Healthy Competition

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Foreword

Michael James

Probably no state-supplied service is as resistant to liberalisation as health care. Indeed, in Australia the trend is actually towards increasing centralisation of government control. This is despite the fact that the potential advantages of allowing more private competition in other services, such as education, are now widely appreciated, even if progress in that direction remains very slow. It seems that to many people, the very idea of a market in health care is outrageous. Why should anyone be allowed to profit from other people's sickness? Should not something as basic and important as the health of the community be attended to by the community as a whole through its collective agencies? Surely good health is a basic right to which everyone is entitled regardless of income?

And yet we take it entirely for granted that we have a free market in the absolutely basic commodity of food. When farmers fail to make profits from other people's hunger, we tend to feel sorry for them. Agricultural subsidies are widely regarded as economic madness. Why the difference? Presumably because, whereas food production has always been driven mainly by market forces, we have become so used to health care being a government service that we assume we would be automatically worse off if we had to take more individual responsibility for it. So deeply entrenched is this attitude that, when government health services (inevitably) fall short of expectations, the typical response is to call for more government spending on them, rather than to look to privately-supplied alternatives. Even Margaret Thatcher has deemed it necessary to assure British voters that her efforts to make the National Health Service more efficient will not violate the principle of 'free' health.

A major achievement of this contribution to the CIS Health Policy Research Program is to demonstrate that health care, like any other commodity, can be produced efficiently and equitably only when producers are subjected to competitive pressures and consumers can work out their prefer-

ences in the light of fully costed alternatives. This isn't to say that health care is no more important than any other good or service; the point rather is that it's too important to be subjected to the inefficiencies and distortions that typically flow from government's attempts to supply goods that the market is better equipped to handle.

Another of this volume's achievements is to show just how imaginative and resourceful the producers and consumers of health care and health insurance can be when confronted with the right incentives and opportunities. The American health system, so often denigrated for looking after only the rich, is in fact undergoing a transformation that is dramatically reducing health costs. There is no reason why similar changes should not occur in more collectivist countries like Australia and New Zealand. But first the point needs to be grasped that a government near-monopoly in health supplies will inevitably reflect the interests of producers at the expense of those of the consumers, not just by protecting producers from competition but also by denying consumers the information about costs and alternatives they need in order to frame rational preferences.

Another good reason for transferring to individuals more responsibility for their own health is to stop governments engineering 'healthier' individual behaviour in the effort to contain state spending. Anti-smoking campaigns, for example, have already moved on from the infantile propaganda stunts of several years ago to outright bans on smoking in certain places. Similar campaigns, often based more on fashion than hard fact, are already taking off to reduce the consumption of alcohol and 'junk' food. These efforts are not only likely to fail; they are less effective than a revived health insurance market would be in providing incentives for healthy living without loss of liberty by making individuals pay for the risks inherent in their own behaviour.

The three authors of this volume are jointly responsible for its entire contents. However, each author is primarily responsible for the coverage of a specific country's health system: John Logan for Australia's, Alan Woodfield for New Zealand's, and David Green for America's. John Logan also drafted the appendix and, with Alan Woodfield's assistance, the introductory chapter on the standard arguments for government intervention in health care. The authors stress that, while they may differ on the precise policies they recommend, they agree entirely on the principles that should inform government involvement in health care.

Finally, the CIS gratefully acknowledges the assistance of Rose Philipson in compiling the index, coordinating the contributions of the authors, and generally preparing the volume for publication.

List of Abbreviations

AAMC	American Association of Medical Colleges
ABMS	American Board of Medical Specialties
ACC	Accident Compensation Corporation (NZ)
AHA	American Hospital Association
AMA	American Medical Association (US) Australian Medical Association (Aust)
ANA	American Nurses Association
ASO	administrative services only (US0
BHPr	Bureau of Health Professionals (US)
BMA	British Medical Association
CON	certificate of need (US)
DRG	diagnosis related group (US)
FSA	flexible spending account (US)
FMG	foreign medical graduate
FTC	Federal Trade Commission (US)
GMS	General Medical Services (NZ)
HHS	Health and Human Services (US)
HIAA	Health Insurance Association of America
HMO	health maintenance organisation
HSA	health systems agencies (US)
HUS	Health United States
IPA	independent practice association
JAMA	Journal of the American Medical Association
JCAH	Joint Commission on Accreditation of Hospitals (US)
LCME	Liaison Committee on Medical Education (US)
MBS	Medical Benefits Schedule (Aust)
MPP	minimum premium plan (US)
NHS	National Health Service (UK)
NZMA	New Zealand Medical Association
NZPHA	New Zealand Private Hospitals Association
OBD	occupied bed-day
PPA	preferred provider arrangement
PPO	preferred provider organisation
PRO	peer review organisation
PSRO	professional standards review organisation
TEFRA	Tax Equity and Fiscal Responsibility Act (US)
TPA	third-party administrator
UCR	usual, customary and reasonable (fees)
VHIAA	Voluntary Health Insurance Association of Australia

Glossary

(In the text, Glossary entries appear in bold type followed by an asterisk.)

ACCIDENT COMPENSATION CORPORATION: In New Zealand, a government body that insures all citizens against medical costs resulting from any accident.

ADMINISTRATIVE SERVICES ONLY: An arrangement whereby an insurance company or other organisation pays claims and provides other administrative functions for a self-insured employer group.

ADVERSE SELECTION: The tendency for the rolls of insurance companies to contain a disproportionately high number of less healthy people compared to the general population.

BULK-BILLING: In Australia and New Zealand, when doctors charge the government directly for each patient and receive their percentage of the officially scheduled fee, while the patient pays nothing at the point of service. Doctors therefore receive a lower fee, but are able to simplify their paperwork and escape bad debts.

CO-INSURANCE: A provision of insurance policies requiring the insured person to pay a proportion of each medical bill, usually 20 per cent.

CO-PAYMENT: Another name for co-insurance, generally reserved for fixed subscriber contributions (e.g. $5 for each visit to a doctor) as opposed to percentage payments.

CONCURRENT REVIEW: A technique of utilisation review that involves a nurse reviewer or physician adviser in the employ of the insurance company double-checking the treatment recommended by doctors before and during hospitalisation.

DEDUCTIBLE: The (deductible) amount that must be paid by an insured person before insurance cover begins, like the 'excess' in motor insurance. It is often an annual figure of about $200.

DIAGNOSIS RELATED GROUPS (DRGs): A classification of medical conditions according to the cost of treatment and clinical similarity. Under US Medicare, patients are classified according to the condition responsible for their admission to hospital, and the provider is paid a fixed price for each of 460-odd DRGs.

EXTERNALITY: A benefit (positive externality) or cost (negative externality) that one's activities incidentally bestow upon others. For example, smoke pollution is a negative externality produced by people consuming tobacco.

FRIENDLY SOCIETIES: Voluntary, non-profit organisations that provide medical and other benefits to members. Membership is generally by

subscription. Friendly societies are a type of 'insurance club'.

GENERAL MEDICAL SERVICES (GMS) BENEFIT: In New Zealand, a subsidy on the doctor's fee to the patient, financed from general tax revenue. It is claimed from the Department of Health by general practitioners under bulk-billing arrangements.

INDEMNITY INSURANCE: An arrangement under which the insurer pays either a pre-determined sum for a covered service, or, the actual expenses of the insured person for each claim, up to a previously agreed maximum.

MALPRACTICE INSURANCE: A type of insurance that covers doctors in the event of their being sued for damages by dissatisfied patients.

MEDIBANK: In Australia, the initial form of Medicare, introduced in the mid-1970s.

MEDICAID: A US federal government grant program in support of state schemes to provide medical care for the poor.

MEDICAL BENEFITS SCHEDULE: In Australia, the official list of approved charges for various medical services. It forms the basis of Medicare's reimbursement of doctors' fees.

MEDICARE: In the US, the federal government scheme to provide medical care for the elderly. In Australia, the program of government-sponsored national health care, in particular medical and hospital services.

MERIT GOOD: A good that the state holds people should be encouraged to consume, for example, education. The opposite is a merit bad, or demerit good, for example, pornography.

MINIMUM PREMIUM PLAN: An arrangement under which self- insured groups cover themselves against catastrophic losses, while remaining largely self-insured.

MORAL HAZARD: The name given to the changes of attitude on the part of both doctor and patient that occur because the patient is insured. Once they have paid their premiums, patients may take the view that they want to 'get their money's worth' and consume more health care than they otherwise would; and the doctor, knowing that either a large company or the government is paying, may advise unnecessary treatment and submit inflated bills.

NON-INDEMNITY INSURANCE (or SERVICE PLANS): Instead of paying a cash benefit the insurer undertakes to provide medical services in kind. The insurer pays the doctor directly or, in some cases, such as HMOs, the roles of insurer and supplier are integrated.

PEER REVIEW: Utilisation review carried out by committees of doctors, and excluding outsiders.

PRE-ADMISSION CERTIFICATION: When the insurer gives permission

in advance for treatment to be carried out.

PROFILE ANALYSIS: see UTILISATION REVIEW

PUBLIC GOOD: A good, the consumption of which by a person does not diminish the amount available to others, and for which it is not feasible to impose a user charge, for example, defense.

SELF-ADMINISTRATION: An arrangement under which a self- insured group provides all its own claims-handling services.

SELF-INSURANCE: An arrangement whereby a group, usually an employer, provides insurance cover from its own resources rather than by paying premiums to an outside insurer.

SERVICE PLANS: see NON-INDEMNITY INSURANCE.

SUPPLIER-INDUCED DEMAND: A theory that holds that, in some circumstances, suppliers (doctors) are able to create additional demand for their services without lowering prices.

UTILISATION REVIEW: The arrangements made to monitor the performance of individual doctors, including the intensity of their use of medical resources and the quality of care offered. It may occur before (pre-admission certification), during (concurrent review), or after treatment, as when the doctor's hospitalisation record is contrasted with some standard pattern or profile ('profile analysis') like median-use rates.

About the Authors

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His latest book, *Everyone A Private Patient*, was published by the IEA in May 1988.

Part I

Health Economics and Government Intervention

Health Policy in Australia and New Zealand

Chapter 1

Is There A Case for Government Intervention?

I. INTRODUCTION

Many economists who work in the area of health care believe that health care is somehow 'different' from most other goods and services with respect to the laws of economics. A life-threatening disease or serious accident in one's family can arouse intense feelings of fear and dismay. Access to a support and repair system in these circumstances is almost universally regarded as a 'right' for which government is responsible. The responsibility is especially strong when the patient is afflicted by poverty as well as disease. Politicians have for many years said that government should step in in the case of catastrophic illness or accident; neither price nor household budgets should act as barriers preventing treatment. Over the years this view has broadened to become the proposition that access to almost all health care in almost all circumstances is also a right; a right that must be paid for by others. In this book we show how the embodiment of this view in government health policy has affected resource allocation, costs, and efficiency.

In Australia and New Zealand the burdens upon the poor of catastrophic illness have been more or less successfully met by combinations of private charity and public subsidy, in varying proportions that have depended upon historical circumstances. The proportion borne by government has grown significantly over recent decades.

But the view that governments should shoulder the financial burden of virtually **all** of the myriad health services in demand was implemented only after World War II, commencing with the National Health Service (NHS) in the UK. The current Australian policy is to subsidise heavily both medical

services and hospital services that are delivered in the public hospital system. In New Zealand medical services are lightly subsidised, but public hospital services are almost totally subsidised by government.

What distinguishes the health systems of our two countries from the British NHS is that ours are essentially mixtures of private, fee-for-service medicine under public subsidy, together with public production that dominates the hospital sector. This is an unstable mixture, and if left alone it will evolve into either more oppressive government intervention, or higher costs of an increasingly inefficient system, with the burden shared among taxpayers and patients. However, recent experience in the US health marketplaces shows that there is a way out.

Government is involved in the health sector through the regulation of doctors, private hospitals and related institutions, and health insurance markets. Government justifies these regulations by arguing that health care and health insurance markets have special peculiarities that seriously impede efficient allocations of health resources in a free-market environment. We address this issue in Chapter 1 by examining various arguments that are used to justify government intervention in the health care market.

Chapters 2 and 3 concentrate on the health care delivery systems of Australia and New Zealand. They sketch the history of the market for medical services, describe the present situation in each country, and then analyse the effects of each country's particular brand of intervention.

In Chapter 4 we recount the early history of the health care market in the USA, and we show how the medical profession controlled virtually all aspects of the industry.

Recently the USA has witnessed a great expansion in the amount of competition for the health care dollar. These moves towards competition are described in Chapter 5. Chapter 6 draws together the general lessons to be learned from the US 'experiment' with a more free-market-oriented health care market.

Finally, Chapters 7 and 8 distil those lessons into policy recommendations for Australia and New Zealand.

A number of arguments have been brought forth for the purpose of establishing a rational basis for government intervention in health. Most of them fall into three broad areas. The first group of arguments maintains that the 'government', or some such authority, knows what is best for people in respect of health services; this is the 'merit good' argument. The second group seeks to establish that free, private, markets in health services fail to function in a socially optimal manner, and that it would be irresponsible for government not to intervene. The third group addresses the problem that a

free market system might not distribute health care 'equitably' among the population.

In this Chapter we address each of these broad areas in turn. We show that the arguments fail to provide any foundation upon which governments can base their interventist policies in the health sector, except in certain readily identifiable areas of market failure known as problems of public health. In Chapters 2 and 3 we show that much mischief is caused by government intervention itself, and so the real problem is one of government failure rather than market failure. Finally we suggest that using 'free' health care as a vehicle for delivering social welfare handouts fails to efficiently achieve its own target.

II. MERIT GOODS AND PATERNALISM IN POLICY

The concept of **merit goods*** was introduced into the mainstream economics literature by Musgrave (1959:13-14). Merit goods are goods or services of which some members of society do not consume 'enough', according to the judgment of a select group, generally a cultured elite or some governing class. The policy implication is that people should be encouraged (or forced), for their own good, to consume more than they themselves would freely choose to consume. Goods and services that have been thought to possess merit good attributes include education as well as health. Achieving the desired changes in people's consumption requires a policy of suitable differential taxes and/or subsidies, or perhaps direct regulation, since by definition people could not normally be expected to choose the 'right' amounts for themselves. In this way the government is thought to be justified in intervening in the relevant marketplaces.

Merit 'bads' can be thought of as the negative of merit goods, with people normally wanting to consume more than is thought to be 'good' for them. Examples from the health area could include fast foods, alcohol, or dangerous sports. The correct policy is then to encourage less consumption of such goods by differential taxes, direct regulation, or tax-funded exhortation.

The merit good argument for intervention is extremely paternalistic. The people who are targets of this kind of policy are assumed not to know that they themselves have any particularly strong preferences for the merit goods in question; if they did, a demand would emerge naturally in the relevant market.

Within the broad category of merit goods there are several separate arguments. One argument to which we alluded above is that most people —

that is, everyone not in the select, choosing, group — do not act in their own best interests and so should be targets for benevolent paternalism. But this is simply an unjustified assertion rather than an argument in the sense of a proposition validly deduced from fundamental axioms of behaviour.

Another argument is that there is an entity known as 'society', which exists over and above the individuals of whom it is composed. 'Society' then 'demands' the merit goods to be produced and delivered, thus maximising its collective utility. Unfortunately no one has come up with a way of defining a 'collective', or social, utility function that could be used to rationally inform policy — apart from the straightforward but brutal method of dictatorially imposing the personal preferences of some individual 'leader' of opinion. Similar problems of definition arise in connection with 'public interest', a term frequently offered up in defence of bureaucratic intervention but never defined in any rigorous way. The search for some measure of collective utility has attracted a vast literature, but the issue remains unresolved.

The merit goods case has also been defended from the point of view of consumer ignorance about the present environment and uncertainty about the future. People are 'rationally ignorant' in that it does not pay them to know all thing at all times; for example most people would probably prefer not to undertake an extensive training in medicine, given the costs. A person who remains rationally uninformed about medicine, law, or other complex subjects reveals a preference for hiring the specialised services of a trained professional who then acts as the person's agent. When people place a value on better information but find it too expensive to produce themselves, then a market emerges for specialists to produce the required services. In one sense, a **professional** is a specialist in the production of information in his or her chosen area of expertise. People seek information or guidance from a doctor or other agent about the course of action (i.e. treatment plan, and so forth) that the professional feels is most appropriate in the client's own individual circumstances.

This relationship works best within the environment of an open, competitive market. Competition forces doctors and other agents to recognise that their own interests are best served by standing as far as possible 'in the place of' the patient, or client, when offering advice and service. That is to say, market competition generates the environment in which patients receive the advice that they would give themselves, had they the same knowledge and expertise as their doctor. These beneficial market outcomes are endangered when governments intervene to regulate market processes. Of course, government can itself enter into the production and dissemination of (free) information. But the cost to 'society' is probably greater , and it is doubtful

whether the outcome would compare at all favourably with what is potentially available from the free operation of market forces.

Finally there is an argument based on utilitarian principles: that the general consumption of merit goods within society yields benefits, or 'utility', to approving members of society, such as the elite or governing class. This is a 'positive externality' (see below), which **may** provide a case for, say, subsidising the consumption of merit goods. However, as discussed above, we still have no way to operationally determine the precise rates and incidence of the subsidy without being altogether arbitrary. Additionally, those who benefit vicariously from the merit good consumption of others are perfectly free to provide their own voluntary subsidies through donations.

Various combinations of these several arguments attract the favour of politicians and bureaucrats. But do they provide a sufficient basis for government intervention? As we have seen, there is no rational and operational method of selecting those particular commodities that are especially endowed with merit. Nor are there any rational rules that can provide guidelines for determining which categories of people are to be targeted for merit good consumption, or how much of each of the chosen commodities it is optimally meritorious for these persons to consume. Nor is there any way of determining exactly who in society should be granted membership in the select or governing class, while avoiding the outcome of dictatorially imposing minority preferences (assuming that this is undesirable). The answer must be that the merit good arguments offer no justification for government's intervention in the market for health care.

III. MARKET FAILURE

Markets are institutional arrangements for the transfer of ownership (i.e. rights to use goods and obligations to provide services). Markets are **necessary** in our kind of society in order that people can acquire ownership of the bundles of goods they prefer. Markets economise on the costs of carrying out transactions, and so facilitate the exchanges that make all market participants better off. Generally markets perform this function best when left undisturbed by government intervention. However there are circumstances in which markets do not perform their function efficiently. In these cases, markets are said to 'fail' in one way or another, and the question here is to what extent might this be so in the case of health.

Four main areas of market failure have been claimed for health: externalities, asymmetric information and moral hazard, monopoly on the

supply side, and supplier-induced demand. We address these claims in turn in the remainder of this Chapter.

Externalities*

Externalities are basically spillovers of some peoples' activities that affect other people who can be thought of as 'innocent bystanders'. For example rotting garbage creates smells; this has a negative affect on the welfare, or 'utility', of others, and so is termed a 'negative externality'. A positive externality is the opposite: for example an attractive garden benefits passers-by. The point is this: if the producer of a negative externality can escape the full cost of his or her actions (for example the cost of cleaning up pollution), then too much of the negative externality will be produced. Likewise, if the producer of a positive externality cannot reap the full reward, then too little will be produced. One way, but not the only way, of correcting the situation is for the government to intervene where externalities seriously affect many people.

The major externality arguments in the health area have to do with the negative effects of people's activities; the two main examples are sanitation and infectious disease. In the absence of government intervention it is extremely doubtful that our environment would be acceptably sanitary and free from preventable disease. In a similar way, unsubsidised medical research, particularly 'pure research', which yields little in the way of immediately marketable innovations, might not be produced within the medical, hospital, or pharmaceutical industry.

Most people would probably agree that it is appropriate for the government to get involved in this general area of public health (see **public good***). Although governments may choose to produce public health services such as sewage treatment themselves, they always have the option of subsidising production in the private sector via, say, a system of public tender. Government production is always susceptible to political influence and to inefficiencies that are endemic in government activity. At least under a tender system, if correctly organised, competition serves to contain the costs of production and government can then simply monitor the outcome. Even in the case of medical research, one wonders how much might still be carried out if universities and research laboratories became private institutions that relied for their survival entirely upon student fees and individual or corporate philanthropy.

In any case, our governments' expenditures upon public health and medical research remain but a tiny proportion of total public sector outlays

on health and health-related services; about 2.5 per cent in Australia and about 2.3 per cent in New Zealand.

Information

As discussed above in connection with merit goods, it does not pay to know everything. When information is costly to produce and acquire, it pays people to purchase information from specialists who are able to produce and sell it more cheaply. The more complex the subject matter, the more it costs to acquire a workable body of knowledge and expertise, and the more it pays people to remain rationally ignorant of the subject and to hire the services of a trained professional, such as a doctor, lawyer, or real estate agent, to act as agent and consultant. To say that doctors or other professionals exploit the ignorance of their clients is like saying that teachers exploit the ignorance of their pupils or road-map sellers exploit the ignorance of tourists (Alchian and Allen, 1977: 264-5). In fact, a trade takes place in agent-client relations that benefits **both** parties: the client receives an expert opinion in exchange for a monetary consideration, which rewards the professional for time and effort previously invested in training. As discussed above, free market competition unhampered by government regulation enhances the efficiency of this exchange, assuming that the law sufficiently penalises fraud and misrepresentation.

However, a condition of 'asymmetric information' is said to exist when participants on one side of the market know more about their own quality (for example) than do participants on the other side of the market. Doctors know more about their own true quality than do their patients, especially when competitive advertising is not permitted in the medical marketplace. Naturally, doctors get to know more about the health status of their patients than do the patients themselves, but this is because of the doctor's expertise and not because information is asymmetric.

The free market is said to potentially fail under asymmetric information. One reason given is that open market trade forces all doctors to charge the consultation fee that is appropriate for a doctor of average quality only, and so high quality professionals will leave the marketplace or not enter in the first place. The result in the long run is a fall in the **average** quality of doctors in the market (Leland, 1979). Note that this has nothing to do with fraudulent claims on the part of doctors; it is a consequence of market processes.

The implication that is frequently drawn is that governments must intervene to ensure that practising professionals are adequately trained and conform to certain performance standards. We turn in Chapters 2 and 3 to

the question of whether government regulation in medicine really ensures better quality than would emerge in an open market. However, in markets where compulsory certification is absent, it frequently pays professionals themselves to establish codes of behaviour and even to supply certification. In medicine, Fellowship of the relevant Royal Society is a signal of particular specialist status, even though there is no law that prevents others from performing specialist services other than potential liability in tort for malpractice.

A second important situation in which asymmetric information is said to distort market signals occurs in the health insurance market, where the problem can take two forms. The first, known as **'adverse selection',*** occurs when people who demand health insurance are aware of certain medical conditions, or perhaps have unhealthly lifestyles (e.g. smoke or drink excessively), which they can successfully hide from insurance companies. In this case, the potentially insured knows more about his or her own riskiness than does the insurance company, so that information is asymmetric. When insurers base their premiums upon risks ascribed to the population at large, they will attract demand from people who are really at greater risk. Eventually the claims made upon insurers who have unwittingly priced their policies too low will mean that premiums must rise, for otherwise insurers will continue to make losses. This means that insured people of average risk pay higher premiums than they would have paid if insurers' portfolios of clients had not contained a biased selection of individuals. In this way, asymmetric information is said to lead to 'adverse selection' by insurance companies.

Is this a case for government regulation? Competitive insurance markets will generally respond to adverse selection by designing a variety of contracts with built-in self-selection mechanisms. For example, people who know they are good risks will choose contracts with lower premiums and higher rates of co-insurance (Rothschild and Stiglitz, 1976; Wilson, 1977). This may not be an efficient solution, but the problem is that government would itself need to know who are the good risks and who are the bad risks in order to effect an improvement. In addition, recent work indicates that in competitive insurance markets innovations in policy design may mitigate the consequences of adverse selection; we return to this briefly below.

The second insurance problem of asymmetric information is known as **'moral hazard'.*** Once a person has succeeded in gaining insurance cover, his or her behaviour can change because he or she then faces a lower cost at the margin of the hazards that are covered by the policy. People will tend to engage in more hazardous and unhealthy (but enjoyable) activities if they know it will cost them less to fix up the damage. As with adverse selection,

premiums rise, and the costs are spread over all insured persons. But moral hazard is not restrained by higher premiums because, first, the cost is sunk and is therefore ignored in subsequent behaviour decisions; and second, anticipated future increases in premiums do not necessarily have any bearing on one's own intensity of hazardous living, unless insurers can invent appropriate incentive or monitoring mechanisms.

Is government intervention necessary to correct these alleged failures in insurance markets? Let us examine the problems an individual faces in planning for future health expenditures. Health expenditures over one's lifetime have two components. The first is reasonably predictable, arising from events such as pregnancies and the effect of ageing. Individuals can successfully deal with this problem by adopting a life-cycle personal savings plan. Their incentive to do this is weakened if they anticipate that they will receive government subsidies. However, a free market could reasonably be expected to develop and offer opportunities for individuals and households to invest in plans that, for instance, bundle lifetime cover for the usual medical and hospital services, together with a contingency for eventual demand upon nursing home accommodation and other medical services that rise rapidly with old age. The gain to the individual is the opportunity to smooth cash outlays over time.

The second component of health expenditure is less predictable. Any person could be forced to make a great many demands on the health system in his or her lifetime as a consequence of events over which the individual has little or no control. Each person handles this problem according to how much risk he or she is willing to bear.

Whether insurance markets are efficient at handling risk has been the subject of extensive discussion in the theoretical literature. The seminal paper was written by Kenneth Arrow (1963), who demonstrated rigorously that universal health insurance, when individuals are themselves averse to bearing risk, is an improvement that can potentially benefit everybody. This proposition was seized upon as one justification for subsequent policies regarding the introduction of universal health schemes, such as Medibank in Australia. However, policy designers have generally ignored the other important parts of this paper, for Arrow also showed that, assuming both insurer and insured are averse to risk-bearing, an optimal policy is one that bundles a front-end deductible with co-insurance thereafter. In subsequent debate upon Arrow's initial paper, it was pointed out that Arrow had assumed that the production of insurance is a free good. In the presence of transactions costs (in particular, administrative overheads), people will freely choose to commercially insure only against large expenditures that are expected to occur with low probability, and to self-insure against the lower-cost, more

predictable services such as visits to the GP. This behaviour is supported by evidence from the US in the pre-Medicare/Medicaid period (Lees and Rice, 1965). That is to say, in their purchases of health insurance under open market conditions, people behave in much the same way as they do when purchasing motor vehicle and house insurance, which is not novel or surprising.

Over the last few years, a growing literature on efficiency in the insurance market has served to exorcise the twin demons of moral hazard and adverse selection. Not only might moral hazard be significantly less of a problem than was originally supposed (see Ehrlich and Becker, 1972), but it is possible to mitigate its effects by including correctly designed monitoring devices and incentives in the insurance contract, such as deductibles or repeated (experience) rating (Shavell, 1979; Palfrey and Spatt, 1985; Rogerson, 1985; Huberman, Mayers, and Smith, 1983; Schlesinger and Venezian, 1986). Another possibility is **indemnity insurance,*** under which an insurer agrees to pay fixed, predetermined amounts for particular well-defined illnesses. When insurers can observe the 'degree of illness' or the chosen level of medical care, indemnity insurance can be shown to potentially benefit all individuals as compared with insurance based only on the cost of care (Harris and Raviv, 1978; Pauly, 1986).

Finally, Pauly (1986:652) reports on recent work by Jonathan Cave, which demonstrates that insurance markets can include insurers who offer different plans to low-risk and high-risk individuals, with the former (marginally) subsidising the latter. Again, insurance markets with these kinds of plans will converge under competition to a configuration where all companies just break even and earn a normal return on capital, and where all individuals can be made (potentially) better off. Pauly (1986: 655) also points to the important conclusion that public subsidy, in his case through tax incentives, **inhibits** the cost-control activity that would emerge in an open unsubsidised marketplace. The possibilities of free market health insurance are also discussed by Hartley and Kyle (1985) and later in this book in respect of recent events in the US health insurance markets.

So government intervention in the health insurance market has its own distorting influence, and it can inhibit private competitive behaviour that could improve market performance. Even if a case can be made on efficiency grounds for government regulation to control adverse selection or moral hazard, it is not at all clear that such intervention can ever make everybody better off.

Monopoly

The third area of market failure concerns the monopoly of the health trade. It is alleged that doctors and other professionals reap considerable advantages from their iron grip over the health marketplace. Ironically, those who favour regulation often claim that monopoly advantages arise because of regulations restricting market entry into the health sector. Doctors and many other health professionals require licences in order to practise legally; private hospitals need certification and consent from governments as to their size in terms of beds available. Competition among practising doctors is further restricted by legislation such as the state Medical Practitioners Acts in Australia, under which any kind of market-based advertising or 'touting' is strictly prohibited.

Yet even with restricted market entry and the anti-competitive components of medical legislation, private hospital and medical markets are fiercely competitive. There are a great many doctors and a large number of entrepreneurial institutional suppliers who compete for custom, to the benefit of patients. Compulsory licensing, as a barrier to entry, could offer above-normal profits to successful entrants. But we argue that competition prevents doctors, and by implication other health professionals, from exploiting patients and insurers.

However, prices funded by the taxpayer are higher than than they would be if (1) entry restrictions into the health markets were relaxed, (2) the anti-competitive sections were excised from the relevant legislation, and (3) **universal** health subsidies were largely dismantled. Rather than pollute the market further with more regulations like fee control, the appropriate policy is for the government to enhance competition by removing itself from the sphere of medical regulation.

Supplier-Induced Demand*

The fourth area of market failure in health, which has received extensive attention in the literature, is the hypothesis that doctors are able to create more demand for their own services without reducing the price they charge their patients. A corollary is that doctors can raise their fees without losing any demand for services. This argument has been used to justify direct government regulation of doctors' behaviour, in particular of how they run their practices.

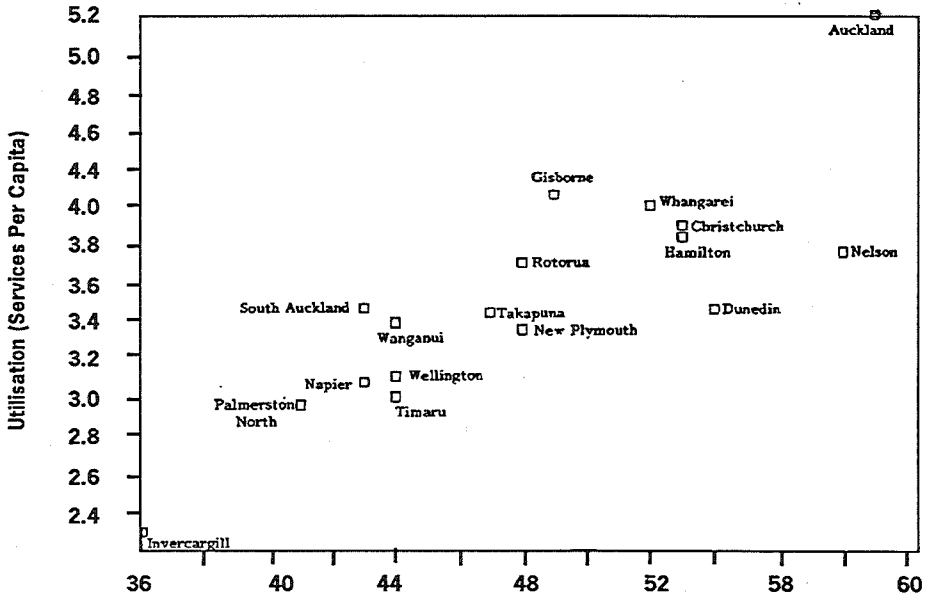
In Australia doctors are said to 'overservice' their patients when they exceed a bureaucratically determined amount of service — notwithstanding the fact that the doctors may only be acceding to the demands placed on them by their patients. The problem is that 'overservicing' has never been rigorously defined in a way that distinguishes it from the price effect of subsidising medical services. The issue has been discussed at length in two recent papers by Ferguson (1987, 1988).

The whole issue remains controversial, with the supplier-induced demand proponents unable to validly separate out the demand generation effects of lower, or even zero, patient fees. If the supplier-induced demand hypothesis were true, as is claimed for Australia in a paper by Richardson (1981), then the consequences for economic theory would be quite profound. The phenomenon would provide a unique counterexample to the Law of Demand, which implies that a doctor can raise prices only at the expense of a reduction in services sold.

New Zealand provides some pertinent data to the supplier-induced demand argument. In their recent Report of the Health Benefits Review, Scott et al. (1986:7) repeat the common view that demand for medical care is 'often supplier-induced' (Malcolm, Higgins, and Barnett, 1980; Malcolm and Higgins, 1981; Malcolm, 1981, 1983, 1985; Ward and Asher, 1984; Cooper, 1979). For example, Cooper argues (1979:2) that 'doctors tend to shape and determine the volume of demand for their own services', influencing 'not only repeat, but also initial, consultations'. Further, 'it is the surgeon and not his patient who decides what constitutes a legitimate hospital admission and surgical intervention, the length of necessary bed rest and the appropriate medication', while since 'the market for doctors in no way corresponds to the textbook model, a glut of doctors will not necessarily lead to either a fall in the price of their services or to their exit in any number from the "market". Rather, the increased supply is likely to generate a corresponding increase in the demand for their services'. Malcolm et al. (1980:399) also express concern about the 'glut' of doctors: 'given the imminent medical manpower surplus and the unrestricted entry of doctors to general practice, action to determine appropriate policies to control availability, utilisation and their associated costs would seem to be the immediate imperative'.

The New Zealand evidence on the incidence of supplier-induced demand is mainly found in the works of Malcolm and his associates, and it involves the presentation of positive associations between estimated regional full-time equivalent doctor/population ratios and the quantity of doctor services rendered per patient (see also Hyslop et al., 1983:164, for figures on hospital use). Figure 1 presents an example of this evidence from Scott et al. (1986:20, Figure 3.2), drawing on Malcolm (1985).

Figure 1: Utilisation and Availability of General Practitioners 1983-1984



There are several problems in concluding in favour of the supplier-induced demand hypothesis from this evidence, even allowing for adjustments for other noneconomic contributory factors such as the racial, spatial, and age distribution of the population.

The major problem is that economic factors that affect the utilisation of doctors' services are ignored. If they were properly accounted for, these **could** in principle account for the observed facts without any necessity to appeal to supplier-induced demand. For example, Malcolm et al. do not attempt to explain the observed regional differences in per capita doctor numbers. Generally, people locate in areas where business is best. If more doctors per capita locate in Whangarei than in Invercargill, the conventional economic explanation would be that demand for doctors is greater in the former region, although there would not necessarily be any regional differences in the price of medical services. This argument is implicitly rejected by Malcolm et al., who seem to believe that there is a fixed 'normal' amount of illness requiring a fixed number of doctors to treat it.

The counterargument, however, does not rest only on regional demand differences. For example, if regional per capita demands were equal, availability and utilisation would be correlated if prices in the high availability regions were lower than in the low availability regions. Malcolm et al. argue that GP incomes in the low availability regions are relatively low. But their income measure is based on doctors' GMS claims, which is a fixed subsidy per unit of service (see Chapter 3 for details). It is possible for doctors' total incomes to be greater in the low availability regions if the share of the GMS benefit in their consultation fee is relatively low, so that high consultation fees limit demand.

Further, demand is determined by fees to the patient, which are determined in part by the degree of insurance cover in the population. As Chetwynd et al. (1983) show, Auckland and Christchurch have greater degrees of cover, and higher utilisation rates, than Wellington or Dunedin. In addition, travel and waiting times tend to be smaller in high density regions, and it is possible that physician amenities and service quality differ systematically across regions as well.

A two-centre study by Burt and Cooper (1983) throws some light on whether conventional economic arguments can at least partly account for the so-called 'facts' of supplier-induced demand. Burt and Cooper compared samples of patients from the Invercargill and Whangarei areas, since these represented the areas identified by Malcolm as the most disparate in terms of GP availability. Whangarei, being the area better endowed with doctors per capita, presumably suffers more from induced demand, while Invergargill, being worse endowed, presumably suffers less. For supplier-induced de-

mand proponents, it would be nice to have supporting evidence showing that medical fees to patients along with other costs of time and travel in attending GPs and obtaining medication were no smaller in Whangerei than in Invercargill.

Burt and Cooper, however, found that average medical costs to patients were 19 per cent higher in Invercargill than in Whangerei. A higher proportion of citizens in Whangerei carried medical insurance. A higher proportion of Invercargill citizens always paid a fee for consultation, and a much higher proportion of them paid a fee in the high range compared to citizens of Whangarei. A higher proportion of citizens in Invercargill reported inconvenience in having prescriptions filled, while time spent waiting for appointments and in waiting rooms was significantly longer. Invercargill citizens, especially in rural areas, faced greater travel distances than their Whangerei counterparts, and a larger proportion of them reported dissatisfaction with their doctors. This evidence does not deny a residual role for supplier-induced demand in determining the high rate of medical servicing in Whangerei relative to Invercargill, but it provides no supporting evidence whatever for supplier-induced demand. Instead, it is consistent with an orthodox economic explanation of the facts.

There are further reasons to doubt the empirical importance of supplier-induced demand. One is that surveys in New Zealand suggest that between 25 and 33 per cent of the population reporting medical symptoms do nothing about them during a two-week interval, while about 40 per cent engage in self-medication, generally using some remedy currently available in the home (see Scott et al., 1986:19-20 and the references therein). Why do doctors not use their information advantage to increase demand by initiating consultations for these people? Only 20 to 33 per cent of people reporting symptoms actually visit their GP, and most people attend only three or four times a year, in many cases for routine treatment of problems for which there can be little informational advantage to doctors. The ability of doctors to initiate consultations may in fact be very limited. For example, Ferguson (1987) refers to US evidence suggesting that approximately 50 per cent of doctor-initiated appointments are not kept.

The response to the alleged doctor glut of the 1980s in New Zealand is also instructive. The overservicing literature frequently argues that existing doctors respond to new entrants in their segment of the market by increasing demand in order to maintain their incomes. New doctors must practice somewhere, so in each region we should observe existing doctors increasing demand in order to maintain their real incomes. The evidence, however, suggests the contrary. As Figure 2 demonstrates, the response to a continuous increase in physician density in the population between 1976 and 1985 was

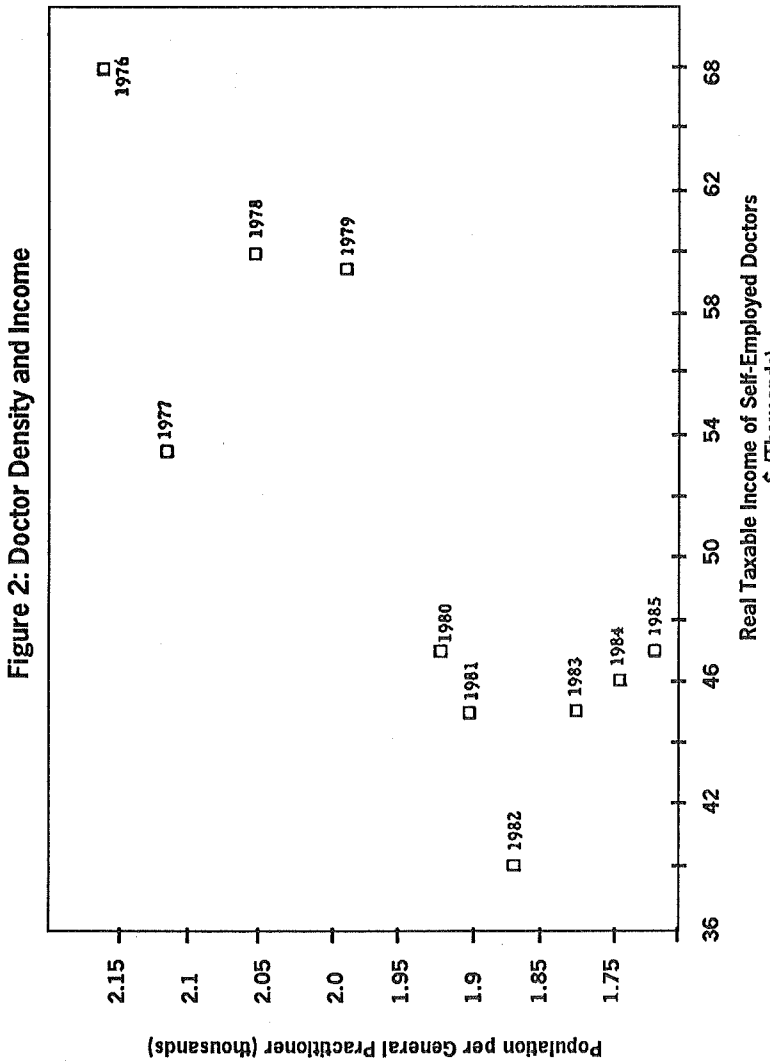


Figure 2: Doctor Density and Income
Population per General Practitioner (thousands)
2.15
2.1
2.05
2.0
1.95
1.9
1.85
1.75
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
36
42
46
50
54
58
62
68
Real Taxable Income of Self-Employed Doctors
$ (Thousands)

a general tendency for the real income of doctors (measured as money income relative to the average money wage) to decline substantially. By the end of the period, the typical doctor was servicing nearly 400 fewer patients than at the beginning of the period and had experienced a fall in real taxable income of 27 per cent. If overservicing was occurring, it was certainly not very effective in maintaining doctors' incomes.

The supplier-induced demand hypothesis also suggests that growth in physician density is positively associated with growth in utilisation rates. Malcolm et al. (1980) present evidence of a statistically significant positive association for 1978-79 (see Figure 3). Such an association, however, although evident for 1983-84, cannot be found for any of the four intervening years. In addition, if the evidence in Malcolm (1983:6, Table 3) for the period 1978-82 is considered, there is no statistically significant relationship between changes in utilisation and changes in availability, even though the study covers a period when the long-run number of doctors was growing. Figure 4 illustrates this case. In three regions, although per capita doctor numbers were growing, in one case at a very rapid rate, utilisation rates were **falling**. Further, only 6 per cent of the variation in utilisation growth is explained by variations in availability growth. (There is a clear difference between the short-run and long-run results for these data.)

