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Immediate Needs Annuities and the Dilnot limited liability system

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Introduction

A significant proportion of social care for older people is paid for out-of-pocket (Wanless 2006). A number of reviews have argued that private financial products might be promoted to help self-payers meet the costs of care (Poole 2006; Wanless 2006; Mayhew, Karlsson et al. 2010). The potential role of these products has also been recognised by the Government; in particular the 2009 Green Paper, *Shaping the Future of Care Together* (Department of Health 2009) and most recently by the Dilnot Commission on the funding of care (Commission on Funding of Care and Support 2011).

A number of potential products have been identified, including *Immediate Needs Annuities* (INAs) (Poole 2006; Mayhew, Karlsson et al. 2010). These products are available to people at the point of needing services who wish to insure against the cost implications of the uncertain duration of that care need. In exchange for an up-front payment, the product then pays out to meet regular care costs in perpetuity. A previous paper (Forder 2011) looked at the possible scope of INAs to help self-payers. The analysis applied two tests: first, an affordability test that assessed the number of people over 65 in England with sufficient wealth to afford the (actuarially fair) premiums; second, a net benefit test to ensure that those people taking up an INA would benefit financially from doing so, compared to paying out-of-pocket. It concluded that the potential size of the INA market was around 45,000 people over 65, considerably greater than the level of actual policy holdings at this time. In particular, the aim of that work was to assess the potential market size rather than predict actual uptake.

The backdrop for the previous analysis was the prevailing means-tested, safety-net model of publicly funding of social care. The main features of this model – which has remained essentially

unchanged since its inception in the 1948 National Assistance Act – are that people with care needs beyond a severity threshold become eligible for state support if their assessable wealth is below a certain level. At present this 'upper asset threshold' is set at £23250 of assessable savings and assets.

The Dilnot Commission made a series of recommendations for reform of this system. The key proposal was that individuals who incur (cumulatively) care cost above a 'limited liability' threshold would have any *care* costs (not accommodation costs) that they pay met instead by the state. Although not making a specific suggestion, the Commission envisioned a threshold of £35,000 of care costs. For people who had incurred cumulative care costs of less than this threshold, the provisions of the current safety net would apply. In this respect, the Commission made a second recommendation: that the upper asset threshold for the safety net system should be increased. A suggested value of £100,000 was given.

The parallel between Dilnot's capped risk proposals and the function of INAs is significant. Both are designed to address the uncertain duration of care needs and therefore the uncertain *lifetime* cost of care. This paper seeks to re-assess the potential of INAs were the Dilnot Commission's proposals to be implemented. The aim is to determine whether the role of INAs is undermined or supported in this case. The focus here is on INAs in the context of the wider research question of whether public funding crowds-out or crowds-in private funding. This paper applies the same tests as the previous analysis.

Three features of the Dilnot proposals are most pertinent. First, the proposals limit the lifetime cost of services and support to help people with care needs and therefore they potentially remove the 'tail-end' risk the people face. Second, although people beyond the £35,000 cap receive a subsidy towards their care costs, they still pay accommodation charges. These are means-tested on the same basis as the current means-test. Moreover, the subsidy that people receive would cover the costs of standard care, but not any additional cost of extra or premium care. This means that many people will still have on-going costs to meet after they reach the cap. Third, although Dilnot raised the *upper* asset threshold (potentially to £100,000), the *lower* asset threshold remains unchanged. Under the current means-testing rules, councils can assume a stream of income – the *tariff income* – on any assets above the lower threshold (currently £14,000), up to the upper asset threshold, at a rate of £1 p.w. for every £250 of asset holding. Charges are made on income at a £1 for £1 basis (above the £20 personal allowance) and so every £1 of tariff income equates to a £1 of charges. With the current upper asset threshold of £23,250, the maximum tariff income, and hence additional charge made to council supported residents is £37 p.w. However, with an upper asset threshold of £100,000, the maximum tariff income charge is £344 p.w. So although someone with just less than £100,000 of assets would

qualify for council support in this case, they are likely to be charged very close to the full cost of care anyway.

As with the previous study, this analysis concentrates on INAs for people to pay for residential care, for which they are currently used.

Methods

The analysis involves three main steps. The first is the calculation of a premium for an INA. This analysis uses the same approach as the previous analysis i.e. that INA providers can make a noisy prediction of the person's length of stay. A care home unit cost (suitably up-rated) can then be applied to the predicted length of stay to estimate an expected lifetime cost of care. In this analysis we use length of stay and unit cost estimates from the PSSRU micro-simulation model[2]. Unit cost in the MS model is £550 per week in 2009/10[3], up-rated in real terms at a rate of 1.5% p.a. The person choses how much of this cost they want to pay from income, and how much is to be covered by the INA. A premium is calculated on that basis. The base (or intermediate) demand care is assumed in this analysis.

