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Immediate Needs Annuities in England

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Discussion Paper 2776

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Introduction

Self-payers under the current funding system for social care have few options to insure themselves against the costs of care (Wanless 2006). At present there are few private financial products available in England to support people with their care costs. The constraints on the potential for the private market has been argued for a number of reasons, including: information problems such as adverse selection, high discounting of the future and crowding out by public funding (Brown and Finkelstein 2007; Brown and Finkelstein 2008; Mayhew, Karlsson et al. 2010). One of the few products that is in operation, albeit at a very small scale, is the Immediate Needs Annuity (INA). These products are available to people at the point of needing care 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.

The potential role of private financial products, including INAs, 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).

Against this policy backdrop, this paper aims to assess whether INAs might have a bigger role to play in the care system, and if so, by implication, whether public support might help to increase uptake. Two types of analyses can shed light on these questions. The first analysis uses a simulation approach to estimate the financial and other implications of INAs in a number of scenarios where INAs are in more widespread use. This analysis uses the PSSRU dynamic microsimulation model of social care for older people. The second analysis is of current INA policy holders, focusing on the income elasticity of demand for INAs. This analysis primarily helps us to understand the prospects for increasing uptake among lower income groups.

Modelling the impact of INAs

At present INAs are purchased by only a relatively small number of people, but it is important to understand the implications of INA use on the assumption that all people that could afford INAs did use them. In other words, if the use of INAs was at its potential then what would be the consequences for the care system overall, and what would be the consequences for individuals?

Expected effects

Individual level

The benefit for individuals in using INAs is in having insurance protection against potential catastrophic costs of residential care resulting from longer than expected stays. So called 'risk averse' people would prefer to take a certain loss (the payment of a premium) rather than the risk of an uncertain distribution of potential losses even where the mean or expected value of the two losses is the same. All insurance works on this principle. The current social care system has a publicly funded safety net for care costs that means that the last £14,000 of a person's wealth is always protected (assumed that the person wishes to move into the public system). But someone with high wealth before entry to a care home could stand to lose a significant amount.

System-level

A number of system-level benefits might be expected. First, by taking an INA, people protect their remaining assets and as a result would not need to turn to state support even if their care costs were greater than expected. Without an INA it is possible that the same person might experience a longer length of stay – and therefore higher lifetime care costs – than expected and so run their assets down below the point that they become eligible for state support. In avoiding the chance of this spend-down, public sector costs of care would be lower where people used INAs compared to the situation where no INAs were available.

The second potential benefit is in reducing the (perverse) financial incentives that exist in the current system for very high need people. Some people who would be assessed as needing residential care under the current system – i.e. very high need people – might instead seek to make do with community-based services due to the financial incentives under the current funding arrangements. In particular, single people living in their own homes are very unlikely to qualify for a public subsidy if they enter a care home. In other words, they will be self-payers and face the full costs of care (and accommodation) themselves. By contrast if they can make a case that they could manage at home with a community-based package then the home is disregarded in their financial assessment. The chance of that person qualifying for public support is therefore much higher, bearing only on the level of their non-housing wealth. The lifetime cost of their care at home will be lower for that individual and higher for the state as a consequence compared to the care home option. To be clear, nonetheless, this case refers to a person who has a care home level of need and as such, by remaining in the community, will experience unmet need. This unmet need stems in part from the willingness of some people to settle for inappropriate care because of the potentially high costs that are involved.

The degree to which INAs can offer system level benefits depends on the nature of people's preferences and their demand for care. It might be that self-payers defer entry into a care home in fear of the potential catastrophic cost of care rather than just the higher *expected* cost in a care home compared to remaining at home. If this is the case, then the availability of insurance against catastrophic tail-end risk in the form of INAs could improve demand for appropriate care in a care home. The individual would end up paying more to buy their INA than the cost of their care if they deferred entry, but their outcomes with an INA would be better.

We might then argue that the availability of INAs would reduce the number of high-need people that defer entry into a care home. Were this to be the case, the overall public cost of care would be lower than the comparator case where INAs are not available. Furthermore, the total level of expenditure on care, counting both state and private payment, would be higher with INAs should demand effects apply. The availability of INAs would have levered additional private spending. If there are no effects on demand from INAs – i.e. people are risk neutral – then additional private spending (on INA premiums) would offset the savings to the public purse; total expenditure would be unchanged.

Potential savings to the public purse from INAs could be used to fund a subsidy to potential INA recipients that might improve the level of take-up. Even if all the public savings were used in this way, total care expenditure with INAs would be greater than total care expenditure without INAs if demand effects apply, implying that un-met need levels would be lower.

Modelling INAs

The PSSRU DMS model simulates the care system for older people in England, with projections of costs and benefits under different scenarios from the present to 2025/6. The base scenario is the current means-tested funding system which, at present, supports some 162,000 older people in residential care in England and around 612,000 people with non-residential care packages. The net cost of care to the (council-run) public system is £6.3bn in care costs, with additional public spend on benefits such as Attendance Allowance. Nearly two-fifths of care home residents are self-payers having assessable assets of more than the current £23,250 upper threshold for support.

In modelling INAs we assume the care system is otherwise unchanged; that is, all current means-testing and needs-testing rules apply going forwards. The potential uptake of an INA is determined according to the need level of the individual, their wealth (including eligible assets)

and the support they can expect under the current MT system. INAs are modelled to be purchased by people with a care home need (which is determined in the model) who have assessable wealth of a value that is greater than the expected premium they would pay for the INA plus the £23,000 upper asset threshold.

- The starting point for determining the premium paid for an INA is the actuarially fair premium for the population of potential INA holders, based on their needs. The actuarially fair premium is calculated to be equal to the cost of a care home placement at the expected length of stay of people in the sub-population in question. In other words, if a person survived in a care home for exactly equal to the average length of stay the actuarially fair premium would just cover the costs of their care, allowing for a 1.5% real terms increase in unit cost per annum.
- Since we are interested in a scenario where INAs are in greater use, we assume that the standard quality of care is secured, where this costs the current supported rate of £550 per week in 2009/ 10. Any quality premium is discounted in this analysis. For the population of potential INA holders, based on current lengths of stay in care homes (around 2.4 years), the population average level premium is £69,000.

