

WORKING PAPER 79

**Funding and Future Options for the
Reform of Medicare**

Jeff Richardson

WORKING PAPER 79

Funding and Future Options for the Reform of Medicare

Professor Jeff Richardson
Director, Health Economics Unit,
Centre for Health Program Evaluation

September 1998
ISSN 1325 0663
ISBN 1 875677 90 9

CENTRE PROFILE

The Centre for Health Program Evaluation (CHPE) is a research and teaching organisation established in 1990 to:

- undertake academic and applied research into health programs, health systems and current policy issues;
- develop appropriate evaluation methodologies; and
- promote the teaching of health economics and health program evaluation, in order to increase the supply of trained specialists and to improve the level of understanding in the health community.

The Centre comprises two independent research units, the Health Economics Unit (HEU) which is part of the Faculty of Business and Economics at Monash University, and the Program Evaluation Unit (PEU) which is part of the Department of General Practice and Public Health at The University of Melbourne. The two units undertake their own individual work programs as well as collaborative research and teaching activities.

PUBLICATIONS

The views expressed in Centre publications are those of the author(s) and do not necessarily reflect the views of the Centre or its sponsors. Readers of publications are encouraged to contact the author(s) with comments, criticisms and suggestions.

A list of the Centre's papers is provided inside the back cover. Further information and copies of the papers may be obtained by contacting:

The Co-ordinator
Centre for Health Program Evaluation
PO Box 477
West Heidelberg Vic 3081, Australia
Telephone + 61 3 9496 4433/4434 **Facsimile** + 61 3 9496 4424
E-mail CHPE@BusEco.monash.edu.au

ACKNOWLEDGMENTS

The Health Economics Unit of the CHPE is supported by Monash University.

The Program Evaluation Unit of the CHPE is supported by The University of Melbourne.

Both units obtain supplementary funding through national competitive grants and contract research.

The research described in this paper is made possible through the support of these bodies.

AUTHOR(S) ACKNOWLEDGMENTS

This paper was delivered to the Consumers' Health Forum in Canberra, June 2 1998.

ABSTRACT

Short and long run problems of Medicare are reviewed. It is argued that the short run issues associated with private health insurance and the public-private balance of hospital services are very largely problems of our own creation. Long term 'problems' associated with rising costs are commonly misinterpreted.

Data are presented which suggest a dramatic misallocation of resources in the health sector. It is argued that the elimination of such inefficiencies represents the greatest long term challenge and the greatest potential source of health improvement. Failure of the medical profession to meet this challenge voluntarily will invite the adoption of managed care in a uniquely, regulated, Australian form.

Table of Contents

Short Run Problems	1
Long Term Problems	2
Options for Reform	5
Australia's Health System in the Long Run	8
References	9

Funding and Future Options for the Reform of Medicare

The reform of Medicare should be driven by the problems that it faces in the short and long run. The response to these problems should, in turn, be determined on the one hand by our social objectives and on the other hand by the technical constraints upon our health system: the trade-offs between desired objectives and the response of the system to various policy initiatives. Determining the appropriate direction of reform is complicated because our information about the operation of the health system is incomplete but, more fundamentally, because of the different social objectives of the different stakeholders in the health system. Despite rhetorical statements to the contrary, providers as a group do not find universal cost control attractive. Community costs are identically equal to their gross incomes. Governments and government agencies often appear to be motivated more by short run expenditure minimisation or in the shifting of costs than in long term system reform. As a consequence, the health care debate is often complicated by assertions that particular options are technically inevitable. More often than not statements of this form are code for the fact that a particular interest group wishes to achieve a particular self interested objective.

Discussion of the problems of Medicare should always be prefaced by the acknowledgment that, by world standards, the Australian health care system provides good access to a wide range of hospital and medical services and at reasonable cost to both the individual and to the nation. As far as we can judge by the limited comparable cross-national data, the outcome from the Australian health system is also good. Infant and age specific mortality rates are similar or lower than in comparable countries. Satisfaction with the system per sé is extremely high. The Health Insurance Commission Annual Survey reports an overall rate of satisfaction of 88 percent (HIC, 1997). The satisfaction is with the system per sé and not with every detail of its operation.

