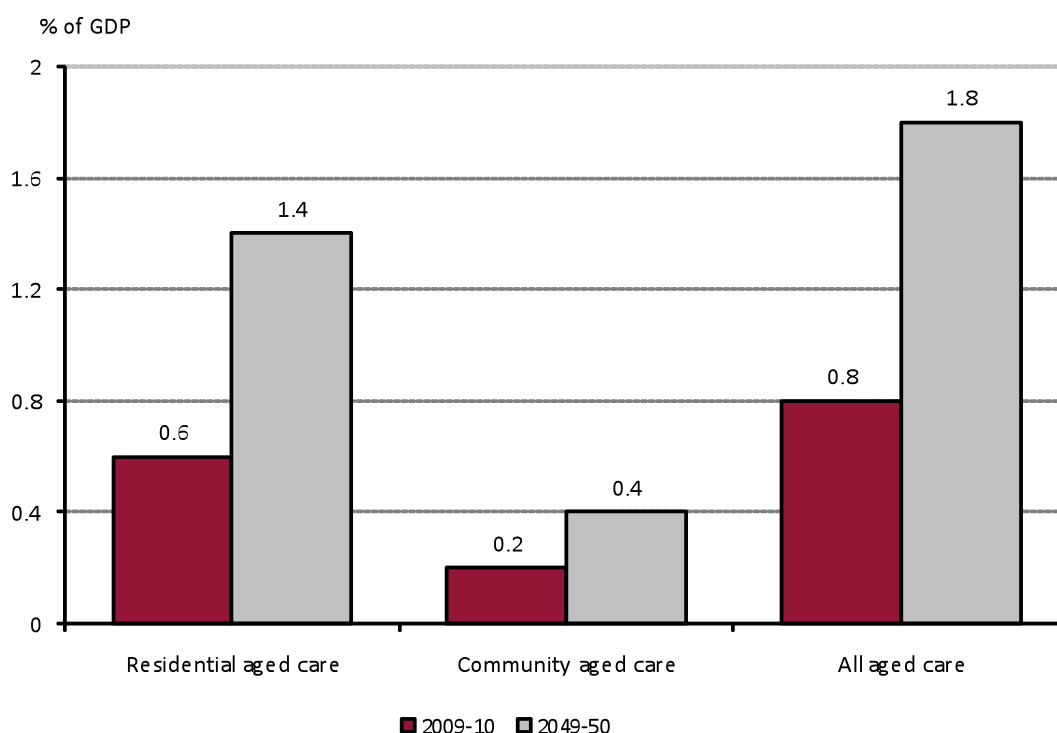
The baby boomer generation will enter aged care with more income and wealth and higher expectations than any generation before, and this could exert significant additional pressure on the aged care system.

1.2.3 Changing pattern of disease

Treasury's forecast of 1 in 20 Australians aged 85+ by 2050 profoundly affects planning for chronic age related conditions. Increasing longevity is associated with higher prevalence of chronic disease, more prolonged duration of illness, and more complex comorbidities to manage.

Access Economics (2009b) has highlighted the challenges that the aged care system will face as the number of people with dementia increases. Neurodegenerative diseases such as dementia can precipitate the need for care services or elevate the level of care required. The proportion of services allocated to high care will need to increase over time and adapt to the special needs of people with dementia and other severe chronic disease. This is expected (Treasury, 2010) to result in a much larger relative increase in spending on RAC than on community care (Chart 1.2).

Overall, Treasury estimates that Australian Government spending on aged care will more than double relative to gross domestic product (GDP) over the period of the Third Intergenerational Report (2010 to 2050).

Chart 1.2: Projected Australian Government aged care spending

Source: Treasury (2010).

1.2.4 Preferences and informal care supply constraints

The type of aged care demanded is expected to be profoundly influenced by changing social constructs and preferences. A primary determinant of RAC admission is living alone. Spouses are an important source of informal care, so higher divorce rates have reduced accessibility of informal care for many people. On continuation of current trends there will be a 90% rise in 65+ single person households from 1996 to 2021 (ABS, 2001).

Smaller family size has also reduced the pool of informal care available. This effect may be amplified by a change in social attitudes towards caring for the elderly. There is evidence that suggests that generation X and Y feel less obligated to provide informal care for the elderly. Access Economics (2009b) found that generation X and Y were nearly 10% less prepared to provide primary care between 1998-2003 than the same cohort were five years earlier, despite the much greater overall need for care during the period. The additional need for care was met by other, older, Australians. More research is needed to assess whether, and if so to what extent, younger Australians will be less willing to provide care relative to their parents and grandparents.

With less informal care available there will be a much greater need for formal care. In particular, formal care available through community care programs. McCallum (2003) cites evidence suggesting that almost 60% of Australians aged 70 years or over would prefer to receive formal care in their own home in the event that they are unable to care for themselves, compared to 28% who would prefer to receive residential care. The remainder would prefer to receive care from family.

2 Current issues in aged care

As shown in the previous chapter, with population ageing and other demand and supply side factors, the need for formal aged care services and the real cost of public provision is increasing much faster than population growth or national income. In addition to ensuring future adequacy and quality of care, policy planners need to prepare for a large expansion of RAC places and community packages to ensure sufficient future supply. This chapter discusses the quality issues in the current system and strategies to ensure that future capital and labour requirements can be met without sacrificing quality.

2.1 Quality of care

Accreditation processes aim to ensure minimum standards in aged care. Minimum standards, however, may not reflect consumer preferences for quality. Quality assurance becomes more problematic as costs burgeon, with a growing imperative to control costs given the highly regulated market and price caps on government subsidies and on what individuals can be charged. Cost reduction has been achieved historically, in part, through workforce substitution (e.g. of personal carers for more highly qualified nursing staff).

Moreover, since costs and hence margins per person can vary greatly depending on factors such as geographic location, scale of service and patient need, there are incentives for providers to give preference in a supply-constrained market to lower cost applicants ('cherry-picking'). In reality there is also variation in the quality of care across places and packages. For example, some RAC residents may receive a private room in a new facility while others may receive a shared room in an older facility.

2.1.1 Key quality indicators

Evaluating the quality of care is difficult because many aspects of quality are subjective and difficult to measure. The aspects that define quality in RAC facilities will share many similarities with those of the health care system. However, the residential component of the care and the prolonged nature of age-related conditions broaden the range of issues that are important. There is growing recognition that patient satisfaction with the service provided and their resulting quality of life should be considered in addition to the medical or clinical process of delivering care (DoHA, 2007).

A quality assessment framework will require identifying the elements that impact on quality of care. Donabedian (1988) outlined three elements of aged care facilities that affect quality of care:

- structure — relates to material resources (such as facilities and equipment), human resources, organisational characteristics;
- process — the clinical procedures undertaken to provide care (such as nutrition, medication, personal care standards); and
- outcomes — whether patient needs are being met (satisfaction with service received).

A set of broad outcomes that indicate quality (such as safety, effectiveness, privacy, mental health status) needs to be identified and then measurable indicators of performance can be

selected (e.g. an indicator of safety performance could be the number of falls per year per care recipient).

Quality indicators are often developed from a provider perspective and focus on the process of care delivery. There is currently a movement towards more patient-centric measures of quality. This involves supplementing the more traditional measures of quality (such as safety, effectiveness, appropriateness, efficiency, access and continuity) with measures of patient satisfaction with their living environment and health outcomes. Naturally any measure of patient quality of life and satisfaction would need to consider confounding factors that are likely to impact health and satisfaction outcomes, such as the specific nature of a condition. For example, in a degenerative condition it would be difficult to maintain previous activities of daily living, and for elderly people with cognitive impairment it can be difficult to measure their satisfaction and quality of life accurately.

2.1.2 Current quality issues

Quality in RAC facilities is currently managed by making government funding conditional on accreditation with the Aged Care Standards and Accreditation Agency (ACSAA). The ACSAA accreditation process is undertaken every three years and involves a combination of self completed documentation and an external audit (ACSAA, 2010). Although the system has been credited with improving the quality of care in RAC facilities since it was introduced in 1997, there is still considerable variation in quality across providers. This system has also been criticised for failing to provide an adequate incentive to promote continued improvement in quality; rather, it caters only for meeting a minimum requirement (DoHA, 2005b). This is partly due to a lack of a national framework for evaluating quality of aged care based on measurable quality indicators. There is no regular reporting requirement of quality indicators, which makes comparison of facilities difficult (O'Reilly et al, 2007).

A number of government reports have indicated the importance of developing a framework for evaluating aged care based on measurable quality indicators.

- The AIHW (2008a) and AIHW (2009b) developed a set of quality indicators for the Australian health care system. This report proposed a set of quality indicators based on data that could be reported annually by health and aged care providers. The indicators would be applied nationally and have consistent and agreed definitions, which would allow consumers and government to compare performance across providers.
- The Victorian Government Department of Human Services has a small suite of quality indicators that it uses to monitor its own state-run facilities (Vic DHS, 2004).
- The National Health and Hospital Reform Commission (NHHRC, 2009) acknowledged the importance of the patient experience in the health care system and recommended the development of national patient experience survey. This will assist with incorporating patient experiences into quality evaluations of aged care.

The Department of Health and Ageing (DoHA) is currently undertaking a review of the accreditation process for RAC facilities. The aim of the review is to develop an accreditation process that ensures a minimum standard of quality while encouraging quality improvement. The review will also consider the administrative burden placed on RAC facilities in meeting reporting and accreditation requirements. A discussion paper was circulated about accreditation issues to industry and interested parties, and responses to the paper are currently being reviewed by DoHA.

2.1.3 Ensuring future quality

A national quality evaluation framework and improved accreditation process would provide a valuable foundation for the aged care system in the future. While this will help to identify areas where quality improvements are needed, it is only part of the solution. An important aspect of quality in the aged care system in the future will be the ability of providers to meet the changing needs of consumers.

Positive outcomes for residents of RAC facilities are directly related to the quality and quantity of care. High quality care is a function of skills and training associated with those providing care, and the amount of care provided. In a comprehensive review of the RAC workforce, Access Economics (2009a) identified the importance of the skills mix in determining quality of care. This report highlighted that:

- the quality of care in RAC facilities has deteriorated in the past five years as the ratio of more qualified to less qualified staff has declined;
- quality of care has also deteriorated during this time as the ratio of residents to staff has increased;
- patients recorded better health outcomes on a number of clinical indicators when care was provided by registered nurses (RNs); and
- the body of evidence reports greater patient satisfaction with care provided by RNs.

The report concluded that increasing the level of support provided to nursing staff would allow nurses to spend more time engaging with residents while providing clinical care, thus improving the individual's experience. Higher quality of care might be achieved by linking funding with the provision of nursing care. This is discussed further in Section 2.2.2.

Along with increases in qualified staff, quality advances may also be achieved through investment in information technology. NHHRC (2009) found that greater use of data, information and communication improves the quality, safety and efficiency of health care. Further, assistive technologies including the use of portable aids such as canes, structural modifications and other devices may also ease the pressure on RAC and community based staff and thus improve quality across the spectrum of care.

An important aspect of quality in the aged care system is its ability to meet consumer needs. Australia has become a more culturally diverse country, increasing the need for culturally appropriate care. Access Economics (2006) projected that over the period 2001 to 2050 there would be a fall in the proportion of Australians speaking English (83.8% to 82.4%) and other European languages (7.6% to 6.0%), and a greater proportion speaking Asian (6.0% to 8.3%) and Middle Eastern (1.8% to 2.3%) languages. Culturally appropriate care is particularly important for people with dementia because the language most recently acquired is lost first. As patients deteriorate it is necessary for carers to be able to communicate with the patient in their first language and to understand their cultural context in order to better manage needs (Access Economics, 2009b).

Quality is also strongly linked to choice and information. Access Economics (2009b) found, in a choice modelling survey, that – of eight potential attributes of RAC – consumers had the strongest preferences for a private room and en suite, for skilled RAC workers, and for accommodation of individual cultural and recreational needs. In community care the three

strongest preferences were for home care support, adequate respite, and local community advice centres.

Greater choice in the aged care sector could be better achieved by moving to consumer directed models of care. Such models allow consumers to make more decisions about how resources are allocated for their aged care, which in turn creates more competition in the industry and drives efficiency with quality. These models, however, require public information about quality and other performance indicators to be available to consumers as they make choices. Constraints can include clinical need which is often time-critical and lack of choices in some areas (e.g. rural towns). Consumer choice is discussed further in Chapter 3.

2.2 Meeting infrastructure requirements

Although the aged care industry is relatively labour-intensive, adequate capital infrastructure investment is critical to meet future growth and replace and maintain existing facilities. Precise investment needs naturally depend on the relative demand for community versus residential care. Costs associated with ensuring sufficient capital and labour are substantial; Hogan (2004) estimated the required capital investment at that time as \$9.2 billion. Investments of this magnitude require careful financing consideration. It is also important to view education and workforce training as an investment, with expenditure gaps leading to individual, economic and social costs. Ensuring future labour supply is imperative, especially since shortages have already begun to emerge (Access Economics, 2009b).

2.2.1 Capital investment

Higher demand for RAC will require additional, and/or larger, residential facilities. In addition to ensuring there are a sufficient number of RAC facilities and beds for the growing population, it will be important to focus on providing appropriately designed facilities for people with special needs, such as people with sensory impairments or dementia (e.g. that limit the number of people within a unit, and that provide secure areas for people who 'wander', and so on). Investment in home modifications and specialised equipment could increase the viability of community care for many people, reducing reliance on RAC.

Necessary investment in RAC may not be occurring because the investment decisions of providers are distorted by regulation. Regulation of the number of RAC places provided by the government means that investment decisions will be based on the expected number of funded places in the future, not the expected demand for places. In the current system the government indicates the number of beds that it intends to fund through the release of planning ratios. These are defined in terms of population aged 70+ (ie, X residential care places per 1,000 population aged 70 years and above). Once funding has been allocated, private providers can tender for the places. However, demographic ageing implies that the average age of elderly people is increasing and therefore the share of this population with chronic care needs is increasing. Hence, planning ratios currently used will need to increase or be redefined (e.g. related to an older population cohort such as 85+) to match the increased proportion of people needing high levels of care.

Even if planning ratios were sufficiently high to ensure government commitment for enough places there may still be a shortfall of investment. Investors will buy an asset when the expected return is greater than, or equal to, the required cost of capital (the cost of capital is the minimum rate of return required for an investment to attract and retain investors). The

return on capital investments for aged care providers is the difference between the revenue that they generate from providing aged care services and their costs. This return needs to be sufficient to offset both the cost of the project and the expected risk to investors. Regulation distorts the risk faced by investors. Although regulation ensures a certain amount of stability in returns, which serves to reduce the level of risk on the investment, it also removes control from providers over their own operations. There are risks associated with potential changes to policy not just in relation to RAC directly but also in relation to alternative care forms. For example, as low care places in the community increase there may be reductions in low care residential places and less scope for cross-subsidisation from low care bonds (since bonds are not permitted for high care places). Hogan (2004) recognised that the mix of high and low care is an important determinant of a RAC provider's ability to raise funds for capital investment because the accommodation bond provides an important source of leverage.

Using current projected revenue streams, Access Economics (2009c) found that new facility development would not proceed since the present value of expected revenue are less than cost estimates. Aged care providers have two sources of revenue – government subsidies and the price capped fees that they charge residents. The amount of government funding for an aged care place is determined using the Aged Care Funding Instrument (ACFI). The ACFI was introduced in 2008 in response to recommendations from Hogan (2004). The ACFI provides a basic subsidy based on a low, medium and high rating for the following domains:

- daily living;
- behaviour; and
- complex health care.

