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Winners and Losers: Assessing the Distributional Effects of Long-term Care Funding Regimes

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ABSTRACT

Using two linked simulation models, we examine the public expenditure costs and distributional effects of potential reforms to long-term care funding in the UK. Changes to the means tests for user contributions to care costs are compared with options for abolition of these means tests ('free' personal care). The latter generally cost more than the former and benefit higher income groups more than those on lower incomes (measuring income in relation to the age-specific income distribution). Reforms to the means tests target benefits towards those on lower incomes. However the highest income group are net losers if free personal care is financed by a higher tax rate on higher incomes and the effect on the whole population considered.

NON-TECHNICAL SUMMARY

How should long-term care for older people be financed? This is an important issue which will affect many of us as more of us live to late old age. The 1999 Royal Commission on long-term care funding recommended that nursing and personal care components of the fees of care homes and home-based care should be met by the state without means testing and financed from general taxation. Means-testing would remain for accommodation and living costs ('hotel' costs) and for help with domestic tasks. The Government accepted many of these recommendations but did not remove the means test for personal care. The Scottish Executive, however, decided that it would also make personal care free of charge. The policy debate has continued, with commentators calling for abolition or reform of the means tests, with more of the costs falling on the state and less on older people at the time they need care.

This study uses computer simulation to explore the expenditure implications of a range of options for reforming the long-term care funding system. The options are: (1) no reform; (2) free personal care; (3) a less stringent means test. The study also identifies who would be the main beneficiaries of each option.

(1) No reform. Under the current funding system and a central set of economic and demographic assumptions, public expenditure on long-term care as a proportion of Gross Domestic Product (GDP) is projected to double over the next half century, from just under 1% in 2002 to almost 2% in 2051. These projections are sensitive to varying the assumptions about future life expectancy, trends in disability rates and trends in real unit costs.

(2) Free personal care. A medium cost version would pay older people who need residential care a flat rate subsidy of around £175 a week towards care home fees and meet all assessed needs for personal care at home without a means test. Its immediate effect would be to raise the public cost of long-term care from just under to just over 1%. The projected public cost in 2051 under the central set of assumptions is 2.25% of GDP, assuming no effect on the demand for care, compared with 2% under the current system.

(3) A reformed means test. Under the current means test, people with capital (usually including the value of their home) above £21,000 have to meet all the fees of the care home apart from any contribution to nursing care costs from the NHS. Below this threshold, the resident's contribution is an amount which leaves them with income no less than a small personal expenses allowance. Simulations suggest that under the current means tests, 43% of care costs are met from users' own resources and 57% by the state. Users in the top fifth of the income distribution meet just over two-thirds of the costs themselves, compared with under 45% for other groups. Reform options included more generous treatment of capital, a lifetime limit on the contribution required from any care user, a higher personal expenses allowance and some options specific to non-residential care. Of the options affecting residential care, a lifetime limit of £100,000 would currently cost the least. A complete disregard of housing assets would cost the most, raising public expenditure from 0.96% of GDP to 1.06% but, at least in the short term, it would cost less than free personal care.

Compared to free personal care, means test reform would give greater benefit to low income groups. Raising the personal expenses allowance would benefit the lowest income groups more than any other of the reforms. The immediate beneficiaries of free personal care would be *relatively* well off care recipients: in the top fifth of the income distribution, gains from free personal care would be nearly 80% above average. The Royal Commission argued that the revenue to finance free personal care could be raised from income tax to counteract this effect. Our modelling suggests that an increase from 40% to 41.5% in the rate of tax on higher incomes would meet the costs of the medium-cost version of free personal care. This tax change would go some way towards counteracting the benefits better off people would receive from free personal care and those in the highest income group of the whole population would *lose* from a combination of free personal care and this higher tax rate.

Introduction

The future public cost of long-term care for older people is a key issue in the on-going debate on how long-term care should be funded in the UK. A second concern is that the current funding system is not perceived as being fair (Hirsch 2005) and there is 'widespread dissatisfaction with the current means-tested funding arrangements' (Wanless, 2006: xxv). The latter is one argument which can be made for non means-tested ('free') care as advocated by the Royal Commission on Long-term Care (Royal Commission on Long-term Care, 1999). The UK Government accepted that the state should make a non means-tested contribution to nursing care but rejected the recommendation that the means test for personal care should also be abolished (Secretary of State for Health, 2000). One of its arguments, shared by two dissenting members of the Royal Commission, was that the immediate beneficiaries would be relatively well-off older people. The Scottish Executive, however, did implement free personal care and pressures for a similar policy in the rest of the UK remain (Brooks et al. 2002; Joseph Rowntree Foundation 2006). Assessments of the likely distributional effects of alternative long-term care policies is therefore critical for informed debate on the future of long-term care policy.

Equity in long-term care funding

Our aim in this paper is to contribute to the debate on what promotes equity or fairness in a long-term care funding system. There are several dimensions to fairness in this context. One concerns differences between the care which is available without charge under the National Health Service (NHS) and care which is subject to means-tested user charges. The NHS embodies a definition of fairness which provides health care on the basis of health needs rather than ability (or lack of ability) to pay. In contrast, access to publicly-funded social care

for older people takes account of both care needs and ability to pay. These differences lead to so-called diagnostic inequities. People suffering from illnesses for which health care treatments exist (for example cancer) receive their personal care without charge as a by-product of their medical care. Those with conditions which are not amenable to health care treatments (such as Alzheimer's disease) do not. Within the UK system, some people receive all their care free in non-hospital settings if judged to be eligible for fully-funded NHS care. Variations in the eligibility criteria for fully-funded NHS care are another source of perceived unfairness (Hirsch 2005).

If ability to pay is taken into account, a separate issue is whether the specific form of the means test results in a fair distribution of public expenditure on social care for older people.

Our analysis addresses both these concerns by comparing the effects of a policy of providing personal care without a means test ('free' personal care) with changes to the means test designed to address the perceived inequities in the current system.

