

# Private Health Insurance and the Pharmaceutical Benefits Scheme: How Effective has Recent Government Policy Been?

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## Perspective

This paper is concerned with the role and importance of Private Health Insurance (PHI) and the Pharmaceutical Benefits Scheme (PBS); and with the recent policy and performance of the two sectors. Two caveats are immediately necessary. The first arises from the fact that both PHI and the PBS are components of a wider health system. Consequently, the appropriate criterion for the evaluation of the two sectors is the effect they have upon the operation and outcome of the health sector. Thus, the size of the pharmaceutical benefit subsidy or the absolute level of expenditure upon pharmaceuticals should not be an immediate concern if the increased use of drugs reduced health care costs elsewhere. Likewise, PHI is not simply a vehicle for the elimination of risk. Rather, it is a source of revenue for other health services. The structure of health insurance creates incentives for particular behaviours, and the most important criterion for assessing PHI is the effect it has upon health system performance and the magnitude and importance of these effects.

The second caveat, which follows from the first, is that costs and the change in costs should be compared with the overall size of the health sector. Despite the exuberance of the debate PHI in 1999/2000 contributed only 7.1 percent of health sector revenues (see Figure 1). In the same year pharmaceuticals represented 12.3 percent of expenditures (see Figure 2). It is true that the cost of pharmaceuticals is rising rapidly. However by either international or historical standards the cost is not great. In 1998 only 6 of the 26 OECD countries listed in Table 1 had lower relative expenditures on pharmaceuticals than Australia. The table also indicates that expenditures on drugs as a proportion of total health care expenditures fell by about 50 percent between 1960 and 1998. There is no structural or economic reason why pharmaceutical expenditures should not return to the earlier level and, indeed, this should occur if drugs were providing good value for money.

These caveats suggest that caution should be exercised in the evaluation of health system sub-sectors. The more appropriate task is the global evaluation of Medicare and, in general terms, Medicare is a good health system. It provides universal financial access to services; as measured by Disability Adjusted Life Expectancy (DALES) Australia has the second best

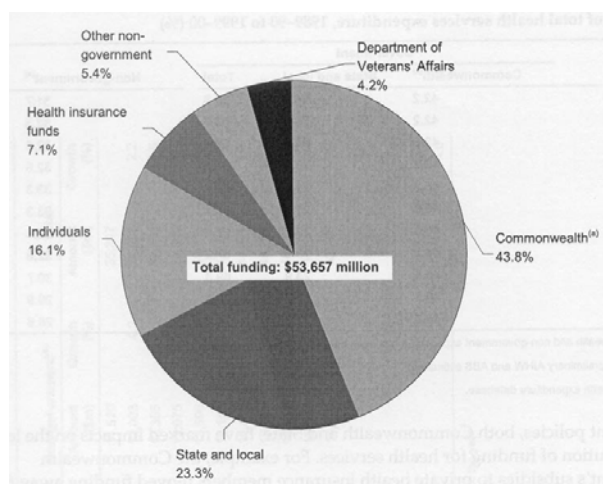
performance in the world (WHO 2000)<sup>1</sup>; using other countries as the benchmark, Medicare's expenditures are almost exactly what would be expected for a country with our GDP; and Medicare is popular. Even the most publicised of its problems—the length of hospital queues—does not appear to be excessively troubling by international standards. For example, a recent OECD draft report found that Australian queues compared well with those in four other countries studied, viz, Canada, Denmark, Netherlands and the UK.

**Table 1 Pharmaceuticals and other medical non durables, % of total expenditure on health**

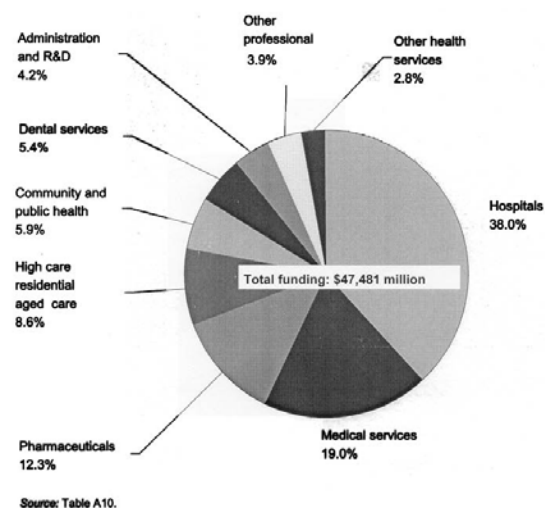
	1960	1998		1960	1998
Australia	22.3	11.4	Japan		16.8
Belgium	24.3	16.1	Korea		13.8
Canada	12.9	15.0	Luxembourg		12.3
Czech Republic		25.5	Netherlands		10.8
Denmark		9.2	New Zealand		14.4
Finland	17.1	14.6	Norway		9.1
France	22.1	22.0	Portugal		25.8
Germany		12.7	Spain		20.5
Greece	26.8	14.7	Sweden		12.8
Hungary		26.6	Switzerland		7.6
Iceland	16.7	15.5	United Kingdom		16.3
Ireland		9.9	United States	16.6	10.1
Italy	19.8	21.9			

