# Policy change and private health insurance: did the cheapest policy do the trick?

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## Abstract

*From the introduction of Australia's national health insurance scheme (Medicare) in 1984 until recently, the proportion of the population covered by private health insurance declined steadily. Following an Industry Commission inquiry into the private health insurance industry in 1997, a number of policy changes were effected in an attempt to reverse this trend. The main policy changes were of two types: "carrots and sticks" financial incentives that provided subsidies for purchasing, or tax penalties for not purchasing, private health insurance; and lifetime community rating, which aimed to revise the community rating regulations governing private health insurance in Australia.*

*This paper argues that the membership uptake that has occurred recently is largely attributable to the introduction of lifetime community rating which goes some way towards addressing the adverse selection associated with the previous community rating regulations. This policy change had virtually no cost to government. However, it was introduced after subsidies for private health insurance were already in place. The chronological sequencing of these policies has resulted in substantial increases in government expenditure on private health insurance subsidies, with such increases not being a cause but rather an effect of increased demand for private health insurance.*

*The paper also considers whether the decline in membership that has occurred since the implementation of lifetime community rating presages the re-emergence of an adverse selection problem in private health insurance. Much of the decline to date may be attributable to failure on the part of some members to honour premium payments when they first fell due. However, the changing age composition of the insured pool since September 2000, resulting in an increasing average age of those insured, suggests the possible reappearance of an adverse selection dynamic. Thus the 'trick' delivered by lifetime community rating may not be maintained in the longer term.*

## Acknowledgments

# Introduction

From the introduction of Medicare until recently, the proportion of the population covered by private health insurance in Australia declined steadily. Following an inquiry by the (then) Industry Commission into the private health insurance industry in 1997 (Industry Commission 1997), a number of policy changes were effected in an attempt to reverse this trend. The main policy changes were of two types: financial incentives that provided subsidies for purchasing, or tax penalties for not purchasing, private health insurance; and lifetime community rating.

The success of these measures depends upon the extent to which they address the underlying causes of declining private health insurance membership. While private health insurance premiums have been increasing, this may have been due to the problem of adverse selection associated with the community rating regulations. These regulations required a uniform premium to be charged for any given policy regardless of health risk, with the result that private health insurance was more attractive to higher risk groups. The reduction in demand for cover by lower risk groups places upward pressure on premiums, making private health insurance even less attractive to lower risk groups. As a result, private health insurers were left with an increasingly adverse selection of risks, and the downward spiral in membership may have been symptomatic of an adverse selection death spiral.

Both the efficiency and equity aspects of the recent policy changes are important. This paper is concerned with the efficiency aspect (see Hall *et al* (1999) and Smith (2000) for discussions of the equity aspect). Within that, one particular aspect of efficiency is considered – what was the effectiveness of the various policy changes in increasing private health insurance coverage, and what was their cost to government? The paper concludes with some speculation on what the future might hold for private health insurance in Australia.

# Overview of three policy changes

## Policy A.  The Private Health Insurance Incentives Scheme (PHIIS)

This scheme was introduced with effect from 1 July 1997. The scheme was based on a 'carrots and sticks' approach in that it provided tax subsidies for lower income groups that purchased private health insurance and imposed tax penalties on higher income groups that did not. The scheme operated on the basis of three annual taxable income bands (see Table 1). Medicare-eligible single persons and families with annual incomes falling within the first (lowest income) band received a subsidy for any eligible ancillary and/or hospital policy. Those in the second band neither received a subsidy nor incurred a tax penalty regardless of their private health insurance status. Those in the third (highest income) band incurred a tax penalty if they failed to purchase an eligible hospital and/or ancillary policy. The eligibility criteria for policies were specified in terms of minimum annual premiums.

The subsidy component of the scheme was introduced under the Private Health Insurance Incentives Act 1997 and was administered by the Health Insurance Commission (HIC) (see Sidorenko (2001 section 2.7.1) for a discussion of the legislative amendments necessary to introduce the scheme). Individuals could opt to take the subsidy in one of three ways: an immediate reduction in the premium; a direct payment from the HIC; or a tax offset at the end of the financial year. The tax penalty component of the scheme was introduced as a Medicare levy surcharge.