We model various scenarios that reflect the degree to which premiums would be adjusted to reflect the characteristics of the individual, so far as that is possible at time of admission.

- In base scenario we assume that it is possible to predict an individual person's length of stay but only with significant noise. In particular, in the base scenario the correlation between the individual's premium and their actual lifetime cost of care is around one-third.
- Reflecting that people at least partially finance their care out of income, we assume that part of the lifetime cost of care is funded in this way, so reducing the size of the annuity that is needed. This assumption reduces the actual INA premium by around a third.

Assessable wealth for individuals depends on household composition. People living alone without dependents in their own home are assumed to include both housing and non-housing assets in their wealth calculation. By contrast for people in couples, only their share of non-housing assets can be included.

Demand effects

As argued above, under the current system there is an incentive for people with a care home level of need to nonetheless stay at home with a non-residential care package. This demand effect is a standard feature of the PSSRU model. With respect to INAs a number of scenarios are considered. In all cases, potential purchasers of an INA must have eligible assets that exceed the expected premium plus £23,000 – this in the *affordability* condition. Thereafter, either:

- INAs have no demand effect: this scenario assumes that only people who would opt for residential care under the current means-tested system (without INAs), express a demand for an INA.
- High demand effect: in this scenario the availability of INAs changes people's behaviour so that in addition to people that would opt for residential care without an INA, those people with non-housing wealth of more than £23,000, or income of more than £250 p.w., or have a high care need would buy an INA.
- Base (or intermediate) demand case: INA availability has an intermediate effect on behaviour. In addition to people that would opt for residential care without an INA, those people with non-housing wealth of more than £23,000 or with a very high care need would buy an INA.

All people that satisfy these conditions are assumed to purchase an INA in these different scenarios. The INA premium is then deducted from their savings after which the weekly cost of the care home placement is met by the insurer less the contribution the person makes out of income. Together this means that no-one needs to draw on their assets after the premium; people are free however to draw on assets to fund other non-care activities etc, as well as save any remaining income.

Affordability

Table 1 shows the numbers of INA holders under the demand scenarios who meet the basic wealth affordability condition. Under the base demand scenario, the model suggests that around 45,000 people could afford an INA. This number is nearly two-fifths of the current number of self-payers over 65 in care homes. The gender split is 71% women, which is a lower proportion of women than is currently the case.

As we might expect, under the higher demand scenario uptake numbers are greater; they are lower in the no-demand case. The no-demand case can be seen as the lower limit to the number of beneficiaries of INAs.

Table 1. Potential number of INA holders, various demand scenarios, by gender

	High demand effect	Intermediate demand	No demand
Female	36700	32200	28600
Male	15900	13100	10800
All	52600	45300	39400

The majority of INA purchasers have high levels of housing wealth prior to entering the care home. The small numbers of people with low housing wealth are likely to be those in the rented sector who have high levels of non-housing wealth.

Table 2. Potential number of INA holders, various demand scenarios, by housing wealth quintile

Housing wealth quintile	High demand effect	Intermediate demand	No demand
Q1 (low)	1100	1100	800
Q2	800	800	300
Q3	8800	7600	6900
Q4	21400	17700	16300
Q5 (high)	20500	18000	15000

Net benefit test

The affordability condition requires that people have sufficient wealth to cover the cost of an INA premium. A £23,000 buffer is built into this condition to reflect that people who have higher than expected costs of care without an INA would reach the safety net of the current means-tested system. The premium needs to be set at a level such that revenue to the insurer is sufficient to cover outlay on average where the outlay is the full lifetime costs of the insured person's care home placement.

Table 3 shows the distribution of lifetime costs of care, where the average length of stay projected for INA holders is just over 2.3 years under the base (intermediate demand) scenario – or just under £69,000. The table also shows the lifetime care charges the same person would pay under the current system without an INA. Up to lengths of stay of three years nobody would pay sufficient charges to take them below the asset threshold, but if they were to live for longer than this, their chances of become eligible to public support grows. For (the very few) people

who live for 13 years, for example, the lifetime costs of care would be around £410,000 (for the standard quality of care), but such a person would only pay around £260,000 on average without an INA in care charges under the current system. As such although the average lifetime cost of care is £69,000, the average lifetime charge a person would pay without an INA is £66,000, some £3000 less. So people will be only better off if the value they place on having certainty (paying a £69,000 premium) rather than taking a risk with an average cost of £66,000 but possibly having to pay £260,000 or more, is worth more than £3000 (or 4% than their premium).

Table 3. Lifetime costs and charges, by actual length of stay

Length of stay	Lifetime INA cost	Lifetime care charges under MT
1	28700	28700
2	57700	57700
3	87300	87300
4	117200	116700
5	147600	143200
6	178500	173500
7	209800	185700
8	241600	239900
9	273900	217100
10 to 12	340400	251000
13 or more	409600	259400

The first column of Table 4 is the actual pay-out cost less the average premium revenue to the insurer, with a mean of zero (actuarially fair premium) and a gain of £8800 at the median. The second column shows the amount of charge a person would pay without an INA less their INA premium. Common to all insurance, after the event some people will turn out to have been much better off having an INA, but others would have been worse off. *Ex ante* uncertainty means that (most) people will not be able know whether they would be winners or losers.

Table 4. Lifetime costs and charges net of premiums: base demand, individualised premiums

	Insurance pay-out cost less premium revenue (£s lifetime)	Savings to individuals of INA (MT charges without INA less premium outlay) (£s lifetime)
Mean	0	-3072
SD	34030	30263
Median	-8838	-9493
1st percentile	-55513	-63263
99th percentile	119890	82811

Figure 1 shows the full distribution of the insurance pay-out less premium revenue (which is summarised in the first column of the above table). Figure 2 gives the savings to individuals. These charts show the significance of the tails of the distributions.

