# Providing and Financing Aged Care in an Aging Society

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*Abstract*: This article surveys the provision and financing of aged care in Australia. Demand for aged care will increase substantially as a result of population aging, with the number of Australians aged 85 and over projected to increase from 330,000 in 2006 to 580,000 in 2021 and to over 1.6 million in 2051. Meeting this demand will greatly strain the current system, and makes it important to exploit opportunities for increased efficiency. A move to greater beneficiary co-payments is also likely, though its extent may depend on whether aged care insurance and other forms of pre-payment can develop.

"Old age", Leon Trotsky famously said, "is the most unexpected of all things that happen to a man." But if becoming old catches us each by surprise, aging is one of the most predictable of all social phenomena, with far-reaching implications for our social and economic future.

In this article, we focus on one dimension of those implications – the impacts of population aging on aged care policy. We begin by considering the consequences of population change for the demand and supply of aged care; we then examine the effects of government policy as it has developed over the years in Australia; and lastly, we turn to the future financing of aged care.

## The demand for and supply of aged care

On current demographic projections, the number of Australians aged 85 and over will increase from 330,000 in 2006 to 580,000 in 2021 and then to over 1.6 million in 2051.[3] Underlying this trend are changes in life expectancy at the conventional retirement age of 65. In 1983, life expectancy at age 65 stood at 14 years for men and 18 years for women; by 2001-3, it had increased to 18 years for men and 21 years for women; it is expected to have increased further to 21 years for men and close to 24 years for women by 2021. Reflecting this increase in life expectancy post age 65, the number of the very elderly is expected to rise especially sharply, in the context of a population which, as a whole, is becoming more concentrated in the older age brackets.

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3 These estimates are from the ABS: see Linacre (2006).

As that process occurs, the challenge of providing long term care[4] of and to the elderly will become of increasing importance.

Two facts are central to this challenge. The first is that older cohorts are living longer than ever before, with a corresponding rise in the numbers expected to live beyond the age of 70 and hence to be at material risk of requiring care.[5] The second is that younger cohorts are having fewer children, which among other things, means they will have fewer voluntary carers to draw on when they reach old age. These trends alone – the sheer increase in the numbers of the very old, especially relative to the potential population of carers – make large and sustained increases in the demand for aged care inevitable.

However, the impacts on the structure of demand for care are also important, though more complex. At the moment, long term care is provided in three forms which broadly correspond to differing levels of acuity: domiciliary care (also known as community care), which mainly responds to situations where the need for care is relatively limited; low-level residential care, also referred to as care in a hostel; and finally, high-level residential or nursing home care, which addresses cases where a high level of ongoing nursing care is required. Residential care has historically accounted for the bulk of (public and private) aged care outlays (82% in 2006-07), with "high level care" in turn accounting for 68 percent of residential care days and 78% of public and private outlays on residential care in 2006-07.

Around 800,000 older people received aged care services in Australia in 2006-07.[6] The majority of these, over half a million people, received quite low intensity levels of support in the community through the Home and Community Care (HACC) Program, which is jointly funded by the Commonwealth and the states and territories. In general, these services (for example, meals on wheels, domestic assistance and home nursing) are delivered as individual interventions by organisations that are block funded. Average expenditure on HACC clients is about $1600 per client per year.

Some 55,500 people received packages of subsidised community care through the Commonwealth's Community Aged Care Package Program and its Extended Aged Care at Home (EACH) Program. These services differ from those provided under the HACC program as they are delivered as packages of care, usually involving case management. Community Aged Care Packages deliver a level of care equivalent to that provided in low-level residential care at an estimated average annual (total public and private) cost of $14,200. Extended Aged Care at Home packages deliver a level of care equivalent to that provided in high-level residential care at an estimated average annual cost of $41,700.

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4 "Long term care" refers to care provided for the treatment of chronic conditions, where the emphasis is on "care" rather than "cure". While long term care is required for many disabilities, the focus here is on the management of those chronic conditions associated with aging. In Australia, this is generally referred to as "aged care".

5 More than half (51.4%) of all women aged 70 and more than one third (34.1%) of all men aged 70 will require permanent residential care at some time in their remaining life. By age 85 these probabilities have grown to almost two-thirds (62.5%) and almost one half (45.6%) respectively. See Cullen (2007).

6 See Australian Department of Health and Ageing (2007a).

A further 202,500 people received subsidised permanent residential aged care at some stage during 2006-07, with an average of around 157.000 people receiving care each night. The estimated average annual (total public and private) costs of high-level and low-level residential care per recipient were $62,200 and $36,300 respectively.[7]

Community care, low level residential care and high level residential care define a notional continuum, in which care recipients move, as their ability to cope with the activities of daily living diminishes, from limited domiciliary care, to low-level residential care and then on (though often for very short periods of time) to high-level residential care.[8] This progression reflects the underlying economics of care provision: domiciliary care allows care recipients to retain the comfort of their own home, but imposes transport costs on non co-resident carers and foregoes scale and scope economies in the supply of care; in contrast, residential care secures economies in specialised infrastructure (including accommodation that is purpose-designed in terms of mobility and safety) and in the use of specialised resources (such as nursing staff), but at the cost of standardised accommodation arrangements and loss of close contact with the external community. As higher levels of disability require ever more use of the specialised inputs, relative to more general inputs such as conventional accommodation, it is generally cost-effective to provide the more intense levels of care in a specialised residential care environment.[9]

Whether movement along this continuum will remain the modal pattern is, however, questionable. Two, somewhat conflicting, factors are at work.

On the one hand, smaller differences in life expectancy between men and women[10] may reduce the demand for residential care as they translate into fewer years of widowhood –

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7 The costs of delivering community care packages and residential aged care are not strictly comparable as recipients of community care packages also directly meet their daily living costs.

8 Not all care recipients transverse the continuum. In 2004-05, about half of all discharges from Community Aged Care Packages were to residential aged care, with about 20% of discharges due to death. For care recipients who were discharged from the Extended Aged Care at Home Program, some 43% entered residential aged care with 36% of discharges being due to death. On the other hand, in 2002-03, fewer than 10% of permanent admissions to residential aged care were of people who had received care through a Community Aged Care Packages in the previous 90 days, although this share is likely to increase as the number of Community Aged Care Packages increases relative to the number of residential aged care places. About one-third of people with an admission into permanent residential aged care in 2002-03 had used HACC services in the previous 80 days. See Karmel (2005).

9 In recent years, some high-level care has been provided in the community through the EACH Program. In general, the delivery of this level of care in the community is made cost effective by the presence of an informal (and unpaid) carer. A strict accounting for the cost of this case option should also, of course, take into account any Carer Allowance or Care Payment received by the informal carer and any foregone income to that carer, as will the cost of any respite care received by the care recipient.

10 The diminished gap between male and female life expectancy translates into a changing male to female ratio in the older population. For the population aged 65 and over, there were 72 males per 100 females in 1984; by 2004, the ratio had increased to 81 males per 100 female. However, the difference in life expectancy for the very old population remains significant, with the ratio for those aged 85 and over being of 47 males per 100 females.

since loss of a family care-giver often precipitates a need for residential care.[11] This effect, which is partially offset by the increase in the number of persons who have never married or who are divorced or separated, may be accentuated by improved health among the "younger elderly"[12], as well as by the likely strong aversion of the "baby boomers" to institutionalised living and institutional forms of care.

