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Searching for the Holy Grail in the Antipodes

The Market Reform of the New Zealand Health Care System

by

Pim Borren and Alan Maynard

DISCUSSION PAPER 103

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ABSTRACT

Throughout the world there is a recognition that the delivery of health care is ineffective and inefficient and that these unpleasant outcomes are a product of the perverse incentives inherent in all health care systems. In New Zealand the Government documented the defects of the health care system and is now introducing radical reforms in the belief that these will improve the system's performance.

The nature of these reforms, centred on the purchaser-provider divide, is similar to changes introduced in the Netherlands, the UK, Sweden, Israel and Russia. As elsewhere, the New Zealand Government is asserting that their reforms will improve performance and it is reluctant both to take time to design crucial micro economic elements in the new system and pilot the changes which are being imposed in a bold and untested fashion.

This Discussion Paper describes the reforms which have been introduced in New Zealand and evaluates them in terms of the eight major problems its Government sought to eradicate by change. The authors argue that instead of mitigating these problems, the reforms may worsen them. There are risks that the system will become fragmented and less equitable. The move away from a single (tax) source of funds (ie the single pipe) may make cost control more difficult. The Government is seeking to address the issue of information generation to facilitate market trading but it is not clear how effectiveness and efficiency data will be produced let alone how it will be used to change producers behaviour.

The authors agree that many of the problems identified by the New Zealand Government are significant and in need of resolution. However whilst the political imperative may require immediate action, the economic case for these reforms is quite poor. Incremental change, with careful evaluation, would "confuse" policy reform with facts about the attributes of competing management mechanisms and reward systems. As it is we have the all too familiar combination of political assertions and an unwillingness to measure the impact of change, behaviours which create the causes for the advocacy of the next "redisorganisation" of the health care system within the next five years!

INTRODUCTION

New Zealand is a sparsely populated island nation with three and a half million inhabitants, situated in the southern Pacific basin. It is currently undertaking major reforms after relatively minor change to its universal public health system adopted over fifty years ago.

BACKGROUND

Prior to the current reforms there were four major components to the New Zealand health system; a hospital sector dominated by the public sector with a growing private sector restricted largely to non-acute surgical procedures, a fee-for-service primary sector heavily subsidised by the government and other third-party payers, a state-subsidised pharmaceutical sector incorporating user-charges, and a publicly provided community services and public health sector.

The principal funders of each of the above sectors were largely four-fold. Consumers through user-charges accounted for about 25 percent of primary and pharmaceutical expenditures and around 50 percent of private hospital treatment charges. The New Zealand government through Vote:Health contributed the largest share, funding 100 percent of public hospital expenditure, 75 percent of pharmaceuticals, 50 percent of primary services, 25 percent of private hospital treatment through subsidies, as well as 75 percent of public health expenditure. A publicly run accident insurance programme,

the Accident Compensation Corporation (A.C.C.), funded 12 percent of primary practice and 8 percent of private hospital treatments. Private medical insurance funded 10 percent of primary practice, and 15 percent of private hospital treatments. Local bodies and voluntary organisations provided the balance of health funding(26).

In 1938, New Zealand was the first country in the world to develop a public hospital service as part of its welfare state. The provision of "free" public hospitals has been the major feature of its health system ever since. State funding of public hospital services in recent times has been through a weighted population-based formula to the fourteen Area Health Boards (Appendix 1) of varying sizes throughout New Zealand. From the outset in 1938, it had been envisaged that all health care costs would be centrally funded(22). However due to the vehement opposition from doctors, the profession retained a fee-for-service structure in general practice.

Government subsidies failed to keep pace with fee increases, especially in the case of adults. In recent years state funding for primary practice has been largely through subsidies for the young, the old, and heavy adult users. Prescription charges, however, remained fully government-funded until 1985. User part-charges have since met an increasing portion of the cost of pharmaceuticals.

Although private hospitals played an integral part in New Zealand's health system prior to 1938, they did not feature to any significant extent until they received a considerable boost in the early 1960's from government assistance in the form of bed subsidies. It was felt at the time that the cheapest solution to the growing strain on public hospital

resources was to encourage private provision(23). While some subsidies have since been removed, state funding for private hospital treatment has predominantly still been through patient subsidies, especially for long-stay patients.

User charges have been part of New Zealand's health system ever since government subsidies failed to cover general practice charges. Growing strains on the public hospital system in the 1960's saw the advent of another cost to consumers in the form of waiting lists and their associated time costs, for elective surgery. Part-charges for prescriptions have further added to the direct health care costs of New Zealanders.

A market response to the increasing user-charges for general practice and time costs for public hospitals saw the re-establishment of private health insurance. Under the 1909 Friendly Societies' Act, the Southern Cross Medical Care Society was established in 1961(18). Policies were designed to reimburse members for health care costs such as private hospital treatments as a means to circumvent public hospital waiting times, and for primary user charges.

Southern Cross' memberships soared through the 1970s and 1980s, encouraging competition from several other private health insurers. Southern Cross, however, maintained a firm grasp of its market leadership with a consistent 80 percent of market share, achieving the milestone of one million members (30 percent of New Zealand's population) in 1987(34). To prevent moral hazard, Southern Cross introduced a 20 percent co-payment on its standard policy, and a list of maximum refunds which have been universally adhered to by private specialists, hospitals, and competitors alike.