Figure 1. Insurance pay-out cost less premium revenue (£s lifetime) - base demand, individualised premiums

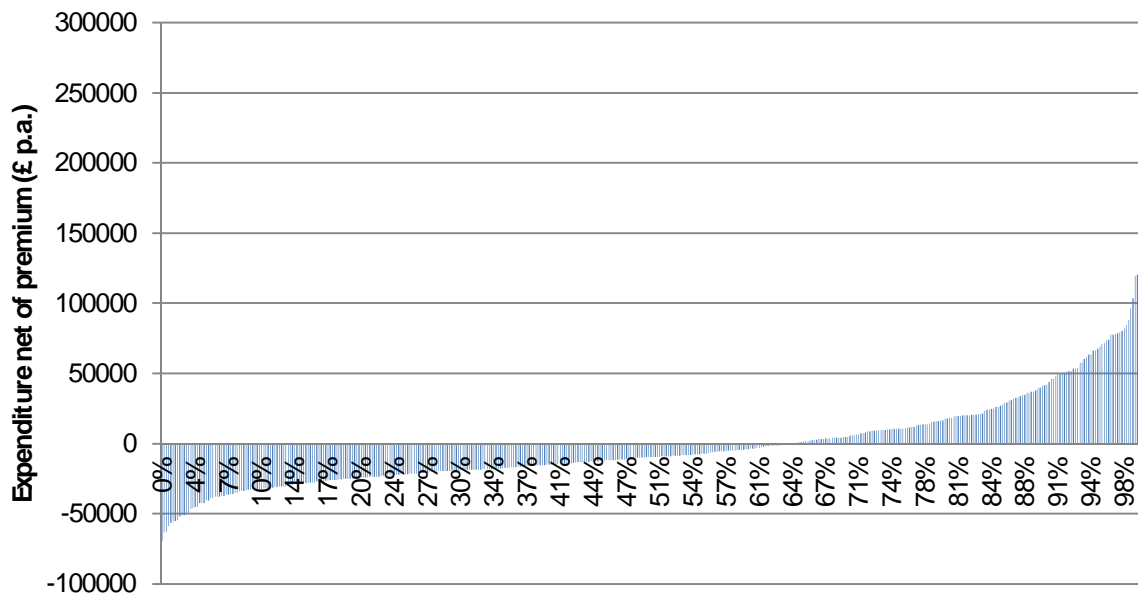
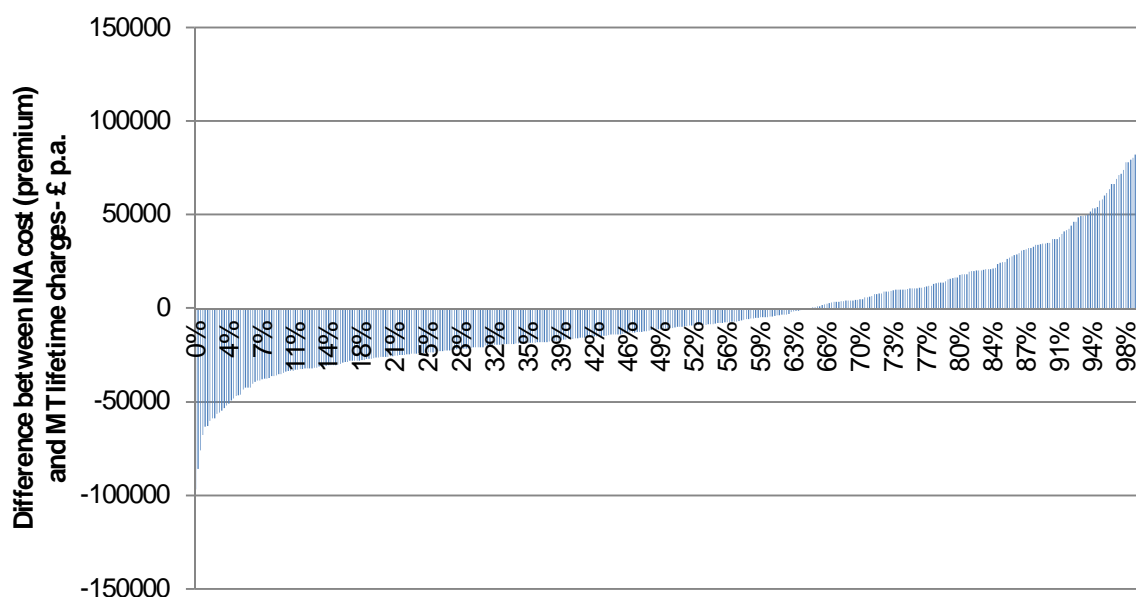


Figure 2. MT charges without INA less premium outlay (£s lifetime) - base demand, individualised premiums



The nature of the premium will have a bearing on the distribution of theoretical winners and losers. The above results are based on the individualised premium where indicators at admission to the care home can be used to predict lifetime costs and so adjust premiums. The premiums in the above charts are about 30% correlated with actual lifetime costs. Compared to the case where everyone pays the same flat premium (of £69,000) the individualised premium acts to flatten out the distribution (to reduce the extreme values of winners and losers). Table 5 summarises the winners and losers distribution for a flat premium, with the respective full distributions graphed in Figure 3 and Figure 4.

Table 5. Lifetime costs and charges net of premiums: base demand, flat premium

	Insurance pay-out cost less premium revenue (£s lifetime)	Savings to individuals of INA (MT charges without INA less premium outlay) (£s lifetime)
Mean	0	-3425
SD	38597	33831
Median	-10688	-12455
1st percentile	-38511	-65306
99th percentile	139180	117895

Figure 3. Insurance pay-out cost less premium revenue (£s lifetime) - base demand, flat premium