On the other hand, the growth in numbers in the very elderly age brackets is likely to be associated with increased numbers of sufferers from dementia, extreme fragility and other serious impairments to the capacity to perform daily living activities, all of which usually require some form of intensive residential care.[13] More generally, while there will be a significant increase in the average number of years a person lives in the age brackets 65 and above, it will continue to be the case that aging will bring with it senescence and, consequently, molecular and cellular pathogenesis that degrades the functional integrity and homeostasis of the body.[14] These normal processes of pathogenesis will be accentuated by the rising population incidence of chronic conditions such as obesity, which appear more likely to give rise to increased morbidity in the older population than to increased mortality.[15] Especially in the "older old", these factors will translate into a requirement for substantial, ongoing and continuous assistance, usually involving residential care.

The overall result seems likely to be to create a growing need for two types of care provision.

The first is care that is provided in a person's home, including in congregated living arrangements – such as "life care" communities – that seek to integrate home and care. This type of care, which corresponds to the various forms of community care, should suffice for the growing numbers who have a reasonable, even if incomplete, ability to carry out basic daily activities, especially in circumstances where they also have spousal or family assistance. The strong preference of the "baby boom" generation for independent living is likely to make this kind of domiciliary care the option of choice for large sections of the aged population.

The second is care in residential facilities that provide for those who have little or very little ability to undertake basic daily living activities, and who need a high-level of close support – as in current "high care". Demand for this kind of care (and for high-level care

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11 The impact of differential mortality on demand for long term care is examined in Lakdawalla and Philipson (2002) and Lakdawalla and Schoeni (2003).

12 Today, the "younger elderly" or "younger old" are perhaps most commonly defined as those between 65 and 74, with the "older elderly" being older than this: see, for example, Alexander, et al. (2001). However, viewed more broadly, "younger old" refers to people who once were considered old, but who broadly remain as a group much more like non-old people of previous generations. As a result, the age group of the younger old has risen over time and likely will continue to do so.

13 The prevalence of dementia, for example, appears to double every five years after age 65. As a result, if current age-specific dementia rates remain unchanged, the prevalence of dementia will double by 2030. See Burns, Purandares and Craig (2002).

14 See US National Institute on Aging, National Institutes of Health (2002) and Gillick (2006, p. 124 and follows).

15 Reynolds, Saito and Crimmins (2005).

at home with a collocated informal carer) will rise as we experience a continued increase in the incidence of those chronic conditions – such as Alzheimer's disease, severe arthritis and serious visual and hearing impairment – that greatly reduce, if they do not eliminate, the ability to live without continuous assistance.

Conversely, demand for low-level care, which is intermediate between home care and on-going close support, may well decline as a proportion of total long term care as the "baby boom" generations come into old age. Low-level care facilities will, of course, remain of importance, if nothing else because the sheer scale of the increase in the older population will ensure continued substantial demand for residential facilities oriented to low, but not insignificant, levels of disability. Moreover, the demand for intermittent residential care services, again oriented to relatively low-levels of disability, is also likely to increase, probably substantially.[16] This kind of care will in many instances be provided in a low-level care setting. But while these factors will ensure that low-level residential care remains significant in absolute terms, its weight in the overall structure of care provision seems set to diminish.

As a result, demand for care is likely to shift from being a continuum that moves from home, into low-level residential care and then (often for only a short time) into high-level residential care, towards a pattern concentrated at the two ends of the spectrum.

At the same time, the temporal structure of care – i.e. the distribution of durations of care in the recipient population – is likely to change.

Thus, long durations are likely to become more common in high-level care, as that care becomes less of an immediate antecedent to death. Already, at all levels of frailty, residents with dementia remain in residential care for longer than other residents.[17] In part reflecting the rising incidence of dementia, over the last four years, the proportion of discharges from permanent residential care that were in care for at least two years after admission has risen by 1.9 percentage points (from 38.6% to 40.5%).

However, short stays will also remain common, and may become more so, both because of the greater prevalence of intermittent care and because many admissions continue to be as a result of acute events. In the last three months of 2006, for example, 10.9% of discharges from high-level residential care occurred less than one month after admission and 12.2% of discharges occurred between one to three months after admission, with 70.0% and 69.8%, respectively, of these discharges being due to death.

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[16] Older people living in the community at times require additional assistance, including residential care, for short periods, for example so as to allow carers to take holidays or otherwise temporarily reduce their load. Providing more services such as respite care (i.e. temporary accommodation in a residential care facility aimed at relieving the carer) will allow more older people to stay in, or return to, the community after a period of more intense care. As a result, provision of facilities for respite care is an important complementary element in a strategy aimed at facilitating primary reliance on community care.

[17] See Lindsay, Griffiths and Boero Rodrigues (2003).

As a result, the distribution of durations of residential care, which already is bimodal[18], may become even more so, with a bunching of durations at the relatively short and relatively long ends of the duration spectrum.

These changes in the level, structure and duration of demand will impose a significant adjustment burden on the aged care sector. The total supply of care will need to increase, with large absolute rises being required in the level of provision in each part of the aged care spectrum. For example, for current ratios of places available to the aged population to be met in, say 2025, an absolute increase of 83,100 places would be required in low care (as compared to a total number of low care places of 86,000 today), with the corresponding increase in high care being of 87,400 places (as compared to a total number of high care places of 81,700 today). At the same time, the structure of supply will need to shift, with larger increases in community care on the one hand, and high-level care residential care on the other.

Supply side adjustments will also be impelled by changes in the costs of the different types of aged care.

Community care often relies upon the presence of a co-resident informal carer.[19] Here somewhat offsetting factors seem likely to operate. On the one hand, a diminished gap in life expectancy between men and women is likely to reduce the number of years of widowhood, effectively increasing the supply of co-resident care. On the other hand, the increased numbers who have never married, or who are divorced or separated, will at least partially offset that increase in supply. Additionally, the greater scarcity of working age people in the future population will increase the opportunity cost of the choice to engage in informal caring, reducing the supply of informal care services. Finally, low birth rates in recent decades mean that the average older person will have fewer children from whom informal care can be sought. As a result, and on balance, the supply of informal care is likely to diminish relative to the size of the older population.

Given that demand for community care is likely to increase strongly, reduced supply of informal carers could impose substantial costs on the community care sector. Already the opportunity cost of informal care, measured as the reduction in paid employment due to caring, is estimated to be about 0.6% of GDP – that is, about 9.9% of the contribution to GDP (gross value added) of formal health care. The cost of replacing the work done by informal carers, were their services no longer available, is of course much higher. It has been estimated that if all hours of informal care were replaced with services purchased from formal care providers and provided in the home, the replacement value would be

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18 See for example, Xie, Chaussalet and Millard (2005).

