# Insuring against lifetime cost risks at the point of need

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# Aims

- To assess the potential for immediate needs annuities (INAs) to operate in the English care system
- Explore how changes to public funding rules might accommodate greater take-up and the public cost consequences of such changes

# Context

- English care system
  - Means-tested public support
    - Asset test
    - Charges in public system based on income
  - Self-pay
    - Pay full care costs out-of-pocket

# Point-of-need Insurance – Immediate Needs Annuities

- Insurance available for people who have established (significant) care need
- Insure against the uncertain lifetime cost of care from that point
- Aimed at people moving into residential care (nursing homes)
- Cost: Lump-sum premium (c. £80,000)
- Benefit: Stream of pay-outs to cover care costs that continue until death

# What are the pros and cons?

- Advantages:
  - Risk averse people exchange an uncertain total cost requirement for a certain lump-sum payment
  - Protects people from 'running out of money' if they live longer than expected
    - Avoid chance to have to move to a lower-cost public nursing home
    - Have some certainty about making bequests
  - People are aware that they have a care need and so are more pre-disposed to buy
- Cons:
  - Insurance-holders penalised by means-tested public care system in England
    - Insurance pay-out income count in the means-test and reduce people's eligibility for public subsidies
  - Affordability is an issue for many
  - Does not protect against the risk of needing care

# Methods

- Assess *potential* levels of uptake of INAs
- (1) Affordability test
  - Do people have enough capital to pay INA premiums?
- (2) Net benefit test
  - Are people better off with INAs than without them?
    - Assume that people are moderately risk averse
    - Are people forgoing eligibility for public subsidies by taking out INAs?

# Net benefit test

- Because INA-holders may be ineligible for public subsidies…
  - Expected costs of care with an INA might be greater than expected cost without an INA
  - This difference might offset the benefits of certainty…
  - i.e. $E[c^I] - E[c^0] > \tau$, the risk premium
- Most likely to be a problem for people with modest wealth who are close to the capital limits of the public system

# Expected costs

- Calculate the annual cost to the individual (= charge – insurance pay-out) for each possible LoS.
- Apply the probability of experiencing each LoS and sum up the probability-weighted cost.
- Then we add the premium which is paid irrespective of the person's actual LoS.
- For an actuarially fair premium, the expected value of the insurance payouts = the premium…
- … so expected lifetime cost in that case is the weighted sum of charges:

