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Workshop Proceedings

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The Productivity Commission

The Productivity Commission, an independent Commonwealth agency, is the Government's principal review and advisory body on microeconomic policy and regulation. It conducts public inquiries and research into a broad range of economic and social issues affecting the welfare of Australians.

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Foreword

The Productivity Commission convened a workshop on Managed Competition in Health Care in Canberra on 23 August 2002. The Workshop drew together fifteen leading analysts and practitioners to examine a model for reform in Australia proposed by Dr Richard Scotton. The Scotton model is designed to harness market incentives to improve the funding and delivery of health services.

Interest in that model has been growing over the past year or so, as it has become more widely known. It was the subject of considerable interest at an earlier Health Policy Roundtable co-hosted by the Commission and the Melbourne Institute. That led in turn to the idea of running a workshop to examine it in more detail.

This report was prepared to enable wider dissemination and discussion of the ideas that emerged from the Workshop and to guide possible future research in this area. It includes the introductory comments and summaries of the general discussion for each of the four Workshop sessions.

The Commission is grateful to everyone who participated in the Workshop. Special thanks go to Richard Scotton who prepared background papers and provided introductory comments for each session, and to Ron Donato who made a significant contribution to the session concerning the payment for programs and services.

The views expressed in this publication should be attributed to the individuals concerned, not the Productivity Commission.

Gary Banks
Chairman

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Helen Owens and Ian Monday from the Productivity Commission had primary carriage for organising the Managed Competition in Health Care Workshop. This volume of proceedings was prepared by Ian Monday with assistance from Scott Hook and Anthony Housego. Roberta Bausch provided valuable administrative support.

Abbreviations

ACG	Adjusted clinical group
AIHW	Australian Institute of Health and Welfare
CMS	Centre for Medicare and Medicaid Services
DCG	Diagnostic cost group
DHA	Department of Health and Ageing
DRG	Diagnosis related group
EBRI	Employer Benefit Research Institute
FFS	Fee-for-service
GDP	Gross domestic product
GPs	General practitioners
GST	Goods and services tax
HIC	Health Insurance Commission
HCC–DCG	Hierarchical coexisting condition – diagnostic cost group
HMO	Health Maintenance Organisation
ICD	International Classification of Diseases
MIAESR	Melbourne Institute of Applied Economic and Social Research
MBS	Medical Benefits Schedule
OECD	Organisation for Economic Co-operation and Development
OMCC	Organisation and management of care consumption
PBS	Pharmaceutical Benefits Schedule
PC	Productivity Commission
PIP–DCG	Principal inpatient – diagnostic cost group
RHAs	Regional Health Authorities
WHO	World Health Organization

Glossary

ACGs	Adjusted clinical groups (previously referred to as ambulatory care groups). A technique for classifying patients, using the diagnostic codes from the International Classification of Diseases, into different groups according to their medical condition to facilitate the development of appropriate risk-adjusted payments to budget holders or insurers.
Budget holders	Budget holders (purchasers) funded on a capitation basis and being at risk for the health care costs incurred by their enrolled populations are central to any managed competition regime. Public and private budget holders contract with service providers to provide access to their enrollees (consumers) for the full range of health care services.
Capitation	Payment per head of population.
Casemix	Describes the mix and types of patients treated by a hospital according to their medical conditions. Casemix is often described with reference to diagnosis related groups (see below).
Coordinated care	Coordination of care of patients between different health programs or sectors of the health system, usually with the assistance of care coordinators or managers.
Copayment	Portion of the cost of an insured health service met by the user — usually a fixed amount, or proportion of the fee, specified in advance. Copayments are intended to reduce unnecessary or excessive consumption of health services by making consumers bear at least part of the costs of their supply.

Cream skimming	Adapting a service or product to appeal most to those people from whom the greatest return can be obtained by the provider (usually the lower risks). Also referred to as preferred risk selection or cherry picking.
DCGs	Diagnostic cost groups. A technique for classifying patients, using the diagnostic codes from the International Classification of Diseases, into different groups on the basis of cost considerations. The resulting information can be used to calculate appropriate risk-adjusted payments for budget holders or insurers.
DRGs	Diagnosis related groups. A convenient way of classifying hospital inpatient casemix, which has a direct relationship to resources used. The criteria for developing groupings are that they are clinically meaningful and involve similar resource use.
Divisions of General Practice	The main activities of these divisions are: representing general practitioners in the local hospital and community; negotiating credentials for general practitioner access to hospitals; organising continuing medical education for general practitioners; implementing peer review and quality assurance; facilitating undergraduate teaching and vocational training; and participating in primary care research, health promotion and education. As such, the divisions perform two distinct roles, namely operating as associations of general practitioners and performing a structural function to facilitate improvements in the provision of health care services.
Fee-for-service	Payment according to the volume and nature of services provided.
International Classification of Diseases	The International Classification of Diseases is designed to promote international comparability in the collection, processing, classification and presentation of mortality, disease and injury statistics. This includes providing a format for reporting causes of death on a death certificate. The reported conditions are then translated

	into medical codes through use of the classification structure and the selection and modification rules contained in the applicable revision of the International Classification of Diseases, published by the World Health Organization.
Managed care	Refers to any system whereby the payer for health care seeks to exercise some control over the care provided, in terms of cost, quality, and appropriateness of care, and even choice of the provider.
Managed competition	Involves setting up a 'market-oriented' structure for health services separating the financing and insurance/third party payer function from the provision of these services. More specifically, the financing of health care is primarily undertaken by government which would fund — through a system of risk-adjusted payments — competing third party payers (or budget holders) to purchase health care services from competing providers on behalf of their enrollees. The budget holders and service providers can be both public and private organisations.
MBS	The Commonwealth Medical Benefits Schedule specifies fee levels for medical services. Medicare rebates are set on the basis of the MBS, although many doctors charge more than the MBS fee.
PBS	The Pharmaceutical Benefits Schedule lists all medicines approved for subsidy under the Pharmaceutical Benefits Scheme. Most medicines available on prescription are subsidised under the scheme.
Reinsurance	A system for sharing the hospital costs of high-risk members among health insurance funds.
Risk adjustment	The process of adjusting payments to budget holders to lessen their incentives to avoid individuals with predictable losses while selecting predictably profitable members (cream skimming). Such selection strategies by budget holders can have adverse effects on access to health care and the quality of care provided.

Key points

- 'Managed competition' seeks to use market incentives to increase economic efficiency, but within a framework which maintains equity and universal access for health care services.
- In essence, it involves the government funding — through a system of risk-adjusted payments — competing 'budget holders' to purchase health care services, on behalf of their enrollees, from competing providers.
- Dr Richard Scotton's managed competition model for Australia is one of a number of similar proposals for addressing perceived weaknesses in health care systems across a number of countries.
- The introduction of managed competition would involve substantial changes to Australia's health financing and service delivery arrangements. As such, it would represent a 'big-bang' reform.
- Among workshop participants, there was limited support for the implementation of the full Scotton model. The model is complex and presents a number of challenging implementation issues. These relate, for example, to the restructuring of the existing multiple program structure and the development of effective contractual arrangements between budget holders and service providers.
- Many judged that it would be preferable to give priority to related incremental reforms offering the prospect of clearer net gains to the community in the short to medium term.
- A number of proposals consistent with the Scotton model were identified as worthy of further investigation, including:
  - evaluating the merits of giving doctors, through the Divisions of General Practice, greater responsibility for purchasing medical services and pharmaceuticals for their patients; and
  - assessing the merits of giving regionally based, public non-competing budget holders the responsibility for purchasing a full range of health services for their residents.

Summary

There has been an international trend towards the greater use of market mechanisms and incentives to organise the financing, purchasing and provision of health care services. Managed competition is an example of this trend.

In essence, managed competition involves setting up a 'market-oriented' structure by separating the financing and insurance/third party payer function from the provision of health care services. More specifically, the financing of health care is primarily undertaken by government which would fund — through a system of risk-adjusted payments — competing third party payers (or budget holders) to purchase health care services from competing providers on behalf of their enrollees. The budget holders and service providers can be both public and private organisations.

A variety of managed competition models operate in a number of countries including the United States, the Netherlands and Israel. Drawing on these models, Dr Richard Scotton has developed a model of managed competition as a means of addressing perceived shortcomings in Australia's health system. His proposal has attracted growing interest in Australia, including at a Health Policy Roundtable convened jointly by the Commission and the Melbourne Institute of Economic and Social Research in March of this year.

In recognition of this, the Commission arranged the workshop to provide an opportunity for a more detailed discussion of the Scotton model by a group of leading health policy analysts. The major focus of the workshop was on implementation issues.

The Scotton proposal

Objectives

In common with overseas models, the Scotton proposal involves the use of financial incentives to modify the actions of funders, service providers and consumers in order to improve the efficiency of the delivery of health care while, at the same time, preserving the government's commitment to universal and equitable access to health services.

The model seeks to address a number of features of Australia's health care system which Scotton identifies as weaknesses, including:

- program multiplicity and fragmentation and, related to this, funding and service overlaps between Commonwealth and State governments and authorities;
- disjunction between public and private sector funding and service provision; and
- remuneration arrangements that are, in many cases, largely unrelated to outputs and outcomes.

These features are seen as exacerbating the funding pressures resulting from cost increases associated with the introduction of new medical technologies. The limited potential for productivity gains relative to most other areas of the economy compounds this problem.

In Scotton's assessment, there is limited scope to address these weaknesses through incremental reforms to the existing system.

Details of the Scotton proposal

The Scotton proposal involves three main elements: the amalgamation of existing health programs; the specification of clear and separate roles for Commonwealth and State governments; and the integration of private sector funding and service provision into a national program.

- Amalgamation would involve incorporating Medicare, public hospital funding, pharmaceutical benefits, nursing home benefits, home and community care, mental health and other community-based health programs into a single national program.
- Specification of the Commonwealth's role would entail:
  - setting overall policy parameters, legislating and regulating coverage of services to ensure access, and setting appropriate 'rules of the game'; and
  - collecting revenue to meet costs and distributing it in the form of risk-adjusted capitation payments to public/private budget holders.

  The States' main roles would encompass planning and providing public health services and supervising/underwriting regionally-based public budget holders.
- The integration of private sector funding and service provision would involve bringing private insurers and service providers within a national framework, using a population based risk-adjusted funding system for program delivery. This would create opportunities for existing insurers to act as competitive budget holders for all health care services and for private providers to compete for the

care of patients enrolled by public and private budget holders alike. Budget holders would be subject to more rigorous budget constraints and incentives for greater efficiency than currently apply.

The implementation challenge

Some commentators have perceived the need for major all-or-nothing change as a serious and possibly insuperable barrier to the implementation of managed competition. However, Scotton considers that this need not be the case.

- First, his proposal would retain many features of the existing arrangements, including universal coverage for medical services, basic hospital services and for pharmaceutical benefits. Hence, from a consumer's perspective, there would be a high degree of continuity with existing arrangements.
- Second, the proposal could be progressively implemented over several years by making some changes prior to the implementation of the new system (such as reforms to public hospital funding) and making progressive changes to other features during the transition period (such as the development of the risk-adjusted payment system).

The progressive and staged nature of the changes would have the advantage of allowing for incremental adjustments in the light of experience.

Reactions by workshop participants

There was broad agreement amongst participants that the introduction of managed competition would involve substantial changes to Australia's health financing and service delivery arrangements. As such, the proposal was seen as a 'big-bang' reform. It was also seen as presenting a number of complex implementation issues.

In this context, several participants pointed to challenges associated with demonstrating the need for such substantial reform. In their view, benefits associated with managed competition are uncertain. And it would herald new transaction costs, as well as higher costs from competition based on the use of sophisticated technology. These costs could exceed the potential gains.

Linked to this, a number of participants contended that some within the community consider that Australia's health care system is working quite well by international standards.

Some participants expressed doubts about the capacity of the managed competition model to deliver the mooted benefits. For instance, would it be possible to sustain competition and innovation in the provision of health care services to rural and remote communities, especially given the difficulties experienced in the USA? Would existing technologies for organising and coordinating health services be adequate?

Notwithstanding these concerns, perhaps the major obstacle that was identified to the implementation of a Scotton-type model is the likelihood of strong resistance from most stakeholders. For example:

- Restructuring of the existing multiple program structure for health care services to create a national framework with clearer lines of responsibility could create tensions between the Commonwealth and State governments over responsibilities for funding and program management. Indeed, given political constraints, the proposed structure may not be feasible.
- Doctors and other providers of health care services would be likely to resist changes that expose them to pressures from purchasers to modify their work practices and remuneration arrangements.
- Consumers used to an open access regime for basic medical and hospital services would be likely to strongly resist the introduction of different payment regimes for different packages of these and other health services. Linked to this, a managed competition regime that allowed budget holders to offer significantly different service packages to consumers would provide real choice, but it could also yield inequitable outcomes and provoke active resistance.
- Private insurers may resist the changes if they feel ill-equipped to adapt to an environment which requires them to become more proactive and discriminating purchasers of health services. Likewise, the Divisions of General Practice may be reluctant to accept responsibility for purchasing services as sub-budget holders.

Reflecting these considerations, there was limited support among participants for the implementation of the full Scotton proposal. Instead, a majority of participants considered that incremental reforms offered the prospect of clearer net gains to the community in the short to medium term.

Alternative proposals

In the light of the probable implementation difficulties, at this juncture, it would appear more productive to explore other ways to improve the efficiency of Australia's health care system. To this end, a number of alternative proposals by

workshop participants for incremental change warrant further investigation. These include:

- evaluating the merits of giving doctors, through the Divisions of General Practice, greater responsibility for purchasing medical services and pharmaceuticals for their patients;
- assessing the merits of giving regionally-based, public non-competing budget holders the responsibility for purchasing a full range of health services for their residents;
- trialing managed competition by allowing people to opt out of the current system to join a competing private health care plan;
- examining the scope to improve current reinsurance pooling arrangements for the elderly in the private health insurance sector by applying better approaches to risk management; and
- exploring opportunities to reform existing financing and delivery arrangements for public hospitals (for example, by modifying the Australian Health Care Agreements).

The Commission will consider the scope for it to make a research contribution in some of these areas.

At a broader level, several participants saw benefits in undertaking a stocktake of existing and emerging problems within the health care sector and an assessment of the relative merits of different reform options.

Opening remarks

Helen Owens
Productivity Commission

Welcome to this one-day workshop on managed competition in health care. I would particularly like to welcome and thank Dr Richard Scotton who has kindly agreed to come out of his so-called retirement for a day to discuss an illustrative model of managed competition he has developed for Australia.

According to Dick Scotton, the general objective of managed competition is to establish structures in which market incentives can increase economic efficiency, but within a universal framework which promotes the primary objective of equity. Managed competition seeks to do this by separating financing, purchasing (via competitive at-risk budget holders) and providers of health care. Dick has tailored managed competition models developed — and in some cases applied — elsewhere to the Australian context.

The proposal is one of the few coherent and well thought out health reform policy prescriptions currently on the table in Australia. However, it is a complex proposal involving a 'big-bang' reform. It would require significant structural, organisational and financial changes to the Australian health system.

The ideas encompassed by the proposal attracted considerable media attention following the Melbourne Institute's Economic and Social Outlook Conference held in April 2002. It also attracted interest at the Productivity Commission and Melbourne Institute Health Policy Roundtable held in March 2002.

In response to this, the Commission thought it would be worthwhile and timely to promote further policy discussion and debate amongst a small group of people with an interest in health policy reform. In this way, we fulfil our charter by helping promote well-informed debate as a precursor to improved policy outcomes.

More specifically, we wanted to give Dick an opportunity to explain the underlying rationale for his proposal, clarify its main features and outline his suggestions for dealing with some practical implementation issues. We also wished to provide

participants with a chance to discuss the merits of his proposal, raise any further technical or political difficulties that might arise and consider alternative strategies.

Today's workshop consists of four sessions.

The first involves a description and review of the Scotton proposal.

The second covers the payment framework for programs and services. Some key issues for this session include the importance of a system of prospective funding of budget holders and whether it is possible to categorise health risks sufficiently to reduce the incentive for budget holders to cream skim. This session also involves a discussion by Mr Ron Donato of the University of South Australia on the development of diagnostic cost groups for possible application in this area and contracting networks between budget holders and providers.

The third session deals with implementation issues. It affords an opportunity to review some of the practical difficulties likely to arise in seeking to implement managed competition.

The fourth session covers outcome-related issues. It involves an examination of the potential effects of the Scotton proposal in terms of dealing with a number of specific problems in our health system relating to cost, service delivery and organisation.

As with previous roundtables and workshops organised by the Commission, a summary of the discussion and other material presented here today will be published. This publication should contribute to a more informed debate on this issue in the wider community and guide further research in the area.

That said, to encourage the expression of 'frank and fearless' views, Chatham House rules will apply; that is, views and ideas may be cited, but without attribution to individuals or organisations.

I would like to invite Dick to open the first session by outlining his proposal.

1 The Scotton proposal

Richard Scotton

Managed competition — why?

Almost a quarter of a century has passed since the introduction of Medibank which marked the start of a new era in the financing of Australian health care services. Since then, or rather since its reintroduction under the name of Medicare in 1984, a structure designed to meet the needs of the mid-1960s has remained remarkably stable.

The basic objective of Medibank/Medicare was equity. Historically, this is the primary reason for government intervention in health care. In my assessment, nothing has changed in this respect. On the contrary, increasing inequalities in income and associated health differentials have given increasing emphasis to the equity objective. In consequence, the only workable and ethically acceptable basis for health care financing is a system which operates *within* a universal and equitably financed — that means government financed — framework.

This gives rise to a natural question: What has changed since the introduction of Medibank/Medicare? I want to highlight three important changes. First, there have been massive and continuing increases in the complexity of inputs — diagnostic and treatment technologies — and outputs — investigative and treatment processes. Second, there have been corresponding increases in the efficacy and cost of state-of-the-art health care. Finally, the rising cost together with improvements in the efficacy of health care have made accessibility to health services an important social issue.

As a result of these changes, it has become much more important to accord a higher priority to achieving efficiency in the provision of health services because, as these services consume a larger share of the nation's resources, the incremental opportunity costs will become greater. Indeed, it can be argued that the overriding goal for the health system needs to be re-expressed as universal access to medically effective health care at least cost.

Efficiency in this context has two dimensions:

- in the strict economic sense: allocative efficiency which includes lowest cost methods of doing what is done, and a product mix reflecting consumer wants; and
- in achieving the (extra-welfarist) objective of using resources allocated to health care in such a way as to maximise health gains.

It can, of course, be claimed that the Australian health care financing system is currently working quite well, by world standards. If so, why change it?

The reasons for considering the need for change are two-fold. First, in the context of rising real costs of state-of-the-art care, the 'low yield' component of health care (that is, that part of health care that is inefficient) will impose increasing opportunity costs on society. Second, as I have argued elsewhere, there are a number of features of the Australian health care system which inhibit the efficient use of health care resources, to a degree which constitutes a good case for contemplating serious structural reform. Specifically, four features of the current system combine to impose barriers to greater efficiency and, in some respects, offer positive incentives for inefficiency, namely:

- program multiplicity and fragmentation;
- funding and service overlaps between Commonwealth and State governments and authorities;
- disjunction between public and private sector funding and service provision; and
- remuneration arrangements that are, in many cases, largely unrelated to outputs and outcomes.

Taken together, the problems created by these features point to the desirability of incorporating efficiency-promoting structures and incentives into the health system, but within the universal framework. The classical method of increasing efficiency is market competition.

There are some economists who argue that there is nothing special about health services and that conventional market-based solutions are therefore fully appropriate. At the other end of the spectrum, others argue that health services are special and that this tempers the opportunities for applying market-based solutions. I believe that the real position is somewhere in between these viewpoints — that while health services have some special features that distinguish them from the general run of goods and services, there are a lot of other features which do not justify departures from competition or competitive forces that give rise to monopoly rents and the misallocation of resources.

Hence, the policy question, in this context, is whether it is possible to devise a regulatory framework which can:

- make market forces operate in the theoretical manner; but
- which will take into account the special features which complicate the treatment of health services as tradable commodities; and
- will fully preserve the objectives of universality and equitable funding.

The managed competition model provides a positive answer to this question. Indeed, the model offers a framework within which the objective of increased efficiency could be pursued without sacrificing the goal of universal access and without the impairment of health outcomes and social cohesion which the abandonment of this access would involve. It would do this by removing the present multitude of structural impediments to rational decision making and allocating to governments and markets the functions which they perform best.

