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September 1998
The impact of economic theory on the art of clinical practice: a study of science, meaning, and health

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A thesis submitted for the degree of
Doctor of Philosophy
at the University of Otago, Dunedin
New Zealand.

September 2005
Abstract

In being philosophically based this thesis is concerned with understanding the human condition with particular reference to matters of meaning and how these find expression in systems of government and social policy.

This study is based on the premise that concepts determine how the world is viewed and people use a variety of conceptual schemes to answer different classes of questions. Scientific endeavour is based in a scheme that enables questions about the material world to be answered. It cannot however answer classes of questions related to many features of human lives as its methods necessitate the development and use of abstractions and generalisations that are ill-equipped by design to determine what is important to people and what motivates and satisfies them. Therefore, the reality of any particular individual or group cannot be adequately understood in scientific terms.

The thesis examines the scientific conceptual framework and minimalist abstractions of the medical model and the quasi-scientific conceptual frameworks of economics and identifies their conceptual limits. It shows that if the medical model is assumed to provide a complete representation of realities in health and is uncritically used as the basis of medical practice it has the potential to overlook the patient as a person and distance medical practice from its social roots which can lead to adverse outcomes for both clinical practice and medicine itself. It also observes that the economic scheme has conceptual limits that create their own distorted representations of reality. A similar dislocation in the meaning of people's lives occurs when abstractions are made by adopting concepts from other schemes based in science, such as the medical model, without any awareness of their conceptual limits. Further distortions occur when these
other accounts are turned into economic ones. Not only is the patient as a person overlooked, so is the patient as an entity.

In light of these observations the thesis examines health reforms that have taken place in New Zealand, whereby the economic scheme has been given dominance in the development of public policy and set the parameters for rationality and what can acceptably be said. It shows that in not recognising features of meaning these parameters have led to health sector reforms that have had unintended and adverse consequences for clinical practice, as shown in the particular case of reforms of maternity services. Furthermore these reforms have severed the health sector from its social roots and moral frameworks and created barriers between it and government so that health sector problems that cannot be understood using economic parameters cannot be addressed in forums where public policy is developed.
Preface

This work had its origins in Government Cabinet and ‘Officials’ meetings that I attended as a senior public servant at the time strategies for the health sector reforms that commenced in the early 1990s were being developed. I was often surprised to hear discussions about a health sector that I had previously worked in that bore little resemblance to my own experiences. More disturbingly, I found that public policy was being developed on the basis of these misunderstandings. This led to a nagging curiosity as to how this was able to happen and why this was the case.

Making sense of these experiences has been built on the insights of many authors to whom I consequently owe an enormous debt of thanks. Without their toil and scholarship the ideas expressed herein could not have been developed. I extend a very special thanks to Professor Donald Evans, who helped me make sense of this mine of information and provided invaluable help in enabling me to express my ideas in an intelligible way. I also wish to thank Grant Gillett, Robin Gauld and Nancy Devlin for their supervision and encouragement.

Finally, I thank Jock, Angus, Andrew, and William for their unconditional love, encouragement and support throughout the long and challenging process of researching and writing this work.
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Introduction

We live in a dump of detail, a welter of tiny nothings, of heels descending on petals and of cats yawning. They make no sense. They are unsorted rubbish.¹

How do we know when a true event, big or small, is taking hold of the world and subtly but surely transforming it?²

Something does not need to be represented to exist; in fact representation deprives the thing in itself of its being, since the referent is by our current standards now less rather than more.³

Change is an inevitable part of life. That circumstances, opinions and values have changed is often only apparent in hindsight, when it becomes evident that the world and the views of people in it are different from what has gone before. Sometimes however, change is rapid and tumultuous, as occurs when new ways of viewing the world are actively promoted and pursued as experienced by the New Zealand health sector over the last twenty years. As part of a comprehensive strategy of economic, social and political reform begun in the 1980s, a carefully crafted, integrated and mutually reinforcing

conceptual scheme with the chief aim of improving the country’s economic performance was systematically introduced and applied to government, the state sector and social services. As public health services in New Zealand were predominantly paid for by taxation and hospital services provided by government agencies, health sector reforms that commenced in the early 1990s featured prominently in the overall reform programme.

The reforms involved restructuring New Zealand economic, political and social life with a ‘theoretical purity’, ‘conceptual rigor and intellectual coherence’ that has been documented as being unprecedented anywhere in the world. The intent was the improvement of the effectiveness and efficiency of the public sector, the enhancement of the responsiveness of public agencies to their clients and customers, the reduction of public expenditure and improved managerial accountability.

Underlying the health sector reforms was the idea that the goal of health policy should be ‘good health’ and ‘improvements in health status.’ The reformers believed that instead, the sector’s use of the medical model as the basis of health care provision resulted in it being principally focused on servicing illness which caused resources to be used inefficiently. Given that medical care and the medical model were seen as one and the same, doctors were perceived as being principally responsible for this state of affairs. As well as practicing in ways that in some cases was harmful to patients they provided care...
that was considered wasteful and unnecessary. It was believed that by introducing new ideas and reorienting health services away from the constraints of the medical model, medical practice would focus on preventing illness rather than treating it, the incidence of illness would reduce, overall population health would improve and consequently, health expenditure would decrease thereby freeing up resources for use elsewhere.

The New Zealand public sector reforms have been celebrated and acclaimed for their radicalism, boldness, coherence and innovative methods, and assessed as having had a positive effect on the services that have been reformed. However, the following events have coincided with the transformation of maternity services. Headlines such as 'Delivery fees too bitter for GPs to swallow', 'Obstetricians lining up to quit', 'Baby care in crisis' and 'Christchurch labour wards under siege: Chronic obstetrician shortage starts to bite' have heralded the loss of many highly trained and highly skilled general practitioners from maternity services. There are reports that choices available for

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10 This is a theme that was first enunciated in the 1940s by Lord Beveridge in the United Kingdom (Beveridge Report. Social Insurance and Allied Services. London: HMSO; 1942.) and has maintained currency to this day. For example, See Ministry of Health. Team health: Health and disability news. Wellington, New Zealand: Ministry of Health; May 7, 2004. The Director General of Health is quoted as saying PHOs (Primary Health Organisations -a structure introduced as part of the reforms) would enable opportunities to be exploited whereby people would be kept healthy. p2. Ministry staff go on to say care at the primary (GP) level is necessary in a bid to avoid as many unnecessary hospital admissions as possible. p4.


women in receipt of maternity care have reduced. Women continue to complain about the services they receive. Service levels for women having normal, uncomplicated pregnancies and births have increased and there are reports that service levels for women having complicated births are decreasing. Relationships between the different providers of maternity services appear acrimonious. Interventions such as caesarean

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sections are increasing,\textsuperscript{18} reportedly because clinicians are involved in maternity care\textsuperscript{19} are concerned about potential medico-legal risks\textsuperscript{20} or are inexperienced,\textsuperscript{21} and because women are choosing to deliver their babies in hospitals rather than primary birthing units or at home\textsuperscript{22} or are making a lifestyle choice.\textsuperscript{23} The incidence of adverse events remains unchanged,\textsuperscript{24} efficiency gains have remained elusive, and service costs have increased at a rate above the level of inflation.\textsuperscript{25} The perception that medical care is both wasteful and harmful remains unchanged\textsuperscript{26} with midwives calling for doctors to be replaced by midwives.\textsuperscript{27} There are reports of babies dying because inexperienced midwives do not recognise or know how to deal with complications.\textsuperscript{28}

It seems that within maternity services the reforms have not achieved the expected efficiency gains, reduction in expenditure, responsiveness, improved accountability and choice and there do not appear to be any accountability links between those who initiated

\textsuperscript{19} Clarkson Fiona. Maternity services ‘not GPs’ concern. INL Newspapers 2002 Jul 8; Source: www.stuff.co.nz. Accessed Jul 8, 2002.
\textsuperscript{21} Hill A. Cutting your options. The Press 2002 May 10:17.
\textsuperscript{23} Hill A. Cutting your options. The Press 2002 May 10:17.
\textsuperscript{26} See section “Maternity Expenditure” in the Maternity case study in the body of this thesis.
\textsuperscript{27} See: Ministry of Health. Maternity report 1999: Normal births are becoming less frequent. 2002 Jan 22; Media release; Source: www.moh.govt.nz/moh.nsf. Accessed Feb 8, 2003. The release advises that 20\% of hospital births were by caesarean. Dr John Marwick states “These high rates of caesarean are of concern. Caesarean births carry a higher risk of complication for the mother and although they can often save babies when there are problems, experts are generally agreed that national rates over 15\% offer little extra advantage.”
St George’s Hospital under attack after baby’s death. The Press 2005 May 25; Sect. A:1.
and implemented the maternity reforms and these reported outcomes.\textsuperscript{29} The Ministry of Health has focussed on highlighting the variable geographical intervention rates in obstetric care from the perspective that the higher levels are inappropriate\textsuperscript{30} and does not appear to be taking any proactive role in addressing the other issues that have arisen.

The central question posed in this thesis is 'Why have the health reforms resulted in these outcomes?' Some commentators have put unintended and adverse outcomes down to poor implementation of the reform programme,\textsuperscript{31} and 'policy drift'\textsuperscript{32} (that the reforms have been modified during the implementation stage and not remained theoretically pure) and that the loss of theoretical purity has resulted in a 'muddle',\textsuperscript{33} when, for example, public agencies are required to pursue non-commercial objectives rather than acting as commercial business entities whose survival is dependent on their financial viability. This is seen as leaving boards of governance without the necessary incentives to pursue efficient and effective service delivery. These explanations seem at best, superficial. It is unlikely that clinicians who have spent decades training in their specialities would walk away from providing maternity services because the reforms had been implemented poorly, not been implemented in their entirety, or not been theoretically pure, and because they did not work for a sector that operated under commercial business requirements. Likewise, it seems unlikely that mothers are complaining about the quality of services because the reforms did not go far enough and provider behaviour was not controlled by financial goals.

This thesis is concerned with understanding why the problems identified above have occurred in an environment focused on improving health services. It aims to test the idea that the unintended, paradoxical and adverse outcomes of the health sector reforms are in part based in characterisations of health that occur within medicine and economics. I

\textsuperscript{29} In the cases of neonatal deaths, accountability is in terms of the health professional involved in the specific case, not those responsible for setting up the system in the first instance.


endeavour to demonstrate that when the concept of 'health' is not grounded in the
discourse of patient experience, but based on abstractions found in modern medical and
economic theory that are applied uncritically to health systems, it distorts the realities of
health care provision and produces detrimental outcomes.

This thesis is set out in two sections. The first develops the conceptual foundations that
are used to underpin the analysis in the second. Using an account developed by Peter
Winch,\textsuperscript{34} chapter one examines the process whereby humans come to attribute meaning to
the situations they encounter, how this process is fundamental to giving meaning to the
concept 'human health' and how the conceptual schemes that underpin meaning set the
parameters for rationality and what can be properly expressed. This is then contrasted in
chapter two with how health is conceptualised when viewed through a scientific lens.
This chapter, together with chapters three, four and five, aims to demonstrate that the
meaning of the term health depends on the context in which it is used. When it is used as
part of scientific discovery it is simplified and given characteristics based on abstractions
created for the purposes of asking questions that have a specific focus; within medicine
abstractions are created to enable questions to be shaped that address the alleviation of
pain and suffering with this framework being termed the medical model; within
economics, abstractions are created that enable questions related to exchange transactions
to be developed in a quest for answers related to economic activity. When simplified in
this way, the term health comes to mean something different within each discourse, and
neither is able to give an account of what health means in the totality of the life of any
particular individual or group. Consequently, although the temptation exists to apply this
knowledge as if it is universal and timeless, it must be applied with due regard to these
conceptual limits to ensure harm does not ensue.

Chapters three and five also aim to show that as well as leading to the assumption that
knowledge generated by each discipline is timeless and universal, scientific frameworks
are unable to differentiate between different classes of questions. Consequently,
questions of meaning that are central to determining if prescriptions from either discipline

\textsuperscript{34} Winch Peter. The idea of a social science. London: Routledge & Kegan Paul; 1958.
have the potential to cause harm, such as those based in moral views expressed in the public context, are overlooked thereby creating the potential for further harms to ensue.

While the conceptual frameworks of medicine and economics result in different meanings being given to the term health, the conceptual limits inherent in the use of science as the way to gaining knowledge causes these differences to be obscured. This creates the temptation for one discipline's concepts to be uncritically used to understand questions that they cannot properly address such as for example, the use of economic concepts to understand clinical practice and its effects on patients. In doing so, the concept of health is no longer grounded in the context that gives it meaning, but in a set of abstractions that divert attention away from many of the subtle complexities of health and present a quasi-objective/scientific account that can have little semblance to reality, again giving rise to the possibility for harms to ensue but to a far greater an extent than previously. Chapter six includes a discussion of the profound consequences for both patients and clinical practice that can result when it is assumed that the accounts developed by the medical model and economics are assumed to be either complete and able to stand on their own or that their various components are interchangeable.

Section II tests the ideas developed in the previous section. Using the specific case of maternity services it evaluates the proposition that that the uncritical use of conceptually limited frameworks has the potential to cause unintended, paradoxical or harmful outcomes because they are unable to take into account questions of meaning. Chapter seven examines the impact of using a scientifically based conceptual scheme – the medical model as representative of reality in maternity care. It shows the specific harms that resulted when this unitary account was used as the basis of understanding pregnancy, delivery and postnatal care and how medicine came to be seen as harmful to care. Chapter eight summarises the conceptual thrusts of the economic scheme that underpinned reforms of the New Zealand public sector, and how, in being seen as able to provide a compete understanding of all matters of social life, assumed dominance in the development of public policy and set the parameters for rationality and what it was acceptable to say. The way this conceptual scheme was uncritically used to understand health and the accounts that ensued is examined in chapter nine. This chapter shows that the economic account further distorted that of the medical model and distanced medicine
not only from patient experience, but from the patient in total. Chapter ten examines how in the case of maternity services this distorted account produced outcomes that exacerbated the harms created by the uncritical application of the medical model and resulted in medical care being formally marginalised from services available to pregnant women. It identifies that the following of set prescriptions and ignoring qualities that are central to human existence, will not necessarily lead to an upward progression in social development no matter how thoroughly investigated these prescriptions might be, and that the uncritical use of ideas that have inherent conceptual limits can have tragic consequences.
Section I

CONCEPTUAL FOUNDATIONS

"The worst thing about being seriously ill is the loneliness. You know that nobody, neither your doctor nor your husband or your best friend, can imagine what it feels like, especially in its more trivial manifestation: how your left calf will clench and tremble for no reason, how dread comes sliding smoothly out from behind the water jug. ...The Doctors might give you a brisk explanation as to the why of it, but they can't help you find the words to describe how it feels."¹

Health related public policy grounded in economic theory has dominated New Zealand health sector reforms undertaken by successive governments since 1992. The intent of these reforms has been to enhance the quantity and quality of human life through improvements in available health services with a specific focus of maximising the impact of finite resources by making tradeoffs between different services and levels of service. Like the reforms, medicine aims to enhance the quantity and quality of human life by addressing issues that compromise health, which requires doctors and patients to make decisions that involve trade-offs between the benefits of interventions and detrimental side-effects.

Successful medical practice must address what is important to people in relation to their health as treating patients for things they do not consider important, while neglecting

those that they do, has the potential to lead patients to perceive medical care as either of little use or even harmful to their well-being. Similarly, public policies must address issues considered important by those who are governed by them. The absence of perceivable and laudable goals is unlikely to ensure co-operation or appreciation by the public. Therefore, in order to achieve desired outcomes public policy initiatives relating to health and health care must marry those aspects considered important by those delivering care and those receiving it.

People perceive what is important through the dynamic interaction of a complex mix of factors and processes that give meaning to their experiences. Consequently, what is considered important is not always obvious at first glance and the potential exists for misidentifying this if the context of health care delivery is not carefully taken into account. Medical practice that is not grounded in understanding the meaning patients attribute to their experiences can lead to either lack of appropriate care or, more significantly, to harm. Such lack of understanding can also spawn public policies that are destined to fail and which might even be counterproductive.