$$E[c^I] = \sum_t c_t^I \rho_t$$

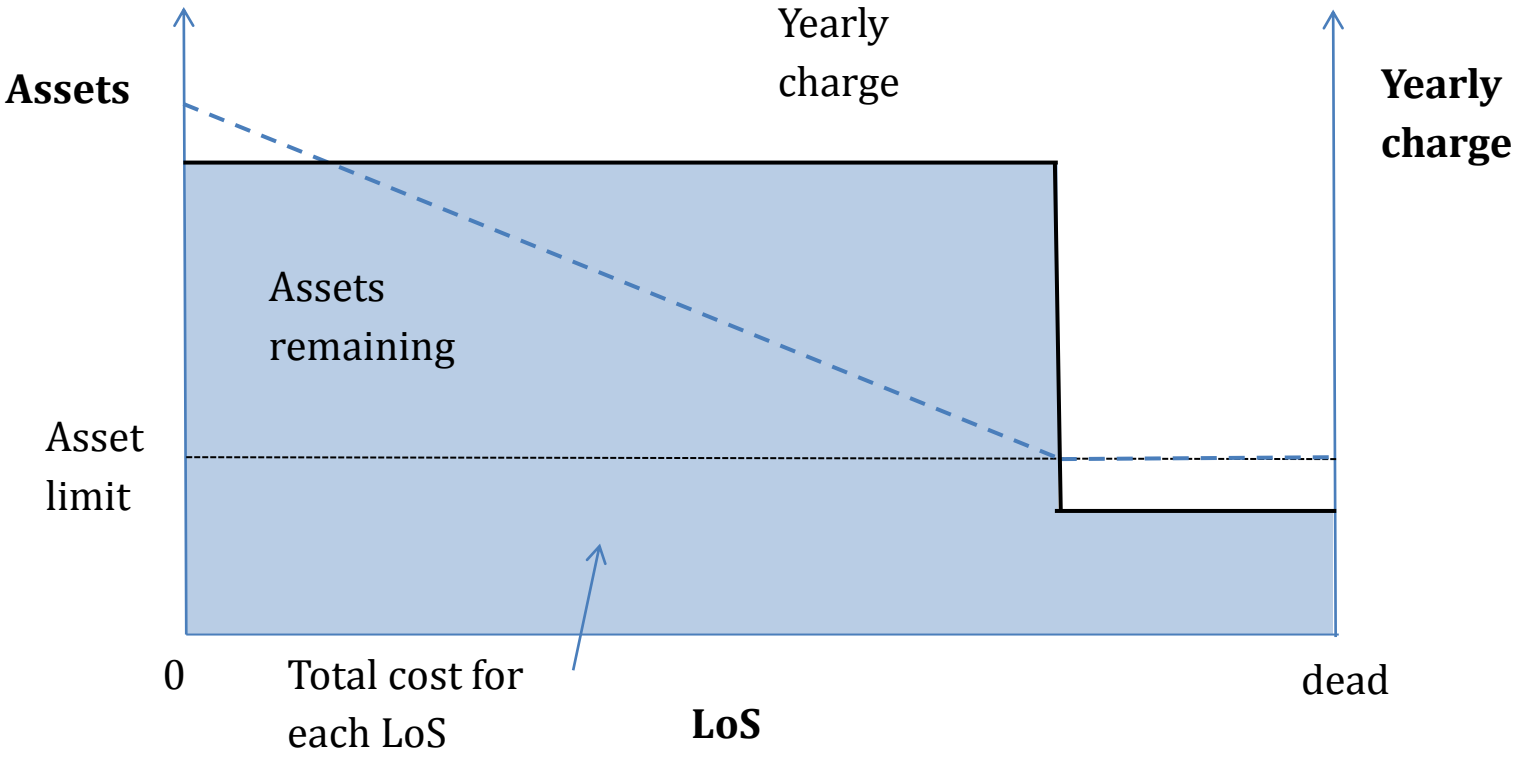
# Expected costs can differ

- Without a means-tested public system, the expected lifetime costs of care would be the same with or without an INA
  - i.e. $E[c^I] = E[c^0]$
- … and risk averse people buy insurance.
- But charges are not the same
  - (a) INA pay-outs count as income and
  - (b) after the initial INA premium outlay people spend down their assets more slowly because they have additional annuity income.