There are additional subsidies for oxygen, enteral feeding and a viability supplement for rural or remote areas (DoHA, 2009b). Access Economics (2008) looked briefly at the implications of the results of the first 33,000 ACFI appraisals (including reappraisals of existing residents and appraisals of new residents) for subsidy payments. The average subsidy payment for reappraisals is significantly higher under ACFI subsidy rates than under the previous assessment system (by comparing the subsidy they were eligible for before and after the ACFI was introduced) reflecting both increased dependency and 'unexpectedly' higher ACFI appraisals. Since 2004-05, eligible aged care providers have also received a Conditional Adjustment Payment (CAP) which is calculated as a fixed percentage of the basic subsidy normally payable for each resident.

In addition to the government subsidies, eligible care providers can charge a basic daily fee, an income tested fee and an accommodation fee or accommodation bond. The first two are aimed at assisting with covering the costs of services provided. Accommodation fees and bonds are designed to help to meet the capital cost of developing care facilities. Accommodation bonds are means-tested and can only be collected from residents at low care facilities or approved extra service high care facilities (facilities deemed to provide above average service). Accommodation payments are made either by the resident (Accommodation Charge) or the Australian Government (Accommodation Supplement), with the share determined by a means test. At 20 March 2008 the capped accommodation payment per day per resident was increased to a maximum of \$26.88 per day. Access Economics (2009c) evaluated the capital financing of high care and found the average construction cost per bed to be \$187,460, equating to a breakeven point for the accommodation payment of \$40.32/bed-day, much higher than the contributions of \$26.88 per day. This suggested that private capital investment in high-care RAC is not worthwhile.

The Australian Government, recognising the shortfall of capital investment, pledged \$300 million for zero real interest loans to build or expand aged care homes as part of the 2008-09 budget, but more is needed to ensure sustainable aged care infrastructure. If, for example, caps on fees were increased or removed (on a means-tested basis), providers would have greater incentive and capacity to fund accommodation costs from accommodation charges, thereby reducing the need to cross-subsidise with funds hypothecated to operational costs.

There is evidence from the US and UK aged care systems that reducing caps would increase competition within the sector. In the US, revenue for providers of RAC comes from both public sources (through Medicare and Medicaid) and private sources (such as residents' personal payments and their private aged care insurance). Unlike the Australian system, US RAC providers are not limited by government regulation to a maximum daily fee they can charge. Depending on their willingness or ability to pay consumers in the US face more choice regarding the quality of facilities and services they receive.

The UK RAC sector is also funded through both private and public sources. A large proportion of UK aged care facilities are publicly owned and thus largely government funded. Public funding is also provided through the National Health Service's 'continuing care funding' which provides subsidies to aged care providers who accept people with certain levels of disability, injury or illness that they are unlikely to recover from. Private sources of funding include private aged care insurance, and residents' personal payments to RAC facilities. Similar to the US, UK consumers enjoy greater choice concerning the quality and services of RAC facilities.

The increase or removal of government legislated caps, potentially on a means-tested basis, would encourage competition for places through expansion of choice including higher-quality options, and competition for nursing staff through improvements to wages and working conditions. There would be greater capacity to respond to individual resident and workforce needs. However, it would naturally be important to ensure that the needs of the most disadvantaged are met and equity considerations are upheld in any potential change to caps. Sharing infrastructure across a broader range of services, such as aged care and rehabilitation, could also ease anticipated capital needs along with promoting diversity in aged care accommodation.

2.2.2 Labour investment

The aged care workforce is made up of a large number of different types of workers. The workforce in RAC facilities includes direct care workers (nurses, personal care staff and nurses assistants) as well as other staff (managers, cleaners, cooks, gardeners etc). Doctors and allied health professionals (such as occupational therapists, dentists, physiotherapists, podiatrists and pharmacists) also contribute to the care of residents but are not currently considered to be part of the dedicated aged care workforce. The vast majority of community care workers are 'aged or disabled person carers (home support workers)' who provide 'general household assistance, emotional support, care and companionship for aged and disabled in their homes'.¹ However, in community care there is still reliance on many other categories of workers who provide assistance with the provision of services.

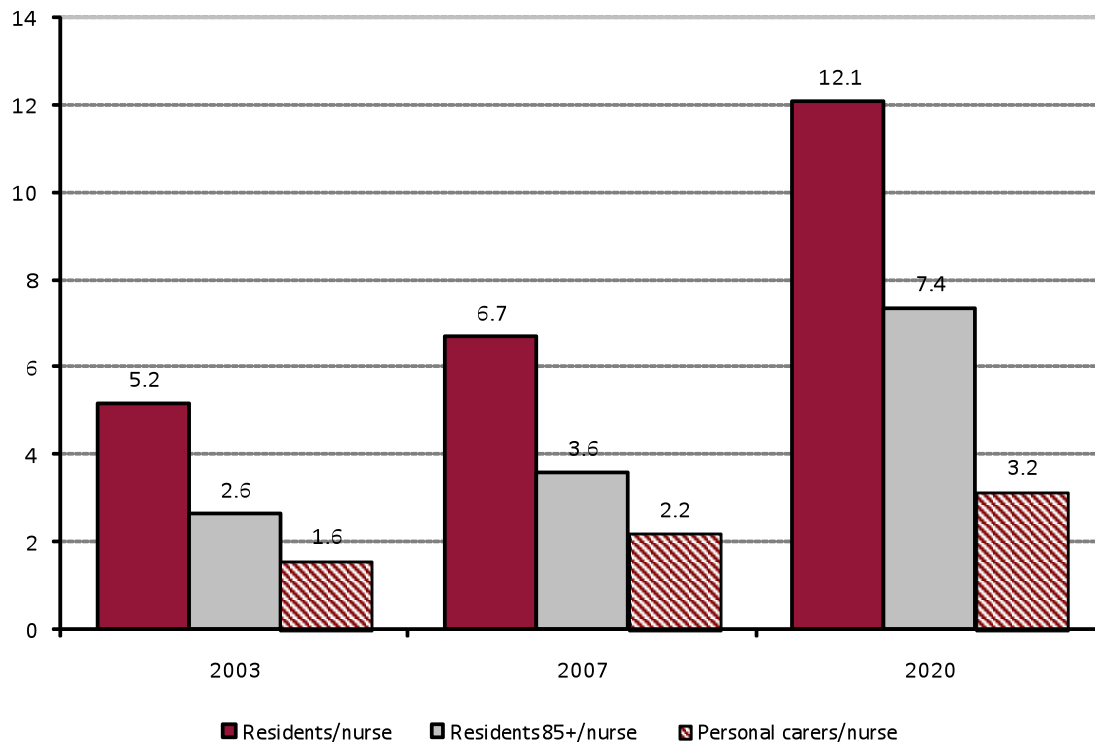
¹ This terminology is drawn from the Australian Standard Classification of Occupations used by the ABS.

In this section the discussion will focus on the direct care RAC workforce – thus excluding non-direct care staff, doctors, and other allied health professionals not dedicated to RAC. This section of the workforce is the one where the greatest shortages occur and where shortages are most directly linked with quality of care (Access Economics, 2009a). The RAC direct care workforce can be broken up into three main occupational groups, as outlined below.

- Registered nurses (RNs) are nurses who are registered with the nurses and midwives board or council in each state or territory. A RN must have at least a three-year degree from a higher education institution or equivalent from a recognised hospital-based program. RNs have to maintain registration by meeting the board's requirements. This includes practising for a specified minimum period in the previous five years (AIHW, 2008b). RNs are a crucial component of the aged care workforce. They manage teams of care staff and provide specialist skills, including complex medication and care tasks (PC, 2008).
- Enrolled nurses (ENs) are nurses who are on the roll maintained by the nursing registration board in each state and territory. The minimum educational requirement for an EN is a one-year diploma from a Vocational Education and Training provider, or equivalent from a recognised hospital-based program. ENs must maintain their enrolment by meeting the requirements of the registration board. ENs undertake less complex procedures than RNs and usually work with RNs to provide patients with basic nursing care. They may undertake more complex tasks than personal carers including medication management and client monitoring.
- Personal carers or 'assistants in nursing' comprise well over half of the RAC workforce and are unlicensed workers who generally have a TAFE qualification such as Certificate Level III in nursing. Personal carers assist clients in their daily living activities by undertaking routine tasks.

Access Economics (2009a) shows emerging critical shortages in the next 20 years in the aged care sector as demand for labour escalates. We estimated that the supply of RAC staff would increase by around 14.1% by 2020 in contrast to the 56.8% increase in demand. Moreover, if the decline in nurses as a share of the total continues until 2015 and then halts, by 2020 the ratio of residents per nurse will roughly double (and residents will be older) and each nurse will on average need to supervise 3 rather than 2 personal carers (Chart 2.1).

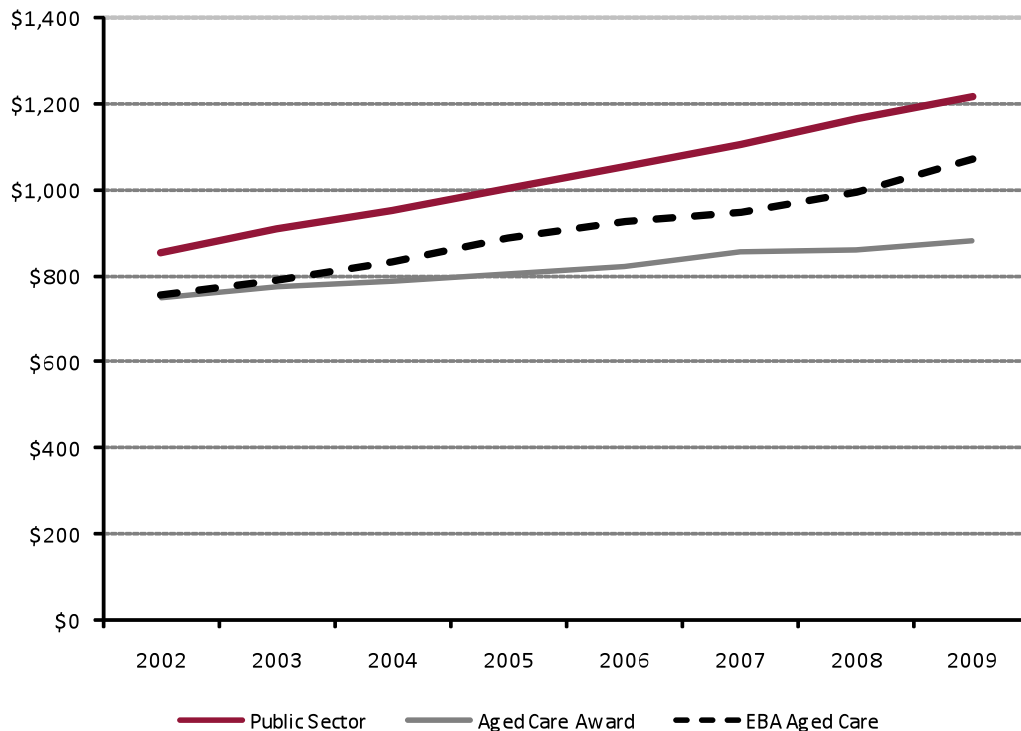
Chart 2.1: Trends in residents, aged residents and personal carers per RAC nurse



Source: Access Economics estimates.

The tightening of the RAC labour market has resulted from difficulties attracting and maintaining a sufficient supply of aged care nurses (particularly RNs). Remuneration is a significant factor affecting the attraction of quality staff in the RAC sector. A wages gap has emerged and productivity growth in RAC to date has not been sufficient to close the gap. Data from the Australian Nursing Federation indicates that in 2009 this wage gap may have been as high as 12-13% across Australia, when comparing aged care enterprise bargaining agreements (EBAs) with EBAs in public sector nursing as a whole (Chart 2.2). As a result of the comparatively low wages in aged care, RNs and ENs continue to exit, in net terms, to other parts of the health and community care sector.

Chart 2.2: Nursing wage disparity 2002-2009 public sector and aged care, Australia



The poor public image associated with RAC and a lack of education and training opportunities have reduced the attractiveness of the profession (Productivity Commission, 2008). There are also concerns about unfavourable working conditions, including excessive documentation and workloads, occupational health and safety issues (associated with managing challenging behaviours, lifting associated with frailty, and longer working hours to cover staff absences, all of which contribute to workforce shortages (House of Representatives Standing Committee on Health and Ageing, 2005)). The current shortages have exacerbated the problem by increasing the stressfulness of the job for the nurses who remain, thereby creating a vicious circle (Preston, 2006). The National Institute of Labour Studies (2008) found that 44% of RAC workers felt their jobs were 'more stressful than ever imagined'; nurses had the highest proportion who agreed with this statement (46.8%).

Demographic ageing will intensify these problems because the declining proportion of the population of working age will increase competition for labour. The RAC industry will need to provide competitive conditions in order to attract a quality workforce. In a report for the Australian Nursing Federation, Access Economics (2009a) made the following recommendations for improving the supply of labour in the RAC industry.

- **Wages and conditions must improve** to attract nurses into the sector. Productivity improvements realised through better technology and restructuring activities may help close the wages gap. More sophisticated monitoring and scheduling systems can increase the quality of care by allowing staff to spend more time with residents, which can also improve job satisfaction. More fundamentally, since there is evidence to show that more nurses in the skill mix leads to better health outcomes, the intensity of nursing care required could be linked to the ACFI scale. This may assist in achieving adequate provisioning for wages.

- A **positive workplace culture** where staff feel valued can increase job satisfaction. Addressing excessive workloads, unnecessary documentation and lack of personal development opportunities helps improve retention. This could be facilitated through: flexibility in rostering hours, time off to study and financial assistance to cover incurred costs; promoting workplace safety and cultural sensitivity; and encouraging a better work/life balance.
- **Training and career advancement opportunities** to enable career development. Continuing education and training is a pre-requisite to ensuring the skills mix responds to changing care needs (more high and chronic type care), including more specialised training, such as dementia care programs. Upskilling ENs and personal carers is also critical given their share of the RAC workforce. The number of undergraduate nursing places should be increased such that they are adequate to meet future demand, and should emphasise aged care specific places and encourage graduates to enter the aged care sector.
- **Broadening staff duties** — Given shortages in the RAC workforce, care delivery can be broadened by extending the scope of practice for various staff. For example, with training, the role of ENs could extend into medication management. However, in some locations duties have already been broadened and there is little scope for further extension. These should be accompanied with mechanisms to ensure quality standards are maintained.

More nurses with improved skills may not be the answer for all RAC facilities. Each facility has its own mix of resident types (low, medium, and high care), so a 'one size fits all' approach will reduce flexibility and lead to an inefficient allocation of resources. An optimal care mix would appropriately match care skills to resident care needs. Currently, there is a disconnect between the level of funding provided through the ACFI funding model and the actual funding required to employ the required skill mix to deliver assessed care. Respondents assessed as needing the same level of care may require different types of people to administer that care. For example, a respondent assessed as needing high care through activities of daily living may only require an EN and personal carers to help with mobility and toileting. A resident assessed as high care through complex health care needs is likely to require a RN to undertake more complicated nursing tasks. Furthermore, residents with dementia, or those from cultural and linguistically diverse backgrounds, will require specialised skills for their care. The current ACFI does not provide guidance on this. This disconnect introduces perverse incentives that can discourage RAC facilities from providing an optimal care mix.

However, the current ACFI framework is amenable to modifications that would enable care needs to be assessed in terms of skill matching services to residents. Each resident would not only be assessed in terms of low, medium or high care, but also on how their needs rely on care by RNs, ENs, personal carers, specialists and others. A 'care assessment' could develop a score for each resident on the expected number of RN and EN hours per day that would be required. For example, a resident that requires a high level of care through pain management would be assigned an estimated number of hours per day from a RN that is required to appropriately manage that pain. Similarly, the estimated number of hours required from an EN and a personal carer would also be estimated, based on the nursing assessment process used within the ACFI.

