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Citation: Mayhew, L., Karlsson, M. & Rickayzen, B. D. (2010). The Role of Private Finance in Paying for Long Term Care. *Economic Journal*, 120(548), F478-F504. doi: 10.1111/j.1468-0297.2010.02388.x

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THE ROLE OF PRIVATE FINANCE IN PAYING FOR LONG TERM CARE*

Les Mayhew, Martin Karlsson and Ben Rickayzen

An ageing population and increased longevity means that long term care will become progressively more expensive. In 2009 the Government published a Green Paper on future funding options and a White Paper in 2010. This article considers the role of private finance products under the 'Partnership' option. It finds that few households are able to pay for LTC based on income and savings but the number increases if housing assets are included. We show that products can be devised for a range of circumstances, although state support would need to continue. We propose a simplified means testing system based on a combination of income and assets.

On 14th July 2009 the Government published its Green Paper on the future of long term care, 'Shaping the Future of Care Together'.¹ This represented another important chapter in the long history of reviews, reports and government papers starting with the Royal Commission on Long Term Care in 1999² and is illustrative of the huge public and political interest that this topic evokes and the difficulties of achieving a system of care that everyone can sign up to. Key proposals included in the Green Paper are the creation of a 'National Care Service' in England based on a system that is 'fair, simple and affordable'. It would include a unified system of needs assessment in which everyone would get a 'proportion of their support costs paid for'. Services would be designed around the individual and there would be greater choice and control over how support is received.

On 30th March 2010 the Government published its long awaited White Paper³ after extensive consultation and public debate following on from the Green Paper. The gist of the White Paper was that the Government confirms its intention to set up a comprehensive National Care Service. The idea was that in the Parliament after next, every citizen will be entitled to care which is free at the point of use and that every adult who can afford to will be asked to contribute to the scheme. However, on the key question of precisely how the new system should be funded the Government decided to refer the issue to a national commission which would be set up after the forthcoming General Election, assuming that a Labour Government was returned (which it was not). Other significant proposals such as providing free personal care at home to those with the greatest needs and providing free care to anyone who has been in residential care

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We gratefully acknowledge the helpful comments of the two anonymous referees. This article is based, in part, on work undertaken at the formative stages of the 2009 Green Paper on behalf of Department of Health in 2008, and on subsequent research commissioned by the City of London and discussed at an event chaired by the Lord Mayor held at Mansion House in September 2009.

¹ *Shaping the Future of Care Together*, Department of Health, available at http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_102338

² See HMSO (1999).

³ *Building the National Care Service*, available at http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_114923.pdf

for more than 2 years were similarly dependent on the outcome of the General Election. Hence, there remained a great deal of uncertainty, especially around the key question of funding.

In view of the above mentioned uncertainty surrounding the White Paper, we take a step back and examine the original Green Paper proposals. We do this from a private finance perspective in a way that seeks to complement the Government's proposals rather than suggest alternatives. We use the term *social care* to describe the support given to people who are elderly, infirm or otherwise unable to carry out normal activities of daily living and who require some form of assistance provided in the home or in institutions. We also use the term *long term care* or *LTC* specifically for institutional care. It is important to distinguish social care from health or nursing care, the main function of which is to administer medical treatment and nursing care and is free under the NHS. The failure to recognise this distinction is most probably the basis for the general misconception that social care is free under the NHS, the result of which is that most people are unprepared for the financial consequences of what may lie ahead in old age.

As an illustration of the financial scale of providing social care, the Green Paper notes that a typical 65 year old would need care and support costs totalling £30k (excluding accommodation costs) during their remaining life. However, this figure is subject to large variation depending on the levels and duration of care so making it difficult to plan for. For the UK, the probability that a 65-year-old woman in full health ever requires nursing home care is around 35%. For males, the corresponding probability is 25%. If we define disability more broadly and include moderate disability, the probabilities are 51% and 37%, respectively (Rickayzen, 2007).

0.1. *Green Paper Proposals*

The approach taken in the Green Paper is based on soliciting the public view on different options for reform of the present system but studiously avoids any detailed analysis except in general terms only. The five funding options proposed are:

- (1) *Self funding*: in this system everyone would be responsible for paying for their own care. The Green Paper rules out this option because 'people cannot predict what care and support they will need'.
- (2) *Partnership*: Everyone entitled to care would have a proportion of their basic care and support costs paid for by the state. The remainder would be paid for out of pocket.
- (3) *Insurance*: In this system everyone would be entitled to some support just as with option 2 but there would be additional enabling support based on insurance, either state or privately operated.
- (4) *Comprehensive*: In this system everyone over retirement age who had the resources to do so would be required to pay into a state insurance scheme (suggested range £17k to £20k). This is the Government's preferred option.
- (5) *Tax funded*: In this system people would pay tax throughout their lives which would be used to pay for all the people currently needing care. This is also ruled out because 'it places a heavy burden on people of working age'.

0.2. *Balance Between the State, Individual and Family*

The balance of funding responsibility between the state, individual and family is a key factor in determining which system will be most suitable for the UK. A fully free at the point of use system which is implied in option 5 (a tax funded system) could lead to moral hazard and erode the important role of informal care with significant consequences for taxpayers. A system that is wholly out-of-pocket (option 1) would be unfair on the most vulnerable in society and so it seems inevitable that a mix of state and private funding should be the way forward.

In recent years, a number of OECD countries have sought to overcome problems of fragmentation 'in service delivery and financing across public programmes, regions, or groups of the population' (OECD, 2005, p. 10). Although systems for funding LTC can take several forms, for most countries the main source of public financing remains general taxation. Discussion of different funding models is given in Wanless (2006, ch. 12) and in an accompanying background paper (Poole, 2006), which observes that a number of countries have opted for a social-insurance type solution. For example, Germany has introduced a social insurance scheme with income-related contributions and in Japan people aged 40+ pay extra taxes and social insurance (Mayhew, 2001) and other countries such as Luxembourg and the Netherlands have also introduced reforms.

However, Karlsson *et al.* (2007) show that were any of these systems to be introduced into the UK they would be, not surprisingly, more expensive than the present system because only the neediest receive any state support. Although it is ruled out in the Green Paper a comprehensive or tax-based system would in theory at least be administratively attractive. However, a key problem is that it would have the effect of depleting disposable income among people who are approaching retirement age.⁴ There is a semantic argument as to the difference between a tax and 'comprehensive social insurance', a term which is usually reserved for a hypothecated 'tax' in which there is no means testing and strict usage criteria laid down. However, the point is that any system that relies wholly on income, as both do, is likely to incur this difficulty. The more realistic of the options will need a broader financial basis by taking account of both income and assets.

Within options 2, 3 and 4 there are potentially larger or smaller roles for the private sector. We focus our attention on the Partnership option which appears to offer the widest opportunity for private sector involvement and also the greatest choice of affordable products (e.g. see Green Paper, pp. 108–14 for descriptions of how these options would work). The balance of advantage between options 2, 3 and 4, all of which offer an element of private sector involvement, are inevitably complex and a full comparative treatment is outside the scope of this article.

The argument is that if the private sector developed a range of products, people would be able to choose how much they wanted to pay in return for care protection. However, in focusing on option 2, we show that state support would still be needed and

⁴ Estimates of the 'tax rate' on income would depend on the start age for any scheme e.g. 20, 30, 40, 50, income itself, economic activity rates by age and the coverage of the scheme. For example to pay for all current private and public expenditure on formal care on a Pay As You Go (PAYG) basis would require a rate of around 2% of income at start age 20 and 7.5% at start age 50 (own calculations).

so the question of how private means are integrated with eligibility for state support becomes a key issue. The Green Paper accepts that 'people find the current means-testing system unfair' and criticises it for penalising those who save for their old age and for the adverse incentives it creates; however, it notably omits any analysis of how these criticisms might be addressed. This issue also remains unresolved in the White Paper.

Based on public consultations the Green Paper notes that opinion is divided over whether support should only be targeted on the basis of income or only on the basis of need; but that 'universal entitlement to a basic level of care and support would be the fairest way to allocate government resources'. Such a system, it is maintained, would be fairer to those who had saved and planned for old age but there is no indication of how this would work. However, on the key question of how services should be paid for, opinions were split other than that the burden should be shared between the state and the individual and not fall wholly on families.

Until now the private sector has played only a limited and specialised role in financing long term care through products such as immediate needs annuities. Any shift towards personal responsibility would create a demand for personal finance products that would help individuals to cope with the financial burden that would be the result. A problem is that there has never been a vibrant LTC insurance market in the UK mainly for reasons of public sector crowding out but also the difficulties in insuring against cost inflation and adverse selection (Mayhew, 2009*a*; Brown and Finkelstein, 2007). Under option 2 set out in the Green Paper we will argue that there is an opportunity to create new financial products, not only insurance-based, which are better suited to personal circumstances. However, in order for this market to take off, certain things would be necessary. These include crucially a system of incentives and simplified rules for state support which did not penalise purchasers of such products.

