

**A GODS Analysis of Medicare:  
Goals, Obstacles, Deficiencies, Solutions:  
Or, In What Form Should We Adopt Managed  
Care**

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# A GODS Analysis of Medicare: Goals, Obstacles, Deficiencies, Solutions: Or, In What Form Should We Adopt Managed Care

## 1 Introduction

The discussion of health sector reform commonly adopts an analytical framework which obscures the overriding importance of health sector objectives. One such approach commences with the observed problems associated with access, cost or outcome and then evaluates alternative solutions of the health sector (Richardson 1998). The final conclusion with respect to policy reform necessarily reflects the problems that have been selected or omitted. Focus upon choice would, most probably, lead to the recommendation of measures to preserve private health insurance. A focus upon cost control and budgetary pressures might lead to the neglect of quality of care.

A second analytical framework commences with a critical discussion of existing institutions, programs and the methods of financing health care and identifies deficiencies in these processes (Duckett 2000). Thus, for example, the observation of cost shifting associated with the Commonwealth-State division of financial responsibilities might result in the recommendation of measures designed to minimise cost and blame shifting irrespective of the magnitude of the problem as judged by its impact upon health and other social goals. Likewise the observation that private health insurance is less attractive because of the option of free hospitalisation in the public sector might lead—and has—to the recommendation of life long health insurance ‘contracts’ which promise lower insurance premiums for those who have held private health insurance for a number of years. Because of the analytical framework, the relationship between the policy and ultimate objectives can be de-emphasised or entirely ignored. Worse, the policy may impede the achievement of long term goals. Thus, for example, if the expansion of private health insurance results in a disproportionate transfer of doctors from the public to the private sector then overall access to medical services may be reduced. If life long insurance ‘contracts’ increase people’s anxiety about the cost of health services—they must now worry about the cost of health services over their entire life and not simply in the following twelve months—then the policy may have a harmful impact upon the very thing that insurance is designed to ameliorate, namely, anxiety over the uncertain financial effects of future illness.

The objective of this chapter is to discuss the reform of Medicare using a framework which does not draw upon objectives *en passant* or in such general terms (‘maximise health and achieve equity’) that they have no real impact upon the subsequent discussion of options. The framework, described here as the GODS approach, consists of a consideration of ‘Goals, Obstacles, Deficiency and Solutions’. The intention in adopting this framework is to ensure that the obstacles and the resulting deficiencies in the performance of the health sector relate to explicit goals of the health sector and not to unstated or implicit objectives of a Government Department or policy analyst. It is argued that this framework highlights—rather than obscures—the role of social values. It further highlights the uncertainty of the ideal package of policy reforms.

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## 2 Goals

Health sector goals clearly include equity and efficiency in the delivery of health care. However even this very general statement can be misleading. For economists, it commonly leads to the analysis of efficiency with only passing reference to equity which, it is assumed, is the domain of government. It is almost universally believed that efficiency and equity are different in kind: that equity relates to social values and that efficiency is a technical matter. Both these views are contestable. First, the separation of equity and efficiency in orthodox economics is based upon the doubtful 'Kaldor-Hicks' criterion, that if an activity increases output to such an extent that losers from the activity can *potentially* be compensated while others remain better off then the activity should be undertaken. Redistribution and compensation, it is argued, are the role of government. The principle is particularly dubious in the health sector. The diversion of resources from one program to another may result in death or a serious loss of health for one group. This makes compensation impossible. When service provision is financed by taxes the 'losers' from a new program will be healthy tax payers. Compensating this group by redistributing income or some other benefit away from program beneficiaries—people who have been sick—is not a political option and, even in principle, is probably impossible. Consequently in the health sector equity and efficiency cannot be separated. This becomes even more obvious when it is recognised that the desirability of efficiency is also value laden. Efficiency is only desirable if it leads to an increase in something which is socially valuable—leisure, income, health, etc.

The conclusion from this brief discussion is that efficiency should be regarded as no more than one of several social objectives and possibly not even the most important. This is highlighted by the recent WHO Global Analysis of Health Systems (WHO 2000). In this, five broad objectives are nominated and their importance quantified. The achievement of health per se only received an importance weight of 0.25. The remaining objectives, with a cumulative importance weight of 0.75, all concerned explicit equity objectives.

The same point has been made by Reinhardt (1999)<sup>1</sup>. Paraphrasing his humorous discussion of the issue: 'the most direct and quickest route from Melbourne to Sydney is not necessarily the most efficient if you wish to go to Perth'. That is, efficiency cannot be separated from a consideration of objectives.

