**Pwyllgor Cyllid I Finance Committee**
**Cost gofalu am boblogaeth sy'n heneiddio | The Cost of Caring for an Ageing Population**
**CCAP 13 Gerald Holtham – Athro Hodge mewn Economi Ranbarthol I Gerald Holtham - Hodge Professor of Regional Economics**

# The promise of social care

Why Wales needs a community insurance fund and how to organise it

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Social care, particularly for the elderly faces a serious squeeze in Wales, not to say a crisis. Local authority spending per older person has declined over the last seven years by around 13%, according Wales Public Services 2025.  The proportion of elderly people in the population requiring residential care is projected to rise by 82 per cent by 2035 and the proportion requiring non-residential care to rise by 67 per cent.  Expenditure overall will need to rise by 75- 80 per cent to account for that and if the recent deterioration in spending per head is to be reversed spending would need to double.  That is consistent with the finding of the Health Foundation which concluded that adult social care funding in would need to rise by 4% in real terms each year for most of the next two decades. Meanwhile the Welsh budget under austerity will probably grow much slower than that.

Absence of adequate social care provision not only leads to suffering in itself but often shows up as a crisis in the health service. Elderly people with chronic conditions end up in hospital and stay there because there is nowhere where they can be safely discharged.  That creates a pressure on available beds triggering problems elsewhere in the health system. It also results in time-consuming, invidious haggling over resources between health and care service personnel.

If social care is to be provided in old age in Wales at a civilized level without commandeering the assets of many elderly people, a new source of revenue is required.  If the UK government devotes more resources to social care more money would become available to the Welsh government via the operation of the Barnett formula but this would be unlikely to be enough. The best means of obtaining the required revenue is through public participation in a new contributory scheme of compulsory insurance.  A very small levy on Welsh residents could feed a dedicated social security fund that meant everyone could be promised adequate social care in old age – a promise that cannot otherwise be made or kept. The scheme should not only be contributory but also funded, rather than "pay as you go" in the more traditional ways of British public finance, whereby all pay-outs come from current contributions or tax receipts..

There are several compelling reasons why the scheme must be both contributory and funded.  It must be contributory because that will ensure readier public acceptance than a tax increase that provides social care to all people in Wales indiscriminately.  Contributions

can be recorded in personal accounts that show people the extent of their entitlements. It must be funded because the main demographic burden lies 10 to 20 years ahead and a pay-as-you-go scheme would require rising contributions and would be necessarily unfair in its treatment of different age cohorts. Moreover, the public is more likely to accept another impost if the proceeds are hypothecated to a service that it appreciates. Hypothecation is just a word, however, without a dedicated fund to accept contributions and disburse payments. A funded scheme is therefore much more likely to enjoy public support. And the fund would have other great benefits because it would have to be invested and could be used to promote other social objectives, for example social housing construction and boosting the growth of promising Welsh businesses.

## *The case for contribution*

Experience shows that it is difficult to maintain an advanced welfare state that has substantial elements of redistribution in a country with open borders and extensive immigration. The United States, for example, a country built on immigration has always had meagre welfare provisions by the standards of rich countries. The most advanced welfare states were developed by small homogenous countries like Sweden and Austria at a time when immigration was insignificant.

In the UK, opinion surveys have charted a marked decline in public support for "welfare" and declining sympathy with the disadvantaged in recent years at the same time as concern has grown about accelerated immigration. Much of this concern is expressed as resentment of competition for public services and a belief that immigrants are entitled to social security benefits before they have made much contribution to the system. The latter concern demonstrates that the public retains a strong attachment to the contributory principle. The same attachment feeds into to the popularity of hypothecated taxes. People like to know where their taxes are going and to feel that they will derive the benefit of their payments.

These public attitudes are of direct relevance to policy in Wales. The Brexit vote probably indicates that the Welsh public shares many of the concerns and preferences of the UK public as a whole. Overseas immigration into Wales is not high but 25 per cent of the population was not born in Wales; most incomers were born in England. If the Welsh public and politicians wish any element of the welfare state to be more generous in Wales than it is in England, how can this wish be fulfilled, given that there is – and will remain – complete freedom of movement and residence across the Wales-England border? The only answer lies in the contributory principle.