The small size of New Zealand's population, together with limited user-charges, have in the past prevented private health insurers offering a more administratively expensive range of policies and premiums. Consumers have not had the choice of insuring for private hospital services separately from general practice, or visa-versa. Southern Cross saw itself as complementary to the free public health service, providing benefits for those health costs which the public sector increasingly could not provide.

In 1974, as private health insurance was beginning to grow, the New Zealand government established a major public accident insurance fund administered through the Accident Compensation Commission (A.C.C.)(1). The major objective of such a publicly administered social insurance programme was to remove the risk of personal liability due to accident. The A.C.C. was seen as a regulatory solution to the growing cost of litigation for employers, motor vehicle drivers, and medical providers, and compensated accident victims' full medical costs, 80 percent of lost earnings, and lump-sum compensations for permanent disability. The fund had three contributing components; levies on employers to cover both work and non-work related accidents of employees, levies on motor vehicle owners to cover all motor vehicle accidents, and the government's own contribution to cover accidents to non-working New Zealanders.

During the 1980s, total claims to the A.C.C. rose alarmingly, as a wider range of personal injury (physical and psychological), became permissible. Administrators had few incentives to limit pay-outs, creating new precedents in compensating claimants. Levies on the three contributing groups rose sharply to cover A.C.C. expenditures, doubling in real terms between 1985-1990(8). The high cost of compensating for loss of

earnings and increased waiting times for some public hospital treatments have encouraged the A.C.C. to fund an increasingly large proportion of private hospital treatments in recent years. The publicly administered A.C.C. has become a major funder for private medical care in New Zealand.

In 1991 the New Zealand government published a Green and White Paper(36), which identified eight significant problems with the previous health system. These were:

1. Public hospital waiting times too long.
2. Funding of system is fragmented.
3. Problems with access to services.
4. Lack of assistance for doctors making decisions.
5. Lack of consumer control.
6. Constraints on Area Health Boards to change services.
7. Conflict in dual roles of purchasers and providers.
8. Lack of equity.

The Green and White Paper also outlined the agenda for major reform of New Zealand's health system. As a result, a National Interim Provider Board (N.I.P.B.) was established to oversee the implementation of the reforms and provision of publicly funded services during the transition period. The first report by N.I.P.B.(27), released in May 1992, highlighted the following perverse incentives in the previous system:

1. Incentives for doctors to choose cheapest procedure for patient, not government or society as a whole, were absent.
2. Innovation was lost in bureaucracy.
3. Hospitals have disincentive to treat more patients for fear of budget over-runs.
4. Capital projects and proposals were deliberately over-inflated to insure against trim downs.
5. Patients' incentives to use hospital services rather than general practitioners existed (because of significant primary care copayments).
6. Patients' incentives to describe ailments as accidents (to access the benefits of the Accident Compensation system).
7. Area Health Boards' had a disincentive to contract out, for fear of worsening relations with existing staff or redundancy costs.

8. Area Health Boards pressured into funding high profile hospitals as opposed to more cost-effective community care.
9. Public hospitals had few incentives to respond to public demand.
10. Public hospitals had no incentives to gather costing records or other information required to determine cost-effectiveness.
11. Incentive for Area Health Board to shift long-stay patients into private hospitals to shift costs onto Department of Social Welfare.
12. No incentive for effective communication between providers to prevent duplication, particularly in diagnostic tests.

Reforms

The New Zealand health reforms were announced in 1991 with implementation over a three year period from 1992-1994. The reforms consist of seven elements:

1. Purchaser - provider split

Four regional health authorities (R.H.A.s) have been established to purchase all of the

publicly financed primary and secondary health services for their regions. Each R.H.A (Appendix 1) will therefore receive their regional shares from four categories of current public health care funding; Area Health Board funding, general practice subsidy funding, private hospital subsidy funding, and A.C.C. health care funding.

On the provider side, groups of large public hospitals and related health services have been renamed as Crown Health Enterprises (C.H.E.s). Smaller community hospitals have been established as community trusts. C.H.E.s, community trusts, and private hospitals will compete, within each region, to supply services to their R.H.A.. Similarly in the primary health care sector, providers will compete for patient subsidies and other publicly funded services. R.H.A.s may choose to fund alternative health practitioners (e.g. chiropractors etc), who may not currently be receiving any government assistance.

The separation between the purchaser and provider within the new system remains consistent through to ministerial level. The old Ministry of Health will take over the responsibility for the purchasers (R.H.A.s), and continue to be the major public funder for health services. A new Ministry of Crown Health Enterprises has been established to oversee the management of publicly owned C.H.E.s and community trusts.

2. Funding

The government announced in its Green and White Paper that R.H.A.s will be encouraged to develop a range of funding arrangements encompassing a variety of provider

incentives. The government suggests that fee-for-service, as is currently the arrangement in general practice and in the private sector, may be more effective for procedural based medicine where there exist standard procedures and lengths of consultation. Salary contracts, as currently used in public hospitals, with added incentives of in-built performance and bonus agreements, are suggested for non-procedure based medicine where there exist an uncertain mix of services and treatments. The government also advises R.H.A.s to investigate alternatives such as capitation, risk-sharing or budget-holding contracts, as possible funding mechanisms for specific health services where the provider's agency relationship in advocating additional services, tests, and referrals, is their main role.

