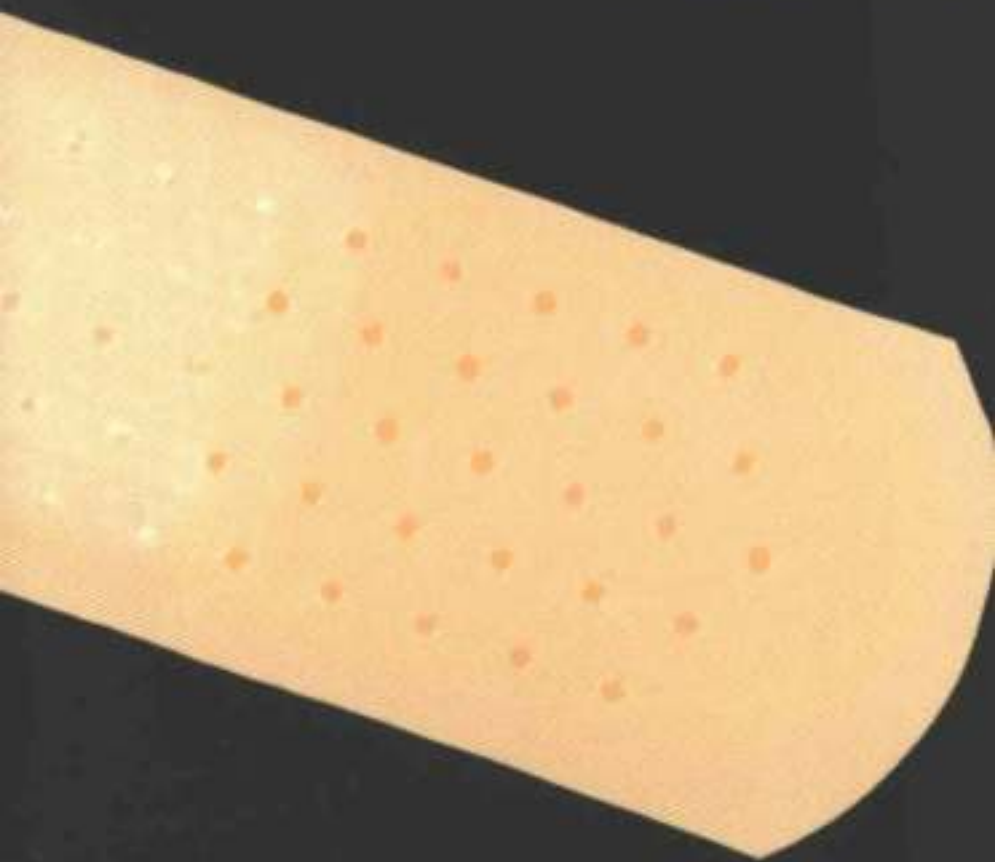


POLICIES AND PRESCRIPTIONS

Current Directions
in Health Policy



Cotton M. Lindsay • Michael A. Walker • John Logan
John C. Goodman • Andrew S. Doman • J. Richardson



Policy Forum

THE CENTRE FOR INDEPENDENT STUDIES

The CIS is an independent economic and social research institute concerned with the principles underlying a free and open society. An essential requirement for a healthy free society is that public policy decisions should not be dominated by one particular view or set of views. If ideas are not tested by competition then public policy decisions may undermine rather than support the foundations of a free society.

In encouraging competition in ideas, the Centre for Independent Studies:

- * conducts research on its own account
- * encourages outside scholars to investigate important issues and develop programs of research
- * publishes the results of its researches
- * provides forums for the public discussion of important social issues
- * promotes the results of its studies to the public-at-large

The majority of the Centre's research is concerned with economics, particularly the study of markets and pricing systems as technical devices for registering preferences and apportioning resources. However, there is a link between economic freedom and personal liberty; accordingly, studies are made of the relation between individuals and the effects of excessive government regulation.

The research work of the CIS is assisted by a Council of Advisers and supervised by a Research Committee. Members of the Advisory Council include:

Professor H.W. Arndt
Professor Ray Ball
Professor R.J. Blandy
Professor Geoffrey Brennan
Professor Lauchlan Chipman
Professor Kenneth Clements
Professor David Emanuel
Professor Malcolm Fisher
Professor R.M. Hartwell

Professor F.A. Hayek
Professor Warren Hogan
Professor Wolfgang Kasper
T.H. Kewley
Dr Naomi Moldofsky
Professor R.R. Officer
Professor Ross Parish
Professor C.G.F. Simkin
Professor Peter Swan

Professor Geoffrey Walker

The Centre is constituted as a non-profit company limited by guarantee and is independent of any political party or group. It is financed by sales of its publications and by voluntary subscriptions and contributions from individuals, organisations and companies.

Executive Director
Greg Lindsay

Research Director
Professor Ross Parish

Executive Editor
Rose McGee

Orders for publications and subscription enquiries should be addressed to:

The Centre for Independent Studies,
575 Pacific Highway, St Leonards, NSW 2065,
Australia
Telephone (02) 4384377 Fax (02) 4387310

POLICIES AND PRESCRIPTIONS
Current Directions in Health Policy

POLICIES AND PRESCRIPTIONS

Current Directions in Health Policy

Cotton M. Lindsay • Michael A. Walker
John Logan • John C. Goodman
Andrew S. Doman • J. Richardson

THE CENTRE FOR INDEPENDENT STUDIES
1986

Published May 1986 by

The Centre for Independent Studies Limited

All rights reserved

Views expressed in the publications of the Centre for Independent Studies are those of the authors and do not necessarily reflect the views of the Centre's staff, Advisers, Trustees, Directors or officers.

National Library of Australia

Cataloguing-in-Publication Data

Policies and prescriptions.

Includes index.

ISBN 0 949769 28 2.

1. Medical care — Australia — Addresses, essays, lectures.
2. Medical policy — Australia — Addresses, essays, lectures.
3. Insurance, Health — Australia — Addresses, essays, lectures.
4. Medical care — Addresses, essays, lectures. 5. Medical policy — Addresses, essays, lectures. I. Doman, Andrew S., 1951— . II. Lindsay, Cotton M. (Cotton Mather), 1940— . III. Centre for Independent Studies (Australia). (Series: CIS policy forums; 4).

362.1'0994

© The Centre for Independent Studies Limited

Typeset by

Love Computer Typesetting

Printed by

Southwood Press

Contents

| | |
|-------------------------------------------------------------------------------------------------------------|-----|
| Foreword | |
| Ross Parish | vi |
| Introduction | |
| Andrew S. Doman | vii |
| The Role of Government in Health Care | |
| Cotton M. Lindsay | i |
| Anatomy of a Conundrum: Canadian Health Care in the 1980s | |
| Michael A. Walker | 21 |
| Government Intervention in Health Care in Australia: Long-term Implications | |
| John Logan | 45 |
| Rationing Health Care: An International Perspective | |
| John C. Goodman | 79 |
| Comments | |
| Allan Passmore | 99 |
| Discussion | 103 |
| Health Insurance and Efficient Health Service Delivery | |
| Andrew S. Doman | 111 |
| Regulation or Reprivatisation of the Health Care Sector: Which Path Should Australia Follow? | |
| J. Richardson | 131 |
| Competition versus Regulation in the Health Care Market: Recent US Experience with Pro-competitive Measures | |
| Cotton M. Lindsay | 163 |
| Privatising Government Health Care Programs | |
| John C. Goodman | 177 |
| Panel Session | 191 |
| Discussion | 197 |
| Index | 207 |

Foreword

As Professor Lindsay reminds us in his first contribution to this volume, health economics is a relatively new speciality. Its emergence has been in response to greatly increased government expenditure on and involvement in health matters. (The development of other specialised fields of economics, e.g. agricultural economics and environmental economics, had similar causes.) Specialists try to differentiate their field by developing those aspects of theory that seem particularly relevant to their problems and by discovering real or imaginary peculiarities of their subject matter. These peculiarities are often the basis for rationalisations of the need for government intervention. For example, some agricultural economists, puzzled by the maintenance of farm output in the Great Depression, postulated that farmers respond perversely to price signals. This theory of the so-called 'peasant response' provided the rationalisation of price policies whereby governments exploited agricultural producers. Similarly, the new field of health economics has thrown up what John Logan calls 'a Say's Law of Medicine, whereby supply creates (some of) its own demand'.

The notion that health care is different from other goods and services underlies much public discussion of health policy. Certainly the lobbyist's rhetoric of 'needs' and 'rights' can be involved more plausibly with respect to the saving of lives and the alleviating of physical suffering than for most other causes. The economist's reasonable (but no doubt boring) talk of 'competing wants' and 'budget-constrained choices' can be brushed aside as mean and uncaring by reference to the 'pricelessness of human life', etc. But, again to cite Professor Lindsay, the proportion of the nation's health dollar that is spent on saving or even lengthening lives (i.e., on what might be conceded to be **needs**) is probably less than 10 per cent. The great bulk of health care is devoted to the satisfaction of ordinary, competing, more-or-less-substitutable **wants**. Sound health policy must be based on the recognition that, to a very large extent, health care is **not** different, and that it is susceptible to ordinary economic analysis, on both the demand and supply sides.

That, at any rate, is one of the themes in this collection of papers from a very successful conference. If some readers find the collection rather unbalanced in favour of the economic rationalist viewpoint, I would point out that this is not the fault of the conference convenor, Andrew Doman, whose invitation to the Federal Minister of Health, Dr. Blewett, to participate was declined; and whose invitation to the Secretary of the Department of Health was initially accepted but, in the event, not taken up.

Ross Parish

Introduction

Andrew S. Doman

The doctors' strike in New South Wales during 1985 brought into the open concerns about the well-being of health care policy in Australia. The advent of Medicare has substantially increased direct government intervention in health services. Dr John Deeble, one of the scheme's architects, revealed recently that government expenditure on health services now accounts for more than 70 per cent of all health care expenditures. This, he noted, was in contrast to other areas of government responsibilities where outlays were tending to decline in relative importance. On the face of it, therefore, one would expect to find problems in the health services diminishing rather than increasing.

It appears, however, that this increased government involvement in the provision of health services is unwelcome in some quarters and claims are made that it is having deleterious effects on the quality and availability of services. In particular, doctors' organisations claim that Medicare has reduced standards of care and that the public hospital system is being allowed to fall into disrepair through lack of funding. It was against this background that the Centre for Independent Studies decided to sponsor a conference on 18 August 1985 entitled 'The Crisis in Health Care: Implications for the Future Role of Governments'. The papers presented at the Conference together with edited commentaries and questions form the basis for this report. The decision to hold a conference on the future of health services in Australia reflects the belief of the Centre for Independent Studies that there is a need to increase debate in this area of public policy. A variety of activities in the health area is scheduled for 1986 and it is hoped further publications will arise. The Centre aims to encourage a broader debate in Australia about the long-run implications (both benefits and costs) of increased government intervention in the health field.

The main focus of the conference was an examination of the role of governments in the regulation of supply of and demand for health services. The issue of the costs and benefits of regulation was considered in the light of recent evidence from Australia and overseas. Alternatives such as some of the procompetitive measures being adopted in the United States were put under the microscope. Insights contributed by the three North American speakers, Michael

Walker from the Fraser Institute in Vancouver, Cotton Lindsay from Clemson University, and John Goodman from the National Center for Policy Analysis, added depth to this discussion.

The Current Crisis

Opinions differed among those at the conference as to the nature of the current crisis in health care policy; indeed some disputed there was a crisis at all. However, the consensus seemed to be that the Australian health service does face a crisis, perhaps not an acute crisis but certainly an incipient crisis, what one participant described as a 'slow-acting' crisis, one more akin to leukaemia than a sudden heart attack. The nature of the crisis revolves around the inability or unwillingness of governments to bear the financial costs necessary to meet current demands for health services. As a consequence those responsible for delivering health services, including doctors, community health staff and hospitals, are forced to restrict access to services. This necessitates the use of a range of rationing devices, which were elaborated in some of the papers given at the conference. Rationing of services leads to the emergence of queues, such as waiting lists for admission to public hospitals. This in turn gives rise to the need to choose who should gain access first and who should wait, that is, who should have the highest priority for admission. Inevitably the rationing process leads to a deemphasis on the patients' needs and increased emphasis on system needs, including cost containment. It also raises difficult ethical questions. The point is that patients' needs become a second-order consideration; the 'market' orientation of the health system is subverted (market orientation means simply putting clients' interests first). Because of their concentration on cost control and accountability of public expenditure, governments react by centralising the decision making process. This results in reduced freedom for the frontline participants in the health system, including doctors, nurses and patients, to make decisions. Controls, expenditure limits, guidelines and regulations become the norm. These are essentially 'supply side' controls on the health services. They are designed to limit access, to contain expenditure within budget limits and to reduce discretion. They lead to perverse decision making and irrational priorities. Their effect is frustration and reduced freedom of choice.

It was possibly the inexorable nature of this process that was the most depressing aspect of the conference. It was observed by speakers that as government involvement in the health sector increases it follows that nonpatient priorities will gain ascendancy. Cotton

Lindsay noted in his first paper that whereas competition between managers of private hospitals results in concentration on the development of services and facilities attractive to patients, competition between managers of public hospitals leads to emphasis on production of favourable statistics that gain the approval of superiors. An example is the concentration of public hospital managers on minimising the average cost per occupied bed day of their hospitals. The easiest means of lowering the apparent cost per bed day is simply to keep patients in hospital longer and to deny admission to patients who need expensive acute care. This is an example of one of the perverse influences that arise as governments take over an ever-increasing proportion of direct health care. Supply side controls result in distortion of incentives that would normally work to enhance the service available.

The prospect of increasing government expenditure on health services is bleak. The federal government is committed to maintaining the medicare levy at its current level, yet the levy is raising only a small fraction of hospital and medical expenditures. The balance of health expenditure comes from consolidated revenue and it is difficult in the current economic circumstances to see where additional funds for health would come from. Patients and health service staff are beginning to realise that the squeeze on hospitals and patient services is long term and that declines in real resources are likely to continue.

Issues

In these circumstances mechanisms of both supply and demand for health services need to be reviewed with the aim of finding more positive mechanisms for balancing the health budget. Participants in the conference focused on two main issues: the regulation of supply of health services and factors of production, and the regulation of demand for health services.

Monopoly control of the medical profession was the subject of a very interesting and challenging paper given by Michael Walker. He argued that deregulating entry into the medical profession, including certification of doctors rather than licensing, and eliminating restrictions on the right of nondoctors to offer medical services, is a first step towards opening health services to market forces. He noted that the assumption by governments of the responsibility for regulating the supply of medical services has led to the use of queuing rather than prices as a means of regulating demand and ultimately to attempts by the Canadian government to limit the supply of doctors through immigration restrictions and

reduction of places at medical schools.

Demand side factors contributing to the crisis were also discussed at length. The principal problem identified by speakers is the effect third-party payment (i.e. insurance or government subsidy) of health costs has on demand for health services. It is argued that when insurance pays most if not all the costs then consumers treat health services as a free good. In these circumstances demand increases and, if budgets are constrained, queues will appear.

Recognising the problems arising from regulation of supply and demand several speakers discussed at length the merits of introducing more positive incentives into the health sector. On the supply side a number of procompetitive measures were discussed including deregulation of the labour market and promoting competition among suppliers of hospital services, with the objective of improving efficiency and containing costs. On the demand side the merits of increased cost sharing by patients through the promotion of a range of actuarially determined insurance arrangements were discussed. It was argued by several speakers that increased 'copayments' would encourage consumers to be more discriminating in their demands for health services.

The Role of Government in Health Care

Cotton M. Lindsay

Cotton Mather Lindsay is J. Wilson Newman Professor of Managerial Economics at Clemson University in South Carolina. He received his PhD from the University of Virginia in 1968 and has taught at the University of California (Los Angeles), Arizona State University and Emory University. Lindsay has authored and edited a number of books and monographs including *Veterans Administration Hospitals: An Economic Analysis of Government Enterprise* (1975), *New Directions in Public Health Care: A Prescription for the 1980s* (1980), *The Pharmaceutical Industry: Economics, Performance, and Government Regulation* (1978), and *National Health Issues: The British Experience* (1980).

The Role of Government in Health Care

Cotton M. Lindsay

There is some irony in my being invited to present a paper today, on this topic, here in Sydney. About 16 years ago Arthur Seldon invited me to assist him in the preparation of a report. An organisation with the name of the Office of Health Care Finance, located in Melbourne, had retained Seldon to advise them on the details of a proposed national health plan and to comment specifically on a study by Scotton and Deeble (1968), which was largely supportive of the proposed structure of the health plan adopted. My task in the project was to write a paper detailing the role for government, if any, implied by economic theory. That is, I was to analyse the provision of health care by the free market to determine whether it involved unique features that imply a special role for government.

Health economics was not a field then. In 1969 few economists had yet turned their attention to this market, which would soon be the focus of many millions of dollars worth of economic research. As a consequence we knew literally no facts. A young economist, fresh out of graduate school, his head filled with ill-digested theorems and principles, could have asked for no more attractive assignment. To be asked to develop policy, unfettered by that scourge of high flown hypothesis, hard data, is a freedom akin to that enjoyed by an engineer asked to design machines for a frictionless world — and about as useful.

Needless to say, I rose eagerly to the challenge. In the space of a few months I had penned the essay requested by Arthur Seldon, which came to be entitled in due course, 'Compulsion and the Provision of Medical Services' (Lindsay, 1969). The agent of compulsion in that paper was, of course, government. Thus, the subject of that paper was remarkably similar to the paper I am delivering today, also commissioned after a fashion by Australians.

In Search of a Role

My charge for this session is to attempt again to define the role of government in the provision of health care. I will not subject this group to the set of nostrums I concocted for that earlier effort. Suffice it to say that a great deal of factual material has come to light since that paper was prepared. Many of its prized conclusions are worth nothing but a chuckle today. I will let those sleeping dogs lie undisturbed. Nor do I believe it wise any more for anyone to attempt to reach, in the course of one short paper, the lofty heights of defining what the government is to do. The fact of the matter is, we are probably not much closer to the truth of this question in health today than we were in our complete and blissful ignorance of 1969.

What I hope to do instead is to survey a number of congested roads down which health policy analysts have travelled seeking answers to this question both before and since my own journey began. This travel has been instructive, even considering that no destination has been reached. Indeed, many of these arguments surface again from time to time like the crimped and shaved coinage studied with more success than health economists have had by Sir Thomas Gresham. If in doing so I can prevent some of you from being misled down some garden path, then I will consider this time well spent.

Technical Arguments

I have arranged the various arguments for a role for government in the health market into groupings of dubious merit. However, they do manage to produce natural breaks in what might otherwise become a tediously long list. The first of these groupings I have called **technical arguments**. I give them this name because they have been made more often by professional economists than by others more directly involved in the development of health policy or in health administration. Under this heading I include the 'insurance' argument and the argument that the organised health care establishment cartelises that industry.

The 'insurance' argument seems to have been invented by Kenneth Arrow (1963). Arrow's argument was that individuals are risk averse, and our demands for health care are by their very nature probabilistic. Everyone therefore has a demand for health **insurance**. Purchasing such insurance commercially is more costly than having it provided by the government, however, because of the selling and administrative costs which government does not bear. This argument

was developed rather elaborately by Scotton and Deeble.

Even economists with no facts were sceptical of Arrow's conclusion. Many doubted that government could produce anything in a cost-saving manner. Its record with such mundane production as mail delivery and refuse collection gave few confidence that such an elaborate industry as health care would be the source of governmental administrative savings.

But Arrow's argument contained an analytical flaw identified by a fellow graduate student of mine at Virginia, Mark Pauly. Pauly's (1968) argument involved a phenomenon with the unlikely name of 'moral hazard'. Moral hazard is simply the insurance industry's way of recognising that demand curves slope downward. Pauly pointed out that government provision of health insurance is definitely welfare-increasing for society **only** if people consume the same amount of health care with insurance that they would consume if they were paying its full cost directly. Yet we know this condition is not satisfied. Insurance lowers the price of health care to zero at the margin, and we can expect consumers to respond by demanding more. This response of demand to the presence of insurance has been widely documented (for example, Feldstein, 1973). We shall have more to say about excess consumption of health care under insurance systems below. Here we need only observe that Arrow's conclusions cannot be unambiguously derived in the presence of moral hazard.

The second technical argument owes at least a part of its foundation to Milton Friedman. In a pioneering work with Simon Kuznets (Friedman and Kuznets, 1945; see also Kessel, 1962), Friedman argued that the medical profession had effectively cartelised the provision of physician services. Entry into this profession was restricted, according to these writers, and the fees for medical services were held arbitrarily high. Friedman never concluded that the appropriate solution to this problem was a state monopoly over medicine, but others made free and indiscriminate use of the hypothesised medical cartel to argue for conscripting doctors into government service.

At best, however, the cartel hypothesis supports some sort of antitrust intervention in this market. The government should ensure that licensing arrangements and professional influence over medical school accreditation are not used to punish price cutters and to restrict the supply of trained physicians. These remedies are adequate to deal with alleged medical cartels and fall considerably short of nationalisation.

Whatever the favoured solution, there appears in retrospect to have been no problem requiring any. Considerable evidence has been

amassed that medical doctors have not used either of these ploys to restrict output and raise price. The behaviour of the institutions through which such influence might be exercised reveals no such tendencies. Leffler (1978) analysed the behaviour of the medical licensing boards in the United States to determine whether standard-setting was used to limit entry. He found evidence inconsistent with that hypothesis. One piece of evidence widely cited by those who believed in medical cartels was the high 'returns' earned by doctors on their 'investments' in medical education (among those who found these returns excessive may be included Friedman and Kuznets, 1945; Kessel, 1962; and Rayack, 1967). Yet some of my own research revealed a bias in these estimates. When this bias is eliminated, no excess returns appear in physicians' earnings.

A telling finding against this cartel hypothesis was advanced by the author of the first technical argument, Kenneth Arrow (1963). Arrow noted that a cartel that maximises group profits will never choose to supply a quantity at which demand is price inelastic. To do so implies that so much output is produced that marginal revenue is negative. Yet estimates of this elasticity are typically in the -0.1 to -0.35 range (Feldstein, 1979). Elasticities in this range imply that any such conspiracy of doctors to restrict output is ineffective indeed. These findings suggest that for every medical service supplied, total revenue for the profession as a whole is **reduced** by roughly four times the amount of the fee collected!

Constraints on supply must operate either through licensing (by restricting the number of doctors granted licences) or on the institutions producing doctors directly. However, when the behaviour of medical schools is modelled in a way that permits us to test for monopolistic response to market conditions, this hypotheses is again refuted.

These tests have been performed by Hall and Lindsay (1980). An econometric model of medical schools is developed in which their responses to changes in nontuition funding are tracked. Medical schools respond to increases in this funding by both expanding enrolment and lowering tuition. Both responses are inconsistent with the restrictive hypothesis. Furthermore, the demand 'price' to donors (that is, the price that will bring forth one additional graduate) is close to our estimate of the marginal cost of a graduate. This latter finding suggests that medical schools themselves behave competitively in their supply of graduates to funding agencies.

The evidence seems clear. Scant support for a role for government in the supply of health care emerges from consideration of these technical arguments.

People Consume Too Little Health Care

Few but academic economists have ever been impressed with these technical arguments, but advocacy of state medicine extends across broad segments of the population. The justifications given for this support are varied. Paradoxically, many of the arguments are mutually inconsistent. For example, some lead to the conclusion that allocation by the price system leads to the provision of 'too little' health care, while others conclude that 'too much' is provided. Let us start with the arguments concerned with **underprovision** of health care by voluntary private markets. We shall explore a number of variations on this theme in turn.

The 'needs' of the poor. One of the most compelling arguments for a government role in health is to meet the 'needs' of the poor. The poor by definition have little money, and a truly costly disease can quickly exhaust what they have. The issue of state intervention can easily become more than a question of the efficiency of achieving maximum social welfare. Occasionally, a person's life or the permanent disfigurement of a child hangs in the balance. I suggest that few people would seek to stand between the government and such patients. Indeed, some level of government has provided for these and other needs of the poor in most developed countries for so long that, even were it an ethical and desirable objective to discontinue it, no government would do so.

The issue raised by the needs of the poor is nevertheless important. That issue is this: recognising the need for government to care for the poor who are in mortal peril, does the same moral imperative inform broader policy questions in health? Many have argued that, because the price system fails when a poor man cannot pay to save his life, need rather than price should govern resource allocation wherever health care is at issue. I believe that is wrong for two reasons.

In the first place, this example does not describe the vast majority of allocative decisions that must be made. Only a small fraction of any nation's total health dollar is spent saving or even lengthening lives. I have been unable to find out what this fraction is, but I would guess that it lies below 10 per cent. To say that need should take precedence over price when a destitute diabetic requires insulin is informative. Such cases are easy to identify, and we may assign them priority in the competition for care. Indeed, I am aware of no health system anywhere that does not do so. However, it is not very helpful to say that need should govern when the question to be answered is whether we allocate resources to the treatment of Smith's runny

nose or Brown's warts. Who can say which need is greater? And, even if we could agree on an objective standard of need for all such cases, how could we embody such a standard into a system that allocated health resources?

An allocative regime must be able to answer difficult questions as well as easy ones. Most of the allocative decisions made by health systems in every country are not easy life or death questions but difficult and petty ones. A price system leaves these questions to the people who know best. In a price system each health care consumer himself decides whether his need is as great as the next person's by weighing what he is willing to pay against what other people have paid.

Second, there are many things that the poor need far more than health care. When I was on the faculty of UCLA, I had numerous occasions to disagree with the faculty of the School of Public Health and their Dean, Lester Breslow. In spite of our disagreements, I must acknowledge that he did some remarkable research that bears directly on the issue I am now addressing. He and Nedra Belloc (Belloc and Breslow, 1972) studied the health status and lifestyles of a large sample of Americans from various walks of life to discover what factors are good predictors of health and longevity. From these surveys they put together seven 'rules' that seem to have a profound impact on good health. For example, they found that people 75 years of age who followed all seven of these rules had effectively the same health status as 40-year-olds who followed fewer than three. Each added significantly to health status and life expectancy, and the impact of following these rules was independent of the income of the person surveyed. The seven 'rules' they found are

1. Don't smoke cigarettes.
2. Get seven hours of sleep each night.
3. Eat breakfast each morning.
4. Keep your weight down.
5. Drink in moderation.
6. Exercise daily.
7. Don't eat between meals.

Observe that regular physical check-ups does not appear on the list. Indeed, I will present some additional evidence below that suggests that access to health care resources has little impact on aggregate health measures of a population.

My point here is that the needs of the poor are many. That is what it means to be poor. If some of those needs are to be met with government money, then it makes sense to spend that money as wisely as we can. Spending money providing the poor with generous health care entitlements in all probability implies that we will spend less

on things they would rather have, such as food, shelter, and education. It may imply that, in providing the poor with as much health care as we want for ourselves, we make it more difficult for them to acquire some of those very items that Lester Breslow found have a more important connection to health status. A nationalised health care system that provides the same measure of care to all deprives the poor of things for which their health 'needs' are greater.

Social and private benefits. A slightly more sophisticated version of the underprovision argument concerns something that economists describe as external benefits. The idea here is that consumption of medical care produces benefits to others besides those who purchase it. In the Pigovian tradition maximising total social welfare requires that each good be produced up to the point at which marginal social cost equals marginal social benefit.* It is widely accepted that the price system achieves this in the absence of external benefits.

The social cost of a good is the value of the resources used in its production. In most cases the social value of a good is what it is worth to the person who consumes it. No one places any value on my eating a peach but me. Society's gain from that peach is therefore my gain alone. The social cost and the social value are typically brought into Pigovian equality through competition. Competition ensures that the price charged by suppliers is no greater than marginal production cost. On the demand side, consumers buy the amount at which their value of the good equals what they pay.

This pleasing condition does not obtain where consumption of a good does produce external benefits. For example, if Smith is willing to pay something to provide Brown with more health care, then the social benefits of Brown's consumption exceed what Brown is willing to pay. Brown's purchases will stop short of equating the marginal

*The 'Pigovian tradition' refers to A.C. Pigou and his pronouncements in *The Economics of Welfare* (1932). We leave aside here discussion of some of the more abstract analytical and methodological problems encountered in implementing this theory of fiscal policy. Concerning the question of the existence of a metric in which social welfare can be measured and therefore maximised, see Samuelson (1947:Ch. 8). Concerning whether changes in resource allocation in the direction indicated by an inequality in marginal social costs and benefits invariably moves the economy toward or away from the social optimum, see Baumol (1964). Concerning the appropriateness of the conclusion of 'underconsumption' itself when social costs and benefits are not equated at the margin everywhere, see Lipsey and Lancaster (1956-57).

social cost with the full marginal social benefit. The conclusion seems to follow that total social welfare will be increased by some policy that increases health care consumption beyond the amount that people will individually choose to buy for themselves.

The relevance of this argument to government policy in the health area is subject to several important qualifications. It takes for granted a benevolent and omniscient government that correctly perceives **and has the will to correct** allocative failures of this sort. We have little reason to believe that either of these conditions is satisfied by the imperfect institutions that govern us. First, modern scholarship does not make us optimistic that government has much interest in policy that improves social welfare. The vast literature of the last three decades devoted to the analysis of government behaviour has yielded a number of approaches to this fascinating subject. Several have implications that permit us to test their predictive power against what has come to be called the 'public interest model' (for a sampling of papers that have empirically examined the choice of policy by government, see McCormick and Tollison, 1981; Peltzman, 1980; or Meltzer and Richard, 1981). These studies provide scant support for the hope that governments follow Pigovian suggestions.

A second but related objection to this line of argument concerns the presence and structure of these hypothetical external benefits. To date social scientists have failed to discover a method for identifying and measuring external benefits. As we lack any such yardstick, we have no way of knowing their scope and magnitude and thus the shape of the 'ideal' government program. Without such a yardstick even a well-intentioned government may err with perverse consequences. Excessive provision of health care can worsen rather than improve social welfare. Simply hypothesising the presence of external benefits does not inform us how much is enough. Uninformed government is at least as likely to provide too much as private markets are to provide too little.

On the other hand, external benefits may exist only for the consumption of health care for those unable to provide it for themselves. In this case the argument merely rationalises what all governments (that can afford it) do anyway. However, some have interpreted the Pigovian argument to imply sweeping reorganisation of the industry, involving government in the provision of health care to all. Consumption of health care by all classes of people is perceived to require government subsidy. This interpretation is difficult to credit given the extent to which most people provide themselves with insurance in the absence of government health plans.

In the United States, where the provision of health care is left to the private sector for most people, there are few who have not

provided themselves with private health insurance. The federal government sponsors two health plans, Medicare for the aged and Medicaid for the indigent. A recent study of health coverage found that less than 7 per cent of the population was not enrolled in either one of these government programs or some private health plan with stipulated minimum coverages. Those enrolled were covered for at least 80 per cent of their inpatient hospital expenses, some inpatient psychiatric care, and 100 per cent of the costs of health expenses in excess of 10 to 30 per cent of individual income (Sudover and Feinstein, 1979). Most of the small minority whose coverage is inadequate by this standard are in this situation for brief periods of time when between jobs and thus between employer-based health plans. It is difficult to conclude that, with such broad-based private health insurance, and the reasonably uninhibited access to the nation's health resources this coverage offers, there are external benefits operating at the margins of these choices assigning value to further consumption of medical care. A reasonable person must conclude that enough is enough.

Furthermore, Breslow's findings discussed in the previous section suggest that many activities dominate the influence of health care in terms of measurable effects on health. If it is health itself rather than visits to the doctor that stimulates external benefits, then a preferred policy may be to engage the government in the discouragement of obesity, the encouragement of eating a hearty breakfast, or even the formation of neighbourhood exercise groups on the model of the People's Republic of China.

People Spend Too Much on Medical Care

Economic theory is a wonderful thing in the hands of policy analysts. While one group of economists is arguing on the basis of the theories just discussed that government intervention is required to raise expenditure on health, another group argues that government intervention is required for precisely the opposite purpose. These economists have developed a set of theories that suggest that people, if left to purchase health care on their own, will buy too much. Some form of government action is called for to stem excessive resource use on health care.

These arguments typically start with the moral hazard condition discussed above. If people are insured, they face a zero price for health care and may consume too much. Pigou's condition for maximum social welfare is resurrected here but with the opposite conclusion. The price faced by those who are buying health care is too low in this case; it is less than the marginal social cost, and people

demand more than the optimal amount. Feldstein (1973) estimated the welfare gain that might be achieved in the United States from raising the coinsurance rate (i.e. the proportion of the cost of health care paid by the insured) from its 1969 level of 0.33 to 0.5 or 0.67. Such a proposal would lead to a substantial reduction in the consumption of health care. The gain from such a 'restructuring' of health insurance was large. Feldstein's estimates suggest a gain in the neighbourhood of one-third of all private hospital care expenditure. Put another way, he suggests that medical care consumption is so high with insurance that effectively one-third of all hospital care is wasted.

Another effect of insurance has been identified by Burton Weisbrod (1983). Weisbrod points out that health care technology itself can be influenced by the way it is provided. Borrowing from Lewis Thomas (1975), he sketches the life cycle of the treatment technology for a disease. In the earliest stage little is known about a disease's aetiology; only its symptoms and its prognosis are understood. There is no known effective treatment, hence little is done and expenditures are limited. However, as knowledge advances, methods of dealing with the symptoms are developed, though the underlying mechanisms producing those symptoms remain imperfectly understood. Replacement of organs by machines, as in kidney dialysis, is an extreme example of such a 'halfway technology'. In this phase expenditure on care can be very high. Ultimately, the disease yields up its secrets. Treatment reaches a 'high technology' and, more importantly, a low cost state, through development of immunisation or drug therapy, and expenditure diminishes.

Doubtless a portion of the explanation for the current level of health expenditure lies in the fact that we find ourselves today with a halfway technology for a wide variety of conditions ranging from kidney and heart diseases to schizophrenia. However, Weisbrod concludes that this may be more than an unfortunate darkness before the dawn of high technologies for these conditions. He contends that the development of these costly halfway treatments is at least in part responsible for the growth of insurance itself. At the same time, this growing importance of insurance has blunted awareness of the high cost of existing treatment technology. There is less demand on the part of potential and current victims of these diseases for development of less costly treatment techniques. Both private and government research efforts that might yield 'high technology' approaches are slowed. Government policy makers are also led to focus on short-run research and development goals at the expense of more basic long-run scientific goals. Government dollars that

might have funded basic research leading to high technology treatment are drained off to finance high-cost halfway technology treatments for increasing numbers of current victims among its beneficiary clientele.

I cannot argue that neither of these effects of private health insurance is unimportant. Both are varieties of moral hazard, and health insurance has moral hazard effects. The question raised by these observations is not so much whether they are true, but how the government should respond to them. Government health plans in many countries, including those for the aged and the indigent in the United States, are insurance-type plans themselves. The government reimburses providers for care, and consumers pay little or nothing. Merely making the government rather than a private company the insurer is unlikely to do anything about moral hazard.

The real issue is whether government or private insurers are better able to develop incentive systems in which excess utilisation by insureds and excess investment in capacity by providers can be controlled. Certainly the 'blunt instrument' regulatory techniques adopted by the US government during the 1970s to 'rationalise resource use' or 'contain costs' failed to achieve either purpose. The elaborate and enormously costly Certificate-of-Need process adopted to control hospital investment has been shown to have had no effect on the level of investment at all (Salkever and Bice, 1979). Furthermore, the current Economic Report of the President informs us that inflation of medical care prices consumed more than half the increased expenditures on health care from 1971 to 1981. These observations do not inspire confidence that costs can be lowered by enrolling the rest of the population in Medicare. Negotiated 'Preferred Provider Plans' developed by the private insurers Blue Cross-Blue Shield and the new Diagnostically Related Group (DRG) reimbursement formula used by Medicare seem to suggest a way of solving this problem without outright nationalisation of the industry. In 'preferred provider plans' the insurance company negotiates directly with individual providers in advance to establish a maximum rate at which all services will be reimbursed. DRG-based reimbursement pays a fixed amount for each separate condition for which a patient is treated in the hospital.

The Myth of Central Planning

Nevertheless, the solution favoured by some is nationalisation. The various effects of moral hazard are viewed as mere special cases of a far more pervasive problem. Advocates of nationalisation believe that a price system is intrinsically incapable of organising the health

industry efficiently (for amplification see Blumstein and Zubkoff, 1979). Doctors and hospitals follow money, and money guides them away from where they 'ought to be'. We are told of regional imbalances in which too many doctors are located in cities and too few in small towns. We are told that consumers are incapable of determining how much medical care they require, and that doctors 'generate' additional demand for their services whenever they need a new suit. This also manifests itself in the type of health care that patients demand. They underinvest in preventive measures and thus must overspend on cure when the time comes. Far more health could be produced with far less expenditure, if only planners were given licence to organise these resources themselves. At least this is the sort of litany recited in some circles.

Indeed, the aspect of government medicine that is the source of greatest satisfaction to its champions is its removal of the price barrier. The assumption is that without price standing between the sick and health providers, medical care will be organised and dispensed according to need. Earlier I remarked on the conceptual difficulty of using need as a criterion for such allocative decisions. Here I wish to comment on this allocative regime in practice. It is a commonplace in economics that, where price cannot rise above zero, more is demanded than can be supplied, and shortages occur. Need can play a role in the resulting nonprice competition for care only if two conditions are met, one on the supply side and one on the demand side. First, health suppliers must be responsive to need in production and delivery. Second, no other pseudo-price rationing mechanism must emerge to screen demanders and prevent those with the most serious needs from pressing their claims. In my studies of two national health plans (Canadian National Health Insurance and British National Health Service) I have found that nationalisation fails on both of these conditions.

Planning failures of supply. Consider the supply side. Planners in Great Britain have the greatest latitude to organise and allocate, since the price system has almost no role to play in the National Health Service (NHS). Yet, one looks in vain for some mechanism that sorts would-be claimants for care into more or less needy pools and gives the former priority. Except for emergency cases, providers rely on waiting lists rather than comparing needs to determine who, at any particular time, will receive care.

Governments have failed with the larger allocative problems as well. Take regional imbalance, for example. Numerous studies of regional equity in resource allocation under the NHS have found that little has changed in the three and a half decades since that system was socialised (see Cooper and Culyer, 1972; Noyce et al., 1974; and

Buxton and Klein, 1975). These studies find large and persistent regional inequities unexplained by health or demographic characteristics. David Owen, Minister of Health in the Callaghan government from 1974 to 1976, remarked in this connection,

The continued existence of geographical inequalities of health care is perpetuated by allocating health money unfairly. The inequalities of health care between different areas of illness and suffering, most marked by the historic neglect of mental handicap and mental illness, are totally unacceptable. And the present inequalities of health care between different income groups are a source of justified concern . . . The spread of provision around the national average was about 50 per cent in 1948, and this variation was, incredibly, the same in 1973, though Wales was by then above instead of below the English average. (Owen, 1976)

It is a bit puzzling to read these words penned at the end of his tenure by the Chief Executive Officer of the very agency responsible for these allocative shortcomings. Still, they do support the contention that replacing the market by a government allocative regime does not guarantee geographical equity in the deployment of health resources.

In Canada government involvement made the situation worse. Indeed, when Canada nationalised its physician corps each province adopted a universal reimbursement schedule that paid the same fee for each service regardless of where it was performed. This had the effect of eliminating the market-established premiums for working in unattractive locations, with predictable results. Those areas with many amenities and a disproportionate share of Canada's physicians before nationalisation now attracted more, and those with few doctors attracted fewer. The advantage in physician/population ratio enjoyed by urban areas was effectively doubled during the first decade of Canadian NHI. In Quebec province, for example, this ratio increased for the ten least urban counties by only 7.3 per cent, while the ratio increased for the entire province by 33 per cent (see Lindsay, Honda and Zycher, 1978).

Nor has nationalisation dramatically altered the allocation of resources away from cure towards the highly touted alternative of prevention, and apparently with good reason. The facts are that for most purposes, prevention is simply not cost effective. Screening for incipient illness is costly, and most people are healthy. It therefore pays, regardless of whether medicine is organised by the market system or the state, to wait until disease reveals itself before devoting

health resources to anyone (see, for example, Schweitzer, 1974).

The final episode in this rather dreary rehearsal of the supply-side failures of government health planning concerns the product itself. About ten years ago I developed a theory of government bureaucracy with applications to health care provision within the American Veterans Administration hospital system (Lindsay, 1975, 1976). I later applied the same model to the operation of the NHS in England, with remarkably similar results (Lindsay, 1980).

Production by government is biased in predictable ways by the competition of managers to **appear to run their enterprises cost-effectively**. When health care is given away, as it is in England and by the Veterans Administration in the US, recipients cannot express their satisfaction with a particular supplier in the amount they pay. They pay nothing to all. The people in charge of these suppliers cannot rely on sales information to determine who is producing a highly valued product and who is not. The quality of the products supplied must be judged by their superiors, who in turn can gauge only a few attributes of the complicated services supplied. Competition influences these suppliers to use the resources at their disposal to produce what their superiors monitor rather than what health consumers want.

Hospital managers seek to appear to produce a lot of health care at low cost. Cutting back on needed therapy will result in complications and even deaths. Observation of these highly visible indicators of low quality care can be expected to earn such a supplier low marks. However, there are many services supplied by health providers besides curing disease. One of the most valuable of these is information. Even when nothing can be done for a patient's condition, the relief of anxiety and uncertainty concerning the prognosis of a condition is worth a lot. Comfort is also an important part of the health industry's output. Just because a person is ill is no reason to deprive him or her of privacy, dignity, and personal attention.

It is in precisely these areas of information and comfort that government health providers economise. By diverting resources from these areas to the provision of those aspects of health care that are more visible to higher authorities, managers may increase their **apparent** skill and productivity in competition with their fellow bureaucrats. A detailed account of the implications of this theory and its empirical support in the operation of the NHS would require more space than I have at my disposal. I would like to list a few of the phenomena that it illuminates, however.

The theory is consistent with the smaller share of GNP devoted to health by the NHS than by the more market-oriented systems in

the US and elsewhere. It also predicts the smaller physician corps, the deteriorating economic position of doctors, and the high proportion of immigrant physicians on NHS hospital staffs. The lower staff/patient ratios and dearth of capital investment by the NHS are implied by the theory.

Finally, let me note that hospital executives may improve their apparent success as managers by retaining their patients in beds beyond the point when it is medically required. Doing so lowers the cost per patient day, a highly visible and important statistic in the management of bureaucratic health systems. Thus it is not surprising to find that detailed analysis of lengths of stay by ICDA category reveals uniformly and substantially longer lengths of stay in NHS hospitals. For example, average lengths of stay were longer in NHS hospitals for 39 out of 40 ICDA disease categories and for 10 of 12 injuries and 12 of 14 surgical procedures (for full details see Lindsay, 1980, 1982).

Delay in delivery as a pseudo-price. Even if suppliers were sensitive to the needs of health care demanders in their organisation and production of care, there is reason to believe that the resulting distribution would be to some extent arbitrary. In a recent study of English waiting lists Bernard Feigenbaum and I (Lindsay and Feigenbaum, 1984) found evidence that the delay in treatment is a significant factor in determining who joins the waiting lists for care under the NHS and thus who ultimately receives it. No price is charged, yet less is provided than people demand at zero price. Although competing demanders are not discouraged from seeking care by a rising price, they are discouraged from joining these queues by lengthening delays. Equilibrium is achieved when the delay has grown long enough to discourage enough demanders of care to equate demand and supply. In other words, delay functions very much like a price.

However, this correspondence is not perfect. The factor that allocates care with a price system is willingness to part with some money. The factors found to be important in the NHS pseudo-price regime are the dynamic properties of the demander's condition. Queue-joining was shown to be sensitive to delay for those with conditions, like infection, for which treatment at some remote date in the future is an imperfect substitute for immediate treatment. Those with conditions that cannot be cured without hospitalisation, like hernia, were less responsive in their queue-joining and thus received a disproportionate share of the care provided as the queue lengthened. The distributional results of the two systems are therefore different. It is not obvious that one is any less arbitrary or more calibrated with the distribution of need than the other.

Government Health Plans and Health

In conclusion I would like to discuss the **results** of these experiments in nationalisation. If planning works better than the market in all the ways I have described above, then health should be demonstrably better in countries with government health plans than in countries without them, and better after they were adopted than before.

These sorts of assessments are difficult to make because other unobserved influences on health differ from country to country and from time to time. Certainly fewer people died of tuberculosis in England after 1948 than before, and this had little to do with access to the NHS. This occurred because of the introduction of streptomycin in the late 1940s. It is also true that life expectancy is somewhat higher in Canada and England than it is in the US. With a one year snapshot, however, it is impossible to tell whether this results from a better health care system or other genetic and environmental factors.

It is nevertheless possible to control statistically for these difficulties, and Robert Williams and I (Lindsay and Williams, 1984) have analysed the available data with a procedure we developed for this purpose. It is possible to sift out the unwanted influences of technical change, heredity and environment on our measure of the impact of a national health plan by relating such factors as the number of physicians, the number of hospital beds and the presence of a government health plan, to the intercountry **differences** in health measures over time. We measured the impact of two complete health plans (England and Canada), and one partial plan (the Medicare-Medicaid package adopted in the US in 1965) on seven measures of health status. The seven health status statistics are the cancer death rate, the heart death rate, the infant mortality rate, the maternal mortality rate, the death rate itself, male life expectancy and female life expectancy.

When this was done, only one of our health indicators was found to be significantly affected by the presence of a national health plan. That indicator was infant mortality, and it responded only to the presence of the British NHS. Infant mortality was not significantly affected by the introduction of Canadian NHI or the Medicaid program for the indigent in America. This suggests that even this effect may be spurious (infant mortality may have responded to any of the wave of social programs introduced by the Atlee government). No plan has even a ripple of an effect on either male or female life expectancy. If government medicine is preferred on the grounds of better employing our health resources, there is scant evidence for these effects in statistical measures of the health of our populations.

References

- Arrow, K. (1963), 'Uncertainty and the welfare economics of medical care', *American Economic Review* 53 (December), 941-73.
- Baumol, W.J. (1964), 'External economies and second-order optimality conditions', *American Economic Review* 54 (June), 358-72.
- Belloc, N.B. and L. Breslow (1972), 'The relationship of physical health status and health practices', *Preventive Medicine* 1, 409-21.
- Blumstein, J.F. and M. Zubkoff (1979), 'Public choice in health: Problems, Politics and perspectives on formulating national health policy', *Journal of Health Politics, Policy and Law* 4 (Fall), 382-413.
- Burton, M.J. and R.E. Klein (1975), 'Distribution of hospital provision: Policy themes and resource variation', *British Medical Journal* (February).
- Cooper, M.H. and A.J. Culyer (1972), 'An economic survey of the nature and intent of the British NHS', *Social Science and Medicine* 5.
- Feldstein, M.S. (1973), 'The welfare loss of excess health insurance', *Journal of Political Economy* 81 (March/April), 251-80.
- Feldstein, P.J. (1979), *Health Care Economics*, John Wiley & Sons, New York.
- Friedman, M. and S. Kuznets (1945), *Income from Independent Professional Practice*, The National Bureau of Economic Research, New York.
- Hall, T.D. and C.M. Lindsay (1980), 'Medical schools: Producers of what? Sellers to whom?', *Journal of Law and Economics* 23 (April), 55-80.
- Kessel, R. (1962), 'Price discrimination in medicine', *Journal of Law and Economics* 1 (October), 20-53.
- Leffler, K. (1978), 'Physician licensure: Competition and monopoly in American medicine', *Journal of Law and Economics* 21 (April), 165-86.
- Lindsay, C.M. (1969), 'Compulsion and the provision of medical services,' pp. 66-85 in *The Price of Health: An Economic Analysis of the Theory and Practice of Financing Health Services*, Office of Health Care Finance, Melbourne.
- (1975), *Veterans Administration Hospitals: An Economic Analysis of Government Enterprise*, The American Enterprise Institute, Washington, D.C.
- (1976), 'Theory of government enterprise', *Journal of Political Economy* 84 (October), 161-78.
- (1980), *National Health Issues: The British Experience*, Roche Laboratories, Nutley, New Jersey.
- (1982), 'The British National Health Service as a government enterprise,' pp. 2-35 in I. Ehrlich (ed), *National Health Policy: What Role for Government?*, Hoover Institution Press, Stanford, California.
- and B. Feigenbaum (1984), 'Rationing by waiting lists', *American Economic Review* 74 (June), 404-17.
- , S. Honda, and B. Zycher (1978), *Canadian National Health Insurance: Lessons for the United States*, Roche Laboratories, Nutley, New Jersey.