## Policy B.  The 30% Rebate

The original Private Health Insurance Incentives Scheme was amended on 31 December 1998 with the subsidy component of the scheme being replaced by a 30% rebate on private health insurance premiums. This amendment extended the subsidy for private health insurance in three ways:

- the original subsidies specified in absolute amounts were replaced with an ad valorem subsidy that delivered larger subsidies for most individuals and families (the only losers in terms of the value of the subsidies were some families previously receiving the $450 subsidy for combined (hospital + ancillary) cover);

## Table 1. Subsidies and tax penalties under the Private Health Insurance Incentives Scheme 1997

| Annual taxable income band | | Subsidy/tax penalty | |
|---|---|---|---|
| | | Subsidies(a) | |
| Single | $0-$35,000 | Ancillary policy | $25 |
| | | Hospital policy | $100 |
| | | Hospital + ancillary policies | $125 |
| Family | $0-$70,000(b) | Without children: | |
| | | Ancillary policy | $50 |
| | | Hospital policy | $200 |
| | | Hospital + ancillary policies | $250 |
| | | Other:(c) | |
| | | Ancillary policy | $100 |
| | | Hospital policy | $350 |
| | | Hospital + ancillary policies | $450 |
| Single | $35,000-$50,000 | No subsidy or tax penalty | |
| Family | $70,000-$100,000 | No subsidy or tax penalty | |
| | | Tax penalties(a) | |
| Single | > $50,000 | Medicare levy surcharge | 1% |
| Family | >$100,000(d) | Medicare levy surcharge | 1% |

Notes:

(a)   To attract a subsidy or avoid the Medicare levy surcharge, a policy must have satisfied the following constraints on annual premiums:
      Ancillary premiums: ≥ $125 Single; ≥ $250 Family
      Hospital premiums: ≥ $250 Single; ≥ $500 Family.
      In addition, to avoid the Medicare levy surcharge, an individual or family must have purchased a hospital policy with or without an ancillary policy (purchase of an ancillary policy alone was insufficient to avoid the surcharge).

(b)   Annual income ceiling increases by $3,000 for each child after the first. Dependent children include children under 18 years of age and full-time student children under 25 years of age.

(c)   Single parent families and families with at least one dependent child. Dependent children are defined as in note (b).

(d)   Annual income threshold increases by $1,500 for each dependent child after the first. Dependent children are defined as in note (b).

- the eligibility criteria required for policies to qualify for a subsidy, originally defined in terms of minimum premiums, were removed (presumably because, when the subsidies were specified in absolute amounts, the subsidy represented a greater proportion of the premium the lower was the premium); and

- all Medicare-eligible individuals or families could receive a subsidy regardless of income.

Individuals could again opt to receive the subsidy in one of three ways as under the PHIIS.

There were no changes to the tax penalty arrangements with the introduction of the 30% rebate on 1 January 1999. However, two factors operating together since then gave rise to a change in the regulations governing the eligibility of policies to avoid the surcharge. The first factor was the extension of the subsidy to all individuals and families regardless of income. This meant that individuals with annual taxable incomes of $50,000 or more (or, for families, $100,000 or more) now *both* qualified for a subsidy *and* avoided a tax penalty by purchasing private health insurance. For example, a family with taxable income of $100,000 purchasing a family policy with an annual premium of $1,800 would receive a subsidy of $540 and avoid the Medicare levy surcharge of $1,000.

The second factor was a change in the range of insurance products offered by the health funds to include policies with larger front-end deductibles (or annual excesses). As with any insurance product, a larger excess results in a smaller premium. When coupled with the first factor just discussed, it became possible for health funds to offer products with a net premium (i.e. gross premium minus rebate) that was less than the Medicare levy surcharge (see Hall *et al* (1999, Table 4) for an example of this using data from the Government Employees Health Fund).

To address this situation, a new criterion governing the eligibility of policies in terms of avoiding the surcharge was introduced with effect from 24 May 2000, *viz.* hospital policies with front-end deductibles greater than $500 for singles or $1,000 for families did not enable purchasers to avoid the surcharge. The new criterion was not retrospective – those who had purchased such policies prior to the effect date would continue to be exempt from the surcharge while maintaining continuous membership under that policy.

## Policy C. Lifetime Community Rating

The third policy change allowed lifetime community rating in the setting of private health insurance premiums. For many years, the community rating regulations governing private health insurance required funds to charge a uniform premium for any given policy regardless of health risk. Lifetime community rating introduces a degree of risk discrimination into premiums by allowing funds to vary premiums according to the age at entry into the fund and the number of years of continuous membership of any fund. This initiative was proclaimed on 29 September 1999 and introduced with effect from 15 July 2000 (the original effect date of 30 June 2000 being extended due to extensive queuing to lodge applications). This allowed a period of around nine months during which private health insurance cover could still be purchased before the new regulations came into effect.