19 When assessed by Aged Care Assessment Teams, older people living alone are more likely to be recommended for residential care than those living with a spouse or other informal carer. There is also evidence that older people who have access to informal care can remain living in the community for longer and enter residential care at a higher level of frailty. See, for example, Lincoln Gerontology Centre (2002). Projections of the availability of informal care are presented in: Australian Institute of Health and Welfare (2004), and National Centre for Social and Economic Modelling (2004).

about 3.5% of GDP (that is, about 62.2% of the contribution to GDP of other formal health care).[20]

The resulting difficulties will be made all the more acute by the fact that the supply of the formal aged care workforce will also face considerable pressure as the share of the population requiring care increases.[21] In effect, population aging seems likely to create an increased demand for hospital care, with here too, the sheer weight of the numbers moving into the higher age brackets more than offsetting possible reductions in the number of annual hospital bed-days required for each person in each age class.[22] The resulting growth in total hospital bed-days will require a corresponding increase in the medical labour force, forcing the aged care sector to compete for nurses and other specialised labour inputs in a tight labour market.

Significant innovations in the way in which services are delivered will be needed if these structural pressures are to be dealt with efficiently. These innovations will affect both the venues in which care services are provided – with forms of congregated, but not institutional, living likely to be important in reconciling the need for care with the baby-boomers demand for independent living – and the manner of service delivery (for example, in terms of the use of IT). Widespread diffusion of these innovations will need to be accompanied by shifts in the composition of supply, and most notably, by a re-weighting of supply towards care in the community on the one hand, and the more intensive forms of "high-level care" on the other.

Whether the aged care sector will have the flexibility required to effect these changes remains to be seen. Aged care in Australia developed initially primarily through the charitable sector and to this day, charitable and non-profit organisations (and state and local governments) account for some 68% of residential places and 95% of community care packages. While there are many respects in which supply by charitable and non-profit organisations can be highly socially efficient,[23] there is also evidence that those organisations find it more difficult to undertake supply adjustments.[24] It may well be, for

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20 Access Economics (2005). See also Productivity Commission (2003).

21 See Stone and Wiener (2001).

22 While 2005-2050 growth in the number of annual public hospital bed-days is expected to be slightly negative for those under the age of 50, that number is expected to rise by 150% for the population aged 60 and over, and by 320% for the population aged 85 and over. As a result, the share of hospital bed-days accounted for by the population aged 65 and over is projected to increase from 47% in 2005 to 67% in 2050. See Schofield and Earnest (2006).

23 It has been claimed, for example, that non-profit institutions may be less likely to opportunistically take advantage of vulnerable clients, so that supply of services by these institutions reduces the extent of the principal-agent problems in situations where clients are not capable of monitoring and enforcing service standards. It is also well-known that the greater the risk of such "skimping", the more likely it is that the gains from the reduced risk of opportunism outweigh the productive efficiency loss arising from reduced incentives for cost-minimisation associated with non-profit provision: see Hansman (1996). Put slightly differently, the more vulnerable the client population, the greater the role that altruism should play in service provision. As the very elderly, and especially those suffering from impairments such as dementia, are typically unable to monitor and enforce service standards, a significant role for non-profits in service provision may be efficient. A formal model setting this out is in Newhouse (2002).

24 See for example Hansmann, Kessler and McClellan (2002).

example, that their willingness to retrench in a timely way is reduced by the absence of a profit constraint, while their ability to expand is constrained by limited access to equity funding.

In short, demographic, social and economic pressures will impose a large and continuing adjustment burden on the aged care sector. While the absolute scale of service provision will need to increase sharply, the nature and composition of supply will also need to change, and far-reaching innovation will be required if community expectations are to be met. The preponderance of non-profit institutions in current supply may hinder the sector's ability to respond to these challenges. But however great the rigidities associated with non-profit supply may be, they are likely to be small compared to those that can arise from regulation. It is to a consideration of regulation and its effects that we now turn.

**The Role of Government**

In an ideal market economy, the role of public policy in aged care provision would be limited to putting in place a framework where market forces could provide individuals with care choices that matched their needs while ensuring an effective safety net for those with little ability to pay. Given the frail condition of many beneficiaries, and the difficulties involved in relying on market forces alone to regulate service quality in an activity where consumers are poorly placed to exercise either "voice" or "exit", such a framework would likely involve a relatively high degree of service quality regulation and other measures to address information asymmetries. Subject to the constraints imposed by that regulation, competition between providers would ensure that the industry adjusted to changing needs, including in terms of the balance between different types and levels of care.

In practice, however, the government role in Australia goes well beyond this. As matters currently stand, Australian governments – and the Commonwealth Government in particular – bear the primary burden of funding residential aged care, even where care recipients are capable of meeting those costs.[25] (The Commonwealth also funds community care, which provides care in the home, but shares that responsibility with the states and territories). Additionally, the Commonwealth extensively regulates care provision. That regulation extends not only to ensuring service quality but also to controlling the number, composition and location of the places made available. More specifically, the Commonwealth uses "planning ratios" that specify the number of aged care places that are to be made available as a function of the population aged 70 and over.[26] Access to these places is controlled through a process of needs assessment, based

[25] On average, the Commonwealth meets about 73% of the cost of providing high-level residential aged care and about 50% of the cost of providing low-level residential aged care.

[26] The planning arrangements, which specify the number and location of places, have been in operation since 1985. Originally the planning arrangements sought to provide 100 aged care places for every 1000 people aged at least 70. In recent years provision has been expanded in real terms and is scheduled to reach 113 aged care places for every 1000 people aged at least 70 by 2011. Over the last two decades the planning arrangements have placed greater emphasis on community care. Originally all 100 places were residential places but under the current arrangements 25 out of every 113 places are

on medical evaluations of disability that grade potential beneficiaries in terms of the degree of care that they require.[27] Through these controls over numbers, the Commonwealth rations the use of the service, thus controlling its fiscal exposure. The Commonwealth also regulates the prices that aged care providers can levy on their residents. While the costs incurred by about a third of residents are entirely borne by the Commonwealth (other than the basic daily fee of 85% of the age pension which is arguably a transfer payment by the Commonwealth), the vast majority of residents pay some part of the charges associated with these regulated prices, with the extent of this co-payment depending on income and assets tests. A notable feature of these tests is their exclusion from the asset base of the family home.[28]

Much of the complexity of these arrangements arises from the position of aged care at the nexus of health and social welfare policy, and from the complex development of those two policy streams in Australian history.[29] When introducing the *Invalid and Old-age Pensions Act 1908* into the Commonwealth Parliament, the then Treasurer, John Forrest, stated that, "No one is to receive an old-age pension unless he is unable to maintain himself.[30] This principle, which gives a primary role to means-testing, still largely guides income support arrangements. Thus, the maximum rate of the pension is set at a level that encourages self-provision. Self-provision is further encouraged and rewarded through the concessional taxation treatment afforded to superannuation and through the tapered income and assets means test.

In contrast, the health policy of successive Commonwealth governments has been chiefly inspired by the principle that access to publicly funded essential health care services

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community care places. The planning arrangements have also been rebalanced to place a slightly greater emphasis on high-level care. The number of subsidised residential aged care places is currently capped at 88 operational places for every 1000 people aged at least 70. The supply of service type within this overall cap is also controlled, so that 44 of every 88 places are primarily for residential high care and 44 are primarily for residential low care. Originally high-level care places were planned to account for 40% of all places. Under the current arrangements they are planned to account for 42.5% of all places.