3. Core services

The Green and White Paper emphasises the government obligation to ensure all New Zealanders have access to "core" services. The government believes an explicit list of core health services must be developed which will be available to everyone. A national advisory committee on core health services has been appointed to combine "consumer, ethical, and expert input into constructing the core, which must reflect community priorities"(19). The government suggests that both negative (not publicly funded) and positive (publicly funded) components make up the list of core services. It is also suggested that the core be updated regularly to allow for the latest medical technology, and assist obtaining the best value for the general public.

4. Financing health care

To help finance health services and to remove perverse patient incentives between services with and without user charges, the government has introduced part-charges, to middle and high income groups, for all publicly provided health services. User part-charges have been introduced for the above groups on what have previously been free public hospital and related secondary health services, as from February 1992 (Appendix 2). The government believes that access to health services will not be affected by the user-charges, which are limited to annual family maximums, and will encourage middle and high income earners to consider the real cost of their health service consumption.

5. Patient choice

One of the main objectives of New Zealand's health reforms is to improve patient choice in publicly provided health services. Currently public hospital patients have little input into whom they are treated by. Since public hospital and related services are currently purchased and provided by Area Health Boards, there are few incentives for public providers to take account of patients' preferences.

To encourage purchasers to be more accountable to their clientele, the government will allow people to transfer their personal annual entitlement to public funding to an alternative health care plan as from 1994. Patient's health care characteristics will determine the exact size of their entitlement. Alternative health care plans will be

required to provide at least the core health services provided by R.H.A.s, many of which will be provided under contract by the public hospital sector. It has been suggested that specific ethnic, gender, or age related groups may prefer the additional services offered by alternative health care plans, specifically designed to meet their health service preferences.

6. Public health

Funding for public health strategies within regions is currently a component of Area Health Boards' bulk funding. The government believes that not enough emphasis has been placed on public health, the benefits of which may only occur in the medium or long term. As part of the reforms, funding for population-based health strategies in the future will be separated from personal services.

A purchaser-provider split will also be introduced in public health to maintain consistency with other reforms. A public health commission will be established to act as the purchaser of all population-based public health programmes, and a public health agency will be established to compete with private organisations to provide services. Contracting arrangements will be established in public health statistics and research. One of the aims behind centralising public health funding is to ensure consistency throughout the country.

Some health promotion and disease prevention services offered in the primary health

sector, by general practitioners, public health nurses, and community-based health professionals, will continue to receive funding regionally, through R.H.A.s.

7. Other components

A number of other components will be implemented as part of the wider health reforms already mentioned. Education and training of health professionals will be reviewed, and clinical training will be funded on a contract basis. An improved monitoring of quality of care is to be implemented through the Department of Health and an Office of Health Commissioner is to be established to deal with individual complaints. Public funding for dental and ambulance services will also be redirected through R.H.A.s in the future.

Although the A.C.C. is administered under the auspices of the Ministry of Labour, as a major funder of health care, it has also undergone major reform as part of the wider health reforms. As from July 1 1992, the A.C.C. was renamed the Accident and Rehabilitation Compensation Insurance Corporation (A.R.C.I.C.). Other changes from July 1, are that employers will no longer be required to contribute to the fund for non-work related accidents of employees. A contribution for non-work related accidents will be collected directly from employees through the Inland Revenue Department. Another change is that all contributors to the A.R.C.I.C. fund will in future pay a component towards public health costs. A supplementary levy on petrol has been introduced to cover the public health costs of motor vehicle accidents. On the benefit side, A.R.C.I.C. will no longer make lump-sum payments, but instead pay a disability allowance to people

suffering ongoing disabilities through accident. Payments for pain and suffering, and loss of enjoyment of life, will no longer be included. A.R.C.I.C. will pay most, but not necessarily 100 percent of, the user charges for health care services. Links between premiums paid and past accident records have also been suggested through an experience rating mechanism(25).

The improved incentives under a reformed health system as highlighted by the N.I.P.B. in its recent publication, are as follows:

1. Purchaser-provider split recognises the "agency" relationship, and removes the bias towards providing own services.
2. Funding mechanisms allow contracting with the most efficient (value-for-money) providers.
3. Free entry and exit in markets give purchasers and providers the incentive to be competitive.
4. Consumer choice in health care plans gives purchasers the incentive to provide what consumers demand.
5. Establishing a "core" creates access for all New Zealanders to a consistent range of services.

6. User part-charges give patients a monetary incentive to conserve health care expenditure, and be aware of relative costs.
7. Allowing public hospital equipment and facilities to be leased to the private sector to prevent wastage and under-utilised resources.
8. Public health programmes funded separately providing the incentive to promote population health measures and disease prevention (not just individual treatments).
9. Quality and outcomes monitored by the Department of Health and a standards complaints commissioner to give incentives to providers to be concerned about service to consumers.
10. Tendering for service contracts to force providers to record detailed costing information.

MARKET FAILURE IN HEALTH CARE

There are a number of traditional arguments in health economics outlining the reasons which prevent efficiency in health care markets under competition. Whenever a competitive market fails to achieve efficiency, there may be justification for some form of government intervention, as long as the additional costs of intervention do not

outweigh the additional efficiency gain.