The main characteristics of this initiative were as follows:

- those over 30 years of age who did not have hospital cover by 15 July 2000 would pay a uniform but higher premium over the remainder of their lifetime;
- the increase in premium is calculated as 2% of the base premium for each year of age above 30;
- the maximum increase in premium is 70% which applies to people aged 65 years and above;
- people aged 65 years or more on 1 July 2000 are exempt from lifetime community rating; and
- transfers of membership between funds do not affect continuity for the purposes of lifetime community rating. (Members are able to drop their cover for a cumulative period not exceeding 24 months over their lifetime without affecting their certified age of entry into private health insurance. When the cumulative period of absence exceeds 24 months, the certified age at entry increases by one year for each additional 365 days of absence).

The degree of risk rating allowed in setting private health insurance premiums under lifetime community rating is considerably less than full risk rating. In a recent study of the price elasticity of demand for private health insurance in Australia, Butler (1999, Table A.1) found that hospital benefits per privately insured person increased considerably with age. The highest benefits per capita were paid to the 80+ age group while the lowest benefits per capita were paid to the 5-9 and 10-14 age groups. For those aged 20 and above, the ratio of the highest to the lowest benefits per capita varied by State but was at least 6.8:1 for females and 14.6:1 for males. The ratio of the highest to the lowest premiums under lifetime community rating is 1.7:1. This suggests that considerable cross-subsidisation between low risk and high risk individuals continues to exist within the insured pool even after the introduction of lifetime community rating.

# Tax expenditures and direct expenditures

Of the three policy changes outlined above, two (A and B) give rise to Commonwealth government expenditures on subsidies for private health insurance. As will be evident from the foregoing discussion, these expenditures take the form of either direct expenditures through the HIC to individuals or health funds, or tax expenditures through tax offsets at the end of the financial year.

Table 2 presents the expenditure estimates through each of these avenues of subsidisation for the three years 1997-98 to 2000-01. Under the tax expenditures category, the Medicare levy surcharge is treated as a negative tax expenditure, representing revenue obtained from high income individuals who chose not to purchase private

health insurance.  The 30% rebate accounts for most of the expenditures on private health insurance over this period.  Overall, total expenditures have increased rapidly each year, reaching $2,849.6 million in 2000-01.

Treasury forecasts indicate that tax expenditures on account of the 30% rebate will increase to $1,130 million in 2003-04, while the negative tax expenditures attributable to the Medicare levy surcharge will remain at $75 million over the same period.  This suggests that total expenditures on private health insurance subsidies will be around $3,000 million in 2003-04.  Two important factors that could alter this forecast are changes in membership of private health insurance and premium increases.  If membership declines, this would tend to reduce total government expenditures on the subsidies.  If premiums increase (as they did early in 2002, for example) this would tend to increase expenditure because 30% of any premium increases will be borne by government.

### Table 2. Direct subsidies and tax expenditures for private health insurance :  1997-98 to 2000-01 ($million, current prices)

|  | 1997-98 | 1998-99 | 1999-00 | 2000-01 |
|---|---|---|---|---|
| **HIC payments** | | | | |
| Cash claims by individuals - 30% rebate | - | 6.4 | 5.9 | 4.3 |
| Payments to health funds - PHIIS | 251.6 | 128.2 | - | - |
| Payments to health funds - 30% rebate | - | 771.9 | 1,391.0 | 1,930.3 |
| Total HIC payments | 251.6 | 906.5 | 1,396.9 | 1,934.6 |
| **Tax expenditures**[a] | | | | |
| PHIIS | 160.0 | 60.0 | - | - |
| 30% rebate | - | 500.0 | 875.0 | 990.0 |
| Medicare levy surcharge | -105.0 | -140.0 | -150.0 | -75.0 |
| Total tax expenditures | 55.0 | 420.0 | 725.0 | 915.0 |
| TOTAL | 306.6 | 1,326.5 | 2,121.9 | 2,849.6 |

**Note:**

(a)  In the source document for tax expenditure estimates, the estimates are reported for the year in which the claim affects the Commonwealth Budget rather than the year in which the claim accrues (which is the preceding year).  In this Table, the tax expenditures are reported for the year in which they accrue.  The figures for 2000-01 are projections.