If the Welsh public pays for enhanced social care in old age, for example, that care must be available only to Welsh residents who have made enough payments into the scheme. The English system may cap the amount that the elderly have to pay for care before the state picks up the tab and it means tests the individual for the assets they have that could be sold to finance care. If Wales wishes to improve on those conditions (and maintain them in a period of demographic stress) it must do so through a contributory system. For people who have not made contributions the default position must be no better than that applying in England. Parity of provision means people are not penalized for retiring to Wales but nor are they rewarded.

Social care is currently paid from local authority budgets and these are determined by the Welsh government from its budget, which is largely determined by the Barnett formula. That formula takes no account of Welsh needs and its effects can be perverse. Suppose, for example, that a substantial proportion of the elderly in Lancashire retire to North Wales, English formulae might reduce grants to Lancashire local governments on the grounds that their needs had decreased. There would be no commensurate increase in the Welsh block grant, however, which is not needs based. In those circumstances it is absurd for Wales to promise better social care for the elderly to people retiring from England. Not only is it unfair to Welsh contributors but it incentivizes more elderly people to move. A non-contributory system of social care in Wales if it offered better conditions than in England could turn parts of the country into a retirement home.

The Welsh public is much more likely to support paying for enhanced social care in old age if they know benefits are not leaking to non-contributors on a significant scale.

Support is also more likely if the scale of individual contributions is seen to be fair. There is plenty of evidence that the public relates fairness to ability to pay. It would generally be regarded as fair if contributions were related to income. As with any insurance system, benefits are largely a matter of chance. If someone remains healthy and independent until death they will not draw on social care benefits, however much they have contributed. Most people would regard someone with that fate as fortunate rather than unfortunate. It is good to be insured and better never to have to draw on the insurance. "From each according to his ability, to each according to his needs" is one socialist principle that therefore enjoys widespread support in the context of national insurance.

Fairness, however, dictates that people with similar lifetime incomes should make similar contributions for the same promise of care in old age. That has clear implications for inter-generational fairness. When a fund starts up, a young person will pay in for perhaps 40 years. Someone aged 55 with the same income may pay in for ten. Obviously they cannot be expected to pay in at the same rate.

## How it could work

*Let us suppose that paying in begins at age 21 and continues until the future state retirement age at 67, that is 46 years (these numbers can, of course, be altered). Now consider someone who begins paying at the age of 27, (because they are that age when the scheme starts or because they finish education or move to Wales at that age after the scheme has started). That person will pay for 40 years. Let us suppose that their payment is x per cent of income. Someone on the same income who is 57 when the scheme begins will expect to pay for just ten years, not 40, so they should pay not x but 4x per cent of income. We can apply that principle generally. If someone starts paying at a given age, $\vartheta$, they will pay a proportion of income equal to: $40/(67-\vartheta) * x$. For example, someone who starts paying at age 47 pays 40/20\*x, that is to say pays twice the rate of someone starting at 27. A 21 year old would pay 40/46\*x, that is 87 per cent of the 27 year old. What might this mean in practice? Suppose someone at 57 pays two per cent of income, the 27 year old would pay ½ per cent and so on.*

*Note that these rates pertain to the age at which payment begins. The people in a given age cohort pay at the same rate throughout their contributing life. Contributions rise with the age at which you start; they do not*

*rise for the individual as she gets older.  Note as the scheme matures and older cohorts retire, most people paying in will have started earlier and the disparity of rates paid will diminish.*

*Such a scheme poses several questions:*

- *What about people who leave Wales to work elsewhere and then return?*

  *Someone's contribution age would be adjusted for periods of non-payment.  Consider, for example, someone who started work at 23, left Wales at 30 and returned at 50. Their target contribution is 40 years at x per cent of income.  They will in fact have an expected 17 years left to contribute and have already contributed 7 years at 90 per cent of x (the rate for a 23-year-old starter).  The new rate they pay at 50 is $(40-6.3)/(67-50)*x = 1.98$.   That is to say they would resume payment at nearly twice the rate for 27 years-olds. On the above example they would pay 0.99 per cent. Alternatively, they could opt to continue payments while not in Wales if they intended to retire here.  There would have to be a system able to collect and process such payments*