The second step is to apply an affordability test. As in the previous analysis, this test compares the cost of the INA premium with the person's eligible wealth (i.e. non-housing wealth and also housing wealth for single people going into a care home). The actual INA premium reflects the coverage rate chosen by the individual on the basis of their income. People are assumed to use a given proportion of their income first and then pay for the remaining care costs using the INA. This means that high-income people need less coverage, i.e. a smaller INA and hence a smaller premium, than low-income people, other things equal.

Potential purchasers of an INA must have total eligible assets, less a buffer amount, that exceeds the premium. The buffer reflects an assumption that people would not want to spend the entirety of their wealth on an INA premium. It also helps to ensure that potential INA recipients pass the net benefit test, as outlined next. The base value of the buffer is £23,000.

The third step is to apply the net benefit test. The test requires that people would reasonably expect to be better off with an INA than if they self-fund under the current funding system. The main issue related to this test is that the current publicly-funded safety-net acts, in some sense as a limited liability model for those people that spend-down assets below the asset threshold. The *affordability* test ensures that people that have the *average* life-expectancy (or less) would

[2] The model uses BHPS (University of Essex. Institute for Social and Economic Research 2010) and ELSA data (Marmot, Nazroo et al. 2011) (supplied by the UK Data Archive) –(see Forder and Fernández 2011, for details and acknowledgements).
[3] As used for the Commission analyses

not spend-down below the asset threshold if they were self-payers, paying out-of-pocket under the current system. But for some self-payers (essentially those people who just pass the affordability test), if they live longer than the average life expectancy, there is an increasing chance that their assets would be spent-down which in turn would entitle them to state subsidies. In other words, such a person would face a reduced cost of care after they spent down their assets. With an INA, their premium is based on the expected cost of care on the assumption that the cost of care is not reduced after some point. If the premium is set at the *expected value* of the costs of their care, it would exceed the *expected value* of the cost of non-INA holder who, at some point, spent-down their assets. The size of this difference, which we might call the *spend-down difference*, will vary inversely with the wealth of the person in question. A very wealthy person, with almost no chance of spending down their assets as a self-payer (i.e. without an INA), regardless of how long they plausibly live in the care home, would have a very small *spend-down difference*. A person with relatively modest assets holdings such that they just pass the affordability test will have a relatively big *spend-down difference*.

Those people are willing to pay a *risk premium* for having certainty over the lifetime amount they pay for care will bear this *spend-down difference* as long as it is not too large. In the analysis we assume that people will pay only a certain risk premium, set in the base case at 5% of the expected costs of their care. This value is the maximum risk premium a person is prepared to pay; those people that pass the affordability test but have a *spend-down difference* of greater than this maximum 5% risk premium are assumed *not* to benefit from taking up an INA.

Implications of a limited liability funding model

The implications for the analysis of the implementation of the Dilnot model can be assessed in terms of the above three steps. In relation to the first step, a Dilnot limited liability model would change the coverage that would need to be sought from an INA and therefore the premium that would have to be paid. We assume that an INA would be taken out to cover, after income-based payments, the full costs of the care home (care and accommodation elements) up to the limited liability threshold (£35,000 of care costs) and thereafter to cover the accommodation element and possible a quality top-up (see below). In the Dilnot proposals, a care home unit cost of £550 per week was assumed, with an accommodation cost of £192 p.w. After the £35000 threshold, the state would pay the difference (£550 – £192), leaving the individual to cover the accommodation only. Note that people can apply for means-tested support towards the accommodation charge on the same basis as the current system. For example, people with assessable assets below the prevailing upper asset threshold (currently £23,250) are eligible for a council subsidy if their income is sufficiently low.

We also model a specification where people pay 'quality top-ups' on the basic care home unit cost i.e. where the individual pays a further £150 p.w. in top-up, in addition to the accommodation cost giving a total care home cost of £700 p.w. The analysis calculates an INA premium for both these cases.

The nature of the affordability test (step two) is unaffected by the Dilnot proposals although the availability of public subsidies for all people whose care costs exceed the £35,000 threshold mean that INA premiums are less expensive compared to the current system for the same gross weekly cost of care.