**Sources:**

HIC payments:  HIC Annual Reports (various years)

Commonwealth of Australia (2001, Table 5.1)

## Effectiveness of subsidies

How has private health insurance coverage reacted to the three policy changes discussed above?  Figure 1 shows the proportion of the Australian population covered by a hospital table over the period from June 1984 to March 2002.  The implementation dates of policies A and B, and the announcement and implementation dates for policy C, are also shown in the Figure.

It appears that policy A (PHIIS) had little effect on the long-term decline in hospital coverage.  To be sure, the counter-factual scenario is not known – coverage may have declined even further in the absence of the policy.  However, this appears to be unlikely as the trend rate of decline appears the same before and after policy implementation.

Policy B (30% rebate) does appear to have had some effect.  Coverage reached its nadir of 30.1% in the December 1998 quarter, and rose to 32.2% in the March 2000 quarter – a 7% increase in coverage.  If this entire increase was attributable to the 30% fall in premiums, it suggests a price elasticity of demand of -0.23. This is a relatively low price elasticity compared with the estimates of -0.44 for hospital cover with or without ancillary cover, and –0.35 for ancillary cover with or without hospital cover, provided by Butler (1999).  Two possible explanations for this apparent discrepancy are as follows.  First, the measured increase of 7% probably understates the true increase due to the rebate because, in the absence of the rebate, coverage would probably have been

lower than 30.1% by the March quarter 2000. Second, some of the increase in coverage after March 2000 may still have been attributable to the 30% rebate. Against this, it might be argued that the time period Deecmber 1998 to March 2000 does overlap with the time period following the announcement of lifetime community rating, suggesting that some of the 7% increase may have been attributable to the announcement effect of lifetime community rating. However, the promotional activities of the government and the health funds regarding lifetime community rating were concentrated in the March and June quarters 2000.

## Figure 1. Percentage of population covered by a hospital insurance table, Australia, June 1984 to March 2002
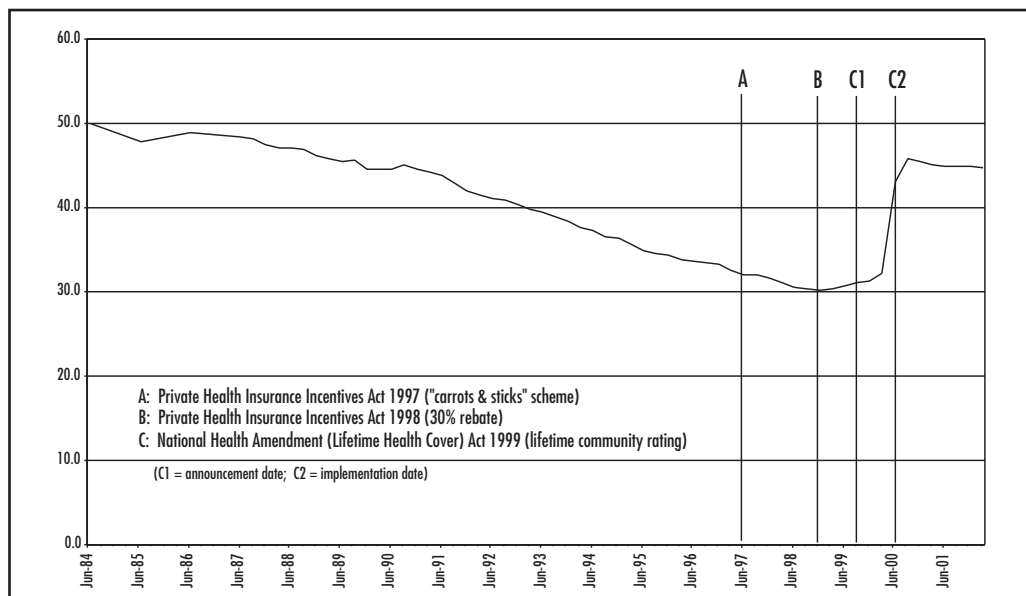


Policy C appears to have a dramatic effect on private health insurance coverage. Over the period from announcement to implementation of lifetime community rating, coverage increased from 31.0% to 43.0% (a 39% increase). While some of this increase may have been attributable to the 30% rebate as already discussed, the empirical evidence on price elasticities of demand suggests that the bulk of the increase was caused by the looming implementation of lifetime community rating. The announcement effect of premium increases up to 70% after 1 July 2000 gave rise to a sharp increase in coverage, particularly in the June quarter 2000.

