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Abstract

In the health care system, there are few clear ways that the escalating growth in expenditures can be reduced whilst maintaining or improving health outcomes. This policy brief provides evidence that reducing rebates on private health insurance in Australia is likely to lead to substantial cost savings. It first discusses the policy context and motivation for subsidising private health insurance in Australia, and presents some evidence and reasons why subsidising private health insurance is not likely to generate cost savings. It presents evidence from econometric modelling on the budgetary effects of reducing private health insurance rebates. A 10 percent reduction in rebates is expected to yield net savings of \$215 million each year, as the savings from reducing the subsidy (\$359 million) are higher than the expected increase in government spending on public hospitals (\$144 million). On the whole, savings from reducing spending on rebates outweigh the predicted increase in public hospital costs by roughly a factor of 2.5.

JEL classification: I11, H42, C31, C15

Keywords: Private health insurance, subsidies, policy simulation

1. Introduction

Rising expenditure on health care is expected to put significant pressure on public spending in Australia. The Intergenerational Report 2010 projects that government spending on health care, as a proportion of Australia's gross domestic product, is expected to increase from 4.0 percent in 2009–10 to 7.1 percent in 2049–50. This growth is driven by population ageing, innovation in medical technology, and growing expectations by Australians for high quality health care. This presents an immediate challenge for the government to identify ways to extract maximum value from the health dollars it spends if it is to achieve fiscal sustainability in the longer term.

In 2012, the government made some progress towards fiscal sustainability by successfully introducing means testing for private health insurance rebates and the Medicare Levy Surcharge. This was after two failed attempts to pass the required legislation through parliament in 2009 and 2011. Spending on rebates has been the fastest growing component of government health spending, which had risen from \$1.4 billion in 1999–2000 to \$4.6 billion in 2010–11 (Australian Institute of Health and Welfare 2012). Real expenditure per person on rebates is projected to grow by more than 50 percent over the next decade, from \$192 in 2012–13 to \$319 in 2022–23, and to double by 2049–50 (Commonwealth Treasury 2010). Modelling undertaken by the Commonwealth Treasury predicts that the means-test will have little impact on private health insurance coverage, and is likely to result in net savings of \$1.9 billion over five years arising from lower spending on the subsidies (\$1.8 billion), as well as higher tax revenues through the surcharge (Commonwealth Treasury 2009).

The introduction of means testing was not without controversy. Representatives of the private health insurance industry strongly opposed the measure, warning about the catastrophic consequences on the public hospital system. A report commissioned by the Australian Health Insurance Association projects that a significant number of consumers are expected to withdraw or downgrade their private insurance cover. The net cost to the public hospital system is predicted to rise by \$3.8 billion as individuals drop private coverage and rely on public hospital services (Deloitte 2011). A widely shared view from those outside the industry is that means testing of the rebates is necessary to control the ballooning public spending. The measure also corrects the perceived unfairness of the subsidies, whereby those who are well-off benefit more.

The motivation for subsidising private health insurance was to encourage Australians to take up private insurance and use private hospital services. It is believed that this would relieve capacity and cost pressures on public hospitals. Based on its original intent, the effectiveness of the rebates may be assessed on whether it generates cost savings to the public budget – that is, whether savings from shifting demand away from the public system exceed the cost of the subsidy program. Conversely, the rebates may be reduced or removed if the potential cost savings in doing so exceed the increase in public hospital costs from individuals dropping private health cover.

This policy brief presents the case for reducing rebates on private health insurance in Australia. Econometric modelling conducted at the Melbourne Institute shows that reducing rebates is likely to lead to net public sector savings. A 10 percent reduction in premium rebates is expected to result in savings of \$215 million per year. This is because the savings from reducing the subsidy (\$359 million) are higher than the expected increase in government spending on public hospitals (\$144 million). On the whole, savings from reducing spending on rebates outweigh the predicted increase in public hospital costs by a factor of roughly 2.5.