Step three, the net benefit test, is significantly affected. Because the limited liability provisions of the Dilnot proposals are universal and not means-tested, people with INAs qualify for limited liability subsidy in the same way as self-payers would without an INA. As such the expected value of the cost of an INA is reduced. After the £35,000 threshold, only accommodation costs and quality top-ups must be met by the resident. With accommodation at £192 p.w. potential INA holders can afford to cover much of this cost out of income, needing INAs mostly for quality-top-ups. If the same people opted not to take an INA they would need to pay the accommodation costs and quality top-up out-of-pocket as they go, but this is still much less than the full costs of care. As such they would have a much lower chance of spending down their assets and thereby qualifying for a means-tested subsidy. It follows that an INA needs to pay for an expected value of the cost of care which is very little different from the expected value of the costs of a self-payer under limited liability. In other words, the *spend-down difference* will be much reduced for most people compared to the current funding system. Only those people very near to the upper asset threshold and with low incomes have a chance of spending-down their assets below that level and therefore gaining a further state subsidy towards their accommodation costs.

Potentially the more significant effect comes from the proposal to raise the upper asset threshold to £100,000. In this case, many more potential INA holders – those who would pass the affordability test – are likely to become eligible for council support than if the upper asset threshold remains at £23,250.[4] However, as outlined above, because the lower asset threshold has not been increased, the size of the council subsidy is actually relatively small for people with assets near the £100,000 level (they would pay up-to £344 p.w. tariff income charge in addition to regular income-based charges) and so the spend-down difference is much smaller than might be anticipated. Tariff income is calculated and factored into the net benefit test to account for this effect.

[4] Current charging rules and existing INA product rule out the possibility of using an INA to pay council charges, even if a specification could be found to make this option a net beneficial one.

Quality premium

In line with the Dilnot modelling, the 'usual' price of a care home place is assumed to be £550 p.w. It is likely that INA purchasers will seek homes with quality premiums. These are assumed to be paid out-of-pocket and are not covered by state subsidies, either under current rules or under the LL model. They can be treated as top-ups in the analysis. The additional amount is figured into the INA premium rate i.e. INA purchasers want additional benefits from the INA to cover the full price of care (£700 p.w.). Higher premium rates affect affordability. They also affect the net benefit test. Quality premiums are not covered by means-tested state subsidies and so a person without an INA that has spent-down below the upper asset threshold will still need pay quality top-ups out-of-pocket. However, payment of quality premium might increase the rate of draw-down of assets (above the asset threshold) and so increase the rate at which someone becomes eligible for support.

Results

Results for the following scenarios are presented:

- (1) The comparison case is the current means tested system with the current upper asset threshold (UAT) of £23,000. Care home placements are at the base £550 p.w. A risk premium of 5% is assumed. Costs are up-rated at 1.5% p.a. in real terms (all figures are in 2010 prices). Population, disability rates etc. are all assumed at levels in the base case of the PSSRU micro-simulation model.
- (2) Current system as above, except at £100,000 UAT
- (3) Limited liability with a £35,000 threshold and a £23,000 UAT. Otherwise same assumptions as the base case.
- (4) Limited liability as above, but with £100,000 UAT
- (5) Limited liability as above, but with £50,000 UAT
- (6) Limited liability with £100,000 UAT, as above, except care purchased with a £150 quality premium i.e. a gross care home cost of £700p.w.
- (7) Current system with £23,000 UAT and a quality premium to give gross unit cost of £700p.w.

Table 1 gives the numbers of people potentially benefiting from an INA. The table as the overall number (column 2), which is stems from the number that can afford an INA (col 3) less the number of those people for which an INA would *not* be net beneficial. The final column gives the

overall number expressed as a percentage of the current number of self-payers (using the figure of 120,000 self-payers). In the base scenario, the current system, around 44,000 people over 65 could potentially afford and benefit from an INA, given assumptions made[5]. Under all the limited liability scenarios the numbers who would benefit from an INA overall are higher than for the current system. With quality-premiums (£700 p.w. rates), there is a small reduction in affordability and net benefit numbers.

Table 1. Numbers of people potentially benefiting from an INA

	Overall	Afford	Not net beneficial	Overall (% of current self-payers)
Current system £23,000 UAT	43,800	50,000	6,200	37%
Current system £100,000 UAT	37,100	50,000	12,900	31%
Limited liability £23,000 UAT	50,700	50,700	0	42%
Limited liability £100,000 UAT	46,200	50,700	4,500	39%
Limited liability £50,000 UAT	49,700	50,700	1,000	41%
Limited liability £100,000 UAT, £700p.w.	44,100	50,200	6,100	37%
Current system £23,000 UAT, £700p.w.	38,700	48,400	9,700	32%

The following tables give descriptive information for each scenario. The tables report:

- the total INA premium paid by INA holders;
- the amount of coverage purchased (as £s per week towards covering the gross cost of the care home place);
- the amount of the gross care home cost that is paid out of income (the co-payment).