## Did the cheapest policy do the trick?

Of the three sequential policy changes examined in this paper, the two involving a cost to government through subsidies for private health insurance premiums were introduced before the policy with no cost to government in and of itself (lifetime community rating). Yet those two policies with a cost to government appear to have had either no impact on private health insurance coverage (PHIIS) or a modest impact (the 30% rebate), while the third policy appears to have induced a major response at virtually no cost to government. Ironically, a government-funded reduction in premiums appears to have had a much more muted effect on private health insurance uptake than an unfunded announcement of an increase in premiums.

A consequence of the sequencing of policy changes discussed in this paper is that government expenditures on health insurance subsidies have increased substantially. This is not because the subsidies actually induced a major uptake of private health insurance but because lifetime community rating induced a major uptake and those insurance policies then qualified for a subsidy. In other words, the large increases in expenditures on subsidies were more likely an *effect* rather than a *cause* of increased demand for private health insurance in Australia.

# The future of private health insurance

Given the experience of the last 20 years, it is interesting to contemplate what the future holds for private health insurance in Australia. A potential consequence of the policy changes over the last five years is the re-emergence of a downward drift in the proportion of the population covered by private health insurance in future. This may seem paradoxical, as the introduction of lifetime community rating appears to have addressed an important underlying cause of the decline in private health insurance coverage. This policy change introduced an age gradient into private health insurance premiums and apparently stimulated uptake. Indirectly, this suggests that adverse selection induced by the original community rating regulations was an important cause of the downward spiral in membership. The Industry Commission inquiry also suggested this was the case. Yet the data for the December 2000 quarter and the March and June quarters 2001 each show a fall in the proportion of the population covered in comparison with the September 2000 quarter (see Figure 1). While coverage stabilised in the September 2001 and December 2001 quarters, it has fallen again in the March 2002 quarter. Will this decline continue? Is this a resumption of the long-term decline in private health insurance coverage that has characterised the industry for many years?

Consider the following two hypotheses as to the cause of this decline. First, it may be due to a failure on the part of some new members of private health funds to honour their first premium payment, with the result that their policy lapsed. Having applied for cover before the effect date for lifetime community rating (16 July 2000) and been counted as policyholders in the September quarter 2000 statistics, these policies lapsed when the premium payment fell due. If this explains the fall in coverage after the September quarter 2000, then coverage may well stabilise in the future in excess of 40% of the population. Non-payers will disappear from the statistics, and the fall in coverage will be a temporary phenomenon reflecting this 'once off' effect.

A second hypothesis is that the decline in coverage since the September quarter 2000 is due to the re-emergence of an adverse selection death spiral. While lifetime community rating has introduced some degree of risk discrimination into private health insurance premiums, the gradient of premiums by age at entry into insurance is somewhat less than that necessary to achieve full risk rating, as shown earlier in this paper. As a result, there remains a considerable degree of cross-subsidisation of older members by younger members. This may lead younger members to begin dropping out again, with consequent upward pressure on premiums inducing even more lower risk members to drop out. Hence, while the current version of lifetime community rating may have caused an immediate lift in coverage, there may be sufficient residual cross-subsidisation for an adverse selection dynamic to reappear.

The data in Figure 1 cover seven quarters (21 months) since the implementation date for lifetime community rating. If the first hypothesis were correct, its effect would most likely have been exhausted within the first four quarters following implementation of lifetime community rating and this is the time period over which most of the recent decline in coverage has occurred. From the September 2000 quarter to the June 2001 quarter, coverage fell from its peak of 45.7% to 44.9% (or 0.8 percentage points). From the June 2001 quarter to the March 2002 quarter, coverage fell from 44.9% to 44.7% (0.2 percentage points).

Can it therefore be concluded that the second hypothesis is unsupported, and that coverage will stabilise? Recent evidence on the age composition of the insured pool suggests that the answer to this question is 'no'. Table 3 shows the average age of persons covered by a hospital table for each quarter from September 1997 to December 2001. Three salient points emerge from these data, corresponding to the three time periods demarcated in Table 3.

- First, the average age increased from 38.9 years to 39.4 years from the September quarter 1997 through to the December quarter 1999 – an increase of 0.5 years over nine quarters.

- Second, the average age fell from 39.4 years in the December quarter 1999 to 37.2 years in the September quarter 2000 – a decline of 2.2 years over 3 quarters. This reflects the influx of younger people into the insured pool in response to the announcement of lifetime community rating.