Historically many countries have determined that market failure in health care was so severe that a large proportion of services have been provided by the central government (even in the US, 42 cents in every health care dollar is financed by Government). Cost inflation is straining public resources in many countries which, as a result, are implementing reforms reintroducing various degrees of market competition(14).

The health reforms in New Zealand are amongst the most market orientated, and are therefore at risk of efficiency loss through market failure. This section describes some sources of market failure in a competitive health care market, and discusses the mechanisms with which the New Zealand reforms attempt to combat them. Many of the benefits of reform are assessed at the a priori level. Their creation (or not) need to be evaluated carefully.

A. Demand

Types of market failure on the demand side include:

1. Uncertainty

A great deal of health care consumption is unanticipated. It is difficult for individuals

to plan for major expenditures in advance. A market response to such uncertainty (as for house fire or car accident) is for most risk-averse individuals to insure against unforeseen costs. The reforms restrict health care expenditures (from user charges) to a known family maximum, and may reduce waiting time costs for treatment. Individuals will still have the option to insure privately to avoid the risk of user-charges and public sector waiting times.

Uncertainty in health care consumption also exists in the form of uncertain diagnosis and uncertain outcomes. Individuals require information from health professionals to determine which health care services will maximise their health status. The reforms may encourage reduced waiting times for public specialists and make health professionals more accountable, to consumers if competition produces data to inform market transactions.

2. Indeterminant product differentiation

A major cause of market failure in demand for health care is that individuals can not differentiate between suppliers' services. In some markets for goods and services, poor quality suppliers are unable to attract custom. The reforms will continue to emphasise professional ethics, as well as monitoring quality of services through the Department of Health. Improved outcome data may assist consumers and their agents to choose between suppliers, although bulk contracting by purchasing agents may reduce consumer choice of provider.

3. Poor price signals

For most goods and services, relative prices determine market demand. Although the reforms have introduced user-charges throughout the public health system, relative prices still vary greatly. Charges for primary services are close to average cost while secondary service charges are only a small fragment of average cost. While the government states that access will not be limited for core services, it admits that charging middle and high income earners will force those consumers to consider the cost of resource use, and effectively anticipate some price-rationing at the margin to help contain total health expenditure. Since consumers are often uncertain with regard to the benefits of health care, it will not just be the marginal consumer who is denied services. Furthermore the cost of creating mechanisms to produce price data are considerable.

4. Perverse incentives and uncertain preferences

Uncertainty and high cost of information in health care has created an agency relationship between consumers and trained health professionals(2). The reforms attempt to establish an explicit agency relationship through separating purchasers from providers. It is unclear whether this distinction will remain when consumers are able to transfer state allocations to alternative health care plans. It has been suggested such health care plans may be adopted by large practices of primary practitioners (eg

H.M.O.s), in which case there will again be a direct link between purchaser and provider. Alternatively if the major health insurer, Southern Cross, develops its own health care plan it is likely that it will contract to its own hospitals and provider services. Market choice may eradicate the purchaser - provider split.

If primary health practices hold total patient health budgets (as budget-holding G.P.s do in the U.K.), maximising general practice incomes in the future may depend on minimising other associated health care charges. Over-prescribing in the past may become under-prescribing in the future. The reformed system relies heavily on professional ethics as before and, as ever, competitive market forces may undermine these controls on practice (for reflections on the deleterious effects of this in the US see (30)). Poor communication and differing values between providers, purchasers, and consumers, will still exist in the reformed system. It has been suggested in the U.K., that patients listed with G.P.-fundholders have less consumer choice because of bulk contracting with few providers. Even if purchasers offer surveys to gauge the preferred providers of their clients, many individuals will have other preferences than the majority, and will not be catered for. The large economies of scale in purchasing will prevent health care plans being developed to suit individual preferences(9).

5. Third-party payers

The New Zealand health reforms do not significantly deal with the problems of moral hazard, quality-price spirals in the public sector may be restrained by purchasers'

contracts and government funding limitations. Preferred private health insurance policies in New Zealand require a co-payment limiting the extent of moral hazard in the private sector.

6. Social externalities and necessities

A major cause of competitive market failure in health care is that, unlike most goods and services, people value the consumption of health care by others. New Zealand has a proud tradition of a society concerned about equal access to health services for all. The reforms attempt to make an explicit list outlining those core services which will be available to all New Zealanders. Such a list of services proved difficult to restrict in other parts of the world(35). Already the national advisory committee on core services has admitted that it will be necessary to retain an element of value judgement by health professionals(20). It may be that it proves impossible to prevent perverse incentives in diagnosis of conditions in favour of accepted core treatments by some members of the health profession. (ie "core creep": diagnosing patients with a condition in the "core" to enable treatment of a condition outside the "core").

The reforms, by encouraging private health insurance for the middle and upper income earners, may worsen access inequalities and the health of different groups, with the state funding a minimum core service and allowing wealthier individuals to top up their state allocations and join elite health care plans providing more modern facilities and services. The reforms have neither attempted to define nor address the concept of

"equity", even though policy makers in most health care systems regard it as of at least equal importance to "efficiency", as it has been a major cause of market failure and state intervention in the past.