- and R. Williams (1984), 'The effectiveness of government health policy', Emory University Law and Economics Center Working Paper.
- Lipsey, R.G. and K. Lancaster (1956-57), 'The general theory of second best', *Review of Economic Studies* 14, 11-32.
- McCormick, R.E. and R.D. Tollison (1981), *Politicians, Legislation, and the Economy: An Inquiry into the Interest Group Theory of Government*, Martinus Nijhoff Publishing, Boston.
- Meltzer, A., and S.F. Richard (1981), 'A rational theory of the size of government', *Journal of Political Economy* 89 (October), 914-27.
- Noyce, J. et al. (1974), 'Regional variations in the allocation of financial resources to the community health services', *The Lancet* (March).
- Owen, D. (1976), *In Sickness and in Health: The Politics of Medicine*, Quartet Books, London.
- Pauly, M.V. (1968), 'The economics of moral hazard: Comment', *American Economic Review* 58 (June), 531-7.
- Peltzman, S. (1980), 'The growth of government', *Journal of Law and Economics* 23 (October), 209-88.
- Pigou, A.C. (1932), *The Economics of Welfare*, 4th ed., Macmillan and Co., London.
- Rayack, E. (1967), *Professional Power and American Medicine*, World Publishing Co., Cleveland.
- Salkever, D.S. and T.W. Bice (1979), *Hospital Certificate-of-Need Controls: Impact on Investment, Cost, and Use*, American Enterprise Institute, Washington, D.C.
- Samuelson, P.A. (1947), *Foundations of Economic Analysis*, Harvard University Press, Cambridge, Massachusetts.
- Schweitzer, S.O. (1974), 'The cost effectiveness of early detection of disease', *Health Services Research* 9 (Spring), 22-32.
- Scotton, R.B. and J.S. Deeble (1968), 'Compulsory health insurance for Australia', *Australian Economic Review* 4th quarter, 9-16.
- Sudovats, S.G. and P.H. Feinstein (1979), *National Health Issues: The Adequacy of Coverage*, Roche Laboratories, Nutley, New Jersey.
- Thomas, L. (1975), *The Lives of a Cell*, Bantam Books, New York.
- Weisbrod, B. (1983), *Economics and Medical Research*, American Enterprise Institute, Washington, D.C.

**Anatomy of a Conundrum:
Canadian Health Care in the 1980s**

Michael A. Walker

Michael A. Walker, a native of Newfoundland, obtained his MA (1967) and PhD (1969) from the University of Western Ontario, where he specialised in mathematical economics, econometrics, and the theory of money. He is Director of the Fraser Institute in Vancouver, a leading independent economic research and publishing organisation.

Dr Walker appears regularly in newspaper columns and on radio. He is an author, editor and contributor to articles and books on economic matters, such as *Balancing the Budget*, *Privatization: Theory and Practice*, and *Tax Facts*.

Anatomy of a Conundrum: Canadian Health Care in the 1980s

Michael A. Walker

I. INTRODUCTION

I am delighted to discuss with you the outlines of the health care market or the Health Care Business as The Fraser Institute has referred to it in a book by that name. My delight springs not from any essential satisfaction with the way we have approached the health care market in Canada but rather because it will give me the opportunity to explore some of the difficulties that have emerged from our experience. Hopefully in surveying our experience from a safe distance you will be spared the necessity to repeat it.

I must also take pains to separate myself from the panel of distinguished experts with whom I am associated. Unlike them, I can make no pretence to special knowledge about the health care sector. I can offer only the observations of an intellectual interloper who has had a passing acquaintance with the subject of health care and some modest experience as a critic on Canadian health policy.

The first thing that must be said about Canada's health care system and, as far as I know, about the health care systems in most of the Western industrialised world, is that there has never, in the modern era, been anything approaching a competitive market for the service. In fact, the modern history of the development of the market for medical services in Canada has been that of a constant struggle of the practitioners of medicine to define and monopolise the supply, and a struggle by others to cope with the results.

A recent book by Hamowy (1984) shows that as early as 1908 the practice of medicine had been entirely circumscribed on a national basis by the practitioners, who had been successful in launching, under Dominion legislation, a national medical council controlling those who might practise medicine. By 1909 medicine included 'surgery and obstetrics and shall mean the art of healing and relieving and attempting to heal or relieve human diseases, injuries, ailments

and complaints by advice, direction, operation, influence of suggestion with or without the use of medicine or drugs' (Hamowy, 1984:250).

While the failings of occupational licensing, especially in the medical area, have been well known and articulated at least since Milton Friedman's *Capitalism and Freedom* (1962), there is, generally speaking, inadequate acknowledgement of the impact such provisions have on the market for medical services. In a recent book, for example, John Goodman (1980) analyses the national health care system in Great Britain in the hope of extracting lessons for the United States. He identifies a wide range of problems which, in his view, 'are natural and inevitable consequences of placing the market for health under the control of politicians' (Goodman, 1980:188). Yet nowhere in his extensive analysis does Goodman refer to the fact that a monopoly supply of medical services may be a prior cause of the difficulties he attributes to the 'socialisation' of medical practice. To be fair to Goodman, I must indicate that in another book entitled *Regulation of Medical Care: Is the Price Too High?* (1982) he has explored the effects of medical licensing. However, his otherwise excellent book on the economics of health care in Great Britain makes no mention of it and is typical of a genre of study that, having suspended consideration of the crimes of the main culprit, proceeds to punish mercilessly a large number of petty thieves.

In Canada the analysis of the role of government has tended to be somewhat more comprehensive, and there has been direct recognition of the fact that complaints about the intervention of government in the marketplace for health services have been asymmetrical. According to one commentator, admittedly one who is predisposed to collective solutions for economic problems,

Medical advocates of 'free competitive practise' usually do not know what they are talking about. Free competition implies freedom of entry and of competitive practise acts and thus removal of the police authority which supports licensure and ethical codes. The policeman would no longer stand ready to enforce the dictates of the College of Physicians and Surgeons any more than those of the Chamber of Commerce. Anyone could practise medicine who could find patients, at any price, and could advertise the fact. (Evans and Williamson, 1978:7)

From another perspective one might say that quite apart from being the unwarranted intrusion of a socialised government, socialised medicine is the natural end of a socioeconomic story, the

first chapter of which is the attempt by doctors to enhance their incomes at the expense of the rest of the population by the contrivance of occupational licensing. Rather than being a cruel and unusual punishment to the medical fraternity, socialised medicine is the predictable result of the government's intrusion into the market to regulate the supply of physicians' services.

To a very considerable extent, the discussion about the market for medical services in more recent times has really amounted to a discussion of the implications of the method of payment for the services provided rather than a more careful examination of the fundamental market forces at work. What I propose to do is provide a stylised history of the market for medical services in Canada from the perspective provided by looking over the shoulder of the medical practitioner.

II. THE MARKET FOR HEALTH SERVICES IN CANADA

Limiting Demand and Supply

The market for medical services, and in particular the demand for medical services, is derived from a basic desire for health. In the broadest sense, departures from health for reasons ranging from the imaginary to the catastrophic can be assessed only by the individual. While a variety of technical measurements can describe the operation of bodily functions, and trauma can be objectively observed and quantified, the state of health is fundamentally a subjective matter, and the demand for medical services reflects the diversity of personal feelings.

During most of the prescientific period, the supply of medical services matched in its range the variety of demands consumers presented to the market. Toward the middle of the last century, however, there began to emerge an establishment view of correct medical procedure. This establishment view became the basis for subsequent demands for legislation to protect the general public from quacks and charlatans.

While the limitations on supply were then, as they are now, allegedly to protect an indiscriminating public from purveyors of worthless or even harmful cures, it must be remembered that this limitation on suppliers also prohibited the sick from demanding services of such individuals — not all of whom were providing dangerous or worthless cures. In fact, according to Hamowy (1984:26) at least some of the cures offered by alternative practitioners were of obviously superior quality, particularly when

they involved doing nothing more than imposing a regime of rest and relieving the patient of the perceived necessity to have the attention of an orthodox physician, who would in all probability have bled the patient and administered a variety of toxic substances such as arsenical compounds and opium.

Thus, with a stroke of the pen, the legislature not only limited the supply of medical practitioners but also determined and limited what would be regarded as efficacious, and more importantly, lawful medical services useable by the general public. This latter effect of medical cartelisation has had profound effects on the structure of medical markets — effects that persist to this day.

A Medical Services Marketing Board?

It may be most easy to visualise these effects by analogy with another area where governments have provided suppliers with monopoly power. In Canada, as in many other countries, governments have given monopolies to the producers of many agricultural products, and in particular to the producers of chickens. The effect of such monopoly supply arrangements are well known and have been documented in many studies (for example, Grubel, 1977; Borchering, 1981).

The licensing provisions that apply to practitioners of medicine are similar to those that apply to members of a marketing board in that they give the members of the board a measure of control over the supply of the product. The medical marketing board has a second set of powers not normally given to members of boards: the power to eliminate substitutes for their product.

In terms of the chicken analogy, the medical monopoly not only controls the supply of chicken, they also outlaw other forms of protein. This eliminates the possibility that consumers might substitute different forms of protein for the artificially scarce and hence higher priced chicken. This may seem to stretch argument by analogy to the bounds of incredulity, but when one considers that chicken is allegedly a more healthful source of protein than red meat and a more complete source of amino acids than some vegetable protein, perhaps it is not all that far-fetched. Remember it is their alleged superiority from a scientific point of view that has led to the monopoly supply of cures and administrations proffered by licensed medical practitioners.

Supply Restraint in a Canadian Setting

The Canadian medical cartel has been very effective in controlling the supply of doctors and hence the supply of medical services. It

has, for example, been much more effective in controlling the supply of physicians than has the American Medical Association in the United States. Table 1 shows that, particularly in the early period, the population per physician in Canada was considerably higher than that in the United States, and it continues to be higher. This is a direct reflection of the fact that the number of graduates from Canadian medical schools actually declined from the end of the last century through to the 1960s (see Table 2). Not until the mid-1970s did the number of graduates relative to population reach the level that had been achieved in the three-year period 1888 to 1890. The restriction on supply was reflected, of course, in the average income of physicians (Table 3), which, relative to other professions, has consistently been 15 per cent above the average and has risen as high as 45 per cent above the average in the period 1969 to 1973.

Table 1: Ratio of Population to Physicians. Comparative Canadian — United States Rates, 1871 to 1980*

| Year | Population per Physician | |
|------|--------------------------|------------------|
| | Canada | United States |
| 1871 | 1248 | 667 ^a |
| 1881 | 1233 | 614 ^b |
| 1891 | 1087 | 629 ^c |
| 1901 | 987 | 637 ^d |
| 1911 | 970 | 685 ^e |
| 1921 | 1008 | 746 |
| 1931 | 1034 | 793 |
| 1941 | 969 ^f | 754 ^f |
| 1949 | 980 | 741 |
| 1951 | 977 | 751 |
| 1952 | 968 | 755 |
| 1953 | 960 | 757 |
| 1954 | 955 | 758 |
| 1955 | 934 | 758 |
| 1956 | 928 | 758 |
| 1957 | 920 | 756 |
| 1958 | 905 | 752 |
| 1959 | 893 | 748 |
| 1962 | 799 | 756 |
| 1963 | 786 | 727 |
| 1964 | 791 | 718 |
| 1965 | 771 | 700 |
| 1966 | 754 | 697 |
| 1967 | 740 | 686 |

continued

| Year | Population per Physician | |
|------|--------------------------|---------------|
| | Canada | United States |
| 1968 | 740 | 674 |
| 1969 | 714 | 664 |
| 1970 | 689 | 658 |
| 1971 | 659 | 643 |
| 1972 | 636 | 626 |
| 1973 | 619 | 622 |
| 1974 | 605 | 604 |
| 1975 | 585 | 583 |
| 1976 | 577 | 568 |
| 1977 | 565 | 568 |
| 1978 | 559 | 544 |
| 1979 | 552 | 527 |
| 1980 | 544 | 514 |

* Data for the periods 1962 to 1980 refer to active civilian physicians only. Active civilian physicians are defined as all civilian physicians, including interns and residents, whether or not in private practice and whether or not involved in direct patient care, neither living abroad nor retired. Doctors of osteopathy are not included in American totals. Had they been included, the ratio of physicians to the population in the United States would be: 1965:669; 1970:629; 1971:615; 1972:599; 1973:569; 1974:580; 1975:559; 1976:549; 1977:544; 1978:522; 1979:505; 1980:493.

Notes: (a) 1870 figures. (b) 1880 figures. (c) 1890 figures. (d) 1900 figures. (e) 1910 figures. (f) physician total includes members of the Canadian armed forces. (g) 1942 figures.

Sources: Canadian data, 1871 through 1951, 1961, and 1968 through 1980: Table A.2; 1952 through 1960: Judek, 1964:26; 1962, 1963: Health Manpower Planning Division (1972:63,64); 1964 through 1967: Health Manpower Directorate (1974:115); American data, 1870 through 1959: Bureau of the Census, *Historical Statistics of the United States* (Washington: Government Printing Office), various issues.

Table 2: Graduates of Canadian Medical Schools per 100 000 Population, 1885-1982

| Year | Graduates | Population (000) | Graduates per 100 000 Population | Graduates (Three-year Average) | Graduates per 100 000 Population |
|------|-----------|------------------|----------------------------------|--------------------------------|----------------------------------|
| 1885 | 202* | 4537 | 4.45 | | |
| 1886 | 275* | 4580 | 6.00 | 249 | 5.43 |
| 1887 | 269* | 4626 | 5.81 | | |
| 1888 | 319 | 4678 | 6.82 | | |
| 1889 | 277 | 4729 | 5.86 | 316 | 6.68 |
| 1890 | 351 | 4779 | 7.34 | | |

continued

Table 2 continued

| Year | Graduates | Population (000) | Graduates per 100 000 Population | Graduates (Three-year Average) | Graduates per 100 000 Population |
|------|------------------|---------------------|----------------------------------------|--------------------------------------|----------------------------------------|
| 1902 | 320 ^b | 5494 | 5.82 | | |
| 1903 | 427 | 5651 | 7.56 | 363 | 6.42 |
| 1904 | 341 ^c | 5827 | 5.85 | | |
| 1909 | 327 | 6800 | 4.81 | | |
| 1910 | 308 | 6988 | 4.41 | 326 | 4.67 |
| 1911 | 343 | 7207 | 4.75 | | |
| 1912 | 263 | 7389 | 3.56 | | |
| 1913 | 305 | 7632 | 4.00 | 296 | 3.88 |
| 1914 | 321 | 7879 | 4.07 | | |
| 1915 | 318 | 7891 | 3.98 | | |
| 1916 | 206 | 8001 | 2.57 | 280 | 3.50 |
| 1917 | 315 | 8060 | 3.91 | | |
| 1918 | 270 | 8148 | 3.31 | | |
| 1919 | 296 | 8311 | 3.56 | 272 | 3.27 |
| 1920 | 251 | 8556 | 2.93 | | |
| 1921 | 406 | 8788 | 4.62 | | |
| 1922 | 434 | 8919 | 4.87 | 444 | 4.98 |
| 1923 | 492 | 9010 | 5.46 | | |
| 1924 | 645 | 9143 | 7.05 | | |
| 1925 | 473 | 9294 | 5.09 | 545 | 5.86 |
| 1926 | 517 | 9451 | 5.47 | | |
| 1927 | 417 | 9637 | 4.33 | | |
| 1928 | 444 | 9835 | 4.51 | 422 | 4.29 |
| 1929 | 406 | 10029 | 4.05 | | |
| 1930 | 448 | 10 208 | 4.39 | | |
| 1931 | 484 | 10 377 | 4.66 | 476 | 4.59 |
| 1932 | 495 | 10 510 | 4.71 | | |
| 1933 | 475 | 10 633 | 4.47 | | |
| 1934 | 476 | 10 741 | 4.43 | 469 | 4.37 |
| 1935 | 457 | 10 845 | 4.21 | | |
| 1936 | 473 | 10 950 | 4.32 | | |
| 1937 | 508 | 11 045 | 4.60 | 525 | 4.75 |
| 1938 | 594 | 11 152 | 5.33 | | |
| 1939 | 486 | 11 267 | 4.31 | | |
| 1940 | 606 | 11 381 | 5.32 | 551 | 4.84 |
| 1941 | 562 | 11 507 | 4.88 | | |

continued

Policies and Prescriptions

Table 2 continued

| Year | Graduates | Population (000) | Graduates per 100 000 Population | Graduates (Three-year Average) | Graduates per 100 000 Population |
|------|-----------|---------------------|----------------------------------------|--------------------------------------|----------------------------------------|
| 1942 | 539 | 11 654 | 4.62 | | |
| 1943 | 496 | 11 795 | 4.21 | 519 | 4.40 |
| 1944 | 523 | 11 946 | 4.38 | | |
| 1945 | 769 | 12 072 | 6.37 | | |
| 1946 | 513 | 12 292 | 4.17 | 616 | 5.01 |
| 1947 | 567 | 12 551 | 4.52 | | |
| 1948 | 632 | 12 823 | 4.93 | | |
| 1949 | 679 | 13 447 | 5.05 | 701 | 5.21 |
| 1950 | 791 | 13 712 | 5.77 | | |
| 1951 | 856 | 14 009 | 6.11 | | |
| 1952 | 783 | 14 459 | 5.42 | 821 | 5.68 |
| 1953 | 825 | 14 845 | 5.56 | | |
| 1954 | 896 | 15 287 | 5.86 | | |
| 1955 | 894 | 15 698 | 5.69 | 871 | 5.55 |
| 1956 | 822 | 16 081 | 5.11 | | |
| 1957 | 831 | 16 610 | 5.00 | | |
| 1958 | 831 | 17 080 | 4.87 | 850 | 4.98 |
| 1959 | 889 | 17 483 | 5.08 | | |
| 1960 | 873 | 17 870 | 4.89 | | |
| 1961 | 839 | 18 238 | 4.60 | 855 | 4.69 |
| 1962 | 854 | 18 583 | 4.60 | | |
| 1963 | 817 | 18 931 | 4.32 | | |
| 1964 | 786 | 19 291 | 4.07 | 878 | 4.55 |
| 1965 | 1032 | 19 644 | 5.25 | | |
| 1966 | 887 | 20 015 | 4.43 | | |
| 1967 | 921 | 20 378 | 4.52 | 942 | 4.62 |
| 1968 | 1017 | 20 701 | 4.91 | | |
| 1969 | 1019 | 21 001 | 4.85 | | |
| 1970 | 1108 | 21 297 | 5.20 | 1087 | 5.10 |
| 1971 | 1133 | 21 568 | 5.25 | | |
| 1972 | 1278 | 21 802 | 5.86 | | |
| 1973 | 1328 | 22 043 | 6.02 | 1391 | 6.31 |
| 1974 | 1567 | 22 364 | 7.01 | | |
| 1975 | 1546 | 22 697 | 6.81 | | |
| 1976 | 1710 | 22 993 | 7.44 | 1648 | 7.17 |
| 1977 | 1688 | 23 291 | 7.25 | | |

continued

Table 2 continued

| Year | Graduates | Population (000) | Graduates per 100 000 Population | Graduates (Three-year Average) | Graduates per 100 000 Population |
|------|-----------|---------------------|----------------------------------------|--------------------------------------|----------------------------------------|
| 1978 | 1761 | 23 445 | 7.51 | | |
| 1979 | 1756 | 23 842 | 7.37 | 1753 | 7.37 |
| 1980 | 1743 | 24 086 | 7.24 | | |
| 1981 | 1770 | 24 343 | 7.27 | | |
| 1982 | 1749 | 24 739 | 7.07 | | |

Notes: (a) Graduates of the Toronto School of Medicine through the University of Victoria College estimated at 30 per year.

(b) Including the following estimates: Queen's University 25; Manitoba Medical College (University of Manitoba) 15; Ecole de Medicine 45.

(c) Including an estimated 45 graduates from the Ecole de Medicine.

Sources: 1885 through 1890: Illinois State Board of Health (1891:8-20); 1904 through 1982: annual surveys of medical education in the United States and Canada, *Journal of the American Medical Association*, various issues.

Table 3: Mean Net Income of Self-employed Physicians as a Percentage of Mean Net Income of Other Selected Self-employed Professionals, Canada, 1946-1981

| Year | Dentists (%) | Lawyers (%) | Engineers/ Architects (%) | Accountants (%) | Weighted Average* (%) |
|------|-----------------|----------------|---------------------------------|--------------------|-----------------------------|
| 1946 | 141.2 | 119.3 | 124.8 | 124.8 | |
| 1947 | 134.2 | 98.0 | 102.9 | 111.1 | |
| 1948 | 153.4 | 99.6 | 111.0 | 118.3 | |
| 1949 | 156.7 | 94.5 | 86.4 | 108.7 | |
| 1950 | 159.3 | 102.5 | 90.2 | 115.3 | |
| 1951 | 158.7 | 97.7 | 103.6 | 122.1 | 115.4 |
| 1952 | 147.9 | 114.1 | 85.8 | 128.8 | 119.6 |
| 1953 | 150.4 | 113.1 | 109.7 | 139.1 | 126.3 |
| 1954 | 150.6 | 99.7 | 98.6 | 137.1 | 117.5 |
| 1955 | 142.2 | 99.4 | 86.9 | 130.6 | 112.2 |
| 1956 | 141.4 | 103.5 | 95.7 | 128.5 | 114.8 |
| 1957 | 136.6 | 105.5 | 95.6 | 128.5 | 114.8 |
| 1958 | 143.2 | 116.0 | 107.0 | 143.6 | 126.1 |
| 1959 | 135.6 | 111.4 | 105.0 | 142.6 | 121.5 |
| 1960 | 133.4 | 111.8 | 104.2 | 142.6 | 121.8 |
| 1961 | 137.8 | 108.2 | 115.8 | 146.3 | 123.7 |
| 1962 | 132.4 | 118.1 | 124.8 | 162.3 | 130.5 |
| 1963 | 142.1 | 119.3 | 129.6 | 176.8 | 136.5 |

continued

Table 3 continued

| Year | Dentists (%) | Lawyers (%) | Engineers/ Architects (%) | Accountants (%) | Weighted Average* |
|---------------|-----------------|----------------|---------------------------------|--------------------|----------------------|
| 1964 | 144.0 | 124.3 | 127.8 | 164.9 | 137.1 |
| 1965 | 148.0 | 121.0 | 120.5 | 172.7 | 136.9 |
| 1966 | 145.2 | 118.8 | 117.9 | 179.2 | 135.8 |
| 1967 | 149.7 | 124.2 | 123.7 | 188.4 | 141.5 |
| 1968 | 144.7 | 123.7 | 128.5 | 171.6 | 137.8 |
| 1969 | 148.5 | 124.9 | 143.0 | 179.3 | 142.5 |
| 1970 | 152.5 | 130.0 | 155.3 | 180.1 | 147.1 |
| 1971 | 153.1 | 142.0 | 182.7 | 212.3 | 161.2 |
| 1972 | 145.2 | 134.6 | 161.7 | 203.5 | 152.1 |
| 1973 | 137.1 | 116.8 | 126.6 | 158.3 | 130.7 |
| 1974 | 125.5 | 104.3 | 130.7 | 145.1 | 120.5 |
| 1975 | 114.2 | 109.2 | 107.5 | 134.6 | 115.8 |
| 1976 | 113.8 | 109.9 | 121.4 | 134.7 | 117.4 |
| 1977 | 117.8 | 117.3 | 141.5 | 137.0 | 123.7 |
| 1978 | 116.3 | 122.9 | 160.9 | 139.5 | 128.0 |
| 1979 | 110.1 | 122.5 | 158.4 | 143.8 | 127.1 |
| 1980 | 111.3 | 128.2 | 154.5 | 142.2 | 129.2 |
| 1981 | 109.4 | 121.1 | 156.5 | 161.2 | 129.8 |
| 1946-1950 Av. | 149.2 | 101.1 | 100.0 | | 115.2 |
| 1951-1955 Av. | 149.5 | 104.2 | 95.9 | 132.0 | 117.9 |
| 1956-1960 Av. | 137.8 | 109.8 | 101.7 | 137.9 | 120.1 |
| 1961-1965 Av. | 141.2 | 118.4 | 123.6 | 164.7 | 133.2 |
| 1966-1968 Av. | 146.5 | 122.3 | 123.5 | 179.3 | 138.4 |
| 1969-1973 Av. | 146.7 | 129.0 | 151.4 | 184.6 | 145.9 |
| 1974-1976 Av. | 117.4 | 107.8 | 119.0 | 137.8 | 117.8 |
| 1977-1979 Av. | 114.5 | 120.9 | 153.5 | 140.2 | 126.3 |

*Based on weighted average of net income from all sources of self-employed dentists, lawyers, consulting engineers, architects, and accountants filing taxable returns. From 1946 through 1950, this average does not include data on accountants.

Source: Taxation Division, Canadian Department of National Revenue, *Taxation Statistics*, annual.

A Minimum Price for Illness

Aside from ensuring that physicians' incomes would, on average, be higher than they might otherwise have been, the medical monopoly also had the effect of eliminating cheap diseases. Since only doctors now could pretend to the art of 'healing and relieving and attempting to heal or relieve human diseases, injuries, ailments and complaints by advice, direction, operation, influence or suggestion with or without the use of medicine or drugs', the arrival of malaise also meant a trip to the local physician. Setting aside for the moment

the efficacy of treatments offered, this was a relatively dramatic change in circumstances, and from the point of view of the evolution of the market for medical services it had a profound effect.

In the absence of restrictions on who might practise medicine, the advent of infirmity might have led the sufferer in any number of a wide range of directions from a bottle of Doctor John's snake oil to a tonsillectomy. Evidently, the first was considerably cheaper than the second remedy, and in hindsight, tonsillectomies no longer being in fashion, we can remark that the therapeutic effectiveness of both remedies was probably about the same in most instances. The expense, however, was considerably different.

In the world of Canadian medicine by the early 1950s, the onset of a severe sore throat for the average Canadian meant the prospect of a very expensive encounter with the doctor and the hospital including the risk of general anesthesia. Pregnancy meant either unattended home birth or admission to a hospital and the attention of a practising physician, since midwives (whose practice is widespread, for example, in the United Kingdom) are forbidden to operate in Canada in those districts where there is a practising physician unless they happen to practise in conjunction with a licensed physician.

In these and countless other instances, because the attendance of a licensed physician was the only practicable, legal method for dealing with disease, the notion of adequate medical care became synonymous with the attendance of licensed, practising physicians and the pursuit of whatever course of treatment they and their colleagues suggested, including a wide range of diagnostic and therapeutic regimes. It is important to note that while the patient may 'demand' such treatments as the appropriate and adequate response to the malaise that he or she feels, the notion of appropriate and adequate has been formed in a circumstance in which the alternatives have been all but eliminated.

Victor Fuchs, in *Who Shall Live?* (1974), distinguishes between the caring and curing aspects of medical services and suggests that the demand for medical services is a demand more for caring than for curing. For example, Fuchs cites a letter from an American physician to the effect that 'fully 80 percent of illness is functional and can be effectively treated by a talented healer who displays work, interest and compassion regardless of whether he has finished Grammar School. Another 10 percent of illness is wholly incurable. That leaves only 10 percent in which scientific medicine — at considerable cost — has any value at all' (Fuchs, 1974:64). In other words, to a very considerable extent the demand for medical services

is a demand for medical attention, and what people will regard as appropriate or sufficient medical attention is in part determined by what we as a society anoint as appropriate medical attention — in modern times, what the College of Physicians and Surgeons judges to be appropriate.

Specialists in Diseases of the Rich

The historical consequence of the limitation of medical practice was that the cost of appropriate medical attention became very high, medical malaise often meant financial catastrophe, and most importantly, doctors were open to the charge that they specialised in diseases of the rich because many low-income citizens were simply excluded from the truncated medical market place. While it is often alleged that doctors subsidised low-income patients by charging higher prices to those whose ability to pay was judged by the doctor to be greater, the evidence from the early Canadian period suggests that there was a strong predilection to limit the extension of any charity because of the effect such extensions were perceived to have on the total revenue of the profession.

As Hamowy discovered in the annals of the *Canadian Lancet*, the profession from its earliest days was concerned about the 'excessive' extension of charity in the form of access to hospitals by those of limited means. While there was a recognition of the need for 'clinical material' in training hospitals, 'the more the public is pauperised to the advantage of the student of medicine, the worse it will be for him when he passes from the college halls and hospital wards into the realities of his professional life . . . no hospital has the right to do anything that would cheat a member of the profession out of a fee. The law society gives no legal advice, nor are there any law hospitals' (Hamowy, 1984:357).

Technology Raises the Cost of Illness

The price effect of limiting the supply of legitimate medicine was enhanced through time by the fact that the services of physicians often required complementary services in the form of tests, and drug or surgical therapy. The latter, in turn, required the hospitalisation of the patient at very high cost. The costs of a medically legitimate course of treatment therefore grew to be five times the fees paid to the doctor — doctors' fees represent less than 20 per cent of the total cost of Canadian medical care.

Providers of medical service eventually recognised that the high

price of entry to the medical system was making it difficult to expand the demand for medical services, especially on the part of the broad middle-income group. As a consequence, they became the sponsors of insurance schemes to reduce the inhibitory effect of the high prices on the demand for physicians' services.

Provider-sponsored insurance plans tended to dominate health insurance until the mid-1950s by which time private corporations began to seriously compete for consumer dollars in the medical insurance area. By the early 1950s medical insurance coverage was widely available to the Canadian public for both hospital expenses and physicians' fees.

The Advent of Public Hospital Insurance

In 1957, in response to the political environment (see Wilson, 1985), the federal government made the provinces an offer 'they couldn't refuse', the result of which was the establishment in the provinces of public hospital care insurance plans. By 1961 all provinces had such a hospital care insurance plan, which was supported on a 50/50 basis by 'federal and provincial' resources. Original provisions were under the federal Hospital Insurance and Diagnostic Services Act of 1957. This was replaced in April 1984 by the Canada Health Act.

From the point of view of the provinces the prospect of being able to spend 50-cent dollars and take political credit for 'removing financial barriers to medical care' were temptations they could not resist. The current form of the agreement between the two levels of government is enshrined in the Canada Health Act and provides for in-patient and out-patient services in hospitals as well as other eligible facilities. Covered under the program are all of the services provided to resident patients including accommodation and meals at the standard or public ward level, necessary nursing service, laboratory, radiological, and other diagnostic procedures, together with the necessary interpretations for the purposes of maintaining health, preventing disease, and assisting in the diagnosis and treatment of any injury, illness, or disability; drugs, chemicals and other preparations when administered in the hospital; use of the operating room, case room and anaesthetics facilities; routine surgical supplies; use of radiotherapy and physiotherapy facilities; services rendered by persons who receive remuneration from hospitals; and other services specified by agreement. Services to nonresident patients are covered provided they are delivered as part of the out-patient services of the hospital. Capital costs, either the principal or the interest, are specifically excluded from coverage under the federal program.

The provision of universal hospital insurance had the expected effect on the market for health services. Because it reduced (some provinces levied a per diem charge as a form of coinsurance) or eliminated the cost of the major component of modern medical treatment — the stay in the hospital — it greatly increased the quantity of medical services demanded and hence the demand for physicians. Accordingly, while the supply of physicians per thousand of population increased steadily in the early 1960s, the relative income position of physicians improved. Whereas during the five years preceding the arrival of universal hospital insurance the income of doctors had been 17.28 per cent higher than the income of other professionals, during the five years following, it was 26.8 per cent higher.

Medicare

In 1966 the federal parliament passed 'an Act to authorise the payment of contributions of Canada towards the cost of insured medical care services incurred by provinces pursuant to medical care insurance plans'. In order to be supported under this Act the provincial plans had to adhere to certain basic conditions. They had to be comprehensive, provide universal coverage, be under public administration, and provide for portability and accessibility.

Comprehensiveness meant that, as a bare minimum, all services provided by physicians, both general practitioners and specialists, had to be covered. That is to say, plans might in addition cover the services of other health care service providers but they at least had to cover the services of physicians, general practitioners and specialists. Universal coverage was to be provided to all insured residents and had to cover a minimum of 95 per cent of insurable residents. No minimum period of residence was to be required nor any waiting period in excess of three months. The public administration requirement provided that all plans must be administered and operated on a non-profit basis by a public authority — that is to say, the provincial government or a provincial government agency. Portability meant that the benefits under any provincial plan must be available both to insured persons temporarily absent from the province and to persons who move to another participating province until such time as they qualify in that province for Medicare benefits. And finally, there was a condition that the provincial plans provide reasonable access to health services for all insured persons.

Since 1971 all provinces have had medical care insurance plans

that qualify for assistance under the federal medical care act. As in the case of the Hospital Insurance and Diagnostic Services Act, the medical care act provided for 50/50 cost sharing between the federal and provincial governments.

Under the original funding arrangements, the conditions for federal support did not include the elimination of user fees, nor did they prohibit the charging of premiums to participants in the plan. In addition, the legislation did not exclude the possibility of practitioners charging their patients a higher fee than that reimbursed under the medical care program in any province. In other words, so-called 'extra billing' was permitted.

Moreover, all the provinces save one explicitly permitted doctors to opt out of the Medicare scheme. Doctors who did this simply charged what was for them a market-clearing price for their services, and it was up to the patients to seek reimbursement from the government for that portion of the doctor's fee authorised under the plan.

From the point of view of the market for medical services, the arrival of universal, first-dollar medical insurance had a profound effect. Faced by a service supply whose only price was the time required to utilise it, Canadians proved to be prodigious demanders of medical services. In fact, by 1977, a joint government-medical association task force concluded that the 'demand for medical care appears infinite' (Joint Advisory Committee, 1977:32), and the total expenditure on medical care began to reflect this increased demand. So also did the welfare of physicians, who again, as they had when universal hospital insurance was introduced, enjoyed an improvement in their relative income position. From a position that had steadily improved to 33.94 per cent above the average for other professionals in the five years preceding the advent of Medicare, doctors' incomes surged to 47.02 per cent above the average in the five years following.

Moreover, this improvement in the income position of doctors was accomplished despite a decline in the length of the average work day and a continuing increase in the number of physicians per capita (Comanor, 1980:13). This conjunction of events is explained by the fact that universal insurance reduced the number of bad debts incurred by doctors, caused doctors to change the nature of their practices — greatly reducing the number of house calls and telephonic consultations in favour of increased numbers of office visits of shorter duration — and increased the possibility that moral hazard would influence the extent of medical service provided to the consumer, particularly by specialists (Blomqvist, 1979:101-3; Brown and Evans, 1977).

The Past as Prologue

Over a 70-year period, therefore, the market for health care underwent a large number of changes. At the turn of the century a monopolised market with restricted entry for practitioners provided a higher average income for the selected numbers permitted into the practice of medicine. At the same time, these restrictions created two classes of consumers: those who could afford the permitted, recognised medical regime, and others who could not and therefore were effectively denied medical access. Advances in generalised insurance and the consequent decline in the perceived cost of medical care eroded this schism of consumers and gave physicians access to a larger potential market for their services. In consequence, even though the number of doctors per capita increased very significantly — particularly over the post-war period — the relative income position of physicians was maintained and even enhanced.

The advent of compulsory, tax-financed, public medical insurance completely removed the exclusionary feature of the medical monopoly and simultaneously removed the economic link between the cost of medical care and decisions about its use. Medical care ostensibly acquired the characteristics of a free good.

Politicised Medicine

In the process, however, the total budgetary responsibility for medical care was vested in government. The consequence was that medical care became progressively politicised and the decisions made with regard to pricing and supply became increasingly dominated by the sensibilities of the governmental apparatus. Fees for service became a matter for negotiation between medical associations and the government and began to reflect the relative bargaining strength of the government and the profession — not in any economic sense of that term, but rather in the sense of the political clout that the parties, respectively, felt they could muster.

From the point of view of the government, it became clear at an early stage that the real variable of interest is not the fee paid for a particular service, but rather the total budget that must be allocated to medical care. That budget is determined by the level of use of the medical care system — a composite of physicians' services, hospital services, diagnostic services and insured drug usage. And so, as the 'infinite demand for medical care' began to find expression in a virtual explosion of total medical care costs, governments reacted in a number of areas.

Parenthetically, it is worth noting to an Australian audience that the response to the rise in health care costs was less prompt than it might have been because of the nature of the federal-provincial fiscal arrangements pertaining to health care. As noted, the federal government had committed itself to pay half the cost of expenditures on hospital and medical care. In consequence, the provinces, which actually spent the money, perceived themselves to be spending 50-cent dollars and behaved accordingly. In 1977 this fiscal arrangement was changed so that the transfer from the federal government to the provincial governments would be insensitive to the amount actually spent by the provincial authorities on medical care. Provincial authorities thus became more responsive to perceptions that health care costs were 'out of control'.

Ironic Response to Cost Explosion

In an ironic twist, governments have responded by directly limiting the supply of medical services. First this took the form of 'rationalising' the supply of hospital beds to 'make most efficient use of the resources' — a move that had the effect of partially reimposing the constraint on surgical practice that had been removed by universal hospital insurance. While it may not be politically possible to announce that not every hospitalisation whim of the public will be met, it is possible to live with queues and they appear to be emerging as the alternative device for rationing hospital services. (Pricing solutions have recently been effectively eliminated from consideration because the federal government, in the Federal Health Act of 1984, has indicated that provinces that levy user fees in the health care delivery system will suffer a loss in transfer income from the federal government equal to the amount of user fees collected.)

The most delicious irony of all, and the one that truly makes current health care provisions in Canada a conundrum, is the fact that the emerging cost containment policy is direct governmental limitation on the supply of physicians. Since 1975 in the province of Ontario, the government has attempted to limit the number of physicians and adopted target levels for population-physician ratios. Recently in the province of British Columbia, the government adopted specific controls on the number of doctors who will be permitted to bill the provincial medical insurance plan for reimbursement. New 'billing numbers' will be given only at governmental discretion, and doctors proposing to practise in rural areas will be given special consideration. According to the government of the day, not only are there too many doctors, but

too many of the ones practising are located in the cities and not enough in the hinterland.

It is interesting in this connection to read what the medical profession in Canada thought about this problem at the turn of the century:

All over the civilized world, there are too many doctors. In Ontario there are about 3500 doctors to 2 000 000 people, or 1 to 700. In the cities, the overcrowding is worse. Remedies for this have been suggested in the direction of rendering the college term longer, and raising the entrance standard . . . But the most important phase of the subject is that doctors when they meet in conventions, pay too much attention to the discussion of disease, and in what way they can give away their time by aiding moral reform, and not enough consideration to the business side of their calling. (from the *Canadian Lancet*, 1906, cited in Hamowy, 1984:184)

In the area of diagnostic services as well, governments have moved to directly control the supply. Clinics offering x-ray or other similar diagnostic services are now licensed and the number of such licences is strictly controlled.

Thus, in a mind-numbing piece of absurdity, governments in Canada now find themselves controlling the cost of providing the population with medical care by directly controlling the supply of the service. From the point of view of the medical practitioner, over whose shoulder we have been viewing the historical evolution, governments are now doing directly what the profession has been trying to accomplish indirectly for more than half a century. Now, of course, the government also controls the price physicians receive for the artificially restricted service, and the income position of physicians has received the limitless attention of ministers of health. As a consequence, the income position of physicians has eroded to a level only 27.6 per cent above the average for other professionals — roughly the level it had attained before the advent of state health plans.

III. LESSONS FROM THE CANADIAN EXPERIENCE

The usual lessons drawn from the Canadian experience with medical services policy relate to the evils of providing medical services at zero cost under a regime operated by government. And there can be no question that a service provided apparently free of charge will be overutilised and the financing of its provision fraught with many difficulties. But the problems being experienced in Canada at the

moment are not significantly different than those that have emerged in the United States under a mixed system of public and private provision of health care insurance. Casual survey of the evidence suggests that the health care cost explosion in the US has been somewhat more pronounced in Canada. While that observation ignores the question of whether the quality of services may differ — as is clearly the case in a comparison of the low-cost British system with either of the North American systems — it also suggests that the root of disorders in the health services market lies deeper than the way in which medical insurance is provided.

In my opinion, the problems that have emerged in medical services markets in Canada are, in a somewhat different guise, the well-known effects of government legislated monopoly. However, unlike the familiar monopolies in other products and services — like agricultural products and communications — the medical monopoly has been permitted to outlaw all substitutes both known and prospective. This monopoly has been of such long standing and so effective that the very frame of reference for the consideration of appropriate health care policy is warped by it. It would be inconceivable for any serious student of health care policy with pretensions as an expert and prospective adviser to governments in North America to suggest that the route to solving our health care problems must inevitably involve us in the harrowing experience of eliminating the medical monopoly.

Not being an expert myself, I feel no such inhibition. That is precisely what must be done. And, it can be done in a gradual and realistic way by first removing from the control of organised medicine the definition of what is medicine and who may offer medical services to the public. In the first instance, that could involve the legalisation of what the medical fraternity refers to as 'paramedical services' like midwifery. Eventually, the deregulation must lead to a replacement of licensing by certification.

Selected Readings

- Blomqvist, A. (1979), *The Health Care Business: International Evidence on Private Versus Public Health Care Systems*, The Fraser Institute, Vancouver, British Columbia.
- Borchering, T.E. (1981), *The Egg Marketing Board*, The Fraser Institute, Vancouver.
- Brown, M.C. and R.G. Evans (1977), 'Does Canada have too many doctors — Two views', *Canadian Public Policy* (Summer), 365-72.
- Comanor, W.S. (1980), *National Health Insurance in Ontario: The Effects of a Policy of Cost Control*, American Enterprise Institute, Washington, D.C.
- Daly, J.C. (moderator), R.A. Berenson, M.D. Barber, B. Conable, Jr, M. Fine, and M.V. Pauly (1979), *National Health Insurance: Now, Later, Never?*, AEI Forums, American Enterprise Institute, Washington, D.C.
- Evans, R.G. and M.F. Williamson (1978), *Extending Canadian Health Insurance: Options for Pharmacare and Denticare*, Ontario Economic Council Research Studies 13.
- Frech III, H.E. and P.B. Ginsburg (1978), *Public Insurance in Private Medical Markets: Some Problems of National Health Insurance*, Health Policy Study 201, American Enterprise Institute, Washington, D.C.
- Fuchs, V.R. (1974), *Who Shall Live?*, Basic Books, New York.
- Friedman, M. (1962), *Capitalism and Freedom*, University of Chicago Press, Chicago.
- Goodman, J.C. (1980), *National Health Care in Great Britain: Lessons for the U.S.A.*, The Fisher Institute, Dallas, Texas.
- (1982), *Regulation of Medical Care: Is the Price Too High?*, Cato Institute, Washington, D.C.
- Grannemann, T.W. and M.V. Pauly (1983), *Controlling Medicaid Costs: Federalism, Competition, and Choice*, Studies in Health Policy, American Enterprise Institute, Washington, D.C.
- Grabel, H.G. (1977), *The Real Cost of the B.C. Milk Board*, The Fraser Institute, Vancouver.
- Hamowy, R. (1984), *Canadian Medicine: A Study in Restricted Entry*, The Fraser Institute, Vancouver.
- Health Manpower Directorate (1974), *Canada Health Manpower Inventory, 1974*, Health and Welfare Canada, Ottawa.
- Health Manpower Planning Division (1972), *Canada Health Manpower Inventory, 1972*, Health and Welfare Canada, Ottawa.
- Illinois State Board of Health (1891), *Medical Education, Medical Colleges, and the Regulation of the Practice of Medicine in the United States and Canada, 1765-1891*, Illinois State Board of Health, Springfield, Illinois.
- Joint Advisory Committee of the Government of Ontario and the Ontario Medical Association (1977), *Report on Methods to Control Health Care Costs*, Province of Ontario, Toronto.
- Judek, S. (1964), *Medical Manpower in Canada*, Royal Commission on

Health Services, Queen's Printer, Ottawa.

- Manga, P. (1978), *The Income Distribution Effect of Medical Insurance in Ontario*, Occasional Paper 6, Ontario Economic Council, Ontario.
- Meyer, J.A. (ed.) (1985), *Incentives vs Controls in Health Policy: Broadening the Debate*, Studies in Health Policy, American Enterprise Institute, Washington, D.C.
- Pauly, M.B. (ed.) (1980), *National Health Insurance: What Now, What Later, What Never?*, American Enterprise Institute, Washington, D.C.
- Salkever, D.S. and T.W. Bice (1979), *Hospital Certificate-of-Need Controls: Impact on Investment, Costs and Use*, Studies in Health Policy, American Enterprise Institute, Washington, D.C.
- Stewart, C.T., Jr and C.M. Siddayao (1973), *Increasing the Supply of Medical Personnel: Needs and Alternatives*, Evaluative Studies 6, American Enterprise Institute, Washington, D.C.
- Wilkins, R. and O. Adams (1983), *Healthfulness of Life*, The Institute for Research on Public Policy.
- Wilson, L.S. (1985), 'The socialization of medical insurance in Canada', *Canadian Journal of Economics* (May), 355-76.

**Government Intervention in Health
Care in Australia:
Long-term Implications**

John Logan

John Logan graduated from the University of New South Wales (University College) in 1965 with a BComm(Hons). Until recently he lectured in economics at the Australian National University. He has become increasingly involved in the health economics area and has written several papers on various aspects of the effects of government regulation in medical markets. He currently holds the position of Research Fellow with the Centre for Independent Studies and is Director of the Centre's health research program.

Government Intervention in Health Care in Australia: Long-term Implications

John Logan

I. INTRODUCTION

Since 1788, when this country received its first shipment of England's excess supply of convicts and their administrators, each of the various governments with which we have been encumbered has seen fit to involve itself in one way or another in the production and delivery of health care services. Medical services, such as they were in those days, were initially supplied by naval doctors as part of the military involvement essential in a penal colony. Later, and especially from the second half of the 19th century, the colonial governments became involved in providing subsidies to hospitals, Friendly Societies and other voluntary groups, which had begun to act as private, ad hoc insurers against the hazards of poverty and ill health (Hicks, 1981). In 1898, for example, almost 60 per cent of all hospital expenditures in New South Wales were funded from the public purse (Royal Commission on Public Charities, 1899:xii).

It was during this period also that the practice of medicine became restricted by law to those who possessed certain prescribed qualifications as laid down in the various Medical Acts in force at that time. For example, the first Act in Victoria required a doctor to have had 'a regular course of medical study', but contained a grandfather clause that extended automatic registration to any practitioners who had been in the business at least 15 years (see Pensabene, 1980:121). These Acts were the precursors of the market closure legislation that nowadays, in each of the States, controls the entry of medical practitioners into the market place and regulates the competition among them.