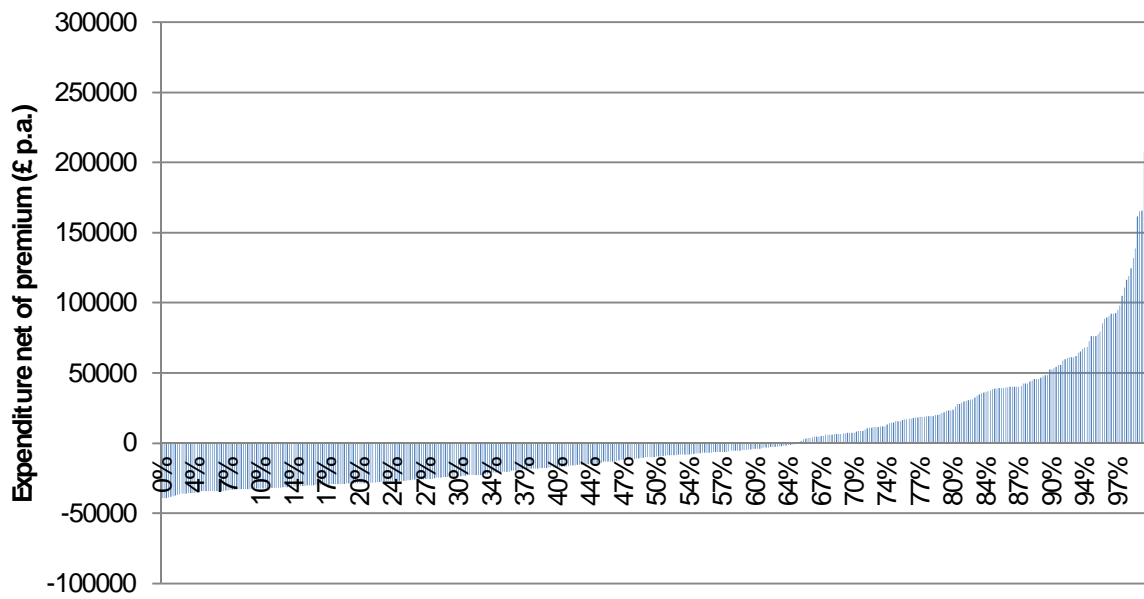
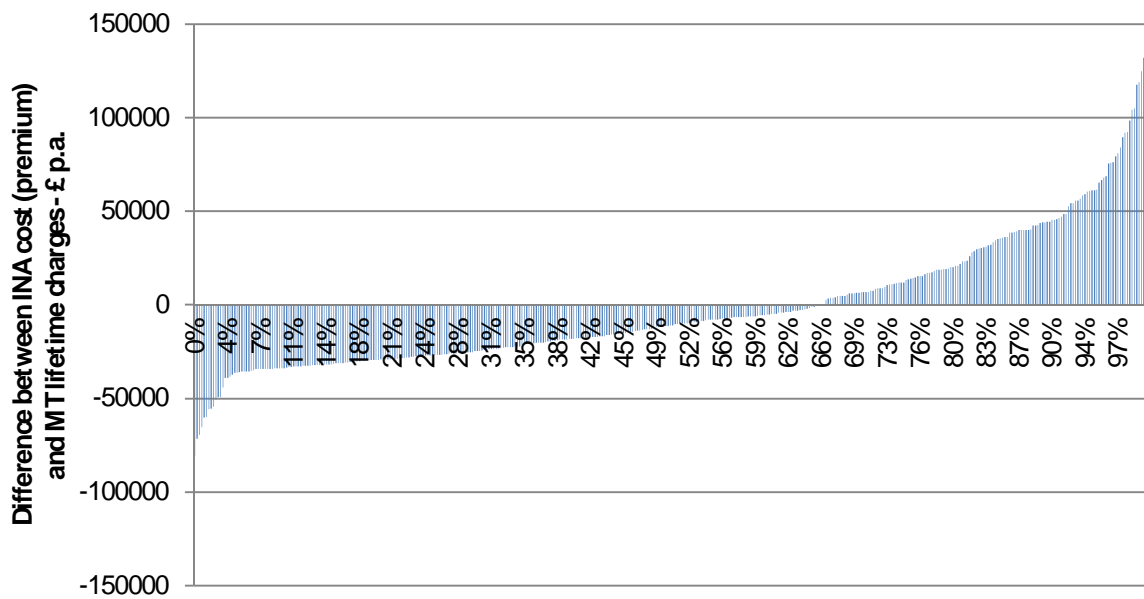


Figure 4. MT charges without INA less premium outlay (£s lifetime) - base demand, flat premium



Potential market size

With the average risk premium that people are prepared to pay running at around 5% of average cost outlay, then the figures in Table 1 give an indication of the potential market for INAs. In other words, subject to reasonable affordability and net benefit tests, the market could be potentially more than 6 times larger than is currently the case. Of course, there is a big

difference between the potential size and the actual size of the market given the whole range of other considerations that people make when deciding to insure.

System level results

Suppose that the number of INA purchasers was at its potential level. What would be the system-wide implications? Table 6 (and graphically in Figure 5) shows the projected net public spend on social care for older people in England as produced in the model on the basis of central assumptions about population growth, disability rates, unit cost growth and so on.¹ Current central projections are for net public spend on social care to increase from £6.36bn to £12.15bn by 2025/ 6. The table also gives results for 4 different INA scenarios:

- Base scenario: intermediate demand effects and individualised premiums
- Flat premium: intermediate demand effects but with a single, community rated premium for all INA holders
- High INA demand effects (as above), individualised premiums
- No INA demand effects (as above), individualised premiums

In all scenarios, net public spending is lower with INAs compared to the no INAs case, although the effect is small. Under the no-demand case, savings accrue only where the use of an INA saves long-stayers from spending down below the £23,000 threshold. Some 6% of people would otherwise spend-down as a result of having longer than expected lengths of stay and having relatively low wealth (although still sufficient to satisfy the INA affordability condition).

Table 7 (or Figure 6) shows the savings under the different demand scenarios. For example, in the no-demand scenario savings grow to around £80m p.a. by 2025/ 6. INAs are only assumed to be available from 2009/ 10 and consequently the (dynamic) system takes some time to reach a steady state.

The size of the savings increase when demand effects are assumed. In these cases, use of INAs saves the public purse from covering the cost of spend-down and also the cost of any subsidy provided to people who use non-residential care as an alternative (despite their high needs). It is projected that under the high-demand scenario, savings would be nearly 4 times as great as

¹ See Julien Forder, José-Luis Fernández, *Analysing the costs and benefits of social care funding arrangements in England: technical report*, <http://www.pssru.ac.uk/pdf/dp2644.pdf> for details.

compared with the no-demand scenario. Although we have no evidence on which to judge demand effects, we would nonetheless expect the high-demand scenario to be an over-estimate.