- *What about people who retire before 67?*

  *Early retirement for genuine reasons of ill health or incapacity would not affect entitlement. Voluntary early retirement could be dealt with in one of several ways.  Firstly, the person could be required to maintain payments out of pension income until age 67 in order to retain full entitlement.  Failure to make such payment could result in a reduction in entitlement.  The nature of that reduction would depend on the detailed care promise that is made to participants in the scheme.  A full answer must be deferred to discussion of the promise.*

- *What about people who leave Wales after contributing?*

  *If people leave and retire elsewhere without completing the full target contribution of 40x times income, they abandon their entitlement.  If moving at a late stage with most contributions made, they could retain entitlement on payment of the appropriate cash sum. If they complete the full contribution and then retire elsewhere, they would retain the right to a cash contribution to bona fide care costs.  The payment would depend on the general care promise and the costs of care in Wales. The insurance fund would not make any allowance for different care costs in other places.*

- *What about people over 57 now, who will not be able to make sufficient contributions to qualify for the care promise under the scheme?*

  *Here there is a serious political question to be decided.  How much of a transfer should younger age cohorts make to the care of today's elderly above and beyond what is being done already via taxation?  We suppose that some minor proportion of contributions would go to the immediate improvement of social care.  That proportion should be analysed in terms of the optimal growth of the community insurance fund - by comparing the social care promise that can be made to long-term contributors to the fund with the level of provision being experienced at present and in the next few years. That remains to be done in detail.  If immediate improvements in care are modest, workers expected to retire in the next few years would be exempted from payments or contribute at a lower rate.*

- *What about the unemployed or people on benefits?*

  *Their contributions would be paid as part of the benefit system.  If they are entitled to benefits, they are entitled to be included in the scheme.  It will be a political choice whether the Welsh government pays the full contribution on top of existing benefit or whether it expects benefit recipients to make some contribution out of the payments they receive. There is also the issue of people not in*

*employment or in receipt of benefits such as house-spouses who care for a home or family and are supported by a working spouse. One possibility is a family contribution rate. A worker could opt to pay a supplement, say 50 per cent more, to their contribution to cover a live-in partner.*

## The case for a funded scheme

While the state in the UK does not maintain funds to support its pension or social security obligations, it is common practice to do so in other countries, like Japan and Canada. Local authorities, of course, maintain pension funds to cover obligations to their workers. A funded scheme will enable the government to set a contribution rate now in the expectation that it can be held constant even as the demographic situation deteriorates, which would be difficult with pay-as-you-go. It also makes it easier to maintain equity between generations or age cohorts. Those elements will make the contributions more acceptable to a sceptical public. Moreover, as noted, the existence of a fund makes hypothecation of revenues concrete and further boosts public confidence.

Finally having a fund is an act of public saving that can have other beneficial consequences. The fund must be invested in order to grow. In effect it becomes a community fund or sovereign wealth fund. Most of its assets must be safe, traded assets like quoted bonds or equities that can be realised easily. A small proportion, however, can be invested in projects with social utility in Wales – like building low-cost housing or investing in local companies. Wales like the UK as a whole does not save enough. That is why the country runs an external deficit and has relatively low investment rates. The social care fund would contribute to alleviating that problem.

### Managing a Social Fund

The objective is to be able to spend the requisite amount on social care for the elderly in the future. Current spending by local authorities is around £550 million a year. Assuming public spending on care matched Welsh government revenue growth, we supposed this would increase at an annual rate of 1.5 per cent above wage growth. This is an assumption which implies some continuation of public sector austerity through the 2020s. Demographic projections imply care spending should rise by 80 per cent in real terms by 2035. That plus the desire to restore a 13 per cent decline in care spending per head in recent years, together mean that total spending must grow at 4 per cent. It would need to double by 2035, while public spending would increase by only some 30per cent. To fill the gap the fund would have to contribute £400 million a year in 2035 at 2017 prices.

If we assume the tendency to an ageing population is peaking in 2035, the annual payout need not grow much thereafter but it could still be necessary for the fund to contribute £400 million a year at constant prices for decades. If contributions are being received from younger workers in return for a care promise, that promise has to hold good indefinitely, at least for some 70 years from the present day.