The total number of full time equivalent RNs, ENs, personal carers, specialists and others required to provide appropriate care to residents of a facility could then be calculated based

on the number of hours and types of skills required to deliver appropriate care to each resident. This could be supplemented by an estimated labour requirement for duties that do not relate specifically to providing care to residents, such as administrative tasks, teaching responsibilities, and decision making.

An approach similar to the one presented above is currently used within the UK aged care framework (Masterson, 2004). The development and application of this type of optimal nursing mix calculation should be further investigated within the Australian context. It is presented here as a potential high level approach to address the current mismatch between ACFI and one of the major operational costs of RAC facilities – and drivers of quality – namely the nursing workforce.

3 Aged care funding models

The previous chapters have outlined the difficulties faced by the aged care sector in the present and future, many of which are intrinsically linked to funding. In this section the sustainability, equity and choice inherent in various models of aged care funding are discussed. The models chosen have been canvassed by the government at various points in time and are similar to models used or under consideration in other developed countries. Revisiting the issue of bonds was out of scope, in order to focus on alternative options.

3.1 Current arrangements in Australia

Under the current system, the government pays for residential and community aged care through general tax revenue. This revenue is used to subsidise the provision of selected aged care services. Access to the system is allocated based on an assessment of care needs and the marginal cost to users is very low. The risk of incurring high aged care costs is borne by society (tax payers) rather than by individuals.

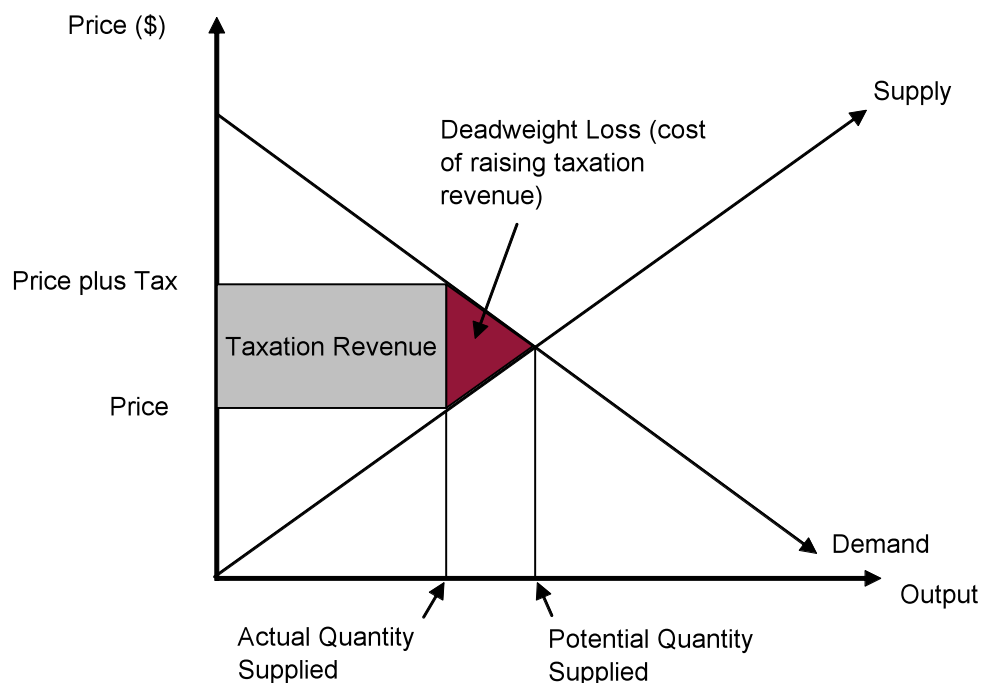
Unless further tax revenue is raised, burgeoning costs threaten the sustainability of the current system. Some cost pressures may be relieved through productivity improvements such as wider use of information and assistive technologies. For example, broadband and wireless technology could be used to improve communication between staff if data and clinical assessments were digitally recorded and transferred within facilities. Integrated IT could also reduce the likelihood of medication and other errors that occur when clients are transferred between aged care facilities and health care providers such as hospitals and general practitioners (DoHA, 2005a). Assistive technologies such as portable aids (e.g. canes, walkers and lifting devices) or structural modifications (e.g. grab bars and ramps) may reduce the amount of supervision needed in RAC and community care settings (Productivity Commission, 2008). However, the Productivity Commission concluded that such improvements are unlikely to be sufficient to ensure the sustainability of the system.

In the absence of sufficient productivity improvements, taxes would need to be raised to cover increased costs, or quality or access would need to be rationed. Raising revenue through taxation results in an inefficiency known as deadweight loss (DWL). The DWL is the cost of administering the tax system and the loss of consumer and producer surplus resulting from the imposition of a distortion to the equilibrium (society preferred) level of output and prices. Taxes alter the price and quantity of goods that are sold compared to what they would be if the market were not distorted. This leads to a reduction in the value of trade between buyers and sellers that would have otherwise been enjoyed (Figure 3.1). The rate of DWL used in this report is 27.5 cents per \$1 of tax revenue raised plus 1.25 cents per \$1 of tax revenue raised for Australian Taxation Office administration, based on Productivity Commission (2003) in turn derived from Lattimore (1997). This means that for every dollar of tax collected, the efficiency loss is 29 cents.

Economic inefficiencies are also created through the in-kind provision of aged care services, which are provided directly as a specific, limited range of goods or services rather than cash; in general people prefer cash which they can then direct to the goods and services that are of most value to them. Inefficiency (and inequity) also arises from the need to restrict access to control costs.

On the consumer side, the restriction of choice means that some people will be consuming services that are not worth as much to them as what they cost the government. For example, the service may not really meet their needs. However, there is no incentive not to consume it because users do not face the true cost and there are few alternatives. There will also be people who are under-consuming aged care services (consuming less than their preferred amount) because they did not meet requirements for access at a historical point in time when assessed. The provision of in-kind aged care requires access to be limited otherwise aged care services will be over-consumed because users are not facing the true cost. The cost of administering this access restriction, through the performance of ACATs, is also a source of inefficiency. Figure 3.1 illustrates the DWL from taxation based on first principles from economic theory.

Figure 3.1: DWL of taxation



A fundamental tenet of economics is that consumers prefer choice. In order to keep administration costs down the government has to limit the range of services it funds. Tilly (1999) reviewed several surveys of participants in consumer-directed care programs overseas and found that increased choice improves consumer satisfaction with aged care services. Consumers in several countries revealed a clear preference for receiving care in the community rather than in RAC facilities when possible. The reliance on informal care in community care programs will make this option increasingly inaccessible in Australia. This is already problematic for those living in regional or remote areas because there is less access to volunteers and organisations that provide support services to the elderly (Productivity Commission, 2008).

One of the advantages of the current system is that it is, in principle, equitable because it provides aged care according to need rather than ability to pay. By limiting the amount of private contributions that can be made to aged care providers, those with greater means are

not able to purchase better quality care. However, the system is not without its inequities. While the subsidies are the same, they do not necessarily provide the same level of service across facilities – for example, a single ensuite room generally attracts the same subsidy as a shared room with shared bathroom. Differences in quality are particularly problematic for people living in regional or remote areas where the provision of aged care is more costly. The equal subsidy means that the provider sacrifices quality in order to provide the service for the same price and there is less choice of services available (Productivity Commission, 2008). The rationing of services means that some people cannot access the care that they need, or have to wait for it to be provided – sometimes for long periods or they may die in the meantime.

The current aged care system is funded through intergenerational transfers. During their working life people contribute to the tax revenue that funds aged care for the generation before them. In return, they receive aged care from the next generation. The ageing population has resulted in inequity in these intergenerational transfers. With a higher ratio of people needing care relative to those of working age, the individual tax burden is much higher for the generation funding aged care than it was for the generation receiving the aged care. For those receiving the aged care now, they may receive a lower quality of care than they provided for the generation before them.

The current system is **not sustainable** without higher tax. Funding the system through tax revenue results in **efficiency losses** of about 29% and **choice is limited**. The system aims for **equity but there are some gaps** and there is **intergenerational inequity**.

3.2 Long term care insurance

Long term aged care insurance (LTCI) would allow people to insure against the risk of requiring high cost aged care services. This would be similar to the insurance that many people already take out to cover unpredictable and catastrophic events such as damage to or destruction of their homes, early death or injury, and loss of income. Insurance pools the risk of high aged care costs across participants in the scheme, thereby limiting the costs incurred by any one individual. LTCI schemes exist in many forms overseas; Table 3.1 summarises some them.

Germany introduced mandatory LTCI for most of the population in 1995. Anyone whose earnings are below the social security earnings ceiling must participate in the social care insurance scheme (Arntz et al, 2007). Premiums are means-tested and paid for through payroll tax, the burden of which is split between employees and employers. High income earners, the self-employed and civil servants have the option to take LTCI with a private provider rather than participate in the social insurance system. The difference between these two schemes is that private providers base premiums on risk profile (such as health status and age) rather than income, potentially resulting in lower premiums. Private insurance can also provide coverage for additional services thus some people have private insurance in addition to public. Around 90% of the population is covered by the social insurance scheme, with the remainder taking up private insurance. Social insurance is provided by a group of highly regulated not-for-profit providers. In the social insurance scheme, the government determines eligibility for aged care services and makes all capital investment for residential aged care facilities (Arntz et al, 2007).

Table 3.1: International models of long term care insurance

	Germany	Japan	United States	France	United Kingdom
System	Social insurance and private insurance	Social insurance	Private insurance	Private insurance	Private insurance
Financing	Means-tested premiums Risk based premiums	Means-tested premiums	Risk based premiums	Risk based premiums	Risk based premiums
Participation	Compulsory (unless have private insurance) Voluntary	Compulsory for those over 40	Voluntary	Voluntary	Voluntary
Eligibility for benefit	Government assessment of need Insurance company assessment of need	Government assessment of need	Insurance company assessment of need	Insurance company assessment of need	Insurance company assessment of need
Insurer	Large number of not-for-profit companies Private companies	Public insurer	Private companies	Private companies	Private companies
Population covered	90% 10%	100% over 40	<10%	25% of over 60	Negligible

Source: Gleckman (2010), Access Economics summary.

Japan introduced an LTCI system in 2000. The scheme is funded by a combination of general tax revenue and additional payroll tax levied on those over the age of 40. Anyone over the age of 65 who is deemed to need aged care is granted access. Limiting participation to people over the age of 40 reduces some of the intergenerational inequity of insurance schemes. Similar to the German system, eligibility for care services is determined by the government (Gleckman, 2010). Both the Japanese and the German social insurance schemes have begun to face increasing cost pressure because pricing contributions has proven to be quite difficult.

In France, the UK and the US, LTCI is voluntary and privately provided. In France, 25% of people over the age of 60 are covered by LTCI. There are no tax-incentives provided to encourage participation, however, access to the public system is means-tested. In contrast, the market for LTCI in the UK is tiny (Karlson et al, 2004) despite means-testing access to the public system. In the US, tax incentives are provided to encourage the purchase of LTCI. Nevertheless, fewer than 10% of the population have a LTCI policy (Gleckman, 2010). The reasons cited for this are the high cost of policies, mistaken beliefs about the risk of incurring high aged care costs and myopic behaviour (LifePlans, 2007). Another possible explanation is that people may choose to self-insure in the absence of incentives.

A LTCI system in Australia is likely to be compulsory or highly incentivised (for example through tax 'sticks' like the Medicare Levy Surcharge) and provided through private insurers. Similar to the German system, premiums would be likely to be means-tested rather than risk assessed. A private system should be more efficient than a public system (less DWL) and result in more diverse coverage of aged care services, since competition between providers for business should result in a market that provides aged care packages that offer broader options to meet consumers' preferences.

A compulsory insurance system spreads the risk of high aged care costs across the population, much like the current system does. However, if designed correctly it can be more efficient than the current system. For example, if premiums are paid by individuals directly to the insurer the system does not place price distortions in other markets (thereby reducing the DWL). It is unlikely that the whole system will be privately funded, given equity considerations, but if premiums are paid at least in part like this then there would be less inefficiency than in a tax-based system.

An insurance system should be more sustainable than the current tax-based system because money is being collected specifically to fund aged care. However, in financial terms insurance is not the best vehicle for protecting against highly likely events, such as the need for aged care. Rather, it is best suited to protecting against rare or catastrophic events, where the insurer is able to control the number of claimants and thereby its liabilities. Hence premiums may be relatively high. Insurance may also result in over-consumption if the insured do not face effective marginal costs for services they consume.

As found overseas, pricing LTCI premiums can be difficult given the long time period between purchasing cover and the event occurring, and given the uncertainty surrounding technological advances and price changes. This may make private provision costly for consumers because insurers are likely to pass on this risk through premiums or copayments. The higher the premiums, the more government assistance that would be required, which would reduce the efficiency and sustainability gain from an LTCI relative to a tax funded system.

A means-test on premiums would assist with maintaining equity in the system. Essentially those with higher incomes would pay their own way, while people on lower incomes would have their contributions 'topped up' by the government. It might also be necessary to provide safety nets for out of pocket costs, since insurance providers typically require copayments as a means of reducing moral hazard.

A LTCI would not resolve intergenerational inequities. Insurance premiums are determined so that they cover the expected cost of the event that has been insured against at each point in time. The risk of incurring high aged care costs is pooled between generations each period. As the proportion of the population that is young declines, the total risk of high aged care costs increases, thereby increasing premiums. This means that, *ceteris paribus*, each generation will pay a greater proportion of their lifetime income towards aged care or receive lower quality care than the generation before. There is also some risk associated with this system for younger generations, as there is no guarantee that the insurance provider will continue to be able to provide insurance if there is a cost blowout, much like the government is unable to continue to provide the same level of services indefinitely under the current scheme.

A LTCI system is more **sustainable and efficient** than a tax-funded system. Competition among providers should generate **more choice** for consumers. The system could be made **equitable** by means-tested premiums but there is still **intergenerational inequity**.

3.3 Healthy ageing savings accounts

The previous two sections have discussed funding systems that are based on pooling risk across society. The alternative is to encourage individuals who have the means to save for their own more predictable costs of aged care. Healthy Ageing Savings Accounts (HASAs) are a system where individuals contribute income throughout their life to a savings fund in their own name, which is used to cover their own aged care costs. This system builds on the success of superannuation in provisioning for future retirement incomes. While HASAs are based on the same principles as superannuation, a HASA scheme would not be identical to increasing the Superannuation Guarantee, and would need to be additional to superannuation. This is because people aged 55-75 have incentives to spend their retirement income on less essential goods and services (e.g. leisure, travel) and fall back on public safety nets in their older age, rather than provisioning for their health needs. Consequently, the government would need to restrict the use of funds to expenditure on items associated with health and aged care needs.

Unlike superannuation in Australia, the establishment of HASAs by individuals would be completely voluntary, along with payments into the accounts. Individuals could be encouraged to contribute savings to the account throughout their life by offering a reduced tax rate on contributions. This would be similar to the tax advantages (15%) offered to superannuation contributions. Balances held in HASAs could be invested in the same range of assets allowed within superannuation. Any investment income earned could be automatically added to the HASA balance at the reduced tax rate.

Greater flexibility in the system could be attained by offering tax advantages on contributions made into *any* HASA account (i.e. to accounts other than the contributor's). For example, parents would have the capacity to contribute funds to their children's accounts, or carers could contribute to the HASA of a person receiving care. To reduce the incentive for

individuals to use a HASA as a tax haven, any income distributed from the account that is not used for qualified health care services and products could be taxed at the highest income tax bracket rate and/or incur a penalty.