Source: OECD 2002.

**Figure 1 Private Health Insurance**



**Figure 2 Size of Sectors**



The importance of international comparisons should not, however, be overdrawn. Virtually every health system has problems and it is clear that Australia, like most other countries, could

<sup>1</sup> WHO 2000 Health System Performance.

significantly improve the operation of the health system. This more general issue is discussed briefly in the final section below.

### Private Health Insurance

The widely known story about the events leading to recent policy initiatives is simple, logically consistent and for the most part wrong. It is that because of the existence of a 'free' alternative—public hospital care—the membership of PHI declined until 1998; that this led to a decreasing use of private hospitals which, in turn, put pressure on public hospitals and that this was the reason for increasing hospital queues. This (incorrect) sequence of events was widely interpreted as indicating a crisis in Medicare and the commonly accepted solution was to reverse the decline in PHI in order to take pressure off the public hospitals.

**Table 2 Recurrent expenditures, source of funds (\$ billions current)**

Year	Total expenditures	Hospital		Expenditures		Individuals
		Pub	Priv	Gov	PHI	
1989/90	26.8	8.2	1.7	18.3	3.1	4.5
1998/99	47.5	14.0	4.0	33	4.8	8.5
% change	77.2	70.7	135	80.3	54.8	88.8

Note: \$4.1 b = revenue less PHI rebate (30%)

Source: AIHW Health Expenditure Bulletins

**Table 3 Private hospital services**

	Separations	
	% of Total	Bed Days
1985/86	25.9	21.9
1989/90	26.7	22.0
1995/96	30.5	26.3
1999/00	34.3	28.1
Increase	32.4%	28.3%

Source: Butler 1999, Bloom 2002

Some of the relevant evidence is presented in Tables 2 and 3. Between 1989/90 the revenues raised by PHI rose by 54.8 percent and private hospital income increased by 135 percent—almost double the rate of growth of public hospital expenditures. From 1985/86 to 1999/2000 private hospitals increased their share of hospital separations from 25.9 to 34.3 percent—that is, private hospitals increased their share of separations by 32 percent. Queuing occurred in public hospitals for two main reasons. First, there is a shortage of some specialists and priority has been given to private, not public, patients. Secondly, State governments have imposed severe budgetary limits on their hospitals. In Victoria, for example, the acute care budget between

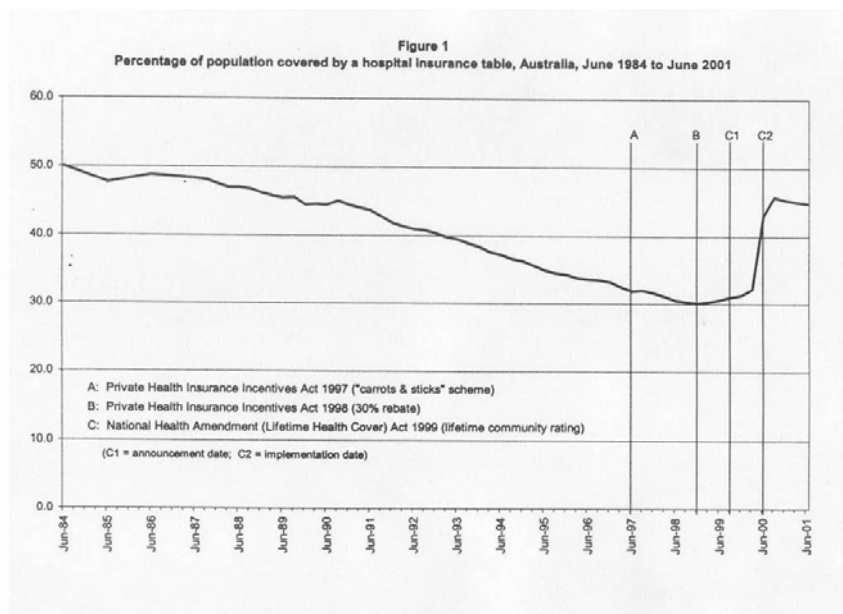
1991/92 and 1994/95 fell by 8 percent in normal terms despite a 12 percent increase in unit costs and a 21 percent increase in standardised throughput.