The focus of this section concerns understanding how ‘meaning’, is achieved and whether the medical and economic disciplines are sensitive to this. This analysis is carried out to determine firstly, whether disparities in understanding exist and further, whether they might be significant with respect to the failure of the health reforms executed in maternity care in New Zealand.

Using Peter Winch’s account of how meaning comes to exist2, chapters one and two lay out the central tenets of this dissertation – that the concept of health is a construct of social relations and cannot be understood purely in scientific or quasi-scientific terms be they those of medicine or economics. They explore the idea that ‘health’ is a concept that gets its sense through social relations - that interaction between people enables meaning to develop which gives concepts their sense. Science has been shown to provide understanding of the material world but cannot provide complete insight into human meaning and reality because its methods necessitate the development and use of abstractions and generalisations as the basis of investigations. It consequently ignores

social relations by design and is ill-equipped to determine what is important to people and what motivates and satisfies them. Therefore, the reality of any particular individual or group cannot be properly understood in its terms.

The scientific and quasi-scientific approaches of medicine and economics are examined with this in mind in chapters three to six in order to identify significant differences which might provide explanations for the failure of the health reforms to achieve their planned objectives and how these differences have the potential to cause harm if they are overlooked. This analysis forms the framework for an examination in section II of maternity care and how this has been impacted by the uncritical application of the unitary accounts of health and health care created first by the abstractions of the medical model and second by those of the economic scheme as actualised in New Zealand reforms commenced in the mid 1980s.
Chapter One

Understanding Human behaviour

Meaning in human terms

What makes us uniquely human? People are more than a sum of individual components which make a functioning body, or a set of behavioural traits. They are multidimensional composites of attributes such as their physical makeup, history, hopes, aspirations, emotions, context, and experiences that result from interactions with the physical world and the people, organisations and social structures among which they live. This makes humans not just more complex, but different in kind from other sentient beings.

Concepts and meaning

Winch, in the publication ‘The idea of a social science’\(^1\), has identified that the way people accord meaning to their experiences is not shared by other sentient beings but developed through a social process whereby the sense attributed to concepts is developed and shared. According to his account, the meaning derived from an experience depends on the concepts used to describe it. For example, the act of eating has specific meanings for humans associated with the context in which eating takes place. Eating within the context of a wedding celebration has different connotations from eating in terms of breast feeding an infant. Celebrations within western societies are shaped by concepts that carry ideas of ‘acknowledgement’, ‘abundance’, ‘ritual’, ‘satisfaction’ and ‘bringing together

members of a group'. On the other hand, breast feeding carries with it concepts related to providing ‘the right nourishment’, ‘immediacy,’ and ‘discretion’. These meanings are specifically human and are not shared by other animate beings such as dogs or monkeys. Furthermore, they may not be shared between different groups and cultures which may accord different meanings to these ideas.

Social interaction makes it possible for shared meanings to be assigned to concepts, invests concepts with sense and enables them to be used to express ideas about reality.\(^2\) Shared meanings set the parameters that determine what can be properly expressed and make it possible to make judgements and generalise. For example, the notion of good manners associated with eating food only gets its sense once there is agreement on the concepts associated with the notion of eating. Being able to say what good manners are is dependent on whether eating is related to a celebration or to a meal break while working, which is further dependent on what the concept of ‘celebration’ means and in which type of circumstance this meaning is appropriate.\(^3\) Regardless of the event, there must be some agreement on concepts for there to be agreement or disagreement in opinion as to what the events mean. One meaning is not dependent on, or superior or hierarchical to another. The differences in meaning are different in kind.

**Concepts and rules**

Grasping and employing concepts involves learning and understanding associated rules and when to apply them. Events which count as qualitatively similar from the point of view of one rule can be seen as different from the point of view of another.\(^4\) The concept of ‘good manners’ associated with eating food requires a shared understanding of what is meant by the term ‘good’ and the term ‘manners’ both of which take their meaning from the context in which eating occurs. As noted above, good manners within the context of a celebration may be different to good manners within the context of breast feeding. In the former, use of correct tools rather than fingers might be crucial. In the latter this is

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\(^3\) Eating associated with wine tasting may not be considered a celebration, but may require the same rules of etiquette as those of a wedding when it came to announcing and toasting winning wines.

irrelevant whereas issues of privacy, the role of women, women's rights, and dress codes and so on might be paramount. Moreover, the meaning of good manners for events such as celebrations and breast feeding will vary between particular groups or cultures. Thus, the term 'good manners' must be evaluated against an agreed standard for it to have any sense, as one can act from considerations only where there are accepted standards of what it is appropriate to appeal to. A determination must be made as to whether the concept is being used in the same way as previously as there is no absolute unchanging sense to the word 'the same.' The rule gives the word 'same' a definitive sense.5

The relationship between concepts and rules is different from cause and effect relationships, where the occurrence of one event is automatically followed by another. The significance accorded an event is dependent on shared concepts and therefore, applying a rule involves more than an action that results from habit. It involves doing something different from what one was originally shown, but in relation to the rule being followed, which requires interpretation on the basis of knowing the right way to behave as determined by what has been previously taught. This necessitates the need for reflection.6 The alternative of acting differently exists because the person understands the situation he is in and the nature of what he is doing (or refraining from doing). Therefore, intentions, understandings and so on all depend on more than causal happenings.

Even if it were possible to limit the range of alternatives that a person could choose from by determining an initial specific set of conditions, these alternatives would only be valid until it was time to interpret the rules in the light of yet new conditions7 such as for example, what 'good manners' means in the light of societal changes in attitudes to breast feeding in public places. The rule relating to good manners must be interpreted in light of these new conditions.

In the absence of shared meanings, the way different groups view one another will depend on their conception of the world. Whether burping loudly while eating is a sign

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of good manners or bad manners depends on the meaning a group has given the concept of good manners in the first instance and these meanings are logically dependent on social relations. A group that has defined good manners as including burping will interpret the behaviour of a non-burping group as rude regardless of the meaning attributed to burping by the latter group. Differences in behaviour between groups of people do not occur because one group follows the rules and the other does not, but because each group respectively follows diverse kinds of rules. Thus, predicting the meaning of a situation cannot be done on the basis of set criteria. Predictions can only be made in knowing a person well and in being familiar with the type of considerations that they believe are important at any point in time.

Summary

Concepts get their meaning through social relations and give meaning to events. Ideas of cause and purpose, good and evil, freedom and slavery, rights and duties, laws and falsehoods arise from the context in which they flourish. They are context specific and have the potential to change over time. They rest on a social context of common activity. Together they form a general framework which in turn shapes how the world is viewed and make what people are doing intelligible to others.

In the absence of shared meanings concepts become unintelligible and agreement or disagreement in opinion about states of affairs becomes impossible.

The meaning of human health

Like other concepts, making sense of the concepts of ‘health’ and ‘illness’ is achieved through the complex interplay of social institutions and personal contexts and the associated rules which issue from these that shape people’s conception of what happens to them.

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Health, Context and Time

How health is understood is shaped by the way it is conceptualised. For example, when a feature of a body system becomes a criterion for lack of health, asymptomatic persons can quickly come to believe they are experiencing ill health. Conversely, where symptoms are the criteria for ill health, asymptomatic people can believe they are healthy in the presence of disability and disease.

Given the internal relations between social contexts and the concept of health, what health means can be different in different places and at different times. For example, the Ancient Greeks conceptualised health as a state of equilibrium between the four humors of the body and disease resulted from disequilibrium of these humors in quantity and in action. As such, ill health was not somewhere in man, but related to the whole man, encompassing his body, values and experiences. Unhealthy persons needed to be treated in their entirety to be restored to health and the role of the clinician was to support the natural forces in the restoration of equilibrium, and therefore health. This is very different to the way health is conceptualised in the biomedical context in the twenty-first century where disease is considered localised in a specific organ or body system and health is the restoration of function or removal of disease in a body part.

As the meaning of concepts varies according to context the term health can mean different things to different groups at the same time. In Germany, for example, the concept of health and its associated rules means that people with low blood pressure (hypotension) consider themselves unhealthy whereas in New Zealand hypotension might be construed as a sign of physical fitness and good health. In the absence of a shared meaning neither group is in a position to agree or disagree on the position taken by each respective group because each group respectively follows diverse kinds of rules.

As when for instance, a person comes to believe they are unhealthy on being told that their levels of serum cholesterol are on the higher side of normal. Persons with for example, paraplegia or acromegaly (an over-secretion of growth hormone causing physical changes) can believe themselves to be healthy in spite of the existence of either of these conditions.

Likewise, professions such as medicine understand the concept of health through their own internal concepts and rules, and in the absence of a shared meaning are not in a position to interpret or understand the meaning attributed to the concept of health by different professions.

Concepts, rules and experience

Although social contexts affect the way health is conceptualised, its application at a personal level is experiential; that is, people believe they are well or ill according to the way they view their own experiences. Therefore, the meaning of health is intensely personal to each individual and apparently identical situations can have different significance for different people. This has been shown in an investigation by Drellich and Beiber\textsuperscript{14} who discovered that patients who had undergone hysterectomy for benign and malignant disease of the reproductive tract held a variety of beliefs about the nature and function of the uterus and that these beliefs profoundly affected their perceptions of the nature of the clinical intervention which they had experienced. The dominant beliefs were that the uterus was a:

- childbearing organ
- excretory organ
- regulator and controller of bodily processes
- sexual organ
- reservoir of strength and vitality
- maintainer of youth and attractiveness.

The way medicine conceptualised health meant that women who underwent hysterectomy for benign and malignant disease of the reproductive tract were clinically considered to have a diseased organ removed and consequently restored to health. However, the women themselves interpreted the situation in a variety of different ways. Some believed they were healthy because they no longer had a malignant disease. Others considered

\textsuperscript{14} Drellich MG and Beiber I. The psychologic importance of the uterus and its functions: some psychoanalytic implications of hysterectomy. Journal of Nervous and Mental Disease 1997;126: 32-336.
themselves cured of a disease but less healthy than previously because they also lost the ability to reproduce and experienced physical and psychological changes associated with hormonal changes. Whether the outcome of the surgery was considered positive was dependent on the way the world was viewed and what the experience meant for each individual. The belief that health was restored through surgery depended on a certain view of what it was to be healthy.

Social conceptualisation and personal experience comes together to shape the meaning attached to health and illness and make it subject to change with changes in context and time. This impacts how health is understood. Consider the biological dysfunction of unexplained infertility. Unexplained infertility can occur in the absence of any disease condition where two people without any physical or psychological illness and able to reproduce with different partners, find themselves infertile. Whether the couple believe that they are healthy or not depends on what they regard as a state of well-being and how ‘unexplained infertility’ is located in this framework. If their world view is one where infertility is either desirable or of no consequence, then the couple are likely to consider themselves healthy. If it is not, the couple may believe themselves to need health care to help them to recover their health.

As well as being specific to each couple, what the view ‘that unexplained infertility constitutes a health need’ means is tied up with their view of many other things at the time of the experience and cannot be understood outside the context of the life they live and the values and preferences which find their home there. Inherent in the presence of ‘artificial conception’ services for instance, is the notion that unexplained infertility is undesirable and able to be overcome, and lack of access to these services is depriving people of something that can help them recover something of importance. The presence of services is therefore likely to promote a world view that unexplained infertility is both undesirable and constitutes the need for health care. When interventions did not exist couples may have considered themselves unfortunate but not in need of healthcare.

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15 Evans D. Values in medicine: What are we really doing to our patients? Inaugural Professorial Lecture Dunedin: Otago University; Feb 13, 1998. p. 34.
Whether an infertile couple is healthy or not cannot be determined by others from independent, authoritative positions. Only the couple affected can judge whether or not the situation they find themselves in is the same as others previously encountered (such as infertility that occurred during times of economic constraint or infertility caused by contraception). The most that can be said from dispassionate observation as a method of understanding is that if there were good independent reasons for regarding infertility as a lack of health, the observation that this function was restored would be a good candidate for assuming health has been restored.

Diagnosing ill health therefore, cannot be properly understood through physically objective methods. It requires knowing the couple well and being familiar with the type of considerations that they believe important at any particular time as different couples in identical circumstances may respond in different and sometimes unexpected ways depending on how the prism of their values and emotions and the context in which they live shapes the way they view their own circumstances. The experiential and perceptual qualities of the concept of ‘health’ make its meaning both socially and contextually dependent and highly individualistic. It can mean different things at different times and different things at the same time and in the same place. People cannot be said to be healthy unless they have some conception of the significance of their situation, and simple facts describing physical states do not constitute incontrovertible evidence for any desired conclusion.16

**Concepts and professions**

As the meaning attributed to the concept of health is determined by social relations, and not determined or discovered like uncovering a seam of coal which is simply waiting to be observed, it can only be understood in terms of what it makes sense to say and this, in turn, will entail that choices must be made in relation to the concepts and rules that shape how the world is viewed and understood.17 The significance of this is that the meaning

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attributed to such a term by one person or group can be different to another’s because shared meanings develop out of the public context in which they are being used.

This also applies to professional concepts. *Because* what health means is grounded in agreed concepts, aspects which are important within one discipline may not have any importance for another. Thus the meaning of the term ‘health’ that develops from the conceptual basis of a specific discipline such as medicine, which is interested in understanding how to alleviate pain and suffering, is unlikely to be the same as that developed from a different conceptual basis such as economics which examines behaviour in regard to exchange transactions. The discrepancy between the fundamental meanings of concepts of different professions is also likely to render subsequent concepts and rules of one profession either unintelligible to another or mistakenly alike. The consequence is that the meaning of the term health as understood by one profession may have little or no relevance or importance to another. However, these differences in meaning are likely to be overlooked or ignored especially when a concept such as health is assumed to mean the same thing for everyone as occurs when scientific concepts are used as the framework for understanding its meaning.

The following chapter examines the way the meaning of the concept health is shaped by science and the conceptual limits inherent in using scientific concepts to understand matters of meaning.
Chapter Two

Science and Human Meaning

Scientific Understanding

Beginnings

Since the time of Plato, humans have viewed the world from the perspective that reality, whatever appearances may indicate, is in essence a rational whole where all things ultimately cohere. It is supposed that there exists (at least in principle) a body of discoverable truths touching all conceivable questions, both theoretical and practical and that there is and can only be, one correct method or set of methods for gaining access to these truths; and that these truths, as well as the methods used in their discovery, are universally valid.¹

In the sixteenth and seventeenth centuries a variety of events occurred that supported these suppositions and led to science being seen as the correct method for accessing this knowledge. One of the most significant was Sir Isaac Newton’s observation that objects repeatedly reacted in the same way when exposed to certain conditions. He concluded that every event had a definite cause and gave rise to a definite effect. This conclusion was extrapolated into two postulates. The first was that all phenomena conformed to a standard blue-print that could be broken down and studied in terms of component parts,

and the results re-integrated to enable a conclusion to be reached. The second was the idea that immutable laws governed the world. Together they led to the idea that once the principles were discovered in their pure form, unencumbered by perceptual interpretations made by humans any part of any system could, in principle, be predicted with absolute certainty if its state at any time was known in all details.

These truths were waiting to be discovered and this could be done by viewing the world in a neutral, objective and value free way through impartial observation, experimentation and logical unidirectional reasoning based on cause and effect. The claim that the natural phenomena conformed to universally valid principles was seen as being equally applicable to biological organisms. In other words, context and human experience came to be seen as irrelevant and values and emotions as impediments to true understanding. Only ‘objective’ facts represented ‘truth’.

As identified by Greaves, the belief in the separability of facts and values, with primacy given to facts, (the only way to ‘truth’ that was objective, rational, and value-free) became one of the principle features of what was termed ‘scientific positivism’. The method for uncovering the facts came to be called ‘the scientific method’. These ideas enabled those that existed before the Enlightenment to be left behind and, with spectacular successes in understanding the material world through advances in astronomy, chemistry, mechanics and physics, led to unparalleled progress in knowledge.