We begin by briefly describing the present system of social care for older people and discuss current cost projections and uncertainties. In order to judge the affordability of private finance products, we analyse the income and wealth of people aged 65+ and their ability to pay for long term care out of pocket (in Section 2). From this we deduce that unless assets are included in any financial assessment, very few people would be able to pay for their own care and so levels of state support would be much higher if assets are excluded. In Sections 3 and 4 we critically analyse a range of products that would suit different personal circumstances at different times in people's lives with a range of different attitudes to financial planning and also their market potential.

The market for such products will be determined in part by the assumed level of state support; if low, then the market for these products will be higher and vice-versa. On the assumption that everybody except self-funders will receive at least some financial support, there would need to be a simplified means of financial assessment to reduce current complexity and improve incentives to save. Section 5 offers a way forward on this question by replacing current arrangements that force people to run down their assets with a simplified system based on personal wealth (as measured by income plus assets). The inclusion of financial incentives and the Government's regulatory role are briefly considered in Section 6 and Section 7 summarises the issues involved.

1. The Present System of Social Care

There are different systems operating in Scotland, Wales, England and Northern Ireland and differences also in the application of the systems at a local level, making the UK system of social care probably one of the most complicated and least transparent in the world to understand. Councils with social services responsibilities (unitary and county councils) are responsible for commissioning social care services for the local community. The local council carries out an assessment of need to determine the level and type of disability and dependency of an individual. Individuals with sufficient means can bypass this system and source their own care if they so wish.

Under the present system only the people who have the highest needs and lowest means get some help through the social care system. However, non-means tested financial support is also provided through the social security system in the form of disability benefits (Attendance Allowance, Disability Living Allowance and Carers Allowance)⁵, which provide a measure of flexibility and choice in terms over service provider. Capacity is further supplemented via the health service which provides a small number of free 'continuing care' places to those who meet the more stringent criteria laid down, which can be supplied in any setting (e.g. at home or in an institution).

Under local authority assessments in England a person's savings and assets are taken into account as well as income, so that a person with insufficient financial means would be expected to use the value of their house to pay for care until almost all the assets are spent. For individuals whose assets are, or fall, below £23,000 in the 2009/10 tax year, an 'assessed income' figure is calculated according to national rules that specify what types of income and assets should be included. All of that assessed income must then be paid towards the costs of residential care, except for a weekly personal expenses allowance of £21.90. Local authorities use the national Fair Access to Care Services (FACS) framework to categorise a person's level of need as low, moderate, substantial or critical.⁶ Each local council has its own budget for adult social care and decides which of these four needs bands it will fund.

Variations in the funding thresholds adopted are widely regarded as one of the reasons for the wide geographical variations in access to social care. However, according to the Green Paper this is only one of five key problems with the present system. Specifically it penalises people who have saved for their old age; the threshold for care is set too high; social care provision is uneven across the country; the system is too complex; and services are poorly organised and not 'joined up' at the point of delivery. The consequences of this can be perverse; for example, concentrating resources only on those with highest needs leads to more hospital admissions, longer hospital stays and more attendances at A&E and hence higher costs to the health and social economy overall (Mayhew, 2008).

⁵ Other financial support is effectively channelled through benefits such as Pension Credit, Council Tax and Housing Benefit although entitlement in these cases is dependent on financial means and not disability.

⁶ See guidance at http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4019641.pdf

1.1. *Supply and Demand Considerations*

It is estimated that there are around 550k care places in residential settings in the UK, of which around 380k are for older people.⁷ Around 250k older people receive public financial support in residential settings and a further 367k receive homecare, averaging approximately 10 hours per week. Most consumers of LTC are over age 80; for example, in England, almost 80% of care home inhabitants belong to this age group (Bajekal, 2002). Since increasing life expectancy causes this group to grow at a faster rate than the general retired population, there is concern that the demographic burden could make the current system of financing LTC unsustainable.

Estimates of the costs of adult social care are complicated by the mix of funding sources, provider organisations, definitional issues, data sources and geography – notably whether just England or the whole UK (Karlsson *et al.*, 2006a). If we just take England, gross public sector expenditure on Personal Social Services in 2007/8 was £20.1bn (National Statistics, 2009). Of this £8.7bn was spent on older people; however this does not include private expenditure estimated to be worth £5.9bn (Forder, 2007). Additional financial support is also provided through the benefits system. In 2007/8 expenditure on Disability Living Allowance in the 65+ age group was estimated to be £2.4bn, with a further £4.4 bn of expenditure on Attendance Allowance (data supplied by Department for Work and Pensions). This gives an estimated minimum total of £22.4bn but notably excludes services elsewhere in the UK or the value of unpaid care which has been estimated to be worth over twice this figure (Mayhew, 2009b).

Demand for services is bound to rise as the number of people aged 65+ is set to increase from 10.1m in 2009 to 14.2m in 2026 and the number aged 80+ from 2.8m in 2009 to 4.5m in 2026. How demography translates into care costs depends crucially on assumptions about the future delivery of care as well as the accuracy of the demographic projections. Wittenberg *et al.* (2008a, b) for example project increases in share of GDP from around 1.4% to 2.3% by 2026 based on a high variant scenario. Within these projections however lie considerable uncertainties in relation to need (Karlsson *et al.*, 2006a). It is currently estimated for example that about 10 years are spent with some form of disability mostly towards the end of life. Not all these years lead to social care but, clearly, if years spent in disability were to increase, there would be more pressure placed on adult social care because disability prevalence would increase proportionately (Mayhew, 2009a).

The Office for National Statistics (ONS) publishes statistics on healthy life expectancy (HLE) for Great Britain, which it defines as years of expected life in either good or fairly good health (based on general health) or free from long standing illness.⁸ The data suggest that whilst both life expectancy (LE) and HLE are increasing, the gap between them is widening. Trend analysis of ONS data since 1981 shows that by 2025 the gap between LE and HLE will be 11.5 years, as compared with 9.75 years in 2005. It is noteworthy that most of the additional years are being spent with non-limiting

⁷ See e.g. Laing & Buisson Ltd (1999).

⁸ Two types of HLE are routinely calculated from the national General Household Survey based on either of the following questions: 'Over the last 12 months would you say your health has been good, fairly good, or not good?' and LE free from limiting long-term illness based on: 'Do you have any long-standing illness, disability or infirmity?'. The method used by ONS to derive health expectancy is known as the Sullivan Method (Sullivan, 1971). See also Breakwell and Bajekal (2005).

diseases and that most additional years are being spent with co-morbidity as opposed to a single disease.⁹ Intuitively, as the health care system becomes more successful at lengthening life, the possibility of greater social care needs is increased insofar as any extra years are spent in poor health, have limiting effects on activities of daily living or lead to the greater occurrence of other diseases such as dementia.

The sensitivity of LTC cost projections with respect to future trends has also been widely analysed elsewhere. Pickard *et al.* (2007) focus on social trends; Comas-Herrera *et al.* (2006) on policy scenarios; Karlsson *et al.* (2006a) on changes in disability and health; and Costa-i-Font *et al.* (2008) and Mayhew and Smith (2009) on demography and mortality. In summary, regardless of how one looks at the evidence, it is clear that demand is set to increase and, in consequence, so is the level of public expenditure. Such trends have the capacity to affect the UK economy significantly and some of the wider issues and ramifications are also considered in Mayhew (2009b). The question for this article is how the costs can be met by broadening the sources of funding available. We begin by analysing sources of funding based on the capacity of households to pay for long term care.

2. Sources of Funding in Old Age Based on Household Finance

Since a premise of the Green Paper is that it will not be possible to fund all social care from taxes and that individuals will be expected to contribute to their cost of care, it is important to consider the resources available for this purpose among individuals and households. In this Section we consider the ability of individuals to fund their own long term care from their own resources and to test what people could afford before or after any state support is factored in. Our data for this analysis is based on the English Longitudinal Study of Ageing¹⁰ (ELSA); we proceeded by splitting the total numbers of people aged 65+ into household types and assessing their levels of income, savings and housing assets.¹¹ We then evaluated how many could notionally afford to pay for care for <1, 2, >3 years based on their income, savings and assets.

Our findings can be summarised as follows:

- The probability of needing social care in later life is high, but for institutional care it is relatively low (about 35% in the case of females); over twice as many females as males are in institutional care but they are least able to afford it.
- Only around 400k households out of 6.5m aged 65+ can afford institutional long term care for more than one year on the basis of income alone but this increases to 3m if savings are included.
- Of the 3.5m households that *cannot* afford care for more than one year from income and savings, 1.6m are female only, 0.6m male only, and 1.3m couple households.

⁹ See Rasulo *et al.* (2009); see also further comment by Jagger *et al.* (2007) which considers certain specific diseases

¹⁰ English Longitudinal Study of Ageing (ELSA) is an interdisciplinary data resource on health, economic position and quality of life as people age. Our analysis is based on wave 2, 2004. For details see: <http://www.ifs.org.uk/elsa/>

¹¹ 65+ is the critical age range for most purchasing decisions for LTC products, although a similar analysis could be undertaken for people aged 50–64 using ELSA, for example, regarding purchase of insurance products.