The brief is organised as follows. It begins by describing the policy environment when financial incentives and penalties were introduced. It discusses some evidence on and reasons why subsidising private health insurance is not likely to generate cost savings. Thereafter, the main features of the econometric model used to analyse the effects of removing the rebate are discussed. This is followed by a discussion of the results and a brief conclusion.

2. Policy context for subsidising private health insurance

From 1998 to 2001, the government introduced private health insurance rebates, the Medicare Levy Surcharge (MLS) and the Lifetime Health Cover (LHC). The aim of these policies was to encourage the uptake of private insurance, as the proportion of Australians with private health insurance had been declining since Medicare was introduced. The prevailing policy stance then supported a balanced public and private involvement in the delivery of health care. The declining health insurance membership was regarded as threatening the financial viability of private hospitals, which could lead to a greater burden on the public hospital system (Commonwealth Department of Health and Aged Care 1999).

The implementation of the three policies resulted in a dramatic increase in the proportion of the Australian population with private health insurance, from a low of 30.1 percent in December 1999 to 45.7 percent in September 2000 (Butler 2002; Private Health Insurance Administrative Council 2009). By mid-2004, coverage had stabilised at 43 percent and more recently has begun to increase slightly. The costs of these policies however were high – the premium rebate alone cost more than \$2 billion when it was first introduced in 2000. By 2010–11, this rose to \$4.6 billion (Australian Institute of Health and Welfare 2012).

It is important to keep in mind that although almost half of the Australian population has private coverage, private health insurance contributes towards a small fraction of total health expenditure. In 2010–11, the government's share of total health spending was 69.1 percent while the share from non-government sources of funding was 30.9 percent. The two largest contributors to non-government spending are health insurance funds and individuals, and these make up respectively 7.6 and 18.3 percent of total health spending (Australian Institute of Health and Welfare 2012).

3. Are subsidies likely to generate cost savings?

Internationally, there is some evidence that the cost of subsidising private health insurance exceeds the fiscal benefits to the public sector. In the United Kingdom, Emmerson et al. (2001) find that only a small number of individuals dropped private medical insurance coverage after a tax subsidy was removed in 1997. In addition, the cost of treating these individuals in the National Health System is substantially lower than the cost of the subsidy. Using data from Spain, Lopez Nicolas and Vera-Hernandez (2008) predict that removing an income tax deduction on private medical insurance would not result in significant cost increases for the public sector.

One reason why subsidising private health insurance is not likely to generate cost savings is that individuals are not very price sensitive when it comes to buying health insurance. As a result, a subsidy needs to be sufficiently generous (and expensive) if individuals are to be encouraged to take up private cover. A measure of how sensitive or responsive consumers are to changes in the price of health insurance is the price elasticity. The larger the size of the price elasticity, the more responsive are individuals to changes in its price.¹

Australian and international studies show that consumers are generally not responsive to changes in the price of insurance (e.g. Butler 1999; Frech et al. 2003; Ellis and Savage 2008). The estimates for the price elasticity for duplicate and supplementary private health insurance range from -0.2 to -0.5 . This means that a 10 percent reduction in price would result in a 2 to 5 percent increase in the number of individuals having private insurance. Frech and Hopkins (2004) calculate that the price elasticity of private health insurance needs to be -1.43 if rebates for private health insurance in Australia are to be self-financing. In the case of the United Kingdom, Emmerson et al. (2001) show that a price elasticity of -1.28 is required if tax subsidies on private medical insurance are to be able to result in savings.

In addition to the price of insurance, the decision to purchase private health insurance in Australia is influenced by a variety of other factors. One factor is the perception of the quality of the public and private health sectors. Deeble (2003) argues that one explanation for the falling membership in the 1980s was the perceived lack of value offered by private health insurance, as well as the growing acceptance of Medicare. Johar et al. (2011) show that the probability of buying private health insurance is higher if individuals are more likely to experience a long wait for elective care in public hospitals. Recent studies by Doiron et al. (2008) and Buchmueller et al. (2008) find that healthier individuals are more likely to have private health insurance.