**Scientific understanding**

The scientific conceptual scheme has been extraordinarily successful as a way to understanding the material world. Its framework for determining and ordering knowledge in systematic and comprehensive ways has enabled many diverse phenomena to be linked together and increased human understanding of the physical world. The

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2 Adam Smith for example, in ‘The Theory of Moral Sentiments’ applied this idea to understanding human behaviour. He states: “I imagine myself as a spectator, I may on the one hand fail to overcome my natural partiality for myself as the actual agent, and in this respect ‘the man within’ may become an inferior witness.” Smith believed the imagined impartial spectator could reach a more objective opinion than actual spectators, who were liable to be misled by ignorance or the distortions of perspective. Smith Adam. The theory of moral sentiments. Raphael DD, Macfie AL. Oxford: Clarendon Press; 1976. p. 16. First published in 1759.

scientific method includes the rigorous use of set methods such as detached observation, and deduction from self-evident maxims according to fixed rules and tests of internal consistency. Phenomena are broken down into discrete parts, enabling their properties and their respective behaviours to be identified and regularities observed. When the properties of each part are brought together they are assumed to describe identical, permanent and unalterable wholes that function according to universal laws that exist independently of human perceptual and interactive experience. These laws are expressed in the form of generalisations formulated in mathematical terms that make it possible to determine with a degree of precision and simplicity, at least in principle, how material objects behave and are affected by different circumstances.

Science is based on the idea that reality is a state that exists of itself with, as explained by Winch, scientific intelligibility being set up as the norm for intelligibility by the claims that it possesses the key to reality. One of the central planks for this assertion is the idea of 'objectivity' - the belief that only the practice of impartial and detached observation gives 'true' information, with all other information being tainted by such human sensibilities as emotions. This has resulted in the knowledge accumulated through scientific methods being seen as comprised of 'objective facts' with facts that have not been construed using scientific methods being inaccurate representations of the real world and, as such, subjective or inferior and consequently invalid. The consequence is that only science is considered able to provide 'objective' facts that are considered to provide superior representations of reality and therefore, true knowledge. If an aspect of reality is not able to be investigated using scientific methods it is rendered either at best of minimal significance or completely non-existent. In other words, the rise of the positivistic view of science has occurred at the expense of non-scientific ways of viewing the world.

The successes achieved through science have led to this conceptual scheme being seen as the one true path to neutral, value-free knowledge of reality, and it has been adopted by many disciplines, such as medicine and economics, as their a framework for theorising about and analysing different phenomena.

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**Scientific study of human meaning**

Science makes it possible to investigate any subject-matter about which it is possible to establish generalisations by establishing causal sequences. Therefore, the scientific framework shapes questions about the phenomena under investigation in ways that enable scientific concepts – those of cause and effect, universality, and timelessness – to be applied.

However, as Winch explains because human characteristics result in people existing in a reality that is greater than the reality of the physical world, understanding why people behave as they do cannot always be achieved through observation and experimentation as human reality generates different classes of questions with some not lending themselves to being answered using the law-like principles of science. These are questions specific to human meaning where, as shown in the previous chapter, the relation between intention and reason for an action differs from the relation between a cause and effect prediction. Therefore the concepts of cause and effect, universality and timelessness cannot be applied as, no matter how solidly based, widespread, inescapable, self-evident a conclusion or a direct datum may seem to be in regard to why people behave in certain ways, it is always possible to conceive something that could modify or indeed upset it. As a result, understanding what situations mean for people and how they will behave can only be done through knowing a person well and in being familiar with the type of considerations that they believe are important at any point in time.

When attempts are made to examine matters of human meaning in timeless and universal ways certain difficulties arise which are overcome by creating abstractions whereby people and their behaviour are made intelligible in scientific terms. This is achieved by characterising people as being the same as objects in nature thus enabling behaviour to be understood in terms of universal principles and generalisations in the same way as the behaviour of inanimate objects. As objects in nature people are able to be placed in a reality that exists independently of their experience, with human characteristics conceptualised as limitations which prevent people from having a true appreciation of this external reality. Thus people are characterised as able to influence the nature and outcome of their behaviour far less fundamentally than is usually thought and meaning is
seen as uniform across all circumstances with the ideas of participants discounted as being, more likely than not, misguided and confused.5

These abstractions enable the scientific conceptual scheme to be used to answer all, or at least parts of the questions under consideration. Where behaviour does not conform to universal laws, an approximate generalisation is considered for most practical purposes equivalent to an exact one on the basis of two assumptions. First, it is assumed that, in the same way as the irregularity of the tides between different places on the globe does not mean that there are no regular laws governing them, human behaviour is believed to conform to universal laws even though this is not apparent at an individual level. Second, individual divergences are explained by the operation of laws on highly diversified individual situations. The same law is operating, but the individuality of the situation means that the result observed may vary as all explanations belong to the same logical structure. Although humans react differently to their environment from other creatures, the difference is assumed to be one of complexity.6 As a consequence, it is assumed that understanding behaviour can be done by reducing it to a single set of criteria.

This conceptualisation of human meaning results in the subject matter, the person, being removed from his or her context and internal connections with their way of living, as the central concepts that belong to understanding social life are incompatible with concepts central to the activity of scientific prediction. On this account the 'rationality' of human behaviour comes to it from without; from intellectual functions which operate according to laws of their own and are, in principle, quite independent of the peculiar forms of activity to which they may nevertheless be applied. Events lose their character as social events as they are being evaluated according to arbitrarily imposed external criteria that determine what will be deemed important. Ends are given, with reason being used mainly to determine the appropriate means of achieving them. Mistakes are no longer possible but interpreted on the basis of false or inadequate data, faulty calculation or

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defective theory, and prediction becomes possible.⁷ Meaning and behaviour is able to be defined, hierarchically ranked and aggregated, timeless and universal generalisations are able to be made and all questions are seen as being, in essence, of the same type.

**Science and human health**

As shown in the previous chapter health is a term that gets its meaning from its social context and scientific methods are not equipped to attribute meaning to the term. Therefore, when scientific methods are used to understand health, the term has to be conceptualised as having the same characteristics as inanimate objects whereby it exists as an entity in its own right, its properties are timeless and universal and it can be understood using universal principles, generalisations and causal relationships. Misconstruing the term health as an entity rather than a concept sets it up to be mishandled in several ways.⁸

First, because science requires the concept of health to be characterised as fixed, definable and therefore intelligible using a single set of criteria, the perception is created that the same thing is being examined and understood in the same way regardless of context. This overlooks the different meanings for the term health that are shaped by the diverse foci of different disciplines and which are created for specific purposes. For example, within medicine the term health is shaped by the aim of alleviating pain and suffering caused by illness. Consequently, the relevant criteria relate to the workings of the human body. Within economics it is shaped by the aim of efficiently allocating scarce resources with the relevant criteria being related to exchange transactions. To say that their terms mean the same thing primarily ignores that the need to identify a set of conditions related to the development of a shared meaning which must be satisfied if there are to be any criteria of understanding at all.⁹ As medicine and economics do not share any conditions that set up a framework for the development of shared meanings their resultant concepts do not ‘add up’ to a ‘single set of criteria’ that provides the basis

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for understanding health. Their meanings of the term health are not dependent on, or superior or hierarchical to each other, nor more complex. They are different in kind. To say that their conceptions of health are reducible to one meaning is the same as saying that all games such as football, chess, patience and skipping are part of a super-game and all that is needed is an understanding of how to play the super-game for all games to become intelligible.  

Even so, the overriding scientific conceptual scheme sets up the conditions for assuming that the meaning of their terms is the same, that the knowledge of both schemes is a subset of the same overall scheme of knowledge and understanding and that each conceptual scheme advances the knowledge of the other. These parameters set up conditions for assuming that economic insights lead to a greater understanding of medicine and vice versa, that constructed meanings that are only intelligible to those who have access to the concepts that underpin these creations are intelligible to all, and limits prescriptions for any perceived shortfalls to those that fit within the overall scientific conceptual scheme.

The celebrated definition of health developed by the World Health Organisation (WHO) in 1947 is a case in point. WHO defined health as ‘a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity’.  This definition has been used internationally thereby giving the appearance that it is both universal and timeless. It has also been the subject of on-going criticism. Doctors, for example, criticise it as unworkable and that it extends their mandate into aspects of people’s lives that are not related to the provision of health care. Economists complain that it “conflates health and utility”. The criticisms made by doctors and economists are only intelligible through knowing the constructions and meanings that these disciplines give to the terms ‘health’, ‘conflates’ and ‘utility’ in the first instance. Solutions are framed in terms of improving the definition from the perspective of each discipline, which in turn, leads to further disagreement rather than acknowledging that developing a

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universal, timeless definition in the first instance is an exercise that has inherent conceptual limits.

The logical progression of this discussion is to deny that health is definable in universal and timeless terms that can be applied to all people in all circumstances, and that health can only be viewed through a framework of cause and effect generalisations and hierarchies. These abstractions do not have a place in reality and consequently have the potential to cause harm if they are acted on without regard to the underlying conceptual limits.

The following three chapters examines in greater detail how the foci of medicine and economics and the scientific conceptual scheme together shape medical and economic enquiries and the conceptual limits inherent in these. They also examine possible consequences when these limits are overlooked.
Chapter Three

Science, medicine and the medical model

Introduction

People in western societies live longer and healthier lives than ever before. Spectacular successes in understanding how human bodies function have to a large extent, freed people from fear of illness and untimely death. The commonplace deaths from whooping cough, polio and diphtheria that occurred prior to the Second World War are distant memories, as are the infant mortality rates that at the turn of the twentieth century saw up to 50% of children die before their fifth birthday. Advances in the amelioration of pain and dysfunction relating to the chronic disabilities of ageing are improving the quality of the lives of people living into old age.

The post-war medical contribution to these changes is well recognised although challenged on the basis that increased wealth and improved living standards have played a significant part. Nevertheless, the knowledge that has led to many significant advances is attributed to medicine, which in turn uses science as its method of discovery. This scientific focus has resulted in the development of the medical model which is central to medical understanding of health and illness and how medical practice is conceptualised and dispensed.

The following chapter examines how medicine came to have a scientific focus and the effect science has had on how medicine characterises human health. It shows how the medical model helps shape questions related to caring for people who are sick or
suffering in order to generate knowledge that will help alleviate this, and the effects that result when it is uncritically used as the basis of clinical practice.

Science and medicine

Although medicine sees itself as a scientific discipline this has not always been the case. The reframing of clinical practice as a scientific endeavour had its origins in the ideas that began their development in the Enlightenment. These were based on a central assumption that reality was in essence a rational whole where all things ultimately cohered, that all phenomena were governed by immutable laws and conformed to a standard blue-print that could be broken down into component parts. Understanding the world could only be achieved through one correct universally valid method - science - and scientific facts provided superior knowledge to any adduced in other ways.

Given its dominance in the social milieu, this conceptual scheme set the boundaries for rational medical endeavour and led to the development of the medical model whereby the body was conceptualised as a machine and the scientific conceptual scheme seen as the only proper way to understand it. Together these ideas enabled medicine to ask questions related to pain and suffering in a systematic and orderly way and resulted in spectacular advances in medical knowledge.

The mechanical body

Various events that occurred around the time of the Enlightenment were interpreted according to the dominant conceptual scheme. For example, in 1628 Harvey demonstrated that blood circulated around the body in a predictable way counter to the orthodox belief at the time that blood ebbed and flowed. Post mortem deconstructions of cadavers revealed that the component parts of the human body, such as muscles and tendons, functioned according to mechanical principles in the same way as levers and pulleys.

The mechanical abstraction circumscribed how these events were interpreted and shaped the idea that the body functioned in the same way as a machine and eventually led to the
reframing of people as biological organisms that could be understood in terms of mechanical principles. The body came to be conceptualised as a complex machine with component parts that was comprehensible in the same way as the workings of a clock. The dominant belief that developed was that, consistent with the world view, examination of component parts by systematic scientific investigation would enable understanding of the body as a whole which, in turn, would enable its workings to be predicted with absolute certainty if its detailed state at a particular point in time was known.¹

This conceptual scheme came to be extended to understanding motivation and behaviour which were seen as conforming to identical mechanical blueprints reducible to competent parts explainable and functioning in accordance with universal laws, with normal behaviour being an expression of the person being in equilibrium within him or herself and within the environment and abnormal behaviour being the result of some form of mechanical breakdown.

**Empirical observation and true knowledge**

The application of empirical methods to medicine is historically best represented by the work of Sydenham, a physician who practised in London from 1656 to 1689, who systematically observed patients independent of medical theories that were current at the time in order to find new and untried cures. Adopting the new ideas of cause and effect that were becoming dominant, he assumed that all diseases were natural, discrete entities awaiting discovery and a natural disease classification could be compiled as more and more diseases were correctly categorised.² Using case histories from many patients Sydenham focused on the typical manifestations of disease rather than the patient’s unique experience of illness and was able to inductively derive general accounts of disease. Although this way of looking at illness and suffering was alien to the traditional physicians of the seventeenth century, the retention of the uniform expression of health and illness developed by the Ancient Greeks complemented the ontological view of

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diseases as specific entities and enabled the adoption of detailed empirical observation consistent with scientific methods.\(^3\)

The success of Koch, Pasteur, Semmelweis and Jenner in demonstrating that disease had causes that were external to the patient gave medical substance to Newton's ideas of cause and effect and lent support to scientific methods and facilitated the conceptualisation of medicine as an exact method involving disciplined observation aimed at uncovering a natural order. Science came to be seen as able to discover objective, value-free facts that were morally neutral, were part of single, unified, coherent scheme of knowledge and enabled reality to be more properly understood thus contributing to an upward progression of knowledge that would lead to the gradual elimination of pain and suffering.

**The loss of meaning**

In setting the parameters for rational endeavour, scientific positivism and the reductionist, mechanical model of medicine gradually came to be applied to different aspects of medicine. The rise of the scientific conceptual scheme caused the patient's reality to become conceptually redundant and was gradually replaced by observational methods and medical facts that came to be termed the medical model. Illness was depicted as a mechanical breakdown of the body caused by disease, and disease came to be seen as a discrete entity located in specific parts of the body, able to be understood through observation and amenable to generalisations in the form of laws. Health was understood as the absence of disease, and treatment and elimination of disease seen as restoring the patient to a state of health. By the latter part of the nineteenth century social relations came to be seen as losing relevance and the rational view of medicine as a scientific discipline became truly established.\(^4\)

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Scientific medical knowledge

Conceptualising pain and suffering as the result of physical aberrations of the human blueprint and health as the absence of pain and suffering, enables medical questions to be shaped in ways that enable scientific methods to be used to understand them. Health and illness become discrete entities that can be defined in universal terms (albeit with difficulty), and objectively described through causal relationships. The fact that they can exist in some organs independently of others assumes the quality of duality – they are either present or absent - with the ideal blueprint being representative of normality. This enables a definitive conclusion to be reached regarding whether a state of health exists. The identification of abnormalities enables ‘health needs’ to be recognised which in themselves are seen as existing as discrete entities that can be quantified and ameliorated with specific, universally applicable treatments.

The logical progression of these abstractions is that health is assumed to be understood in value-neutral terms and that it can be predicted, managed and controlled. It becomes possible for the term ‘health’ to be used as a referent within the conceptual framework of the medical model and make it amenable to scientific investigation.

Conceptual limits

Matters of meaning

The conceptual scheme underlying the medical model has successfully enabled the workings of the body to be understood. However, as discussed in the previous chapter, any framework solely shaped by the scientific concepts is not equipped to answer matters of meaning. For example, inherent in the question of whether it is appropriate to provide a therapeutic abortion is the question ‘What precisely makes an embryo human?’ The medical model can only shape questions such as ‘When do embryonic organisms start functioning in their own capacity?’ and ‘When are human features identifiable?’ that relate to the embryo’s physical makeup. Although these observations can provide detailed information on the nature of the embryo in its development, they cannot settle
the question of when the embryo becomes human as this identification finds its roots elsewhere in relation to moral views expressed in the public context which lie outside medical knowledge. Furthermore, other external referents connected with the patient’s individual circumstances shape decisions related to the appropriateness of any particular course of action. For instance, providing a therapeutic abortion where a mother’s health is threatened by continuation of the pregnancy may not be the right course of action where the mother has strong convictions that abortion is a murderous act. Likewise, while providing a blood transfusion for haemorrhaging patients is deemed clinically appropriate by the medical model, providing one to a haemorrhaging Jehovah’s Witness could cause long-term harm to the patient’s well-being.