This evidence suggests that subsequent policies were not designed to avert the collapse of the public system but to preserve or expand PHI as a social objective in itself.

In the past 5 years there have been three main policy changes with respect to PHI. (i) In July 1997 the Private Health Insurance Incentives Scheme (PHIIS) introduced tax subsidies for low income workers and tax penalties for high income individuals and families (with incomes above \$50,000 and \$100,000 respectively) who had failed to purchase PHI. (ii) In September 1998 the tax subsidy was replaced by a '30 percent rebate' for all PHI irrespective of the recipient's income. (iii) In September 1999 'Life Time Community Rating' was announced to become effective from July 2000. For those purchasing PHI before the age of 30 and maintaining PHI there is now a lifetime discount on the insurance premium. The discount is reduced by 2 percent per annum for each year beyond the age of 30 at which a person purchases PHI.

The policies have been spectacularly successful. As shown in Figure 3 membership increased from 30 to 45 percent. In a careful analysis of this change Butler (2001) demonstrates a very uneven contribution from the three policies. The PHIIS probably had no impact. The 30 percent rebate probably increased membership from 30 to 32.2 percent. Almost all of the effect—the increase from 32 percent to 45 percent coverage—is attributable to the introduction of lifetime tables.

**Figure 3 Percent population covered by a hospital insurance table, Australia June 1984 to June 2001**



Source: Butler 2001

While the policies have successfully increased the membership of PHI, they have created an industry which, along with the echidna and platypus could be the Australian entry into an international 'Strange but True' contest. As individual and family income rise above the threshold, the effective price of PHI (direct price less subsidy less surcharge avoided) now falls and quickly becomes negative—individuals and families are effectively paid to purchase the product—they

are left with a higher net income if insurance is purchased! PHI is probably unique in the world in being supported by a subsidy which depends upon the purchase of a particular product. It is similar to the introduction of a surcharge on the incomes of those who fail to buy an Australian made car in order to promote the automobile industry.

Next (and possibly offsetting some of the apparent inequity of paying the wealthy to take out PHI) people with private health insurance may be substantially out of pocket in a way that does not happen if there is no health insurance—the financial risk is greater with, than without, health insurance! This is also likely to be unique in the world. The third and most successful policy to encourage PHI also has a bizarre dimension. Insurance is normally intended to reduce the anxiety associated with risk. In the present context it is the risk of needing private health care and being unable to pay for it without insurance. Before the introduction of life time policies this anxiety arose because of the risk facing individuals and families in the next 2 to 5 years. But the introduction of life time tables means that families must now consider the next 20 to 30 years and the success of the policy is almost certainly due to the fact that it increases the very thing which insurance is intended to reduce, namely, anxiety associated with the future.

The change in PHI income and membership has undoubtedly increased hospital expenditures in the private sector. An alternative policy would have been to increase public hospital expenditures by an amount equal to the subsidy. Using this as a benchmark PHI is not very efficient. As shown in Table 4, PHI revenues increased from \$4.8 billion to \$7.1 billion between 1998 and 2000. However hospital benefits paid by PHI rose by only \$1 billion. As the subsidy in 2001 was approximately \$2.3 billion only 43 percent of it flowed through to additional hospital expenditures. The full cost of the different policy measures in 2001 was probably closer to \$3.8 billion (Segal 2002). This implies that only 26 percent of the total subsidy was spent on hospitals. Most of the remainder was spent on activities which are outside the public national health scheme. If the subsidy has been allocated by PHI companies pro rata then only 58 percent of it would be spent upon hospitals (public and private) 5 percent would be spent on medical services and the remaining 35.1 percent would be spent on services not included in the national health scheme for other patients (see Table 5).