The means tests for long-term care in England and options for reform

The systems of means-tested charges for long-term care vary across the constituent countries of the UK. As already mentioned, a policy of free personal care in both residential and domiciliary settings exists in Scotland. Aspects of the means test in Scotland (as applied to the non nursing and personal care elements of care home fees) and Wales differ from those in England. In this paper the English system, as if applied to the whole of the UK, is used as the basis for comparison with reform options.

The English system for charging for care in a care home

People entering residential or nursing homes on a permanent basis must first be assessed as

needing such care, before they can receive state help with meeting care home fees. If they are assessed as needed nursing care in a nursing home, the NHS pays a non means-tested contribution at one of three rates depending on assessed need. Users pay a contribution to the remainder of the fees depending on their income and capital. For those with capital in excess of an upper threshold equal to £21,000 in April 2006 (approximately €30,600), the contribution is 100 per cent for as long as capital remains above this threshold. The value of an older person's home is excluded from capital for the first twelve weeks after entry to a care home. After that, it is taken into account unless the older person has a partner or other qualifying relative who continues to live in the home.

If total capital is below the upper threshold, the resident's contribution to the care home's fees is an amount which leaves the resident with income of no less than a 'personal expenses allowance'. In calculating income for this purpose, investment income is disregarded but a notional 'tariff' income is assumed from capital between a lower capital threshold and the upper threshold. This is at the rate of £1 per week for every £250, or part of £250, between these limits. The personal expenses allowance currently (April 2006) stands at £19.60 (€29).

Two social security benefits are relevant to long term care funding. Attendance Allowance (or equivalently the care component of Disability Living Allowance[1]) is payable to older people who need help with personal care or supervision because of illness or disability. It is not means tested and is payable at one of two rates depending on the extent of help needed.

The second relevant social security benefit is Pension Credit, a means-tested income maintenance benefit. Entitlement to Pension Credit depends on both income and capital but there is no upper capital threshold and capital above the lower threshold is deemed to generate weekly income at a lower rate (£1 per £500 of capital) than for care home charging. In assessing entitlement to Pension Credit, Attendance Allowance is disregarded but

triggers entitlement to the Severe Disability Premium, an addition to Pension Credit. Attendance Allowance is included in the income on which users' contributions to care home fees are calculated and remains payable if the older person is required to pay the full fee. If the resident is entitled to a state contribution to the fees, Attendance Allowance ceases to be payable (after four weeks) as does any Severe Disability Premium.

Charging for home care

There is no national charging system for home care but national guidance sets out principles to which Local Authorities must adhere. One is that charges should not leave users with disposable incomes lower than 125% of the ordinary (before disability premiums) level of the 'Guarantee Credit' within Pension Credit. This level is the minimum income guaranteed to pensioners who claim any entitlement to Pension Credit. Another principle is that if income from Attendance Allowance or the Pension Credit Severe Disability Premium is included in the means test for home care, Local Authorities must deduct from income an allowance for extra expenditure resulting from the user's disability (disability related expenditure (DRE)). A 2003 survey of Local Authorities found that three-quarters of Local Authorities undertook an individual assessment of DRE, the rest used a fixed amount or disregarded disability benefits (Thompson and Matthew, 2004).

A third principle is that the value of the user's home should be disregarded in full and the capital thresholds and tariff income applied to other capital should be no less generous than for residential care.

Reform options

Two types of reform options are considered: reforms to the means tests which address some of the perceived unfairness within the existing system; and options for non means-tested

state contributions to personal care, referred to here as free personal care. Reforms to the means tests include: four options which involve more generous treatment of capital in the means tests for both residential and home care; an option for allowing care home residents to retain more of their income by increasing the personal expense allowance; and an option which limits the total lifetime contribution that people are required to make towards care home fees.

The treatment of capital and especially housing wealth lies at the heart of much of the dissatisfaction with the means tests. The upper capital threshold is substantially below the average value of homes owned by older people (approximately £150,000 in April 2002 prices[2]). The Royal Commission on Long-term care and more recently the Joseph Rowntree Foundation both suggested raising the upper capital threshold (Royal Commission on Long Term Care, 1999; Joseph Rowntree Foundation, 2006). Four of five options for reforming the means tests listed in the Wanless review of social care, involved changes to the treatment of capital (Wanless, 2006:229-230).

Previous work (Hancock, 2000) demonstrated that an increase in the personal expenses allowance would particularly benefit lower income care home residents. The Joseph Rowntree Foundation argues that the current low level of the personal expenses allowance undermines the dignity of people in care homes 'treating them like children with pocket money rather than adults with pensions based on lifetime contributions' (Joseph Rowntree Foundation, 2006: 13). We examine a substantial increase in the personal expenses allowance, from £18.05 to £73.10 (April 2002 prices) which we estimate to have the same public expenditure cost as the residential care cost of one of our free personal care options.

Suggestions for a lifetime limit on the amount individuals are required to pay towards

residential care home costs have been made on the grounds that such a limit would promote private insurance by limiting the period for which insurance would be needed (Royal Commission on Long term Care, 1999; Johnstone, 2005).

Three options for free personal care differ in the way the non means-tested state contribution to personal care in care homes is calculated and uprated in the future. All three apportion care home fees into nursing care, personal care and 'hotel' costs (accommodation and ordinary living costs). Hotel costs remain subject to means-tested user charges. Option one sets hotel costs each year by reference to the level of the Guarantee Credit in Pension Credit, the personal expenses allowance and an allowance for accommodation costs. Personal care costs are recalculated annually as the care home fee less these hotel costs and for nursing homes, the state contribution to nursing care. This is referred to as the 'fixed hotel costs' version of free personal care. Option two calculates hotel cost in the base year in the same way as option one but deducts these from the average fee level in independent residential care homes. The result is a flat rate contribution to personal care costs in all types of homes. This is held constant in real terms for future years. We describe this as a 'fixed care costs' version of free personal care. The third option starts with a flat rate contribution to personal care equal to the rate which applies in Scotland[3] but holds that rate constant in nominal terms. The rate that applies in Scotland has not been uprated since the policy was introduced. This option illustrates the longer term implications of failing to maintain the value of the state contribution to personal care in care homes and is referred to as the 'Scottish model'.