These situations require choices to be made that are not a matter of brute fact and what is appropriate clinical care cannot be determined simply by referents developed by the medical model as, in being based in minimalist abstractions, it creates simplistic accounts that cannot take into account crucial matters of significance as to what counts as a benefit. Determining what is appropriate clinical care necessitates the inclusion of views that are necessarily related to the public context⁵ and the patient’s reality that cannot be explained in terms of the complexity of either the patient’s physical state or the type of medical care.⁶ In only providing minimalist, unitary accounts of what constitutes appropriate clinical care, the medical model cannot properly address what is considered appropriate care for any particular group at a particular time and thus has inherent conceptual limits.

**Shaping clinical care**

If used uncritically, this conceptual scheme (whereby medicine is regarded as a science, the body as a machine, and health and illness as states that are separate from patient experience), has the potential to set the parameters for what is the appropriate doctor patient relationship and what is proper clinical practice in ways that both undermine the care patients receive and undermine clinical practice itself.

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⁵ Evans D. Values in medicine: What are we really doing to our patients? Inaugural Professorial Lecture Dunedin: Otago University; Feb 13, 1998. p. 32.
In the first instance, in setting up the independent objective observer as having a true understanding of the patient’s state of health, it marginalises patient experience as a non-medical concern with the consensus of medical experts having greater validity than the patient’s own experiences and interpretations. Consequently, clinical care is no longer tied to the patient’s illness, experiences and values, but determined by using empirical value-free criteria. The logical outcome of this approach is that medical scrutiny of body systems is seen to provide a more informed view of the patient’s state of health than what the patient believes their own state of health to be, which in turns shapes medical concerns as being solely limited to the identification of deviations from normality by, for example, screening the body in ever-increasing detail; (for example, screening body systems such as the circulatory system, body parts and organs such as breasts and prostates, cells such as cervical cells and cellular structure such as DNA). Although symptoms may indicate the potential for health to be impaired, this experience is seen as offering only rudimentary clues that might stand in the way of true understanding of the patient’s health status and therefore should not be considered conclusive until diagnostic testing against the normal human blueprint is carried out. Where the definition of abnormality exists in purely statistical terms, the person who happens to have a statistical highly abnormal value on a particular criterion is automatically classed as ill even if they feel perfectly strong and able to function well in social situations.\(^7\)

The conceptual scheme that underpins the medical model creates the possibility for clinical practice to become solely based in minimalist abstractions that produce simplistic accounts of health and healthcare which elevate clinical descriptions and what is objectively measurable to positions of definitive importance. It has the potential to move clinical practice from caring for patients in times of pain and suffering to a series of recognisable, scientifically determined sequential steps aimed at realising health by identifying defined ‘health needs’ and applying prescribed treatments that are objectively described, quantified and classified into health promotion, disease prevention and treatment strategies.

When the pursuit of health as an entity replaces care of the suffering patient, medicine is set on a path of providing care regardless of what this might mean for the patient (other than gaining acquiescence in whatever way is considered ethically appropriate at the time). It creates the potential for crucial matters of significance to be overlooked or ignored leading to both harm being caused to those in receipt of medical care and setting up patients to complain about the care they receive, become critical or sceptical of scientifically based advice, and apportion blame if unwanted outcomes occur. Over time this can lead to medicine's credibility in alleviating pain and suffering being undermined.

Undermining medicine

Although the medical model enables ideas related to alleviating pain and suffering to be examined in systematic ways the conception that sets advancements in medical knowledge as an upward progression to a better life makes it unacceptable to acknowledge that the development of medical knowledge can come from ideas that lie outside this scheme and that their development is often characterised by repeated failures prior to any advancement being realised. For example, significant medical figures such as Vesalius, Harvey and Semmelweis did not follow mainstream ideas of their period or the views of their peers but developed ideas that moved away from what had gone before. Furthermore, failure is intrinsic to the process of examining and either adopting or discarding new ideas, and learning to do new things when new technologies requires new skills to be mastered. However, the medical model sets perfect knowledge and success

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9 For example, consider the condition ‘transposition of the great arteries’ where children are born with the heart’s outflow vessels transposed: the aorta emerges on the right side of the heart instead of the left and the artery to the lungs emerges from the left instead of the right. As a result, blood is pumped back to the body instead of the lungs for oxygenation. Unless this situation is remedied survival is impossible. For years, switching the vessels to their proper positions was not technically feasible. Instead the Senning procedure was performed whereby a passage was created inside the heart to let blood from the lungs cross backward to the right heart. This procedure allowed children to live into adulthood. The weaker right heart, however, could not sustain the body’s entire blood flow as long as the left. Eventually, these patients' hearts failed and they died.
as always being a possibility. Consequently, ideas that are superseded are seen to have been held due to human failings such as 'collective self-deception'. Failures that are part of the process of developing new ideas and techniques are interpreted as deficits in knowledge or the result of self-interest whereby doctors practice in ways that will enhance their reputations without regard for the people who pay for their professional advancement with their lives.

Application of the model also undermines concepts and relationships such as those that serve to ground medical knowledge in the patient's realities and the social context that are central to effective clinical practice. One such concept is that of 'clinical freedom' which enables patient experience to stand alongside the scientific categorisation of illness, disease and medical treatment and enables clinicians to depart from predetermined prescriptions set by the medical model. When the concept of clinical freedom is taken out of the of the social context of clinical care and used within the structures set by the medical model, it becomes a mechanism that enables the uncritical applications of prescriptions of the medical model regardless of the outcomes for those concerned. This sets the concept of clinical freedom up to become something to be condemned.

The medical model obscures the way patient experience is often communicated to doctors by other health professionals. For example, due to the nature of their work nurses tend to spend longer periods of time with patients than doctors. This provides opportunities for shared understandings to develop between nurses and patients as to what the prescribed

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By the 1980s, a series of technological advancements made it possible to do a switch operation safely and it rapidly became the favoured procedure. In 1986, the Great Ormond Street (a hospital in the United Kingdom) surgeons made the changeover. Their annual death rate after a successful switch procedure was less than a quarter than after the Senning, resulting an increase in life expectancy of nearly twenty years. However, the price of learning to do the procedure was appalling. In their first seventy switch operations doctors had a 25% surgical death rate, compared with just 6% with the Senning procedure. With time the death rate reduced to 5%. As well as perfecting the technique, with time and experience, doctors came to have a sense as to which patients would benefit from this procedure and which would not. This case is reproduced from Gawande Atul. Complications A surgeon's notes on an imperfect science. New York: Picador; 2002. p. 27–8.


See: Cochrane AL. Effectiveness and efficiency. London: The Nuffield Provincial Hospitals Trust; 1972. Cochrane makes the critical observation that new medical procedures and services are repeatedly introduced and become widely available without their being assessed and that doctors are consistently resistant to the systematic evaluation of their practice.
course of clinical care means for them. Environments that encourage social interaction between health professionals facilitate the transfer of these meanings to clinicians on the patient’s behalf. However, the medical model predisposes doctors to seeing the contribution of other health professionals to clinical care as limited to the performance of defined tasks with their views being of little importance. Conversely, it also serves to promote the view among these other groups of health care providers that the medical contribution to care is similarly limited. This sets up tensions in the relationships between different professions and has the potential to make them competitive and undermine clinical care.

Overcoming conceptual limits

As well as creating temptations which result in the loss of the patient’s reality from medical discourse, the severing of medical practice from the social milieu in which it occurs, and the undermining of medicine as a profession with expertise in alleviating pain and suffering and its relationships with other health professionals, the conceptual boundaries set by the medical model prevents medicine from addressing its conceptual limits in any meaningful way when unexpected or adverse outcomes eventuate. These same boundaries act to explain failures as being caused by the use of the wrong method, or by not using the method correctly or by inadequacies in the medical model that prevent it from properly addressing matters in question.

Given the scientific conception that perfection and equilibrium is always a possibility, the failure of the medical model to deliver a better life can lead to its rejection, as is the case in Illich’s contention that true answers to a better life lie elsewhere. Illich implies that these can be found in some ideal time in the past when society was perfect and man was in a natural state with health being a natural state derived from and residing in each individual’s autonomous expression of his independence. Alternatively, the faults are seen to lie with clinicians who have not used the model appropriately as suggested by McKeown and Cochrane, who both promote more rigorous empirical scientific

evaluation of medical procedures and medical care as the way to ‘appropriate’ clinical practice. Cochrane also suggests that doctors should be educated out of ‘bad habits’ and into more rational ways of behaving whereby they more rigorously use scientific methods and knowledge.\textsuperscript{15} Wulff suggests shortfalls lie in clinicians choosing medical models that do not have the ‘right’ level of complexity. He develops a hierarchy of models that increase in complexity from simple mechanical models to open systems and advises that the use of a model with the ‘right’ level of complexity will improve clinical practice.\textsuperscript{16} Cassell suggests that the model should be applied with increased rigor and extended into relationships with patients by, for example:

- “de-individualising the patient to make them look like the textbook
- transforming medical information so that doubt is erased by fiat
- redefining the patient’s problem
- shrinking the patient’s problem to a narrow clinical focus
- accepting the present uncertainty and believing that it will resolve itself in time.”\textsuperscript{17}

The limits of the conceptual scheme in which the medical model is based not only prevent the shortfalls that result from the use of its minimalist abstractions from being understood in meaningful ways but also prevent any awareness that, as concepts that give meaning to experience are often incompatible with one another, the possibility of perfect knowledge is based on a fond illusion that cannot be realised. This means that no matter how sophisticated the medical model and medical knowledge may be, medical care will always involve making choices that can have tragic consequences.

Applying medical knowledge

Social relations and shared meanings

Once they start practising, doctors become aware that the medical model does not provide all the necessary answers for successful clinical practice. In spite of its scientific self-image, face to face interactions with patients on a daily basis ground clinical practice in its social context and patient experiences. Even where there is no acknowledgement that the accounts of the medical model do not provide a true representation of patient realities, the very nature of clinical practice means that doctors engage with patients thereby facilitating social relations and the development of shared meanings. For example, although Cassell was quoted previously as advising against engaging in social relations he goes on to say:

*Withdrawal from the patient is rewarded with certainty and punished by sterile inadequate knowledge; movement toward the patient is rewarded with knowledge and punished with uncertainties. The fact remains, however, that to disengage from the patient is to lose the ultimate source of knowledge in medicine.*\(^{18}\)

*...To seek certainty itself is ultimately to abandon the patient; to pretend to oneself a nonexistent certainty is to retreat into magic.*\(^{19}\)

Stimson and Webb describe a typical general practice consultation as follows:

*Either doctor or patient may interrupt the speech of the other, jump from one topic to another, refer back to statements previously made, or formulate the problem in a different way if either feels the other has not reacted as desired. This makes for what would appear to an observer to be the uneven nature of the exchange in the consultation; there is often a great deal of skipping or back-tracking as the problem is being*

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defined, redefined and reformulated and some kind of solution or compromise reached.\textsuperscript{20}

Even so, the temptations embodied in the medical model remain a threat to patient care. Doctors who engage in social relations with their patients enable different meanings and realities to be shared and informed choices to be made. How responsive doctors are to their patients' views depends however, on how tightly they subscribe to the structures set by the conceptual scheme that underpins the medical model and how far they are able to engage with patients in a manner which has clinical significance.

Chapter Four

Science and economics

Introduction

The scientific conceptual scheme has its origins in the seventeenth century when reality came to be understood as a rational whole and science came to be seen as the universally valid method for accessing this knowledge. The success of these ideas in understanding physical phenomena has seen them standing the test of time and being adopted by any discipline wishing to be seriously considered as contributing to intellectual debate, economics notwithstanding. The particular focus of economics is to attempt to scientifically understand how economic order is achieved in terms of the economy existing as an independent entity functioning on the basis of immutable universal laws, fixed axioms and causal relationships with the answers assumed as being part of a single, coherent scheme of knowledge and providing prescriptions that lead to a better world.

Previous chapters have identified that meaning and human experience is not intelligible through science which can only provide partial descriptions of how people behave. In order for science-like methods to be used to understand what motivates people to act in the ways that they do when they participate in economic exchanges, minimalist abstractions must be created that link their motives with observable behaviour. This chapter examines how people are characterised so that economic concepts can be used to understand human behaviour.
Science and economics

The economic historian Mark Blaug identifies the focus of economics as a desire to understand "the mystery of market exchange". He states that economists seek to understand how economic order is somehow the outcome of the exchange transactions between individuals, each seeking to maximise their own gains. Economic theory therefore, is based on understanding how economic order is achieved in a transaction based market.

Blaug summarises the development of economic theory in the following way.

In the first half of the nineteenth century, economics was regarded as an investigation of the nature and causes of the wealth of nations.

...After 1870 economics came to be regarded as the science that analysed human behaviour as a relationship between given ends and scarce means which have alternative uses. ...After two centuries of being concerned with the growth of resources and the rise of wants, economics after 1870 became largely a study of the principles that govern the efficient allocation of resources when both resources and wants are given.

He highlights the principle focus of economists as being the scientific development of economic theory through the verification of predictions by submitting them to evidence.

Economic theories are said to offer formal explanations of the relationships between economic variables, offer a cause-and-effect interpretation for a set of events, or show the effect on one variable when another changes. They are consequently assumed to enable the prediction of future market behaviour, and provide solutions that correct market imperfections where the necessary characteristics required for efficiency are either

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partially or entirely absent. In other words, in being based in the scientific conceptual scheme economic explanations are believed to offer impartial, objective, and rational descriptions of reality that logically make apparent how people should be organised to ensure maximum efficiency. This knowledge then forms the basis of economic policies that set guides for courses of action.⁵

Minimalist abstractions

Economics is interested in finding universal answers to questions of how scarce resources can best be used to satisfy demands.⁶ In other words, economics is interested in understanding what motivates people to act as they do, how their decisions impact the efficient allocation of resources and the conditions under which they will make the most efficient decisions. Given human characteristics and the ways humans attribute meaning, before the science-like methods can be used a reductionist abstraction of people must be selectively created that characterises human behaviour in terms that are amenable to scientific investigation with a particular economic focus.

Objects in nature

The scientific conceptual scheme determines the nature of this characterisation. People are characterised as beings whose behaviour is determined by universal laws in the same way as other material objects enter into causal relationships according to the laws of physics. Human behaviour is no longer understood as the result of autonomous thinking and reasoning based in experience, circumstance and human emotion. It is rather, predicated by the existence of an eternal order brought about by quasi-natural laws whereby every event has a cause from which it unavoidably follows. Behaviour is thus transformed into a series of causal relationships that can be understood in mechanical terms that are amenable to mathematical formulation. The causal relationships between characteristics and properties that exist within and between objects can be hypothesised

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and tested against reality and understanding these relationships is seen as leading to understanding the phenomenon in its totality.

Positivistic analysis becomes the logical tool for understanding meaning and behaviour once people are abstracted a priori as objects in nature whereby their behaviour is subject to timeless, universal laws. The use of this approach is advantageous in several ways. First, the use of a scientific framework makes it possible to construct a logically organised transparent system that is guaranteed in all its parts and therefore true, demonstrable, wholly clear and irrefutable. The parts are measurable, definable and capable of fitting into this transparent system. Conclusions are seen to be rigorous in that they rest on clear observable axioms that enable the application of rules.

Second, this conceptualisation simplifies meaning and enables it to be understood in terms of categories and criteria, and as determined by universal laws. Behaviour moves from something that is motivated by meaning developed from different experiences, contexts, values, emotions, hopes, aspirations and culture (factors that are particular to the individual at any point in time) and public concepts that shape how the world is viewed, to something that is value free, universal and predictable. Ambiguity and obscurity is eliminated and positive analysis is then able to describe the effects of different decisions. This enables certainty to be assumed in the relationship between intention and reason and permits the observed relationships of past events to be used to predict outcomes of current and future ones.