Managed competition — what would it involve?

It is not my purpose today to describe the managed competition model, other than in broad terms. (A fuller description of the model, its underlying rationale and key features is set out in two articles reproduced in appendixes C and D.) It should be stressed that this model is an example of a possible plan, designed to examine the feasibility of the concept and facilitate discussion of health system reform issues, rather than as a fully-developed reform initiative. In addition, as noted in my comments for the session dealing with implementation issues, some of its features are influenced by the need to achieve a workable implementation path from the existing arrangements.

In brief, my proposal would involve:

- comprehensive amalgamation of existing health programs;
- clear and separate roles for Commonwealth and State governments; and
- the substantial integration of private sector funding and service provision into a national program using population-based funding for program delivery.

As such the proposal would involve the substitution of market incentives (that is, price signals) for many features of the existing command system (that is, government regulation, subsidies to providers and direct service provision).

The first aspect of the proposal, the comprehensive amalgamation of programs, would involve incorporating Medicare, public hospital funding, pharmaceutical

benefits, nursing home benefits, home and community care, mental health and other community-based health programs into a single national program. The rationale for this change would be to eliminate opportunities for cost shifting between service providers and to promote efficient resource allocation decisions by removing barriers to efficient substitution between services. The present system presents a barrier to such substitution as there is no way in which, for example, cost savings from reduced hospitalisation can be captured by funders or service providers to provide funding for alternative and more cost-effective programs.

An illustration of the opportunities for achieving improved efficiency in service provision is provided by a recent comparison of the performance of the United Kingdom's National Health Service with an integrated system operated by Kaiser Permanente in California (Feachem, Sekhri and White 2002). Kaiser Permanente is a non-profit health maintenance organisation (HMO) and as such represents an example of an organisation operating within a managed competition framework.

As noted earlier, a second aspect of the proposal is to specify clear and separate roles for Commonwealth and State governments. While the proposal involves a significantly reduced role for governments, the functions which they retain would be central to the operation of the managed competition model.

The main roles for the Commonwealth Government would encompass:

- setting overall policy parameters, legislating and regulating coverage of services to ensure access to all eligible persons and setting the (competitive) 'rules of the game'; and
- collecting the revenue to meet program costs for all services and disbursing it in the form of risk-adjusted capitation grants to both private and public budget holders.

The main roles for State governments would encompass:

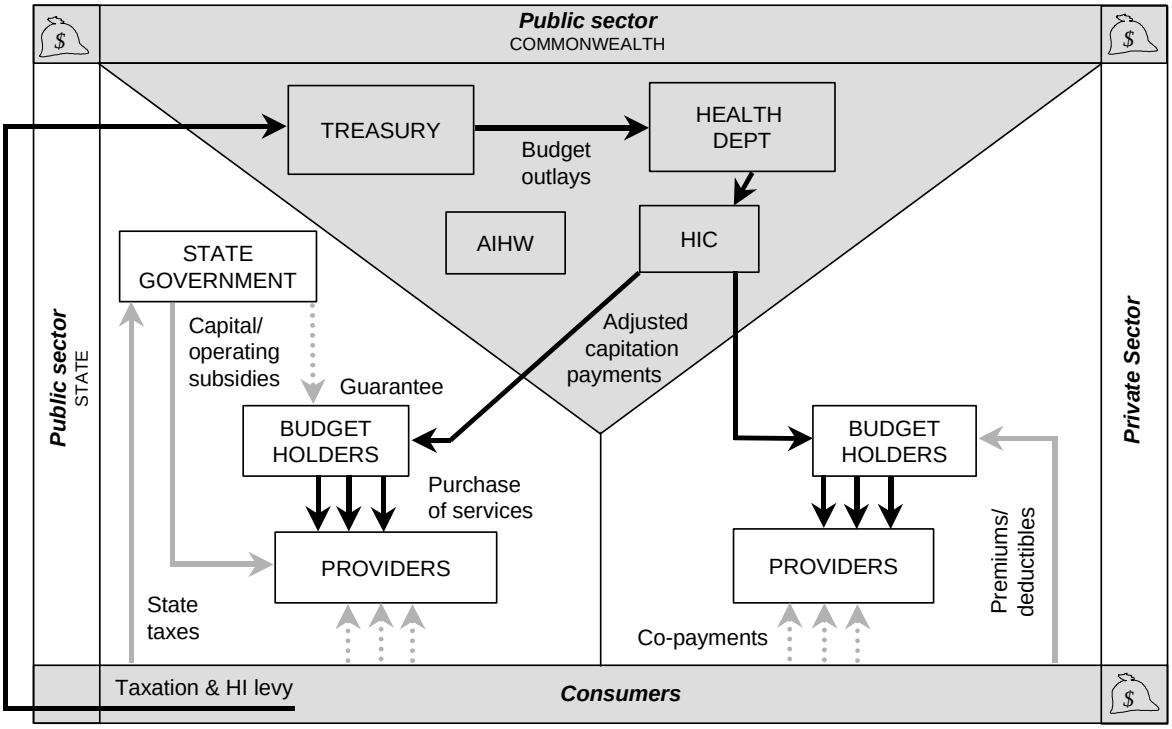
- planning and providing publicly provided health services; and
- supervising and underwriting regionally-based public budget holders.

Third, the proposal would also involve the substantial integration of private sector funding and service provision into a national program. Public and private budget holders would receive risk-adjusted capitation grants for all people enrolled with them. In turn, they would provide their enrollees with all the benefits and services covered by the program. This would mean that, as distinct from the current arrangements, the private budget holders would have responsibility for delivering public benefits — that is, publicly-provided services under the universal program — to all people enrolled with them. In addition, private budget holders would collect

premiums to cover their administrative costs, and would — as now — provide additional services (including access to private hospital care) not covered by public budget holders.

A simplified summary of the main financial flows within the managed competition framework is presented in figure 1.1.

Figure 1.1 **Managed competition model: financial flows**



Source: Reproduced from Scotton (1999) — see appendix C in these proceedings.

As evident from the figure, there are four distinct groups of players — the Commonwealth and state governments, private sector participants and consumers. The costs of health services to consumers would primarily be met by general taxation and the health insurance levy with the possibility of some legislative copayments. Most of these revenues would flow through to Treasury and be passed onto the Health Department which would use them to fund payments to the Health Insurance Commission (HIC). These payments would then be distributed to the public and private budget holders in the form of risk-adjusted capitation payments for their enrollees. These budget holders would use these payments to contract with service providers to purchase health services. Private budget holders would also collect premiums to cover the costs of any additional services provided by them.

The adoption of a managed competition proposal would effectively create two main markets for health care services. One is a market where there is competition

between budget holders for customers to enrol with them. The other is a market where there is competition between service providers to supply health care services to customers through budget holders.

The main simplification applying to figure 1.1 is the exclusion of the interface between budget holders and service providers covering the cross-contracting arrangements between these players. Also excluded is the network of sub-budget holders and providers which would represent another element within the overall competitive framework.

Many of the interactions between budget holders and service providers would be covered by informed contractual relationships in a broadly competitive market and these would replace interactions currently characterised by regulation, public monopoly and hierarchy — the consequences of which have been graphically described by a number of analysts (see, for example, Paterson 1996 and Samuel 2000). The next two papers by Scotton and Donato, discussed in session 2, examine the payment framework in more detail.

In summary, an environment much more conducive than at present to efficient resource use would be achieved through a combination of:

- competing budget holders being responsible for meeting — out of their global budgets — the costs (less any legislated copayments) of all services provided to their enrolled populations; and
- providers of services having to contract with budget holders for payment for these services.

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General discussion

The discussion focused on:

- equity and access within a managed competition framework;
- funding issues covering the public and private sectors; and
- the role of budget holders in a managed competition framework.

Equity and access within a managed competition framework

The discussion session began with one participant highlighting that the choice dimension within a managed competition framework may lead to outcomes at variance with the notion of egalitarianism. He observed that managed competition is designed, among other things, to provide people with choices about different packages of health care services. In this context, there are two broad options. First, an overall package of care provided by public and private budget holders would only cover basic medical and hospital services (that is, life saving and major quality of life treatments) with the option of supplementing this with a limited number of additional services. In this case, differences in care packages between budget holders would be quite limited and the resulting degree of choice would also be limited. Second, packages of care characterised by significant differences in services relating to life and major quality of life outcomes could be offered. In this case, consumers would have real choice, but the outcomes might be deemed inequitable.

Richard Scotton responded by observing that under the existing system there is a universal or mandated set of care services which are financed mainly by income-related levies and general taxation. People can supplement this package by paying premiums for private health insurance with a variety of options in relation to additional services. However, within this system, private health insurance receives a subsidy which is inequitable. In contrast, under his proposal, there would be a reversion to a situation consistent with the original Medibank/Medicare program. That is, the entitlements of the public program would be available to everyone, whether they chose to obtain them through a public or private budget holder, while individuals could choose to spend their own money (in the form of supplementary

payments of premiums and copayments) on additional services. Scotton contended that we live in a society that can afford to fund such an arrangement and that such an outcome is unobjectionable. In contrast, meeting the costs of supplementary services via the public purse, particularly for the non-poor, was unlikely to attract support from the wider community. In addition, he emphasised that, under a risk-adjusted capitation payment system, people in poor states of health would attract the bulk of health funds and resources. Further, to the extent that government contributions to health expenditure are constrained by budgetary considerations, contributions by users of health services would enable a larger and/or broader range of services to be provided than otherwise would be possible.

Another participant indicated support for this view, observing that private contributions in the form of supplementary insurance premiums and copayments offer a direct and effective way of financing health services beyond the mandatory basic package.

A number of participants observed that equity objectives in relation to health systems could be handled in a variety of ways and that the adoption of a managed competition regime did not threaten the attainment of these objectives per se. Indeed, equity objectives could be addressed through decisions relating to the nature of the health services included within the mandatory component of the benefits package, the extent of public subsidy within the risk-adjusted capitation payment system, the scope and extent of copayments and the funding of specific programs for disadvantaged groups.

Another participant indicated that equity and efficiency objectives are two different things and need to be handled separately. While agreeing with the proposition that equity objectives could be handled in a variety of ways, he felt that the focus in examining the rationale for managed competition should be on its merits as a way of significantly improving the efficiency of the health care system.

Funding issues covering the public and private sectors

A number of participants raised issues about the relationship between the current funding arrangements and those proposed for the managed competition model. Allied to this, the respective roles of the public and private sectors within the health care system were discussed.

One participant observed that, under the current funding arrangements, people who are privately insured contribute to the cost of providing health services via the Medicare levy, premiums paid for private health insurance and various copayments. The net cost to these people is reduced by the health insurance rebate. He

questioned the nature of the services and costs included within the proposed risk-adjusted capitation payment system — particularly those relating to private hospitals — and the proposed treatment of the private health insurance rebate.

In commenting on the funding issue and the tendency for this to often be viewed in a partial framework, another participant observed that a key question is how much governments should pay given concerns about containing government expenditures.

In response, Scotton indicated that under his proposal the private health insurance rebate would disappear and be incorporated into the total funding of the proposed scheme. Beyond this, public and private budget holders would receive risk-adjusted capitation payments at the same rates for their enrolled populations. These payments would cover all the benefits and services included within the national program. Hence, a private budget holder would receive the same amount of money from the federal government, regardless of whether their patients were treated in public or private hospitals. Budget holders would, however, be able to collect additional payments from patients, in the form of insurance premiums and copayments, to cover the costs of providing additional services in private hospitals — for example, single accommodation, extra services and choice of own doctor. The subsidy embedded in the risk-adjusted capitation payment would reduce the amount of the additional payment or supplement to perhaps something like the amount private insurers currently pay. Scotton also observed that it would be possible to adjust the reimbursement arrangements to generate a desired outcome having regard to equity considerations and appropriate settings for system parameters such as copayments and insurance deductibles.

Another participant pointed out that the extent of any difference in the supplementary or additional payments under the managed competition proposal relative to the current arrangements would be sensitive to the rate of payment included in the risk-adjusted capitation payment. The rate of payment could be related to the assessed cost of a public hospital stay or be equalised across the public and private sectors. Scotton responded by indicating that more analysis was likely to be required to support any fine tuning of the proposed reimbursement arrangements.

In discussing the respective roles of the public and private sectors, one participant noted that, under the Scotton proposal, a large component of private health insurance and related services would be included within the funding base for the integrated national program. One consequence of this was likely to be an expansion in opportunities for health insurers to operate as competitive budget holders for the full range of services included in the program. Private service providers would be able to compete in meeting the care needs of patients enrolled with private and public budget holders. A further feature of the proposal was that private budget

holders would be able to compete for what are currently public patients, as well as for private patients.

The role of budget holders

A distinguishing feature of managed competition is competition between budget holders to act as agents for their enrolled populations. The incentive for budget holders to compete would arise from the fact that consumers would be able to exercise real choice between them.

Recognising the importance of budget holders within a managed competition framework, several participants sought clarification about their role compared with the existing private health insurance funds.

A few participants observed that, to be effective in securing the potential benefits of competition, the role of budget holders would need to extend beyond the pure financial intermediation or insurance function of Australia's existing private health insurers to encompass an active role in the production and delivery of health care services. In effect, budget holders would need to be arms length from government and have the freedom to contract with service providers to organise different and integrated packages of health care. In this context, some participants considered that it was useful to characterise budget holders as 'health improvement agencies' or as developing 'health plans' for their enrollees in a way akin to the operation of HMOs within the United States. One participant suggested that a useful example of this enhanced role was provided by Kaiser Permanente — a non-profit HMO operating in California.

A number of participants observed that without the addition of a more proactive and discriminating purchasing function the overall gains from the adoption of a managed competition framework were likely to be relatively small (or even negative). Such an outcome was possible because of the higher administrative costs associated with a multiple purchaser–provider framework.

Scotton indicated that in using the term 'budget holders' he envisaged that they would be active purchasers of health care services in much the same way as HMOs, rather than pure insurers. He also maintained that a good illustration of the pattern of service use and associated arrangements entered into by budget holders in discharging their role within the health care system was provided by a recent comparison of the performance of the National Health Service with California's Kaiser Permanente (Feachem, Sekhri and White 2002).

In response to Scotton's suggestion that the Feachem, Sekhri and White (2002) analysis provided a useful illustration of the gains from effective budget holder arrangements, a participant noted that the study had attracted considerable interest and provoked a lively debate. He suggested that in assessing the Feachem et al. study it was desirable to review the responses to the study at the website for the British Medical Journal (2002).

Several participants commented on the implications of an enhanced role for budget holders, noting that a related outcome could be the implementation of 'managed care' arrangements. It was recognised that while these arrangements can take a variety of forms, they could involve the development of preferred provider arrangements within contracts between budget holders and service providers. This may require budget holders to constrain the choices available to patients and their treating health care professionals. Inevitably, the development of revised arrangements arising from a more active role for budget holders would take time as existing third party insurers would need time to adapt to their new role.

Some participants noted that the actual impact on users and providers would depend critically on the nature of the arrangements put in place by the budget holders, doctors and other service providers, as well as the nature of the regulatory framework associated with managed competition. Another participant observed that the introduction of a more sophisticated purchasing function along the lines of that observed within the United States had proved to be highly contentious, particularly where 'managed care' arrangements had constrained the choices of consumers and providers.

On a related matter, another participant highlighted the importance of developing an effective regulatory framework to support the operation of a managed competition system by clearly specifying the role and operating framework for budget holders. Drawing on US experience, she also alluded to the difficulties of sustaining competition and innovation in rural areas, arguing that these difficulties may be more pronounced for Australia because some of our regions are far more remote.

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2 Payment for programs and services

Introductory comments

Richard Scotton

Incentives for budget holders to compete on grounds of efficiency will only be effective if the way is barred to easier paths to profitability. In other words, the prevention of cream skimming, involving preferential recruitment of low-risk customers, is a key condition for a workable competitive market. Although a regulatory framework designed to minimise cream skimming is a necessary feature, it is even more important to incorporate individual risk adjustment of the capitation payments to budget holders. To the extent that these rates accurately reflect the expected costs incurred by people in the various categories, the rationale for cream skimming would disappear.

The practical question then becomes whether it is possible, in practice, to categorise health risks sufficiently well to reduce the incentives to budget holders to use cream skimming tactics. I do not propose to go into any detail about the theoretical and applied analyses which have been undertaken in other countries in the development of diagnostic cost groups (DCGs) as a means of doing just this, as Ron Donato is the expert on this subject. I will confine myself to some conclusions arising from the observation that only 15–20 per cent of the individual variance in annual health care costs is estimated to be explicable in terms of systematic demographic and health status measures, and that the proportion of variance which can be prospectively explained by these factors may be about half of this figure. Recent innovations in capitation which focus on introducing health status variables into the risk adjustment process, such as the use of DCGs, produce formulae that are capable of explaining around 10 per cent of the variance in health costs.

This does not sound very encouraging, *but:*

(a) It is only the *predictable* factors that can be used in cream skimming. The remainder of the variation is, in practical terms, random. To the extent that a budget holder can discover causative factors which are not incorporated in the

operating DCGs, they will also be found by ongoing analysis by the HIC and incorporated in the progressive refinement of the risk adjustment formula. Any advantage gained is likely to be ephemeral, and hopefully not worth the cost incurred.

(b) A substantial part of the risk faced by budget holders would be possible losses resulting from random variation from the mean experience. The means of minimising such variations is to limit participation in the program to large organisations — covering, say, at least 500 000 people.

(c) It would also be possible to protect budget holders from extreme variations (resulting from either source) by an 'outlier' arrangement, along the lines of those used in diagnosis related group (DRG) payment systems. Donato will be able to inform us of research results arising from modelling various forms of outlier schemes.

In short, there are grounds for optimism about the practicability of workable risk adjustment of capitation grants to budget holders. However, in the short term — before the refinement of the risk adjusters — it would be necessary to implement transitional arrangements, possibly along the lines of the mixed system proposed by Newhouse (1996), with the capitation component being progressively increased. This topic will be taken up in the session dealing with implementation issues.

Payment of providers

Under the managed competition proposal, the risk-adjusted capitation formula would be used only for the calculation of global allocations to major budget holders. All other payment arrangements — to service providers and to the intermediaries and program managers who may mediate between budget holders and service providers — would be the outcome of contracting between the parties. The fact that there are multiple budget holders on the one hand, and large numbers of service providers and intermediaries on the other, would provide the basis for competitive markets to develop.

Donato will be speaking about the contracting and subcontracting networks which would function as the transmission belt for efficiency-promoting incentives to be extended throughout the health service delivery system. The concepts of financial risk and risk aversion are central to this process. Consider the polar case of straight capitation and fee-for-service benefits as formulas for paying for health services. Under capitation, all the risks associated with variations in volume and costliness would be borne by providers, whereas under fee-for-service, all the risks would lie with payers. Under the managed competition proposal, it could be expected that the

budget holders would seek to diffuse their risk, as far as possible, by paying providers on the same basis as their funding (that is, by capitation). Providers would of course resist this, and would have good grounds for doing so, in that the variance of costs of *components* of health care would be greater and more unpredictable than the variances in *total costs* for many reasons, including substitutability between services.

Consequently, it can be expected that, in a competitive market, the formulas for payment of intermediaries and providers would comprise varying proportions of fee and capitation (and perhaps other) components. One can imagine regional health authorities — especially those with limited medical resources — being prepared to contract on a formula involving a high proportion of capitation revenue, while small general practices would have great difficulty in budgeting on the basis of a fixed capitation grant, even under circumstances in which their patients constituted a defined population for whose primary care they were solely responsible.

Under contractual freedom in a competitive market, it can be expected that great ingenuity would be exercised in formulating blended payment arrangements designed to share and diffuse risk, and to promote efficient substitution between treatment modalities. Over time, this could be expected to result in profound changes in the structure of the delivery system. The resulting system may exhibit a diverse array of payment and contracting arrangements. It can be expected that mixed payment systems, where there are elements of both capitation and other bases of payments, such as fee-for-service, may be apparent across the system. The managed competition system does not preclude this from happening. Looking at general practice, in particular, a budget holder might be very wary of allowing fee-for-service payment in metropolitan areas. However, this may not be the case in country areas with a constrained population and ceilings on provision.