A final option is examined for the base year. The Royal Commission argued that free personal care should be funded from general taxation saying that general taxation 'is broadly based, largely progressive and easily understood' (Royal Commission on Long-term Care, 1999:73. Since free personal care tends to benefit relatively well-off care recipients we

examine an option designed to balance this by raising the rate of tax on higher incomes. The fixed care costs version of free personal care is combined with an increase from 40% to 41.5% in the higher rate of income tax. CARESIM estimates this increase in tax to be just sufficient to meet the extra public cost of the fixed care costs version of free personal care.

The principle features of the base and reform options systems are summarised in **Table 1**.

Methods

Definition of long term care

The services included in our projections of the future costs of long-term care are: NHS long-stay hospital and community health services; Local Authority (i.e. public) and independent sector care homes; Local Authority and independent home care, day care and meals; Local Authority assessments of care needs and care management. The distributional analysis which forms the focus of this paper, however, is restricted to residential and nursing home care and social care provided to people in their own homes. These are the categories of care which are subject to the means tests. The contribution of Attendance Allowance to care costs is treated as public expenditure in the aggregate and distributional analysis.

Simulation models

This paper draws on two simulation models that are designed to investigate the implications of different options for financing long-term care. One has been developed by the Personal Social Services Research Unit (PSSRU) and is concerned principally with the aggregate effects of policy options. It is outlined in Pickard et al. in this volume with further details available in Wittenberg et al. (2006). The second model, CARESIM, is a microsimulation model designed to analyse the distributional effects of alternative long-term care charging

regimes. CARESIM uses data from the British Family Resources Survey (FRS) to simulate what each older participant in the survey would have to pay towards care home fees or home care. The model performs simulations for single people currently aged 65 and over, and for the older partner in couples where at least one partner is aged at least 65 years. The simulations are performed for a base year (here 2002) and for future years. Simulations for future years involve 'ageing' the sample and modelling the evolution of their incomes and capital under certain assumptions. Because it is more difficult to predict the future incomes of people who are not yet retired than it is for those who are already drawing pensions, the sample is not 'refreshed'. By 2022 the simulations are representative only of people aged 85 and over. However, it is at these oldest ages that the need for care is highest and institutionalisation rates rise sharply, so this restriction is not as limiting as it might seem. All distributional analysis in this paper is restricted to people aged 85 and over.

In the analysis reported here, CARESIM uses data from the 1999/2000, 2000/01 and 2001/02 FRS with money values uprated to the price levels prevailing in 2002. The base year simulations are performed for 21,334 older people. Separate simulations are performed for three different types of care homes – independent sector residential homes, Local Authority residential homes, and independent sector nursing homes – and receipt of three packages of home care corresponding to low, medium and high intensity care. Each older person is assigned an uncompleted length of stay in each type of care home based on a PSSRU survey of residential care (Netten et al., 1998). Their contribution to care costs is calculated for that point allowing for capital depletion due to paying for their care up to this point. The model effectively mimics a cross-sectional survey of care home residents. Home care recipients may also have to draw on their capital to meet charges although this is less likely than for care home residents. There are no data on uncompleted periods of receipt of home care. We

assume that the mean length of time for which recipients of home care have been receiving services is 18 months. Their contributions to home charges are calculated for that point.

CARESIM models the care charging rules for residential care as closely as possible. Pre-reform home care charges are simulated by applying a standardised means test embodying the principles set out above:

- the user charge is the minimum of
  - the excess of disposable income over 125% of the relevant ordinary Guarantee Credit level

  and

  - the gross cost of the care package
- disability benefits are taken into account in full with flat rate allowances for DRE which vary with the level of the home care package.

Further details of CARESIM are in Hancock et al. (forthcoming) and Hancock (2000).

The PSSRU model and CARESIM are linked in two ways. First, CARESIM produces projections of the proportion of care home residents and home care clients who are eligible for public support with their care costs under the current or an alternative charging regime, along with projections of the average contribution to care costs made by those receiving public support. These are used in the PSSRU model to apportion projections of total expenditure on long-term care between the public and private sector. Secondly, the PSSRU model produces weights which are used to adjust CARESIM results to take account of the fact that the care home residents and recipients of home care are not a random subset of the older population. CARESIM results are re-weighted according to projection year, housing tenure and marital status within each age and gender group. The weights are based on the PSSRU model projections of the (previous) housing tenure and marital status of service users.

They differ between the different types of care home and different packages of home care.

Both the PSSRU and CARESIM models make projections on specified assumptions and not forecasts of what will actually happen in the future or under changed funding regimes.

Assumptions on exogenous factors

To make projections of the future costs of alternative long-term funding regimes assumptions are needed on the factors which are largely independent of the funding regime. These assumptions concern: the future numbers of older people; their marital status, living arrangements and home-ownership rates; the prevalence of disability by age and gender; rates of receipt of care services and disability benefits within age, disability and other needs-related category; and rates of increase in care costs relative to economic growth. The assumptions used in this paper form a set of 'central' assumptions and are set out in the Appendix. In other work we have investigated the consequences for aggregate costs of varying these assumptions (Hancock et al. forthcoming). Since our focus here is on the distributional effects of alternative funding systems we restrict ourselves to a single set of central assumptions on exogenous factors.

Measuring the distributional effects of the current and alternative funding regimes

To assess the distributional effects of alternative long-term care funding regimes we analyse the average proportions of total care costs contributed by recipients of care and by the state according to income level and housing tenure (owner-occupiers and others)[4].

In classifying individuals by income level, income is the net income (before housing costs) of the family unit (single older person or older couple) that they would receive when living in their own homes without any care needs. Individuals are classified according to the quintile (fifth) of the relevant income distribution in which their income falls. For most of the analysis, the relevant distribution is age group specific (here 85+). This ensures equal numbers (and adequate sample sizes) of the 85+ age group in each income quintile. The last

reform option involves an increase in income tax and so affects all ages. For this option we analyse the whole population and classify individuals according to the total population income distribution. Income is adjusted for family size using an equivalence scale of 1 for the first adult, 0.6 for each subsequent person aged at least 14 years and 0.4 for each child aged under 14.