**Table 4 PHI expenditure and revenue**

	<b>Pop Cover (%)</b>	<b>PHI Income \$b</b>	<b>PHI Hosp Benefits \$b</b>
1998/99	30.1	4.8	2.8
2002 (est)	44.9	7.1	3.8
Increase		2.3	1.0
Subsidy			
30%			2.3
full (Segal) <sup>1</sup>			3.8
Change in Hosp			
÷ 2.3b			0.43
÷ 3.8b			0.26

Source: PHIAC, Annual Reports

<sup>1</sup>Segal, Australian Financial Review, includes cost of exemption from Medicare Surcharge; 30% rebate; coverage of medical, pharmaceutical costs due to higher use of services.

**Table 5 PHI Areas of expenditure and subsidy**

	Expenditures 1998/99		Pro rata allocation of subsidy
	\$b	%	\$b 2001
Recurrent	4.06	100.0	
Hospitals	2.35	57.9	1.33
Medical	0.21	5.2	0.12
Other Professional	0.20	9.1	0.21
Drugs/Appliance	0.17		
Dental	0.56	13.7	0.32
Admin	0.50	12.3	0.28

The impact of the PHI policies upon public hospitals has not been properly analysed. There are, however, grounds for believing that it may have been perverse. In the simple, but wrong analysis of PHI outlined earlier, an increase in the number of private hospital patients would reduce the 'pressure' upon public hospitals' and thereby decrease the length of queues. However the logic of this argument is incorrect. Queues depend upon the balance between supply and demand. While it is true that a transfer of patients to the private sector will reduce the demand for public services, a transfer of doctors between the sectors to meet this demand will decrease the supply of doctors for public patients.

**Table 6 Ratio of likelihood of receiving a service following admission to private and public hospitals after AMI, 1995/97**

	Private Hospital Patients :Public Patients to		Private Patients in Public Hospitals : Public Patients to	
	<i>Angiography</i>	<i>Revascularisation</i>	<i>Angiography</i>	<i>Revascularisation</i>
Within 14 days				
Men	2.20	3.43	1.77	1.53
Women	2.27	3.86	1.57	1.81
Within 3 months				
Men	2.24	3.43	1.53	1.23
Women	2.28	3.34	1.49	1.32
Within 12 months				
Men	2.16	2.89	1.42	0.97
Women	2.22	2.84	1.48	1.10

Source: Victorian Inpatient Minimum Dataset

Table 6 presents some of the miniscule evidence relevant to this issue. In sum, it indicates that patients admitted to private hospitals after a heart attack are 2 to 4 times more likely to receive an intensive procedure (angiography, revascularisation). This implies that an expansion of the private sector will increase the number of these procedures which will require a disproportionate

transfer of doctors from the public to the private sectors. If this pattern were generally true and, for example, a 10 percent transfer of patients was accompanied by a 20 percent transfer of doctors, then the expansion of the private hospital system would increase, not decrease excess demand and queuing in the public sector. This scenario is highly plausible. Doctors have a strong financial incentive to give a larger number of more complex services in the profitable fee-for-service, private sector than in the less profitable, salaried or sessional, public sector.

### **Pharmaceutical Benefits Scheme (PBS)**

Ordinary Australians pay the full price of prescription pharmaceutical drugs when it is less than \$22.40 after which the cost is met by 'Medicare'. Health care holders must pay the first \$3.60. After a 'safety net' level of expenditure has been reached in a financial year both groups receive a greater subsidy so that the price is \$3.60 for ordinary citizens and nothing for health card holders. There have been no recent changes in the basic structure or operation of the Scheme although, as discussed below, there may have been a significant shift in the performance of the PBS.

Since government intervention became unfashionable in the 1970s economists have been quicker to identify regulatory failure than regulatory success. Thus, for example, despite the *prima facie* evidence that the PBS had been, for a number of years, spectacularly successful in their price negotiations with pharmaceutical companies, few have noted this fact and the Industry Commission (1996) was sparing in its praise! With the vigorous use of its monopsonistic power, Australia's health authorities drove down the price of the pharmaceuticals it purchased to almost 50 percent of the average price in other countries (Industry Commission 1996). Until 1993 negotiations were essentially ad hoc (although economic data had previously been provided to the Pharmaceutical Benefits Advisory Committee—PBAC). Since 1993 companies seeking to have their drugs listed on the PBS have been required to submit a formal economic evaluation (which must follow a detailed methodological protocol). The Australian regulation was the first such requirement in the world. Similar legislation was subsequently passed in Canada, New Zealand and the United Kingdom.