Table 6. Net public spend, various demand scenarios (£bn p.a.), England, 65+

Year	No INA	Base: intermediate demand	Flat premium; int demand	High demand	No demand
2009/10	6.36	6.34	6.34	6.32	6.36
2010/11	6.63	6.61	6.61	6.58	6.63
2011/12	6.92	6.89	6.89	6.85	6.91
2012/13	7.18	7.13	7.13	7.08	7.17
2013/14	7.49	7.42	7.42	7.35	7.47
2014/15	7.74	7.66	7.66	7.59	7.71
2015/16	8.07	7.99	7.98	7.92	8.04
2016/17	8.34	8.27	8.26	8.18	8.30
2017/18	8.59	8.51	8.51	8.43	8.54
2018/19	8.95	8.83	8.82	8.75	8.88
2019/20	9.40	9.28	9.27	9.20	9.34
2020/21	9.79	9.66	9.63	9.57	9.73
2021/22	10.14	9.99	9.97	9.88	10.07
2022/23	10.53	10.37	10.35	10.25	10.46
2023/24	11.08	10.94	10.91	10.82	11.01
2024/25	11.63	11.46	11.44	11.34	11.56
2025/26	12.15	11.98	11.95	11.84	12.07

Figure 5. Net public spend, various demand scenarios (£bn p.a.), England, 65+

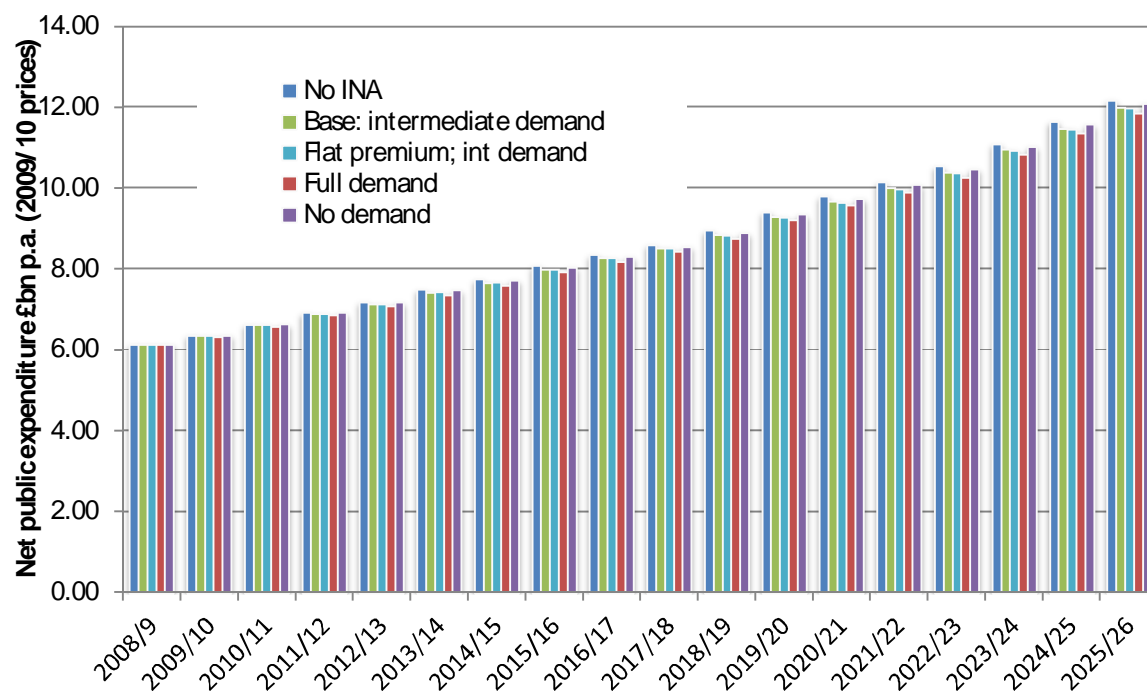


Table 7. Savings on net public spend from INAs, various demand scenarios (£millions p.a.), England, 65+

	Base: intermediate demand	Flat premium; int demand	High demand	No demand
2009/ 10	20.00	20.00	40.00	0.00
2010/ 11	20.00	20.00	50.00	0.00
2011/ 12	30.00	30.00	70.00	10.00
2012/ 13	50.00	50.00	100.00	10.00
2013/ 14	70.00	70.00	140.00	20.00
2014/ 15	80.00	80.00	150.00	30.00
2015/ 16	80.00	90.00	150.00	30.00
2016/ 17	70.00	80.00	160.00	40.00
2017/ 18	80.00	80.00	160.00	50.00
2018/ 19	120.00	130.00	200.00	70.00
2019/ 20	120.00	130.00	200.00	60.00
2020/ 21	130.00	160.00	220.00	60.00
2021/ 22	150.00	170.00	260.00	70.00
2022/ 23	160.00	180.00	280.00	70.00
2023/ 24	140.00	170.00	260.00	70.00
2024/ 25	170.00	190.00	290.00	70.00
2025/ 26	170.00	200.00	310.00	80.00

Figure 6. Savings on net public spend from INAs, various demand scenarios (£millions p.a.), England, 65+