Five sources of contributions to care charges are of interest:

1. The NHS contribution (i.e. the contribution from the government health budget). This applies to care home residents only and corresponds to the NHS contribution towards nursing care in nursing homes.
2. The contribution of a Local Authority (LA) (the contribution from the government's social care budget). It is the difference between what the NHS contributes and what the user contributes as determined by the means test.
3. The user's resources contributed from Attendance Allowance (AA)
4. The user's resources contributed from Pension Credit (PC)
5. The user's other resources

The first and second are commonly treated as the state contribution to long-term residential and home care costs. However, there is a growing interest in the role of Attendance Allowance which although paid to people with care needs has not featured greatly in the debate on long-term care funding in the UK (Joseph Rowntree Foundation 2006, Wanless 2006). Entitlement to Pension Credit is also partly dependent on care needs, through the Severe Disability Premium so its role in financing user contributions to care is also of interest. Any apportionment of user contributions to individual sources of income or capital is essentially arbitrary. However, some assumptions are needed to analyse the impact of the means-test (for example whether all income is used before drawing on capital) and others

are useful to gauge the contribution of disability-related social security benefits to care costs. Assumptions underlying the apportionment of user charges to each of the last three of these sources are detailed in the Appendix. Given these assumptions, the contribution of Attendance Allowance should be interpreted as the maximum contribution that it could make towards care costs

Analyses of the reform options also consider the gains to care recipients calculated as:

a. the change in the total user contribution (including that met from Attendance Allowance or Pension Credit)

plus

b. any change in entitlement to Attendance Allowance

plus

c. any change in entitlement to means-tested benefits

less

d. any change in income tax liability

This calculation measures the change in users' disposable incomes after meeting care costs. There may also be changes in users' wealth if capital is depleted at different rates under the reform options. This is not taken into account explicitly.

For each reform, average gains within income quintile or tenure category are expressed as a percentage of the overall average gain to facilitate comparison across reforms which are of substantially different scale. A figure of 100 for every income quintile would indicate that average gains were the same for all income groups. A figure of 200 for the lowest quintile and 50 for the highest would indicate that the gains in the lowest income group were on average twice that of the overall average, but only half in the top quintile.

Distributional results for the base year are presented for all reform options. Results for free personal care are also presented for 2022.

Results

Aggregate costs

Table 2 contains our projections of the future public and private expenditure on long-term care for 2002, the base year, and for 2022 for the current (English) funding system and each of the nine reform options. Projected expenditure is expressed as a proportion of projected Gross Domestic Product (GDP). In the base year free personal care options have the highest public expenditure costs taking public expenditure from 0.96% of GDP under the current system to 1.13%, 1.11% or 1.09% (fixed hotel costs, fixed care costs and Scottish version respectively). The least costly options are placing a maximum lifetime limit of £100,000 on a user's contribution to residential care costs (0.99% of GDP) and raising the upper capital limit to £150,000 (1.01% of GDP). Other options for more generous treatment of capital raise public expenditure on long-term care to between 1.04% and 1.06% of GDP. Increasing the personal expenses allowance raises public long term care expenditure to 1.04% of GDP. The ranking of the projected 2022 public costs of the options differs slightly from the 2002 rankings. This is mainly because the cost of the Scottish version of free personal care is contained by not uprating the state contribution to personal care in care homes. In 2022, the projected public expenditure costs of three of the four options which treat capital more generously are greater than the costs of the Scottish version of free personal care.

The distribution of public expenditure on long-term care under the pre-reform funding regime

Figure 1 shows for care recipients aged 85 and over, how, under the English funding

regime, the estimated share of long term care costs met from different sources varies by income and housing tenure. Users in the highest income quintile meet just over two-thirds (68%) of the proportion of their care costs from their own resources compared with under 40% in all other income groups. The average contribution of users in the lowest income group is slightly lower than that in the second income quintile (7% compared with 10%). This is a reminder that income alone does not determine liability for care charges. Local Authorities meet 18% of the care costs of the highest income group compared with 57% of those of the lowest income group and at least 45% in other income groups. The treatment of Attendance Allowance in residential care is evident in the pattern of its contribution to care costs. It contributes 8% of the long term care costs of those in the highest income group compared with 3% in the lowest group. The role of housing wealth is apparent in the comparison by housing tenure. Owner-occupiers contribute 44% on average from their own resources compared with 18% of non-owners. Local authorities meet on average 42% of the care costs of owner-occupiers compared with 66% for others. The NHS contribution to the costs of nursing care in nursing homes is the same (6%) across income groups reflecting the fact that it is not means-tested. It is slightly lower amongst owner occupiers because they are less likely to be in nursing homes than older people from other tenures.

The distribution of gains from reform options in the base year

Figure 2 presents the distribution of relative gains from the four reform options which involve more generous treatment of capital in the means tests for residential and home care. The gains are much large for owner-occupiers than for other tenures highlighting the importance of housing wealth. However, for all these reforms the gains for the highest income group are below average (i.e. below 100). Gains are above average in the third and fourth income quintiles. Gains from disregarding housing wealth are only two-thirds of the average in

the lowest quintile but marginally above average in the second quintile. Gains are above average for the other three reforms in the lowest quintile and somewhat below average (87%-97% of the average) in the second quintile.

Figure 3 shows the relative gains from the two options which are specific to residential care – a substantial increase in the personal expenses allowance and a lifetime limit of £100,000 on users' contributions to residential care costs. Gains from the former are between 9 and 13% higher than average in the lowest three income groups, equal to the average in the fourth income quintile and only 61% of average in the highest income quintile. This is a reform where the effect on capital can be substantial. The larger personal expenses allowance reduces the user contribution for all people with capital below the upper threshold. However we assume that care home residents put all their income apart from the personal expenses allowance towards their care home fees before drawing on their capital[5]. For those with capital above the upper threshold, who continue to meet the full care home fee, increasing the personal expenses allowance therefore increases the rate at which they draw on their capital. The amount of remaining capital that care home residents are simulated to have left at the point at which we calculate their contribution to care costs provides a measure of this effect. Under the higher personal expenses reform, the average reduction in capital at this point compared with the current funding system is a approximately £2,000. The average reduction is between £1,000 and £1,500 in the lowest three income quintile, £2,000 in the fourth quintile and £4,300 in the highest income quintile.