A note on sub-budget holders

It would not be necessary for capitated budget holders to contract directly with every kind of health service provider; management and provision of various components of care used by sub-populations could be devolved on a contractual basis to others. Fundholding general practices in the British model are an obvious example. Another might be managed care organisations covering broad ranges of services to the aged, disabled and particular categories of the chronically ill. Diffusion of risk bearing among a network of more or less specialised sub-budget holders would provide scope for diversity and initiative in matching needs and services in an efficient manner. These sub-budget holders might in turn contract with various providers for particular services to the patients for whom they had

assumed responsibility. Some examples of possible remuneration arrangements will be provided in the final session dealing with outcome-related issues.

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Competition and capitation

Ron Donato

Adequate risk adjusters are critical to the success of any market-oriented health system reform. In this context, I want to highlight briefly the current state of research in risk-adjusted capitation, and to discuss several notable international examples of the application of capitation methods. I also want to comment briefly on payment arrangements within health systems which allow a greater role for competition.

Risk adjustment

As a first point, it is important to recognise that relatively recent advances have moved research away from simple risk adjustment based on socio-demographic variables to more sophisticated formulas. The Netherlands, Israel, Belgium and Switzerland are currently implementing managed competition arrangements using socio-demographic models. However, while socio-demographic risk adjusters based on variables such as age and sex go some way towards determining expected future health costs they are, by themselves, quite crude. In the USA, the Centre for Medicare and Medicaid Services (CMS) which had been using socio-demographic models has since moved on to incorporate health status variables in establishing capitation payments to managed care organisations on behalf of its beneficiaries. This makes intuitive sense — since two people of the same age and sex can have different expected health costs because of differences in their health status.

Most recent research and application is seeking to extend the process of risk adjustment to incorporate health status variables so as to lessen opportunities for cream skimming and quality skimping. The question then arises — what methods are available to measure health status, and how much explanatory power does each method add to the risk adjustment model.

Health status can be measured using three broad criteria: functional health status, perceived health status and prior utilisation. The first two methods involve individual assessment either by clinical examination in the case of functional status or by way of individual patient survey methods for self-reported status. These two methods are considered costly and/or subjective (in the case of self-assessment) and accordingly research into these methods has been very limited. However, extensive research and validation has taken place with respect to the use of prior utilisation

data — more specifically the use of diagnostic information — which is the method I would like to focus on.

Prior utilisation data, based on costs, is an excellent predictor of future individual health costs. An individual who has been hospitalised or incurs higher medical expenditures this year has a very good chance of incurring higher medical expenditures in the following year. However, the problem with funding budget holders on the basis of prior expenditure adjusters is that it creates perverse incentives. Health plans that spend more in the current year know they will receive an increase in funding in the next year as a result.

Prior utilisation data based on diagnostic information (for example, medical diagnosis) is also a good predictor of future costs, and is less easily 'gamed' by health plans. Measures of diagnosis based on the International Classification of Diseases (ICD)-9s — now ICD-10s — allow one to infer health status and to use this as a basis for predicting next year's expenditure. Research is now at the point of incorporating diagnostic and socio-demographic information to provide governments with the same information that health plans have on individuals. Health plans will inevitably have prior cost information, but the major diagnostic groupings — diagnostic cost groups (DCGs) and adjusted clinical groups (ACGs) — can predict with an accuracy which is now better than prior cost models.

Available models and their predictive accuracy

Theoretical work on DCGs commenced in the 1980s with the contributions of Randy Ellis, Arlene Ash and colleagues at Boston University (see, for instance, Ellis and Ash 1989). They developed the principal inpatient model — the PIP–DCG model — which CMS (known at the time as the Health Care Financing Administration) implemented in 2000. This model is applied to the Medicare population in the USA who are contracted out to managed care organisations. However, this original model (as the name suggests) was based only on a single principle inpatient diagnoses.

Since the early 1990s, work has moved on to include multiple conditions, leading to the development of the hierarchical coexisting condition (HCC) model — the HCC–DCG model. There has also been a move away from a focus only on inpatient diagnoses to the development of what is called an all-encounter model. In this model, which is the most sophisticated within the capitated frameworks, diagnosis information is generated at any point of entry into the health system (that is, to record diagnosis present from encounters with the health system in any setting including primary and/or ambulatory care). Within the USA, the CMS proposes to apply the HCC all-encounter model for capitated payments from 2004 onwards.

These various models have different predictive power (table 2.1). The ACG or DCG models predict better than prior cost. Using DCGs, the inpatient model does not predict as well as the all-encounter version, as would be expected. However, these models yield predictions below the 20 or so per cent of expected health care costs that are considered predictable (that is, they yield imperfect outcomes).

Table 2.1 **Predictive capabilities of different risk-adjusted capitation models**

Model	*Proportion of variance explained by the model*
Socio-demographic (age/sex)	1.6
Prior cost	6.3
ACG	6.6
HCC/DCG	9.2
Medicare (Commercial)[a]	
Inpatient – PIP model	6.2 (6.6)
All encounter – HCC model	8.8 (9.5)

[a] Figures in brackets relate to the commercial privately insured population, while figures outside brackets relate to the Medicare population within the US as per the DxCG Inc. study.

Sources: Ash and Byrne-Logan (1998); DxCG Inc. (2000).

Risk sharing arrangements — such as proportional, outlier, high-risk and condition-specific risk sharing — and retrospective reimbursement become important and necessary when risk adjustment is imperfect. The use of such arrangements presents policy makers and regulators with an efficiency-risk selection trade-off. The Dutch have done considerable work on optimal forms of risk sharing, and this has relevance to countries considering competition-based reforms to their health systems. (A useful survey of risk adjustment/sharing mechanisms is reported in Van de Ven and Ellis 2000.) Also relevant is the US experience with the design of risk sharing arrangements associated with the development of managed care systems.

Beyond risk sharing there are a number of other mechanisms that can be used to promote better outcomes, including the risk rating of consumer premiums within certain ranges, the provision of improved consumer information, the use of ethical codes of conduct for insurers/budget holders and qualification and certification arrangements. With iterative improvements to risk adjusters over time it would be possible to lessen reliance on risk sharing and other arrangements and increase the use of prospective payments to budget holders.

International developments

Several countries have had experience in implementing and refining capitation frameworks. In the Netherlands, one key area of research has considered how best

to incorporate imperfect risk adjusters within a competitive health system. This work has been concentrated at Erasmus University (Wynand Van de Ven and colleagues) and has produced several interesting developments. First, while the researchers are still only using single diagnostic models — the PIP–DCG model — they have experimented with adding multi-year hospital diagnoses. Instead of looking at the diagnosis from hospital encounters across one year, they have looked at patients who have been hospitalised at stages over the previous two and three years. This has led to improved predictive outcomes. Second, the Dutch are also looking at obtaining outpatient diagnosis information associated with chronic conditions from the use of prescribed drugs.

Both these developments are relevant to Australia. Incorporating multi-year inpatient diagnoses is relevant in the medium term as all States are now integrating their hospital information. It may, as a result, be possible to trace patient expenditure and hospital diagnosis. Measures of chronicity gleaned from pharmacy-based information might also be feasible in Australia. If pharmacy data systems recorded drug names by patient, it would be possible to develop a system of anatomical classifications providing that PBS data could be linked to state-based hospital inpatient data. In short, both these research directions could be relevant in Australia as a fallback position if primary care diagnostic information is not available in the medium term.

In Israel, experiments have begun with health survey data, the third possible measure of health status mentioned above. As described by Hadley, Rosen and Shmueli (2002) these experiments represent an attempt to capture the predictable costs for individuals even from amongst those who are not hospitalised. However, it is an expensive exercise to undertake individual health status surveys. It may be feasible to utilise data from such surveys and/or similar information from health plans to improve existing health status models.

Australia

In Australia to date there has only been limited research on risk adjustment. For example, Donato and Richardson (2002) have done some preliminary work dealing with the application of DCGs to New South Wales hospitals. This study only used hospital inpatient diagnostic and hospital inpatient expenditure information. It did not have data which were fully linked to the MBS and PBS. Predictive results of around 6 per cent were obtained, which is about three times better than risk adjustment based only on age and sex. The results are comparable with early results obtained in the USA using inpatient data to predict inpatient expenditure. A useful extension of the study would involve using the recently linked inpatient data for Western Australia with MBS and PBS data sets.

However, throughout Australia, there is marked variability in data systems and the level of information linkage between them. In South Australia, for instance, a patient who goes to two different hospitals will be allocated two different patient identifiers, and these would have to be linked to follow the patient and gather information about expenditure patterns and health status. If governments were to invest the large amounts of money needed to link data, then it would also be desirable to start collecting information on out-of-hospital encounters. As a minimum, even without managed competition, the linking of hospital inpatient information with PBS and MBS data for both the public and private hospital systems is desirable to support a variety of other possible reforms to health care. This would also be necessary in a single fundholding system. However, currently legislative provisions covering privacy and other aspects place constraints on the linking of data sets to trace patient encounters within the health system.

Key contractual and payment arrangements

Capitated payment systems are only one element of the efficiency-enhancing features of a managed competition model. Another element relates to the contractual and payment arrangements between budget holders and providers.

Regarding contractual arrangements, a broad spectrum of these are likely. This might include vertical integration, strategic alliances and arms-length spot contracting. Managed care type arrangements are also possible, and these have the potential to lower transaction costs and control health service utilisation whilst simultaneously seeking to maintain quality standards.

The actual forms of payment within a managed competition system are also likely to be diverse in nature. They could include not just capitated payments but also salaries, fee-for-service reimbursement and capitation with a variety risk sharing arrangements. Pure capitation systems encourage integration and innovation in the delivery and design of health services. However, incentives to quality skimp and risk select may remain in a capitated system, particularly where payments are uniform and patients are heterogenous. Most researchers therefore conclude that some mix of capitation together with cost-based reimbursement may yield a better system.

Recent theoretical models show that, in addition to supply-side cost sharing, optimal reimbursement involves some demand side cost-sharing together with a series of non-payment mechanisms. These mechanisms include professional codes of ethics and micro-management tools such as primary care gatekeepers, preferred providers, profiling and utilisation reviews and disease and case management. A key role for

public policy is to provide a regulatory framework which guarantees open enrolment and the dissemination of health information to consumers.

As to international evidence on provider payments and contracting arrangements in competitive health systems, a number of notable examples have emerged. The development of managed care in the USA provides important insights into the types of contractual and organisational structures which are likely to evolve. Empirical evidence from the USA indicates the existence of an array of micro-management techniques and a variety of organisational structures and provider relationships, together with a blend of payment methods including reward and penalty arrangements. Experience in the Netherlands, Germany, Israel and Belgium points to common issues with respect to provider organisations within managed competition systems. In particular, their experience has generally been that selective contracting has been severely restricted by governments. Indeed, governments appear to have been unwilling to abandon traditional tools of macro cost containment, with the result that health funds have often lacked the means to effectively manage care. Such a stance tends to yield an incoherent mix of heavy-handed regulation and competition.

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General discussion

The discussion focused on:

- whether the introduction of a capitated system would solve system-wide problems such as under-funding and doctor shortages;
- the incentives for efficiency and equity in a capitated payment framework; and
- the extent to which capitated funding can overcome risk selection behaviour.

Capitation and system-wide problems

One participant questioned the effects of switching to a risk-adjusted capitated system on current problems such as doctor shortages in rural areas. Ron Donato responded by stressing that the risk-adjusted capitation payment system was not designed to address access and resourcing problems in service provision, although it has the potential to do so. He pointed out that risk adjustment was aimed at correcting the potential informational asymmetry between the budget holders and funders of health services (the government). Issues relating to access, resourcing and the possibility of under-funding were separate matters which needed to be addressed by any systems for financing and organising the delivery of health services. However, he suggested that a switch to capitation could lead to the expansion of the workforce in rural areas without problems like supplier-induced demand associated with fee-for-service medicine arising.

Other participants suggested that an end to rationing of doctor numbers or changes in the nature of practice — letting nurses prescribe for example — represented cheaper and more immediate ways of addressing access and resourcing problems.

In supporting the introduction of capitation, another participant suggested that one of the interesting features of a capitated system with premiums based on age and sex was that people in rural areas would potentially receive a larger share of health funding. The distribution of revenue linked to the needs of populations would tend to raise the incomes of regional service providers servicing large numbers of patients and 'cap' the amounts of revenue available to service providers in metropolitan areas. There would, however, continue to be a flow of regional patients to service centres and facilities in metropolitan and larger centres reflecting economies of scale and scope in the production and provision of many health

services. The implication that the redistribution of funds under capitation would automatically solve the rural doctor shortage was questioned by another participant who suggested that incomes for doctors in rural areas were already high. Issues about overwork and poor conditions seemed more important influences on the rural doctor shortage.

Another participant argued that the introduction of capitation, with funding for individuals based on health status, represented a move away from the idea of health as an economic good. He suggested this was overly prescriptive, and that it would restrict people from consuming greater health services as their income rose. One participant suggested that out-of-pocket copayments could be used to solve this problem, and that such payments could increase in a capitated system within over-doctored metropolitan areas. People would receive as much primary care as they liked, as long as they were willing to pay for it.

The discussion on this topic ended with a participant questioning if geographical location was a legitimate risk adjuster. Another participant observed that, depending on costs, it may be appropriate to include a loading in the risk-adjusted capitation formula for, say, remote populations.

Incentives for efficiency and equity

One participant suggested that a switch to capitation would only be justified if it encouraged budget holders to purchase in ways which improved the efficiency of service provision through, say, reduced costs. Clearly, budget holders would have a capacity to achieve cost savings through the selection of providers and an incentive to do so if they could retain a share of the savings. In this context, the participant questioned who would keep the savings from any efficiency gains?

Donato argued that the incentives within the competitive payment system were such that the budget holder, provider or both would keep the savings. While the budget holder would ultimately make the savings, through competition, they may be shared with providers and even passed on, in part, to consumers.

On a related matter, another participant argued that it was essential to build capacity within the payment system for the payer to become an active, rather than a passive, purchaser and to take a profit. A capacity for budget holders to purchase on an arms-length basis and to not underwrite the income of providers is essential if adequate incentives for efficiency are to exist. According to one participant, this is a key distinguishing feature of the HMO model within the USA.

Another participant observed that flexible contracting arrangements under a managed competition model were likely to give rise to access problems for some consumers. Donato acknowledged that scope for competitive contracting was likely to be limited in rural areas. However, in city areas, a range of supplier networks were likely to be available to negotiate with, and vertical integration, spot contracting and relational contracting were all possible.

Overcoming risk selection and dealing with high-risk individuals

There was broad agreement among participants that the incentive for budget holders to compete on grounds of efficiency would only be effective if paths to easier profitability — such as cream skimming — were barred or made difficult by effective risk adjustment of capitation payments. In this context, one participant observed that while moving towards a risk-adjusted capitation payment system was relatively straightforward conceptually it did present practical challenges.

During a discussion of these practical challenges, another participant argued that, even with sophisticated capitation methods based on DCGs and ACGs, health plans might still possess information which was not available to the funder. Richard Scotton suggested that the HIC, the key body charged with administering the capitation system under his proposal, could move to improve the risk adjustment process over time to overcome such information asymmetries. A participant questioned this view, arguing that it was almost always the case that the budget holder has additional information, for example, data on attitudes and pharmaceutical use. In his view, the critical question then becomes the likely size of any risk selection — cream skimming — problem.

While acknowledging this, Scotton pointed to Enthoven's suggestion that risk adjustment is not the 'be all and end all' of managed competition. There was also within managed competition an emphasis on using a regulatory framework to constrain opportunities for risk-selection by, for example, providing for mandatory open access to budget holders. Whilst agreeing with this point, one participant observed that risk selection can occur in different ways, including via a diverse range of indirect means such as marketing and the use of special tables, and that it would be difficult for regulatory bodies to handle some of these practices.

One participant commented that a number of key questions about high-cost (high-risk) groups would need to be addressed in any capitation system. He maintained that a fairly common distribution of health risks covering medical, pharmaceutical and hospital services is apparent across commercially insured populations in

Europe, America and Australia. First, 75 per cent of the population are presumptively well and account for about 20 per cent of total health expenditures. Second, 2 per cent of the population have catastrophic diseases — defined as disorders that take them into penury or, in the case of the US, expenditures over about US$15 000 per year — and they account for about 30 per cent of total health expenditures. Finally, about 23 per cent of the population have chronic illnesses with acute episodes, and they account for 50 per cent of total health expenditures. He suggested that people in this last group were increasingly attending hospitals and were the main generators of health expenditures. In his view, it was better to fund services for the aged and chronically ill from outside the capitation system as occurs in the Netherlands.

If, on the other hand, risk adjustment was to take place for everyone, then risk adjusters for chronic illness would be needed. This raised the question as to which particular variables should be incorporated in a risk adjustment formula that, on the one hand, gave sufficient funds to those budget holders which were going to enrol the chronically ill and the aged, yet at the same time avoided the use of data that could be 'gamed'.

Donato responded to these issues by suggesting that analysis of relevant variables would continue to be the prime focus of current research to improve the quality of the risk adjustment process. For the chronically ill, it is certainly possible to adopt different strategies to handle the associated risks such as 'carve-outs' (that is, separate funding arrangements) and risk sharing. However, the downside of these strategies is that they would reduce incentives for efficiency. Risk sharing arrangements focussing on high-risk clients could, however, offer a practical way of handling such risks while diminishing possible adverse effects on incentives for efficient service provision. Under this approach, a budget holder could be asked to nominate who they consider to be the high risks and share this information with the funder. This approach relies on the budget holder providing the funder with information about the risk characteristics of their enrollees, rather than regulators attempting to gather this information from other sources.

On the issue of dealing with high-risk individuals, Scotton argued that a managed competition system would provide positive incentives to budget holders to cater for people in high-risk categories and to provide coordinated care for people with chronic illness. One participant suggested that this was not certain. Budget holders might have higher- or lower-risk exposure depending on the mix of enrolled risks around the standard deviation. As a result, searching out high-risk clients for higher capitation payments might not be a sensible strategy for budget holders. Donato pointed out that there was an important difference between conventional insurance arrangements and the risk adjustment aspect of a capitation system. Outlier policies,

adopted in conventional insurance, were for treating large variations in random, and therefore inherently unpredictable, expenditure whereas risk adjustment was about handling the predictable aspect of expenditure.

Discussion then moved on to the possible application of better risk adjustment methods to the current reinsurance pool in Australia. Currently, under the reinsurance pool for private health insurance, the hospital claims of all people aged 65 years and over and those with more than 35 days of hospitalisation in a year are effectively shared by all health insurance funds. In effect, health funds with above average claims for these people receive a compensating amount from those funds with below average claims. This arrangement has a number of perverse consequences. For example, it weakens incentives to control costs for the affected groups of people because these costs are 'pooled' across the private health insurance industry. Initiatives to improve the design of these arrangements through the application of better risk management techniques would have a number of advantages. For instance, changes could be made so that health funds would not just get all their expenditures relating to high-cost enrollees paid for by other funds thereby improving incentives to control costs. It would also represent a logical and positive move to provide experience with risk adjustment which could be used to facilitate the development of an effective capitation payment regime for Australia.

3 Implementation issues

Richard Scotton

There is a widespread perception that, however compelling the arguments for managed competition may be in principle, the practical difficulties involved in implementing it would be such as to rule it out as a practicable reform program. The discussion below attempts to call this perception into question. As such, it is not an exercise in advocacy so much as a modest attempt to identify one possible path of implementation.

One of the often-cited problems is the political feasibility of having it picked up by a major political party, because it lies in a political no-man's-land, between the ideological positions of both the parties. Moreover, since the managed competition model involves the erosion of monopoly positions and loss of the rents associated with them, very strong opposition from funders, managers and providers can be expected. In effect, governments would have powerful reasons not to embrace it. Only time will tell whether this is an insuperable barrier: if the cost pressures become sufficiently compelling, official attitudes may be transformed. It is sometimes remarkable how quickly the unthinkable can become the desirable, or even the necessary. However, this lies outside the range of issues on which a health economist can claim to speak with authority.

A second perceived barrier to the feasibility of implementing the managed competition model is the technical difficulty of getting to it from the present system comprising Medicare and a number of other public programs. A transition using a pilot program covering a sample of the Australian population is not practicable, any more than was the case with the original Medibank program. There are two reasons for this.