During the first half of the 20th century governments made several abortive attempts to extend their participation in the health care market place by introducing various compulsory 'national insurance' plans. These plans were designed to deliver health services at below

market prices (or free) to the user, pensions, and other welfare benefits, all to be financed by some mixture of compulsory 'contributions' from employees and employers, together with a subsidy from general government revenue (these plans, commencing with the Page Plan in 1928, are documented in Hicks, 1981 and Sax, 1984). Each of these schemes met with concerted and vigorous opposition from certain quarters, not least from the British Medical Association (BMA, which ultimately became the Australian Medical Association, or AMA, in 1961) in its efforts to preserve a free (but closed) market for medical services and to protect its members from other forms of government interference (Sax, 1984:Chs 2,3; Hicks, 1981:Ch 2).

The BMA did not, on the other hand, exhibit any particular aversion at the time to government subsidies in the health care area, provided that these were simply straight handouts unencumbered with controls over medical fees or practices. This permitted, between 1951 and 1953, a relatively smooth passage of Sir Earle Page's postwar plan for free medical services for pensioners, free (selected) pharmaceuticals, and subsidies to hospitals and for medical care. It is the habit in Australia to call these subsidies 'benefits', which conveniently overlooks the fact that they are equally 'costs' (i.e. to the taxpayer). Interestingly, the Commonwealth subsidy was conditional upon the recipient having agreed to buy the services of a private health insurance fund, which had to be 'registered' under the National Health Act and was therefore subject to the regulations imposed under that Act.

These arrangements survived until the early 1970s with certain relatively minor modifications, for example, to the rate of subsidy and to the consumer charges for pharmaceuticals. However, secular inflation in the prices of health services meant that the proportion of health costs borne by the patient rather than by third-party payers increased steadily over time. Thus a large and growing proportion of health care expenditure remained unsubsidised and was therefore available for political exploitation. In addition, at the end of the 1960s the total annual government outlay on health was not yet sufficiently large to be noticed by the taxpayer against the backdrop of all of the other 'benefits' that governments of the day were busily bestowing upon worthy recipients in other areas.

Recent History

The era of enthusiastic expansion of subsidised health probably began with the Nimmo Report in 1969. From this and subsequent discussion grew the Medical Benefits Schedule (MBS), which was initially based

upon the 'most common fee' and was to serve as the basis for determining the level of subsidy for each of the vast array of services and procedures available from suppliers in the health industry. At this time (1970) patients' personal outlays were reduced not just by governmental and other third-party reimbursements paid as a proportion of a scheduled fee, but also by the policy introduced at the time of limiting patients' personal outlays to a maximum of \$5 (equivalent to about \$19 in 1985) for any one service. The government was to pick up the rest of the tab.

This particular piece of government largesse radically altered price relativities within the industry. For example, a minor surgical procedure now cost the same to the patient whether it was performed by a general practitioner or by a specialist provided that no referral was necessary, and twice the price otherwise. Patients responded predictably, and the consequent shift in demand appeared to have caused a certain amount of intra-AMA turmoil (Sax, 1984:91). The result was a tightening of the referral system.

Around this time discussion was under way in various quarters concerning the possibility of the government (in particular the one not then in power) making yet another essay into the area of compulsory national health insurance (which is the technical name for mega-subsidy). The intellectual groundwork for such a scheme had been laid in the late 1960s in papers by Scotton and Deeble (1968; see also Scotton, 1968), which more or less became the basis of the Labor Party's health policy. After their success at the polls in 1972, the Labor Party wasted no time in setting up a committee to plan the implementation of the government's 'universal health scheme'. In July 1975 the scheme was introduced as Medibank (Mark I, as it subsequently became known).

Basically, the scheme subsidised patients for 85 per cent of their medical costs and 100 per cent of their hospital costs, conditional upon the patient accepting treatment by a salaried doctor appointed by the hospital in question. Everybody was, in effect, compulsorily granted membership, and this extended the subsidies to people who had previously chosen to self-insure against the hazards of illness. The option to take out insurance to cover the 15 per cent remaining as the unsubsidised portion of medical expenses (called 'gap' insurance) was available, as was the option to demand one's 'doctor of choice' while under treatment in hospital. Private insurance was available for this contingency. The costs generated under the scheme were to be met partly from an additional levy upon taxable income and partly from continuing the budget grants that had been coming from general revenue. That is to say, funding was to be both from existing tax revenue and from extra tax revenue, although the

additional levy took some time to get off the ground. The Medibank Mark I scheme survived in its original form for around 15 months, during which time there was a change in government.

The new government had at one time been 'committed' to private market production and delivery of both medical services and health insurance; at the time of their election they were 'committed' instead to preserving more or less the status quo with respect to the Medibank scheme; after their election they soon changed their collective mind once again. In October 1976 the details of the original scheme were altered. The government introduced a 2.5 per cent levy on taxable income (with ceilings), which could be avoided by purchasing 'basic' health insurance cover from one of the registered funds. This meant that, although people could avoid the Medibank system, in essence they were still required to purchase some kind of approved health insurance.

With this policy change, the coalition embarked upon what was to be a series of four relatively major policy shifts over the period to April 1981 (these are documented, for example, in Sax, 1984:Chs 5,6). After November 1978 it was no longer compulsory to purchase health insurance, and a subsidy was available to the self-insured (referred to in the literature as the 'uninsured') in the form initially of a subsidy from the Commonwealth Government of 40 per cent of the MBS (i.e. scheduled) fee with a maximum out-of-pocket outlay per service of \$20, and eventually (May 1979) in the form exclusively of the maximum \$20 patient outlay. As the penalty for reluctance to insure had therefore been substantially reduced, it is not surprising that people reacted accordingly. Between the end of 1978 and March 1981 there was a continuing slide in the number of people who carried 'basic' health insurance (Voluntary Health Insurance Association of Australia, 1984, 1985), at least with the registered funds. The slide was arrested, however, by the penultimate policy shift in April 1981, when the government offered a 30 per cent subsidy of the (scheduled) medical fees, plus a maximum 'gap' of \$10, contingent upon the claimant having purchased basic medical insurance from a registered fund. In addition, 30 per cent of the cost of basic health insurance was recoverable as a write-off through the tax system. Now faced with a significant price incentive, people rushed back to the registered funds in droves (VHIAA, 1985:5,6).

Medicare

This latest scheme was not destined for longevity, however, as its proponents lost office just two years later. The new Labor

government, in a temporary fit of consensus, lost no time in implementing the Labor Party's health policy. The requisite legislation was enacted six months after the 1983 election. The result was a near-clone of the 'universal health scheme' of the Labor government of the early 1970s and, perhaps for purposes of product identification, it was called 'Medicare'. There are, however, three important distinguishing features of the new scheme.

First, it is partly financed by a 1 per cent levy upon taxable income above a certain threshold level (\$7110 for a single person); second, the legislation implied contractual arrangements between doctors and hospitals that were anathema to the doctors (the 'section 17' provisions); and third, insurance companies were not permitted to write policies for any health insurance that covered the unsubsidised gap in the scheduled fees. Apart from these features, Medicare is more or less Medibank Mark I reincarnated. That is, everybody is a member, 85 per cent of scheduled medical fees are paid for by the scheme, the remaining 15 per cent come (compulsorily) from the patient's pocket, and (standard) accommodation in public hospitals is free to patients who do not reveal a preference for a doctor of their own choice. Patients who prefer their own doctor may purchase insurance (partly) for this purpose from one of the registered funds (for a discussion of the implications of the Medicare system with respect to costs and efficiency, see Logan, 1985).

The current federal Minister for Health, in a speech on the imminent introduction of Medicare, felt confident at the time (September, 1983) that this new scheme would remain more or less intact until the end of the century. Given the shifting sands of the political environment and the impermanence of office faced by the ruling party, it is a moot point whether this particular announcement will prove correct. Already some cracks are appearing in the Medicare edifice. As a result of the section 17 provisions mentioned above, there was considerable unrest among doctors in New South Wales during 1985. The latest amendments to the Health Insurance and National Health Acts effectively remove the provisions that were odious to doctors. In addition, insurers are now permitted to offer policies to cover the unsubsidised gap in the fee for 'certain' services rendered at a hospital.

The government has also taken the opportunity to make it illegal, with stiff penalties, for persons, funds, and companies who are not registered under the Act to write health insurance of any kind. This provision took effect in September 1985. The result will be that the (small) number of for-profit health insurance organisations that had grown up alongside and in competition with the registered funds will

either be eliminated from the market place or, by meeting the registration requirements, join the (closed) company of the other registered funds. Thus we are in the midst of yet another change in the environment created by government policy in relation to health.

Over the five or so years following the demise of Medibank Mark I, with each change in health policy, the government fiddled with the constraints imposed under the Health Insurance Act upon the types of policies the registered funds were permitted to offer. This involved changing the percentage of medical fees that could be covered by third-party payers, and the maximum patient payout per service. Insurance rates were altered in consequence to maintain viability of the registered funds.

These significant and frequent changes in both the public and private health insurance and subsidy arrangements have meant that producers and consumers have been forced continually to adjust to a spasmodically shifting environment. This has been one factor over the last ten years or so that has contributed to irregular swings in variables such as the supply of doctors, their incomes and location, the supply and costs of hospital facilities, and so on.

Perhaps one of the few constants in the system over this period was the availability of the Health Benefit Card to certain groups such as pensioners, war veterans, and people classified as 'socially disadvantaged'. Holders of the cards can get free hospital and medical care provided that the particular medical practitioner involved supplies the service at a reduced rate (with the discount equal to the uncovered 'gap'). In 1983 it was estimated that just over three million people, or about 19 per cent of the total population, had access to such subsidies (Australian Bureau of Statistics, 1983).*

This is a reasonably large proportion of the population and hence their demands could well have lent some stability to the medical market places (except of course to doctors' incomes, which changed whenever the government decreed a new 'gap', or discount rate). The Social Welfare Policy Secretariat has estimated that a card-holding, home-owning, single pensioner in 1981-82 could look forward each year to an average card-linked subsidy of around \$960 (\$1180 at 1985 prices), provided the concessions etc. were fully exploited. If they were not, the expected annual effective subsidy should be adjusted downwards to around \$500 (\$615 at 1985 prices). The cost to state and Commonwealth governments of supplying these

*Note that the prospect of losing the Health Benefits Card if one earns more than a specified amount in a year introduces a significant discontinuity into the structure of effective tax rates, and therefore adds yet another 'poverty trap' into the welfare system.

concessions and fringe benefits was conservatively estimated at around \$2000m (Social Welfare Policy Secretariat, 1984:110) at 1981-82 prices (\$132 per capita and over \$300 per taxpayer per annum), which is not (subsidised) chicken feed. At a 5 per cent real interest rate, an anticipated ten year's worth of fully exploited card-linked benefits had a capital value of just over \$9000 at 1985 prices. This created a definite incentive to gain entitlement to this valuable asset.

The various fringe benefits and concessions that had been available to card-holders have been continued under the existing set of rules, although some of them nowadays are no longer directly linked to the card, but are part of the health subsidies available to everyone through Medicare. Even so, the card is still a valuable asset: the value of the post-Medicare fully-exploited card-linked benefits to our home-owning single pensioner was estimated at around \$920 a year (Social Welfare Secretariat, 1984:30) after adjustment to 1985 prices, so that a ten-year stream of post-Medicare benefits discounted at five per cent has a capital value of \$7104.

II. EXTENT OF GOVERNMENT INVOLVEMENT

Financial Commitments

The extent of government involvement in health care is perhaps indicated in a conservative way by a brief review of its financial commitments in the area. Total health expenditures in Australia have grown from about 5.5 per cent of GDP in 1969 to about 7.5 per cent of GDP in the early 1980s, with a brief increase in this proportion in the mid-1970s. The various governments (Commonwealth, state and local) have together, over recent years, provided the finance for roughly 62 per cent of total expenditures on health (Department of Health *Annual Reports*), with the proportionate contribution varying in response to the shifts in policy over this period. Figure 1 gives a picture of real government health spending over the recent past, especially its growth from 1980 to the present. Table 1 contains estimates of government outlays on health disaggregated into state and Commonwealth sources, their rates of growth over the preceding year, and their amounts per head of (state) population. State government spending on health has grown over the last two financial years (1983-84 and 1984-85) by an average of 11 per cent, and its incidence per capita has not been distributed

Figure 1
Public Sector Real Health
Expenditure (1979-80 prices)

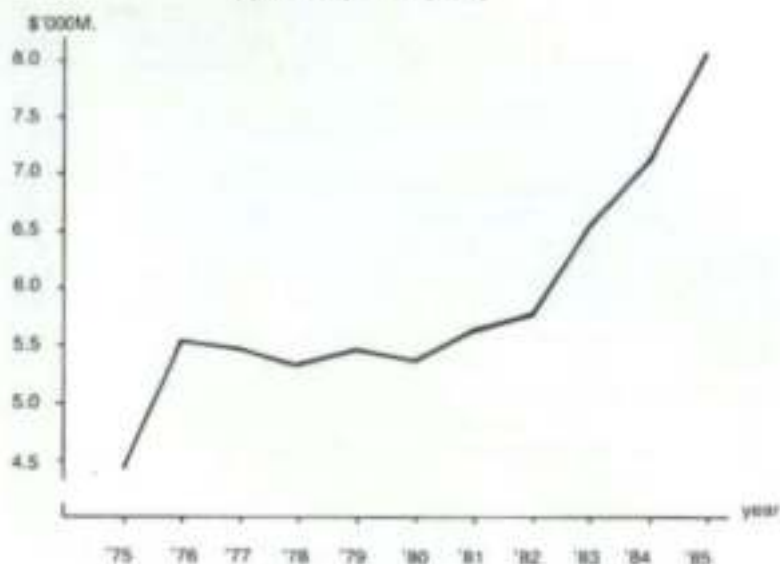


Table 1: Government Outlays on Health

| State | Outlays on Health | | Per Cent Change % | Estimated Population '000 | Per Head 1984-85 \$ |
|-----------------------|-------------------|----------------|-------------------------|---------------------------------|---------------------------|
| | 1983-84 \$m | 1984-85 \$m | | | |
| NSW | 1767.3 | 2069.5 | 17.1 | 5431.2 | 381.04 |
| VIC | 1895.0 | 2097.1 | 10.7 | 4095.1 | 512.10 |
| QLD | 987.7 | 1074.7 | 8.8 | 2525.3 | 425.57 |
| SA | 600.6 | 652.9 | 8.7 | 1359.0 | 480.43 |
| WA | 593.4 | 656.9 | 10.7 | 1394.2 | 471.18 |
| TAS | 172.6 | 195.2 | 13.1 | 439.5 | 444.14 |
| NT | 103.9 | 115.1 | 10.8 | 141.2 | 815.16 |
| ACT | 127.3 | 140.9 | 10.7 | 249.1 | 565.64 |
| C ['] wealth | 3989.1 | 5305.1 | 33.0 | | |
| TOTAL GOVT | 10236.9 | 12307.4 | 20.2 | 15634.6 | 787.19 |

Source: Commonwealth and State Budget Papers, various.

uniformly across all states. Health expenditure by all government bodies is estimated to have grown at 20 per cent over these last two years, a significant part of which may be attributed to the new Medicare scheme. The total amount of government spending on health for 1984-85 is estimated at \$787 per head for Australia as a whole, which comes to \$2013 per individual taxpayer. Thus, in principle, if the health system were completely privatised, the average taxpayer would have \$2013 available for his or her own chosen allocation to health. My original estimate of \$1000 (see Logan, 1985) was vastly conservative.

Behavioural Effects

As large as it is, the government's monetary stake in health care understates the true extent of its influence in this area. The controls and regulations that abound as a result of government involvement alter people's incentives in certain ways and thus cause them to behave differently. Resource misallocation, inefficiency, cost increases, and irrecoverable waste are generally the results. Quite often governments react when these unwelcome outcomes of their own activities become distinctly apparent to all (that is, when the waste and excessive spending become a 'grave concern', or even a 'public scandal') by inventing and imposing yet more regulations and controls in an effort at least to appear sensitive to the wishes of their electors. In this way, regulation begets more regulation in a veritable epidemic of government intervention. An example of this phenomenon is the government's responses to the increase in its health payouts over the 1970s.

One of the effects of the government subsidies in their various manifestations throughout the recent past has been to raise the amounts of medical and institutional services demanded. This permitted a rise in the prices received by producers such as doctors. This ultimately increased the supply of doctors, which served to moderate the price rise (in fact, fees in real terms fell over the late 1970s). The net result was a significant increase in the cost to the government of its promised largesse, particularly over the Medibank Mark I period, and a subsequent increase in the supply of doctors relative to the demand for their services. The explosion in total outlays on health care and its implications as a potential and continuing drain on the government's coffers prompted government to investigate the causes.

A factor that further complicated matters was that, along with the cost escalation, the (lagged) increase in the supply of doctors resulted in a fall in their real incomes, especially towards the end

of the 1970s. But this is a predictable result in a market distorted by subsidised third-party payments arranged as they are in this country. As will be demonstrated below, the nature of the reimbursements to patients for their medical bills generates a changed set of demand conditions for the seller of medical services. It turns out that the seller's optimal pricing strategy is to set a fee at or above the point at which the patient begins to incur out-of-pocket expenses; under Medicare, for example, this point occurs at 85 per cent of the MBS scheduled fee. It is predictable that some doctors will primarily bulk bill, some will charge at the scheduled fee rate, and others will add a premium to the scheduled rate. However, no doctor will cut prices below the 85 per cent point, and some will find that it does not pay to reduce their fees below the scheduled rate in the face of declining demand for their individual services. It all depends on their individual cost structures. Therefore the effect of an increase in the number of doctors for a given market demand is to divide that market among a greater number of sellers who, instead of cutting price, (optimally) take a fall in sales and hence in income.

On the other hand, statistical evidence from the US and from Richardson's (1981, 1980) survey of the Sydney market shows a positive correlation between the number of doctors and the number of services purchased. Instead of drawing the conclusion that this is no different than would be expected from a similar study of, say, used car lots, many of the various authors deduced a Say's Law of medicine whereby supply creates (some of) its own demand. But if this is so, then why don't practitioners simply create some more demand to tide them over the shoal of the doctor glut? Why not go all the way? The Rolls Royced and chauffeured doctor commuting daily from private mansion to sumptuous consulting rooms should be commonplace.

Reactions of Government

The link between increasing numbers of doctors, current and anticipated cuts in their practice net incomes, and demand-inducement as a response to these factors, were soon made by the bureaucrats who were then directing their energies at discovering some solution to the government's problems in the health area. This link became known as 'overservicing', and the Commonwealth Department of Health set up the now defunct Fraud and Overservicing Detection System (FODS) to investigate the problem.

The Department has continuous data relating to Medibank and Medicare claims made by patients, and the registered insurance funds are also required by law to provide such data. It was (and is) therefore

possible for the Department to generate a frequency distribution for the various items of service for which claims are made. Since data for an individual doctor's sales of medical services can be readily extracted from the claim data collected by the Department, it is then a simple matter to compare a particular doctor's frequency of servicing with the 'average', or 'group norm'. The result is the 'Scan Profile', which endeavours to show whether a doctor is permitting his or her patients to purchase 'too many' units of any given scheduled service (Parliamentary Joint Committee of Public Accounts, 1982). If the Scan Profile looks suspicious, a more complete profile of the doctor's entire practice can be generated.

If a case of genuine overservicing were strongly suspected by the investigatory team, the Department, resources permitting, would send around one of its officers, who would attempt to discover whether there was some innocuous reason for the offending doctor's 'deviance'. If there was not the investigator would 'counsel' the doctor to desist from overzealous selling of medical services. If the doctor was intransigent, or if his or her claiming patterns were 'consistently deviant' (Parliamentary Joint Committee, 1982:224), then the matter would be referred to one of the Medical Services Committees set up under the Health Insurance Act.

The Department of Health (*Annual Report 1984/85*:231) reports that, in 1983-84, 23 cases of overservicing were referred to a committee. This is a microscopic number in relation to the total number of registered medical practitioners in Australia, and to the amount of overservicing that 'actually exists', according to the regulators. The 'black hole' attitude to regulation is that this signals a need for tighter controls and more resources devoted to monitoring and regulating the behaviour of health care providers. It could well be, however, that the mere existence of the Surveillance Branch and the various investigatory committees and tribunals is sufficient to reverse or at least discourage the overenthusiastic supply of medical services by many doctors.

But if the losses from overservicing are great enough for the government to be willing to invest the taxpayers' money in its eradication, then why is not underservicing also a problem for government to solve? Even more importantly, whereas overservicing is revealed in a monetary transfer from the taxpayer, underservicing is effectively revealed only in the Department of Health's computer profiles of doctors' behaviour. One would have thought that a government as alert to instances of social disutility as the current one would by this time have brought the attention of the Health Department to bear upon cases of doctors who are supplying particular services at a rate **below** their group norm. A counsellor

(might I suggest a welfare economist?) could be sent out to advise the doctor about the serious social costs generated as a result of his or her patients missing out on the services they should have been supplied, but were not. And if the government holds little favour for the word 'underservicing', then this antisocial behaviour could instead be defined, in healthspeak-officialese, as 'negative overservicing', and the offending doctor reprimanded for 'negative deviance' from the group norm.

Self-Generated Problems

This particular exercise in regulatory overkill has come about because the government refuses to address the question of the extent to which it has generated its own problems. What the government defines as overservicing (see Joint Parliamentary Committee, 1982:223) is simply a rational response to the ordinary market forces of revealed demands at the going customer prices. Despite this fact, the government appears intent on pursuing and even extending this brand of regulation of supplier behaviour. Instead of the supplier of health care services and the patient having the right to enter into a mutually agreeable arrangement to exchange medical services for money, as would be the case in a free and open market, that supplier is now forced to monitor the patient's demands so as to eliminate, for example, 'frivolous' expenditure on health care. With one eye alert to the FODS squad, the supplier will now think twice before acceding to certain of the customer's demands. Both parties are thereby worse off.

Typically in this kind of regulatory threat system, the supplier does not know exactly how much servicing constitutes *overservicing* in the collective mind of an investigatory committee. In principle the supplier should keep tabs on the various group norms. And each supplier will probably arrive at a different idea of the permissible limits to satisfying patients' demands. The uncertainty thus created by the system has its own nonmeasurable economic costs. In the light of official statements and other supportive literature, it is not difficult to deduce that this variety of direct regulation of medical markets is a growth industry. Because of the incentives facing regulators (i.e. politicians, bureaucrats and sundry academics) in the diverse political markets where favours are traded, it is likely that this situation will continue into the future as long as the government is heavily involved in the production and delivery of health care services.

Controls over the behaviour of providers have helped to steer us in the direction of a full-blown national health system complete with doctors as government employees, poorly used hospital resources,

and rationing by waiting in line (but perhaps with lower monetary 'costs'; see Goodman, 1980). Further movement in this direction is at present hampered only by the lack of a generous interpretation by the High Court of the Constitutional interdiction of 'civil conscription' (s.51).

Non-market-oriented controls over suppliers is, however, the consequence of an environment which is, in turn, the result of the economic effects of a history of government regulation in the health area.

III. REGULATIONS AND THEIR EFFECTS

Government regulations fall into roughly three categories: regulation of the entry and professional behaviour of practitioners; management of third-party payments for the use of health resources; and control over the development, funding, and operations of institutions such as hospitals, nursing homes, and health centres. I now turn to consider how some of these regulations can be expected to yield their unpleasant side effects.

Barriers to Entry and Professional Conduct

The first set of controls regulates entry and competition on the supply side of the medical services markets. They are embodied in the Medical Act or Ordinance currently in force in a particular state. Entry into the medical profession is restricted to people who (1) have completed a lengthy course of study at an Australian university (or at one of the limited number of designated universities overseas), (2) have completed a year's apprenticeship as an intern at a 'recognised' hospital, and (3) are 'of good fame and character'. Entry into the market place is then acquired by becoming 'registered' with the Medical Board in the state where one intends to practise. It is illegal, with stiff penalties, for anyone not possessing the asset of registration to call himself or herself a (medical) doctor or to practise medicine, and in some states it is an offence even to give away services in respect of certain prescribed diseases. Overseas doctors who wish to emigrate to Australia, but who do not possess the relevant qualifications under Australian law, have the option of gaining an Australian MBBS (Bachelor of Medicine, Bachelor of Surgery) or attempting a rigorous set of examinations set by the Australian Medical Examining Council.

The ostensible purpose of these regulations is to ensure that there

is quality control at least at the input end of the medical market place. The actual effects, however, are to create market closure rents, which are initially reaped by those in the industry at the time the relevant legislation is enacted (recall the grandfather clauses contained in the 19th century Acts) but are eventually dissipated throughout the system. This could be expected to happen in the following way. The demand for medical services grows over time as population grows and technology improves. The restriction on market entry of producers leads to a temporary shortage of supply, which raises prices. Thus the medical markets clear at higher prices (fees) than they would without entry restrictions. The prospect of higher rents to be had in this profession, relative to others, creates more demand for services of the (approved) training institutions as people compete to acquire the registration requirements, and prices rise in the medical education industry. In the long run the doctor just breaks even, in the sense that the higher fees and incomes earned in practice just yield a normal rate of return on his or her higher investment in education. (Any other surplus above costs in the long run will reflect above average ability in one or more aspects of professional practice.) If there are no resources particularly specialised in the long run to the pursuit of training future doctors, then people in the training industry will also just break even, all costs taken into account. Thus the market closure rents are an ephemeral creation of the regulations, and are dissipated in the long run. The final result is that medicine is supplied at higher market clearing prices, and if the long run demand for medical services is price elastic, total health expenditure is higher than it would otherwise have been. In addition to this, the taxpayer incurs the higher taxes to sustain the bureaucracy necessary to monitor and control the registration procedures. This is the price paid for legislated quality control. (For a further discussion of market responses to entry restrictions, see Logan, 1984.)

Any subsequent changes in the conditions confronting buyers and sellers in the medical markets will mean appropriate adjustments to prices and costs. For example, 'free' education of doctors via tax-funded university fees lowers the costs to the medical student of acquiring registration. In the long run this will bring down medical fees, but taxes will have to be raised to finance the event. Free education also generates excess demand for places at medical school. Since demand cannot now be rationed by price, other rationing criteria are used. It is debatable whether these other criteria are related to eventual productivity as a doctor any better than the willingness to pay the price.

And what is the price? Ignoring the fixed costs of a university education, such as the Vice Chancellor and the buildings and

grounds, the marginal cost of a medical student can be roughly estimated at an average amount (1981 data) of \$8000 per annum in 1985 prices, although this figure varies widely across medical schools (coefficient of variation of about 35 per cent). At a five per cent real discount rate, the capital value of the marginal cost of a six-year course in medicine, assuming course completion in minimum time, is \$40 600. If a doctor entered the market place nine years after entry to medical school, and planned to retire at age 65, then he or she would need to earn an extra net income of \$3700 per year in order just to cover the university costs. This implies that if medical students were to bear their own (marginal) costs at university of acquiring the MBBS, and if Dr Average were to have 150 consultations a week over 47 weeks, then market forces would, in the long run, drive the average consultation fee up by 52 cents. On the other hand, the individual taxpayer would save about \$13 a year by not having to provide free university places in medicine. The introduction of full fees for access to medical school would deter some new students from continuing, but it would still pay later year students (at some point in the six-year training cycle) to continue with their training because their costs of lost opportunities in their early years are sunk. So there would be some lag before the effects of such a policy on the supply of doctors would be felt sufficiently strongly to raise fees. However, in the long run doctors would again just break even.

In addition to the market entry regulations, the Medical Acts contain the more blatantly anticompetitive restrictions on advertising (although the New South Wales Government has recently relaxed these slightly) and 'touting'. These serve to limit competition among currently practising doctors by reducing the quality of information available to consumers (see Logan, 1984). Thus both market closure regulations and advertising restrictions act to sustain higher medical fees than otherwise.

If the Medical Acts were repealed in toto, much heartburn would be generated in the short run as those who had already adjusted themselves to the regulated system suffered windfall losses from intensive competition. Reversing the previous line of argument, the ultimate effects would be reduced market clearing medical fees and doctors' net incomes, but the latter would in the long run yield a normal rate of return to whatever profile of training were to become the market norm. One can envisage greater specialisation and variety in medical training. It is quite likely that institutions or corporations specialising in certification would be voluntarily established, as has happened in the New South Wales (free) market for clinical psychologists. Consumers could avail themselves of whatever

information concerning doctor quality were to be produced in the free market, but would have the option of purchasing the services of one or more Rolls Royce doctors who chose to acquire an MBBS after an intensive and exhaustive six-year course of study followed by a few years under the expert guidance of other Rolls Royce doctors here or overseas. It would all depend upon the patient's preferences, income, and portfolio of insurance.

In a truly free market environment, in which 'title transfer' contractual arrangements were the only ones with legal recognition, malpractice involving, say, surgical error or lapse of the doctor's 'duty of care' would not necessarily be actionable. An effective hedge against this kind of unfortunate circumstance would be the use of a legally binding 'performance bond', in which damages for incomplete performance would be mutually agreed upon by the doctor and the patient at the time the contract was entered into for the delivery of the service itself (Rothbard, 1982:Ch 16).

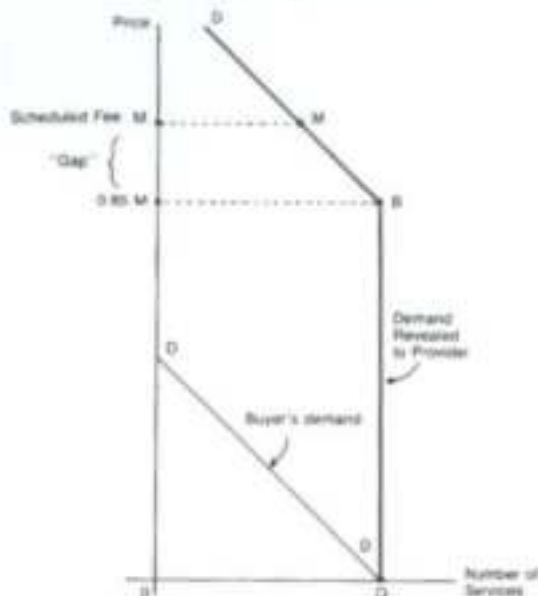
If the purchase of pharmaceuticals were deregulated at the same time, then it would be in the buyers' interests to acquire information about the curative effects, side effects, and other parameters of drug purchase, and it would pay sellers to generate this kind of information in competition with each other for the pharmaceutical market. In fact, it would probably pay most people to purchase the services of a free market agent from whom they could buy advice in the form of a suggested 'prescription'. Certain negative externalities could arise, however, in the excessive use of certain drugs on the market. I return to this problem below.

How Payments Are Made

The second form of market intervention is in the delivery of the government's subsidies and the control over the kinds of policies that the private, registered insurance funds are permitted to write with their own clients. The details of some of these regulations have already been outlined. Although they differ in detail, their effects on the demand for health care services are qualitatively the same.

Medicare, which is our current system of subsidised health, offers the following package: 85 per cent of the scheduled fee is paid by the government up to a maximum patient 'gap' per service of \$10, and if the sum of all the 'gaps' incurred by a patient reaches \$150 in any one financial year then the government picks up the tab for the entire scheduled fee. Figures 2, 3 and 4 sketch the underlying demand curve generated from hypothetical consumers' choices made in an unsubsidised market (DD) and the demand curve derived from

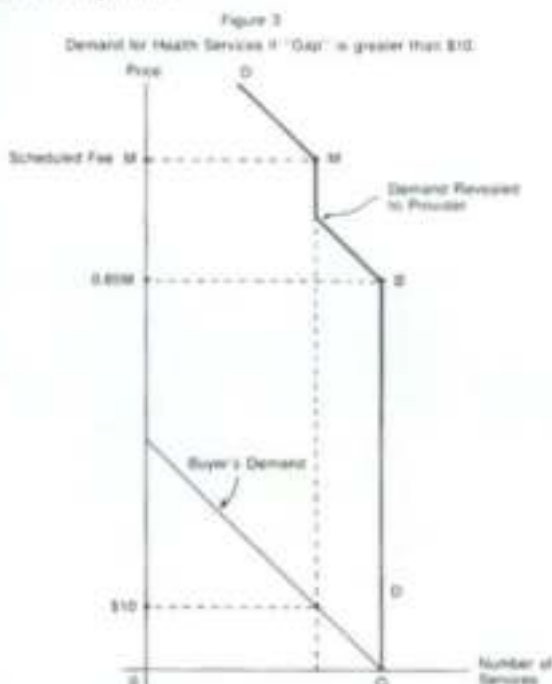
Figure 2
Demand for Health Services if "Gap" ($= 0.15M$)
is less than \$10.



the underlying demand conditions when the consumer is in various positions relative to the subsidy entitlement ($D'D'$). Note that each of the demand curves $D'D'$ is 'kinked' at certain points. The kinks in each case are determined precisely by the level of the scheduled fee.

Consider Figure 2, which is for a person who simply receives the 85 per cent subsidy. The amount demanded Q is constant up to the point at which the buyer begins paying for the service from his or her own pocket: the commencement of the 'gap'. If sellers charge a higher price, even beyond the total scheduled fee M , then the amount demanded shrinks along the underlying demand schedule. For the linear demand curves drawn, the elasticity of demand that a seller would observe (i.e. along $D'D'$) is greater than the elasticity of the buyer's underlying demand since the **percentage** change in price that induces a given percentage change in demand is smaller for the seller (a quick calculation shows that the ratio of the seller's to the buyer's price elasticity is $1 + 0.85M/p(b)$, where $p(b)$ is the expense per service to the buyer).

Figure 3 is for a person purchasing items priced above \$67 (1985 fee levels), which is the point at which the \$10 (approx. 15 per cent of \$67) maximum patient payout is operative. The demand curve

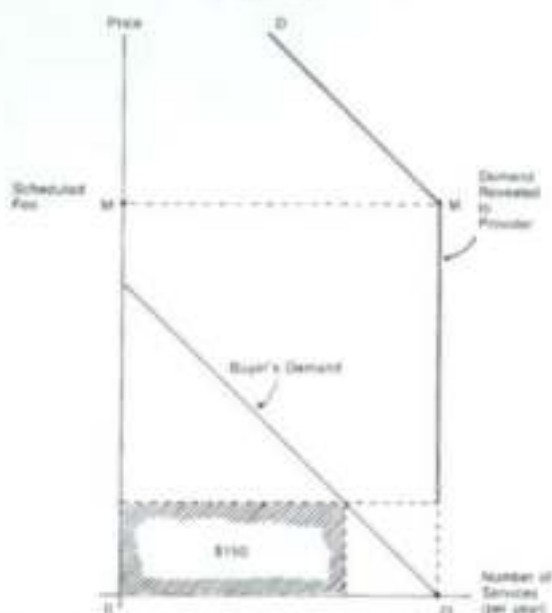


$D'D'$ is the same as in Figure 2 until the buyer strikes his or her maximum payout point A. The amount demanded is then unaffected by higher prices until sellers start changing above the scheduled fee. Under the rules any amount above the scheduled fee is paid for out of the buyer's pocket. This seller's demand curve thus has two kinks, one at the bulk-billing point B, and another at the scheduled fee M.

Finally, a heavy user of medical services would confront a seller with a demand curve $D'D'$ as shown in Figure 4. A seller would not observe the lower portion of the demand curve, and again would face a kink in demand conditions at the scheduled fee M.

It is the derived demands $D'D'$ that confront the seller. Together with cost conditions and the competitive environment in which the seller is located, these derived demands will determine the seller's price and sales strategy. Since the market demand is the sum of all of the (potential) individual patients' demands, that too will reveal kinks at the levels determined above. Performing the usual textbook exercise of superimposing a battery of different cost curves upon such a hypothetical market demand curve, we can see that prices for expensive (say, specialist) services are likely to cluster at either the scheduled fee or the discounted fee. For run-of-the-mill consultations with general practitioners, prices charged could

Figure 4
Demand for Health Services if announced Gap
and at least \$150



optimally be anywhere from the discounted scheduled fee upwards (point B in Figure 2), but *never* below this point.

This small diversion into the economics of price-searcher behaviour implies first that changing market conditions, such as the entry of more doctors, will shift the demand conditions facing each seller but will not change the heights of the kinks in them. Therefore changes of this kind are likely to result in a fall in doctors' incomes rather than in the prices which they charge, for any given Medical Benefits Schedule. A change in the scheduled fee relative to costs of production would shift the kink(s), and sellers' pricing policies would adjust accordingly. Second, the amount demanded is greater than in an unsubsidised market, and is even likely to be greater than it would be if medical fees were reimbursed with a straight 85 per cent subsidy, whatever the fee (draw in the $D'D'$ curve for a 15 per cent coinsurance rate to see this).

Another implication of this analysis is that, except for people who buy the standard consultation from a general practitioner, people will tend to seek medical attention under the subsidy up to the point where their marginal valuation of the service performed is about zero, or at most equal their other marginal costs (such as time) of buying in these markets. This is at least part of the 'overservicing' discussed

above. Since it is certainly not costless to produce the services that are in demand, the subsidy generates a misallocation of resources in that peoples' valuations of the additional services they consume, relative to the unsubsidised amount they would otherwise consume, are below their valuations of all the other things necessarily given up in order to have those marginal medical services produced and supplied to them. The difference represents wasted production and exchange opportunities, and is the deadweight loss of the subsidy.

Even if the government is unperturbed by the relatively invisible spectre of deadweight losses, budget costs will tend to rise in the long run and these are distinctly visible. This cost hike takes place over time, not just because more goods and services are demanded, produced, and supplied than before, but also because they are more costly to produce. Resource prices must rise in order to attract the additional units demanded into the health care markets. The result is more resources at higher prices, and hence a rise in total health expenditure measured in dollars (the economic cost is less than this because intramarginal units generally have lower transfer prices). Inevitably the government will be faced with the problem of funding a proportion of these higher costs. In the long run government will require more taxes to fund the scheme, and it might also impose other more direct controls in an effort to 'contain costs'.

A solution to the problem would be to remove the subsidy completely, thus eliminating the taxes no longer required for this purpose; and simultaneously to deregulate the health insurance markets, permitting private insurers to write policies tailored to the varied preferences that would then be revealed in the market place. Most people would probably take out insurance against the hazards of large and uncertain costs, such as surgery and hospitalisation, and self-insure for the regular, predictable, relatively low cost visits to the general practitioner. Indeed, Lees and Rice, in their criticism of Arrow's famous paper on the subject of health insurance, conclude that this is an optimal strategy when there are positive costs involved in the production of insurance policies (Lees and Rice, 1965).

Insurance policies would probably contain front-end deductibles, or some rate of coinsurance, or a combination of these ingredients. People in identifiably different risk classes might be offered policies with different premiums (Hartley and Kyle, 1983), and perhaps lifetime insurance would be available to those who wished to hedge against higher premiums in their later lives. One can even envisage no-claim bonuses and discounts for healthy life styles. Some people, particularly the relatively young or those who anticipate good health, might choose not to insure. The 1983 Health Insurance Survey (Australian Bureau of Statistics, 1983) revealed that in fact about

15 per cent of 'contributor units' who did not have a Health Benefits Card chose not to insure at all, even when faced with a significant price incentive to do so. A compulsory national health scheme prevents these people from adopting their own voluntarily chosen risk profiles.

Controlling Health Care Institutions

The third set of regulations refers to the control of institutions such as hospitals, nursing homes, and health centres. The hospital and nursing home industry in Australia is comprised of a mixture of government and private ownership, with predominantly public ownership of hospitals (about 60 per cent). Nursing homes have been a growth industry as a consequence of demographic factors, and direct government ownership is in the minority. Nursing homes are primarily a mixture of privately-owned, for-profit enterprises, and ownership by nonprofit religious and charitable organisations. Health centres are government operations and many offer, among other things, services similar to a privately operated clinic. All institutions, public or private, are subject to government control in various ways. They must seek licences for business, to ensure that their customers can receive subsidies of one form or another, and to be eligible for those subsidies that are paid directly to the institution. Public hospitals and health centres are subject to some form of more direct central control through the relevant Health Commission.

Public institutions can be expected to behave somewhat differently from privately-owned operations, simply because their managements face different incentives. Under private ownership, management is forced by competitive pressures, including those stemming from the public hospital system, to take notice of market signals and to attempt to effectively monitor costs. The public hospital administrator is not so constrained since, although faced with 'tight budgets' and problems from the unions, the consequences of operating at a loss are less severe than they are for his or her colleague in the private sector. Similar incentives confront the lower level management staff. Besides this, the public hospital administrator gets no benefit from any surplus he or she might generate through innovative efficiency. The consequences are predictable, and have been observed in other industries where government has assumed ownership and control. Less devotion to painful cost-cutting efficiency measures can be expected, staff/patient ratios will tend to be greater (even after adjustment for the 'teaching role' of many public hospitals), and other costs will tend to be higher than in similar situations in the private sector.

If there is any market closure rent to be had from the regulations that control the entry of competing institutions, this will tend to be captured by the hospital's suppliers, of both labour and materials, or will be dissipated in waste and inefficiencies. Thus a Parkinson's Law of subsidy would be expected to apply in this context: costs tend to rise to the extent of the subsidy available. In a word, there will be higher costs and larger demands upon the taxpayer to fund the system. The recent Jamison Committee in its findings on the hospital system commented upon the large variability between institutions in cost per unit (measured in terms of 'bed-days') and other variables. This would not happen in an industry in which firms that produced and sold similar products were responsive to market forces. The Committee also commented that the federal government at the time (1979) was bankrolling the state-run public hospitals to the tune of 50 per cent of their running costs, an arrangement hardly conducive to parsimony in hospital spending among the states (Commission of Inquiry, 1980). This situation has now been effectively reversed.

Signals from the market have only a distant and indistinct effect upon decision making in the public sector. One example of this is the eternal search among the relevant bureaucracies for a meaningful way to allocate resources over public hospitals and health centres. Even in a world of bureaucratic omniscience in which peoples' marginal values of resource use are discoverable, those values are relevant to a subsidised environment and are not the ones that would be revealed in a free and open market. Therefore they are not relevant to efficient resource allocation. No amount of cost-benefit studies or similar 'research projects' in a regulated market will reveal what would have been revealed in a free market. Thus the allocation of resources by bureaucracy is likely to be either entirely arbitrary, or else determined by the equilibrium consensus in some political market. In the latter event, the values of people with a comparative advantage in the political trade will tend to dominate whatever committee determines resource allocation.

It is interesting to imagine what might happen if state governments were to relinquish their control over these publicly-owned institutions by selling them off to the highest bidders, and if government regulations of the privately-owned institutions were repealed. There would certainly be some structural adjustments, especially if governments simultaneously ceased subsidising any form of health care whatsoever. The first effect would be a considerable tax savings, since government outlays on hospitals constitute a significant proportion of total health outlays. Second, a system of completely private, free market hospitals would eliminate the extensive queuing

that has recently served as a rationing device for beds. This would happen as hospitals responded in the usual ways to market demands by appropriate pricing, or, in the longer term, as more hospitals opened and existing structures were rationalised. Since privatisation of the public hospital system is highly unlikely, the long-term prospect in the area of cost (and demand) containment will depend upon the particular directions taken by the various state governments in their responses to the recent changes in funding arrangements with the federal government.

Under the present government, privatising the hospital, nursing home, and health centre systems, removing health subsidies, and deregulating health insurance all lie in the realm of imaginative fiction. Under any Australian government, deregulating the supply of medical services by repealing the Medical Acts is in the realm of total fantasy. With the present government's predilection for consensus, social engineering, and wealth redistributions, the Medicare system is certain to be retained. A government can indulge in its predilections, however, only if it retains office. As the recent exercise in tax summitry clearly illustrated, soaking the voting taxpayer in order to fund the increasing costs of big governments is not the road to success.

One solution (apart from the unacceptable one of reducing its own size) is for government to convert, as far as possible, the visible costs of its activities into the invisible costs of regulation. It can do this by imposing more direct controls on people who are closely involved with spending decisions that affect the government's budget outcome. The smaller the groups who suffer the effects of the additional controls, the better it will be for the government on polling day. Thus the incentive is there for controls over doctors' activities, especially since doctors draw little sympathy from the community at large. Unfortunately for the government, total control via co-opting doctors into the public service under a national health scheme would violate the ban on civil conscription, which, interestingly, was inserted into the Constitution (s.51) in 1946 by a previous Labor government.

IV. ANSWERING ARGUMENTS AGAINST DEREGULATION

Suppose that the fictional events referred to above were to come about. Would any problems arise that would induce doubts as to the wisdom of this particular foray into free marketeering? Some of the arguments against deregulation of the health care market can

easily be rebutted, but at least one argument, the 'externalities' argument, requires careful consideration.

Miscellaneous Objections to Deregulation

Initial doubts could perhaps arise about the quality of information available to customers about the services of individual sellers in a free market. Regulators are quick to point to 'imperfections' inherent in the market place, and to insist that the only solution is government control. But as we have seen, regulation in medical markets has quite possibly reduced the quality and has certainly reduced the quantity of customer information by limiting advertising and creating a closed market. The efficiency of an open market with price-searchers has been established in the literature on contestability, and so the argument that medical markets 'do not work' does not hold.

A more serious doubt is whether the wealth redistribution that follows the deregulation would be acceptable. If, however, it is not acceptable to certain individuals, then they are perfectly free themselves to engage in charitable activity designed to improve the distribution of wealth. Of course, in a society such as ours, there is probably less voluntary charity than otherwise because private charity tends to be crowded out by the government's compulsory charity.

An 'unacceptable' distribution of income (not wealth) may arise naturally from the effects of life-cycle earnings. Upon retirement, one's income from working is, by definition, zero. In a free market, however, people are faced with different incentives, one of which is the incentive to insure and to save against old age and infirmity. Lest it be thought that this would be an onerous burden, first recall that people would be paying less taxes, and second, a simple actuarial calculation shows that a mere \$4 a week invested at a real rate of five per cent from the age of 20 (\$7 from the age of 30) would ensure sufficient funds for full accommodation in a nursing home for five years (from age 75 to age 80) at the current rate of resource cost (including normal profit). Finally, in the medium term, a Benefits Card system for those 'socially disadvantaged' still carrying the burden of the past is always a feasible option.

The Externalities Argument

There is one general area, however, in which advocates of government intervention in the health care trade are not so easily rebutted. This last bastion of the regulators is generated by the

problems that arise in efficiently allocating a good or service when externalities are present. This happens when the actions of one or more people affect the well-being of third parties ('innocent bystanders'), who are limited, generally by an absence of contractual arrangements, in the ways they can respond. In the area of health, the externalities that occur are called public health problems.

For example, suppose that a number of people live along the length of a river, which is used by all for drinking water and other aquatic activities. If nobody has property rights in the river, or if the river is an unpoliced piece of 'communal property' (and thus no **individual** has property rights) then the dumping of untreated sewage into the river is virtually costless to the person who does the dumping. Sewage thus dumped is relocated by the river to produce a less felicitous supply of drinking water to the many people who happen to live downstream. In this way the costs of the dumper's productive activity (i.e. local sewage removal) are borne by the downstream dumpees; in the economist's jargon, the upstream dumper's activity has produced an **external diseconomy**.

Several alternatives are available to control river usage. One alternative would be for government to outlaw completely the use of the river as a dump for sewage, treated or otherwise. Another would be for the government itself to enter into the business of sewage treatment and disposal, the costs of which would be borne by the inhabitants as an addition to rates, or as a levy upon taxable income. In each case the costs to the user (of the treatment and disposal facilities) are independent of the rate of usage; thus the river is cleaner but the **total** social costs of sewage production are not diminished, merely shifted to a monetary form. The second policy would be the one most likely to be adopted if there were a sufficiently powerful band of local manufacturers of treatment equipment and other ancillary supplies who could convince the government of the social benefits of their expanded activity.