Short Run Problems: The most obvious and well publicised problems in all of the States are the varying queues in the public hospitals and the related budgetary problems. This is commonly (but not altogether correctly) linked to the decline in private health insurance whose membership has dropped from over 50 percent at the commencement of the Medicare scheme to its present level of 31 percent of the population. In one sense these short run issues are problems of our own creation. Except in those specialty areas where there is an inadequate supply of doctors, hospital queues are a result of the constrained budgets imposed by State governments partly as a result of the reluctance of Australia's politicians to increase taxation and partly as a result of the legitimate desire to force efficiencies upon the historically inefficient public hospital system.

Similarly, the decline in private health insurance was triggered by the removal of government subsidies and the simultaneous increasing cost of private hospitalisation resulting from the decision by private hospitals to increase the sophistication of their technology and the range of expensive options that they offered. But undoubtedly the decisive reason for the declining health insurance membership is that funds compete against the 'free' public health system: membership of a private fund requires individuals to pay their contribution to the public system and then, additionally, for their private care. With some important caveats this amounts to double payment for hospital costs.

Long Term Problems: The long term problems facing Medicare are real and more intractable. First, in the immediate future there is no particular limit to the amount that we could spend on health care. US expenditure is over twice the Australian level and before Managed Care controlled its runaway expenditures, the US Health Care Financing Agency (HCFA) predicted a doubling of real health care costs. With the technical possibility of such a high level of expenditure there is a legitimate concern over the cost of health care. Contrary to common opinion it is not limited by technically determined need and by well established protocols. There is therefore a serious and legitimate concern about future health care costs and whether increasing expenditures be justified by increasing health benefits? If these cost increases occurred they would be attributable, like cost increases in the past, to the introduction of new and costly technologies, to the more intensive use of existing procedures and to an increasing supply of highly paid professionals each of whom has a financial and professional interest in carrying out these procedures. Contrary to common opinion, it would have relatively little to do with the ageing of the Australian population which, in the next twenty to thirty years will have an age profile very similar to European countries which presently spend no more on their health care than Australia does at present.

The very real possibility of increasing expenditures have given rise to two common arguments. The first is that 'the nation will be unable to afford the health bill' and the second is that 'governments will be unable to finance such expenditures and will be forced to transfer financing and responsibility to the private sector'. In the absence of some politically motivated and unstated assumptions both assertions are unambiguously false. There is no particular limit to the amount that may be spent on health just as there is no particular limit to the amount that may be spent on entertainment, computers or any other economic activity. Our expenditure is entirely a matter of choice and neither economists nor any other group of neutral commentators can advise on the desirability of a particular pattern of expenditure except to insist that we should obtain the maximum possible benefits in exchange for our spending.

Likewise, it is entirely a matter of social choice whether or not health services are collectively or privately financed. Cross-national comparisons show that, contrary to partisan assertion, countries where governments finance a larger proportion of the health services, have a somewhat lower total expenditure on health care suggesting that concentrating buying power in the hands of a single authority results in either lower prices or a lower level of service provision. The difference, however, is quantitatively modest and certainly too small to persuade a country that is ideologically committed to maintaining a significant personal responsibility for health care expenditures, to nationalise its health service (a somewhat hypothetical option for most countries other than the United States).

In addition to the concern over rising health costs there is a second, and arguably more fundamental, issue which concerns the existing health system. This is whether or not present expenditures can be justified by existing benefits; or whether existing resources could be used to better effect? Despite the prima facie need for additional hospital expenditures, by world standards Australia is a very intensive user of hospital resources despite the fact that, by comparison with other developed countries, we still have a relatively young population which would be expected to use hospital services less, not more, than in other countries.