Third, as observations rather than intent are believed to identify the facts about what people believe to be important and some form of expertise is required to ascertain what are considered to be the facts, the external expert becomes a better judge of what motivates people than the people themselves as shown in the following example.

*When someone smokes they (presumably) enjoy the taste and the ending of the craving for an addictive substance. The decision to drive to nearby shops is a decision not to get the health benefits of some exercise. Crossing roads at pedestrian crossings reduces the chance of death or injury, but many people save themselves a few minutes and cross heavy traffic. Driving fast is exciting, saves time and increase*
chances of death or injury. In these senses people constantly make a trade-off between consuming more health and consuming other goods which have utility. We may claim that our health is of paramount importance, but our behaviour does not always support this claim. By observing our choices of health enhancing and health-damaging goods and services we can in principle impute the demand for health.\(^7\)

The way people are characterised leads to the view that people are ‘captured’ in their own situation and so are unable to access objective and value-free facts. In this example observed behaviour is believed to demonstrate that the demand for health is less important than the people being observed might claim. Therefore, giving cognisance to the views of those with direct experience of a situation is seen as distorting the analysis.\(^8\) Consequently, observable facts explain what situations mean to people rather than what people themselves believe.

Finally, these abstractions enable information obtained through economic methods to be seen as objective, neutral, timeless and universal, coherently linked to a single scheme of knowledge and providing a true representation of reality.

**The perfect world: equilibrium**

Within the scientific scheme nature is conceptualised as a cosmos in which there can be no disharmonies with the corollary that objects in nature are continually striving to reach their natural state of equilibrium. Given the economic conceptualisation of behaviour as having the same qualities as the properties of objects in nature, human behaviour is also understood as continually moving toward, or attempting to attain a state of equilibrium. This logical progression culminates in the idea that economic behaviour will result in general equilibrium if it is unencumbered and allowed to follow natural universal laws.


Giving objects in nature an economic focus

Although both the medical and economic investigations are based in the scientific conceptual scheme, where medical concepts shape questions related to understanding the workings of the physical body, economic concepts shape questions related to economic transactions and the benefits gained - utility levels, and result in behaviour being characterised as a series of exchange transactions predicated by universal laws whereby people aim to maximise utility. That is, behaviour is characterised as being motivated by the benefits that are realised with all non-utility levels being excluded. This abstraction shapes the subsequent questions asked by economics.

Universal law of self-interest

The principle law that is believed to drive all economic behaviour is that of self-interest. Self-interest drives people to maximise benefits. The benefits people want - demands - are assumed to be infinite – that is, there is no end to consumption aspirations. This determinism casts people as ‘rational self-interested utility maximisers’. Utility maximisation is the abstraction that holds that individuals choose rationally – that is given a set of options, an individual can rank the options and choose the most preferred among them according to defined notions of consistency. The internal logic of science and economics combine to ensure that, given the right method, a correct answer that would enable utility to be cardinally measured and interpersonally compared can be discovered. Inherent in the concept ‘defined notions of consistency’ is the idea that inferences can be made from empirical observations.

The concepts of determinism and equilibrium create the possibility that with the right incentives people can maximise benefits in ways which will enable them to satisfy their demands given the constraint of limited resources. If the world is ordered correctly, they can theoretically make perfect purchasing decisions whereby they cannot achieve any

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greater benefits. Further, it is theoretically possible that the right goods will be produced and sold at the right time\textsuperscript{12} to meet these demands if the universal law of self-interest is unimpeded. Equilibrium is achieved when an optimal state of efficiency is reached and the amount of total planned spending on new goods and services equals the total output in the economy.\textsuperscript{13} Efficiency occurs when goods and services are produced at the lowest possible cost thereby enabling society to experience the greatest lessening of the scarcity problem – the limited ability of resources to meet insatiable demands.\textsuperscript{14}

This conceptual framework shapes the way imperfect or unexpected behaviour (that is, behaviour that is considered ‘irrational’) is understood. Consistent with the mechanical metaphor, it is seen as the result of system failures or malfunctions that lead to inefficiency. The most common term used to describe this is that of ‘market failure’ where inefficient decisions are made because of inappropriate incentives such as taxation regimes that favour certain types of investment decisions, constraints such as the lack of competition, social behaviour such as discrimination, inadequate information, and general interference by governments in the workings of the market.\textsuperscript{15}

These minimalist abstractions together enable economics to construct theories that will enable behaviour to be understood and predicted. For example, the theories of Pareto are based on the notion that people behave according to determinate laws – that they will maximise their best interest - and the sum of their decisions will gravitate towards equilibrium if the right incentives are in place. In a Pareto efficient world there is no reallocation of resources which could increase the welfare of one consumer without a cost to the welfare of others.

\textsuperscript{14} Economists generally distinguish three concepts of efficiency. ‘Technical efficiency’ is achieved when production is organised to minimise the inputs required to produce a given output. ‘Cost-effectiveness efficiency is achieved when production is organised to minimise the cost of producing a given output. ‘Allocative efficiency is achieved when resources are produced and allocated so as to produce the “optimal” level of each output and to distribute the outputs in line with the value consumers place on them. Hurley J. An overview of the normative economics of the health sector. Chapter 2. In: Culyer AJ, Newhouse JP, editors. Handbook of health economics. Holland: Elsevier; 2000. p. 59–60. (vol 1A).
As human behaviour is not able to be tested using scientific methods in the same way that material properties can be, because science has been set as the only proper method of investigation, quasi-scientific methods have been developed for testing the robustness and merits of economic theories.

**Economic theories and public sector reform**

The scientific scheme sets parameters that shape economic concepts and abstractions that in turn set parameters for what is considered rational behaviour. The following section provides an overview of how the combined scientific and economic concepts shaped the parameters of the economic theories that underpinned public sector structural reforms that began in New Zealand in the mid 1980s and were extended into structural reforms of the health sector and health policy prescriptions. The focus of this section is the parameters for rationality set by this account for society in general given that this determination shapes all subsequent ones. The way that accounts of rationality in health, health care and health care management were shaped are discussed in the following chapter.

The three principle theories, (public choice theory', 'agency theory' and 'transaction cost economics') that underpinned these reforms have their origins in a branch of economics called institutional economics that has as its focus understanding behaviour and decision-making and the factors that influence decisions within institutional frameworks such as systems of government. Institutional economics is said to allow for more complex motivations than traditional economics in the same way as increasing the level of complexity of the medical model is seen to enable the model to answer questions of meaning. Even so, in being scientifically based it is still grounded in the premise that all behaviour is determined by the universal law of self-interest and uses the abstractions of utility, demands, efficiency and equilibrium to analyse the form, function and behaviour of private and public institutions.

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16 Scott G. Public management in New Zealand. Lessons and challenges. Wellington, New Zealand: New Zealand Business Roundtable; 2001. p 27. As Graham Scott was one of the principal architects of the New Zealand state sector reforms his publication has been used to identify his interpretation of the conceptual thrust of institutional economics.
At its most general level, institutional economics postulates that institutions, (be they formal, as for example, in a written constitution or informal, as in conventions or codes of behaviour) are seen as constraints that can enable or constrain the universal law of self-interest and accordingly shape exchange transactions. Within an institutional framework, organisations, (which are groups of individuals joined together in pursuit of common purposes), take shape and evolve over time. As their behaviour is determined by the universal law of self-interest their purpose is to take the opportunities prescribed by the institutional framework and wider environment. This includes feeding back into the institutional framework and, if the world is not organised correctly (such as in the absence of a market economy), influencing the rules so that they constrain the universal law of self-interest to the organisation’s own ends and efficiency is undermined. In other words, “the institutions are the rules and the organisations are the players” and “over time the players can influence the rules.”

The two key analytical ideas used to understand how behaviour is influenced under different institutional forms are first, transaction costs, (where people and organisations seek to minimise these costs in the same way that they seek to minimise other costs of production) and second, that information is costly to acquire. The terms coined for systems of government that are not structured according to market principles is the ‘political economy’, the phenomenon whereby institutions are modified in ways that would not occur in a market economy is ‘capture’ and the problems that ensue is termed ‘government failure’.

**Public Choice Theory**

The central tenet of public choice theory is that all human behaviour is determined by self-interest. While the pursuit of self-interest in the economic marketplace is expected to yield socially desirable outcomes, economic abstractions and logic lead to the conclusion that similar behaviour in a political marketplace (that is, one in which there is government involvement) has damaging consequences. Resources are not used efficiently because the direct link between buyer and seller that exists in the economic marketplace (and which creates a fundamental requisite for efficiency and general

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equilibrium) does not exist. Consequently taxation generated resources are either not used in the way intended, or in the best or most efficient way.

Just as businesses supposedly seek to maximise their profits, politicians and bureaucrats are characterised as seeking to maximise their own benefits. Politicians are seen as pursuing their own particular objectives at the expense of their constituents, interest groups are perceived as engaging in behaviour that disadvantages the wider community, and government officials are believed to engage in attempts to expand their budgets rather than seeking the best outcomes for society as a whole. As a result, the state is seen as growing well beyond what is necessary to guarantee national security, maintain law and order and satisfy voter preferences to where individual liberty is undermined and powerful interest groups capture a disproportionate share of the national income and create institutional rigidities that reduce economic growth.

Given these preconceptions, public choice theory focuses on ways to minimise the role of the state. It advocates the sale of state commercial assets, preventing politicians (through constitutional changes if necessary) from running budget deficits or imposing taxes beyond a certain level, and curbing the functions of government agencies. Similarly, it focuses on ways in which government departments can be prevented from both tendering advice and implementing policy and how they can be encouraged to be efficient by introducing market relationships such as contestability. Curbing the power of politicians and the functions of government agencies is believed to mitigate the lack of incentives for people in a political economy to act in accordance with the public good. Analytical

techniques are used to understand the problems that arise when individual self-interest produces suboptimal outcomes for the collectivity and to identify how people (rational actors) behave given different institutional settings with different incentive structures.\textsuperscript{23}

Public choice theory also seeks to improve decision-making processes in the presence of costly information, risk and uncertainty (which are all seen as critical considerations in designing structures and functions in the public sector),\textsuperscript{24} through techniques such as objectively aggregating and quantifying individual preferences and identifying ways in which these social choices can be represented through voting systems.

\textit{Agency theory}

Like public choice theory, agency theory is based in the characterisation of human behaviour being determined by the universal law of self-interest and that individuals are rational, self-interested, utility maximisers. Agency theory is concerned with specific issues that arise where one party referred to as the principal, enters exchanges with another party, the agent, for services that the principal is unable to produce due to lack of skills or information.\textsuperscript{25} The interests of agents and principals are seen as being in conflict


because each party seeks to attain maximum personal advantage from the interaction with each other. Agents however, have better information about the service they provide and therefore have an advantage in the relationship. Doctors for example, know more about medical care than their patients and are therefore as seen as being in an advantageous position with regards to what services they recommend.

Agency theory is specifically concerned with understanding and ameliorating the impediments to efficient exchange where buyers and sellers are in unequal positions of power. The central focus of agency theory is in determining the optimal form of contracting, which includes the best way of motivating agents (via rewards and sanctions). The aim of agency theory as finding the most satisfactory way of negotiating, specifying, and monitoring contracts so as to minimise the likelihood of violation resulting from opportunism on the part of the agent.

**Transaction-Cost Economics**

Transaction-cost economics (TCE) gets its sense from the notions of universal laws, equilibrium, and determinism. It is closely related to agency theory, but has a different focus. Whereas agency theory examines mechanisms for controlling behaviour between individuals, TCE is concerned with identifying the best environment within which these exchanges can occur.

People (rational agents) are characterised as determinate and acting in accordance with the universal law of self-interest. However, TCE takes this a step further than public

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choice or agency theories do – people are characterised as opportunistic: that is, they are prone to ‘self-interest’ with guile’. In other words, people are characterised as intrinsically bad. Unless the right incentives exist, they will pursue self-interested behaviour such as cheating, lying, deceiving, shirking, promise breaking of provide incomplete or distorted information. Rational agents will also select governance structures that minimise their aggregate production and transaction costs regardless of the consequences to society as a whole.

The capacity of principals and agents to behave opportunistically depends on structural and environmental conditions. If the environment is structured in such a way that individuals can actualise their self-interested behaviour, inefficiency will result. The aim of TCE is to answer questions on the best way to structure the environment to ensure people behave well.

Environmental problems

The environmental conditions that affect efficient economic exchange and lead to inefficient decision-making are identified by TCE as the degree of uncertainty, the existence of information asymmetries, bounded rationality, asset specificity and small-numbers bargaining.

Two types of uncertainty are postulated: general uncertainty (which refers to the absence of perfect information and difficulties in measuring organisational performance) and behavioural uncertainty (which refers to a lack of confidence in the reliability of one of the parties to fulfil the conditions of a contract). The concept of bounded rationality rests on the notion that individuals have neither the capacity to gather all the information and knowledge necessary for optimal decision-making, nor the cognitive ability to process available information. Hence, rather than making optimal choices, bounded rational individuals engage in what is referred to as ‘satisficing’ behaviour based on well

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established routines, patterns, and rules. In accordance with the notion of general equilibrium, people seek predictability and certainty through organised or structured environments, and are highly selective in the range of information upon which they draw in making choices. As the complexity and uncertainty of a situation increases, the greater the limits imposed on individuals by their bounded rationality and the more likely it is that transactions into which they enter will fail.  

Another impediment to efficient decision-making is asset specificity. An asset, such as labour, capital, land, or knowledge, is said to be specific, as opposed to general, if it makes a necessary contribution to the production of a good (such as for example, the contribution of medical knowledge in the provision of medical care) and has much lower value in alternative uses. A supplier with assets of this nature enjoys an advantage over potential competitors, (such as other health professionals) who face barriers to entering the relevant market. They also face a potential loss if there is a collapse in demand for the goods produced. Where asset specificity is absent and firms can enter or exit costlessly, the market is said to be perfectly contestable. On the other hand, where a high degree of asset specificity occurs, the market will be relatively uncontestable, (that is, the costs of entry make it too difficult for other suppliers to enter).

Closely related to asset specificity is the concept of small-number bargaining. This refers to a situation where there are few potential buyers or sellers. Here contractors are able to generate monopoly situations and increase prices or reduce the quality of the service provided if incentives are not in place to encourage them to do otherwise.

Solutions

Given the problems identified by TCE, in the first instance, wherever possible, individuals are better placed to make purchasing decisions for themselves from providers acting in competition with each other rather than having decisions made on their behalf. Therefore, they should directly purchase the services they demand. To mitigate the

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uncertainty, information asymmetry, and bounded rationality, services must be defined and quantified to enable transparent decision-making (that is, open to public scrutiny), and make them amenable to contracting.

TCE proposes that ideally, governments should not be involved in the provision of publicly funded services as direct provision is believed to allow for greater flexibility. Even so, direct provision however, does not guarantee a satisfactory outcome. In situations of high uncertainty, where transaction costs are high and where opportunism is unconstrained and many complex transactions are involved, hierarchical or rule-governed organisations such as public bureaucracies can be efficient. However although opportunism can be reduced, it cannot be eliminated as public bureaucracies are subject to a range of problems including poor co-ordination, ‘organisational slack’, and information distortion that occurs accidentally or deliberately as it flows up and down the hierarchy. Ensuring economies of scope and scale and holding agents to account remains difficult and potentially negate the possible efficiency gains from in-house provision. Therefore, a fundamental premise is that private sector provision is preferable to the public sector and where public provision is not feasible, services should be subject to contestable arrangements whereby it is possible for alternative providers to enter the market. Governance structures that entail high transaction costs and large cognitive demands should be avoided.

Abstractions and reality: dealing with conceptual limits

In conferring the image of objectivity to economics, science enables the economic answers to be seen as comprehensive and providing the facts about the situations being examined. Although internally coherent, in being based in minimalist abstractions problems arise when economic theories and prescriptions are used to understand the significance of events in people’s lives. As in medicine, failures are explained as being caused by the use of the wrong method, by not using the method properly or because the method used is insufficiently developed to properly address matters in question.