In each case, however, the policy chosen completely evades the issue of what precise amount of sewage treatment, together with water quality, would be preferred by each individual in the community were that individual to bear the full costs of his or her own activity (i.e. to **internalise** all externalities). In fact it is not possible for a government to observe individual preferences when these are not revealed in a market context (or elsewhere), and so it is not possible for the government to direct the allocation of resources in any 'socially optimal' way. This means that any 'solution' by government of the public health problem confronting the river community must involve essentially arbitrary choices in the allocation and use of resources, although these choices will be modulated by

the competing political demands of the time. In addition, each policy requires, for its implementation and continuing control, more bureaucrats, more policepersons to monitor the regulations, and thus more taxes to sustain these supernumeraries. Finally, casual observation of the operation of just about any government-run 'enterprise' leads one to predict a demand for yet more taxes to be dissipated in productive inefficiencies, managerial perks, and sweetheart deals with the Brotherhood of Effluent Engineers. These extra costs are not simply the consequence of laxity on the part of officials, or of insufficient thought given to the monitoring of performance; they are inherent in the incentive structure of bureaucratically-controlled agencies and are thus inevitable (Niskanen, 1968). These and similar criticisms can be levelled at all other approaches to the public health problem that assume the involvement of the government or its agencies.

There are many alternative ways in which the river could, in principle, be parcelled up and divided among the inhabitants. These range from a monopoly in the river owned by one individual (**not** the government), who would then sell rights to use in response to the demand for them, to a distribution whereby each household owned an adjacent portion of the river, and any one portion of the river was owned by someone. In the latter case upstream dumping would be an invasive violation of the property rights of downstream inhabitants, and would thus be actionable at law (facility for class action would reduce the anticipated legal costs involved). In a society where full property rights are respected, this second allocation of the resource would be established initially and would reflect the various 'homesteader' ownership rights in proportion to individual use (Rothbard, 1982:Chs 10, 11). If the costs of monitoring resource use, selling rights to water, and other transaction costs were feasibly lower under a more contracted ownership structure, then it would pay some individual(s) or corporation(s) to eventually buy out the small holders' individual shares of the river.

In either of these two alternative allocations of property rights, the social cost of an act of pollution is borne directly by the polluter. Resource users now independently decide upon their own usage rates by stacking up their values of the resource use at the margin against the **full** expected social marginal cost of their planned activity. Social marginal values are revealed in the market for river access, and an efficient allocation and use of the resource is achieved without the ponderous interposition of gaggles of politicians and bureaucrats. Of course, peoples' wealth will depend upon how this previously communally owned resource is divided up among them, and this could present not a few headaches for politicians. However, this is

a problem pertaining to the distribution and control of society's wealth, not a public health problem per se.

Thus a system of fully allocated property rights is a viable solution to the problem of public health when this arises from collective externalities that would be produced when nonowned or communally owned resources are misused. It applies to the use of hitherto publicly-owned resources of all kinds, including waterways, roadways, and public places such as parks, gardens, and city squares. The success of this kind of property rights system would depend upon restraining not only governments' desires to 'own' (i.e. take) and control resources of various kinds, but also their addiction to supplying, with the taxpayers' money, public services such as water supplies, sewage disposal, and so forth, in competition with private individuals who can profitably organise the requisite productive activity.

Another example of the externality problem in the area of public health is when interpersonal externalities occur in cases of infectious disease. There are basically two contexts: a person unknowingly transmits a disease to another person (or persons) either because the former was unaware that he or she in fact was infected, or because he or she was ignorant of the infectious potential of the disease; and a person knowingly endangers another without the latter's knowledge or consent.

In the second context the solution clearly lies in the recognition at law of a person's absolute and complete property right in his or her own person (strengthening of this property right would preclude all forms of 'civil conscription'). In this instance, the person doing the infecting has knowingly committed an aggressive act of invasion of the property rights of the second person, and the victim therefore has a right at law to sue for damages. The fact that carriers of infectious diseases would face a definite personal cost as a result of transmitting their maladies to others would be a significant disincentive. We could predict a reduction in the public appearances of infected people. This consequence would be enhanced in an environment of class actions where the entire cost to the victims of infection among, say, a bus or trainload of people would be borne by the infector.

But a similar argument also applies in the first context. Whether or not the infector knew about his or her condition, there is still an invasion of the property rights of the victim, and under a full property rights system the infector remains liable for damages. This is no different from the accidental damage that could occur if an unexpected stone flung at random from beneath my lawnmower were to forcefully intersect with my neighbour. I would have caused

damages to my neighbor's person, even after taking due precaution, and would thus be answerable to a public risk suit.

The solution to the financial problems that arise in these instances is to deregulate the insurance markets, in particular in the health area, so that insurance companies could offer public risk contracts for people who desired to hedge against the anticipated costs of an 'infection suit' brought against themselves or their dependants. Most open market insurance contracts would contain waivers in the event of the insured knowingly infecting others, just as insurance contracts do at present with respect to accidents caused by drunken driving.

It would pay insurance companies to encourage defensive behaviour among their clients by, say, offering reduced premiums to those who purchased inoculations against imminent contagion, or alternatively imposing penalties upon those who chose not to inoculate (each of these generates the same incentives, dollar for dollar). People who chose not to insure (i.e. to self-insure) would also have an incentive to purchase inoculations since they would face the choice between the actual costs of the inoculation and the expected costs of anticipated damage suits (in addition to their own personal costs) arising from themselves suffering a particular malady. In a free market environment, drug companies, doctors and others specialising in the health industry would compete for the inoculation trade; inoculations would be efficiently delivered at lower cost than otherwise. Competition among sellers would result in advertising campaigns directed at informing the public of any threats of imminent disease and of the relative benefits to be derived from the various inoculations. Free market doctors would offer their services as agents eager to advise consumers in their choice. The quality of information cheaply available to people about disease prevention would be higher than it is now under the regulated closed market regime. In addition to this, competition among serum producers and drug companies would drive a continuous search (i.e. research) for better and cheaper products to offer, and the cost to the community would be lower. (Although the out-of-pocket costs for some of the drugs now subsidised would be higher, at least initially, so would the anticipated costs of *not* inoculating.) More inoculations would be purchased, and again the incidence and severity of infectious disease would be reduced, quite possibly below the current level, and without the intervention of government. Thus the externality effects of infectious diseases are appropriately internalised by a system of complete and enforceable property rights under which the offence of infecting is actionable at law.

Some argue that identifying and apprehending the offending party is too difficult, particularly when there is a lapse of time between

the actual transmission of the disease and its observable effects. But these are exactly the same difficulties that have always confronted the victims of other violations of property rights such as theft. Although thieves are often difficult to apprehend and convict, there is probably less theft under the current system of anticipated punishment than there would be if property rights as conventionally viewed were not so clearly defined and protected at law. The perpetrators of infections, or of thefts, would be more efficiently and cheaply apprehended, and victims more readily compensated, under a system of private law and 'protection/insurance' agencies, as outlined in the writings of Rothbard (1982) and others.

Reversing the argument, the recognition at law of each person's inviolable property right in his or her own person, and the effective enforcement of this right, would serve to control and limit the spread of infectious disease in the manner outlined above. Since the private monitoring of infection is likely to be considerably more efficient than public monitoring and control, the spread of contagious diseases would be expected to be even less extensive and less severe than under the current, but much applauded, control by government regulation.

The Importance of Property Rights

The free market solution to the problem of the infectious disease externality rests simply upon the appropriate strengthening of property rights. Once this is achieved, other laws and regulations that inhibit voluntary exchanges can be repealed to the benefit of all (the regulators and other current beneficiaries excepted). One example is the current regulation that restricts the purchase of certain pharmaceuticals, which are required by law to be prescribed by a registered medical practitioner. A justification for this regulation, other than the usual paternalistic one, is that with no such control people might purchase and consume a sufficient quantity of, say, antibiotics so as to induce a mutation in a particular bacterium and thus create yet another strain of infectious disease. Under the full property rights system envisaged above, people would be forced to bear the full (expected) social cost of this kind of activity. It would pay them to exercise appropriate care in drug consumption, and to seek out full information, either themselves or via agents (such as doctors), concerning appropriate dosages and the risks involved in excessive consumption.

The arguments outlined above demonstrate that there is an appropriate free market solution to the public health problem, even in the so-called intractable case of infectious disease. It is probable that the free market solutions suggested above involve less cost to

the community, and thus more resources would be available for the production and enjoyment of other things. In a word, we would be better off (bureaucrats and politicians again excepted). So falls the last bastion in defence of the regulators.

References

- Australian Bureau of Statistics (1983), *Health Insurance Survey*, March, Cat. No. 4335.0.
- Commission of Inquiry into the Efficiency and Administration of Hospitals (1980), *Report*, December.
- Department of Health, Commonwealth (various years), *Annual Report*.
- Goodman, J.C. (1980), *National Health Care in Great Britain: Lessons for the U.S.A.*, The Fisher Institute, Dallas, Texas.
- Hartley, P. and A.S. Kyle (1983), 'The economics of medical insurance', mimeo.
- Hicks, R. (1981), *Rum, Regulation and Riches*, Australian Hospitals Association, Sydney.
- Lees, D.S. and R.G. Rice (1965), 'Uncertainty and the welfare economics of medical care: Comment', *American Economic Review* (March), 140-54.
- Logan, J.G. (1984), 'A brief exploration into the anatomy of the medical profession: The market for GP services', pp 41-59 in R.A. Albon and G. Lindsay (eds), *Occupational Regulation and the Public Interest*, Centre for Independent Studies, Sydney.
- (1985), 'Medicare: Public provision and private incentives', *CIS Policy Report 1* (February), 7-11.
- Niskanen, W. (1968), 'The peculiar economics of bureaucracy', *American Economic Review* 28, 293-305.
- Parliamentary Joint Committee of Public Accounts (1982), *Medical Fraud and Overservicing — Progress Report*, Report No. 203.
- Pensabene, T.S. (1980), *The Rise of the Medical Practitioner in Victoria*, Research Monograph No. 2, Health Research Project, Australian National University, Canberra.
- Richardson, J. (1980), 'The inducement hypothesis: That doctors generate demand for their own services', mimeo.
- (1981), 'A model of doctor practice: An empirical analysis using Sydney Survey Data', pp 17-53 in *Economics and Health 1980*, Proceedings of the Second Australian Conference of Health Economists, Australian National University, Canberra.
- Rothbard, M.N. (1982), *The Ethics of Liberty*, Humanities Press, Atlantic Highlands, New Jersey.
- Royal Commission on Public Charities (1899), *Fourth Report: Hospitals of the Colony*, Government Printer, Sydney.
- Sax, S. (1984), *A Strife of Interests*, Allen and Unwin, Sydney.
- Scotton, R.B. (1968), 'Voluntary health insurance in Australia', *Australian Economic Review* 2nd quarter, 37-44.
- and J. Deeble (1968), 'Compulsory health insurance for Australia', *Australian Economic Review* 4th quarter, 9-16.
- Social Welfare Policy Secretariat (1984), *Pensioner Fringe Benefits*, June.
- Voluntary Health Insurance Association of Australia (1984), *Statistical*

Policies and Prescriptions

Bulletin No. 1, April, VHIAA, Canberra,

_____(1985), *Voluntary Health Insurance Today*, April, VHIAA, Canberra.

**Rationing Health Care: An
International Perspective**

John C. Goodman

John Goodman is President of the National Center for Policy Analysis, a Dallas-based think tank. The Center produces books and studies that examine issues such as health care, Social Security, education, the federal deficit, national defence, comparable worth, privatisation, and other major policy issues.

Dr Goodman has a PhD in economics from Columbia University. He is author of five books and numerous articles published in professional journals. His book, *Economics of Public Policy*, is widely used in colleges and universities throughout America. His book, *National Health Care in Great Britain*, has been favourably reviewed both in the US and in Britain and led to the formation of the Center for Health Studies, which Dr Goodman founded in 1980 at the University of Dallas. His book, *Social Security in the United Kingdom: Contracting Out of the System*, has generated considerable interest in the Reagan Administration. His latest book, *Privatization*, explores the reasons for the highly successful privatisation revolution in Britain being pioneered by Margaret Thatcher and argues that a similar revolution can, and should, occur in the US.

Rationing Health Care: An International Perspective

John C. Goodman

Among health economists, there is a natural tendency to look to the United States to try to understand what happens when health care is rationed by competition and prices, and to look to European health care systems to try to understand what happens when health care is rationed by nonmarket mechanisms. In this paper I argue that not very much can be learned about rationing through the price system by studying the US health care sector because (at least in the hospital sector) there is very little rationing going on. By contrast, a great deal can be learned about nonmarket rationing by studying the health care systems of developed countries outside the US.

I. THE US HEALTH CARE SYSTEM

The health care system of the United States is unique among the health care systems of the developed countries. It is the only system in which over half of spending on medical care is done by the private sector rather than by the government. Accordingly, the United States relies on the market place to allocate medical resources more than any other developed country.

It would be a mistake to conclude from these facts that the central features of our health care system are primarily determined by competition in the free market, however. Were there a genuine free market for medical care in the US, our health care system would be very different from what it is today (for a general survey of the historical evolution of government restrictions on the medical market place as well as a critical analysis of these restrictions, see Goodman, 1980a).

The Market for Physicians' Services

There have been episodes in our history when the free market existed in various sectors of the health care industry. In the later part of

the 19th century, for example, there was virtual free entry into the medical profession and into the 'business' of medical education. Proprietary medical schools flourished throughout the country and there were no serious restrictions on the ability of physicians to compete for patients (Hamowy, 1979).

All of this changed radically in the first few decades of the 20th century. Under strong pressure from physicians' organisations (principally the American Medical Association), state legislatures enacted strict licensing laws controlling entry into the profession and the conditions under which medicine could be practised (Kessel, 1958, 1970).

As a result of these laws, entry into the profession was greatly curtailed. Proprietary medical schools were abolished, and the educational requirements for becoming licensed to practise were made increasingly burdensome over time. In the first three decades of the 20th century the number of medical schools in this country was cut in half and the number of physicians per capita was reduced by one-sixth. The 20th century has seen an enormous increase in the demand for the services of physicians. It has seen only a modest increase in supply. There are fewer physicians per capita in the US today than there were over 100 years ago.

Licensing legislation also greatly impeded the ability of physicians to compete for patients. Among the proscribed practices were: advertising for patients, price-cutting, 'criticising' other physicians, participating in prepaid medical insurance plans, and engaging in group practice under a 'corporate' form of business organisation. Only in recent times have these restrictions been relaxed.

Limitations on the number of physicians who could be educated in US medical schools have had a number of interesting consequences. Competition for entry into medical schools is fierce, and leads to occasional scandals. In one case, the parents of a student offered a covert bribe of \$250 000 to secure their child's entry into medical school. The number of US students going to medical schools outside the US has been steadily increasing. In 1975, over 35 per cent of all newly licensed physicians in our country were graduates of foreign medical schools.

There has also been a substantial growth in the number of nonphysician personnel to supplement the services of physicians. In 1900, the ratio of nonphysician health personnel to physicians was 0.6. By 1980, there were 4.5 nonphysician health professionals for every physician in the US. Most observers agree, however, that nonphysician professional are underutilised in the US health care system. Many states prohibit them from performing simple and routine medical tasks, which they are well qualified to perform. A

great deal of inefficiency has resulted from these restrictions.

The restrictions on the ability of physicians to compete with one another may be an even more serious source of inefficiency. The original 'Code of Ethics' of the American Medical Association virtually required physicians to participate in the formation of a physician cartel. Failure to comply could cost a physician his or her licence to practise. The restrictions thwarted the ability of patients to compare prices and quality in the market for physicians' services, and they also inhibited physician entrepreneurs who might otherwise have instituted many cost-reducing innovations in medical practice. Today, physicians are free to advertise, to engage in price competition and to participate in prepaid medical insurance schemes. Yet the traditional views of organised medicine still linger and most physicians in the US are reluctant to engage in these practices.

The Market for Hospital Services

Free competition among hospitals also proliferated around the turn of the century. In 1910, approximately 56 per cent of all hospitals were proprietary (for profit). By 1960, however, only 11 per cent of all hospitals were proprietary and they accounted for only 7 per cent of all hospital admissions. That year, 73 per cent of hospital admissions were in private nonprofit hospitals and 20 per cent were in government-owned hospitals (for an analysis of the decline of the proprietary hospital in the US, see Steinwald and Neuhauser, 1970).

The decline of the proprietary hospital in the US is not the result of natural market forces. In some states, proprietary hospitals were simply outlawed. In all states, nonprofit hospitals enjoyed tax advantages over the proprietaries. In addition, the federal government administered a massive program (the Hill-Burton Program) to subsidise the construction of nonprofit hospitals. No subsidies were given to the proprietaries.

The decline of the proprietary hospital is nonetheless very important. Economic theory and empirical evidence suggest that proprietary hospitals operate more efficiently than nonprofit hospitals (Berry, 1974; Goodman, 1980a:56). In a hospital market place dominated by nonprofit hospitals, the typical hospital has been poorly managed and aggressive competition is rare. In recent years there has been some improvement in this picture due to the growth of proprietary hospital chains such as Hospital Corporation of American and Humana. These chains employ highly sophisticated management techniques and they not only operate their own hospitals but are increasingly contracting to operate nonprofit hospitals as well in return for a management fee.

The Market for Health Insurance

Health insurance developed in the United States in the early part of the 20th century, in a largely unregulated market. In many states, prepaid insurance schemes competed freely with fee-for-service schemes. All had one thing in common: close scrutiny of the physician's medical practice. Physicians were often asked to justify their procedures or to justify an above average length of stay for a particular patient (Goldberg and Greenberg, 1978).

By the 1940s, however, all this had changed. Under prodding from organisations of physicians and hospitals, some states outlawed prepaid insurance schemes. Other states tightly regulated them and inhibited their ability to compete (for a summary of a number of case histories in which physicians' organisations used their political power to thwart the development of prepaid medical plans, see Kessel, 1958:34-41; Rayack, 1967). In addition, most states enacted legislation giving favourable treatment to two provider-sponsored schemes: Blue Shield, created by physicians, and Blue Cross, created by hospitals. By 1950 these two schemes controlled 49 per cent of the market for hospital insurance and 51 per cent of the market for regular medical insurance. For the next three decades the share of the market held by these two plans never dropped below 40 per cent.

As a result the Blues enjoyed a monopolistic position in the market, while any single rival had only a very small market share. What this meant was that it was very difficult for a commercial insurance company to adopt reimbursement procedures that differed in any fundamental way from those used by Blue Cross and Blue Shield. If an insurance company with a small part of the market attempted to deviate in a radical way, the medical community could threaten to boycott that company and refuse to treat its patients. Even a company the size of Aetna Life and Casualty, with nearly 12 million policy holders, discovered that it could not fundamentally alter its reimbursement procedures in a way that threatened conventional insurance procedures.

What were the reimbursement procedures adopted by the Blues? In general, they involved very little interference in the clinical judgment of doctors or in the medical decisions made in hospitals. Perhaps of more importance, under Blue Cross hospitals came to be reimbursed in a way that hospitals almost unanimously approved of — cost-plus (for a discussion of the US system of cost-plus hospital finance and recent attempts to find alternatives to it, see Goodman and Musgrave, 1985).

For example, one of the most common formulas used by Blue

Cross plans to reimburse hospitals is the 'per diem' method. It works like this: Suppose that on average 30 per cent of the patient days of a particular hospital are accounted for by Blue Cross patients. Then Blue Cross will agree to pay the hospital 30 per cent of the hospital's costs. 'Cost' is determined by various accounting techniques, about which there can be much arguing and bickering. Usually a 'plus' factor is thrown in to cover the value of working capital and equity capital. Hence, the term 'cost-plus' (for a discussion of this and other reimbursement formulas, see Law, 1974:59-114).

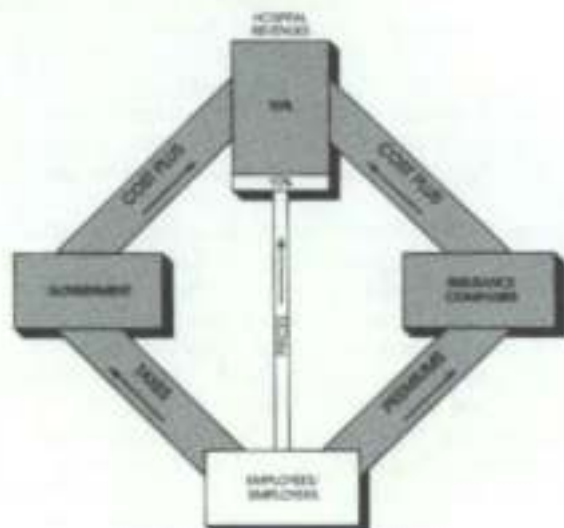
One does not have to study the per diem reimbursement formula for very long before being struck by the following realisation. The one sure way for a hospital to increase its revenues is to increase its costs. Thus, if a hospital adds more beds (even if they go unfilled) or buys expensive equipment (even if it goes unused) it increases its costs, and therefore its revenues from Blue Cross. Conversely, anything a hospital does to decrease its costs, also decreases its revenues. Blue Cross, then, pays for hospital care in much the same way the US Defense Department pays for some weapons systems, but without the same rationale. Figure 1 shows how US hospital costs are fuelled by the cost-plus reimbursement method, which draws on public sector tax dollars (which fund government-sponsored Medicare programs) while at the same time drawing on private sector funds through premiums paid to insurance companies.

It is important to realise that the cost-plus system is antithetical to the market system, where prices and competition allocate resources. Frequently, the cost-plus system creates incentives that are the precise opposite of the incentives created by a market.

By and large the American system of public and private health insurance is designed to ensure that hospitals do not go out of business, that they receive sufficient revenues to cover their costs. From the hospitals' point of view, the system has worked reasonably well. Very rarely do we see a hospital go bankrupt and close up shop. Our system of health insurance has managed to insulate hospitals from the potentially fatal risks that competition naturally creates for firms in other markets.

What is good for hospitals though, is not necessarily good for patients and policy holders. An insurance system designed to make sure that hospitals cover their costs is inherently adverse to the interests of those who are insured. The cost-plus system virtually guarantees that health insurance premiums will go right on rising because the people who are directly responsible for controlling hospital costs find that the only way they can increase their revenues is by increasing their costs. In this system, it is in the financial self-

Figure 1
HOW HOSPITALS GET THEIR MONEY
(The Cost-Plus System)



Source: National Center for Policy Analysis

interest of the providers of health care for costs to rise.

The result is a system in which hospitals have very weak incentives to be efficient — to get rid of high-cost services, to take advantage of economies of scale, to specialise in procedures where they are the low-cost producer, etc. The result also is a hospital system in which the nation's annual health care bill is much higher than it needs to be. Indeed, it is a system that rewards and even encourages waste and inefficiency. As Somers and Somers (1967:192) have observed:

In no other realm of economic life today are payments guaranteed for costs that are neither controlled by competition nor regulated by public authority, and in which no incentive for economy can be discerned.

Regulation vs. the Market

The chief problem with the US health care system can be stated succinctly: poor incentives. The participants in the system — whether patient, physician, hospital administrator, or health insurer — do not bear the full costs of their bad decisions or reap the full rewards of their good ones. A principal virtue of the marketplace is that it

provides participants in the market with good incentives. Yet despite the fact that the system is predominantly private, the market has been restricted in precisely those ways that vitally affect the incentives of the participants in that market.

For obvious reasons, citizens relying on private medical care will tend to contract for some form of private health insurance. Because of the tax laws in our country, however, people have an incentive to 'overinsure'. They purchase greater health insurance coverage than they would in the absence of special provisions in the income tax law.

On average, patients staying in hospitals in the US will pay out of their own pockets only 10 per cent of the total bill. The remainder is paid by insurance, either private or public. This means that patients have very weak incentives to contain costs. They bear only 10c out of each \$1.00 of expense they incur.

Physicians and hospitals are reimbursed by insurance companies based upon the costs they incur. The more procedures and the more tests they perform, the higher their incomes will be. Since insurance companies rarely question these tests and procedures, both the patients and the providers of medical care have an incentive to overutilise medical resources. The problem is made worse by the lack of aggressive competition among physicians, among hospitals and among insurance companies.

The result is that Americans are spending too much on medical care, or what amounts to the same thing: they are not getting their money's worth for the health care dollars that they are spending.

It is clear that in the US we will not continue indefinitely spending a larger proportion of GNP on health care every year. What is not clear is how this eventuality will be avoided. On the one hand there is considerable pressure for more government regulation — price controls, output controls, etc. On the other hand, there has been considerable movement in recent years in the direction of a free market. If market forces are allowed to work, the US may produce within the next decade a genuine showcase for the world of free market medicine.

Nonproblems in the US Health Care System

Having covered what is the principal problem in the US health care system, I will briefly discuss two issues that **are not** major problems. Citizens of other countries tend to have two common misperceptions about US health care, primarily, I think, because of the tendency of the socialist press to distort the facts.

Is it true that the average American lives in constant fear of

bankruptcy due to catastrophic medical bills? The facts say otherwise. The number of families who declare personal bankruptcy each year for reasons of illness amount to 5/100 of one per cent of all American families. About 93 to 94 per cent of all Americans have some form of health insurance, public or private. Moreover, 80 to 90 per cent of these have adequate coverage for in-patient hospital care. There are some families in the US who do not have adequate insurance coverage. But the problem is nothing approaching the crisis it is sometimes made out to be by critics both inside and outside the US.

Is it true that poor families in the US are systematically denied medical care because they cannot afford to pay for it? Nonsense. If nations were ranked in terms of the quality of medical care given to the very poorest of their citizens, the US would probably rank number one. Two federal programs enacted in the 1960s have been especially beneficial for low-income patients — Medicare (for the elderly) and Medicaid (for the poor).

Even before the advent of Medicaid and Medicare, the number of visits to physicians made each year by the poor (4.3) was not that much different from the number of visits made by the nonpoor (4.6). By 1972, the number of physician visits made by low-income families exceeded the number of visits from families in every other income group. Today, there is an inverse correlation between the number of physician visits and family income that extends across all income groups (Schwartz, 1982).

Statistics on hospital admissions tell a similar story. Here, too, there is an inverse correlation between family income and the number of hospital admissions per capita, and between family income and the number of days spent in hospital per capita. In 1979, low-income families had 52 per cent more hospital admissions per capita than did high-income families. Moreover, among low-income families there were 1.8 times as many days spent in hospital per capita as there were among high income families (National Center for Policy Analysis, 1983).

II. RATIONING HEALTH CARE IN OTHER COUNTRIES

Three of the most common ways of evaluating a country's health care system are in terms of the criteria of equity, quality and efficiency. These are difficult criteria to apply because of the problem of getting accurate data concerning them. However, I would like to present some data that support conclusions I have held for some time: that the US health care system is more equitable, more efficient, and

provides a higher quality of care than the health care systems of most other developed countries.

Equality of Access to Health Care

One of the most surprising features of the health care systems of European countries is the enormous amount of attention given to the notion of equity and the importance of achieving it. I say this is surprising because the rhetoric about equal access to medical care in these countries rarely has any relationship to the facts.

Take Britain for example — a country whose Ministers of health for over three decades have been assuring the British people that they were leaving no stone unturned in a relentless quest to root out and eliminate inequalities in health care. After an unofficial government campaign to suppress it, a report of an official investigation revealed the results of this 37-year effort. The report concluded the following:

It will come as a disappointment to many that over long periods since the inception of the NHS there is generally little sign of health inequalities in Britain actually diminishing and, in some cases, they may be increasing. (Black Report, 1980)

What made this finding particularly dramatic was that the study is the most thorough and comprehensive investigation into the subject that has ever been conducted in Britain. Virtually every scholarly study of the issue for the past 20 years, however, has pointed to a similar conclusion (LeGrande, 1978; Culyer, 1976; Cooper, 1975; Cooper and Culyer, 1972; Noyce, Smith and Trickey, 1974; and Goodman, 1980b).

The case of Britain is not unique. Other studies have also documented widespread inequalities in health care in Sweden (Stahl, 1980) and Canada (Lindsay, Honda and Zycher, 1978) — two countries with health care systems that are often pointed to as examples which the United States would do well to emulate.

One of the difficulties in learning about inequalities in access to medical care is that very rarely is such information collected and distributed by the source best suited to do it: the governments themselves. There are, however, some international statistics available on treatment rates for certain diseases according to the age of the patients being treated.

Discrimination by Age

Take cronic renal failure, for example. Across Europe generally, 22 per cent of the dialysis centres report that they refuse to treat patients over 55 years of age. In Britain, 35 per cent of the dialysis centres

refuse to treat patients over the age of 55; 45 per cent refuse to treat patients over the age of 65; and British patients over the age of 75 rarely receive treatment at all for this disease (*End Stage Renal Failure*, 1980:3,6). Table 1 presents the number of new kidney patients treated each year per population, by age, for four European countries. Since the incidence of renal failure rises with age, the fact that treatment rates decline at upper age levels in all four countries indicates a systematic tendency to discriminate against older patients. This contrasts markedly with the experience of the US, where the treatment rate for those over 65 is nearly the same as the treatment rate for the population of middle age.

Other indications of discrimination against elderly patients are general population mortality rates. As Table 2 shows, the British mortality rate for males aged 25 to 35 is 24 per cent lower than the comparable rate in the US. But among those 75 years of age and older, the mortality rate in Britain is 15 per cent higher than it is in the US. Italy's mortality rate for males aged 25 to 34 is 12 per cent lower than the rate for the US. But among those over 75, it is 15 per cent higher than the US rate. The comparable figures for Germany are one per cent higher for males between 25 and 34 and 19 per cent higher for those over 75.

I would like to propose a hypothesis concerning these statistics. As far as I can ascertain, discrimination against elderly patients is not a national policy of any particular country, and it may well be that the planning authorities in most countries are completely

Table 1: Treatment for Chronic Renal Failure (Acceptance of new patients per million population, 1978)

| Age | West Germany | France | Italy | United Kingdom |
|----------|--------------|--------|-------|----------------|
| Under 15 | 2.3 | 3.9 | 3.5 | 4.0 |
| 15-24 | 13.1 | 13.9 | 12.5 | 17.7 |
| 25-34 | 22.8 | 27.6 | 22.0 | 26.9 |
| 35-44 | 41.7 | 34.2 | 37.2 | 33.1 |
| 45-54 | 58.8 | 59.8 | 55.7 | 43.5 |
| 55-64 | 71.3 | 69.5 | 69.5 | 22.7 |
| 65-74 | 49.9 | 56.6 | 52.2 | 3.5 |
| 75+ | 8.6 | 17.6 | 7.3 | 0.0 |
| TOTAL | 30.9 | 30.4 | 29.0 | 19.2 |

Source: Proceedings of the European Dialysis and Transplant Association, Vol. XVI.

Table 2: Use of Modern Technology and Mortality Rates by Age

| | Aust | Canada | France | W.Germany | Italy | Japan | UK | USA |
|-----------------------------------------------------------------|------|--------|--------|-----------|-------|-------|------|-------|
| % of health spending done by govt., 1976 | 75 | 76 | 75 | 84 | 80 | 90 | 89 | 43 |
| pacemakers per 100,000 pop., 1976 | 7.3 | 22.3 | 22.6 | 34.6 | 18.8 | 2.7 | 9.8 | 44.2 |
| CAT scanners per million pop., 1979 | 1.9 | 1.7 | 0.6 | 2.6 | NA | 4.6 | 1.0 | 5.7 |
| kidney treatment (dial.& transplant) rates per mill. pop., 1979 | NA | 73.4 | 111.3 | 105.0 | 102.0 | NA | 71.2 | 170.0 |
| mortality rate from all nat. causes as % of US, ages 25-34 | 77 | 80 | 94 | 104 | 88 | 81 | 76 | 100 |
| mortality rate from all nat. causes as % of US, ages 75 + | 107 | 103 | 101 | 119 | 115 | 100 | 115 | 100 |

Source: National Center for Policy Analysis, Dallas, Texas.

unaware of it. I believe that the discrimination arises instead because physicians and hospital administrators are often put in strange situations — where limited medical resources force them to choose among patients who cannot all receive optimal treatment. In such situations, the choice among patients is often based on the patient's age.

On average, countries whose mortality rates rise with age, relative to US mortality rates, are utilising less medical technology than the US is. At the Centre for Health Policy Studies at the University of Dallas, we have discovered additional supporting evidence of particular diseases. For example, there is a statistically significant rank correlation between the total number of kidney patients treated

per million population in European countries and the average age of patients treated. We have also discovered a statistically significant rank correlation between the total number of pacemaker implants per million population and the average age of patients receiving implants. In other words, the fewer the medical resources that are available, the lower the likelihood that an elderly patient will have access to them, relative to a younger patient.

Use of Modern Medical Technology

I would now like to propose a second hypothesis concerning these statistics: countries in which government plays a greater role in allocating medical resources will, other things being equal, utilise less modern medical technology. I first proposed this hypothesis in my study of the British health care system (Goodman, 1980b:192-9; see also Goodman, 1980c) and a recent study of the international market for medical technology at the Centre for Health Policy Studies provides strong empirical confirmation of it (Goodman, 1981).

If both of these hypothesis are true, the implications are ironic in view of the traditional rhetoric used to defend socialised medicine. Government-run health care schemes have been traditionally defended on the grounds that they provide greater equality of access to medical care than market-dominated health care systems. The foregoing suggests just the opposite. Greater government intervention in health care tends to lead to a lower utilisation of modern medical technology than would otherwise be the case. This makes rationing problems more severe, and it leads to greater inequality in access to health care than would otherwise exist.

Support for this conclusion comes from yet another study done at the University of Dallas. We have found evidence that the phenomenon of a country's mortality rate rising with age, relative to US mortality rates, is apparently related to the percentage of total health care spending done by government (Goodman and McMillan, 1981).

An extensive study of the use of medical technology in the British National Health Service was recently published by the Brookings Institution. The authors of the study compared the use of expensive medical technology in Britain with its use in the US and made crude estimates of the number of British patients denied optimal treatment each year, based on US levels of treatment. Table 3 presents these estimates along with estimates of what it would cost the NHS to bring British treatment rates up to US standards. In most cases where Britain falls considerably behind the US, the disease is one that is

more likely to afflict the elderly. However, for bone marrow transplantation, which is also very expensive, British treatment levels are about the same as in the US. This treatment is useful only for patients under 40. Similarly, British treatment for haemophilia is also equivalent to US treatment levels, and this is also a young person's disease (Aaron and Schwartz, 1984).

Table 3: British National Health Service

| Service | No. of Patients Denied Treatment Each Year | Added Cost of Treating These Patients (In Millions) |
|-------------------------------------|--------------------------------------------------|-----------------------------------------------------------|
| Renal Dialysis | 9000 | 140 |
| Cancer Chemotherapy | 10 000-15 000 | 40 |
| Total Parenteral Nutrition (TPN) | 450-1000 | 45 |
| Coronary Artery Surgery | 4000-17 000 | 175 |
| Hip Replacement | 7000 | 50 |

Source: Author's calculations based on Aaron and Schwartz (1984).

Before leaving this subject I would like to propose a final hypothesis. I do not believe elderly patients are discriminated against because they are old. I believe they are discriminated against because, relative to young patients, they have lower human capital. If put in the position of having to decide which patients will receive treatment and which will not, most of us, I believe, will tend to choose to treat those patients with the highest human capital, other things being equal. This means that patients with higher income-earning potential will be treated in preference to individuals with lower income-earning potential.

Space does not permit an elaboration of my reasons for this hypothesis. I will merely point out that it seems to be consistent with the British experience, and if it is generally true there is far more inequality in access to medical care throughout Europe than is often thought to be the case.

Efficiency

The subject of the efficiency of health care systems has proved elusive, primarily because of the difficulty of measuring efficiency. At the University of Dallas, we have constructed a measure of the efficiency of the health care systems of the developed countries relative to each other (Goodman and Scully, 1981). The measure is a crude one. But to my knowledge it is the first attempt at such a measure that has been done.

We treat the output of a health care system as a country's survival rate (one minus its mortality rate). The inputs of the health care system are medical resources. A system becomes more efficient if, given the medical resources it is using, it achieves a higher survival rate (lower mortality rate).

For mortality rates, we used mortality rates from all natural causes of death and mortality rates for a group of diseases judged to be 'preventable and treatable' (both rates gave approximately the same results). These rates were standardised for age and sex. For inputs, we used physicians per capita and hospital beds per capita. The method involves estimating a production frontier (for a description of this technique, see Timmer, 1971:776-794; Forsund and Hjalmarsson, 1974:141-153). For each country's health care system, a technical efficiency coefficient is calculated. These coefficients range between 0 (completely inefficient relative to other countries) and 1 (most efficient relative to other countries).

The results of these estimates are presented in Table 4. They may be interpreted as follows: Since the coefficient of the US health care system is 1.0 and the coefficient of Germany's health care system

Table 4: Technical Efficiency Coefficient

| High Income Countries | | Low Income Countries | |
|-----------------------|--------|----------------------|--------|
| Sweden | .7923 | Australia | .8338 |
| Switzerland | .6115 | Finland | .8019 |
| Denmark | .8312 | Austria | .5902 |
| Canada | .8549 | Japan | 1.0000 |
| Norway | .8176 | Italy | .6123 |
| USA | 1.0000 | Spain | .8013 |
| Netherlands | .9311 | Ireland | .9514 |
| Germany | .7175 | Greece | .6232 |
| Belgium | .7863 | Portugal | 1.0000 |
| France | .9577 | | |

is 0.72, Germany is using 28 percentage points more medical resources than the US to achieve the same survival rate. Alternatively, Germany is spending 39 per cent ($1 - 1/0.72$) more than the US is in order to achieve the same survival rate.

III. CONCLUSION

The US health care system is a predominantly private system. Yet it has been becoming less so. Government expenditures on health care have risen from less than 25 per cent to a current 43 per cent of all health care spending over the past two decades. Along with increased government spending on health care, we have also experienced increased regulation of the health care market place. In so doing, we have been moving in the direction of many of the health care systems of Europe.

Our experience suggests that government is an inefficient consumer and an inefficient producer of medical care. Accordingly, the Reagan Administration's attempts to reduce the government's role in health care and to place greater reliance on competition in the market are steps in the right direction.

References

- Aaron, H.J. and W.B. Schwartz (1984), *The Painful Prescription: Rationing Hospital Care*, The Brookings Institution, Washington, D.C.
- Berry, R. (1974), 'Cost and efficiency in the production of hospital services', *Health and Society — Milbank Memorial Fund Quarterly* (Summer), 291-3.
- Black Report (1980), *Inequalities in Health*, Department of Health and Social Security, London.
- Cooper, M.H. (1975), *Rationing Health Care*, Halstead Press, New York.
- and A.J. Culyer (1978), 'Equality in the NHS: Intentions, performance and problems in evaluation', in Joseph P. Newhouse (ed.), *The Economics of Medical Care*, Addison-Wesley, Reading, Massachusetts.
- Culyer, A.J. (1976), *Need and the National Health Service*, Rowman and Littlefield, Totowa, New Jersey.
- End Stage Renal Failure (1980), Office of Health Economics, London.
- Forsund, F. and L. Hjalmarsson (1974), 'On the measurement of productive efficiency', *Swedish Journal of Economics* 76, 141-53.
- Goldberg, L. and W. Greenberg (1978), 'The emergence of physician-sponsored health insurance: A historical perspective', pp. 288-321 in W. Greenberg (ed.), *Competition in the Health Sector: Past, Present and Future*, Aspen Systems Corporation, Germantown, Maryland.
- Goodman, J. (1980a), *Regulation of Medical Care: Is the Price Too High?*, Cato Institute, San Francisco.
- (1980b), *National Health Care in Great Britain: Lessons for the USA*, Fisher Institute, Dallas, Texas.
- (1980c), 'USA: Health services are superior', in A. Seldon (ed.), *The Litmus Papers*, Centre for Policy Studies, London.
- (1981), 'The market for medical technology: International evidence', Center for Health Policy Studies Working Paper No. 3., University of Dallas, Dallas, Texas.
- and G. McMillan (1981), 'National health insurance and the elderly population', Center for Health Policy Studies Working Paper No. 1, University of Dallas, Dallas, Texas.
- and G. Musgrave (1985), 'The changing market for health insurance', Policy Report 1985, National Center for Policy Analysis, Dallas, Texas.
- and G. Scully (1981), 'The efficiency of health care systems: International evidence', University of Dallas Working Paper No. 2, Dallas, Texas.
- Hamowy, R. (1979), 'The early development of medical licensing laws in the United States, 1875-1900', *Journal of Libertarian Studies* 3(1), 73-119.
- Kessel, R. (1958), 'Price discrimination in medicine', *Journal of Law and Economics* 1 (October), 20-53.
- (1970), 'The AMA and the supply of physicians', *Law and Contemporary Problems* (Spring).

- Law, S. (1974), *Blue Cross: What Went Wrong?*, Yale University Press, New Haven, Connecticut.
- LeGrande, J. (1978), 'The distribution of public expenditure: The case of health care', *Economica* 45, 178.
- Lindsay, C.M., S. Honda and B. Zycher (1978), *Canadian National Health Insurance: Lessons for the United States*, Roche Laboratories, Nutley, New Jersey.
- National Center for Policy Analysis (1983), 'Equality of access to medical care: The untold story of the changing nature of the American health care system', Policy Report 102, Dallas, Texas.
- Noyce, J., A.A. Smith, and A.J. Trickey (1974), 'Regional variations in the allocation of financial resources to the community health services', *The Lancet* 30 March.
- Rayack, E. (1967), *Professional Power and American Medicine: The Economics of the American Medical Association*, World Publishing Company, Cleveland.
- Schwartz, H. (1982), *National Health Insurance: A Pragmatic Perspective*, Hoffman-LaRoche, Nutley, New Jersey.
- Somers, H.M. and A.R. Somers (1967), *Medicare and the Hospitals: Issues and Prospects*, Brookings Institution, Washington, D.C.
- Stahl, I. (1980), 'Can equity and efficiency be combined: The experience of the planned Swedish health care system', paper presented to A Conference on Health Care — Professional Ethics, Government Regulation, or Markets?, sponsored by the American Enterprise Institute, 25-27 September.
- Steinwald, B. and D. Neuhauser (1970), 'The role of the proprietary hospital', *Law and Contemporary Problems* (Autumn).
- Timmer, C. (1971), 'Using a probabilistic frontier production function to measure technical efficiency', *Journal of Political Economy* 79 (July), 776-94.

COMMENTS

Dr Allan Passmore Australian Medical Association

I propose to summarise briefly the four preceding papers and then to offer some comment on how what we have heard relates to the Australian context.

Professor Lindsay set out to look at the role of government in health care and to consider the merits of the arguments that have been put forward for that role. He began by looking at what he referred to as technical arguments, such as that health insurance can be provided more cheaply by a government than by a private organisation, or alternatively, that the government should be involved in order to provide a countervailing force to cartels that may develop among doctors, hospitals, or in the health insurance industry.

He then moved on to arguments about consumption of health care, starting with the proposition that people consume too little health care and therefore government assistance should be provided. He indicated that very few people would stand between the government and a poor person in acute need of medical care. He looked at the arguments on social costs and benefits of medical care and the proposition that because of the existence of external social benefits of medical care an individual might be willing to pay extra to supplement the services received by another member of the community.

He then turned to arguments that people spend too much on medical care and that government intervention is necessary to prevent that happening, referring in part to the so-called moral hazard argument and also to a theory of the life cycle of technologies. He argued that central planning fails first because there is no mechanism for suppliers to measure need, and second because instead of rationing by price central planning results in rationing by the formation of queues. He concluded that there was no statistical evidence that government programs improved morbidity.

The implication for Australia, and I think for many Western countries, of what Professor Lindsay has had to say is that there needs to be a reexamination of prevailing health care systems. The obvious conclusion one would draw from his comments on health care finance is that some sort of health insurance should be available for catastrophic illness, or perhaps for cumulative expenditure in

excess of say \$1000 per annum. I would argue that in case of economic hardship, cumulative expenditure of less than \$1000 per annum should be covered by some form of income supplementation.

I turn now to Dr Walker's comments about the control of the provision of health care by the medical profession in Canada. I must say I was somewhat surprised to read in his paper the very restrictive definition in Canadian legislation of who can and who cannot provide health care in Canada. If I may briefly summarise his argument, Dr Walker indicated first of all that the medical profession in Canada established a monopoly over the supply of medical services and excluded all competitors. Second, he said they then began to be accused of specialising in providing services to the rich. This was accompanied by a rise in prices for technology, leading to provider-sponsored insurance plans and eventually to public hospital insurance. Third, he argued that public hospital insurance resulted in a vast increase in demand for medical care. This in turn led to an increase in demand for government control over expenditure, which has taken the form of limiting hospital beds and controlling the areas in which doctors may practice. The upshot is that the Canadian government is now controlling the provision of medical care in Canada by controlling the supply of medical services. The solution Dr Walker proposes is to remove licensing and replace it with a system of certification.

Dr Walker's paper is very interesting. If we accept the general argument that the medical profession exercises a monopoly in Canada, and I think he proves fairly conclusively that that has been the case, then it appears to me that it is not sufficient simply to remove licensing in order to remove the monopoly. It would also be necessary to provide insurance subsidies to anyone else who wished to provide health care in any form. In practice it would not be possible to remove the medical monopoly if doctors continued to be subsidised and other health care workers were not.

This raises the interesting question of which services government should subsidise. What criteria should a government use to determine which providers should be subsidised? There is a wide variety of providers of health care other than doctors, ranging from highly qualified people such as midwives to people with less conventional qualifications such as herbalists. I would argue that, notwithstanding the fact that there is an element of monopoly created by a licensing system, and that economic rents accrue to people who enjoy the benefits of the monopoly, there is still a case to made for licensing. I will use an analogy — airline pilots — to make my point. I personally would have no wish to fly in a plane unless I was certain that the pilot had been licensed, and if that led to his being able to

extract a higher wage than he otherwise would then I would say so be it.

The legislative environment in Australia is somewhat different from that in Canada. In Australia, only people with medical degrees can claim to be doctors. Most drugs are available only for prescription by doctors, and certain diseases such as cancer, diabetes, multiple sclerosis, venereal disease and a few others can be treated only by doctors (I am using the word 'doctors' now to mean people with medical degrees). Other than these restrictions on the use of drugs and the treatment of certain diseases, there is no restriction in Australia on anyone opening up a shop and offering to treat patients who are ill and who wish to pay for the treatment.

There is of course a restriction similar to the one in Canada in that medical benefits are available only for services provided by doctors. That subject is under consideration at the moment by the Medicare Benefits Review Committee, established by the government to examine the structure and scope of the Medicare Benefits Schedule. The Australian Medical Association was part of that Committee but it has withdrawn while the Committee considers whether or not government benefits ought to be payable for services provided by other health professionals. Naturally the AMA does not wish to be involved in making that sort of decision.

I turn now to Mr Logan's paper. He provided an interesting survey of the extent of the regulations in Australia on the provision of health care, dealing first with the medical profession, particularly the regulation of entry, regulation of competition among practising doctors, and the effects of those regulations on prices for medical services. Second, he turned to the very extensive government involvement in the insurance industry and in particular the exclusion of commercial health insurers from the direct provision of health care. He pointed out that the changing policy of various governments towards intervention in the market for various medical services has had what I would call a ripple effect. Increased regulation and intervention flows through over a long period of time and often in quite unexpected ways. He mentioned that one of the government's solutions to problems of increasing costs has been to introduce nonmarket controls on suppliers designed to discourage what he called 'frivolous services'. He foreshadowed more emphasis on government control of hospitals and nursing homes. The relevance of what Mr Logan had to say about Australia is self-evident.

Dr Goodman developed themes somewhat similar to those of Professor Lindsay except that he looked at more real world examples rather than taking Professor Lindsay's theoretical approach. He indicated that health insurance in the United States is dominated,

or was dominated in the past, by two organisations, the Blue Cross and the Blue Shield, and demonstrated how the practice of reimbursing hospitals on a cost-plus basis is an incentive for inefficiency. He told us about some changes in health insurance, the development of employer insurance, some of the initiatives employers are taking, and initiatives by the US government in the form of Diagnostically Related Groups.