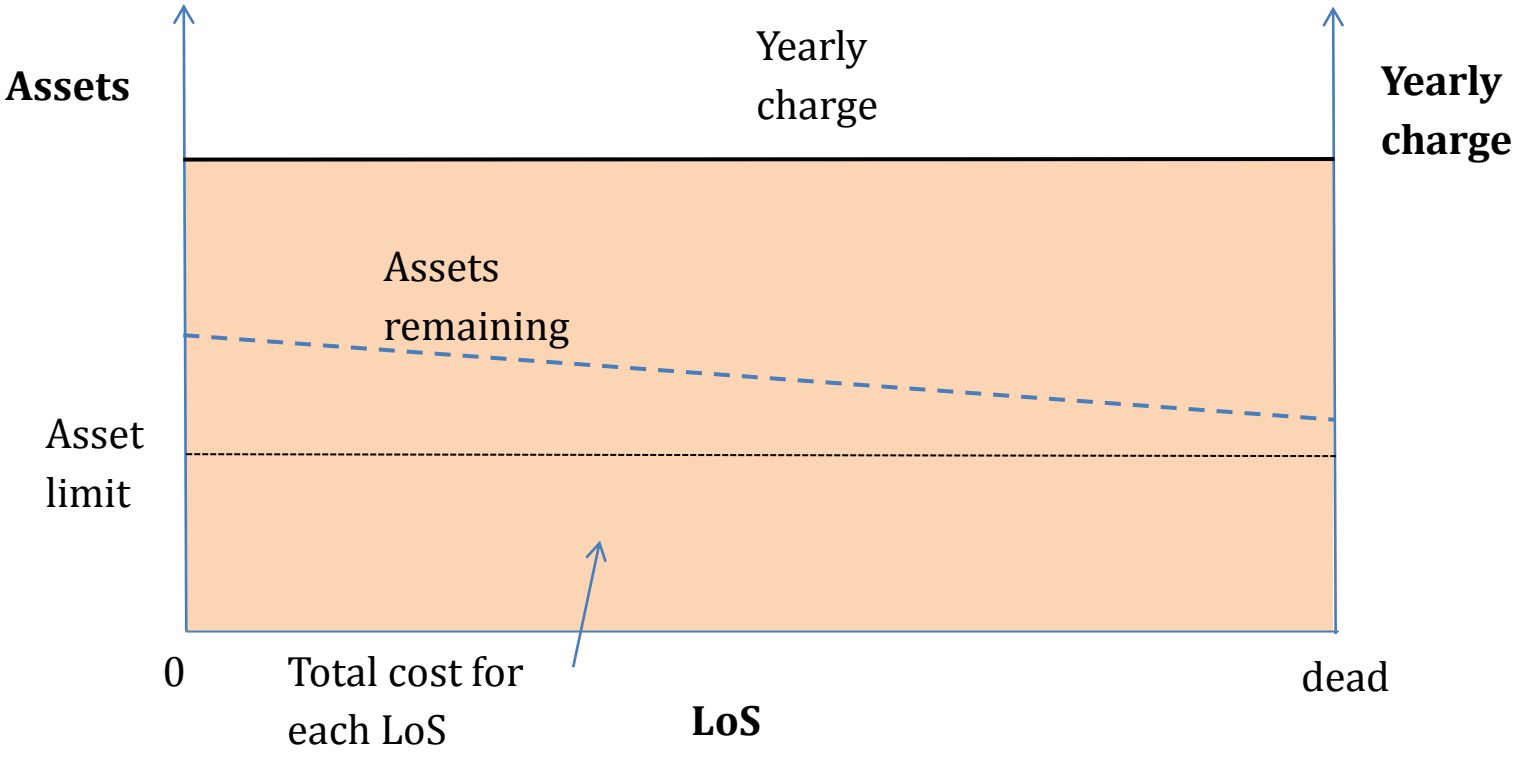
# Expected costs can differ

- The implications of this analysis can be distinguished for three groups of people.
  - (1) High-income
    - These people are unlikely to buy an INA if they can cover most or all of the costs of care using regular income
  - (2) High-wealth, but lower income
    - If wealth is high enough that even a very long-stay in a care home would not exhaust their assets then $E[c^I] = E[c^0]$ and risk averse people buy insurance.
  - (3) Low-wealth (and low income)
    - If a long-stay means assets would still be depleted and so eligible for public subsidies then $E[c^I] > E[c^0]$ . These people only insurance if $E[c^I] - E[c^0] < \tau$.

# Stylised experience of person without an INA



# Stylised experience of person with an INA



# Solutions

- To increase number who buy insurance…
- Adjust the public system rules:
  - Increase the capital limit for those people with insurance
  - Disregard some/all of the insurance payout in the public charge income test