This point is explained using the example of the Paretian social welfare function. Although the meaning of the concept 'social welfare' can only be understood through social relations, the economic scheme conceptualises it terms as 'whatever is good, or whatever ought to be maximised' which enables social welfare to be seen as able to be identified in timeless and universal terms. Within this conceptual scheme a social welfare function is considered to imply that a single set of welfare values can be assigned to any specified state of the world. The Paretian social welfare function is based on a vector of individual welfare values (or utilities), and applies the criterion that social welfare improves only if each value changes in a non-negative direction.

The conceptual limits inherent in attempting to define matters of meaning in timeless and universal terms become apparent when attempts are made to apply the Paretian social welfare function to real situations as shown in the following excerpt from an economic text that discusses the qualifications that are made to make the Paretian social welfare theory fit reality.

In the real world of collective decision making it is not easy to find Pareto improvements. ...Strictly applied, the criterion that no one may be worse off means that almost no decision can be made. ...In this strict interpretation, any programme that uses any tax finance cannot constitute a Pareto improvement. ...We need some basis for judging the relative importance of the gains to the gainers and the losses to the losers. One approach is to ask those who gain to compensate those who lose. ...An apparently small step is to argue that even if they do not compensate the losers, if they could do so and still be better off, then there is a potential Pareto improvement, and this justifies a decision. Sadly there is a problem with this argument. ...[The Scitovsky paradox] is a warning that the apparently modest development of the idea of a Pareto improvement to a potential Pareto improvement may undermine the welfare economics basis for the

analysis. ...Most of the time the Scitovsky paradox is treated as a theoretical nicety.

The cost-benefit framework can be justified as the application of the idea of the potential Pareto improvement.

...If the utility of any individual rises (with no fall for anyone else) this increases social welfare in the Pareian sense, but this framework does not allow us to quantify change. ...Social welfare increases with increase in the welfare of individuals, but otherwise the shape of the function is not determined. This has two limitations.

...aggregation presents complex issues which are avoided by the Pareian social welfare function. Suspicion of interpersonal comparisons of utility are[sic] long-standing and characterise the 'new welfare economics' (in comparison with the 'old welfare economics' of Pigou). Many believe that while it is possible to order an individual's utilities, it is not possible to measure them 'cardinally' (against a natural zero) or to compare them between individuals.37

McPake et al go on to conclude 'if this is the case, aggregation is impossible.'38 Even so they state:

The 'revealed preference' approach, proposed by Samuelson (1938), seems to offer a way forward. This approach argues that, in making choices between choices and goods individuals reveal marginal valuations of each. ...[However] it has ignored issues of income distribution and the underlying problem of inter-personal comparison of utility. Proposals to 'weight' the results according to income level cannot be derived from the underlying rationale of 'revealed preference' on which the social welfare function is based. They can

only effectively be arbitrary judgements of how a ‘society’ might want
to re-weight preferences.\textsuperscript{39}

And so on. The parameters set by the economic scheme shape the view that these modifications are part of increasing the complexity of economic models in a step-wise fashion that will eventually lead to correct answers or failing this, the next best thing. Even so, the tensions that exist because of the conceptual limits of this construction still make themselves felt. McPake et al continue:

\ldots Some argue that the attempt to derive the social welfare function from the aggregation of individual welfares is misguided. Social welfare is more than the sum of its parts. A ‘communitarian approach’ claims the existence of an explicit or implicit ‘social contract’ and a community-based notion of the common good (for example see Reich 1995). This notion provides a standard by which to order alternative states of the world.

In contrast a Marxist approach rejects the existence of a unique social welfare function. Stewart (1975), for example, argues that individuals do differ not just in their tastes but in their interests, which are embedded in class. These cannot be reconciled, averaged or substituted: “To select projects in such a way that net benefits are maximised is meaningless until we have defined whose benefits we are talking about.”\textsuperscript{40}

Because applying a theory based on fixed axioms and predicated by timeless and universal laws to matters of meaning carries inherent conceptual limits, the theory has to


References referred to in the excerpt are:
undergo modification to remain comprehensive making it clumsy to apply and unworkable in some instances.

Similar problems arise when the theories of institutional economics are applied to real situations. For example, the characterisation that people are prone to self-interest with guile can only be made on the basis of a determination of what is good and, given the conceptual framework, must be defined in economic terms with science being the only correct way of making this determination. In institutional economics this relates to the function of government. Even though questions related to the purpose of government belong to a class of questions that are different in kind to economic ones the boundaries set by the scheme means that it perseveres with scientific approaches even when it becomes apparent that these limits undermine what it is attempting. For example, McPake et al state:

> In judging the merits of the different possible theoretical bases for economic evaluation it is worth distinguishing between unresolved debates about theory, and proceeding without a theoretical basis. All science is based on clear and explicit theory... ...it is important that economic evaluation is carried out and interpreted within clear and explicit theoretical frameworks, which guide the conduct of research, and assist in its interpretation. ...The fact that the theoretical issues are difficult is not a reason to run away from them. 41

These same parameters set the way shortfalls are explained. The economic historian Blaug states:

> ...welfare theory has fallen victim to ‘a theoretical blight.’ 42

> ...The great difficulty of testing economic theories, whether ancient or modern, is not so much the impossibility of making controlled experiments and thus disproving theories once and for all but rather that, lacking suitable laboratory conditions, economists (and for that

matter all social scientists) cannot agree on definite empirical criteria for falsifying hypotheses about how firms and households actually behave...43

Blaug does not see the problem as inherent in the conceptual limits of the exercise but in lying in the inability to develop the right theory in the first instance and on a lack of agreement on right criteria that should be used to test any theory that is postulated. He goes on to say:

...And so, has there been progress in economic theory? Clearly, the answer is yes; analytical tools have been continually improved and augmented; empirical data have been increasingly marshalled to verify economic hypotheses, metaeconomic biases have repeatedly been exposed and separated from the core of testable propositions which they enmesh; and the workings of the economic system are understood better than ever before.

...But if s/he wants to know why some economists in the past held a labor theory of value while others believed that value is determined by utility, and that this is not only at the same time and in the same country but also in different countries generations apart, s/he is forced to concentrate on the internal logic of theory.....44

The view that economic knowledge is part of a single coherent scheme and a lack of awareness of the conceptual limits inherent in the scientific scheme encourages the perception that by focusing on its own internal constructions, intensifying efforts to improve economic techniques, broadening the scope of enquiry its scope to make it more encompassing,45 by adopting ideas from other disciplines such as the behavioural sciences,46 extending economic analysis beyond exchange transactions,47 making

economic abstractions more descriptive,\textsuperscript{48} and by undertaking increasingly more detailed examination of individual phenomena that, with perseverance, economics will remedy shortfalls and the economic system as a whole will be understood. Economic constraints prevent any awareness of the way people come to give meaning to their world and that this process results in different meanings in different times and different places. In not gaining an appreciation or understanding of matters of meaning it cannot ground its ideas in reality.

**Exclusivity and harm**

By selecting specific human characteristics and assuming that they wholly describe human behaviour, although internally coherent, economic abstractions impose a distorting framework on reality that is unable to accommodate the fact that human values differ, can be incompatible and cannot all be attained in the pursuit of some ultimate end. The concepts of self-interest, utility and exchange transactions cannot address the reality that choosing between incompatible values can involve tragic consequences that must be reconciled against the moral context as expressed in public ideas and the individual's circumstances before a course of action can be determined.

As well as being unable to accommodate differing and incompatible values, the internal logic of the economic scheme actively excludes any externally based insights of its limitations. Entering the economic discourse requires an acceptance of its internal logic and rules to make the scheme itself intelligible. New theories and methods of analysis can only be developed and understood in relation to these rules or they are not intelligible and \textit{ipso facto}, in the same way as people who do not know the rules of a particular game will not understand it or be able to comment on it, not understanding and accepting the rules of the economic scheme precludes entry into the discourse.

\textsuperscript{47} This argument is based on the assumption that health economics is grounded in the medical model and for progress to be made needs to move to a more socioeconomic model of health whereby health economics informs wider social policy that affects health. Edwards Rhiannon Tudor. Paradigms and research programmes: Is it time to move from health care economics to health economics. Health Economics 2001;10:635–49.

\textsuperscript{48} For example, see: McCloskey Donald N. The rhetoric of economics. Great Britain: Wheatsheaf Books; 1986.
When the consequences of conflicting values are overlooked, ignored or dismissed as irrelevant or a hindrance to true understanding, crucial elements of significance are lost and whether decisions are right or wrong is determined in accordance with the logic of the economic scheme. With the loss of shared meanings and significance these determinations cannot hold true in universal and timeless terms and consequently, their uncritical application can potentially cause unintended outcomes or harm to those to whom they are applied with the exclusivity of economic logic providing the ideal conditions for this to happen.

The following chapter examines how the economic scheme shapes how health and health care are conceptualised and understood, the prescriptions for a better life that develop out of this conceptual scheme and the possibility for harm to ensue if they are uncritically applied.
Chapter Five
Economics and health

Introduction

This chapter examines how economic concepts and abstractions shape economic understanding of the term health and the limits inherent in these abstractions.

Minimalist abstractions and the meaning of health

Economics is interested in understanding health because of the relationship between health and the resources used in the provision of health care. In line with the theoretical bases previously outlined, before economic analysis of these relationships can occur the concept of health must be formulated so that it can be addressed using quasi-scientific methods and empirical statements to answer related economic questions.

Health as an object in nature

To make the concept of health amenable to scientific investigation it must be characterised as definable and determinate and standard across time, culture and circumstance. In other words, before health can be understood objectively it must assume the characteristics of an object in nature and have an existence that is external to human sensibilities. This characterisation permits health to be linked to causal relationships that can be expressed in mechanical terms amenable to mathematical
formulation which in turn create the impression that it is able to be quantified in finite terms and its occurrence is able to be predicted. It also creates the perception that health as a state can be better understood by the impartial observer than by direct experience.

Health as an economic concept

As well as needing to be amenable to scientific investigation, the concept of health must also cohere with the economic concepts of self-interest, utility and exchange transactions to have any sense within the economic discourse. Health must therefore have characteristics that permit it to be seen as something that is demanded according to individual preferences and as having the same characteristics as a tradable commodity. The abstraction created to enable health to cohere with these concepts is that health is a demand\(^1\) that is derived from people seeking to maximise their self-interest. The following construction has been created to make the concept of human health cohere with the internal logic and rules of the economic discourse.

People will rationally want to be healthy, as this will help them maximise other wants such as economic gain. A rational person will actively seek to maintain their health, or will act in ways that does not harm it. ‘Good health’ is something that people invest in so that they can maintain or increase their inherited stock of good health to produce an output of healthy time. Therefore, rational people will organise their expenditure on health inputs and consumption whereby the highest possible level of health and other benefits is achieved.

People gain or produce ‘health’ by investing in health care. Investments include utilising health inputs, such as nutritious foods, health care, exercise etc. Utilising more health inputs results in improved health, but successive additions to the quantity of health inputs employed resulted in successively smaller improvements or benefits\(^2\) as impediments such as limited income, prices of health inputs and consumption activities limit the

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opportunities for transforming health inputs into health. All other things being equal however, a rise in the price of health care is said to reduce the amount of health that is consumed, and a fall in price increases this consumption. Increased income is associated with higher demand for health services, and lower income with lower demand.

Given the right conditions, people will maximise benefits in ways which will enable them to satisfy their demands given the constraint of limited resources, with health being one of many preferences in the demand continuum. They engage in behaviour that is detrimental to their health as they do not place an overriding value on their health but make trade-offs between health and other commodities in order to maximise their preferences.

Ill health creates a need for health care, (inputs) which restores a persons' health (or forestalls a worsening of health). Death occurs when health stocks fall below a certain level. The rate of investment in health produces an immediate rise in the stock of health capital to desired levels. Biological factors associated with ageing raise the price of health capital and cause individuals to substitute away from future health until death is 'chosen'. Therefore through investment, individuals can choose the length of their life and are assumed to reject the prospect of longer life because it is too costly to achieve.

This construction makes it possible to assume that demands can be cardinally measured, interpersonally compared and aggregated permitting predictive mathematical models of life cycle behaviour for the demand for 'good health' to be developed.

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8 Hurley provides an overview of the assumption used in normative economics to describe how people behave. This is defined as utility maximisation whereby individuals choose rationally and given a set of options, an individual can rank the options and choose the most preferred among them according to defined notions of consistency. How a person comes to their choice is not relevant. Rather outcome, not process is what is considered important. See Hurley J. An overview of the normative economics of the health sector. Chapter 2. In: Culyer AJ, Newhouse JP, editors. Handbook of health economics. Holland: Elsevier; 2000. p. 56-118. (vol 1A).
Health as a commodity

Once the concept of health is understood as a derived demand it can logically be thought of in the same as any other commodity. In order for the term health care to cohere with the concepts of the economic discourse, definitions of health as a good must cohere with the notions of utility and preferences. Accordingly, it is defined as the ‘benefits derived from enhanced quality and/or length of life’ or ‘health outcome’ with utility levels of outcomes able to be defined, cardinally measured, interpersonally compared and aggregated.

As well as making it possible to understand the term health using economic concepts this construction makes it possible for health to be seen as produced by a mechanical manufacturing process in the same way as other commodities, with the process - health care – able to be specified and the costs of production able to be identified and compared. Like health, interventions are also characterised as fixed definable entities that can be understood in timeless and universal ways and defined and categorised using frameworks such as the International Classification of Disease (ICDs), Diagnostic Related Groups (DRGs), and caseweights.

After it is produced, health care can be bought and sold in the market. Price is determined by the scarcity or availability, and benefit or outcomes – that is, volume and quality as related to achievable health gains. One technique for determining value is cost benefit analysis. This approach requires the assessment of programmes and services by measuring the costs and benefits (life-years gained) in monetary units, calculating the net benefits and ranking the allocative efficiency of those programmes and services on the basis of net benefit.

Advances in medical science are characterised as increasing the efficiency of health production. As medical science progresses, understanding of the health production process increases and enables health to be produced more efficiently in that more health can be produced per unit of health input than previously. Therefore, technical advances are assumed to satisfy demands for health more efficiently.

Together, these abstractions make it possible to link the concepts of health and health care with those of efficiency and equilibrium. Efficiency occurs when health and health care is produced at the lowest possible cost thereby enabling society to experience the greatest lessening of the scarcity problem, and equilibrium is achieved when an optimal state of efficiency is reached given the preferences of the populations and the amount of total planned spending on new goods and services equals the total output in the economy.

**Rationality, and health care**

The constructions created by the combined concepts of science and economics lead to the assumption that health has a causal relationship with economic decisions and it is possible to efficiently maximise the production of health using this means-end relationship. Whether or not it is rational to obtain particular types of health care is no longer grounded in the reality of those affected but determined by economic criteria which set the parameters for the types of health care that it is rational to provide as determined by techniques such as cost-benefit and cost-effectiveness analysis. These techniques require an assessment of health care by measuring the costs and benefits (life-years gained) in monetary units, calculating the net benefits and ranking the allocative efficiency of those programmes and services on the basis of net benefit. This enables determinations of the economic benefits that would be derived given the trade-offs made if the option of treatment were pursued.

When coupled with the idea of measuring gains before health care is provided so that the efficient allocation of resources can be determined, the boundaries of rationality are set

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whereby it is irrational to provide care where the benefits are negligible both in terms of restoring the person to health or improving their quality of life. For example, as a person in a vegetative state or suffering from terminal cancer is unlikely to derive any economic benefits from an enhanced quality and/or length of life, providing medical care to these people would not be considered a rational use of resources. Conversely, economic benefits would be derived from the activity of screening people who are well to ensure they do not get ill. Therefore, investing in such programmes is considered rational.

The advantages of using such criteria are that judgements such as rationing decisions are able to be made without reference to social values or to the people affected by the decisions.