Finally, if doctors can engage in so-called overservicing to the extent implied by the literature, why don't they do a lot more of it? In particular, why do doctors wait until other doctors enter their regions before generating demand? Why should there exist any unrealised gains from this exploitation of consumer ignorance? Must existing doctors really be protected from competition in order for them to resist the temptation to lead consumers into the abyss of endless 'unnecessary' medical care? The answer to the last question must be No.

The above arguments notwithstanding, it is still possible for doctors to engage in overservicing, although our ability to empirically detect its existence or extent is limited (Auster and Oaxaca, 1981). The problem of overservicing, however, is essentially independent of the number of doctors, since it can occur in principle whether there are many or few doctors in a region. It arises because the nature of the doctor/patient relationship is that of agent and principal. The patient as the principal would like the doctor to recommend a suitable course of medical treatment, given the patient's budget and related methods of financing medical care. If the patient is substantially insured, either through private or public schemes, the doctor as agent has little incentive to economise on treatment, either in his or her own interest or in that of the patient. If the patient is uninsured, the doctor has an interest in convincing the patient to buy more treatment than the patient

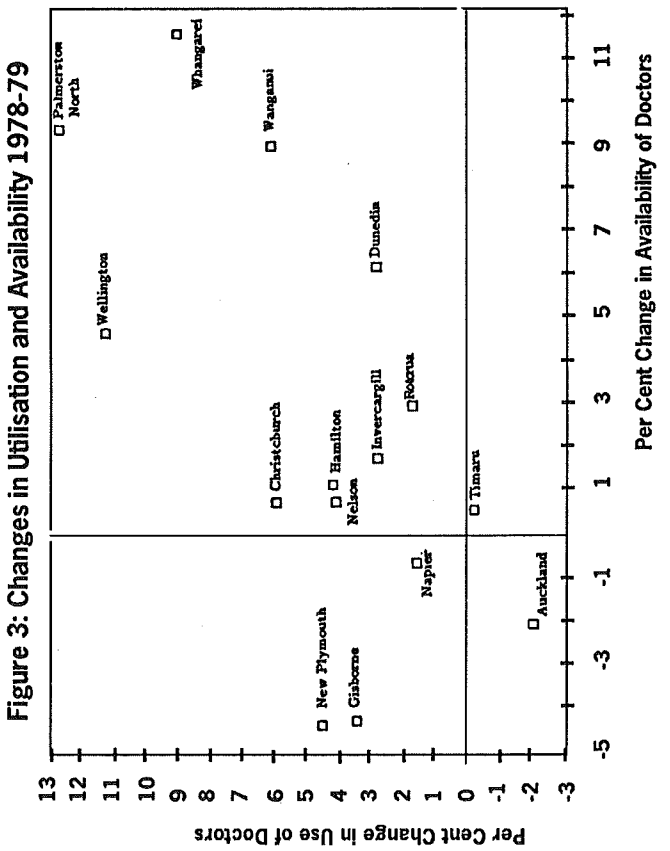
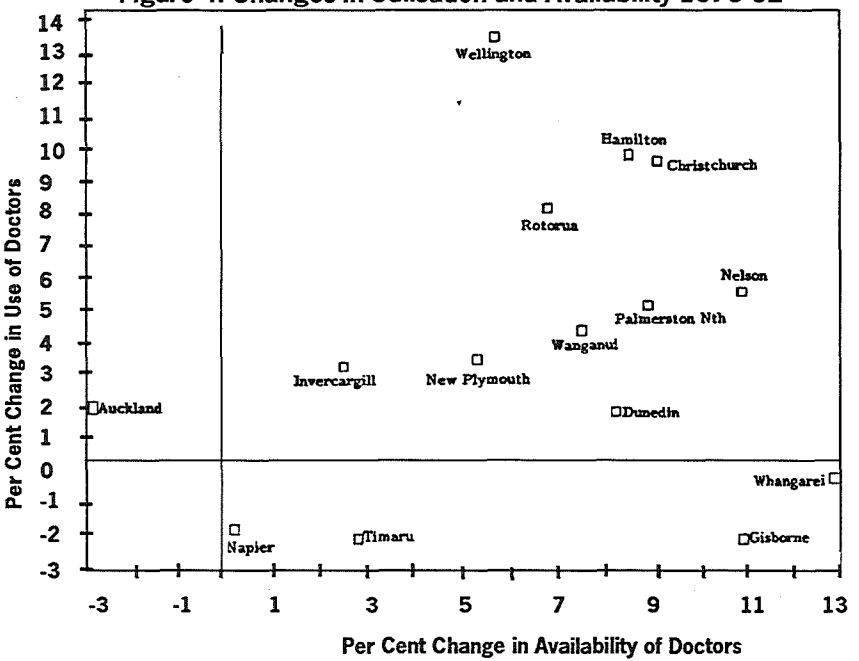


Figure 3: Changes in Utilisation and Availability 1978-79
Per Cent Change in Use of Doctors
13
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2
-3
Per Cent Change in Availability of Doctors
-5
-3
-1
1
3
5
7
9
11
Palmerston North
Wellington
Whangarei
Wanganui
Christchurch
Hamilton
Nelson
Dunedin
Invercargill
Rotorua
Timaru
New Plymouth
Gisborne
Napier
Auckland

Figure 4: Changes in Utilisation and Availability 1978-82



would choose if he knew all that the doctor knows.

Scott et al. (1986) believe that market failure arises out of the information advantage of doctors, an advantage that presumably everybody would agree it is rational for only a few individuals to have. What is not clear is how the state is able to correct for consumers' disadvantage either by enforced capitation schemes (which create a different set of incentive problems) or by regulating the supply of doctors, a practice currently followed in Canada of which Scott et al. write admiringly. Walker (1986:40), on the other hand, describes the Canadian scheme as 'a mind-numbing piece of absurdity' in which 'governments are now doing what the profession has been trying to accomplish indirectly for more than half a century'.

IV. EQUITY: THE DISTRIBUTIONAL BASIS FOR INTERVENTION

Governments often seek to justify intervention in particular instances, such as education or health, on the grounds that certain disadvantaged persons miss out on adequate education, health care, or whatever commodity is singled out for attention. Government adopts a policy of 'redistributing' said commodity so that all members of society, including the disadvantaged, have access to it. One method of achieving an 'equitable' distribution is to make the services cheap or even free to everybody on the grounds that access, at least, is then equal.

However, 'in-kind' redistributive policies do not always benefit the target groups as intended. They also have unfortunate side effects that serve to reduce the net gain. In order to clarify the hidden consequences of policies that redistribute goods in-kind, for example when health services are made 'free', let us consider the following example.

Suppose that a certain community consists of 100 persons who regard a visit to the doctor as an important part of everyday life. Each person, rich or poor, reveals a preference for a doctor-a-day at the current competitive market fee of $10 a consultation. The community therefore spends $1000 on a daily consumption of 100 medical consultations.

Now suppose the local politicians become convinced that 'the community' is truly concerned about the distribution of income and wealth. Economists provide evidence that half of the people in the community are 'rich' and the other half are 'poor'. Since access to doctors is thought to be a right, not a privilege dependent upon the ability to pay, a policy is implemented under which those who are relatively well-off are forced to pay for a health system that delivers medical services free to everybody.

A tax-funded market research project discovers that citizens freely choose to visit their doctors once each day under current market conditions. Thus government planners budget for a daily medical expenditure of $1000. It is decided to finance the new health plan with a 'medical levy' borne equally by all whose income happens to be above a certain threshold. The threshold is chosen so that the 50 rich people bear a levy of $20 per day each, and the remaining 50 pay no levy at all. In effect, each rich person is supporting one poor person in his or her daily medical consumption of one visit to the doctor. No fee is charged to anyone, rich or poor, at the time of consultation. There are several points to consider.

First, even if the policy had no effect on the number of medical consultations people demand, the same effective redistribution could be achieved more cheaply by not intervening at all in the medical market, but instead by simply taking $10 per day from each of the 50 rich people and giving $10 per day to each of the 50 poor people. The saving would be the cost of the health bureaucracy no longer required to implement and monitor the free medical system, minus the cost of the marginally extra clerical work of redistributing the $10 notes.

Second, the Law of Demand comes into effect. The number of consultations demanded will rise because of the price effect. Suppose that the poor now demand 65 consultations in total, and the rich 55 consultations (less than the poor because the rich are less rich since now they each pay the levy). Also, suppose that the consultation fee has to rise to $11, otherwise doctors will not be willing to work the extra hours to supply the larger daily consumption of 120 consultations. The budget cost of the policy therefore rises to 120 times $11, or $1320, which is $26.40 for each of the 50 levy-payers; a rise in their tax burden of 32 per cent. The poor, on the other hand, would probably prefer the $10 cash and the option of spending it on a consultation or on other things, rather than the 'right' to a free consultation but no extra cash. The rich are paying more to deliver less in terms of welfare to the poor than was possible under the straightforward cash-transfer policy outlined above.

Third, the 32 per cent budget 'blow-out' in health soon worries electorally-conscious politicians. The concern about deficits results in cut-backs. The free consultation remains intact, but budget expenditure, and therefore the burden of the levy, is restricted to its planned former amount of $1000. The government must cut the system's utilisation of resources to ensure that the 20 extra medical services are not produced at all. It can do this by issuing ration cards, or by itself taking over exclusive production of consultations (a local NHS health system), or by some other policy.

The problem with ration cards is how to decide exactly whose consumption is to be cut, and by how much. In the absence of price signals, it may easily turn out that valuable ('emergency') medical services are inadvertently refused. Say the ration cards entitled each person to one consultation a day, as before. Why not simply dismantle the entire free health system and return to the free market, perhaps with cash transfers to redistribute income?

Under nationalisation, the inevitable inefficiencies in production by committee mean that the cost per consultation would be above that of the free market (assuming that the market is not otherwise distorted by tax advantages to suppliers of health services, such as insurance). If, say, the production cost remained at $11, then consumption would have to be cut to 91 consultations a day to achieve a daily budget expenditure of $1000. Not only are people prevented from exercising their demand for the 20 extra consultations at zero price, but they also have to give up nine of the consultations for which they revealed a demand at a price of $10 in the free market. Who will be left out? A poor person who values a consultation at $10 (or more) might miss out, depending upon how the rationing of medical services is designed and implemented.

If the government does not practice overt rationing, then waiting lists can be expected to grow. If medical conditions that give rise to the demands for consultations are impermanent, and evaporate 'overnight', 29 people will simply miss out each day. However, if the medical problem remains until 'cured' by a consultation, waiting lists will grow exponentially as the backlog of untreated cases accumulates. The outcome of the free health system is that not even the poor are guaranteed their daily doctor.

Finally, our example began with the assumption that in a free market every individual revealed a demand for one medical consultation per day at a price of $10. Suppose instead that the aggregate market demand is 100 consultations but that this number is distributed unevenly across the population. Some people might not want a doctor at $10; others might want two or even three visits. The free health policy would then distribute differential benefits across the community, depending upon the various values that different people place upon visits to the doctor (i.e. the demand schedule for each person). The point is that it would be impossible for the government planners to accurately predict precisely who benefits, and by how much. Also, unfortunate discrimination against heavy medical users would be **more likely** under government cut-backs, and it would certainly not be possible to design a fair method of rationing reduced supply.

Redistribution in Australia

In Australia, the beneficiaries of the Medicare system are people whose incomes are low, but not so low that they would have otherwise been covered under the Health Card safety net; people who have a relatively larger demand for health care; and people who have a lower personal cost of time to spend waiting in line for hospital beds. Certain producers also benefit, for example doctors in government employment, to the extent that their incomes are higher than they would have been in a competitive open market. The armies of bureaucrats involved in the health system at all levels also benefit from socialised health insurance and from the public production of hospital services.

Others are relative losers, in particular those on low incomes who are fit and healthy. The redistribution in-kind has minimal benefit for these people, who otherwise would have gained from an injection of cash. Also, people on low incomes who cannot afford the now higher private insurance premiums (low-cost insurance being illegal) must make do with hospital services without doctor-of-choice. They must now join lengthy queues for hospitalisation for elective procedures, whereas under the older honorary system (under which doctors charged nothing for 'public ward' patients) they received the same high quality medical care, with minimal waiting, as did the fee-paying patients.

Redistribution in New Zealand

In the New Zealand context, according to Scott et al. (1986:1), 'The basic tenet behind the 1938 Social Security Act's provision for health care was that all citizens were equally entitled to health care, regardless of their ability to pay. Health care, it was believed, should be as accessible to the poor as to the rich'. The government of the day clearly preferred socialised medicine with salaried doctors operating under a capitation scheme similar to that embraced as early as 1911 for primary care in the UK, but the British Medical Association (BMA) successfully rebelled against this proposal. With the medical emphasis firmly in favour of curative medicine, doctors saw a zero-price capitation scheme as one in which they might raise their incomes (at least initially) but would be run off their feet with fiddling complaints and would have to reduce their quality of service in response to their 'unlimited contractual responsibility' (Lovell-Smith, 1966:99). Doctors clearly saw

that there was no such thing as a well-defined set of price-independent medical 'needs' in the population, and realised that the proposed scheme would force them into a less preferred income/leisure trade-off.

Instead, doctors proposed a complex scheme involving grading the population into four income groups, with the poorest receiving complete care for free, the next two groups complete care with partial contributions from patients, and the highest income group no public benefits. This was rejected because the government, led ferociously by Finance Minister Nash in this debate, would have no association with any scheme that provided free service only to the poor. Fundamentally, the government was hostile to anything that smacked of demeaning acts of charity. Instead it advocated schemes to meet the medical 'needs' of the population in a way that was 'freely available to all whatever their rank, station or income' (House of Representatives, 1938:5).

Since 1938 no political party in power has fundamentally changed the structure of medical care delivery, and the poor have been major losers. The reason is that the GMS benefit has fallen to a very small proportion of the cost of visiting a GP, who is the gatekeeper to medication, specialist referral, and hospitalisation. The uninsured poor have considerable financial difficulty getting access to medical care, and some have attempted to bypass the GP in favour of care in outpatient departments of public hospitals, to which treatment they are not 'properly' entitled. The uninsured poor are also most likely to be found on long waiting lists for elective surgery in public hospitals. Over time, the poor have been getting a smaller proportion of health expenditure. The system designed mainly to protect them has ended up enriching the middle classes. It is hard to imagine that the poor would not have done far better under the scheme proposed by the BMA back in 1938! It is no doubt cold comfort for a person who is both poor and ill to be reminded that at least the state is not subjecting him to a means test.

The problem of access to medical care for the poor is their problem of limited access to goods generally. Their access can be improved by income transfers but without any necessity for public production of commodities. Social security benefits generally recognise this, and the beneficiaries of income transfers are free to buy what they want from the private sector. If government wants to target medical care specifically, it has the option of issuing vouchers that can be redeemed against medical expenditures incurred, or, more appropriately, against approved forms of medical insurance. Therefore a subsidised universal health system is a poor instrument for redistribution, as compared with transfers of dollars.

V. SUMMARY

No good case can be made for government intervention on the grounds listed above, except for the area of public health. Governments may well have a role for policy implementation when there is intractable market failure involving externalities. However, compared to the enormous government outlays currently devoted to the health sector, the expenditure required for the correction of externalities is extremely small.

Chapter 2

Australia's Health System

I. BRIEF HISTORICAL BACKGROUND

Nineteen eighty-eight marks the bicentennial of government intervention in the provision of health services in Australia. In the early days most health care, such as it was at the time, was under the direct control of the colonial military and naval authorities. At the time of Federation governments were extensively involved in the hospital sector, with the Colony of NSW funding about 60 per cent of hospital expenditures (Royal Commission on Public Charities, 1899). From time to time, up until the Second World War, politicians engaged in several unsuccessful attempts to introduce some kind of universal health plan under the guise of 'national insurance' (for an account of this early period see Hicks, 1981).

Australia's present health system really began in the early 1950s with the implementation of Sir Earle Page's plans for free medical services for pensioners, a list of free pharmaceuticals, and selected subsidies for hospitals (for a fascinating personal account of the evolution of the 'Page Plans', see Page, 1963). Over much of this early period the 'welfare' part of the federal government's health services was largely funded from the National Welfare Fund, and was frequently identified in government reports (and Commonwealth Year Books) alongside other social security spending. This included hospital and medical benefits, pensioner health benefits and the pharmaceuticals subsidy. On the other hand, spending from the National Welfare Fund also included 'public good' purposes such as the tuberculosis campaign. Apart from this, health spending for welfare purposes was more or less identified as functionally separate from public health spending such as

quarantine and the control of infectious diseases. This clear separation was less apparent when the health portfolio was expanded and rationalised in the early 1970s with the introduction of Medibank.

It was also at this time that the government provided a spin-off that offered a degree of shelter for the 'voluntary' health insurance funds by delivering the subsidy (then known as the 'Commonwealth benefit') only to those patients who had taken out a policy with a fund that was registered under the National Health Act.

During the 1960s the government-funded proportion of health expenses fell as medical costs rose while levels of Commonwealth benefits failed to keep pace with inflation. The era closed with the Nimmo Committee's investigations of medical costs and the Nimmo Report (Commonwealth Committee of Enquiry, 1969), which recommended that government subsidies be based upon the 'most common fee' with a maximum patient payment of $5 (which is $24 at 1987 prices). This was more or less the scheme that was introduced in 1970, a policy that effectively made the Liberal Party, then in government, the first of the big spenders in the domain of health care.

The case for universal health 'insurance' had been put in the late 1960s by Scotton and Deeble (1968; Scotton, 1968), who subsequently became involved in the design of the Labor Party's health policy. After its success at the polls in 1972, the Labor Government set about to implement its universal health scheme, an event that took place in July 1975. This initial essay into socialised health funding, then known as **Medibank*** and later as Medibank Mark I, is the model for the present Labor Party's **Medicare*** scheme.

Reversal and re-reversal of health policy in Australia closely followed the demise of the Labor Party at the end of 1975. While the Labor Party languished in opposition, the Liberals under Malcolm Fraser wove their way erratically from one health policy to another. The system eventually stabilised for a short period with a plan introduced in 1981 under the instruction of the Prime Minister. Between 1975 and 1981, no fewer than four quite major alterations were made to the government's role in the Australian health system, with citizens rushing into and out of the private insurance market in response to changing incentives (this is revealed in statistics contained in VHIAA, 1985:5-6).

The 1981 scheme was essentially a compromise between the wets and the dries within the Liberal Party. It offered a 30 per cent subsidy for 'scheduled' medical fees (Commonwealth of Australia, 1987), with a $10 maximum 'gap' paid by the patient, plus a 30 per cent tax rebate **provided** the patient was a member of a registered fund, thus reinstating the subsidy shelter for the voluntary funds. The scheme had another very important

element: the Commonwealth ceased funding the States' public hospital system on the basis of an open-ended dollar-for-dollar subsidy of recurrent costs. Instead the States would receive 'identified health grants', and later 'Medicare compensation grants'. This means that State public hospitals have had to compete on virtually equal footing with other worthy areas of State government expenditures; grant-dollars, like taxes and subsidies, do not necessarily stay where they are put. The present Labor Government has retained this arrangement, although public hospital funding was due for renegotiation in 1988.

After the March 1983 election the Labor Government set about to reinstate its universal health scheme. Medicare (son of Medibank), after an appropriate nine months gestation, was born in February 1984.

II. THE PRESENT HEALTH SYSTEM: MEDICARE

Medicare, like Medibank, is a universal system for financing health services. The basic idea is that all Australians should have access to inexpensive medical services and that public hospital services should be freely available at no cost to the patient, on the condition that the patient accepts treatment by a doctor chosen by the (public) hospital administration.

Following is a more detailed description of the Medicare arrangements that are in place at the time of writing.

Medical Services

The rates of subsidy for medical services under Medicare closely resemble those that applied under Medibank: 85 per cent of the 'official' fees for services performed outside hospital, and 75 per cent of the official fees for services performed within hospitals, are now reimbursed by Medicare, with the patient bearing the cost of the 'gap' between the Medicare subsidy and the fee that the doctor actually charges. In addition, there is a cap of $20 on patients' out-of-pocket costs of medical services. This is a little less in real terms than the maximum patient outlay that was introduced in the early 1970s. Originally, this applied to all medical services, wherever performed, but budgetary economies have since resulted in the removal of the $20 cap from services performed within hospitals (Commonwealth of Australia, 1987).

The official fees used by the government to determine the Medicare rebate are listed in an attachment (Statutory Rules) to the Health Insurance Act known as the **Medical Benefits Schedule.*** Australians are not permit-

ted to take out insurance against the gap between the MBS fee and the 85 per cent rebate of that fee for services performed outside hospital. However, gaps for in-hospital medical fees (equal to 25 per cent of the MBS fee) are legally insurable. Finally, if the sum of the gaps reaches $150 for any one family in a single year, Medicare reimburses the full MBS fees for all subsequent services within that year. This provides a secondary cap on patients' medical costs, and applies to all medical services, whether or not they are performed in hospital.

Doctors can charge any fee they wish; there is no direct government control over market prices. They can collect the full amount of the fee from the patient and send the patient to Medicare for the rebate; or doctors can **bulk-bill*** the government for their patients. Under bulk-billing, the doctor receives the 85 per cent rebate directly from Medicare but forgoes the 15 per cent from the patient, thus netting less revenue but simplifying his or her paperwork and eliminating the risk of bad debts. Since the first official government fee schedule appeared in 1970 the Australian Medical Association (AMA) has produced its own schedule of fees for the advice of its members, with the first issue appearing in July 1973. Members are not directly constrained to charge AMA fees or MBS fees, although the AMA exhorts members that its recommended fees should not normally be exceeded. In fact doctors' fees are constrained by market forces, and are determined by the interaction of supply and demand. The effect of the Medicare subsidy on the demand side of the marketplace significantly influences the pattern of market fees that emerges from this process.

Hospitals

Free treatment in public hospitals is available for people who elect to be classified as Medicare patients, but they must forgo the right to choose their own doctor. For Australia as a whole, Medicare patients used about 70 per cent of bed-days in public hospitals in the year ended 31 March 1986 (Commonwealth Department of Health, 1986:114-15, Tables 13-15). Because public hospitals provided just under 80 per cent of all hospital bed-days, 56 per cent of all hospital bed-days utilised over the entire system were used by Medicare patients in that year.

Who funds the Medicare patients? Public hospitals in Australia are funded through State budgets and are controlled by State government bureaucracies. Since the Commonwealth government ceased sharing recurrent costs on a 50/50 basis with State governments, funds for public hospitals have formed part of the Commonwealth's 'identified health grants' to the States ($1651m in 1986-87, $1783m budgeted for 1987-88). In addition, State

governments receive specific purpose grants (about $1147m in 1986-87, $1284m being budgeted for 1987-88) as compensation for income lost as a result of free hospitalisation under Medicare, and for other purposes such as AIDS control programs, etc. Although Medicare patients are in principle largely funded from Commonwealth sources, States can, within limits, choose to shuffle their resources into and out of the hospital system in response to political circumstances. This has had the effect of reducing the supply of public hospital beds continuously since 1983, and has therefore exacerbated the shortages in the public hospital system that have been a focus of recent media attention.

Private hospitals, on the other hand, have received virtually no special subsidies since the Commonwealth's budget economies of 1986, except in special circumstances. Beds in the private sector are allocated by price, with patients paying the hospital charges themselves or taking out private insurance to cover at least a proportion of the cost. Medical services performed in private hospitals are subsidised to the extent outlined above.

Public hospitals also take private patients. Private patients used about 25 per cent of public hospital bed-days in 1985-86. However, a part of the cost of a private patient in a public hospital is borne by government (around $50 per bed day), which means that a subsidy is directly available to patients who choose private status (to preserve doctor of choice) in public hospitals, or is indirectly delivered to all privately insured patients through the reduction in insurance premiums that cheaper public hospital charges make possible.

Welfare: The Health Benefits Card

Free hospitalisation and cheap medical services (and pharmaceuticals), as a policy designed to alleviate the financial burdens of illness upon the poor, is not peculiar to Medibank and Medicare. Various categories of 'socially disadvantaged' people, including pensioners, war veterans, and others, have had access to heavily subsidised health care in Australia continuously for many years.

People eligible for these special subsidies are given one or other of the 'health benefits' cards issued by the Department of Social Security. An assets test has been introduced recently in an attempt to control costs.

Cardholders also have access to a range of other concessions, such as cheaper telephone rentals, reduced rates, cut-rate entry to public swimming facilities, and so forth. The precise range and value of additional concessions varies depending upon particular state or municipal policies. It has been estimated that a single pensioner, for example, who is able to fully exploit his or her card-linked fringe benefits, receives non-taxed gifts of goods and

services in kind worth just over $1000 at 1987 prices (Social Welfare Policy Secretariat, 1984). It is therefore no wonder that people have a strong incentive to retain their health benefits cards, and that they adjust their economic activity accordingly.

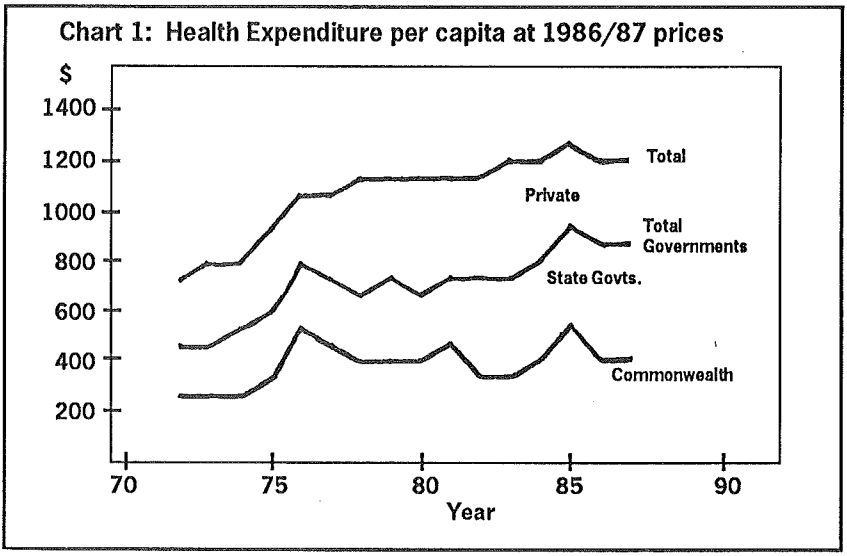
Until Medicare, the card system acted as a reasonably effective health care safety net, in addition to providing a range of fringe benefits to people on low incomes. The former is what one would normally regard as the welfare aspect of government policy in health. The latter, fringe benefits, is simply the use by various government agencies of an identification system already in place in order to deliver other non-cash benefits on the basis of means-tested eligibility.

Under Medicare, however, the welfare function is less efficiently performed, at least with regard to hospitalisation, because the poor are crowded into hospital queues along with relatively well-off Australians who choose to demand beds in public hospitals. The Medicare system aims to radically extend the provision of heavily subsidised health care to the entire community. Medicare cannot therefore be validly regarded as a strictly welfare-oriented health policy; it is in fact the application of socialism to the funding of health services.

III. HEALTH SPENDING IN AUSTRALIA

Trends in components of overall health spending in Australia are shown in the accompanying Charts. Chart 1 shows total health expenditure since 1972, and the decomposition of funding into private and public sources. The graphs show components of health spending per head of population, crudely adjusted for price changes that have taken place over this period.

Total real per capita spending on health rose by about 65 per cent over the period shown in the Chart, with two growth phases coincident with the introduction of Medibank (1975-76) and Medicare (1983-84). Total per capita spending on health care grew on average faster than gross domestic product (GDP) per capita, so that the proportion of GDP spent on health rose marginally to 7.2 per cent from 5.7 per cent over this period. Aside from the effects of the two important changes in government health policy, a relative expansion in health spending is to be expected in a society that generates higher real incomes over time; in the jargon of economics, health care is a 'superior' good. In addition to this, the demand for new procedures that have resulted from innovations in medical technology has added even more demand for services at higher prices, and so resulted in further increases in health expenditure.



If health services were bought and sold on the open market, free of government subsidy, the relative growth of health expenditures would be of small matter except perhaps for health economists or national income statisticians. However, government spending now comprises over two-thirds of total health expenditure in Australia. How that money is spent has a decisive effect on the figure for total health outlay. Government health spending is important first because its increase is ultimately borne by the taxpayer, and politicians are sensitive to the negative effects of imposing heavier taxes.

Second, and possibly more importantly, changes in government health policy affect the mix of public and private spending. Behind these changes that are invariably engendered by government policy lie the countless adjustments that patients, doctors, and institutions are forced to make in response to their changing environments. These adjustments are significantly more disruptive to personal circumstances than are the effects of, for example, the more predictable demographic changes upon the demands for health services. Even innovations in new medical technology affect the market with a more predictable, regular pattern than do abrupt changes in government policy.

The changes in private vs public spending on health over the last 15 or so years are shown in terms of real per capita expenditure in Charts 2 to 4. Compare the graphs for private and Commonwealth spending across these

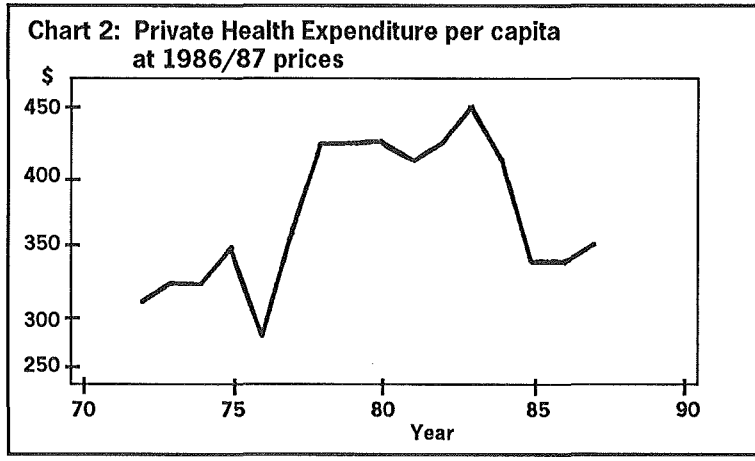


Chart 2: Private Health Expenditure per capita
at 1986/87 prices
$
450
400
350
300
250
70
75
80
85
90
Year

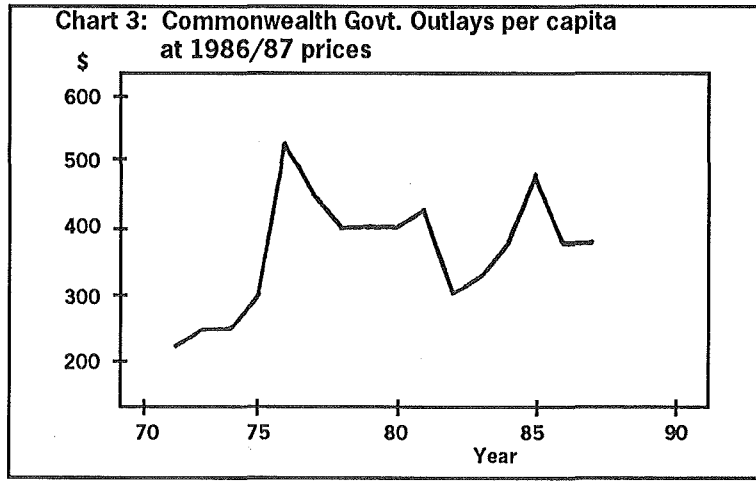
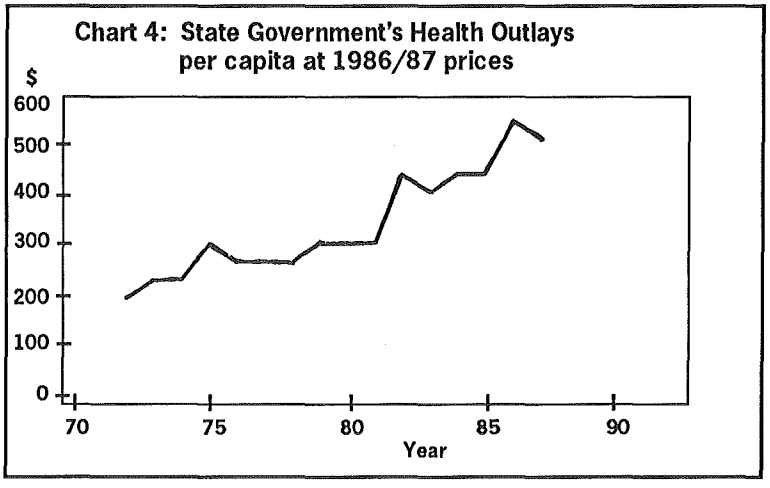


Chart 3: Commonwealth Govt. Outlays per capita
at 1986/87 prices
$
600
500
400
300
200
70
75
80
85
90
Year

years as shown in Charts 2 and 3. Commonwealth health policies towards medical and hospital subsidies in particular can be expected to strongly affect the incentives that individuals have to provide more of their own funding, for example through private insurance. Changes in policy can be clearly identified in the succession of peaks and troughs in the graph for Commonwealth spending (Chart 3). The time path of Commonwealth spending is mirrored in the cyclical behaviour of private spending (Chart 2), with changes taking place perfectly in step but in opposite directions. That is to say, there is almost perfect 'crowding out' of private spending by public spending. The opposite movements in these two components of the sources of health funding cancel out in regard to the overall changes in total health spending. This means that focusing attention exclusively upon trends in total spending hides the underlying swings in component spending aggregates, and so to this extent tends to play down the true impact that government policy has within the health sector.

A similar comparison across the components of total government spending shows up additional compensating adjustments. Comparing Commonwealth and State government spending since 1980-81 (Chart 4) reveals that downward trends in Commonwealth spending are at least partially offset by upswings in State spending. Presumably this reflects the effects of Commonwealth revisions to how State hospital expenditures are compensated.



The broad changes considered here are the sum of many significant changes at the micro level in the many different markets through which health services are channelled. For example, in the first full year of Medicare, 1984-85 to 1985-86, the number of GP services grew by 5.9 per cent, and the total number of medical services of all specialties grew by 7.4 per cent; both rates were way above what might be predicted from changes in demographic factors alone. Numbers of available hospital beds have fallen since 1983, and at a relatively greater rate in public than in private hospitals. Finally, waiting lists for elective in-hospital procedures have developed over this same period.

Meanwhile there is much hand-wringing within government circles over the problems of Australia's health system. The solutions proposed generally involve either shoring up the existing system with a few funds parcelled out here and there, or injecting further distortions by re-aligning certain MBS prices and not others, or introducing even more bureaucracy and regulation into the health marketplaces.

The following sections analyse these problems in detail, tracing most of them back to the (mostly) well-meaning interventions of government itself.

IV. GOVERNMENT FAILURE

Medical Services

Government intervention in the delivery of medical services by doctors can be divided into two areas. First, the Commonwealth government heavily subsidises most medical services under Australia's Medicare scheme; second, each State government in Australia restricts entry and regulates competition in medical markets under various State medical licensure laws.

Medicare subsidies. The Medicare subsidy distorts the markets for medical services by driving a wedge between the price that the buyer pays and the return that the seller receives. For example, if the doctor charges an MBS fee of $20, the patient pays only $3. If the doctor chooses to bulk-bill, then the patient pays nothing and the doctor receives $17 (85 per cent of the MBS fee). Similarly for services rendered within a hospital; the doctor receives $15 more than the patient pays for every service for which the MBS fee is $20.

The effects are these: first, demand expands because medical services are cheaper to the patient. This is the 'price effect'. Second, since most of the medical services that were purchased previously are now cheaper to the patient, the patient has more real disposable income to spend on all kinds of

goods and services, including more medical services (Feldstein, 1979:90-4). This is the 'income effect'.

Medicare has also resulted in higher taxation. The Medicare levy takes an extra 1.25 per cent of income above a threshold income level that depends upon family circumstances. This reduced income would normally tend to reduce demand, except that in this case: first, the effects are spread across all goods and services; and second, people who are disproportionately large users of medical services (the aged, for example) are likely to have incomes below the thresholds, and so they avoid the extra tax altogether. On balance, the income effect of the additional levy is not likely to outweigh the other demand-expanding effects of the Medicare system.

The price effect and the income effect of the subsidy therefore reinforce each other in the case of medical services, creating extra demand. There is (crude) evidence that this has taken place in Australia. This increased demand is often taken as evidence in support of the view that doctors themselves create additional demand for their services; this issue is addressed in Chapter 1 (pp.11-19).

In any case, the supply of doctors and the volume of services delivered rise to meet the demand for them. Demand grows until marginal services are valued at the price the patient pays; $3-$5 in the example given above, or zero if the doctor bulk-bills. It costs $20 to produce those marginal services. This 'marginal cost' is $20 worth of other goods that other people have to forgo in order to release the scarce resources necessary to produce the extra medical service. This is clearly inefficient since the community is giving up $20 worth of some goods to get $0-$5 worth of other goods or services. Adding up all the differences between costs and patient's values of all of the extra services produced because of subsidised medicine yields a measure of the waste, or 'deadweight loss', inherent in Medicare. The allocation of resources is distorted away from an allocation that is efficient from the point of view of society as a whole, which means that the subsidy is against the public interest.

Private, voluntary subsidies (charity) do not create the same distortions because anybody is perfectly free to **voluntarily** donate some of his or her **own** wealth to others, with any 'waste' voluntarily borne by the donor. Public subsidies, on the other hand, are forcibly extracted from taxpayers who have no choice but to pay up. Public subsidies can therefore be criticised on this ground also, even if no waste were ever generated.

Other consequences of the subsidy. Two other features of Medicare seem almost designed to promote extra demand. First, if a family outlays more than $150 in any one year on the non-rebatable portion of MBS fees (e.g. the 15 per cent for out-of-hospital services), then Medicare rebates

subsequent MBS fees in full. Beyond this point the cost to the patient is zero, provided that the doctor charges no more than the MBS fee, and this applies to all services whether rendered in hospital or otherwise. One visit to hospital could easily eat up the $150 in non-rebatable medical expenditures. The price effect can be expected to cause yet more demand from families eligible for total subsidy of medical expenses for the remainder of any one year.

Second, the bulk-billing option has the peculiar consequence that competition among doctors can, in the long run, drive the medical markets towards an equilibrium configuration in which most doctors bulk-bill, and many are organised in vertically integrated clinics that bundle several different specialties under one roof. Why is this so?

Medicare was introduced at a time when the number of doctors entering particularly the GP market was on the increase. This appears to have been partly the consequence of events that occurred in the 1970s. When Medibank was first introduced in 1975 there were not enough doctors to meet the extra demand. For a time waiting rooms were overcrowded, appointments were necessary, and surgery hours were often inconvenient to the patient. Two new medical schools were opened in the mid to late 1970s (at Flinders University in 1974 and the University of Newcastle in 1978), and the two large Sydney medical schools shortened their degrees from six to five years. They had double graduations in 1979, and at the same time the number of overseas doctors migrating to Australia was rising. New medical graduates began to enter the GP market after their intern year plus two to three years residency in hospitals. All of this meant that when Medibank was reincarnated as Medicare in February 1984, the subsequent rise in demand was met with an expanded supply that had, to a large extent, already taken place in response to earlier policies. Many members of the medical profession, as well as the AMA, were complaining that there were 'too many doctors'.[1]

In normal circumstances price-cutting competition between doctors would have driven fees down to the costs of production plus a rate of profit that doctors could earn in their best alternative occupation, if they so desired. Under Medicare, however, patients are reimbursed 85 per cent of the MBS fee or the fee the doctor actually charges, whichever is lower. Therefore it

[1]Foreign doctors now have to sit a stringent set of exams before gaining registration, and the Sydney medical schools have not reverted to six-year degrees. Note that although the Medibank policy was reversed after the change of government in 1976, this did not mean that medical students would desert their chosen career paths in great numbers. This is because the costs of training that have already been incurred up to the time at which there is a change in expectations about future prospects in medicing are sunk (irrecoverable), and so the costs of staying with a medical career are thereby lower.

does not pay a doctor to cut his price below 85 per cent of the MBS fee on services performed outside hospital for which the gap is less than $20 (thus for which MBS fees are less than $20/0.15 = $133.33). This is because the patient gains nothing from the price cut and the doctor loses without attracting any extra patient demand. Similarly, it does not pay to cut price below the bulk-bill point for **any** service performed in hospital because there is no $20 cap on patients' outlays. (This is offset by the fact that patients are permitted to take out private health insurance to cover the in-hospital gaps; this partial reversal of the legal ban on such insurance was introduced in 1985.) Finally, non-hospital services for which MBS fees are in excess of $133.33 cost the patient just $20, whatever the fee level, and so for the same reasons it does not pay to cut price below the MBS fee itself.

The formula for Medicare subsidies therefore places a floor under market prices. For services rendered outside hospitals the floor is the bulk-bill point for services cheaper than $133.33, and the MBS fee itself for services dearer than this amount. The more doctors there are in any locality the greater is the competitive pressure to cut fees down to the floor levels. Any doctor who does not meet the market runs the risk of losing clientele to bulk-billing competitors.

Markets for medical services, especially GP services, are thus driven to a bulk-billing equilibrium combined with full MBS fees for more expensive services. In addition, since it does not pay to compete by cutting price further than these floor prices, competition spills into non-monetary forms such as longer surgery hours, or waiting rooms decked out with plush carpeting and this week's reading material in place of last year's.

A further avenue for competition is to offer patients several different kinds of services such as primary GP care, radiology, pathology, sports medicine, etc., under one roof. This reduces the the costs of searching and the other costs of transactions, such as the patient's time spent scheduling specialist services not available in the GP's clinic. The number of 24-hour 'super clinics' organised in this way has mushroomed in Australia. Until recently, the after-hours loadings built into the fees schedule gave clinics a further incentive to stay open at all hours. For example, a standard GP consultation in 1986 carried a fee of $A15.60 (bulk-billed at $A13.26), while the MBS fee for the same consultation performed after hours was $A24.00 ($A20.40 if bulk-billed). This quite substantial 54 per cent price differential was largely removed in May 1987, to the annoyance of clinic entrepreneurs, and so this new change to Medicare can be expected to result in a drop-off in graveyard shifts at super clinics.