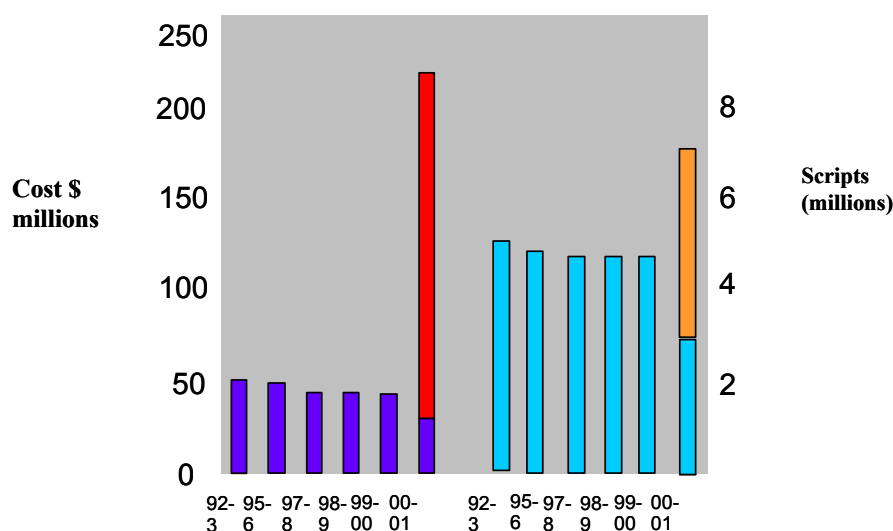
The submission of a cost effectiveness analysis does not, in itself, increase the governments negotiating power. While it will eliminate highly cost ineffective drugs—those with lower effectiveness for high cost—it could, perversely, lead to an increase in the final price of highly cost effective drugs. Pharmaceutical companies which are aware of the cost effectiveness of their product and will have an incentive to inflate apparent costs when drugs are highly effective in the knowledge that they will still appear to be cost effective. Consistent with this, the negotiated price of more recent drugs has been closer to the world average price. The outcome, however, may reflect learning by those purchasing drugs in other countries who are in a position to observe the lower Australian prices.

The regulatory framework of the PBS now has four separate, and separately administered, stages. First, drugs are examined for safety and efficacy by the Therapeutic Goods Administration and, when successful, drugs are registered. Secondly, the Pharmaceutical Benefits Advisory Committee examines the costs and benefits of a drug and recommends rejection or adoption and, in the latter case, an appropriate price. Thirdly, the Pharmaceutical Benefits Pricing Authority recommends a price to the Commonwealth Minister for Health who, it is believed always accepts this price. Finally, drugs are dispensed by regulated Pharmacists and for a regulated fee for the Pharmacist.

In principle, the present framework is a good one. It combines rigorous economic evaluation with a capacity for authorities to exercise discretion at all stages. A retrospective analysis of 355 consecutive submissions to the PBAC between January 1991 and January 1996 indicated that the PBAC normally rejected drugs with a cost per life year greater than \$76,000 and were unlikely to reject drugs where the cost per life year was less than \$42,000. Between these two values the committee exercised a degree of discretion as might be expected depending upon specific contextual factors.

The framework does not, of course, guarantee successful regulation and problems may arise for at least three reasons. First, it is possible that the market for a particular drug might be significantly greater than anticipated and, consequently, realised expenditures might exceed the expected level. This problem does not, itself, indicate a defect in the framework. If the cost effectiveness of a drug is sufficiently high then a larger market simply indicates that greater than anticipated benefits will be obtained. If this results in a global budgetary problem for government then the threshold at which any drug is accepted should be incrementally increased until a satisfactory budget outcome is achieved.