**Rationality and health care delivery**

The theories of institutional economics have sought to understand the means-end relationships between the political economy and the efficiency with which resources are used. The following section discusses the boundaries of rationality in health care created by these theories as documented in the case of the New Zealand health service.\(^\text{14}\)

**The political marketplace: government involvement in the health care market**

In the context of the theoretical bases of institutional economics any government involvement in the funding and provision of health services creates incentives for

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\(^{14}\) The 1991 New Zealand health service reforms were initiated by an evaluation using the abstractions of institutional economics. Graham Scott was one of the principal architects of the State Sector reforms and one of the government’s principal advisors in the health sector reforms, hence the reliance on the publication ‘Scott G. Public management in New Zealand. Lessons and challenges. Wellington, New Zealand; New Zealand Business Roundtable; 2001.’ in this and following chapters for an overview of the conceptual thrusts behind the reforms.

The following documents detail the evaluations that ensued when this conceptual scheme was used to evaluate the health sector:

resources to be used inefficiently. Just as businesses supposedly seek to maximise their profits, politicians spend taxation generated revenue on building hospitals regardless of need so they can be re-elected (maximise their votes). Health professionals seek access to taxation revenue to advance their professional and financial interests, and patients seek to maximise their health through the consumption of health care funded by taxes. The alleged result of this abstraction is that decisions which are taken by the individuals and organisations within a health sector that is organised along the lines of a political economy are often not in the best interest of the public good. Services that favour their interests are likely to be provided rather than those that are needed, and more money will be spent than necessary thus preventing it from being used for activities that are of greater benefit to society.

**Self-interested politicians**

The assumption that politicians give legitimacy to the demands of sectional interest groups rather than make objective decisions in the interest of the public good underpins the view that politicians are likely to allocate generous amounts of tax revenue to health services, particularly in the form of tangible structures such as hospitals, to show their commitment to the community, without regard to whether this is the best way to use these resources. Politicians are seen as also likely to acquiesce to political demands and protect public institutions over other more efficient providers when allocating funds thus minimising or eliminating the possibility of competition.

The limits set by the concepts of uncertainty and information asymmetry result in the judgement that politicians have difficulties in holding public providers such as hospitals and other public health services accountable for the money they spend.

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Self-interested organisations

The economic assumption that an ‘uncontested’ market (a market in which there is no competition) is inherently inefficient shapes the judgement that publicly provided services tend to be centralised, rigid and unresponsive to change.18

The abstraction that sets the presence of multiple functions as facilitating institutional capture results in the judgement that decision-making is inefficient where health services are responsible for both the allocation of public money to health services and the provision of these services. Funding decisions that determine what services are provided are more likely to be made on the basis of community or sectional interest group demands, rather than through the use of objective criteria, and funders who are also providers are more likely to favour themselves, rather than to look for more efficient alternatives, regardless of how inefficient they are.19 In not being subjected to commercial pressures hospitals operating in a political economy do not pursue activities such as contracted provision, acquisitions and mergers20 and economies of scope and scale are lost.

Economic abstractions shape the conclusion that the political economy is an inherently inefficient way of providing health care and that freeing the market from political constraints would result in better economic decisions that would lead to resources being better allocated within society as a whole.

Self-interested health professionals

The abstraction that the market is inherently more efficient than the political economy and that people behave in determined ways under the forces of self-interest creates a framework for judging specialised occupational groups working within the health sector.

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20 A euphemism for closures.
Doctors, for example, are seen as able to capture health care institutions and use their agency power to influence politicians into providing the sector with increasing levels of tax generated revenue (using threats such as ‘patients will die’) so they can pursue their own interests – generally related to the provision of high cost technical care in hospitals, rather than provide the cheapest care available and maximising the amount of care available for patients. Doctors operating under the rubric of ‘clinical freedom’ are seen as having incentives to provide more care or higher cost care than necessary in order to enhance their professional reputations and incomes under third party payment regimes as well as able to provide unnecessary or poor quality care with impunity.

The presence of regulatory schemes are interpreted as evidence of self-interested doctors providing financial and political support to politicians in return for favourable legislation such as regulatory changes that distribute wealth away from the general public and to doctors as a group and which prevent competitors from accessing third party payment systems.

The existence of long, resource intensive medical training programmes as seen as further evidence of self-interest. These programmes are seen as creating barriers to entry through intellectual requirements and long training times (and high associated costs) and as a way of restricting the total number of members in the profession. Together these two mechanisms enable doctors to enjoy asset specificity and small numbers bargaining which permits prices to be inflated above what a competitive market would allow.

These abstractions lead to the conclusion that medical behaviour within a political economy is inherently inefficient and results in sub-optimal outcomes for the collectivity.

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**Self-interested patients**

The abstraction that behaviour is determined and that the absence of market forces in a political economy causes inefficient decisions also creates a framework for judging patient behaviour.

Free health care provision is seen as not 'creating any financial incentives for taking care of one's own health or considering the costs of health services used.'\(^{26}\) It creates incentives for people to engage in unhealthy behaviour because the consequences of their behaviour may not be realised for many years, and when they are, the financial burden is carried by others and outside agencies are seen will protect them or repair the effects of their neglect. Furthermore, in a political economy those who take good care are penalised in that they pay the same for health services (through taxation) as people who take poor care of their health.\(^{27}\)

Where health services are funded by taxation there is no appreciation of their value and they are perceived as being 'free'. This creates incentives for health services to be overused. When hospitals services are free and primary services are partially funded people delay getting treatment until they are sick enough to access 'free' high cost hospital care rather than using lower cost services which command a user-part charge.\(^{28}\)

The assumption that in the absence of pricing mechanisms demand for health is virtually unlimited leads to the conclusion that political economies create expectations that governments can do everything for everyone, and make available all the technological possibilities of modern medicine, like for example, those techniques which are highly successful but only benefit a few people. Consequently, health expenditure funded by the taxpayer increases\(^{29}\) beyond what would occur in a market economy.

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The assumption that market economies provide incentives that result in efficient decisions and the restrictions set by agency theory shape the idea that political economies disadvantage patients in their relationships with health professionals. The lack of pricing mechanisms, informational asymmetry between providers and patients, the uncertainty of when medical services might be required and the lack of alternative providers caused by regulatory constraints limits their ability to manage the opportunistic behaviour of doctors. Where services are free, patients are more likely to accept the doctor’s advice rather than consider the financial costs of the treatment and challenge what the doctors propose if this is considered excessive. Patients are also likely to engage in satisficing behaviour – that is, they trust doctors to do what is best for them on the basis that this option has the fewest transaction costs. The same assumptions lead to the conclusion that patients who bear at least some of the costs are more likely to take an interest in the financial implications of what is being proposed. The assumption that political economies lead to institutional capture sees patients as agreeing to unnecessary or poor quality treatment because they are not able to call doctors to account due to government regulation of accountability mechanisms.

**Overcoming bounded rationality**

The abstraction that health and health care can be defined and quantified in universal and timeless ways and the assumptions that sets agency relationships as limiting the ability of patients to make informed choices when they engage in health related transactions lead to the judgement that the provision of information that both defines services and identifies their quality will assist patients to make rational decisions whereby they choose high quality care at the lowest cost.

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32 Such as expressed in The Accident Rehabilitation, Compensation and Insurance scheme run by the New Zealand Government. This scheme compensates people who suffer injuries for health costs regardless of the cause of the injury. The corollary for the no fault aspect is that the right to sue under common law is not available as a form of redress for injury, apart from provisions whereby injured parties are able to sue for exemplary damages.
Minimising the effects of the political market place

As well as leading to the conclusion that the provision of health care within a political economy has inherent structural flaws that result in the inefficient and inappropriate use of resources, the assumptions embodied in the economic conceptual scheme also shape possible solutions for making the sector efficient. In the first instance, they set the best way of improving efficiency as through the creation of a market economy. In regard to the health sector this is seen as best achieved by eliminating government involvement in the sector through privatisation and leaving health services to be traded in the same way as any other economic good.

The next best option is structuring the sector so that it approximates the economic market as closely as possible. This necessitates minimising the influence of politicians by curbing their ability to allocate resources to the sector, preventing them from influencing decisions taken within the sector, simplifying the functions of health sector organisations so that they are no longer responsible for both funding and providing health services, creating competition, deregulating health care providers and creating a fee system whereby patients have to carry some form of direct financial responsibility for the use of health services.

Benefits

The benefits that are likely to accrue if the precepts of institutional economics are applied to the health sector are predicted to include greater efficiency, flexibility and innovation, shorter waiting times for operations, greater choice of providers for patients, less reliance on hospital services, more information about the costs, prices and quality of different


services, more community control, better planning and decision-making, greater numbers of patients attaining health with the same or with reduced resources.\textsuperscript{36}

Price signals will reduce the amount of health care used, for example, the use of outpatient care. Length of stay and the number of hospital admissions will decrease enabling the closure of expensive hospital beds and a reduction in total health care expenditure.\textsuperscript{37}

The perverse incentives created by the political economy and agency relationships will be mitigated once competition and contractual relationships are introduced. Once services have been objectively defined, quantified, priced and rationed, politicians will not be able to be pressured by communities, patients and interest groups such as doctors into funding unnecessary services and, in taking decisions of what is appropriate patient care out of their hands, doctors will no longer able to provide them.\textsuperscript{38} Instead, they will be held accountable for providing the right services of the right quality and at the right time according to predefined economic parameters through contracts that include economic sanctions for non-compliance.

### Conceptual limits: Economic abstractions and reality

Although useful for addressing economic questions, when it comes to addressing matters of meaning the economic conceptual scheme rests on a false representation of reality and therefore carries inherent conceptual limits that can cause unintended or unexpected economic outcomes and harms that extend beyond financial ones. For example, the conceptual limits in the account that health is able to be increased by engaging in ‘investment activities’ overlooks significant matters of meaning that can affect economic


\textsuperscript{38} The Gibbs taskforce proposed that Diagnostic Related Groups (DRGs) and the International Classification of Disease (ICD) codes as the units for the goods being produced. Hospital and Related Services Taskforce. Hospital and related services taskforce: unshackling the hospitals. Gibbs A, Chair. Wellington, New Zealand: Government Printing Office; 1988. p. 41.

objectives. As health needs are not static and predictable, this account is unable to consider that participating in sports related activities for example, (on the basis that this constitutes an investment in health) is unlikely to increase the person’s stocks in health or reduce subsequent health expenditure. As well as increasing the likelihood that health services will be used either during or after participation (when the cumulative effects of injuries create health needs), it overlooks the possibility that ill health can occur from events that are completely beyond the person’s control as in, for example, an influenza epidemic. It also overlooks the possibility that regardless of the efforts taken to maintain health, illness can still occur. Increased life expectancy also creates new needs related to aging and health needs can be generated by improved technology which enables conditions that were not previously understood as health needs to be alleviated. All these factors are more likely to result in increased expenditure rather than reducing it as implied by economic abstractions.

The uncritical application of economic parameters that set efficiency as being linked to price can create barriers to care that result in the weakest and most vulnerable members of society, such as the poor, children or the elderly, losing access to any form of medical care at times when they need it most.

Economic determinations can undermine the provision of appropriate clinical care. For example, in Germany, hypotension, which refers to the lower end of a statistical distribution of blood pressures that exist in a population, constitutes a health need that requires treatment, while in New Zealand it is associated with good health. In economic terms a German seeking treatment for hypotension in New Zealand is irrational and wasteful regardless of the consequences that could develop from a lack of treatment.

The assumption that sets people as able to make rational and informed decisions prevents any acknowledgement that illness undermines this ability and people who are sick or in pain are often unable to make any decision let alone an informed one.

The simplistic account that results when democracies are conceptualised as political economies results in matters of crucial significance in regard to the efficient and effective delivery of health services being overlooked. Within democracies, the function of political systems is to actualise shared concepts that communities believe are important.
Government involvement in the health sector for example, is an expression of a variety of concepts that include equity, security, caring, and cohesion and so on. Severing health services from political structures and setting up economic concepts as the boundaries for rationality removes these social referents from the provision of health care and can lead to the provision of services that conform to economic prescriptions but are no longer grounded in the values of the society. This can result in services that are unlikely to yield net positive gains in economic terms, such as those that care for those who are chronically sick, the terminally ill and the seriously mentally and physically impaired, becoming financially marginalised and those who rely on them not having any way of expressing their concerns.

Within the economic conceptual scheme events lose their character as social events and are evaluated according to arbitrarily imposed external criteria that determine what is important. Ends are given, with reason being used mainly to determine the appropriate means of achieving them. In not having to refer to social referents that exist in both the health sector and the greater community or to the people affected by the decisions, the consequences of economic prescriptions are obscured and the magnitude of possible harms is unknown. Hard cases are either excluded from the analysis or modifications are made that make them increasingly clumsy to apply. When a sufficient number of modifications occur they become unworkable or these cases are simply regarded as unimportant exceptions.39

Dealing with conceptual limits

As shown above, although internally coherent, in being based in minimalist abstractions that impose conceptual limits problems arise when economic theories and prescriptions are used to understand matters of meaning. Although questions related to health and health care cannot be properly understood using scientifically based economic techniques, the belief that science alone represents the path to understanding and truth

acts to obscure the limits of this endeavour and problems are attributed to failings on the part of people using the conceptual framework or to poorly developed techniques.

**Searching for truth**

The search for economic answers to matters of meaning in regard to health has led to the development of the subspecialty of health economics with a specific focus of developing techniques that enable health and health care to be defined, quantified, ranked according to preference and aggregated. Although the conceptual limits of this undertaking have plagued this branch of economics since its inception, the conceptual framework that underpins it keeps the discipline focused in its attempts and grounded in the abstractions of the economic scheme. This is highlighted in the following excerpt from a health economic text:

> With the exception of the profile in which the individual spends the rest of a [sic] life in their current state of health, whichever approach is adopted a decision is required about the way in which health is to be described.\(^{40}\)

Although the conceptual limits inherent in defining health make the task impossible, this excerpt suggests that the conceptual limits of the exercise have not been recognised. The problem is not seen as lying in attempting to scientifically understand matters of meaning outside the context in which events are experienced but in a failure to decide what health means in a timeless and universal way and this prevents the rest of the analysis from proceeding.

Where the conceptual limits inherent in using scientific methods to understand matters of meaning are more obviously apparent, the fault is seen as lying in the use of the wrong techniques. For example:

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The five generic measures [to describe health] have been shown to be feasible and, to a lesser extent, reliable but there is very little evidence for their validity.\(^{41}\)

...it is difficult to make a choice between the measures at the moment and what is really required are within-respondent comparisons of the methods.\(^{42}\)

In other words, the fault lies in not approaching the task in the proper way.

**Further abstractions**

Because the economic scheme embodies mechanisms that prevent its conceptual limits from being recognised, the impossibility of explaining meaning by referring to universal and timeless axioms is not recognised. Instead the problems are explained as lying in asking theories to explain too much or too little. For example, Dolan advances the idea that the reasons for short-falls lie in theories over-reaching themselves and being asked to explain more than they are able to. Hence his statement in regard to what should be incorporated into measures of health:

> An additional consideration relates to externalities: in the context of this discussion, the extent to which one's person's health status might affect another person's utility. At one level, such information is included in a preference-based HRQoL\(^{43}\) measure since, when expressing their own preferences over different health states, people are allowed to take into account any factors they consider relevant; including the effect that the health states may have on other\(^{44}\) people. However, to the extent that they disregard considerations others may have about their health, then such externalities are ignored. This raises

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\(^{43}\) HRQoL: Health Related Quality of Life

\(^{44}\) The emphasis is Dolan's.
many issues concerning the meaning, role and relevance of altruism in health care decision-making; issues which are beyond the scope of this present chapter.\textsuperscript{45}

Dolan advises that asking a theory to accommodate such ‘externalities’ is asking too much of it. He acknowledges however, that ‘information about an individual’s preferences over different levels of HRQoL is essential if such issues are to be addressed adequately.’\textsuperscript{46} Although this scientifically based economic conceptual framework produces simplistic accounts that overlook crucial matters of significance, the same concepts and abstractions encourages the adoption of further simplifications. Conversely, given that the scientific scheme holds that all explanations belong to the same logical structure, Edwards suggests that economic theories should move beyond the examination of economic transactions related for example, to health care and into an examination of health.\textsuperscript{47} The problem is seen as being related to complexity and able to be resolved by expanding the scope of economic inquiries.