He then moved on to some international comparisons. In particular he looked at the provision of health care to the aged in the United Kingdom; then he made some comparisons of technical efficiency between different countries. I have some difficulty with the conclusions that were drawn from comparisons of the provision of health care in the United States and in other countries. Dr Goodman did qualify his conclusions from these comparisons, but nevertheless I have some difficulty with the conclusion that the differences he highlighted are largely due to differences in the nature and extent of government intervention in the market place. For instance, in the example of renal dialysis Dr Goodman said that the United Kingdom had sufficient money to provide additional services if it diverted resources from expenditure on ambulance services. However, comparisons of this sort are difficult between two countries with such different per capita expenditures on health. I would have preferred to see a comparison drawn between two countries expending similar portions of their GDP on health services, one of which had a largely private system and the other a largely state-controlled system as the United Kingdom has. Likewise I would also have preferred to see Dr Goodman's comparisons of the use of medical technology standardised in some way for the very different per capita incomes in the countries he compared.

Many of you will be aware that there is a strong feeling both within and without the medical profession that there is excessive use of high technology in some countries. Most of us will be familiar with stories of people being kept alive by high technology means, such as hyperalimentation in intensive care, well beyond the time when it is the practice in countries outside the United States to cease treatment. I will not go into the merits of those arguments here but simply draw your attention to them and point out that the level of technology provided in the United States is not necessarily acceptable in all other countries.

I will now attempt to put the papers we have heard into the Australian context. Recent debate in the United States has centered largely on the rapidly increasing share of GDP going to health and the quite serious financial difficulties being experienced by some government programs such as Medicare and Medicaid. There is less

government involvement in health care in the United States than there is in any other Western country. Currently the United States is spending about 10.5 per cent of GDP on health care. Because of the relatively low direct government involvement in health care provision in the US it should not be surprising that the sorts of solutions that have been put forward this morning by our US speakers in many cases involve enhancing market place effects.

In Australia, government involvement varies from time to time because of changing political policies. I am sure that when Dr John Deeble (quoted by Andrew Doman this morning) said that 70 per cent of expenditure on health care in Australia was now provided by the government he was not putting that forward as a criticism, because it is a direct consequence of policies that Dr Deeble has advocated and in many ways has been responsible for.

It is interesting to look at the level of government involvement in health expenditure over time. In the late 1970s government was responsible for about 50 per cent of total health care expenditure and this has fluctuated with changes in the health insurance system. It is notable that as a percentage of GDP health care expenditure in Australia has not fluctuated. It went up from about 5.5 per cent to about 7.5 per cent in 1975-76 and it has remained at that level ever since.

What are the problems we face and how is the issue of government involvement relevant to them? I think we need to distinguish between the long-term problems and the short-term problems. The problems Mr Logan talked about are long-term structural problems in the health care sector that need to be addressed. I propose to focus on some of the short-term problems that have confronted Australia recently and see how government involvement affects those.

First, one of the most significant problems at present is a severe shortage of nurses. On the face of it the shortage is not a consequence of government involvement. In fact governments in most states are endeavouring to increase the number of nurses. Another important issue is the question of drug abuse, alcohol and tobacco. I don't think either increasing or reducing government involvement will solve these sorts of problems — they are sociological problems. The same applies to Aboriginal health and other major health problems confronting us. The most significant recent problem where there has been a clear link with government intervention was the problem in New South Wales between the medical profession and the New South Wales and federal governments.

In summary, I would like to take a fairly broad view. Community involvement in the provision of health services for members of the community is not new. There is a hospital in Paris that was founded

in 1250 and has been providing free services continuously since that time. It was financed by taxes on the community (in 1250 the money was raised by the church rather than by the state). My point is that government involvement is not an innovation.

The North American experiences we have heard about this morning hold important lessons for us. There are strong grounds for considering that an extension of government involvement does not automatically lead to a better outcome. But we need to recognise that the problems in North America are not the same as the problems in Australia, although we may experience similar problems in the future. Each problem needs to be examined on its merits. It cannot be assumed that government intervention is never appropriate, but any solution that requires government involvement must be considered with a cold and critical eye before it is accepted.

DISCUSSION

Question: I am worried by the potential conflict of interest between fee-for-service medicine and government underwriting of medical services. A recent example in NSW was the relocation of some hospital services to the western suburbs of Sydney. I wonder whether the same situation pertains in the United States, namely that doctors, under the cloak of being entrepreneurs, are in fact underwritten in all this entrepreneurial activity by government, resulting in rapid growth of health care expenditure.

Dr John Goodman (National Center for Policy Analysis): I want to begin by saying something in defence of Mike Walker's views on licensing. An example was given of an airline pilot. I don't think any of us would want to get into an airplane that is going to crash, but that is not the real issue when it comes to medical licensing. In the United States when medical licensing was first introduced they immediately 'grandfathered' everybody who was practising medicine. It didn't matter what they were doing, they were immediately licensed and ever since then the only people who have ever been required to take any exam are the new people entering the market. Somebody can be practising medicine for 50 years and no one ever asks again whether that person is competent to practise medicine. I think this is also true of Canada. So when we talk about licensing we are not, at least in the United States and Canada, talking about a system that ensures high quality care. We are talking about nothing more than a barrier to entry. And in the United States numerous studies have shown that physicians' assistants and nurses and other paramedical personnel can perform primary medical care and can provide very high quality care — not quite the same quality as someone who's had a lot of medical education but very high quality, acceptable to most people. I think in the United States and in Canada we would all be better off if we allowed people with those qualifications to offer their services to the market place.

I am not quite sure what you mean by government and the entrepreneur. I can tell you that in the United States we have done something in health care that we have not done in any other market. We have said to the scientists and the inventors, all you have to do is invent it, and show us that it has some value to the patient, and we will buy it. We do not say that to the people who are working in television or radio or electronics or any other industry, but in the health care industry, because of our cost-plus system, we have written

them a blank cheque. I think that has certainly distorted incentives and we cannot keep doing it.

Dr Michael Tatchell (Pharmacy Guild of Australia): I wonder whether the panel would tell me just what is 'The Crisis in Health Care' that prompted this conference. The proportion of GDP that we are spending on health care has remained pretty stable in the last few years, as Dr Passmore has been telling us. An area that I am particularly interested in at the moment is the cost of drugs. In Australia the cost of drugs is between 40 and 60 per cent less than elsewhere. I do not believe we have a crisis on the health side either. After all, health status continues to improve in Australia — life expectancy has certainly increased significantly in the last few years. I wonder then if the only crisis we are facing in health care in Australia is an ideological one.

There is one other point I would like to make. John Logan told us earlier that we have had something like seven changes in health insurance arrangements since 1975. Some research I undertook a few years ago showed that these changes had no perceptible impact on the overall utilisation of medical services. There was in fact a gradual increase over time in the frequency of consultation with doctors, but this is in no way related to the changes in the health insurance arrangements. It seems that changes in utilisation relate more to the increase in doctor numbers than to changes in the system of financing.

John Logan (Centre for Independent Studies): To comment on Dr Tatchell's first point about whether or not there is a crisis in health care, I'm not sure the conference was appropriately titled. But my impression is that there is much concern about how the particular health care expenditure is delivered to those who are receiving benefits under our current system of Medicare. Under Medicare, services are rendered virtually free at the point of service. I claim that this has the kind of predictable results that apply in any system in which the taxpayer is asked to forgo other things in order to pay for somebody else's expenditure. It distorts incentives in the ways we have discussed today. This results in a transfer of wealth (or income if you like) from taxpayers to the recipients of services. Along the way some of the wealth is diverted to support the bureaucracy that controls the regulations, administers the transfer payments, attempts to monitor the results, and, when the results get out of line with what the people in the regulating industry think should be the case, intervenes.

Regarding the second point, I recall reading a paper on those

results some time ago and if my understanding was correct they referred to the Medibank era in 1975-76. I'm not quite sure I could comment on those particular results without in fact doing the work myself. Some research is being carried out by Frank Milne and Pravan Trivedi on the effect of the Medibank Mark I arrangements, but those results are not yet finalised. Just on an ad hoc basis, the effect of the recent changes to our insurance system seems to be two-fold: first, Medicare appears to have had the effect of increasing the number of consultations. According to Health Insurance Commission figures the increase has been about 10 per cent per head of population, although it is too early to analyse whether or not that has been due to the change or due to some other exogenous factors.

The other interesting thing with respect to consumer choice regulation and the Medicare system is that a lot is said about people who choose not to insure. It is often held that these people would have chosen to insure if they had been in possession of the full facts. In fact there still seems to be a strong preference in Australia for people to self-insure. This follows from the ABS health insurance survey in 1983, which revealed that despite the 1981 health insurance change (which imposed a significant cost on not being insured, that is, people who weren't insured lost a 30 per cent tax rebate, lost access to the subsidy, and so on) about 15 per cent of contributor units still chose to remain uninsured. Since people choose or reveal a preference for not insuring themselves it would seem to me that compulsorily making them members of the one big union, so to speak, makes at least those people worse off than they otherwise would have been.

Dr Michael Walker (The Fraser Institute): I think Australia can draw some important lessons from the Canadian experience on this business of whether there is a crisis or not. The crisis currently afflicting Canada is not so much a crisis in medical markets as it is a crisis in budgetary allocations. As I mentioned, most of the decisions in Canada today are made in the context of the governmental bureaucracy, on the basis of the political balance of power between the providers of medical care and the government. And the government is making its decisions about how much money to allocate to health care on the basis of almost purely political considerations. So the quality of health care and the other aspects of health care markets that have been discussed here today are simply shovelled off into an alcove while the decisions about budgets are made. And this is becoming increasingly important as our population ages.

So I think that in Canada we have an incipient crisis rather than

an actual crisis. Governments are looking ahead, observing how much of the total budget is allocated at this moment, looking at how much will be required if the current level of health care is demanded by the population as it ages, and simply making the quite correct arithmetic conclusion that there isn't enough money to supply that demand.

But to speak now from the point of view of what you can learn about our experience, the reaction to the perceived or incipient crisis in Canada has been totally irrational. Instances include the business of supply limitation, the business of increasing bureaucratic involvement in decisions about where doctors will be located, what kinds of services doctors can provide, and so on. In other words there is a tendency in Canada at the moment to respond to this incipient crisis by taking the decision-making process away from the actual participants in the health care market: the doctor and the patient. And that is not an ideological question, it is a very important practical issue.

The second lesson I think you can learn from the Canadian experience, particularly in comparison to what is happening in the United States, is that John Goodman's demonstrations show that there is in fact a rational market process happening now in the United States to reduce costs, to attempt to respond to rising costs in an intelligent way. The response in Canada, where most of the market function has been removed, is entirely irrational. To attempt to control rising costs by limiting supply, from the point of view of simple economics, is irrational. But that response is nevertheless being made.

So if you really want to draw from the North American experience, do not look at it from the point of view of the structures of the systems themselves. Look at how the systems are responding to the current incipient crisis. I think that the real lesson is that where markets have been left to function more actively, that is to say in the United States, the adaptation to the incipient crisis is more intelligent than it is in Canada where most of the market function has been removed.

Dr Michael Aroney: On the question of whether there is a crisis in Australia, I believe there is. In Victoria the waiting list for elective admission to hospital is now up to 30 000, and the waiting period to have say a hip replacement done in New South Wales has increased from three months to a year, and that time is increasing every day. So I would say there is a crisis here.

Now to a specific question. I would like to ask John Goodman

whether there is any possibility in his view for private doctors to interact with their private patients without the intervention of a third party. I am not sure I can agree with him that the best way of keeping down costs is through the intervention of a third party as an agent for the patient. I would say the best policeman for keeping down costs is the patient himself.

Goodman: I totally agree with what you are saying. Markets work best when the people who make the decisions bear the costs of their bad decisions and reap the benefits of their good ones. Of course that's going to be more true in the health insurance market place if patients pay their own money to doctors. One of the very biggest problems in the United States is that patients are not paying money out of their own pockets, it is being paid by a third party. I made the point in my paper that over 90 per cent of all hospital revenues are paid for by someone other than the patient, and only 10 cents on the dollar comes out of the patient's pocket. That means if the patient makes a bad or wasteful decision, 90 per cent of the waste is going to be paid by someone else. Those are terrible percentages. We've encouraged that through our income tax system. The greater the percentage of the bill paid for by the patient, the more efficient and rational the system is going to be.

I want to add one other thing that may be useful to you here in Australia. In the United States the typical private health insurance arrangement is for an employer to provide a health insurance policy for employees. Of course, the payment for that health insurance policy comes out of funds that otherwise would have been paid to the worker in wages. During the 1970s the trend was towards insurance programs in which the direct cost to employees during hospitalisation became smaller and smaller. The general view of employees was that a really good health insurance policy was one that paid 100 per cent of the cost. Well, it reached a point where all the major corporations realised they were being exploited. The large US corporations responded by sitting down with their employees and putting the view that when decision makers do not have to bear any of the cost of their bad decisions then they are liable to make bad decisions that force up the costs for everybody else. This proved to be a fairly persuasive argument and now in the 1980s most companies are moving in the opposite direction, raising the deductible to the patient. The result is that direct out-of-pocket costs to the patient are rising. In addition a lot of companies are providing workers with choices; for example, employees can choose a fringe benefit package with a low deductible where they do not pay very much when they

go in the hospital, or they can choose one with a high deductible and a lower premium. So employees begin to realise that the policy with low deductibles is really an expensive one, and the reason it's expensive is that there is so much waste in that kind of policy. With the other policy where the premium is much lower, employees can take the money and save or spend it as they choose.

Dr Dennis Mackey (General Practitioners' Society): Some have suggested today that the crisis is one more of government intervention in health care. And we have heard how there is more inequality in government bureaucratised systems than in the free market. If this is so, can somebody from the panel tell us how we can get government out of health care? How can we get rid of a bureaucracy that spends so much money and gives us so little in return, that is more intent on regulation than deregulation? If there is an answer to this I would like to know.

Health Insurance and Efficient Health Service Delivery

Andrew S. Doman

Andrew Doman graduated in Medicine from Adelaide University in 1974 and subsequently worked as a Resident in Canberra. He graduated in Economics from Ottawa University in 1980 and joined the NSW Department of Health as a health economist in 1981. He has worked in various capacities in the health system in NSW, most recently as Director of Health Services Research and Evaluation in the Northern Metropolitan Region. He has published a number of papers on health economics issues. He is currently studying for a Masters in Business Administration at the Australian Graduate School of Management.

Health Insurance and Efficient Health Service Delivery

Andrew S. Doman

Introduction

It seems to me as an observer currently removed from the day-to-day politics of health care that Australians have yet to settle comfortably with any particular system of funding health services. We have tried various approaches and we have met with a great deal of success in reducing the incidence of illnesses in the community. Among the achievements has been a substantial improvement in life expectancy in the last decade and substantial reductions in the incidence of certain kinds of heart disease and cerebrovascular disease.

Yet there is continued strife and conflict in one area of health services or another. In 1985 we witnessed a lengthy strike by visiting medical officers at New South Wales hospitals. This was by any yardstick dramatic evidence of the dissatisfaction felt by those practitioners. Nineteen eighty-four was another turbulent period, which led to the appointment of the Committee of Inquiry into Rights of Private Practice in Public Hospitals — the Penington Inquiry.

The common thread running through the debate on health services is funding mechanisms. In the final analysis the funding mechanism of the day defines not simply the means of payment for health services but also, perhaps more importantly, which party or parties to the transaction carry the greatest influence over how, when, where and by whom services are provided. I will argue in this paper that our reliance on government-sponsored universal health insurance as the principal means of funding health care carries with it the seeds of continued conflict.

In the first part of the paper I will review the economic theory of demand for health services under conditions of insurance or other types of third-party payment. I will then go on to examine the impact third-party payment has on the costs of health services with particular

reference to the type and volume of health services offered. In the final section I will draw some conclusions concerning the efficient delivery of health services in response to consumer preferences.

I want to make it quite clear from the outset that I recognise this is a difficult subject, a subject about which many people hold strong views. I agree that there may be a trade-off in some circumstances between achieving economic efficiency in the delivery of health services and equality of access to services. To the extent that both efficiency and equality of access are perceived as economic 'goods', then compromise between these objectives may be necessary (Okun, 1975:88). However, this is not always the case and in my view it is possible, as I explain in this paper, to redesign health funding arrangements in a way that would be simultaneously more equitable, more efficient and more attuned to consumer preferences. While I will discuss this issue in more detail later, my initial focus will be on the costs the community bears through its apparent disregard for the efficiency criterion — what an economist would refer to as the welfare losses associated with third-party payments.

Demand for Health Services

Categorising demand for health services is no easy matter. We must attempt to distinguish **need** for health services as perceived by patients from **utilisation** of health services, which reflects 'needs' modified by extrinsic factors. This distinction is useful because it allows health economists to focus on the modifying factors that are susceptible to external control. It is never possible to measure precisely a patient's 'need' for health services, since this cannot be observed directly. However, it is possible *ex post facto* to relate need for health services to certain intrinsic factors. Examples of intrinsic factors and extrinsic modifiers include:

- a) **Intrinsic factors** — age, sex, ethnicity, psychosocial characteristics, the illness process (embracing factors such as the severity, frequency, duration and acuteness of symptoms).
- b) **Extrinsic modifiers** — waiting and travelling time, appointment delay, bed availability and other supply-side constraints, education, income, apparent cost (i.e. own cost net of third-party payments), agents (medical practitioners and other health professionals).

Most of these factors and modifiers are self-explanatory; however, I want to make special reference to the modifying effect agents have

on utilisation of health services. Once the patient gains access to health services, the actual consumption of health services is generally determined by consultation between the patient and the medical practitioner (or other health professional) to whose care the patient has entrusted himself. What is known as an agency relationship is established between the doctor and the patient. A perfect agent acting on behalf of a patient will take into consideration all factors relevant to the patient in making a decision regarding treatment. In practice, of course, there will usually be an opportunity for detailed discussion between doctor and patient including an examination of the effects of various alternative approaches before a decision is reached. It is the agent's duty to bring to the attention of the patient all relevant factors that need to be considered in reaching a decision. The point is that the medical practitioner, acting as a good agent, will bring to bear in each case a set of considerations including items such as diagnosis, prognosis, emotional and physical support available to the patient at home, tolerance of pain, the age of the patient, the costs of the proposed alternatives, etc. Some of these considerations will be aired explicitly between the doctor and patient while others will not.

Once these matters are settled and the patient and the agent have agreed on a course of action, this is translated into an explicit demand for access to health services. This might take the form of a request for hospital admission, x-ray or pathology services, etc.

My principal interest in this paper lies in the relationship between the apparent cost of services to the patient and demand for health services. In other words, the extent to which intrinsically driven demand, that is, patients' preferences, are modified by the extrinsic factor of apparent cost. So far I have distinguished two types of demand for health services: first, the direct demand initiated by the patient, and second, the indirect demand mediated by the patient's agent.

It will be apparent that there may be a discrepancy between the price elasticity of demand experienced by the patient and the price elasticity perceived by the agent. A perfect agent would of course be as sensitive to price as the client, but doctors may not necessarily be good agents. They may be influenced in their decision making behaviour by their own profit maximising, income satisfying or leisure maximising objectives.

If a third party, such as a health insurer, now enters the picture via a contractual arrangement to provide benefits for health services, the relationships and incentives become even more complex. The central question is whether the patient will be as sensitive to price as the insurer, and hence whether the patient's agent will be as

sensitive to price as the insurer — with whom the agent has no contract.

The Effect of Third-Party Payment on Demand for Health Services

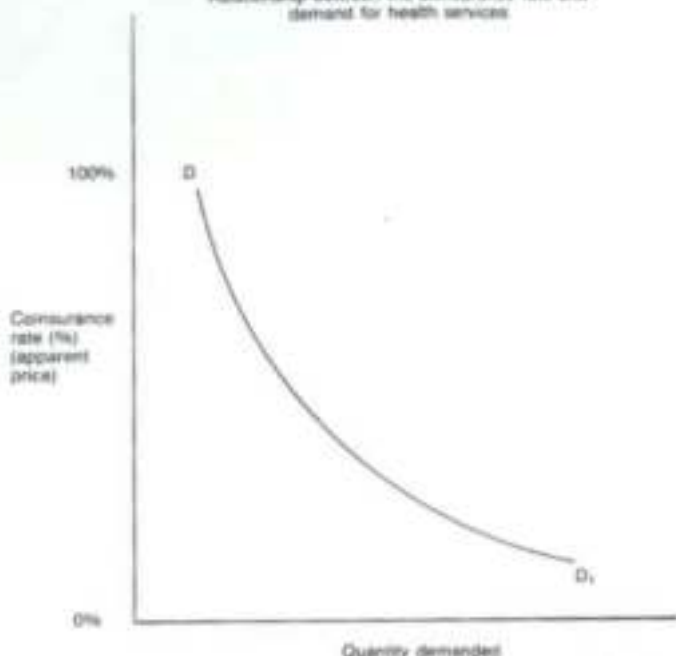
Under conditions of third-party payment for health services (and by third-party payment I mean payment by an insurer, employer or government), the apparent cost of health services is reduced. The basis for this assertion is what is known to economists as a common property relationship. Those who contribute to a health insurance fund recognise that the claims experience of the fund will ultimately be reflected in premiums. Likewise with government-funded schemes, taxes will be related (with a lag perhaps) to the overall cost of the scheme. However, at any instant when a consumer must make a decision regarding the consumption of care, the only cost factor that will enter the decision will be the marginal direct cost. The long-term prospect of some indirect effect of higher insurance premiums or taxes will be virtually completely discounted.

Under the Medicare arrangements currently in place in Australia charges for hospital care are eliminated altogether. The services of medical practitioners outside hospitals are free of charge if the doctor elects to bulk bill, or the patient receives a rebate of 85 per cent of the scheduled fee if the doctor does not bulk bill. The difference between the fee and the health insurance refund is referred to in economic jargon as the coinsurance rate or copayment. A zero coinsurance rate means that services are free of charge at the point of service, whereas a 100 per cent coinsurance rate means the patient meets the full cost of the service out of his or her own pocket. A copayment is similar but is expressed as an absolute dollar amount instead of as a percentage.

As I noted above, the overall demand for health services is related to the apparent price of the services. When the apparent price increases demand falls, and vice versa. The relationship between the apparent price and the quantity of services demanded is illustrated in Figure 1. This curve is known as the demand curve, and its slope depends on the price elasticity of demand exhibited by consumers. The more nearly vertical the slope of the curve, the more inelastic the demand is said to be. The negative slope illustrated here indicates the expectation economists have that quantity of services demanded declines as the apparent price increases.

It is probable that the more urgent the perceived need for services, the more inelastic the demand curve will become. In other words at each level of coinsurance patients are likely to become less sensitive

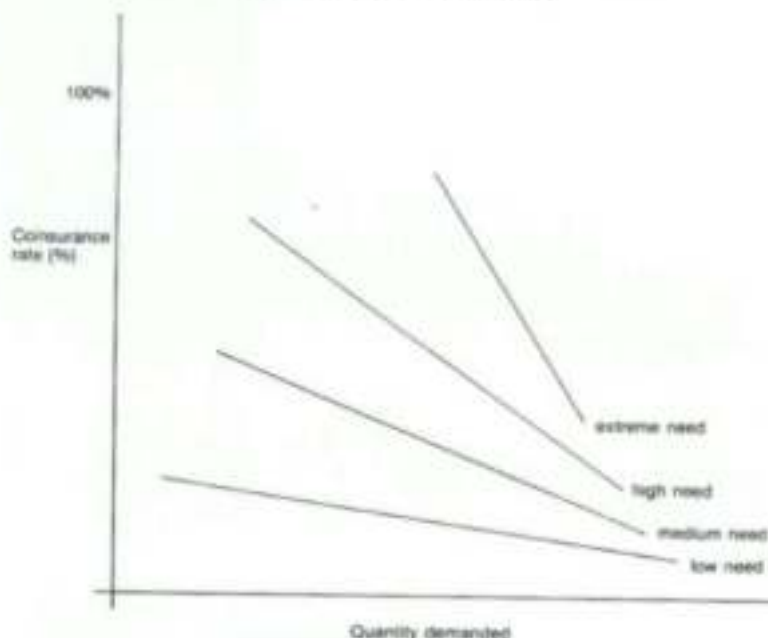
Figure 1
Relationship between the coinsurance rate and
demand for health services



to price, the more serious their need. This point is illustrated in Figure 2. This diagram implies that in the case of low need services, demand may be completely choked off at relatively low levels of coinsurance, but that even high levels of coinsurance will not cut off demand when the patient perceives a serious threat to health (or life). In other words, demand becomes less price elastic as severity of illness increases. Direct charges to patients represent only one cost faced by patients. Other costs include waiting and travelling time. The relative importance of these factors will depend on the marginal opportunity cost of time faced by individual patients. Patients who are on welfare will not lose income if waiting times are long; therefore their opportunity costs may be relatively low. Employed patients are likely to have a relatively high opportunity cost and will be more sensitive to delays.

Of course, in some 'ideal' world where people used only the resources they really needed regardless of cost, the price of health services would not be relevant. However, economic theory indicates that this is not the case in the real world. As the apparent cost of services declines, including direct and indirect costs, utilisation of

Figure 2
The relationship between the insurance rate and demand for health services depends on perceived 'need'

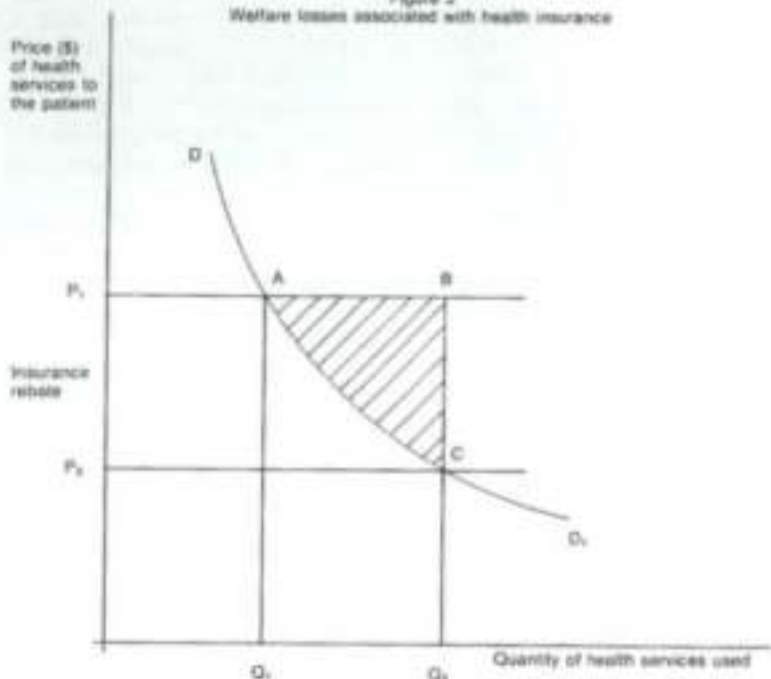


services tends to increase. This accounts for the observation that patients who have health insurance tend to use more health resources than those who are not insured. This phenomenon is known as 'moral hazard', and applies in much the same way in other areas of insurance.

Whether the excess utilisation of services is due to excess demand by patients or to overservicing by doctors the result is the same, namely, inefficient allocation of resources and a loss to the whole community. This is known in economic terms as a 'welfare loss', illustrated in Figure 3. P1 is the price paid by the patient before insurance is taken out. P2 is the price paid after insurance is taken out. The quantity of health services utilised increases from Q1 to Q2. The overall cost to the patient remains much the same; however, the cost to the community as a whole increases by the amount of subsidy drawn by the patient from the insurance pool. This leads to a general increase in insurance premiums and a loss of utility in the community as a whole. The size of this loss is represented by the shaded area ABC.

I should point out here that it is not only patients who can push

Figure 3
Welfare losses associated with health insurance



the quantity of health services used from Q_1 to Q_2 . Medical practitioners, as agents for patients, also play a part. I am not suggesting that either patients or practitioners are behaving irrationally — quite the contrary. In economic terms it is rational to increase consumption until the marginal cost of services equals the marginal benefit. If the marginal cost is zero it is probable that consumption will increase until the marginal benefit is zero too. Of course doctors *may* be acting in their own interest in recommending a course of treatment to a patient. They may also be acting quite rationally and ethically in recommending treatment that they know is of value to the patient even if the absolute value is small. That is, they may be acting as perfect agents.

In addition, it is worth observing that doctors and patients will be indifferent to two treatment modalities that offer the same benefits but have substantially different costs to the insurance pool. A classic example of this is the comparison between equally efficacious medical and surgical treatment of illness. Medical treatment may require a series of visits to the doctor over a number of years, which will involve time costs to the patient, the cost of drugs, and a coinsurance

payment at each visit. Surgical treatment on the other hand may involve only one or two visits to the doctor and a short stay at a hospital. In the presence of third-party payments the costs of surgical intervention may be lower in terms of time and out-of-pocket payments than the equivalent medical treatment. However, the present value to the insurance pool (discounted by an appropriate discount factor) of the medical treatment may actually be lower than the cost of the surgical intervention.

Another factor behind the higher utilisation rates of insured patients is a phenomenon known as 'adverse selection'. Adverse selection was observed in the days before compulsory health insurance. It results from the asymmetry of information available to the insurer and also from the so-called community rating principle. Under the community rating principle insurers offer to insure all members of the population at the same rate. However, some individual members of the community know that they tend to use health services more than other citizens. For these patients health insurance will seem a relatively good buy. Other members of the community, typically young healthy males, know they are unlikely to need health services and to them health insurance premiums set on the basis of the community rating principle seem relatively expensive. Because of this the members of voluntary health insurance funds are likely to be higher users of health services than those who are not. One advantage of the Medicare plan introduced on 1 February 1984 is that it is a **universal** health insurance scheme and thereby overcomes the problem of adverse selection.

Another method adopted by some private health insurers is to deny benefits for preexisting illnesses. This has the effect of reducing (but not eliminating) the asymmetry of information and of encouraging individuals to take a longer term perspective in making their health insurance decisions.

The use of the community rating principle or compulsory universal health insurance is only one method of sharing the risk of health insurance. If we were prepared to relax the conditions that all members of the community should be eligible for health insurance at the same rate, then it should be possible to introduce health insurance at premiums based on actuarial data. In other words premiums could be tailored to age of entry, sex and lifestyle risk categories. It is not clear to me for instance why nonsmoking members of the community should subsidise the extra health costs incurred by smokers, or why single individuals should subsidise the cost of pregnancy. In practice, the community rating principle results in large cost transfers within the community, both across risk categories (lifestyle, sex, marital status) and across generations. It

serves to weaken the nexus between the cost and expected benefits of insurance.

Empirical Evidence

The real question then is to what extent health insurance increases utilisation of services; or, in economic terms, what is the price elasticity of demand for health services. If demand is relatively inelastic the theoretical concerns I have listed above may be disregarded; however, if demand is relatively elastic small changes in apparent price could result in large-scale misallocation of resources.

Empirical analyses of price elasticity have resulted in a range of estimates of the effect of copayments on utilisation. One of the lowest estimates was reported by Beck and Horne (1980). They examined the impact of the introduction in Saskatchewan of user charges of approximately 33 per cent of medical and 6 per cent of hospital charges after a period when all services were free. Beck and Horne found a 6 per cent reduction in utilisation of medical services but no evidence of a decline in the use of hospital services. Critics of this study have suggested that the small decline in services may have been due to the accumulation of a backlog of demand when services were free, or to supply side effects discussed in more detail below, or to both these factors.

There have been several US studies of price elasticity. For instance Scitovsky and McCall (1977) found a 24 per cent reduction in demand when a 25 per cent coinsurance rate was introduced in a Stanford University group clinic. In the one major Australian study of which I am aware, Richardson and Harvey (1983) estimated that a \$1 copayment in 1976 was associated with average reductions of 17.6 per cent in standard GP visits, 11.7 per cent in total GP visits, and 8.9 per cent in specialist consultations (see Table 1). However, Richardson and Harvey note that due to problems with their data they probably overestimated the impact of a \$1 charge.

Other observations made in the literature about the price elasticity of demand include:

- Women tend to reduce demand for services more than men when a copayment is introduced. This may reflect a lower marginal cost of their time.
- Persons in lower socioeconomic groups tend to respond more to prices than those in higher socioeconomic groups.

All of the studies referred to above suffer from one weakness or

Table 1: Impact of Price on Use of Services in Australia, 1976

| | Standard GP Consult. | All GP Consults | All Specialist Consults |
|-----------------------------------------------------------------------------------------------|-------------------------|--------------------|----------------------------|
| Effect of \$1 Copayment | -17.6% | -11.7% | -8.9% |
| Elasticity at the Mean | 0.14 | 0.10 | 0.29 |
| Reduction in Use Following Intro of 25% Coinsurance upon Previously Free Services | 27.0% | 19.4% | 40.3% |

After Richardson and Harvey (1983).

another, and these have been discussed in the literature. The main conceptual weakness has been the inability to select and assign patients randomly to one group or another. There is always the possibility of confounding factors. Substitution effects (e.g. between ambulatory care and hospital treatment) also need to be taken into account.

The one study that has overcome these problems is the Rand health insurance experiment (Newhouse et al., 1981). This multicentre experiment ran from November 1974 to January 1982. Participants were 3958 people aged 14-61 years, who were enrolled for three to five years. The 2005 families involved were assigned to one of 14 experimental insurance plans, which varied along two dimensions: the coinsurance rate, and the maximal annual dollar expenditure (deductible). The four coinsurance rates were zero per cent (free care), 25 per cent, 50 per cent, and 95 per cent. The maximum dollar expenditure was 5 per cent, 10 per cent, or 15 per cent of family income, to a maximum of \$1000.

The results of the Rand experiment indicate that total average health expenditure per capita (Hospital and Ambulatory, excluding Dental and Outpatient Mental Health Services) rises steadily as coinsurance falls. Average expenditure per person with free care is approximately 60 per cent greater than for persons who pay 95 per cent of health bills up to a maximum of \$1000 per annum. These results are set out in Table 2.

Table 2: Expenditure on Health Care

| Plan | Total Expenditure | Nonhospital Expenditure |
|-----------------|--------------------|-------------------------|
| Free Care | \$401 (\pm 52) | \$186 (\pm 9) |
| 25% Coinsurance | \$346 (\pm 58) | \$149 (\pm 10) |
| 50% Coinsurance | \$328 (\pm 149) | \$120 (\pm 12) |
| 95% Coinsurance | \$254 (\pm 37) | \$114 (\pm 10) |

The reduction in average per capita expenditure was achieved through a combination of fewer visits to physicians and fewer hospital admissions. However, once admitted, costs per patient differed little between plans. This observation is probably explained by the high probability that, once hospitalised, a patient will incur costs in excess of the annual ceiling. An important finding was that poorer families were not more cost sensitive when the cost sharing was related to family income.

In addition to measuring utilisation effects, the Rand experimenters also measured the health status of participants in the trial (Brook et al., 1981, 1984). The only significant positive effect of free care was a slight difference in corrected vision (2.4 vs 2.5 Snellen Lines). No other health measure showed a statistically significant difference, although the difference in diastolic blood pressure (-0.7 mm hg) between those in the free plan and those in the cost sharing plan approached significance. Furthermore, only for hypertension, the risk of dying, and role functioning did the direction of the effect favour the free plan. On other measures including mental health status, social contacts, health perceptions and cholesterol, the fee-for-service patients averaged better scores (not significant).

Some caution should be exercised in generalising the results of the Rand experiment. Because the patients involved in the study were widely scattered, any decline in their use of health services is unlikely to have had a significant impact on income earned by individual medical practitioners. Therefore, the Rand experiment does not measure any supply side effects that might become apparent if copayments were increased generally. The first impact of higher copayments would be reduced waiting times. This would tend to stimulate demand somewhat. However, once this effect was exhausted the reduced demand would increase the free time available to doctors and reduce their incomes. Supply side effects might then

become evident. These effects could include longer average consultations, increased frequency of practitioner initiated patient recalls, and an increase in ancillary services rendered by the practitioner. These supply side effects would tend to erode the savings predicted from the Rand experiment. However, in the longer run fees charged by medical practitioners could decline.

Long-run Implications of Third-Party Payment

What then are the long-run effects of third-party payments likely to be? There is now a substantial body of evidence available confirming the economist's expectation that a reduction in the direct cost of health services leads to an increase in the demand for such services among all socioeconomic groups. And it appears that the savings available through the introduction of more efficient health insurance arrangements may be very substantial indeed.

We have experienced a number of national medical and hospital benefits schemes in Australia, beginning in April 1951 with the scheme introduced by Earle Page. The essential characteristics of this scheme and its successors have remained remarkably similar with the exception of the element of compulsory universality, which was introduced with the first Medibank scheme. Importantly, all the schemes have maintained inviolate the community rating principle. We have had an opportunity therefore to build up a fairly comprehensive picture of the effects of widespread third-party payment on medical practice.

One of the outstanding characteristics has been the very rapid growth of health service expenditures as a proportion of GNP. This has also been the experience of many other Western nations, and no doubt there are other factors at play apart from the nature of the economic relationship between doctors and patients. Nevertheless it is third-party payments that have underwritten this expansion in health care expenditure. As Dr Sidney Sax noted recently, 'under conditions of third-party payment, styles of medical practice can be endlessly elaborated to absorb every dollar that society is willing to spend. For example, why perform only \$50 worth of tests to be 95 per cent certain of a diagnosis, when \$500 worth of tests will provide 96 per cent certainty?' (Sax, 1984:195).

If the underwriter is constrained from introducing copayments, deductibles or actuarially-based premiums, there is no natural limit to the demand for health care. Ultimately (assuming away supply constraints), the time and pain costs of health care become the limiting factors at zero marginal costs. Faced with these

circumstances the rational underwriter will attempt to limit the overall number of claims. In Australia under successive federal governments various attempts have been made to limit overall expenditure on health care by placing tight caps on hospital bed numbers, hospital subsidies and payments to the states, coupled with appeals and threats to medical practitioners concerning practice patterns and overservicing. The constraints have been remarkably successful. Overall health care expenditure has remained reasonably steady for the past five years. The Penington Inquiry reported that expenditure on health services as a proportion of GDP seemed to have levelled off but warned 'this is almost certainly a temporary respite' (Committee of Inquiry into Rights of Private Practice in Public Hospitals, 1984:39-40).

But constraints on overall expenditure under conditions of unconstrained demand only serve to bring into sharper focus the emerging natural conflict between patients and their agents on the one hand, and the underwriter (the government) on the other. At the centre of this emerging conflict is the conscious and unconscious rationing of health services that is occurring throughout Australia in everyday medical practice. Resources are limited, therefore access for some patients to some services must be rationed. For well-established services the result is that queues of eligible patients form. For treatments and services that are not so well established, services may be curtailed without such obvious manifestations as queues. Entirely new services and techniques become the subject of intense efforts by government to prevent or delay their introduction.

In its starkest relief, rationing raises the ethical questions of who should live and who should die. Fortunately, most day-to-day rationing decisions do not involve questions of this weight, but for some doctors, especially those in intensive hospital practice, this is a very real dilemma.

Unwittingly, doctors have become the gatekeepers for governments, which are determined to make doctors a party to the contract between the patient and the insurer. Clearly, however, this results in a certain dissonance. In particular, doctors have seen their role as the confidant of the patient eroded and intruded upon. Expressing this in terms of the agency framework introduced above, doctors find themselves acting increasingly as agents for government rather than as agents for the patient. This not only raises a moral and ethical dilemma for doctors, but also holds out the possibility of conflict emerging between doctors (acting in accordance with government wishes) and patients.

Ultimately under rationing, new currencies and new forms of transactions are introduced that tend to undermine the very equity

principle that drives the rationing process. In attempting to ration services governments are doubtless motivated by sentiments of equality. Yet for a variety of reasons the result can be very different. The educated upper income groups and those on the inside tend to gain greater access to rationed services than the underprivileged. In Britain, after more than 30 years of the National Health Service, the discrepancies between the standardised mortality ratios of the highest and lowest income groups are greater than ever in spite of an improvement in average life expectancy in all classes. As Dr Sax noted, the professional, administrative and technical classes 'are informed and articulate people who understand the way our systems operate and the value to themselves of health' (Sax, 1984:195). There are numerous subtle ways in which the relatively privileged gain greater access to health services during rationing.

At the same time, universal health insurance encourages the expectation among patients that unlimited access to the latest health services will be available no matter what the cost. Governments are peculiarly vulnerable to such claims, and unfortunately for them it is impossible to quarantine Australia from knowledge of the newest techniques overseas. We have seen a number of rather dramatic cases of the government being 'held to ransom' in recent months. Such direct appeals to governments will become more frequent as more and better services become available overseas.

Another major long-term impact of increased government involvement in health service delivery will be an increasing expenditure on the production of health services of low marginal benefit to patients. This problem will arise because patients are unable to reveal their preferences. They have no way, apart from political channels, to inform those who decide on the allocation of health service resources: which services they would prefer, how much of them they want, and where and when they would prefer to receive them.

One area of great concern to me is the rapid development of community health services under government auspices. Some of the services offered are no doubt greatly valued by patients, but I am quite certain that many patients would not continue to accept some services if even such a modest fee as \$1 per occasion were levied. There are two possible reasons for discrepancies between an individual's preferences and the product supplied by the government: either the government lacks perfect knowledge, or the government believes there is some external public health or welfare benefit. In most cases we can exclude the possibility of any external benefits. Therefore we can conclude that governments have difficulty determining which services should be given funding priority. The

result is that many needed services go unfunded while others with little patient support proliferate. In the absence of knowledge about patient preferences health departments resort to crude methods of resource allocation such as formulas based on the age, sex and standardised mortality ratios of patients in each area.

As Hayek has so succinctly put it, the essence of the problem of economic planning is 'who is to do the planning' (Hayek, 1948:79). Is planning to be done by a central planner such as a health authority, or on a decentralised basis by the individuals who consume the services, or by intermediaries such as hospital executives, doctors etc? The answer to this fundamental question must rest on an understanding of where the requisite knowledge lies. If we take the view that health authorities can quickly and efficiently assemble all the knowledge necessary to make long-range plans for health services, then central planning would be a viable option. However, if we incline to the view that the requisite knowledge (that is, detailed knowledge of consumer preferences, medical techniques, availability of personnel and other resources) is difficult to acquire centrally, then we would probably prefer to see a predominance of decentralised planning or ultimately resort to free markets. The point is that the economic planning process must be tailored to the locus of knowledge. Deviations such as excessive centralisation or excessive decentralisation imposed by governments will result in tensions, inefficiency and ultimately conflict.

Alternatives

My main point so far is that the welfare losses to the community associated with universal health insurance along the lines of Medicare are very substantial. Unfortunately, these losses, like the costs of tariffs, are hidden from general view. The effects will be felt only indirectly, most obviously in the form of queues, increasing bureaucracy and in the general malaise of the health professions and frustration of patients. It is difficult to quantify the possible welfare losses; however, if we face similar price elasticities of demand to those discovered in the US by the Rand researchers, the losses could be of the order of several hundred million dollars per annum just among the age groups studied in the Rand experiment.

What alternatives exist? Or more precisely, what arrangements can be introduced that will meet simultaneously the objectives of reasonable equity of access to health services and efficient delivery of services?

The first principle in seeking a solution is that we should not regard

any element of the existing arrangements or controls on the market for medical and hospital services as sacrosanct. I believe we should review many aspects of the current arrangements with a view to decentralising decision making. Our aims should be (1) to set up arrangements that introduce an incentive for efficiency on the part of both the doctor and the patient (and hospitals for that matter) and that allow for full expression of patients' preferences, and (2) to introduce funding mechanisms for the disadvantaged designed to minimise the adverse impact on efficiency and yet still offer reasonable equity of access.

At the core of the problem is the monolithic system of a single, standard, universal health insurance scheme. Just as we allow for the existence of a variety of consumption patterns in other fields I believe we should encourage a diversity of health insurance arrangements. Individuals should be able to choose from an unbounded range of actuarially-based health insurance schemes. They should be free to choose their own levels of coinsurance and deductibles ranging from full cover to catastrophic insurance only. Indeed, individuals should also be free to carry their own insurance if they so choose. I believe particular attention should be given to the development of prepaid health plans, which break with the traditional fee-for-service system. But any such development should be on a competitive basis, and hospitals, doctors and other staff should be free to opt in or out of plans operating in their areas.

Assistance for the poor and disadvantaged should, like other welfare services, be specifically targeted. Wherever possible, part of the benefit should be given as a voucher to purchase eligibility for benefits through health insurance or prepaid health plans. In all cases a mandatory level of coinsurance should apply to the receipt of benefits by welfare patients. This will ensure that demand for services with low marginal benefits is discouraged. In order to offset the cash disadvantage implied by such a requirement a health care supplement equal to the cost of the expected incidence of claims could be added to the cash payment made to welfare recipients.

In summary, I believe there is an urgent need in Australia to revise health insurance arrangements in such a way that individuals are free to exercise greater choice: free to choose higher or lower levels of health insurance and services than the level set by Medicare. We must redesign the funding arrangements to give freer rein to individual preferences. The potential for improvement in the overall community standard of living is substantial, and if properly managed this improvement can be realised without detriment to disadvantaged patients.

References

- Beck, R.G. and J.M. Horne (1980), 'Utilization of publicly insured health services in Saskatchewan before, during and after co-payment', *Medical Care* 18(8), 787-806.
- Brook, R.H. and J.E. Ware (1984), 'Does free care improve adults' health?', *New England Journal of Medicine* 310(22), 1468-70.
- Brook, R.H. and J.E. Ware (1984), 'The effect of co-insurance on the health of adults', Rand Corporation, California.
- Committee of Inquiry into Rights of Private Practice in Public Hospitals (1984), *Final Report*, AGPS, Canberra.
- Hayek, F.A. (1948), *Individualism and the Economic Order*, University of Chicago Press, Chicago.
- Newhouse, J.P. et al. (1981), 'Some interim results from a controlled trial of cost sharing in health insurance', *New England Journal of Medicine* 305(25, December), 1501-1507.
- Okun, A.M. (1975), *Equality and Efficiency: The Big Tradeoff*, Brookings Institution, Washington, D.C.
- Richardson, J. and R. Harvey (1983), 'Price elasticities for private medical care services in Australia', Technical Paper No. 7, Health Economics Research Unit, Canberra.
- Sax, S. (1984), *A Strife of Interests*, George Allen and Unwin, Sydney.
- Scitovsky, A. and N. McCall (1977), 'Co-insurance and the demand for physicians services: Four years later', *Social Security Bulletin* 40(5), 19-27.

**Regulation or Reprivatisation of the
Health Care Sector:
Which Path Should Australia Follow?**

J. Richardson

Jeff Richardson is a health economist based at Macquarie University. In 1985 he was the acting director of the Health Economics Research Unit at the Australian National University, and he is currently the president of the Australian Health Economists Group. He has done work on the theory of health insurance; international comparisons of health care systems; medical technology; doctors' practices and incomes; medical fees; demand, supply and distribution of medical and hospital services; the chiropractic industry; the cost of pain; and health services in Malaysia. He is currently studying the effects of bulk billing, 'entrepreneurial medicine' and health care in Papua New Guinea.

Regulation or Reprivatisation of the Health Care Sector: Which Path Should Australia Follow?