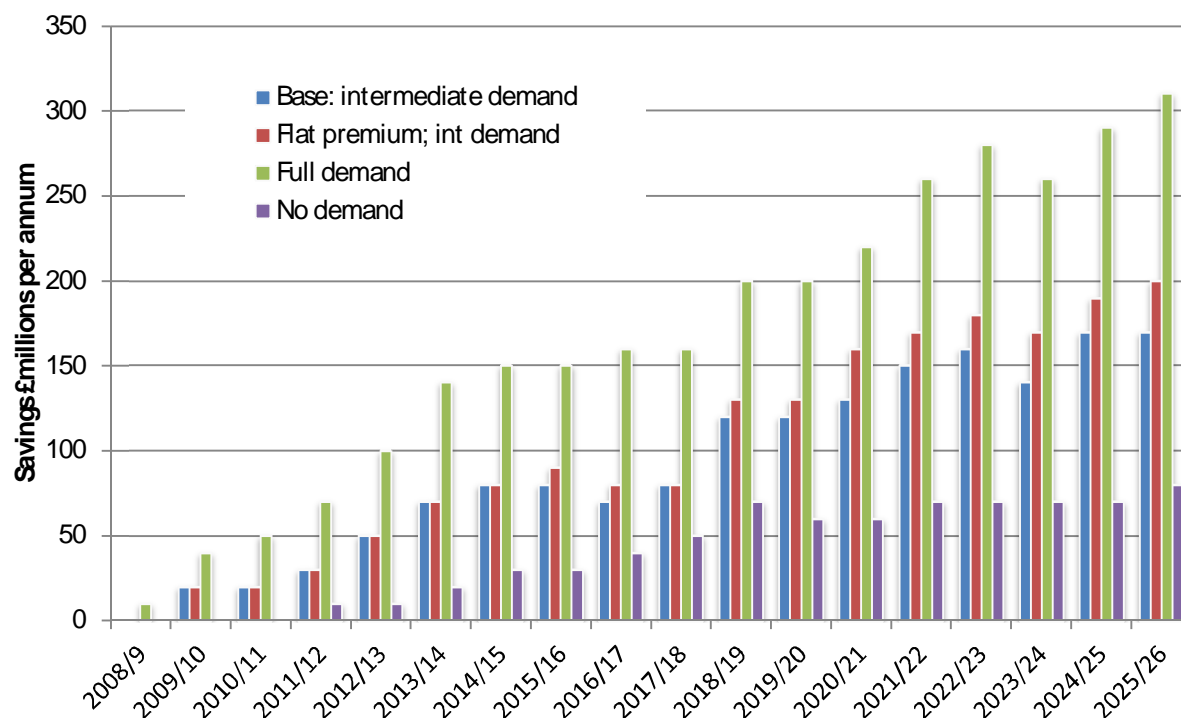


Table 8 (Figure 7) reports the total (public and private) expenditure on care projected by the model. This total spend is around double the net public spend, indicating that around half of all care spend for older people is out-of-pocket under the current system (as charges for publicly supported people and fees paid by self-payers). Under the no-demand scenario with actuarially fair premiums, the use of INAs has no effect on total spend – see also Table 9 (Figure 8). In this case the saving to the public purse is funded by the INA holder’s premium payment. However, where demand effects are prompted by the availability of INAs, additional private spending is levered as people with high-level needs opt to go into a care home with INA funding rather than seek lower-cost community care as they would do in the scenario of no INA availability. These behaviour change people would end up paying more with their INA compared to the no-INA case, but would be benefiting from an appropriate level of care (i.e. no unmet need).

Table 8. Total care spend, various demand scenarios (£bn p.a.), England, 65+

	No INA	Base: intermediate demand	Flat premium; int demand	High demand	No demand
2009/10	13.78	13.93	13.93	14.12	13.78
2010/11	14.20	14.41	14.40	14.63	14.20
2011/12	14.95	15.22	15.22	15.48	14.95
2012/13	15.40	15.66	15.64	16.00	15.40
2013/14	16.13	16.39	16.39	16.71	16.13
2014/15	16.86	17.19	17.19	17.52	16.86
2015/16	17.45	17.79	17.80	18.20	17.45
2016/17	18.24	18.58	18.59	18.95	18.24
2017/18	18.91	19.31	19.32	19.71	18.91
2018/19	19.68	20.05	20.06	20.52	19.68
2019/20	20.63	21.08	21.09	21.56	20.63
2020/21	21.49	22.03	22.04	22.55	21.49
2021/22	22.48	22.99	23.02	23.48	22.48
2022/23	23.43	23.94	23.96	24.50	23.43
2023/24	24.52	25.07	25.09	25.68	24.52
2024/25	25.84	26.41	26.43	27.07	25.84
2025/26	27.03	27.65	27.68	28.31	27.03