HASAs serve to smooth the burden of health care spending across an individual's life time by allowing for an accumulation of funds during the early stages of life where the individual is typically healthy, and the purchase of health services and products from the fund during the later stages of life when health starts to decline. However, a disadvantage of HASAs is that private saving is not the best mechanism for funding highly uncertain costs. Some people will end up with excess saving while others will not have enough. Allowing balances in HASAs to pass through estates into heirs' HASAs would reduce the inefficiency of over-saving for uncertain costs and reduce the disincentive to save. Providing the option for payments to estate beneficiaries to be in the form of cash or a transfer between HASAs would also reduce the disincentive to contribute savings to HASAs.

Similar to care insurance, HASAs could be complemented by tax-financed safety nets for the disadvantaged. However, rather than provide less efficient direct services to these groups, contributions could be made by the government directly into the person's HASA. Again, this encourages private saving because eligibility for government assistance is means-tested throughout life rather than at the time of consumption of services. In the United States, HASAs have proven quite popular with lower income groups. A third of voluntary HASA accounts have been taken up by previously uninsured people of whom 42% were people with incomes below the median. Lower income groups are potentially more attracted to saving for their own needs rather than pooling risks through insurance (US Department of the Treasury, 2006).

HASAs redirect the responsibility and choice for purchasing aged care goods and services to the consumer who, with their health care professionals, would have their best outcomes as core goals. Consumers will also face more appropriate price signals, thereby inducing a greater incentive for individuals to shop around and reduce the use of borderline (or unnecessary) health and aged care (Baicker et al, 2006; Feldstein, 2006). Improved allocation efficiency will be achieved within the aged care system because a market will function. However, it is also possible that increased price sensitivity may incentivise HASA members to forgo necessary care because they are not well enough informed to make decisions about their own care needs (Minott, 2009). However, a case study of Discovery Health in South Africa (AON, 2006) found that although HASA members consumed less health care when paying from their savings they invested more in preventive care. Consumers also shopped around, which had a positive impact on price control more generally.

HASAs make the aged care system more efficient and sustainable while maintaining equity, with the additional advantage over insurance that they reduce the inequity between generations. At the moment, current taxpayers pay for the aged care of the generation older than them and that would be the same with most models of care insurance; such intergenerational financing creates problems as tomorrow's needs are much greater than today's with ageing. With HASAs each generation saves to fund their own aged care costs. Depending on design and rollout mechanisms, take-up may reach around 10% of the population within four years and continue to grow thereafter, in line with international experience.

Voluntary incentivised HASAs are more **sustainable** and **efficient** than a tax-funded system. Private financing of consumption should result in **more choice** and better allocation decisions. The system could be made **equitable** using means-tested safety nets. There is also the advantage of **intergenerational equity**.

3.4 Reverse mortgages

A reverse mortgage allows people to borrow money against the equity in their home (i.e. the difference between what the home is worth and what is owed on it). The difference between a reverse mortgage and a regular mortgage is that the borrower does not need to make any repayments until they sell the home, move into care or die (ASIC, 2010). Interest and fees are covered by the accumulation of the debt. The idea of a reverse mortgage is that it allows borrowers that could not service a regular mortgage (such as retirees who do not earn income) to release the equity held in their house without selling it.

Reverse mortgages have been growing in popularity in the last ten years. The current generation of retirees were not covered by the compulsory superannuation scheme and are subject to diminutive pensions. For many, the majority of their personal savings is held in their house. A reverse mortgage allows them to draw down on these savings to fund their retirement but remain living in their own home. Consequently a reverse mortgage expands choice because it allows consumers to meet their preference for remaining in the community as long as possible.

A potential difficulty with reverse mortgages is that they are complicated financial products and it would be important to ensure that elderly people are not taken advantage of when subscribing. According to ASIC (2010) the cost of a reverse mortgage is based on a number of factors including:

- the amount of the principal;
- the term of the loan;
- the loan structure – whether the payment is a lump sum or a regular income stream;
- interest and fees; and
- whether or not there is a no negative equity guarantee (NNEG).

The first three points tend to be quite clear. The complexities arise in relation to the interest rates, fees and the NNEG. There are often terms and conditions in the loan agreement that can result in the occurrence of additional fees. For example, reverse mortgage holders are typically required to undertake necessary maintenance to preserve the value of the house. The NNEG guarantees that the sum of the loan and the fees and interest will not exceed the value of the equity in the house. Although costly, for many elderly people it is important to ensure that they are not left with debt that has to be serviced through their retirement savings as a result of a reverse mortgage. Overseas, some people have been left in difficult situations with no more home equity and insufficient funds to meet obligations or to move to alternative accommodation.

The main advantage of a reverse mortgage scheme is reduced reliance on public money, thus increasing efficiency. Government funded safety nets would still apply for people without

home equity or other assets; thus, wealthier individuals would fund their aged care costs with their own assets and the less wealthy would still be protected. Consumers would have more choice to remain in the community. A disadvantage is that the amount of money a person receives is limited to the amount of equity in their house. There is also a risk that housing equity is an important resource for funding non-aged care costs of retirement (Bruen, 2006). Reverse mortgages do not encourage additional saving beyond what the current system encourages, without which many people may find themselves without sufficient savings to fund both retirement and aged care. Once the equity has been drawn down people not only require access to the public system but may also need an alternative place to live.

It could be difficult to design a sustainable and equitable aged care system around reverse mortgages. With adequate safety nets in place there could be a substantial distortion in the incentive to save, and save through housing. While the current generation of elderly would have to fund their aged care using their own assets, the next generation may decide that it is not worthwhile saving for aged care costs. If they know that they can rely on safety nets for their aged care costs then it might be optimal to invest in non-housing assets or not invest at all. Consequent reduced demand in the housing market may be sizeable enough to diminish the value of the equity currently held in housing, thus diminishing the value of the reverse mortgage. There would also be a need to prevent people from selling their property and spending or gifting money to children, and then falling back on safety nets when aged care is required. To prevent such actions there would have to be an incentive for self-provision such as access to higher quality care, which would introduce inequity into the system.

It is likely that reverse mortgages will have to continue to be used as a supplement to the current tax-based system (or another more broad based funding system) rather than replace it. They could thus increase **efficiency** and **sustainability** to the extent that they relieve some pressure on public funds. There is some improvement in **equity** because the wealthy contribute more to the cost of their aged care. Consumer **choice is improved** because people can remain in their own home for longer. However, there are a number of limitations of reverse mortgages as a 'system'.

3.5 Vouchers

Under the current system, government subsidies for aged care are paid directly to service providers. An alternative method would be to provide consumers with vouchers that they could use to pay for the aged care services of their choice. Payments could be means-tested and still subject to eligibility criteria, based on the level of care need. A voucher system would give consumers greater choice in the provision of their aged care and generate competition in the market. However, a voucher system is only a method of provision of services; it does not address financing, efficiency or sustainability issues. Revenue for the voucher system would still be raised through taxation.

Vouchers have been trialled in a number of countries and found to be quite successful at improving consumer satisfaction with quality of service. In Germany those who qualify for aged care, which is based on need for care, have the option to receive their benefit in cash, services or a combination. The value of the services benefit is almost double the value of the cash. In the first year of operation, 84% of those on the lowest level benefit and 64% on the highest level benefit elected the cash option (Tilly and Bectel, 1999). Although the benefit is

paid in cash it is conceptually a voucher because recipients have to account for their expenditure of the money and the quality of care is periodically audited. In a survey of recipients, a larger proportion of those who elected for a cash benefit reported satisfaction with the choice that it gave them than did those who took the services. Almost half of cash recipients felt that the quality of care that they received had improved. In France and the Netherlands, voucher type schemes were trialled and the results supported the proposal that participants preferred to have control over their aged care services (Tilly and Bectel, 1999).

A voucher system could potentially increase quality and choice in the aged care system. Competition means that providers have an incentive to be responsive to peoples' preferences, thereby generating more choice in the types of services offered, and a better chance that these services will be delivered efficiently. There may be limits to these benefits in regional areas, however. Moreover, some aged care recipients — particularly those requiring high care — may not have the ability to make fully informed choices about their care. It could be difficult for such people or their families to undertake the administrative tasks involved in hiring and firing carers. Another difficulty is that some people, particularly disadvantaged groups, may not be aware of what kind of care they require; there is the potential for poor outcomes for such people. Consequently, a voucher system may still require some government intervention in service quality and allocation for some population sub-groups, as is done in Germany and Austria. The cost of doing this would be a DWL.

Equity can be maintained under a voucher system by means-testing the vouchers. Ultimately, vouchers improve allocation but, since they are tax-financed, do not solve the main problem of the current system, which is sustainability.

A voucher system still relies on tax revenue so it is **equal in sustainability and equity** but there should be **greater consumer choice** relative to current in-kind provision. It may marginally improve **efficiency** through the better allocation mechanism.

3.6 Combinations

A hybrid scheme, combining two or more of the models discussed above, could reduce the risks or negative aspects of the individual schemes, albeit at the cost of some of the positives. However, some combinations may not be so effective. Four potential combinations are considered in this section. Vouchers are excluded since they are a reallocation mechanism for purchases, rather than an alternative financing system per se.

Combining care insurance and HASAs – LTCI could be used to insure against low-probability catastrophic health or aged care events (such as cancer) while HASAs would encourage savings for higher-probability aged care costs. These might include costs such as hospital services, residential and community aged care services, out of pocket expenses, deductibles, and preventive health. Consumer choice should be greater than in a LTCI scheme alone, because people with private savings in HASAs will have greater control over how those resources are spent. The combination should also be more efficient than the individual schemes. With care insurance alone, moral hazard introduces inefficiencies in consumption which are reduced when combined with HASAs because private savings are used to fund predictable costs. On their own HASAs rely on the government to use tax revenue for more unpredictable costs whereas in a combined scheme care insurance could cover these.

Combining care insurance and reverse mortgages – LTCI would again be used to insure against catastrophic health or aged care events while reverse mortgages would fund more predictable aged care costs. The major difference is that reverse mortgages do not encourage maximum savings for aged care. The ability to self-fund aged care would be intrinsically tied with preferences for housing and those who make poor investment decisions could end up without sufficient funds. Also, those who could afford to save more than the amount that is tied up in housing equity are not provided with the incentive to do so. The advantage of reverse mortgages is that even if HASAs provide an attractive savings vehicle, it is unlikely to deter investment in housing. Many people will not make voluntary contributions into a HASA until they have made their desired investment in housing. Reverse mortgages will thus increase access to private savings for funding aged care as long people are not relying on this equity to fund other aspects of their retirement. This could result in fewer resources from housing equity being available for aged care than anticipated. It is likely that either care insurance or tax funded safety nets may have to play a larger role in this scheme than when care insurance is combined with HASAs. This would make it somewhat less efficient and sustainable but still more so than under the current system.

Combining HASAs and reverse mortgages – with this combination, there would be incentives in place to encourage people to save through HASAs and the government could provide contributions for those without the means to contribute in order to maintain equity. Since many people will invest in housing regardless, HASAs provide an additional means for saving for aged care costs. This system should yield the greatest amount of private savings for aged care and, with more private sector involvement, greater competition should result in greater choice. Greater use of private resources also increases efficiency and fiscal sustainability. This gain is not likely to offset the reliance on the government to cover the costs of catastrophic events. Although more efficient and sustainable than the current system, there are potentially less gains with this system than there are when insurance is combined with private savings.

Combining care insurance, HASAs and reverse mortgages – combining all three provides the most comprehensive private coverage of aged care costs. HASAs and reverse mortgages are used to fund predictable costs while care insurance provides coverage for catastrophic health events. Including HASAs and reverse mortgages diversifies options for private savings (particularly important because many people put most of their savings into housing) while still encouraging maximum savings. The more people who are able to self-fund, the greater the efficiency and sustainability of the system. More people using their own funds will increase competition and therefore choice. Insurance pools the risk of very high aged care costs across the population and reduces the reliance on the government to fund them. There are of course costs of setting up a new scheme and it is beyond the scope of this report to estimate the costs for each model. However, it is reasonable to conclude that the more complex the system, and in this case the greater the number of parties involved, the more costly it may be to initially set up and administer. It is, however, possible that one provider could provide joint product options for consumers, thus saving on set-up and administration costs.

4 Preferences for aged care funding in Australia

To establish how Australians would prefer to pay for aged care in the future, a survey was developed and fielded.

4.1 Survey methodology

The options included in the pilot and final surveys were the same as those researched and discussed in Chapter 3. Given the technically complex nature of this issue, respondents were provided with a brief overview of each option. This description outlined key characteristics of the option and the anticipated difference in the efficiency, sustainability, equity and choice of the option relative to the current system, based on the evidence from the desk research. Respondents were then asked to rank each option on a scale of 1 to 5, with one being 'definitely don't support' and 5 being 'strongly support'. Following this they were asked which policy was their most preferred. Finally, respondents were asked how they thought each option compared with the current system on providing sustainability, equity and choice. The survey questions are available from Access Economics.

A web based survey approach was implemented, which allowed respondents to take their time in reading the information and considering their answer to the questions. To ensure that multiple responses from the same individual were not received, the survey could only be completed once on any computer. One of the primary benefits of using Internet questionnaires is that it is a relatively inexpensive method of collecting responses. This is especially useful when wide geographical coverage is required as Internet charges are not a function of distance. Respondents are also more likely to reply truthfully on sensitive or complex issues when they feel that their response is completely confidential. This feeling is increased when there is no direct contact with an interviewer.

The major disadvantage of using a web based survey is that it will miss out on preferences from those who are unfamiliar with the Internet, or do not have access to a computer. These individuals are generally older, less wealthy and living in more remote areas. The anonymity of a web-based survey may also contribute to difficulties obtaining a representative sample. Without human interaction it can be more difficult to incentivise individuals to complete a survey and hence more difficult to obtain a high completion rate (many participants will begin the survey but not finish it). This may be a problem if certain characteristics are associated with choosing not to respond or not to complete the survey. For example, high income earners are generally less likely to participate in surveys because the opportunity cost of the time taken to complete the survey is higher than for low income earners. It is also more likely that people who choose to participate may have stronger opinions about the issue than the population generally.

The increasing cost of funding aged care is an issue that affects all Australians. Most people will access aged care services for themselves or others during their life and most people contribute, through taxation, to funding the current system. Likewise, any changes made to funding aged care will affect everyone. It is thus important to capture the views of a range of people, as those of different ages, culture, income, wealth, health status or gender may have different preferences. In order to capture a broad range of preferences, respondents were sourced using three means:

1. from information directing people to the Internet survey in the NSPAC weekly newsletter *Connect*, the survey was advertised for two weeks;
2. a random sample of 3,000 NSPAC members were directly contacted via email;
3. Access Economics distributed the survey to contacts aged under 50 years to increase sampling of this age group.

Before the survey was distributed an initial draft of the survey was developed in consultation with a small group of potential respondents and distributed to a pilot group of 30 people randomly selected sample from the groups above. Piloting occurred over the period 12-17 February 2010, with all but one respondent able to complete the survey successfully and validly. After minor refinements the survey was fielded with responses collected over the period 19 February to 23 March 2010.

A total of 4,687 people commenced the survey, of whom 3,292 (70.2%) completed all of the compulsory questions. Chart 4.1 shows the age distribution of respondents. As expected, the sample is skewed towards over 50s since this is the demographic of NSPAC members and the age group of most interest. Table 4.1 presents a summary of the demographic characteristics of survey participants. Culturally and Linguistically Diverse Australians and those of Aboriginal and Torres Strait Islander descent were not well-represented in the sample, with only 38 and 26 respondents respectively. Two thirds of the sample were female, partly reflecting the older demographic of the sample.