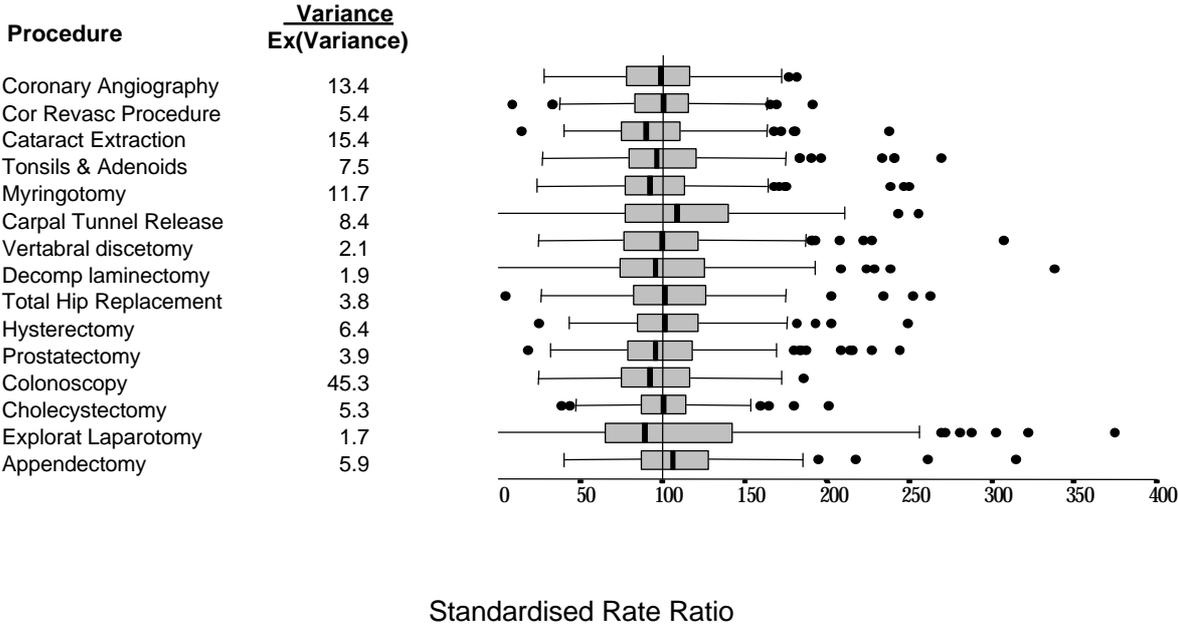
This concern about the efficiency of our spending—whether we spend too much on hospitals, particular types of services in particular areas, too much upon some pharmaceuticals or perhaps too little on others; too much on some institutional care and too little upon some forms of ancillary care, etc—is what economists call ‘allocative efficiency’ and it is, without doubt, the quantitatively largest problem facing Australia and other countries in the longer term. The problem has received greater recognition in recent years as policy analysts have highlighted the plethora of uncoordinated health programs and, more fundamentally, the irrational dichotomy of the administration and financing of Medicare between two fractious and quarrelling authorities, namely, the State and Commonwealth governments. The health sector has been more characterised by cost and blame shifting than by cooperation and coordination. After herculean efforts agreement was reached between the two levels of government to carry out coordinated care trials. Inadequate funding and constraints arising from other short term objectives have limited the likely impact of these and governments appear to have, at least temporarily, lost interest in this pioneering and important initiative, possibly as a result of the crescendo of blame shifting associated with the stylised quarrelling over the new Medicare agreement.

The full extent of the allocative inefficiency in the health sector has not, until recently, been known because, despite the availability of the data for many years, health authorities appear to have defined their role in terms of financial objectives rather than the equitable provision of best practice health care. The extent of the misallocation has been highlighted by two recent research projects at the Health Economics Unit. In the first project we computed the average annual use of 15 well defined hospital procedures in each of the Statistical Local Areas (SLA) in Victoria in 1995/96. These were then (indirectly) age-sex standardised and indexed so that if the residents of an SLA received the ‘expected’ number of procedures (based upon their age sex composition, population and state average use) then their ‘rate ratio’ would equal 100. The variation in the actual ratios is shown in Figure 1. The thick bar for each procedure indicates the 25th and 75th centiles for each procedure. The thin lines indicate the highest and lowest rate ratios except for ‘outlying’ SLAs as defined by a particular statistical algorithm (which is of no particular significance here).