Unfortunately there has been relatively little investigation of social objectives in the health sector other than the achievement of health. Yet the range of possible objectives is very large. The list includes the distribution of health and health services, the range of services and of providers that should be accessible to different population groups; the content of the minimum package of services which should be included in a national health scheme; and which services should be restricted for particular population groups. In addition to the effect upon the quality and quantity of life the criteria for selecting services for a national scheme may also be wide ranging. In recent years it has been suggested that, in addition to health and quality of life, economic evaluation should include the severity per se of the initial health state, the age of recipients, the maintenance of hope, the certainty of treatment and the potential per se for health gain (Nord 1999; Nord et al 1999; Menzel et al 1999). In particular contexts society may endorse the rule of rescue, the fair innings argument, libertarian or communitarian values. A consequence of this is that no single health scheme is likely to suite every country. Rather, the 'best' health scheme will depend, in

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<sup>1</sup> Reinhardt, 1999, Keynote address to the International Health Economics Association Second Conference, Vancouver, 1999.

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large part, upon country-specific social values and, for this reason, it is not possible to recommend a 'best' path for the evolution of Australia's Medicare without first understanding social objectives.

Despite this, the achievement of efficiency in the conventional sense is of importance; that is, identified objectives should be achieved at minimum cost. As a number of important objectives are known—health, patient orientation/responsiveness to patient wishes, etc and, consequently, some of the characteristics of an ideal Medicare scheme can be described. This is done in the following two vignettes, the first illustrating the need for allocative efficiency and the second a hypothetical scenario describing an adoptive and fully integrated system which responds to patient preferences.

'Ethix, a Seattle based Managed Care organisation was asked to establish a health plan for a nearby country town. The scheme included, *inter alia*, detailed utilisation review. Shortly after commencement this detected an unexpectedly high level of spinal injury in youths. Investigation established that the reason for this was a tree stump which had been left in the middle of a popular toboggan run. Young people were crashing into this and injuring their backs. The health plan paid for a bulldozer to remove the tree stump.' (Summary from a public address, Richardson et al 1999)

Medicare does not, currently, pay for tractor services!

'A woman with dizziness is concerned about her health. She rings the state call centre which advises her to visit her local health team. She is able to see the GP quickly who asks her a series of questions from the relevant research based protocol and undertakes a clinical examination. The GP emails the results to a local specialist... who orders some further investigations consistent with the state research based care path... Advice of (an) impending admission is automatically conveyed electronically to the GP and the social worker in the referring health team. The social worker contacts the hospital to discuss discharge planning... The specialist... suggest a number of sources for information about the patient's condition. The patient contacts the call centre for further information... The case is randomly selected by the hospital audit committee for quality review. The committee suggests some slight changes to the state-wide protocol committee.' (Duckett 2000 p241).

Australia does not generally have systems which could result in such a scenario.

### 3 Obstacles

Many of the obstacles to the achievement of an ideal health scheme are well known and have been widely discussed (Duckett 2000; Bloom 2000; Richardson 1998; Scotton 1998). Only three of these will be highlighted below. The first, and arguably most important, is the all pervasive lack of good information about the effectiveness of health services. The US Office of Technology Assessment and the OECD have both estimated that less than 25 percent of services currently used have been adequately tested for efficacy. This implies that selection of a best treatment protocol is very largely a matter of judgement and not simply a matter of knowledge. This in turn disempowers consumers and can be used to justify, – rationalise – a very wide range of treatment options for service providers. This would not, in itself, represent an obstacle to change if information was adopted and acted upon as it became available. However there is currently no method for ensuring this occurs in Australia. To the contrary, health service delivery is fragmented and individual providers commonly operate in isolation from existing networks which might disseminate knowledge. Further, the demand for 'clinical freedom' may frustrate measures

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designed to disseminate best practice: the demand for medical autonomy may effectively override the patient's right to evidence based care.

A second and related obstacle is the existence of vested interests. Health expenditures are identically equal to provider incomes and, consequently, policies designed to reduce health expenditures will be resisted by those whose incomes will be reduced. Health sector providers are a particularly articulate and politically effective pressure group.