Chart 4.1: Number of respondents by age

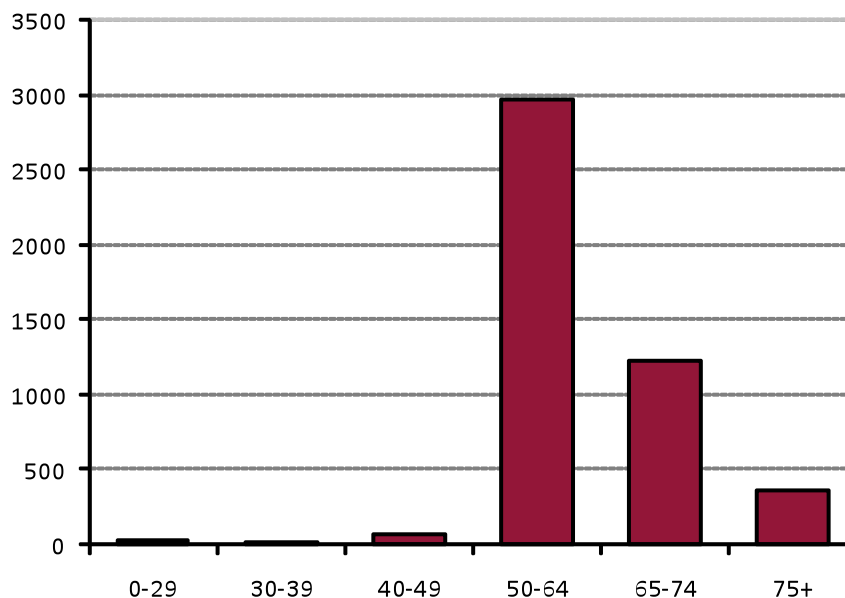


Table 4.1: Demographic details of survey respondents

	Number of respondents	Proportion of total ^(a)
Gender		
Male	1,868	39.9%
Female	2,812	60.1%
Culturally and linguistically diverse^(b)	38	0.8%
Aboriginal or Torres Strait Islander^(c)	26	0.6%

Notes: (a) Total does not include non-responses. (b) This question was voluntary and 43 respondents did not answer. (c) This question was voluntary and 122 respondents did not answer.

Table 4.2 shows the geographic location of respondents in terms of state² and Australian Standard Geographic Classification (ASGC) Remoteness Structure (ABS, 2010). The majority of respondents were from Queensland and New South Wales, although all states had a fair representation relative to population shares. Most respondents (66.2%) resided in a major city, with most of the remainder in inner and outer regional areas. In line with population there were very few individuals in remote and very remote areas.

Table 4.2: Geographic location of survey respondents

	Number of respondents	Proportion of total ^(a)
State		
QLD	1402	33.1%
NSW	1123	26.5%
VIC	746	17.6%
WA	416	9.8%
SA	213	5.0%
ACT	187	4.4%
TAS	88	2.1%
NT	58	1.4%
Regional environment^(b)		
Major City	2804	66.2%
Inner Regional	994	23.5%
Outer Regional	387	9.1%
Remote	33	0.8%
Very Remote	15	0.4%

Notes: (a) 447 respondents did not respond or provided an invalid response. The total excludes these observations. (b) Based on ASGC 2001 classification of postcodes (ABS, 2010).

In interpreting the findings in the next section, it should be noted that the sample is small for some groups and thus cross-tabulations are presented to draw out differences in views between groups. When findings for the whole sample are reported, it should be borne in mind that the overall view will be heavily influenced by the views of the disproportionately large group of over 50s (who are not CALD or ATSI and do not live in remote areas).

² The term 'state' is used to encompass the territories as well.

4.2 Findings

HASAs were the most popular option overall for funding aged care in future, with 29.6% of respondents selecting this as their most preferred option (Table 4.3). The second most popular option was the current system (23.8%), while a combination of HASAs and LTCI ranked third (13.4%).

Of all respondents, 1,773 or 41% preferred an option that included a HASA, and 1,104 (25%) preferred an LTCI option, compared to 18% preferring current arrangements alone. Reverse mortgages were relatively unpopular, with the four reverse mortgage combinations ranking in the bottom four places in Table 4.3.

Table 4.3: Overall preference of respondents

Funding option	Frequency	% total
Healthy Ageing Savings Accounts (HASAs)	983	29.6%
Current arrangements	792	23.8%
Care insurance together with HASAs	444	13.4%
Long term care insurance	415	12.5%
Vouchers	260	7.8%
Care insurance, HASAs and reverse mortgages	210	6.3%
HASAs with reverse mortgages	136	4.1%
Reverse mortgages	50	1.5%
Care insurance with reverse mortgages	35	1.1%
Total	3,325	100%
Combinations		
HASA combinations	1,773	41%
Care insurance combinations	1,104	25%
Reverse mortgage combinations	431	10%
Vouchers	260	6%
Current arrangements alone	792	18%
Total combinations	4,360	100%

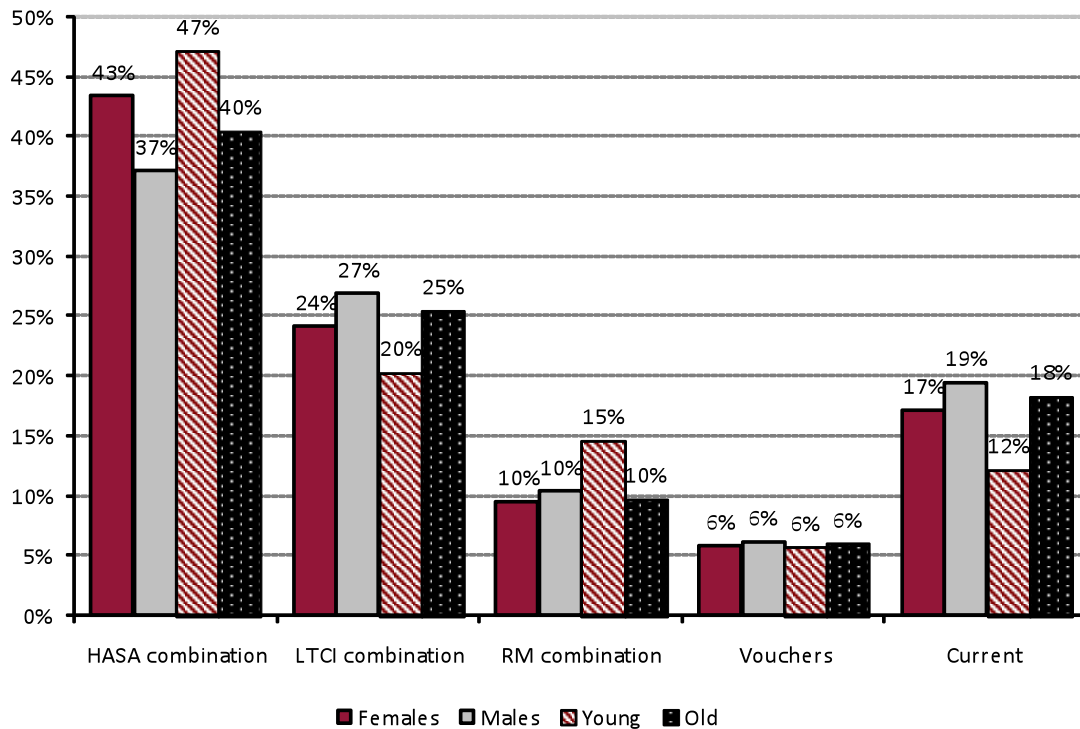
Notes: 1,355 respondents did not provide a response to this question and are excluded from the total.

It is not known how non-responses might be distributed, which may introduce bias if they were to disproportionately choose one response over another. However, even if all non-respondents were to choose the current arrangements alone (37% of the total), this would still not be preferred to HASA and care insurance combinations (50% in total). Hence any non-response bias does not affect the overall conclusions.

4.2.1 Preference by age and gender

Looking at combinations of options, younger people were more attracted to options including HASAs (47%) than older people (40%), while older people were relatively more attracted to LTCI (25% compared to 20%) and to the current system (18% compared to 12%). Young people also had a greater preference (15%) than older people (10%) for reverse mortgages (Chart 4.2).

Chart 4.2: Comparison of preferences by age (over/under 50) and gender (% total)



4.2.2 Evaluation of each option

HASAs were not only the most popular option with respondents when asked for an overall choice but also received the greatest amount of support when assessed individually. Respondents were asked to rate their support for each policy on a scale of 1 to 5. The results by age and gender are shown in Table 4.4.

Overall HASAs and LTCI both received a ranking of ‘support’ as their most frequent ranking. Both of the options had more people choose a positive ranking (4 or 5) than a negative one (1 or 2). However, there was more support for HASAs (51% support) than there was for LTCI (34% support) and HASAs had a majority of positive rankings (58%). People were most frequently ‘Indifferent\don’t know’ about the current system (33%) but there were more negative (41%) than positive responses (26%). For reverse mortgages and vouchers ‘don’t support’ was the most common response and both of these had more negative rankings than positive. Reverse mortgages were less popular than vouchers, with 66% negative responses for reverse mortgages and 47% negative responses for vouchers (Chart 4.3).

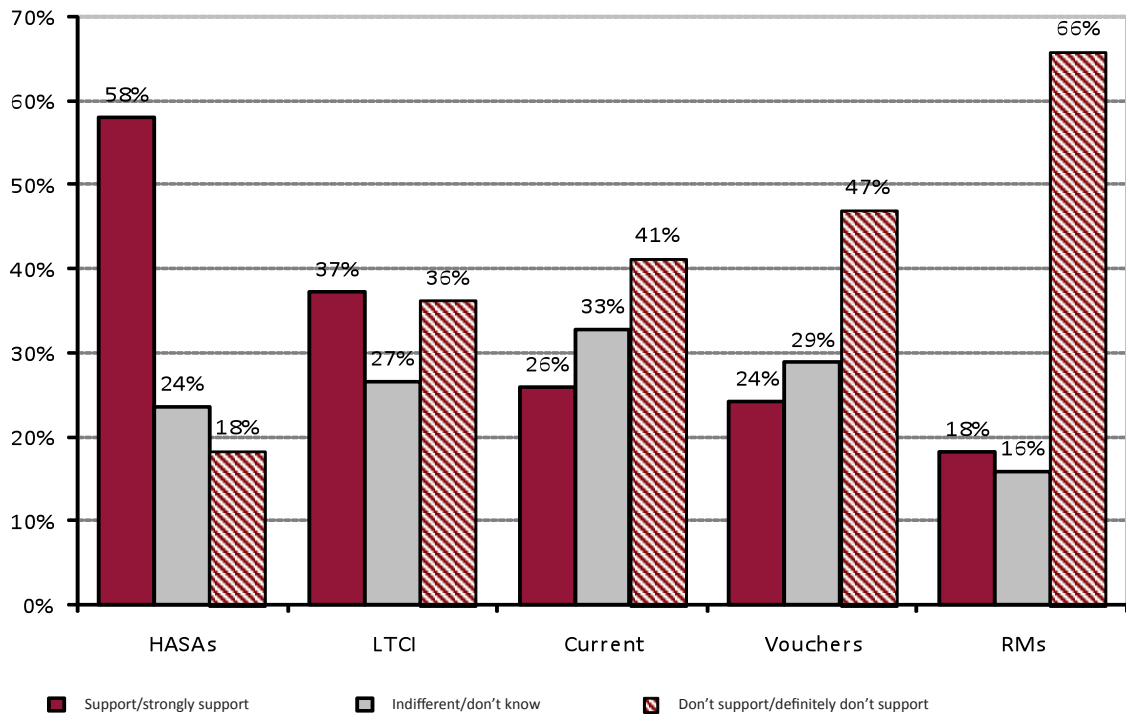
Table 4.4: Support for each option by age and gender (frequency and % total)

Ranking	Female (aged <50)		Male (aged <50)		Female (aged 50+)		Male (aged 50+)		Total	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Current System										
1. Definitely don't support	11	14.3%	1	4.0%	263	10.7%	179	10.3%	454	10.6%
2. Don't support	25	32.5%	6	24.0%	801	32.7%	480	27.7%	1312	30.7%
3. Indifferent / don't know	27	35.1%	12	48.0%	807	33.0%	557	32.2%	1403	32.8%
4. Support	12	15.6%	4	16.0%	515	21.0%	446	25.8%	977	22.8%
5. Strongly support	2	2.6%	2	8.0%	61	2.5%	69	4.0%	134	3.1%
Total^(a)	77	100%	25	100%	2,447	100%	1731	100%	4,280	100%
Long term care insurance										
1. Definitely don't support	7	9.3%	1	4.2%	214	9.1%	178	10.4%	400	9.6%
2. Don't support	20	26.7%	10	41.7%	681	28.9%	398	23.3%	1,109	26.6%
3. Indifferent / don't know	22	29.3%	6	25.0%	641	27.2%	440	25.8%	1,109	26.6%
4. Support	25	33.3%	6	25.0%	766	32.5%	621	36.4%	1,418	34.1%
5. Strongly support	1	1.3%	1	4.2%	57	2.4%	68	4.0%	127	3.1%
Total^(b)	75	100%	24	100%	2,359	100%	1,705	100%	4,163	100%
Healthy Ageing Savings Accounts										
1. Definitely don't support	1	1.4%	0	0.0%	115	5.0%	110	6.6%	226	5.6%
2. Don't support	8	11.1%	2	8.3%	306	13.4%	203	12.1%	519	12.8%
3. Indifferent / don't know	15	20.8%	8	33.3%	537	23.5%	397	23.8%	957	23.6%
4. Support	44	61.1%	11	45.8%	1,182	51.6%	845	50.6%	2,082	51.3%
5. Strongly support	4	5.6%	3	12.5%	149	6.5%	116	6.9%	272	6.7%
Total^(c)	72	100%	24	100%	2,289	100%	1,671	100%	4,056	100%
Reverse Mortgages										
1. Definitely don't support	16	22.5%	1	4.3%	571	25.0%	428	25.8%	1,016	25.1%
2. Don't support	30	42.3%	8	34.8%	1,001	43.8%	612	36.8%	1,651	40.8%
3. Indifferent / don't know	10	14.1%	4	17.4%	352	15.4%	275	16.5%	641	15.9%
4. Support	14	19.7%	8	34.8%	343	15.0%	319	19.2%	684	16.9%
5. Strongly support	1	1.4%	2	8.7%	20	0.9%	28	1.7%	51	1.3%
Total^(d)	71	100%	23	100%	2,287	100%	1,662	100%	4,043	100%
Vouchers										
1. Definitely don't support	6	8.7%	1	4.3%	176	7.9%	165	10.0%	348	8.8%
2. Don't support	25	36.2%	6	26.1%	910	40.9%	572	34.8%	1,513	38.2%
3. Indifferent / don't know	13	18.8%	6	26.1%	656	29.5%	467	28.4%	1,142	28.8%
4. Support	24	34.8%	7	30.4%	447	20.1%	409	24.9%	887	22.4%
5. Strongly support	1	1.4%	3	13.0%	35	1.6%	31	1.9%	70	1.8%
Total^(e)	69	100%	23	100%	2,224	100%	1,644	100%	3,960	100%

Notes: Non-responses are excluded from the total. (a) 400 non-responses. (b) 517 non-responses. (c) 624 non-responses. (d) 637 non-responses. (e) 720 non-responses.

Chart 4.3 shows the strongest support for HASAs (58%), followed by LTCI (37%), then the current system (26%), then vouchers (24%), with reverse mortgages last (18%). There was a commensurate and consistent increase in the lack of support for each option – only 18% did not support HASAs, increasing to 66% not supporting reverse mortgages.

Chart 4.3: Relative support for each option (% total)



The ranking for each of the age gender groups tended to reflect the overall responses, with the exceptions reflecting the underrepresented group of young males. All age-gender groups had HASAs as their most supported option.

4.2.3 Preferences of different respondent groups

HASAs were also the most popular policy across different income and wealth groups (Table 4.5 and Table 4.6). Two measures of gross income – personal and family – were used, and wealth was classified separately into house value and the value of other assets. Income and wealth groups were based on ABS quintiles.