The distribution shown in Figure 1 is astonishing. For example, for coronary angiography the rate ratio varies from approximately 25 to 175 or by a factor of 7. That is, after standardising for age and sex the rate at which coronary angiography is provided to SLAs varies by 700 percent. Part of this variation could, of course, be random. Some of the procedures listed are relatively uncommon and the population of some SLAs is relatively small. For this reason we calculated the expected variance in the distribution of rate ratios (based upon the assumption that each individual’s likelihood of receiving a procedure was subject to a Poisson distribution with the state mean and standard deviation for the age cohort). We then divided the observed variance in the rate ratio across SLAs by the predicted variance. The results are startling. At the lower end the actual variance for prostatectomy is 3.9 times greater than expected. For coronary angiography

variance is 13.4 times greater than expectation and for colonoscopy the variance is a staggering 45.3 times greater than expected: variance is 4,530 percent of expectation! This suggests that for some procedures resources are almost randomly allocated across the state.

Figure 1: Standardised Rate Ratios for Various Operations in the Statistical Local Areas in Victoria, compared to the Rate Ratios for All Victoria



Median, range, 25th & 75th centiles for Statistical Local Areas, standardised to Victorian State Ratio = 100. Extreme values greater than 3 times 50th-75th and 25th-50th centile intervals are recorded as separate points.

The second project was part of an international collaborative investigation of the costs and benefits of new technology in the treatment of emergency heart attacks. As part of this study we investigated the likelihood of a patient receiving a revascularisation procedure (coronary artery bypass graft, balloon angioplasty or stenting) in the eight weeks following an initial emergency admission for a heart attack. Preliminary results from this study are also startling. In 1996 the likelihood of receiving one of these procedures in the 8 weeks following an emergency admission to a private hospital was 4.9 and 6.7 times greater for men and women respectively than for men and women admitted as public patients in public hospitals. Three caveats are important. Firstly, the choice of revascularisation over thrombolytic drug therapy is not a life-death decision. Secondly, it is possible that private hospital patients are simply receiving procedures more swiftly and that public patients will subsequently receive more such procedures. Thirdly, even if the differential rate persists through time the data do not indicate whether or not private patients are over-serviced or public patients are under-serviced. What is certain, however, is that very significant differences occur in the pattern and type of treatment between different groups of patients and that these and similar differences should be very carefully scrutinised. Prima facie they cast serious doubt upon the common belief that Medicare results in similar access to important services for the entire population.

These two sets of results suggest that the pattern of resource allocation under Medicare represents the overwhelmingly most important issue in the long term. As compared with service utilisation rates which vary by 500-800 percent, cost efficiencies of 10-20 percent or successful cost shifting between levels of government or from government to the population are utterly trivial issues. The almost exclusive focus upon these issues represents a massive loss of perspective and the ascendancy of accounting imperatives over equity and the health of the population.

Options for Reform

Some of the many options for reform are summarised in Table 1 which is taken from a forthcoming book on Australian health policy, edited by Mooney and Scotton¹. The structure of the table highlights several important points. First, options are neither unambiguously good nor unambiguously bad. In the real world (as distinct from the idealised construct of the advocate) options often result in a trade-off between different objectives. The final choice depends upon the weighting that is applied to each criterion. Thus, for example, from the perspective of a cost accountant in a Department of Finance or Treasury, increased patient co-payments or total privatisation of the health sector may appear to be highly desirable because it improves the government budget. However, from the table it is obvious that while these options score very well with respect to this most unimportant of all of the objectives², they do not score well on most socially relevant concerns.

More generally, the table indicates that a number of the options that dominate the public debate have been targeted at a limited number of often low importance objectives and often at the expense of more important long term reforms. For example, a subsidy on private health insurance decreases the inequity for those who purchase private health insurance and 'pay twice' for their hospital care but it hinders cost control. The increased Medicare levy on the wealthy has a (very marginal) positive effect upon financing while simultaneously sending a powerful message to health insurance funds that complacency and failure to control costs will not be penalised.