¹ The price elasticity of demand measures the responsiveness of the demand for a good or service after a change in its price. It is calculated as the percentage change in quantity demanded in response to a one percent change in price. Individuals are regarded as not responsive to price changes if the size of the price elasticity of demand lies between 0 and 1. In this case the demand is elastic and the percentage change in demand is proportionally smaller than the percentage change in price. Conversely individuals are responsive to price changes (or the demand is elastic) if the size of the elasticity is more than 1.

In addition to the significant cost involved in subsidising private health insurance, there are a number of reasons why private health insurance in Australia is expected to have small cost-shifting effects. First, private hospitals usually manage patients with comparatively straightforward medical conditions, leaving public hospitals to be responsible for those who require complex and potentially expensive care. Second, Australians with private health insurance can, and do, continue to use the public system. In Victorian hospitals for example, 19 percent of patients with heart conditions, a majority of whom have private health insurance, use both public and private hospital services (Cheng et al. 2011). Third, because doctors can work in both public and private sectors, expanding the role of private insurance can worsen the burden on the public hospital system if doctors leave the public sector for the private sector.

4. Modelling the impact of reducing the subsidy

The econometric model used to investigate the effect of reducing subsidies for private health insurance in Australia is discussed in detail in Cheng (2011).² The main features of the model are briefly described below.

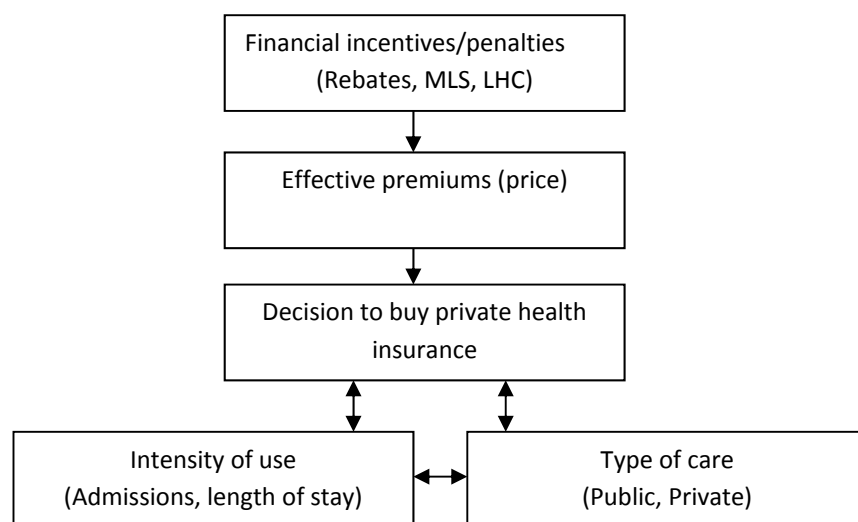


Figure 1: Conceptual framework

The conceptual framework in Figure 1 illustrates how premium rebates influence the decision to buy private health insurance, and its subsequent impact on the use of health care services. Rebates, along with the MLS and LHC policies, determine the effective premium which in turn has an effect on the decision to buy insurance. The availability of health insurance influences individuals' decisions on whether to obtain health care from the public or private sector, and how much care to consume. The relationship between insurance and the use of health care services is bi-directional: individuals' expectations on how much health care they

² An updated version of the paper is available at <<http://terencechaicheng.wordpress.com/research/>>.

would use will influence the decision to buy insurance, whilst the decision to buy insurance will influence individuals' use of health care.

An econometric model based on the framework outlined in Figure 1 is developed. The model is estimated using survey data from Wave 4 (2004) of the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The 2004 HILDA Survey collected detailed individual-level information such as private health insurance status and the use of hospital care services, as well as household-level information such as household income. The sample that is analysed consists of individuals aged 25 years and over.