First, since most of the programs operate under Commonwealth legislation, it is not possible to deprive a geographically-defined subgroup of Australians of their entitlements under existing programs in order to use them as subjects for experimental trials of another program. Like Medibank and Medicare, the managed competition program would have to be introduced as a universal program, replacing the others, for the whole population, from a date set down in the legislation. On one

day the present system would operate and on the next day the new one would come into force.

Second, the managed competition model depends for its effectiveness on interactions between supply and demand sides of the health care market. A pilot scheme — such as the Rand Health Insurance Experiment described in Manning and Newhouse, et al. (1987) — can provide information about the demand side but cannot measure the critically important behavioural reactions on the supply side. Only a natural experiment involving the whole population can do this.

The need for an all-or-nothing big step change is seen by some as a serious and possibly insuperable barrier to the implementation of a managed competition regime of the type which I have described. But this is not necessarily so.

In the first place, the model which I have put forward continues many features of the present arrangements — in particular as they affect the consumers of health services. These features would include:

- universal coverage for free treatment as public patients or outpatients in public hospitals;
- universal coverage for medical benefits for private medical services;
- universal coverage for pharmaceutical benefits, with differential amounts of copayment depending on age and pension entitlements;
- availability of private insurance to cover private hospital treatment and other supplementary benefits; and
- nursing home benefits for elderly and disabled people assessed as requiring admission for this degree of institutional care.

From the consumer viewpoint, this managed competition regime would demonstrate a very high degree of continuity with the existing arrangements. Moreover, to the extent that it would involve significant structural changes to payment and delivery systems, the implementation of the program could be smoothed out by two types of action:

- making whatever changes can be implemented under the pre-existing system *before* the date on which the new system formally comes into existence; and
- introducing the managed competition program with temporary features which can be progressively unwound over a transitional period.

Changes to precede the formal implementation date

Public hospital funding

The major change which could be made before implementation of managed competition is the method of payment by the Commonwealth Government toward the treatment of public patients in state public hospitals. Ever since the introduction of the original Medibank program this has been a vexed issue, since the formulas which determine Commonwealth grants to the states for this purpose have been changed many times. Since the introduction of Medicare in 1984, they have become more complex with each successive Commonwealth–State agreement, to the point that few, if any, understand them. Furthermore, the use of government-to-government grants has offered opportunities for substantial cost shifting, as exemplified in its grossest form by some states accepting rising volumes of Commonwealth money, but reducing their own grants to their hospitals and hence their capacity to provide services to Medicare beneficiaries.

Up to the mid-1990s, the use of grants to the states could be justified by the fact that there was no workable measure of hospital output, but since the invention of DRGs, the inefficiencies arising from payments unrelated to output has been quite unjustified. Since the sole interest of the Commonwealth Government in state public hospitals is to have Medicare beneficiaries treated free and without means test, the obvious way of doing this is to provide funding in the form of cash benefits defined in terms of casemix-adjusted episodes. These benefits could be made payable through the hospitals, as with nursing home benefits. As a result, Commonwealth funding to state hospitals — and indirectly, to state governments — would only flow to the extent that they admitted and treated Medicare patients. If thought appropriate, the total amount of benefit payable in a state could be capped at levels related to its population.

It may be noted that this arrangement could be implemented unilaterally by the Commonwealth Government on the termination of the current (or any other) Commonwealth–State hospital agreement.

This would be a reform of great value whether or not the decision was made to move towards the managed competition model. However, it would be an absolutely necessary precondition for the implementation of managed competition, since it is the only way in which funding of public hospitals can be pooled with funding for other health services. This is not simply an issue of formal tidiness — efficient substitution of other services for inpatient hospital care is probably the single largest source of potential efficiency gains. They cannot be secured under the existing system since there is no means by which savings from reductions in hospital costs

can be used by a funder to provide any substitute services, no matter how much less costly they may be. A very good illustration of this idea is the cost-effective arrangements within Kaiser Permanente as described by Feachem, Sekhri and White (2002). In contrast to the British National Health Service or our own hospital arrangements, Kaiser substitutes away from hospital services based on open-ended grants wherever possible.

Role of the states as funders

The predominant role of state governments at present is to manage and provide the residual funding of their public hospital systems, through having to meet from their budgets:

- the net operating costs of their public hospital systems, after receipt of Commonwealth funding; and
- the provision of public hospital capital, for new and replacement purposes.

Under the managed competition model, the total operating costs of public hospitals would become a Commonwealth responsibility, and would constitute a notional component of the capitation grants to budget holders. There would need to be an offsetting reduction in Commonwealth payments to the states (out of hospital grants or GST reimbursements) to compensate for this. While this in itself would relieve the states of their present responsibility as residual funders of public hospital systems, the model involves this being replaced by a residual financial responsibility for the solvency of public budget holders in their jurisdictions.

On the grounds that the state public hospital systems are key pillars of the Australian health system as a whole, it is envisaged that — at least as far into the future as can be foreseen — the prices which budget holders would pay for public hospital services would be uniform throughout each state hospital system and would be determined annually by the state governments, subject to an agreed costing process. State governments would retain their present freedom to determine the scale and location of their public hospitals, and to control their functions through determining the DRG categories for which they may bill budget holders. In addition, for as long as public hospital prices are fixed, there would have to be an agreed cap of some kind on the total billings (and by implication the volume of services provided) by public hospitals. The power of state governments to allocate this cap between hospitals would reinforce their planning powers.

The equitable treatment of capital costs is a more complex issue. One possible solution would be to include a capital amortisation (or replacement) component in

the operating costs funded through the capitation grants to budget holders, and to leave the states with the responsibility for providing new capital to public hospitals.

Budget holders

Another important precondition for launching a managed competition regime would be the formation and registration of budget holders to operate from the date of commencement of the program. These bodies — and the information systems necessary for them to function — would have to be operative before the starting date.

Relevant features of the model include:

- Regional *public* budget holders — covering populations of, say, 500 000 or more — assuming liability for costs incurred by people who do not choose to be covered by private budget holders. The regional focus is based on the likelihood of their contracting primarily with service providers located in their designated areas.
- Because of considerations of scale, few of the organisations presently registered under the National Health Act would qualify to become private budget holders. Given minimum target populations of, say, 500 000, no more than five existing organisations would be likely to qualify as budget holders under the managed competition program.
- At the same time, the managed competition model is designed to encourage new types of intermediary to register as private budget holders. One should not be prescriptive about this. The possibilities include vertically-integrated health maintenance organisations (HMOs) in the two largest cities and maybe a coalition of health and other organisations catering to different styles of care.

It would be necessary for all people covered by private health insurance funds not participating in the new program, and wishing to continue supplementary private coverage, to make new elections before the starting date of the new program.

Information systems

Australia is fortunate in the breadth and sophistication of its health service information systems held in the HIC and Department of Health and Ageing (DHA) and the hospital morbidity systems operated by state authorities and the Australian Institute of Health and Welfare (AIHW). Managed competition will require a greater degree of integration of these systems — presumably in the HIC — in order to have a data base capable of:

- generating the DCG-based risk adjustment categories and relativities, and applying them to the population;
- recording the budget holder responsible for costs incurred by every eligible person; and
- sharing utilisation and cost data on their covered populations with the relevant budget holders.

This distributed database should be operating by the starting date, to the extent of establishing working claims and payment procedures, recording all covered services and allocating costs between budget holders.

Changes to be made after the formal implementation date

Key elements of the managed competition model would not be in operation at the outset of the program. In fact, they would have to be progressively implemented over a period of several years, and the full evolution of the delivery system in response to the changed incentives offered by the managed competition model could be expected to work its way through over a further period. This unfolding process would have the advantage of allowing incremental adjustments to be made in the light of experience.

Risk adjustment formula

While the program would start with many of the structural components in place, the key driving force — namely the risk adjustment of capitation revenue paid to budget holders — would have no accurate way of being calculated ahead of the implementation date. Consequently, in the first year, the architecture of the new system would have to be used substantially to continue the delivery of the old. In other words, benefits payable under the various existing programs would continue, with the payers (budget holders) being reimbursed through the HIC from the Commonwealth budget.

The data flowing from these payments would provide the basis for the formulation of the first set of risk adjustment factors. These would include the formulation of risk adjustment categories, the allocation of individuals to these categories, and the calculation of cost relativities. The availability of first-year data would permit the DHA, the HIC and budget holders to frame their budgets for the second year of the program, in which a portion of the payments to budget holders would desirably consist of risk-adjusted capitation grants. As further years of data resulted in progressive refinement of the risk adjustment formula, the proportion of payments

to budget holders taking the form of risk-adjusted capitation grants would increase, as would the pressure on them to contract with providers in such a way as to require them to share risks related to variations in service utilisation.

Payment for services

In the first year, services would presumably be paid for as if existing programs continued, but would generate data which would enable budget holders to gauge utilisation patterns and costs and to commence negotiations with intermediaries and providers. It would also enable providers to form alliances and coalitions designed to put them in a position to negotiate on prototype mixed-reimbursement systems of the kind proposed by Newhouse (1986).

The balance between capitation and service-based payments would vary through the system, depending on such factors as the control of the intermediary/provider over utilisation and the extent of other utilisation-limiting factors such as supply constraints and global budget limitations. For example, in the public hospital inpatient area, budget limitations and supply constraints might make it possible for cost-based remuneration (that is, case payments) to comprise the great bulk of remuneration. In other cases, such as primary care or diagnostic services, capitation may apply at the budget holder/intermediary level, but a substantial element of per service payment could exist at the individual practitioner level, through a pooled fee-for-service arrangement.

One of the great advantages of the managed competition model is that it would permit a great variety of payment arrangements, governed by differences in circumstances and the mutual convenience of payers and providers.

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General discussion

The discussion focused on:

- reforms to the current structure of federal-state health financing and delivery;
- evidence of benefits from implementation of managed competition; and
- alternative implementation strategies.

Reforming current financing and delivery arrangements

Several participants identified rigidities in current financing and delivery arrangements, notably between hospitals and other health services, as an area where worthwhile gains from reform were achievable either in their own right or as part of a managed competition model.

One participant argued that reforms to public hospital funding along the lines of those proposed by Richard Scotton were unlikely to be embraced in the current political climate. While reform to the existing Australian Health Care Agreements was technically feasible, it seemed unlikely that the Commonwealth Government would support a system where the whole cost of funding for public hospitals was transferred to the Commonwealth and was uncapped.

Another participant foresaw a range of possible problems during the transition to a managed competition system. For example, attempting to cap the level of funding would produce queuing problems similar to the existing system, while not placing a cap within a demand-driven hospital system could lead to significant expenditure over-runs.

Scotton maintained that placing a barrier between the funding and organisation of inpatient care was unjustifiable because the largest efficiency improvements were potentially available from reforms in this area, making it possible to substitute freely other health services for inpatient care. To establish a revised system, an adjustment could be made to GST revenue transfers to the states/territories to offset direct Commonwealth payments to public hospitals. As a variation on the proposed interim arrangement, the Commonwealth could accept responsibility for a fixed amount of funding of, say, 50 per cent of hospital costs plus a benefit factor. This payment could be allocated as a cash benefit which would cover variable costs, and

states would then cover the remaining costs. The states, as controllers of the public hospital system, would then possess a greater degree of control than at present. This would allow them to dictate the DRG types for which individual hospitals could bill them, providing improved leverage in managing the public hospital system.

One participant questioned the need for any interim step as part of the process of reforming public hospital funding arrangements. Scotton suggested that his managed competition proposal represented a big step change and would, in consequence, have to be introduced slowly.

Scotton maintained that moving to a broadly-based capitated funding system would allow budget holders and providers to exercise great ingenuity in organising more cost-effective alternatives to inpatient, nursing home and other high-intensity care. Another participant observed that, given sizeable variations in the costs of inpatient treatment for patients between states, the overall incentives for pursuing efficiency gains in this area would be sensitive to the prices used for different health services in the capitation funding formula.

One participant questioned the focus on reforms to the financing and delivery of hospital services, arguing that Commonwealth expenditure on pharmaceutical benefits was likely to exceed Commonwealth expenditure on public hospitals within the next five years or so. In his view, there were sizeable gains to be made in improving the use of pharmaceuticals, with efficiency gains in hospital use likely to be less important in relative terms. It was suggested that a transition to managed competition might therefore defer reform to financing and delivery arrangements for public hospitals, with a greater concentration initially on managing the MBS and PBS jointly, with associated opportunities for service substitution.

Evidence of benefits from moving to managed competition

Several participants argued that the magnitude of the perceived benefits and costs of managed competition reform were largely uncertain. The introduction of managed competition was likely to bring with it new transaction costs which may exceed the potential gains from improved allocative and technical efficiency. While such reform could produce savings from role rationalisation between the Commonwealth and states and efficiency gains from competition between budget holders and between service providers, there would also be an increase in administrative costs connected to enhancing the role of private purchasers.

One participant suggested that, within the current system, approximately 2 cents in every dollar of Commonwealth and state outlays were absorbed by administrative costs, while a figure of approximately 12 cents in the dollar applied to private health insurance funds. A portion of this relatively higher cost figure for the private sector was connected to exercising a (minor) purchasing function, whilst another portion was connected to the costs of providing choice in the form of information/marketing costs. While reform would change the relative prices of the factors within the health system, it might be possible that there was little improvement in the overall costs of service provision and delivery. It was suggested that another important implementation issue related to the fundamental question as to whether technologies for organising and coordinating health services were available to achieve improvements in health outcomes and allocative efficiency.

It was suggested that the introduction of coordinated care trials in Australia had resulted in some improvements of the kind that were likely to occur with managed competition. This included improved flexibility, improved mix of services and cost-effective service substitution. However, the trials had not led to simultaneous improvements in health outcomes. The participant concluded that, while it may be theoretically attractive to argue that changed funding arrangements would lead to both improved health outcomes and reduced costs, the single largest reform trial in Australia had shown that this was open to question. Indeed, the results from a relatively short two-year trial were far from definitive, and a longer period of experimentation may be required.

Another participant commented on the lack of evidence about the overall effects of managed competition reforms. In his view, the magnitude of benefits and costs were largely unknown, and this included potential cost savings, extra administrative and contracting costs and quality outcomes. From an Australian perspective, evidence from the USA of significant cost savings arising from the introduction of managed care was unconvincing, because this system was characterised by significantly over-inflated costs prior to reform. Limited evidence from the UK suggested that budget holding had the effect of reducing unnecessary care, but overall costs could fall or rise. Regarding quality effects, recent studies from the USA suggested that managed care had negligible effects — positive or negative — on the quality of care. Further, Dutch experience suggested that managed competition might mean that budget holders competed via cost-attractiveness rather than cost-effectiveness. This involved managed care groups marketing health plans with an emphasis upon the provision of high technology care to consumers. If this drove up health care costs, with only marginal benefits in terms of health outcomes, then it would call into question the extent of the benefits from managed competition reform.

Another participant suggested that worthwhile reform was often delayed due to a lack of evidence. However, economic theory, including its underlying principles, often provides a valid alternative indicator of the likely effectiveness of reform based on introducing the right incentive system. He cited casemix funding as an example of where reform had been introduced and produced effective results in spite of initial resistance based on a supposed insufficiency of evidence. Another participant disagreed with the idea that theory and principles provide an adequate framework to inform decisions about the merits of major reforms in the health sector. In his view, some reforms involve relatively complex issues and important empirical questions which point to the usefulness of staging reform to facilitate trials/experiments and evaluations of benefits and costs against prior expectations.

Alternative implementation strategies

One participant proposed that managed competition could be introduced on a trial basis. He questioned Scotton's assessment that such a reform could not be confined to a regional or demographic subset of the population. He suggested that some portion of national health funding could be allocated on a capitated basis to a regional budget holder within a framework similar to that applying, say, to Kaiser Permanente in California. The budget holder would be able to provide health services to consumers within a specified area on an opt-in basis. The process would need to be transparent, in that consumers would need to be fully informed from the outset about the level and type of care provided under the revised system compared with existing arrangements. Such a trial had the potential to demonstrate whether pareto improvements were likely to accrue from a managed competition-type reform. It would provide an indication of its attractiveness to providers and consumers. Further, the failure of such a localised trial, should it occur, would be far less catastrophic than a reform failure across the entire health system.

Another participant put forward an alternative implementation strategy to that proposed by Scotton based on a non-competitive public budget holder model. He proposed a staged, gradual transition with a built-in evaluation process which could yield an end point resembling the Scotton proposal. Initially, Commonwealth and state funds would be transferred to a limited number of Regional Health Authorities (RHAs). These RHAs would have a single and flexible budget similar to the default Medicare scheme in the Scotton proposal. Incremental changes could then be made to funding levels over time to progressively align actual and 'expected' risk-adjusted population-based budgets. These changes would be accompanied by a progressive increase in the range of activities which RHAs would be permitted to undertake. A decision concerning the final transition to the full Scotton model could

then be made after a careful assessment of experience with the non-competitive model.

According to the participant, it is preferable to introduce reform in a way which involves minimum costs and risks, while positioning the health sector for subsequent and more radical changes if further evidence and analysis warrants this. Caution is necessary in introducing scope for greater competition within the health care system because such change brings with it the possibility of cost inflation. A gradual transition would also allow more time to elapse so that further international evidence on the costs and benefits of pro-competitive reforms could emerge.

Scotton questioned the merits of this alternative approach, noting that in its early stages it left a largely unregulated private sector operating under continuing fee-for-service arrangements. This would not solve existing problems between the public and private sectors, including cost shifting, and would allow the private sector to engage in unrestrained risk selection. He also suggested that reform which produced an integrated system at the public level would leave controls and disciplines over the financing and delivery of health services to a system of administrative checks and balances rather than those generated by the market itself. It would also fail to provide a key efficiency-enhancing feature of managed competition — the existence of competitive private budget holders which actively compete with public budget holders.

Another participant suggested that it would be preferable to modify the sequencing of the Scotton proposal. In his view, the potential gains from seeking to promote efficiencies in the use of medical and pharmaceutical services exceeded those likely to be available from reforms to the public hospital system. Moreover, reforms to the public hospital system and related changes to the mix of health expenditures were likely to raise more challenging implementation issues in areas like changing Commonwealth/State roles and improved coordination of health services. Accordingly, he suggested the pooling of MBS and PBS funds, with GPs operating as budget holders via the Divisions of General Practice. Reforms to the public hospital system could be pursued at a later stage in the reform process.

4 Outcomes of managed competition

Richard Scotton

The rationale of the managed competition model is *not* conceptual neatness (although it has that), but that it is seen as the *only* way in which it will be possible to manage (if not necessarily solve) a number of specific problems which are becoming increasingly intractable in the context of the present arrangements for Australia's health care system. These problems may be grouped into three broad areas — costs, service delivery and organisation.

Costs

We face rising real costs in health care. Without any changes to the current system, Australians will face increasingly severe and arbitrary rationing of particular services and/or growing inequalities of access between the better-off and worse-off members of the community.

The primary goal in this area is securing the most efficient resource use, not the minimisation of expenditure per se. However, the two objectives run together, as do the policy instruments:

- (a moving) global budgetary cap on total program outlays; and
- a funding formula which incorporates economising incentives, all the way from the budget holders to the individual service providers.

As always, the pursuit of multiple objectives involves trade-offs, but the incentives running through the global capitation and the contracting network would be pushing in the same direction to a much greater degree than at present. Indeed, the implementation of improved incentives via managed competition offers a practical way of increasing productivity and containing the real costs of providing acceptable health care.

The most rapidly increasing components of health expenditures include certain inputs to the health care produced by doctors — notably pharmaceutical drugs and

some diagnostic services, into the development of which there is a torrent of expensive innovation.

Under the present arrangements, doctors order these expensive inputs to their production processes without incurring any of the cost. Indeed, some of these 'free' inputs may substitute for doctors' own time, which can then be used to generate more fee-for-service income. Viewed in terms of social costs and benefits, the incentives arising from this situation are highly inefficient. For example, commercial clinics providing primary care services operate on the principle of handling a high throughput of patients and generating prescriptions as part of the service provided to patients. The prescriptions may have an average cost to the taxpayer of say $60. One outcome of this approach to delivering health services is excess prescribing of drugs.

The remedy — to the extent which is possible in the context of the way in which medical practice is organised — would be to include, in the capitation component of doctors' remuneration (that is, that part which is related to the population for whose treatment they are responsible) an allowance for the cost of drugs which they prescribe, and to require them to pay all or a negotiated proportion of the cost of these drugs. Like other parts of the health system, doctors would earn their incomes by selling their services while meeting the costs of the inputs they provide. Thus doctors would meet the costs of pharmaceuticals as part of the costs of treatment. One can hypothesise that this would result in a significant decrease in needless prescribing, and in the substitution for it of doctors', nurses', counsellors' and paramedics' time with little impact on the health of the population.