- If housing wealth is taken into account then 4.6m households could afford care for more than 1 year.
- Of the 1.8m households that *cannot* afford care for more than one year if housing wealth is included, 0.9m are female only, 0.4m male only, 0.4m couple households and 0.1m other.

2.1. *Income Only*

Figure 1 considers couple households with at least one person aged 65+, single adult male households 65+, single female adult households 65+, and all households 65+. ¹² It shows that 2.5m households have incomes of less than £200 per week or well under half the amount required to fund one week of LTC for one person based on a cost of £500 per week. Figure 1 also implies that fewer than 400k out of 6.5m households would have enough income to support one person.

2.2. *Income plus Savings*

A larger group of people could be self reliant by drawing on savings until they run out. If savings are drawn down regularly in order to top up income then it is possible to estimate the duration that different households could pay for LTC for one person in different income/savings brackets. This is shown in Figure 2 in which numbers of households are plotted against the estimated number of years that one person in a household could be self-supporting for different household types. The results show that approximately 3.5m of the 6.5m households with a person(s) age 65+ would only be able to support one person for a year or less, 0.7m for 1 to 2 years, 0.9m for 2–3 years

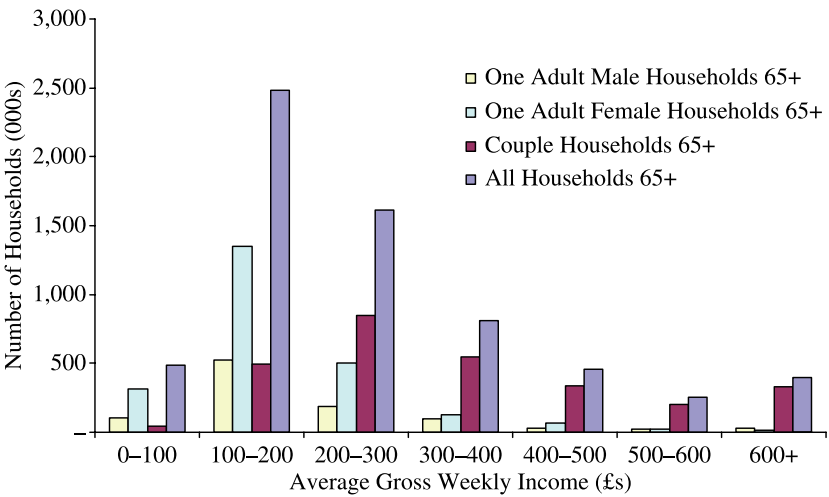


Fig. 1. *Distribution of Weekly Household Incomes by Household Type*

Source. ELSA.

¹² Includes residual households e.g. with 2+ adults.

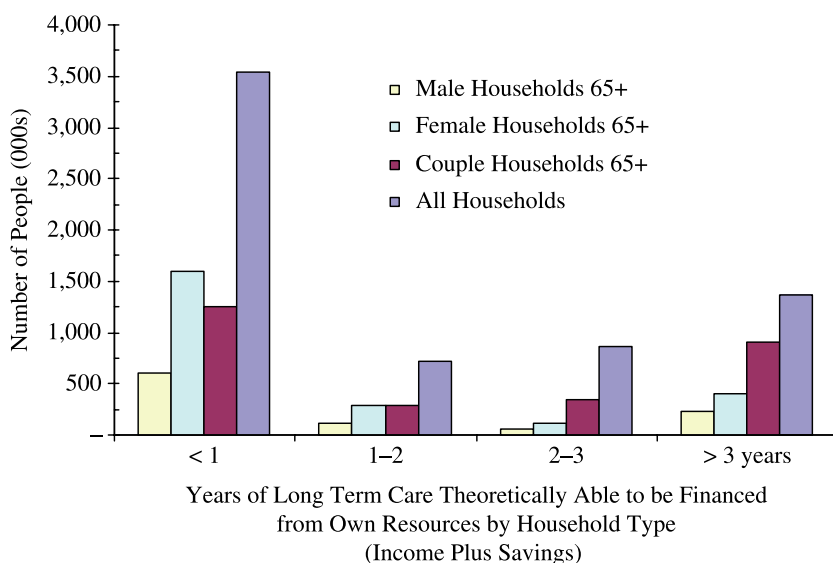


Fig. 2. *Number of Households Who Could Afford <1, 1-2, 2-3 or 3+ Years in Long-Term Care from Income and Savings*

Source. ELSA.

Table 1

*Number of Households (thousands) With at Least One Person Aged 65+ According to Weekly Income and Value of Savings*¹³

Income (£s per week gross)	Savings (£000s)							Total
	<1	1-5	5-10	10-20	20-30	30-50	50+	
0-100	51	158	93	62	46	31	48	489
100-200	282	929	355	308	165	192	253	2,484
200-300	137	385	200	218	156	159	359	1,614
300-400	37	99	99	125	73	114	264	810
400-500	40	48	22	60	18	66	201	456
500-600	18	9	11	16	22	29	148	255
600+	15	13	11	18	18	31	288	394
Total households (000s)	581	1,639	791	808	498	623	1,560	6,500

Source. ELSA.

and 1.4m for 3 or more years. A more detailed breakdown by income and savings is given in Table 1.

2.3. Including Housing Wealth

Most of people's wealth in the UK today is contained in the value of their homes with around 70% of people aged 65+ being home owners. The managed release of income from housing assets is seen as one possible means of paying for LTC. This has several

¹³ Note that numbers may not add exactly due to rounding.

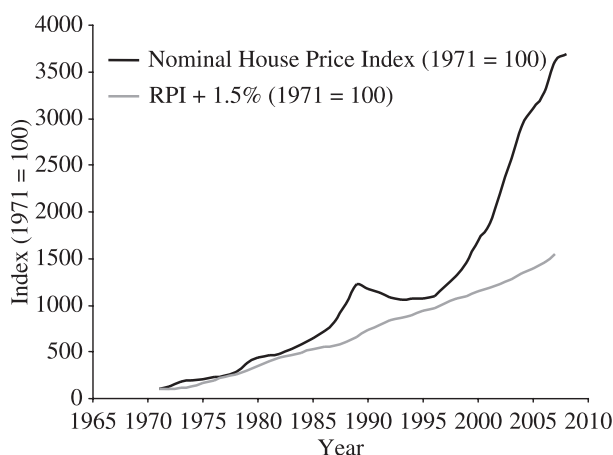


Fig. 3. *FT House Price Index and RPI*

Source. Acadametrics¹⁵ and ONS¹⁶.

advantages over the present system including the chance to pass the property itself on to relatives rather than having to sell it outright. The potential for releasing equity to fund LTC is best illustrated by means of Figure 3 which shows the index of house prices as compared with an index of care costs from a base value of 100 in 1971.

If one assumes that the cost of LTC has moved broadly in line with the RPI + 1.5% and that the weekly cost of care in 2008 was £500 on average, then the equivalent cost in 1971 would have been £32 per week by this argument.¹⁴ By comparison the average price of a house in 1971 was just £6.2k as compared with £230k in 2008 (based on the FT index of house prices). Thus the ratio of average house prices to the annual cost of care was just 3.7 then as compared with 8.8 today (notwithstanding recent falls in house prices connected with the credit crunch which will reduce this differential in the medium term).

Put differently the proceeds from selling a house would have paid for roughly 3.7 years of care in 1971 and 8.8 years of care in 2008 depending on one's assumptions (i.e. administrative charges and interest rates). In practice, durations of care are often shorter than this (less than a year if a person is severely disabled), so that it would be expected that some equity would remain to pass on to relatives after all care costs have been met (most people entering nursing or residential care are unable to live independently at home and are at an advanced stage of frailty).

The 6.5 million households with at least one person aged 65+ equate to a total population of 9.9 million. Of these households, 2.8m are couple households, 1.0m are single male households, 2.4m are single female households and 0.3m are other

¹⁴ There is no equivalent LTC index stretching back this far. If average earnings are used as a proxy for LTC costs then it would show a higher increase than the RPI so we have assumed RPI + 1.5%. It could be argued that a slightly higher assumption could be made (e.g. RPI + 2%) since, in recent years, care cost increases have tended to outstrip average earnings increases.

¹⁵ <http://www.acadametrics.co.uk/>

¹⁶ http://www.statistics.gov.uk/downloads/theme_economy/Rp02.pdf

Table 2

Number of Households (thousands) With at Least One Person Aged 65+ According To Weekly Income and Net Housing Wealth¹⁷

Income (£s per week gross)	Housing wealth (£000s)								Total
	<1	1–50	51–100	101–150	151–200	201–250	250–300	300+	
0–100	148	22	38	106	70	35	33	37	489
100–200	971	112	304	348	319	189	104	137	2,484
200–300	410	57	211	247	282	152	101	154	1,614
300–400	128	22	77	130	137	126	77	112	810
400–500	57	13	20	46	99	68	55	99	456
500–600	26	7	18	29	42	29	33	70	255
600+	26	9	11	20	24	51	59	194	394
Total households (000s)	1,766	242	679	927	973	650	462	802	6,500

Source. ELSA.

household types (e.g. 2+ adult households). Table 2, based on data from ELSA, shows the estimated number of households (in 000s) in different income brackets according to the net equity remaining in their homes.