Partly for these reasons it is likely that health sector reform will always proceed slowly and the effects of structural and financial reforms are unlikely to be observed in the short run. This is illustrated by the experience of both the UK and New Zealand. In the former case the introduction of budget holding general practitioners and the gradual expansion of their responsibilities had little discernible effect. While the use of pharmaceuticals appeared to decline the pattern of referrals to consultants and the subsequent hospitalisation rates did not alter. As argued by Ashton (2001) the failure of the New Zealand reforms was, at least in part, attributable to the speed at which they proceeded and the confusion that this caused. The experience in both cases suggests that short run experimentation with health system financing and delivery, such as occurred in Australia with the Coordinated Care Trials, may be unable to determine the long run potential impact if such reforms were to remain in place for a longer time period.

Thirdly, the multiplicity of health programs in Australia makes the achievement of allocative efficiency very difficult. That is, there is no incentive for the flexible delivery of services illustrated in the first vignette involving the health scheme established by Ethix. In principle there should be no obstacle to the establishment of a unified source of funding and program responsibility. In practice, this is frustrated by State-Federal jealousies and the existence of localised self interest. In sum, we are the prisoners of history and the obstacles facing health sector reform have largely arisen from the embedding of systemic characteristics which were determined historically.

Finally, there is a further broad category of 'obstacles'. These arise from the technical inevitability of trade-offs between the achievement of possible objectives. These include, *inter alia*, the trade-off between total expenditures and the scope of the health sector, either within or outside the government scheme. As the number of procedures provided increases, so budgetary expenditures must rise. Second; the demand for private health insurance and the right to spend one's own income on health care may result in a two or multi tier health sector which may lead to a deterioration of the public health service as its most politically articulate members and supporters transfer into a superior private scheme. Further, the existence of a private sector which attracts both providers and patients through the provision of expensive facilities may increase national health costs without a corresponding increase in health benefits. Third there is a trade-off—at least in the long run—between the cost and quality of the services provided by a health scheme. Fourth, systems now available have the potential to improve the treatment of individual patients but also provide a capacity for evaluating the impact of services by monitoring patient experience through time. This objective must be traded against the demand for patient confidentiality and, at present, this latter objective almost totally overrides the former. Finally, and as noted above there is a potential trade-off between provider autonomy and the patient's right to evidence based medicine.

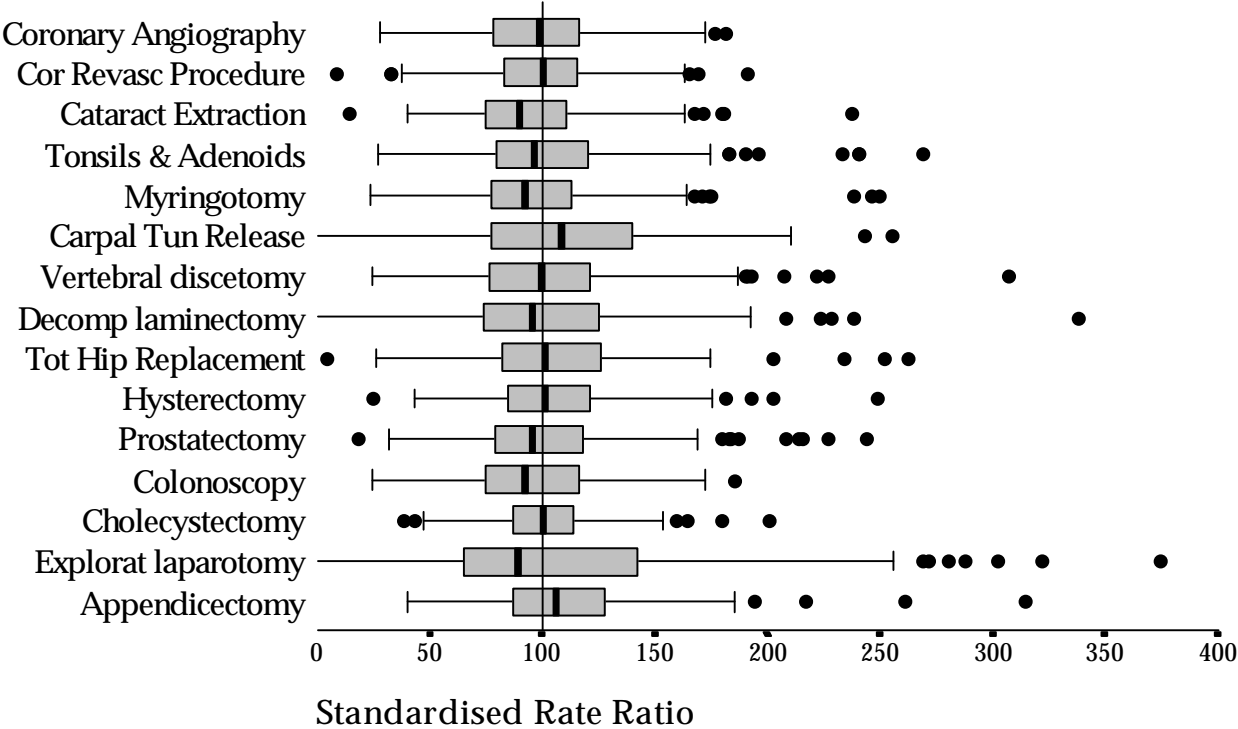
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## 4 Defects