Actual service provision ratios differ from these planning targets, largely because of the policy of 'ageing in place' (which allows a resident who enters a low care place for low care to remain in that place if and when he or she comes to need and receive high care). Reflecting that policy, around 58 of every 88 places are used for high care with the remaining 30 places used for low care. The number of subsidised community care places is currently capped at 25 operational places for every 1000 people aged at least 70, of which 4 in every 25 packages are for the equivalent of high-level care.

27 This assessment is currently done by Aged Care Assessment Teams ("ACAT"), which are funded by the Commonwealth but managed by the states and territories.

28 In general, residents pay a basic daily fee (85% of the basic age pension), an asset-tested contribution towards the capital cost of their accommodation (accommodation bonds and charges) and an income-tested contribution to the cost of their care. Capital contributions had been a feature of the hostel funding arrangements since their very beginning and a degree of asset testing was first introduced into those arrangements in 1987. Capital contributions were extended to nursing homes in 1997 and at the same time an asset tested Commonwealth contribution (the concessional resident supplement) was introduced for those unable to make a personal capital contribution. Income tested care contributions were also introduced in 1997. See Cullen (2003).

29 See Cullen (2003).

30 Australia, *Parliamentary Debates* (1908) p. 11948.

should be irrespective of means.[31] However, unlike social welfare policy, where means tests would be applied to ensure that the cost of care remained affordable for individuals who could not meet the full costs of their own care, health policy has sought to give individuals a sense of personal and social responsibility through the use of co-payments. In some cases, such as the Medical Benefits Schedule and private health insurance, the co-payment is unregulated, while in others, such as the Pharmaceutical Benefits Schedule, it is regulated. In the case of public hospitals, the co-payment is temporal (waiting time), rather than monetary. Counterbalancing the principle of universal access to tax-payer subsidised care, moreover, has always been the need to ensure that the cost of care should also be affordable to the Commonwealth (and in respect of public hospitals, the states and territories). Reflecting that need, access to assistance is subject to a clinical necessity requirement and, additionally, to quantity rationing.

Commonwealth involvement in the funding of aged care arose at the intersection of the pension (and more generally, income support) and health care systems. From the former, it inherited an emphasis on means testing. From the latter came an emphasis on universality of access, tempered by quantity rationing (enforced through the restrictions on the number of places) and by reliance on significant co-payments.

The consequences of this mixed approach have been extensively discussed in Professor Hogan's *Review of Pricing Arrangements in Residential Aged Care* (April 2004) and the basic economics of the situation have not altered materially since the time of Professor Hogan's review.[32]

Recent reforms, introduced in response to Professor Hogan's report, will significantly increase the overall level of supply of subsidised aged care places, better target the income and asset testing arrangements and improve the financing arrangements for high level residential care.[33] However, they do not alter the underlying rationing system that determines the supply of places. That rationing of places, while it does manage the Commonwealth's fiscal risk, creates an artificial scarcity that limits the scope for competition, blunts pressures for efficiency and innovation and deprives consumers of choice.

Thus, since the turn of this century, occupancy levels in residential care facilities have been in excess of 90% for low care and of 95% for high care, and though they have recently declined slightly (most probably as an temporary artefact of the construction of a significant number of new places), occupancy rates are likely to stay high for so long as the current planning controls persist.

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31 Although that is not to say that universality has consistently been achieved, nor ever been the sole objective of policy. See Gillespie (1991).

32 Hogan (2004).

33 See Australian Department of Health and Ageing (2007b).

This, in turn, means that suppliers face little threat of displacement and have limited competitive pressures to be efficient.[34] This localised market power is intensified because consumers seeking a place, especially in high care, are often doing so as a result of either a sharp deterioration in performance or the death of their spouse or carer: there is therefore an element of urgency in their search for a place. Moreover, they usually have strong preferences as to the location of the facility, and would incur a significant element of discomfort should they need to move from one facility to another. These features further increases the market power arising from rationing, and hence add to the blunting of pressures for efficiency.

The result is an industry structure which, while it does secure some important policy objectives (such as geographic equity of access), does not make the most efficient use of scarce resources.

As at 30 June 2006, some 1,276 businesses/organisations ('approved providers') were engaged in the provision of subsidised residential aged care through 2,929 outlets ('aged care homes'). There has been very little change in the number of aged care homes over recent years, although there has been some amalgamation of approved providers. The residential aged care industry continues to be highly disaggregated, with the average approved provider operating 2.3 aged care homes and 128.1 operational places in June 2006. Some 65% of providers operate only one home and 71% of providers operate less than 100 places. Many current providers seem too small to achieve economies of scale and scope; but the restrictions on the number of places make it difficult for entrants to secure a sufficient number of beds in any locality to themselves achieve scale and scope economies and displace less efficient incumbents.

The consequence is persistent technical inefficiency. Professor Hogan estimated that in 2001-02, the average technical inefficiency of the residential aged care industry, measured in terms of the difference between average practice and the technical efficiency frontier, was 17%. It is questionable whether that gap has diminished significantly since then. Thus, industry returns continue to be highly variable. In 2004-05, for example, the average net profit/loss per bed day varied from a loss of $7.31 (or a profit margin of -4.6% of revenue) in the lowest quartile of performance to a profit of $25.42 (or a profit margin of +15.9% of revenue) in the highest quartile of performance.

As well as blunting the incentives for efficiency, consumers' limited ability to exercise choice means that some form of price control is needed to prevent the abuse of localised market power. Reflecting this, most of the prices that can be charged by care providers are controlled by regulation.[35]

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[34] On the other hand, the regulatory constraints that are placed on provider's incomes do provide them with some incentives to achieve efficiencies.

[35] The Commonwealth sets the maximum fees that residents can be charged, with the important exception of accommodation bonds, which can only be charged in low care. There are no caps on the amount that can be charged for a bond (except that the resident must be left with a minimum level of assessable assets). In high care, no bonds can be charged (unless the resident is obtaining an "extra service" room), and the maximum accommodation charge that the resident can be asked to pay is currently $16.63 per day. Even in the small 'extra services' segment of the industry – where providers are

As with all forms of price control, there is a risk of allocative inefficiency, as the limited number of places may not be allocated to those who value them most highly. Additionally, there is a longer-term risk that prices will not be allowed to reach levels that cover efficient costs, compromising the incentives to invest, at least in those locations with high costs of service. The inefficiency created by the rationing of places may then be accentuated by distortions to the pattern of investment, with places ultimately not being available when and where they are needed. The fact that the regulated prices are largely geographically uniform[36], despite some variations in costs[37], makes the risk of inefficiencies all the greater. There is also the risk that the Commonwealth (as principal funder) may be paying above the level needed to cover efficient costs in some areas.

In short, the current arrangements, while likely relatively effective in providing for equitable access to aged care services, achieve that goal through a complex tangle of quantitative restrictions that impedes supply flexibility and limits competition. The lack of competition, and the desire to limit the Commonwealth's fiscal exposure, then give rise to price controls, that though extensive are of very differing degrees of effectiveness. Consumers face restricted (and distorted) choices in terms of the range of care available, and charges that are often difficult to understand as a result of the interaction of complex prices with even more complex income and assets tests. Recent changes to policy do move broadly in the right direction in addressing these issues; but there remains a need for more comprehensive reform, which by its nature will take some years to devise and effect.