J. Richardson

I. INTRODUCTION

There have been major changes in the economic theory of regulation since the 1960s. The welfare economics of Arrow, Bator and Musgrave have been increasingly supplemented by the positive theories of regulation introduced by Stigler, Posner and Peltzman. While the earlier welfare economics often had a proregulatory bias, the opposite appears to be true with the new positive theories. Applied welfare economics often followed a simple formula: identify market failure, assume that a government authority could and would eliminate the failure through judicious and costless regulation, and then conclude with the recommendation that such intervention should occur. By contrast, a major theme of the new positive theories is that the object of government intervention is to redistribute income in favour of influential, sectional interests and that this redistribution reduces general welfare. A common corollary of this positive prediction is the assumption that markets operate sufficiently well that deregulation in these circumstances would increase general welfare. In parallel with this change in the emphasis of economic theory, there has been a shift from the advocacy of ever larger government and more extensive controls to the privatisation of government enterprise and the deregulation of industry.

In Australia, as in most Western countries, the health care sector has been heavily regulated. The supply of hospital beds, facilities, and health care professionals is controlled by direct regulation, budgetary controls, the training institutions and licensing. Demand is underwritten and regulated through the insurance of private hospital and medical services and the direct employment of health professionals in the public hospital sector. In these circumstances

it is to be expected that the health care sector should attract the attention of the advocates of reprivatization. This has occurred in the USA and to a much lesser extent in the UK and Canada. In these countries there has been a loose coalition between the medical profession, advocacy groups and a number of academics. In their analysis of the 'Push for Reprivatization' Weller and Manga (1983:496) identify the chief advocates in the following way:

In all three systems [the USA, UK, and Canada] . . . the professional associations [of doctors] are the leaders of the fight for reprivatization . . . [It] is not supported by most other health workers such as nurses . . . In Canada, the doctors . . . receive some sympathy and assistance from the insurance sector of the health care system and from a few academics such as Ake Blomquist and R.D. Fraser. They also receive the support of at least one advocacy group, the Fraser Institute. No federal political party however threatens reprivatization in the same way that national parties in both the United States and Britain do . . . In Britain, the fight for the reprivatization of health care carries overtones of class conflict . . . The conservative ideologues surrounding the central organs of the conservative party, including Arthur Seldon and others associated with the Centre for Policy Studies which have close ties with Margaret Thatcher, seem particularly influential . . . The widest range of advocates of the reprivatization of health exists in the USA . . . where there is a great deal of similarity of thought amongst professionals, corporations . . . and the Republican party. A large number of advocacy groups such as the American Enterprise Institute and a large number of academics, such as Cotton Lindsay and Alain Enthoven also advocate reprivatization.

Since this passage was written, Mrs Thatcher's support for reprivatization declined and the 1983 general election was fought with the theme 'the NHS is safe with us' (Klein, 1985).

While the members of these groups have had a common interest in reducing government influence in the health care sector, their motives for adopting these positions almost certainly differ. Academic economists want to revitalise market forces and replicate, as far as possible, the outcome predicted by the competitive model of the market. The medical profession's stated motivation, at one stage, was that government intervention would fuel the excessive growth of expenditures (see Weller and Manga, 1983). More recently the opposite claim has been made, namely that government controls will result in underfunding and a deterioration of health services. Whichever position is adopted it is unlikely that the true motivation is the replication of the outcome of the competitive model. Reinhardt (1981:3) makes the reason for this clear:

I present the economist's vision of freely competitive markets in the expectation that the mere description of such a market environment will make most health care professionals blanch and run for rescue by — you guessed it — the public sector.

Whatever the motives of the critics, it is likely that with the present antiregulatory mood, the government's role in the Australian health care sector will be increasingly questioned. Consequently, the purpose of this article is to review some of the major arguments relevant to the debate. In the second section of the paper some key aspects of the conventional welfare case for government intervention are reviewed, and in Section III a number of the claims of the new positive theorists are discussed. The conclusion is that both approaches have been misused; comparing an imperfect market with an omnipotent and benign government, or a stumbling and purely self-interested regulatory body with a fantasised competitive environment, are equally invalid forms of argument. Both strands of economic theory highlight potentially important issues or hypotheses. However, by focusing attention on only one aspect advocates have elevated particular hypotheses to the status of ideology. The case for the market or for regulation depends upon the quantitative relationships between means and objectives and upon the social value judgments that determine the relative importance of different objectives.

This general conclusion highlights the complexity of the issue. Different countries may have different objectives — for example the USA and Australia appear to attach quite different weights to equity and efficiency. Further, success of regulation or of a particular form of competition is not independent of the institutions, traditions and characteristics of a particular country. In Section IV some of the evidence with respect to the success of regulatory systems is reviewed, and in Section V the procompetitive regulatory proposals in the USA are discussed and evaluated.

II. THE CONVENTIONAL WELFARE CASE

An acceptable case for an unregulated market must establish a link between such a market and some desired objective or objectives. The usual case, which links economic freedom of choice with individual welfare, has been formalised in the economist's model of perfect competition. This demonstrates that the market may, potentially, have a number of desirable properties. If consumers' valuation of a product rises, then revealed demand rises and prices will be bid upwards. The increasing price will have the dual effect of dampening

demand and increasing supply. An equilibrium will be reached where, on the margin, the benefits to the consumer will just equal the costs to the producer as reflected in the supply function. Similarly, if supply increases so that more marginal, less valued services are produced, price will fall. This has the dual effect of increasing demand and partly restraining the increase in supply. Once again, an equilibrium will be achieved where the individual's valuation of the product purchased just equals the cost of production. In other words, under ideal conditions, the market ensures that the product will be purchased if and only if its benefit is greater than or equal to its (social) cost. When benefits exceed costs the industry will expand. When benefits are less than costs the industry will contract.

The success of this model in demonstrating the desirability of a competitive environment depends upon the fulfilment of a large number of preconditions. The conventional welfare case for regulation has rested upon the claim that one or more of these preconditions are not fulfilled — that the market 'fails'. A number of these claims have clearly been false and the conclusions drawn from them invalid.

In the health care market there are numerous deviations from the competitive ideal, so that the removal of a single impediment could increase rather than decrease allocative efficiency (the 'law of second best'). Further, market failure, as defined by Bator, is the 'failure of a more or less idealised system of price-market institutions to sustain desirable activities or to estop undesirable activities'. This definition is designed to discriminate between temporary imperfections in the market or imperfections resulting from rigidities peculiar to a particular system, and imperfections that are the inevitable outcome of the nature of the commodity, its production or marketing. The former types of imperfections may be eliminated within the market framework; the latter require some sort of outside intervention. Despite this, the majority of the imperfections discussed in the literature have been specific to particular market environments. This issue is discussed at length in Richardson (1977).

However, two issues arise from this literature that cannot be dismissed and that have profound implications for health care systems. These concern the role of information and the social objectives to be achieved.

Information

An essential part of the appeal of the market model is that there is a mechanism to ensure that consumers' desires will be fulfilled in the most efficient possible way. Preferences are 'revealed' by the

purchase of a commodity and, with sufficient information, consumers will select the particular commodity that maximises their welfare. Complete information is not required. Rather, sufficient knowledge is needed by a sufficient number of people so that mistakes are not replicated. Subsequent purchases must be evaluated in light of the initial experience. Gradually, goods and services providing the greatest consumer benefits will be 'preferred' and come to dominate the market.

Generally, consumers evaluate a product by comparing their welfare with and without the product. They directly experience the first of these states after the receipt of the product. Normally, they assess the second state from their welfare prior to the purchase. Except for trivial illnesses, this cannot happen with health care. The course of events without treatment is uncertain. The illness could get worse, or stay the same, or disappear on its own. This prevents consumers from equating welfare without treatment with welfare prior to treatment. Assessing the most probable course of events is normally part of the medical service being judged. Since each episode of illness is in a very real sense unique to the consumer, reliance on personal experience is limited and, in the case of serious illnesses, impossible. The patient could seek advice from a number of physicians and make a judgment on this basis; however, since medicine is not an exact science there is ample scope for legitimate differences of opinion with respect to both diagnosis and treatment.

Despite this, individuals could, in principle, attain a sufficiently wide range of opinions to make an accurate assessment. Apart from time and money, they would need to be aware of the potential advantages of such an investigation and to have confidence in their ability to conduct the study and assess its results. However, while it is reasonable to conceptualise a more or less idealised system of market institutions in order to assess whether market failure is inevitable, it is not reasonable to assume that the market is populated with more or less idealised people. The former assumption is useful since it abstracts from the influence of particular markets. The latter assumption would simply make analysis irrelevant to any real world situation. There is also evidence that patients frequently do not seek information even when it is possible to obtain it (Bunker, 1985). This may be because they recognise their analytical inabilities, or because of psychological factors that operate when people are helpless and dependent. The reason for the behaviour is unimportant. The significant question is whether patients do or do not receive sufficient information with which to evaluate the care received and the consequences of that care. Except for the most trivial care, the answer appears to be that they do not.

The most important consequence of this informational failure is that it casts very serious doubt upon the relationship between revealed preferences and individual welfare. Since individuals cannot or do not assess the impact of health care services upon health, they will adopt alternative criteria for assessing health services, for example, the 'bedside manner' of the doctor or the quantity of services provided. After hospitalisation, even the scope for assessing these factors is largely removed. It is not surprising in these circumstances that the widespread incidence of poor medical treatment is not associated with a loss of patients and bankruptcy. Studies have indicated that between 29 and 62 per cent of US hospital patients are victims of serious errors of medical management; that between 61 and 65 per cent of well care ambulatory visits to physicians result in deficient care (Gaumer, 1984); and that quality of physician care is not related to patient assessment (Peterson, 1963).

Poor information is not, however, confined to consumers. An important characteristic of health care is the professional uncertainty concerning the appropriate form of treatment (see Wennberg et al., 1982). Doctors as well as patients may justifiably equate quantity and quality, thus creating the preconditions for the so-called theory of 'supply-induced demand' (for a discussion see Richardson and Wallace, 1983). This suggests that increasing the number of medical practitioners or medical facilities will eventually result in their use irrespective of costs or benefits. The argument is particularly compelling in the case of new technology. As McKinlay (1981) has documented, the life cycle of a medical innovation usually progresses from 'enthusiastic report' to general adoption with the best professional motivation and the minimum scientific evaluation.

In sum, there are strong reasons for believing that, except with a tautological interpretation (purchases occur because there are benefits; benefits are defined by what people reveal by their purchases), consumer sovereignty may result in the overuse of services — to use beyond the point where costs are matched by benefits or by the best estimate of likely benefits — and that there is little or no market mechanism for ensuring that only the most cost-efficient procedures will be employed. The empty logical circle of the consumer sovereignty argument is broken only if consumers are able to evaluate what they have purchased.

Social Objectives

Welfare economists have always recognised that people are concerned about the well-being of others and that, as a consequence, health care may be treated as being different from other commodities. The

usual response of antiregulatory economists has been to argue that the appropriate role of the state is to redistribute income until individuals are capable of purchasing health care services if they so desire. If they then do not purchase health care, it is because their welfare is maximised by the purchase of something else. If a second person wishes the individual to buy additional health care, it must be as a result of the benefits that the second person receives from the knowledge that the first individual is receiving the 'correct' level of care — that is, the level that the second person believes to be appropriate. In this case the antiregulationists argue that the second person may assist the individual through charitable donations.

There are two serious and related defects with this argument. First, charitable organisations cannot satisfactorily fulfil the role assigned to them because of the 'free rider' problem. Generally, charitable individuals do not benefit from the act of donating, but from knowing that a particular level of health care has been achieved in the society. The individual's donation has an infinitesimal effect upon the average level of utilisation and therefore upon the individual's welfare. But it does impose a cost. Consequently, contributions will remain at a lower level than is necessary to satisfy the social demand for charitable behaviour.

Second, and partly in recognition of this dilemma, it is likely that there will be a demand for collective action. Individuals may vote for higher taxation and for government intervention to ensure that the burden of health care costs is shared across the community. In an analogous way Thompson et al. (1983) found that a significant majority of a random cross-section of the Australian community favoured an increased subsidy to each of the major performing arts to be paid by the government. Respondents were prepared to nominate the source of the funds used. The result was also true for the subsample of individuals that did not attend the performing arts.

The antiregulatory response to this argument may be that it is not legitimate to increase taxes for people who do not receive a benefit from this particular type of subsidy. It is, however, an empirical issue whether this objection is sufficiently persuasive to prevent individuals from voting in this way. The political response to compulsory insurance in a number of countries suggests that it is not. Of course, interpretation of voting patterns is notoriously open to challenge, but it is possible to test this issue directly. Richardson (1977) undertook a study to determine whether there was an 'external' demand or whether health care was treated as a 'meritorious good', using Culyer's criterion of compulsion to distinguish between these categories. In the survey, 170 individuals were questioned about their attitudes towards government assistance for health and medical

services. One set of responses was prefaced by the statement that the subsidy would be financed from the taxes of people who did not want their money to be spent in this way. The responses after this information was given were as follows:

- | | |
|------------------------------------------------------------------------|-----|
| — The entire population should receive some assistance | 57% |
| — The poor and disabled should receive assistance | 76% |
| — There should be no government assistance when compulsion is involved | 24% |

A statistically significant majority within each income group also favoured intervention. This and other evidence suggests that, at least in Australia, the majority of the population is prepared to use compulsion to achieve what is perceived to be a desirable objective.

A legitimate rejoinder to this claim is that while governments may be obliged to implement certain policies, such majority-imposed restrictions will reduce welfare. But unless welfare is defined exclusively in terms of consumer sovereignty this is not necessarily true. The reason for doubting the usefulness of the consumer sovereignty criterion of welfare in the purchase of health care services was discussed earlier. It may also be judged defective by a majority of the population in the market for health insurance. The decision not to purchase insurance may be the result of a poor understanding of either a complex insurance system or the full consequences of the decision; it may result from inertia, forgetfulness or short-term economic pressures. In each of these cases, the processing of information by the individual is defective and, as noted earlier, in the absence of adequate information there is little reason for accepting consumer sovereignty as an index of welfare.

When individuals are fully and accurately informed with respect to the likelihood of ill health, consumer sovereignty can still be reasonably rejected as a criterion for social welfare. Those who do not purchase insurance may believe that their welfare will be increased by this decision. Some will lose this gamble and as a result of unanticipated sickness they will be unambiguously worse off. At best, therefore, consumer sovereignty redistributes the realised level of welfare: the successful risk takers gain, the unsuccessful lose. It requires a particular value judgment to decide whether this increases social welfare — whether this situation is or is not better than the alternative distribution of realised welfare that would occur when insurance is compulsory. Advocates of consumer sovereignty can simply proselytise on this issue; they cannot legitimately assert that social welfare is increased or decreased. Thus, for example, such a use of compulsion has been described as 'the tyranny of the 51

per cent'. This is a bizarre description of democratic government. By implication, the preferred form of government would appear to be a politbureau of carefully selected libertarians who circumscribe what may or may not be the subject of democratic decision making. Small restrictions upon individual liberties do not constitute a tyranny. In this case it is explicit paternalism held in check by the ability of the population to vote differently in the future.

In summary, there are compelling reasons for believing that the health care market is 'different' and that its special status in virtually every civilised country is not simply a product of well-intentioned but misled populations. Available evidence suggests that consumer sovereignty is not accepted as the sole criterion for welfare and that its rejection is, at least in part, based upon an informational deficiency in the market system. As a consequence, it is not possible to accept the link between freedom of economic choice and maximum social welfare that is established by the logic of the competitive model.

III. THE NEW POLITICAL ECONOMY OF REGULATION

The arguments in the previous section do not demonstrate that government intervention is desirable; even less do they indicate that there should be a particular set of institutional arrangements. Rather, they indicate that the usual *a priori* analysis cannot be used to establish the desirability of a competitive market in the health care sector. This does not mean that the competitive solution is inappropriate. But the case for competition must be in terms of its superiority to the regulatory solution with respect to explicit objectives.

The new political economy of regulation has focused attention upon a number of undesirable aspects of government intervention; it has matched the possible sources of market failure with a set of possible regulatory failures. The chief theoretical idea, originating from the University of Chicago, is the private interests hypothesis. In contrast with the view that regulation is imposed to increase public welfare, this view postulates that the real purpose of regulation is to promote private interests. Government intervention is less concerned with efficiency than with achieving a distribution of income that is favourable to a particular group. Analytically, regulation may be regarded as the outcome of a supply and demand for regulation. Thus, for example, demand will be greater when the recipient group is small, when it has homogeneous objectives and when large gains are expected. These preconditions are conducive

to the formation of effective and well-financed political lobbies. Supply will be more readily forthcoming when the costs of regulation are sufficiently small or dispersed that no countervailing pressure group is likely to be formed. In these circumstances, regulators are likely to be 'captured' by those they purport to regulate and the public intervention is inimical to the public good.

This theory of private interests and the derivative theory of unbalanced political markets has been used by Palmer (1980:25) to identify those who are most likely to lobby for favourable regulations or for regulations that will be ineffective in restraining expenditures in the health care market.

Health care personnel in general have benefited from increased expenditures on health services, and measures to contain the growth of costs will have major adverse repercussions on their incomes and employment opportunities . . . Those likely to be adversely affected, medical staff, administrators, the suppliers of equipment, materials and services to hospitals, and hospital board members, are amongst the most well informed, best organised and articulate members of the community. Their influence on the political process is therefore likely to be disproportionately large in relation to their numbers. The adverse effects of cost escalation on the rest of the community, in their role of taxpayers and consumers are relatively unimportant.

The inference that might be drawn from the theory of private interests and from Palmer's application of it is that regulation of the health care sector will lead to an escalation of costs and expenditures since this is what satisfies the dominant private interests.

It is not clear that the theory, as stated, is universally applicable or that its interpretation in the health care sector is as simple as implied above. In their review of the economics of regulation, Pincus and Withers (1983:50,49) note that

Because of this lack of a good theory of the political process, the private interest view of regulation is better seen as a theory not *the* theory of regulation . . . It is not a coherent theory yielding unambiguous and therefore testable hypotheses . . . [i]t suggests redistribution from large to smaller groups — whereas the economic theory of democracy suggests redistribution from smaller to majority groups. At present it remains unclear when minority pecuniary interests count more than majority votes in the private interest model of regulation.

Two relevant factors in this calculation are (1) the absolute size of the sector to be regulated and consequently its public exposure, and (2) the magnitude of the government budgetary commitment and

thus the potential for budgetary restraint when the demands for particular types of regulation are resisted. Richardson and Wallace (1983:125) illustrate the magnitude of the budgetary implications of the health care sector with the following arithmetic figuring:

If the Commonwealth's percentage share of total health expenditure had remained at the 1970 level, its 'revenue savings' from the reduced contribution to the total health expenditure of 1976 would have been almost sufficient to finance a doubling of the Commonwealth's outlays on education or defence; alternatively, Commonwealth social security and welfare payments could have been increased by 30 per cent, or personal income taxation reduced by one-quarter.

Thus, there is a major political incentive to reduce the government contribution to health care. This can be achieved by diversifying the sources of finance (and potentially losing government control) or by resisting the demands for cost-escalating interventions — by restricting the supply of particular types of regulatory control.

In sum, the new political economy of regulation focuses attention upon a series of new, potentially relevant issues. It does not establish that regulation is inevitably or even generally ineffectual. As a consequence it is necessary to establish the case for or against particular forms of regulation with appropriate quantitative arguments — to demonstrate that the assertions are supported by the available evidence.

IV. THE EVIDENCE

It is not possible with the available information to prove or disprove the general superiority of a regulatory approach to the health care sector. Specific examples of regulatory failure no more prove a general conclusion with respect to regulation than specific examples of market failure demonstrate the general undesirability of markets. Specific examples of regulatory success cannot prove the general superiority of this approach in all contexts. It is, however, possible to investigate the success of particular regulatory approaches or to determine whether an entire health care system appears to have achieved its objectives in a relatively satisfactory way.

There has been no comprehensive analysis of the success of the Australian regulatory authorities or of the extent to which they have been captured by those they regulate. (The recent Committee of Enquiry into the Rights of Private Practice in Public Hospitals, the Penington Report, was concerned with the extension or reform of regulation rather than the evaluation of its overall success.) A

superficial review of the evidence suggests that the entire health insurance system may have been 'captured' by the medical profession in 1952-53, but that more recently the authorities may have acted against professional interests.

Hunter (1980) provides an excellent review of the role of the AMA as a pressure group in Australia. The hospital and medical insurance introduced in 1952-53 was essentially the scheme proposed by the AMA. While underwriting fees, it imposed minimal controls on the profession and none on their ability to generate income. Despite the preservation of the basic principles of this scheme, regulatory authorities have increasingly impinged upon the profession in recent years. Average incomes have fallen significantly as a direct result of unfavourable outcomes from the annual medical fees tribunal (see Richardson, 1984). Recent industrial disputes have resulted, at least in part, from attempts to curtail the established power of the profession.

Evidence from the pharmaceutical sector unambiguously indicates that regulation has been designed for the public and not for private interests. The Commonwealth Department of Health has used its monopsony power to reduce the price of Australian drugs to perhaps the lowest in the world. The prices in the UK, USA, Europe and Japan are 42 per cent, 61 per cent, 99 per cent, and 220 per cent higher than in Australia (Gross, 1984). (For an analysis of the factors that led to this result see Bureau of Industry Economics, 1985.)

On the other hand, suggested changes in the regulation of the private hospital sector are the result of private interests and potentially may threaten the coherence of the entire system. The public and private sectors are interdependent. The private hospital system offers, potentially, very large rewards to the best physicians. Consequently, either public patients will be deprived of these practitioners or public salary and sessional payments will be forced to rise competitively. Technology will be introduced into the private sector when there is an expectation that it will result in a profit and not necessarily after adequate clinical trials of efficacy (see above). This generates both a public and a professional demand for similar technology in the public sector. A possibly false perception of quality, strong physician incentives to direct patients into private fee-for-service based hospitals, and a public subsidy both to the private hospitals and to the procedures carried out in them could well lead to an expansion of this sector. As also noted earlier, an increase in the supply of beds appears to result in an increased use of facilities (the theory of supply-induced demand or Roemer's Law). Since there is nearly universal agreement that this is undesirable, a major expansion of the private hospital sector grafted on top of the existing

system would reduce the cost effectiveness of health care in Australia.

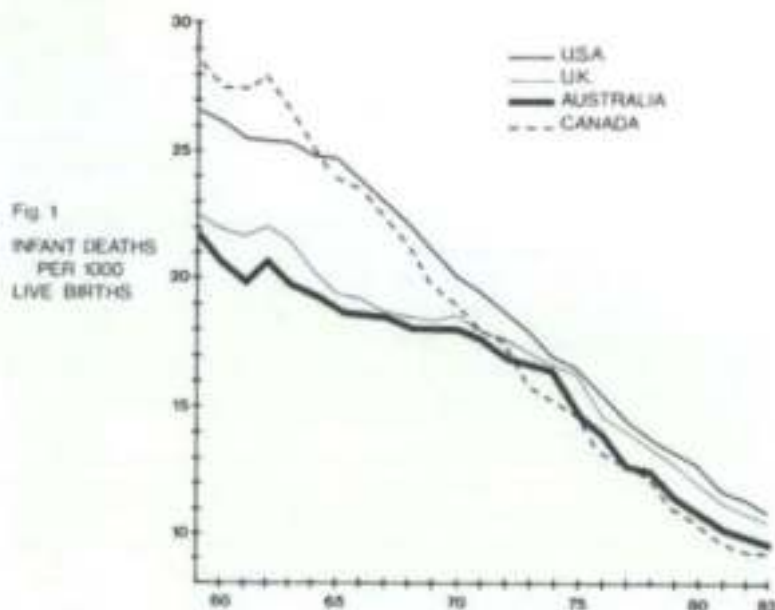
In sum, the demand for deregulation of private hospitals arises from the private interests of doctors and from the desire to prevent effective controls of technology, medical practice or medical incomes. While the desirability of a purely private system has not yet been discussed in this paper, the point here is that the coherence of Australia's regulatory system would be seriously jeopardised by the total deregulation of private hospitals.

Such ad hoc evidence as has been discussed above may indicate areas where intervention may be improved, but it is difficult to use in an overall evaluation of the regulatory approach itself. By contrast, there has been extensive investigation of particular regulatory devices in the USA (for reviews, see Sloan, 1982; Steinwald and Sloan, 1981; Joskow, 1981; and Gaumer, 1984). These reports conclude that in the US market, the mandatory regulation of rates and revenues reduces costs.

The recent experience with prospective reimbursement reinforces this conclusion. Results with respect to Certificate-of-Need (CON) legislation are more equivocal. Steinwald and Sloan (1981) consider that they have been 'a classic example of regulatory failure', whereas Ginsberg (1982) suggests that more recent results may have been favourable. In its review of the evidence, the Health Commission of Victoria (1984:31) concludes that 'in some settings and under some circumstances CON may yield results consistent with its goals', that in the USA these preconditions have often been missing, and that the unfavourable results of analyses such as Steinwald and Sloan's may be the result of the aggregation of successful and unsuccessful uses of the legislation.

The US experience suggests an important distinction between 'incoherent' and 'coherent' regulation. With the former, partial regulation creates loopholes and introduces a variety of distortions that subvert the intended objective. For example, CON control of US bed supply resulted in the substitution of other capital intensive services (Joskow, 1981). 'Coherent' regulation does not promote such substitution or the unwanted expansion of some other part of the health care system. Coherence applies to an entire package of regulations and not to each regulation separately. Thus, for example, budget limits employed in the UK appear to achieve coherence in this way with the minimum intervention at the point of delivery. The potential benefits of coherent regulation should not, therefore, be judged by the failure of incoherent regulation.

Despite experimentation with a large number of regulatory approaches, US health insurance and health care industries have less coherent regulations than in most Western countries. A comparison

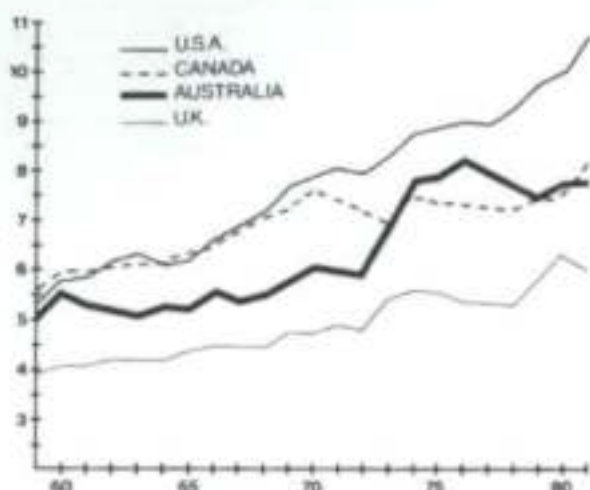


of their system with the more regulated systems in the UK, Canada, and Australia provides some *prima facie* indication of the relative success of the regulatory approaches in these countries.

Two key indicators of performance are shown in Figures 1 and 2. While there are many dimensions to what is loosely referred to as the 'outcome' of the health care sector, infant mortality has been generally accepted as an important indicator of the success of a system. It is important in its own right, and it correlates with total mortality and other indicators of health status (Jazairi, 1976). As shown in Figure 1, the three more extensively regulated systems perform favourably when contrasted with the USA. While the poorer US performance may not be entirely attributable to its delivery system, insurance coverage has been less comprehensive in the USA than in each of the other three countries. There are clearly established links between low levels of insurance for low income groups, lower utilisation of health care services and higher infant death rates (see Richardson, 1985). That is, there are strong theoretical grounds for believing that the US experience is, in part, a consequence of its system.

A comparison of Canadian and US experiences is particularly interesting. Prior to the introduction of Canadian (hospital) Medicare

Fig. 2
HEALTH
EXPENDITURE
AS A PERCENT
OF G.D.P.



Sources: United Nations, *Statistical Yearbook*, Various Issues
Australia, 1984, p.43

in 1962, infant mortality had been consistently higher in Canada than in the USA. Shortly after the introduction of Medicare, Canadian rates fell below the American level and have remained lower. Canadian health authorities have claimed that the only explanatory variable that changed during the relevant period was the extent of the Canadian insurance coverage, and that Canada's improved relative position was a direct consequence of this change (Armstrong, 1975).

The superior performance of the regulated health systems, as judged by rates of infant deaths, has not been achieved through greater expenditures. Figure 2 indicates that the opposite is true. Once again, a comparison of the USA and Canada is of interest. Before the introduction of hospital Medicare, Canadians devoted a greater share of their GDP to health care. This position was reversed immediately after the introduction of Hospital Medicare. Following the introduction of Medical Medicare in 1970-72 expenditures rose as a result of increasing medical prices. For the remainder of the 1980s Canada achieved a level of restraint over its expenditures that was unequalled by any Western country except Australia. Other evidence suggests that declining expenditure resulted in declining costs (Detsky et al., 1983).

Canada's experience strongly supports a hypothesis not yet discussed in this paper. This is that cost escalation is minimised when the strongest incentive is given to a body that is in a position to exercise effective control. When the financing of health care is diversified across a number of sources, incentives are weakened since the benefit of any effective action is shared among the different sources. Canadian Medicare increasingly concentrated the cost of health care upon the provincial governments while in the USA neither the consumer, the employer, the state or federal governments, nor the insurance companies had a sufficient incentive to act decisively. The hypothesis is further suggested, but less clearly, by a similar experience in Australia following the increased government share of the health care bill in 1975-76.

The comparison between the USA and Canada is, of course, incomplete. It is possible that other aspects of health outcome are inferior in Canada. However, until these aspects are demonstrated, there are well-documented reasons for doubting that in the health care sector 'more means better'. It is true that the Canadian system has been criticised in recent years. Much of this has originated with the medical profession, whose relative income has fallen behind that in the USA. Other criticisms have been rather exaggerated for the purposes of domestic consumption. For example, Evans has stated that Canada's health care system has begun to see 'the tunnel at the end of the light' (quoting from Stoddart and Seldon, 1985). Plain (1984:50) has also argued that in Canada equity 'is as unattainable in 1982 as it was prior to the passage of the medical act in 1966'. The conclusion is drawn from the fact that 2 per cent of Canadian medical bills were not reimbursed and that some low income groups experienced low copayments. The conclusion is grossly overstated and should not have been drawn without comparable data for the pre-1966 period. The level of Canadian copayments is remarkably low when judged by the level in virtually any other country.

These comments reflect concern with recent trends in medical prices. Canada also faces an ageing stock of hospital beds. However, it is easy to lose perspective on the significance of these problems. Evans also believes that however long Canada's health care tunnel may be, if encountered at all, the health care system will remain significantly superior to the US system with respect to its cost effectiveness and the achievement of equity objectives.

Canadian assessment of Medicare is best summed up by the conclusions of two official enquiries:

I found no one, not any government or individual, not the medical profession nor any organisation, not in favour of Medicare. (Hall, 1980:2)

The task force did not hear evidence that Canadians were not generally satisfied with their publicly funded system . . . It seems clear that the Canadians generally would endorse the view that the publicly funded health care system we enjoy is one of the great achievements of Canadian society. (*Parliamentary Task Force*, 1981:98)

It is inconceivable that at present the US system would achieve such universal acclaim. There is a near consensus that expenditure is excessive and that the system is inequitable. It is often forgotten that in the USA rationing (in the general, not in the economist's sense of the word) also occurs but is carried out through the imposition of patient payments. The consequences of US rationing are spelled out by Bunker (1985:7): 'One of the disgraces of national policy is that the poor and unemployed who cannot afford to pay for medical care or who have no medical insurance must often accept inferior treatment if they can get it at all'. It is not clear that the cost of this rationing, concentrated upon one group, is less than the cost of the system described in the recent study by Aaron and Schwartz. Klein (1985) has argued that queues represent tangible evidence of equal provision and may in fact contribute to the popularity of the NHS in the UK.

While there has been no detailed comparison of the Canadian and US systems, Aaron and Schwartz (1984) provide an excellent and detailed comparison of the consequences of the British and American experiences with rationing health care. In 1982 per capita health expenditure in the USA was 224 per cent greater than in the UK. In part this is because Britain is a relatively poor country — in 1984 US per capita GDP exceeded the English level by 73 per cent. (At current exchange rates, 1984 per capita GDP figures were US\$13 969 for the US and US\$8072 for the UK. Per capita health expenditures in 1982 were \$1265 and \$390. See Klein, 1985.) In part it is because a smaller share of GDP is spent on health care in the UK. The issue considered by Aaron and Schwartz is whether, with the USA as a standard for comparison, the British regulatory system has succeeded in allocating their more limited resources according to socially desired criteria. Their conclusion (pp. 80-100) is that resources are less likely to be rationed in the following cases:

- when the patients are younger and so life expectancy is greater;
- when the quality of life is significantly improved;
- when the treatment results in less cost than the social cost of inaction;
- when the absolute costs involved are very low;
- when it is not possible, by the control of capital for example,

to prevent 'incoherent' regulation and inequity in the selection of patients for treatment;

- when a 'dread disease' such as cancer is the source of widespread public fear.

The authors found little evidence that advocacy plays an important role in decision making. Quality of care, once provided, appeared to equal the American standards, economy being exercised only when quality was not jeopardised.

It was found that some new technologies, such as as hemeodialysis and open heart surgery, are underutilised and consequently deaths occur that would not occur in the USA. The UK has institutionalised a principle that remains covert in other countries, namely, that it is not desirable to extend all life at any cost. Rather, it has accepted that when the quality of life is an objective, an explicit trade-off is necessary. In an economically depressed country the trade-off must occur at a lower level of health care than might be achieved elsewhere. However, the evidence unambiguously indicates that resources are allocated and rationed on the basis of cost effectiveness, administrative feasibility and, as in the case of dread diseases, in response to identifiable public demands.

Total health care expenditure in the UK can be and is controlled, but the care provided is available to the entire population. There is no financial barrier as in the USA; barriers are erected after entry into the system using medical criteria. This equity aspect almost certainly explains why the NHS, next to the monarchy, is Britain's most popular institution, and why public opinion polls have consistently found, throughout its history, that 90 per cent of the population have been satisfied with the service (Klein, 1985). Such a record is not unimpressive. It lends credence to Klein's assertion that 'Britain's NHS has, without fear of challenge, one distinction. It is the best buy model of health care in the Western world in the sense that it manages to offer a comprehensive coverage of the entire population at the least cost, as measured by the proportion of the national income devoted to health care' (1985:42).

V. PROCOMPETITIVE REGULATION IN THE USA

Victor Fuchs (1985:1) introduces a recent review of the US health care system in the following way:

The United States is in the midst of a revolution in health care finance, the third since the end of World War II. Medicare's prospective

payment system (PPS) based on diagnostic related groups (DRGs), the State of California's hospital specific contracts for Medi-Cal patients, deductibles and co-insurance, health maintenance organisations (HMOs) and preferred provider organisations (PPOs) are amongst the best known symbols of the new era in health care finance.

The Consumer Choice Health Plan

This situation was preceded by an increasing enthusiasm for the activation of market forces, and this in turn was stimulated by the widespread support for the 'Consumer Choice Health Plan' (CCHP) advocated by Enthoven (1981) and for other 'procompetitive' measures. (A complete edition of the *Milbank Memorial Fund Quarterly*, vol. 59 no.2, 1981, is devoted to competition in health care. See also Olson, 1981; Ginsberg, 1980, 1982; and Hellinger, 1982.) While it is too soon to assess the final effects of the US revolution, or to predict its future course, its strengths and weaknesses are likely to be similar to those of the CCHP, which represented a blueprint for the coherent and comprehensive use of the market.

The CCHP is not a plan for the deregulation of health care but is rather a set of 'market corrective' regulations that would activate competitive forces. The plan would require legislation to ensure that each employee was offered at least three different and comprehensive health insurance schemes, all of which meet minimal standards of care. Those who selected cheaper plans would be entitled to a cash benefit equal to the difference between the plan and the most expensive alternative offered by the employer. Tax subsidies would be equal for all plans. Enthoven believes that in such an environment there would be a growth of Alternative Delivery Systems (ADSs), which would consist mainly of Health Maintenance Organisations (HMOs) but also of Independent Practice Associations (IPAs) and a variety of group practices.

In theory, the CCHP has a number of advantages over the old US system. Each scheme in the plan would offer a 'coherent' package of health care in the sense that there would be no incentive, except 'cost attractiveness', to offer to a particular type of service in favour of another. Costs would be minimised rather than shifted to a nonplan authority. In principle, the plans would compete with one another to offer the most cost-attractive alternative to the individual, and individuals would have an incentive to select the most suitable plan for their personal needs or preferences. The experience of US HMOs is cited as evidence for the beneficial effects that could be

achieved. Considerable reliance is placed upon deductibles and coinsurance as methods of reducing costs.

With the American domination of the English-speaking professional literature, US enthusiasm usually spreads to other countries. It is likely that, sooner or later, a CCHP will be suggested for Australia, or an adaptation such as Stoddart's (1984; Stoddart and Seldon, 1985) proposal for the reformulation of the Canadian Health Care System. There are, however, a number of reasons for treating such suggestions with extreme caution. At best the CCHP is unproven even in the USA, where there is now a considerable tradition of HMO-type delivery. A number of serious criticisms have been raised about the general applicability of the plan in the USA. It is even more doubtful that the scheme would adapt itself to the Australian environment or be appropriate for the Australian value system. A number of lesser objections to the scheme are listed below.

Minor Difficulties

1. Cost minimisation is most effectively achieved by 'risk skimming' — by enrolling only low risk patients. Legislation can prevent overt risk skimming. The indigent may be subsidised and then expected to pay higher premiums. However, it is still possible that an unregulated market (especially in smaller population centres) would not respond in a socially desired way. It is difficult to prevent selective advertising and discriminatory limits to benefit packages if schemes are not to be regulated excessively. At best, administrative costs would rise as the government administered a benefits scheme for the needy and as the health plans categorised their membership.

2. According to the 1980 Canadian Royal Commission on health care, US administrative costs for health care are 16 per cent of total expenditure whereas in the centralised UK and Canadian schemes the cost is between 2 and 4 per cent (quoting from Weller and Manga, 1983). The CCHP would be expected to increase these costs. First, for the reasons quoted above, each individual would need to be screened and categorised. Second, unregulated competition would entail significant expenditures on advertising. Third, considerable nonfinancial costs would be placed on the individual, in both selecting an appropriate scheme and, in many cases, fulfilling reimbursement requirements.

3. It is not certain that health plans would proliferate and grow as envisaged. (Enthoven himself predicts a slow growth rate.) The essence of the prepaid plan is that it limits the patient's choice of services to those offered by the plan. (It is possible to waive this restriction if expenditures outside the plan are deducted from the

plan's revenue by a centrally administered authority, but this would expose schemes to very high levels of risk and retard their proliferation.) This is unlikely to be popular. Hellinger (1982) notes that if physicians are committed to fee-for-service practice and have a well-established relationship with their patients, new forms of practice will take root slowly. Further, as the CCHP may result in the proliferation of salaried medical care, it is likely that the medical profession would strongly oppose its development. This alone could prove fatal to the CCHP in Australia.

4. Once established, it is not certain that health plans would compete on the basis of cost. In the USA, Hellinger (1982) claims that HMOs have failed to do so. More recently, however, Hay and Leay (1984) report more favourable trends but are careful not to claim that the results are generally applicable. It is, of course, easier for businesses to collude than to compete, and Australian business has traditionally excelled at this. Nonprice competition would be cost enhancing, not reducing. There would be a particular problem in country areas where the limited supply of health facilities and health care personnel would make the competition envisaged by the CCHP problematic.

5. The apparent success of US HMOs has been quoted to indicate the benefits that could accrue from the CCHP. While the evidence does, on balance, suggest that HMOs reduce costs, it is still not clear to what extent the data reflect the self-selection of enrolled populations (at least one study, Manning et al., 1984, indicates that this is not a significant explanatory factor). More seriously, it is not clear that results can be generalised to the nation. At present, only about 10 per cent of the US population is enrolled in HMOs. The reduced use of medical services on such a small scale would not cause a substantial supply-side reaction. Displaced physicians may easily be absorbed in the dominant fee-for-service sector. However, the growth of the CCHP would increasingly jeopardise the incomes and careers of suppliers, activating a variety of measures to prevent effective cost containment.

6. As noted, advocates of the CCHP place considerable reliance on coinsurance and deductibles in order to reduce costs. Allowing for the inevitable supply-side response to the imposition of user charges, the best available evidence suggests that these would result in a very small and once-off reduction in expenditures and possibly in no cost saving at all. Copayments also impose a variety of other costs upon the consumer (see Richardson, 1985).

7. The evidence reviewed earlier strongly supports the hypothesis that there is likely to be effective cost containment when the entire national costs of health care are concentrated in the government

sector. The CCHP would destroy this concentration of national costs. This would result in an imbalance in the power of the cost-inducing and the cost-curtailing bodies. Further, each scheme would only be motivated to keep expenditures **comparable** with those of competitive plans. If all the plans encountered a common obstacle — the expenditure-inducing demands of medical professionals or of the distributors of new technology — there would be little incentive or ability to surmount these obstacles.

Major Objections

There are two more serious sets of objections to the CCHP. These arise from the issues discussed in Section II, namely the level of consumer ignorance about health care and the value judgment upon which health care delivery is based.

In a simplistic statement of the operation of the CCHP it may be envisaged that the consumer would evaluate the quality of care offered by the plan, while the plan would be motivated to provide or ensure the most cost-effective services. New technology would be assessed by the managers of the plan and included or excluded in accordance with their consumers' preferred trade-off between cost and quality. It is possible that with a very limited number of plans, where the corporate objective was not profit maximisation or survival, but where the lack of competition permitted altruistic objectives, such an agency relationship would lead to a satisfactory evaluation of the true impact of services. But such an oligopolistic market is the antithesis of the CCHP. In the truly competitive environment envisaged by proponents, the criterion for inclusion of services in a plan would be 'cost attractiveness' — whether the services would retain and increase membership. Cost attractiveness and cost effectiveness would correspond only if consumers could evaluate the services themselves. As noted earlier, this is not possible. In the environment of the CCHP there would be a compelling commercial motivation for the distributors of new technology to employ the most sophisticated techniques for the remoulding of consumer preferences with respect to new procedures. Since the evaluation of these procedures by research professionals has proved to be most difficult it is scarcely credible that the casual response of the individual could indicate objective benefits. In these circumstances the revelation of deliberately and skilfully distorted preferences could not be accepted as indicating consumer welfare.

Second, it is likely that the equity implications of the CCHP would be unacceptable in Australia. An important element in the plan is that individuals would have a financial incentive to select the cheapest

scheme. An inevitable consequence of this would be that the poor would select the cheaper schemes. As envisaged, the CCHP would be regulated so that a minimum level of care would be provided. But for the scheme to be successful there would have to be significant and obvious differences between plans. This permits two possible situations. First, the differences could be with respect to ineffective procedures. But the objective of health care reform is to prevent the delivery of such services. Second, the differences could be with respect to effective services. In this case the CCHP implies inferior quality care for the poor and this would appear to contravene Australian values.

CCHPs have the potential for generating a cost spiral. Plans for the wealthy would be sold on the basis of 'quality'. In the health sector this is easily equated with quantity and with the newest technology — a view that would be forcefully endorsed by self-interested professionals and corporations. The perception of a growing gap between the care offered to the poor and to the wealthy would lead to continual and irresistible pressure upon the government-regulated minimum level of care. As the minimum rose, it would be necessary to increase the apparent quality of 'superior' plans. To prevent this spiral it is likely that there would be increasing recourse to regulatory controls, but with the government's effective power emasculated by the need for plans to 'freely compete'.

The consequences of the CCHP, the social values it embodies and its ultimate justification are clearly enunciated by a supporter of the scheme.

Unlike Scandinavians and the British, Americans are more enthusiastic about the virtues of the free market . . . There is more tolerance here for the belief, for better or worse, that if one wants to pay more one should get more . . . these American values have created the social climate that permits acceptance of Enthoven's ideas . . . Will the competitive future envisaged by Enthoven slash soaring medical care costs? No . . . Health insurance cover is not very price sensitive within the price ranges likely to occur. . . . If a large number of Americans have a choice between plans with different prices and most of them choose the high cost, top of the line option, the message is clear; we do not have a health care cost problem. (Neuhauser, 1980:1116-7)

Such a belief in the efficacy of consumer sovereignty may also be unique to the USA.

The present US experiment may or may not result in sufficient innovation to achieve cost controls as effective as those that already exist in the UK, Canada and Australia. If it does, such innovations may be selectively adopted by the regulatory authorities in these

countries. This is currently happening with the DRG technique for assessing hospital costs and with day care surgery in Australia. It is unlikely, however, that the US approach could ever achieve the level of equity desired in these three countries.

VI. CONCLUSIONS

In a democratic society there is considerable appeal in the claim that individuals should be free to carry out their business as they choose without interference and without regulation. However, a society also has the right to determine its own objectives with respect to the distribution of health care and the distribution of income. Unless it can be shown that these two sets of objectives are compatible, the demand for unrestricted economic freedom may become little more than the public rhetoric of the self-interested. Since the time of Adam Smith the most powerful idea linking economic freedom and social objectives has been the argument embodied in the 'welfare economic' model of perfect competition. The social objective in this case is the maximisation of consumer welfare or 'utility' defined in a particular way, namely what consumers reveal to be of value by their spending.

Three main points have been made in the present paper. The first is that neither the welfare model and the a priori analysis of its defects, nor the theoretical contributions of the new political economy of regulation, establish a satisfactory link between any particular form of market — regulated or unregulated — and social objectives. Those who claim to demonstrate the superiority of a particular type of scheme by comparing a particular market with a theoretical ideal are generally guilty of bad analysis. The preconditions of the theoretical arguments are either not fulfilled or, at best, the subject of empirical investigation. Similarly, it is an empirical issue whether a given objective can be achieved efficiently or more efficiently with a particular set of regulations than without regulation. The evidence suggests the unsurprising conclusion that badly formulated regulation may not work. However, while the evidence is incomplete, the available indicators must lead to the conclusion that in the UK, Canada and Australia regulation has resulted in a fairly satisfactory outcome as judged by the US performance.

The second major point in the paper is that when the information available to consumers is poor there is a strong case for abandoning or at least for interfering with consumer sovereignty as a social objective. Advocates of deregulation sometimes appear to support the tautological argument that products are demanded because they provide benefits and the evidence for these benefits is that the

products are demanded. Worse still, benefits are sometimes simply defined in terms of consumer sovereignty. The circularity of this case is broken only by a clear link between consumer choice and consumer benefits defined in some objective way. This link is usually provided through an assumed level of consumer information with respect to the nature of the product. The evidence does not suggest, even in the context of the proposed US CCHP, that consumers are capable of evaluating the consequences of health care.

Third — and the point that appears to be most neglected in the literature — any proposal for a health scheme presupposes a particular social value system. Those who cannot conceive of an alternative to individual economic freedom in the health care sector simply do not understand the basis of their proposals. This relationship between values and health system can be highlighted by paraphrasing and supplementing a passage from three of the UK's leading health economists, Culyer, Maynard and Williams (1981:135-6,149):

Two prototypal sets of value systems may be envisaged. The first approximates the prevailing values of the USA, West Germany and France. It is believed that personal responsibility for achievement is very important and that unearned rewards jeopardise economic growth and undermine moral well-being because of the connection between moral well-being and personal effort. Social Darwinism results in a seemingly cruel indifference to some. Charity is a proper vehicle for any concern in this regard. Freedom is sought as the supreme good in itself. Compulsion attenuates personal responsibility. Centralised health planning and a large government role in health care financing are an unwarranted abridgement of individual freedom. Equality before the law is the key to equity and freedom should be given precedence over equity whenever the two conflict ... The prototypal health care system that is likely to evolve in a society with these values will seek to satisfy consumers through the market. Access to health care will be part of the economic 'reward system' in which rewards depend upon willingness and ability to pay. There will be minimal government control over budgets and resources. Health care professionals will be rewarded according to market forces.