To sum up, the effect of the Australian government's universal health plan, Medicare, is to generate more demand for medical services that are

valued less than their costs of production. The result is larger government outlays, and so more taxes, and a distorted, wasteful allocation of resources in medical markets.

Medical licensure. The second important area of government intervention in medical markets is the compulsory licensing of medical practitioners. This is a common feature of health care markets around the world. In Australia medical licensure is called 'registration', and it has been enshrined in state laws for over 50 years.

Briefly, the various state Medical Practitioners Acts require that, in order to gain registration as a doctor, a person must successfully complete a six-year university course at one of the university medical schools, and follow this with a year spent as an intern at a 'recognised' hospital. Successful registrants are then legally entitled to practise medicine, to refer to themselves as (medical) doctors, and most importantly, to have the costs of their services subsidised by Medicare.

In some states the Acts prohibit unregistered persons from selling medical services (although not in NSW), and from calling themselves (medical) doctors. Therefore they close off entry of unregistered competitors into the medical marketplace and they bar non-registered individuals from access to tax-funded medical subsidies.

For those who seek entry via the route laid down in the legislation, the training requirements impose significant costs. Although the (large) costs of university training are borne by the taxpayer, a medical student still has to bear the cost of income that is forgone as a result of not taking up some alternative occupation. Even though this cost is not directly incurred in the form of monetary outlays, it is a cost nonetheless because it is something one must give up in order to invest in medical training. For example, suppose that a person would have to give up a job worth $20 000 per annum (net of tax) in order to attend university full time. If this person chose a three-year course in science or economics, the income forgone would be equivalent to owning an asset worth $54 465 if the real rate of interest were 5 per cent. If the person chose medicine, which is a six-year course, the asset equivalent of income forgone would be $101 514, which is 86 per cent larger.

Other sections of the Medical Practitioners Acts serve to limit competition between established, practising doctors. Doctors are not permitted to engage in effective advertising or to 'tout' for custom. In Victoria, for example, advertising other than in the (highly restrictive) prescribed manner is referred to in the code of ethics as 'infamous behaviour' (Burton, 1971:ch. 23). Doctors are restricted to practise in the state in which they are registered, thereby eliminating competition from transient doctors. Finally, the system under which a referral is necessary for one's patient to be covered under

Medicare serves to reduce competition between doctors in different segments of the medical marketplace.

Are doctors wealthier under the subsidy and thanks to legal barriers to entry? The economics of professional licensure indicates that in any market, an important change in the producers' environment will benefit those individuals who were fortunately in position just at the right time. Some doctors no doubt captured extra revenues in the short run when Medibank and Medicare were introduced. As people became aware of the higher returns available in the medical profession, more producers entered the market. Ultimately this increased competition destroys the abnormally high returns. The time it takes for this to happen depends upon how fast supply responds to the attractions of higher earnings. In medicine the response time is quite long because of the time it takes to invest in medical training. Established producers can slow down the whole process by successfully establishing barriers to entry, and better still, by having these barriers policed by government.

Doctors willingly incur greater costs of training in order to enter the profession and capture any excess returns that might have been created in the past by the legislated market closure. But the higher costs of entry eat into the surpluses. In the long run the 'surpluses' become revenues that are necessary to cover the costs of training and any other additional costs that doctors bear as a result of the Medical Practitioners Acts.

As an example, there are some rough calculations showing that, at least in the case of GPs, the asset equivalent of a lifetime of net returns after practice costs and tax have been deducted is just about the same as the asset equivalent of net income for a person on 'average weekly earnings' (given that the taxpayer bears a proportion of the training costs), and is below the asset equivalent for an economist, a profession that is unprotected by compulsory licensing (see Logan, 1984; Leffler, 1978). The upshot is that patients pay a little more for medical services than they would without the protection of the licensing Acts, while doctors break even over the long run.

The Medical Practitioners Acts are frequently justified on the ground that ordinary people should be protected from quacks and unethical practitioners. Do patients benefit from higher quality medicine because of the Acts? On the one hand, if people are forced to take a Rolls Royce when they would have preferred a Volkswagen at a lower price, they are worse off; this is so also if they are forced to take a free automobile but bear a higher tax burden.

On the other hand, do the provisions of the Acts ensure that a Rolls Royce medical system is actually delivered? The Acts ensure only that a doctor has been successful at a prescribed course of training at a recognised medical

school and has completed an intern year in hospital at some time in the past. The Acts do not require doctors to invest in subsequent training, to keep up with current developments in their areas of expertise, or to perform a minimum number of operations per year in order to maintain their expertise in particular procedures. Doctors, however, voluntarily undertake all of these without benefit of legislated incentive, just as do any professionals who rapidly discover that they must maintain and extend their human capital in knowledge and expertise in a competitive environment. So it is not the Acts that ensure quality; rather it is a combination of market forces and personal standards of professionalism in medicine that sustain quality of care.

Government intervention creates two real problems in respect of the quality of medical care. First, Medicare distorts relative prices and thus distorts the signals that prices provide to patients in their choice of doctor. Second, the ban on advertising severely restricts the flow of information to patients about the doctors among which they could choose.

Hospital Services

In Australia there are about 91 000 beds in just over 1000 hospitals (Commonwealth Department of Health, 1986:113). Seventy per cent of all hospitals are public hospitals, which are largely funded from State government funds but do collect fees for private patients. They are managed by hospital administrators and are regulated by State government bureaucracies. Public hospitals have 77 per cent of all 'approved' beds. Private hospitals are mostly for-profit institutions, but some are non-profit hospitals owned and run by religious or charitable organisations.

We noted above that in 1981 the Commonwealth Government changed the method of funding State public hospitals. It removed the dollar-for-dollar subsidy of recurrent costs, and increased the more general revenue-sharing grants to each State by amounts that in principle should permit a continuation of States' hospital programs. However, grant dollars do not necessarily stay where they are put; it all depends upon the priorities that State politicians accord different spending programs, and the relative costs of meeting those competing priorities. Under the current system, the cost to the State budget of spending an extra dollar on a hospital is a full dollar's worth of expenditure cuts somewhere else, whereas under the previous arrangements the cost was only 50 cents. This makes hospitals twice as expensive to State budgets in comparison to other programs, such as the Sydney Darling Harbour scheme, or NSW's home tutor scheme, or other deserving projects.

The price effect applies to political decision making under budget constraint as well as elsewhere, and we would expect a fall in real hospital

spending relative to other projects. This appears to have happened. Public hospital occupied bed-days per head of total population have decreased by 16.5 per cent since 1981-82 (occupied bed-days per head in private hospitals have decreased by 6.9 per cent). 'Approved' beds available have also fallen over this period, as wards have been closed or bed-'rights' sold to the private sector.

A second reason for the reduced supply of public hospital beds is that costs have risen. A recent fees inquiry (Medicare Fees Inquiry, 1985) resulted in higher hospital costs for visiting medical practitioners. New wage deals have increased nurses' wages and improved their working conditions, which means higher costs of hiring nursing staff, especially as hospital services are nurse-intensive. In NSW for example, nurses comprise on average about 43 per cent of the hospital workforce, and so any wage increases strongly affect hospital budgets. With cuts in real budget levels, hospital administrators are forced to make economies.

Because of the way award wages are set in Australia, wages often are artificially forced to remain at levels that are too low to meet the demand for labour. This has happened in the market for nurses in NSW. Managerial incentives in public enterprises often permit administrators to avoid the consequences of customer dissatisfaction when services are cut. Public hospital administrators have an incentive to resist wage claims, because of their effects on hospital budgets. Falling relative wages have induced nurses to leave the industry to seek work elsewhere, and administrators have had to close beds in response to the 'nurse shortage'. At the same time, changes in the training programs and requirements for nurses have created a temporary shortage, exacerbating the problem. Finally, there is an increasingly severe shortage in particular skilled areas when changes in medical technology generate demands for new nursing skills, but the structure of relative nurse wages prevents the supply from responding as required.

Therefore, the lack of growth in public hospital budgets and the widening imbalance in nurse supply means that more beds are closed and so patient waiting lists lengthen.

A third reason for resource problems in public hospitals is that public hospitals are administered essentially as bureaucracies. Administrators' incentives to notice the demands of patients are weakened because Medicare patients are not able to offer a price in order to secure a bed, and the administrator's income is largely unaffected in any case. Nor are administrators and health bureaucrats required to return a profit, and so they have a diminished incentive to ensure that their institutions are efficiently organised, that cost control is exerted through optimal accounting procedures, and so forth.

Public hospital administrators have found themselves faced with restricted budgets, rising costs, and an increasing demand for hospital beds for which they cannot charge a price, private patients excepted. Governments have been unwilling to impose the extra taxes or to reduce other spending programs to the extent necessary to alleviate the bed shortage. In effect they have allowed the market for hospital services to clear not by price but by queuing.

Waiting lists for many hospital services have lengthened (see, for example, Logan and Collins, 1986), and this has attracted intermittent attention from the media, together with stories about patients dying to get into hospital (*Sydney Morning Herald*, 22.10.87, p.1). Both Commonwealth and some State governments have just recently sought to alleviate the shortage by small injections of funds or by permitting private hospitals to invest in additional facilities.

For some years now patients have borne non-monetary costs of waiting. These costs are not directly revealed as prices are in markets, and so governments can, for a while, turn a blind eye. In fact, some bureaucrats have been heard to express their paternalistic opinion that waiting in line is really a more appropriate rationing method than competing for scarce resources on grounds of price, especially in health. The point is, however, that patients have been burdened with these additional costs of waiting as a consequence of the combined effects of Medicare and events that have affected the supply side of the public hospital system. But these are not all of the costs. Patients who get 'sick' of waiting transfer their demand to the private hospital sector. There the market clears by price adjustments, and so the spillover from the public hospital sector has the effect of raising private hospital bed-day charges. This in fact happened in early 1988. Costs of hospitalisation have thus risen under Medicare — both non-monetary costs of waiting and higher private hospital charges paid either directly out of pocket or in the form of higher private health insurance premiums. There is simply no way for patients to escape the additional costs that are created by the system.

Health Insurance Markets

The health insurance market up to 1985 in Australia consisted of over 60 non-profit 'voluntary' funds that were registered under the National Health Act, together with a small number of for-profit non-registered private funds that chose to avoid the regulations of the Health Act. Just before Medicare there were about 14 non-registered funds. Since September 1985, these funds have been prohibited from writing new business.

Registered funds offer a limited variety of policies, and they are required to offer each applicant the same premium (price) in any single state. They must take all applicants regardless of risk class. They set premiums on the basis of 'community rating', which pools risks across the whole population that is covered. The funds differentiate their products in minor ways, but compete mainly on the price of the community-rated policies offered to all. Their policies contain minimal incentives for policy holders to engage in health-promoting activities or to avoid unhealthy behaviour such as smoking and drinking. Except for a small number of plans, there are no front-end deductibles and the options to choose different co-insurance rates at different prices are severely limited. Since insurers are unable to offer contracts tailored for different risk classes (i.e. low-risk people would prefer cheaper policies but with less coverage), the outcome in this kind of regulated insurance market is inefficient.

The portfolio of policies available from the registered funds clearly does not suit everybody. The burgeoning number of non-registered health insurance funds that appeared in the immediate pre-Medicare years offered low premiums, reasonably wide choice of front-end deductible or co-insurance rates, and discounts for non-smokers. However, the non-registered funds mostly limited their clients to people in lower risk categories, such as those under 65. This meant that the registered funds acted as insurers-of-last-resort, and a Gresham's Law of health insurance inevitably drove the worst risks into the caring arms of a registered fund. Registered funds then acted as a de facto safety net for the otherwise uninsurable. Thus government policy in respect of health insurance markets created adverse selection (see Chapter 1) with a vengeance. Private for-profit funds, which effectively specialised in good risks, could afford the low premiums, while the voluntary registered funds had to raise prices to cover the higher cost of a disproportionately large high-risk component in their portfolios of clients. It is likely that persistent lobbying by the registered funds played at least some part in achieving the September 1985 legislation that now protects the cartel of registered funds from entry of competitors.

With Medicare promising substantial subsidies to everyone, regardless of their private insurance status, there was initially a predictable fall in the number and proportion of Australians who chose to remain with the registered funds. The main benefits of retaining private insurance under Medicare are, first, patients retain the right to choose their own doctors as private patients in public hospitals; second, they can insure against the various gaps for in-hospital services in public or private hospitals; and third, insurance covers a proportion of the costs of a private hospital for patients who simply prefer the care provided in the private sector or wish to avoid the long waiting

lists at the larger public hospitals. However, a number of people considered the benefits to be worth the costs of the premiums, and about 50 per cent of 'contributor units' remained privately insured after Medicare. This proportion has risen slightly since 1985-86, perhaps because of the growing queues at public hospitals, and because a number of procedural specialists are now confining their operations to private hospitals, facilities permitting.

Who gains and who loses from the redistributive effects of forcibly replacing the mixed pre-Medicare insurance market with the Medicare-plus-registered funds system? A few calculations serve to show that, taking into account only the additional impost of the Medicare levy together with insurance premiums charged by registered funds before and after Medicare, everybody whose income is above the Medicare levy threshold and who prefers the basic private cover that ensures doctor-of-choice is financially worse off than they were in the period before Medicare when insurance premiums attracted a 30 per cent tax rebate. Ignoring the pre-Medicare tax rebate for insurance premiums paid, the 'break-even' gross (pre-tax) incomes above which these people are worse off under Medicare are about $A16 000 for a single person and $A32 000 for a family. These are not remarkably high income levels compared to average weekly earnings (male adult) of about $A24 000.

Therefore the Medicare package is inefficient in redistributing income from the more productive members of society to those who remain on the lower income scales and who use the health system. It is inefficient first because the recipients of the welfare transfer must consume their gains in-kind. Second, part of the tax dollars are lost in the administrative costs of delivering the goods. And third, the income-in-kind is not necessarily distributed to those who are struck down with a bout of poverty. An example is the young but sickly person who is temporarily without cash flow because he or she is undertaking some kind of professional training, but who is rich in future anticipated income.

A curious side effect of the system is that many people who do pay the Medicare levy seem to think of it as some kind of insurance premium. It should be clear that the levy is in no way an insurance premium, nor does it 'finance' Medicare, nor bear any discernible relation to individual needs for health care or for health insurance. The levy is simply a tax like any other proportional tax, with a poverty trap (the levy thresholds) built in at the level of low to middle income ranges.

To summarise, government intervention in the health insurance market in Australia has resulted in a cartel arrangement under which the registered funds offer policies that are well designed to encourage more utilisation of health care services rather than less. The government has closed the market

to insurers who might offer alternative policies, for which many people had already revealed a preference. But barring non-registered, for-profit funds from the insurance marketplace can be regarded as an inevitable outcome of the adverse selection that was the consequence of government regulation itself, as we have seen.

A less obvious outcome of the regulatory constraints on health insurers is to reduce the incentive to create innovative cost-effective insurance policies, such as, for example, the 'cafeteria plans' that have arisen in the US market and are described in the following chapters. In the same way, the presence of government reduces insurance funds' scope for introducing marketing and production innovations such as workable Health Maintenance Organisations (HMOs), or effective monitoring devices for controlling the costs of hospital and medical services.

Chapter 3

New Zealand's Health System

I. BRIEF HISTORICAL BACKGROUND

Access to Primary Care

The election of the first Labour Government and the passing of the 1938 Social Security Act marked a watershed in the development of New Zealand's health system. The government believed it had received a mandate to introduce a free and universal health service. Unfortunately for the government, the medical profession refused to play its prescribed role (see Lovell-Smith, 1966). Virtually all members of the New Zealand branch of the British Medical Association refused to join a state-funded capitation scheme or become salaried rural or hospital medical staff, and insisted on maintaining a fee-for-service payment structure. Moreover, the government's approved fees were not accepted as full payment. Consequently the government's desire for a fully integrated state health service was left unfulfilled, and what emerged was the so-called 'dual system' of public and private health care delivery.

This compromise arrangement did not result in zero-priced primary health care for the consumer. The **General Medical Services (GMS) benefit*** accounted for about 75 per cent of the standard fee for a visit to the GP in 1941, but its real value has been significantly eroded by inflation over the years, notwithstanding occasional upward adjustments. By 1988 the benefit (which is usually claimed by doctors under bulk-billing arrangements) covered less than 10 per cent of the normal adult fee, but with more generous provisions for the young, old, chronically ill, and social welfare

beneficiaries. Although the GMS benefit was increased substantially in October 1988 (while the subsidy on prescription pharmaceuticals was reduced), no political party has been willing to make regular adjustments in the benefit or to index it against inflation.

According to Richards (1981:64), patients saw the GMS benefit as a subsidy to doctors and did not bother lobbying for increases in the benefit, since this would appear 'merely to be further lining the doctor's pocket'. When the subsidy was finally increased, after remaining at 75 cents for 31 years, some doctors took the view that they had been underpaid for many years and refused to reduce the component of the fee paid by the patient in proportion to the increase in the subsidy. Richards, in common with most observers, argues that if patients had been required to claim the refund, they would have recognised the GMS benefit as targeted to them and would have pressed for increases in the benefit.

Unfortunately most observers would have been wrong, since the division of the subsidy between doctors and patients is determined by the price elasticities of supply and demand and does not depend on who is the legal recipient of the subsidy. Other things being equal, the less elastic (that is, the less price responsive) is the supply of doctors, the greater will be the share of the subsidy going to the medical profession. Restrictions on the number of people practising medicine and on the immigration of doctors, and the absence of restrictions on the emigration of doctors, serve to skew the redistribution of taxpayers' funds towards the medical profession.

The medical profession has lobbied persistently for increases in GMS benefits (see Medical Association of New Zealand, 1975) in the professed interests of its patients, but it has not been very successful despite the introduction of full or nearly full subsidisation of other parts of the health system. It is almost as if successive governments were punishing doctors for their intransigence. For consumers the outcome of these events has been a rapidly rising price for GP services and, for many, the purchase of health insurance to prevent what has been a rapid rise in the effective front-end deductible in the public 'insurance' scheme. For those without insurance, a fee of greater than $20 is a substantial deterrent to purchasing medical services unless the expected benefits are relatively large.

In August 1988 the General Practitioner Society 'reminded' the Minister of Health of its concerns by publishing in its journal an allegedly confidential Treasury paper recommending greater subsidies for GP visits and increased charges on prescriptions, maternity visits and laboratory tests. On 26 October 1988, the Minister of Health announced a long-delayed health policy in which the adult GMS subsidy was raised by 200 per cent and the adult prescription charge by 400 per cent. While the Minister of Health claimed

to have received assurances from the NZMA that doctors would pass on benefit payments to patients, there was little apparent change in consultation fees on the grounds that the higher subsidy allowed postponement of cost increases that had already been incurred. But with freedom to set prices, there was nothing to keep doctors from passing on alleged cost increases prior to the change in policy. Consequently the result is as expected, namely, that the subsidy has been largely captured by the inelastic supply of doctors.

Some writers, Fougere (1984) for example, argue that welfare states distribute medical care on the basis of need rather than ability to pay. It does not, however, appear that primary care is allocated on this basis in New Zealand. Rising taxes on the incomes of the lower-paid have reduced their ability to afford such 'luxuries' as frequent visits to the doctor or medical insurance. This problem is compounded by the fact that GPs are the state-approved sole gatekeepers to other parts of the health system, including diagnostic and laboratory testing, prescription pharmaceuticals, specialist referral, and secondary care. Moreover, the higher GMS subsidy rates are targeted very loosely; the mere fact of being elderly or a child does not mean that one necessarily needs a higher rate of subsidy.

The lack of uniformity in state third-party funding has no obvious rationale on equity grounds and has led to some bizarre situations. For example, Kerr (1987:2) reports a recent remark of the Minister of Finance that 'We give prompt service and generous income support to someone who pulls a muscle at jazzercise, no matter how wealthy they are, and even if they have private medical insurance. But someone with crippling rheumatoid arthritis pays almost all their own GP bills, waits in public sector waiting lists for services, and waits in the queue at Social Welfare for the sickness benefit'.

Access to Secondary Care

As with primary care, post-1938 developments in the hospital sector also saw some accommodation with the private sector. Although there was an initial steady decline in the share of hospital beds provided by the private sector, it was not wholly crowded out. Private patients received a daily subsidy that was increased from time to time and by 1986 included long-term medical and geriatric benefits. On 1 August 1987, however, the government removed medical, surgical, and maternity benefits to private hospital patients below the age of 65, and it has subsequently removed subsidies relating to prostheses, medical gases, non-clinical drugs and anaesthetic drugs.

The share of private hospital beds increased during the 1950s in response to state capital cost subsidies. There are now some 180 private hospitals, mainly licensed under the 1957 Hospitals Act, providing over 6500 beds or

somewhat more than 20 per cent of the total.

The hospital sector is dominated by public hospitals, which provide treatment at zero price though with considerable non-price rationing. The 1938 Act led to rapid growth in central government funding of new facilities and the demise of previous arrangements where local hospital boards raised funds from ratepayers with an equal contribution from central government. Hospital boards have gradually lost autonomy ever since, and there have been continuing attempts to amalgamate them, along with district offices of the Health Department, into Area Health Boards. A major impetus in the drive towards centralised hospital administration in New Zealand may be found in the Third Labour Government's White Paper on health reform (see House of Representatives, 1975).

The completion of this task is planned by the Fourth Labour Government's October 1988 health policy, in which a new Ministry of Health will supersede the Department of Health, and 14 to 16 Area Health Boards are predicted to evolve and supply representatives to a new overview body and policy-maker, the Health Council, on which private sector interests are to receive no representation.

II. HEALTH CARE EXPENDITURE

The Broad Picture

Scott et al. (1986) have provided a relatively up-to-date listing of growth rates in various areas of real public spending on health, along with a breakdown of who pays for what in New Zealand health care. Their Tables 1 and 2 (1986:139) are reproduced here.

Table 1 presents the growth in components of public health expenditure in real terms. In the decade to 1986, health spending fluctuated between $NZ700 and $NZ800 million in 1977 prices, and fell sharply during 1983-85. The share of GDP taken up by health spending has increased from less than 5 per cent in 1960 to about 6.5 per cent, about one percentage point greater than the increase in the UK over the period, about half of one percentage point less than Australia's increase (except for the blowout in the mid-1970s), and several percentage points below both the regional Swedish system and the most heavily decentralised US system. Unfortunately, intercountry comparisons of the shares of health spending in GDP are quite unrewarding for purposes of health policy. They say nothing about the quantity and quality of output, and do not capture the fact that some markets, especially for non-elective surgical services, are grossly out of equilibrium.

Table 1
New Zealand Health Care Expenditure 1975 – 1981

Year ending March	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975
Residential Care												
Health camps	989	1 033	1 008	831	832	855	743	1 037	720	640	769	609
Board's allocation	369 835	385 588	383 286	403 005	420 157	408 758	393 053	389 237	343 008	329 571	354 738	328 929
All hospitalisation	884 276	403 971	401 485	420 726	438 103	425 684	403 393	403 538	357 004	345 061	369 464	342 437
Capital costs	14 184	12 591	14 400	16 476	18 231	27 241	33 845	44 638	39 009	42 315	36 382	23 769
Community-based Care												
Pharmaceuticals	114 000	100 588	99 268	91 378	89 265	84 545	82 125	74 246	68 715	63 749	60 386	56 479
Primary medical care	56 650	50 022	51 256	52 215	55 737	61 161	63 955	71 676	63 101	68 996	75 420	67 660
Public health*	19 729	21 966	22 615	25 365	26 283	26 244	27 744	23 886	26 881	25 487	25 374	26 043
Public administration	5 944	6 214	6 090	5 945	5 978	5 346	5 861	5 923	3 609	4 144	3 278	2 921
Other	14 630	12 436	14 256	8 028	7 767	9 115	8 230	9 940	10 325	8 226	6 765	6 323

Notes: Figures are in constant 1975 dollars (000's). Aggregated figures are based on different deflators and are indicative only.
*Includes sewerage subsidy, school dental service, public health nurses, and health protection.
Source: Scott et al. (1986:139, Appendix 2).

There are, however, some interesting changes in the composition of the health budget in Table 1 that deserve mention. First, the budget has been contained in part by an unwillingness to provide new capital works. Second, real GMS benefits fell steadily until 1985, after which time some targeted benefits were increased. There has been substantial growth in administrative salaries and in public health nursing, but the two most dramatic changes have been in the funding of practice nursing and in pharmaceutical benefits. These will be discussed in detail below.

Current Funding Levels

As data in Table 2 show, the government is responsible for about 80 per cent of total health spending. Private patients meet about 15 per cent of the total from their own resources, and they dominate expenditure for geriatric, paramedical, dental, and specialist care. Insured refunds account for just over 2 per cent of total expenditures, mainly serving to finance short-term hospital stays and GP services. Of similar magnitude are payments from the **Accident Compensation Corporation*** (ACC), which now makes significant contributions to the funding of short-term hospital stays, paramedical, GP, specialist, and diagnostic services.

III. THE GROWTH IN HEALTH INSURANCE

Health insurance in New Zealand is a relatively recent phenomenon. It seems to be closely associated with increased waiting times for zero-priced elective surgery in public hospitals and the declining real value of the GMS subsidy for primary care. Over one-third of the population is now covered by some form of medical insurance. The market, which is comprised mainly of six specialist non-profit **friendly societies,*** is dominated by the Southern Cross Medical Care Society. Established in 1961, Southern Cross enrolled its one millionth member during 1987, and has more than three-quarters of the market. Most members are in group schemes, which tend to be fairly loosely defined and offer concessional premiums.

All societies offer a standard health care plan. Two societies offer 100 per cent refunds for both primary and secondary care (to specified maxima) under their standard plans. The others involve some degree of **co-insurance,*** the maximum co-insurance rate being 20 per cent under the Southern Cross plan, which also reimburses according to a schedule of fees. The four largest societies also offer 'executive', or 'VIP', or 'sovereign' plans, all of which offer 100 per cent reimbursement along with ancillary benefits. These

Table 2
Relative Shares of Health Funding 1985

Expenditure type	Total amount	Percentage breakdown				
		% Public funds	% Insured refund	% Patient pockets	% ACC	% of total
Administration	40 745 300	100.0				1.6
Institutional						
Long-stay hospital						
private	94 062 949	68.5	2.1	29.2	0.0	3.8
public	95 835 000	100.0				3.8
Old people's homes	130 208 350	38.5	0.8	60.5	0.0	5.2
Short-stay hospital						
private	53 716 901	17.1	46.6	14.5	21.6	2.1
public	1 257 956 700	100.0				51.0
Total Institutional	1 631 679 900	90.5	1.7	6.9	0.7	66.2
Community						
Paramedical*	63 345 179	3.6	2.2	72.2	21.9	2.5
Dental	104 583 445	34.4	0.0	62.5	3.0	4.2
Pharmaceuticals	322 337 454	79.0	0.7	20.1	0.0	13.0
GP services	164 437 704	36.2	11.3	36.0	15.8	6.6
Specialists	37 227 524	23.4	3.3	56.6	16.4	1.5
Diagnostics	44 123 951	82.9	1.3	5.6	10.0	1.7
Public health	55 651 778	100.0				2.3
Total Community	791 707 035	61.5	3.4	35.1	7.2	32.1
Overall Total	2 464 132 235	80.0	2.1	15.1	2.6	100.0

*Includes 'alternative' primary carers such as physiotherapists, chiropractors, clinical psychologists, acupunturists, and osteopaths.
Source: Scott et al. (1986:139, Appendix 2).

plans carry suitably princely premiums about three times those of the standard plans (although the actual price does not generally appear to be public information). These plans and their implications are discussed in Chapter 8.

Plans that offer 100 per cent cover up to prescribed maxima clearly have a rear-end deductible. As a consequence, insurers advise patients to inform their health care providers of the nature of their insurance. In the words of Southern Cross, 'it is important that your surgeon knows you belong to the Society and that you discuss fees **BEFORE** an operation. The surgeons, who know our benefits, prefer it this way'. The effect of this is to provide some attempt at fee containment for surgeons who charge at above average rates, since the patient pays the full excess over the scheduled maximum. However, this procedure does not serve to contain the average fee itself.

Some analysts blame the growth in medical insurance for the fact that the public hospital system is increasingly unable to handle the demand for its services. Thus Fougere (1986:88) contends that 'taking out medical insurance ... works to worsen public sector performance by draining it of its supply of medical services'. His argument is that hospital specialists can earn more in the private sector than in the public sector, so that 'the public sector loses some of its supply of medical services and its performance worsens; more people become dissatisfied and take out medical insurance, and so on'. The dynamics of this process are, however, far from clear.[1]

As far as hospital waiting lists are concerned, there is no way to predict whether they will grow or shrink since they will no longer include insured patients. In the long run, larger numbers of specialists will emerge to take advantage of the higher incomes available. But the real problem is that the government, perhaps using its 'countervailing power' to offset the medical monopoly, is paying less for services of specialists than those specialists can earn elsewhere.

The emergence of health insurance has permitted many people to satisfy their legitimate demands for medical care. Over one-third of New Zealand's population has chosen to use its own **after-tax** resources to protect itself against medical exigencies rather than pressuring for extended GMS benefits and more free public hospital care. Perhaps this is a signal to those who argue

[1]The dynamics of the funding process arising from the so-called 'Blue Book' formula are much more clear. Here, hospital boards' current funding is reduced in response to the **change** in use of the private sector substitute facilities. If private hospital bed numbers begin to grow, the public sector will contract continuously, raising waiting lists and increasing the demand for medical insurance over time.

for more rather than less government involvement in the delivery of health care to typical New Zealanders.

Compare the dual funding scheme for primary care suggested by the Board of Health (1986), which is acknowledged to be considerably more expensive than the present GMS scheme. According to the Board (1986:8), 'This does not concern us unduly; it has been apparent for many years that the funding of primary medical services is woefully inadequate compared with expenditure on institutional services', a typical bureaucratic response that ignores the opportunity cost of taxpayers' funds and promotes a scheme that is not clearly preferred by any consumer. Further, the Board does not even address the question of whether existing public resources could be better allocated by transferring some to primary care and away from secondary care. New Zealand's history of social policy is replete with examples of grand social engineering without reference to budget constraints.

IV. SUBSIDISED MEDICAL EDUCATION

In New Zealand, most direct training costs are fully subsidised for deliverers of 'official' health care at all levels. Although doctors must declare an intention to reside in New Zealand upon registration, the migration statistics tell a different story. The close proximity of Australia, the acceptability of New Zealand-trained doctors and nurses under Australian registration legislation, and a substantial earnings differential between two closely integrated labour markets compound New Zealand's problem.

Over the period 1979-86, New Zealand actually gained doctors through migration from all sources, but there was a net loss of 167 doctors through trans-Tasman migration. There was also a net loss of more than 4500 nurses during this period, including a cumulative net loss of 3761 nurses to Australia, representing more than 10 per cent of the 1985 nursing workforce. Although gains were made during 1984, there were serious losses at the beginning and the end of the period, the latter in part due to a change in training procedures in New South Wales that created 1000 nursing vacancies in that State overnight. During 1986 New Zealand's net loss to Australia represented over 2 per cent of the nursing workforce. By the end of 1986 there were over 1000 nursing vacancies in New Zealand, while nearly 800 nurses left New Zealand in the year ended March 1986 (these data come from data prepared for the Population Monitoring Group of the Planning Council of New Zealand). Although problems eased somewhat during 1987, future nursing shortages can be predicted as a consequence of the growing size of

the elderly population, the shrinking size of the potential nursing workforce, and competing demands by other professions.

There continues to be a significant wage differential in the nursing profession between Australia and New Zealand, as well as a serious nurse shortage problem in Australia. The real income differential actually widened substantially between 1982 and 1985, owing first to a wage freeze in New Zealand, and second to a significant currency depreciation after the exchange rate was floated. In October 1985 Savage (1985:27-8) concluded that 'the after-tax income of Australian staff nurses is approximately 50 per cent higher than for their New Zealand counterparts. Given the extent of shortages and discontent in both Australia and New Zealand, current salary negotiations will quite possibly result in sizeable wage increases not just here but also in Australia'. History has borne out these predictions. For example, New South Wales senior staff nurse wage rates increased by 25 per cent in 1986. In New Zealand, by September 1985, comparable wage rates had increased by only 10 per cent in four years, but this was followed by a massive 38 per cent adjustment in November 1985, which has served to reduce the current differential to below the average for the 1980s.

V. REGULATING THE SUPPLY OF PROVIDERS OF MEDICAL CARE

The supply of providers of medical care in New Zealand is heavily regulated, both by explicit controls and implicitly through the complex system of health benefits. Essentially, certain actions associated with the delivery of medical care are made the legal or economic preserve of certain well-defined subsets of the population.

Controls on Practice

The most obvious regulations involve controls on practice. Through Acts of Parliament, the government determines the characteristics of those who may be registered as particular types of providers. In order to practise a person must be registered with a vocational board or council, which has the duty under statute to ensure that those seeking the right to practise have met prescribed educational standards and levels of experience. In addition, the boards and councils frequently have a role in approving course content and examining those seeking registration. A special education committee of the Medical Council is charged with overseeing the training of GPs. The Medical Council also provides temporary registration for immigrant doctors

who manage to satisfy the requirements of the Immigration Act and the minimum standards of education and experience. Foreign doctors who have not been trained in one of the 'major' Commonwealth countries have little hope of obtaining registration, and registration is also denied unless a position has already been arranged.

For doctors, regulations begin with training. There are no private medical schools in New Zealand. Doctors are trained at the two public medical schools in Dunedin and Auckland, with some clinical work also being taught at the Wellington and Christchurch clinical schools. There are no university teaching hospitals, and clinical work is performed in association with some of the major metropolitan public hospitals.

Medical students take a six-year course including a final year as a salaried trainee intern. Training is heavily dominated by diagnostic and curative techniques; at the centennial conference of the New Zealand Medical Association (NZMA), the president noted that only 1 per cent of funding to the Auckland Medical School went into epidemiology, and there were no full-time nutritionists on the staff. Most students complete an additional year as an intern to gain experience, and in 1987 there were 80 salaried students enrolled in the government-funded Family Medicine Training Programme. Although this Programme is voluntary there are moves afoot to make it compulsory, thus further extending the training period and raising the price doctors must charge for their services in order to recover the income they lose during training.

Medical students pay nominal annual fees for courses and equipment, probably in the order of $NZ1000 in 1987. Nurses pay similar fees in each of their three training years. The direct cost of training a medical student appears to be well in excess of $100 000 in 1988 prices, almost all of which is taxpayer-funded. In July 1988 the Report of the Working Group on Post Compulsory Education and Training (the Hawke Report) recommended the imposition of a 'graduate tax' or income-contingent tuition-fee deferment plan (similar to the Wran proposal in Australia) that would serve to reduce the public subsidy to tertiary education by 20 per cent. It is estimated that this would require a repayment of $40 000 by doctors following their graduation.

There has been significant nonprice rationing of places in medical schools for many years. In 1987 only one-quarter of those who applied were accepted. Presumably everyone who applies meets the minimum entry standard, but many who meet the standard (or are capable of meeting the standard) do not apply, and instead transfer to other subjects. At Auckland University students are admitted on the basis of their school scholarship or bursary examinations, plus an interview. Similar criteria are used at Otago University, along with results from the examinations for medical intermedi-

ate students. Students may also enter at Otago if they have completed another degree at a high standard in the minimum time. Otago University also practises discrimination against Caucasians in that the first six of the 170 places are reserved for Maoris and Polynesians.

Many commentators express concern about the low level of tertiary participation by students from low-income families. Given the allocation mechanism used to ration places in medical school, the prospects of such students entering the medical profession are poor.

Controls by Providers

Like professional associations elsewhere, health professional associations in New Zealand attempt to proscribe certain activities of their members. Both the NZMA and the New Zealand Nurses Association set restrictions on practise. The NZMA includes an ethical code of behaviour in the information supplied in its annual Handbook (now Calendar) to practitioners setting up practice in New Zealand. For instance, advice about starting new practices is afforded only after new entrants consult with those already in the market at a particular location, who must also agree with the decision to supply such advice. Doctors are advised not to pay a locum tenens on a fee-for-service basis but on the basis of salary, expenses, and incentives, as 'the practice which has arisen of locums expecting and taking all they earn for a period is to be resisted as it is not in the best interests of the development of Family Medicine' (NZMA Calendar, 1986/87:25). Doctors wishing to appear on radio or television programs designed to provide medical information to the public must secure the approval of the Divisional President of the NZMA.

The NZMA also advises its members on the role of subsidised practice nurses, emphasising the complementary role of the nurse in providing services related to reception, basic examination, routine nursing treatment, prevention and health promotion, and maintaining records. Doctors are reminded that nurses are not qualified to diagnose and prescribe, and the scheme is one that 'should encourage community nursing services to become centred upon, responsible to, and employed by general practices' (NZMA Calendar, 1986/87:28). Such a view is not encouraging to the development of independent nurse practitioners.

Until 1986 the NZMA's code of ethics contained stringent restrictions concerning advertising. Doctors were to advance in their profession 'by the normal process of building up a good professional reputation — any other means to enhance a professional reputation or standing, with a view to increase of practice ... may be regarded as advertising' which must 'be taken in the broadest sense' (NZMA, 1985/86:sec.4.15). Advertising was deemed

unethical. Doctors were not to advertise in the press, by card, or circular, except for minimal announcements when starting up a practice. They could not employ agents to assist in securing patients, and nonmedical persons were not to be associated with partnerships or companies formed to practise medicine. Further, the public display of fees was deemed to be 'highly undesirable and in most circumstances unethical' (NZMA, 1985/86:sec.4.19). In 1986, however, the revised Commerce Act outlawed professional anti-advertising codes of this type.

Control of 'Outsiders'

Although there are few legal restrictions on who may practise medicine in New Zealand, there are many explicit and implicit restrictions on who may do what, with what, to whom. In so-called 'alternative medicine', including homeopathy, osteopathy, colour therapy and the like, there are no formal barriers to entry involving educational requirements and subsequent licensing. Some of these groups are now calling for government regulation to 'protect' the consumer against unsuitably trained or untrained personnel. Given the fall in the real value of the subsidy to orthodox practice, the relative price of alternative medicine has fallen, leading to a rapid increase in its use. Calls for regulation, therefore, are not surprising.

Control of Private Hospitals

Almost all private hospitals in New Zealand are licensed under the 1957 Hospitals Act. They are owned variously by religious organisations, charitable trusts, welfare organisations, private companies, and individuals. Since 1938 many of the smaller hospitals have left the market, and private maternity hospitals have given way to growth in geriatric care.

Both the Hospitals Act and the 1964 Private Hospitals Regulations impose minimum standards involving management, staffing, records, premises, etc., and both are enforced by Health Department inspection. For new developments, however, more than minimum standards must be met. Since 1977 the Health Department has established bed guidelines for all hospitals by region. Since 1984 some private hospitals, including the new Southern Cross Hospital in Christchurch and a geriatric hospital in Hastings, have had their development plans thwarted because of a bureaucratic decision that they would be **exceeding** the guidelines. But with the guidelines merely satisfied, there is still massive excess demand for hospital care, as is apparent from the waiting lists in public hospitals. Also, when private facilities expand the Hospital Boards' funding formula dictates less government spending on

public facilities. The interests of the consumer evidently are lost in this nightmarish allocation scheme.

Approximately 70 per cent of private hospitals are members of the Private Hospitals Association, the most notable exception being the Southern Cross group of hospitals. The Association 'has a primary objective for the promotion of the highest possible standards in the interests of private hospital patients' (New Zealand Private Hospitals Association, 1987:16), which it aims to achieve by a code of ethics requiring members to deliver high standards of care and protect the interests of their patients. The problem is that high standards cost money, so that members who voluntarily satisfy the requirements may be creating an entry barrier to lower-cost firms, unless the latter refuse to join the Association.

The Association's first eight Articles describe methods of conduct and confidentiality and are unexceptionable in that they are couched in vague generalities. Articles 9 and 10 deal with relations with fellow members. Article 9 requires that members should account for the interests of their fellows (i.e. their competitors) and should not seek advantage 'except by means which are scrupulously fair and honourable' (NZPHA, 1987:16). Article 10 requires members to advise their competitors when they intend to attempt to hire their competitors' staff. The meaning of Article 9 is unclear. Although it does not appear to ban advertising specifically, in practice competitive advertising is considered unethical. Southern Cross had previously been a member of the Association. Being both an insurer and a provider of hospital care, Southern Cross is able to charge its own insured patients the co-insurance share (20 per cent) of hospital bills at point of discharge. Other hospitals billed their patients fully, and refunds were claimed at a later date. It appears that some Association members may have seen this as a competitive advantage contravening the ethical code.

VI. EFFICIENCY: THE FAILURE OF THE NEW ZEALAND MARKET FOR MEDICAL CARE

The recent Report of the Health Benefits Review in New Zealand (Scott et al., 1986:Chapters 2,7) reviewed the cases for and against a free market in health services. The Report concluded (in Chapter 8) in favour of a monopoly funding role for government, with a provision allowing government to purchase many services from private contractors. In the long run the Report favoured a move to a competitive HMO model. Unfortunately, the Report typifies the widespread misinterpretation of American evidence. The United States, says the Report, 'is an example of a market model in which ... the state

plays a minimal role in regulating and funding health care services'. And, it continues, 'Funders in the United States are not in a position to exercise effective control ... There is little incentive for cost effectiveness in the United States ...' (Scott et al., 1986:92).

This statement is flawed in two main ways. First, US health care is in very large measure the product of government intervention. Not only has widespread regulation distorted the market, but huge open-ended federal subsidies to workplace health plans have undermined the cost-consciousness of health service purchasers. Second, Scott and her colleagues seem unaware of the re-awakening of competition which America has witnessed in the last few years (see Chapters 5 and 6 below).

According to Scott et al. (1986:7), 'Government involvement in health care is sometimes described by economists as arising out of "market failure"'. By 'market failure', economists generally mean situations where markets fail to achieve an efficient allocation of resources. In particular, markets are not efficient if it is possible to find a costless-to-administer change such that some members of society are better off while the remaining members are no worse off.