Above and beyond the efficiency issues we have already noted, it is questionable whether the current arrangements are fully sustainable. It is to the issue of the future financing of aged care that we now turn.

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allowed to charge residents higher prices in return for improved hotel and accommodation services – providers must first have their prices (but not the size of the accommodation bonds they levy) approved by the Department of Health and Ageing and can only change the prices they charge once every twelve months.

[36] Commonwealth subsidies for residential aged care are, in general, paid at a national rate dependent only on the assessed needs of the care recipient. A viability supplement is paid to some aged care homes in rural and remote areas in recognition of the additional costs of providing care in those areas. The supplement can be up to $8,500 per resident per annum – ie, a 20% and 60% premium on the average Commonwealth payments for high-level and low-level residential care respectively.

[37] For example, cost estimates for the construction of an aged care home in 2006 varied from between $90,600 and $97,700 per place in Adelaide to between $104,900 and $113,100 in Brisbane, see Rawlisons (2006). Similarly, nursing wages, which are a significant driver of care costs, vary between jurisdictions. For example, as at 1 September 2007, the top pay point for a Registered Nurses Grade 1 varies from $1110.36 in New South Wales to $963.45 in South Australia, see Australian Nursing Federation (2007).

**Providing for Aged Care Costs**

Over the coming decades, funding aged care will place a growing burden on the community. Currently, 1.2% of Gross National Income ("GNI") goes on the provision of residential aged care and community care packages. Under current policies, public and private expenditure on aged care will more than double to 2.9% of GNI by 2046-47.[38]

At the moment, the bulk of aged care funding is provided by the Commonwealth through consolidated revenue. Funding aged care in this way amounts to requiring current tax-payers, who are mainly in the labour force, to pay for the costs of caring for older Australians.

There is clearly a case based on social equity for the community to continue to fund the cost of long term care for those older Australians who could not do so themselves. Moreover, the modern theory of efficient taxation suggests that under reasonable assumptions, a lower degree of inequality in incomes (or more generally, in living standards) is necessary or justifiable in the older population than among working-age income earners.[39] In a "pay as you go" system, this redistribution occurs primarily through a shift in income from the working population to those who are retired.

The extent of the inter-generational wealth transfer this entails should not be exaggerated. An effect of Commonwealth funding of aged care is to protect the bequests made by long term care recipients to their heirs. The exclusion of the family home from the assets tests used in determining eligibility for aged care subsidies is of central importance in this respect, as the family home is the primary asset most older Australians own and are in a position to pass on. As a result, the extent of the redistribution effected by the existing "pay as you go" system depends on the degree to which the taxes used to cover current aged costs are correlated with the bequests that are being preserved. As that correlation seems likely to be quite high, the system may cause fewer intergenerational transfers than commonly thought.

This also means that an increase in the degree of means-testing of aged care assistance may not be as favourable to current taxpayers, in terms of their lifetime income position, as superficially appears to be the case. In effect, the immediate impact of increased means-testing is to induce more rapid asset decumulation among the elderly, which

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[38] Estimated by applying the current public/private split of funding (69%/31%) to estimates of public expenditure on residential aged care and community care packages. See Australian Government (2007). Similar estimates have been derived by: Productivity Commission (2004).

[39] Especially among the very old, tax/subsidy arrangements do not directly affect labour/leisure choices, though they may give rise to other distortions (such as in the composition and bequesting of assets). As a result, their impact on labour/leisure choices depends on their effects on those choices during working life. Given some myopia in the treatment of distant future income, future income transfers (including in the form of subsidised access to aged care services) will have a relatively weak effect on work effort. At the same time, normal risk aversion implies gains from equalising ex post incomes. The net result is to make the efficient extent of income inequality lower among the elderly than it is in the working age population. See generally Diamond (2003, particularly chapters 3 and 4).

reduces expected bequests to the younger cohorts that currently bear the bulk of the tax burden.[40]

Additionally, greater means-testing of aged care assistance is effectively a tax on asset accumulation during working life. This can reduce the incentive for life-time savings, as well as distorting accumulation choices towards assets that escape the means-testing. These impacts need to be set against any efficiency enhancement that means-testing (or increased means-testing) may allow in terms of immediate reductions in tax burdens and associated tax wedges.[41]

These considerations have not prevented the contribution beneficiaries of care make to their aged care costs from rising significantly in recent years. Thus, while new entrants to high-level residential care paid approximately 21% of their residential care costs in 1995-96 (the remainder being covered by payments from the Commonwealth), that proportion had risen to 29% in 2005-06. New entrants to low-level residential care paid approximately 40% of their residential care costs in 1995-96 and that proportion had risen to 57% in 2005-06.

The financial burden aged care costs can impose on older Australians is already material. For example, some 25% of female and male part-pensioners with total income of $30,000 per annum and assessable assets of $160,000 who enter permanent residential low care will face an additional lifetime cost of more than $78,000 and $48,000 respectively (over and above the normal living costs they would have met if they had not entered residential aged care). Similarly, 25% of female and male self-funded retirees with total income of $60,000 per annum and assessable assets of $280,000 who enter permanent residential low care will face an additional lifetime cost of more than $153,000 and $94,000 respectively. If they choose to receive permanent residential care on an extra service basis, then 25% of women and men with this level of wealth will face an additional lifetime cost of more than $257,000 and $157,000 respectively.[42] These are clearly substantial amounts, even relative to average (much less median) wealth levels.

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40 Of course, as the population ages, the average age of inheritors rises. This means that the direct beneficiaries of the bequests the current funding preserves may themselves not be all that young – indeed, one suspects the current arrangements largely protect bequests to the baby boomers (who are themselves approaching retirement). But they too will have inheritors (albeit fewer of them), who will ultimately benefit from any preservation of bequests.

41 Increased means-testing, which implies an increase in the co-payment rate, may also reduce the extent of inefficient moral hazard. However, as noted above, moral hazard is unlikely to be significant, at least in the demand for high care residential care.

42 See Cullen (2007).

Despite those increases, it is likely that the Australian arrangements are still at the relatively redistributive end of the international spectrum[43], and that pressures for a further move to "user pays" will persist, regardless of which political party is in office.

This is most obviously because the burden on taxpayers and on the Commonwealth budget associated with the existing arrangements seems likely to increase sharply over time. While aged care funding currently consumes about 3% of Commonwealth revenues, by 2046-47, Commonwealth expenditure on aged care is projected to grow (on current policy settings) to about 9% of Commonwealth revenues (assuming revenues remain at their long term average of about 22% of GDP). As noted above, the *Intergenerational Report 2007* projects that Commonwealth aged care expenditure will increase from 0.8% of GDP, currently, to 2.0% of GDP by 2046-47. This is lower in absolute terms than the projected increase in heath costs, from 3.8% of GDP to 7.3% of GDP, and on the age pension, which is projected to increase from 2.5% of GDP to 4.4% of GDP. However, the rate of growth in expenditure is the highest in aged care. The pressures to reduce this growth, and to see more of the cost borne by beneficiaries, are therefore likely to become progressively greater. This raises the question of whether a further increase in the co-payment rate is feasible, much less desirable.