B. Supply

Market failure on the supply-side of health care markets has the potential to create even greater welfare losses than on the demand-side. A necessary and sufficient condition to oblige producers to operate competitively in contestable markets is free entry and free exit. The reforms have stipulated that free entry and exit to health care markets will be permissible. Removing regulatory barriers to entry and exit, however, is not sufficient to guarantee that all barriers will disappear. The most common non-regulatory barrier occurs through high cost of entry. Industries which require large initial investments suffer from such natural entry barriers. Some health care markets show similar attributes. The most notable are hospitals which require large capital investments both in buildings and medical technology. In areas with populations already well served by one large hospital, there is a natural monopoly with the risk of volume and price manipulation which may have detrimental effects for patients.

In the most competitive health care market in the world, the United States, there are many examples of anti-competitive behaviour. There is evidence that hospitals are able to restrict output and create rents, at a major loss to society, due to differences in services, differences in equipment, and differences in location from other hospitals.

Furthermore the evidence shows that there exists cross-subsidisation due to differences in competitiveness between some services to others (a particular hospital may have a monopoly on one type of technology) and differences in patient need(31),(32).

There are also barriers to entry in most health professions. Limitations to medical schools restrict free entry into medical professions. The high training costs associated with many specialities also restrict entry. The small number of specialists in some medical specialities, and difficulty in obtaining quality staff in a small country, allow further monopoly-type power amongst providers. The mitigation of the effects of such labour monopoly will need significant regulation as shown in the United States where doctors' fees in Medicare are now increasingly determined by "relative values" rather than market power (3),(21).

Competition in the US has led to the bankruptcy of rural hospitals and urban hospitals that serve the poor. It has also created significant difficulties for teaching hospitals and those involved in research. It is unlikely the New Zealand government will be prepared to allow one of its major hospitals to close down due to bankruptcy. Poorly managed businesses in competitive markets are subject to take-over bids. Will the government allow the privatisation of state owned C.H.E.s as is necessary for an efficient market? Evidence in the United States of barriers to entry, exist in that many hospitals remain open while retaining loss-making services(15),(28). Thus to sustain the rural and teaching hospitals the US Federal government pays subsidies (in excess of \$5 billion) in addition to DRG payments for Medicare patients. Price competition in health care markets worldwide is typically very muted. In some health care sectors price

competition is replaced by quality competition (eg in pharmaceuticals and US hospitals) which can inflate prices, particularly if excess capacity is created. The creation and maintenance of price competition is inherently difficult.

It is common for people to argue that greed is the creative engine of economic growth. This argument is particularly used by those with liberal market ideologies. Adam Smith, the eighteenth century political economist, agreed that duty was the principle which governed exchange in most markets (33).

It is not from the benevolence of the butcher, the brewer and the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our necessities but to their advantages.

(Smith 1776, 1976, 1, p.26-27)

In health care markets, are duty and professional ethics more efficient than regulated competition in producing high quality care?

EVALUATION OF REFORMS

Whilst much has been written about the weaknesses of the previous system and the proposals for reform, there has been little formal evaluation to determine how the reforms will improve the deficiencies of the existing health care system. A framework for evaluating proposals for change to the U.K. health care system was developed by

Brazier et al(4),(5). Key questions (Table 1) covering efficiency, equity, and consumer choice, were used to evaluate various proposals. This section uses the Brazier et al framework to evaluate the New Zealand health care reforms.

A. Efficiency

The purchaser-provider split is designed to encourage competition amongst providers and encourage cost minimisation. In theory, regional health authorities will be able to choose between public and private hospitals according to variations in costs of providing specific services. This will give providers the incentive to be cost-minimisers so as to maximise market share.

In practice, however, there may be only limited competition. Alternatives for hospital services exist only in large centres, and even then only in a narrow range of services. Most public hospitals retain a local monopoly in one speciality or other, even in the main centres. The private hospital sector currently offers only elective procedures. Where public hospitals have no competition, the purchaser-provider split offers no improved incentive for cost-minimisation, and in fact may increase costs as hospitals utilise their monopoly powers to extract surpluses to spend on unnecessary services. In centres where there is an alternative hospital, large public hospitals may be in a position to cross-subsidise inefficient services by inflating prices in services where they have no competition. Such cross-subsidisation will enable hospitals to retain or even increase market-share in areas where they are not cost-minimisers.

Evidence in the U.K., where a similar purchaser-provider split has operated for some eighteen months, is that there has been very little change in market shares. Variations in costs between hospitals in different regions have remained. There has been no evidence of hospitals retaining only their technically efficient services(10) and some evidence of quality competition (and duplication of capacity). The internal market has identified more clearly excess hospital capacity and the need for large ward and hospital closures in London and other cities. Technological change, in particular the rapid development of minimally invasive surgery and day case treatments, may require the closure of more large hospitals in the next decade. This may create more competition if politicians can tolerate the effects of rapid market change.

The purchaser-provider split will lead to increases in the cost of management and administration. Previously non-existent purchasing authorities are to be established. A considerable increase in the cost of middle management and management systems within public hospitals will need to take place, as hospitals attempt to improve efficiency and estimate average costs of procedures. The creation of information systems to inform management on both sides of the market is costly and in the UK tens of millions of pounds have been wasted on systems which do not work. Those that operate typically are not integrated and some hospitals now have incompatible and isolated systems for patient numbers, doctors, nursing and finance!