With the second prototypal set of values — approximating those in the UK and Scandinavia — personal incentives are viewed as desirable but economic failure is not equated with social worthlessness. Charity is viewed as demeaning to the recipient, corrupting to the donor and usually inequitable. It is preferable to create social mechanisms to determine entitlements that are sanctioned by society at large. Freedom is seen as the presence of real opportunities of choice and while economic constraints are less openly coercive than political constraints they are nevertheless real. Freedom is not indivisible but

may be sacrificed in one respect to obtain a greater freedom in some other. Government is the means by which individuals achieve greater scope for action, that is, greater freedom. Equity in certain basic respects is the extension to the many of the freedoms otherwise enjoyed by only a few. It is morally justified to restrict some of the freedoms of the more powerful to protect the freedoms of the less powerful members of the society . . . The corresponding prototypal health care system will seek to promote health, not consumer rights. Equal access to health care services will be an important objective. Payment will be through the taxation system, little or nothing will be paid at the point of service. There will be central control of budgets and physical resources. Countervailing monopsony power will be exercised to moderate the impact of market forces.

Australian attitudes appear to be closer to those described by the second value system. This should not result in a health system resembling the corresponding prototype if the empirical relationships in the world were such that the system imposed an unacceptably high burden — if costs were significantly higher and outcome poorer than in the market system. To date, the evidence suggests that the opposite may be true and that the unacceptable burden may be for those who persist with the market oriented system of health care.

References

- Aaron, H.J. and W.B. Schwartz (1984), *The Painful Prescription: Rationing Hospital Care*, Brookings Studies in Social Economics, Washington, D.C.
- Armstrong, R. (1975), 'The Canadian health insurance experience', public address at the University of New South Wales, 2 June.
- Bunker, J. (1985), 'When doctors disagree', *New York Review of Books*, April.
- Bureau of Industry Economics (1985), Submission to the Industries Assistance Commission, Canberra.
- Canadian Medical Association (1984), Submission to the Task Force on the Allocation of Health Care Resources, Ottawa.
- Committee of Enquiry into Rights of Private Practice in Public Hospitals (1984), *Final Report*, AGPS, Canberra.
- Culyer, A.J., A. Maynard, and A. Williams (1981), 'Alternative systems of health care provision: An essay on moles and beams', pp. 131-50 in M. Olson (ed.), *A New Approach to the Economics of Health Care*, American Enterprise Institute for Public Policy Research, Washington, D.C.
- Detsky, A.S., S.R. Stacey, and M.D. Bombardier (1983), 'The effectiveness of a regulatory strategy in containing hospital costs', *The New England Journal of Medicine* (July), 151-8.
- Enthoven, A. (1981), *Health Plan: The Only Practical Solution to the Soaring Cost of Medical Care*, Addison-Wesley Publishing Co., Reading, Massachusetts.
- Fuchs, V. (1979), 'Economics, health economics, and post industrial society', *Milbank Memorial Fund Quarterly* 57 (2, Spring).
- (1985), 'Playing the pipe, calling the tune: Implications of changes in reimbursement', Working Paper 1605, National Bureau of Economic Research, Canberra.
- Gaumer, G.L. (1984), 'Regulating health professionals: A review of empirical literature', *Milbank Memorial Fund Quarterly* 62 (3, Summer), 380-416.
- Ginsberg, E. (1980), 'Competition and cost containment', *New England Journal of Medicine* (November), 1112-15.
- (1982), 'Procompetition in health care: Policy or fantasy?', *Milbank Memorial Fund Quarterly* 60 (3), 386-98.
- Gross, P.F. (1984), 'Compulsory generic prescribing: Its likely effect on government budgets, consumer costs, safety and professional roles', Health Economics Monograph II, Institute of Health Economics and Technology Assessment, Sydney.
- Hall, E.M. (1980), *Canada's National Provincial Health Program for the 1980s: A Commitment for Renewal*, Department of National Health and Welfare, Ottawa.
- Hay, J., and M. Leay (1984), 'Competition amongst health plans: Some preliminary evidence', *Social Economics Journal* 50(3).
- Health Commission of Victoria (1984), *Certificate of Need*, Submission to the Parliamentary Social Development Committee Inquiry into Certificate of Need Legislation, June.

- Hellinger, F.J. (1982), 'Perspectives on Enthoven's consumer choice health plan', *Inquiry* 19 (3), 199-210.
- Hunter, T. (1980), 'Pressure groups and the Australian political process: The case of the Australian Medical Association', *Journal of Commonwealth and Comparative Politics* XVII (July).
- Jazairi (1976), *Approach to the Development of Health Indicators*, OECD Social Indicator Development Program, no. 2, Paris.
- Joskow, P.L. (1981), 'Alternative regulatory mechanisms for controlling hospital costs', pp. 219-57 in M. Olson (ed.), *A New Approach to the Economics of Health Care*, American Enterprise Institute for Public Policy Research, Washington, D.C.
- Klein, R. (1985), 'Why Britain's conservatives support a socialist health care system', *Health Affairs* (Spring), 41-58.
- McKinlay, J.B. (1981), 'From "promising report" to "standard procedure": Seven stages in the career of a medical innovation', *Milbank Memorial Fund Quarterly* 59(3), 374-411.
- Manning, W.G. et al. (1984), 'A controlled trial of the effects of a prepaid group practice on use of services', *New England Journal of Medicine* 310, 1505-10.
- Menken, M. and C.G. Sheps (1985), 'Consequences of an oversupply of specialists: The case of neurology', *Journal of the American Medical Association* 253(13).
- Neuhauser, D. (1980), 'Enthoven's health plan', *New England Journal of Medicine* (November), 1115-17.
- Olson, M. (ed.) (1981), *A New Approach to the Economics of Health Care*, American Enterprise Institute for Public Policy Research, Washington, D.C.
- Falmer, G. (1980), 'The political economy of health care', in M. Tatchell (ed.), *Economics and Health*, Proceedings of the First Australian Conference of Health Economists, Technical Paper 3, Health Research Project, Australian National University, Canberra.
- Parliamentary Task Force on Federal Provincial Fiscal Arrangements (1981), *Report: Fiscal Federalism in Canada*, August, Minister of Supply and Services, Ottawa.
- Peterson, O.S. (1963), 'Medical care in the United States', *Scientific American* 209.
- Pincus, J.J. and G.A. Withers (1983), 'Economics of regulation', pp. 9-76 in F. Gruen (ed.), *Surveys of Australian Economics* 3, George Allen and Unwin, Sydney.
- Plain, R. (1984), 'Perspectives on extra billing in Canada', paper presented to the Parliamentary Committee Reviewing the New Canada Health Act, Ottawa.
- Reekie, W.D. (1984), 'Drug prices in the U.K., U.S.A., Europe and Australia', *Australian Economic Papers* 23(42, June).
- Reinhardt, U. (1981), 'Table manners at the health care feast', in D. Yaggy and W.G. Anlyan (eds), *Financing Health Care: Competition Versus Regulation*, Ballinger Press, Cambridge, Massachusetts.
- Richardson, J. (1977), *The economics of health insurance: A theoretical and*

- empirical study, unpublished Doctoral Thesis, Macquarie University, Sydney.
- (1984), 'Incomes of private medical practitioners and their control', in M. Tatchell (ed.), *Economics and Health*, Health Economics Research Unit, Australian National University, Canberra.
- (1985), An economic analysis of extra billing for medical services, manuscript, Health Economics Research Unit, Australian National University, Canberra.
- and R. Wallace (1983), 'Health economics', pp. 125-86 in F. Gruen (ed.), *Survey of Australian Economics*, vol. 3, George Allen and Unwin, Sydney.
- Sloan, F.A. (1982), 'Government and the regulation of hospital care', *American Economic Review* 72(2).
- Steinwald, B. and F. Sloan (1981), 'Regulatory approaches to hospital cost containment', pp. 274-308 in M. Olson (ed.), *A New Approach to the Economics of Health Care*, American Enterprise Institute for Public Policy Research, Washington, D.C.
- Stoddart, G.L. (1984), *Rationalising the Health Care System*, QSEP Report No. 109, Faculty of Social Science, McMaster University, Hamilton, Ontario.
- and J. Seldon (1985), 'Publicly financed competition in Canadian health care delivery: A proposed alternative to increased regulation', pp. 121-43 in J. Boan (ed.), *Proceedings of the Second Canadian Conference of Health Economics*, The University of Regina Bookstore, Regina, Saskatchewan.
- Thompson, B.J., C.D. Throsby, and G.A. Withers (1983), *Measuring Community Benefits from the Arts*, Research Paper 261, School of Economics and Financial Studies, Macquarie University, Sydney.
- Weller, G.R. and P. Manga (1983), 'The push for reprivatization of health care services in Canada, Britain and the United States', *Journal of Health Politics Policy and Law* 8(3, Fall).
- Wennberg, J.E., B.A. Barnes, and M. Zubkoff (1982), 'Professional uncertainty and the problem of supplier induced demand', *Social Science Medicine* 16, 811-24.

**Competition versus Regulation in the
Health Care Market:
Recent US Experience with
Pro-Competitive Measures**

Cotton M. Lindsay

Cotton Mather Lindsay is J. Wilson Newman Professor of Managerial Economics at Clemson University in South Carolina. He received his PhD from the University of Virginia in 1968 and has taught at the University of California (Los Angeles), Arizona State University and Emory University. Lindsay has authored and edited a number of books and monographs including *Veterans Administration Hospitals: An Economic Analysis of Government Enterprise* (1975), *New Directions in Public Health Care: A Prescription for the 1980s* (1980), *The Pharmaceutical Industry: Economics, Performance, and Government Regulation* (1978), and *National Health Issues: The British Experience* (1980).

Competition versus Regulation in the Health Care Market: Recent US Experience with Pro-Competitive Measures

Cotton M. Lindsay

Health experts in the United States these days converse in a mind-boggling language replete with three-letter acronyms like HMO, PPA, and DRG. This proliferation of names and the institutions they stand for are manifestations of the fact that the method of paying for things has important economic consequences. If I am going to talk about HMOs, PPAs and so forth, I need to make some lists and some distinctions. I said that all of these things are manifestations of the fact that the way we pay for things has economic consequences. This is an idea that has been resisted bitterly by the American health administration establishment. They have attempted to deal with the various consequences of modifying the way we pay for care with a number of sometimes costly and nearly always ineffective techniques. First they used a technique that we in America call 'jawboning'. When the adoption of Medicare and Medicaid began causing prices to rise, these experts attempted to 'talk prices down'. They started calling people names and using value-loaded language, filling their analyses with terms like 'cream skimming', 'moral hazard' and 'abuse of the system'. This was done in an attempt to make these consequences of changing the way we paid for health care go away. It was not effective.

When jawboning did not work we had a wave of regulation in the 1970s — I talked about that in my earlier paper and will bring it up again later on, so we will leave it for now. I am getting ahead of my story. The bottom line is that these regulatory techniques did not work very well either. Attention finally turned to attempting to control costs by fostering (or imposing) structural change on the institutions providing care. This is the so-called 'competitive' approach. It is this latter approach that has brought the HMOs, PPAs, and other provider novelties to the centre of the health policy debate today.

Before we get into the details of what each one of these things is, I want to point out the **range of dimensions** in which paying for health programs has economic consequences. I have not come up with any effective scheme for grouping and arraying the various consequences. I am just going to list the various dimensions in which the consequences occur. Then I will talk about the various programs in more or less chronological order.

There are four dimensions that I want to talk about. As I have listened to the various presentations today, others have occurred to me that I wish I had thought of, but it is too late to try to work them in now. I am going to restrict my comments to the following four:

1. Quantity
2. Quality
3. Risk Exposure
4. Product Design

The first dimension, quantity, has been talked about a lot today. The quantity that actually gets provided is, of course, affected by the interaction of the demanders and suppliers in the various markets. In the previous session Andrew Doman gave us an insightful discussion of how the price that demanders pay and other factors influence the quantity that people want to receive.

But supply responds to price too. Even the health experts will sometimes allow that demand is responsive to price, but they are loath to admit that supply curves slope upward, and that this might have important consequences too. If the price suppliers get for providing services is lowered, fewer services will be provided, even though demanders have very elastic demands for those services. And this effect will become more pronounced in the long run. Both demand and supply-side consequences must be considered when we evaluate the quantity dimension of these various financing schemes.

The second dimension I want to talk about is quality. I have in mind something very specific when I mention quality here, because there is another dimension of quality that I will get to in a moment. Here I have in mind the medical efficacy of whatever treatment has been provided. I maintain that the range of providers over which the demander has some choice will affect the quality of the care he or she gets.

The third dimension of these consequences is risk exposure. There is a large random element in the demand for medical care; whether any one of us is going to come down with cancer next year or next month is probabilistic. If we happen to be unlucky and become a

cancer victim, we are going to be spending a lot of money on health care; if we don't, we are not. This breeds a demand for insurance. People are fundamentally risk-averse, and when exposed to the risk of large losses, will seek to cover these with some form of insurance.

Fourth and last, there is the dimension of product design. This is what I am trying to distinguish from the concept of quality. Quality denotes only the efficacy of care, the effectiveness of the intervention in bringing about speedy recovery. However, we also sometimes talk about quality of care in terms of the range of benefits that are supplied along with whatever therapy we are receiving. Let me try to make this clear with examples. At one extreme might be complete 'no frills' care, in which amputations are performed without anaesthesia for example, though there is very little risk of infection or complications. It is a different sort of product from what might be supplied at the other end of the spectrum, where very luxurious hospitals provide gourmet meals, string quartets, manicurists and hairdressers coming in daily, even though the therapeutic aspects of care are equivalent. The way health care is provided and financed affects what happens in this dimension as well.

Financing Methods and Their Consequences

I now want to move to a discussion of three different systems for providing and financing health care and their consequences for our four dimensions.

Fee-for-service. We will begin with the original and certainly the simplest system, the standard sort of over-the-counter transaction in which each service is priced, and consumers pay for the quantity they choose to consume. Clearly in terms of items 1, 2 and 4 in our list, this is the best system. It is best on the quantity dimension because people make calculations about marginal quantities of health care. When they consider visiting the doctor one more time, they weigh the benefit they perceive from the visit against the out-of-pocket costs. They go only if the trip passes this little cost-benefit test. We could engage in some quibbling around the margin concerning the desirability of that choice when patients must make it in ignorance of the medical worth of what the doctor might do in individual cases. However, it is my belief that quantity in a fee-for-service market arrangement is less subject to the sorts of gross distortions that are likely in some of the other market arrangements we will talk about.

As to quality, fee-for-service is typically conducted in a highly competitive environment. In the United States there are nearly 400 000 medical practitioners of one sort or another. A person buying

medical care over the counter can be treated by anyone he or she is willing to pay for. The consumer sees an array of prices and varying degrees of professional distinction and chooses the combination that provides the right sort of service at the right price. In this environment there is an incentive for providers to supply high quality service. They want to earn a reputation for high quality care, because doctors who are well regarded by demanders can charge more. The more people demand their services, the higher the fees they can collect. Fee-for-service is conducted in a competitive environment, and that competition improves quality.

I do not want to exaggerate the benefits of this sort of competitive environment. The history of medicine presents real problems for economists who want to argue that a free market solves all allocative problems. I think it is fair to say that until the middle of the 19th century most doctors did more harm than good even when using state-of-the-art methods. Certainly, doctors back then were unable to cure many problems, and quite often what they did made the patient worse. In fact, this had been true for hundreds of years, yet there continued to be throngs of sufferers willing to pay for this worthless treatment. That this could go on for so long is a source of genuine embarrassment to those economists who assume that people are able to process this sort of information and avoid misrepresented products after sufficient experience. Still, taking all this into account, I am convinced that the possibility that a patient who feels mistreated may go elsewhere does have a disciplinary effect on suppliers. I think this is obvious to anyone who has observed systems where this sort of competition is not possible. I think competition improves quality.

In the product design dimension fee-for-service also has desirable consequences. These occur for the same reason that they occur in connection with quality: this form of provision leads people to make appropriate decisions at this margin. If people want to bear the extra cost of having a string quartet in their room or having steak every day instead of tuna salad, they will patronise facilities that provide these — even though the price is higher. Under fee-for-service people typically get what they are willing to pay for.

The problem with fee-for-service arrangements obviously lies with dimension 3, risk exposure. A bad roll of the dice can cripple its victim financially as well as physically. There is a demand for insurance, and therefore typically we buy medical care not strictly in a fee-for-service environment but in one in which some sort of insurance is attached to the purchase of medical care. And the nature of this insurance contract can dramatically alter the performance of the system.

Reimbursable insurance. Now consider the standard reimbursement insurance contract of the sort that developed in the United States and perhaps in Australia. This insurance is provided on a 'cost-plus' basis. John Goodman told you earlier a little bit about cost-plus contracts in medical care and their effects. Hospitals simply bill the insurance companies, or the US government in the case of Medicare and Medicaid (both reimbursement programs), for a certain portion of their total costs, and that's that. Obviously, where insurance is present, this will have important effects in the risk exposure dimension. However, not only does it affect risk exposure, which is why the insurance is introduced, but this form of provision has consequences in the quantity and product design dimensions as well.

Every participant on this program, myself included, has talked about moral hazard, and I do not need to say much more about those consequences. Lowering the insurance copayment rate lowers the price to the consumer, and the consumer will demand more services, will seek to go to the doctor more often, and will stay longer in hospital.

As this increase in demand registers in the market, two things happen. Initially, because supplies are not perfectly responsive to changes in demand, we get inflation in these prices. Prices of hospital and physician services rise. Second, after a lag, the quantities of these services will expand in response to higher prices. As I mentioned in my earlier paper, the term 'moral hazard' is merely a reflection of the principle that demand curves slope downward. People demand more when prices fall. This is the substance of the quantity consequences of reimbursement insurance.

However, in dimension 4 we see a similar sort of thing happening. Competition among providers tends to have the effect of attaching more frills to the product supplied. The cost to the hospital of adding more frills is effectively zero: it gets reimbursed for costs whatever they happen to be. Because hospitals are competing with one another for patients, each has a tendency to add these sorts of things to their product. If one hospital offers a string quartet, and insurance companies are paying all the bills, then patients will demand to be admitted to the hospital that has one rather than another hospital that lacks such luxuries. Sooner or later all the other hospitals decide that they had better get a string quartet too, or they are not going to have any patients. This sort of escalation in the range of services ripples around until the costs of care are sky high.

Of course I am exaggerating with this string quartet business, but the effects I am describing are real and they have important consequences. Some evidence on this score is provided by comparing

the rates of health care cost inflation in the United States in the decades before and after the adoption of Medicare and Medicaid. It is embarrassing to those who like to blame all the problems in the health sector on government intervention, but the fact is that the inflation in health care prices (relative to other goods and services) was greater from 1955 to 1965 than in the following decade. One obvious reason for this is that it was precisely during the earlier period that cost-plus reimbursement insurance was extended to most Americans.

As I mentioned earlier, the government's initial response to these price and quantity consequences was jawboning. We had a name-calling session that had no effect whatsoever on the rising tide of health expenditure. There was a period in the 1970s when it seemed like the entire Social Security budget was going to be consumed financing hospital care. One of the favourite expressions of the times was that health care costs were 'out of control'. I am not sure what that means, but I suspect that some of the people who said it were simply admitting that jawboning was not keeping costs down.

At any rate, the next attempt to deal with these consequences involved regulation. We adopted the Physician Service Review Organization system for physician peer review, which created a mountain of paperwork. For every operation the surgeon had to file detailed reports describing exactly what the condition of the patient was, what the surgeon had done, and why. Statistical analyses of experience under this system found that it had no measurable effect on surgery, or on anything else for that matter.

The Certificate-of-Need program for hospitals was an even larger burden. In order to expand or build a hospital it was necessary to file a document, which would be reviewed by regional health boards, demonstrating the 'need' for this construction. Of course, there was a great demand for new hospital capacity for reasons just discussed. Cost-plus reimbursement released a large amount of resources that increased the demand for hospital services. A lot of agencies, both public and private, wanted to get into the business of supplying this extra demand, and this competition to get the authorisation took the form of submitting fatter Certificate-of-Need applications. This was very costly to hospitals and ultimately to consumers and taxpayers because they had to pay the bills for all these applications. On the other hand, it created a real bonanza for economists and accountants in the United States because the firms engaged in preparing these applications typically billed on the order of US\$200 000 to US\$300 000 per certificate.

The Certificate-of-Need program had no effect on health expenditure either. As a matter of fact, many states in the US have

now abandoned this program, and regulation of hospital building is experiencing a hiatus. This is not to say that the problems have vanished; it merely suggests that confidence in the power of regulatory authority to correct these problems has been shaken.

If I may summarise to this point, we have the following situation. Insurance (both public and private) is creating a lot of excess demand, with consequences in the quantity dimension and product design dimension. It is also having consequences in the risk exposure dimension that are making people happy, but it is creating problems in the other dimensions. Disillusionment with regulation has led some to seek to address these problems by altering (once again) the way health care is financed and provided.

Prepayment plans. The first experiment along the lines of a prepayment plan was the Health Maintenance Organisation (HMO). As we have noted, the problem with reimbursement insurance is that both patients and providers have an incentive to expand service beyond the point where it is worth what it costs. The HMO introduces incentives to restrain expenditure in those dimensions by combining the insurance function and the health provider function within the same organisation.

This can and has taken a number of forms. A group of doctors could contract with a hospital to supply a certain amount of hospital services. They could then sell hospital or medical care services on a prepaid basis. Insurance companies can form HMOs by hiring a group of doctors and building a hospital. The structure of the HMO is not really as important as the fact that the providers, physicians and hospitals, are contracted for on a prepayment basis: so much per patient or so much per group of patients. This alleviates at least some of the difficulties in the output and product design dimensions.

HMOs employ screening of one sort or another to decide which patients need which services, which patients get into hospitals and which patients get to see doctors. They also decide in advance what sort of product is going to be supplied. There is no competition to provide string quartets. When subscribers are to be hospitalised they have no choice, they must go to the hospital provided by the HMO. The effect of these HMOs on utilisation has been widely documented. The savings can be substantial, both to subscribers of prepayment plans and to government as well, if government patients are served by HMOs.

Rather paradoxically, as John Goodman pointed out, HMOs have not really swept across the American medical landscape. One might expect that an institution that solved these serious problems would rapidly displace a system with the undesirable consequences we have outlined, but that has not been our experience. In 1972 about three

per cent of the US population was covered by some sort of prepayment plan. In the intervening 15 years, this has grown to about 6 per cent.

The solution to this paradox may be related to item 2 on our list. Although HMOs do seem to control these consequences in the quantity and product design dimensions, there may be a problem in the quality dimension. Patients and subscribers of HMOs lose their freedom of choice. Doctors I know prefer to call this the advantage of the personal doctor-patient relationship, but I, being an economist, refer to it simply as the benefits of competition.

The HMO typically has a stable of doctors, and subscribers must choose from among them. A subscriber who is not satisfied with one doctor may choose another from the group but may not go outside the panel associated with the HMO. Obviously, subscribers do not have as much choice as they do under fee-for-service or reimbursement insurance. And with this reduction in choice goes at least a perception of quality control. Patients do not feel like the product they are getting is as good.

I have experienced this feeling myself. When I was on the faculty of the University of California at Los Angeles, I was a subscriber in Kaiser Permanente, one of the largest and oldest HMOs in the United States. I knew in principle that I was getting a very good deal; the fees I was paying were considerably lower than the commercial insurance plans also available through the university, and the coverage was more extensive. Still I felt like a very small cog in a very large wheel. I felt as if I did not have much control over the product I was getting from Kaiser Permanente, and I finally dropped out of the plan and went back to a standard commercial insurance reimbursable plan.

In defense of HMOs, their proponents, like Professor Alain Enthoven of Stanford University, argue that competition is not really eliminated by HMOs but merely shifted. In many cases employers, like UCLA, have a whole range of alternatives including several HMO plans for employees to enrol in, and the subscriber has a choice between a number of competing plans. Therefore advocates of HMOs argue that HMO organisers have an incentive to produce high quality medical care because they are competing with other plans for subscribers.

My hunch is that the American health care consumer has not found the results of this kind of competition as effective as competition between one doctor and another. In other words, Americans feel more comfortable choosing among doctors than among anonymous HMO organisations. Certainly, as far as government patients are concerned, there is never any incentive to enrol in HMOs; the cost

savings associated with belonging to an HMO go to the US Treasury rather than to the patients themselves. None of the Medicare or Medicaid patients have an incentive to join.

On the Horns of a Trilemma

To sum up this experience, we seem to be caught on the horns of a trilemma, if there is such a beast. First we have reimbursable insurance with excessive use and high premiums (and high taxes in the case of its counterpart, government-financed cost reimbursement programs). Second, we have the ineffective but costly regulation that can be attached to these options. Third, we can go with HMOs that reduce outlays on health resources but have different consequences. With HMOs we lose the benefits of competition and personal doctor-patient relationships.

I wish I could say that American experience has provided a solution to this trilemma, but that simply is not true. No miracle cure has been found. Indeed, as an economist, I must predict that we are unlikely ever to discover one. As I pointed out in my opening remarks, methods of payment have economic consequences, and the art of policy making consists of selecting from among such methods the one that produces the least disagreeable consequences.

This is not to say that we have exhausted all possibilities for cost-saving innovation in health care delivery. I can point to two promising alternatives that are being tried with some success. One has emerged in the private sector while the other originated in Washington.

In the private sector we have seen the emergence of something called a Preferred Provider Organisation (PPO). Rather than combining providers and insurers within a single organisation as is done in HMOs, the PPOs maintain a separation between these two functions. In this sense they are like reimbursable insurance plans. They differ from reimbursable plans, however, in the fact that they negotiate with providers **prior to the delivery of care** over such matters as fees, charges and utilisation rates. As the PPO in question may have tens of thousands of subscribers, their power to command such accommodations is substantial. Doctors and hospitals that are willing to supply services at reduced rates are identified as preferred providers, and importantly the savings achieved go to the subscribers themselves.

PPOs differ from HMOs by not locking their subscribers into a particular set of doctors and hospitals; patients are free to use any provider, regardless of whether it is on the PPO panel. The important feature of these plans for cost control is that the PPO reimburses

visits to non-panel providers at the same rate negotiated with preferred providers. Subscribers who choose to visit non-panel providers must themselves pay the difference between the fee charged by this provider and that negotiated with providers on the panel.

There are, in other words, strong incentives for subscribers themselves to control the costs of the health care they obtain. Those who are attentive to the health resources they use end up paying less than those who are not. On the other hand, those who feel that in certain cases providers outside the panel offer something worth paying for are free under the PPO system to seek it. The PPO combines greater cost control than can be obtained with reimbursement insurance with more of the benefits of freedom of choice and competition than HMOs can provide.

The second innovation was discussed earlier by John Goodman so I need not spend a great deal of time on it. This is a new system of hospital reimbursement adopted by Medicare and Medicaid. Hospitals are no longer reimbursed for 'costs' however high they may be. Instead they are reimbursed on the basis of services performed within Diagnostically Related Groups (DRGs). Patient stays in hospitals are grouped into diagnostic categories, and reimbursement rates are determined for each. Instead of simply reimbursing hospitals for everything they choose to supply, and therefore influencing them to provide as much as they can convince patients to accept (and to provide as many string quartets as they can talk the government into financing), Medicare and Medicaid reimburse a particular amount for each patient treated with a given set of symptoms.

For example, assume that the average appendectomy patient requires a three-day hospital stay, a session in the operating room, and related services that would cost, if purchased *a la carte*, a total of \$1750. Medicare under the DRG reimbursement system simply gives each hospital \$1750 for each appendectomy performed regardless of what was provided in each instance. If the patient can be released after two days, the hospital makes money. If the patient must remain a fourth day, the hospital loses. These DRG reimbursement rates are calculated on the basis of averages, and presumably prudent hospital administrators can cover their costs on average.

This system raises the possibility of an opposite sort of problem to that for which it was developed. One can foresee the possibility that under this regime hospitals may be influenced to supply less care than people would buy on a fee-for-service basis and perhaps a skimpier product than they would have chosen on that basis. Whatever the effect of these biases, and two and one-half years of

experience suggests that they are not serious, the DRG system of reimbursement certainly eliminates the bias toward overservice. If Medicare experience with DRGs continues to be favourable, there will surely be great pressure on hospitals to accept DRG reimbursement for their privately insured patients as well.

On the whole I think the outlook is promising, certainly more so than it was ten years ago. At that time observers speculated from day to day on what sort of new massive regulatory initiative Washington was going to concoct to solve the problem created by its last regulatory initiative. I think we are moving away from that sort of 'reduce cost at any cost' regulatory approach. We are moving (perhaps stumbling is a better word) towards a recognition that the best way to achieve an allocative objective is to adopt processes that harness rather than ignore market forces. To an economist this appears to be real progress. I look forward to observing the progress of these two innovations over the next three or four years.

Privatising Government Health Care Programs

John C. Goodman

John Goodman is President of the National Center for Policy Analysis, a Dallas-based think tank. The Center produces books and studies that examine issues such as health care, Social Security, education, the federal deficit, national defence, comparable worth, privatisation, and other major policy issues.

Dr Goodman has a PhD in economics from Columbia University. He is author of five books and numerous articles published in professional journals. His book, *Economics of Public Policy*, is widely used in colleges and universities throughout America. His book, *National Health Care in Great Britain*, has been favourably reviewed both in the US and in Britain and led to the formation of the Center for Health Studies, which Dr Goodman founded in 1980 at the University of Dallas. His book, *Social Security in the United Kingdom: Contracting Out of the System*, has generated considerable interest in the Reagan Administration. His latest book, *Privatization*, explores the reasons for the highly successful privatisation revolution in Britain being pioneered by Margaret Thatcher and argues that a similar revolution can, and should, occur in the US.

Privatising Government Health Care Programs

John C. Goodman

Privatisation is the practice of moving assets and activities out of the government sector and into the private sector of the economy. It is the practice of having private, profit-seeking firms do what was previously done by public officials.

Until recently, very little thought or attention was given to the subject of privatisation. Traditionally, conservative governments in countries around the world have tried to hold back the growth of the public sector and allow for the expansion of the private sector. The traditional conservative approach is to try to accomplish this objective by holding down spending on public sector programs. The problem with this approach is that it sets the conservative government against its opposition over the level of spending on particular programs. While the conservatives may be able to reduce spending by some amount, they always do so at great political cost, and even when they enjoy some success, the success is usually very modest and the spending cuts are not very great. Moreover, these successes are frequently very temporary and are easily undone once the opposition regains political power.

The approach of privatisation is very different. The techniques of privatisation allow the government to avoid altogether the debate over how much is going to be spent on a particular program and to focus instead on the wholesale transfer of the program to the private sector. Once the transfer is made, individual choice and market forces begin to play a greater role in determining how resources are going to be allocated, and government bureaucrats and political special interests play a lesser role.

What makes privatisation politically practical whereas spending cuts are not? In the first place, goods and services produced by the private sector are generally produced at a much lower cost — often at one-half the cost — of public provision. In the second place, with competition or competitive bidding among potential private

suppliers, the quality of the product is generally higher in the private sector than in the public sector. In principle, then, privatisation leads to higher quality goods or services, produced at much lower prices.

The fact that privatisation leads to higher quality for lower cost is extremely important from the point of view of practical political advantage. It means that consumers of the good or service gain because they are able to get a better product. It also means that the government almost always saves money when it privatises. This savings provides government officials with a new source of funds, and these funds can be used in part to 'buy off' the political opposition by structuring the privatisation effort in such a way that powerful special interests who potentially would oppose the effort find that privatisation is to their economic advantage.

Finally, if the privatisation effort is to have long-run success, it must be done in such a way as to create new coalitions that find private provision of the service in their self-interest and are willing to protect and defend the new arrangement against future politicians who are tempted to undo it.

Privatisation: A British Success Story

Numerous studies have documented that privatisation generally leads to a higher quality product at a lower cost (Bennett and Johnson, 1981; Savas, 1982; Poole, 1980; National Center for Policy Analysis, 1985). Until recently, however, no one had ever examined systematically how the techniques of privatisation work or given a theoretical explanation of why they work. The breakthrough came with the publication of a book by Madsen Pirie, president of the Adam Smith Institute in London (Pirie, 1985; Goodman, 1985). Focusing primarily on the British experience, Pirie explored 22 different privatisation techniques that have been used by Margaret Thatcher — each illustrated with numerous successful examples from the Thatcher administration.

Pirie's book represented an important contribution to what might be called the 'new political science'. He explained at a theoretical level why various practical political strategies work. As the case of Britain illustrates, privatisation is a political option that does work. Although Margaret Thatcher was able to make almost no progress in cutting government spending for various programs, her administration has been extremely successful in privatising those programs.

Consider that:

- When Margaret Thatcher assumed office, nationalised industries accounted for 10 per cent of Britain's Gross Domestic Produce and one-seventh of total investment in the economy.
- Nationalised industries employed 1.5 million people and dominated the transport, energy, communications, steel and ship-building sectors of the economy.
- Under privatisation, the government has sold more than US\$5.5 billion of stock in nationalised companies and intends to continue selling at the rate of about US\$2 billion a year.
- To date, more than 400 000 jobs — almost one-third of the total nationalised workforce — have been transferred to the private sector.

Privatisation, of course, is not confined to Britain. It is occurring all over the developed world, throughout the underdeveloped world, and even in communist countries. Consider, for example, some of the recent experiences of developing countries in Asia (Rowley, 1985; Roth, forthcoming).

- State-owned telephone and telegraph companies are being sold to the private sector in Bangladesh, Thailand, South Korea, Malaysia, and Sri Lanka.
- State-owned airlines are being sold to the private sector in Thailand, Singapore, Bangladesh, Malaysia and South Korea.
- State-owned banks are being sold to the private sector in South Korea, Bangladesh, the Philippines, Singapore and Taiwan.
- Railways and bus services are being privatised in Thailand and Sri Lanka.
- Highways are being privatised in India and Malaysia.
- Shipping and shipbuilding are being privatised in Singapore, Bangladesh and Sri Lanka.
- Oil and petrochemical companies are being sold to the private sector in India, South Korea and the Philippines.
- State-owned hotels are being sold in Singapore and the Philippines.
- Other general industries are being privatised in Sri Lanka, Pakistan, Singapore, the Philippines, India and Bangladesh.

Yet while other countries have dabbled in privatisation, the British have honed it to a science. In this sense, Britain has provided the world with a showcase for other nations to emulate. In what follows, I will draw on the British success story to develop lessons for other countries.

Privatising Entitlement Programs

An 'entitlements program' is a program under which individuals receive money or goods in kind from the state as a matter of law. In this paper I will use the term to include services such as health care, where, although the individual is entitled to the service as a matter of law, there may nonetheless be rationing (such as rationing by waiting).

It is generally acknowledged that entitlements programs are the most difficult ones to privatise. This is because entitlements programs are generally pure redistribution programs — programs that take money out of the pockets of one group and put it in the pockets of some other group. The difficulty of privatising such programs is that the private sector does not arbitrarily redistribute income except under threat of coercion.

Of all entitlements programs, Social Security is surely the most difficult to privatise. Under Social Security those who pay into the system (the young) and those who receive benefits from the system (the old) are clearly separated by age. Moreover, since the Social Security systems of almost all developed countries are pay-as-you-go systems, they represent pure redistribution of income from young to old. It is difficult for most people to see how such a program could be transferred to the private sector.

Nonetheless, these programs can be privatised, and once again, the premier example is Britain. In 1978, Britain established a two-tier Social Security program and allowed employers to contract workers out of the second tier by providing them with good private pensions (Goodman, 1981). Just seven years later, in the spring of 1985, the Thatcher government announced its intention to abolish the second tier altogether and rely completely on the private sector to provide second tier pensions. Chile is another country that has made substantial progress in privatising its Social Security system by encouraging individual retirement accounts as an alternative to participation in the government pension scheme.

The experience of other countries in privatising Social Security is very important in understanding how government-run health care schemes can be privatised. In general two groups of people derive benefits from national health insurance. On the one hand, there are the beneficiaries of working/taxpaying age. This group derives benefits from state-provided health care, but it also pays the taxes to fund those benefits. On the other hand, there are the elderly. This group derives health care benefits from the state but pays very little in taxes. As a consequence, their health care benefits are paid for by someone else — specifically the population of working age.

Of the two groups of beneficiaries, the elderly pose the biggest problem. Privatising health care for this group is more difficult than privatising health care for the working population. To date, I know of no country that has privatised health care for the elderly. However, the problem is very similar to privatising Social Security and much can be learned by taking a close look at how Social Security has been successfully privatised.

The Case of Social Security

I want to begin by discussing two principal ways of thinking about Social Security programs that interfere with our ability to think about private alternatives to them. When economists think about opting out of Social Security, they frequently come to the conclusion that it will not work. And they think it will not work for two reasons: The first is that economists think of Social Security as a government-run chain letter. They are quite right about that, by the way. It is a chain letter. It is a Ponzi scheme. In most cases, Social Security Trust Funds are in fact little more than accounting deceptions. For all practical purposes, every dollar that comes into Social Security is immediately spent — every hour of every day. No funds are being stashed away in bank vaults, or being invested in interest-bearing assets.

Chain letters exist in the private sector, but the problem is that private sector chain letters are short-lived. The thing that is unique about the chain letter run by the government is that the government has the power to tax. I can remember a decade or so ago, the American economist Paul Samuelson was writing about Social Security and came up with the brilliant observation that Social Security is a Ponzi scheme that works! The reason he said it works is the government's power to tax. Now everyone is willing to admit that the private sector can provide pensions. It can provide pensions that work. But few of us would be willing to admit that the private sector could provide a chain letter that works. And, therefore, since Social Security is primarily a chain letter, it would appear that it must necessarily be run by government.

The second idea that interferes with our thinking about this area is that when economists think about private alternatives to Social Security they often come to the conclusion that private alternatives are in no one's self-interest.

What happens when chain letters collapse in the private sector? There are losers. They are the last people who bought in. And who are the last people buying into the Social Security? They are the

current generation of workers. The current generation of workers is paying taxes into the system to support the retirement pensions of the elderly. Why should this group of workers say, 'We'll continue to support the elderly, but when it comes our turn, when we retire, we'll not accept anything from the generation which follows'. What that would mean is that the current generation would be required to pay twice. They pay once for current generation of retirees, but when they retire, they will be taking on the obligation of paying for their own retirement.

I think these two points are instructive because if we think about them for a moment they can help us see our way out of this. Let me return first to the chain letter idea. When Social Security was started in the United States, it was not sold to the public by politicians bringing Paul Samuelson to Congress to testify that he suddenly discovered a way to make chain letters work. Instead, when Social Security was started, there was a lot of hoopla about comparing Social Security schemes to the private pensions schemes. People were encouraged to think of Social Security as a substitute for private pensions. As a matter of fact, most people even today think that Social Security and private pensions are substitutes. So given that the public is already of that inclination, why not encourage them to continue thinking of private pensions as a substitute for Social Security?

We are helped in this by a fundamental principle. The principle is that in a mature Social Security system there is a theoretical limit to the rate of return each generation can earn on its investment in Social Security. By mature system I mean one in which there is no net population growth and each generation is essentially getting the same deal from Social Security as every succeeding generation. In such a system, each generation can get a rate of return from its Social Security dollars equal to the rate of increase in real wages that is occurring in the economy (Aaron, 1966). Historically it has been true that the rate of return on capital has been two, three or four times greater than the increase in wages. People who are forced into a system where they are getting a low rate of return when the market is paying a much higher one will tend to perceive that private pensions are a much more attractive alternative. They will perceive that they are worse off under Social Security than if they had put those same dollars into the private capital market and received the rate of return on capital.

What about the problem of this generation paying twice? In the first place, generations do not make decisions as generations. We make decisions as individuals. And that is a very important point in thinking about private alternatives to Social Security. What we

have to do is create an alternative that individuals perceive to be in their self-interest — irrespective of the effect on their generation.

There are three principles that characterise the opting out schemes in Britain and in other countries (Goodman, 1983). There are three practical political realities that we cannot get around. The first principle is: promised benefits must be paid. We will not succeed with opting out schemes that say to the elderly 'We're going to cut you off'. Maybe we can cut back on benefits a little bit. Maybe we can play with the indexing provisions and do something there, but not very much.

An effective approach in promoting privatisation is to argue that it would make the future of Social Security more secure. That is what they did in Britain. The British government did not say it was going to destroy Social Security. They said it was a plan to make Social Security secure. They said, the system is in trouble, and we are going to make it better. The political strategy is to assure the elderly that we are not going to take their benefits away from them; that we are going to make it more likely that those benefits will be paid.

The second principle is: the choice must be voluntary, at least for everybody that has already paid taxes into Social Security. We cannot say, 'We're going to throw you out of the system'. The option must be open to people. We might do what they did in Chile and say that for each new generation of workers entering the labour market, who have never yet paid any taxes into the system, they automatically must be in the private sector. But we cannot say that to the current generation of workers.

The third principle is: if people are to be given a choice, then there must be a differential tax. It must be in their financial self-interest to be out of the system. Workers who want to remain in the system will face a very high payroll tax, or a very high income tax. But if they opt out of the system they pay a much lower tax. Then individuals go through the calculations and discover that on the whole they are better off opting out of the system.

I remember when I did my study of the British Social Security System, I calculated the rate of return that workers earned at different age levels and different income levels, so that I could see how well workers did outside the system and how they did inside the system. I showed this to a high official in Health and Human Services in Britain and said I thought it was very interesting and could not find anywhere that it had ever been done before. He looked at what I had done and was very irritated by the entire enterprise. I asked what was wrong with it, and he replied, 'Well, we don't generally think it's a good idea to encourage workers to calculate to see what kind of rate of return they get in the system'.

True enough. They don't. Nonetheless, on the average, there is a seven percentage point differential on payroll tax paid between those in the system and those out of the system in Britain. That economic incentive is what it took to make it to the advantage of most workers in Britain to opt out.

The two most noticeable cases of opting out of Social Security are Great Britain and Chile. Britain has a modified scheme. There are two Social Security tiers. The basic tier is comparable to a minimum income. Everybody pays into it and at retirement everybody gets the same pension. The second tier is earnings-related: the more you earn and the more you pay into the system, the more you get out. Therefore, the second tier is more comparable to a private pension, and it is that second tier that people are opting out of. The choice is not made by individuals but by companies in consultation with their workers. The company agrees to provide workers with a pension that pays benefits just as good or better than benefits that would have been paid had those workers stayed in the government's system. Again, there is a payroll tax reduction, which initially was seven percentage points for those who opted out.

There has been some mumbling and grumbling here and there, but essentially, as far as I can tell, most people are very happy with the system. Pension managers are getting a good rate of return. There are provisions for returning a private pension fund back to the state, so that companies can opt to be out for awhile, decide they have made a mistake, and then get back into the state system. But almost all the companies that decided to opt out have remained out and it consistently seems to work and work well.

Chile has a more radical plan. In Chile it is an individual choice, and the payroll tax differential is even more substantial than in Britain. What Chile does is more similar to what we have talked about doing in the United States. Chilean workers opt out of Social Security by putting funds into an individual retirement account. Competing institutions offer these accounts and workers put funds into them and forgo their right to draw Social Security benefits at retirement. I believe that all new workers entering the labor market do not have a choice, but are required to be in the private sector.

Implications for the Privatisation of Health Care for the Elderly

I have dwelt at some length on successful examples of privatisation of Social Security because, in general, Social Security is more difficult to privatise than health care and because the principles of privatisation that have worked for Social Security also apply to health

care for the elderly.

Like Social Security, government programs that provide health care for the elderly are like chain letters. Those who receive benefits in the early years of such a program receive benefits far in excess of any taxes they paid to support the program. But over time, the program begins to look less attractive to each new generation of young workers.

For example, the US Department of Health and Human Services has calculated the taxes and benefits for elderly individuals covered by the federal government's program for health care for the elderly (Medicare). According to the government's own calculations, a male worker earning the average wage who reaches age 65 today will have paid only US\$2640 in Medicare taxes. Yet he can expect to receive about US\$28 255 in Medicare benefits before he dies. If the man has a dependent spouse, the expected Medicare benefits for the couple will approach US\$62 360.

Things are very different for young workers entering the US labor market today, however. After some expected changes are made to eliminate the projected deficit in the Medicare trust fund, young male workers will find that over their lifetimes they can expect to pay about US\$33 171 more in Medicare taxes than they will receive in Medicare benefits (Ferrara et al., 1984:7). As a result, the opportunity is there to privatise Medicare in much the same way that Social Security has been privatised in other countries.

One such proposal was put forward by the National Center for Policy Analysis in January, 1984 (Ferrara et al., 1984:12-16). Under the proposal, workers would be encouraged to make annual deposits to medical individual retirement accounts (MIRAs) — accounts that are the private property of the worker but are managed by financial institutions. The funds that build up in these accounts over an individual's working years provide the wherewithal to purchase private health insurance and to make private purchases of medical care during the retirement years.

Workers who make annual deposits to MIRA accounts forgo their right to draw Medicare benefits at retirement. Under the NCPA proposal, after 30 years — 30 annual deposits — a worker would be completely opted out of Medicare, except for very expensive, catastrophic health insurance. To encourage workers to make such deposits, a dollar-for-dollar income tax credit is given on funds deposited in a MIRA account. Thus from the individual's point of view, the money being deposited is money that otherwise would have gone to the government. The maximum allowable deposit is set at a level to make the private alternatives financially attractive to anyone who actually calculates what benefits can be expected by remaining

in Medicare and by opting out.

This proposal has been well received in the United States. It has generated considerable interest and enthusiasm in the medical community. The American Medical Association is about to release its own MIRA proposal, which will be a variation on the NCPA proposal. A bill proposing MIRA legislation is expected to be introduced before Congress this fall.

Implications for the Privatisation of Health Care for the Non-Elderly

As noted earlier, privatising health care benefits provided to people during their working years is an easier matter than privatising health care for the elderly. Nonetheless, the same three principles that apply to Social Security and health care for the elderly apply here as well.

First, existing benefits cannot be destroyed. No British government can abolish the National Health Service. No Australian government can abolish free hospitalisation under Medicare. Indeed, the political strategy should be just the opposite. Beneficiaries should be assured that their right to obtain future benefits under these programs is made more secure.

Second, there should be a private alternative to the state system. Moreover, the private alternative should be encouraged to grow and flourish by adopting specific policies, in much the way that Margaret Thatcher has encouraged the growth of private health insurance and private hospitals in Britain. The national government must make it clear that the private option is a welcome development because it gives people greater freedom of choice and subjects the public system to the rigors of competition.

Third, those who choose the private option should derive financial benefit from doing so. Money spent on a private health insurance policy, for example, might qualify for a tax credit — a dollar-for-dollar reduction in taxes (the tax credit might be limited to the individual's pro rata share of the government's total health bill). The official rationale for the tax advantage given to those who use the private sector is that such people reduce the burden on the public sector and therefore reduce public expenditures. Ideally, tax credits given to those who choose the private alternative should be funded by a dollar-for-dollar reduction in the budget of the public health service.

As in the case of Social Security, the private sector alternative can be made more attractive by removing restrictions and controls on private entrepreneurs and by creating an environment in which private citizens can reap the full advantages of competition in an

open market place. In most countries, including the US, this would produce hospital and health insurance sectors radically different from the ones we observe today.

What would we expect to happen if such a plan were instituted? We would expect private health insurance companies to offer the most attractive benefit packages to patients who are least likely to get sick. These are the people who are subsidising the health care of others under the state system. As in any market where competition is allowed, new entrants will go after those customers who are being most overcharged by the existing firms.

The departure of these customers from the state system, however, will put a greater financial squeeze on the state system. Public sector health care will find its revenues declining faster than its costs. This development, in turn, will lead to deteriorating quality in the services being offered by the public sector and will encourage even greater opting out.