Placing a lifetime limit on user contributions to residential care is of greatest benefit to care home residents who were previously owner occupiers and residents in the highest income quintile, where average gains are more than double (128% and 183% respectively) the average gain. Non-owners gain very little while average gains in the lowest four

income quintiles are below average, being lowest of all (just 37% of average) in the second quintile.

The distribution of gains from the free personal care options is illustrated in Figure 4. Gains are above average amongst highest income group and owners. They are 76 to 79% higher for the highest income quintile and 53 to 58% higher for owners. Gains are below average for the lowest three income groups and non-owners. Average gains are lowest of all for lowest income group and non-owners. For the former they are nearly 40% lower and for the latter around 60% lower than average.

Raising tax revenue to pay for free personal care

The distributional effect of the fixed care costs variant of free personal care combined with an increase in the rate of income tax on higher incomes is illustrated in Figure 5. Classifying by the total population income distribution suggests that gains from free personal care, before allowing for revenue raising, are concentrated in the middle income group. This implies that the richest group of care home residents are concentrated in the middle of the total population income distribution. The higher rate of tax changes the picture only for those in the highest fifth of the total population income distribution. Instead of gaining an average of 35 pence a week they lose on average £2 a week.

The distribution of gains from free personal care in 2022

Figure 6 can be compared with Figure 4 to consider how the distributional effects of free personal care may change over the next 20 years. The general picture does not change greatly. The gains remain highest in the top income group although in 2022 they are around 60% higher than average compared with 78% in 2002. The relative gains to owner-occupiers are reduced slightly. Gains remain well below average for the lowest income group

and for non-owners with some variation across the versions of free personal care.

Discussion

We have used two simulation models to project the costs and distributional consequences of alternative funding regimes for long-term care in the UK. Of the reform options considered, and under a central set of assumptions, the projected base year increase in the public cost of long-term care is greatest for options involving free personal. The public cost of these options is projected to increase from 0.96% to between 1.09% and 1.13% of GDP in the base year. Limiting the lifetime user contribution to residential care costs to £100,000 is the least costly, increasing the public cost to 0.99% of GDP. Other options which reform the means tests cost intermediate amounts – between 1.01 and 1.06% of GDP. Under the current funding regime, public spending on long-term care is projected to rise to 1.18% of GDP by 2022. We estimate that the fixed hotel costs, fixed care costs and Scottish versions of free personal care would raise this to 1.43%, 1.35% and 1.30% respectively. The projections indicate that by 2022, three of the four options which change the treatment of capital would have public costs similar to the fixed care costs variant of free personal care. Increased rates of owner-occupation contain the future public cost of the current system but their affects are less under options which disregard more capital.

The current system of funding long-term care in the UK clearly directs public resources away from the richest care recipients and also away from owner-occupiers. Reforms which treat capital more generously in the means tests are of relatively little benefit to people who do not own their homes. Of these options, a full disregard on housing would benefit those in the lowest income group least (since this is where non owner-occupiers are concentrated). It would also deliver below average gains to the highest income group, suggesting that their

incomes are such that they would be required to meet significant proportions of their care costs even if their housing wealth was disregarded. The distribution of gains from reform options which raise or abolish the upper capital threshold suggest that there is a group of older care recipients who have incomes in the lowest quintile of the income threshold but enough capital to benefit more than average from these reforms.

A lifetime limit on contributions to residential care costs would be of greatest benefit to those in the highest income group and to owner-occupiers. A large increase in the personal expenses allowance would be of least benefit to the highest income group whereas the lowest three income groups would all benefit more than average. A higher personal expenses allowance would particularly benefit non owners.

The free personal care options would benefit the richest income group and owner occupiers most and benefit the lowest income group and non owners the least. However, looking at the population as a whole, and classifying by the total population income distribution, the gains from free personal care would be concentrated in the middle of the total population income distribution. Financing a fixed care costs version of free personal care by an increase in the rate of tax on higher incomes would convert small gains in the highest income group to losses, with minimal effects on other income groups.

In this paper we have sought to contribute to the debate on the equity of alternative ways to pay for long-term care in the UK, focussing on the distribution of gains from a range of reform options. The simulation models we have used involve making very many assumptions about exogenous factors and of the details of the reforms. Their results must be considered projections of the possible effects of the reforms, not forecasts of what would happen in practice. Many more permutations of the sorts of reforms we have analysed are

possible. However, the complexity of long-term care funding in the UK makes it difficult to gauge the distributional effects of such reforms without the kind of analysis presented here. We would argue that analysis of this kind is essential if informed judgements about policy options are to be made.

Notes

[1] People entitled to Disability Living Allowance before reaching age 65 can continue to receive this benefit rather than Attendance Allowance. The eligibility conditions for the care component of Disability Living Allowance and the rate of benefit are the same as for Attendance Allowance. In this paper all references to Attendance Allowance should be interpreted as Attendance Allowance or the care component of Disability Living Allowance.

[2] £150,000 is the average value of homes owned by older people as estimated within CARESIM for the base simulation year (2002).

[3] This rate was derived when the policy was implemented in Scotland in a similar way to the rate we use in option two but has not been uprated since then.

[4] Older people and their partners who are householders and live in owner-occupied housing are classed as owner-occupiers. Older people who live in other tenures or are not householders are classed as non owner-occupiers. This latter category therefore includes older people who live in housing owned by their children or other relatives. Care home residents are classified according to their housing tenure before entering residential care.

[5] This may not be the most appropriate assumption where the personal expenses allowance is large.