In responding to the challenge of containing the growth in outlays on health care, the largest potential savings from improved efficiency lie in the provision of services to the most expensive groups in the population, including the aged. The obvious means of realising these savings is to substitute other services for inpatient care, both in the acute and nursing home sectors. This is not done as much as it could at present, partly because the payers and providers cannot use savings from reduced hospital and nursing home care to provide more outpatient and domiciliary care.

If we were to take, for example, the population cohort aged 80 to 85 years, the high levels of risk-adjusted capitation payable for their care would include a substantial component of inpatient and resident care, based on the assumption that (say) 35 per cent of people in the cohort could be expected to require such care. A budget holder and/or subcontractor being paid on this basis would have a powerful incentive to substitute other (and not necessarily medical) services for the inpatient component, wherever cost savings could be achieved without sacrificing outcomes. The substituted services could even extend to payments to family carers. As an example,

if a budget holder or aged care provider could reduce the level of nursing home bed use from 35 to 30 per cent in the cohort, significant savings could be achieved, with equal or superior outcomes from the viewpoint both of patients and their carers. One way in which this might be achieved could involve subsidising families and relatives to look after the aged in their own homes.

Service delivery

The adoption of a managed competition framework would aid the process of addressing a number of service delivery challenges.

One challenge in the service delivery area is how to maintain and support the public hospital system as a key pillar of the health system as a whole. In the Australian context, it is essential to provide universal free access to public hospital care as a compulsory component of all packages. Given the supply constraints, there is no potential for over-use. It is envisaged that public hospital services (to both public and private patients) would be funded by casemix-adjusted payments at common rates applying to all public hospitals under blanket contracts between state hospital authorities and budget holders. At the present time, private insurers get a 'free ride' when their members are admitted to public hospitals as public patients and, to avoid copayments, conceal their insurance status.

In a managed competition model, since the payments to hospitals would always follow the patient, people insured with private budget holders would have the choice — subject to capacity being available — of treatment in public or private hospitals. In the long run, the proportion of public and private beds would be determined by patient preferences.

Another service delivery challenge relates to the question of how to improve/support the primary care system (especially general practice), with emphasis on efficient use of all resources, including people with qualifications other than medical degrees.

Under managed competition, primary care would become more than just 'general practice'. Indeed, providers would have an incentive to develop a more efficient primary care system using other personnel for health advice, follow-up care and home visits. There are many services in which trained para-professionals could operate under the supervision of doctors.

The ideal manner of contracting for primary care, from a budget holder's point of view, would be by a (case-adjusted) per capita payment for taking responsibility for a defined range of care provided to an enrolled sub-population. This payment would

include the expected cost of a number of externally-provided services (such as drugs and diagnostic tests) ordered by the practice, with the actual costs being billed to the practice. The incentives flowing from this arrangement would promote continuity of care and efficient substitution between doctors' and non-doctors' time and other inputs. In practice, most primary care practices would not be large enough to moderate the risks involved, which would require one or both of the following:

- mixed reimbursement, including fee-for-service and (possibly) other components, as well as capitation (see Newhouse, 1986). This would allow a great variety of payment methods, according to circumstances and the outcomes of contract terms; and
- intermediary contractors between budget holders and primary care providers. These could include Divisions of General Practice, which could contract on a population basis and pay practices by pooled fee-for-service and/or other mixed systems.

Many possible innovative variants to these arrangements can be imagined.

Another key service delivery challenge relates to support for, and improved availability of, health services to non-metropolitan populations.

Within a managed competition framework, the fact that funding flows would follow risk-adjusted covered populations provides an almost automatic solution to this problem. For example, to the extent that the ratio of medical practitioners to the population would be lower in regional than in metropolitan areas, the gross incomes earned by non-metropolitan doctors would automatically be higher than those of their big city counterparts. To some extent this would enable them to make more use of nurses and paramedical personnel, but it could be expected that their net incomes would also be higher. This would tend to induce an increased flow of doctors to country areas, up to the point at which the 'premium' paid to country doctors equated to the value placed by doctors on living and practising in metropolitan areas.

Managed competition would also provide opportunities for improving the management of care to people with multiple or chronic and degenerative conditions through better coordination of services. Conditions such as diabetes and asthma generate a substantial volume of morbidity. In many cases, appropriate supervision and regular treatment not just improve well-being and outcomes, but also reduce or avoid the occurrence of acute episodes requiring inpatient treatment. Managed competition might be expected to promote specialist organisations to which people suffering these conditions could be referred for continuing supervision and treatment using coordinated care — an example of managed care at its best.

Organisation

A managed competition framework would also provide a basis for addressing a number of organisational issues more effectively. Some illustrative examples follow.

First, under the existing arrangements, there are some indications that the growth of corporate medicine will give rise to inefficiencies in the system due to inconsistencies between private and public sector financing and provision. The motive behind some of these arrangements (such as 24 hour clinics) is to maximise the publicly-underwritten fee income per patient. This is not a dishonest or perverse reaction, but rather a predictable outcome of the incentives incorporated in the present system.

By contrast, under managed competition, budget holders — both public and private — will have to meet all program costs incurred by all their enrollees and meet the costs of services either directly (if vertically integrated) or by contracting with their (public and/or private) intermediaries and providers for a range of services such as pathology, pharmacy and radiology. To the extent that corporate for-profit bodies operate in this system, they will be contracting on a wholly or partly capitated basis, and the incentives bearing on them will push them in the direction of efficiency and cost containment, rather than fee-for-service revenue maximisation.

Second, the $2 billion plus private health insurance subsidy is a singularly ineffective and inequitable use of public money.

Under the managed competition model, the subsidy would simply be redirected into the budgetary allocation for the program — that is, into the pool from which risk-adjusted capitation payments would be paid to budget holders. This would be consistent with equity, in that all eligible people would effectively receive a subsidy toward their health benefits — based on their expected health costs, and hence related to their health status — regardless of whether they opt for additional private insurance cover or not.

Although there would be no direct public subsidy for care as a private hospital patient, the capitation payments received by private budget holders would be available for them to meet the costs of private as well as public care. The premiums charged to their enrollees would only reflect the higher prices paid for private care and the additional hospital use (if any) associated with private coverage.

Finally, under managed competition, it would be possible to eliminate Commonwealth/State service delivery overlaps and cost shifting by amalgamating health care programs. The functions of these different levels of government would

be separately and clearly demarcated and all services to patients would be covered by budget holders. Under such an arrangement, the scope for cost shifting would be eliminated — not just between Commonwealth and state governments but between the public and private sectors, from one service to another and between sectors.

Reference

Newhouse, J.P. 1986, 'Rate adjusters for Medicare under capitation', *Health Care Financing Review*, Annual Supplement, pp. 45–55.

General discussion

The discussion focused on:

- the likely impacts of managed competition on health sector participants;
- the role of managed care within a managed competition framework;
- equity outcomes in a managed competition system;
- the need for managed competition reform; and
- ideas for further research.

Likely impacts of managed competition

A large amount of the discussion in this session focused on the likely impacts of managed competition reform on the health sector as a whole, as well as on participants such as GPs, hospitals, consumers and private health insurers.

Regarding the likely impacts on the health sector, some participants argued that past experience with market-based reforms in other sectors provided some broad indications of the likely impacts. One participant used the example of the rationalisation and commercialisation of statutory marketing boards and reforms to production controls applying to several of Australia's agricultural industries. He suggested that, prior to reforms of these industry arrangements, previous regulatory structures had acted as a dead hand on product and process innovation and effective marketing initiatives. As in these industries, promotion of competition within the health sector was likely to create pressures for improvements in service delivery.

Another participant suggested that the current structure of regulation and funding within the health sector had perverse impacts. Restrictions on doctor numbers contributed to supply shortages and access problems. Under the fee-for-service system, all the risks of variation in volume are borne by payers and the incentives for cost-conscious care are limited. The scope for improvement within the hospital sector is currently constrained by under-funding and an emphasis on patient throughput. As a result, there is a distinct lack of innovation in key areas, such as the use of information technology, to improve service delivery. Beyond this, the structure of program-by-program based funding creates opportunities for cost

shifting and constrains the development of cost-effective service provision through the better coordination of health services.

Several participants commented on the implications of managed competition for consumers. One participant noted that the overall effectiveness of a managed competition regime would be shaped by the design of its supporting regulatory framework — notably in ensuring the provision of adequate information to aid consumers in making effective choices between health plans offered by budget holders and protection to circumscribe opportunities for risk selection and quality skimping by budget holders. A number of participants commented on the implications of managed competition for constraining consumer choice of a GP compared to existing arrangements under which consumers are able to exercise choice. Another participant observed that open access to GPs could be achieved by varying copayment rates or premiums to accommodate choice. In effect, consumers would face a more explicit and expanded choice — price trade-off for health care services similar to the existing trade-off for accessing different types of hospital services. Another participant maintained that it was important to recognise that existing restrictions on doctor supply and funding operate to constrain choices and access to health services.

The impact of managed competition on the private health insurance sector was also raised, with one participant asking whether people would still be able to pay a premium to supplement the services covered by the risk-adjusted capitation payment to budget holders. Richard Scotton indicated that people would be free to use their own money to buy supplementary services as occurs under the existing system.

The same participant observed that, if under the Scotton proposal everyone was allocated a risk-adjusted capitation voucher or entitlement to health services, there would presumably be a need for an overall cap on expenditure to avoid having an open-ended system. In response, Scotton observed that the rising real costs of state-of-the-art health care were likely to present a growing challenge in the future. However, managed competition would make it possible to obtain more from a given outlay on health services through, for example, improvements in the technical efficiency of these services and the substitution of lower cost for higher cost services. These efficiency gains would lessen funding pressures within the system. In this context, expenditure could be allowed to grow with more value for money being sought. Alternatively, the same amount of health care as consumed now could be provided, but at a lesser cost. Overall, the funding problem is going to be less than it otherwise would have been and this will influence assessments about the need for and degree of tightness of any expenditure cap(s).

Scotton also observed that a switch to managed competition would enable better comparisons of the health status of different groups in the populations covered by budget holders. Such information could be used to improve the design and delivery of health services. While accepting the scope for making better comparisons, two participants questioned the practicality of doing so. One participant commented on the difficulties of attributing changes in population health to particular health programs, while the other referred to the difficulties experienced by the Commonwealth Grants Commission in isolating the causes of variations in health status between states.

Role of managed care

A number of participants maintained that managed care would inevitably be employed as a cost control device by budget holders within a managed competition framework. For them, managed care strategies involving preferred supplier arrangements, utilisation reviews and various quality assurance measures were likely to be used by budget holders.

Drawing on the US experience, one participant referred to the restriction of consumer choice in this context. She maintained that managed care often includes measures to ensure consumers use only certain providers and facilities. Some plans provide wider options to consumers in exchange for varying copayment rates which allow consumers to exercise choice having regard to the value they attach to it. Another participant observed that the regulatory framework associated with managed competition could include limitations on the extent to which budget holders can restrict choice. Indeed, in the USA, some states have introduced legislation for this purpose.

Scotton noted that this is one of the areas where budget holders may choose to compete by differentiating their health plan offerings. If choice is important to consumers, budget holders are likely to respond accordingly.

Another participant argued that it was possible to overemphasise the linkage between managed competition and managed care. She observed that, in both the public and private sectors in Australia, examples of managed care techniques were apparent, and this trend had become more pronounced over the past five years. Examples included increased use of contracting, the use of utilisation reviews and the growing use of clinical guidelines/protocols. Further, several participants suggested that the debate about health reform within Australia was too closely focused on the USA. Introducing reforms involving the use of market-based incentives was apparent in a broad range of countries and a number of common

elements were evident — including proactive purchasing, the specification of basic benefit packages and increased private sector participation.

Equity outcomes

In commenting on equity outcomes under managed competition, one participant emphasised that such a regime could be designed to accommodate a variety of equity objectives. The mandatory defined benefits package could, for example, be comprehensive or restrictive. Another participant maintained that the risk-adjusted capitation payment could include a social status variable or, alternatively, provision for different levels of reimbursement, with higher levels of copayments for higher income people.

Scotton suggested several ways in which a managed competition system could be designed to achieve equity objectives. He argued that all countries faced the dilemma of defining what constitutes an acceptable level of care for their citizens and pointed out that his proposal supported the maintenance of a universal program of basic services. Observing that there was a well demonstrated relationship between social status and health status, he maintained that risk-adjusted capitation ensured that those with poorer health, many of whom were economically disadvantaged, would receive greater health entitlements. Copayment rates could also be varied according to social security status to enhance further the equity of the system.

The need for managed competition reform

While acknowledging the potential benefits of managed competition, a number of participants commented on the challenges associated with demonstrating the need for such reform to Australia's health care system and its potential implications.

One participant observed that the potential for cost savings from the adoption of managed competition was likely to be considerably less than the USA where it was the main justification for reform.

Another participant agreed with this assessment and went on to observe that it can be claimed that Australia's health care system is working quite well by international standards. It is important that steps are not taken which could undermine its overall performance. He also observed that the prices for GP consultations and drugs compare favourably with prices for these services in many other countries. Further, Australians seem to appreciate the open system for accessing GP services. Beyond this, he noted that managed care had been subject to criticism in the USA. While

managed competition offered the prospect of enhanced consumer choice across health plans, it was likely to involve a restricted choice across a variety of treatments and practitioners. To date, Australian providers and consumers of health services have shown little interest in managed care. Taken together, these considerations suggest that persuading the public to accept managed competition as a reform strategy is going to be particularly challenging.

Responding to these comments, another participant maintained that it is important to be clear about what problem(s) we are trying to solve. Is the problem one of access to primary care for people in rural and low-income areas? Is the problem one of allocative efficiency? Is the problem one of technical efficiency? Is the problem something else?

The presentations and discussions identified a wide range of problems. Managed competition can solve many of these if it is implementable. However, given the practical and political challenges, it may be preferable to adopt other solutions, and in so doing move some way along the path to managed competition. A number of participants considered that a reform strategy which focused on picking up easier to implement reforms with the potential for high pay-offs (the low hanging fruit) represented a sound approach.

Ideas for further research

The discussion session concluded with a number of participants commenting on opportunities for further research and analysis including:

- evaluating the merits of giving doctors, through the Divisions of General Practice, greater responsibility for purchasing medical services and pharmaceuticals for their patients;
- assessing the merits of giving regionally based, public non-competing budget holders the responsibility for purchasing a full range of health services for their residents;
- trialing managed competition by allowing people to opt out of the current system to join a competing private health care plan;
- examining the scope to improve the current reinsurance pooling arrangements for the elderly in the private health insurance sector by applying better approaches to risk management;
- exploring opportunities to reform existing financing and delivery arrangements for public hospitals (for example, by modifying the Australian Health Care Agreements);

- assessing the merits of different approaches to risk-adjusted capitation, including the feasibility of developing linked data sets covering primary and acute care and pharmaceuticals, and the appropriate mix of risk sharing strategies; and
- analysing the nature of contracting arrangements likely to apply in a more competitive health system, involving a comparison of more active purchasing initiatives with current arrangements applying to health insurance funds.

At a broader level, several participants saw benefits in undertaking a stocktake of existing and emerging problems within the health care sector and an assessment of the relative merits of different reform options.

The Commission will consider the scope for it to make a research contribution in some of these areas.

A Workshop program

Productivity Commission
Canberra Office
Nature Conservation House
Belconnen ACT

Chair: Helen Owens

Friday, 23 August 2002

9.00 – 9.30	Registration
9.30 – 9.40	Welcome/Introduction
	Helen Owens (Productivity Commission)

Session 1: The Scotton proposal

9.40 – 10.10	Richard Scotton
10.10 – 11.00	General discussion
11.00 – 11.20	Morning tea

Session 2: Payment for programs and services

11.20 – 12.30	Introductory comments (Richard Scotton/Ron Donato)
	General discussion
12.30 – 1.30	Lunch

Session 3: Implementation issues

1.30 – 2.30	Introductory comments (Richard Scotton)
	General discussion

Session 4: Outcomes of managed competition

2.30 – 3.30	Introductory comments (Richard Scotton)
	General discussion
3.30 – 3.45	Afternoon tea
3.45 – 4.00	Closing remarks

B Workshop participants

Dr Robert Bain	Australian Medical Association
Mr Simon Blair	Medibank Private
Professor Jim Butler	Australian National University
Dr Frances Cunningham	NSW Health Funds Association
Mr Ron Donato	University of South Australia
Professor Stephen Duckett	La Trobe University
Mr Paul Gross	Institute of Health Economics and Technology Assessment
Mr Tony Kingdon	Department of Health and Ageing
Mr Ian Monday	Productivity Commission
Ms Mary Ann O'Loughlin	Allen Consulting Group
Ms Helen Owens	Productivity Commission
Dr John Paterson	Telstra Health Industry Adviser
Professor Jeff Richardson	Monash University
Mr Graeme Samuel	National Competition Council
Mr Russell Schneider	Australian Health Insurance Association
Dr Richard Scotton	Health Economist
Mr Francis Sullivan	Australian Catholic Care Association

C Managed competition*

Richard Scotton

The general objective of managed competition is to establish structures in which market incentives can increase economic efficiency — that is, make better use of resources to improve health outcomes and satisfy consumer wants. It is a complex concept, with implications for every aspect of the health care system.

While managed competition involves the use of market tools to guide resource allocation, it also includes a regulatory framework designed to eliminate sources of market failure found in unregulated markets for health services. Its most obvious structural innovation is the establishment of competitive, at-risk budget holders as the purchasers of health services on behalf of defined populations of consumers enrolled with them. In terms of detailed applications it comes in many forms to meet the diverse needs of the various health care systems in which its operation has been proposed.

Background

Perhaps the best way to introduce the concept of managed competition is in terms of its historical context. The development of health care financing arrangements in developed countries can be thought of as taking place in three stages. The first stage saw the establishment of national health/health insurance programs designed to secure universal access and equitable incidence of costs, with varying degrees of direct government involvement in funding and service delivery. While the European origins of this intervention took place as early as the 1880s, the process continued until the 1970s in some countries. The second stage was the application in the 1970s and 80s of budgetary ceilings to control unsustainable rises in health expenditure. These fairly gross measures were effective in abating the rate of expenditure growth

* This appendix reproduces a paper prepared by Dr Richard Scotton on managed competition in 1998. The original contribution appears in: Scotton, R.B. 1999, 'Managed Competition', in G. Mooney and R. Scotton (eds), *Economics and Australian Health Policy*, chapter 11, Allen and Unwin, pp. 214–31.

and, in some cases, in actually reducing the proportion of GDP allocated to health services.

The third stage, which commenced in the 1980s and is still current, is dominated by responses to continuing rises in real costs of state-of-the-art health care resulting from advances in medical knowledge and technology. The impact of cost increases is sharpened by declining rates of sustainable economic growth in the developed world. Global cuts in government health budgets have already been pushed, in many countries, to the stage of threatening access, equity and even quality of care. In this context, raising health service efficiency has become the overwhelming policy imperative.

For this reason, microeconomic reforms involving some aspects of managed competition are being increasingly looked to as the most promising means of continuing to provide first-class health care to all citizens at a sustainable cost (Chernichovsky 1995; Van de Ven 1996). Policy makers in most countries are aware that there is not a direct trade-off between the social and economic objectives; in particular, publicly financed national health and national health programs, which are primarily designed to secure access and equity, are also an essential tool in controlling total health care expenditures. It is in this context (ie of national health systems involving management by governments of global health care budgets) that aspects of managed competition can be contemplated in the great majority of OECD countries, including Australia.

The major exception to this historical pattern is the USA, where the impetus to national health insurance (other than for the elderly and the very poor) has stalled, and where successive governments have lacked the authority to implement global expenditure controls. Precluded by political factors from the path of strong public intervention followed by other countries, American health economists and policy analysts have given much greater emphasis to approaches based on pluralism and microeconomic reform than their counterparts elsewhere. It is in the USA that the concept of managed competition originated and has been most vigorously developed.