I do not have the time or space to detail all of the techniques that can be used to make such a privatisation effort practical and politically feasible. Nonetheless I have given a general outline of a policy which, if followed, should lead very quickly to the wholesale privatisation of health insurance and medical services.

References

- Aaron, H.J. (1966), 'The social insurance paradox', *Canadian Journal of Economics* 32 (February/November), 371-4.
- Bennett, J.T. and M. Johnson (1981), *Better Government at Half the Price*, Caroline House Publishers, Ottawa, Illinois.
- Ferrara, P., J.C. Goodman, G. Musgrave, and R. Rahn (1984), 'Solving the problem of Medicare', National Center for Policy Analysis, Dallas, Texas.
- Goodman, J. (ed.) (1985), *Privatisation: Conference Proceedings*, National Center for Policy Analysis, Dallas, Texas.
- (1983), 'Private alternatives to social security: The experience of other countries', *Cato Journal* 3(2), 563-73.
- (1981), *Social Security in the United Kingdom: Contracting Out of the System*, American Enterprise Institute for Public Policy Research, Washington, D.C.
- National Center for Policy Analysis (1985), 'Privatisation in the US: Cities and countries', Policy Report 116, Dallas, Texas.
- Pirie, M. (1985), *Dismantling the State: The Theory and Practice of Privatisation*, National Center for Policy Analysis, Dallas, Texas.
- Poole, R.W. (1980), *Cutting Back City Hall*, Universe Books, New York.
- Roth, G. (forthcoming), *Private Provision of Public Services in Developing Countries*, World Bank, Washington, D.C.
- Rowley, A. (1985), 'Private affairs in Asia', *Far Eastern Economic Review* 25 July, 63.
- Savas, E.S. (1982), *Privatising the Public Sector*, Chatham Publishing House, Chatham, New Jersey.

PANEL SESSION

Hon. Jim Carlton, MP: The question was asked, Is there a crisis in health care? I think there is. It is the sort of crisis you have when you have slow-acting leukaemia rather than a sudden heart attack. At the time the subject of this conference was set, the sudden heart attack seemed to be upon us because of the doctors' withdrawal of services and resignations. But that has passed off for the moment, and so we can see what the longer term problems are.

And what are the longer term problems? I think Jeff Richardson's talk gave us a good indication of what they are. Basically, if we want a system obsessed with cost control, a system that will achieve that objective by making it a lot less comfortable for the elderly sick in particular, then we can make a public choice to have that system. There has been an obsession with costs for many years, not just under the Labor Government but also under previous governments. Recent governments, both Labor and Liberal, have been advised by the same public service advisers, and the debate has been dominated generally by socialist health economists. It is not surprising therefore that the predominating policy strand has remained unchanged. As a result of that, slowly before Medicare and now more rapidly with Medicare, the quality of the system is falling. You can see this best in Victoria where if you are old and uninsured at the moment it is not a very happy position to be in. The fact that some of that squeeze occurred in Victoria before Medicare has nothing to do with my argument, because that same cost obsession was there beforehand in a milder form and it is now heightened because of Medicare.

Coupled with this general decline in quality of service as indicated by queuing for services to the old and the poor, public hospitals are becoming increasingly unmanageable. A combination of public service rules of management, a squeeze on costs resulting from volume controls set at the top, and the greater capacity of trade unions to put the squeeze on public sector managers because there's no bottom line, is making our public hospitals ungovernable. I had the job for a short time of being in charge of two public hospitals directly and I can assure you that, having looked closely at the management systems of those two hospitals, and the unions with which we had to deal in the ACT, I can give you many many examples indeed of why it is no longer possible to manage a public hospital successfully in New South Wales. This is another reason that helps explain why nurses are leaving the system: it is because it becomes increasingly unpleasant to work in places that are not

properly managed.

So we have under Medicare basically an unstable system. In addition to the previous cost squeezes that were recommended by bureaucrats, we added free medical treatment and free hospital beds without any means test, two additional substantial burdens. Anybody who says that peoples' habits are unaffected by apparently free services has to be blind. Dr Blewett does make that claim and quotes certain research that was done years ago — I simply do not believe it. The more research is done the more it proves that the market for health services conforms to basic economic precepts of supply and demand. In particular, if you offer free treatment without a means test then you are going to get additional utilisation, and you add that to an already difficult situation.

Medicare is inherently unstable because it has sharply increased the government's share of health expenditures — now up to 70 per cent — and yet the Treasury is increasingly unable to provide the dollars to run the system because people are fed up with paying tax. So there's no way that health Ministers are going to replace all those lost private dollars with tax dollars. Each year people drop out of health insurance and dollars are lost to the whole system. The principle of equity as described by Jeff Richardson demands that all Australians regardless of their willingness to pay should be serviced by the same health system as is used by the poor. As a result private dollars are pushed out of the system, but if each private dollar lost is not replaced with a public dollar, a tax dollar, then the system gradually declines and that is what's happening. There is a cost squeeze and a cost obsession.

What should we do in the future? First of all one we must realise one thing: it does not matter fundamentally how much of our GDP we spend on health provided that the additional expenditure is in a competitive market place. That is a fundamental issue, a fundamental point that certainly was not understood by my political party over 20 years. It is still not understood by the population at large and it is denied by three-quarters of health economists. It simply does not matter how much people choose to spend on health or comfort or string quartets, provided they spend it in a competitive market place. That takes the load off the taxpayer's dollar and frees it for its real purpose, which is to worry about the poor and the chronically ill and possibly the catastrophically ill. So we must as far as possible free up insurance. We must gradually privatise the hospital system, and I do not care whether the nuns run it or private enterprise runs it or any community boards or whatever run it, it simply must be got out of the 'octopus'.

So that is the future and I think a clear idea of that emerged from

the various papers given today. It was also immensely useful to have one paper that gave us a good glimpse of where the Medicare alternative is leading us.

Dr Jodhi Menon (General Practitioners' Society): Let me say at the outset that as far as I am concerned in Australia today there is no crisis in health care. Health care is readily available and nobody is dying as a result of any lack of health care except when that care has been rationed by governments. I say that very advisedly. I have cases of patients who have died not as a result of lack of resources but purely as a result of government intervention. If Jeff Richardson or anyone else wants to ask me I have a dossier full. The bureaucrats sitting up in Canberra, or wherever the computers are, have no business interfering and it is their interference that is causing the crisis. There is a crisis that does affect the health care that many Australians receive and that is a crisis in government.

The fundamental function of any government in a free country is the protection of the life, liberty and property of the citizens. If this fundamental function is properly discharged then very little needs to be done, if anything at all, for the welfare of the nation, be it in health care or any other area. And it is a sad fact that no government in this country in modern times has been willing or able to discharge this basic responsibility, and nowhere is this more evident than in the area of health care. The life, liberty and property of the individual have been placed at risk as each successive government has pursued its primary goal, possession of political power. It is indeed a tribute to the workers in the public sector that we have not yet seen a real crisis in spite of this.

All governments have concerned themselves with those aspects of health care that give some control over the doctor and the patient, ignoring or relegating to lesser importance those items that don't give them political kudos. Governments have failed to provide adequately for the protection of the life of the citizen in the following ways: First, ambulance service. What could be more essential if you are seriously injured or seriously ill? Unless you are a pensioner Medicare will not pay a penny toward the ride of your life. Second, maintenance of real accident and emergency centres. The present accident and emergency centre is really nothing more than a general practice run by government within the hospital. Decisions about who shall see the doctor urgently are made by our very own version of the Chinese barefoot doctor, except we call them triage nurses. The triage nurse decides if the patient is sick enough or not. Government should be channelling funds to provide for real accident centres rather than wasting money on expensive community health centres if it is

concerned about the health of the nation.

We are, particularly in New South Wales, supposedly facing a crisis in health care, or so we have been told frequently by politicians and various sections of the popular media. According to the dictionary a crisis is 'a turning point or decisive moment, especially in illness, a time of acute danger or suspense'. The last few years have certainly not been without danger or suspense in terms of health care. But the whole scenario could hardly be described as acute as the country has muddled on under administrations of politicians and bureaucrats, most of whom appear to suffer from the peculiar delusion that they know more about health care needs of the community than doctors or patients.

I want to now briefly comment on a point John Logan made that we have not previously realised, and that is that we are the reverse of the United States. We started off with government intervention. Our early doctors had no chance of establishing private practice because most of their patients were convicts. The only thing our successive governments have done in recent decades, with the collusion of the AMA, is put up health schemes that essentially did no more than rob Peter to pay Paul. The Peter has been the pensioner, the chronically ill and others that are properly the responsibility of the community. The Paul has been the doctor and the average voter. This was clearly demonstrated on 1 July 1985, when the federal government reduced 'benefits' to pensioners and war veterans, increased prescription charges to \$5, and at the same time gave bulk billing doctors an instant pay rise by increasing the fee schedule. As George Bernard Shaw said, the state that robs Peter to pay Paul can always count on the support of Paul.

Finally, I will leave you with the thought that we do have a crisis but it is a crisis in government. The effect of that crisis on our lives as doctors and patients can be eliminated if we can work towards just two goals: (1) get government out of medicine, and (2) get the AMA out of politics.

Dr Errol Pickering (Australian Hospitals Association): Before I comment can I make it clear that I am here representing the hospitals without the string quartets, indeed hospitals where the lid has been screwed on for the last ten years under governments of varying flavours.

I must say that today has left me greatly confused. Two weeks ago I was at another large conference on health care. There, about 300 of the nation's most eminent health researchers were almost unanimous in seeking stronger government intervention in health care — including among the gathering and the speakers the Director

General of the World Health Organisation — and they asked also for increased regulation and gave almost total support for universal health insurance. So today I feel quite buffeted about in the wondrous world of academic economists.

I represent hospital administrators, who, like Sir Humphrey in 'Yes Minister', are but humble servants. But as an administrator I must say that we need time with our present system. We need to assess our circumstances, our administrative processes and the outcomes of care under the universal health insurance system. Administrators are distrustful of experts carrying ideological banners. As unskilled in economics as I am, and it was only a minor in my undergraduate degree, I believe that there was today some occasional mischievous use of figures in order to make a value-loaded point. Even when, however, the data was unquestionable, as in the Rand study, I am still very suspicious about its applicability in this country. There are enormous environmental issues that need to be considered and I think we must look at Medicare in the same light.

I think that we should let Medicare settle down and look at the data on usage in a year's time. We want a period of stability in our health care financing system. We have time because I believe there is no crisis in health care. The problems are here of course, and we can deal with them; in fact those who describe the present situation as a crisis remind me of individuals who write the headlines for the *Sydney Telegraph*.

My biggest disappointment of today, however, has been that we have been talking about health care financing. There has been almost no mention whatsoever of health care, it has all been about money. In a situation where there appears to be a stable percentage of the GDP being spent on health care in this country, I think we can spare a little time to forget about that and look at health care options. For example, what is the community health program? Will it work? Let's see if the prevention and health promotion models work — I'm extremely doubtful but let's have a look. That is, let's get on with the health care debate. If free enterprise wants to have a play, sure, let's have a go. We should try some private enterprise models in the public hospital systems too. I think we could make some gains, and it would also be politically acceptable. Let's have a go at the DRGs, let's experiment, let's see what that does to quality and costs of health care in this country. I think too that we're right for experiments in HMOs. Indeed I see a role for a good old-fashioned administrative compromise. Some private enterprise elements can be introduced into our system, but let's leave the basic health funding system alone. Until we get Australian data based on solidly researched facts we must have this period of stability. We have to

forget vested interest, ideology and party politics and come to some factual conclusion as to what is good for the health care of our Australian community.

Dr Bruce Shepherd (Council of Procedural Specialists): Quite frankly I am wondering what world I'm in. We have some people saying there is no crisis in medical health and I just wonder where they have been over the last few weeks or months or even if they are living in a different country. The public hospital system in New South Wales at the present time is in chaos. The public hospital system in Victoria is not very much better. And yet we have people saying everything's fine, let's get on with it fellas.

I am very grateful that I came today and that I have this chance to speak because it made me realise what sort of information and what sort of guidance this government has been getting. My daughter some little time ago, half-way through her second year of economics, said Dad I'm giving up economics, it's all bull. Maybe she was fairly close to the truth. You cannot make the decisions and the judgments that you made today on the data that has been collected. People have talked about value judgments. You cannot make a value judgment and then make a whole string of decisions based on that. You have to go to the people who have actually lived in that world. I've lived in another world, a nationalised system, for three years, and I have friends who have worked in most other countries. I can tell you the lack of love and the lack of care in those systems has to be seen to be believed. The system absorbs the responsibility, which means nobody absorbs the responsibility. I returned to Australia and suddenly discovered that the buck stopped here, that the patients were my patients, they weren't the system's patients. And the difference, no matter what you say about theory, is immeasurable.

I'm grateful for another thing and that is that I and many of my colleagues have stayed resigned from the public system because we refuse to be public servants. I see today how those public servants are advised and it makes me think of some figures that were given to me recently: in the public service 40 per cent of people superannuate before their time and 60 per cent of those people do so on psychological grounds. I certainly do not want those people running my life. The public service has also given rise to the quarter million dollar man: the average age for retirement for a schoolteacher in the public service is 47 years and he takes a quarter of a million dollars with him. We cannot afford such regulation of our lives, of our delivery of health care. It is beyond all common sense to suggest government regulation of health care. We have to privatise or perish.

DISCUSSION

Dr Alan Grant, question to Dr Pickering: Did you hear that the superintendant of the Gosford Hospital, a 600-bed hospital and the only main hospital there, sent out a circular to all the medical staff saying the hospital was in a shambles, and of their six operating theatres only two are functioning throughout the day and sometimes one at night. We are 50 nurses short and it is not due to the doctors' withdrawal.

Pickering: I think that the crisis being talked about today has to do with Medicare. It is all about universal health insurance. There is a major problem with regard to the shortage of nurses, and I agree with the person who said that the government was at least partly to blame for that because they cut nursing intakes some years ago. I might say, however, that it was on the very best of professional advice that they acted. This question of nurses is obviously very serious, and there is some public sympathy for nurses. It has been discovered that there are some 250 working at the Myers shops in Melbourne, and they are being paid more as shop assistants than they were in our hospital system.

The truth of the matter is, however, that the vast percentage of Australians are getting critical and urgent health care immediately when they need it, and that an even larger number of people are getting their routine care within reasonable time.

Mr Robert Sheraton (Hospital Corporation of Australia): I would just like to ask what you regard as urgent and critical treatment and what you regard as reasonable timing, because there are a lot of people out there who feel that hip replacements are fairly urgent and that the time they are waiting for surgery is not reasonable. I would be interested to hear, because you use the terms 'urgent' and 'critical'. What is your definition?

Pickering: Well, obviously, life threatening and as they were described earlier in another paper, those causing grave concern to the patients affected. But again, I would like to conduct the public opinion polls here that were used in Britain and Canada to see whether the Australian public is satisfied with its health system, both private and public sectors. I predict that we would get the same result they got in the UK, namely a high level of public satisfaction.

Mr Peter Welsh (Richards Medical Company): Figures were quoted earlier that somewhere in the vicinity of 90 per cent of people in the UK were happy with the medical services they were receiving. My question is, is that the same 90 per cent of people that do not use the health care system on a general basis? What about the 10 per cent that are the sick percentage of the population?

Pickering: I will just note that I worked in the Canadian system for 12 years and I did not see all the anxiety and misery that has been suggested here today associated with the Canadian Universal Health Insurance scheme, which has been in effect for many many years. But I think Dr Richardson would be the person to respond to the question about the British health service polls.

Dr Jeff Richardson (Macquarie University): Unless the British NHS has such an astonishing effect with its preventative care that only 10 per cent of the British population has been sick and received medical care, then it is fairly clear that more than 10 per cent of the British people has experienced the services provided by the NHS. I suggest that virtually everyone in Britain over a period of time has had contact with the system. So the question was inappropriate.

I would like to expand on a related point in reply to something John Goodman said about the accessibility of US health services to the poor. I have a quotation here from John Bunker, a respected medical epidemiologist in the United States, dated April 1985, in which he states 'one of the disgraces of our national policy is that the poor and unemployed who cannot afford to pay for medical care or who have no insurance must often accept inferior treatment if they can get it at all'. This theme is repeated in the *New England Journal of Medicine* by perhaps the most respected health economist in the world, Victor Fuchs, also this year. While it has been claimed that people may lack information about nationalised services, exactly the same may be true in the market system. Clearly there are people who are not receiving care. In Australia there are Aborigines, there are chronically sick elderly, there are the near poor in the United States. The free enterprise system has swept these people under the carpet and unless there is no compassion among the remainder of the population one can only hypothesise that this information is not widely known.

I suspect that a number of the speakers behind me do not have a resounding faith in the democratic process. For a number of years and in all Western countries health care insurance and delivery has been thoroughly debated. The case for a private system has been advocated vigorously by private interest groups. However, in 1983

Margaret Thatcher, one of the chief advocates of privatisation, fought an election on the slogan, 'The National Health Service Is Safe With Us'. The reasons for that are analysed in a recent article in *Health Affairs*, and the answer given is that a well-informed British population has selected the NHS as an appropriate model. In response to Dr Shepherd's claim that he has experienced such systems, I would suggest that the British who live in Britain have experienced their system. Canadians who live in Canada have experienced their system. In both cases the merits of the systems have been extensively debated and in both cases public enthusiasm for them has made serious change electorally impossible even for conservative governments. In 1984 Mr Mulroney suggested the examination and reprivatisation of all aspects of social welfare except for Canadian Medicare. Virtually every Western democracy except for the United States has moved in the direction of such national schemes. To suggest that in every case the population has been misguided is not a strong resounding vote of confidence in the democratic system.

As for socialist health economists: the large number that I know, including myself, are generally in favour of selective reprivatisation in the economy. Many of us believe that the government has extended its role too far, that regulations have been extended far too far. However, this generalisation is not a universal truth. In a context where it has not been demonstrated it is no more than a working hypothesis. To extrapolate from one context to another and to draw dogmatic conclusions is to elevate a hypothesis to an ideology.

Menon: Professor Alan Maynard, whom you quoted, said that rationing of health care was inevitable under the system. Professor Donald Atchison, the head of the Health Department in Britain, told the Royal College of General Practitioners in Britain that the days when the GP had the freedom to prescribe the best for the patient regardless of cost were over. Also from Canada, you quoted Justice Hall. He must either be a liar or be blind or be forced to call all journalists in Canada liars. At home I have a pile of press clippings that thick of the front pages of newspapers, big newspapers like the *Ontario Globe and Mail*. There are headlines like 'Hospitals 100 million dollars in the red', 'Finance Minister plans to cut \$500 million from hospitals'. Are the Canadian journalists lying?

Richardson: Of course not. The comment made by Hall was about Medicare as a system. There is evidence that the Canadian capital stock has run down; that is a problem that has been accepted in Canada. Justice Hall was talking about the system as distinct from

how it has temporarily run down during a period of economic recession.

Dr Michael Walker (The Fraser Institute): I think you ought to let people know that the same Justice Hall that you are using as a source of evidence on whether the Medicare system in Canada is functioning well or not is the same Justice Hall on the basis of whose report in 1965 the Medicare system was based. In other words you can hardly cite him as an independent source of evaluation of the system.

Richardson: Of course I can. The quotation I made was that he received no submission that the system was not a good one. He was not expressing a personal opinion, he was saying that he had not received a negative submission, including the submission from the medical profession. The Canadian medical profession has not opposed Medicare.

Carlton: Can I just make a point about Hall. I went to Canada in 1983 to have a good look at this Hall quote because it's dragged up always by economists of a certain hue to support certain arguments about Canadian Medicare. Hall was one of the originators of the Canadian Medicare system. He was asked back by the government at the age of I think 84 to have another look. I read the report right through and talked to people that Hall had talked to. It's the most superficial document analysing anything that I've read in my life. I ask anybody who wants to form their own opinion about this particular little argument, go and read the Hall report. Just read it.

John Burton (Institute of Economic Affairs, London): I would like to take up this point that Jeff Richardson has raised. He points out that people do not act on the basis of perfect information about health care products and services, and he comes to the conclusion that when the information available to consumers is poor there is a strong case for abandoning or at least for interfering with consumer sovereignty.

I want to point out that this can be used equally as an argument to say that government should not interfere. The reason is that there are only two ways of making a choice in association with somebody else. You can either choose to enter into a free and voluntary transaction with somebody else, maybe a doctor or patient, or you can choose to subvert the market. Now, over a number of years from 1964 to 1969, 1976 to 1979, the Institute of Economic Affairs has carried out very large-scale sample surveys about voters'

understanding of government spending on health, education and welfare programs in Britain — to test their perception and understanding of what the political process was. What these studies have revealed is this: voters are appallingly ignorant, absolutely appallingly ignorant about how much government is spending on health, education and welfare and how that breaks down into certain programs.

So the first point I am making is, if you see this as a reason for interfering with the market process, it is equally a reason for suspending democracy. That is a logical consequence of the argument because there is even greater ignorance in the political market than in the free market and that is what we would expect from public choice theory, that people rationally think about the distribution of benefits and costs.

The second point I want to make is that when people are faced in these sample surveys with the question of whether they would prefer to have the government spend money on health, education and welfare, or whether they would prefer to have an equivalent tax reduction which if they liked they could spend themselves on health, education and welfare, the overwhelming majority always said they would prefer to spend the money themselves. The IEA surveys are the only ones that have ever asked that question in Britain, would you prefer to have your money back and spend it yourself. Of course people always say they think the National Health Service is good because they will always value something that is provided 'free'.

Just one other final point. You mention the consumption externality argument for government provision of health care in your paper. In fact that whole hypothesis has been tested and rejected by Robert Sugden. Those findings were published in the *Economic Journal* in 1980 and in another publication by the Institute of Economic Affairs called *Who Cares?* That hypothesis has been dismantled empirically.

Richardson: With respect to the argument concerning ignorance, the only conclusion I drew was that it casts great doubt on the market model. I was careful to draw no further conclusion. The next step in an analysis is to consider the empirical evidence. In my article I was trying to show that many of the arguments that have been used to date are inconclusive. I went no further, so to that extent I agree with the first part of your comments.

With respect to peoples' ignorance, there is quite a fundamental difference between what I was talking about and what you are talking about. The fact that people know the aggregate level of expenditure on something is quite irrelevant to the efficiency of the market.

People may have no idea what national expenditure on food is, yet they are quite capable of selecting the food they like. Why? Because after they have sampled the food they can assess whether or not they have received benefits from it. It is information at the individual level — whether or not a person can assess and choose — not information at the global level that is important for the efficiency of the market.

With respect to the National Health Service, you say that people would like to have money back to spend elsewhere. That theory is very simply tested by whether or not they actually vote to repeal the National Health Service. The evidence is that people do not select that option.

With respect to the final point, I would have to see the study you have quoted. But the suggestion that people are not concerned with the welfare of others is perfectly ludicrous. One of the most fundamental facts about health is that people are concerned about others. You can use the term 'merit good', or 'externality', or whatever you like, but people simply are concerned about other people.

Shepherd: The economists are frightening me more and more. Quite frankly, all I can see is that if we allow ourselves to go down the road to further control and further regulation by government then we are seeing the same inefficiencies that we have seen in all other things that government has been involved in. We cannot afford to do it. Every time the money goes through government, about 30 per cent of it is taken off as a handling charge, and that is what we cannot afford. We know that government cannot manage things. You can use all the economic theory you like to say that people want this and people want that but basically they want to be able to choose their own doctor, and it is up to us to give it to them. We know we can give it to them much more cheaply than government can, especially when they are guided by economists.

Dr Peter Catts (Association of Surgeons): There are lies, damn lies and statistics. I was quietly going to sleep and I didn't realise that Dr Richardson was going to drop these statistics on us deep in his paper. First he uses the infant mortality rate as evidence that the British NHS is a quality product. Then he goes on to say that the British NHS is cost efficient. Then he uses some fatuous public survey to say that 90 per cent of people support the British NHS.

We all know that if something is free and you ask somebody if they like it, of course they will say they like it. Also, despite what we doctors believe about ourselves, most people like doctors. At the

height of our dispute we got about an 80 per cent approval rating, much to our amazement. So I think that people in any country like their doctors, and they like their system, and they believe that the doctors are doing the best under difficult circumstances.

In 1969 I was practising surgery in England and I was a registrar. That has really left its mark on me, and that is why I am involved in the doctor's dispute now. My family was personally involved in sickness under the British NHS and I could not opt out because I was a registrar at the hospital. My private health insurance from Australia cost much less at that time than the money I was paying in tax stamps to run the British health insurance. I could not go private, I did not have the choice of doctor, and my child who was seriously ill had to be looked after by the registrars in the hospital, which is a common event in England. It is not a quality product.

To use a fatuous public approval rating in a country where they have never known anything but queueing is ridiculous.

I might also say that using the infant mortality rate as an estimate of the quality of the product is ridiculous. Look at the graphs: the Australian output is still much better than the UK output, if you believe that statistic. And looking further at the graph, the costs really start to go through the roof in 1975 with the introduction of Medibank into this country. Until that point the graphs are fairly parallel and not too far apart.

Richardson: First, with respect to the infant mortality rate, you are wrong. It has been universally accepted as one of the best indicators of quality in the provision of health services. The conclusion I drew was tentative on the basis of the available evidence; the alternative is to start manufacturing our own evidence.

Your ringing vote of confidence in British democracy is not encouraging. I assume the alternative to allowing voters to choose the health scheme they want is a politbureau of carefully selected libertarians who decide what may and may not be the subject of democratic choice.

With respect to British doctors generally, surveys have now repeatedly shown that they are in favour of the British national health scheme. It was not just one survey that showed the British public's approval of the health service.

With respect to Medibank, your figures are wrong. The costs of the Australian health care scheme rose shortly before Medibank; it was not a quantity effect, it was a price effect. The cost stabilised shortly after that.

With respect to Dr Shepherd's comments, he has twice said something about economic theory. I wish he had been here during

my paper. He would have recalled, had he listened to it, that I spent some time saying that economic theory leads to no particular conclusion; we must look at the evidence. The evidence that is available tentatively supports the hypothesis that regulated health sectors have performed well. It is in fact those people who refuse to accept that evidence who are dealing in theory, and that theory has become an ideology.

Doris McGillivray (Nurse): A few things seem to have escaped your attention in talking about the crisis. One is that, yes, nurses are leaving the public hospital system, they are leaving it in droves. And with the attitudes I have seen reflected here today maybe it is a good thing. My daughter is doing her college training now and I am wondering why she is.

The economics of the situation are this: nurses are leaving the hospitals and the government says great, wards are being closed because the nurses are leaving, that means less allocation that we have to give the hospitals. The fact is that a first-year nurse, a trained nurse, gets less money than the domestic who is cleaning the hospital floors. So please, while you are talking about economics, while you are talking about allocations, do not forget the nurses and do not put us down because you will not get very far without us.

Carlton: That is a good contribution because that gets to the heart of the issue. Economic theory is useful only in so far as it tells you something about how things work or how they might work. There is good economics and bad economics, and if economics is not about people it is bad economics.

I am a manager by training. Before I got into politics I had been in charge of factory operations, office operations, sales forces, production teams, all these sorts of things, and I have some understanding of when something is working and when it's not. Now, we have a rigid wage system that will not let you pay people properly according to their own merits and according to market needs. It is regulated and it is not working. We have a health system where the people who are supposed to be managing these places simply cannot do what they need to do to attract nurses. They cannot alter their pay, they cannot pay a good nurse more than a bad nurse, they cannot alter the conditions, they cannot do anything that a flexible, private sector management in a deregulated market could do. When is this country going to wake up? Nurses are a first-class example of what is wrong with this whole system.

Good economics is sensible economics, it is about people and how things work. And this system is simply not working. That is a simple

observation. I have tramped round 200 or 300 hospitals over the last three years, I have talked to hundreds of hospital managers, nurses and doctors. The system is simply not working and we are having ourselves on if we say let's leave this thing in its stable condition for another couple of years. It is not stable. It is not financially stable, it is not managerially stable. The whole thing is bleeding to death.

Shepherd: I would like to agree with one aspect of Mr Carlton's comments. There is great concern about the conditions of nursing staff in the public and private hospital systems, and I believe there is great danger of trivialising and using simplistic arguments about the nursing problems of today. To simply say the problem is money or conditions is to get at some of the factors, but it is a much more complex question of educational equivalency within the health system, power structures within the hospital system, and questions of status vis a vis the medical staff. The issue is very complex. The nursing staff problems of today will not be solved by simply making adjustments to Medicare.

INDEX

Access to medical care outside the US, 89. *See also* Equality of access

Adverse selection, 120

Advertising, restrictions on, 61, 82, 83

Age. *See* Elderly

Agent, relationship of patient and doctor, 115, 119, 125

Allocation: of government money, 107; of health spending, 8; of hospital resources, 68

Alternative Delivery Systems, 151

Ambulance service, 193

American Medical Association, 82

Australian Medical Association, 40, 101, 144, 194

Barriers to entry, 59-62, 105; in the US, 82

Blewett, Neal, vi, 51

Blue Cross-Blue Shield, 13, 84, 102

Breslow, Lester, 8

Bulk billing, 56, 116

Canada Health Act, 35

Cartel, in the medical profession, 5, 6; in Canada, 26; in the US, 83

Certificate-of-Need, 13, 145, 170-1

Certification, and licensing of doctors, ix, 61-2. *See also* Licensing

Charity, 103-4; as alternative to government, 70; in Canada, 34; reasons for, 139

Coinurance, 66, 128; defined, 116; effect of, on cost, 152, 153; effect of, on demand, 12, 17, 122; effect of, on health status, 123

Community health services, 126-7

Community rating principle, 120, 124

Competition, 128, 192; in Canada, 23; effect of, on costs, 67; and HMOs, 172; and quality, 168; in the US, 82, 83, 87

Consumer Choice Health Plan, 151-6

Contract, as a way of organising medical exchanges, 62

Copayment: defined, 116; effect of, on demand, 123; effect of, on supply, 123-4; level of, in Canada, 148. *See also* Coinurance

Cost-plus reimbursement: defined, 84-5; effect of, on efficiency, 102; effect of, on health care delivery, 169-71; effect of, on inventions, 105-6

Costs: administrative, 152; and benefits, 68, 136; in Canada under monopoly, 33, 34; and Consumer Choice Health Plans, 151, 152, 155; controlling, 147, 148, 152, 165, 191; and demand, 66, 115, 117; and insurance, 169; marginal, and marginal benefits, 9, 119, 126; and privatisation, 180; and regulation in US, 85, 145

Cure, vs prevention and cost effectiveness, 15-16

- Deeble, John, vii, 103. *See also* Scotton and Deeble
- Demand, x, 114; curves, 62-6, 116, 117; effect of government involvement on, 55, 60, 65; effect of insurance on, 100, 107, 124; and need, 114-5; and price, 17, 115, 116; and supply, 14, 166
- Department of Health, vi
- Deregulation: effects of, 61, 66-7, 68-9, 133; of insurance, 74; of private hospitals, 145. *See also* Regulation
- Diagnostically Related Groups, 102, 174; and costs, 13; in Australia, 195
- Doctors, definition of, in Australia, 101. *See also* Physicians
- Drug abuse, 103
- Drugs. *See* Pharmaceuticals
- Economic efficiency. *See* Efficiency
- Education, effects of subsidising, 60-1
- Efficiency, economic, 94-5; vs equality of access, 114; incentives to attain, 16, 86
- Elderly; discrimination against the, 89-90, 93; privatising health care for the, 186-8
- Emergency centres, 193
- Entitlement programs, 182-3
- Entrepreneur, doctor as, 105, 106
- Equality of access to medical care, 89, 114, 150, 154-5
- Expenditure on health: as a proportion of GDP, 103, 124, 149, 192; effect of coinsurance rate on, 122; and supply, 125; and success of health system, 147; total, in Australia, 53
- External benefits, 9, 10, 126
- External demand vs meritorious good, 139
- Externality: defined, 71; and deregulation, 70-5; negative, 62
- Fee-for-service, 105, 128, 167-8
- Fraud and Overservicing Detection System, 56-7
- Free market, 3, 81
- Free riders, and charitable organisations, 139
- Friedman, Milton, 5, 24
- Friendly Societies, 47
- Government, role of, in health care, vii, 4, 24
- Grandfather clause, 47, 60, 105. *See also* Licensing
- Gresham, Sir Thomas, 4
- Health Benefit Card, 52-3
- Health economics, vi, 3. *See also* Welfare economics
- Health Maintenance Organisations, 151, 165, 171-2; effect of, on supply and price, 153; in Australia, 195
- Health status: effect of coinsurance rate on, 123; under nationalisation, 18; predictors of, 8
- Hill-Burton Program, subsidising nonprofit hospitals in US, 83
- Hospital Corporation of America, 83
- Hospitals: administration of, 194-6; in Canada, 35-6; deregulation of, ix, 144, 145; public, vii, ix, 191, 192; regulation of, 67-9
- Humana, 83
- Incentives, 67, 87, 109
- Independent Practice

- Associations, 151
- Infant Mortality, as indicator of quality health care, 146, 147, 202, 203
- Information: available to consumers, 70, 136-8, 156-7, 201; available to providers, 138; effects of regulation on availability of, 70, 141
- Institute of Economic Affairs, 200-1
- Insurance: in Canada, 35-6, 37; deregulating, 74; effect of, on cost, 169-71; effect of, on demand, 5, 37, 121, 169; effect of, on technology, 12; history of, in Australia, 47-8; incentives created by, 13, 50, 109 (see also Moral hazard); and moral hazard, 13; private, 120, 189; regulations on, 48, 51, 52, 62-7, 74, 101, 124, 146-7; and risk profile, 4, 128, 140; in the US, 84-6, 109-10; universality of, 49, 197, 124, 126, 128
- Jamison Committee, 68
- Kaiser Permanente, 172
- Labour market, deregulation of, x
- Licensing: as a barrier to entry, 25, 105; in Canada, 24, 41; vs certification, 41, 100; in the US, 6, 82. See also Grandfather clause
- Longevity, predictors of, 8
- Marginal cost. See Cost, marginal
- Market closure legislation, 47
- Market failure, as basis of welfare economics, 136, 141
- Medibank Mark I, 49, 55, 107
- Medical Benefits Schedule, 48-9, 50
- Medical Individual Retirement Accounts, 187-8
- Medical schools: in Canada, 26; and monopoly, 6; in the US, 82
- Medical services, history of, 25-6, 47-50
- Medicaid. See Medicare (US)
- Medicare (Australia), 55, 62, 69, 116, 192
- Medicare (Canada), 36-7, 147, 148, 199, 200
- Medicare (US), 11, 18, 88; and costs, 102, 170; privatising, 187-8
- Meritorious good vs external demand, 139
- Midwifery, practice of, in Canada and the UK, 33
- Modalities, treatment, benefits vs cost of, 119-20
- Monopoly, 24; of insurance in the US, 84; over the medical profession in Canada, 23, 26, 38, 41, 100
- Moral hazard, 5, 11, 13, 118, 169
- Mortality, infant. See Infant mortality
- Mortality rate, 90, 94-5
- National Health Insurance (Canada), 15, 18
- National Health Service (UK), 14, 16-17, 202-3; and equality of access, 14-15, 89, 126, 150; evaluations of, 134, 150, 198-9; and health status, 18
- Nationalisation, of the health care industry, 13-15, 18, 58-9
- Need, 7, 14. See also Poor
- Negative externalities, 62
- Nimmo Report of 1969, 48

- Nonphysician health personnel, 25, 33, 82-3, 105
- Nurses, dissatisfaction of, 103, 191-2, 197, 204, 205
- Nursing homes, regulation of, 67-9
- Optimal pricing strategy, 55
- Overservicing, 56-8, 65-6
- Page Plan of 1928, 48
- Page, Sir Earle, 1951 health plan, 48, 124
- Parkinson's Law of subsidy, 68
- Pauly, Mark, 5
- Penington Inquiry, 113, 125, 143
- Pharmaceuticals: cost of, 106, 144; under a free market, 74; regulations over, 101, 144
- Physician Service Review Organization, US, 170
- Physicians, income of: in Canada, 32, 36, 38, 40, 148; in Australia, 55-6, 65, 144
- Pigou, A.C., 9
- Poor: providing health care for the, 7-8; in the US, 88
- Positive theories of regulation, 133
- Preferred Provider Plans: lowering spending, 13; described, 173-4
- Prepayment plans, 171-3
- Prevention, vs cure and cost effectiveness, 15-16
- Price elasticity of demand, 115, 116, 121, 127
- Price: of drugs, 144; effects of regulations on, 60, 61; and supply, 166. *See also* Cost
- Pricing strategy of sellers, 64-5
- Private interests hypothesis, 141
- Privatisation, of government health care programs, 179-89
- Property rights, and public health problems, 71-3
- Public health: infectious diseases, 73-5; externalities, 71-5
- Public interest model, 10
- Queues: in Australia, 108, 125, 127; under deregulation, 68-9; and equality, 149; as a rationing device, viii, 17, 39, 125. *See also* Rationing
- Rand health insurance experiment: described, 122; applicability of, to Australia, 195
- Rationing, viii, 81-95; in Australia, 125; in Canada, 39; conditions that cause, 125-6, 149-50; by government, 92, 193; in the UK, 149, 199; in the US, 149. *See also* Queues
- Redistribution, 70, 133, 141, 182
- Regulation, ix, 110, 133, 141; and availability of information, 70; coherence of, 145, 151; and costs, vii, 142, 145, 170; of health care institutions, 67-9, 144; of insurance, 62-7, 101; of physicians, 47, 59-62, 82. *See also* Deregulation
- Rent, market closure, 60, 68
- Risk, exposure to, and demand for insurance, 4, 166
- Roemer's Law of supply-induced demand, 144. *See also* Say's Law.
- Say's Law of Medicine, vi, 56
- Scan Profile, 57
- Scotton and Deeble, 3, 5, 49

- Section 17 provisions, of
Medicare, 51
- Self-insurance, 50, 107
- Social Security, privatising in
the US, UK and Chile,
182-6
- Social Welfare Policy
Secretariat, 52
- Social cost, and social value, 9
- Socialised medicine, in
Canada, 24, 25
- Strike, NSW doctors', vii, 51,
113, 196
- Supply: effect of demand on,
138, 144, 166; effect of
HMOs on, 153; effect of
regulations on, 14-16, 26,
39, 55, 60, 107, 108
- Supply-induced demand, 138,
144
- Sweden, inequality in health
care in, 89
- Technology, 144, 150, 154;
and costs, 34-5; under
government regulation, 92;
life cycle of a new, 12, 138;
to prolong life, 102
- Thatcher, Margaret, and
privatisation, 100-101, 199
- Third-party payments, 49, 52,
56, 113-14, 116-20, 124-7
- Universality, 49, 197;
compulsory, 124, 126, 128
- Voucher, as part of welfare
benefit, 128
- Waiting list. *See* Queues
- Waiting time, as a cost, 117
- Welfare 139, 140, 141
- Welfare economics, 133, 156.
See also Health economics
- Welfare loss: due to excess
demand, 118; due to
universal insurance, 127
- Windfall losses, 61

CIS PUBLICATIONS IN PRINT

READINGS

1. **Wage-Price Control: Myth & Reality**, edited by Susha R. Shency.
(1978) ISBN 0 9596485 0 X \$6.95
2. **Rent Control: Costs & Consequences**, edited by Robert Alton.
(1980) ISBN 0 9596485 7 7 \$9.95
3. **A New Financial Revolution?** edited by Malcolm Fisher.
(1982) ISBN 0 949789 04 5 \$7.00
4. **The Constitutional Challenge**, edited by Michael James.
(1982) ISBN 0 949789 01 0 \$7.95
5. **Occupational Regulation and the Public Interest**, edited by Robert Alton and Greg Lindsay.
(1984) ISBN 0 949789 13 4 \$8.95
6. **Chaining Australia: Church Bureaucracies and Political Economy**, edited by Geoffrey Brennan and John Williams.
(1984) ISBN 0 949789 18 5 \$6.95
7. **Hayek's "Serfdom" Revisited** by Norman Barry et al.
(1985) ISBN 0 949789 22 3 \$10.95

RESEARCH STUDIES IN GOVERNMENT REGULATION

1. **Domestic Airline Regulation: The Australian Debate** by Michael G. Kirby.
(1991) ISBN 0 9596485 9 3 \$5.50
2. **Rationalising Rustic Regulation** by E. Seger.
(1982) ISBN 0 949789 02 9 \$5.50

POLICY MONOGRAPHS

1. **On Buying a Job: The Regulation of Taxicabs in Canberra** by Peter Swan.
(1978) ISBN 0 9596485 3 0 \$2.00
2. **Lessons from the Ord** by B.R. Davidson and Susan Graham-Taylor.
(1982) ISBN 0 949789 03 7 \$3.95
3. **The Politics of Multiculturalism** by Raymond Swain.
(1982) ISBN 0 949789 06 1 \$3.95
4. **Free to Shop** by G.R. Hogben.
(1983) ISBN 0 949789 08 6 \$5.95
5. **The Resource Rent Tax: A Penalty on Risk-Taking** by Ray Ball and John Bowers.
(1984) ISBN 0 949789 15 0 \$3.00
6. **Capital Xenophobia: Australia's Controls of Foreign Investment** by Wolfgang Kasper.
(1984) ISBN 0 949789 21 5 \$8.95
7. **Private Correspondence: Competition or Monopoly in Australia's Postal Services?** by Robert Alton.
(1985) ISBN 0 949789 20 7 \$10.95
8. **Affirmative Action: The New Discrimination** by Gabriel Moens.
(1985) ISBN 0 949789 27 4 \$11.95

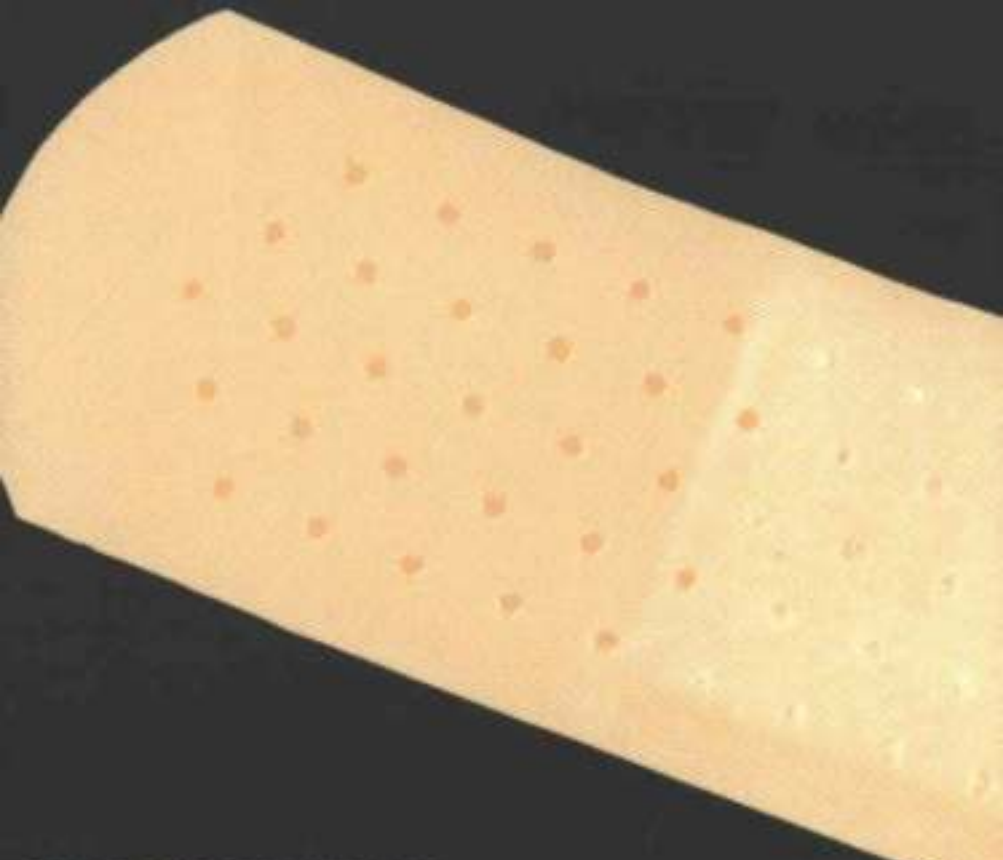
POLICY FORUMS

1. **The Economics of Bureaucracy and Statutory Authorities** by Gordon Tullock et al.
(1982) ISBN 0 949789 10 X \$5.95
2. **The Entrepreneur in Society** by Barry Maley et al.
(1982) ISBN 0 949789 07 X \$5.95
3. **Changes in the Air? Issues in Domestic Aviation Policy** by Christopher Findlay et al.
(1984) ISBN 0 949789 16 9 \$6.95
4. **Policies and Prescriptions: Current Directions in Health Policy** edited by Andrew S. Duman.
(1986) ISBN 0 949789 28 2 \$14.95

OCCASIONAL PAPERS

2. **Social Justice, Socialism & Democracy** by F.A. Hayek.
(1978) ISBN 0 9596485 3 4 \$2.95
4. **Taxation, Inflation and the Role of Government** by Milton Friedman.
(1981) ISBN 0 949789 00 7 \$3.50
5. **The Rhetoric and Reality of Income Redistribution** by Gordon Tullock.
(1981) ISBN 0 949789 08 8 \$2.50
6. **Liberty, Justice and the Market** by Lauchlin Curran.
(1981) ISBN 0 949789 05 3 \$2.00
7. **The Christian and the State** by Geoffrey Brennan.
(1982) ISBN 0 949789 11 8 \$3.00
8. **Democracy in Crisis** by Michael C. Jensen and William H. Meckling.
(1982) ISBN 0 949789 12 6 \$2.00
9. **UNCTAD and the North-South Dialogue** by Kenneth R. Minogue.
(1984) ISBN 0 949789 14 2 \$3.00
10. **The Role of the Entrepreneur in the Economic System** by Israel M. Kirzner.
(1984) ISBN 0 949789 19 3 \$3.00
11. **The Case Against the Arbitration Commission** by P.P. McGuinness.
(1985) ISBN 0 949789 25 8 \$3.50
12. **Enterprise: Free, Dependent or Captor?** by Warren F. Hogan.
(1985) ISBN 0 949789 23 1 \$3.95
13. **Trial Without Error: Anticipation vs Resilience as Strategies for Risk Reduction** by Aaron Wildavsky.
(1985) ISBN 0 949789 17 7 \$2.95
14. **The Anti-Capitalist Mentality: Post-Mortem for an Ideology** by R.M. Hartwell.
(1985) ISBN 0 949789 26 6 \$3.95
15. **Ideas about Freedom: A Discussion** by Kenneth R. Minogue, John Gray and Hannes H. Gausson.
(1986) ISBN 0 949789 29 0 \$3.95

(Prices are subject to change without notice)



POLICIES AND PRESCRIPTIONS

Current Directions in Health Policy

Contributors

Cotton M. Lindsay • Michael A. Walker • John Logan
John C. Goodman • Andrew S. Dorman • J. Richardson

Australian governments have been involved in health care ever since the first doctors came on the ships with the first convicts. The essays in this collection were originally presented at a major conference on health care policy organised by the Centre for Independent Studies. They recount the results of the Australian experience and the experiences of other countries, analyse those results, and suggest a greatly diminished role for government in the health care industry.

Cotton M. Lindsay and John C. Goodman describe aspects of health care in the United States where the market is much less regulated but people are still very concerned about cost escalation. Michael Walker, a Canadian, recommends breaking the doctors'

monopoly by allowing a wider range of people to practise medicine and give health care treatment. John Logan outlines the long-term implications of Australia's tendency to let government take care of health care. Andrew Dorman, convener of the conference, deals with health insurance and its effects on the medical marketplace. J. Richardson examines evidence for and against government involvement in health care and applies it to the Australian situation. A panel of health care experts offer their comments on the research