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Appendix: key assumptions

Exogenous factors

- The number of people by age and gender changes in line with the Government Actuary's Department 2004-based population projections for the UK (GAD, 2005).
- Marital status changes in line with GAD 2003-based marital status and cohabitation projections for England and Wales (ONS, 2005): as these projections run to 2032, the 2031 marital status rates are applied to 2041 and 2051.
- Within the 65+ population, there is a constant ratio of single people living alone to single people living with their children or with others and of married people living with partner only to married people living with partner and others.
- Prevalence rates of disability by age and gender remain unchanged, as reported in the 2001/2 General Household Survey (GHS) for Great Britain.
- Home-ownership rates, as reported in the 2001/2 Family Resources Survey (FRS), change in line with projections produced by CARESIM.
- The proportions of older people receiving informal care, formal community care services, residential care services and disability benefits remain constant for each sub-group by age, disability and other needs-related characteristics.
- The funding system remains unchanged as the current system for England which is applied for the whole of the UK.
- Health and social care unit costs rise by 2% per year in real terms (but non-revenue staff costs remain constant in real terms). Real Gross Domestic Product rises in line with HM Treasury assumptions (HM Treasury, 2005).
- The supply of formal care will adjust to match demand and demand will be no more constrained by supply in the future than in the base year. The model effectively

assumes that the assumed real rise in care costs will be sufficient to ensure that supply will rise to meet projected demand.

The apportionment user contributions to care charges among different sources of income and capital

- all income above the personal expenses allowance for residential care and above disregarded income for home care, is put towards the user's assessed charge before drawing on capital
- income sources are used towards care charges in the following order
    - Attendance Allowance/Disability Living Allowance in excess of any allowance for Disability Related Expenditure (the latter being assumed to be met from these benefits)
    - Pension Credit
    - other income

Table 1: Main features of the base long term care charging system and reform options

	capital thresholds		weekly tariff income	personal expenses allowance	non means-tested state contribution to nursing care in care homes	non means-tested state contribution to personal care in care homes
	lower	upper				
Base system						
parameter values in base year[a]	£11,750	£19,000	£1/£250	£18.05	£83.60[c]	-
uprating assumption	prices	prices	-	earnings[b]	earnings	-
More generous treatment of capital						
Upper capital threshold raised to £150,000						
parameter value sin base year	£11,750	£150,000	£1/£250	£18.05	£83.60	-
uprating assumption	prices	prices	-	earnings	earnings	-
Upper capital threshold raised to £150,000 and the lower threshold to £50,000						
parameter values in base year	£50,000	£150,000	£1/£250	£18.05	£83.60	-
uprating assumption	prices	prices	-	earnings	earnings	-
No upper capital threshold, tariff income reduced to £1 per £500[d]						
parameter values in base year	£11,750	no upper threshold	£1/£500	£18.05	£83.60	-
uprating assumption	prices	prices	-	earnings	earnings	-
Full and permanent disregard of housing wealth						
parameter values in base year	£11,750	£19,000	£1/£250	£18.05	£83.60	-
uprating assumption	prices	prices	-	earnings	earnings	-
Changes specific to residential care						
Raising the personal expenses allowance						
parameter values in base year	£11,750	£150,000	£1/£250	£73.10	£83.60	-
uprating assumption	prices	prices	-	earnings	earnings	-
Maximum lifetime limit on contributions to care home costs of £100,000						
parameter values in base year	£11,750	£19,000	£1/£250	£18.05	£83.60	-
uprating assumption	prices	prices	-	earnings	earnings	-
Free personal care						
Fixed hotel costs version						
parameter values in base year	£11,750	£19,000	£1/£250	£18.05	£83.60	difference between care home fee and £152.05[e] dependent on assumptions for Guarantee Credit
uprating assumption	prices	prices	-	earnings	earnings	
Fixed care costs version						
parameter values in base year	£11,750	£19,000	£1/£250	£18.05	£83.60	£175.95.
uprating assumption	prices	prices	-	earnings	earnings	prices
Scottish version						
parameter values in base year	£11,750	£19,000	£1/£250	£18.05	£83.60	£145
uprating assumption in base year	prices	prices	-	earnings	earnings	constant in nominal terms

a. April 2005 rates at April 2002 prices
b. The personal expenses allowance has historically be uprated at the same rate as means-tested benefits which we assume are linked to earnings
c. The state contribution to nursing care is set at the average which was paid in fiscal year 2003/4 converted to April 2002 prices.
d. This option is based on the treatment of capital for Pension Credit
e. The hotel costs of £152.05 are based mainly on the Guarantee credit rates which are assumed to be linked to earnings. However, the element assumed for accommodation costs is linked to prices.

Table 2: Public and private expenditure on long-term care for older people as a percentage of GDP: 2002 and 2022

%

	Public Expenditure		Private expenditure		Total expenditure	
	2002	2022	2002	2022	2002	2022
English funding regime	0.96	1.17	0.52	0.70	1.49	1.86
More generous treatment of capital						
Upper capital threshold raised to £150,000	1.01	1.26	0.47	0.61	1.48	1.86
Upper capital threshold raised to £150,000 and the lower threshold to £50,000	1.05	1.31	0.44	0.55	1.48	1.86
No upper capital threshold, tariff income reduced to £1 per £500	1.05	1.32	0.43	0.54	1.49	1.86
Full and permanent disregard of housing wealth	1.06	1.32	0.42	0.52	1.49	1.84
Changes specific to residential care						
Raising the personal expenses allowance to £73.10	1.04	1.26	0.45	0.61	1.49	1.86
Maximum lifetime limit on contributions to care home costs of £100,000	0.99	1.22	0.50	0.64	1.49	1.86
Free personal care						
Fixed hotel costs version	1.13	1.41	0.36	0.45	1.49	1.86
Fixed care costs version	1.11	1.33	0.38	0.53	1.49	1.86
Scottish version	1.09	1.28	0.40	0.58	1.49	1.86

Source: PSSRU and CARESIM models

Figure 1

Base funding regime, residential and home care combined: mean contribution to care charges by source; recipients of care aged 85+ by income level and (previous) housing tenure, 2002