Figure 4 Cost and scripts for NSAIDs



Source: Segal et al, 'Priority Setting' CHPE Seminar to Population Health Division, DHAC, January 31, 2002

The second and more serious problem is that, as with any regulatory process, the regulators may be 'captured'. The recent and highly publicised experience of the anti-inflammatory drug Celebrex is consistent with (but does not 'prove') the hypothesis of regulatory capture. As reported in *The Age* (02/2001) the PBAC recommended that Celebrex be priced at \$1.00 per day with a halving of the price once an agreed number of scripts had been issued. Despite this, and for the first time, the government accepted a pricing authority recommended price 20 percent higher than the recommendation. No quantity discount was negotiated. Announcing the listing of Celebrex, Health Minister Dr Michael Wooldridge foreshadowed expenditures of \$54 million per annum. Realised expenditure, in the event, was \$232 million. As shown in Figure 4 this caused a dramatic increase in the national bill for non steroidal anti-inflammatory drugs. Adding to the *prima facie* evidence of capture, three of the members of the PBAC publicly expressed concern



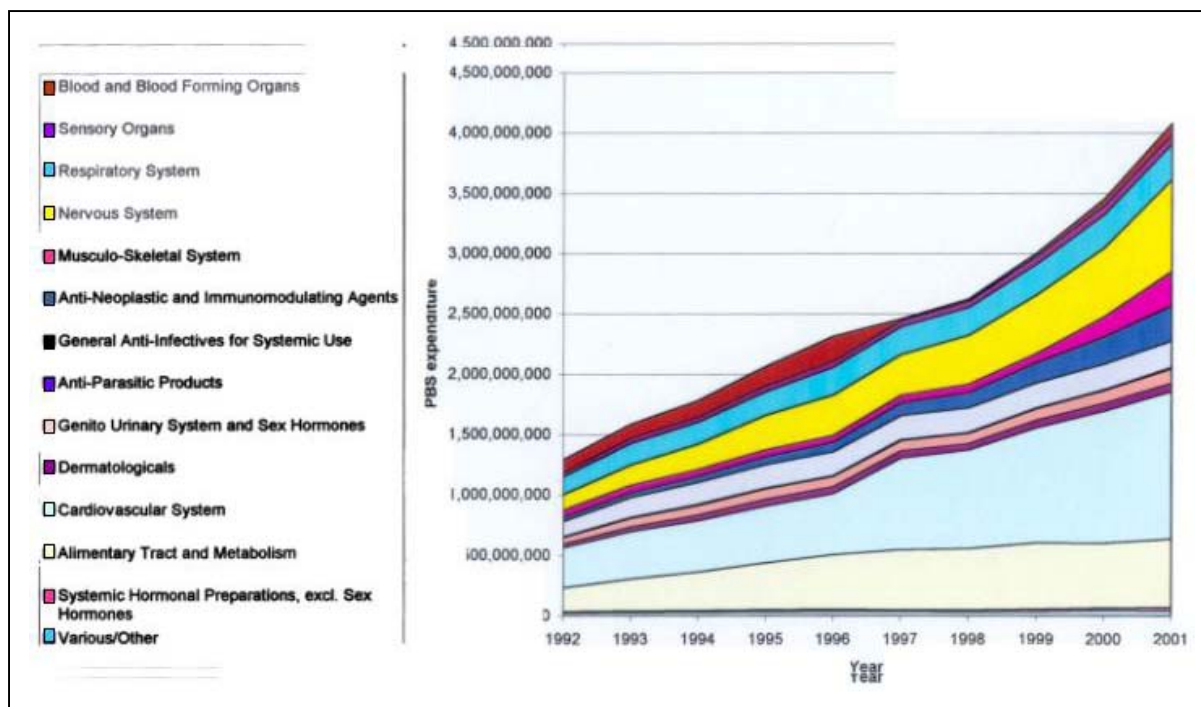
over the growing political influence of the drug industry which now has a representative on the five member pricing authority.

Regulatory capture cannot, however, satisfactorily explain the ten year trend in pharmaceutical expenditures. These are shown in Figure 5 which indicates a significant growth, not simply in drugs of the muscular skeletal system (which includes Celebrex) but a growth in all drug categories and particularly those of the cardiovascular system. The figure suggests that expenditures have been driven by new technologies, a trend which is likely to continue as biotechnology and research into the human genome is translated into a new generation of pharmaceuticals.

The third and most worrying weakness in the PBS system is its reliance upon doctors to prescribe drugs only when the clinical indicator (blood pressure or cholesterol level etc) has reached the threshold suggested by the PBAC. It is believed that doctors commonly ignore these recommendations and prescribe drugs even when the clinical indicators suggest that the drug is 'cost ineffective'.

An ad hoc option for ameliorating this third problem is to increase the capacity of the Health Insurance Commission to analyse prescribing patterns and to counsel doctors with clearly deviant prescribing habits (as it was with doctor services). A second, and more general, ad hoc policy is the provision of resources to the PBAC to re-examine a larger number of currently listed drugs and to target those with rapid expenditure growth. The process could also involve an examination of prescribing habits.