Each of the obstacles mentioned above and others discussed in the literature may lead to manifest problems; that is, a failure to realise achievable objectives. However the relative importance of any such problems is an empirical issue and health sector policy should reflect the quantitative importance of each problem. While this conclusion may appear self evident, policy has not, commonly, been driven by the empirical evidence concerning the need for reform, nor have governments systematically sought to determine system failures. Thus, significant effort has been devoted to the privatisation of hospitals despite the lack of evidence of the need for such a policy. The self evident importance of the quality of hospital care has not, until recently, resulted in a significant attempt to monitor and ensure this outcome. Little effort has been devoted to the orientation of services to patients. The huge discrepancy in the distribution of services has only recently been addressed and the extent of the discrepancy has not properly been investigated. More generally, there has been remarkably little attempt to systematically evaluate the relationship between health service delivery and social objectives.

Figure 1 and Table 1 indicate two sets of problems which are arguably amongst the most serious for Medicare. Figure 1 depicts the number of services received per 1,000 population in the different statistical local areas of Victoria. The rates are adjusted so that the index number 100 represents the expected service delivery given the population, age and sex. The thick lines in the box plot represent the 25th and 75th centiles (ie 50 percent of SLA's are in this range). Dots represent statistical outliers. The figure reveals variation in service use of 200 to 1,000 percent over the two year period from which data were obtained. As this pattern cannot be explained by known medical factors, it reflects the erratic allocation of resources that might be expected when there are no clear guidelines for particular interventions.

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



Source: Richardson, J, 1998 'The healthcare financing debate' in *Economics and Australian Health Policy*, G Mooney & RB Scotton (eds), Allen & Unwin, Sydney, p198. Data were analysed at the HEU by Dr Iain Robertson.

Table 1 indicates the type of treatment received by patients following a heart attack. The numbers in the table represent the likelihood of receiving a procedure for a private patient in a public hospital or a private patient admitted to a private hospital divided by the likelihood of a public patient in a public hospital receiving the same service. The table indicates a dramatic difference in patient treatment and indicates the existence of a two-tier system, at least in the treatment of AMI.

**Table 1 Ratio of Rates of Angiography and Coronary Artery Revascularisation Procedures in Private versus Public Hospitals\***

	Rate ratio (95% confidence interval)**			
	Angiography	Angioplasty/stent	CABG	Any CARP
Public patients in public hospitals	1.00	1.00	1.00	1.00
Private patients in public hospitals	1.43	1.09	0.90	1.00
Private hospital patients	2.17	3.05	1.95	2.87

\* Rates are for all Victorian residents aged 15-85 years admitted to Victorian acute care hospitals with acute myocardial infarction, July 1995-December 1997, adjusted for age group, sex and half year of initial admission. Comparative group: male public patients, 55-64 years old, in public hospitals July-December 1995.

\*\* Rate ratios are calculated using the Cox proportional hazards model.

CABG = Coronary artery bypass grafting CARP = Coronary artery revascularisation procedure.

Source: Robertson & Richardson (2000) *MJA*, vol 173, 18 September 2000 p 293.

The significance of these illustrations is two-fold. First, they highlight behaviours which many would consider to be a 'problem'. From Figure 1 it must be concluded that either some operations are over-serviced or some under-serviced. The problem in part reflects the discrepancy between service rates in urban and remote areas. Table 1 raises the question of whether or not we wish to have such a two-tier system. The second issue illustrated is that governments have not had an interest in the type of data presented in Table 1 and Figure 1. They have neither sought such analyses and often not responded when such analyses have been made public. This is a problem of government failure.

## 5 Solutions

A wide range of possible solutions have been discussed in Richardson (1998). Three general points will be made, each about the prerequisites for achieving 'efficiency', broadly defined as the achievement of policy objectives.