With this background, let us evaluate the arguments of Scott et al. as to whether it is markets or governments that fail.

Uncertainty and Insurance

According to Scott et al., a state insurer is 'far more willing than private insurers to provide cover to people on low incomes and to those with poor health status' (1986:9). It may be true that the poor cannot afford health insurance premiums, but it does not follow that the state must be a monopoly funder, less still that the state must directly supply health care. We have already shown that the New Zealand welfare state has **not** effectively insured those on low incomes. Instead, the state covers large hospital expenditures for low and high income patients alike. Since high income patients are served at zero cost, there are fewer tax dollars available for properly insuring the poor. If the state had simply purchased a standard private insurance policy for each poor person, or had financed such purchases, at least 80 per cent of all but major medical expenditures would have been covered.

Scott et al. also argue that, since competitive insurers have an incentive to minimise premiums, they 'shed high-risk applicants'. This view is misleading. Competitive insurers have incentives to offer low premiums for any **given** risk class, but they also have incentives to differentiate risk classes so that the more risky classes pay higher premiums. Although the New Zealand health insurance market may not be perfectly competitive, neverthe-

less high-risk classes do generally get served. At present, people over 65 cannot enrol as new members of a medical care society, but existing members are not excluded by their age, although premiums rise on attaining 65 years. Pre-existing conditions are often covered under group schemes, or by paying higher premiums. As for those who are a 'financial drain on the fund', although contracts are typically renewable annually, nonrenewal is rare. This is to be expected since, in group or even family policies, nonrenewal would involve the loss of the healthy as well as the unhealthy part of the insured pool.

Nevertheless, we do not deny that any attempt to privatise health insurance overnight would create serious short-term intergenerational equity problems. Many people have been forced to pay taxes during their healthy working lives to fund the medical costs of others, and they may find themselves elderly, unhealthy, uninsured, and with little savings through circumstances beyond their control. Consequently, the state would be required to act as a residual insurer of this group during a transition to a competitive market.

Regulating Suppliers

Scott et al. argue (1986:7) that 'Government subsidies and regulations lend support and endorsement to some forms of care over others', and that regulatory barriers to entry and minimal competition among suppliers make supply conditions in health care quite different from other markets. These distortions, however, are surely not the result of failure of competitive markets but are a direct result of government intervention in the market process. Lack of competition results from legal barriers to entry embodied in the restrictions of the Medical Practitioners Act, in immigration legislation, and through restrictions on the number of people being trained in state monopoly medical schools. Breaking down these entry barriers would allow a wider variety of medical care providers to emerge, not least nurse practitioners and other medical auxiliaries who can provide less expensive medical care for routine problems. As Brash (1986:2) notes, 'the independent professional nursing role has already emerged and been accepted by the New Zealand public'. This does not mean that nurses are taking over the role of the doctor. Rather, it means that limited aspects of primary care can be delivered more economically. Just as GPs would not seriously contemplate engaging in specialised surgery, nurses will also have strong incentives to self-regulate their activities. The role of the state then becomes one of certification, so that claims made by practitioners at all levels are verified, and quacks and charlatans exposed.

Expanding the number and variety of suppliers of medical care can and will lead to reduced costs for consumers. In the US this expansion has come about in part by increased subsidisation of medical students and other medical trainees. Although we do not address the issue of the appropriate financing of training in detail here, we do not advocate expanded public funding. In fact, reduced subsidisation of training would create pressure for shorter, less costly training programs at every level of training. Since medical students do not bear the direct costs of their training, they have less incentive than they might to press for reductions in the length of training.

The NZMA has not publicly recommended restrictions on doctor numbers, nor does it have an official role in determining the mode and form of medical training. In 1975 it supported proposals to increase the numbers of medical graduates, although it also recommended that GMS benefits be upgraded, extended, and reviewed annually (see MANZ, 1975). The NZMA has also supported the extension of competition where this would serve the interests of its members. Thus it has recommended restrictions on the employment of house surgeons and the size of their case loads in public hospitals in favour of expanded access to GPs and specialists (NZMA, undated:1). Professional bodies, however, tend to be hostile to suggestions of opening up their markets to competition, their hostility usually being justified in the interests of 'protecting' the consumer.

Third-Party Funding

Scott et al. argue that when third parties pick up the tab for medical expenses, users and providers do not get the price signals they need to make their demand and supply decisions. This, it is alleged (1986:8), 'may encourage the overuse and oversupply of services. This "market failure" justifies state intervention in the production and distribution of health care'. This view, however, is quite misleading. Third-party funding has the important advantage of relieving people from large and unanticipated medical bills. This is one of the great successes of market insurance. But because the demand for medical care is partly determined by actions of consumers and providers that cannot easily be monitored by insurers, there are inevitable moral hazard problems associated with health insurance. The question is, however, does the market handle these problems more successfully than the state, given that the problem is no less inherent in government insurance schemes, as Scott et al. acknowledge?

Arnott and Stiglitz (1986) have recently investigated the conditions under which government can improve on market arrangements when moral hazard is present. They find that government **may** have a corrective tax role

to play, involving taxing commodities that complement poor health and subsidising those that complement health promotion. The informational requirements for implementing these policies are, however, very demanding. But they are certainly worth comparing with the Scott et al. assertion, unsubstantiated in theory or fact, that state production and distribution is a better solution than a competitive market (tax-corrected or otherwise).

In their short-term strategy for change in providing primary care, Scott et al. argue that access to primary care should be either 100 per cent subsidised, or else there should be a small rate of co-insurance (they use 15 per cent for illustrative purposes). They specifically do not offer a preference for either option. They argue a case for following the Australian Medicare example of banning private insurance to cover the unsubsidised gap. Insuring the gap would simply convert the second 'solution' to the first.

In New Zealand insurance markets, however, people can choose between policies offering different co-insurance rates at different premiums. Scott et al. want all New Zealanders to be forced into a public insurance scheme for primary care that offers either zero or positive co-insurance. The reason Scott et al. cannot choose between their two suggested 'solutions' is that they are trying to deal with a complex problem that trades off equity against efficiency, but the problem is too vaguely specified to admit any precise solution.

Hospital Efficiency

Ever since central government began contributing funds to hospital boards there has been persistent concern about waste of taxpayer funds and the efficiency of public hospital care. There are very few studies of how efficiently public funds have been used, leading Scott et al. (1986:50), to remark that 'lack of accountability of providers is ... characteristic of the whole health area'.

The major issue of efficiency that has been debated is waiting lists for surgery in public hospitals. There is no doubt that public hospital waiting lists are long, and growing. Waiting lists for all surgery in public hospitals grew by over 13 000 to 46 502 cases in the decade to 1985. Although public hospitals treat 'non-elective' cases first, on the basis of medical 'need', there are still substantial and on average growing waiting lists for cardiothoracic surgery, for example (over 800 for 1983 and 1984, and over 600 for 1985). Cardiologists report that many patients do not return to work even after successful cardiac surgery, and they attribute this to delays before operations are performed.

Patients will seek private hospital care for two reasons. First, they may

prefer the nature of the service even at a higher price. In private hospitals patients have choice of specialist, but they must take whoever is assigned in public hospitals. They may also prefer the 'hotel' aspects of a private hospital. But many patients choose private hospitals because they are unwilling to wait up to two years for say, major orthopaedic surgery in a public hospital. They prefer to pay more to have the treatment sooner. Even though they pay taxes to support public hospitals, they cannot have **their** medical demands met without inordinate delay. Low-earners or the uninsured must be content to join the queue.

In this allocation process, many who are able and willing to pay for urgent treatment do not do so (yet this treatment is more highly valued than is non-urgent treatment), while those who find it difficult to pay for major surgery or to insure themselves against major surgical expenses simply have to tough it out. The welfare state treats the proper beneficiaries of welfare arbitrarily, and offers freebies to many people who do not need it.

This raises the question of whether more patients could be treated in public hospitals for a given outlay of funds. Two studies addressing this issue are the Business and Economic Research Limited report for the Southern Cross Medical Care Society (BERL, 1986), and the Arthur Anderson and Company (1987) study for the Hospital and Related Services Taskforce (the Gibbs Report, Gibbs, 1988). In the BERL report, the authors examined the average time patients spend in public and private hospitals for various types of surgical operations. The results suggested that the mean stay in private hospitals is substantially smaller than for public hospitals. For all operations, the public hospital mean stay was nearly twice that of private hospitals, while for a subset of operations for which surgical procedures and patient profiles was considered similar, the public hospital mean stay was over half as long again as for private hospitals. For a selected set of similar surgical specialties, private hospital costs were estimated to be only two-thirds of public hospital costs.

Since patients in private hospitals must pay the uninsured and unsubsidised component of private sector charges, they have a strong incentive to economise on pre- and post-operative hospitalisation, especially if their opportunity costs of time out of the workforce are high. It would be interesting to know whether there were systematic differences in length of stay for insured and uninsured patients in private hospitals. The BERL study, however, cites differences in managerial practice as the most likely explanation for these results, but it provides no evidence. In addition, both the authors of the BERL study and (more especially) Pugh (1986) have raised serious qualifications concerning issues of patient and procedural homogeneity necessary to make valid comparisons.

The Arthur Anderson and Co. approach involved comparing costs within the New Zealand public hospital system, along with a comparison of lengths of stay between New Zealand and US public hospitals following the introduction in the US of cost-saving incentives through **diagnosis related groups*** (DRGs) and other forms of managed care. Specifically, the following two questions were asked. First, if hospitals are grouped according to size (to account for different degrees of acuity), and if all hospitals operated at efficiency levels demonstrated by the better performing New Zealand institutions, what would be the estimated value of the resources released? Second, if New Zealand admission rates and lengths of stay paralleled those of the US for 1985, what would be the estimated value of the resources released? The study found that the estimated resource savings amounted to between $451.2 million and $600.9 million (compared to 1986-87 spending of $1 857.9 million), depending on assumptions made about the degree of increased acuity associated with more streamlined operations. The percentage shares of these cost savings were seen to come from the following areas: reduction in length of stay, 33 per cent; reduced utilisation of institutions, 4 per cent; savings in departmental operations, 17 per cent; savings in support functions, 11 per cent; and cost reductions via incentives, 35 per cent.

Seven key changes were identified as necessary in order to achieve the objectives of higher productivity and greater efficiency, along with equity, access, and high quality of public hospital care. These included (1) more health care being delivered at low-cost hospitals; (2) rationalisation of some acute hospitals; (3) a single manager accountable for overall performance of each institution; (4) production of consistent management information; (5) monitoring of admission, treatment, and length of stay criteria; (6) financial incentives to encourage appropriate resource use by producers and consumers, along with the separation of funding and provision; and (7) the introduction, in the short term, of experienced managers from industry or overseas hospitals and the establishment of hospital management education programs.

Nonetheless, the BERL study does suggest that there is a strong *prima facie* case to be answered by the public hospital sector regarding mean stays and costs. As it stands, the evidence is consistent with the theory of bureaucracy developed and applied by Lindsay (1975, 1980) to the American Veterans Administration Hospital system and to the British NHS. Lindsay argues that under free hospital care it is not possible to use sales information to determine who is producing products that are highly valued by consumers. Hospital administrators are accountable to funders, but funders can observe only a few characteristics of hospital output. Administrators have an incentive to produce 'visible' output items at apparently low cost, and may economise on expenditures related to comfort of patients in favour of

extensive therapy that marginally reduces the risk of complications. For similar reasons managers will tend to hold patients longer in hospital, and the result of this may be to lower the highly visible cost per patient day compared to private hospitals, which typically have lower occupancy rates.

Although there is little hard information about the relative efficiency of private and public provision in New Zealand, the evidence concerning hospital bed stays, along with theoretical principles concerning the operation of private and public firms generally, provide cold comfort for writers such as Easton, who argues that 'there may be a place for the private hospital in the welfare state providing, of course, that they are as efficient users of medical resources as public hospitals carrying out the same job', while the 'apparent cheapness (of private surgical hospitals) arises because they only carry out simple operations and because of hidden subsidies from the public hospital sector. In fact they are probably wasteful of medical resources, and we should assume this until evidence is presented to suggest otherwise' (Easton, 1974:94-5).

In the absence of well-developed insurance markets, it is clear why private hospitals do not engage in complicated surgical routines: they are expensive to provide and the public sector may be willing to provide them at zero cost to the patient. The rapid development of insurance during the past two decades, however, has been associated with growth in many areas of major surgery, including heart surgery.[2] However, efficiency can be properly tested only by permitting patients to choose between the public and private sectors. This can be achieved by permitting hospitals to compete for patients under circumstances where neither sector is favoured by subsidies or taxes.

Nurse Practitioners

The rising price of GP services in New Zealand has led to a desire by some nurses to provide substitute 'orthodox' treatment via an independent nurse

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[2]It is interesting to note that Christchurch had no public or private heart unit by mid-1987. The new Southern Cross hospital had constructed theatre facilities for heart surgery, but appeared to have been effectively blocked from using the facilities by legislation restricting bed numbers. In June 1987 the government announced that it intended to remove the private hospital surgical subsidy as from 1 August for patients under 65, and also to remove the bed restrictions. Southern Cross then announced that it would seriously consider opening its heart unit. The government countered by establishing yet another committee to investigate the 'feasibility' of a heart unit in one of the public hospitals.

practitioner role. According to Brash (1986:1), 'it appears more and more New Zealand nurses are wanting to practise more professionally, wanting to control their own practice, to provide primary health care and to have primary therapeutic responsibility in their areas of expertise. They are also willing to be responsible and accountable for their own patients'. Such a view stands in nice contrast to the NZMA's recommended role for nurses in the community. At present, however, nurses' aims are thwarted by government controls and subsidy policies. Only GPs can prescribe and legally supply the heavily-subsidised drugs on the drug tariff, and approximately two-thirds of GP consultations involve at least one prescription. Nurses cannot supply prescription medicines, including vaccines. Nor can they issue medical certificates, make referrals to specialists, or order subsidised diagnostic tests.

Further, nurse practitioners cannot claim any form of government funding at present, including GMS benefits and Accident Compensation Corporation payments on behalf of patients. Not surprisingly, the role of nurse practitioners (and of medical auxiliaries generally) is not well developed in New Zealand, although some nurses work independently in teaching institutions, rural areas, and in industry. Yet the potential market for such services may be extensive, especially among women and minority groups who commonly express disenchantment with GPs who 'have priced themselves out of the market' (attributed to Christine Bird of The Health Alternatives for Women in a 1987 press statement), or are seen as 'pompous, patronising, and pedantic' (attributed to David Caughey of Auckland Hospital in a 1987 press statement). An interesting pilot community experiment funded under the practice nurse subsidy scheme is currently being undertaken in Auckland, involving a clinic of three nurse practitioners. Perhaps we would learn more about the 'acceptability' of nurse practitioners from this experiment if their subsidy rate was similar to that for GPs.

The Accident Compensation Corporation

The Accident Compensation Corporation (ACC) entitles all citizens to compensation for the effects of accidents from all sources and independent of cause or fault. There is no longer any right under tort law to sue for damages resulting from negligence by a party to an accident. Generally, the ACC has covered in full accident-related medical costs in the public sector, and until recently in the private sector also. The ACC is also bound by its terms of reference to encourage the full rehabilitation of injured persons.

Since its inception in 1974, the growth in ACC spending for health services and earnings compensation has been spectacular. In 1987 levies on employers were **tripled** in order to prevent the effective bankruptcy of the

Corporation. Although employers in 'high-risk' industries pay higher levies, the ability of any firm to reduce its levy by its own actions is extremely limited.

Because of the no-fault rule, because employers are liable for non-work-related accidents, and because taxpayers are liable for public hospital costs, there is no way for the scheme to provide an effective incentive for accident prevention. As might be expected there has been a blow-out in costs, leading to an Officials Committee of the ACC (1986:3) reporting that the scheme 'cannot continue in its present form'. The Committee expressed concern about the administration of claims 'for an enormous number of minor injuries ... not anticipated by the Royal Commission which believed that New Zealanders did not need assistance for every minor setback and ailment' (1986:5). The Committee also expressed concern at the inability of the ACC as a third-party funder to effectively monitor either the quantity or price of medical care delivered to accident victims. Consequently, the scheme sees many 'accidentless-victims', or, in the terms used by the Committee, 'General Practitioners are able to make key decisions about what constitutes an accident and what treatment will be given'.

The issue is important because of the significantly lower relative price for medical care faced by the victim of an 'accident'. As mentioned earlier, inflation has gradually eroded the GMS benefit so that uninsured patients pay for almost all of their GP costs — unless they have suffered an 'accident', in which case they pay very little. It is therefore unsurprising that over the period 1977-86, while there was no significant change in the total number of GP visits, the proportion of those visits compensated by ACC increased from 13.5 to 19.3 per cent. During 1986, GP, physiotherapy, radiology, podiatry, specialist, and private hospital room and theatre costs compensated by ACC all increased by more than 30 per cent. Between 1981 and 1986, the growth rates in accident-related visits to GPs, physiotherapists, and radiologists were 44, 100, and 29 per cent, yet the labour force grew by about 1 per cent per year.

The Pharmaceuticals Subsidy

The pharmaceuticals benefit was introduced in 1941. It provided free prescription medicines from the drug tariff listing until February 1985, after which time a $1 prescription charge was payable by all but certain disadvantaged groups. There has been a blow-out in pharmaceutical costs, attributed to: more and more 'necessary' medicines being added to the list; bureaucratic delays by Customs and Trade and Industry preventing the importation of generic drugs (some common antibiotics, tranquillisers, and inhalers, for

example) which an importer claimed would cut 30 per cent off the price of the top ten drugs purchased by the Health Department; and poor bargaining by the Health Department with multinational suppliers of brand-name drugs leading to purchases of some products at more than twice their Australian price. During the period 1975-86, the real price of pharmaceuticals rose by nearly 50 per cent, while total prescriptions increased by 27 per cent.

The demand for GP services is in part a derived demand for medicines. Once a patient has paid the entry fee to the gatekeeper, the incremental cost of delivering medicines and many other aspects of medical care are close to insignificant for both the patient and the doctor. It is even arguable that the subsidy encourages doctors to substitute medicines for time spent explaining why medicines are not medically necessary (see Scott et al., 1986:65-9 for details). This effect is especially likely to occur when doctors charge their patients under a fee-for-consultation scheme rather than a scheme that closely ties the fee to the time spent delivering the service. According to Lovell-Smith (1966:152), 'many overworked practitioners soon found it was much easier and quicker to dismiss the patient with a prescription than to listen to the manifold symptoms of neuroticism'. Naturally, the incentive is the same for 'underworked' practitioners as well. The Minister of Health appeared to recognise this argument in October 1988 when the prescription charge was increased to $4.

The Practice Nurse Subsidy

The growth in practice nurse costs arises from a scheme to assist doctors to provide more medical care while relieving them of some of the more routine aspects of their jobs. For most of the period, a 100 per cent subsidy was available to cover the salary of a practice nurse (one per doctor), although the subsidy was reduced to 75 per cent in July 1986. A quirk of the scheme, however, was that doctors could not claim GMS benefits for patients who saw the nurse but not the doctor. As a consequence, doctors could permit nurses to perform some of their duties but had a strong incentive to glimpse the patient on the way past and charge a consultation fee in order to claim the benefit.

Conclusion

The plethora of controls, regulations and subsidies that have characterised the welfare state approach to medical care delivery in New Zealand have, until recent years, been widely accepted as a necessary means of getting low cost, high quality medical care to all New Zealanders. This view, if it was

ever sustainable, is no longer so. Many citizens can no longer afford to get served at the primary level, or cannot get service at a zero price at the secondary level. Whether others get served or not depends in part on more or less arbitrary factors such as whether the demand is accident or illness generated.

Recent taskforces, judicial committees, and consultants' reports have argued for a very substantial shake-up in health service provision in order to foster the interests of consumers rather than providers. The interests of consumers have been largely bypassed in the evolution of medical care delivery in New Zealand. A number of commentators have expressed concern at the arbitrariness and sometimes contempt for the ordinary citizen meted out by the dominant state provision of medical care. Damning criticism has been levelled at New Zealand's public medical and surgical hospitals, and psychiatric hospitals, by official investigating committees. Charges of unnecessary waiting lists and massive resource waste in public hospitals, inhuman treatment of patients in psychiatric hospitals, and negligence on the part of practitioners and administrators at National Women's Hospital in connection with failing to provide accepted treatment for symptoms of cervical cancer do not add up to a raging success for the public sector or the medical profession it protects.

For individuals living in a supposedly free society, this barrage of criticism is profoundly disturbing. As will be seen, however, the discipline provided by competitive market forces can lead to a reinstatement of the consumer as the focal point in the provision of medical care in an open society.

Part II

Health Care in the United States

Chapter 4

The Rise of Monopoly

I. RESTRICTING ENTRY

Using evidence from the 1970s, many British health economists have noted that professional monopoly power appeared to be a characteristic of all advanced nations. Culyer (1982:37), for example, observed that

> a strongly organised professional monopoly that controls entry to the profession, terms of service, permitted forms of advertising, disciplinary procedure, etc. is a *universal* characteristic of all developed countries (wherever they lie on the liberal-collective spectrum). [italics in original]

Two main explanations for professional power are usually given. The first, according to Maynard, is that it is the 'natural inclination' of a competitive market 'to become monopolistic' (1982:495). The second reason is that the consumer is too ill-informed to be able to exercise real power of choice, and is thus driven into the arms of the producer. There are, says Abel-Smith, 'few fields of consumer expenditure where the consumer is as ill-equipped to exercise his theoretical sovereignty as in health services' (1976:48). Culyer goes further. The marketeer, he says, 'betrays a naive faith in the capacity of individuals to resolve their own problems'. The marketeer's image of a 'prototypical consumer shopping around for the best quality care at the least price, and getting it, is not a phenomenon that is anywhere actually going to be observed' (1982:38-9).

The 'market vulnerability' theory favoured by Maynard and Culyer may be contrasted with the theory of 'state capture'. This questions whether professional monopoly is inherent in the market, and suggests instead that it is a result of government interference. According to Lees, for instance, monopoly gains are 'potentially largest where a profession has achieved legal or effective monopoly through the political process' (1966:46). On this argument, professional power is a result not of 'market failure', but of 'government failure'.

Today we have more evidence to test the two competing theories; not only historical evidence from both Australia and Britain (Green and Cromwell, 1984; Green, 1985b), but also strong new evidence from America.

The American Medical Association's Approach to Monopoly

The chief instrument of professional monopoly has been the American Medical Association (AMA). Established in 1847, by the turn of the century the AMA had already acquired its legendary power. In the early 1960s around 75 per cent of all US doctors were in the AMA, and, more significantly, about 90 per cent of doctors in private practice were members (Rayack, 1967:2). It was not until the 1970s that cracks began to appear. In 1971, for the first time in 50 years, AMA membership fell to around 50 per cent of doctors, and it has subsequently continued to hover around that level (Starr, 1982:398, 427). From 1975 the AMA also faced mounting pressure from the Federal Trade Commission (FTC) to refrain from impeding competition. These interventions weakened the anti-competitive impact of the AMA, which is the subject of a later section. First we will describe how the AMA conducted itself up to the mid-1970s.

The AMA has long had a federal structure. At the base there are about 2000 county medical societies. Until 1982, when direct membership was permitted, a doctor did not usually join the AMA direct, but rather the county medical society. The county societies form part of the autonomous medical society in each state, which in their turn are the constituent associations of the AMA. Constitutionally, the 300-strong House of Delegates is the AMA's policy-making body, but it meets only twice a year and in reality the 15-member Board of Trustees wields effective power.

Dissent among AMA members has generally been suppressed — space in its journal has been denied to critics (Hyde et al., 1954:946) — but the key to the AMA's control over members has been the power of the county medical society. Because its control reaches into the locality, the county society can enforce the AMA's *Principles of Medical Ethics*, often without having to take formal action. Social ostracism can be decisive to a doctor,

whose business depends crucially on being able to refer patients to specialist colleagues and on receiving such referrals. This power became all the more awesome as specialisation expanded. In 1940, 24 per cent of doctors described themselves as specialists. By 1955 the proportion was 44 per cent, and by 1966, 69 per cent (Starr, 1982:358-9). A doctor judged 'unethical' could also be made to suffer loss of advancement in hospital appointments or in his career generally. When such informal sanctions failed each county medical society had a 'board of censors' to enforce formal discipline. Members could appeal, with the AMA's Judicial Council having the final say but being bound by local findings of fact (Hyde et al., 1954:949-50). Consequently, most doctors have toed the line. As the authors of the *Yale Law Journal's* pioneering study of the AMA concluded, for the large majority of doctors defiance of the AMA meant 'professional suicide' (Hyde et al., 1954:951).

Local medical societies have also denied price-cutting doctors access to the Blue Shield medical plans described below. Similarly, local malpractice insurance companies have been used against colleagues who engaged in competition. In a country where doctors face a high risk of being sued by dissatisfied patients, the denial of malpractice insurance cover makes practice more expensive and, in the extreme, impossible. Commercial rates for non-county medical society members have often been 20-100 per cent higher, and some commercial companies have refused to give non-society members any cover at all (Hyde et al., 1954:951).

Controlling the Supply of Medical Practitioners

From the outset the AMA sought to monopolise medical practice, and its first objective was to establish a system of licensing. It lobbied in every state for the establishment of boards of medical examiners to administer examinations and to issue licences. By the turn of the century most states had succumbed and established a medical examining board, which usually followed a policy identical to the AMA's. It became common for the state medical society to recommend or nominate appointees to the examining boards, and in one case the State Medical Society Board of Censors was the State Board of Medical Examiners (Hyde et al., 1954:959).

In the early years of this century, once licensing was firmly under professional control, the AMA gradually switched its efforts to controlling the accreditation of medical schools, thus enabling it more sharply to limit the number of doctors. In 1904 the AMA's Council on Medical Education was founded, and in 1906 it surveyed all medical schools and judged that 32 out of the total of 160 were unacceptable. In order to give its findings enhanced

public credence, the AMA persuaded the prestigious Carnegie Foundation to repeat the survey. The outcome was the Flexner report of 1910, which recommended the closure of a number of medical schools. According to the report, only medical schools adjudged by the AMA to be class 'A' should be allowed to function. (Until 1928, the AMA classified medical schools as A, B, or C. After 1928 it simply listed those that were approved.) The result was that medical examining boards in most Sates, either by rule or habit, adopted the policy that only graduates of medical schools approved by the AMA or the American Association of Medical Colleges (AAMC) would be accepted as qualified for licensure. (The lists of the AMA and the AAMC were virtually identical.) The results were dramatic. In 1906 there were 162 medical schools; the number was reduced to 85 in 1920, to 76 in 1930, and to 69 by 1944 (Kessel, 1958:25-9).

This reduction was a mixed blessing. Some medical schools had turned out graduates with virtually worthless certificates. The disappearance of 'degree mills' was no real loss, but the cost came later. By pushing out the degree factories, medical school accreditation fell under the sway of the AMA, which soon turned this power to self-interested use. Rayack's authoritative study (1967:70) concluded that the initial reduction in the number of medical schools was justified by the low standards prevailing in some, and that the sharp fall in the number of doctors was an unintended side effect. But, during the depression years and subsequently, the AMA pursued a clear policy of deliberately restricting numbers to increase doctors' take-home pay.

In 1933 the AMA Council on Medical Education declared that America had a surplus of 25 000 doctors and called upon the AAMC to bring about a 'substantial reduction' in medical school enrolments to eliminate the 'overcrowding' (*Journal of the American Medical Association [JAMA]*, 1933, vol. 100:1425). The Council's secretary criticised the practice of enrolling students 'without any regard to the needs of the profession or the country as a whole' (Hyde et al., 1954:972; Rayack, 1967:73-6). The AMA's appeal was not ignored. In each of the five years before 1934 there had been an increase in enrolments; for each of the six years after 1934 enrolments fell (Starr, 1982:272).

Until 1942 the AMA and the AAMC had each accredited medical schools, but from that year they jointly established the Liaison Committee on Medical Education to authorise programs of undergraduate medical training. Henceforward there was a single monopolistic accrediting agency. During the war years the AMA relaxed its efforts to restrict numbers, only to fight vigorously the efforts of post-war federal administrations to subsidise medical training. In 1949 and 1950 the AMA reported the highest expendi-

ture among all the groups registered under federal lobbying law (Hyde et al., 1954:955-6). It was opposed, however, by the medical schools, represented by the AAMC. From 1951, under pressure, the AMA reluctantly accepted federal grants for construction work where there was a 'demonstrated emergency', though it remained totally opposed to federal aid towards running costs. From 1958 the AMA finally conceded that there was a shortage of physicians, and accepted increased federal aid for construction work, but still opposed subsidies towards medical school running costs.

The AMA was then forced still further onto the defensive. Between 1958 and 1960 three official reports claimed that doctors were in short supply. The AAMC continued to favour federal aid, and, finally, in 1963 the Health Professions Educational Assistance Act was passed, under which federal building grants as well as loans to students could be made. The AMA continued to oppose federal support for the operating costs of medical schools until 1967, but by then pressure for federal subsidies had become irresistible. From the late 1960s federal monies flowed into medical schools on a huge scale (Campion, 1984:242-3).

The AMA claimed throughout that its opposition to federal subsidies was based on its hostility, as a matter of principle, to state interference. The expanding state, it said, was a threat to individual freedom. That its real aim was to diminish competition is revealed by its enthusiastic acceptance of federal aid for medical research after the Second World War. By 1958, with the AMA's blessing, government grants comprised 64 per cent of total medical school research expenditure. The reason, Rayack concluded, was that research subsidies increase the **demand** for medical services, whereas training subsidies increase **supply** (1967:99). Nor did the AMA oppose the Hill-Burton Act of 1946, under which hospital construction and renovation was subsidised. Indeed, it enthusiastically supported it because doctors benefited financially from improved hospital facilities.

Foreign medical graduates. One effect of the AMA's control of the supply of doctors emerging from US medical schools was a huge influx of foreign medical graduates (FMGs). From time to time efforts have been made to restrict immigration. During the 1930s there was an increase in the number of foreign doctors coming to America as refugees from European fascism, and additional restrictions were introduced in some States, with 22 admitting no foreign doctors at all.

During the post-war years the number of FMGs obtaining licences in the US was not very tightly controlled because American doctors were content to allow some immigrants to practise in order to fill unpopular vacancies, especially in mental institutions. But newcomers were excluded from lucrative specialisms by the requirement imposed by several specialty boards

that candidates must be US citizens, which excluded immigrants for at least the five-year citizenship qualification period.

The sharp rise in medical incomes that occurred in the 1950s led to a search for cheaper substitutes, and foreign-trained doctors began to enter the US in large numbers. In 1950, 5.1 per cent of doctors licensed in the US were trained overseas (other than in Canada). In 1959 the figure was 19.7 per cent, rising to a peak of 44.5 per cent in 1973, and thereafter declining to 23.6 per cent in 1978 and 16.6 per cent in 1981 (Bureau of Health Professions [BHPr], 1984:Table B-1-2). But since the early 1970s about one-fifth of active physicians have been FMGs.

Foreign medical graduates are not only from overseas. The shortage of places in US medical schools drove increasing numbers of Americans abroad to train in the expectation of practising in the US on their return. In 1955, 2056 US citizens sought medical education overseas. Numbers accelerated during the 1960s, and in 1978 the figure was 11 500 (Health Resources Administration [HRA], 1982).

As the number of foreign medical graduates grew, the eligibility criteria for licences were tightened. In 1976 a more demanding medical examination, the Visa Qualifying Examination, was introduced to slow down the influx of foreign-trained doctors, and from 1984 a new two-day examination was introduced by the Educational Commission for Foreign Medical Graduates and the National Board of Medical Examiners (established in 1915) to replace the previous qualifying examinations (BHPr, 1984:A-1-22). The failure rate of FMGs has always been high. In the 1930s between 30 and 50 per cent failed licensure examinations. In the 1940s the failure rate usually exceeded 50 per cent, and in the 1950s it ranged from 32 to 55 per cent (Council on Medical Education [CME], 1964:168). This was due to the poor training provided in some foreign medical schools, and not simply to the AMA's preference for restriction of the supply. A considerable number of US citizens who train overseas never qualify in the US. One study that followed up the careers of 550 Americans ten years after graduation in a foreign medical school found that about 25 per cent never qualified (cited in BHPr, 1984:A-1-23).

Specialists: Limiting numbers and supporting monopolies. Doctors not only sought to control the total number of colleagues in active practice; they also tried to limit access to lucrative specialisms. The practice of voluntary certification of specialists dates from 1917 when the American Board of Ophthalmology was founded. By 1961 there were 18 specialty examining boards (American Board of Medical Specialties [ABMS], 1980) and in 1983 there were 23, which between them issued certificates of qualification in 57 areas of general or specialist practice. In 1980 about 50

per cent of all physicians in the US were certified by at least one of the 23 boards (BHPr, 1984:A-1-23).

The American Board of Medical Specialties, a federation of the 23 boards, oversees the certification programs. Its policy of discouraging overlap between specialties tends to create a number of discrete monopolies. New specialist schemes find it impossible to get established without ABMS approval, thus giving established practitioners the chance to impede the emergence of alternative forms of health care (Havighurst, 1983:308).

From time to time demarcation disputes occur. In the 1960s there was heightened conflict between GPs and specialists over the confinement of hospital privileges to board-certified specialists. Dr Letourneau, president of the American College of Legal Medicine, has given examples. Asked by the journal *Medical Economics* whether staff privileges were ever withdrawn from GPs en masse, he replied:

> Yes, typically this happens when a horde of surgical specialists moves into an area only to discover there's not enough surgery around. I've seen it affect four or five hospitals in the same community. Board-certified men tried to freeze out the competition completely, although local GPs have been there for thirty years doing good work.

Similar conflicts occurred between specialists. Dr Letourneau said that 'Wherever specialties overlap, there's likely to be contention. General surgeons clash with gynaecologists. Plastic surgeons clash with nose and throat men'. He recalled a particular case:

> We decided to give all the fractures to the orthopods [orthopaedic surgeons]. No go. The general surgeons decided they just weren't going to hand over all those cases. Eventually there may be enough orthopods to change the ground rules and make them stick. Meanwhile, both factions have access to the disputed area of fractures. (Rayack, 1967:224-5)

The specialty boards lay down standards of training and establish minimum training periods ranging from three to seven years. Eligibility criteria have also been used to restrict competition. For instance, Kessel found that membership of the county medical society was required before specialty board examinations could be taken. Many young doctors who,

because they are just starting out, are likely to engage in price competition to attract customers, also want to obtain specialty qualifications, for this is a principal method of enhancing income. But to cut prices was to risk denial of county medical society membership which, in turn, closed the path to specialist qualification (Kessel, 1958:32).

The chief claim to legitimacy made by specialty boards is that they improve and safeguard standards. But, as Rayack says of demarcation disputes, 'Clearly, the physician's income was at issue and not the quality of medical care' (Rayack, 1967:225). Some boards have also imposed citizenship requirements, which have no direct link with competence; others have reserved the right to reject candidates for **any** reason, with no obligation to state the reason and no appeal allowed (Rayack, 1967:221).

A number of studies have examined whether specialty board qualifications serve as a guarantee of quality. Rayack, for instance, found this not to be so. Certainly he found it no safeguard against unnecessary surgery, citing a study conducted by the Columbia University School of Public Health and Administrative Medicine in 1962. A medical audit of 406 hospital admissions was carried out: one-third general surgery, one-third obstetrics and gynaecology, and one-third medical. The report found that, of 60 cases in which a hysterectomy had been performed, a review of the operative report and the pathology findings indicated that one-third were 'unnecessary' and that questions 'could be raised about the advisability of the operation in another 10 per cent'. Of 13 primary Caesarean sections, 'the surveyor raised serious questions about the necessity for surgery in seven'. Three-fifths of the 406 admissions were judged to have received good or excellent medical care, one-fifth were judged fair, and one-fifth were felt to have received poor care. Patients under the care of physicians certified by a specialty board, or under the care of house staff in voluntary or municipal hospitals, were judged to have received 'the highest proportion of optimal care'. But this was true only when care was given in hospitals affiliated with medical schools. The care given by 'certified specialists in hospitals unaffiliated with medical schools or having no approved training programs was not superior to the care given by physicians without such qualifications' (Rayack, 1967:217-18).

In April 1976 the FTC's Bureau of Competition began to investigate whether physician specialty societies functioned as anti-competitive trade associations. It set out to discover whether their licensing procedures went beyond quality control, which it acknowledged could assist the consumer. The American Society of Plastic and Reconstructive Surgeons attracted particular attention on the ground that the use of board certification unfairly restrained non-certified physicians from practising (*New England Journal of Medicine*, 28 December 1978, 1464-6). The American Board of Medical

Specialties and some societies altered their regulations so that they could not be accused of unfairly denying certification to applicants, and the FTC took no further formal action.

Summary

From 1910 the AMA was able to keep a tight grip on the number of doctors being trained and hence to limit the supply of doctors in active practice. Because of America's traditional support for the free movement of citizens, the AMA found it difficult to control the influx of foreign-trained doctors, but its power to limit doctors' numbers was not seriously threatened until the federal government deliberately set out to encourage the training of more doctors from the late 1960s.

II. SUPPRESSING KNOWLEDGE

Until 1982 an important part of the AMA's monopoly strategy was severely to restrict advertising by doctors. Having established a single standard of qualification by controlling medical school accreditation and physician licensing, it was important to maintain the pretence that doctors were essentially all alike. This could be achieved only by forbidding any doctor from drawing attention to the differences between his services and those of his colleagues. According to the FTC, the advertising ban successfully deprived consumers of information about prices and types of service, which they needed to make a rational selection between physicians.

The FTC's first case against the AMA, in December 1975, concerned the unlawful restriction of advertising. The case was brought against the AMA, the Connecticut State Medical Society, and the New Haven County Medical Association. The AMA's *Principles of Medical Ethics* did not explicitly ban advertising, but Section V urged that a physician should not solicit patients. A number of interpretations of the 1957 *Principles* by the AMA's Judicial Council made it plain that in practice all advertising was banned. In one case the Judicial Council had found that 'solicitation as used in the Principles means the attempt to obtain patients or patronage by persuasion or influence' (Avellone and Moore, 1978:479). When the FTC case came to court, examples were cited of how the rule was interpreted in practice. A clinic in Santa Clara, California, was typical. It wanted to offer employers a scheme to prevent and treat industrial injuries, but found that each time it sought to make its service known to employers the county medical society told it that the AMA code of ethics prohibited physicians from sending out leaflets or

brochures about their services or approaching local employers in any other way (FTC, 1981a:90).

The control of advertising is closely related to the concealment of information in malpractice cases. For many years doctors cultivated the tradition that members of the profession should not criticise each other in the presence of outsiders, and especially patients. In addition to making it difficult for the patient to judge the relative merits of doctors, this professional solidarity has proved particularly harmful to patients when doctors have refused to testify against colleagues accused of negligence in malpractice cases. In the past, some doctors who gave evidence in court found that sanctions were applied against them. Kessel (1958:45) cites the case of a doctor who acted as an expert witness in California, only to find himself barred from the staff of every hospital in that State. In recent years doctors have been less willing to go to such extremes.

III. CONTROLLING HOSPITALS

By the 1930s medical care was becoming more and more expensive as it became increasingly dependent on capital investment in equipment and facilities. The result was a growth in the importance of hospitals to provide the new technology and insurance companies to finance its rising cost. Hospitals and insurance companies posed a threat to the power of the organised medical profession, a threat which doctors sought to neutralise. (Insurance companies are discussed below, pp.87-96.)

From the earliest days, the organised medical profession has preferred hospitals to be controlled by self-governing medical staffs rather than by boards of non-physicians. To prevent hospitals from controlling doctors' fees, doctors also insisted that patients should receive separate bills for physicians' services and hospital accommodation charges.

Medical Profession's Influence over Hospital Management

The AMA's control of medical training has also been used to neutralise the potential power of lay hospital boards of management. Under State laws doctors are required to undergo a period of hospital service before they can be licensed. This year of hospital training, traditionally called an 'internship', had to be undergone in an approved hospital. Interns (first-year graduate trainees) and residents (medical graduates in their second and subsequent years) play an important part in the economics of hospitals, because they can be paid lower salaries. Approval for training is therefore

keenly sought and this has put hospitals at the mercy of the AMA, which until recently controlled the accreditation of internships and residencies within hospitals. Since 1981 the AMA has shared control of graduate medical education with other organisations through the Accreditation Council for Graduate Medical Education.

Organised medicine has also controlled the general accreditation of hospitals, through the Joint Commission on Accreditation of Hospitals (JCAH), a physician-dominated body made up of representatives from the American College of Physicians, the American College of Surgeons, the American Dental Association, the AMA, and the American Hospital Association (AHA). This control of hospital accreditation was used to discourage competition. For many years the AMA required hospitals to abide by the 1934 Mundt resolution, which laid down that all hospital staff must be members of the local county medical society. This requirement further enhanced the already considerable power of these local associations. In effect, country medical societies had the power partially to withdraw medical licences, because a doctor cut off from the hospitals would be very limited in the services he could provide (Kessel, 1958:32). As a result, the organised profession has been able to maintain a solid front against hospital boards, which might otherwise have resisted the wishes of their medical staffs. Such boards found themselves threatened with the possibility that every doctor with admitting privileges would send his patients to other hospitals.

Organised medicine has continued to seek to control hospital policy by boycotts and other means. Until 1979 the American Society of Anesthesiologists imposed restrictions on doctors who chose to work for hospitals for a salary. And in 1981 doctors in Brownfield, Texas, threatened to boycott the local hospital's emergency room unless the hospital stopped recruiting outside physicians on terms considered unacceptable by local doctors. Both cases were the subject of FTC intervention, which is discussed below.

IV. IMPEDING INSURERS

As the cost of medical care increased and hospitals began to play a larger role in the inter-war years, so it became more difficult to finance health outlays by household budgeting and therefore more necessary for individuals to finance health expenditures by insurance. There are two basic methods of health insurance:

(1) cash **indemnity insurance*** or **reimbursement plans**, under which the patient claims a cash benefit in order to meet medical bills,

usually actual expenses up to a prescribed limit; and

(2) **non-indemnity insurance*** or **service plans**, under which the insurer provides in-kind the level of medical service laid down in the contract. In some variants, payment goes direct from the third-party insurer to the provider; in others the roles of insurer and provider are integrated.