Given that each age cohort pays in at a different rate and the older cohorts pay more, the average contribution rate will fall over time as the older cohorts retire. Contribution rates have to be set so the fund is sustainable. Essentially that means when the contributions into the fund are subtracted

from the £400 million it pays out to get the net outflow from the fund, that outflow must not exceed the growth rate of the fund.  If the fund's investments mean it is growing at, say, 5 per cent and the final annual contribution is £200 million a year, the net outflow of £200 million must not exceed 5 per cent of the fund.  In other words, the fund in this example must be at least £4 billion.

We use simulations to explore different contribution rates to the fund and different disbursement rates from it. We assume rates of contribution that broadly follow the formula for variation with age outlined earlier.  However, strict inter-generational equity would mean very steep increases for older cohorts.  Someone aged 57 with 10 years to pay would pay only half as much as someone aged 62 with five years to pay. That seems too steep a rise for those nearing retirement especially since payouts from the fund will not be so large in the early years.  We therefore suppose there is a ceiling on the contribution rate around age 60.  We further assume that a top contribution rate of 3 per cent is the highest politically acceptable. That implies 27 year-olds would be paying at a rate of 0.7 per cent and the weighted average contribution rate for the whole labour force would be just under 1.5 per cent.  That would fall over the decades to around 0.6 per cent. We test whether these rates lead to a sustainable system. Obviously, variations are possible implying some departure from strict intergenerational equity.

Apart from setting rates that are reasonably fair to different generations and that make for a sustainable system, the government and trustees of the fund must decide how much of any inflow should be dedicated in year one to an immediate increase in spending on care and how much retained and invested to grow the fund. Given an annual inflow from levied contributions to the fund, the question is how much should be disbursed immediately for social care and how much invested for future requirements.  Since the amount to be disbursed in 2035 is predetermined at £400 million, setting the initial disbursement in year one also determines how fast that disbursement has to grow to reach the 2035 figure. The disbursement and its growth are a policy pair that has to be set.

## Simulation assumptions

*We assume the scheme begins in 2019 and test options by simulating their effects.  We need stochastic simulation because we do not know with certainty what investment returns will be over any given time period.*

*For the simulations we assume the investment returns to the fund are random and normally distributed with an average of 5 per cent a year and an annual standard deviation of 7.5 per cent.  These numbers are selected on the basis of their reasonableness, being slightly below the long run averages for equity markets.  They are, however, inconsistent with a belief in secular stagnation of the world economy.  We assume the fund would be invested in , blue chip equities with some government bonds and small holdings in public housing and Welsh private equity.*

*To make the simulations we need to project the revenues arising from different contribution rates.  These will depend on the evolving age structure of the economically active population.  We take population projections by age published by the Welsh government.  We also have data for the economically active population or labour force.  We assume the relation between the population and the labour force is stable for each cohort, enabling us to estimate and project the labour force forward.  We have data from HMRC for the UK as a whole of income by age cohort.  We assume the ratio of the average income for each cohort to overall average income is the same for Wales as the UK and is also stable over time.  We ignore the overall growth of wages over time because we assume care costs rise at the same rate as  average wage income, enabling us to ignore the growth*

*of both. These data and assumption enable us to project the revenue that will accrue over time for any set of contribution rates as the population evolves.*

*Evidently the results of simulations are dependent on these assumptions.*

## *Simulation Results*

The objectives of the fund are firstly to be able to disburse a meaningful amount of money to social care from the outset and that this amount should grow to some £400 million a year by the early to mid 2030s. A second objective is that the fund should reach such a size that when contributions have settled down the net payout from the fund should be sustainable indefinitely, i.e. outflows should not exceed the growth of the fund.

If the fund were to disburse £135 million in its first year it would restore at a stroke the 13 per cent decline in care spending per head since 2009. It turns out that for this to be probably sustainable, the minimum contribution to the fund for any age cohort would have to be set at 1 per cent. Since the top rate is assumed to be 3 per cent, that would entail some transfer from younger to older cohorts. If strict age proportionality of contributions were preserved the minimum contribution for working teenagers would be 0.56 per cent, given a 3 per cent ceiling for those at 57 and above. In that case, sustainability would be very hard to achieve. It would require the fund to reach some £5 billion by 2035. The initial disbursement in this case would have to be low. With a disbursement of even £50 million initially, the fund would not be expected to reach £4 billion in 2035 and in the worst case might be only around £1 billion. Moreover it would then fall.