**Figure 5 PBS expenditure from 1992 to 2001**



These palliative measures are unlikely to have a significant impact while the economic incentives are perverse. Doctors have no reason for withholding drugs whenever they have any positive value for their patients. This suggests the need for a restructuring of the payment system and,

more specifically, the adoption of a system in which pharmaceuticals are treated as an input into the production of a service—pharmaceuticals should be ‘bundled’ with the doctors consultation. Experience in the UK, US and New Zealand suggest that the provision of a pharmaceutical budget to a ‘GP Budget Holder’ may have beneficial effects upon prescribing practises. This, however, is only one example of the need for a comprehensive re-evaluation of the incentives which have evolved haphazardly in Australia over time.

**Figure 6 Justification for a subsidy for PHI**

- What Could be Expected
  - Data systems for patients/clinicians EBM included in doctor’s software
  - Information to patients inc quality of hospitals
  - Multi-purpose clinics
    - coordination service for chronic/elderly
  - Incentives for health promotion
  - Quality initiatives
- Government Policies
  - Link subsidy to above
  - End default payments
  - Reduce number of funds
  - Encourage service delivery in groups
  - Increase Fund exposure to risk arising from high provider incomes and inappropriate work patterns

## Discussion

The two sectors discussed in this paper face different ‘problems’. First, the PHI industry has proved to be an inefficient vehicle for increasing public hospital capacity. In the pharmaceutical sector there is concern about the rate of increase of expenditures. There is, however, a common element in these problems. This is that, in both cases, the appropriate solution requires an understanding of social objectives which does not, at present, exist. Controversy arises when groups with different interests or ideologies diagnose the problem or recommend solutions.

Can subsidies to private health insurers or the private sector generally be justified? The answer is undoubtedly, ‘yes’. The private sector offers a degree of ‘choice’ and it allows resource allocation to be determined, in small part, by the individual’s willingness and ability to pay. It is clearly the government’s role (and not that of an economist) to decide whether or not these objectives should be pursued. However it is possible to analyse and quantify the benefits of the particular model of ‘choice’ currently offered and the extent of the redistribution of income from taxpayers generally to those with PHI.

At best, the measures taken to encourage PHI represent a lost opportunity for invigorating private health insurers and coaxing or goading them into the sort of entrepreneurial activities which economic theory and proponents of the market argue will occur in the private sector but, to date, have been almost totally absent from PHI. Some examples of such measures and some appropriate government policies are given in Figure 6. Rather than a dynamic force which seeks and implements innovative forms of health care, care coordination and information systems

Australia's PHI has anaesthetised price signals, underwritten provider incomes and adopted the passive role of funds transfer agent. Recent policy has simply reinforced the message that this role is appropriate and health insurers will be protected if their product does not prove to be attractive.

In the case of the Pharmaceutical Benefits Scheme the unknown element is the willingness of the Australian population to collectively finance health services. Rising expenditures per se do not represent a 'problem' if benefits exceed costs. Likewise, the rising cost of tourism does not represent a 'problem'. Rather, the twofold issue is, first, whether or not particular drugs to particular patients are cost effective—benefits exceed the threshold cost society is willing to pay and, secondly, what is a social willingness to pay?

In the absence of this latter information there are likely to be two default judgements. The first is that the country cannot afford a higher level of health care expenditures. This belief is almost self-evidently wrong. The spectacular rise in American health care costs has not inhibited the rapid expansion of the economy elsewhere. Even if this did occur the desirability of health care expenditures depends, unambiguously, upon the benefits which they bestow. (Most would probably be happy to pay 30 percent of the GDP in exchange for a life expectancy of 120 years of full health.)

Secondly, it may be judged that governments cannot afford the bill for health care. This is likewise an incorrect statement and particularly in Australia which has a relatively small government health sector and relatively low taxes. The relevant issue is whether or not health expenditures are financed collectively (involving a cross subsidy from the healthy wealthy to the unhealthy poor) or more individualistically (thereby avoiding the redistribution of income). Either option is possible. The discipline of economics purports to show how best to use our finite resources to satisfy social welfare. Depending upon social objectives this may involve either collective or individual financing of health services. It is an empirical issue which of these alternatives describes Australian social preferences. But, to date, the empirical research has not been carried out.

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