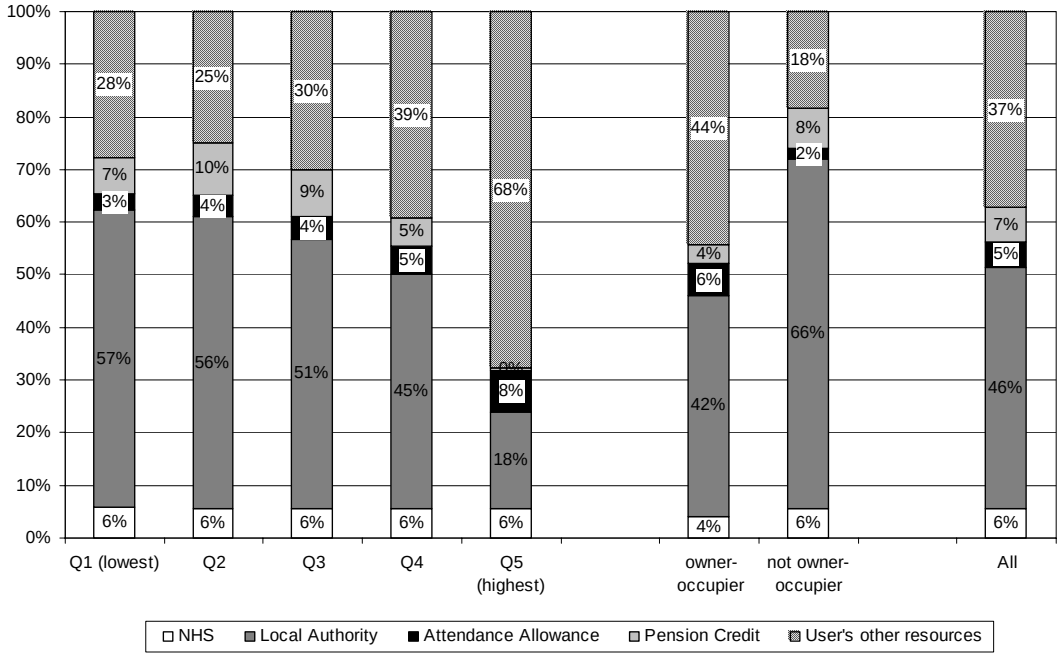

Figure 2

Relative gains from different treatment of capital: recipients of residential or domiciliary care aged 85+, 2002