Figure 7. Total care spend, various demand scenarios (£bn p.a.), England, 65+

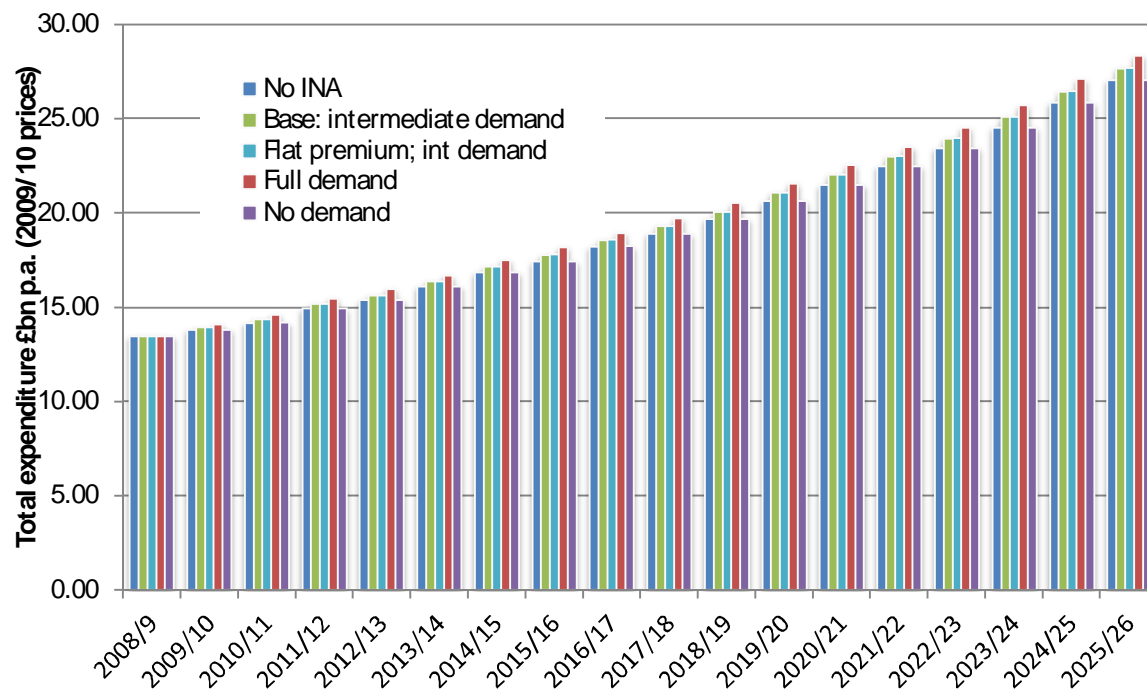
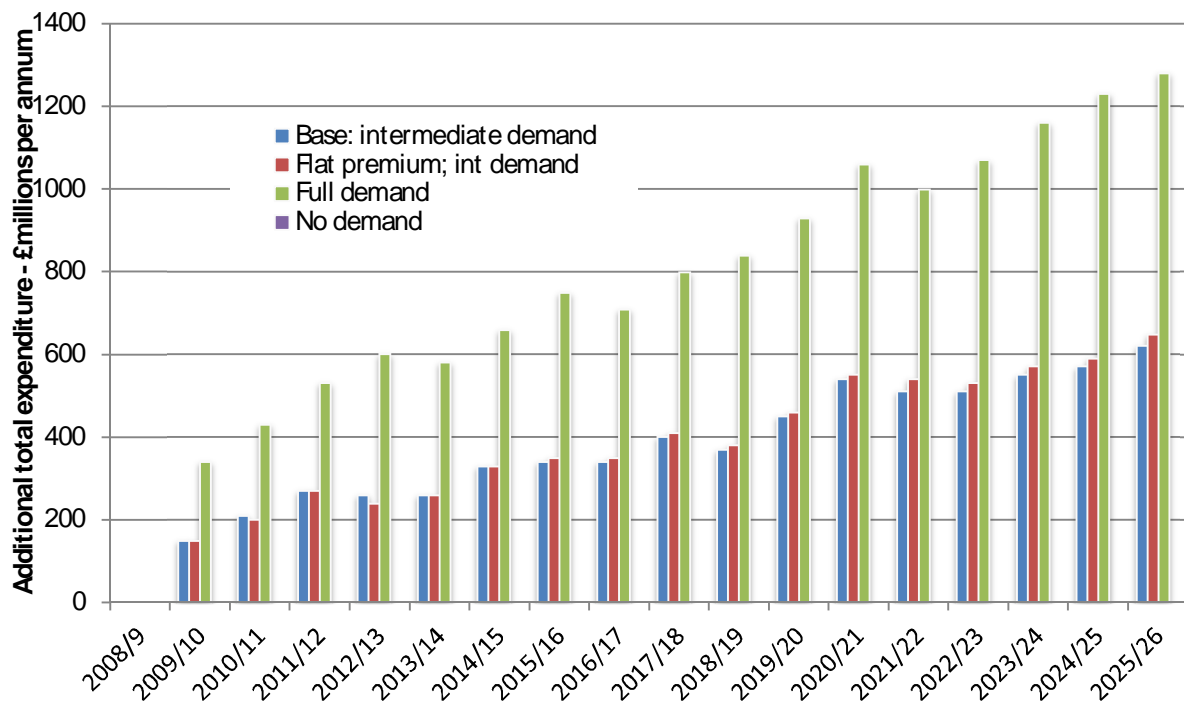


Table 9. Increase in total care spend from INAs, various demand scenarios (£millions p.a.), England, 65+

	Base: intermediate demand	Flat premium; int demand	High demand	No demand
2009/ 10	150.00	150.00	340.00	0.00
2010/ 11	210.00	200.00	430.00	0.00
2011/ 12	270.00	270.00	530.00	0.00
2012/ 13	260.00	240.00	600.00	0.00
2013/ 14	260.00	260.00	580.00	0.00
2014/ 15	330.00	330.00	660.00	0.00
2015/ 16	340.00	350.00	750.00	0.00
2016/ 17	340.00	350.00	710.00	0.00
2017/ 18	400.00	410.00	800.00	0.00
2018/ 19	370.00	380.00	840.00	0.00
2019/ 20	450.00	460.00	930.00	0.00
2020/ 21	540.00	550.00	1060.00	0.00
2021/ 22	510.00	540.00	1000.00	0.00
2022/ 23	510.00	530.00	1070.00	0.00
2023/ 24	550.00	570.00	1160.00	0.00
2024/ 25	570.00	590.00	1230.00	0.00
2025/ 26	620.00	650.00	1280.00	0.00

Figure 8. Increase in total care spend from INAs, various demand scenarios (£millions p.a.), England, 65+



In summary, as well as the direct insurance benefits (protection against spend-down), system-wide benefits will also depend on whether INA availability can generate demand effects. Without evidence this question is hard to judge, but some demand effects seem likely.

Current uptake demand

According to data available from Partnership, a little under 7000 INAs are in force nationally at present. Although data on the age, sex and frailty of annuity holders are on record, there is much less evidence about the wealth of people who buy INAs. We can clearly hypothesise that only relatively wealthy people can afford the premiums, but without a better understanding it is difficult to assess the current relationship between uptake and wealth. People do not disclose their wealth on application but we can infer to some degree their affluence according to property prices in the area that they might live. Confidentiality concerns appropriately restrict the scope of this mapping but we can nevertheless shed some light on this issue.

Table 10 gives the distribution by age and sex and the rate of policy holding per respective population. Women hold far more policies than men but also constitute the larger part of the over 65 population. Although with 4.78 policies per 1000 women in the population over 85, we can say that these over-85 women are more likely to hold policies than older men, the difference expressed in this way is less stark.

Table 10. Uptake, numbers and rates per capita

Policy uptake rates	Number	Percentage	Policies per 1000 population
Females less than 85 per capita	1633	25%	0.42
Males less than 85 per capita	592	9%	0.20
Females older than 85 per capita	3400	52%	4.78
Males older than 85 per capita	887	14%	3.47
All 65+	6512	100%	0.78

Policy holders tend to live in areas with high house prices as we might expect – see Table 11.