First, as there are various possible objectives, both the nature and precise structure of the ideal health scheme for Australia cannot be determined until these objectives are known.

Secondly, the achievement of allocative efficiency will almost certainly involve a change in current funding arrangements. Within a health scheme designed, basically, to provide the same kind of care to all citizens, there is a need for the flexibility that can be achieved with a single fund for each individual. Enthusiasm for this reform has almost certainly diminished with the failure of the Australian Coordinated Care Trials to demonstrate a significant increase in the cost effectiveness of services following fund pooling. These results should, however, be interpreted with caution. They demonstrate that a change in funding unaccompanied by significant change in delivery may have little effect in the short run. However, as noted in the context of the New Zealand reforms, change in the health sector performance may be slow. The initial effect may be upon risk factors, not final outcomes, and these were not included in the evaluation. A further conclusion which cannot easily be tested empirically in such a trial is that fund pooling fund pooling may be

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necessary but not sufficient for significant reform. It may be necessary to experiment with different modalities of service delivery such as, for example, the primary care groups which have evolved in New Zealand.

If the ideal health sector seeks to provide greater choice of services to different individuals and to encourage a larger element of patient payment then government subsidies must, to a much greater extent, be based upon patient needs. That is, increasingly funds must follow the patient and not the provider.

Thirdly, it is almost certain that whatever the other attributes of a health scheme it will be necessary to incorporate evidence based medicine which, in turn, implies the adoption of more or less flexible protocols (depending upon the strength of the evidence available and the capacity to precisely classify diseases). At present this process is impeded both by the lack of acceptable protocols (the absolute number of protocols now in existence is large) and by provider resistance to an intrusion upon their 'clinical freedom'. The first of these problems is being rapidly overcome. Protocols are evolving both in Australia and, very rapidly, in the USA. The second obstacle may prove to be the more difficult. Broadly there are two options. Firstly, the medical profession, led by the various colleges, may work autonomously or cooperatively with government to further develop protocols. If practitioners then adopted such protocols, self regulation—self management—would achieve at least one important social objective—best practice medicine. If this process is thwarted by provider self interest and the demand for 'clinical freedom' one alternative is for government to devise regulation and incentives to drive this process. If the government cannot implement benign and effective policies, the residual solution is—to use Reinhardt's phrase—to employ the 'bounty hunters' of the private sector: the problem may be privatised. This would imply an Australian version of private sector Managed Care. Scotton has already, on numerous occasions, described a framework which might be employed to achieve this objective, viz, Managed Competition (Scotton 1998). Which of these broad alternatives evolves depends very largely upon the response of the medical profession.

## 6 Conclusion

There have been two major themes in this chapter. The first is that policy analyses should commence with a clear understanding of objectives. It is not sufficient to state these in such general terms that they have no operational meaning or for precise objectives to emerge as the analysis proceeds. Rather, goals should be explicit and detailed. Contrary to common practice, it has been argued here that efficiency—the achievement of maximum health or maximum utility—should be regarded as only one of several objectives and the achievement of 'efficiency' should relate equally to each of these objectives. This is in contrast to the presumption that efficiency must be traded off against other social objectives. In this process, economists do have a significant role to play. The skills of economics are particularly suited to the determination of population values and the quantification of the inevitable trade-offs that will result from the technical constraints upon the health system.

The second main theme has been that Australia's Medicare system does not achieve allocative efficiency nor, potentially, the desired distribution of services. In part this has arisen because of the paucity of information about best practice and the power and flexibility this gives to individual practitioners. As this informational deficit diminishes, mechanisms must evolve which ensure information based policy and practice. As there is no known formula for ensuring that this will

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occur, health systems must be flexible and capable of ongoing experimentation with alternative systems of funding and service delivery.

The final destination for Medicare will depend not simply upon objectives and the nature of trade-offs and the type of care which is most cost effective but also upon the response of the medical profession to the challenge of best practice medicine. One way or other, however, Managed Care must be embraced: the rate of change of medical knowledge is so great and the incentives for self-interested behaviour so strong that this challenge is unlikely to be met by an anarchic system of uncontrolled 'clinical freedom'. As it is unlikely that a country will indefinitely deny its population best practice medical care, it is concluded that Australia will almost certainly adopt Managed Care in one form or other. As best practice medicine is best for patients, its achievement should be very high on the priority list of desirable policy reforms.

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