**Increasing the co-payment rate**

An immediate constraint on placing a greater share of the cost of long term care directly on beneficiaries is the income available to older Australians. Out of the population of Australians aged 80 or over, 72% of men and 83% of women have Government pensions and allowances as their main source of cash income.[44] Moreover, although older Australians have significant assets, those assets are very unevenly distributed, despite the growth in superannuation holdings, and for most older Australians, consist mainly of the family home[45]. Particularly for the very elderly, securing greater labour income is not an option, further limiting their ability to respond to adverse relative price increases (such as an increased co-payment rate for aged care).

It may be that markets would respond to an increased co-payment rate for aged care through the further development of financial products that allow consumers to convert relatively illiquid assets into current income. Given the portfolios typically held by older Australians, the most relevant product of this type is the reverse mortgage, by which home owners can secure a non-recourse loan on which repayment only becomes due at the time the home is vacated. While reverse mortgages are becoming more widespread, there are some significant constraints on their potential.[46]

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43 Comparing the incidence of aged care costs is complex because it depends on the interaction of tax and transfer systems: see Karlsson, Mayhew and Rickayzen (2007).

44 See Linacre (2006). That said, many older Australians do have some access to additional cash funding. Thus, according to the ABS (2006), while 13% of all persons would be unable to raise $2000 in a week for something important, the proportion for those aged 65 and over living in couple-only households was 7.1% and for those aged 65 and over living alone it was 12.7%.

45 Headey, Marks and Wooden (2004).

46 See especially Mitchell and Piggott (2004).

Reverse mortgages are a non-recourse product, which means that the mortgagee bears the risk that the home, at the time of sale, is worth less than the outstanding amount of the loan. As a result, the mortgagee has some exposure to adverse selection by mortgagors who have a high expectation of prolonged tenancy in homes, who are in homes that are particularly vulnerable to price depreciation, or both.[47] In practice, this adverse selection risk may not be all that great.[48] Of greater significance is the fact that the owner of a portfolio of reverse mortgages is exposed to correlated risk, arising from three features of reverse mortgages: since repayment is only made once the property is vacated, the amount of the loan increases over time, rather than decreasing as it does in a standard mortgage; the amount at risk therefore rises with longevity, but shocks (such as advances in medical technology) that increase longevity for one mortgagor may well increase it for all or many mortgagors; finally, given the non-recourse nature of the loan, adverse trends in house prices, which cause negative equity on some loans, may deteriorate the value of significant sections of a mortgagee's loan book.

This exposure of mortgagees to correlated risk naturally limits the loan volumes they will make available, as well as increasing the cost of those loans. As a result, even though the reverse mortgage market seems set to continue growing rapidly (albeit off a low base), the degree to which older Australians can access housing wealth without selling their home is likely to remain quite severely constrained. In addition, given that entry to residential aged care often occurs after 20 or more years of retirement, it is likely that in many cases older people will have exhausted their reverse mortgages for retirement income prior to entry to residential care.

In short, though reverse mortgages and similar products may help recipients of aged care "unlock" some income streams, the extent of the likely impacts seem relatively small.

Another option would be to introduce a targeted element of pre-payment into the funding of aged care: that is, some mechanism by which future beneficiaries could set aside the amount needed to cover some or all of the care costs they were ultimately likely to incur. Potential beneficiaries would, in other words, be encouraged or required to save enough to help cover future aged care costs.

Raising this question is not to imply that there is necessarily anything inherently undesirable in "pay as you go" approaches. Thus, while current income earners might resent paying for the care costs of the elderly, the reality is that they too would at some point impose a cost on cohorts younger than their own. Moreover, if productivity is rising over time – as it historically has – then it is sensible not to "pre-save" today all that is

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47 There is also a moral hazard problem associated with the risk of deterioration in the quality of the house against which the loan is being made. Contractual conditions that go to required maintenance outlays can help deal with this moral hazard issue.

48 Davidoff and Welke (2004), find little evidence of adverse selection in a sample of reverse mortgages. They attribute this to the fact that the types of people who wish to take equity out of their homes through reverse mortgage borrowing are also likely to take out the remaining home equity by selling their homes, so that the duration risk associated with the pool of actual mortgagors is lower than associated with potential mortgagors – a form of advantageous selection – rather than to any ability of the mortgagee to prevent adverse selection occurring.

needed to pay future care costs, as doing so would unnecessarily reduce current consumption.

However, the risk with "pay as you go" approaches is that they can prevent sufficient savings from occurring now to allow future burdens to be met without an unjustifiably large sacrifice to consumption. In other words, just as we might "pre-save" too much, so the belief that future generations will pay for care costs might induce us to "pre-save" too little. This could be harmful, as it might induce future generations not to respect the commitment to pay for care costs, imposing unneeded harm on older Australians. Moreover, even were that commitment respected, doing so in a situation where too little had been set aside would unnecessarily harm the living standards of then current taxpayers (as high tax rates would be needed) as well as reducing national income through the disincentive effects of high taxation.[49]

The question then is whether some form of pre-payment for long term care costs is feasible and what form such pre-payment could most efficiently take.

**Pre-paying long term care**

The risk of incurring long term care costs is significantly, though not entirely, a function of longevity.[50] The longer one lives, the greater the likelihood of needing aged care; and if one lives for much longer than one's cohort, one is likely to need aged care for longer. Insurance for the cost of long term care therefore involves a substantial element of insurance against longevity risk.

Traditionally, insurance against longevity risk was provided by defined benefit superannuation schemes. These schemes amounted to buying an annuity, which provided an income stream for life in retirement. The move from such defined benefit schemes to defined contribution schemes has, somewhat paradoxically, removed this form of longevity insurance just as population aging makes longevity risk a matter of greater concern.

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[49] That said, it is not obvious that there is any macroeconomic sense in which current savings levels in Australia are undesirably low: see Gruen (2005). Moreover, there are obvious issues about whether a further rise in savings aimed at pre-paying aged care costs might be offset by reductions in other forms of savings. This is not to suggest that savings behaviour accords with Ricardian equivalence (a claim inconsistent with the available evidence), but that further increases in mandatory forms of savings may have a higher offset than the previous increases appear to have had.

[50] The lifetime risk of entering aged care at least once rises steadily from age 65 to the early 90's. For men, the remaining lifetime risk of receiving permanent residential aged care reaches its maximum at age ninety-one, when it is 49.7% or 9.3 percentage points greater than the remaining lifetime risk of first admission at that age. For women, the remaining lifetime risk of receiving permanent residential aged care reaches its maximum at age ninety-two, when it is 66.0% or 15.9 percentage points greater than the remaining lifetime risk of first admission at that age: see Cullen (2006a, at pages 5 and 6). That said, it may well be that the mean duration of a stay falls, the higher is age on entry, which would mean that the expected income loss associated with the risk of requiring long term care does not increase as rapidly as the underlying hazard rate. However, the wealth effect may still be significant, as a person who enters long term care at (say) 90 is likely to have exhausted more of their wealth by that time then someone who enters long term care at (say) 75.