There have been two streams in the US-managed competition literature. The first of these involved an explicit public framework, starting with Somers and Somers' (1972) proposal and culminating in the abortive Clinton plan (White 1995). The other, which emphasised the power of competitive markets, dated from Enthoven's (1978) initial formulation of a 'consumer-choice health plan', and culminated in the latest version of the Jackson Hole plan (Ellwood et al. 1992; Reinhardt 1994). Although no significant reform at the federal level has eventuated, pressure from private employers and state payers has lifted managed care coverage on the part of competing insurers and health care providers from 18 per cent of the insured

population in 1988 to an estimated 73 per cent in 1995 (EBRI 1994; Jensen et al. 1997).

The relevance of European experience of managed competition to Australian health policy is that it relates to its development *within* a national program. In this context it is seen as a devolution of decision making, through the use of financial incentives and commercial contracting, in hitherto single-payer systems relying heavily on regulatory and administrative machinery as the means of achieving efficiency and cost control. When seeking examples on which to draw for the broad financing and regulatory structure European precedents, such as the arrangements being implemented in the Netherlands, are clearly the most relevant (Netherlands 1992; Van de Ven and Rutten 1995).

However, when looking at the all-important consumer/provider nexus, the hothouse growth of managed care and managed competition in the USA is the best source of evidence on the shape of purchasing, risk management and service delivery arrangements under managed competition. The very diversity resulting from the lack of public intervention in the USA — not to mention the ready availability of research funding — has resulted in its being the source of the overwhelming bulk of information of the responses of consumers, providers and funders to the incentives incorporated in managed competition.

The Australian context

There is a widespread feeling among Australians at all levels that our health system is in progressively worsening trouble. However (and despite the litany of problems cited in this chapter), Australians have much to be pleased about, in terms of the quality of care generally provided, the accessibility of services to people at all levels of income, health outcomes and the overall cost of health services to the community. The deficiencies that give rise to dissatisfaction, such as hospital waiting lists, high costs of private insurance and arbitrary cost sharing, do not presage an early collapse of the system, but reflecting as they do the working out over an extended period of inherent contradictions in the way health services are financed and organised, they flag the need to reconsider the structural features that generate them.

The Australian health care system is far from unique, and is best thought of as our particular version of a national health insurance model common to most developed countries. Within this model, differing political and cultural contexts have resulted in health care systems with distinct national characteristics. By comparison with most of its counterparts, the distinguishing features of the Australia system are:

- overlapping Commonwealth and state powers and programs to an extent unique in federal systems and, by definition, unknown in unitary systems of government. The consequences include poor coordination of planning and service delivery; barriers to efficient substitution between alternative types and sources of care, and wide scope for cost shifting, to which considerable ingenuity and resources have been devoted (National Health Strategy 1991; Paterson 1996);
- a relatively large private sector (if the USA is excluded from the comparison), with 33 per cent of total health costs met from private sources, 32 per cent of the population privately insured and about 43 per cent of hospital inpatients privately treated. The scale of the private sector is of less significance than the inefficient financing and payment systems within it, and the lack of articulation between public and private sectors, which adds considerably to the opportunities for cost shifting and cost inflation. The cost-enhancing tendencies built into existing private sector arrangements are overlooked by most of the advocates of substituting private for public sector services as a means of containing public outlays; and
- a dynamically unstable balance between public and private sectors, due to the coexistence of free and universal access to the public hospital system and an unsubsidised private health insurance system with escalating premium costs (Industry Commission 1997, pp. 291–311). The erosion of private insurance to the point at which it constituted no more than a minor supplement to a basically public system, as in UK and Canada, would not be a disastrous outcome but would require a corresponding expansion of public sector provision, funded by higher Medicare levies and/or taxation. More importantly it would resolve few of the inherent inefficiencies in current payment arrangements.

The COAG initiatives discussed in Scotton (1999) are too tentative yet to offer a pathway to serious reform. The limited scope for remedying the basic causes of our problems through incremental change is the reason for contemplating more radical structural change. The structural inefficiencies embedded in the present arrangements mean that Australia could stand to gain more than most other countries from a well-designed system of managed competition.

On the basis of the foregoing analysis, the features to be incorporated in such a system would include:

- defined and distinct roles for Commonwealth and state authorities;
- a private sector basically operating within the national system subject to incentives designed to achieve national program objectives — and not (as now) outside it;

- efficiency-promoting incentive systems, including:
  - all government subsidies taking the form of risk-related capitation payments to purchasers or budget holders (to inhibit risk selection, or cream skimming);
  - all costs incurred in the treatment of any individual being financed out of a single budget (to prevent cost shifting); and
  - the income of all service providers consisting of payments by budget holders for services provided to their enrollees, at prices reflecting the full costs of efficient production (to promote internal efficiency).

The sweep of the structural changes involved emphasise the point that managed competition is not designed (like, for example, Medicare) primarily to affect the way in which services are paid for. Rather it is deliberately designed to bring about significant behaviour change on the part of funders, providers and consumers, by means of financial incentives that bear on their decision making.

The elimination of cost shifting between different programs and payers would focus the corporate objectives of funders and providers on cost reduction, subject only to the need to satisfy consumers and to meet whatever outcome and quality standards are required by the regulators. The capitation basis of budget holders' income would inevitably lead in the direction of provider remuneration based on populations served rather than on items of service rendered, and toward cost containment through selective contracting and managed care. What would *not* be affected by reforms involving these features would be the universality of coverage and equitable incidence of existing programs such as Medicare.

A managed competition model for Australia

Without going into a good deal of detail, it is difficult to explain the full ramifications of a complex and elastic concept such as managed competition, and in particular what it might mean for the participants in our health care system. One way to do this is to set out an explicit model, which has the additional benefit of testing whether a workable design incorporating the principle is capable of being specified. On the other hand, the presentation of a model runs the risk of appearing unduly prescriptive and of focusing attention on inessential details. It is therefore important to note that the model which follows is to be regarded as no more than illustrative. It is certainly not advanced as a blueprint for an implementable program.

The model can be outlined in terms of the roles of three participants — Commonwealth Government, state governments and private sector — in carrying out the functions of financing, budget holding and service provision.

Commonwealth Government

The Commonwealth Government would be responsible for funding and overall direction, through the amalgamation of all existing publicly funded programs into a *single program,* incorporating Medicare, pharmaceutical benefits, nursing home benefits, home and community care, mental health and diverse community health programs. The Commonwealth functions in the model would be:

- to prescribe basic coverage by budget holders and mandate outcome and quality control standards;
- to collect revenue, calculate adjusted capitation rates, and pay these to budget holders for people enrolled with them; and
- to set the rules for budget holders so as to promote competition, and to minimise cost shifting and risk selection.

This would involve Commonwealth Government withdrawal from many existing functions related to the administration of specific benefit and grant-supported programs. However, it may be necessary to remove the existing panoply of regulation progressively over what could be an extended transition period. One would need to be satisfied, for example, that a workable competitive market had been established before dismantling controls over prices and benefit levels in key industries such as pharmaceuticals and private medicine. Most of the administrative machinery functions involved in statistical and payment operations could be undertaken by the Health Insurance Commission.

State and territory governments

State and territory governments would be responsible for *public sector* service provision and for the establishment and management of *public sector* budget holders. These functions would include:

- planning, regulation and (subject to delegation) operation of public providers of health services. These providers would depend for revenue on selling their outputs to budget holders and, as far as possible, would receive no public subsidies for service provisions; and
- establishment, policy direction and prudential supervision of public (*area*) budget holders. Public agencies must be financially accountable to elected

governments, and the states would exchange their present liability as residual funders of public hospital systems for liability as guarantors of the public budget holders.

The private sector

Under the model presented in this chapter, a large proportion of private insurance and the services currently financed by it would be brought within the framework of the national program. This would enlarge the opportunities for existing health insurers to function as competitive budget holders for *all* services covered by the program and for private providers to compete for the care of patients enrolled with public budget holders.

It is proposed that private budget holders satisfying prudential and other requirements set by the Commonwealth Government would:

- receive risk-adjusted capitation payments, at the same rates as public budget holders, for individual members of their enrolled populations;
- provide all benefits and services covered by public budget holders under the national program; and
- collect premiums to cover administrative costs and additional services, of which limited access to private hospital care (eg elective services, in a restricted number of contracting hospitals) would be a mandatory component.

Budget holders

Budget holders funded on a capitation basis and being at risk for costs incurred by their enrolled populations are central to any managed competition or purchaser/provider regimen. The conditions under which public and private budget holders would operate (especially the requirement to meet the full costs of services covered, less any applicable copayments and deductibles) would subject them to much more rigorous budget constraints and efficiency incentives than now apply to private health insurers.

Public budget holders would be the funders in their designated geographic areas of all services now covered by Medicare and the other public programs folded into the basic package. In order to ensure large risk pools and to secure economies of scale, it is suggested that their target populations should be in the range of 500 000 to 1 000 000 persons. Universal coverage would be maintained by the provision that all people not contracting for coverage by a private budget holder would be automatically covered by the public budget holders in their areas of residence.

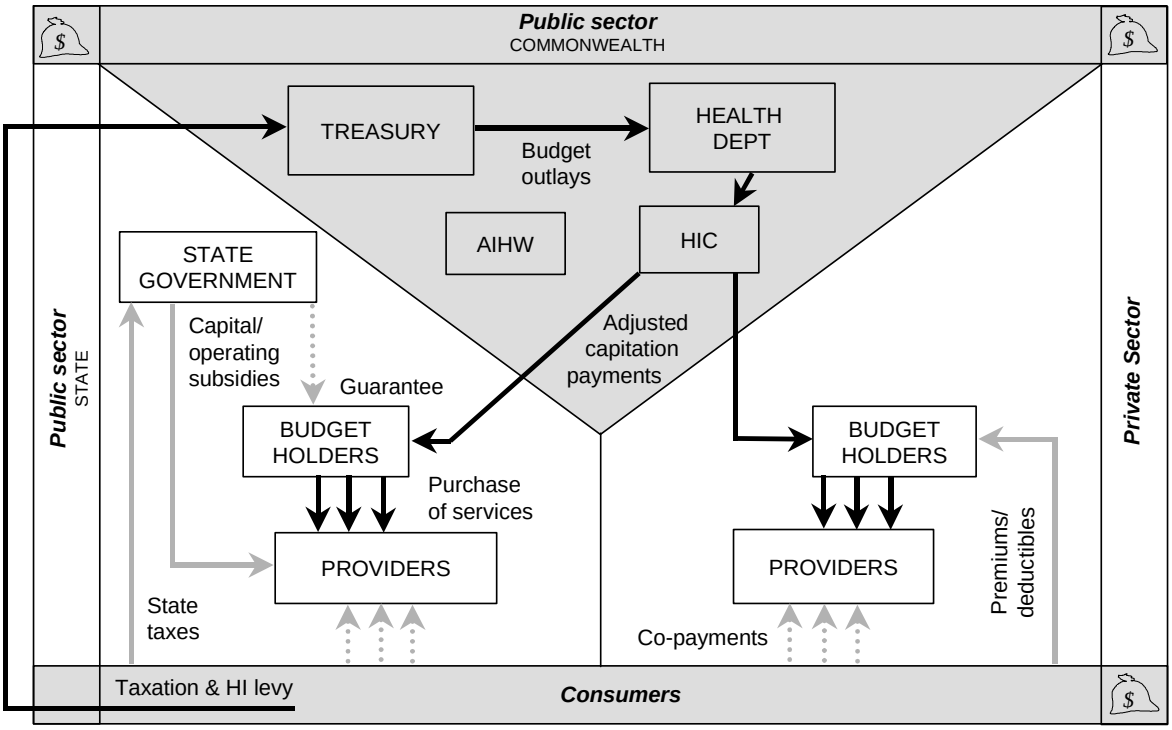
The criteria for registration of *private budget holders* would be based on financial viability and capability of delivering services to consumers. Although it is assumed that many organisations currently registered under the National Health Act would wish to become budget holding health plans, the conditions of registration would be such as to encourage new types of intermediary (eg as health maintenance and preferred provider organisations, coalitions of community health centres and other organisations catering to different styles of care) to enter the system.

Both private and public budget holders would have the widest possible freedom to contract (or not contract) with public and private providers, in order to provide access to their enrollees to the full range of services at the lowest possible cost. The only exceptions would relate to hospital services. First, because of the central importance of public hospitals in the health system, it is essential that all packages offered by all budget holders include full coverage of the costs of all treatment as a public patient in any public hospital. Second, it is proposed that coverage of in-hospital treatment as a private patient would continue to be available only under private plans, for an additional premium. Private budget holders would be required to provide a minimum table covering all services in the basic public package plus a minimum private cover.

With *sub-budget holders*, it would not be necessary or desirable for primary budget holders to contract directly with every kind of health service provider for services to all of their enrollees. On the contrary, it is envisaged that management and provision of various classes of care used by sub-populations would be devolved on a contractual basis to others. Fund holding general practices on the British model are an obvious example. Another might be managed care organisations covering broad ranges of services to the aged, disabled and chronically ill. Diffusion of risk bearing among a network of more or less specialised sub-budget holders would provide scope for diversity and initiative in matching needs and services in an efficient manner.

Figure C.1 is a simplified diagram showing the financial flows between the three sectors in this model. The major simplification is the interface between the budget holders and service providers; it does not show the cross-contracting arrangements between public and private sector budget holders and providers. It also omits entirely the network of sub-budget holders and subcontractors that would in time constitute the most substantial outcome of the reforms to the delivery system.

Figure C.1 **Managed competition model: financial flows**



Some design issues

Defining service coverage

Given the centrality of purchaser/provider contracting in market-oriented reforms of national health insurance programs, health authorities in some other countries devoted a good deal of time and effort to the definition of the services covered by their proposed programs. In the Australian model, this would translate into the services a public budget holder would have to provide to enrolled persons in return for the capitation payment. Despite the ease with which a few services of limited social and medical value could be identified (as possible exclusions), the goals of developing functional definitions of use in priority-setting proved elusive.

What does this mean in the Australian context? In the proposed model, the services involved are defined broadly as those currently covered under Medicare and other public programs. This would include institutional care in nursing homes and state psychiatric facilities, admission to which is now confined to people with major medical diagnoses. It could be argued that their inclusion in the adjusted capitation payment system would provide budget holders with incentives for substitution wherever possible of community-based services, and providers with incentives to

technical efficiency. However, Van de Ven and Schut (1994) have presented a compelling case for the exclusion of residential homes for the aged and handicapped (ie hostels) from a managed competition program to cover health care risks.

Competition between budget holders

Competition between multiple payers (budget holders) is the feature of managed competition distinguishing it from less radical reforms involving the introduction of purchaser/provider arrangements into single-payer systems. Promotion of a multiple competing payer model appears to fly in the face of the conventional wisdom that a single-payer regimen has substantial advantages in terms of eliminating adverse selection, increasing bargaining power vis-à-vis service-providers, gathering information for service planning and management purposes, and minimising administrative costs. Concerns on these accounts are the basis of vigorous opposition to managed competition by White (1995) and reservations expressed by influential European policy analysts (OECD 1995; WHO 1996).

It can be argued that the advantages of single-payer systems have been greater in the past than they are likely to be in the future, and that the proposed Australian model, in particular, incorporates features specifically designed to minimise them (Scotton 1995). It could be argued that the amalgamation of public sector program streams and the inclusion of private sector funders in a budget-constrained envelope would be in effect a move towards, rather than away from, the benefits claimed for a single-payer system.

However, the prime argument in favour of competition is that it is likely to increase the effectiveness with which budget holders act as the agents of their enrolled populations, and that the motivation for their doing so arises from consumers having a real choice between them, involving the right to vote with their feet. The incentives would apply to both public and private budget holders. Indeed, the greatest benefit might lie in the resulting incentives on the public budget holders to be responsive to the expressed needs of their populations. In the long term the proportion of the population opting for private coverage could be expected to reflect the relative levels of efficiency with which public and private budget holders met the demands of their covered populations. Public and private shares would have little or no public policy importance.

Risk adjustment of capitation payments

Incentives to compete on grounds of efficiency will be effective only if the way is barred to easier paths to profitability, involving preferential recruitment of low-risk customers. Indeed there is general agreement that the prevention of cream skimming is a key condition for a workable competitive market. One requirement — to which Enthoven (1978) accorded great emphasis — is a framework of continually monitored and revised regulation to minimise cream skimming by penalising discriminatory tactics designed to attract good risks and discourage bad risks. A second necessary element is the risk adjustment of capitation payments to budget holders. To the extent that these rates accurately reflected the expected costs incurred by people in these categories, the rationale for cream skimming would disappear. Equity and efficiency objectives would both be met, in that budget holders would receive income on a basis corresponding to the risks they incurred, while people in high-risk groups would not be required to pay the full expected costs.

The question then becomes whether it is possible in practice to categorise health risks sufficiently well to reduce the incentives to budget holders to use cream skimming tactics. The complex issues involved have been analysed by several USA and Dutch health economists, in the context of reforms involving devolution of public programs to capitated budget holders. The most significant statistical findings are that only 15–20 per cent of individual variance in annual health care costs is potentially explicable in terms of systematic demographic and health status measures, and the proportion of variance that can be explained by a set of prospective factors relating to health status is probably less than 7 per cent (Newhouse et al. 1989; Van de Ven et al. 1994).

On the basis of these figures (ie 80–85 per cent of individual variation being random, with a substantial fraction of the predictable variance being explained by objectively derivable factors), one could be optimistic about the possibility of devising a formula for risk-adjusted capitation payments which would reduce the scope for cream skimming to workable proportions. However, there is no general agreement on this point. Van de Ven and Schut (1994), believe this to be the case, but only for services other than those involving ‘catastrophic’ risks. Newhouse (1996) has concluded, for several reasons, that pure capitation adjusters would have to possess much higher explanatory power than any yet analysed to inhibit cream skimming by insurers and budget holders. He advocates a mixed-payment formula, involving a blend of risk-adjusted capitation and reimbursement of individual beneficiaries’ previous year’s costs.

My view is that, under Australian conditions, the services covered by capitation payments should include most of the 'catastrophic' risks that are proposed to be excluded from the Dutch program (Scotton 1995). However, Newhouse's arguments for a mixed-payment system are compelling. One might therefore aim over time to increase the share of the capitated component in payments to budget holders. In the context of an annual review process which could periodically change budget holders' revenues so as to reduce the prospective returns from cream skimming, a mixed-payment formula as advocated by Newhouse could reduce it to acceptably low levels.

Cost sharing by patients

It is proposed that the services covered by the managed competition model be predominantly financed, as at present, by income-related earmarked levies and general taxation. At the same time, it is legitimate to consider the extent to which the costs of the public program should be borne by the users of services — that is, by individuals as consumers rather than as taxpayers. As an equity objective, meeting 100 per cent of the health care costs of the non-poor would not rank high in the priorities of most taxpayers. To the extent that public outlays on the program were constrained, contributions by service recipients would enable a wider range, or larger volume, of services to be provided than would otherwise be the case.

At any level of out-of-pocket payments, aggregation of programs under the managed competition model would offer the opportunity to rationalise the present mix of copayments, safety-nets, exclusions and mandatory patient contributions, the effect of which is that out-of-pocket costs may largely depend on which services a patient receives. One way of rationalising out-of-pocket payments in a manner consistent with equity and efficiency would be to replace all or most of them by a uniform global deductible, from which health care card-holders (and selected others, such as infants) could be exempted. However, in some cases — notably the patient contribution to nursing home costs — it would be reasonable to retain separate service-specific copayments.

Policy on patient contributions to service costs may differ with respect to private and public sectors. With regard to public budget holders, there would no doubt be spirited debate on the appropriateness of any deductible, while in the case of private budget holders there could be an expectation, on the general grounds of containing moral hazard, that all tables would incorporate deductibles and that higher-benefit would generally carry larger deductibles than lower-benefit tables.

Implications of the model

Consumer interests

Meeting the felt needs of consumers, as well as advancing their health status, are twin goals of any heath care system. In the real world, consumer sovereignty in health care choice is limited by relative ignorance vis-à-vis providers and the bewildering complexity of the health care system. In cases of serious illness the critical issue is not one of control over treatment but of engaging the most effective manager of the process. To the extent that managed competition is conducive both to managed care of the whole patient/patient episode, and that budget holders are constrained to incorporate quality assessment in their contracting and payment arrangements, they and their sub-contractors will have incentives to act as enlightened agents for consumers.