- Third, the average age increased from 37.2 years to 37.7 years between the September quarter 2000 and the December quarter 2001 – an increase of 0.5 years over five quarters.

**Table 3. Average age of persons covered by a hospital table, Australia, September quarter 1997 to December quarter 2001**

| Quarter | Average age |
| --- | --- |
| Sep 97 | 38.9 |
| Dec 97 | 39.0 |
| Mar 98 | 39.1 |
| Jun 98 | 39.3 |
| Sep 98 | 39.3 |
| Dec 98 | 39.4 |
| Mar 99 | 39.3 |
| Jun 99 | 39.4 |
| Sep 99 | 39.3 |
| Dec 99 | 39.4 |
| Mar 00 | 39.2 |
| Jun 00 | 37.6 |
| Sep 00 | 37.2 |
| Dec 00 | 37.3 |
| Mar 01 | 37.5 |
| Jun 01 | 37.5 |
| Sep 01 | 37.6 |
| Dec 01 | 37.7 |

Source:   Private Health Insurance Administration Council (PHIAC),
          Statistical Trends in Membership (downloaded from http://www.phiac.gov.au).

Even if total membership were constant, the trend over the most recent five quarters would be of concern as it indicates that departures by younger members are being offset by arrivals of older members. This will exert upward pressure on premiums. When overlayed on declining membership, this trend is of even more concern. Finally, the increase in average age of 0.5 years over the most recent five quarters has occurred over a much shorter time period than the same increase in average age in the earlier time period (see first bullet point above). Taken together, these points are indicative of the reappearance of adverse selection in private health insurance. This would not be surprising given the considerable degree of cross-subsidisation that continues to occur from low risks to high risks within the insured pool.

## Conclusions

The Australian experience of private insurance subsidies in recent times provides some interesting lessons on the timing and sequencing of policy changes, and on the importance of selecting policy instruments that accurately target the causes of the problems to be remedied. Had the policy of lifetime community rating been introduced prior to subsidies for private health insurance, a large proportion of the uptake in coverage would likely have been achieved without the large expenditures on subsidies that have now been, and will continue to be, incurred.

But while the lifetime community rating policy may have been superior to the subsidies in terms of inducing uptake of private health insurance at little cost, both policies share a potentially more serious problem – a failure to correct adverse selection associated with community-rated premiums. There is a danger that the recent upsurge in private health insurance coverage is a 'once off' increase that cannot be maintained because the underlying adverse selection dynamic has not been corrected. Should a downward spiral in membership re-emerge, and recent declines in membership coupled with an increasing average age of those insured indicate this is possible, then at some point in the future coverage may return to the levels experienced before the policy changes were implemented. Recent research using trend rates of decline in the past conclude that, if such trends resume, this point will be reached in about 10 years (Frech, Hopkins and MacDonald 2002; Quinn 2002).

To be sure, sufficient time has not yet elapsed to conclude definitively that declines in membership since September 2000 are not attributable primarily to non-payment of initial premiums following the upsurge in membership applications before the implementation date for lifetime community rating. But policy-makers will face challenges in the future whatever scenario eventuates – stable or declining membership. If membership stabilises, then the challenge will be to achieve political acceptability of large government expenditures on private health insurance subsidies which will likely exceed $3,000 million per year by the middle of this decade. If membership continues to fall due to the adverse selection dynamic, then the challenge will be to move further towards full risk rating of private health insurance premiums (e.g. by increasing the penalty on age at entry to 3% per year or more). Failure to do this may lead to another policy challenge – managing the demise of the private health insurance industry.

The challenges ahead are not confined to policy-making. Further research is needed to deepen our understanding of the interactions between private and public health insurance, and of the role of adverse selection in private health insurance in a system where coverage by a national health insurance scheme is mandatory. While adverse selection appears to be an important cause of the malaise that has afflicted private health insurance coverage, this proposition is not uncontested. For example, a recent paper by Vaithianathan (2001) has argued that the consequences of adverse selection may have been exaggerated because insurers can design plans to separate risks and hence achieve risk discrimination through self-selection of insureds into different plans. Thus the empirical importance of adverse selection in private health insurance in Australia remains a vexed issue.

In the meantime, to answer the question posed in the title of this paper, it does seem that the cheapest policy really did do the trick – but with a fiscal sting in it's tail! And whether that 'trick' is characterised by a permanent or only a temporary increase in membership of private health insurance remains to be seen.

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