From the early years of the insurance industry, the organised medical profession sought to prevent insurers from exercising any control over medical practice. The profession adopted three main anti-competitive tactics: it set out to eliminate competition by establishing producer-controlled insurance plans (Blue Cross and Blue Shield) intent on dominating the industry; it fought the efforts of other insurers to contain costs; and it vigorously opposed the development of service plans, and especially integrated or pre-payment plans, now called health maintenance organisations (HMOs).

Blue Cross and Blue Shield

By the early years of this century voluntary health insurance had begun to emerge. There are four main types:

(1) Hospital expense insurance, covering hospital accommodation charges, emerged first in the 1880s.
(2) Surgical insurance benefit, covering surgeons' and anaesthetists' fees, developed next in 1903.
(3) Medical benefit, embracing non-surgical physicians' fees, followed in 1910.
(4) 'Major medical expense' insurance, offering protection against unusually large medical expenses, came along much later — in the 1950s (Dickerson, 1959:111,145).

As health insurance developed rapidly in the 1930s, largely in response to consumer demand, the industry quickly began to be dominated by hospitals and physicians. The initial impetus for Blue Cross hospital expense insurance plans came from groups of employees. Probably the first were a group of Dallas school teachers who tried to organise hospital insurance for themselves in 1929. The result was the Baylor University Hospital Plan, which soon attracted national attention. The group insurance movement

received considerable encouragement from the publication in 1932 of the report of the Committee on the Costs of Medical Care, which carried out a major five-year study. It favoured service plans and recommended that medical services should be furnished largely by organised groups of medical personnel, based on a hospital, though it emphasised that fee-for-service medicine should continue unscathed for those who wanted it (Rayack, 1967:147).

The AMA was violently hostile and its journal supported the dissenting minority report produced by nine members of the 48-strong committee. It dismissed the expenditure of almost a million dollars on the report, 'with mingled amusement and regret', and ridiculed the efforts of the committee: 'A coloured boy spent a dollar taking twenty rides on the merry-go-round. When he got off, his old mammy said: "Boy, you spent yo' money but where you been?"'

In the same editorial, group insurance plans organised around hospitals were denounced as 'medical soviets'. The general practitioner, it said, should be restored to 'the central place in medical practice'. In the journal's estimate, 'more than 80 per cent of all the ailments for which people seek medical aid can be treated most cheaply and most satisfactorily by a family physician with what he can carry in a handbag'. The editorial concluded,

> The alignment is clear — on the one side the forces representing the great foundations, public health officialdom, social theory — even socialism and communism — inciting to revolution; on the other side, the organised medical profession of this country urging an orderly evolution guided by controlled experimentation... (*JAMA*, 1932, vol.99:1950-2)

The *JAMA* made no secret of the reasons for its opposition: 'One of the chief menaces' of group insurance plans was the 'incitement to solicitation for patients and competitive underbidding'. Such 'half-baked' schemes, insisted another editorial,

> are fraught with danger in placing hospitals on a competitive basis for patients, offering service at prices lower than warranted with subsequent skimping of the service, and, most serious of all, disruption of medical organisation and of the whole institution of medicine. (*JAMA*, 1933, vol.100:973)

Attack on Voluntary Group Insurance

During 1932 and 1933 the AMA published a number of studies emphasising the 'defects' of voluntary group insurance. Its overriding concern was to limit the growth of competition, and to prevent control of medical practice from slipping into the hands of third-party insurers. A report drawn up by the director of the AMA's Bureau of Medical Economics identified 15 defects of voluntary group hospital insurance. The first was that

> such a plan ... creates a division within the hospital field and the medical profession, and, ... by creating an artificial monopoly through salesmanship and compulsion by employers is able to exert 'unfair competition' on those hospitals outside the schemes. This situation encourages the formation of rival groups and such undesirable forms of commercial competition as solicitation, underbidding and consequent deterioration of service.

The second defect was even more revealing: 'All such plans tend to lessen the control of county medical societies over medical practice — while at the same time it increases the influence of lay commercial interests'. Defect number six was equally explicit:

> The moment the sphere of commercial competition is permitted to invade the organisation, direction and marketing of medical services ... rival schemes fight for survival by lowering payments for professional services.

As Rayack (1967:153,160) comments, 'Clearly, what was involved was a question of medical economics rather than medical "ethics", though the two are often synonymous in the jargon of organised medicine'.

The American Hospital Association (AHA) disagreed with the AMA and, in the hope of maintaining the revenues of hospitals struggling amidst the Great Depression, gave strong encouragement to the organisation of hospital insurance plans from 1933. It formulated a set of principles to guide the schemes being set up all over the country. Group hospital cover was to be non-profit, covering hospital costs only, not doctors' charges. Free choice of doctor or hospital was unchanged, and each plan must be economically sound. But the AHA also sought to discourage competition, urging that advertising should be conducted in a 'co-operative spirit and dignified

manner', aimed at selling the plan as a whole and not individual hospital services. In 1936 the AHA began formally to award the right to use the Blue Cross symbol to plans that met these criteria (Dickerson, 1959:112-13; Rayack, 1967:158). Blue Cross schemes were usually based on retrospective reimbursement of costs, enabling hospitals to cover their costs whatever they turned out to be. The typical Blue Cross plan was set up under special State legislation, and was usually supervised by the State insurance department. Normally the self-perpetuating boards of directors comprised hospital representatives, physicians, and members of the public, with the medical representatives dominant.

By 1934 a division of opinion about hospital insurance was emerging within the medical profession. The American College of Surgeons had come out in favour, as had the AMA-affiliated Michigan State Medical Society. Under pressure, the AMA relented slightly, drawing up ten principles to which voluntary insurance schemes should conform. The first principle gave the game away:

> **All features** of medical service in any method of medical practice **should be under the control of the medical profession.** No other body or individual is legally or educationally equipped to exercise such control. [emphasis added]

Principle Ten required that 'There should be no restrictions on treatment or prescribing not formulated and enforced by the organised medical profession' (Rayack, 1967:164-5). Voluntary hospital insurance grew rapidly from 2000 subscribers in 1933 to 600 000 in 1937, when the AMA was forced reluctantly to accept it.

Medical Opposition to Blue Shield Breaks Down

The next step was the appearance of Blue Shield insurance plans covering the cost of physicians' services. After developing first in California and Michigan in 1939, growth was slow due to a lack of support from most local medical societies, but by 1943 Blue Shield had 965 000 members, compared with 10 million in hospital plans (Rayack, 1967:178; Dickerson, 1959:145). By 1942 the AMA had come reluctantly to accept Blue Shield, but it remained half-hearted until a few years later, when it feared that the Truman administration was about to impose compulsory national insurance on the profession.

Insurance grew rapidly after the war. In 1940, 12 million people (10 per cent of the population) had some form of private health insurance, rising to 77 million in 1950, 122 million in 1960, and 192 million by 1983. The US Bureau of Census estimated that in the fourth quarter of 1983, 85 per cent of the population was covered by either government or private insurance, with 75 per cent of the population covered by private insurance (Health Insurance Association of America [HIAA], 1985:9). By 1950 Blue Cross and Blue Shield dominated the insurance market. In that year the 'Blues' sold 51 per cent of all hospital and medical insurance (HIAA, 1985).

Blue Shield plans initially offered service coverage for the lower-paid patient, and cash indemnity to the higher-paid, thus enabling doctors to continue to charge better-off patients fees higher than the insured figure (Hyde et al., 1954:984). Later, a system of 'usual, customary, and reasonable' fees emerged to avoid price competition. Like Blue Cross, Blue Shield plans were established under special state laws and supervised by state insurance departments. The AMA required that they be sponsored by the state or county medical society, under the control of physicians without any third-party involvement, and allow free choice of doctor. Doctors had to be able to set fees in accordance with income and in a manner that was 'mutually satisfactory' (Rayack, 1967:51).

Until the early 1970s Blue Cross and Blue Shield were dominated by producer interests. In 1959, 51 per cent of Blue Cross board members were hospital trustees and administrators and a further 17 per cent were doctors and representatives of medical societies. In the early 1960s, 61 per cent of Blue Shield board members were physicians (Goodman and Musgrave, 1985:3). This producer control of Blue Cross and Blue Shield was significant because it enabled the organised medical profession to exercise a very strong influence over the rest of the insurance market. In particular, it was able to establish the principle that insurers should not interfere with medical judgments, regardless of the implications for cost. Thus, the health insurance industry was dominated by organisations that were concerned to see that producers received the financial returns they sought. Blue Cross, in particular, existed largely to keep hospitals solvent. The usual pressure from insurers to limit costs was therefore missing. By the early 1970s, however, Blue Cross and Blue Shield were beginning to lose market share to cheaper commercial insurance companies, which began to adopt a more adversarial role towards the medical profession. In 1972 Blue Cross took the AHA symbol off its logo, and subsequently both Blue Cross and Blue Shield adopted an increasingly critical attitude towards medical fees.

Limiting Cost-Containment by Insurers

Examination of the insurance industry in similar fields like accident, motor or fire insurance shows how insurance companies try to contain costs. Garages in the business of repairing accident-damaged cars find that motor insurance companies are often hard taskmasters, laying down maximum charges, double-checking work estimates, and scrutinising claims. Fire insurance companies treat builders in much the same way. In a competitive industry, this helps to keep premiums lower for the consumer. Until recently economic analysis of health insurance has shown that the industry has not functioned in this manner. The conclusion has frequently been drawn that health insurance is fatally flawed and incapable of containing costs. Below we examine recent efforts by insurers to contain costs, but first we must ask why health insurers have not operated in the same manner as other insurers, even when the same company supplied motor, fire or accident insurance as well as health cover.

Study of recent history indicates that they once did. In some States, such as Oregon and Washington, the health insurance industry was well developed by the early years of the century. Doctors were warned about unnecessary surgery, asked to justify hospitalisation, and had their bills checked. This supervision did not become general because organised medicine objected strongly and used a variety of tactics to stop insurers functioning in a cost-conscious manner.

Goldberg and Greenberg (1977a) found in Oregon in the 1930s and 1940s that the insurance market was sufficiently competitive to generate spontaneous efforts at cost control. Early this century in Oregon, insurers (locally called hospital associations) developed to cater for employees in the timber, railroad and mining industries. They were initiated by physicians but later some were run by lay persons. Some ran their own hospitals, while others used the community hospitals. The employer and the employee jointly paid a fixed periodic fee and the hospital association contracted to supply all necessary medical care. They were profit-making associations, employing some doctors full-time and others part-time.

The hospital associations usually insisted that no patient be admitted to hospital (except in emergencies) without the advance approval of the insurer. Unless treatment orders or tickets had been issued in advance by the insurer, no bills would be paid. Similarly, no surgery could be performed without first obtaining a second opinion. This acted as a safeguard for the patient against unnecessary surgical intervention (Goldberg and Greenberg, 1977a:51). Doctors resented such insurance companies, but acquiesced because pay-

ment was guaranteed, a factor of special importance during the depression years.

Until 1941 county medical societies had tried to fight the hospital associations by setting up their own local pre-payment plans and expelling doctors involved in 'contract practice'. But they were not opposed to contract practice as such, only when it was not under the control of doctors. The new strategy pursued from 1941 was to establish an alternative state-wide, physician-controlled insurance company, the Oregon Physicians Service (OPS), to give doctors the stability of income they sought without controlling fees and utilisation. Simultaneously, Oregon's physicians refused to deal with the traditional hospital associations.

The usual procedure of the hospital associations when hospitalisation had been recommended was to issue the patient a ticket signifying that the association would pay the bill directly and in full. After establishing their own insurance company, doctors refused en masse to accept hospital association tickets. This meant that patients had to pay the bill themselves and then claim from the insurer. The advantage of advance approval over retrospective claiming was that the amount judged by the insurer to be reasonable was settled in advance of treatment, so patients could be certain of their outgoings. Without advance approval, if the doctor's bill was higher than the insurance company was willing to pay, the patient had to find the balance.

The doctors' boycott soon turned patients against the hospital associations and they switched in large numbers to the OPS. Faced with a loss of business, the hospital associations knuckled under. They stayed in business, but only on the doctors' terms. Efforts to control unnecessary surgery by advance approval and compulsory second opinions were abandoned, and efforts to contain doctors' fees were brought to an end. The case was brought to trial in 1952, but in a now-notorious ruling the courts perversely accepted as legitimate the actions of Oregon physicians in forcing the hospital associations to abandon their efforts to contain professional fees (*United States* v. *Oregon Medical Society*, 343 US 326 [1952]).

Similar anti-competitive action took place in the 1970s. The AMA succeeded in bringing to heel the giant life insurance company Aetna, with around 12 million health policy holders. It was Aetna's policy that where the doctor's fee exceeded prevailing rates and the doctor and patient could not amicably settle the matter, the company would pay the legal expenses of a patient who was sued by a doctor for non-payment of the outstanding balance. The AMA convention in June 1972 resolved that 'the medical profession will not condone or tolerate action on the part of any third party that would encourage ... litigation' in fee disputes. A month later a doctor

in Florida (successfully) sued an Aetna policy holder, whose legal fees were paid by Aetna (Rosenberg, 1972). Doctors were enraged by Aetna's attitude. One doctor suggested in a letter to *Medical Economics* that doctors should refuse to perform life insurance medical examinations for Aetna, and another suggested that all Aetna patients be boycotted (Goldberg and Greenberg, 1977a:63-4). Under pressure, Aetna backed down and agreed to discontinue its practice of offering to pay patients' legal expenses, and to submit future disputes about fees to a review committee made up of doctors. In practice Aetna abandoned its efforts to contain costs on behalf of policy holders.

Limiting Alternatives to Fee-for-Service

The third tactic of the AMA was to oppose non-indemnity plans, and especially pre-paid group schemes under which the roles of the insurer and the provider were integrated. Now called health maintenance organisations (HMOs), such schemes receive fixed monthly premiums and in return agree to provide specified medical services, when required. HMO premiums naturally reflect age, the services covered in the agreement, family size, and so on, but do not vary with income, so that it was not possible for doctors to continue the custom of charging wealthier patients higher fees.

Traditionally, opposition to HMOs took two main forms: (a) using sanctions to drive existing HMOs out of existence; and (b) seeking legislation in the states to prevent the foundation of new organisations. The general attitude taken by organised medicine was that it was unethical for a physician to sign a contract with any third party where there was competitive bidding or when the payment was considered to be less than the prevailing norm. The AMA also opposed any doctor accepting employment at a salary for any non-medical organisation (including hospitals run by lay boards or committees). In some states doctors were able to secure laws prohibiting physicians from offering their services to the public while in the employment of any corporation. The 'corporate practice of medicine' was prohibited ostensibly to stop hospitals or other organisations profiting from the doctor's services.

In reality, such laws were often aimed at HMOs. Legal restrictions against HMOs were achieved in many states. In 1954 at least 20 states had laws intended to discriminate against HMOs and in favour of fee-for-service medicine (Kessel, 1958:41-2). The federal HMO Act of 1973 pre-empted State laws for federally-qualified HMOs, but in the late 1970s the Federal Trade Commission was still concerned, and questioned whether the ban on the corporate practice of medicine was necessary to maintain high quality and to protect the public (FTC, 1981a:97).

Laws regulating insurers have also been used subtly to discriminate

against HMOs. For instance, the free choice statute of the state of Utah says 'that the right of any person to exercise full freedom of choice in the selection of a duly licensed [provider] shall not be restricted' (in Gibson and Reiss, 1983:254). Such so-called freedom-of-choice statutes have often been interpreted as outlawing the approved panels of doctors around which HMOs are built. HMOs are of service to the consumer precisely because they are based on approved panels of doctors, selected according to their willingness to accept conditions attractive to consumers, such as their ability to supply good quality service at a competitive price. Without the freedom to exclude inefficient doctors, HMOs could not function.

Private professional campaigns to discriminate against HMOs occurred across America, affecting numerous organisations. One celebrated case, the Community Hospital-Clinic of Elk City, Oklahoma, was founded by the Farmers Union Hospital Association (FUHA) in 1929. It was a consumer cooperative in which the members owned the hospital and paid the staff fixed salaries. Because medical care was supplied on a pre-paid basis the county medical society tried to drive it out of existence during the first 20 years of its life. Dr Michael Shadid, the first medical director of the Hospital, was their chief target. Because he had been a respected member of the medical society for 20 years he could not be expelled, but the county medical society was so determined to get rid of him that it dissolved itself for six months and then reorganised a new county medical society without him. All other Hospital-Clinic doctors were barred from the county medical society and therefore from the State society and the AMA. In addition, the doctors sought the enactment of legislation that would have outlawed the Hospital-Clinic. It survived, however, and in 1950 the FUHA took the county medical society to court, charging it with restraint of trade. An out-of-court settlement was reached and sanctions against the Hospital-Clinic were withdrawn (Rayack, 1967:180-1).

It was not until 1982 that the Supreme Court ordered the AMA to end its support for systematic discrimination against HMOs.

V. OBSTRUCTING AUXILIARIES

As medical incomes grew in the 1950s because of the restriction of supply, there were pressures for less expensive personnel to take on some of the doctors' duties. The use of non-physicians has expanded quickly, particularly physiotherapists, occupational therapists, nurses and nurse-midwives. In 1900 there was one doctor for every other health worker. By the early 1960s the ratio was nearly 1:4.5 (Rayack, 1967:60). As a result of federal

subsidies, this trend accelerated during the 1970s and by 1981 the AMA thought the ratio could be as high as 1:20 (Campion, 1984:456).

The reaction of the AMA has generally been to try to limit the competitive potential of other health care professionals. Using their control of access to hospitals and medical malpractice insurance and their control of physician-dominated Blue Shield plans, doctors have discriminated against colleagues who worked with competing professionals like nurse-midwives. This strategy continued virtually unchecked until the FTC took a stand against it in the late 1970s.

Until the 1970s there were also several severe legal limitations on the roles that could be played by paramedical personnel. Typically, medical practice statutes laid down that

> a person who in any way performs, offers to perform, or holds himself out to the public as performing specific functions — e.g. diagnosing, treating, operation or prescribing for a disease, ailment, pain, or condition — must be licensed as a physician.

This severely limited competition, but during the 1970s most States began to modify their laws (Goodman, 1980:40-1). By 1975 at least 41 had enacted statutes allowing physicians to delegate to physicians' assistants or nurses, though this was a case of law following reality, for it had long been commonplace for nurses to carry out tasks that were legally the exclusive preserve of licensed physicians, such as injections, blood tests, taking temperatures and catheterisation (Rayack, 1967:127). Nevertheless, the American Nurses Association (ANA), representing 170 000 nurses, continues to complain about the disabilities imposed on nurses by regulators in some States. In Alabama in 1982, for example, the board of medical examiners proposed guidelines that would have prevented nurses from functioning at all without a physician present. And in Arkansas the board of medicine was attempting to limit to two the number of nurses a physician could employ or work with at any one time (ANA, 1982:436).

State laws still prescribe the scope of each health occupation. Most states have a licensing board for every health profession. California, for instance, has eleven allied health care profession boards. Some, like Michigan, have a coordinating agency to avoid conflicts of interest (Gibson and Reiss, 1983:255). The boards interpret and enforce the statutes governing the scope of practice of each occupation. Many such laws are vague, thus giving licensing boards considerable arbitrary power. As a result, occupational relationships are gradually changing at the expense of orthodox medicine.

State insurance law has also restricted competition. Some States have 'freedom-of-choice statutes' laying down that health insurers must cover non-physicians' services, but at the same time they also stipulate that insurers must pay physicians and non-physicians the same fee for like services. This places a barrier in the path of non-physicians who might otherwise offer cheaper alternatives.

Access to hospitals has often been used to obstruct non-physicians who offer popular alternatives. Hospital doctors have been particularly hostile to nurse-midwives. At the Washington Hospital Center, for instance, obstetricians denied hospital privileges to three nurse-midwives who were well respected by patients. Similarly, hospital privileges were denied to nurse-midwives at the Vanderbilt University Hospital (ANA, 1982:436).

Physician-dominated Blue Shield insurance plans have also been used to narrow the market opportunities of competing professionals. In *Virginia Academy of Clinical Psychologists* v. *Blue Shield*, the courts held that Blue Shield's discrimination against non-physician psychotherapists violated the Sherman Act (Havighurst, 1983:309). Similarly, physician-controlled malpractice insurance companies have been used as weapons. In 1983 a consent order was accepted by the State Volunteer Mutual Insurance Company, a physician-owned medical malpractice insurance firm, not to discriminate against physicians who supervised self-employed nurse-midwives. The insurance company had cancelled the insurance cover of some doctors who worked with nurse-midwives, but this was found to be a boycott that contravened anti-trust law (FTC, *Annual Report*, 1983:25).

Despite the AMA's hostility, alternative medicine has expanded rapidly, along with the 'allied' health care professions. Osteopaths, chiropractors and optometrists were once attacked by the AMA as 'cultists'. All commentators readily concede that the AMA has done much good by attacking and exposing quacks and frauds, but its efforts have consistently overflowed into anti-competitive attacks on legitimate and successful alternatives. Osteopaths and chiropractors have achieved legal recognition in all States and enjoy wide public confidence. The number of chiropractors, for instance, more than doubled between 1939 and 1960, when the number of doctors grew by only one-third (Rayack, 1967:127).

VI. SUMMARY

In this Chapter we have seen how organised medicine conducted itself in the USA until the mid-1970s. Until that time doctors did indeed wield considerable monopoly power. The key to this power was control of the number of

doctors in active practice achieved by limiting the number of graduates from medical schools. It proved possible to limit numbers in medical schools because the AMA was able to convince state medical examining boards to recognise only the qualifications of AMA-approved medical schools. Medical examining boards, established in each State ostensibly to protect the consumer, were dominated by the medical profession. The basis of AMA power was therefore the recognition that professional self-regulation was an acceptable method of regulating medical practice.

The evidence so far presented is of a self-seeking medical profession, but, as one recent study found, organised medicine is not solely a 'monopolistic guild'. An important basis of its authority was 'lay deference' (Starr, 1982:144). This was in part a consequence of the AMA linking its selfish interests with 'good causes'. Early this century, for instance, there were a number of 'degree mills' that churned out doctors after four weeks training armed with virtually worthless paper qualifications. Doctors rightly exposed them, but urged upon State regulators a solution that played into the hands of the profession. The AMA also did much good in the early years of the century by drawing attention to fraudulent medicines, such as William Radam's Microbe Killer, a product that exploited public misunderstanding of the discoveries of Pasteur (Starr, 1982:128). This campaigning raised the AMA in public esteem, but the AMA was quick to exploit its public standing to extract from governments concessions favourable to the material self-interest of doctors.

In addition, the AMA used a variety of subtle and not-so-subtle private sanctions to discourage competition. It denied cost-cutting doctors access to a number of vital facilities, such as hospital privileges, specialist qualifications, malpractice insurance and even ordinary health insurance plans. It similarly discriminated against non-physicians. The evidence also suggests that consumer ignorance has been manipulated by the medical profession, especially by its restriction on advertising.

Finally, we have seen that the failure of third-party insurers to contain costs has been partly a consequence of efforts by organised medicine to monopolise health decision making. So far, the analysis suggests that the chief 'market failures' are not inherent in the market. We must now examine the evidence of more recent developments before judging how far professionally inspired obstacles to effective competition can be removed.

Chapter 5

The Emergence of Competition

I. BREAKDOWN OF CONSENSUS

Concern about the escalating cost of health care was mounting throughout the 1970s. Year by year an ever-rising proportion of national income was consumed by the health industry. In 1950 health care absorbed 4.4 per cent of GNP, rising to 7.4 per cent in 1970, 9.1 per cent by 1980, and reaching 10.7 per cent in 1985 (*Health United States*, 1986:Table 89 [hereafter *HUS*]).

The federally-funded **Medicare*** and **Medicaid*** programs played a major part in causing these rising costs. From just over $1 billion spent on Medicare benefits in 1966, the cost rose to $7.1 billion in 1970, $15.6 billion in 1975, $35.7 billion in 1980, and over $70 billion in 1985. Medicaid spending increased from $2.9 billion in 1967 to nearly $40 billion in 1985 (*HUS*, 1986:Table 106). From 1950 until 1965, the last year before Medicare and Medicaid began, federal, State and local governments funded about 22 per cent of all US personal health care expenditure. In 1975 the figure reached 39.5 per cent, roughly where it has remained since. In 1985 the figure was 39.7 per cent (*HUS*, 1986:Table 96). Health-care expenditure has consumed an ever-increasing proportion of the total federal budget. In 1963, 4 per cent of the federal budget was devoted to health care. By 1981 the figure was 13 per cent. As costs rose remedial action became more and more necessary.

Unsuccessful Attempts to Control Health Costs by Regulation

Until the late 1970s as Americans grappled with rapidly escalating health costs, the vast majority of health experts assumed that government regulation

of hospital prices and the limitation of hospital building through State planning agencies was the answer. It was commonly assumed that it was just a matter of time until a compulsory national health insurance scheme was enacted.

Certificate-of-need (CON) reviews of hospital construction plans were first introduced in Maryland in 1968, with other states soon following. Under the 1974 Health Planning and Resources Act, States were required to enact CON laws if they wished to continue receiving federal subsidies, and by 1982 all States except Louisiana had done so. In the early years of CON reviews virtually all plans to establish new health facilities or to add to existing institutions were subject to regulation. Usually regulatory agencies reviewed all proposed expenditures in excess of $100 000 or $150 000, depending on the State. But by the early 1980s confidence in the efficacy of such programs had diminished. From 1981 only planned expenditures in excess of $500 000 were covered. Definitions of 'need' varied from place to place, as did the make-up of the regulating agency. Generally this method of restricting entry was welcomed by existing suppliers because it gave them the chance to stifle competition at birth by arguing that there would be 'duplication', but the effect of CON laws on total hospital expenditure was minimal (Joskow, 1981:241).

In an effort to control Medicare and Medicaid outlays, professional standards review organisations (PSROs) were introduced in 1972 by the Department of Health, Education and Welfare (HEW) (now the Department of Health and Human Services [HHS]). Hospital records were reviewed case-by-case and contrasted with 'standard' patterns of usage, including admission rates, length of stay, and diagnostic and treatment regimes. Hospitals that could not explain deviations from standard usage profiles could be denied Medicare and Medicaid payments. A review of the system carried out by HEW in 1977 found from a study of 172 PSROs between 1974 and 1976 that they made little impact on utilisation rates. Indeed the cost of the PSRO reviews exceeded any savings (Zeckhauser and Zook, 1981:93). Not all the evidence has been as negative, but generally there is little to suggest that PSROs were effective.

The extent of federal involvement in health planning had grown steadily during the 1960s through the Regional Medical Programs and the Comprehensive Health Planning Act of 1966. But in 1974 the National Planning and Resources Development Act introduced extensive federal control of planning. At the head of the new hierarchy was the Secretary of HEW, then came a national advisory council, then State planning agencies, and finally 204 local Health Systems Agencies (HSAs). They were largely ineffective. A report by the Government Accounting Office found that they tended to set

goals that were too vague and sometimes too ambitious. By 1981 the program had few defenders, and from that year the Reagan administration began to phase out its funding.

No Consensus for More Regulation

When the Carter administration's cost-containment legislation was finally defeated in 1979, it became clear that there was no Congressional consensus for still more regulation of health care. By then Americans had 15 years experience of Medicare and Medicaid behind them, and several years experience of health planning through HSAs and investment control through CON reviews. None of these inspired confidence in regulation.

Thus, the lack of a consensus for additional regulation pre-dates the Reagan administration. Indeed, the poor results of earlier regulatory experiments contributed to the public mood that made possible his election on an anti-regulation platform. Yet, despite the rhetoric of the Reagan administration, it has not pursued a consistently pro-competition strategy in health. By refusing to support regulatory schemes brought before Congress, it has nevertheless sent the clear message to health-care providers and insurers: 'You are on your own'. The private sector has reacted vigorously, particularly employers, who play a vital role in US health care. Around 85 per cent of all private health insurance premiums are paid by group insurance schemes, chiefly because the tax code has since 1954 given employer group health-benefit plans tax-free status.

Escalating Costs to Employers of Health Insurance Schemes

Until recently the tax subsidisation of employer health insurance schemes has discouraged employers from taking the cost-conscious view of health care that they take of every other aspect of their corporate affairs. Health insurance premiums paid by employers are a business expense and not taxable, but if they are paid by an employee, federal, State and possibly local taxes would be due on any earned income. Thus, until the 1986 tax reforms, a $1000 pay rise could have been subject to income and payroll taxes of between 40 and 50 per cent, while a $1000 increase in health benefits would have been tax free. This helped to make both employer and employee unusually tolerant of cost escalation, an effect which has been diminished but not removed by the lower levels of personal taxation promised since 1986.

In the late 1970s, however, enormous increases in premiums began to bring a change of heart. From 1982, price escalation was particularly sharp as a result of the reform of Medicare by the Tax Equity and Fiscal Respon-

sibility Act (TEFRA), the first significant effort to tighten Medicare payments to hospitals. In 1983 the Medicare prospective payment system came into effect, based on 467 **diagnosis related groups*** (DRGs). It had a dramatic impact on hospital finances. Previously, hospitals had charged Medicare more or less whatever they pleased. Thenceforward, they would get a fixed sum per DRG — so much for a patient admitted with appendicitis, angina pectoris, diabetes, and so on. When hospitals reacted by shifting their costs onto their non-Medicare customers, employers, who were already facing crippling medical costs, bore the brunt.

In 1959 companies had paid 2.3 per cent of payroll for medical, dental and death benefits and life insurance premiums combined. But, according to the US Chamber of Commerce, between 1977 and 1983 employer healthcare costs alone increased from 9 per cent of payroll to 11 per cent (Gensheimer, 1985:54-5; USCC, 1985:i). A 1983 survey of the *Fortune* 500 industrial companies and the 250 largest non-industrial companies found that health costs amounted to 24 per cent of average after-tax profits. Between 1981 and 1983 the average rate of increase of health insurance premiums was 20 per cent. According to the president of one large corporation, health benefits were the third largest cost element after raw materials and 'straight-time pay' for most manufacturers (Herzlinger and Schwartz, 1985:69-70). Since 1960, employer contributions to employee health insurance plans have been doubling every five years. Between 1984 and 1985 costs increased 13 per cent to $104.6 billion (*Coalition Report*, February 1986:1). These are real increases reflected in the growing proportion of GNP they consume. Employer contributions were 1.35 per cent of GNP in 1973, increasing to 2.63 per cent in 1983, and falling back slightly to 2.57 per cent in 1984 (*Coalition Report*, March 1986:1). Some companies faced huge health bills that threatened their business survival. In 1984 Chrysler spent $402 million on health care. Adding to this its Medicare taxes of $22 million and a portion of the health insurance premiums of its suppliers, the total came to $530 for every car sold, nearly 10 per cent of the price of its cheaper models. This meant that Chrysler had to sell 70 000 vehicles, just to pay for employee health benefits (Califano, 1986:30).

It was these escalating expenditures that compelled employers, who pay the vast majority of private health insurance premiums in the US, to attempt to contain costs. Hitherto, employer groups had looked to government regulation for assistance. From 1969 to 1974 the Nixon administration had frozen prices under its economic stabilisation program, and in the mid to late 1970s further price regulation seemed just a matter of time. But the failure of government regulation persuaded employers that, if costs were to be contained, they must act alone. Pressure on employers was increased by the

removal, after TEFRA in 1982, of the huge distortions of the market caused by open-ended Medicare subsidies. Hospitals, long used to the 'cost-plus' system of charging for their services, under which they could pass on their costs without check to both private and government sectors, now faced cost-conscious buyers of health care across the board.

The remarkable success of employers described later would not have been possible but for two partly fortuitous developments. First, during the 1970s there was a huge growth in the supply of medical practitioners. And second, the Federal Trade Commission intervened decisively to outlaw professional restrictive practices.

II. THE GROWTH OF SUPPLY

For many years the control over the supply of doctors exercised by the organised medical profession was considered by economists to be a classic of its kind (Friedman, 1962:149-60). Gradually, however, the profession's stranglehold has been broken.

Physicians: Effect of Federal Subsidies on Supply

Direct federal subsidies for medical students were first made available in 1963 when the Health Professions Educational Assistance Act authorised student loans. Previously, only modest construction grants had been made along with subsidies to medical school affiliated hospitals. In 1965 the Act was amended to allow improvement grants to be made to medical schools, which raised the size of their first-year classes (Campion, 1984:240). By 1968 Medicare and Medicaid as well as the Vietnam War had generated increased demand for doctors' services, and in that year President Johnson declared there was a shortage of about 50 000 doctors. Subsequently, federal money flowed into medical schools at an accelerating rate. In 1960-61 federal aid other than on research had been $43 million. Ten years later it was $322 million, and in 1975-76, $398 million. It peaked at $415 million in 1982-83, before dropping in 1984-85 to $403 million (Campion, 1984:243; *JAMA*, 1985:1576; *JAMA*, 1986:1574).

The primary purpose of federal subsidies was to increase significantly the number of active doctors, but they have also been used to try to manipulate the specialty mix in the medical profession (AMA, 1984:1516). Federal subsidies have increased both the number of medical schools and the number of doctors. Medical schools have grown rapidly since the early 1960s. In

1950 there were 79, and in 1960 still only 86. By 1970 there were 103. Five years later there were 114, and by 1984, 127 (BHPr, 1986:3-21).

During the same period the number of graduates also increased sharply. In 1950 there were 5600 graduates from medical schools. In 1960 there were 7100, and in 1970, 8400. Then came a sharp increase. In 1975, 12 700 students graduated, and five years later, 15 100 (AMA, 1984a:1527). In 1986, 16 191 were expected to qualify (*JAMA*, 1985:1553; *JAMA*, 1986:1545).

The number of active doctors has also grown, particularly during the 1970s. In 1950 there were 209 000 active MDs at a ratio of 134 per 100 000 population and in 1963 there were 276 500 at a ratio of only 146. In 1970, there were 314 000 at 150 per 100 000. Ten years later, there were 440 000 at a ratio of 189, and in 1984, 481 000 at 202 (BHPr, 1984(vol.2):B-1-1, and 1986:2-6 [excluding osteopaths]). Numbers are expected to increase, with one estimate anticipating over 650 000 active MDs by the year 2000 (BHPr, 1986:3-50 [excludes osteopaths]).

This massive increase has dramatically altered the balance of power between doctor and patient. Some young doctors find it impossible to get established in solo practice and therefore find the alternative of salaried employment by an HMO relatively more attractive. The reluctance to compete, which characterised an earlier generation of doctors, has been significantly eroded among the young.

The AMA's Continuing Anti-Competitive Activities

The AMA continues, however, to try to maintain as tight a grip as it can. One technique has been to extend the time it takes for a doctor to qualify. In the early days, one year of graduate education was the minimum requirement, though two or three years quickly became common. By 1982 most specialties required four years and some seven (*JAMA*, 1985:1619).

In recent years the AMA has sought to increase its control of graduate medical education and continuing medical education in the hope of establishing a single, uniform pattern of training. In the mid 1960s frequent clashes between the specialty societies and the AMA threatened the stability of medical practice. According to C.H. William Ruhe, the staff secretary to the AMA's Council on Medical Education, there was a danger of medicine becoming 'balkanised' (Campion, 1984:444). In his view, there ought to have been 'a single, overall authoritative body to determine policy and establish standards for the entire field of medical education'. Throughout the 1970s the AMA fought for such a body to ensure that there was a 'continuum from premedical preparation through the continuing education of the prac-

tising physician'. Similarly, medical education ought to be 'intertwined with education for the allied health professions and services'. Without such a continuum there would be 'divergent policies', or in other words, competition (Campion, 1984:445).

Non-Physicians: Rapid Growth of Assistants and Nurse Practitioners

Doctors have faced increased competition not only from fellow physicians; the number of members of other health occupations has also increased sharply. This too has been in part a result of a deliberate federal policy. Federal funding has given particular encouragement to physician assistants and nurse practitioners.

Physician assistants are, as the name implies, trained health practitioners able to provide clinical services under the supervision of a physician. They usually train for two years, with the emphasis on practical work (BHPr, 1986:4-15). In the early years, many physician assistants were former Vietnam War 'medics', though by 1984 some 40 per cent were women. Between 1972 and 1985 the federal government spent $93 million on training and demonstration programs. Numbers have grown steadily. In 1986 there were 17 000 physician assistants, with around 14 000 thought to be in active practice, an increase of almost 60 per cent since 1980 (BHPr, 1986:4-3, 4-14).

Federal funding has also been used to encourage the emergence of specialised nurses able to act independently of physicians, usually described as nurse practitioners. Between 1975 and 1984 over $97 million was invested by the federal government in nurse practitioner training (BHPr, 1984:C-1-10, 1986:10-36). In 1984 there were 18 642 registered nurses described as nurse practitioners or nurse-midwives, which was about 1.3 per cent of all registered nurses (HHS, 1984). About 43 states have amended their laws to permit the expanded nursing role, and in practice it is recognised in most. Many studies have shown the effectiveness of nurse practitioners. The report of the Graduate Medical Education National Advisory Committee found in 1980 that

> nurse practitioners and nurse midwives can make positive contributions to the health-care system, can enhance patient access to services, decrease cost and provide a broadened range of services. (BHPr, 1986:10-40)

In 1984 there were 481 000 active doctors of medicine (excluding nearly 20 000 osteopaths). Podiatrists, dentists, optometrists, pharmacists and

registered nurses totalled 1 781 250, of whom 1 453 000 were registered nurses. Between 1970 and 1984 the number of MDs increased by 53 per cent whereas nurses increased in number by 94 per cent over the same period (BHPr, 1986:2-6).

In 1950 the first osteopaths were given unrestricted rights in some hospitals, and in 1973 the last State law restricting osteopaths was repealed. They now enjoy full rights to use medicines and practice surgery in all States. In 1950 there were nearly 11 000 active osteopaths. The number rose slowly to 14 000 in 1975, subsequently accelerating to almost 20 000 by 1984 (BHPr, 1986:2-6).

In addition, huge numbers of 'allied health personnel' came on the scene, including dental assistants, dieticians, medical laboratory workers, occupational therapists, physiotherapists, radiologists, speech pathologists, and physician assistants. In 1970 these occupations numbered 670 000, increasing to 1 235 000 in 1984, an 84 per cent rise (BHPr, 1986:2-7, 12-28).

Many health-care occupations have reached an accommodation with the AMA, on the understanding that they have the status of 'allied professionals'. The AMA cooperates with most of these other health occupations in devising their training programs, with the aim of giving each a niche in the established order. In 1977 it sponsored the Committee on Allied Health Education and Accreditation (CAHEA) to accredit allied health occupation training programs. In 1984-85 the AMA collaborated with 49 allied health organisations or specialty societies to set standards for 25 allied health-care occupations (*JAMA*, 1986:1606-7). This makes for a rigid division of labour and a lack of experimentation with alternative forms of provision. But not all 'allied' health workers have complied with the AMA's wishes, particularly the physiotherapists.

Alternative medicine continues to flourish. Osteopaths have allowed themselves to be absorbed into the ranks of orthodox medicine, but the chiropractors have remained independent. In 1986 it was estimated that there were around 30 000 chiropractors in active practice, up from 14 000 in 1970 (American Chiropractic Association, 1986:25).

Thus, for most of this century the AMA has been able to limit the number of doctors in active practice through its control of licensing. But it proved powerless to prevent huge federal subsidies flowing into medical schools from the late 1960s onwards. Doctors have increased in numbers so sharply that there is now said to be a 'surplus'. The number of paramedical personnel has also increased rapidly, again partly due to federal subsidies. Some of these non-physician groups offer cost-effective alternatives to orthodox medicine and therefore add to the competitive pressure faced by doctors.

III. ANTI-TRUST ACTION: THE FTC INTERVENES

In the mid-1970s the Federal Trade Commission began to investigate the regulation of the professions. The chief reason the FTC chose to focus on the medical profession was disclosed by the new chairman, Mr Michael Pertschuk, in 1977. Conscious of the wide public concern about ever-escalating costs, he suggested that

> one possible way to control the seemingly uncontrollable health sector could be to treat it as a business and make it respond to the same marketplace influences as other American businesses and industries (in Greenberg, 1978:12).

There are two grounds for government intervention to promote competition in the supply of professional services:

(1) The 1890 Sherman Act gives the US Department of Justice the power to bring civil or criminal proceedings against parties acting in restraint of competition.
(2) Under the 1914 Federal Trade Commission Act (section 5), 'unfair methods of competition' are prohibited. The FTC can order producers to terminate any anti-competitive practice through 'cease-and-desist' orders. These can be challenged in the courts. It also issues advisory opinions and consent orders. Under the latter, the FTC and the producer agree that a particular restrictive practice will stop, without the necessity for litigation. The FTC may also make rules governing competition in a particular industry.

Until 1975 the application of these powers to the professions was somewhat uncertain. There was no statutory exemption as in British law, but the professions had long enjoyed de facto immunity, in spite of a case in 1943 when the Supreme Court took a very strong line against an AMA boycott of an HMO. The AMA claimed that its action was designed to protect patients' interests, but this was firmly rejected by the Supreme Court (*American Medical Association* v. *United States*, 317 US 519 [1943]). In 1952, however, another case had muddied the water. In an *obiter dictum* a judge said:

> We might observe in passing ... that there are ethical considerations where the historic direct relationship be-

> tween patient and physician is involved which are quite different than the usual considerations prevailing in an ordinary commercial matters. This Court has recognised that forms of competition usual in the business world may be demoralising to the ethical standards of the profession (*United States* v. *Oregon State Medical Society*, 343 US 326 [1952])

It was not until 1975 that the Supreme Court took a decisive step towards enforcing anti-trust law on the professions. The turning point came in a case directed against advertising restrictions within the legal profession. In *Goldfarb* v. *Virginia State Bar* the Supreme Court firmly rejected the notion that the 'learned professions' enjoyed immunity from anti-trust law (421 US 773 [1975]).