To sustain an initial disbursement of £50 million, (an increase of nearly 10 per cent on current LA spending) the minimum contribution to the fund would need to be set at 0.75 per cent at least. That is, those beginning in the age range 18-27 would pay 0.75 per cent and the contribution would rise with age cohort to 3 per cent for those aged 57 and above - there would be a ceiling at that level. The initial disbursement could not be higher unless the minimum contribution rate were raised. Even then there could be a shortfall if investment returns were poor. If the minimum contribution were set at 1 per cent, higher disbursement rates would be possible

Simulation results show that a payout of £80 million with a minimum contribution rate of 1 per cent would leave the fund with an expected value of £6.1 billion in 2035 with a worst case value of £2.2 billion. While risks would remain from low investment returns, that seems a reasonable compromise.

To compare the consequences of different policy pairs we look at three variables, one is the cumulative spend on care over the whole period to 2035; two is the terminal value of the fund in that year. A third variable which we call utility combines a number of considerations; it takes the discounted cumulative spend on care, the discounted terminal value of the fund and the discounted sum of investments that the fund is presumed to make in social housing and Welsh venture capital and weights them together. We assume rather arbitrarily a social discount rate of 6 per cent in calculating utility. We tested this for sensitivity and found variation of the discount rate between 4 and 6 per cent had no effect on the ordering of policy pairs.

For a number of policy combinations we ran a stochastic simulation where the return to investment in the fund was a random variable drawn from a normal distribution as noted above. The simulation

was repeated 10,000 times for each pair and the average value and minimum value taken for the three variables of interest. Some results are shown in the attached table on the next page. Their main features are as follows: utility as we have defined it goes up as the initial annual disbursement goes down for low levels of minimum contribution. For example for a minimum contribution rate of 0.75 per cent, it is higher with a £40 million initial payout than for a £50 million initial payout. However, when the minimum contribution rate is raised to 1 per cent, utility rises with the initial payout, all the way to an initial £135 million. Whether this is really the best policy, however, depends on how one balances higher payments for care in the early years against a larger terminal fund with the concomitant greater capacity to sustain the same or higher spending after 2035 and less risk of a shortfall requiring an injection of funds.. If social care is being supported on the contributory principle, the later payments to people with a full payment record must be at least as good as immediate payments which are being received by people who have not had the chance to contribute. A larger fund also implies greater investment in social housing etc.

Monte Carlo analysis therefore implies that policy-makers should lean towards setting a minimum contribution rate for youngsters of 1 per cent, departing from strict age-proportionality of contribution. An initial allocation to care spending, can then be set anywhere in the range £50-135 million.

People over 57 will make a smaller contribution to the fund than younger citizens and those over 67 will make no contribution at all. Full contributors will typically start to need care in 20 years' time or more. At an initial annual payout of £50 million, conditions would improve but the 13 per cent per capita decline in care since 2009 would be made good completely only after some 12 years. While the existing elderly would benefit from an immediate 10 per cent increase in expenditure on care and improved conditions thanks to the payments into the fund (there would be some income transfer between age cohorts) they might not enjoy quite as good conditions as later cohorts who have paid in. That seems to be consistent with the contributory principle. The precise scale of intergenerational transfer is, or course, a matter of political choice. That choice will determine the initial payout in the £50 million-£135 million range. But the higher it goes the greater the risk of an investment shortfall requiring increased contributions later to preserve the integrity of the contributional scheme.