2.4. Years of Affordable Care Based on Income and Housing Assets

We conclude this Section by considering the *total resources* available to an older household if the equity in homes were released and combined with income. Note that in couple households the resources must be spread over 2 people and only 1 person in a one adult household. In what follows we refer to a disability scale which ranges from 0 to 10 that derives originally from an OPCS survey in the 1980s (and is discussed in Rickayzen and Walsh, 2002). For our purposes a person who falls into the range 0–6 is assumed to be ‘healthy’, between 7 and 8.5 moderately disabled, and between 8.5 and 10 severely disabled. A person in the moderately disabled category is adjudged to have failed 2 ADLs and in the severely disabled category 3+ ADLs, where ADLs are activities of daily living.^{18,19}

After making an allowance for the cost of equity release, we obtain the results given in Table 3. This breaks down households by population size and provides estimates of the number people with moderate or severe disability based on the Rickayzen-Walsh disability model.²⁰ The final column gives a rough indication of the number of new cases with disability per year, so giving a first cut of the number of people in each category potentially flowing on to some form of social or long term care. It is

¹⁷ Note that numbers may not add exactly due to rounding.

¹⁸ Typical ADLs are being able to feed, wash and dress oneself, go to the toilet unaided, mobility (e.g. climb stairs) and transfer from bed to chair.

¹⁹ The use of ADLs for product design is considered in Dullaway and Elliot (1998).

²⁰ This estimates the number of people with different levels of disability. In this Table these are expressed in terms of the number of failed ADLs (activities of daily living) such as going to the toilet or feeding and washing oneself.

Table 3

Number of Households and People (thousands) Aged 65+ Who Could Support Themselves in LTC for Given Durations, the Approximate Number of Disabled (2+ ADLs) and Severely Disabled (3+ ADLs) People in Each Category; and Estimated Annual Flow of New Disabled Persons 65+ with 2+ failed ADLs

Years of affordable care	Number of households (income plus equity) 000s	Number of people (000s)	2+ ADLs number of disabled (000s)	3+ ADLs number of disabled (000s)	Estimated number of new cases of 2+ ADLs per year
<1	1,714	2,619	275	141	137
1–2	190	291	31	16	15
2–3	342	523	55	28	27
> 3	4,253	6,496	682	349	341
Total	6,500	9,929	1,042	534	521

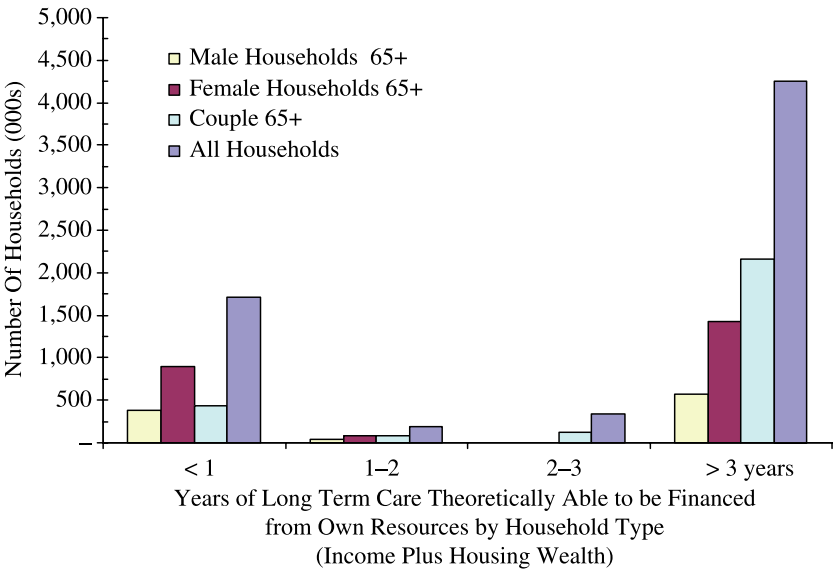


Fig. 4. *Number of Households That Could Afford <1, 1–2, 2–3 or 3+ Years in Long-term Care From Own Income and Housing Wealth*

Source. Based on ELSA.

noteworthy that the number of new cases, 521k, broadly equates to the annual number of deaths in the UK.

Figure 4 breaks down column 1 of Table 3 into constituent household types. Affordability of care is largely determined by whether or not the home is owned by the household or not. It shows that around 4.2m households are able to support more than 3 years of care due to the current high average value of residential property and 1.7m for less than 1 year. A much small intermediate group comprising 0.5m households would be able to afford care for one year but less than 3 years.

3. Financial Products for LTC

Under the Partnership option in the Green Paper, there is a range of ways for the private sector to become more involved in the financing of LTC to meet the private funding gaps identified in Section 2. As the Green Paper notes, the private sector can help people to prepare for the costs of care by offering a variety of products; they can for example take out insurance, release equity from their homes, or use an annuity to create income from a lump sum. However, how such products are viewed by potential purchasers would be skewed by the present means testing rules. In Section 5 we consider how such products could interface with a revised system of state support.

In this Section we consider some of these potential products although a distinction between our analysis of potential products and Poole's analysis (Poole, 2006 pp. 15–38) is that we focus attention more on individual circumstances and possible behaviour (Mayhew, 2009*b*). For example, there is a significant difference between products that are purchased at the point of need, products purchased around the time of retirement and products purchasable at any time during adult life. The assumption is that people will express different purchasing behaviours depending on their attitude to risk, for example whether they are 'forward planners' or if they simply prefer to 'take things as they come' but ensure they have something in reserve to meet contingencies.

Some of the products discussed below are novel and would require additional work before they could be introduced more widely, and possibly new legislation. The products we consider are as follows²¹:

- (a) equity release;
- (b) 'top up' insurance;
- (c) disability linked annuities;
- (d) immediate needs annuities
- (e) accelerated life insurance and
- (f) LTC bonds.

Of these, only (a) and (d) are currently available in the insurance market. As we assume wider eligibility for state support in this article, the illustrative costs and benefits of different products which we suggest should only be seen as a guideline since the actual amounts of benefit needed would be a function of personal circumstances and eligibility for state support (see Section 6).

(a) Equity Release Products

Equity release products have been available for some time but they are chiefly designed to supplement income in old age rather than fund LTC needs. Although previously criticised on the grounds of their high administrative costs, sales of equity release products are increasing. According to the industry, around 29,000 plans were completed in 2007 valued at around £40,000 per plan, giving a total market value of approximately £1.2bn.²² Equity release products come under three main categories, and within each one there are numerous different types of plan. A lifetime mortgage

²¹ This is a much wider selection than is mentioned in the Green Paper which is concerned primarily with pre-funded insurance schemes. There is only passing reference, for example, to equity release.

²² See SHIP Equity Release website: <http://www.ship-ltd.org/consumerdemand.aspx>

allows a person to release a lump sum from the value of their property, with the amount released plus any interest accrued repaid from the estate when the person dies. In a drawdown lifetime mortgage, cash is released over time, which can reduce the amount of interest accrued. In a home reversion plan, some or all of the ownership of the property is surrendered in exchange for a lump sum and the right to remain rent free in the home is granted for as long as a person lives. The type of equity release product most suited to LTC is likely to be for a short term and on the basis of immediate needs to minimise the pay back period and the consequent administrative costs. A limiting factor in equity release is that mortgage companies do not like homes remaining empty in the event that a sole occupier goes into care. This may limit the scope for ownership retention although in practice this may not be a serious drawback as a person may be better advised selling the house anyway.

(b) Top Up Insurance

Insurance products are given more attention in the Green Paper than other products and under the 'Insurance' and 'Comprehensive' options they form a central core. Here we consider insurance as part of a wider product mix under the Partnership option. In general, insurance products are typically bought by people who wish to protect their savings or meet the catastrophic costs of eventualities such as going into long term care. However, attempts to launch pre-funded LTC insurance in the UK have not been as successful as in the US and the market remains very small. Even in the US, where around 10% of the older population hold private LTC insurance policies, there are difficulties with overpriced policies offering poor coverage of actual risks: problems which possibly are due to adverse selection and supply side imperfections (Brown and Finkelstein, 2007). One lesson for the UK could be to focus on innovative products that provide cash benefits or 'top ups' rather than prescribed care packages (i.e. a product that provides cash to bridge the expected difference between state support, personal income and the cost of care at the time of need, Karlsson *et al.*, 2006b).