Advertising and Contract Practice Bans

The weapons used by the medical profession to stifle competition have often been subtly chosen, so much so that the AMA has been able to deny with any degree of plausibility that it functioned as a cartel (*American Medical Association* v. *FTC*, 638 F.2d 443 (2d Cir. 1980); 452 US 960 [1982]). The AMA often argued that it was merely a voluntary association, whose only power was to expel members, a matter of no more consequence than the expulsion of a member from a sporting or social club. But the Supreme Court has been alive to such sophistries. In another context it has noted that 'experience has shown' business honour and social penalties to be 'the more potent and dependable restraints'. And in another case involving price fixing among estate agents, the Court observed that 'Subtle influences may be just as effective as the threat or use of formal sanctions to hold people in line' (Havighurst, 1983:298). This has certainly been true of many of the AMA's anti-competitive manoeuvres.

In December 1975 the FTC brought its first case against the medical profession, when it ordered the AMA to desist from enforcing restraints on advertising and to abandon its policy of discriminating against alternative delivery systems like HMOs. In 1980 a final order was issued requiring the AMA to stop interfering with prices charged by its members, and to stop characterising as unethical the use of approved panels of doctors or the participation of non-physicians in the ownership or management of health care organisations. After a long legal battle the FTC order was affirmed by the Supreme Court in 1982 (452 US 909 [1982]). The AMA appealed in 1980

to the Second Circuit Court of Appeals, arguing that it had already abandoned the practices complained of, but the appeals Court upheld the FTC ruling (638 F.2d 433[1980]).

Under the order, the AMA was prohibited from restricting truthful advertising but permitted to police 'false or deceptive' claims made in advertisements. This concession has been criticised by some academic observers like Havighurst, who believes it contains a 'potential for unchallenged harm' by allowing the AMA to keep power that could be used to 'harass and intimidate' other doctors (1983:307). The FTC order also prohibited the AMA from anti-competitive interference with arrangements made for the supply of medical care by any doctor, whether in a hospital, an HMO, or anywhere else. The Court of Appeals also prohibited AMA rulings which prevented doctors from forming partnerships with allied health care professionals. The FTC found that these rules impeded the emergence of economically more efficient forms of practice (FTC order in *JAMA*, 27 August 1982:981-2).

Medical School Accreditation

Chapter 4 showed how the AMA has used medical school accreditation to increase the take-home pay of doctors. This history of abuse led the FTC to investigate the AMA's role in accreditation, which today is a function of the Liaison Committee on Medical Education (LCME). In 1985 six of the Committee's 17 members were appointed by the American Association of Medical Colleges and seven by the AMA, with two public members, one a government representative and one representing Canadian Medical schools (*JAMA*, Vol 254,1985:1619). By law the LCME must periodically petition the federal Office of Education for official recognition. Until 1977 it was required to seek re-authorisation every four years, but in March of that year the FTC's Bureau of Competition advised the Office of Education to deny the LCME recognition, arguing that the AMA's influence over it was incompatible with the public responsibilities of an accrediting agency. At that time, not only did the AMA appoint six of its members, it also contributed half its funding, and directly administered the scheme every other year. According to the Bureau, it was therefore very strongly placed to influence the judgments of the LCME. Greater autonomy was required to avoid this clash of interests. The federal Commissioner of Education did not withdraw recognition, but limited it to two years. Because the huge growth in number of doctors described above (pp.99-100) has swamped the AMA's restrictions, no further action has been found necessary by the FTC.

Interfering with Insurers

The FTC recognised that since insurance coverage weakened or removed the insured person's incentive to contain medical costs, the efforts of insurance companies to limit outlays should not be impeded. To the extent that the insurance companies sought to reduce medical expenditures they were acting in pursuit of the consumer's interests. As we have seen, three strategies have been used by doctors to restrict cost-containment by insurers: boycotts against insurers who sought to influence prices or utilisation rates; discrimination against HMOs; and the foundation of physician-controlled insurance plans like Blue Shield.

Again, doubt remained about the applicability of anti-trust law to the professions until the Department of Justice brought an important case in 1978. In *National Society of Professional Engineers* v. *United States*, the professional engineers argued that their code of ethics, which prohibited members from submitting competitive bids, was justified because it prevented competition from generating work of inferior quality. The Supreme Court ruled that there were no exceptions to the Sherman Act. Expressing the majority view, Justice Stevens said:

> The Sherman Act reflects a legislative judgement that ultimately competition will not only produce lower prices, but also better goods and services ... The assumption that competition is the best method of allocating resources in a free market recognises that all elements of a bargain — quality, service, safety, and durability — and not just the immediate cost, are favourably affected by the free opportunity to select among alternative offers. Even assuming occasional exceptions to the presumed consequences of competition, the statutory policy precludes inquiry into the question whether competition is good or bad.

This judgment plainly threw doubt on the medical profession's claim that its anti-competitive contrivances were designed to protect the consumer. But until 1982 it was not certain that the courts would apply the same thinking to doctors. Some anti-competitive actions — such as price fixing, geographical carve-ups, group boycotts, tie-in deals, and allocation agreements — are seen as *per se*, or automatic, violations of the Sherman Act. In other cases the 'rule of reason' may apply. This notion is defined in the FTC enforcement policy on doctor controlled medical prepayment plans. Generally, concerted activities are illegal only if they unreasonably restrain trade:

> Under this 'rule of reason', there must be an examination of the purpose for which the parties have entered the agreement or course of conduct and of the effects that have resulted or are likely to result from their concerted activity. Any pro-competitive effects are weighed against anti-competitive effects in determining whether the restraint, on balance, is unreasonable. (FTC, 1981b)

The focus of the inquiry is whether or not the restraint under investigation promotes or suppresses competition. The issue came up in a case concerning fixed-fee schedules. Traditionally, doctors have laid down fees and applied sanctions against colleagues who charged less and against insurance companies that paid below AMA rates. In *Arizona* v. *Maricopa County Medical Society*, the Supreme Court held that the establishment of maximum fees for medical services was price-fixing, and therefore a *per se* violation of the Sherman Act. The case concerned two physician-controlled 'foundations for medical care', which laid down maximum fees participating doctors could charge when patients were covered by insurers who had accepted the foundations' fee schedules. Even though maximum rather than minimum fees were being controlled, the Court ruled against price-fixing as such, finding that 'Even if a fee schedule is ... desirable, it is not necessary that the doctors do the price fixing'. Insurers could just as easily do it (102 S Ct 2466,2477 [1982]).

In another case the FTC accused the Michigan State Medical Society, which represented 80 per cent of the State's doctors, of engaging in an unlawful conspiracy to fix physician fees. For instance, the society collected written proxies empowering the society to cancel doctors' arrangements with Blue Cross/Blue Shield and Medicaid if they did not accept the society's terms. The Michigan State Medical Society was forbidden by the Court to continue this practice and prohibited from negotiating reimbursement terms on behalf of its members (*FTC Annual Report*, 1983:49).

The FTC has focused particularly on the efforts of dentists to deny insurers information on which to base cost control. It issued consent orders to stop the Indiana Federation of Dentists and the Texas Dental Association collectively refusing to submit dental X-ray films requested by insurers (*FTC Annual Report*, 1983:43-49). The Texas Dental Association agreed not to interfere with insurance companies' efforts to minimise costs by requesting X-rays to evaluate the treatment planned for policy holders. The Indiana Federation appealed but the Supreme Court unanimously upheld the FTC ruling.

Peer review (utilisation review carried out by committees of doctors and excluding outsiders) is another device by which the medical profession has been able to arrogate to itself the power to settle matters about which insurers have a legitimate concern. By insisting that professional peer review committees should be the sole arbiters of disputes between doctors and insurers about fees or utilisation rates, doctors have been able to discourage cost containment. According to Havighurst, the Maricopa County case (see above) outlaws professional demands to have the final say in fee disputes, but an element of doubt remains (1983:312).

Provider Control of Pre-Payment Plans

A more difficult area is the direct control by doctors of insurance plans like Blue Shield. In the mid-1970s the FTC set out to establish whether the medical profession influenced the Blue Cross and Blue Shield insurance plans in such a manner as to modify the normal incentive of the insurance industry to minimise costs. It found that not every case of producers getting together to offer service could be construed as anti-competitive, and for this reason found it difficult to lay down hard and fast rules. It determined, therefore, to proceed on a case-by-case basis, in accordance with the principals laid down in an enforcement policy published in 1981 (46 *Federal Register* 48982 [1981]).

Usually, a combination of a relatively small proportion of physicians in a locality in a 'merged' or group arrangement would not raise anti-trust concerns. As a rule of thumb, up to 30 per cent of physicians in a locality could be involved. The document distinguishes between group practices, like staff or group model HMOs (see below) and 'partially integrated' plans like foundations for medical care, independent practice associations and Blue Shield plans. The latter are examined under the 'rule of reason' and the pro- and anti-competitive effects weighed before final judgment is made. However, if a partially integrated scheme covered two-thirds or more of active physicians in a locality, it would be very likely to be judged anti-competitive. Approved panels of doctors, the document points out, are pro-competitive insofar as they encourage choice between those on the panel and those outside it.

Denying Access to Hospital Privileges

The denial of access to hospital facilities has been a common device used by hospital medical staffs against HMOs or price-cutting physicians. The principal the FTC has asserted is that a hospital can be selective so long as

its judgment is not influenced by anti-competitive considerations. Thus, in selecting staff a hospital may take into account professional 'track record', willingness to accept the hospital's preferred salary, or to participate in discounting arrangements with insurers, and so on, but it may not allow its medical staff to deny hospital facilities to physicians because the newcomers will compete with insiders or because they do not conform with professional restrictive practices.

For instance, consent order proceedings were initiated in 1979 to stop doctors of the Pittsburgh Hospital Group denying hospital privileges to colleagues associated with the Forbes Health System HMO (*FTC Annual Report* 1980:52). Similarly, medical staffs may not deny hospital facilities to non-physicians like podiatrists (chiropodists), osteopaths, or nurse-midwives (Havighurst, 1983:309).

Mergers and Takeovers

Where it sees a possibility of local market domination, the FTC has intervened to prevent hospital mergers and takeovers. For instance, American Medical International, a for-profit hospital company, was ordered in 1983 to dispose of a hospital in California because its purchase in 1979 had been an attempt to reduce price and non-price competition (*FTC Annual Report*, 1983:47).

Conclusion

Anti-trust law has been enforced against most of the restrictions identified in Chapter 4, although some obscurities remain. Specialty certification is still open to abuse by denying entry to newcomers, and the restriction of comparative information persists (Greenberg, 1984). The American Hospital Association still warns against making direct comparisons between one hospital and another, but, careful to avoid the attentions of the FTC, it advises only that direct comparisons should not be made 'unless they can be measured and substantiated' (AHA,1977). Access to PSRO (now peer review organisation [PRO]) findings is not wholly satisfactory. PRO investigations could be a source of evidence about the competence of doctors and hospital departments that consumers could well find useful. Indeed, access to information about the quality of individual physicians or hospitals is strongly resisted by all providers. Nevertheless, the record of the anti-trust enforcement agencies since the mid-1970s has been impressive.

Chapter 6

Transformation through Competition

The reawakening of competition in the US market as the balance of power has shifted in favour of the consumer owes much to the efforts of employers. An early reaction was to form health coalitions, or local business groups, to seek a unified approach to rising medical costs. Between 1978 and 1981, 50 emerged; in 1983 the US Chamber of Commerce listed 103, and according to the AHA (*Hospitals*, 16 December 1985:43), by 1985 there were 151. A typical example is Dallas, where in the early 1980s a handful of business leaders began by discussing informally their common worries about rising health costs. The outcome was the formation of the Dallas Business Group on Health in 1982. By 1985 it had 32 affiliated companies. Most coalitions are dominated by purchasers, though insurers and providers are frequently represented. By 1984 the AMA, the AHA, and the Health Insurance Association of America (HIAA) each had departments charged with promoting the involvement of insurers or suppliers in the work of the new coalitions.

National groups have also developed. The Washington Business Group on Health was established in 1974, the Business Roundtable founded its Health Initiative in 1981, and the US Chamber of Commerce established its Clearinghouse on Business for Health Action in 1982 (Lewin and Associates, 1984:Ch. V).

Some local coalitions have become pressure groups seeking state price-fixing laws, such as in Massachusetts, but most have sought to promote cost-saving reform of benefit plans and to encourage the emergence of new cost-effective delivery systems like HMOs and preferred provider organisations (PPOs). They have frequently sought the cooperation of county medical societies and local hospitals in identifying and re-educating 'rogue' provid-

ers. Thus, the Dallas Business Group on Health cooperates with the local county medical society in identifying doctors who regularly hospitalise their patients more frequently than their colleagues, perhaps ordering hospital stays of ten days for a given complaint when seven is usually found adequate. There may be many good reasons why a doctor does not conform to some standard pattern, but in any event the Dallas group cooperates with the county medical society to identify 'outliers' and to seek explanations for any deviance. After many years of intransigent hostility to lay interference with the doctor's judgment, many county medical societies are happy to cooperate with such programs, and the AMA nationally claims it is content to look upon this kind of monitoring as part of the doctors' education, though it still insists that all final decisions must lie with physicians.

I. GROWTH OF SELF-INSURANCE

One striking trend has been the shift away from the traditional group health insurance to self-insurance (an arrangement whereby a group, usually an employer, provides insurance cover from its own resources rather than by paying premiums to an outside insurer). Under the traditional group system each employee group is 'experience-rated' by the insurance company, according to its history of claims. Schemes vary, but generally premiums are calculated by estimating likely benefit payments and adding a proportion for administration and profit. If costs exceed revenue, losses are recouped the following year. If there is a surplus a dividend may be paid to the contributors. The insurers pays claims out of the premium income held.

Self-insurance usually operates as follows. Instead of paying premiums to the insurer who holds them in order to pay claims, the employer agrees to pay an insurer a fixed amount to process claims, but the employer holds onto the premiums in a special account. The insurer provides **administrative services only*** (ASO) — that is, he receives the claim forms and pays claims out of the employer's special account. For the employer this improves cash flow and widens the choice of organisations available to process claims. Some companies, for instance, do not use an insurance company at all. They have brought in specialist fund management agencies or third-party administrators (TPAs), of which a number have emerged (over 100 are listed in the Business Insurance Directory). Some companies have gone further still and opted for **self-administration,*** in which case they can control expenditure on administration directly.

But the trend towards self-insurance is not only a consequence of the desire of employers for increased freedom of action in their dealings with

insurers. It is also the result of changes in federal law. In 1974 the Employee Retirement Income Security Act (ERISA), which regulates pension plans for workers in the private sector, enabled employers who provided employee welfare benefits through self-insurance to escape the jurisdiction of state insurance laws.

Under State laws there are three types of insurer: Blue Cross and Blue Shield, the commercial insurers, and the self-insured. The 'Blues' and commercials both face financial and benefit regulation by State insurance departments. This includes controlling initial solvency, reserves, types of investment, and premium rates. Premium taxes of about 2 per cent are usually levied on the commercial insurers, and sometimes on the Blues, though in about half the States the premium taxes are not imposed on Blue Cross and Blue Shield. Self-insurers avoid premium taxes and regulation by State insurance departments, and, of particular value, they are not bound by State laws requiring certain benefits. In recent years many States have required all insurers to provide mandatory benefits like treatment of alcoholism or drug dependency or mental illness, and this restricts the freedom of employers and employees to devise an insurance package to meet their own needs. As Chapter 5 showed, some State laws also forbid price discrimination. Self-insurance enables companies to escape these and similar anti-competitive laws.

The disadvantage of self-insurance is that in a very bad year the employer may face unexpectedly high losses. A mechanism has emerged to cover this eventuality — the **minimum premium plan.*** The MPP is an arrangement under which companies self-insure up to a ceiling. Usually a company accepts liability up to an agreed monthly or annual maximum. It would hold, say, 90 per cent of premiums and pay the remainder to an insurer to cover catastrophic losses. The employer gains advantages of self-insurance, including avoidance of state insurance premium taxes on all but the sum paid to the insurer, while containing potential losses within acceptable limits.

The extent of the shift towards self-insurance has been measured by several surveys. A study of the *Fortune* 500 top industrial companies and the 250 largest non-industrials in 1983 found that 97 per cent had some element of self-funding and 57 per cent were wholly self-funded (Herzlinger and Schwartz, 1985:76). A survey of mainly large companies conducted by management consultants Towers, Perrin, Forster and Crosby in New York found that 62 per cent of employers self-funded company health plans in 1985, up from 43 per cent in 1982. In another survey, the Wyatt Co. found that 75 per cent of employers with between 7501 and 10 000 employees self-funded their health plans, up from 25 per cent in 1980. It is now becoming

difficult to find a large company not involved in some way in self-insurance. But small companies are also turning to it. According to the Wyatt survey, 55 per cent of employers with fewer than 500 staff were self-insured in 1984, up from 18 per cent in 1980 (*Business Insurance*, 27 January 1986:3-4).

These developments have brought about changes in the market shares of insurers. According to the US government's Health Care Financing Administration, in 1965 Blue Cross/Blue Shield had 45 per cent of the private insurance market, already reduced from the 1950s, while commercial insurers had 48 per cent. Prepaid plans had 2 per cent and self-insured/self-administered schemes 5 per cent. By 1983 Blue Cross/Blue Shield were down to a 35 per cent share. Self-insured/self-administered plans had 8 per cent, third-party administrators 3 per cent, and prepaid plans 6 per cent. Commercial insurers continued to hold a 48 per cent share, but the nature of their business had changed dramatically. In 1965, 81 per cent of the share was in the form of group policies. By 1983 group plans accounted for only 50 per cent of their business. Minimum premium plans accounted for 29 per cent, and administrative services only schemes 15 per cent. Altogether, self-insurance (including self-administration, TPAs and ASOs) and quasi-self-insurance (MPPs) accounted for 32 per cent of private health insurance in 1983 (Arnett and Trapnell,1984:34-5).

The shift to self-insurance does not in itself reduce costs, though it helps by enabling employers to escape premium taxes and State legal requirements to provide ever more comprehensive and costly benefits. Above all, employers gain increased flexibility to design tailor-made health packages. They have seized the opportunity offered, on the one hand by self-insurance and on the other by the recent shift in the balance of market power in favour of the purchaser, to demand more cost-conscious health insurance. This has been achieved partly by modifying health plans to increase the extent of cost-sharing with the employee in order to overcome the moral hazard inherent in third-party funding; but as we will consider below, much has also been achieved by introducing administrative mechanisms that involve no sharing of costs.

II. COST-SHARING

Traditional group health plans usually gave employees comprehensive cover with very little cost-sharing. At each pay round, which in America has generally meant every three years, trade unions or workforce representatives sought to increase health benefits as part of the wage bargain. In a competitive labour market employers were ever anxious to present them-

selves as 'generous' and readily agreed to more and more extensive health benefits, so long as they could pass on part of the cost to the community through tax subsidisation. The disadvantage of the traditional group scheme was that neither employer nor employee had much regard for what it all cost, and in the end this led to such rapid cost escalation that for some companies health bills threatened their very survival. Remedial action became unavoidable.

Co-insurance

One obvious measure was to introduce cost-sharing to ensure that individual employees faced an incentive to think about costs while continuing to be protected against serious illness. Instead of paying 100 per cent of all or most medical bills, companies introduced or extended **co-insurance,*** whereby the employee usually pays 20 per cent. **Deductibles,*** whereby the employee pays all the medical bills up to an agreed sum before cover begins, have also been increased. Traditional group policies often had a small deductible of $50 a year. Employers have sought to increase it to $200 or more. Some employers have introduced individual 'stop-losses' to protect employees who face heavy expenditures in a given year. Rockwell, for instance, places an annual maximum of $500 per person or $1000 per family on **co-payments***. In some cases these individual stop-losses have been linked to salary. At LTV, a company with 55 000 employees including many in the highly unionised steel industry, the annual deductible is limited to 1 per cent of basic salary, and co-payments are restricted to 2 per cent.

Financial incentives to make low-cost choices are often built into schemes. Co-payments may be waived or reduced if, for example, instead of going into hospital, the patient has surgery in an outpatient department, in the doctor's surgery, or in an ambulatory (day) surgery centre. The first ambulatory centres independent of a hospital emerged in 1970 in Rhode Island and Arizona. They do not have the high overheads of hospitals and because they have no inpatients are usually much cheaper. The use of ambulatory surgery centres saved Blue Cross and Blue Shield of North Carolina $5.3 million in the first half of 1985, and Blue Cross of Philadelphia announced it was distributing to policy-holders $55.9 million in special 'utilisation awards', equivalent to one month's premium each, in recognition of their use of more cost-effective suppliers (*Consumer Exchange*, January and March 1986).

Similarly, financial incentives have been offered to take second opinions when surgery has been recommended. Rockwell, for instance, will pay only 50 per cent of the cost of the surgery if no second opinion has been

obtained. Second opinions often produce non-confirmation rates of between 25 and 35 per cent.

Flexible Spending Accounts

Another cost-sharing device is the individual medical expense account, or flexible spending account (FSA). When LTV revised its health plan in 1984 it introduced co-payments and increased its deductible, when previously it had paid 100 per cent of all bills. To preserve the tax-free status previously enjoyed by employees it established FSAs. Staff could pay into their FSA by payroll deduction and withdraw from it to meet co-payments and deductibles. Such payments are tax free, just as if the company had paid for the health care in the first place. According to a survey of 861 companies carried out by the consulting firm A.S. Hansen, 14 per cent had established a health care spending account for individuals. Just under one-third made a company contribution (*Coalition Report*, February 1986:7) Xerox, for instance, agreed to pay $400 per employee into a personal medical expense account, the amount they had saved by redesigning their health plan. Initially, money not used on co-insurance or deductibles was allowed to accumulate at interest to be taken in cash at the end of the year, though legal changes now prevent this from being done. Flexible spending accounts have been less popular since the Deficit Reduction Act of 1984 required individuals to forfeit the balance remaining in their FSA at the end of the year, instead of taking it as taxable income.

Flexible Multiple Choice Plans

Several companies have introduced flexible benefits packages in which employees choose between health plans at varying costs. If they choose a cheaper one they share the savings. The oldest example of a multiple choice plan is the Federal Employees Health Benefits Plan, which covers employees of the federal government. Employees receive a fixed dollar subsidy and may choose from among a number of registered alternatives. In a few cases companies have introduced 'cafeteria' plans, offering an array of tax-deductible benefits like pensions as well as health care. Savings made from one plan may be spent on another benefit, though not taken as cash. Some firms have hesitated to develop such plans because of the uncertainty that has surrounded their tax status.

The chief advantage for the employer is that in each contract cycle he can agree to contribute a fixed cash sum, whereas in the past employers often agreed to supply a prescribed set of health benefits and then had to go out and

buy the previously agreed package in an uncompetitive market. The employee gains flexibility. If he chooses to invest more in a pension than in a health plan he can do so. This is especially helpful to the growing number of families with two wage-earners. Instead of being in two health plans, one partner can gain family health cover at one workplace, and the other partner can invest up to the hilt in a pension or other benefit at the other.

Again, LTV is probably typical. It offers its 55 000 staff over a dozen alternatives. The company provides certain 'base benefits', like medical cover and disability, and in addition a variety of others can be obtained from the 'supplemental salary', an earmarked element of salary calculated as a percentage of base earnings and increased with length of service. The employee can choose between additional health benefits, day care, legal services, disability income, life insurance, accident insurance, pension, and alternative forms of capital accumulation, including an in-house company scheme and the federal individual retirement account (LTV, Benefit Planning Kit).

The Impact of Cost-Sharing

There are a number of studies of the impact of cost-sharing. Some economists believe that doctors have sufficient market power to be able to manipulate demand. V.R. Fuchs, for instance, claimed that a 10 per cent increase in the surgeon/population ratio resulted in a 3 per cent increase in surgery (Fuchs, 1978:35-6), and in an older study M.S. Feldstein argued that doctors were able to exercise similar power within the British National Health Service (Feldstein, 1967:196-200, 278-80). Confidence in the ability of suppliers to increase demand has led some governments, including Canada and New Zealand, deliberately to limit the supply of doctors to avoid overutilisation.

Other studies suggest that the power of doctors to generate demand is limited. A huge examination of the effects of cost-sharing on utilisation rates conducted for the US Department of Health and Human Services by the Rand Corporation found that expenditure per person varied according to the extent of cost-sharing. Expenditure per person was nearly 50 per cent greater in insurance plans without cost-sharing compared to plans that required 95 per cent co-insurance up to a $1000 maximum in a year. The study concluded that ' cost-sharing unambiguously reduces expenditure' (Newhouse et al., 1982:v). But there is a degree to which doctors can manipulate demand and there is good evidence that doctors seek to achieve a ' target' income by adjusting their workload.

A further study, also conducted by the Rand Corporation, examined the effects of cost-sharing on health status. It contrasted the health of 3958 patients aged between 14 and 61, some of whom were members of insurance plans requiring cost-sharing and some of whom were not. Patients in cost-sharing plans visited doctors about one-third less frequently and entered hospital about one-third less often. People on low incomes with poor eyesight or high blood pressure were slightly better off under ' free' plans, but for the average participant, and regardless of income or initial health condition, no significant effects on their subsequent health were detected (Brook et al., 1983, 1984). Thus, cost-sharing appears to produce a lower use of medical services without impairing health.

III. ADMINISTRATIVE MECHANISMS WITH NO COST-SHARING

Under some plans second opinions for surgery are compulsory, with the plan paying in full for second and even third opinions. Counselling is also growing to advise employees faced with a recommendation for possibly 'unnecessary' surgery. Blue Cross and Blue Shield of Illinois and the Zenith company introduced a Medical Services Advice Program in January 1983 for 3000 staff in Chicago. Employees faced with hospitalisation are invited to talk it over with Zenith's medical adviser. They discuss cheaper or more effective alternatives, but any change is wholly at the patient's discretion. If asked, the medical adviser will also discuss the case with the physician. The Blues plan to extend the scheme. The Teamsters Union offers a phone-in and walk-in service to 14 branches in New York, New Jersey, and Connecticut. It will recommend reliable and cost-effective providers and arrange referrals, if requested (Lewin and Associates, 1984:43-5).

Advance approval or **pre-admission certification*** is now frequently required for all recommended hospital stays. When LTV introduced its revised health plan in April 1984, some cost-sharing through pay-related deductibles and co-payments was entailed, but the chief cost-saver was the requirement that all hospital stays must be the subject of advance approval by the insurer. Under the old plan, hospital admissions between January 1982 and March 1984 had taken place at the rate of 154 per 1000 plan members. Between April 1984 and February 1985 hospital admissions fell to 93 per 1000, a 40 per cent reduction. On a per capita basis, hospital inpatient claims fell by 41 per cent, from $2021 to $1196, though there was an additional cost of $275 because of more intensive use of outpatient facilities (LTV, internal memorandum).

Other insurers have introduced convalescent benefits to encourage people to obtain care outside hospital: home care is a popular alternative, supported by a visiting nurse or a home health agency. Another option is a skilled nursing facility; and for the long-term sick there is care in a hospice or nursing home.

Childbirth has been especially affected by pressures to discourage people from staying in hospital. Blue Cross and Blue Shield of Philadelphia encourage mothers to go home after 24 hours, but pay for home nurse visits and homemaker/aide visits. Blue Cross in Rochester, New York, provides three days' home support with homemaker/aide back-up. This costs $70 a day, compared with hospital inpatient fees of $300 a day. Insurers also encourage the use of independent 'birthing' centres in place of hospital maternity wards (Lewin and Associates, 1984:28).

The changed attitude towards hospitals is not only the result of a desire to save money. It also reflects a wider determination by people not to have their lives controlled. Pregnant women led the way in refusing to be dictated to in the intensely personal matter of childbirth. The home birth movement was a protest at how childbirth, an essentially natural act, had been turned into an 'illness' subject to regimentation by professionals. Women demanded to remain at home with their husbands present, often preferring the female midwife to the (in most cases) male doctor. Partly in response, specialist 'birthing' centres emerged to provide a home-like atmosphere, with extra safeguards that are helpful in emergencies. Hospitals too had to respond, and now delivery rooms often mimic the home environment with homely wallpaper and soft furnishings, with fathers attending births as a matter of routine. Hospitals are, nonetheless, large institutions that can run only by routine and discipline, and they are having difficulty holding their market share.

'Wellness' Incentives for Subscribers

Both employers and insurers are seeking to encourage subscribers to take better care of themselves. Insurers offer non-smokers' discounts. Blue Cross and Blue Shield plans in Washington, Alaska, Oregon, Minnesota, Virginia, Idaho and Texas have introduced discounts of around 10 per cent for non-smokers (*Consumer Exchange*, November 1985). Many employers offer 'wellness' programs. A survey of 191 organisations in New England by the consulting firm William M. Mercer-Meidinger found that over 62 per cent were promoting self-help. Some sponsored health education classes and literature, others established facilities to monitor conditions like high blood pressure, and some subsidised employee membership in fitness facilities (*Business Insurance*, 3 February 1986:25). The 1984 Roundtable survey of

122 employer health plans covering 7.5 million employees found that one-third gave new employees physical examinations, and a quarter offered periodic check-ups to all staff. Half provided 'keep fit' programs, and many provided employee counselling on alcohol and drug abuse or personal family problems (Business Roundtable, 1985).

Managed Care

Faced with a huge loss of market share, Blue Cross and Blue Shield have had to change their role significantly. They now actively promote HMOs and PPOs. In addition, most Blue plans offer 'managed care', a traditional indemnity insurance package reinforced by cost-containment measures. Master Health Plus, introduced by Blue Cross of Massachusetts, is a fairly typical managed care scheme. Benefits are comprehensive with limited cost-sharing: a $5 co-payment for visits to the doctor's surgery; a $25 deductible for hospital outpatient procedures; and a $3 charge for generic drugs and $4 for branded medicines. The main savings come from **utilisation review.*** Following the lead of other insurers, pre-admission review of hospital stays has been introduced. Failure to get pre-admission approval (except in emergency) means that the subscriber must pay the first $1000 of any bill.

During pre-admission review the insurer's representative, usually a registered nurse, judges whether hospitalisation is necessary, or whether outpatient care may be cheaper. The nurse reviewer also tries, where appropriate, to schedule surgery on the day of admission, and to coordinate lab tests and X-rays in advance. Pre-admission diagnostic testing is often carried out on a massive scale, and from 1979 Blue Cross and Blue Shield sought to modify hospital practice by discouraging the indiscriminate carrying out of 'admission batteries' of tests such as blood haemoglobin, urine analysis, biochemical blood screens, chest X-rays and electrocardiograms. Physicians were urged to order each specific test individually and thus to think carefully about the necessity for each. In some hospitals 'guest rooms' have been introduced at about $25 per night. Patients who can otherwise look after themselves can stay in the guest room before surgery, when this is convenient. This compares with the average local hospital charge of $500 a day.

Second opinions for surgery have been made mandatory because Blue Cross has found financial incentives to consult a different specialist an insufficient inducement. Blue Cross pays for second and even third opinions, but patients failing to comply must pay the first $1000 of the hospital bill and all the surgeon's and anaesthetist's charges. Otherwise Blue Cross pays in full (*Benefits Today*, 20 Dec 1985). During hospitalisation there is one on-

site **concurrent review*** to double-check the necessity for diagnostic and surgical procedures carried out in hospital and to avoid unnecessarily long stays. Discharge planning is also a common feature of managed care. Nurse reviewers ensure that physicians do not allow patients to remain in hospital any longer than required, and make arrangements for home care backed by specialist nursing support or other alternatives. This is not only a matter of saving money, it is also in the patient's interest to avoid staying in hospital longer than necessary, for hospitals are the home of virulent infections. In 1983, according to one estimate, nearly 2 million patients contracted new illnesses in hospital, and 96 000 died as a result.

The cost-containment mechanisms built into managed care have achieved very significant savings, though at this early stage the evidence is unsystematic. The Blues' managed care scheme in Michigan claims to have saved $2.57 million between April 1984 and September 1985 through pre-admission review of hospital stays, and $403 000 between July 1983 and June 1984 among enrollees at Ford and Chrysler through mandatory second surgical opinions (*Benefits Today*, 20 Dec 1985). North Dakota Blues saved $1.5 million after only five months of pre-admission review (*Perspectives*, Fall 1985:37). Experience elsewhere has been similar. The mayor of New York, Edward Koch, reported that the city had saved $1 million in 1985 by requiring municipal workers to get second opinions (*Journal of Commerce*, 29 January 1986:12A).

IV. INTEGRATING SUPPLY AND INSURANCE

On the supply side, the most significant response to pressure from purchasers and insurers has been the emergence of groups of providers who market themselves as cost-effective suppliers. Most have accomplished this by abandoning the traditional third-party payment role in favour of integrating health-care delivery with insurance. Vertical integration has taken two main forms: the growth of HMOs and the emergence of PPOs.

Health Maintenance Organisations

The first HMO, the Ross-Loos Clinic, was founded in Los Angeles in 1929. Until the 1970s the growth of HMOs was stifled by a hostile medical profession, but now there is at least one in every major metropolitan area and recent growth has been enormous. In 1972 there were 142 HMOs with 5.3 million members, but by June 1985 membership had increased to 19 million and the number of HMOs had risen to nearly 400 (Interstudy, 1985a).

Between June 1985 and June 1986, membership increased by a further 25 per cent to 24 million, while the number of HMOs rose to almost 600 (Interstudy, 1986). By March 1987 the total membership had risen to nearly 28 million in 650 HMOs (*Interstudy Edge*, Summer 1987:1).

There are four main types of HMOs, the staff, group, network and independent practice association (IPA) models, though there are many hybrids. Under the staff model, doctors are usually salaried employees who provide care at a central location under the control of the HMO. Under the group model, the HMO contracts with an independent, often pre-existing, group practice at a single location. The physicians, both generalists and specialists, receive a capitation payment, usually paid monthly. The network model is like the group model except that the HMO contracts with more than one independent group practice. The IPA is an arrangement whereby the HMO contracts with a variety of doctors, most of whom are in solo practice, but some of whom may be in groups. They are usually paid by the HMO on a fee-for-service basis.

IPAs have been growing most rapidly, chiefly because they combine some of the advantages of traditional fee-for-service medicine with the cost restraint of other types of HMO. In June 1986 they comprised 58 per cent of all HMOs, with staff models 12 per cent, group 14 per cent, and network 16 per cent. Traditionally, HMOs were non-profit but recently, largely in an effort to raise capital for expansion from the equity market, more have become for-profit. In March 1987, 64 per cent were for-profit, up from 18 per cent in 1981, though not-for-profit plans accounted for 56 per cent of all members (*Interstudy Edge*, Summer 1987:7).

In the past, HMOs were typically local community health plans. Now there are 24 national firms with HMOs in more than one state, ten of which opened for business between June 1984 and June 1985. In 1985 the top seven HMO firms (Kaiser, CIGNA, Health America, Maxicare, US Health Care Systems, Prudential and United) accounted for over 80 per cent of total national HMO firm membership and 44 per cent of all HMO membership (Interstudy, 1985b).

HMOs depend for their success on being able to offer comprehensive services at a competitive price, by controlling utilisation, particularly of hospital stays. They use a range of strategies, including financial incentives to doctors not to over-use hospital facilities, informal peer pressure, formal utilisation review including pre-admission certification and concurrent review, lifestyle and 'wellness' education programs for members, preventive health programs, and searching out cost-effective providers.

Increased consumer power and lower costs. The economic significance of HMOs is that because they threaten the position of established

suppliers, they increase the bargaining power of the consumer and discipline the monopoly power of organised medicine. Goldberg and Greenberg (1977b:110-18), in a study for the FTC, found that the presence of an HMO produced an increase in Blue Cross benefits, reduced bed utilisation rates for members of Blue Cross as well as other organisations, and induced the Blues to found their own HMOs.

The HMO selects only those physicians who come up to scratch. Within the staff, group and network models, under which doctors are paid either a salary or a capitation fee, the financial incentive to over-hospitalise is removed. Under the IPA model doctors do have an incentive to over-use, but this is checked by utilisation review procedures. Often IPA doctors are also given financial incentives. Physician Care of Washington, DC, for instance, has a fixed-fee schedule of 85 per cent of usual, customary and reasonable (UCR) fees. Initially, 20 per cent of this nominal fee is withheld, and at the end of the year each doctor's utilisation record is examined. Doctors judged to have over-used services may receive only a proportion of the withheld sum, and unrepentant practitioners can be removed from the panel altogether.

Thus, the HMO enables the consumer to pay fixed monthly sums in return for comprehensive care from a set of known providers acting in an environment designed to promote cost-effective treatment. The HMO also eliminates the moral hazard faced by third-party insurers. It does so by eliminating the third party and acting as both provider and insurer.

The chief disadvantage of HMOs is that they have an incentive to under-provide medical services. A recent study in Seattle contrasts the health status of three groups of patients: (a) members of a local HMO; (b) fee-for-service patients required to share costs through co-payments or deductibles; and (c) fee-for-service patients with no cost-sharing. The study found that for most people HMO care saved money and may have contributed to better health. But low-income participants who began the experiment with health problems were in some ways in worse health than at the beginning. The authors of the study were uncertain about the reasons for this difference, but the HMO itself recognised that poor members were more likely to suffer from under-treatment, and to remedy this weakness it had introduced an 'outreach' program of medical services for poor families (Ware et al., 1986). However, other studies have found no difference between the treatment of HMO and fee-for-service patients (e.g. Yelin et al., 1985). Several HMOs have erected internal safeguards against under-provision, but the subscribers' chief protection is their ability to take their money elsewhere. It is vital to maintain the consumer's freedom to choose, so that HMOs can flourish only by satisfying their customers.

Preferred Provider Organisations

The recent rapid growth of PPOs has been largely a competitive reaction to the expansion of HMOs. As they lost customers, other suppliers came up with an alternative style of service that avoided some of the disadvantages of HMOs. The development of PPOs reveals how, once barriers to competition are removed, suppliers must re-direct their efforts into offering improved services to consumers.

An individual who joins an HMO pays a monthly premium and the HMO is at full risk for any health care which is required by the subscriber and included in the contract. The HMO 'locks-in' its subscribers, that is, if they go to a doctor outside the HMO panel they have no insurance cover. The PPO differs in two main respects.

First, the PPO itself bears no financial risk for the medical expenses incurred by subscribers. These are borne by the insurer, whether an insurance company or a self-insured employer. The providers are paid on a fee-for-service basis, at negotiated discounts, not by the individual patient, but by the insurer.

Second, the PPO does not lock-in subscribers. If consumers choose to use the services of a PPO doctor they are of course covered, but if they use an outside hospital or doctor they still enjoy cover, though possibly at a lower rate (perhaps 80 per cent or less). This is possible because the PPO has generally emerged as an additional option available to members of existing group insurance plans. For the individual, the selection of a provider remains as it always was. He or she chooses a doctor or hospital, whether or not they are part of the PPO, and the insurer pays.

For the doctor or hospital the attraction of a PPO is the opportunity to increase market share. In addition, neither doctor nor hospital bears a financial risk. They are paid agreed discounted fees by directly billing the insurer, thus avoiding bad debts and the costly necessity to bill patients individually. Discounts range from 1 to 30 per cent of UCR fees for physicians, with an average of 20 per cent, and hospital discounts in December 1984 varied from 1 to 42 per cent (*Hospitals*, 16 December 1985).

For the patient the advantages are that fees are reduced, and doctors usually conform to internal utilisation review, which can protect the patient from poor quality work. Above all, unlike the HMO subscriber, the PPO patient is not locked in to a particular set of providers, so the individual with a serious illness who decides to take no chances and opts to consult a specialist of national repute who is not in the PPO, can do so and still enjoy insurance cover. Significantly, a few HMOs have reacted to the growth of

PPOs by introducing a new model, an 'open-ended' HMO. Generally, this combines HMO cover with traditional indemnity insurance for doctors outside the panel, usually with significant co-payments or deductibles. Some 360 000 people had joined open-ended HMOs by March 1987 (*Interstudy Edge*, Summer 1987:2-3).

For the insurer and purchaser (employer) the attraction of the PPO is that it is a halfway house between an HMO and traditional fee-for-service. It is a simple way for insurers or purchasers to identify cost-effective providers. It is also simpler to establish than an HMO, needing only an agreement about fee levels, utilisation review, and the details of claiming and direct billing. There is no capital expenditure. The PPO therefore provides a very loose, flexible formula, rather than a clearly definable organisational type. Indeed, it is not really an 'organisation' in the same sense as an HMO, but an agreement between providers and an insurer about fee discounts, utilisation review and methods of payment. For this reason the American Hospital Association insists on calling PPOs preferred provider arrangements (PPAs). PPOs differ from the HMO also in not relying on total integration of the insurance and provider roles. The insurer continues to be a third party but the 'moral hazard' is reduced by the terms of the PPO contract. The beauty of the PPO is that hardly any two are alike, so it is a formula that can be adapted to the widely differing circumstances of time and place.

Because providers, purchasers (employers) and third parties (insurers and third-party administrators) all benefit from PPOs, each has had a hand in setting them up. Physician PPOs have usually been formed to maintain market share. Normally, a hospital builds the PPO around its existing medical staff (that is, all doctors with admitting privileges) and utilisation review machinery. Purchasers have usually started by identifying efficient doctors and hospitals and have then sought to incorporate them into their insurance plan by redesigning benefits to encourage subscribers to use the 'preferred providers'. The available evidence suggests that employers have been more interested in identifying physicians with a low utilisation record than those who are merely cheap (Lewin and Associates, 1984:III,16).

Insurers and third-party administrators (TPAs) have also promoted PPOs. Indeed, the initial impetus appears to have come from TPAs like the Ad Mar Corporation in Santa Ana, California, and Martin E. Segal and Co. in Denver (Lewin and Associates, 1984:III,9). Just under half the PPOs operating in 1986 were sponsored by physicians or hospitals, while 32 per cent were funded by insurers (including the Blues and the commercials), up from 16 per cent in 1985 (American Medical Care and Review Association, 1985; *Modern Health Care*, 1987:38). Employers are no less interested in

PPOs. According to the survey of 861 companies carried out by A.S. Hansen, 12 per cent had PPOs in 1985, and 37 per cent of those without PPOs were considering them (*Coalition Report*, February 1986:7).