A possible improvement in the reforms with regards to technical efficiency would be for hospitals to compete for quality rather than price. If purchasing authorities agreed on standard prices paid for procedures, then hospitals would compete on quality alone. This

is essentially what currently occurs within the private sector, with the Southern Cross Medical Care Society setting suggested price bands through its price schedule for elective surgical procedures. It could be suggested that such a price schedule has aided efficiency in the private sector as practitioners compete for services on quality alone. A similar comparison can be drawn with the U.S. medicare programme, where prices are nationally determined with the aid of diagnosis related groups (D.R.G.s), and hospitals compete for patients on quality alone.

The difficulty in competing in terms of price is that for health care, unlike most other goods and services, quality can often not be predetermined. Lowest-priced hospitals may not be the most efficient if their quality of service is also of a lesser standard.

One of the major concerns regarding the health reforms is that cost effectiveness has not been defined as an objective measure of health status in either the Green and White paper nor the N.I.P.B. report. It seems that the mechanisms for achieving cost effectiveness, will be entirely market driven. There is no evidence anywhere in the world, that such mechanisms will achieve cost effectiveness in health care markets. Indeed the US Jackson Hole Group argue that central Government must regulate the market to create information about outcomes and cost effectiveness (11) if resources are to be used efficiently.

The New Zealand reforms do encourage increased accountability for consumer satisfaction, through willingness-to-pay, by introducing user-charges throughout the system. Unfortunately the majority of the two-thirds of New Zealand's population

affected by user-charges, already hold private medical insurance, which may undermine the value of the willingness-to-pay measure. Willingness-to-pay as a measure of consumer satisfaction is also dependent on the availability of alternatives and degree of necessity of treatment. Often in health care, consumers have little choice but to accept what is offered. A possibility for helping to determine a willingness-to-pay-measure of consumer satisfaction could be through patient surveys using hypothetical payments to compare with actual costs of treatment and more questioning of health care practices by the population.

Social efficiency of New Zealand's health service is determined by society's valuation of the last dollar spent on health compared to the last dollar spent on any other public or private good or service. The reforms suggest no mechanism by which society can choose to spend more or less on health care, thereby determining the size of the health sector. By far the greatest spender on health care will be the new purchasing authorities, who will be limited by centrally determined budgets determined by the political process.

The user part-charges will be a very crude mechanism in helping consumers decide how much to consume in aggregate, as they do not reflect society's willingness-to-pay for treatments, and will largely be offset by third party payers.

The establishment of a core health service encompassing the services which society feels everybody should have access to, may facilitate social efficiency. Although the reforms do not specify clearly how society will determine the nature of the "core" list of

treatments, this mechanism may allow society to make some comparison between expenditure on health treatments and other public spending. An improvement to the reforms would be if the size of the core was used to help determine the public budget for health care. Possibly the purchaser - provider exchanges and their focus on cost effectiveness may increase the pressure for more public spending. There is no evidence available as to the success of a list of core services in determining total health care expenditure. The Oregon experiment has proved highly controversial but led to increased public expenditure and the core committee in New Zealand has so far avoided a specific list, preferring to retain an element of professional case-by-case judgement. Possibly willingness-to-pay surveys may aid in the establishment of the core.

B. Equity

The reforms' main equity claim is to guarantee access to "core" services for all New Zealanders. The New Zealand government is concerned that services which could be deemed necessary to society, have different accessibility to different New Zealanders, in terms of geography, income, or time.

While the government's main equity goal may be equal "access" for equal "need", it is not clear whether it believes equity is better defined as equal "usage" for equal need. Alternative goals would be to equal "access and usage" of health care or generally more equity in health. The failure to debate the appropriate definition of equity in the provision of health care means that the success of the reforms will be difficult to

evaluate.

The government is concerned that middle and high income earners meet a higher proportion of costs of public treatment through user-charges. Such higher proportions are however not progressive by incomes (as could be achieved by increasing marginal income tax rates), but are set rather arbitrarily according to individual and family income limits. The health care system may fragment further, with low income earners receiving free public treatment and other New Zealanders insurance-subsidised private treatment(12), and perhaps this will be regarded by Government as the achievement of some implicit goal?

Equity in finance according to usage has been introduced up to maximums for most public health services, for the higher income groups. There is no evidence that user part-charges are more equitable(7),(29).

C. Consumer Choice

The reforms will have little effect on consumer choice in method of payment for health services. In the past, New Zealanders have had the choice between paying the monetary price for private treatment or the time "price" of public treatment. User-charges for public treatment may increase the attractiveness of private treatment, but any resulting reduction in waiting times for public treatment will have the opposite effect. Middle and high income earners will not be affected greatly, since the majority already hold

private medical insurance, whose price is rising substantially as a result of public sector reforms. Low income New Zealanders will have reduced choice, as few will be able to afford higher medical insurance premiums. Although they will be exempt from many user-charges, they will be forced to wait for public hospital services. There is no suggestion in the government's Green and White paper, that waiting times will be reduced significantly.

Consumer choice with respect to providers of publicly financed health care will be reduced. In the past consumers were able to influence their general practitioners(G.P.s) with regards hospital and specialist referrals. In the future, bulk population contracting by purchasing agents will restrict choice. Evidence in the U.K. suggests that G.P. fundholders offer patients less choice with respect to health services and prescriptions(16).