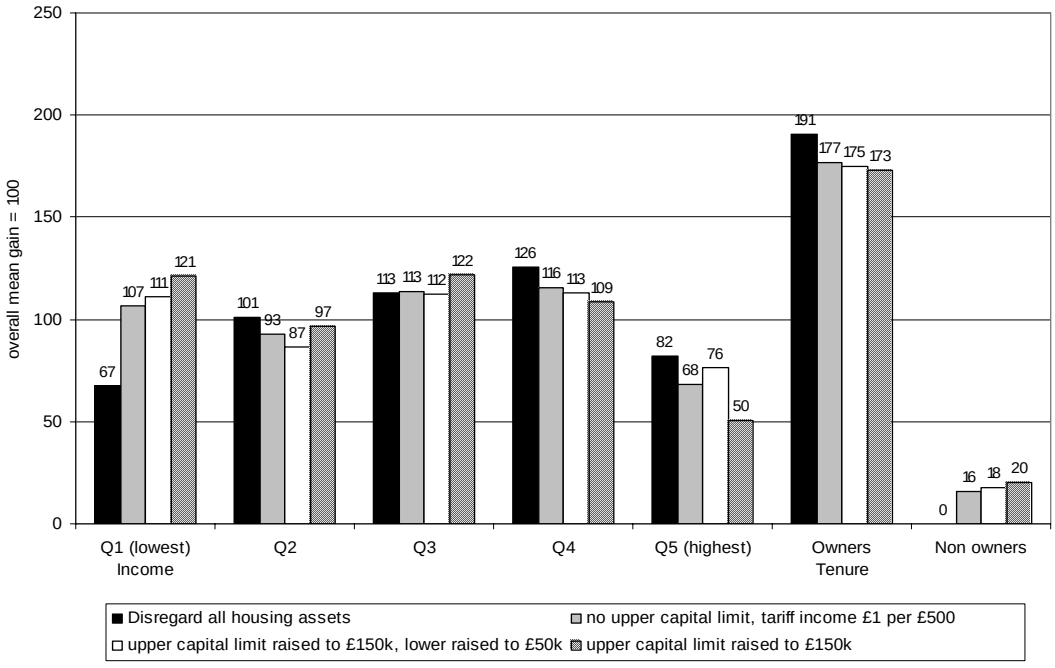

Figure 3

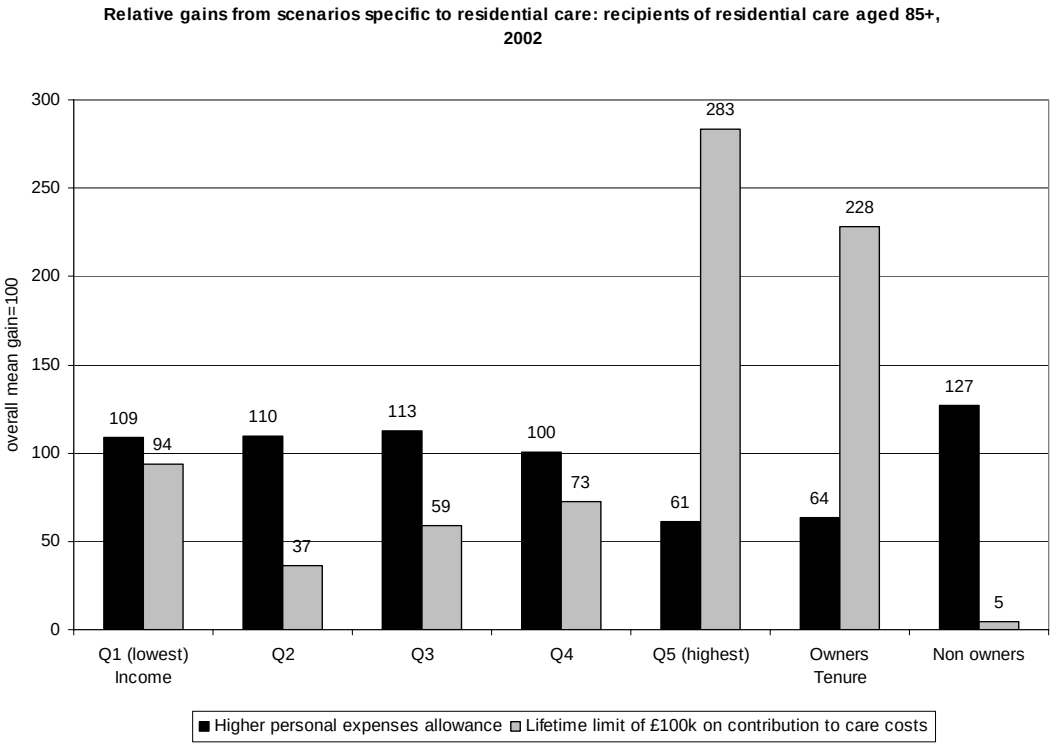

Figure 4

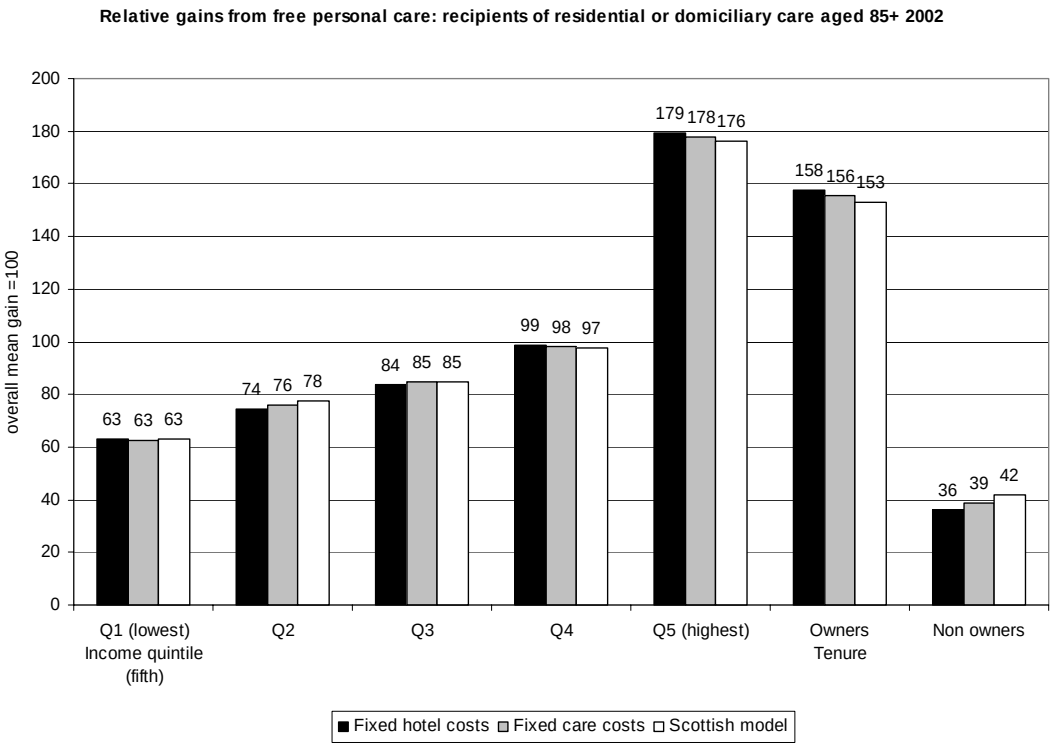

Figure 5

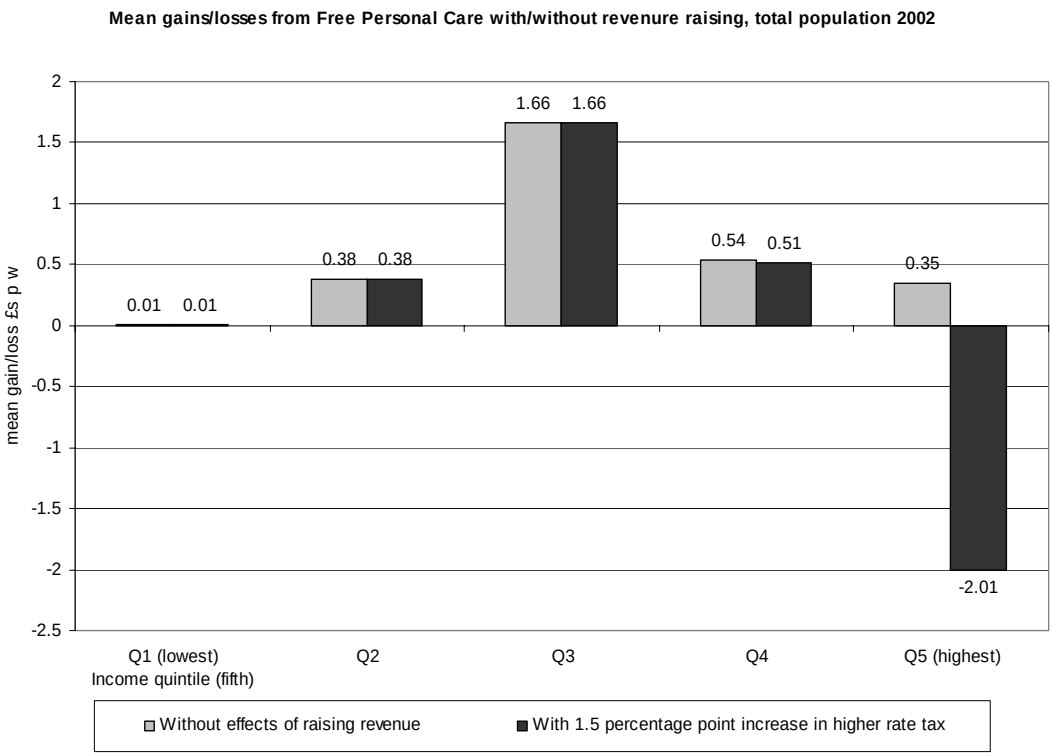

Figure 6