The rise of PPOs has been rapid. In 1975 there were none. In 1982 the American Hospital Association identified 33 in its first survey and by December 1984 it had found 115 (*Hospitals*, 1 September 1985:68-73). At the end of 1986 the American Medical Care Review Association (AMCRA) put the number of PPOs at 454, with an estimated 30 million members, while a further 52 organisations were at the development stage (AMCRA, 1985, and 1986 update). At least a quarter of hospitals and physicians now have PPO contracts.

Thus, in a total American population of about 250 million, there are some 58 million people in either HMOs or PPOs, a ten-fold increase since the mid-1970s.

V. SPECIALISATION

Not only is insurance being integrated with provision, but segments of the insurance role are also developing into specialised businesses, with new specialists emerging to compete with traditional insurers. Similarly, specialised suppliers, such as ambulatory surgery centres, emergency clinics, and home health agencies have emerged to compete with hospitals.

Insurers

Re-insurance companies have developed, specialising in stop-loss or catastrophic coverage of the kind sought by employers with minimum premium plans. Sometimes a monthly limit is placed on the company's total losses, and sometimes a limit per subscriber is calculated. This has led to the emergence of a new re-insurance institution, the New York Insurance Exchange (similar to Lloyds of London) (Etheridge, 1986:7).

Third-party administrators (TPAs) have grown apace. In 1984 they had 6700 employer clients with a total of 5 million employees. Specialised claims-processing firms are also taking market share, offering the use of advanced electronic processing. Examples are the National Electronic Information Corporation (NEIC) and IMX, which is backed by a British subsidiary of ITT (Etheridge, 1986:7). They can supply physicians with terminals in their office connected to an on-line central billing bureau. Some specialise in the analysis of claims records in the light of statistical profiles, others in claims validation, and particularly double-checking whether bills

match services rendered. Hospital bills are notoriously inaccurate. In 1982 the Health and Human Services Inspector-General carried out a three-year study of 34 Illinois hospitals and found that patients were 'often over-charged'. In 1985 Equifax Services of Atlanta audited big hospital bills in all states at the request of employers and found that 97.2 per cent of the bills referred to them contained overcharging errors (*Perspectives*, Fall 1985:32).

Specialist data collection and analysis is also an offer. This can be of particular value to small employers with too few staff to make a viable insurance group. Specialist data analysts can arrange the pooling of several small firms to enable reliable premiums to be calculated. Peer review organisations (PROs) which have the Medicare franchises, as well as by other agencies (Etheridge, 1986:7; Lewin and Associates, 1984:Chapter IV).

These new agencies have shaken up the industry and now the traditional insurance companies have set up specialist units to compete with the new TPAs, bill validation companies and data analysis organisations.

Providers

Hospitals are now acutely conscious of the competition they face and this has been reflected in an increase in advertising. Some 91 per cent of hospitals advertised during 1986, with spending up 61 per cent compared with 1985 (*Hospitals*, 5 December 1986:58). Hospital inpatient care faces a challenge from ambulatory surgery centres offering one-day surgery. Their number doubled between 1980 and 1985 to 250 and continues to rise. Between September 1985 and September 1986 $2.5 billion was spent on the construction of ambulatory care facilities compared with $5.1 billion on hospitals (*Hospitals*, 20 February 1987:58). One survey of people who had received surgery in the two years up to 1985 found that 9 per cent had used a day surgery centre (*Hospitals*, 16 December 1985:54-5). Hospital inpatient care is also under threat from home health agencies, the number of which rose from 1713 in 1966 to 4343 in 1984. By October 1985 there were 5825 Medicare-certified home health agencies alone (*Hospitals*, 16 December 1985:52).

Walk-in emergency clinics also offer competition with local hospital outpatient departments and emergency rooms. They treat minor emergencies like fractures and carry out simple diagnostic tests. In 1985 there were 1697, and patient visits were estimated to be up from 25 million in 1984 to around 44 million by the end of 1985 (*Hospitals*, 16 December 1985:55).

The for-profit hospital companies have been especially quick to respond to the reduced popularity of hospital inpatient care. The Hospital Corporation of America (HCA) increased outpatient revenues in its US hospitals by

61 per cent in 1985, and is actively extending its role in the alternative services market. During 1985 it purchased three home care agencies (HCA, 1985). AMI is the market leader in day surgery centres, where over 750 medical procedures can be carried out at a savings of between 30 and 50 per cent of hospital inpatient charges. It also has a fleet of mobile diagnostic vans, used by AMI facilities as well as others. This enables about 120 hospitals to share costly diagnostic devices such as CAT scanning units, cardiovascular ultrasound clinics and magnetic resonance imaging (MRI) units.

Hospitals are anxiously searching for alternatives to traditional inpatient treatment. One such alternative is 'cooperative care'. Patients are taught certain skills, including the use of sophisticated equipment, so that they can help to manage their own recovery, thus permitting earlier discharge. An early experiment was conducted at New York University Medical Center from 1979. In a wing of 104 beds, patients and their families have become 'care partners', carrying out many tasks that staff normally perform, including arranging their own meals and appointments with specialists, and even minor pain relief. The hospital director reported savings of 40 per cent compared with traditional inpatient care (*Hospitals*, 1987 Fact Book).

VI. PRICE COMPETITION OR QUALITY COMPETITION?

That there has been a reawakening of competition in American health care in the last few years is not disputed, but it has not taken the form of price competition alone. Using 1982 data for 5732 US hospitals, Robinson and Luft found that hospitals with many local rivals engaged in a competitive struggle that led to increases in average costs per admission and that average costs were higher in those areas where hospitals faced more rivals. In markets with more than ten hospitals within a 24 kilometre radius, average costs per admission were 26 per cent higher than in hospitals with no competitors within a similar radius, and average costs per patient-day were 15 per cent higher. This was because hospitals compete not only on price, but also in terms of the perceived quality of care and the level of amenities offered. Where patients make the key choice of location, as in maternity cases, hospitals compete by offering a range of 'alternative' delivery methods, prenatal classes for the expectant parents in everything from delivery technique to the avoidance of sibling rivalry, and by providing a 'homely' atmosphere. Where the patient relies heavily on advice from a doctor, hospitals have sought to make themselves attractive to doctors by offering benefits like

convenient parking, office space and clerical support, as well as the most up-to-date technology and a good nurse-to-bed ratio (Robinson and Luft, 1987:3241-5): 'I wouldn't say that competition wasn't operating', said Luft, 'It was a very competitive environment; it just wasn't price competition'. Until 1982 or 1983, he explained, 'Price didn't matter in the hospital industry, so competition occurred in a different way — on the basis of quality of service' (*Hospitals*, 10 December 1987:34-5). Hospital competition in these respects has certainly increased consumer satisfaction, but it has not necessarily improved clinical outcomes for patients.

Robinson and Luft's study covered the period before cost-containment efforts began to bite from about 1983 onwards. They are borne out by a second study conducted by Catherine McLaughlin, who examined the impact on price competition of HMOs. It was once argued that HMOs would compel rivals to lower prices, but McLaughlin found that in areas of high HMO penetration there were fewer admissions to hospitals and lower lengths of stay, but higher hospital expenses per day and per admission. This is partly because less serious cases are treated outside the hospital setting, thus leaving more serious cases requiring more intensive treatment, but also because the competitive reaction of rivals has not necessarily been to cut prices; rather they have sought to convince consumers that they offer a higher quality service (McLaughlin, 1987:183-205).

Both these studies, as their authors recognise, predate the post-1983 growth of cost-containment. Has the new atmosphere produced more price competition? According to Robinson and Luft, price competition resulting from hospitals contracting with HMOs, PPOs, and Medicaid programs 'can be expected to reduce costs', though non-price competition is likely to remain. The continued importance of non-price competition, they thought, would help to prevent cost-containment efforts leading to reductions in quality (Robinson and Luft, 1987:3244). Studies of California, where hospital contracting has grown rapidly, bear out this claim.

A survey of the responses of Californian doctors to PPOs in 1986 suggests that price competition has been growing. Early PPOs tried to contain costs by negotiating discounts from usual, customary and reasonable fees, but later they switched increasingly to fixed-fee schedules. Over 80 per cent of doctors surveyed reported that their fees had been reduced by 10 per cent, nearly a quarter by between 20 and 30 per cent, and 15 per cent had reduced fees by over 30 per cent (Johns and Jones, 1987:59-69).

But price discounting is not the only concern of employers, the chief purchasers of health insurance. The first generation of PPOs laid heavy stress on discounts in return for volume. Between 1983 and 1985 many Californian

hospitals, for instance, gave discounts of 17-25 per cent but did not increase their throughput by as much as they anticipated. Subsequently PPO contracts have laid more emphasis on quality, through systematic peer review, risk-adjusted outcome indices, laying down treatment standards and appropriate-care protocols. Above all, medical outcomes are being monitored to discover whether patients regained optimal functioning after treatment (Boland, 1987:75-81).

The Impact on Hospital Use

About 40 per cent of US health spending comes from government sources, largely Medicare (the federal scheme for the elderly and disabled) and Medicaid (the joint federal/state program for the poor), where cost containment has also been the order of the day. The new climate of cost containment in both public and private sectors has brought about a fall in hospital use. There are about 6800 hospitals in the USA with around 1.3 million beds, mostly classified as 'community hospitals'. The number of hospital inpatient admissions fell by 6 per cent between 1984 and 1985, having fallen by 10 per cent from the 1981 peak figure (*Health United States*, 1986:Table 63). The average length of patient stay in non-federal short-stay hospitals fell between 1979 and 1984 from 7.2 to 6.6 days, though it has subsequently increased slightly, reflecting the greater severity of condition of remaining inpatients as less-serious cases have obtained care in outpatient settings. The number of days spent in hospital per 1000 population has fallen from 1111 in 1979 to around 970 patient days per 1000 population in 1985 (*Health United States*, 1986:Tables 59-60; *Hospitals*, 5 October 1986:68). Day surgery in America accounts for about 50 per cent of all surgical cases, whereas in the UK the comparable figure is more like 20 per cent. Hospital occupancy rates have also been falling. In 1980 the hospital occupancy rate for 'community hospitals' was 75.2 per cent; by 1984 the rate was 69.3 per cent and falling. After many years during which the number of hospital beds increased, the total began to fall in 1984 (*Health United States*, 1986:Tables 79, 83).

These trends are in part the result of a shift to increased use of more cost-effective outpatient facilities. Outpatient visits rose by 10 per cent from 220.9 million in 1981 to 243.4 million in 1985 (*Hospitals*, 5 October 1986:67). The pattern of employment in the health-care industry has also changed as a result of cost-containment. In 1976 hospital employment accounted for about 66 per cent of all health service employment, while in

1986 the figure had fallen to 55 per cent (*Health Care Financing Review*, Summer 1987:1).

The Impact on Spending and Average Prices

Despite these improvements in the cost-effectiveness of medical treatment, total expenditure on health care in America has not been falling. It continues to increase in absolute terms and as a proportion of GNP, rising from 9.4 per cent in 1981 to 10.5 per cent in 1983, slipping back in 1984 to 10.3 per cent, but rising in 1985 to 10.6 per cent and nudging 11 per cent in 1986 (*Health United States*, 1986:Table 89; *US Industrial Outlook*, 1987:54-61; *Health Care Financing Review*, Summer 1987:Table 12).

According to the AMA, as a direct result of increasing competition, the real purchasing power of doctors' incomes fell during 1984. The median physician's net income after expenses but before taxes increased by 2 per cent between 1983 and 1984, less than the rate of inflation (AMA, 1985:1, 8-9). And in 1985 net earnings fell in real terms by the largest margin since Medical Economics began its regular authoritative survey. In 1986, however, net earnings rose 10 per cent, the biggest percentage increase since 1979. These sharp changes mask the long-run trend revealed by the figures for the decade 1975-1985. Taking inflation into account, the median net income of physicians fell by 5 per cent (Clare, Spratly, Schwab, and Iglehart, 1987:101-2). Competitive pressure has also made a very big difference to newcomers to the profession. They have often had to embark on their careers as salaried employees at relatively low incomes rather than as self-employed solo practitioners. Perhaps the main effect of competition on doctors has been that they have had to submit to increased scrutiny of their activities in the form of utilisation review or quality assurance systems operated by both hospitals and insurers.

The consumer price index (CPI) for medical care items did not increase as fast between 1982 and 1985 as it had in previous years. During the five-year period 1975-80 the average annual increase was 9.5 per cent, and in 1979-80, 1980-81 and 1981-82 the increases were 10.9, 10.8 and 11.6 per cent respectively. In 1982-83 the increase slowed to 8.7 per cent, and in both 1983-84 and 1984-85 it was lower still at 6.2 per cent. However, the average price level of medical goods increased faster than for goods generally. The CPI for all items in 1984-85 rose by 3.6 per cent, and for all services by 5.1 per cent (*Health United States*, 1986:Tables 86, 88).

The high level of spending in the USA as a proportion of GNP compared with Britain is explained partly by the higher quality of service provided in America. This has much to do with a higher standard of amenities, which may make little or no difference to outcomes, but there are also some indications that higher spending produces a better quality outcome for patients. America spends 2.8 times more per head than Britain and 1.7 times more than France. Differences in life expectancy are not large, but the nosocomial (post-operative) infection rate in the USA at 4 per cent is much lower than France's 7 per cent and Britain's 10 per cent (Schieber and Poullier, 1987:112).

Some particular factors also explain recent increases in American spending. Possibly the single most important is the huge open-ended government tax subsidy to employer health plans, estimated in 1986 to be worth about $49 billion when total spending was $458 billion (Enthoven, 1985:3; *Health Care Financing Review*, Summer 1987:Table 13). There has also been continuous pressure from rising malpractice insurance premiums and the growing number of elderly persons using expensive services. A larger number, for instance, are now reliant on nursing homes. In 1982 there were some 14 500 nursing homes (with 25 beds or more) providing in all about 1.5 million beds. The cost of nursing-home care, just under half of which is paid for by Medicare and Medicaid (mainly the latter), is rising faster than the average for all health-care items, 10.6 per cent in 1984-85 compared with the average of 8.9 per cent (*Health United States*, 1986:Tables 85, 95). Spending on long-term care by Medicaid was about $13 billion in 1986 (*Modern Health Care*, 16 January 1986:42).

Expenditure on home health care is also growing rapidly. It is not easy to calculate, but one US government estimate puts spending in 1985 at over $2 billion. Medicare reimbursement for home health care alone reached $1.6 billion, up from $519 million in 1978 (*US Industrial Outlook*, 1987:54-5).

To sum up: the climate of cost containment in the USA has produced dramatic changes in hospital use. Inpatient days, for instance, are at an 18-year low. Total spending, however, continues to rise in real terms, partly because of price rises, which reflect higher quality as well as rising labour costs, and partly because new demands are being made, especially for nursing-home places and home-nursing care. It is also because a continued open-ended tax subsidy conceals the true cost, and, not least, because many Americans want to spend at a high level on health care, as the high level of out-of-pocket spending testifies. Nearly 29 per cent of American personal health expenditure still comes from direct out-of-pocket payment (*Health Care Financing Review*, Summer 1987:Table 15).

The most serious criticism of health insurance is that it is inherently

incapable of containing costs, and until the mid-1970s this was a valid complaint about American health insurers. But this weakness had much to do with the restrictive practices enforced by the mighty American Medical Association, which in recent years has had its wings clipped by the Federal Trade Commission. Subsequently there has been a renewal of competition, and now the promotion of cost-effectiveness is the order of the day.

VII. WHAT ABOUT THE POOR?

Gainers and Losers

Medicare and Medicaid were enacted in the mid-1960s to widen access to health care for elderly Americans and poor people, but substantial problems remain. We have seen how the cost of Medicare and Medicaid far outstripped expectations because payments were open-ended. As demand increased, Medicare and Medicaid simply had to pay. As we have also seen, this problem has so far been overcome by predetermining a fixed payment for each diagnostic group. Doctors now have to live within these cash limits. We also saw how hospitals initially reacted by shifting their costs onto other users and how employers (who as the main purchasers bore the brunt of this cost-shifting) reacted. Providers now face not only Medicare cash limits and a variety of Medicaid controls in some states, but also downward pressure on private sector prices due to competition. Again, the reaction of hospitals has been to try to shift their costs elsewhere.

The chief losers have been the uninsured. Private American hospitals have always treated a proportion of uninsured persons, either free of charge or at far less than cost. However, as competitive pressure has mounted, their willingness to do so has decreased, with the result that more uninsured patients have been sent to the county hospitals, which are funded from local taxes and function under an obligation to treat all patients.

This trend is a sharp reminder of the failure of the Great Society poverty program. Before the mid-1960s there had always been considerable private charity care, but it was then felt that instead of relying on charity, people should be treated as of right. This has been accomplished for the elderly by Medicare, but the Medicaid scheme for the poor has failed to cover all those who live below the federal poverty line. There is now a pressing need to devise new arrangements to enable low-income families and the unemployed to share in the purchasing power enjoyed by the vast majority of Americans as competition in health has re-emerged.

How Many Uninsured? — And Who Are They?

How many people in America are uninsured? The official National Health Care Expenditures Study of 1977 revealed that about 18.5 million people had been uninsured for a whole year, and an additional 16.1 million for part of the year. In any quarter, about 25 million people were uninsured (NHCES, 1985:3). Subsequently the number has increased. The National Center for Health Services Research concluded in 1981 that there were about 27 million uninsured persons. The Washington-based Urban institute put the figure at 33 million in 1982, and the Robert Wood Johnson Foundation found from its 1983 survey that 19 million reported themselves as uninsured (HIAA, 1985:9). The US Census Bureau's Survey of Income and Program Participation estimates that in the third quarter of 1985 nearly 32 million out of a population of 236 million were without either government or private health insurance.

Who are the uninsured? The likelihood of having no insurance for the whole or part of the year was well above the national average for the 19-24 age group, and for Hispanics, blacks and the poor (NHCES, 1985:15). About one-third of the uninsured are poor or near-poor; but half of the total are not, and have incomes at least double the poverty line (Wilensky, 1984:54). An important cause of the lack of insurance is unemployment. In a country where 85 per cent of privately insured people are insured through their employer, losing your job can mean losing your health cover. One study showed that about half the unemployed in Detroit had no health plan (Berki et al., 1985). But about half the uninsured work at least part of the time during each year. They tend to be low paid, poorly educated people in small firms, more often in agriculture and services than manufacturing. Many are part-time, seasonal or self-employed, but the majority are full-time, whole-year workers (Wilensky, 1987:42). Small employers do not always provide health benefits, and of those uninsured persons in work, nine out of ten were unable to obtain insurance through their employer.

The chief difficulty is that Medicaid eligibility is strictly limited in many States. In 1977, 92 per cent of people with incomes below the federal poverty line were covered by Medicaid. In 1980, only about 49 per cent were covered and two years later, only 38 per cent (*Hospitals*, 20 January 1987:51). In recent years about half of those with incomes below the federal poverty line have had no public or private health insurance. Medicaid covered most of the remainder, though 13 per cent relied on employer health plans (Joe et al., 1985:60; *Hospitals*, 20 January 1987:51). But the uninsured are not left to go without health care altogether. 'Uncompensated care', which includes charity care and unpaid hospital bills, is provided on a large scale by the vast

majority of hospitals. State and local governments supported public hospitals by grants worth about $9.5 billion in 1982, in addition to Medicaid (Feder et al., 1984:544). Between 1982 and 1984 private hospital expenditure on uncompensated care increased from $3.2 billion to $5.7 billion, 4.6 per cent of total hospital expenditure (AHA, Care for the Medically Indigent, DATE, and AHA, 1986). According to an AHA estimate, this is recovered by increasing charges on paying customers by over 10 per cent (*Trustee*, January 1987:13).

The Uninsured and 'Fairness'

The beneficiaries of uncompensated care are not a homogeneous group. Some are not poor, but have decided to remain uninsured or, if they have insurance, do not pay their deductibles or co-payments. But others live below the official poverty line and therefore are in need of help, while simultaneously the federal government subsidises higher income groups through tax exemptions.

The cost in 1986 of federal tax subsidies to employer group health insurance has been estimated at about $49 billion (Enthoven, 1985a:3). In 1983 when the median household income income was $20 885, a study by the Congressional Budget Office estimated that 88 per cent of tax-free employer contributions went to households with incomes over $20 000. The tax benefit averaged $622 per household in the $50 000-$100 000 income bracket, and only $83 for those in the $10 000-$15 000 range. This is both imprudent and unfair. It is imprudent because it encourages high income groups to be careless about the cost of health insurance. According to Enthoven, the message from the government to the well-paid is: 'Even if you buy wastefully expensive health cover, we will pay 40-50 per cent of the cost' (1985a:6). Open-ended subsidy is not only imprudent; it is also morally unjustifiable. If there is a case for subsidy, then it should go to the people least able to buy health insurance.

These failings are widely acknowledged, and a variety of proposals to cap the tax subsidy have been put forward, including several along the lines of a 1985 bill sponsored by the Department of Health and Human Services and proposed in Congress by Senator Durenberger. It proposed to allow tax relief only on the first $100 of employer contributions for individual coverage, and $250 a month for family cover, index-linked to GNP. As yet, reform has not proved possible.

But the disadvantage of tax cap schemes remains that the people who cannot afford to pay health insurance premiums are left without subsidy. Enthoven, among others, has therefore proposed that every person should be

eligible for either a tax credit or a direct subsidy payable to qualified health plans. It would be worth 40 per cent of the premiums up to a limit of $60 per month for an individual, $120 for a couple, and $180 for a family at 1986 prices, again index-linked to GNP. According to Enthoven, this would have the effect of subsidising everyone, including those currently uninsured, and also making every beneficiary cost-conscious above the subsidy cap. At an estimated $47 billion in 1986, the cost would be a little less than the present subsidy (Enthoven,1985a:8).

VIII. CONCLUSION

Federal and State price controls under Medicare and Medicaid, combined with downward pressure on private sector prices due to competition, have led to cost-shifting. The chief losers have been the uninsured poor. At the same time the federal government subsidises employer group health insurance plans, which cover some of the best paid people in the land. There is an urgent need to reform tax subsidies to give the unemployed and low paid the power of choice that the present competitive market can make available to all.

Part III

What Australia and New Zealand Can Learn

Chapter 7

Lessons for Australia

We have sought to establish three general propositions. First, there is no justification for government intervention in the delivery of health services, except in the case of public health. Second, when governments do intervene there are often unforeseen consequences, the outcomes of which are quite the opposite of what was intended. The health systems in Australia and New Zealand are permeated with examples of major government failure. Third, if markets are allowed to operate unfettered by invasive government regulation, it is possible for competitive processes to achieve the cost-saving efficiencies that politicians often talk about but perennially fail to achieve.

In Australia and New Zealand governments over the years have intervened more and more in health marketplaces on grounds that have ranged from supposed market failure to merit-good paternalism. However governments justify their presence in the health system, the fact remains that there are votes to be won in offering 'free' or 'cheap' medical and hospital services to everyone while distributing the costs over taxpayers. We have seen how this exercise in applied socialism inexorably yields a more costly system, all costs taken into consideration.

However, even in the current environment of hospital queues and rising tax burdens, politicians find difficulties in promoting meaningful deregulation. Patients in fear of losing their subsidies join forces with the vociferous minority of vested interests on the supply side to lobby loudly against any move towards a system in which health services could be produced and distributed in accordance with the normal forces of supply and demand. Advocates of a health sector where services are produced by unregulated profit-maximising private entrepreneurs in response to the market-revealed demands of private citizens, and in which bureaucrats with their myriad committees are conspicuous by their absence, are denounced for promoting

an arrangement under which health would be marketed in the same manner as are massages, plumbing, or motor vehicle repairs. There are indeed votes to be lost in taking away gifts from some people that were coercively appropriated from others. This disincentive is reinforced when it is so difficult for the ordinary voter to be fully aware of the benefits that could flow from a privatised system, and when the true costs of the current system are not directly revealed, or are hidden in the welter of systematic disinformation that frequently accompanies political interference in markets. Moreover, any change has its attendant costs and risks, which are in most instances unevenly distributed throughout the community. This creates a certain incentive for politicians to minimise their own (political) risks by avoiding any radical departure from the status quo. Ultimately people become used to a bad but comfortably regulated system. They cannot imagine how the seemingly uncontrolled and uncoordinated chaos of the marketplace could ever be an improvement.

On the contrary, it is a fundamental proposition of economics that it is market processes that efficiently and effectively coordinate and control the allocation of productive effort in response to peoples' individual wants and needs. The market has its own regulatory controls, which operate far more efficiently than is possible under bureaucratic 'planning'. How these control mechanisms work is illustrated in any one of the thousands of asset and commodity markets that effectively coordinate the competing wants of consumers with the available resources, and that perform this task without the advantage of extensive official regulation or interference.

The lesson by example that has occupied the major portion of this book is that competition in the production and delivery of health services is both possible and effective. We saw, especially in Chapters 5 and 6, how entrepreneurial activity by competing insurers and health providers has resulted in innovative approaches to the ways in which health service delivery is organised, and how it is possible to monitor and control costs.

A basic lesson from these examples is that people, consumers and producers alike, respond to incentives in predictable ways. When health providers are directly rewarded in proportion to their success in discovering customers' needs and in effectively meeting these needs, they have a powerful incentive to ensure that the kinds of services they offer — their location, their timeliness, and their cost — are in the best interest of patients. In a market system, doctors, nurses, hospital managers, and medical entrepreneurs are all forced to make the interests of patients their prime concern. We have seen in the earlier chapters how these competitive forces are in the process of transforming the US health system.

On the other side of the market, when patients have to bear the costs of

their actions in demanding health services, they too respond in predictable ways: the higher the cost, the less is the amount demanded. This price effect is supported by numerous well-conducted studies, including in particular the recently completed Rand experiments (see Duan et al., 1987) on the effects of alternative health insurance arrangements. In a market system it is really the **patients** who monitor the costs of health and who control the allocation of our scarce resources to the production of health services. Surely this is totally consistent with the ideals enshrined in our codes of medical ethics.

I. THE US HEALTH SYSTEM

We do not wish to draw the conclusion that the US health system is the pinnacle of achievement in the direction of a rational health system; a pinnacle towards which we would be well advised to commence ascent. Far from it. The US system has its own mixture of regulation, cartelisation, and political control. For example, the US Medicare and Medicaid programs fund health services that are heavily subsidised. The anti-competitive forces of entrenched professional monopoly have until recently acted as a barrier against the emergence of competition in medical markets within the US.

However, there are limitations to eligibility for Medicare and Medicaid in the US, in contrast to Australia where everybody is on the system; and the US has had some success in the use of anti-trust legislation to chip away at the medical cartel. Competitive forces certainly have wider ambit in the US health system than they have in Australia, with the beneficial outcomes documented in Chapter 6.

On the other hand, there has been increasing concern about the inflation in medical costs in the US and the alarming rise in the proportion of US health expenditure relative to GDP. Apart from the inflationary effects of Medicare and Medicaid, most of which should have by now worked through the system, an important contributory factor has surely been the hidden subsidies that are delivered for health insurance taken out via employer-funded health plans.

Health expenditure by employers on behalf of their employees is not taxed in the hands of the recipient, and it remains a tax deduction against revenue for the employer. Thus, health insurance is a way for employers to compete for workers by offering a tax-free fringe benefit. Although in principle the benefit is delivered in kind, many employer plans are now designed to permit employees to commute some of their savings on health expenditure not incurred in any one year into other benefits, such as extra holidays. So the differential tax treatment in the US of employer-funded

health insurance allows wage packages to carry a tax-free component that includes the purchase of health cover as a necessary ingredient. Of course, labour markets adjust the market-clearing (taxed) wage downwards in response to any extra labour supply forthcoming under the new more attractive wage packages, and so part of the gains from free health insurance are offset by lower money wages. Nevertheless, the distortions introduced by the tax-free status of employer-funded health insurance tend to cause an increase in the demand for health services, and an institutional development in which suppliers are increasingly organised in ways that attract business from the corporate sector. Thus, for example, HMOs have enjoyed boom conditions in US health markets in recent years.

Obviously this is not the whole story. Other factors have been influential in generating the recent inflation in demand and in health costs in the US. Two candidates for consideration are the recent exponential trends in relatively expensive 'hi-tech' medicine; and the plain fact that the economic growth in the US has for many years resulted in rising per-capita incomes, which itself could be generating proportionally larger growth rates in demand for health care (Feldstein, 1979).

These are not our concern here, however, as they are the natural outcome of dynamic market processes. Innovations in medical technology allow people access to new procedures, improved drugs, and new solutions to medical problems. The fact that patients demonstrate their willingness to pay the price for these new techniques reveals that they value the results more highly than they value the money given up (or, more accurately, the commodities that the money could have otherwise purchased); patients are therefore better off. The fact that people voluntarily choose to spend a higher proportion of their own incomes upon health services should not concern governments. People generally spend their higher incomes to purchase relatively more of many commodities, and to purchase relatively less of many other commodities, often to the dismay of 'planners'. To despair at the rising proportion of extra incomes **voluntarily** spent on health is about as pointless as decrying the extra TV sets, compact disc players, Volvos, or overseas holidays that are the objects of rising demands made possible by general economic growth.

The problems that beset health markets, and that are absent from plumbing or TV or Volvo markets, are the consequences of government intervention, whether it be within the US or within Australia or New Zealand. The question is, how can we gain the advantages of a more free and open competitive marketplace in health, while at the same time avoiding the disadvantages of government over-kill when it invades the private sector in order to redistribute income-in-kind and to regulate suppliers' behaviour?

How can we get the best out of the lesson that is taught us by recent developments in the US health system?

II. STEPS TOWARDS REFORM

The following is an overview of the steps that should be taken in Australia in order for the government to effectively disengage itself from its extensive involvement in health, to which it has become accustomed. We do not advocate a complete and total withdrawal of government from the health sector (at least in the short run), but we propose that its residual functions be confined to two areas only: public health, and the maintenance of a safety net of last resort.

Eliminate the Universal Subsidy

The first step towards a market-oriented competitive health sector would be to dismantle the system of universal subsidy embodied in Australia's Medicare. Prices faced by patients or insurers would rise, but the government would have the option of reducing taxation by the amount of the budget cost of the present system, less the costs of the government's residual health functions. Health providers would be forced to compete more directly for patient dollars, and patients would have a direct incentive to weigh up the value per dollar of extra health services consumed against the value per dollar that could be had from other goods and services. Within the category 'health services', the **relative** prices that would emerge in the health marketplaces for alternative procedures (e.g., day-surgery or in-hospital surgery) would more closely reflect costs of production, and so patient choice would enhance the efficiency with which scarce resources are allocated across competing uses. Because people would notice relative costs, and would economise where their value of marginal health services was not worth the prices charged, the amount of health services available (i.e. the supply) would respond more directly to 'needs' as perceived by patients, rather than needs as perceived by bureaucrats.

Naturally, there would be distributional effects. First, however, why should **any** change away from a bad policy automatically carry compensations; and second, redistributions of incomes and wealth are best effected via cash transfers rather than by transfers in-kind. It is not necessary for the chronically ill or generally uninsurable person to suffer excessively as a result of a move towards a market-oriented system, as these people can be catered for by combinations of private philanthropy (e.g. hospitals or wards

funded by religious or charitable organisations) and a public safety net.

If the government were to continue funding medical services for the chronically ill, the impecunious, and other disadvantaged citizens, this function would be best located within the general Social Security portfolio alongside other components of government welfare, so that safety net health expenditure demands would compete directly with other uses of welfare dollars. We return to alternatives for safety net funding shortly.

Deregulate Health Insurance

The second step would be to repeal legislation that singles out health insurance for special regulatory control beyond the ordinary regulation of insurance in general. This would mean removing the legislative support given to the current cartel of 'registered, voluntary' health funds, and it would open the health insurance market to further competition. Community rating would no longer be a legal requirement for the writing of health insurance, nor would new health plans or premiums need to be cleared with the bureaucracy. Insurers would be permitted to compete for custom by endeavouring to tailor policies to suit the needs of different individuals and families. Wider choice of alternative schemes, including cheaper plans with larger front-end deductibles along with more expensive plans for complete health cover, would be the probable outcome of expanded competition among insurers.

Innovative ways of combining health insurance with different delivery mechanisms would become possible. For example, privately owned and operated HMOs that bundle insurance with delivery could emerge naturally in competition with other organisational forms. Thus insurers would be forced by the discipline of market competition to make their customers' preferences their prime concern, rather than having to contend with the opinions of bureaucrats in the design and pricing of policies.

The option of self-insurance would be open to anyone, and it might be expected that younger people on lower incomes would be more likely to prefer this alternative. Insurers would then have an incentive to offer lower-priced policies under which younger, or healthier, people would enter into health insurance contracts that extended over longer periods of time. In addition, more people would choose to insure against expensive but irregular hazards, such as hospitalisation and surgery, and to self-insure for the more regular and predictable, yet relatively less expensive, visits to the GP.

Insurers would also have an incentive to offer lower premiums (or premium discounts) in return for abstinence from health-reducing activities such as smoking, in the same way that some private non-registered insurers

in the immediate pre-Medicare period offered non-smokers discounts. Other cost-reducing incentives could be introduced, depending on their profitability to insurers, and thus upon the demand for discounted insurance. More people would have more incentive to adopt healthier lifestyles than under the current system, and the outcome would be a reduced demand on the health system and on insurance claims. It is enhanced market competition, and not bureaucratic regulation, that maximises the likelihood of these felicitous events.

Privatise Hospitals

The third step towards a rational market-based health system would be to move towards the ultimate privatisation of the institutions involved in the delivery of health services, especially hospitals, but also government nursing homes, clinics, and community health centres. Initially institutions could be required to charge fees so as to balance their books. For example, even though a public hospital were government owned, it would be required to set fees to cover costs of production including normal return on funds invested, in competition with other hospitals, government or private. As an additional incentive, managerial salaries could, at least in part, be based upon profitability. In the longer run, the ownership of public hospitals and similar institutions should be transferred to the private sector; and there are ways to achieve this with minimal discomfort to the parties directly involved (see Pirie, 1985).

Moves towards some degree of privatisation in the hospital sector are under way within the present system, with some public hospitals selling off wards and beds to private interests as ways of rationalising their production arrangements under the constraints of tighter hospital budgets. Privatisation in this sector does not appear to be as unfeasible as was once thought.

As with the dismantling of Medicare, patients or insurers would face realistic market prices that reflected costs of production. **All** hospitals would compete on an equal basis, unless government subsidies under the safety net function were directed consistently towards some politically favoured segment of the hospital market. Not only would resources within the hospital sector be more efficiently allocated, but inefficient forms of rationing, such as waiting in lengthy queues, would largely disappear. When faced with market-determined relative prices for different hospital services **across-the-board,** people who considered hospitalisation sufficiently urgent to pay the charges would no longer be crowded out by other people whose hospital 'needs' were less urgent but who were lucky enough to be placed higher in the queue.

Another consequence would be an enhanced incentive for hospital managements to seek innovative ways of efficiently delivering cheaper services to patients. For example, the introduction of day-surgery in the US has significantly cut costs of those procedures for which it is suitable. Unbundling the medical and 'hotel' functions is another feasible alternative. Some progress along these lines has been achieved recently in Australia, but we could expect a more rapid rate of innovation under the incentive of supplier competition. We have seen how insurers can act in innovative ways to contain medical and hospital costs; DRG monitoring of hospital costs is one example.

Although it is impossible to accurately predict exactly how hospitals would change, we can at least offer informed conjectures. The forces of competition must inexorably drive hospitals towards adopting least-cost organisational structures. Whether or not the large multipurpose hospital would survive would depend upon the economies of scale and scope that are possible within this sector. It is also perfectly feasible that hospitals might 'unbundle' into loosely interconnected networks of specialist units; it all depends on costs vis-à-vis potential market size.

Yet another innovation in organisation would be the development of different contractual arrangements between hospitals and doctors. Hospitals might find that it pays to hire a core of medical professionals as salaried doctors and to lease rights to other 'visiting' doctors in return for some *quid pro quo*, such as cash or treatment of certain patients for free. It might also emerge that the full price for an episode involving hospitalisation could be arranged through the doctor-of-first-contact, such as one's GP, who would then arrange to pay the hospital. The exact mechanisms for contracting, pricing, and paying for bundles of health services would generally be those for which the sum of suppliers' and patients' costs of transactions (i.e. the costs of search, risk-bearing, etc.) were least, as is the case in other markets where subcontracting frequently takes place.

The ultimate outcome of competition among hospital entrepreneurs would be reduced hospital costs and therefore lower insurance premiums. In addition, the costs to the taxpayer of funding the government's safety net function would also be reduced as a result of lower hospital costs.

Deregulate Health Professionals

The fourth step towards a truly market-based system would be to begin deregulating health professionals. In Australia, health professionals are required to be legally registered under the relevant Act before the services they deliver can attract the various governments' subsidies. Doctors must be

registered in order for their patients to collect the Medicare rebate. However, if the entire system of government rebates — safety net funding excepted — were dismantled, then the advantage to the doctor of legal registration would evaporate.

The proposition that legal registration that imposes some set of training requirements maximises or even sustains quality of service is dubious; nor is it clear that maximum quality is desirable when it costs more to produce than people would willingly pay if they had a choice.

Professional regulation in the health area is frequently combined with blatantly anti-competitive restrictions on professional behaviour. These include the prohibition of advertising, other than 'approved' advertising, as well as ownership and other restrictions in the retail pharmacy market. These kinds of restrictions have been successfully targeted by anti-trust prosecution in the US. In Australia, the repeal of those sections of State Medical Practitioner Acts related to advertising and 'touting' restrictions would constitute a useful initial step towards promoting competition by eliminating the legislative prop to collusive activity.

We have already referred to the fact that market adjustments caused by changes in regulatory legislation serve to eliminate producers' above-normal profits. In the long run, other things equal, regulated health professionals just break even on the personal costs of their training and other investments necessary to provide service. This means that market deregulation imposes economic losses upon those who had gained professional training and had entered the market unaware of impending changes to legislation. Whether or not established doctors and other professionals who would be adversely affected by a policy of systematic deregulation 'should' be compensated by taxpayers is subject to the same doubts that were raised earlier in respect of compensation for removal of Medicare subsidies.

However, one sure way to erect a financial barrier to entry into one or more of the health professions, and thus to preserve the marketable value embodied in the acquired skills, training, and expertise, of established professionals, would be to end the government subsidisation of all health and medical education. This would ideally comprise part of an overall package to end subsidised tertiary education across-the-board, and so preserve comparability in relation to costs of training across the various professions or trades to which young people might direct their academic efforts. If doctors were required to bear **all** of the costs of their training, then, as before, markets would adjust so that these costs would be borne largely by patients rather than by the general taxpayer. As an example, if the costs of medical education had a capital value of $100 000 when a student first entered medical school, and if he or she became a practising GP nine years later and

planned to work until age 65, then his or her annual net income would have to be about $9000 higher in order to just cover the extra training costs levied in the form of university fees, etc. (assuming a 5 per cent rate of discount). At a marginal tax rate of 50 per cent, this would mean a gross income increase of $18 000. If the doctor sold 7200 consultations (150 per week for 48 weeks) per year, then the implied rise in patient fees would be $2.50 per consultation. The result is that the patient, as the user of medical services, effectively pays for the doctor's education.

III. LEGITIMATE ROLES FOR GOVERNMENT

We suggested above that governments, at least in the short run (which is perhaps the foreseeable future), could retain a minimal presence in the health marketplaces consistent with permitting the majority of health functions to be performed fully in the private sector.

The first major government function is in the area of public health, which can be defined to include medical research as well as preventing the spread of infectious disease and maintaining the standards of sanitation. Although effort could be directed to investigating whether portions of this function could be handed to the private sector under government subsidy and regulation, the amounts currently spent by governments on public health (as defined here) are not large, especially when compared to the sizes of State and Commonwealth health budgets.

The second major function that could remain within the domain of government intervention is the funding of health care for the poor, the chronically ill, and other persons who are considered to be disadvantaged. It is not necessary for the government itself to produce health services for these people; simply to subsidise production in the private sector. One method would be to continue with the system of identifying those persons eligible for safety net funding by use of the Health Care Card and the Pensioner Health Benefits Card, which are issued by the Department of Social Security. Under this system it would be appropriate to have the actual funding channelled through Social Security, as indicated above. The cards would then effectively become vouchers for the purchase of medical or hospital services, or could alternatively be available for the purchase of basic insurance cover for those who are not uninsurable. People who are otherwise uninsurable could be picked up in the safety net through direct subsidy.

There are many possible variations in the design of such a system, such as retaining the Medical Benefits Schedule for the purpose of setting rebates, and permitting card holders to 'top-up' with extra insurance or direct out-of-

pocket payments. The government could even step back a little from in-kind subsidies by allowing card holders to sell their card rights on the open market in exchange for cash, for which they would thereby reveal a greater 'need'. Or the government could even give a cash top-up to pensions and other Social Security benefits sufficient to purchase health insurance, while still retaining direct funding of the chronically ill. These are but a few of the possibilities. Reform of the health system should release enough public servants to populate enough committees to successfully achieve the design of a workable safety net.

Chapter 8

Lessons for New Zealand

The major conclusion of this study is that the interests of health care consumers can be far better met by the operation of open, free and competitive markets than is widely believed in countries that have opted for socialised medicine. The empirical evidence advanced in favour of this proposition is taken from recent developments in medical care markets in the US. That evidence demonstrates that it is both feasible and vital to outlaw restrictive practises in the supply of medical care, to encourage an expansion in the quantity and variety of medical services supplied, and to provide greater consumer choice in both the form of medical care delivery and its financing.

It is important, however, to appreciate that this argument could not have been made until very recently. The delivery of medical care in the US, and its financing to a marked extent, had been dominated by the monopoly position of the medical profession. Our study emphasises the efficient provision of medical care arising from **competition** in markets, not merely from privatisation *per se*. Reform of the health sector in the New Zealand economy should clearly recognise this, since it is unlikely that any objective observer would want to put New Zealand on the rack of medical cost inflation suffered by the US.