To some extent, the problems this could create are eased by the very fact that the spread of superannuation, even in its defined contribution form, means that ever more Australians will enter old age with some savings set aside. Those savings will provide a cushion that can be used to contribute to aged care costs. However, the fact remains that in defined contribution schemes, it is superannuants that, unless they purchase annuities, are the bearers of longevity risk; moreover, annuities (which would shift the longevity risk on to the issuer) generally have high loadings and low rates of voluntary take-up[51]. It is of course possible for public policy to seek to incite greater annuitization – indeed, there are jurisdictions (such as the UK and Germany) where some degree of annuitization of retirement savings is mandatory. However, even were that to occur, it seems unlikely that the amount of those annuities could realistically provide for long term care costs[52] – much less do so efficiently.

The inefficiency of relying on annuitization of retirement savings to provide for long term care costs arises from the fact that although use of long term care will become more widespread, there will still be considerable unevenness in the distribution of long term care use among the older population.

Thus, on best current estimates, almost half (49.9%) of women and a third (31.9%) of men aged sixty-five will enter permanent residential aged care at some time in their remaining life. Of those who do enter permanent residential aged care, women stay for 3.5 years, on average, while men stay for 2.3 years, on average. However, actual durations of care vary considerably. More specifically, some 36.0% of residents stay for less than one year (45.8% of men and 30.3% of women) with 17.1% of residents staying for less than three months (22.6% of men and 13.8% of women). On the other hand, 21.3% of residents stay for at least five years (13.6% of men and 25.8% of women) and 4.6% of residents stay for at least ten years (2.6% of men and 5.7% of women).[53]

These variations in hazard rates imply considerable unevenness in the distribution of expected care costs within the elderly population. Given that unevenness, a pure savings scheme would either result in savings that were inadequate to cover care costs (if most households saved less than the risk they were exposed to), or alternatively, if large numbers saved enough to cover potentially high exposures, the elderly would be forced to make larger bequests (and hence have lower lifetime consumption) than they desired.

Rather, it would seem more efficient to allow the risk to be pooled through some form of insurance targeted at long term care. The question then is the extent to which the risk of long term care possesses the characteristics required for a risk to be insurable.

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51 See for example Poterba (2001).

52 This is all the more the case given the relatively low-levels of current superannuation entitlements. Estimates suggest that the median superannuation savings of female "baby boomers" in 2004 was only $8,000, while that of male "baby boomers" was $30,700 – clearly not enough to fund retirement, much less make a significant contribution to long term care costs: see Kelly (2006).

53 These estimates are drawn from Cullen (2006a at page 7). See also Cullen (2006b).

Historically, it has not proved to be so in Australia; with the most recent attempt being abandoned in 1981 with the following comment from the then Health Minister:

> Nursing home patients are, strictly speaking, uninsurable through voluntary insurance in which guaranteed benefits without discrimination or exclusion are made mandatory; and the arrangement represents an inequitable liability for the bulk of the people with hospital insurance … the government also believes that this measure will further assist in containing the cost of health insurance.[54]

Nevertheless, prima facie, there is no obvious reason why it should not be possible for private insurance markets to offer insurance against long term care costs. Thus, the event that would be insured is definable: it is, in other words, possible to determine whether or not the event "a need for long term care" has indeed occurred, through assessment instruments that measure the extent of disability.[55] Moreover, the losses associated with long term care costs have a probabilistic character: while the likelihood of ever requiring long term care is relatively high, the duration of that care, and hence its costs, varies greatly within the population, in ways that are amenable to statistical characterisation. Finally, given annual long term care costs of $50,000 or more, the severity of the event occurring should be high enough to induce risk averse individuals to finance the loadings (associated with underwriting and other administrative costs) needed to make an insurance product viable.

Given these features, it is unsurprising that insurance products aimed at covering long term care costs exist in a number of countries. (Indeed, as we have noted, such insurance was part of the aged care arrangements in Australia in the period to 1981.) However, experience in Australia and overseas suggests that the widespread development and take-up of these products encounters substantial difficulties.[56] Three factors seem to be involved.

First, there are many complexities involved in devising and properly pricing long term care insurance products.

To begin with, the risks associated with the need for long term care may not be independent, in the sense of being uncorrelated across the population. This is because the factors that increase longevity for any one member of a cohort (say, advances in medical technology), may also increase longevity both for other members of that cohort and for succeeding cohorts.[57] This correlated risk limits the scope for intra- and inter-generational risk pooling and means that insurers would need higher reserves, which in

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54 Australia, *Parliamentary Debates* (1981) p. 2919.

55 Moreover, substantial efforts are underway to achieve international standardization in needs assessments: see Milbank Memorial Fund (2003).

56 For the US, see Brown and Finkelstein (2004), who report that long term care insurance accounts for only 4% of US long term care payments, while health insurance generally covers 35% of US health outlays as a whole. For the UK, see Johnson (2006), who reports very low take-up rates for private long term care insurance in the UK, and the withdrawal of most UK insurers from the field.

57 Cutler (1996).

turn implies that loadings would be higher (or exclusions and limitations greater), reducing demand.

Moreover, an insurance instrument for long term care that was narrowly drawn – say, in only covering residential high care – would likely be inefficient, in that it would perpetuate existing forms of care at the expense of innovation in care delivery (which could increase the relative efficiency of domiciliary care). However, an instrument that covered a wider range of forms of care could be materially exposed to adverse selection (that is, the danger that only those who are likely to need high payouts take out the policy, causing the insurer to bear net losses) and especially moral hazard (the risk that once insured, the holders of insurance will have every incentive to make use of any benefits the policy provides).

Finally, the need for long term care is not merely a question of health status but also of the availability of informal, and especially spousal, care. As a result, an efficient long term care insurance policy needs to condition not only on the insured's health condition but also on his or her family circumstances. However, there is little experience with the design and actuarial assessment of these products and hence the risk and loadings they involve are likely to be high, especially in the initial phases.[58]

As a result, it remains to be seen whether the insurance industry is capable of generating products that provide reasonable cover for care costs at affordable premiums.

Second, as well as these issues on the supply side, there are important demand side constraints on the development and widespread take-up of effective long term care insurance.

The most obvious constraint on demand for care insurance is the fact that the Commonwealth assures, and will continue to assure, access to a high quality safety net service through Commonwealth funding of aged care (essentially a publicly funded insurance arrangement). While this has obvious benefits in terms of equity of access, protecting the dignity of older Australians, and more widely social cohesion, it inevitably reduces the incentives for individuals to make provision for themselves.

The scope for "extra service" may partially offset this disincentive effect. However, in a means-tested scheme, it will likely remain the case that any payments made for that service will be offset against the Commonwealth subsidy. This reduces the net benefit to the insured, as the "cost" to the insured of the extra care is the sum of the direct cost of that care (reflected in the insurance premiums, along with a loading) and the foregone subsidy. As a result, even in a system where "extra service" options are available, some "crowding out" effect will persist.

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[58] There are policy designs insurance companies can use to deal with this, at least to some extent. For example, some long term care insurance policies in the US cap the length of coverage provided, but allow this to be extended to the extent that full or partial "self" provision of care, including at home, is undertaken. The actuarial issues involved in pricing joint conditioning policies are discussed in Karlsson, Mayhew and Rickaysen (2006).