However effective these arrangements may turn out to be in terms of health outcomes, they would not satisfy the need for consumer choice as an end in itself. It is therefore necessary to ask what the critical aspects of consumer choice are. The managed competition model has several answers to this, in the terms of *real* choices between packages offering various options in *styles of care,* and in the level of choice in service provision.

Managed care will be an inevitable tool of cost control in many packages offered by budget holders. At the same time it is important that consumers have the option of avoiding the consequent limitations on freedom of choice of provider and services used, *subject to the proviso that the additional costs of doing so would be met by the user*. Under the model, private budget holders would be able to offer packages giving unconstrained choice of provider, but with the proviso that they be priced in a way that involves no cross-subsidisation from more basic tables. As it might be expected that these higher tables would be subject to adverse selection, the additional premiums required might be very high indeed.

Equity for high-risk consumers

In unregulated markets for private health services, it is likely that the composition of output would be oriented toward demands expressed by the well-to-do at the expense of people with more pressing health needs and less income. This orientation is entirely reversed in the managed competition model presented here, in which the spending power — in the form of risk-rated capitation revenue — is weighted in favour of the most ill. There would be no more ‘healthy singles’ tables, for which low-risk capitation payments would yield slim pickings. On the contrary,

if the risk-adjustment formulae are accurate, budget holders' offerings would be designed to attract the high users, and the result might well be the development of specialist (sub-budget holder) organisations geared to meet the needs of various high-risk/high-need sub-populations.

Regional (non-metropolitan) populations

There is a chasm between the levels of service available to health care consumers in the major cities and other areas of the country. To some extent this is the inevitable product of distance, the dispersal of non-metropolitan populations, and the economies of scale relating to the production of many secondary — and most tertiary-level specialist services. However, it is also partly the product of payment methods, which make it possible for doctors and other health service providers to live and work in their preferred locations and make good livings by providing higher volumes of services per head to their relatively small catchment populations.

By comparison, a risk-adjusted capitation formula would automatically build in equity between populations living in different areas. (Depending on costs, there might even be a loading in favour of regional/remote populations in the risk-adjusted capitation formula.) The redistribution of revenue in accordance with the needs of populations would raise the incomes of regional providers serving larger numbers of patients and cap the amounts available to metropolitan providers. There would always be a flow of rural patients referred to higher-level services in metropolitan centres, but the capitation formula might stimulate greater innovation in meeting the needs of regional populations.

Implications for delivery systems

Managed competition is designed to have a profound impact on the structure and functioning of the health care delivery system. It can be considered as a serious program of microeconomic reform, analogous to others which have been implemented in formerly protected areas of economic activity during the past decade. Typically, the changes in regulatory environment and incentives would result in a continuing process of dynamic change. While the pace of such change is difficult to predict, it is possible to project some of the direction in which managed competition would steer the Australian health system by reference to the rapid changes that have occurred in many parts of the USA over the past five years.

It could be expected that preferred provider and exclusive provider arrangements would increasingly become the norm for contracts between budget holders, sub-budget holding intermediaries and health care providers. This substitution of

contractual freedom for anticompetitive regulation would bring about a new balance of market power between the purchasers and providers of services. The 1995 amendments to private health insurance constituted some tentative steps in this direction. The much wider scope of contracting and the stronger incentives to cost reduction under managed competition would greatly accelerate this process. A concomitant outcome would be the widespread implementation of managed care as a key cost-containment strategy, especially in 'basic' packages. Managed care comes in many forms, but basically involves processes by which the choices available to some patients and their treating doctors are constrained by care managers, who intervene in the planning and coordination of service use. It should be an objective of the Australian Medical Association to ensure that the medical profession is properly represented in the formulation and administration of protocols governing these processes.

Another logical consequence would be a transition from fee-for-service to population-based remuneration as the basis of budget holder contracting. In the Australian context, this would most likely develop through the sub-budget holding network, as intermediaries came forward to contract for ranges of services to defined sub-populations, who might be the residents of particular localities, members of particular age groups or sufferers from defined chronic conditions. Such intermediaries would inevitably seek to contract with their providers so as to devolve the sharing of risks further. This process has progressed so rapidly in California that capitation has largely replaced fee-for-service as the basis of physician remuneration (Trauner and Chestnutt 1996).

In the USA, these trends have been accompanied by substantial restructuring of service providers, both defensively (to maintain market share in the face of rising surplus capacity) and offensively (to gain the benefits of economies of scale in risk-bearing). The result has been the development of integrated provider organisations, based around hospitals and/or multispecialty groups, contracting directly with ultimate funders (employers) on a capitation basis and cutting out the intermediaries (budget holders) altogether. It is hard to say what the implications might be in the Australian context, but there is no doubt that our large metropolitan conurbations would provide scope for considerable vertical (or 'virtual') integration along the lines depicted by Robinson and Casalino (1996).

Given the key role of general practice in the Australian health system, the consequences for it carry considerable weight in any assessment of the managed competition model. In fact, the implications are bullish for primary care in general and general practice in particular. On cost grounds budget holders can be expected to favour primary care, for its relatively low cost both as a care modality and as a gateway into the health system. It would be logical for budget holders to place

progressively greater emphasis on the gatekeeping function, and to restructure their contracting arrangements on this basis, perhaps along the lines of the GP fund holders in the reformed British National Health Service.

This would involve patients being induced to enrol with practices that would receive budgets — at least partly determined on a capitation basis — to cover services such as pharmaceutical drugs, diagnostic tests and ancillary professional care, in addition to the services personally rendered by them. The resulting incentives would encourage the practitioners to substitute lower-cost for higher-cost inputs to care, which might induce more discriminating patterns of prescription and referral, and would promote patterns of practice more consistent with evidence-based medicine and continuing care than the current fee-for-service arrangements. Another likely effect would be an increase in practice size, with greater opportunity for peer review and linkage with other elements of the health system.

Has managed competition a future in Australia?

This is a complex question, which needs to be answered in several steps. Does the Australian health system have problems requiring remedial action? If so, are they of a kind requiring systemic, as distinct from incremental, reform? If the former, does managed competition offer the best solution? Finally, even if it does so *in principle,* are the barriers to its implementation surmountable?

Only an outline sketch of the answers can be offered here. With regard to the first question there is a general consensus that, despite a high level of community and bipartisan political attachment to its basic structure, the Australian health system is becoming stressed to a degree that puts at risk its ability to meet access and quality objectives. On the second, while a description of the system as being 'in crisis' is not supported by evidence, there are widely held views that the problems are not susceptible to remedy by incremental and piecemeal reforms of the kind seen over the past decade. The Industry Commission report on private health insurance (1997, chapter 9) reviewed the many submissions relating to system-wide policy options and went beyond its terms of reference in recommending (p. lvi) a broad public inquiry into the health system — which the Commonwealth Government was quick to reject.

It may well be that such an inquiry would not be the best way to work towards an agenda for systemic reform. But the case for putting managed competition on such an agenda is probably stronger in Australia than in almost any other country one might nominate. On the benefits side, the programmatic maze and the scope for cost shifting between Commonwealth, state and private sectors described by Paterson

(1996) and epitomised as the ‘health jigsaw’ means that we have more to gain from major reform that systematically tackles these problems than countries with more integrated program and governmental structures. On the costs side, the advanced development on a nationwide basis of infrastructure components such as information systems (Medicare, pharmaceutical/nursing home benefits, hospital morbidity), DRG categories and case payment experience, and private health insurance organisations means that the development and implementation effort (and hence costs) could be expected to be lower than elsewhere.

The case for managed competition is that it deals (at least potentially) with specific structural features that are widely held to underlie the observed problems of our health care system, and that the institutional barriers to its implementation are lower than elsewhere. However, neither it nor any other structure will solve all problems, although some will do better than others. What *can* be claimed for a managed competition regimen along the lines of the model presented here is that it provides a framework within which many problems that now seem intractable could be more successfully tackled.

What are the chances that the systemic reform will be seriously considered, or that managed competition will be placed on the agenda? This is a political rather than an economic issue. However, even an economist can observe that the barriers are substantial. First, health care reform is characterised by a great diversity of views on the direction it should take. The disparate positions held by stakeholders are strongly driven by ideology and self-interest. Second, a reform as radical as managed competition involves a big step into the (largely) unknown. The normal path of incremental change is not applicable, and the potential for electoral damage from a sceptical and easily sensitised voting public would be well understood by politicians. Somewhere along the way, a brave decision (in the ‘Yes Minister’ sense) would be required.

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D Managed competition: the policy context*

Richard Scotton

Among OECD countries, there has been a growing advocacy of health system reforms involving a greater use of market and quasi-market relationships and incentives, in order to introduce a degree of self-regulating capacity within health care systems. This advocacy (and the corresponding reforms) are framed in the context of universal national programs offering a guaranteed package of care, in general financed publicly through taxation or earmarked social security contributions. The central question considered in this paper is whether, and to what extent, a model of this kind would have advantages in the Australian context. The managed competition model offers a framework within which the objective of increased efficiency could be pursued without sacrificing the goal of universal access and without the impairment of health outcomes and social cohesion which the abandonment of this access would involve. It would do this by removing the present multitude of structural impediments to rational decision making and allocating to governments and markets the functions which they perform best.

Introduction

It is now almost a quarter of a century since the introduction of Medibank marked the start of a new era in the financing of Australian health services. Since then, or rather since its reintroduction under the name of Medicare in 1984, a structure designed to meet the needs of the mid-1960s has remained remarkably stable.

Much has changed in the Australian health system since then: the health status of the population, in medical knowledge and its applications, and in the composition and organisation of health service providers. Against this background it is not

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surprising that signs of stress have emerged and that the issue of structural change to the financing system has appeared-if only peripherally-on the policy agenda.

It is in this context that I have advanced the concept of managed competition over the last few years. However, it is not my present purpose to recapitulate in any detail the model which I have put forward.[1] Rather, it is to set it, the present arrangements — and by inference other proposals which have been advanced — in the context of broad policy objectives for the Australian health care system as a whole.

The objectives of health policy

There are various causes of differences in prescriptions for health system 'reform': they range from different perceptions of how the existing system works (or doesn't) to inconsistent ideological starting points and outright conflicts of material interest. At the same time, there is a greater measure of agreement about the public policy goals and objectives than there is about their specific policy implications.

It has become necessary these days to state one's position in the economic spectrum. I am of the extra-welfarist persuasion; that is to say, I believe health services have special characteristics which distinguish them for the purposes of public policy analysis from the general run of goods and services.[2] In particular, I hold the view that the goals of health service systems should include not only the maximisation of utility in the strict microeconomic sense, but also population health and equitable access to services, based on medical need. The existence of multiple goals is one of the reasons for the complexity of health policy issues with regard to both problems and solutions. This is the more so, in that although the goals are conceptually different, they are in practice closely interconnected. The equity and health goals are linked by the fact that, from a utilitarian perspective, population health status will be raised more by directing preventive and personal health services to the disadvantaged than to those in a position to provide for themselves. The link is strengthened by the strong inverse relationship between socio-economic status and levels of health.

1 See Scotton (1999) for the most recent description of the model.

2 The policy implications of the special characteristics of health care has a long tradition in economics, dating from Arrow's classic (1963) article. For those interested in this debate, a recent exchange between economists of the welfarist and extra-welfarist persuasions appears in a series entitled 'Assessing Markets: Model and Practice' in *Journal of Health Politics, Policy and Law*, vol. 22, no. 2 (April 1997) pp. 383–508.

Let us look a little more closely at the three goals and their policy implications with regard to government intervention in the form of regulation and funding.

Efficiency means the optimal allocation of resources, to and within the health care sector, to maximise utilities based on individual preferences. It is maximised by the operation of free markets, with few exceptions, the grounds for government intervention being limited to the existence of externalities, anti-competitive structures and practices and information deficiencies.

The acceptance of better **health** as an independent goal of policy is a more powerful justification for public intervention, in the form of discrimination in favour of services and delivery modes which have higher returns in terms of health improvement per unit of resources used. The advance of medical knowledge and techniques has given a great impetus to public interventions in pursuit of this goal, well beyond the range of externalities in the strict economic sense.

The **equity** objective relates to the special status of health care as a component of a decent standard of living in a humane society with a developed economy. It can be expressed at various levels, of which perhaps the most conservative of which is the proposition that no person's access to medically-effective health services should be limited by inability to pay or should result in financial hardship. The exclusion of health services — to a greater or lesser extent — from the reward system which governs access to most other goods and services is a feature of all developed countries and many others at a lesser level of development.

In examining the implications of the above, I start with the central proposition that the **equity objective** is, and always has been, the primary rationale for government funding of the health care system. Over time, as the effectiveness and the cost of personal health services have increased enormously, the demand for and supply of public funding has steadily risen, to the point that about 68 per cent of all current health expenditures are met from government sources — a figure which ranks Australia toward the lower end of the OECD range. In the light of the inverse relationship between health status and socioeconomic status, rising real costs of state-of-the-art health care, growing inequality of incomes and the increasing proportion of the population in the upper age groups, there is no reason to believe that the enormous need for cross-subsidisation will become any less. Nor is it possible that the requisite degree of cross-subsidisation would be forthcoming from any conceivable set of private arrangements based on the voluntary choices of individuals.

The fact is either that government has to remain in the cross-subsidisation business in a very big way, or the access of the less healthy and the poor to health services will be seriously curtailed. The risk is not confined to a small and easily identifiable

group of very poor and/or chronically ill. The concept of medical indigence has largely fallen into disuse since the almost universal prevalence of national health programs, but the level of income at which the occurrence of major health problems would cause serious financial difficulties is well above the poverty line, and those at risk form a large (and perhaps growing) proportion of the population. The case for universal coverage under a national program in which the cross-subsidisation is undertaken by government agencies funded through the budget is as compelling as it was 25 years ago.

In fact, the increasing inequality of incomes and wealth, and reduction in employment security which have resulted from globalisation and microeconomic reform have, if anything, increased both the need for universal health coverage and the voting public's valuation of the security which it offers. Quite apart from the valuation placed by individuals on security from the costs, universal coverage has an immense social value, at a stage in our history when many other institutions which have performed this function in the past are felt to have gone or to be under threat. It may be noted that none of the other industrialised countries exploring health system reform have contemplated reduction in the universal or near-universal coverage of their national programs, which they regard as an essential expression of the principle of 'solidarity'. Social cohesion may have little bearing on short-term GDP growth but its erosion could generate very large long-term costs. In this context there is no doubt that Medicare and the other universal components of our health system are increasingly important elements in our social cement. Moreover, unlike many of the protectionist arrangements that have been dismantled, they do not inherently impose additional costs on the economy.

This is where the **efficiency** objectives come into the picture. The consequence of government intervention on the demand side — originally in the form of direct service provision, selective cash benefits and subsidies and other encouragement to private health insurance, and later through the establishment of universal publicly-funded benefit programs — was a massive increase in the effective demand for health services, which necessarily undermined whatever capacity the health care market might have had for equilibrium in the absence of these interventions. The impetus for rapid expenditure growth did not come solely from the demand side, but was also powered by rapid advances in new medical knowledge and technology, which provided treatments which were far more effective in clinical terms than their predecessors and — especially in the case of conditions for which no curative treatments had existed — on balance more expensive also.

In this respect, Australia's experience over the past half century has paralleled that of other developed countries. For a while, up to the early 1970s, rates of economic growth in OECD countries were such that rises in health care costs absorbed a quite

tolerable portion of the incremental GDP. However, as growth rates declined, the opportunity costs of increased use of health services rose sharply, and governments in most countries — with the notable exception of the USA — moved to contain them directly through budget and capacity ceilings and price controls, and subsequently through attempts to limit access to services in a selective manner, hopefully related to the effectiveness of particular services in improving health outcomes.

These measures were substantially successful, in Australia and most other countries: the graphs of the percentage of GDP devoted to health care show a pronounced discontinuity in the 1975–85 period. It was the very existence of a universal, publicly-run program which provided the means by which financial constraints could be imposed; the notable exception to the trend was the USA, where the absence of a national program meant that there was no machinery through which budget ceilings could be imposed. However, the inexorable increase in the cost of state-of-the-art health care has continued through the years since, with continuing pressures being placed on health providers through growing stringency in current and capital budgets, with the emergence of waiting lists and other symptoms of explicit rationing of services. One senses a growing sense of malaise about health care systems in many countries, although the differences in their institutional arrangements means that the stresses are manifested in various ways.

In fact, global budget ceilings and capacity limitations are blunt weapons, consistent only in a loose sense with allocative efficiency. While they are a necessary tool for constraining the resources allocated to health care, hopefully to a level approximating the point at which marginal social benefits are equal to marginal social costs, they are relatively ineffective in improving the efficiency with which health care resources are actually used. In fact, over time, the increasing complexity of medical practice and health care organisation have diminished the capacity of government agencies to make efficient allocation decisions.

As a result, among OECD countries, there has been a growing advocacy — to some extent carrying over into implementation — of reforms involving a greater use of market and quasi-market relationships and incentives, in order to introduce a degree of self-regulating capacity within health care systems (Hurst 1991; Enthoven 1993; Van de Ven et al. 1994; Chernichovsky 1995; Van de Ven 1996). This advocacy, and the corresponding reforms, are all framed in the context of universal national programs offering a guaranteed package of care, in general financed publicly through taxation or earmarked social security contributions. In his description of what he terms the ‘emerging paradigm’, Chernichovsky (1995, p.347) distinguishes three conceptually different key system functions:

i. financing of care, including responsibility for the legislative and regulatory framework (that is, the 'rules of the game');

ii. organisation and management of care consumption (OMCC), defined as that part of consumption (ie the socially guaranteed package) funded from the public program, and

iii. provision of care.

In Chernichkovsky's terms, the 'emerging paradigm' involves the separation of the government from the functions of OMCC and provision. In addition, he envisages that the second and third functions would generally be undertaken by different organisations, except to the extent that vertically integrated HMO-type organisations were viable.

The central question considered in this paper is whether and to what extent a model of this kind would have advantages in the Australian context.

The state of Medicare

After a period in which it occupied a central position in our national political debate and election platforms, the broad issues of health care financing and organisation are now in a sort of twilight zone. The turning point was the rejection in 1993 by the electorate of the radical proposals to dismantle Medicare which were incorporated in the *Fightback!* program. Since then, the coalition parties have promised to maintain Medicare, effectively neutralising it as an election issue, while the emphasis on controlling budget outlays at the federal and state levels has fostered a creeping privatisation largely lacking serious rationale or observable benefits. The Commonwealth Government carefully circumscribed the terms of reference of the Industry Commission's inquiry into private health insurance, and its subsequent extension by way of the income tax rebates of huge subsidies to private health insurers bore no resemblance to the Commission's recommendations and was implemented with a minimum of debate. The current atmosphere is one in which serious discussion of big issues is not welcomed.

In the ideas market, Medicare has been regularly attacked by market economists and by spokespersons for people with material interests in the private health system. Many of their attacks are designed to promote the proposition that Medicare is in a state of crisis and can no longer be 'afforded' — a proposition at odds with the Australian record of maintaining total health expenditures at about the average level of non-US OECD countries. The policy implications of this view are that efficiency gains in the health sector be achieved by abolishing universal entitlements and

replacing them by means-tested subsidies for the poor and medical savings accounts for the rest of the population. Such programs would be rewarding to those in better health and economic circumstances and to many (especially the larger and more entrepreneurial) providers and insurers, but singularly disadvantageous to people in neither of these categories.[3]

At the other end of the policy spectrum we find a tenacious attachment to the detail of the present Medicare arrangements, the main rationale for which is the (not totally unjustified) fear that in the present political climate any changes are more likely than not to be for the worse with respect to the universality of coverage and income-related financing which are its key features. However much this may be justified as a short-term tactic, it has little to contribute to long-term strategy.

These polar positions leave a large vacant policy domain in between. In the first place, Medicare is not in 'crisis', in the sense that any real meaning can be attached to that emotive term. The basic structure of Medicare is highly resilient and in terms of the ultimate outcome measure 'how does the average sick person get on?' the Australian health system probably does as well, in both absolute and value for money terms, as that of any other developed country. On the other hand, there are signs that it is under growing stress, evidenced by more difficult access to publicly-provided services and erosion of private health insurance coverage. These are the manifestations of longer run problems, for which no short term or simple fixes are available.