Further, we have produced evidence that conflicts strongly with the view that consumers are so ignorant about medical treatment that they **prefer** the government to take the responsibility of determining who will be served and how. It is not surprising that in our modern, educated society people are very aware of and informed about medical treatment.

I. THE 1986 REFORM OF THE COMMERCE ACT

We have argued that consumers respond positively to improved information about the quality of suppliers, and are keen (as are their competitive insurers) to seek out low cost/high quality medical care. Until the May 1986 reform of the 1975 Commerce Act, the medical profession was exempt from any collective pricing agreement provisions. If the medical profession wanted to act as a cartel and set minimum fees, it was not prevented from doing so under anti-trust legislation. The 1986 Act prohibits this behaviour, unless a specific exemption is applied under section 43. The interpretation of the Act has yet to be determined fully, but the Commerce Commission offered a number of guidelines in press statements during 1986. As far as the medical profession is concerned, the more important of these are the following:

First, the Commission frowns on mandatory fee scales.

Second, the Commission does not believe that minimum fees are necessary in order to maintain standards. Rather, the Commission recommends making members aware of their legal liabilities and encouraging high standards of work.

Third, rules relating to membership must include clearly defined professional criteria that cannot be construed as anti-competitive devices for the exclusion of potential members.

Fourth, rules should discourage the supply of unwanted services to consumers. This prohibition contradicts the legally sanctioned restrictive practice of requiring GP referral for specialist consultation.

Fifth, restrictions on advertising are uncompetitive if their result is to stop consumers from getting access to information on the range of services offered. The Commission argued that service quality would not be adversely affected by advertising except when it involved unsubstantiable claims of superiority, was inaccurate or misleading, or brought the profession into disrepute. These are similar to restrictions on commercial advertising covered by the 1986 Fair Trading Act.

Sixth, group boycotts or concerted action against other doctors are prohibited, and this could even include unwillingness to assist in meeting normal rostering duties.

Finally, arrangements to share the market are outlawed.

Thus US anti-trust principles have now been enshrined in New Zealand legislation. Professional bodies may still be different from commercial enterprises under the law, but they are not so different that they can use their position to prevent what is widely regarded as behaviour consistent with the interests of consumers. The Commerce Act has had immediate implications for the New Zealand medical profession, as outlined by Ahdar (1987). As far

as the Act is concerned, 'work of a professional nature' simply means 'services', while 'trade' now includes 'any profession'. The thrust of the Commerce Commission is clear: while professions are applauded for their integrity, quality and high ethical standards, there is no need to prevent competition in order for these characteristics to be produced.

Consequently, the NZMA has been legally advised to refrain from expressing in public its views about current or appropriate fees. A commissioned study on 'appropriate' fees (which recommended $160 an hour in 1986) was not publicly announced even though it is not unlawful to provide information about the cost of providing medical services. Regarding price fixing, since the concept of fixing is rather weak, including gentlemen's agreements, and circumstantial evidence is admissible in determining whether collusion occurs, Ahdar (1987:250) recommends that since authorisation for fee fixing was unlikely to be granted, practitioners should act independently, retain documents that could help relate fees to costs, avoid fee-setting discussions with other doctors, and avoid sending fee schedules to other doctors. Interestingly, the detailed advertising restrictions formerly stated in the NZMA's Handbook are entirely absent in the 1986/87 issue of the NZMA Calendar.

The 1986 reform of the Commerce Act is clearly an important first step in the process of deregulating the medical monopoly in New Zealand.

II. PRICING MEDICAL CARE

Prior to 1938 in New Zealand, higher-income patients generally paid their medical bills in full, while low-income patients paid reduced fees. Many working people received medical care under capitation schemes negotiated between doctors and the friendly societies, arrangements that have since virtually disappeared. Very poor people were either treated free of charge or else went without treatment.

One interpretation of this situation is that doctors generously cut their prices so that poorer people were not denied access to treatment. But, as Lovell-Smith (1966) points out, doctors had little enthusiasm for capitation schemes with the friendly societies and rejected the proposed government general capitation scheme — both of which would have made treating the poor much easier — on the basis that they would lead to a reduced standard of service. Of course there may have been instances of benevolence in these arrangements, and it is true that honorary work in public hospitals was undertaken. Nevertheless, benevolence is less convincing as an explanation for differential pricing than is monopolistic price discrimination. Since

medical services cannot be traded, it pays doctors to charge higher prices to people with lower demand elasticities for medical care, these generally being the better-off. This maximises doctors' net incomes. In order for monopolistic price discrimination to work, entry into the market must be controlled. It is interesting to note that the government of the day (pre-1938) threatened to import foreign doctors in large numbers in order to force the New Zealand branch of the British Medical Association to accept the capitation scheme. In fact, foreign doctors were not brought in and the BMA did not acquiesce. The legal monopoly of medical practice continued as before.

The BMA proposed a sliding scale of subsidies that would have substantially increased demand by poor patients, while having little impact on the rich. With inelastic supply, the result would have been a substantial income transfer to doctors with little increase in delivery of medical care. Although the proposal was rejected, the BMA was able to enforce its preferred pricing scheme of fee-for-service, which has persisted until the present day.

Over the years the NZMA has continued to emphasise the desirability of maintaining and extending fee-for-service medical pricing arrangements. In the 1960s an NZMA policy submission called for an extension of fee-for-service principles to hospital specialist work, damning sessional work as a 'relic of the honorary system' (NZMA, undated:2). In its 1975 response to the Third Labour Government's White Paper (a document designed mainly to justify increasing centralisation of health administration), the NZMA recommended 'that the fee for service principle be retained as the method of GP and specialist remuneration' (Medical Association of New Zealand, 1975:6). For GP services, Easton (1974:92-5) dismisses fee-for-service as having 'no obvious rationality' while 'there is even less argument for specialists to be paid by piece rates'. Easton prefers 'a salary structure, with an incentive system related to output'.

There is little doubt that in agency relationships it is in the consumer's interest to have fees related to outcomes, yet this arrangement is very rare in medical markets anywhere. Of course, in the case of very bad and almost entirely unanticipated outcomes fees may be adjusted through malpractice suits, but this is extremely uncommon in New Zealand. Under a capitation scheme it does pay doctors to practise preventive medicine, since this reduces demand without reducing doctors' incomes. Unfortunately it also pays doctors to underservice their patients, in the sense that patients will receive less medical care than their doctors would provide for themselves under similar circumstances. Fee-for-service, on the other hand, does nothing to encourage the practise of preventive medicine by doctors, and sets the necessary conditions for the practise of supplier-induced demand and price

discrimination (although capitation fees could also vary by patient).

Another important concern is the cost of determining the effectiveness of treatment. This is a serious problem since doctors have an incentive to overstate effectiveness, while for patients, as Pauly (1980:126) points out, it is 'so easy for the principal to dissimulate about the outcome actually achieved, that such arrangements are not really optimal'.

For all of these reasons, different people will prefer different pricing arrangements in the delivery of medical care. As this book has emphasised, when markets are made more competitive a wide variety of schemes will emerge: capitation, fee-for-service, group insurance involving traditional indemnity, PPO schemes offering different deductibles and co-insurance rates, and so on. Entrepreneurs will attempt to satisfy the diversity of consumer choice in a world of asymmetric information. Schemes that fail to satisfy consumers will fail the market test. In any reform of New Zealand's health system that emphasises consumer choice, such diversity is both natural and vital. Yet Scott et al., while noting that the present structure does little to encourage greater choice, participation, or responsibility (1986:102), conclude in favour of either a system of competitive HMOs that everyone would be obliged to join, or else a system where the state is a principal funder but contracts out some of its services. The justification for these arguments is that there are efficiency and equity gains associated with close provider/funder links. We agree that at least for many consumers this will be the case — but not necessarily for all. As a consequence, we disagree with the idea of a single form of provision, be it HMOs or anything else.

Similarly, we disagree with for the Board of Health's (1986) suggestion of a dual funding scheme for general practice, where the state provides approximately 50 per cent of GPs' income via a capitation payment, the rest being either subsidised or unsubsidised fee-for-service. We see no convincing rationale for any single pricing structure devised by bureaucrats in the 'public interest'.

III. IMPLICATIONS FOR HEALTH INSURANCE

A major shift to private medical care with the state acting as insurer of low-income groups either directly or indirectly has significant implications for suppliers of medical insurance services. An important role for the state will be to ensure that conditions for easy entry into this market are maintained. At present the market is dominated by Southern Cross, but this does not necessarily imply monopoly power; what is required is that the market is contestable.

About one-third of New Zealand's population is currently insured; this number would be expected to rise substantially. In the US, for example, over 90 per cent of the population is covered by some form of medical insurance. The widely held view that only the well-off can afford medical insurance cannot be sustained. In New Zealand, however, the cost of medical insurance is high relative to the after-tax incomes of some people, at least in part because of high marginal tax rates. People who do buy insurance pay taxes **and** their insurance contributions, but presumably rarely avail themselves of public hospital care. This serves to redistribute income to those not insured.

As the insurance market expands, however, there are several lessons to be learned from the US experience of medical cost inflation. The first is that the state must be prepared to enforce competition in the market for health insurance, and in particular to prevent any attempt by the medical profession to dominate ownership of health funds. Next, the state should prevent the medical profession from being in a position where it can effectively stop insurers from determining low-cost sources of supply, checking diagnoses, operating peer review schemes, and offering contracts requiring second opinions or pre-admission certification. Automobile insurers are not constrained in this manner; neither should be medical insurers.

The US evidence supports the argument that there are efficiencies to be gained from diverse ways of linking providers and insurers. The diversity of the market can alleviate if not completely solve vexing issues of asymmetric information, where doctors cannot completely control the actions of their patients and patients cannot completely control the actions of their doctors. Markets have adjusted in many ingenious ways to cope with incentive problems associated with moral hazard and adverse selection in the market for medical care; for examples, see Woodfield (1987). The US evidence also suggests, however, that traditional indemnity insurance schemes can lead to runaway health cost inflation when the supply of health professionals is rigidly controlled, an eminently avoidable situation.

Consequently, New Zealand should aim for a substantially expanded private health sector with competitive supply of a wide variety of health care deliverers. This would stimulate the expansion of traditional indemnity insurance as well as competitive HMOs, PPOs, and related institutions geared to the containment of health costs. No HMOs currently exist in New Zealand, although it appears that the Wellcare Corporation, along with hospitals in Wellington and Auckland, are seriously investigating their possibilities. Some institutions, such as the Otumoetai Health Centre in Tauranga, have some properties of HMOs. The Otumoetai Centre has operated for several years with a system whereby doctors receive an equivalent of their GMS fee-for-service subsidies as a capitation payment, and

practice nurses can deliver their services without the notional appearance of the doctor. Seddon et al. (1985), however, report that there has been no clear shift toward preventive and promotive care during this period, although given the limited training of doctors in these areas perhaps little could have been delivered in any case. Further, there was no change in patient fees under this arrangement, and the capitation fee was but a small proportion of total health costs. Nevertheless, although there was little recorded change in hospital admission rates, the Centre observed significantly lower costs of secondary and tertiary care for its patients, attributed mainly to the expanded role of practice nurses, and lower pharmaceutical prescribing rates compared to the national averages. Further, voluntary peer reviews by doctors seemed to generate lower referral rates to specialists and lower rates of diagnostic testing, along with a reduced variance in these rates across doctors, compared to elsewhere. It was not possible, however, to determine whether these represented changed behaviour in response to the new incentive structure.

At present we know of no PPOs in New Zealand. Under existing insurance, members of societies receive specific benefits for specific contingencies. There is a certain amount of product differentiation, although most policies are fairly close substitutes. Each society (apart from Union Medical Benefits) offers more than one policy. Policies offering basic cover usually involve some co-insurance, the exception being the New Zealand Medicare Society, which offers 100 per cent cover on all its policies. Southern Cross has the highest co-insurance rate of 20 per cent, and reimburses according to a schedule of specialist fees reflecting average charges, and hospital accommodation charges according to a hospitals price index. Notwithstanding these restrictions, Southern Cross massively dominates the market and appears to offer competitive premiums and little hassling over claims.

None of these structures, however, is necessarily optimal for the typical consumer. As argued earlier, in the presence of transaction costs for writing and administering policies, the optimal contract for consumers involves a front-end deductible and a positive co-insurance rate, with a very low rate of co-insurance for catastrophic life-threatening medical events for which the moral hazard element is minimal. Only one society (Group Health, with its premier plan) offers a front-end deductible. This reduces the standard premium by one-third, and certainly seems designed to economise on costs associated with frequent transactions. Some of the other societies simply recommend infrequent claims, but without offering any incentives to encourage such behaviour. No society offers both a front-end deductible and co-insurance, or variable rates of co-insurance, and only one currently proposes to introduce premium differentials that promote good health. All societies

place rigid upper bounds on reimbursable expenses. The effect of this is to impose an unbounded rear-end deductible on consumers, which, for major surgery, may leave a large part of the risk uninsured. It is one thing to design contracts to provide incentives for consumers to search out low-cost providers and to refrain from spending vast amounts on routine treatment. It is quite another to leave potentially life-threatening medical problems substantially underinsured, as any heart transplant patient who faces a $120 000 bill will testify.

Most societies, however, also offer 'Rolls Royce' plans, advertised in glossy brochures that spell out the benefits in great detail but generally do not quote the price. In some cases, the New Zealand Medi-care Society for example, benefits include those in the basic policy along with a number of add-ons such as funeral, cash, convalescent, additional treatment procedures, dental, artificial aids, and heart surgery benefits. Other plans, however, involve more than just add-ons. The Southern Cross Ultracare plan is designed for corporate high achievers and does not appear to be available to less exalted citizens. Although it constrains certain expenditures in a manner similar to its basic policy, ancillary services being a case in point, Ultracare offers 100 per cent cover of scheduled fees up to a substantially larger maximum for general surgery (25 per cent greater than for basic cover), and has a separate schedule for the much more expensive cardiac surgery.

Although the more luxurious policies offer more numerous benefits with greater cover, there is less incentive for consumers to seek out lower cost treatment since co-insurance is absent and the rear-end deductible comes in at a higher expenditure level. Consequently, the 'Rolls Royce' policies are about two and one-half to three times as expensive as basic policies. Moreover, they are relatively recent developments and appear to be closely related to changes in the tax treatment of health insurance premiums.

In 1985 a fringe benefit tax with a 45 per cent tax rate was introduced in New Zealand. The tax rate was increased to 48 per cent in April 1987. Health insurance premiums paid by employers were, until December 1987, exempt from this tax. It is not surprising that health insurers responded with new plans to meet the demand created by this tax distortion. And it is little wonder that such plans were geared to 'high achievers'. From 1988, however, employers have been required to pay fringe benefit tax on health policies, but at a significantly lower rate than most other subjects of the tax, especially if the health policy involves a scheme approved by the government actuary, for which the tax rate is 24 per cent. Although the fringe benefit tax exemption is now less generous, there remains sufficient non-neutrality in tax treatment to provide significant incentives to continue the expansion of employer-subsidised health plans. Under such circumstances, New Zealand could soon

find itself facing cost inflation for health services along with excessive insurance for less serious health problems.

In New Zealand indemnity insurers are not in any way integrated with provision of hospital services. Yet the mechanism for this is firmly in place in the case of Southern Cross, which, in addition to offering insurance, operates nine private hospitals in various areas, and has broadened its activities into cardiac surgery and emergency care. It is not clear that Southern Cross widely practices the cost containment measures outlined in the discussion of PPOs in this study. Southern Cross emphasises in its brochures that its clients are free to choose their own doctor and decide on methods of treatment and forms of payment. The benefit schedules encourage patients not to spend more than the maximum, and do tie them to scheduled fees, but they offer no incentives to patients willing to use specialists who charge less than the average. Given that Southern Cross permits such freedom of arrangements, it has little incentive to require second opinions, conduct utilisation reviews, or engage in other measures to contain costs and prevent overservicing. Clients are not required to use Southern Cross hospitals where these are available, and are given no particular incentive to do so, say by offering a lower rate of co-insurance in such circumstances. One cannot help but wonder whether Southern Cross is constrained by the medical profession in these matters. Given what we know about the US history, the evidence is not inconsistent with such constraint.

IV. CONCLUSION

Recent reforms to make the US market for medical services more competitive have brought significant potential benefits to consumers. It is not possible to obtain these benefits under present arrangements in New Zealand. Substantial reform of the public hospital system is needed. At present, public hospitals have a huge price advantage since they are fully subsidised. In August 1987 the private hospital subsidy was removed, and health insurance premiums increased by 17 per cent as a result. This will drive patients back to the public sector and lengthen waiting lists further.

A revision of the welfare role of government is called for. We argue that the proper welfare role of the state is to protect disadvantaged citizens who cannot provide for their own basic living standards. This involves income transfers, and perhaps health vouchers, but not massive state involvement in the production of medical care.

Further, the view that professional monopoly power cannot be eroded by a determined government is false. Inroads have already been made in New

Zealand with the revision of restrictive practices legislation contained in the 1986 Commerce Act. The competitive thrust, however, should be carried much further to allow a much wider range of providers to emerge. This will require the effective repeal of the Medical Practitioners Act, and the removal of discriminatory subsidies favouring doctors and specialists and disfavouring nurse practitioners and other medical auxiliaries. The object of these reforms is not to attack the existing medical profession but to promote extended consumer choice. The US evidence suggests that people or their agents are capable of making effective choices in the field of health care. In addition, rapidly growing numbers of health professionals have been associated with considerable innovation in cost-effective methods of financing and delivering health care.

Arguments in favour of expanded consumer choice in a context of competitive markets are rarely found in the New Zealand literature, although Kerr's (1987) address to the NZMA centennial meeting is a refreshing counterexample. Yet some New Zealanders have long believed that the US, as the closest approximation to the competitive market model, has a health system that should be avoided like the plague. For example, the president of the Hospital Boards Association dismissed the Health Benefit Review's option for reform that reduced the role of government to that of health insurer as undeserving of much attention, since 'It is in line with the American system and it is generally acknowledged that New Zealand's system is superior to this'.

We argue that this is a misperception of the present state of medical affairs in the US. Recall that much of America's rapid medical cost inflation occurred during the expansion of the government-funded Medicare and Medicaid programs. Nevertheless, we do not propose a simple transfer of US medicine to the New Zealand situation. Much of US hospital care is still extremely expensive by anyone's standards. What we do suggest is that, in the present deregulatory environment initiated by the fourth Labour Government in New Zealand, it is better to begin the analysis of reforming the health sector by treating medical services just like any other commodity that can be efficiently produced and consumed under competitive market conditions. It is better to settle equity issues without particular reference to the health sector. And we argue that a more competitive system of health care delivery will produce fewer reactions like those of Nora Shannon (1978), who wrote of herself as 'a voice in the wilderness: a mere consumer', who 'formed the impression that the public health service often operates as a self-serving bureaucracy to which the needs and desires of the average patient are largely irrelevant', suffered 'the horror anecdotes from the nurses' in a pre-natal ward, and the doubtful charms of GPs 'who seem to automatically assume

that their role is not only to diagnose and treat the complaint, but to gratuitously offer advice on any number of irrelevant subjects, from real estate to your sex life', concluding that 'there are some areas where the consumer is guaranteed much better service if he is prepared to pay'.

Appendix

I. MARKETS

We begin this economic analysis of health services by describing a model of how the market for services might work in the absence of government intervention. A market is made up of a **demand** side and a **supply** side. We first look at each side separately, and then we combine them to see how they mutually determine prices (or fees) together with the amounts of health services that are actually produced and delivered to patients.

A fundamental proposition in economics called the Law of Demand states that if the price of a good or service rises, when other things are held constant (including **real** income) then the amount demanded will fall, and conversely. This is shown in Figure 1. In this diagram the price of this service is measured on the vertical axis, and quantities (say, numbers of consultations, or bed-days) are measured on the horizontal axis. The line labelled DD represents demand. It shows how much people want to buy at each price, given their incomes and prices of other related commodities.

On the supply side of the model, we begin by assuming that amounts of a service supplied will be positively related to the price received by the seller. That is, the higher the price, the larger the amount supplied, and conversely. This seems reasonable because the higher the price that a seller expects to receive, other things constant including cost per unit, the greater is his or her incentive to produce and sell more services.

For the market as a whole, more resources can be attracted into the health industry only by competing them away from alternative uses, and this mostly succeeds only when higher resource prices, such as nurses' wages, are offered. Thus the extra, or marginal, cost of having an extra service produced rises with output, both because individual businesses are likely to continu-

ously choose production rates at levels where marginal costs are rising, and because additional production competes up resource prices. The relation of the amount supplied to price of the service is shown in Figure 1 as the supply line SS.

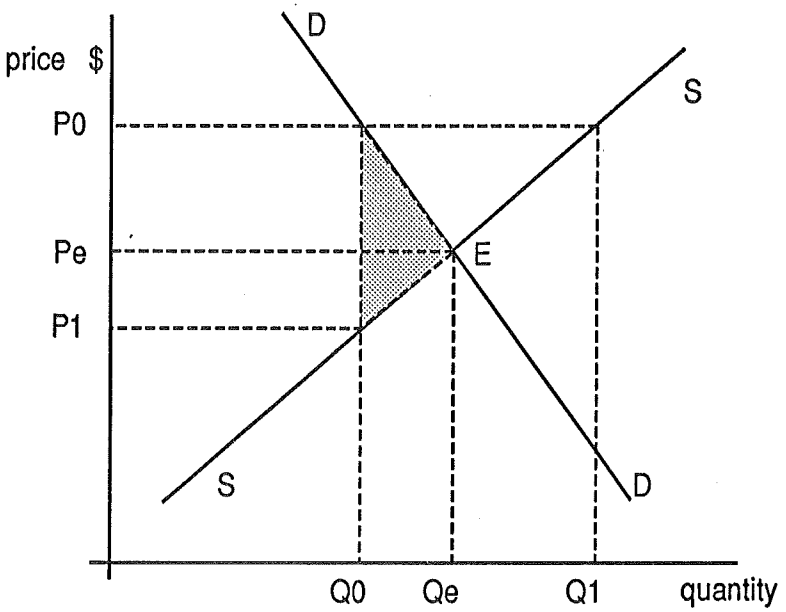

Figure 1

We say that the market **clears** when the amount demanded and the amount supplied are equal, or in balance. This condition occurs at only one point, marked E for equilibrium.

Adjusting to Change

Any change that shifts the demand line DD, or the supply line SS, or both, will change the location of the equilibrium E. The old price Pe, or the old quantity Qe, or both, no longer clear the market. An adjustment process is set in train, and the market converges towards its new market-clearing price and quantity configuration.

Price changes that take place in response to market imbalances generate incentives for people who own resources to re-direct them towards higher valued uses. If this process is not allowed to take place, the outcome is social losses. For example, if government intervention on the supply side prevents

resources from flowing into our model market, forcing market sales to remain at Q0 in Figure 1, which is below the equilibrium level, then we would have a situation in which customers (patients) would be willing to pay up to almost P0 for an extra service while sellers would only need to receive P1 for them to be willing to produce the extra service. P1 measures the (marginal) cost of this health service at an output rate of Q0, and so provides an approximate measure of the value of the best alternative commodity or service that these resources can produce. Therefore, the value that patients place on this extra unit of service, measured by P0, is greater than the value, measured by P1, of the other goods that resources are 'forced' to produce instead. This gap between the consumers' price and the producers' price is often referred to as the (potential) social gain from production and exchange of an extra unit. The sum of all the social gains is the sum of all of the gaps between prices that consumers are just willing to pay and prices that sellers are just willing to receive, added up over all of the extra units produced. In Figure 1 this sum is represented by the shaded triangular area.

Within these overall gains, however, there are transfers among market participants. When a single market undergoes an adjustment because of some change in underlying factors, there are people who are made worse off as well as people who benefit from the change. For example, when prices fall because of a greater supply of doctors, patients gain and so do new doctors, who demonstrate by entering the market that they can do better here than they could have done elsewhere. But established doctors lose as the new competition for custom cuts into their revenues on the one hand, and competes up resource prices and so raises their costs of production on the other.

Because we live in a dynamic world in which information is costly and the future is uncertain, the terms on which people exchange goods and services often change in response to unforeseen circumstances. These changes can bestow benefits on some people and losses on others. In economics these outcomes are often referred to as 'windfall' gains and losses. In a sufficiently risky environment, markets can develop that allow people to 'hedge' against windfall losses from unpredictable events, and the health insurance market is one example (see below).

II. THE ECONOMICS OF GOVERNMENT HEALTH POLICY

Now let us consider some of the effects of government intervention in the health sector, first through government subsidies within the context of a fee-

for-service private enterprise production of health services, and second through government production through its ownership of hospitals and clinics.

Subsidies and other Third-Party Payments

Flat rate co-insurance. The simplest approach to begin with is to suppose that the government, or some other third party such as an insurance company, pays a certain percentage of a patient's medical bill, whatever this might be, and the patient pays the rest. In the case of insurance, the proportion that the patient pays is known as the 'co-insurance' rate. For example, if the government were to pay 60 per cent of whatever price the doctor or institution charged for a service, the co-insurance rate would be 40 per cent. The patient would pay 40 per cent of the bill. If a doctor charged $20 for a consultation, the patient would pay only 40 per cent, or $8.

We can see the effect of the subsidy in our simple model by adjusting the demand line (Figure 2). There are now really two demand lines: the original demand line shows the maximum price that people would pay for an extra service, and the new demand line gears that maximum price up by the amount of the subsidy so as to equal the total price that people can offer sellers. It is important to recognise that the amount consumers demand is determined by the net price they pay, or in other words, by their out-of-pocket cost. For example, if consumers demand 100 consultations per day at $8 each, then they would demand the same number if the price were $20 of which $12 (60 per cent of $20) were paid by the government, so that the consumer still paid only $8.

In Figure 2 the second demand line D'D' is constructed by rotating the first demand line DD clockwise about the point Q0 until the price the buyer pays (on line DD) is only 40 per cent of the price the seller receives (on line D'D'). The higher the rate of subsidy, the more D'D' is rotated upwards. DD can be thought of as the 'underlying demand' in this market, and D'D' can be called the 'revealed', or 'subsidy-driven' demand because it reveals how much will actually be demanded at each price that is charged by sellers.

The subsidy thus imposes a fundamental change in market conditions; the increase in demand will determine a new market-clearing price and quantity produced and sold. To see exactly how the market is affected we must also look at the supply line SS. From the diagram and from our earlier discussion we see that the market equilibrium jumps from point E to point A as a result of the subsidy. The result is that sellers (doctors) all receive a higher price than before, and patients all incur a lower out-of-pocket cost than before. Output expands from Qe to Q' until the increase in the marginal cost

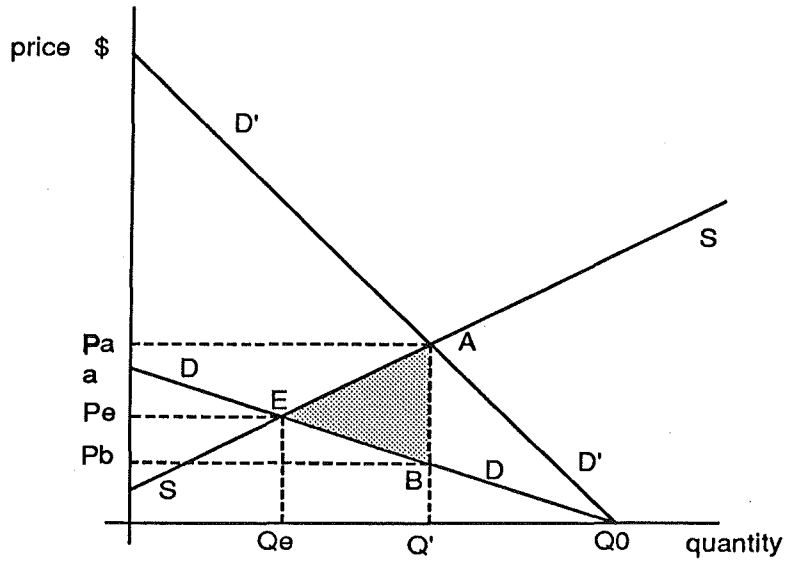

Figure 2

of consultations that results from competing resources away from other uses just matches the higher price (always assuming a competitive market). The difference between the price that doctors receive and patients' out-of-pocket cost is paid by the government, and this is the subsidy that is borne by taxpayers in general.

We can now determine the gains, losses, and transfers that result from the subsidy. First, consider the doctors. In our example the new market-clearing price for the service is Pa, and so sellers receive (Pa – Pe) more dollars than before for all the consultations they were happy to produce (Qe) and deliver at the old price (Pe). Doctors receive extra net income, and thus they are wealthier than they were before the subsidy. In addition, they are induced by the higher price to produce (Q' – Qe) more services than before. However production costs for these extra services rise, and so some of the subsidy is used to cover the costs of those more valuable alternative commodities that are necessarily given up in order to release extra resources for production in the subsidised market. Therefore some of the subsidy is dissipated in higher costs, and in the diagram this is shown by the rise in SS between E and A. Doctors receive the price increase minus the amount by which resource costs of each of the extra units produced are higher than the marginal cost at the old equilibrium. Thus the net effect is that doctors as a

group receive extra net income measured in total by the area PeEAPa, which is the doctors' net gain per unit added up over all of the Q' units that are produced at the higher price. Individual doctors share in this total income gain in proportion to their shares in the overall market for medical consultations.

Next, how do patients benefit from the subsidy? At the new market-clearing price of Pa, a consultation costs the patient only Pb. Patients pay (Pe – Pb) less than they paid before the subsidy for all the consultations they purchased at the old price. Thus they are now wealthier than before, in that the dollar savings on the consultations they had been consuming are now available to spend on other goods or services. But because patients pay less than before, they demand more. Consumers do not gain all of the price-fall (Pe – Pb) for these extra units consumed, because all of the extra units between Qe and Q' are successively less valuable to them. That is, the maximum price consumers would be willing to pay for an extra unit (i.e. their 'marginal value') falls as more is consumed, and this is measured in the diagram by the fall in the height of the underlying demand line between E and B. Thus the gain to consumers is the price reduction (Pe – Pb) **minus** the amount by which the their marginal value of these extra units is less than their marginal value at the old equilibrium. Again part of the subsidy is dissipated in covering the cost (fall in value) that consumers incur by switching expenditure away from more valuable commodities and towards this commodity at the subsidised price. As a group, consumers gain by an amount that is measured by the area PeEBPb, which is consumers' net gain per unit, added up over all the units consumed at the new equilibrium.

Who loses? The taxpayers who are required to fund the subsidy. Since Q' consultations are purchased and sold, and each of these consultations carries a subsidy measured by the gap (Pa – Pb) between the market price and patients' out-of-pocket costs, then the total tax cost of the subsidy is Q' times (Pa – Pb), and is measured on the diagram by the area PbBAPa. Now compare the areas that measure the doctors', or sellers', gain and the consumers' gain, with the area that measures the tax cost. The comparison reveals that the subsidy transfers PeEAPa dollars from taxpayers to doctors, and transfers PeEBPb dollars from taxpayers to consumers. Subtracting these two transfers from the rectangle PbBAPa that measures the tax cost, leaves an amount measured by the triangle EAB that is paid by taxpayers but received by nobody. This is the precise amount that is dissipated in the form of higher resource costs and lower consumer values. In economics this is often called the 'deadweight loss' of the subsidy: 'too many' consultations are produced, and 'too little' is produced of other things.

Administered Fees: Australia's Medicare. A policy of universal subsidy, such as Australia's Medicare, delivers a rebate to patients which is

a set percentage (85 per cent for out-of-hospital services) of a 'scheduled' fee. Unlike the example in the previous section, the scheduled fee upon which the rebate is based is set outside the marketplace, through a process of applied bureaucracy. The subsidy has the same types of effects upon resource allocation and income transfers as it had in the previous model. However because the scheduled fees are 'administered' and do not respond directly to market forces, the policy has other consequences for the ways in which health markets adjust.

Unlike the preceding example in which the subsidy was a straightforward percentage of whatever fee the doctor charges, the rebate under Medicare is fixed at the predetermined amount given by 85 per cent of the **administered** fee. This rebate is paid to the patient independently of the actual fee charged, provided that the fee is no less than Pb. If a doctor were to charge less than Pb, then Medicare would rebate the lower fee only and not the full 85 per cent of the scheduled fee; 'you can't make a profit from Medicare'. Doctors who charge the rebate only, Pb, have the option of 'bulk-billing' Medicare for services rendered. In this case the rebate is paid directly to the doctor instead of to the patient. The out-of-pocket cost to the patient is zero.

The results are similar to those of our earlier model with flat-rate co-insurance. However a little more insight can be gained into how the Medicare rebate system drives medical markets by considering how it affects individual sellers, or in our model individual medical practices. In Figure 3 we draw the demand conditions that face an individual practice. For this lone individual, the number of consultations that can be sold at a patient cost of zero (i.e., if the doctor bulk-bills Medicare) is marked on the quantity axis at q0, and the practice's sales that would result from fees higher than Pb are graphed hypothetically along the lines marked d1d1 or d2d2, depending upon market conditions. Both the bulk-bill sales, q0, and this practice's own demand lines are determined not only from patient preferences and incomes, but also from the presence of competitors who are selling 'almost' the same product.

When there are relatively few doctors in a geographical area (or in a speciality) then the demand line facing an individual practice is more likely to look like d1d1: fewer sales are sacrificed if the doctor raises the fee. The more doctors there are to serve a market, the more intense will be the competition among them. The demand line d2d2 endeavours to capture the outcome of this situation. The effect is to place downward pressure on the optimal fee that the practice charges. In the limit d2d2 becomes almost horizontal, and so the fee is inexorably forced down to the bulk-bill fee of Pb. Once a practice chooses to bulk-bill for all services, it no longer has the option

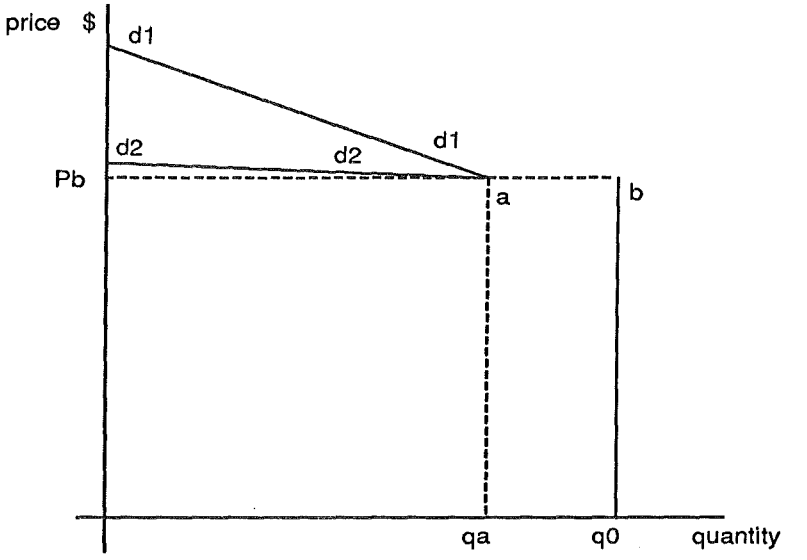

Figure 3

of competing on price. Thus a Medicare-type rebate system can be used by a government to impose de facto price control in environments where direct price control is not available, perhaps for constitutional reasons.

Government Production: Public Hospitals and Government Clinics

Our model of government production is based upon two fundamental assumptions. The first is that public hospital budgets are determined outside the hospital system, and are fixed in amount for any single budget period (normally, one year). The second is that the services of public hospitals cost patients nothing (except their time given up).

The model is illustrated in Figure 4. Costs and prices are measured on the vertical axis, and quantities on the horizontal axis. We have chosen to use 'occupied bed-days' (OBDs) supplied by a public hospital over one year as the unit of 'output' of hospital services. The demand line dd graphs the amounts of OBDs demanded if patients pay full prices, assuming that all other hospitals also charge full prices.

For simplicity we assume that the cost per OBD is constant over the range of outputs that is relevant to our discussion, as shown by the line cc. The public hospital's output is constrained by the size of its predetermined

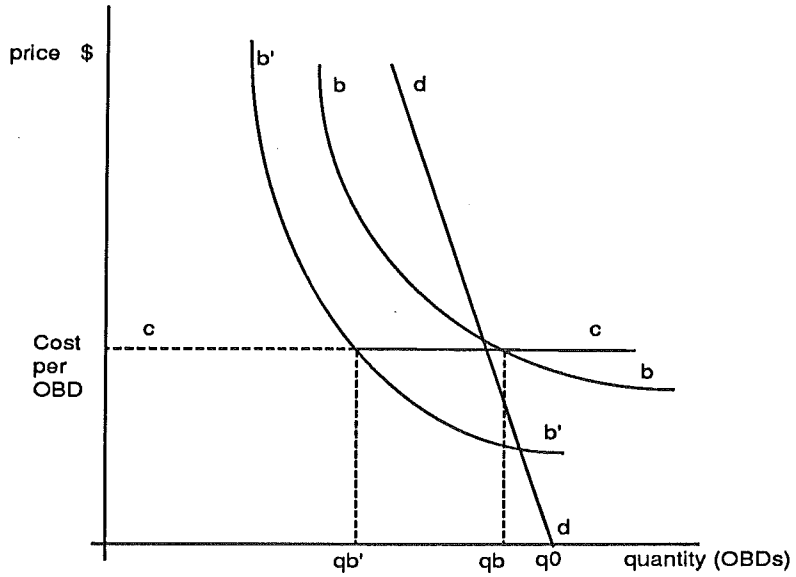

Figure 4

budget. Since this is fixed by assumption, the hospital's options are limited by the simple fact that cost per OBD times number of OBDs can be no greater than its budget. Since feasible output must therefore fall in the same proportion as unit costs rise, the relationship between the hospital's feasible outputs and unit costs are given by the line bb. In our example, the hospital breaks even, using up all of its budget, only when its output of OBDs is exactly equal to qb.

Because the patients pay nothing, they demand q0 OBDs. Thus there is a shortage of bed-days equal to (q0 – qb). The amount supplied must be rationed among the larger amount demanded, which is generated partly because of the zero price to the patient. If the situation were more felicitous for the patient, with qb larger than q0, then the hospital would underspend its budget. There are two possible consequences of this: first, unit costs might rise under 'cost-padding' behaviour of hospital administrators (that is, fancier offices, less effort in monitoring expenditures of staff, etc.), and second, the health bureaucracy might cut the underspent surplus from the hospital's budget allocation next year. Since the prospect of the latter event can induce behaviour of the former kind, there is a bias that favours having no available beds in excess of beds demanded. Any increase in demand, for example if new techniques or procedures become available, or because of

some epidemic, will therefore generate a larger bed shortage, perhaps along with some reshuffling of the patient waiting lists in the light of new 'priorities'.

It is not easy to precisely identify the incidence of the gains and losses in this situation. Naturally, hospital administrators and sections of the health bureaucracy gain, because of the jobs created. Nurses, doctors, and other suppliers of resources may or may not gain, depending upon whether incomes and 'conditions' are superior to those that would be available in a fully privatised system. If the public hospital central bureaucracy can use its central buying power to screw down wages and other input prices, doctors, nurses and others may be worse off (doctors who desert the de facto salary control in the public hospital sector, in turn place downward pressure on fees and salaries in the private hospital sector).

But what about the patients? Patients who can 'jump the queue' gain because they pay nothing for services for which they do not have to wait. And patients for whom the personal non-monetary cost of waiting (e.g., the 'pain and suffering') for a bed outweighs the monetary cost of a bed in an alternative private hospital (assuming alternative facilities are available) also gain. The losers are everybody else.

What happens if government imposes an across-the-board cut in budgets because of a general tightening of government expenditure. The reduced budget for our sample hospital is shown as a shift leftwards in the entire bb line to b'b'. The number of OBDs that the hospital can now afford to supply is qb', and the consequence is a more severe shortage of beds, as measured by (q0 – qb'). If the hospital were to experience a higher cost per OBD as output was reduced, perhaps because it has large fixed overheads to spread over a smaller number of OBDs, then the effect upon qb, and thus upon the resulting shortage, will be that much more severe.

Some Economics of Medical Licensure and Doctors' Incomes

When the practice of medicine requires a period of training at medical school and hospital, the earlier sacrifice of fees and income forgone must ultimately be offset by later higher net incomes plus the value of any non-monetary benefits from producing and selling medical services. The longer the training period, the larger must be the income that is earned over the doctor's remaining professional life; otherwise the doctor would have been better off not to have chosen medicine. Therefore, even though some specialists might earn an enormous income, this is the cash flow that at least, after tax, must cover the interest on the prior investment in training; if it does not, fewer doctors will voluntarily incur the additional costs of becoming trained as

specialists, until the reduced supply of specialists drives up their incomes to the point at which they again just break even on investment in additional training.

In a free market without compulsory medical registration, doctors will optimally select just the right level of training to yield them saleable professional expertise in their chosen area of specialisation, whether it be as a GP or as a heart surgeon. However, when training requirements are laid down in the law relating to medical practice, and are greater than those that would emerge in a free market, professional incomes must adjust upwards until their present values are again in balance with the present values of income streams from best alternative occupations.

One of the many problems that aspiring (and established) doctors face is the uncertainty that is injected by the activity of governments in relation to its health policies. For example if the government were to reverse its policy of medical subsidy, then those higher incomes would no longer be anticipated. But the expected supply of doctors would not immediately revert to its former level since a proportion of medical students would have already completed part of their training.

If the policy of subsidised medicine were reversed, say, ten or so years after its initial introduction, then most GPs would have completed their primary training and entered practice by this time. The costs of training (including income forgone) that had been incurred up this point are now history: they lie in the past and there is nothing one can do to recover them. In the terminology of economists and accountants, these past costs are 'sunk', and have no relevance to subsequent wealth-maximising behaviour. If aspiring doctors were to recompute their present values at the point at which the government changed the rules, the calculation would therefore not include those sunk costs. This reduces the anticipated costs of the training that remains to be acquired, and so to some extent balances the reduced anticipated incomes when the doctor enters into medical practice.

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