Table 4.5: Preferences by income (% total)

Gross personal income	<\$400	\$400-\$599	\$600-\$799	\$800-\$1,099	1100+
Current arrangements	23.1%	22.8%	21.8%	24.9%	20.1%
Long term care insurance	11.0%	14.3%	13.8%	11.1%	12.4%
Healthy Ageing Savings Accounts (HASAs)	29.5%	30.2%	32.1%	28.5%	30.2%
Reverse mortgages	1.8%	0.9%	1.4%	0.9%	2.3%
Vouchers	8.9%	8.6%	6.2%	6.7%	6.0%
Care insurance together with HASAs	14.6%	12.9%	12.6%	15.4%	14.7%
HASAs with reverse mortgages	4.0%	4.1%	3.0%	4.2%	5.5%
Care insurance with reverse mortgages	1.3%	0.9%	1.4%	0.7%	0.8%
Care insurance, HASAs and reverse mortgages	5.9%	5.2%	7.8%	7.6%	7.9%
Total^(a)	100%	100%	100%	100%	100%
Gross family income	<\$500	\$500-<\$1,000	\$1,000-\$1,600	\$1,600-<\$2,500	2500+
Current arrangements	27.8%	23.5%	21.0%	19.9%	21.3%
Long term care insurance	12.6%	14.0%	11.1%	13.4%	13.0%
Healthy Ageing Savings Accounts (HASAs)	25.7%	29.6%	31.4%	30.9%	24.8%
Reverse mortgages	1.6%	1.9%	1.2%	1.8%	2.2%
Vouchers	10.8%	7.4%	8.1%	5.5%	6.5%
Care insurance together with HASAs	11.0%	12.4%	15.2%	14.9%	16.1%
HASAs with reverse mortgages	3.4%	3.7%	4.1%	6.3%	6.1%
Care insurance with reverse mortgages	1.3%	1.4%	0.4%	1.0%	0.9%
Care insurance, HASAs and reverse mortgages	5.8%	6.0%	7.5%	6.3%	9.1%
Total^(b)	100%	100%	100%	100%	100%

Notes: 1,355 respondents did not specify a preference and these respondents are excluded from the table. (a) 579 respondents did specify their income making the total 2,746. (b) 652 respondents did not specify their income making the total 2,673.

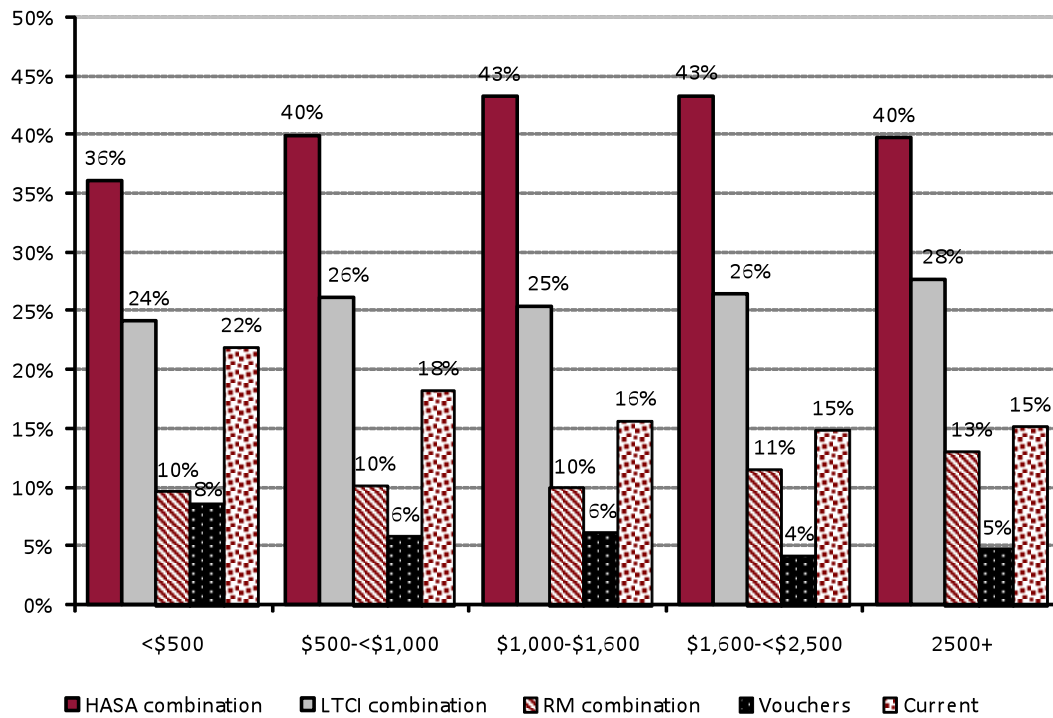
Table 4.6: Preferences by wealth (% total)

Value of family home ^(a)	<\$100,000	\$100,000-<\$250,000	\$250,000-<\$400,000	\$400,000-<\$800,000	800,000+
Current arrangements	25.9%	22.8%	24.8%	22.1%	18.8%
Long term care insurance	13.4%	14.7%	13.2%	12.3%	11.7%
Healthy Ageing Savings Accounts (HASAs)	25.9%	28.3%	28.2%	30.8%	32.7%
Reverse mortgages	0.0%	3.3%	1.2%	1.8%	1.8%
Vouchers	10.7%	7.4%	8.1%	7.0%	5.6%
Care insurance together with HASAs	12.5%	13.2%	13.2%	13.9%	17.0%
HASAs with reverse mortgages	1.8%	3.7%	4.2%	4.9%	3.3%
Care insurance with reverse mortgages	1.8%	0.7%	1.1%	0.7%	1.8%
Care insurance, HASAs and reverse mortgages	8.0%	5.9%	6.0%	6.5%	7.4%
Total	100%	100%	100%	100%	100%
Value of other assets ^(b)					
Current arrangements	14.7%	19.9%	23.2%	18.6%	14.7%
Long term care insurance	10.3%	12.7%	7.9%	15.1%	10.3%
Healthy Ageing Savings Accounts (HASAs)	36.3%	33.3%	32.1%	33.0%	36.3%
Reverse mortgages	1.7%	2.5%	1.1%	1.7%	1.7%
Vouchers	5.8%	8.7%	8.6%	4.5%	5.8%
Care insurance together with HASAs	15.1%	13.9%	15.4%	14.1%	15.1%
HASAs with reverse mortgages	4.8%	3.0%	6.4%	5.2%	4.8%
Care insurance with reverse mortgages	1.7%	0.5%	0.7%	1.0%	1.7%
Care insurance, HASAs and reverse mortgages	9.6%	5.7%	4.6%	6.9%	9.6%
Total	100%	100%	100%	100%	100%

Notes: 1,355 respondents did not specify a preference and these respondents are excluded from the table. (a) 656 respondents did specify the value of their home making the total 2,699. (b) 1,295 respondents did specify the value of their home making the total 2,030.

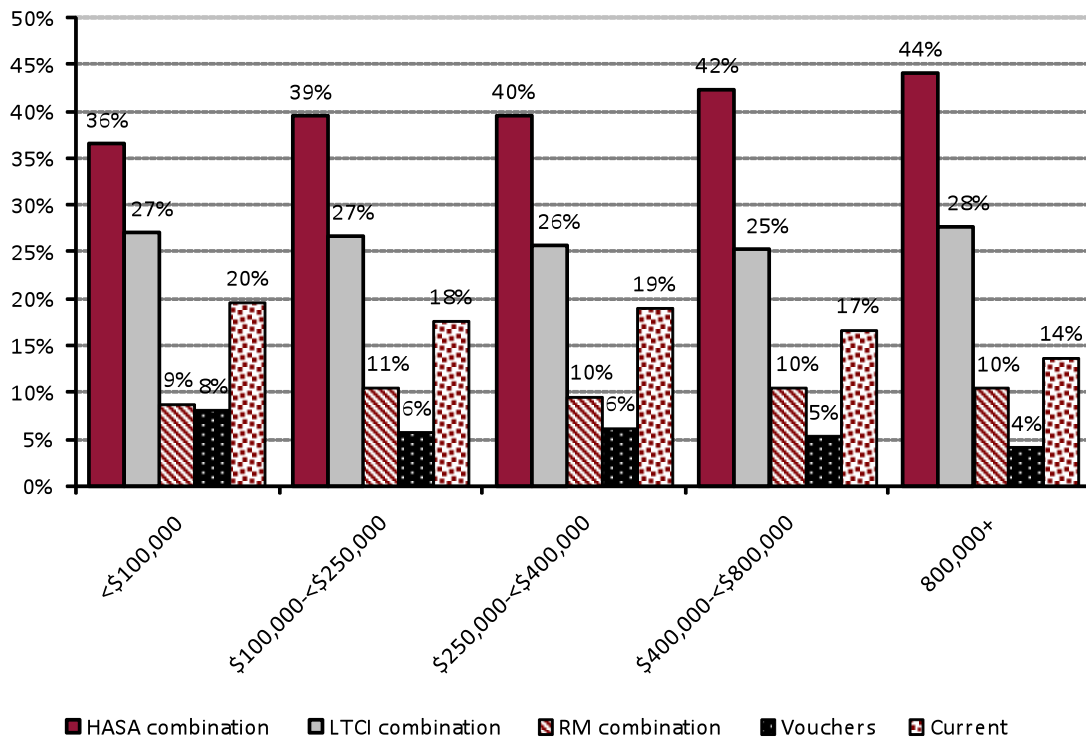
When split by income, all groups preferred HASAs except the lowest of the family income groups, who preferred the current system followed by HASAs (Table 4.5). However, HASA combinations were clearly preferred by all income groups, with family income preferences illustrated in Chart 4.4.

Chart 4.4: Comparison of preferences by family income (% total)



HASAs were also preferred by people of all wealth groups - regardless of whether wealth was measured using house value or the value of other assets. Respondents whose home was worth less than \$100,000 (most likely not home owners), however, had equal support for the current system and HASAs (Table 4.6). However, HASA combinations were clearly preferred by all income groups, with preferences by home ownership value illustrated in Chart 4.5.

Chart 4.5 Comparison of preferences by value of family home (% total)



It is unsurprising that for people in the lowest income and wealth quintiles there was slightly more indifference between the current tax funded system and a largely self-funded savings system, since these groups would be most reliant on the government safety net with HASAs.

There were some respondent characteristics that did not affect preferences. Table 4.7 divides responses according to marital/family status. Respondents who were partnered but had dependants are the only group that preferred the current system over HASAs. When split into partnered versus single or with dependants versus without dependants HASAs were preferred.

Similarly, people with all different levels of education (Table 4.8) preferred HASAs followed by the current system. The exception was those who specified 'other', who preferred the current system.

There was more variation in preferences between people with different accommodation arrangements. Home-owners, regardless of if they have debt, and those in retirement villages were the groups who had HASAs as their most preferred option. Renters, those who live rent-free (with a family member or as a carer) and those in other accommodation arrangements (caravans, those who have their accommodation provided by their employer, or those with life tenancy) liked the current system, although HASAs were a close second. Those in RAC facilities marginally preferred a combination of care insurance and HASAs to HASAs alone.

Once again, in combinations, HASA combinations were the clear winners across all respondent groups (Chart 4.6, Chart 4.7, Chart 4.8).

Table 4.7: Preference by marital/family status (% total)

	Partnered with dependant(s)	Partnered without dependant(s)	Single with dependant(s)	Single without dependant(s)
Current arrangements	29.1%	24.4%	19.0%	21.6%
Long term care insurance	10.7%	12.7%	11.4%	12.6%
Healthy Ageing Savings Accounts (HASAs)	24.8%	28.6%	32.4%	32.4%
Reverse mortgages	3.1%	1.4%	0.0%	1.4%
Vouchers	8.9%	7.1%	14.3%	8.0%
Care insurance together with HASAs	8.9%	14.2%	9.5%	13.7%
HASAs with reverse mortgages	5.2%	4.2%	2.9%	3.6%
Care insurance with reverse mortgages	0.9%	1.1%	1.9%	0.9%
Care insurance, HASAs and reverse mortgages	8.6%	6.1%	8.6%	5.8%
Total	100%	100%	100%	100%

Notes: 1,355 respondents did not provide preference and an additional 24 did not specify their family/marital status. These are excluded from the total.

Table 4.8: Preference by level of education completed (% total)

	Year 10	Year 12 (secondary school)	Technical college or trade	Undergraduate tertiary degree	Postgraduate tertiary degree	Other
Current arrangements	23.8%	24.8%	26.0%	21.7%	22.4%	27.6%
Long term care insurance	13.7%	14.5%	12.5%	11.7%	11.3%	10.4%
Healthy Ageing Savings Accounts (HASAs)	30.9%	29.2%	28.9%	29.7%	29.9%	26.9%
Reverse mortgages	1.1%	1.5%	1.2%	2.3%	1.4%	0.7%
Vouchers	9.3%	6.6%	6.5%	8.0%	8.6%	8.2%
Care insurance together with HASAs	10.5%	12.7%	14.7%	15.2%	12.8%	13.4%
HASAs with reverse mortgages	3.8%	3.4%	3.9%	3.8%	5.0%	4.5%
Care insurance with reverse mortgages	1.7%	0.7%	0.9%	0.4%	1.6%	0.7%
Care insurance, HASAs and reverse mortgages	5.1%	6.6%	5.4%	7.2%	7.0%	7.5%
Total	100%	100%	100%	100%	100%	100%

Notes: 1,355 respondents did not provide preference and an additional 19 did not specify their level of education. These are excluded from the total.

Table 4.9: Preference by accommodation arrangement (% total)

	Owner-occupier with mortgage	Owner-occupier, no mortgage	Renting	Residential care facility	Retirement village	Rent-free	Other
Current arrangements	24.1%	23.1%	29.2%	14.3%	15.4%	29.6%	31.3%
Long term care insurance	12.2%	12.5%	10.6%	14.3%	18.3%	18.5%	12.5%
Healthy Ageing Savings Accounts (HASAs)	27.5%	30.9%	28.6%	28.6%	25.0%	22.2%	25.0%
Reverse mortgages	1.1%	1.8%	0.8%	14.3%	1.0%	0.0%	0.0%
Vouchers	6.7%	7.7%	11.2%	0.0%	8.7%	11.1%	0.0%
Care insurance together with HASAs	13.1%	13.8%	8.7%	28.6%	22.1%	11.1%	18.8%
HASAs with reverse mortgages	5.2%	3.9%	3.3%	0.0%	2.9%	0.0%	12.5%
Care insurance with reverse mortgages	0.8%	1.0%	1.6%	0.0%	1.9%	3.7%	0.0%
Care insurance, HASAs and reverse mortgages	9.2%	5.4%	6.0%	0.0%	4.8%	3.7%	0.0%
Total	100%	100%	100%	100%	100%	100%	100%

Notes: 1,355 respondents did not provide preference and an additional 13 did not specify their accommodation status. These are excluded from the total.