Top up products are most likely to be attractive for people with some means, who would not be able to afford the cost of care from their income or savings and wish to plan ahead. This strength, however, is also its weakness since the poorer the household the less top up would be affordable. The households that could be interested in 'top up' insurance therefore are those whose weekly income is below the weekly cost of care but not so much so that they would need to sacrifice other purchases to pay the premiums. Such people are assumed to be healthy at the time of purchase and may live alone or have no immediate relatives to support them. They may have limited housing wealth or be reluctant to take the step of releasing equity in their home. A crucial issue affecting take-up, however, will be how top up products interface with the system of state support (see Section 5).

(c) Disability Linked Annuities (DLAs)

A disability linked annuity is a special type of annuity which is purchased whilst in reasonable health at retirement. If the policy holder later becomes disabled then the annuity payments are increased to a higher level depending on the severity of the disability. For example, an annuity may commence at a rate of £10k p.a., increase to

£15k p.a. on becoming moderately disabled and to £25k p.a. once the annuitant has become severely disabled. In shorthand notation such a policy could be written as a 1/1.5/2.5 DLA, the factors representing the amount of enhancement or uplift to any base annuity. Obviously uplift factors can be varied. Although DLAs do not currently exist in the UK, their features have been analysed in detail by Rickayzen (2007).

A DLA has three features that make it an attractive option:

- (a) reassurance from the fact that the annuitant receives a standard annuity whilst healthy and an uplift should they become disabled;
- (b) an annuity enhancement to help with the additional cost of care;
- (c) an annuity would not prescribe the form that LTC might take and therefore enable a purchaser to choose.

DLAs would initially be most applicable to people in defined contribution pension schemes although the principles could be extended to defined benefits schemes including big public sector schemes such as civil service pensions. Note also that a DLA could be formulated to enhance the basic state pension as a replacement for Attendance Allowance which is paid at a lower and higher weekly rate of £47.10 and £70.35 depending on level of disability. If the weekly value of the state pension is £95.25, then this would equate to a DLA with uplifts of 1/1.5/1.7.

However, the main advantages of DLAs are the efficiency gains that the bundling of two separate risks may give rise to. Since LTC and longevity risks tend to be negatively correlated (Warshawsky *et al.*, 2002), the underwriting procedure for a combined product may be simplified compared with separate policies and thus administrative costs are likely to be lower. Furthermore, the bundling of LTC and longevity risk might open up the LTC insurance market for risks which are otherwise screened out of the market due to high expected care costs. A limiting market factor for DLAs is that the level of the pension lump sum realised would affect the decision on whether to purchase a DLA. If the amount of lump sum is small, a DLA would be relatively unattractive since the annuitant might prefer the higher initial level of payment from purchasing a standard whole life annuity. The potential market for DLA products is large and with over 400k new pensioner annuitants each year, DLAs could make an important contribution to LTC planning. Presently however the average size of the typical pension 'pot' is not large enough to make this a significant option so it could take time for private pension pots to build up sufficiently for DLAs to become a major factor in the LTC market place.²³

(d) *Immediate Needs Annuities*

Immediate needs annuities were first introduced into the UK in the late 1990s and are designed specifically to meet the care costs of those who are at the point of entering

²³ According to the Association of British Insurers (ABI), almost two-thirds of annuitants arranged their annuity 'internally' (through the provider of their private pension). Defined contribution pensions are relatively new and therefore still maturing with a majority of schemes only being set up since 2000. About 41% of annuitants draw premiums of less than £10k p.a. and 23% less than £5k p.a. and so are currently small in size (Gunawardena *et al.*, 2008). However, this is not necessarily a guide going forward since many people will own more than one pension pot either through different employers or individually. Thus the total value of pensions pots per individual can be expected to grow over time as they become the preferred means of pension saving.

care, or are already paying for care out of their own resources. Their primary aim is to insure against the risk of living too long and hence eliminate the risk of depleting a person's estate by more than they (or their heirs) would wish, or at an extreme, running out of money altogether. They are equally suitable for those paying fees to a care home, or paying fees to receive care in their own home.

Immediate needs annuities are distinct from 'impaired life annuities' which are effectively retirement annuities for people with serious medical conditions such as cancer, stroke, high blood pressure, multiple sclerosis etc. According to the main supplier of this increasingly popular product in the UK²⁴ a typical purchaser of an immediate needs annuity is aged 85, paying a single premium of £80,000 to provide payments of approximately £25,000 per annum for the rest of his/her life, increasing either at a predetermined rate or in line with inflation. The exact premium payable is calculated with reference to the annuitant's state of health at the time.

Taken together, the number of new annuitants is small relative to the number of people who become severely disabled each year, and is of the order of a few thousand. Immediate needs annuities are obviously unsuited to people who do not have sufficient assets or savings, although clearly there is a good fit with equity release-type products. It is therefore arguable that more could be done to promulgate their existence at relevant points of contact, e.g., local health or social services. Although the average life expectancy of a typical purchaser is approximately three years, industry data demonstrate that the actual number of years lived is highly variable. However, the company offering this product has built up sufficient experience to ensure that benefits are paid for life.

(e) Accelerated Life Insurance

At the moment people in, or approaching, old age may take out whole of life assurance policies. The aim is usually to meet one (or a combination) of the following three aims: to pay for funeral expenses; to pay inheritance tax; or to increase the size of the estate on death. The first two can be seen as removing a financial burden, while the third one is more to boost benefits. The idea behind an accelerated life insurance product would combine the life assurance product with a disability annuity. If someone dies before falling ill then the whole sum assured is paid out so it is similar (in benefits) to the whole of life policy. However, if someone falls ill and meets the criteria for ill-health then they would start receiving a benefit that would be paid out on a regular basis until death. These payments would reduce the sum assured so the longer someone is alive after starting to receive the payments, the lower the benefits to be paid out on death.

Since the sum assured may diminish to a low amount, this product would not be designed for the first two aims of the whole of life policies stated above. It is targeting the third aim. The advantages are that if a person falls ill the annuity will help to pay for long term care, but if a person does not need long term care then the individual's family will receive the eventual death benefits instead. This would therefore mitigate

²⁴ Partnership Assurance: see <http://www.partnership.co.uk/products/longtermcare/default.asp>

the prevailing view with some health insurance products that the benefits will never be paid out. It is possible that the death benefit may, in fact, be reduced to zero although this would not mean that the payments in ill-health would be stopped, although clearly it would depend on how the policy is written.

(f) LTC Bonds/Trust Fund

It is clear from our analysis of household income and assets that a significant proportion of the population will not be attracted to any of the products described in (a) to (e) above. This group will include those on low income, those with few assets or only a limited sized pension fund, or people who are already in poor health. It is useful, therefore, to explore other ways to raise the issue of the cost of LTC and to encourage people to put money or assets aside. One idea worthy of consideration is the 'LTC bond'.

LTC bonds are similar to long established premium bonds but would attract interest as well as paying out prizes as follows. A person buys regular amount of bonds with a face value of say £1 each. A small proportion is deducted and is placed in a prize fund. The bonds accumulate in value with interest but are cashable only in the event of a person requiring LTC or upon death. LTC bonds would be entered into a monthly draw with cash prizes paid out to lucky winners. The product could be purchased by anyone over 18 but is expected to be especially attractive to older adults on lower to middle income because of the prize element.

Any illustration is necessarily highly simplified. Suppose twelve million of the adult population each buys £100 worth of bonds a year for 25 years from age 50 onwards. Two per cent of each bond is deducted and entered into a prize fund which pays out £24m p.a. There is a monthly draw with a top prize of £1m and numerous smaller prizes (typically over 10,000 prizes a month). Suppose a bondholder's deposit attracts 4% interest per annum and the average age of a bond is 13.5 years. The value of a bondholder's assets after 25 years is estimated to be worth £4.1k which combined with pension income would be a worthwhile, if small, contribution towards the cost of LTC. The total fund would be worth £19bn in the steady state, based on these assumptions, and even more if enhanced by government top up. Administratively, the scheme could be run by National Savings & Investments (NS&I) with bonds being sold online or at post offices.

The size of any market for LTC bonds will depend on how they are structured, the incentives to invest and any prize element. A comparison with premium bonds and the national lottery is instructive but not necessarily indicative. With premium bonds the top prize is £1m and the total value of prizes is £118m. There are 23.7m premium bondholders and the fund is worth about £35bn at the present time (i.e. the number of bonds in the draw). This compares with 1957 when bonds were first introduced and there were only 6m bondholders. LTC bonds are not the same as the lottery because the investment is eventually returned, but as a guideline of what could be expected, the average UK adult aged over 16 spends on average £100 a year on lottery tickets with gross ticket sales of £5bn.²⁵

²⁵ Source: Camelot annual report 2009.

4. Summary of Potential Market for LTC Products

As previously noted, the products described fall into three main groups including:

- those that can be purchased at any time such as top up insurance or LTC bonds;
- retirement products such as DLAs;
- point of need products such as equity release or immediate needs annuities.