A number of the policies which entuse government have little rationale in terms of known economic effects. There is little evidence that the privatisation of hospitals will have a significant impact on efficiency. To the contrary, if (as suggested by the study of revascularisation rates following hospitalisation for heart attack) private hospitals facilitate the increased use of medical procedures and assist doctors to increase personal incomes then privatisation could generate medical costs to the Commonwealth government that exceed by many orders of magnitude any conceivable efficiency gains in the delivery of hospital care. The increasing reliance upon patient co-payments assists with budgetary controls and has a marginal beneficial impact upon total cost but this is at the expense of access and a marginal decline in health outcomes.

By contrast with these relatively ineffectual policies there are other options which are unambiguously advantageous which are currently ignored for political reasons. In particular there is almost universal agreement that ending the irrational Federal-State division of responsibilities

1 Mooney, G and Scotton, RB Economics and Australian Health Policy, Allen & Unwin.

2 Any favourable impact upon the budget may equally be achieved through tax policy. Except in the most marginal of cases the 'excess burden' of achieving budgetary objectives by the cannibalisation of health policy will greatly exceed the excess burden of an incremental increase in a broad based tax.

and coordinating care under a single budgetary unit would have unambiguous net benefits. The failure to adopt such policies is entirely attributable to a failure of the political system and the inability of the two levels of government to agree about the allocation of responsibilities and powers.

The final two options listed illustrate the need to interpret Table 1 cautiously. Managed Care - broadly, the intervention of funding groups in the market to achieve cheaper and/or better care - and Managed Competition - broadly, where Managed Care organisations compete for customers - both have a large number of positive aspects. However the quantitative importance of the effects are not well known (and would depend upon the nature of the Managed Care scheme) and, more importantly, under some circumstances could increase costs and have an adverse impact upon health. If the evidence suggested that this was the most probable result of Managed Care and Managed Competition then these two negative aspects would clearly outweigh the positive effects shown in the table.

At least in the short run, sensible debate over Managed Care has been impeded by the successful attempt of the medical profession to discredit it. The attempt is unsurprising as the beneficial effects of Managed Care - lower costs, coordinated and better care - translate into lower medical incomes and interference with medical autonomy. It is, however, disappointing that a significant and influential part of the Australian media has been captured by this campaign and has accepted that Managed Care is indistinguishable from 'US style Managed Care' and that this is an unmitigated evil. Managed Care is almost certainly responsible for the (at least temporary) stabilisation of US health care costs. In a number of instances medical incomes have fallen and there has been a massive reduction in the power of organised medicine. Evidence on the effect upon the quality of medical care is ambiguous. In some cases it has improved and in others it has declined.

The former result is of greater relevance to Australia. It demonstrates the possibility of a simultaneous reduction in cost and improvement in quality. This suggests that the option of Managed Care should be considered very carefully. It is simplistic and misleading to assume that the Australian version of Managed Care would be identical to the American version. The two systems are quite different in two fundamental respects. First, Australia has a long tradition of careful regulation and the introduction of Australian style Managed Care would almost certainly be accompanied by a series of regulatory safe guards. For example the rules of funding bodies which impact upon health care delivery could be made subject to review by a statutorily independent quality assurance agency. Secondly, and possibly more importantly, US health insurance is sold primarily to employers and not to individuals or to families. Consequently, the customer is primarily interested in reducing costs. In the Netherlands where recent reforms have moved the system towards Managed Care and Managed Competition, there has been an explosion in the growth of quality assurance measures. This latter effect would almost certainly characterise the Australian health care market.