Chart 4.6: Comparison of preferences by marital/family status (% total)

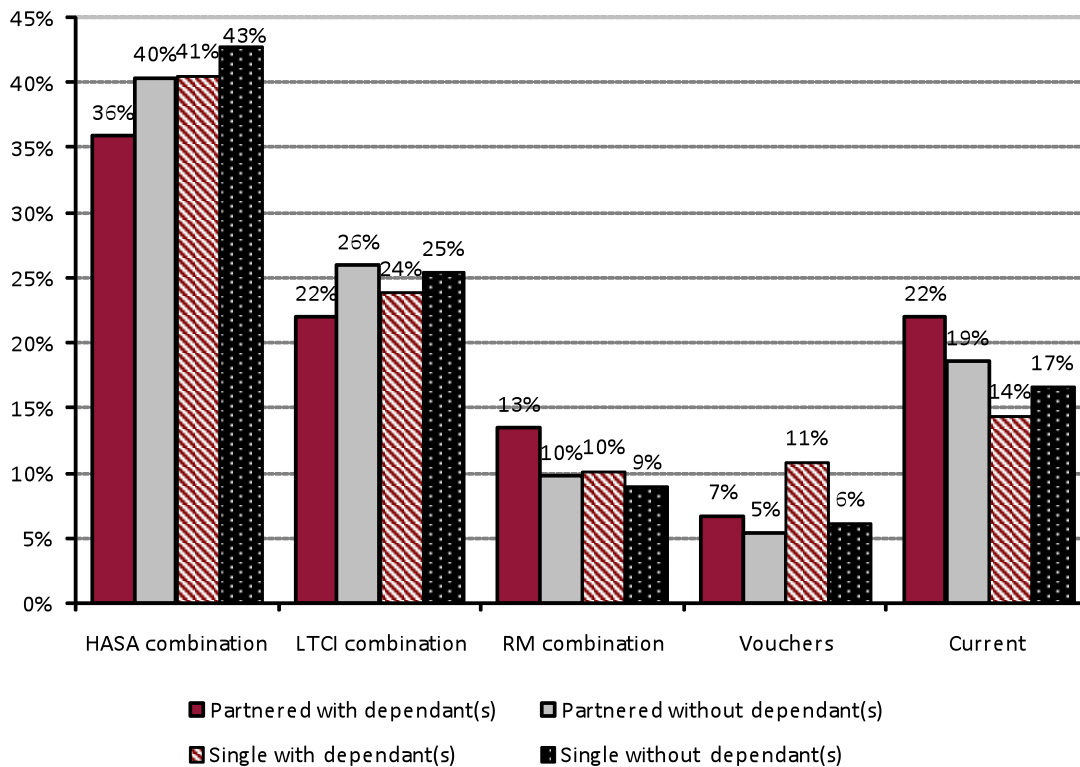


Chart 4.7: Comparison of preferences by level of education completed (% total)

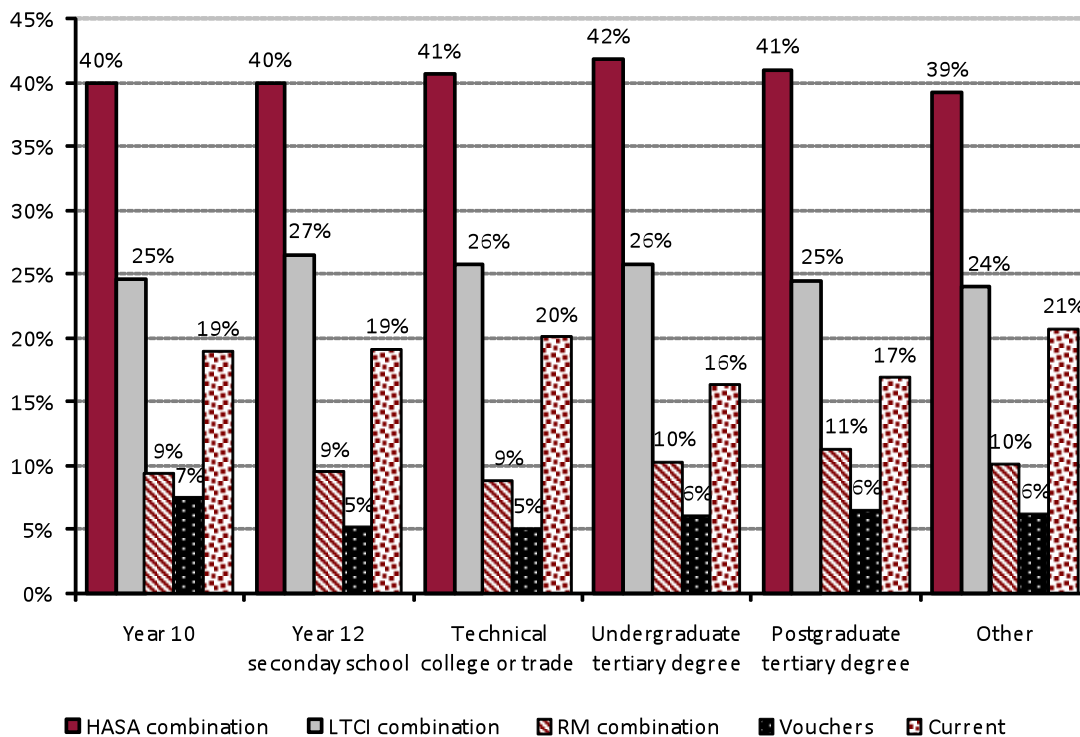
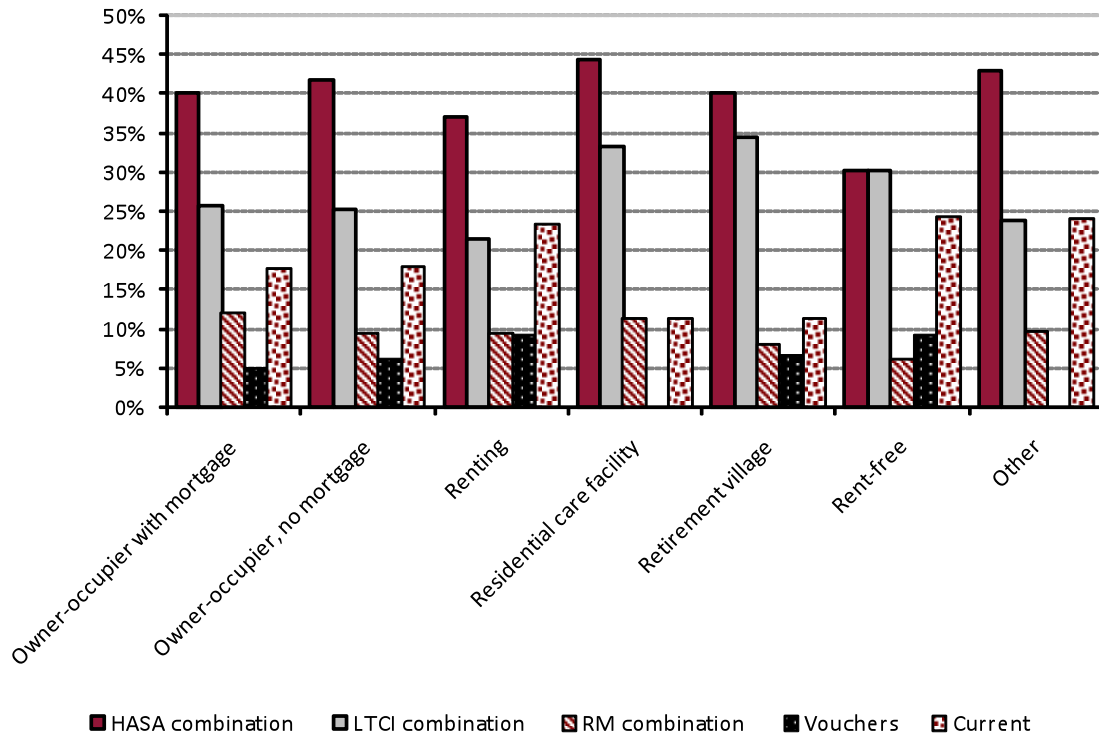


Chart 4.8: Comparison of preferences by accommodation arrangement (% total)



4.2.4 Cultural perspectives

The need for more culturally appropriate care was a quality issue that was raised in Section 2.1.3. The sample was too small to reliably present individual options, with only 31 CALD and 21 ATSI respondents to this question. Combinations, however, are shown in Chart 4.9 and Chart 4.10.

- Of CALD respondents, 34% preferred a HASA combination, 29% preferred a LTCI combination and 24% preferred current arrangements alone, compared to 41%, 25% and 18% of non-CALD respondents respectively.
- Of ATSI respondents, HASAs and current arrangements ranked equal first (27%), compared to the strong preference for HASAs (41% compared to 18%) from non-ATSI respondents.

These findings are likely to reflect disadvantage as well as small sample size. As with income and wealth, there is naturally more indifference between the current tax funded system and a largely self-funded savings system for groups that would be most reliant on the government safety net under a HASA system anyway.

Chart 4.9: Comparison of preferences by CALD or not (% total)

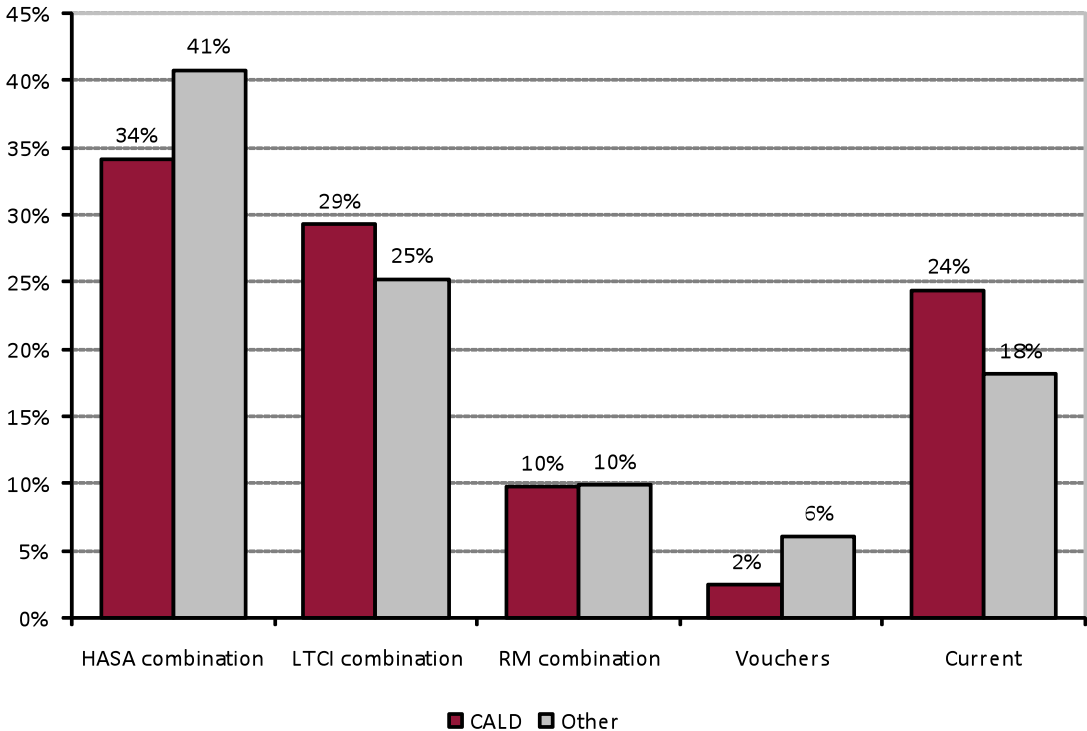
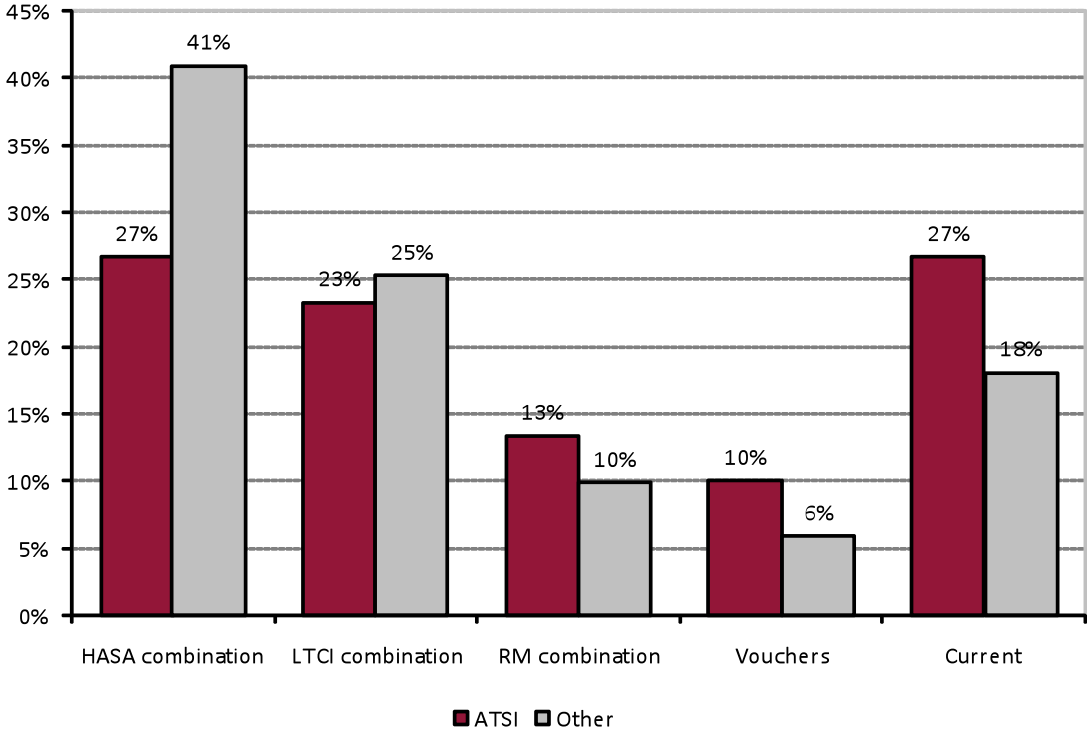


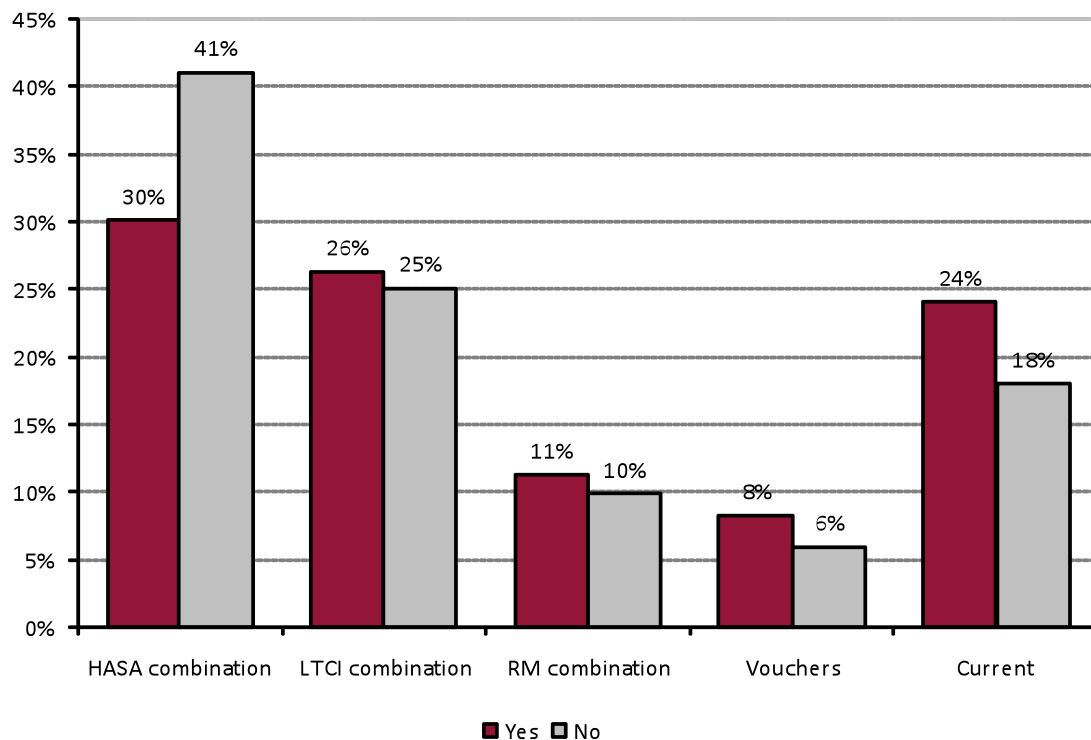
Chart 4.10: Comparison of preferences by ATSI or not (% total)