Also reported in the tables is:

- the average wealth of INA holders (prior to paying premiums), including where relevant, both housing and non-housing assets;
- the person's net income, as used to finance the out-of-pocket co-payment.

Table 2 describes this information for the 43,800 potential INA holders estimated for the current funding system. In this case the average premium is £50,400 including up-rating, sufficient to fund £350 per week of coverage against the £550 p.w. (plus up-rating) gross cost. These figures correspond to a life expectancy of around 2.8 years for this group of people, some 20% higher than the whole care home population average life expectancy. Table 3 gives similar information for the £100,000 UAT case.

[5] This figure is very slightly lower than the previous estimate due to up-dating of the PSSRU model (including wealth and income holdings in the future and life expectancy rates).

Table 2. Current system £23,000 UAT

	Mean	Std Dev	Min	Max
INA premiums (£s)	50,400	20,290	18,920	105,170
Coverage purchased (avg benefit £s per week)	350	70	280	550
Contribution not covered (co-payment £s p.w.)	210	70	20	280
Assessable wealth (£s)	230,840	190,190	58,160	1,536,340
Net income (before contribution) (£s p.w.)	280	150	40	970

Table 3. Current system £100,000 UAT

	Mean	Std Dev	Min	Max
INA premiums (£s)	48,240	19,870	18,920	104,180
Coverage purchased (avg benefit £s per week)	340	60	280	510
Contribution not covered (co-payment £s p.w.)	220	60	50	280
Assessable wealth (£s)	258,510	197,380	85,400	1,536,340
Net income (before contribution) (£s p.w.)	310	150	100	970

As shown in Table 4 the average premium in the limited liability case (£35,020) is much lower than for the current means-tested system. Potential INA holders need to coverage a lower average amount over the same life expectancy. The same holds for the limited liability scenarios at UATs of £100,000 (Table 5) and at £50,000 (Table 6).

Table 4. Limited liability £23,000 UAT

	Mean	Std Dev	Min	Max
INA premiums (£s)	35,020	4,650	18,920	51,530
Coverage purchased (avg benefit £s per week)	260	60	120	420
Contribution not covered (co-payment £s p.w.)	200	70	20	280
Assessable wealth (£s)	224,030	185,980	29,770	1,584,800
Net income (before contribution) (£s p.w.)	270	140	40	970

Table 5. Limited liability £100,000 UAT

	Mean	Std Dev	Min	Max
INA premiums (£s)	34,890	4,790	18,920	51,530
Coverage purchased (avg benefit £s per week)	260	60	120	420
Contribution not covered (co-payment £s p.w.)	200	70	20	280
Assessable wealth (£s)	238,870	187,750	76,040	1,584,800
Net income (before contribution) (£s p.w.)	280	150	40	970

Table 6. Limited liability £50,000 UAT

	Mean	Std Dev	Min	Max
INA premiums (£s)	34,890	4,790	18,920	51,530
Coverage purchased (avg benefit £s per week)	260	60	120	420
Contribution not covered (co-payment £s p.w.)	200	70	20	280
Assessable wealth (£s)	238,870	187,750	76,040	1,584,800
Net income (before contribution) (£s p.w.)	280	150	40	970

The following two tables concern the scenarios where people buy INAs that are sufficient to cover £700 per week (after co-payments). Table 7 is for the current system. In this case the average INA premium is £67,800, covering £470 p.w. The INA premium for limited liability is also higher in the £700 p.w. case (Table 8) compared with the £550 p.w. case (Table 5).

Table 7. Current system £23,000 UAT, £700 p.w.

	Mean	Std Dev	Min	Max
INA premiums (£s)	67,800	27,900	24,030	137,630
Coverage purchased (avg benefit £s per week)	470	90	350	700
Contribution not covered (co-payment £s p.w.)	240	90	20	350
Assessable wealth (£s)	232,690	196,400	41,960	1,503,660
Net income (before contribution) (£s p.w.)	300	150	40	970

Table 8. Limited liability £100,000 UAT, £700 p.w.