Mounting concern about health system performance is not peculiar to Australia. Our situation is no more than the local manifestation of the effects of secular growth in the real cost of state-of-the-art health care resulting from continuing advances in medical science and techniques. This experience is shared by all developed countries, which alone have the luxury of committing themselves to the objective of providing state-of-the-art care to their entire populations. Given the constraints which apply to economic growth in developed economies, increments of real health care expenditure come at increasing opportunity cost, with consequent pressure to find economies, that is, to increase the efficiency with which health care resources are used. In other words, **efficiency** must now be accorded a higher priority in health system than ever before; the overriding goal may now be re-expressed as

[3] I exempt from this generalisation a serious proposal advanced by in the recent discussion paper on 'transferable Medicare entitlements' issued by the Australian Private Hospitals Association. (APHA,1998). It incorporates cost calculations which are indicative for the managed competition model, and which indicate that the budgetary cost of the model would be about the same as present government outlays, when the cost of the private hospital *subsidy is* taken into account. However, the implications of cashing out Medicare entitlements are significantly different from entitlements to coverage by organisations operating within a managed competition framework.

universal access to medically effective health care *at least cost*. It is pertinent to note that this qualification relates to *total* health costs, and is independent of the private and public sector shares. Hence any solution must also address efficiency in both sectors.

The intrinsic difficulties in finding efficiencies in the health system are compounded in Australia:

(a) by the almost unique division of responsibility for health service funding between federal and state governments;

(b) by the multiplicity of separate programs; of which Medicare is only one, through which public sector health services are funded; and

(c) the lack of articulation and of comparability of incentive systems between public and private sector funders and providers.

The consequences are:

- distortion of consumer choices and provider allocation decision making;
- impediments to efficient substitution between higher- and lower-cost modalities of care funded under different programs; and
- the generation of opportunities for cost shifting between different payers, which are availed of on a wide scale, at considerable direct and indirect cost.

The implications of this diagnosis, if accepted, are that an overall strategy for the health system would include not only general market-oriented reforms designed to transmit better incentives to all participants in the system (funders, providers and, as far as possible, consumers), but also significant restructuring of existing program and funding arrangements, in order to encourage productive substitution and minimise cost shifting. This would involve substantial dismantling of the existing regulatory systems, rationalisation of the roles of Commonwealth and state governments and, to the extent consistent with other objectives, promotion of genuine competition within and between public and private sector participants.

In considering what this means for Medicare, it is important to distinguish the *essential* elements of Medicare and those which are products of the circumstances of the time at which the program was implemented. Like its successor, the original Medibank was designed and implemented with **equity** as its predominant rationale. The two core features of Medicare, by which the goal of access to health care for all members of our society is secured, are universal coverage and income-related financing. These are quintessentially public functions, which are deliverable only by governments through the exercise of legislative and taxation powers.

However, there are other aspects of Medicare — and of the health system as a whole — to which the same considerations do not apply. In principle at least, there are other areas (at the industry/firm level) in which market tools could contribute to economic efficiency (both technical and allocative) in much the same way as for the production and distribution of other goods and services.

In the past, the use of market tools in the health field has been impeded by several factors:

- inherited traditions of extending public assistance to poor and disadvantaged people through the direct provision of services;
- the need to control or offset deeply-rooted anti-competitive norms and institutions in the health field; and
- lack of workable output/outcome measures and information systems which could support efficient price signals.

Governments have traditionally intervened extensively, by anti-competitive regulation and by the establishment of (sometimes monopoly) public providers, to secure the public objectives set out above, and to protect consumers and payers (including themselves) from exploitation of monopoly power. However, in recent decades the situation has changed radically, with respect to the relative capacity of government (through regulation, public provision and centralised allocation decisions) and more decentralised, market-oriented approaches to improve system efficiency. The driving factors have been:

(a) the increasing complexity of medical knowledge and technology, with consequent diversification of skills, professional structures and organisational arrangements — which make the effectiveness of centralised allocation of resources ('control of the commanding heights') increasingly ineffective as a management strategy. Market tools provide an alternative means of achieving efficiency through the decentralisation of allocation decisions.

(b) technical progress which has greatly improved the prospects of establishing workable markets in health services:

    (i) the development of casemix tools — especially in the high expenditure area of acute hospital care — as measures of output to which prices can be applied,

    (ii) advances in information technology which have not only made possible, but also offer prospects of huge decreases in unit costs of, processing the vast amounts of information necessary for the

establishment of complex data bases required for efficient payment and risk-mediation systems.

(c) changing public attitudes to the exercise of government power over many areas of economic activity constitute an environment in which the balance of relative effectiveness between public regulation and market tools has shifted decisively in the direction of the latter.

This is the context in which the managed competition program is proposed, that is, as a means of continuing to achieve the social and equity objectives which Medibank/Medicare was designed — in the circumstance of the present time, that is, 30 years later — while delivering improved efficiency at the microeconomic level. Whether that is interpreted as reform or abandonment of Medicare is basically a matter of semantics. Candidly, I can envisage no other reform which has any promise of achieving these objectives, and I would not be advocating radical amendment of the system if there were a feasible incremental alternative.

What might managed competition achieve?

As previously indicated, it is not the function of this paper to describe the managed competition model, other than in the broadest terms. In fact, it should be stressed that the model set out in Scotton (1995, 1999) is put forward as an example of a *possible* plan, designed to examine the feasibility of the concept and to promote discussion of health system reform issues, rather than as a developed program. In addition, some of its specifics are influenced by the need to effect a workable transition from the present arrangements, and could be amended as those needs disappear.

The extensive structural changes in my model are largely configured around the establishment of agencies which I have termed ‘budget holders’. These organisations would take over from governments the OMCC function described by Chernichovsky (1995) and would occupy the central place in the health system. They would be the means whereby many of the interactions now characterised by regulation, public monopoly and hierarchy — the consequences of which have been graphically described by Paterson (1996) — would be replaced by informed contractual relationships in a broadly competitive market.

Within the framework of universal entitlement and global public funding, the model is designed to achieve a number of quite specific and identifiable goals notably the elimination of cost shifting between major participants and the inhibition of other manifestations of moral hazard, and the promotion of efficient resource allocation decisions at all levels of the system by the diffusion of rational financial incentives.

Cost shifting would be eliminated by the aggregation of existing programs into a single program, involving a single budget holder having total financial responsibility for the all the costs incurred by all persons enrolled with it. Moral hazard in the form of cream skimming would be minimised by the funding of budget holders through risk-adjusted capitation payments (Scotton 1995, pp. 94–5). The combined effect of these features would be to give an overwhelming focus to the goal of efficiency, which would be reflected in the contractual conditions offered for service provision. In this respect, the bargaining strength of purchasers of services would be enhanced, since budget holders would be in a much stronger position than individual consumers in need of care.

At the level of the secondary (consumer) market in services, budget holders would be constrained from 'skimping' or other forms of exploitation by the need to compete for market shares. As will be explained in the following section, consumers would have — if not the theoretical sovereignty promised under pure competition — an highly effective choice between alternative packages which they would generally be better able to evaluate than the services of different health care providers.

While the model would significantly reduce the role of governments, the functions which they would need to retain are central to the managed competition model. The first of these is the basic funding of the national program. The Commonwealth Government would retain responsibility for cross-subsidisation through the raising of the great bulk of program revenue through the budget and disbursing it in the form of risk-adjusted capitation payments to the budget holders. In addition, it would retain functions related to ensuring the broad outcomes of the program: setting overall policy parameters; maintaining the (competitive) rules of the game; managing the risk-rating process; and ensuring the access of all eligible persons, with special emphasis on the disadvantaged, to the benefits of the program.

Continuity with the present arrangements would also require a public sector presence in the budget holding function, to ensure that people who did not contract with a private budget holder would be automatically enrolled with a public budget holder, that is, protected in a manner analogous to the present Medicare. In the model I have put forward, this would basically be undertaken by regional public budget holders, whose supervision, within the context of Commonwealth law, would appropriately be the responsibility of the relevant state governments. The relative shares of public and private coverage might change over time, but would be an issue of relatively small public policy interest — as distinct from its present undue prominence in public debate. The suggested model also involves state governments retaining responsibility for the operation of publicly-provided health services. Control of the scale and location of publicly provided health services

would remain an important policy parameter, although the dependence of agencies providing personal health services on payments from budget holders would limit state governments' discretion in the exercise of this function.

Consumer interests

While reforms directed to increased efficiency are most often thought of in terms of their impact on participants involved on the supply side — on providers and funders of services — it needs to be remembered that the end of economic activity is the welfare of consumers. In fact, the managed competition model has the potential to benefit consumers in a number of ways, in addition to the obvious corollary of increased efficiency, in the form of an increase in the volume of health and/or other services which can be purchased out of their incomes.

However, this does not mean that patients would have an increased say in their medical treatment. This issue was addressed by Paterson (1996), when he commented on the abysmal lack of access of medical consumers to information, and about deficiencies in communication between providers of care in respect of the same patient. The remedy he advocated was the empowerment of consumers through access to their medical records, on the grounds that consumers, thus armed, would be in a position to bargain effectively with providers, without the need for intermediaries in most cases. The case for unification of medical records and for better access to them by patients is worthy of support on many grounds, but for many, empowerment would be more effectively achieved by OMCC agencies acting on their own behalf than by an enhanced bargaining capacity as an individual. In any case, the right to information would enhance the capacity of consumers, individually and collectively, to bargain with budget holders.

In fact, Paterson goes some way toward this view, in that he argues in favour of the application of 'coordinated care' (a euphemism for managed care?) in the case of large multi-program users of the system. In another context he expresses the view that 'innovation on the aggregators' side offers extraordinary potential for dynamic evolution of a new health industry structure (p. 39). In my view, this is precisely what managed competition is about. It is clear that many features of the present system are inimical to the development of 'aggregators' able to offer packages of health services in a competitive market. Their establishment and subsequent evolution can only occur in a different program structure, designed so as to be conducive to their development.

Chernichovsky's (1995) case for the OMCC function to be delegated to a number of competitive intermediaries rests substantially on the empowerment of consumers through the public entitlements being packaged in a variety of forms tailored to their

needs, rather than set out in legislation inevitably involving arbitrary decisions about which particular types of services are to be included in public entitlements. Protracted debates in the Netherlands, New Zealand and Oregon have highlighted the difficulties involved in central decision making of this kind, and the limited results achieved from prolonged search. The fact is that almost every possible medical intervention may be justified in some set of circumstances. The rationale for these — or for non-medical substitutes for services defined as 'medical' — is often capable of being set down in professionally certified protocols, but in many cases case-by-case decisions are needed. Good decision making in these circumstances cannot be legislated for, nor is it appropriate for centrally-based officials to have the powers required for the exercise of wide discretion.

In my suggested managed competition model this advantage does not result simply from its greater market-driven responsiveness to the diverse needs of individuals. It is powerfully reinforced by the risk-rated capitation formula, calculated from the differential expected costs of enrolled individuals, the effect of which would be to give greater weight to the care needs of people in poorer states of health and lower income than would be the outcome of an unregulated market. In the managed competition model, spending power — in the form of risk-rated capitation revenue — is weighted in accordance with health care needs. There would be no more 'healthy singles' tables, for which low-risk capitation payments would yield slim pickings. On the contrary, if the risk adjustment formulae are accurate, budget holders' offerings would be designed to attract high users, and the result may well be the development of specialist (sub-budget holder) organisations geared to meet the needs of various high-risk/high-need sub-populations.

On the subject of consumer welfare, it is necessary to address the issue of managed care, of which a caricature of the US system has been advanced in order to resist any suggestion that individual doctors might be subject to some external constraint on their use of publicly funded resources as inputs to treatment. From the opposite point of view managed care means no more than the planned use of resources available from constrained budgets to achieve the best outcomes, and is likely to be applied — on grounds of cost-effectiveness — to cases of serious and long-term illness involving large and preferably avoidable expenditure. It is highly desirable that managed care regimes should be undertaken in accordance with protocols and guidelines incorporating expert medical opinion, based on the best evidence, and be under the control of medically qualified people, with the aim of maximising clinical effectiveness, rather than minimising costs. In some cases, such as the management of many long-term chronic conditions, managed care regimes involving regular supervision and intervention at the community level, may result in improved health outcomes and cost reduction through the avoidance of acute episodes requiring costly inpatient treatment.

The fact is that freedom of choice costs money, without necessarily delivering better health outcomes. In fact, to the extent that multiple choice combined with fee-for-service remuneration facilitates polypharmacy, failure to coordinate medical records, excessive testing and over-treatment, it may be negatively correlated with health outcomes. There is no need to apologise for the proposition that competitive pressures applying to budget holders operating in the framework of managed competition would almost certainly result in limitation of access to uncontracted providers and the selective application of managed care in most basic plans.

At the same time, the flexibility of the model allows for a market-based solution. It would be consistent with my managed competition model to allow consumers who place a high value on freedom of choice to contract out of such restrictions. Under the model, private budget holders would be able to offer packages giving wider choice of provider — ie to a greater or lesser extent offering exemption from the application of managed care — but with the proviso that they be priced so as to preclude any cross-subsidisation from more basic tables. Since it would be expected that these higher tables would be subject to adverse selection, the additional premiums required might be very high indeed.

Providers

Unlike a financing system such as Medicare, the managed competition model is designed to effect profound changes to the supply side of the health system. The incentives to efficiency — and to evolutionary structural change conducive to further efficiency — would be primarily effected through the operation of the primary remuneration formula of risk-adjusted capitation, from government to budget holders. The pressure to spread risk by sharing it with providers would be very strong; if American experience is any guide, the adjustment process (at least in large urban locations, in which the great majority of the population lives) could be quite rapid. Aspects of the expected results include larger scale, more integrated organisation of providers, in which:

- fee-for-service would decline as a component of remuneration. The form of remuneration would be determined by contracts between budget holders and providers/sub-budget holders, and (unlike the present arrangements) could vary according to individual circumstances. Given the incentives to diffuse risk, it is probable that mixed systems of remuneration would emerge, incorporating fee-for-service, capitation and other elements, such as revenue or profit-sharing. There need be no uniformity; different doctors could be paid in different ways.
- managed care would apply to a growing proportion of patients. Managed care has been much maligned. However, on a broad view, it could be defined simply as a process designed to secure the rational use of resources — as, for example,

by the use of treatment protocols based on the best evidence to guide medical decision making, in order to achieve the best available health outcomes.

Managed care has the potential for substantial savings in some cases, especially those involving patients with serious and/or long-term illnesses involving potentially high-cost treatments. On the other hand, it also involves significant administrative costs. Its application should therefore be selective, in accordance with a mixture of clinical and economic criteria. However, even with the benefit of protocols to guide allocation, the determination by any sort of bureaucratic process of who would or would not fall into categories requiring managed care would be greatly complicated by changes in health status; many individuals cannot be classified into high-cost/low-cost categories on a long or medium term basis. It can be expected that the most efficient application of managed care would be by budget holders using flexible criteria, motivated by a direct pecuniary interest in making it work.

It is here that the role of the medical profession is crucial; the political stance of the medical profession should be to ensure that it is in charge of this process — of defining the protocols and making clinical decisions for which its members are uniquely qualified — rather than defending the right of individual doctors to be unaccountable for their use of resources.

- primary care resources would be redistributed more evenly between metropolitan and country populations. The operation of the adjusted capitation formula would tend to bring this about automatically in the case of primary care, since the per-provider revenue available would be a function of the population–provider ratio, rather than the number of services per provider. Disparities in populations served would lead to a redistribution of notional general practice incomes between metropolitan and non-metropolitan GPs, and the resulting disparities would strengthen the incentives on GPs to move to non-metropolitan locations. The issues regarding specialist care are somewhat different, but the capitation formula might promote some diffusion of out-of-hospital specialist services to larger non-metropolitan centres.
- public hospitals would have the opportunity to maintain their status as (along with general practice) a key of the Australian health system. Universal access to public treatment in public hospitals is an essential aspect of the universal system; they should not decline to the status of last resort for the desperate. The managed competition model I have proposed mandates free access to public hospitals as a universal entitlement of all packages offered by budget holders; to do less would be to seriously abridge the rights now enjoyed and appreciated by Medicare beneficiaries.

  This would by no means amount to a monopoly for public hospitals. They would depend for the bulk of their income on contractual payments by public and

private budget holders, which might be expected to take the form of DRG-related case payments. This would be the case for the treatment of private as well as public patients, which would enable public hospitals to compete actively for private patients, within pricing constraints which ensured that their prices fully covered their costs.

Provider restructuring

In recent years in California the need to bid for and secure contracts with budget holders for a share of capitation revenues has led to profound restructuring among service providers in directions which theory would predict. Coalitions of hospitals and multi-specialty medical groups under the aegis of one or the other party have been formed, for the purpose of offering broad-spectrum service coverage of defined populations. Two developments are noteworthy: these organisations have not been tightly structured like the classical staff model HMO ('vertical integration'), but tied together by internal contracting, based around shared information systems ('virtual integration') (Robinson and Casalino 1996). Secondly, they have proceeded to the next step, of offering their services directly to funders (ie large employers), thereby cutting out the third party intermediaries or — to put it another way — they have moved to take over or internalise the budget holding function, in the same way as the classical HMOs.

There is no reason, under the managed competition model, why the risk-pooling function should be reserved to specialist financial intermediaries such as the present health insurance funds. Indeed, diversity in budget holding — subject only to obvious prudential requirements — should be positively encouraged. The relative concentration of Australians in a few large metropolitan conurbations provides scope for the entry of one or perhaps more HMO type organisation(s), of which the local beginnings can perhaps be seen in the growth and diversification of Health Care of Australia. In the context of managed competition, their entry could inspire unaccustomed strong competition from the more entrepreneurial of the established insurers. There is no framework other than the managed competition model in which the market can be expected to deliver such beneficial outcomes in the health care system.

General practice

In a health financing system incorporating efficient incentives, general practice would be enhanced, through expansion of (and payment for) gatekeeper and public health functions in respect of defined populations. Responsibility for a range of own, referred and ancillary services provided to defined populations would require

the enrolment of patients with a specific practice, with the corollary of some degree of restriction on coverage of services obtained from or through other providers. This would, of course, contribute to that continuity and coordination of service provision which are advocated as especially conducive to good patient care.

Contracting arrangements of this kind between primary care providers and budget holders would be conducive to larger practice size, in order to spread risks, to encourage some degree of sub-specialisation and employment of paramedical personnel, and to take advantage of economies of scale in purchasing and administration. Trends of this kind have been observed among fundholding general practices under the British NHS. This would not necessarily mean — nor would it be desirable — that small-scale and even solo practice would disappear. Advances in information technology have made it possible for small practices to share information, financial risks and purchasing costs without structural integration. This is a function which might be taken on by the emerging divisions of general practice, and which could become their principal *raison d'être*.

Ancillary health and support services

The present system of fee-for-service remuneration results in disincentives to the use of ancillary personnel in private medical practice and lack of access to nursing and paramedical services on the part of many patients who would benefit from it. Population-based reimbursement of providers, such as could be expected to become more prevalent under managed competition as budget holders seek to share their risks, would encourage the substitution of lower-cost alternatives to doctors' own time, both within medical practices and by contracted-out or bought-in services in circumstances in which the outcomes were judged to justify the costs.

In summary

With modern health technologies, there is no way in which any society can afford to provide all the health services which individuals and/or their medical advisers might — without being subject to financial or other constraints — wish to have. Limits have to be set, either by imposing financial costs on consumers (which the well-to-do are better placed than poorer people to pay) or by rationing the volume and type of services which are publicly-provided or subsidised, for which the incidence of costs depends on the criteria governing the provision of services. In fact, the transfer of costs to patients is of limited efficacy in reducing consumption, and to the extent that it does work, has negative consequences for equity and health goals, not to mention wider aspects of social welfare (Rice 1997, pp. 412–21).

As long as the goal of universal access to all medically effective care is maintained, the basic problem presented by the increasing real cost of state-of-the-art health care cannot be solved or avoided. The only feasible strategy is one of containment, by increasing efficiency, both at the system-wide and micro levels. It is at this point that one can join the advocates of freer markets. Provided that it is possible to establish a market which meets sufficient of the microeconomic criteria to be regarded as workable, efficiency will be maximised by allowing allocation decisions to be made by many individual producers reacting to market signals.

The managed competition model offers a framework within which the objective of increased efficiency could be pursued without sacrificing the goal of universal access and without the impairment of health outcomes and social cohesion which the abandonment of this access would involve. It would do this by removing the present multitude of structural impediments to rational decision making and allocating to governments and markets the functions which they perform best.

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