Even putting this "crowding out" effect aside, demand may also be affected by complex behavioural factors.

To begin with, although it is not clear how much weight should be placed on this, potential insureds may be reluctant to purchase insurance if this makes it more likely that their children will place them in long term care (or limit their supply of informal care) in circumstances where they would otherwise choose not to.[59]

Moreover, given the cost of long term care, it is not realistic to expect those currently close to or in retirement to obtain a high degree of insurance coverage against long term care costs: the premiums they would have to pay would be so high as to make obtaining insurance unattractive, if not unaffordable. This is both because they would need to accumulate a claim in a relatively short space of time and because, having made it to retirement, they are more likely than the population overall to make it to the age at which there is very high demand for long term care.[60]

Rather, long term care insurance is most likely to be affordable for younger consumers, who could accumulate a claim over a life time and in any event form a more diverse risk pool. However, those younger consumers are unlikely to be much concerned about long term care. Rather, there is considerable evidence that consumers under-estimate the potential value of income claims that are in the relatively distant future, claims that they may discount at hyperbolic rates.[61] The fact that those consumers would need to pay insurance loadings for many years before claiming would likely reduce the attractiveness of these insurance products even further. And even if those consumers are concerned with health costs in old age, they may not want to split up their savings into smaller buckets (including one dedicated to aged care costs), as each such bucket involves some transactions costs and loss of diversification benefits.[62]

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59 This is one of the factors cited by Mark Pauly as explaining low-levels of take-up of long term care insurance: see Pauly (1990). However, were this factor strong, one would not expect to see widespread support among the elderly for public long term care insurance.

60 In other words, the risk of adverse selection is higher for insurers supplying long term care insurance to older buyers. This will be reflected in loadings, making the insurance product relatively unattractive. Brown and Finklestein (2004) estimate for the US that the typical long term care policy purchased and held until death has a loading of 0.18, as against a typical loading of 0.06 to 0.10 on purchased acute health insurance policies.

61 See Cutler and Zeckhauser (2004).

62 Indeed, even older consumers seem unconcerned. A recent survey of 7000 Australians aged at least fifty for the Australian Housing and Urban Research Institute has confirmed that older people and people approaching retirement do not tend to plan ahead, especially with respect to their future health and aged care needs. Respondents to the survey argued that too much planning was a waste of time as health expectations are unknowable and that frequent changes in Government policy also make it impossible to plan sensibly for the future. Almost a fifth of all respondents, and almost a quarter of respondents aged fifty to fifty-nine, indicated that they had given no consideration to how they would pay for their future aged care needs. See Olsberg and Winters (2005).

As a result, it is not apparent that voluntary demand for long-term care insurance would be sufficient to make this an attractive market for insurers.[63]

Third and last, a move to a situation in which a greater share of long term care costs was covered by pre-payment would involve complex **transition** issues.

As noted above, those potential users who are at material risk of needing long term care in the very near future are likely to be effectively uninsurable. As a result, their costs will have to be largely covered under current "pay as you go" arrangements and hence will fall mainly on the working age population. However, that population would at the same time need to start accumulating the claims on whatever pre-payment instruments were going to fund (or contribute to funding) their eventual use of aged care. As a result, in the transitional phase, the working age population would face a "double whammy", whose incidence would depend on the speed with which any such transition was being made.

Of course, greater longevity may itself ease this problem, as it implies that there is a longer period of time separating the current working age population from entry into aged care. Nonetheless, the need to manage a period in which there is both a tax burden **and** a pre-saving burden on the working age population may affect the rate at which any transition to a different funding model occurs.

In short, experience to date is not encouraging as regards the development of efficient, voluntary forms of pre-payment for long-term care. Superannuation alone is unlikely to be sufficient, at least in the relatively near term, for the vast majority of Australians. Annuities might provide a means of procuring some additional coverage against longevity risk, but the market for suitable annuities products is not well developed. Moreover, seeking to cover the risk associated with long term care costs through annuities alone would likely imply inefficiently high-level of bequests. Finally, the most direct form of cover – long term care insurance – has not proved effective, at least in jurisdictions where it has been available on a voluntary basis.[64]

This is not to deny or overlook the inventiveness of financial markets and the incentives participants in these markets have to develop instruments that could help individuals meet long-term care costs. Providers of long-term care may also have incentives to assist in the development and commercialisation of relevant savings products. Moreover, it may be that these products could be constructed out of combining existing products – for example, through annuities that provide additional income on the occurrence of defined events. However, even accepting each of these points, the fact remains that there is a

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63 This conclusion is consistent with Brown and Finklestein (2004), who find that the greatest obstacles to the more widespread use of long term care insurance lie on the demand side.

64 One of the few jurisdictions where long term care insurance appears reasonably widespread is Germany. However, it is arguable whether that insurance is genuinely voluntary; rather, it is essentially a complement to, and a means whereby high income earners can opt out of, a compulsory savings scheme based on income-linked contributions (which exceed the cost of private long term care insurance for high income earners). A significant number of self-employed, who are not covered by the compulsory scheme, have no long term care insurance cover, suggesting the insurance is not attractive to those who can avoid the levy.

substantial "chicken and egg" element to the current equilibrium: comprehensive, Commonwealth-funded, coverage reduces the incentives to save for future care costs; this means that markets for most of the potentially relevant products are thin, accentuating adverse selection risks and in any event compromising the ability to achieve scale economies; this is reflected in a cost penalty which further reduces demand; with the result that very few long-term care beneficiaries are covered by these products, making it politically and socially difficult to increase the co-payment rate, even in a phased manner.

**Going forward**

Internationally there would appear to be a general consensus that the ageing of the population will drive the need for reform in long term care.[65] Any reform of long term care in the Australian context needs to balance the needs of social policy – for example, ensuring equity of access, including in geographic regions not normally amenable to market forces, and addressing the information asymmetries inherent in health markets and especially prevalent in the long term care market – with those of fiscal policy, while providing greater scope for competition, service differentiation and innovation than current arrangements permit.

While reform can help ensure aged care provides "good value" to consumers, the reality is that younger Australians face a future in which they will have to provide a potentially rising share of aged care costs. If it is a goal of policy to prevent future tax rates on income earners from having to rise substantially, some savings would need to be set aside now to fund future aged care costs.

Some of that savings can be done through Government running a budget surplus. However, there could be efficiency gains if individual consumers can provide for themselves, be it by accumulating the assets required to self-insure against long term care costs or by purchasing financial products that supply that insurance.[66] Moreover, a move in that direction seems consistent with a general approach of encouraging individuals and families to take a responsible approach to the future and thus be able to exercise greater control over, and choice in, the aged care services they consume. Additionally, greater private sector involvement – including through insurers covering care costs – could make for innovative approaches to care provision and for better monitoring of care providers, as private health insurers are now beginning to do in respect of hospitals and of chronic disease.

In short, though the Australian aged care system preforms well in terms of the quality and scope of service provision, governments will need to face important issues about the system's sustainability and efficiency as population aging progresses. As a result, the provision and financing of aged care is likely to become an ever greater area of policy attention in the years ahead.

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[65] See, for example, OECD (2006).

[66] The extent and limits of those efficiencies are discussed in Lindbeck and Persson (2003).

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