The model is used to investigate how the proportion of Australians with private hospital insurance, and the use of public and private hospital care, are expected to change when premium rebates are reduced. The analysis considers five hypothetical scenarios where rebates are reduced by a multiple of 5 percent to a maximum of 25 percent. The effect on public hospital expenditure is then estimated by applying the predicted changes in public hospital use to data on recurrent expenditure on public hospitals (Australian Institute of Health and Welfare 2009). To assess the net budgetary impact of the reduction in premium rebates, the additional cost on the public hospital system is compared against the savings obtained from reducing government spending on rebates.

The reference year for calculating government expenditures on public hospitals and premiums rebates is the fiscal year 2007–08. This is chosen so as to minimise any modelling complications that might potentially arise from changes in the MLS thresholds that came into effect in October 2008. Given that the econometric model is estimated using data from 2004, it is implicitly assumed that individuals' behaviour remains unchanged over this period.

Table 1: Impact of reducing rebates for private health insurance

Reduction in rebates (percent)	Baseline	5 percent	10 percent	15 percent	20 percent	25 percent
Percentage change in the proportion of population with private hospital insurance	52.4 percent	-0.7	-1.4	-2.1	-2.7	-3.4
Total public hospital inpatient expenditure (\$ million)	16,080.0	16,153.8	16,224.0	16,292.3	16,360.6	16,427.8
Predicted change in public hospital inpatient expenditure (\$ million)		73.8	144.0	212.3	280.5	347.8
Change in public expenditure on rebates (\$ million)	3,587.0	-179.4	-358.7	-538.1	-717.4	-896.8
Net change in expenditure (\$ million)		-105.6	-214.7	-325.8	-436.9	-549.0

5. Simulation results

The findings from the analysis are shown in Table 1. To illustrate the results, consider the scenario where rebates are reduced by 10 percent (i.e. decreased from 30 percent to 27 percent). This reduction is expected to lead to a 1.4 percent decrease in the proportion of the Australian population with private hospital insurance cover, from the baseline coverage of 52.4 percent. The predicted decrease in the number of privately insured individuals is expected to increase total public expenditure on hospital care by \$144 million, as more Australians rely on the public system for their health care needs. Government expenditure on premium rebates is expected to decrease by \$359 million given that total public spending on these subsidies was \$3.59 billion in 2007–08. The measure is expected to generate savings of \$215 million, as the reduced public spending on premium rebates is larger than the increase in spending on public hospitals.

As shown at the bottom of Table 1, for all of the five simulation scenarios considered, the reduction in rebates for private health insurance is expected to bring about net savings. It is noteworthy that the amount of potential savings is larger for a greater reduction in premium rebates. For instance, a 25 percent reduction is expected to result in savings of \$549 million, compared with \$215 million for a 10 percent reduction in rebates. Savings from the reduction in spending on rebates outweigh the predicted increase in spending on public hospitals by a factor of approximately 2.5.

6. Concluding remarks

Australians are generally positive about many aspects of their health care system, and demonstrate strong support for the role of the public sector in health care, as well as maintaining the mixed public and private model of financing (Hardie and Critchley 2008). Given that Australians value the benefits of having the choice of private care if they desire, it is probably reasonable that they pay for this choice. The issue here is why the government should subsidise individuals to buy private health insurance. The question of whether private health insurance has delivered on its much heralded benefits is still the subject of continuing debate. It is clear that rebates for private health insurance are expensive and fiscally unsustainable. The evidence presented in this policy brief shows that reducing rebates could potentially yield substantial public sector savings.

Means testing of rebates is a positive first step and it would therefore be important to evaluate the impact of means testing. The gradual removal of rebates would be a logical and fiscally responsible next step. This should not happen quickly as the public hospital system currently has a fixed capacity and workforce which would require time to expand. It is essential that the savings generated from means testing be wisely invested into the public hospital system to ensure public hospitals have additional resources to expand their capacity.

There are few clear ways of substantially reducing the growth of health expenditures whilst at least maintaining or even improving health outcomes. New evidence suggests that there is potential to reap significant savings by reducing the price that Australians pay for generic

drugs, which is one of the highest in the world (Clark 2012). Revisiting the question of whether rebates should be gradually removed is one such policy that can generate cost savings to be re-invested directly back into the health care system.

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