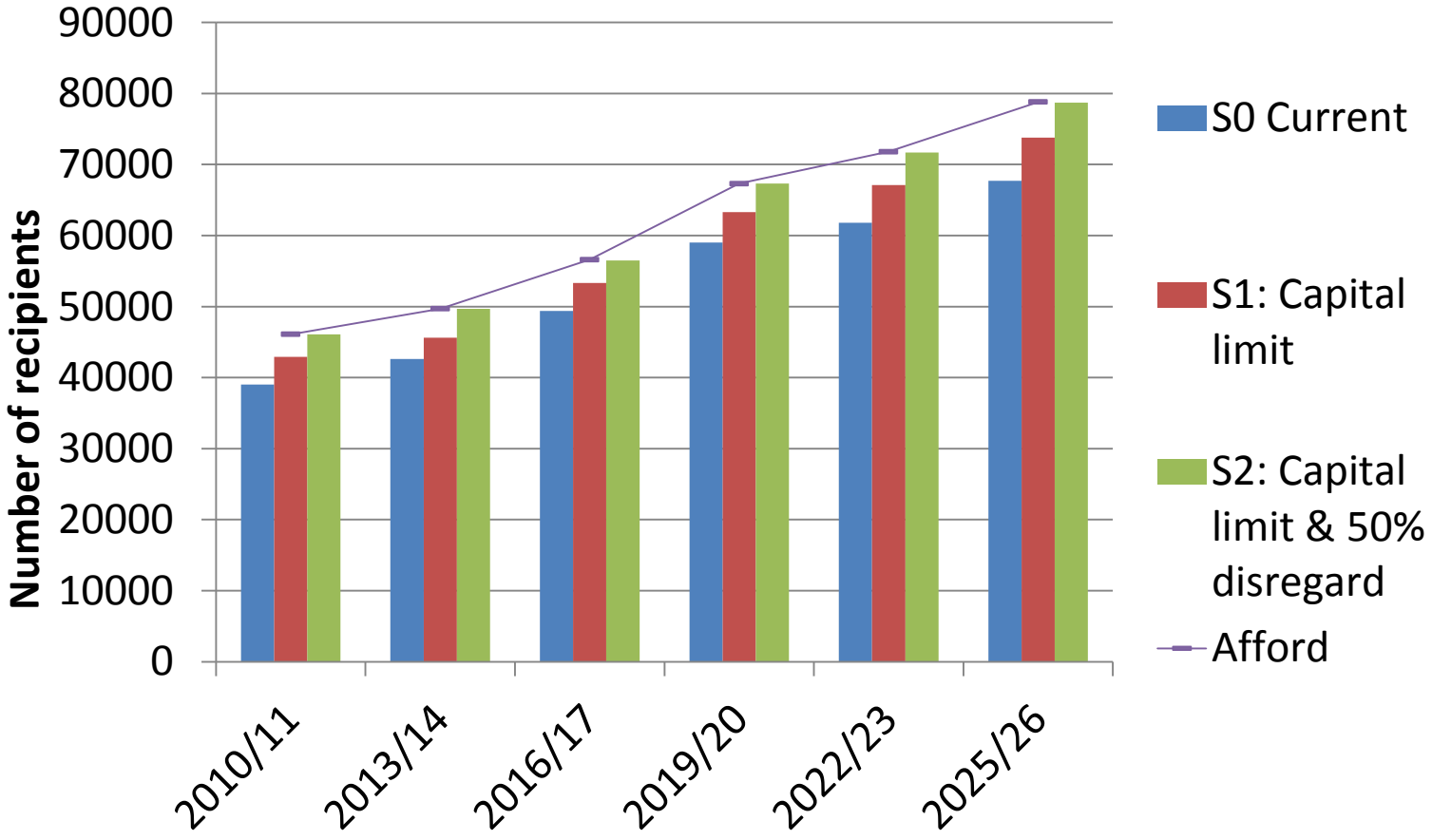
# Assessing possible solutions

- Too complex to model general solutions…
- … use micro-simulation
- PSSRU Dynamic micro-simulation model
  - Uses pooled sample of 65+ from BHPS
  - BHPS provides exogenous variables: e.g. age, sex, baseline wealth, baseline need(ADLs)
  - Derived variables, calculated using:
    - deterministic relationships: actual rules and features of the current care and support, benefits and tax systems
    - stochastic relationships: behaviours and other stochastic processes that are estimated statistically e.g. demand for care