4.2.5 The effect of aged services receipt and health status on preferences

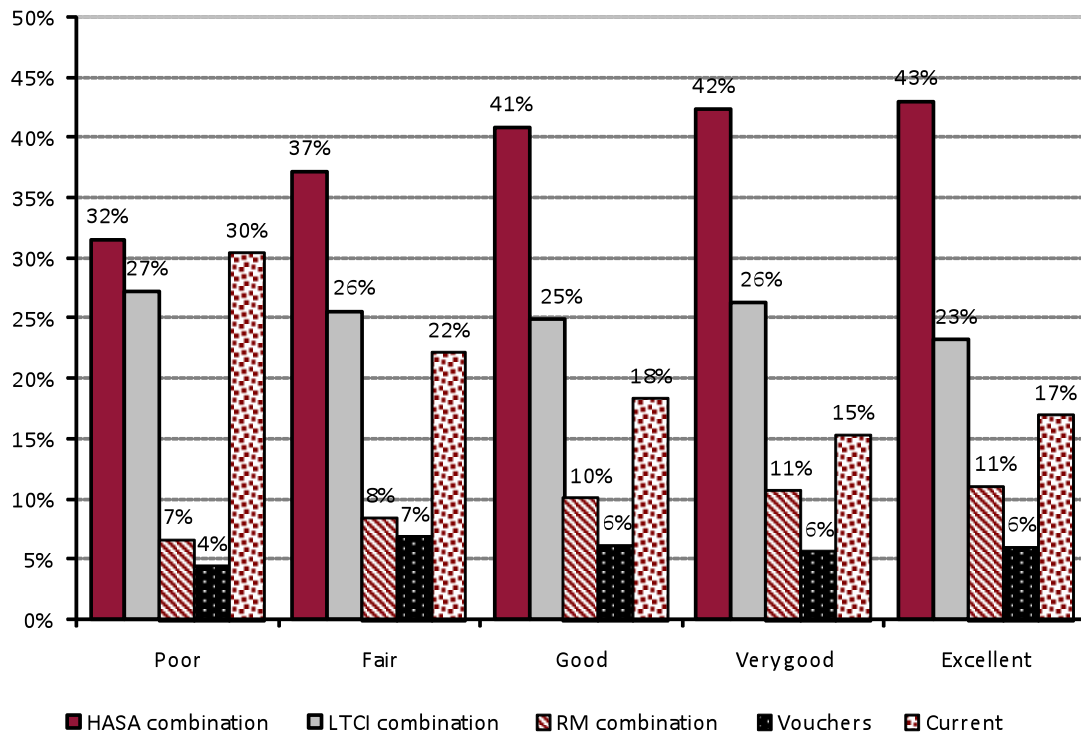
For the relatively small number of respondents to this question (100) who were receiving government-funded aged care services, preferences for HASA combinations were still strongest although less pronounced (30% compared to 26% for LTCI combinations and 24% for current arrangements) than for respondents not receiving aged care services (41%, 25% and 18%) – see Chart 4.11.

Chart 4.11: Comparison of preferences by receiving aged cares services or not (% total)



For the 3,325 respondents who reported their health status and preferences, there was a strong relationship between health status and preference. While all health status groups preferred HASA combinations, for the 74 respondents who ranked their health status ‘poor’, 32% preferred HASA combinations with current arrangements ranking second (30%). Preference for HASA combinations increased steadily with health status to 43% for those in excellent health, while preference for current arrangements declined. For all those with fair health or higher, LTCI combinations were the second preference (Chart 4.12). Once again these findings are likely to reflect socioeconomic disadvantage, due to the strong correlation between health status and income/wealth, after controlling for age.

Chart 4.12: Comparison of preferences by health status (% total)



4.2.6 Overall ranking of options

Respondents were asked to rank each of the core options, LTCI, HASAs, reverse mortgages and vouchers compared to the current system based on respondents’ perceptions of sustainability, equity and choice.

Only HASAs were ranked better/much better than the current system on all three criteria (Table 4.10) – 59% viewing HASAs as more sustainable, 46% as more equitable and 57% as offering greater choice.

Care insurance was perceived to be better/much better in terms of sustainability (44%) and choice (48%), but 70% of respondents were indifferent or thought LTCI may be worse than the current system on equity grounds.

Reverse mortgages were perceived to be worse/much worse on all three criteria relative to the current system, while vouchers were viewed as indifferent on equity and choice but worse in terms of sustainability.

Table 4.10: Ranking options relative to the current system by sustainability, equity & choice

	Sustainability	Equity	Choice
LTCI			
Better/much better	44%	31%	48%
Indifferent	31%	35%	32%
Worse/much worse	26%	35%	21%
HASAs			
Better/much better	59%	46%	57%
Indifferent	24%	30%	28%
Worse/much worse	17%	24%	16%
Reverse Mortgages			
Better/much better	17%	12%	23%
Indifferent	26%	28%	32%
Worse/much worse	57%	59%	45%
Vouchers			
Better/much better	22%	22%	30%
Indifferent	37%	40%	38%
Worse/much worse	41%	38%	32%

Respondents had the option to provide a written answer in addition to their choice and 208 did so. Although detailed summary of these comments was beyond the scope of this project, we note that many responses mentioned that provision for disadvantaged individuals was important in aged care services and funding. There was concern expressed in the comments that the current generation of elderly people does not receive quality aged care or a 'reasonable' pension and this is 'not fair' for people who contributed to the taxation that paid for past generations.

References

- Access Economics 2009a, *Nurses in residential aged care*, Report for the Australian Nurses Federation, <http://www.accesseconomics.com.au/publicationsreports/getreport.php?report=224&id=284>, accessed 22 February 2010.
- 2009b, *Making choices: Future dementia care: projections, problems and preferences*, Report for Alzheimer's Australia, <http://www.accesseconomics.com.au/publicationsreports/getreport.php?report=196&id=251>, accessed 22 February 2010.
 - 2009c, *Economic evaluation of capital financing of high care*, Report for Anglicare Australia, Baptist Care Australia, Catholic Health Australia, Churches of Christ Living Care, Lutheran Aged Care Australia, Sir Moses Montefiore Jewish Home, National Presbyterian Aged Care Network, UnitingCare Australia, <http://www.accesseconomics.com.au/publicationsreports/getreport.php?report=193&id=248>, accessed 22 February 2010.
 - 2006, *Dementia in the Asia Pacific region: the epidemic is here*, Report for Asia Pacific members of Alzheimer's Disease International, <http://www.accesseconomics.com.au/publicationsreports/getreport.php?report=99&id=135>, accessed 22 February 2010.
- Aged Care Standards and Accreditation Agency (ACSAA) 2010, *Accreditation Overview*, <http://www.accreditation.org.au/accreditation/accreditationoverview/>, accessed 22 February 2010.
- AON 2006, *The Impact of Consumer-Directed Health Plans with Integrated Health Improvement Services on Health Care Consumers*, AON Consulting Inc.
- Arntz, M, Sacchetto, R, Spermann, A, Steffes, S and Widmaier, S 2007, 'The German Social Long-Term Care Insurance: structure and reform options', *IZA Discussion Paper*, No. 2625.
- Australian Bureau of Statistics (ABS) 2010, *Remoteness structure*, <http://www.abs.gov.au/websitedbs/D3310114.nsf/home/remoteness+structure>, accessed 22 February 2010.
- 2001, *Australian Social Trends*, ABS Cat No 4102.0, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4102.02001?OpenDocument>, accessed 22 February 2010.
- Australian Institute of Health and Welfare (AIHW) 2009a, *Residential aged care in Australia 2007-08*, Report No. 28, <http://www.aihw.gov.au/publications/index.cfm/title/10709>, accessed 22 February 2010.
- 2009b, *Towards national indicators of safety and quality in health care*, Australian Institute of Health and Welfare, <http://www.aihw.gov.au/publications/hse/hse-75-10792/hse-75-10792.pdf>, accessed 22 February 2010.
 - 2008a, *A set of performance indicators across the health and aged care system*, Australian Institute of Health and Welfare, http://www.aihw.gov.au/indicators/performance_indicators_200806_draft.pdf, accessed 22 February 2010.

- 2008b, 'Nursing and midwifery labour force 2005', *National Health Labour Force Series*, 39.

Australian Nursing Federation (ANF) 2009, *Ensuring quality, safety and positive patient outcomes*, Issues paper, http://www.anf.org.au/pdf/submissions/2009/Sub_Performance_public_private_hospital.pdf, accessed 22 February.

Australian Securities and Investments Commission (ASIC) 2010, *More about reverse mortgages*, <http://www.fido.gov.au/fido/fido.nsf/byheadline/Reverse+mortgages?openDocument>, accessed 22 February 2010.

Baicker, K, Dow, W H and Wolfson, J 2006, 'Health Savings Accounts: Implications for Health Spending', *National Tax Journal*, LIX (3): 463 – 475.

Bruen, W 2006, *A Summary of Options for Long Term Financing of Community and Residential Aged Care*, A discussion paper prepared for the National Aged Care Alliance, Alzheimer's Australia, http://www.naca.asn.au/pdf/LT_Financing.pdf, accessed 22 February 2010.

DoHA (Department of Health and Ageing) 2009a, *What is the AFCI?*, Department of Health and Ageing, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-acfi-factsheets.htm>, accessed 22 February 2010.

- 2009b, *Report on the operation of the Aged Care Act 1997, 1 July 2008 to 30 June 2009*, Department of Health and Ageing, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-reports-acarep-2009.htm>, accessed 22 February 2010.

- 2009c, *Home based care: Home and Community Care program overview*, <http://www.health.gov.au/internet/main/Publishing.nsf/Content/hacc-index.htm>, accessed 22 February 2010.

- 2009d, *Community aged care packages*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-commcare-cacp.htm>, accessed 22 February 2010.

- 2009e, *Home-based care: Extended Aged Care at Home program*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-commcare-comcprov-eachdex.htm>, accessed 22 February 2010.

- 2009f, *Home-based care: Extended Aged Care at Home Dementia program*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-commcare-eachd.htm-copy3>, accessed 22 February 2010.

- 2007, *Evaluation of the impact of accreditation on the delivery of quality of care and quality of life to residents in Australian Government subsidised residential aged care homes : final report*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-iar-final-report.htm>, accessed 22 February 2010.

- 2005a, *On the Road to Paperless Resident Records, Clinical IT in Aged Care Case-Study*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-rescare-clinitfly-case6.htm>, accessed 22 February 2010.

- 2005b, *Description and comparative analysis of structure, standards, accreditation survey process and outcomes*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-iar-description-outcomes.htm>, accessed 22 February 2010.

Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) 2009, *Accommodation choices for older Australians*, http://www.fahcsia.gov.au/sa/seniors/pubs/accom_choices/Pages/12_residential_care.aspx, accessed 22 February 2010.

Donabedian, A 1988, 'The quality of care: how can it be assessed?', *JAMA*, 260:1743–1748.

Feldstein, M 2006, 'Balancing the goals of health care provision', *National Bureau of Economic Research*, Working Paper 12279.

Gleckman, H 2010, *Long-term care financing reform: lessons from the U.S and abroad*, http://www.commonwealthfund.org/~media/Files/Publications/Fund%20Report/2010/Feb/1368_Gleckman_longterm_care_financing_reform_lessons_US_abroad.pdf, accessed 03 March 2010.

Hogan, W 2004, 'Review of Pricing Arrangements in Residential Aged Care, Final Report', *Department of Health and Ageing*, <http://www.health.gov.au/internet/ministers/publishing.nsf/Content/health-mediarel-yr2004-jb-bis033.htm?OpenDocument&yr=2004&mth=3>, accessed 22 February 2010.

House of Representatives Standing Committee on Health and Ageing 2005, *Future Ageing: Inquiry into Long-Term Strategies to Address the Ageing of the Australian Population over the Next 40 years*, Report on a draft report of the 40th Parliament, Standing Committee on Health and Ageing 41st Parliament, Canberra, <http://www.aph.gov.au/house/committee/haa/strategies/report.htm>, accessed 22 February 2010.

Karlsson, M, Mayhew, L, Plumb, R and Rickayzen, B 2004, *An international comparison of long-term care arrangements: an investigation into the equity, efficiency and sustainability of the long-term care systems in Germany, Japan, Sweden, the United Kingdom and the United States*, http://www.cass.city.ac.uk/media/stories/resources/Full_report_-_LTC.pdf, accessed 8 March 2010.

Lattimore, R 1997, 'Research and development fiscal incentives In Australia: impacts and policy lessons', paper presented to the *OECD Conference on Policy Evaluation in Innovation*, Paris, 26-27 June.

LifePlans 2007, *Who buys long-term care insurance? A 15-year study of buyers and non-buyers, 1990-2005*, Report prepared for America's Health Insurance Plans, http://www.ahipresearch.org/pdfs/ltc_buyers_guide.pdf, accessed 03 March 2010.

Masterson, A 2004, 'Towards an ideal skill mix in nursing homes', *Nursing older people*, 16(4):14-16.

McCallum, J 2003, *Submission to the Inquiry into Long Term Strategies to Address the Ageing of the Australian Population over the Next 40 Years*, <http://www.aph.gov.au/house/committee/ageing/strategies/subs/sub132.pdf>, accessed 22 February 2010.

Minott, J 2009, 'How valid are the assumptions underlying consumer-driven health plans?', *Changes in Health Care Financing and Organisation (HCFO)*, Robert Wood Johnson Foundation, Findings Brief XII (4).

National Health and Hospitals Reform Commission (NHHRC) 2009, *A healthier future for all Australians*, Final Report, <http://www.nhhrc.org.au/internet/nhhrc/publishing.nsf/Content/nhhrc-report>, accessed 22 February 2010.

National Institute of Labour Studies (NILS) 2008, *Who cares for older Australians? A picture of the residential and community based workforce 2007*, http://nils.flinders.edu.au/assets/publications/NILS_Aged_Care_Final.pdf, accessed 22 February 2010.

O'Reilly, M, Courtney, M and Edwards, H 2007, 'How is quality being monitored in Australian residential aged care facilities? A narrative review', *International Journal for Quality in Health Care*, 19 (3): 177 – 182.

Preston, B 2006, *Nurse workforce futures: development and application of a model of demand for and supply of graduates of Australian and New Zealand pre-registration nursing and midwifery courses to 2010*, report for The Council of Deans for Nursing and Midwifery (CDNM).

Productivity Commission 2008, 'Trends in aged care services: some implications', *Commission Research Paper*, <http://www.pc.gov.au/research/commissionresearch/aged-care-trends>, accessed 22 February 2010.

- 2003, 'Evaluation of the Pharmaceutical Industry Investment Program', *Research Report*, AusInfo, Canberra.

Tilly, J 1999, 'Consumer-directed long-term care: participants' experiences in five countries', *American Association of Retired Persons*, Washington, D.C., http://assets.aarp.org/rgcenter/consume/ib36_ltc.pdf, accessed 22 February.

The Treasury 2010, *Australia to 2050: future challenges*, http://www.treasury.gov.au/igr/igr2010/report/pdf/IGR_2010.pdf, accessed 22 February 2010.

United States Department of the Treasury 2006, *Fact sheet: Dramatic growth of Health Savings Accounts (HSAs)*, United States Department of the Treasury, <http://www.ustreas.gov/offices/public-affairs/hsa/pdf/fact-sheet-dramatic-growth.pdf>, accessed 22 February 2010.

Victorian Government Department of Human Services (Vic DHS) 2004, *Public Sector Residential Aged Care Quality of Care Performance Indicator Project Report*, Aged Care Branch, Department of Human Services, http://www.health.vic.gov.au/agedcare/downloads/public_sectorm, accessed 22 February 2010.