*Simulation Results*

| min 1% contribn, initial payout £50m | | | | min 1% contribn, initial payout £135m | | |
|---|---|---|---|---|---|---|
| *Simulation results* | average | minimum | | *Simulation results* | average | minimum |
| utility | 1511 | 1061 | | utility | 1605 | 1061 |
| cumulative spend £'000s | -2818 | -2818 | | cumulative spend £'000s | -4163 | -4163 |
| fund value 2035 £'000s | 7101 | 3015 | | fund value 2035 £'000s | 4966 | 1861 |
| fund value 2039 £'000s | 8184 | 2925 | | fund value 2039 £'000s | 5505 | 1652 |
| | | | | | | |
| min 1% contribn, initial payout £80m | | | | min 0.75% contribn, initial payout £50m | | |
| *Simulation results* | average | minimum | | *Simulation results* | average | minimum |
| utility | 1587 | 1020 | | utility | 1248 | 775 |
| cumulative spend £'000s | -3478 | -3478 | | cumulative spend £'000s | -2956 | -2956 |
| fund value 2035 £'000s | 6117 | 2197 | | fund value 2035 £'000s | 4555 | 1452 |
| fund value 2039 £'000s | 6855 | 1904 | | fund value 2039 £'000s | 4655 | 731 |
| | | | | | | |
| min 1% contribn, initial payout £100m | | | | min 0.75% contribn, initial payout £80m | | |
| *Simulation results* | average | minimum | | Simulation results | average | minimum |
| utility | 1602 | 1074 | | utility | 1253 | 782 |
| cumulative spend £'000s | -3731 | -3731 | | cumulative spend £'000s | -3478 | -3478 |
| fund value 2035 £'000s | 5688 | 2254 | | fund value 2035 £'000s | 3731 | 1208 |
| fund value 2039 £'000s | 6368 | 1457 | | fund value 2039 £'000s | 3644 | 429 |

Note:  The three simulations in the first column are of a minimum contribution of 1 per cent with different initial pay-out rates.  All appear to be sustainable unless investment returns are extremely poor.  The first simulation in the second column shows the consequence of a higher initial pay-out of £135 million, which also seems to be sustainable though the error margin is less.

The next two results have a lower minimum contribution rate of 0.75 per cent.  That with an initial pay-out of £50 million may be sustainable but there is a high risk further contributions would be required.  The final simulation with an initial pay-out of £80 is not a sustainable plan.  The fund does not reach the level of £4 billion needed to be sustainable at these contribution rates and falls after 2035.

*What would the care promise be?*

A contribution averaging 1.5 per cent across the age cohorts would mean the mean wage earner paying about £450 a year or £9 a week. Contributions would differ with age.  27 year-olds would pay 1 per cent and 57 year-olds 3 per cent, the top rate.  The contribution could raise expenditure per head by at least 10 per cent immediately, enabling standards of care to improve and nursing homes

to be more viable. The increment to funding would grow at double digit rates enabling expenditure per head to return to 2009 levels in 10-12 years from the start of the fund while accommodating expected increases in demand owing to population ageing.

Together with recently announced increases in Welsh government spending we believe the means test on asset values could be raised substantially. The Welsh government has promised to raise the asset value beyond which public care support is not available to £50,000. That is widely regarded as inadequate when the average house price in Wales is £175,000. The Welsh government may also receive more money via the Barnett formula if the UK government increases spending on social care for the elderly. Without knowing what the normal Welsh budget would be we cannot say what precise promise on care for the elderly could be.

The Dilnot Commission in England recommended a cap on private expenditures on care to protect people from the effects of catastrophic bills resulting from prolonged infirmity or acute illnesses requiring expensive specialised care. Provision for the latter is necessary to relieve the health services of the consequences of inadequate social care provision and consequent bed blocking. It is difficult to obtain private insurance against catastrophic bills so this is a worthy objective and use of public money. The social care fund would permit a lower cap, more generous means testing or even largely free social care depending on other budgetary provision.


*Conclusion*

More work is required, of course, to settle details but these initial explorations suggest it is feasible for Wales to create its own social security fund to enable enhanced public provision of residential and non-residential care for the elderly. A minimum contribution rate of 1 per cent would be levied on the incomes of those entering the scheme at age 27 or less. Contributions would rise with age cohort to a ceiling of 3 per cent for earners aged 57 and above. This would provide enough funds to improve care provision immediately by at least 10 per cent and deal with the expected demographic shifts towards a more elderly population. It would also raise the national savings rate and provide a community fund of several billion pounds by the 2030s. That in turn would facilitate ongoing investment of tens of millions of pounds a year in worthwhile, cash-positive investments in Wales. This approach plans for a future in a way that reflects the motivation of the 2015 Wellbeing of Future Generations Act of the Welsh National Assembly.