The reforms may enable consumers to have a choice of purchaser through alternative health care plans. Whether such alternative purchasers will offer a choice of provider, or be more likely to bulk contract is yet to be seen. It seems likely that small alternative purchasers will have difficulty competing with the bulk contracts of large Regional Health Authorities. If this is the case, consumers may not end up with the choice of purchaser that is envisaged and, as in UK, be dependent on the local (monopolistic) buyer of health care services.

SUMMARY

Many countries are currently in the process of assessing the effectiveness and efficiency of their health care systems. Pressure from aging populations and escalating costs of medical technology are forcing countries to consider reverting to market-orientated strategies, as suggested by the Enthoven model(13).

The New Zealand government is in the process of introducing major reforms with the goal of mitigating eight major problems (page 5) highlighted by the previous system. Although the reformed system will create an environment not seen in New Zealand for fifty years, it is not clear whether or not the problems will be improved(24):

1. Why will waiting lists fall in public hospitals? Greater clarity in prioritising waiting lists, changing referral patterns and purchasers' identification of latent illness in society may have the opposite effect.
2. The funding of the health system is likely to become even more fragmented if alternative health care plans come into existence. Best practice in designing a health care system suggests that a "single pipe" - global budget is a necessary condition for controlling health care cost inflation (6).
3. Access to services may be reduced by hospital closures, especially in less populated regions. To mitigate the problem it will be necessary to close big units and maintain smaller, local units if this is demonstrably cost effective.

4. There is no clear indication as to how doctors will be given assistance in decision-making. Who will provide effectiveness information and outcome measures? As the Dutch have noted this is not an easy task (17).
5. Consumer control and choice may be reduced by the reforms. Purchasers will act as consumers agents and consumers may have little choice of agent.
6. Whether the new R.H.A.s will find it any easier to change current public health services is yet to be seen. There will be considerable consumer pressure to retain current services. If alternative services are to be considered, detailed cost-effectiveness comparisons will need to be carried out. The committee on core services is having a great deal of difficulty in determining what to include in or exclude from the public health care core.
7. The conflict between the role of purchasers and providers may become more pronounced rather than less, if group practices and medical insurers are permitted to offer alternative health care plans, and thereby act as purchasers and providers. There is much rhetoric to support "doing the splits" ie separating purchasers and providers. But what benefits does this give and at what cost?
8. The reforms may increase fragmentation in the health care system in the future, with low income earners relying on an underfunded public health system, and middle and upper income earners covered by a more expensive private sector subsidised by the government and medical insurance. Is this consistent with the

health and health care goals of the government and New Zealand society?

At both antipodes (New Zealand and the UK) there is much rhetoric but little real evidence. The New Zealand health care reforms may worsen the eight major problems of the previous system which were highlighted by the New Zealand government. Whilst radical reform may have political attractions, the economic case for change is absent. The reformers should confront the general question, "if it ain't broke don't mend it", and the particular question, if you introduce radical reform you are obliged to define its goals and evaluate your success, or lack of it.

Always and everywhere there is an inclination to "disorganise" administrative structures and, because of the failure to define reform goals, manage change, and evaluate success, produce little benefit in terms of the efficiency and equity of health care finance and deliver.

"We trained very hard, but it seemed that every time we were beginning to form up into teams, we would be reorganised. I was to learn later in life that we tend to meet any new situation by reorganising, and a wonderful method it can be for creating the illusion of progress, while producing confusion, inefficiency and demoralisation.

Caius Petronius (AD 66)