Table 1: Policy Options

	1 ↑ PHI subsidy 2 ↑ Private hosp subsidy 3 ↑ Levy on wealthy 4 ↑ Patient co-payments 5 Health savings accounts					6 Privatised hospitals 7 Empower PHI		8 ↑ Public hosp funding 9 Rationalisation Fed State Division 10 Coordinated care			11 Total Privatisation including deregulation 12 Privatisation + voucher + Private Premium 13 Managed care (MC) 14 MC & Managed Competition			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Structural														
- Fed-State Imbalance									✓✓✓	✓	✓✓✓	✓✓✓		✓✓✓
- Allocative efficiency										✓✓	XX	XX	✓✓?	✓✓✓ ?
- Uncoordinated programs							✓?		✓✓	✓✓	?	?	✓✓✓	✓✓✓
- Patient empowerment							✓			✓✓	X	X	✓?	✓?
Medical accountability	X	X	X				✓?			✓	XX	XX	✓✓	✓✓
Equity														
- Financing	✓	✓✓	✓	X	XXX							✓		✓✓
- Equal access	X	?	XX	XX	XX			✓		✓	XXX	✓		XX
- Level playing field (pub/Pte)	✓✓	✓✓✓	✓					X					✓✓	✓✓✓
Private Health Insurance														
- Inequity to members	✓✓✓	✓✓						X			✓			✓✓✓
- Historical complacency	XX	XX	XXX				✓✓✓				X	X	✓✓✓	✓✓✓
Public Hospitals														
- Queuing, excess D	✓	✓	✓			✓	✓	✓✓✓	✓	✓			✓✓?	✓✓?
- Technical efficiency	X	X	X			?		X			?	?	✓	✓
- Overuse of hosp	X	X	X	✓		X	✓	X	✓	✓			✓✓?	✓✓?
Medical														
- Open ended ffs	XX	XX	X				✓			?	XXX	XXX	✓✓	✓✓
- Excess doctor supply														
Cost and Finance														
- Total cost control	XXX	XXX	XXX	✓	XX	?	?	X	✓✓		XXX	XXX	✓?	✓?
- Govt budget	XX	XX	✓	✓✓	✓			XX	✓		✓✓✓			?
Health Outcome				X			✓?		✓	✓✓	XX	X	✓✓?	✓✓?

Australia's Health System in the Long Run

There is no inevitability about the future path of the Australian health system. Some changes are highly probable; others will depend upon social objectives and technological innovation. The final shape of the system will also depend, very largely, upon the response of key players—and particularly the medical profession—to the challenges that arise from the present shortcomings of the system. Sooner or later the health and well being of Australian patients may assume greater importance than the control of power in the political system; and the funding of health services will be shifted to one level of government or other thereby permitting the coordination of health services. The technical advantages of physical co-location of services is likely to overcome the inherent conservatism of service providers and multi specialty health clinics are likely to emerge. While health care costs are currently driven by cost enhancing technology, in the medium to long term technologies are likely to emerge which reduce rather than increase cost. The US market—which fuels most technological research—has now fundamentally changed from one which rewards high expenditure to one which rewards low expenditure and innovation is likely to respond to these changed incentives. The long run balance between government and private sector funding will be determined by the long run commitment to collective provision and the strength of communitarian values. This in turn will reflect community attitudes towards the trade-off between diversity and choice on the one hand and equity and uniformity on the other.

Finally, and perhaps most importantly, the shape of the health system will be moulded by the response of the medical profession to the evidence of widespread and massive inequity and inefficiency in the allocation of our medical resources. A vigorous response from organised medicine, the adoption of evidence based procedures and measures to persuade or coerce recalcitrant colleagues to adapt these may ensure that, in the long run, the health system will be controlled and directed by the medical profession. If organised medicine does not move with sufficient vigour or if the membership of the different colleges successfully resist their leaders' attempts to rationalise resource use then the option of Managed Care will become increasingly probable as it is unlikely that the community will be prepared to forego the large benefits that are likely to follow from the adoption of best practice medicine. The first of these alternatives is more likely to be in the best interest of the community.

References

Health Insurance Commission (1997), Annual Report, 1997

Richardson, J (in press), 'The health care financing debate', in *Economics and Australian Health Policy*, eds G Mooney & RB Scotton, Allen and Unwin.

Richardson, J, Robertson, I, Hobbs, M, Edwards, D (in press), 'The impact of new technology on the treatment and outcomes of acute myocardial infarction in Australia', in (eds) M McClellan & D P Kessler, *A Global Analysis of Technological Change in Health Care: The Case of Heart Attack*, The University of Michigan.