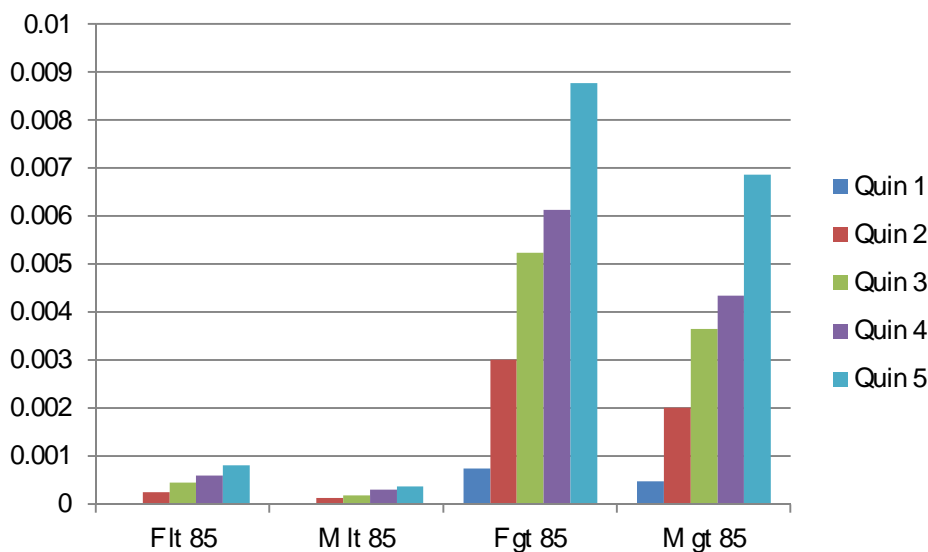
Table 11. House prices, INA premiums and policies per capita

Quintile	Average house price (£s)	Average INA premium (£s)	Policies per capita 65+
1	103253	53040	9.76E-05
2	157590	62822	0.000493
3	199376	63301	0.000842
4	244470	67331	0.001003

5	340677	74290	0.001473
Total	209070	67316	0.000782

Statistical analysis can be used to estimate the relationship between the average house price per area in England and the likelihood of INA uptake. Figure 1 illustrates the strong relationship between uptake and house price quintile, particularly for over 85s.

Figure 9. Estimated relationship between INA uptake probability and house price average, by age and sex – quintiles of house price



The statistical analysis suggests that in areas with 10% higher house prices than average, the chance of being a policy holder in the population increases by 15%. At an individual level this income effect might be even stronger. This result suggests that INAs are seen as luxury products, a finding that is consistent with the simulation model results.

Summary and conclusions

Immediate Needs Annuities (INAs) are one of the few options that self-payers have to insure themselves against the costs of residential care. To date, however, take-up of INAs has been small and rather selective.

This paper has aimed to assess whether INAs might have a bigger role to play in the care system. The PSSRU dynamic microsimulation model of social care for older people was used to look at the scope for the beneficial use of INAs among older social care users. This model can be used to simulate a wide range of policy and demographic scenarios, including the uptake of

INAs, as they would affect a representative sample of older people in England (drawn from the British Household Panel Survey).

An affordability test and a net benefits test were used to determine the potential uptake of INAs; the former test selects those potential new care home residents with sufficient available funds to pay the premium for their INA; the latter refines the selection to those people that would benefit from buying an INA.

The model results suggest that around 45,000 people would pass these two tests on the assumption that they had at least modest degrees of risk aversion. This number is six or seven times greater than the actual number of people holding INAs.

These 45,000 beneficiaries are largely those people that are living alone with high levels of wealth (especially housing wealth). They would be self-payers under the current funding system having available assets of more than their expected INA premium (which averages £69,000) plus a buffer of £23,000. The buffer helps to ensure that potential INA holders meet the net benefit test, which requires that a person's expected lifetime expenditure with an INA (essentially the initial purchase of the annuity) must not exceed what they would otherwise have expected to pay without an INA (as a self-funder in the care system), less a risk premium.

Under current arrangements, people that run their remaining *assessable* assets down below £23,000 (the upper asset threshold rate as of 2009/ 1) might become eligible for state support, which reduces their private costs of care thereafter. INAs would not be beneficial for people with a good chance of becoming eligible without the INA, that is, people with more modest total holdings of assessable assets, often including couples where only non-housing assets can be counted towards total assessable assets. For people with assessable assets above £23,000 plus the actuarially fair premium for INAs, the average lifetime cost of care of new residents would be £66,000 under the current means-testing rules. With an INA these people would expect to pay a premium of £69,000 so that anyone willing to pay £3000 or more in return for peace of mind (that their remaining assets would be protected) would benefit from an INA. The 45,000 estimate therefore reflects the current estimated holding of assets by people with care needs in England.

Another important factor, in addition to asset holdings, is the price of the INA relative to expected cost of a person's care. If the price of an INA was above the actuarially fair premium rate, then the net benefit test would be met by fewer people, those with a valuation of peace of mind in excess of £3000.

There is an expectation that people will live for longer in the future in particular disability states and this may mean that average lengths of stay in care homes will increase (although it might also mean people enter care homes later than before, pushing down on length of stay). If average lengths of stay do increase, so will average premiums and this will impact on the affordability test, possibly reducing the potential size of the market. To counteract this effect somewhat, with longer lengths of stay lifetime care charges would also be greater for the person if they did not have an INA. Also, new cohorts of people entering the 75 plus population are expected to be wealthier in real terms than those in the past making INAs more affordable.

The comparison of lifetime costs has been made without discounting or interest accrual considerations. We would expect that people who discount the future heavily are less likely to benefit from INAs than people who are more forwards-looking.

Where people take INAs they would never need to draw on public support, whereas without an INA they have a chance to become eligible if their actual length of stay is much longer than expected. People still buy INAs because they are willing to pay the difference (£69,000 compared to £66,000) in exchange for certainty. Taking an overall system perspective, with INAs being purchased, therefore, the costs of care to the state overall will be lower than otherwise in a no-INA scenario. This saving to the public purse is estimated to be relatively modest, but does indicate a win-win situation: better outcomes for people taking an INA and lower state expenditure on care.

Overall, whilst there will always be a limit on the suitability of INAs for less wealthy people, we can conclude from this analysis that there is significant scope to extend their beneficial use among current self-payers of residential care in England.

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