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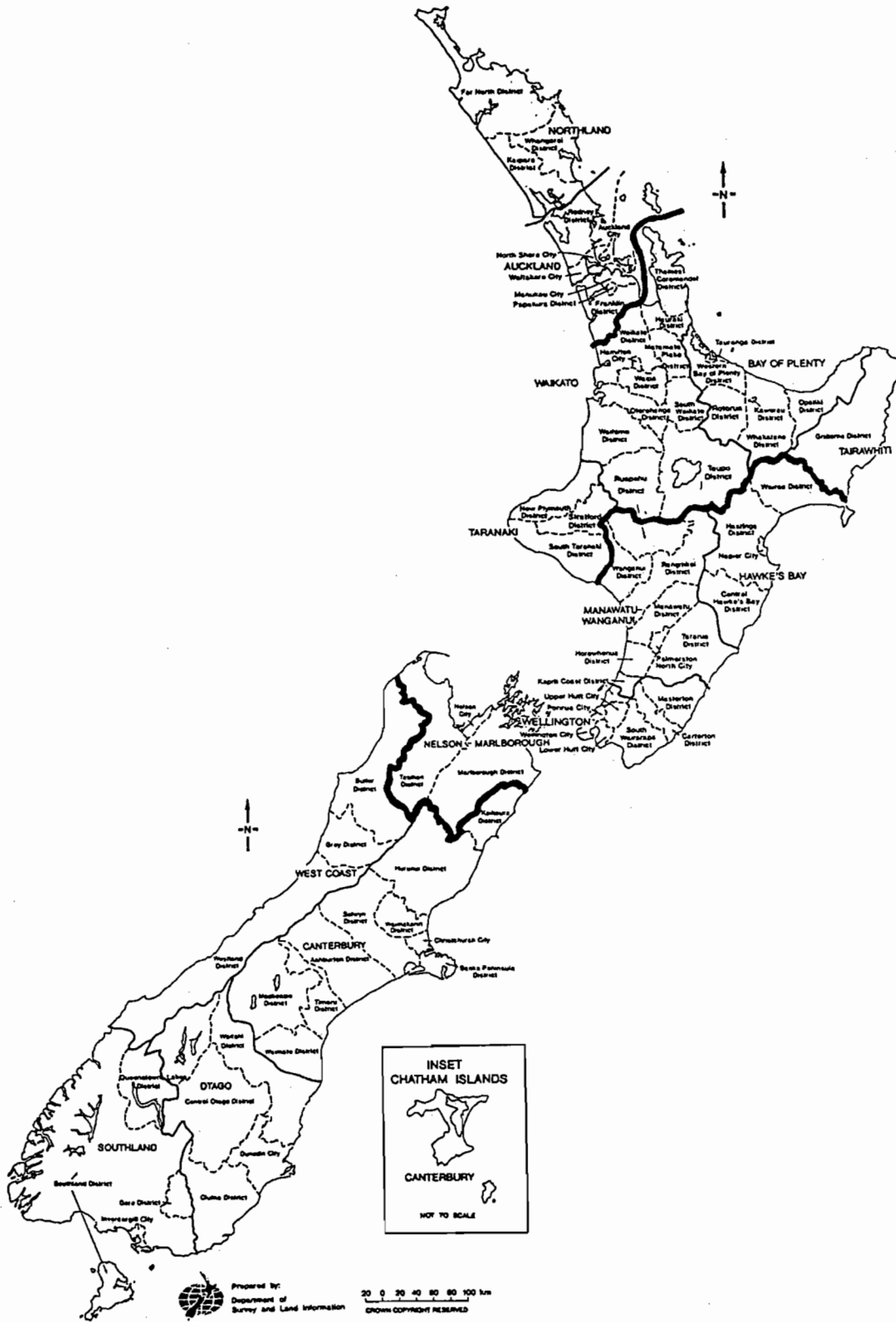
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TABLE 1: KEY QUESTIONS FOR THE EVALUATION OF PROPOSALS

<p><u>Technical Efficiency</u></p> <p>This is assumed to have a common definition regardless of ideological viewpoint.</p> <ol style="list-style-type: none">1. What mechanisms exist for minimising the cost of each activity carried out?2. What evidence exists that these mechanisms work?3. What is the implication of these mechanisms for the cost of managing the system?4. What adjustments to the scheme might improve its performance?
<p><u>Cost Effectiveness</u></p> <ol style="list-style-type: none">1. How is cost effectiveness defined in the proposal:<ol style="list-style-type: none">a) by reference to an objective measure of gain in health status; orb) by reference to consumer satisfaction with services as indicated by willingness to pay?2. What are the proposed mechanisms for achieving cost effectiveness?3. What evidence exists that these mechanisms work?4. What adjustments might be made to the scheme to improve its performance?
<p><u>Social Efficiency</u></p> <ol style="list-style-type: none">1. How is the socially desirable overall size of the health sector defined in the system:<ol style="list-style-type: none">a) by reference to the relative valuation by the community of measured gains in health status, derived from all forms of health care and promotion, and benefits derived from other forms of public and private expenditure; orb) by reference to the relative valuation by individuals of the benefits derived from health services and the benefits from the purchase of other goods and services?2. What are the proposed mechanisms for achieving the appropriate overall size for the health sector?3. What evidence is there that these mechanisms will work?4. What adjustment might be made to the scheme to improve its performance?
<p><u>Equity</u></p> <ol style="list-style-type: none">1. What aspects of equity in the finance and provision of health care concern the authors of this proposal?2. What mechanisms are proposed to achieve such equity?3. What evidence exists that these mechanisms will promote equity?
<p><u>Consumer Choice</u></p> <p>What effective opportunities will the proposal offer consumers to choose:</p> <ol style="list-style-type: none">1. their method of payment for health services;2. their level of expenditure on health services;3. their providers of health services (eg. doctors, hospitals); or4. the timing of their treatment?

Appendix 1



Appendix 2

New Zealand Public Health User-Charges

	New (Old) Charge:	
	<u>Adult</u>	<u>Child</u>
<u>General Practice</u> (per consultation)		
Low Income	\$16-\$19 (\$31)	\$6-\$11 (\$6-\$11)
Mid-High Income	\$31 (\$31)	\$31 (\$6-\$11)
<u>Hospital Inpatient</u> (per night)		
Low Income	\$0 (\$0)	\$0 (\$0)
Mid-High Income	\$50 (\$0)	\$50 (\$0)
<u>Hospital Outpatient</u> (per consultation)		
Low Income	\$0 (\$0)	\$0 (\$0)
Mid-High Income	\$31 (\$0)	\$31 (\$0)
<u>Prescription Pharmaceuticals</u> (per item)		
Low Income	\$5 (\$15)	\$5 (\$5)
Mid-High Income	\$20 (\$15)	\$20 (\$5)
<u>Laboratory Services</u> (per test)		
Low Income	\$0 (\$0)	\$0 (\$0)
Mid-High Income	\$2 (\$0)	\$2 (\$0)