Five markets for these products can be recognised:

- (1) People on low income with little or no assets who do not normally consider making any provision for LTC (LTC bonds)
- (2) People on moderate incomes who may have already committed themselves to a standard retirement annuity (top up insurance)
- (3) People who like to plan ahead and have reasonably large pensions or life insurance policies (DLAs, accelerated life insurance)
- (4) Those whose wealth is mainly concentrated in their homes and so would tend to release equity at the point of need (equity release, immediate needs annuities)
- (5) People who have sufficient income to self insure.

It is difficult to give a meaningful estimate of the potential demand for the products listed above for two reasons. First, an important factor which explains the low demand for LTC insurance is the public support system which works as an implicit tax on such products, thus crowding out a sizeable share of the potential demand. Secondly, the public's understanding of LTC products is low especially given the level of complexity involved. This is particularly true for people in frail health or for their relatives who are about to undertake one of the most important financial decisions affecting their futures.

It is instructive nevertheless to provide rough estimates of how a market for LTC products could be divided into different segments based on income and wealth. Figure 5 shows an equity-income map of households that are identifiable as households that might be interested in buying LTC products if these products were offered.

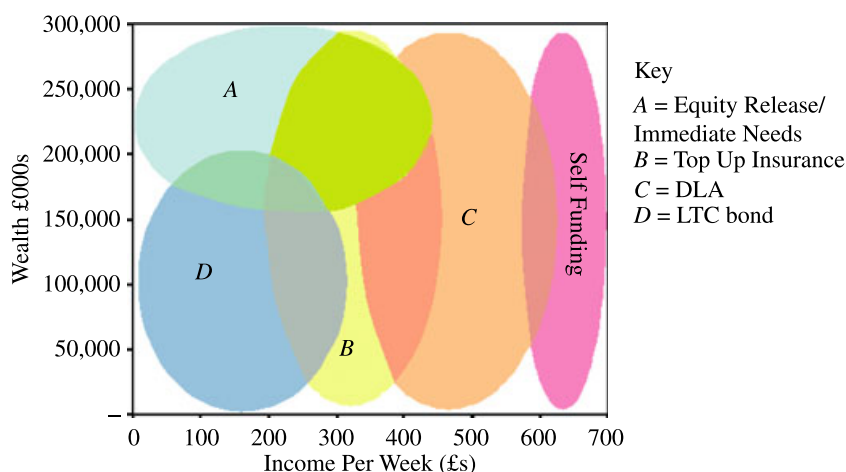


Fig. 5. *Income-equity Map of Target Households for Different Types of LTC Products Based on ELSA (stylised)*

Table 4
*Estimated Number Households by Type for Whom Different Types of LTC Product
 Could be Attractive*

Product	All households 65+ (000s)	Couple households 65+ (000s)	One adult male only household 65+ (000s)	One adult female only household 65+ (000s)	Other households (000s)
LTC bonds	3,645	1,011	717	1,757	160
Top up	2,423	1,392	283	631	117
Equity release	2,064	959	222	781	102
DLA	1,520	1,082	150	214	74
None	394	331	28	16	20

Table 5
Targeting Parameters for Estimating Number of Households by Product Type in Table 4

Product	Income (£ per week)	Equity (£000s)
LTC bonds	<300	<200
Top up	200–400	>0
Equity release	<400	>150
DLA	300–600	>0
Self fund	>600	>0

Table 4 quantifies these households and the age 65+ population affected but it is not an indication of take-up; it is only an estimate of the size of the target groups. It should be noted that the products overlap so that some households are potentially interested in more than one product but would not necessarily buy more than one per person or household. Table 5 specifies the income and housing equity range assumed for each target group.

5. Moving Towards a Fairer and Affordable System of State Entitlement

A condition for a vibrant private sector support for LTC is that the system of state support must operate in a way that is transparent and gives people clear choices depending on personal circumstances. If the rules are too complex, always changing, and the financial calculations too obscure then the private sector will be limited to those who are outside the ambit of the present rules (i.e. self-funders or those with sufficient assets). More perniciously, means testing has the effect of distorting a person's behaviour by creating, as in this case, a disincentive to save or an incentive to give assets away in order to avoid future liabilities (Poole, 2006, p. 10).

A key problem is that everybody must run down their assets before they receive any support at all.²⁶ This includes any housing assets as long as there are no others living in the home. The weakness arises because the public help people receive only extends for

²⁶ In England the threshold is £23,000 based on the 2009/10 tax year.

a limited way up the wealth distribution. This leaves moderately wealthy people with no state support coupled with the currently narrow range of insurance products and a limited opportunity to insure against the financial risk of needing care. Poole (2006) reviews changes to the system based on changes to the present income and capital thresholds that would alleviate these problems to a degree.

Our view, however, is that whilst this would deal with the immediate issues it would not address the complexity issue or how sources of income including those from privately financed LTC products would be treated for means testing purposes. After extensive consultations, the consensus in the Green Paper is for a system based on need, and some support or entitlement for everybody based on means. In consequence, some state support is inevitable. It therefore seems sensible to ask how such a system could be constructed in practical terms that would be fairer than the present system. Nothing in the published literature or set out in the Green Paper offers a mechanism on this key point.

The option of providing everyone with a 'basic package' of entitlement coupled with matched funding has attracted some support (Wanless, 2006, p. 231) but it is likely that such an approach would spread resources too thinly and still necessitate means testing. Clearly any system in which there was total entitlement to support would, by definition, reduce any private market to zero but a system where there was some public entitlement could make private finance options more attractive as a form of 'top up'.

However, a system of state support could take several possible forms. It could provide tax relief on the premiums paid for the financial products and so make them more affordable, or ignore the insurance benefits for means-testing purposes; it could provide direct support to social care providers in the form of subsidies; or it could make a contribution towards the cost of long term care to the individual. The possibilities of building on current tax incentives, such as those that exist for pensions, are considered in Section 6.

A system that gives a measure of support to everybody as is envisaged under the Green Paper's Partnership option would need to recognise that individual wealth is made up of both income streams and assets and that, arguably, it would be unfair to treat people with the same wealth but who had different mixes of income and assets in different ways (e.g. should a person on low income but with a home worth over £1m be treated the same as a person with a high income but no home?).

Under present legislation there are clear rules on the treatment of assets and income for means testing purposes.²⁷ However, we do not dwell on these issues here but simply note that any system of state support could be fine tuned in terms of asset categories. For illustrative purposes it is assumed that assessment arrangements would be as now and undertaken by local authorities but that more financial advice would be available at the point of need. A distinction needs to be drawn between people who can afford care from their income alone and those who can only afford care once their assets are included. Where costs can be met from income alone, it would be expected that there is no need for any state support.

²⁷ These include a wide range of asset types from savings, investments including stocks and shares, financial gifts and housing.

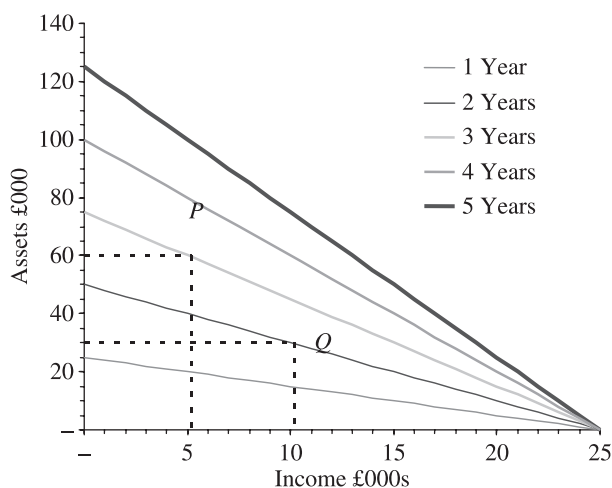


Fig. 6. *Notional Years of Affordable Care Based on Combination of Assets and Income*

5.1. A Worked Example

To create a system which recognises that personal wealth can comprise different mixes of assets and income we need a measure that places people into wealth brackets against which entitlement to state support can be assessed and reckonable income taken into account. For the sake of argument suppose that the state sets the institutional care costs at a notional level of £25,000 per annum (a figure that could be reassessed and re-calibrated just as personal allowances are annually updated in the tax system). Figure 6 is a graph of assets versus income in which lines are drawn showing the years of LTC that could be notionally afforded by an individual based on any mix of income and assets. In the example given, income and assets are given equal weights (£1 of asset equates to £1 of income).

For example, a person at point P with £60k of assets and £5k annual income would be notionally able to afford three years worth of care from their own resources [$£60,000 / (£25,000 - £5,000) = 3$ years]. A person at point Q with assets of £30k and an income of £10k would be notionally able to afford up to 2 years worth of care from their own resources [$£30,000 / (£25,000 - £10,000) = 2$ years]. Note that a person with an income greater than £25k is assumed to be self funding. Also it is assumed that if assets are shared in joint names (as often arises in home ownership) the assets would be split accordingly.