	Mean	Std Dev	Min	Max
INA premiums (£s)	40,690	8,020	24,030	65,780
Coverage purchased (avg benefit £s per week)	300	60	120	470
Contribution not covered (co-payment £s p.w.)	230	90	20	350
Assessable wealth (£s)	239,330	188,960	84,760	1,567,480
Net income (before contribution) (£s p.w.)	280	150	40	970

It is worth reflecting why these INA premiums are somewhat lower than actual INA premiums. First, this analysis covers potential recipients; actual INA purchasers may be more selective (i.e. people with higher than average life expectancy). Second, these figures are in real terms (2010 prices) and are up-rated at 1.5% p.a. real, reflecting long-term assumptions. Actual premiums would include price inflation and possibly a higher real-terms increase as well. Third, the actual coverage sought by INA holders might be greater than that related to the £550 and £700 p.w. scenarios in this analysis. Finally, the premiums here do not include any overheads or profit margins.

Summary points

This paper develops the analysis of INAs previously undertaken[Error! Bookmark not defined.]. Using the same three step approach – INA premium setting, an affordability test and a net benefits test – the analysis estimated the numbers of people over 65 that could potentially afford and benefit from an INA overall.

The main aim was to compare this potential number as between the current means-testing funding system and the limited liability proposals of the Dilnot Commission. In the base scenario, the current system, around 44,000 people over 65 could potentially afford and benefit from an INA, given assumptions made. Under all the limited liability scenarios (with a liability cap of £35,000) the numbers who would benefit from an INA overall are higher than for the current system. Even with the upper asset threshold increased to £100,000 under the Dilnot proposals (and a liability cap of £35,000), the number of potential INA beneficiaries overall is 46,000. With an unchanged upper asset threshold (at £23,000) the number of potential INA beneficiaries overall is nearly 51,000. In small part this increase in numbers is due to better affordability, but it is mainly due to more people passing the net benefits test under limited liability. Average premiums under limited liability are lower than they would be under the current public funding system.

This analysis concerns potential uptake – and specifically the number of people that could afford, and in principle, benefit from an INA, assuming a reasonably degree of risk aversity. We might speculate, nonetheless, that the reduction in the coverage required from an INA (to cover quality top-ups and accommodation costs) under a limited liability policy, and thus the premium cost might increase actual demand for these products. Margins are likely to lower in absolute terms from each INA, but sales volume would be higher if this speculation bears out.

There are a number of avenues of potential further work. First, the present study only considers the most obvious form of INAs under a limited liability model, but different options could also be assessed; for example, INAs that start only when people reach the limited liability threshold and that are used to cover accommodation and top-ups. There would also seem to be a greater potential to link INAs with take-up insurance. Second, further scenarios could be considered, assessing the impact of different life expectancy, different up-rating, risk premium thresholds and so on. Third, although this analysis concentrates on INAs for people to pay for residential care, there is no particular reason why an INA could not be used to pay for non-residential care. There are likely to be more stringent implications in terms of affordability and net benefits, but these could be assessed to investigate whether INAs could be used to pay for community care.

References

Commission on Funding of Care and Support (2011). Fairer Care Funding. London, Commission on Funding of Care and Support (https://www.wp.dh.gov.uk/carecommission/files/2011/07/Fairer-Care-Funding-Report.pdf)

Department of Health (2009). Shaping the Future of Care Together. London, Department of Health (http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_102338)

Forder, J. (2011). Immediate Needs Annuities in England. Kent, PSSRU PSSRU Discussion Paper 2776 (www.pssru.ac.uk)

Forder, J. and J. L. Fernández (2011). Analysing the costs and benefits of social care funding arrangements in England: technical report (revised), PSSRU, University of Kent and London School of Economics. PSSRU DP 2644 (http://www.pssru.ac.uk/pdf/dp2644.pdf)

Marmot, M., J. Nazroo, J. Banks, R. Blundell, B. Erens, C. Lessof, F. A. Huppert, National Centre for Social Research and et al (2011). English Longitudinal Study of Ageing: Wave 0 (1998, 1999 and 2001) and Waves 1-4 (2002-2009) [computer file]. 15th Edition. Colchester, Essex, UK Data Archive [distributor], April 2011 SN: 5050, http://dx.doi.org/10.5255/UKDA-SN-5050-1

Mayhew, L., M. Karlsson and B. Rickayzen (2010). "The Role of Private Finance in Paying for Long Term Care*." Economic Journal **120**(548): F478-F504.

Poole, T. (2006). Funding Options for Older People's Social Care. London, King's Fund. Wanless Social Care Review Background Paper 12 (http://www.kingsfund.org.uk/document.rm?id=6330)

University of Essex. Institute for Social and Economic Research (2010). British Household Panel Survey: Waves 1-18, 1991-2009 [computer file]. 7th Edition. Colchester, Essex, UK Data Archive [distributor], July 2010 SN: 5151

Wanless, D. (2006). Securing good care for older people: taking a long-term view. London, King's Fund.