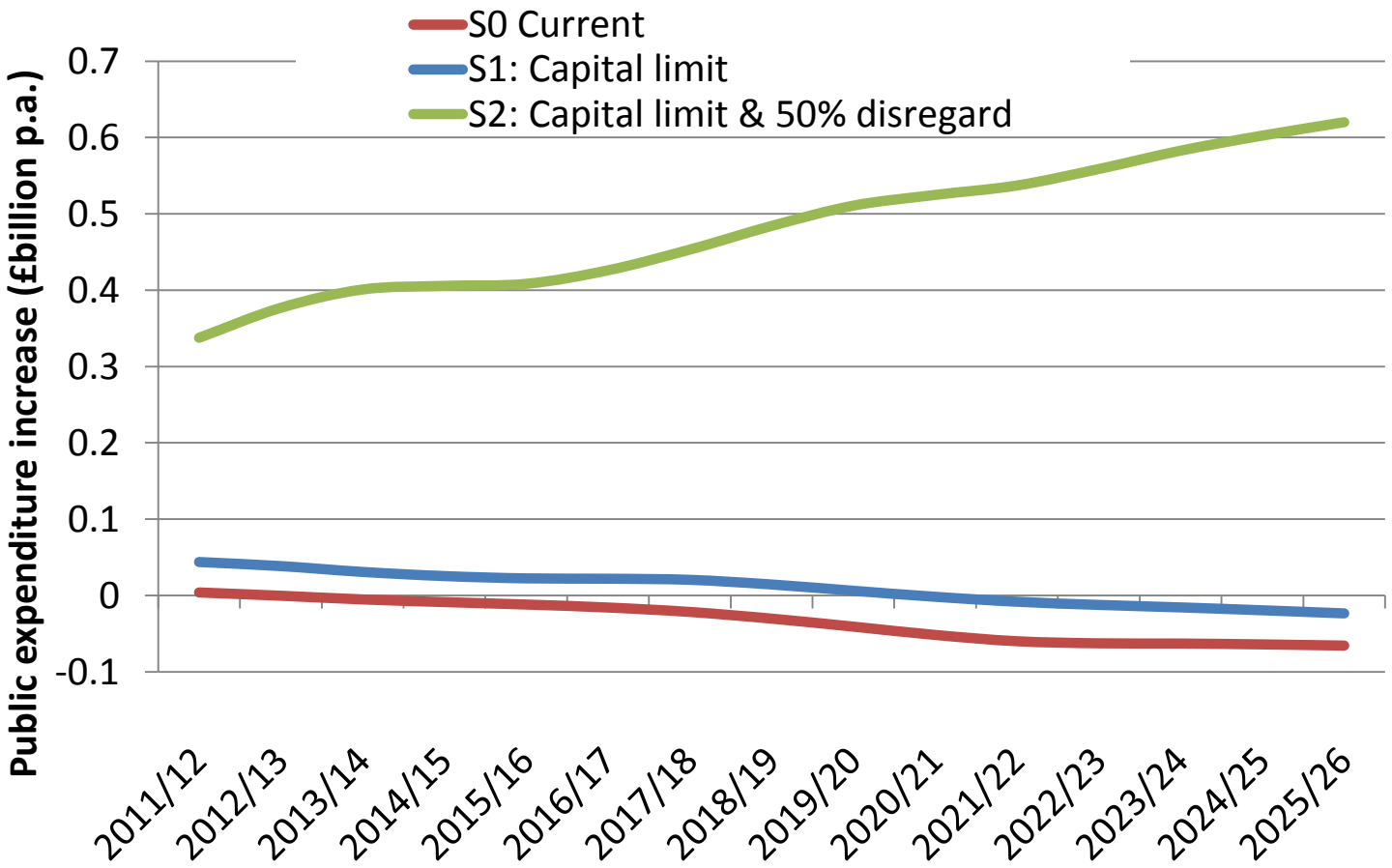
# Results

- We modelled three scenarios
  - S0 No change: Current MT rules with no special allowance for INAs
  - S1: Capital limit increased by the amount of insurance held (initial purchase value of INA)
  - S2: Increased capital limit plus having 50% of INA pay-out income disregarded in the charge means-test

# Numbers of people who could potentially afford and benefit from an INA



# Change in public cost of full uptake of INAs



# Conclusion

- Reconfiguring the public system means-testing rules can make INAs more attractive to people
  - Esp. those people near the capital limits of the public system
- Costs of greater uptake to public system following reform would be modest
- Issues:
  - Assumes actuarially-fair premiums – actual premiums would be much higher
  - Concerns potential uptake, not actual uptake
- Financial reform is likely to be a factor in seeing greater actual take-up