This information can be used to place people into 'wealth bands' based on which entitlement to state support could be assessed. An example based on five wealth bands is shown in Figure 7. On the vertical axis is the assumed percentage level of public support and on the horizontal axis is the 'wealth band' into which people receiving an assessment are placed.²⁸ Anyone in wealth band A (those who notionally could afford only 12 months of care from their own resources) would

²⁸ Figure 7 may be compared with the representation of this concept on p. 111 of the Green Paper which suggests a non-linear system of state support (note: axes are reversed).

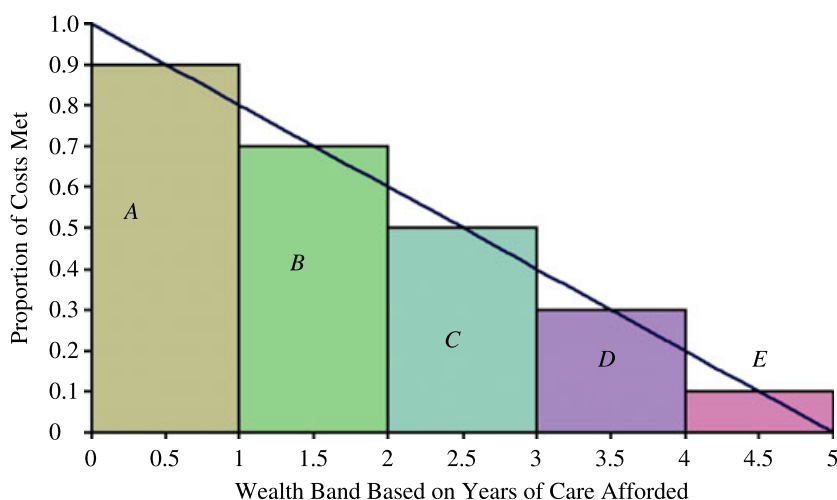


Fig. 7. *Placing People in Wealth Bands Based on Income and Assets*

receive 90% support if they were assessed as needing institutional care, those in band *B* 70%, those in band *C* 50%, those in band *D* 30%, and those in band *E* 10% support based on this example. Those whose income or wealth placed them in a band higher than *E* would not receive any entitlement under this worked example i.e. they would be 'unbanded'.

Clearly entitlements could be altered to suit any particular political consensus. However, anybody receiving an entitlement would need to pass the appropriate needs assessment which would be universal across the country and strictly applied. The amount of entitlement towards the cost of care would then depend on reckonable income. This could be defined in several ways and could include, for example, the state pension, pension credit, Attendance Allowance, occupational pension and other sources. As far as privately purchased LTC products are concerned our basic premise is that these would be excluded from the eligibility test since to do so would make a significant indent on their take-up.

To provide a numerical example, consider a person in band *A*, who had received an assessment. If we assume that the value of the state pension plus any benefits is worth £10k per year, then a person in band *A* would receive up to £13.5k per annum²⁹ in support $(£25k - £10k) \times 0.9$; band *B* $(£25k - £10k) \times 0.7 = £10.5k$ p.a.; band *C* $(£25k - £10k) \times 0.5 = £7.5k$ p.a.; band *D* $(£25k - £10k) \times 0.3 = £4.5k$ p.a.; and band *E* $(£25k - £10k) \times 0.1 = £1.5k$ p.a.

Under this arrangement if a person opted for a more expensive care home or were refused entitlement then they would have to meet any extra costs themselves. It would be the role of private finance products such as those described above to fill the gap between state support and care costs. Since the gap is smaller for people of

²⁹ This person in band *A* would then have a total amount of £23.5k per annum to put towards the LTC cost. They would therefore need to find a care home for no more than £23.5k per annum if they do not have additional insurance benefits to put towards the cost of care.

modest means the necessary financial support from privately financed products would become more affordable for people in lower wealth bands.³⁰ A key implication of this approach is that people saving for long term care would not be financially penalised under these arrangements as long as they had purchased a recognised LTC product.

Putting an overall cost on such a system of support depends on a number of considerations as well as assumptions, e.g., the number of people qualifying for support, the length of time spent in an institution and the needs assessment itself. Out of pocket contributions in some cases may be deferred until after death depending on individual circumstances (e.g. in cases where the assets are recouped from the estate by the local authority).

It was clear from Figure 4 that most people fall into one of two categories – either they are home owners with notional assets that would cover 3 or more years of care (wealth bands *D* and *E*) or they only have assets and income that would pay for one year or less (band *A*). The number falling into wealth bands *B* and *C* are smaller in comparison to bands *A*, *D* and *E*, but it is people in bands *B* and *C* who would stand to benefit the most from the proposed new system as they are most likely to have to run down their assets under the present system.

Assuming a current stock of around 380k older people in institutional care and a distribution of income/wealth based on figures from earlier Sections of this article then this would imply a total cost per annum of around £9.4bn a year. However, because those entering care will tend to be older and tend to have fewer assets than the general age 65+ population this figure could increase. Such estimates are subject to the precise rules of the system which would need to be calibrated against what can be afforded in public expenditure terms.

A parallel analysis could also be undertaken to establish the levels of financial support that would be needed in the case of domiciliary care based on similar considerations. Here, the charges levied would be far less stringent and there are already a wide range of local financial arrangements in place including free domiciliary care, flat rate charges and means testing. The Personal Care at Home Bill was designed to provide free personal care at home for people with the greatest needs and could thus have obviated an extension of this analysis to the domiciliary sector; however, the new Coalition Government has decided to discard the Bill and has appointed another commission to look at the issues again.

6. Ideas for Wider Financial Incentives to Plan for Old Age

On the basis of evidence presented here there could be a significant market for privately financed LTC products such as those described in earlier Sections. Until now, however, the public has shown little willingness to purchase such products with the exception of some point of need instruments such as immediate needs annuities or equity release products. The take up of LTC products will depend on a number of factors, including their perceived adequacy, reliability, affordability and marketing and

³⁰ It may be necessary to include a zero banded option in the system of support for people of no means who would attract 100% support as a form of safety net.

also their interaction with the system of state support. Under our revised approach benefits payable from certified LTC products would be disregarded in the calculation of the level of state support offered which would, in itself, be an incentive to purchase such products.

An important objective is to encourage people to save for their old age and encouragement can take several forms. It would also depend on how different types of income and assets are taken into account in any new entitlement process. The Government could provide financial incentives to save or invest in one or more LTC products. For example, contributions to private and occupational pensions already attract tax relief of up to 50% in the case of some higher rate taxpayers. Since disability linked annuities (DLAs) are arguably an extension of existing pension products, they should automatically qualify for tax relief on the same basis, but this needs to be verified.

The practical effect of the system of assessment as outlined above would be to create more affordable LTC insurance products. Based on US experience, LTC insurance products tend to be 'overpriced', leading to a tendency for policy holders to lapse their policies after a few years - a situation that the UK should seek to avoid. This problem might be addressed by regulating administrative costs. A precedent for putting a cap on pension administration costs has already been set in the case of some UK pension products.

However, it is possible that increased transparency and competition in the market for LTC insurance products might achieve the same goal, without the adverse effects on economic efficiency that price regulations entail. Hence, one way to increase the efficiency in the insurance market would be to define a small number of standard products with which different providers could then compete for customers. Equity release products are slightly different as they are purchased at the point of need. In their case regulation already exists in the form of a code of conduct.³¹

Government support and encouragement could also manifest in other ways. For example, in some countries such as Austria the cost of care home places is tax deductible. In the UK this benefit already applies to the small number of people with immediate needs annuities since, provided the annuity is payable to a registered care provider, payments made are entirely free of tax. In the case of LTC bonds or trust funds (effectively bonds without a prize element), the Government could add to a person's LTC fund by topping up personal bond accounts, for example on a £1 for £1 basis. This has the advantage of being administratively simple and the level of support could be varied over time in the event that the fund became 'over-subscribed'.

Whilst average amounts generated by LTC bonds would not be large they could provide a useful contribution, for example, towards funeral expenses. According to a House of Commons debate in July 2008 the cost of a funeral averages around £2,500 and the total cost of a death around £6,000³². Currently the Social Fund spends nearly £50m a year on funeral grants to around 35,000 people and so to some extent unspent LTC bonds would have the welcome effect of offsetting this expenditure.

³¹ See SHIP: <http://www.ship-ltd.org/shipguarantee.aspx>

³² Hansard Column 1516 July 9th 2008.

7. Key Conclusions

LTC costs are expected to increase significantly over the next 20 years as the ageing population increases. These costs include institutional care, home-based care and the indirect costs of informal care (mainly the opportunity cost of forgone wages). The Government Green Paper sets out the options, at least two of which would lead the way forward to a much larger role for the private sector in the form of privately financed products.

These are the 'Partnership' option which gives the greatest scope for product development and the 'Insurance' option. The 'Comprehensive' option could leave a role for the private sector depending on how it was set up. If it simply became a part of the current National Insurance System then the role of the private sector would be more limited but if it were privately operated with competing products there would be a much larger role for a private initiative.

In the UK a lot of the personal and household wealth is held in assets, and income sources are insufficient to pay for long term care out of pocket. It is also questionable whether older people would have sufficient income to pay the premiums required if the system were wholly insurance-based unless a 'top-up' approach, as described here, were to be adopted. This suggests that if a market for long term care products is to grow in the UK it needs to diversify into other kinds of products and not simply insurance, although insurance will remain a part of the mix.

The article describes a range of LTC products which could be available to people in different circumstances and with different financial means. In all the cases considered there are already comparable products on the market on which LTC variants could be based and so developing such a private sector initiative should not require a large bureaucracy to administer or new government machinery. Doubtless there will be other ideas for privately financed long term care products in the future; however, the institutional environment in which they are launched is critical for their potential success as well as transparency.

The article also addresses the issue of providing a broader base of public support by reforming the present means testing system so that most would qualify to some entitlement. The new approach would not require individuals to run down all their assets before they become eligible for state support but, instead, almost everyone would be required to make some out of pocket contribution towards costs. The gap between entitlement to support and the actual cost of LTC would define the market to be filled by insurance and other products. Since most researchers agree that a factor preventing the growth of LTC products is public sector 'crowding out' and a lack of clarity about what people can expect from the state, the proposed new rules would arguably create a better 'fit' between public expectations and state affordability.

The recent White Paper proposed that a Comprehensive option would be adopted during the Parliament after next. However, there are many details which would need to be finalised before then, and the political party in power has changed. If, ultimately, the decision is to go with a system that is a mix of state and privately funded health care then we suggest that there should be five roles for government for realising the potential for privately funded LTC products: These are:

- (1) to facilitate their introduction and provide regulation;
- (2) to provide appropriate incentives for people to take them up;
- (3) to clarify the role of the state in terms of the state entitlement people can expect based on a unified assessment system;
- (4) to make it easier to get advice and direction at points of initial contact with provider services in the private and voluntary sectors as well as the statutory sector³³; and
- (5) to cover risks that the market cannot handle such as excessively long durations in care.

These could be functions, for example, that could be remitted as part of the responsibilities of the proposed National Care Service outlined in the Green Paper and now confirmed in the White Paper.

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References

- Bajekal, M. (2002). *Care Homes and their Residents*, London: The Stationery Office.
- Breakwell, C. and Bajekal, M. (2005). 'Review of sources and methods', *Health Statistics Quarterly*, no. 26, available at <http://www.statistics.gov.uk/articles/hsq/HSQ26HLE.pdf>
- Brown, J. and Finkelstein, A. (2007). 'Why is the market for long term care insurance so small?', *Journal of Public Economics*, vol. 91(10), pp. 1967–91.
- Comas-Herrera A., Wittenberg R., Costa-i-Font J., Gori C., Di Maio A., Patxot C., Pickard L., Pozzi A. and Rothgang H. (2006). 'Future long-term care expenditure in Germany, Spain, Italy and the United Kingdom', *Ageing & Society*, vol. 26, pp. 285–302.
- Costa-i-Font, J., Wittenberg, R., Patxot, C., Comas-Herrera, A., Gori, C., di Maio, A., Pickard, L., Pozzi, A. and Rothgang, H. (2008). 'Projecting long-term care expenditure in four European Union member states: the influence of demographic scenarios', *Social Indicators Research*, vol. 86 (2), pp. 303–21.
- Dullaway, D. and Elliott, S. (1998). *Long Term Care Insurance: A Guide to Product Design and Pricing*, Sessional meeting, London: Staple Inn Actuarial Society.
- Forder, J. (2007). 'Self-funded social care for older people: an analysis of eligibility, variations and future projections', PSSRU Discussion Paper No. 2505, Commission for Social Care Inspection, London.
- Gunawardena, D., Hicks, C. and O'Neill, D. (2008). 'Pension annuities and the open market option', ABI Research Paper No. 8, 2008, Association of British Insurers, London.
- HMSO (1999). *With Respect to Old Age: Long Term Care - Rights and Responsibilities*, Royal Commission on Long Term Care, HMG Cm 4192-1.
- Jagger, C., Matthews, R., Matthews, F., Robinson, T., Robine, J-M., Brayne, C. and the Medical Research Council Cognitive Function and Ageing Study Investigators (2007). 'The burden of diseases on disability-free life expectancy in later life', *Journal of Gerontology*, vol. 2A(4), pp. 408–14.
- Karlsson M., Mayhew, L., Plumb, R. and Rickayzen, B. (2006a). 'Future cost for long term care: cost projections for long term care for older people in the United Kingdom', *Health Policy*, vol. 75, pp. 187–213.
- Karlsson M., Mayhew, L. and Rickayzen, B. (2006b). 'Investigating the market potential for customised long term care insurance products', Actuarial Research Paper No. 174, Cass Business School, London.
- Karlsson M., Mayhew, L. and Rickayzen, B. (2007). 'Long term care financing in four OECD countries: fiscal burden and distributive effects', *Health Policy*, vol. 80, pp. 107–34.
- Laing & Buisson Ltd. (1999). *Care of Elderly: A Market Survey*, London: Laing & Buisson Publications Ltd.
- Mayhew, L. (2001). 'Japan's longevity revolution and the implications for health care finance and long term care', IR-01-010, International Institute for Applied Systems Analysis, Laxenburg, Austria.
- Mayhew, L. and Harper, G. (2008). 'The economic and social benefits of care co-ordination for older people ~ the Integrated Care Co-ordination Service', Cass Business School, London. See also: [http://nkm.org.uk/flyers/SpecialReports/ICCS_Comp_doc_v1\[1\].pdf](http://nkm.org.uk/flyers/SpecialReports/ICCS_Comp_doc_v1[1].pdf)

³³ e.g. see Mayhew and Harper (2008) and Mayhew (2008).

- Mayhew, L. (2008) 'On the effectiveness of care co-ordination services aimed at preventing hospital admissions and emergency attendance', *Health Care Management Science* DOI 10.1007/s10729-008-9092-5, available at <http://www.springerlink.com/content/b04173312x4g4347/>
- Mayhew, L. (2009a). 'Increasing longevity the economic benefits of living longer and healthy ageing', Cass Business School, London, available at, <http://www.hmg.gov.uk/media/33715/economicsofageing.pdf>
- Mayhew, L. (2009b). 'The market potential for privately financed long term care products in the UK', Actuarial Research Paper No. 188, Cass Business School, London.
- Mayhew, L. and Smith, D. (2009). 'Whither human survival and longevity or the shape of things to come', Actuarial Research Paper No. 189, Cass Business School, London.
- National Statistics (2009). *Personal Social Services Expenditure and Unit Costs England, 2007–8*. Leeds: The NHS Information Centre.
- OECD (2005). *Long Term Care for Older People*, Paris: OECD Publishing.
- Pickard L., Comas-Herrera A., Costa-Font J., Gori C., Di Maio A., Patxot C., Pozzi A., Rothgang H. and Wittenberg R. (2007). 'Modelling an entitlement to long-term care services for older people in Europe: projections for long-term care expenditure to 2050', *Journal of European Social Policy*, vol. 17(1), pp. 33–48.
- Poole, T. (2006). 'Funding options for older people's social care', available at http://www.kingsfund.org.uk/research/publications/appendices_to.html
- Rasulo, D., Mayhew, L. and Rickayzen, B. (2009). 'The decomposition of disease and disability life expectancies in England, 1992–2004', Actuarial Research Paper No. 191, Cass Business School, London.
- Rickayzen, B. (2007). 'An analysis of disability-linked annuities', Actuarial Research Paper No. 180, Cass Business School, London.
- Rickayzen, B. and Walsh, R. (2002). 'A multi state model of disability for the UK: implications for need for long term care for the elderly', *British Actuarial Journal*, vol. 8(II), pp. 341–92.
- Sullivan, D.F. (1971). 'A single index of mortality and morbidity', *HSMHA Health Reports*, vol. 86, pp. 347–54.
- Wanless, D. (2006). 'Securing good care for older people - taking a long-term view', available at <http://www.kingsfund.org.uk>.
- Warshawsky, M., Spillman B, Murtaugh C (2002). 'Integrating life annuities and long-term care insurance: theory, evidence, practice and policy', in (O. Mitchell, Z. Brodie, B. Hammond and S. Zeldes, eds), *Innovations in Financing Retirement*, pp. 198–221, University of Pennsylvania Press.
- Wittenberg R., Malley J., Comas-Herrera A., Fernández J.-L., King D., Snell T., Pickard L. (2008a). 'Future demand for social care, 2005 to 2041: projections of demand for social care and disability benefits for younger people in England', [online] PSSRU Discussion Paper No. 2512, available at: <http://www.pssru.ac.uk/pdf/dp2512.pdf>
- Wittenberg R, Pickard L, Malley J, King D, Comas-Herrera A, Darton R (2008b). 'Future demand for social care, 2005 to 2041: projections of demand for social care for older people in England', [online] PSSRU Discussion Paper No. 2514, available at: <http://www.pssru.ac.uk/pdf/dp2514.pdf>