The conceptual framework that underpins economic endeavour keeps economic enquiries grounded in its abstractions and looking for ways to measure health and health care, albeit in either more simple or more complex ways.

\textbf{Perseverance}

Another explanation for the problems experienced as a result of not taking into account the conceptual limits inherent in the economic scheme is that the technical tools of economics are insufficiently developed to reveal the truth and that with perseverance these technical difficulties will eventually be overcome. Note the following comments at

\textsuperscript{47} This argument is based on the assumption that health economics is grounded in the medical model and for progress to be made needs to move to a more socioeconomic model of health whereby health economics informs wider social policy that affects health. Edwards, Rhiannon Tudor. Paradigms and research programmes: is it time to move from health care economics to health economics. Health Economics 2001;10: 635–649.
Very few health care interventions have no effect on HRQoL. So when it comes to allocating resources, it is vital that changes in HRQoL are taken into account. Some readers may have initially been optimistic about our ability to do this, but, in the light of the arguments developed in this chapter, with its emphasis on the theoretical and empirical problems associated with the measurement of health outcomes, many have become increasingly disillusioned with the whole enterprise. This would be unfortunate because facing up to the violations of certain axioms and the many unanswered questions is better than the alternative of disregarding HRQoL altogether. This negative response would also ignore the considerable methodological advances that have been made in the field, particularly in the last twenty years. Moreover, many of the issues (how health is described, who is to value it and so on) are issues that are faced by any measure of health outcome — it is just that they are made more explicit when measuring HRQoL.

It is also important to remember that the violation of certain assumptions (for example, those in the QALY\textsuperscript{48} model) does not mean that the models concerned should necessarily be abandoned (for example, in favour of something like the HYE\textsuperscript{49} approach). Most assumptions can only be satisfied approximately and thus a judgement will ultimately have to be made about the extent to which the loss of realism (e.g. of more general QALY-type models) are compensated for by their greater tractability (e.g. compared to less general HYE-type approaches).\textsuperscript{50}

\textsuperscript{48} Quality Adjusted Life Years
\textsuperscript{49} Health-years Equivalent
Because true knowledge is seen as belonging to the same single scheme these answers all contribute to true understanding. Dolan argues that even though attempts to define and measure health have been unsuccessful the development of the internal logic of economics has made significant strides. Although the conceptual limits inherent in economic abstractions are felt they are not recognised as possibly being inherently related to the conceptual limits of the exercise in the first instance and therefore unable to be accommodated in any meaningful way. Instead, the boundaries of the economic scheme leads to economic techniques being developed and refined in the hope that once the respective behaviours of each part of the economic system are understood the whole will one day become apparent.

Reconstructing questions of human meaning into economic ones and minimising the opportunities for grounding economic ideas in the social milieu in which human behaviour occurs has the potential to result in an even greater reliance on theoretical abstractions that serve to increasingly distance economics from human meaning and reality. This has the potential to result in resource allocation prescriptions that fail to take proper account of the people affected by them, thereby paradoxically causing harm rather than the intended benefits.

The following chapter develops the idea that although different, economics and medicine have the same theoretical conceptual roots and therefore can be uncritically used to answer each others questions without regards to the conceptual limits inherent in each scheme and that when either is used to answer questions for which it was not intended the possibility for harm to ensue is accentuated.
Chapter Six

Coming together – medicine and economics

Introduction

This chapter seeks to draw distinctions between the way the medical model and economics characterise health in order to show that they are conceptually different and therefore different in kind. It demonstrates that given their common conceptual foundation, economic prescriptions find a unity of spirit with the medical model when applied in health care management that sets up a recipe for compounded misunderstandings of the human condition and increases the possibility for harm to ensue.

Same word – different meaning

Earlier chapters have shown that medicine and economics conceptualise health in accordance with the concepts and rules of each discipline. Given the constraints set by the scientific conceptual scheme, the medical model and economics attempt to understand health by conceptualising it as an independent entity functioning on the basis of immutable universal laws, fixed axioms and causal relationships, with the answers generated by each discipline being assumed to exist as part of a single, coherent scheme of knowledge that facilitate prescriptions that will lead to a better world. As both
economics and the medical model are constructed from the same platform, their concepts share similar logical features that give the impression that their terms are both interchangeable and supportive which, in the absence of social relations and shared meanings, creates the temptation to assume that following the prescriptions of one discipline will lead to advancement of the other.

Nevertheless, the terms used by each discipline mean things that are different not just in degree, but in kind because they are being used to answer different questions; those of the medical model are used to answer questions related to providing clinical care to the sick and those of economics are used to answer financial ones. As shown in the previous chapter when economic concepts are used to answer questions regarding human health they must necessarily turn them into economic ones in order to make them coherent and comprehensible with the internal logic of economics. Consequently, although the term health may seem the same, the concepts and internal logic and rules of each discipline shape different meanings. The economic conceptualisation of health as the result of determined decisions is different in kind to the medical conceptualisation of health as an absence of physical dysfunction, which may be different from what patients experiences mean to them and different again to the shared meaning reached between patient and doctor.

**Concepts and obscured meanings**

In sharing quasi-scientific forms both the economic scheme and the medical model are constructed in ways that carry inherent conceptual limits that cause crucial matters of significance in regard to health to be overlooked thereby creating the potential for harm if their prescriptions are uncritically applied. As both schemes are based in similar logical structures they also carry the temptation to assume that they can answer each others questions. However, just as it is not logically possible to understand one game by using the rules of the other, it is not possible to understand clinical practice using economic concepts even where both disciplines appear to be using the same terms. Assuming identical words from different disciplines have the same meaning is like assuming that a particular meaning of the term 'foul' can be used interchangeably between different
games. Likewise, trying to understand the clinical meaning of health using economic concepts is akin to trying to understand the game of basketball using the rules of tennis. Moreover, just as judging one game using the rules of another would lead to confusion and the breakdown of the game being played, using economic concepts to understand medicine would lead to a breakdown in understanding. For example, the economic term ‘benefit’ to determine care of the sick is different to the medical one. Using the economic terms to define medical care could result in those with the greatest needs being denied care thereby undermining the raison d’être of medicine. In not being created to understand clinical matters economic concepts cannot address clinical matters. However, if they are misused in this way they can act to formally remove clinical care from its social roots, and both compound the distortions caused by the medical model and undermine medicine’s role in caring for those who are sick or in pain.

The loss of meaning and harm

When the economic scheme and the medical model coexist they can mitigate each other’s conceptual limits to a certain extent. Although economic parameters set resource allocations that constrain clinical practice (provided appropriate budgetary and productivity controls are in place) clinical decisions can be taken that overlook these if they threaten to inappropriately displace social considerations in the process of clinical decision-making.

Dislocating clinical practice

As discussed previously, the medical model creates the temptation for clinical care to be based in abstractions that result in the patient’s experience being seen as insignificant thereby causing matters of crucial significance to be missed. Doctors who concentrate exclusively on a disease model of medicine will be blinded to matters of crucial significance and consequently cause unintended harm to their patients. It has also been shown that economic concepts specifically require clinical care to be formally dislocated from the social milieu in which it takes place with clinical care being conceptualised as the unmitigated application of economically derived health care interventions. If
economic parameters become dominant over medical ones social considerations play an even lesser role than in the application of the medical model alone in medical decision-making. Within this framework internal features of medical practice, such as clinical freedom, that mitigate some of the abstractions of the medical model become marginalised and appropriate clinical care is set as being solely concerned with the application of scientifically derived health care interventions thereby giving unfettered licence to the abstractions of the medical model over the social nature of medical practice. Applying the right treatment at the right time assumes priority over gaining a proper understanding of what this might mean for the patient. As taking the time to listen, hear and understand what clinical situations mean for patients is considered unnecessary and inefficient, the quick provision of information takes priority over the development of social relations. The skills of highly trained medical practitioners are considered better used in performing technical procedures that can be standardised, ranked, measured and quantified, and eliminate ‘health needs’. Furthermore, clinical care that does take social issues into consideration is considered to constitute evidence of inappropriate care resulting from medical self-interest that is unconstrained by market forces. This reasoning leads to the conclusion that structural reforms are necessary and that medical agency power must be constrained by removing clinical decision-making from the clinical context.

Once clinical care is seen as a technical procedure it is no longer seen as necessary for clinicians to have a holistic knowledge of their patients lives. The corollary is that medical education can be seen as confined to understanding technical knowledge and the development of technical expertise, and as such, able to be acquired with reduced levels of education and training. The logic that ensues is that medical care can be successfully provided as discrete components by health practitioners that have not undergone the extensive medical training that doctors go through. Thus as well as not recognising the patient as a person, the patient as a physical entity is also lost from the medical discourse. Over time, economic determinations can constrain and undermine clinical practice to where advances in care are no longer possible. They will lead to new initiatives being perceived as inappropriate because they are expensive, pre-existing ‘evidence’ of their usefulness does not exist, or they do not conform with the economic criteria of delivering
the greatest good for the greatest number. Furthermore, clinicians who act on new ideas are likely to be blamed for profligacy and practising badly. Creating the expectation that medical care can be perfectly provided is also likely to cause the climate of blame to extend into relationships between patients and doctors and doctors and the wider community with patients. In undermining medicine's standing in the community by setting up impossible expectations patients and communities are encouraged to look outside medicine for medical care and to seek revenge and reparation when perfect results are not achieved.

Caring for the well

The abstractions created by the medical model encourage optimism that illness can be prevented provided the workings of the human body are known in all its parts. As discussed in chapter three unless grounded in reality this abstraction creates the temptation for clinical practice to focus on prevention of illness in the well rather than treating the sick.

Economic abstractions set a criteria whereby it is better to use scarce resources to care for people who will derive the highest level of economic benefit rather than providing care to those who will not. Within this context, treating those who have fewer or less severe needs that can be quickly resolved assumes priority over treating people who have life threatening or chronic conditions. Likewise, investing in hospital care for those who have needs that require hospitalisation is seen a less effective way of using scarce health resources than investing in primary care strategies aimed at people who do not require hospital treatment by preventing illness in the first instance. If the economic scheme becomes dominant in rationing health care, it soon appears to be appropriate to move

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1 See: The Press Christchurch and Radio New Zealand news week of 25 Apr 2005 for reports of a liver specialist being forced to leave a major tertiary centre because economic criteria dictated his specialist work was of lower priority than completing higher volume, lower cost procedures. Also discussed in No simple answer to lack of medical specialists in NZ. Otago Daily Times 2005 Apr 28; p3. Accessed www.odt.co.nz Accessed 5 May 2005.
2 GP and community based health services.
resources away from hospitals, so that they are either reduced in size or closed, and into primary care. In other words, services for the least sick are increased at the expense of those who are the sickest. Doctors become constrained in their ability to look after those with the greatest need and instead must focus on providing care for those to whom the greatest economic benefits will accrue. This is not to say that caring for the sick earlier in their illness so that the episode of ill health does not become severe should not occur. It is to say that economics is not equipped to make adequately sensitive determinations in the allocation of clinical care when rationing decisions are required.

Another consequence is that clinical practice is prevented from progressing as the clinical advances of the future are based in looking after the failures of the present that are generally concomitant with providing care to patients who have the greatest needs. Treating those with little hope of survival, albeit in a considered way, often forms the basis of breakthroughs in clinical care that result in the efficiencies of the future. In other words, the routine evidence-based care of today has its origins in the high-tech speculative care of yesterday. Like-wise, the high-tech care of today could produce advances that lead to future efficiencies.

**Distortions and the loss of reality**

In being a social practice, by definition, the further removed medicine becomes from its own conceptual scheme, patient experience and the social milieu in which it is practiced, the more likely becomes the possibility of providing clinical care that causes unintended harm. Once it is completely severed from its conceptual basis and internal concepts and rules, patient experience and the public context the type and magnitude of the unintended harms are no longer a medical concern. Once this step occurs medicine effectively

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3 This sentiment is reflected throughout these reports. See for example: Hospital and Related Services Taskforce. Hospital and related services taskforce: unshackling the hospitals. Gibbs A, Chair. Wellington, New Zealand: Government Printing Office; 1988. p. 2, 9, 10, 11, 14, 15, 16, 20, 22, 23, 37.
becomes severed from its raison d’être of caring for people who are sick or in pain. In other words, it loses its conscience.

**Monism and truth**

When the abstractions of all the sciences, economics and social sciences exist together on a level playing field, their conceptual limits are mitigated to a certain extent. When one discipline assumes dominance over all others, what is acceptable is set by a particular set of minimalist abstractions that do not provide a proper representation of reality and lead to distortions that not only undermine the benefits that the framework is able to provide but eliminate the insights that other conceptual frameworks can offer.

Given that the potential consequences of letting economic abstractions become dominant in clinical care are so profound, it would be logical to assume that medicine had inbuilt mechanisms to prevent this from occurring. However, it is hampered in its ability to do so by the same underlying conceptual scheme that underpins the medical model – science – which obscures the differences in meaning that exist between different conceptual schemes and denies the significance of the public context. Consequently the dangers of letting economic parameters assume dominance in clinical practice go unrecognised.

Similarly, because science confers the image of objectivity to answers obtained to economic questions, and economics is grounded in the notion that all knowledge belongs to a single scheme and that all correct answers are universal and timeless, the conceptual limits of economic answers are obscured and the temptation is created for their uncritical application to all human activity regardless of context. In addition, because economic answers are believed to be universal and timeless, prescriptions developed in one context are seen as transportable to others.

In being grounded in the notion that universal truths make apparent which ends ought to be pursued in the means-end relationship so a better life can be realised, economic concepts actively encourage the unselfconscious use of economic answers to address questions beyond matters related to exchange transactions to questions of how to live and
what to do in every aspect of life regardless of context. For example, the economist Hirshleifer notes:

*There is only one social science.* 4 What gives economics its imperialist invasive power is that our analytical categories—scarcity, cost, preferences, opportunities, etc.—are truly universal in applicability. ...Thus economics really does constitute the universal grammar of social science. 5

Even though economic insights are based on distorted realities, its abstractions give it the confidence to extend these into examining aspects of human meaning that lie beyond those related to economic transactions, such as examining the meaning of health for example, and in so doing setting the parameters for what is considered rational and thus what can be properly expressed regardless of context and is perhaps most dangerous in the context of health care provision.

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4 Emphasis in the original.
Section I Conclusion

The focus of this section has been on developing the conceptual foundation to test the thesis that unintended or paradoxical outcomes of public policy result when minimalist abstractions are used to understand matters of human meaning. It has explored the minimalist abstractions of both the medical model and economics and identified their limits and possible adverse outcomes should they be assumed to provide a proper representation of reality and uncritically used as the basis of medical practice or health policy. The medical model has the potential to distance medical practice from its social roots and economic abstractions can lead to further distorted representations of the reality of clinical practice and health care delivery. As well as identifying the conceptual limits of schemes based in minimalist abstractions, this section has also identified that when a particular set of abstractions assume dominance over others in any particular discourse the distortions are compounded and undermine the systems they seek to improve.

These ideas are tested in the following section using maternity services as a case study.
Section II

ECONOMICS, REFORM, AND HEALTH SERVICES

When the great French Revolution failed to make men happy and virtuous overnight, some of its adherents claimed either that the new principles had not been properly understood, or had been inefficiently applied, or that not these, but some other principles, were the true key to the solution of the problems;¹

The central theme of this dissertation is that the meaning of human experiences is constructed using concepts that are developed through social relations with others which is overlooked by the monistic doctrine whereby all reality and all the branches or knowledge form a rational harmonious whole, and that there is ultimate unity or harmony between human ends. The previous section examined the ways unintended, adverse and sometimes paradoxical harms can ensue if scientifically based conceptual schemes are uncritically used to understand human affairs.

This section focuses on testing these ideas. It examines the effects of two conceptual schemes: the medical model which had a period of dominance in maternity care in New Zealand from around the 1930s until the mid 1980s, and the economic scheme that underpinned the New Zealand state sector reforms that had their origins in the mid 1980s and included reforms of maternity care. Chapter seven examines the effects of uncritically using the medical model to understand maternity care. Chapters eight and

nine provide an overview of the economic prescriptions that underpinned the state sector reforms and the harms that ensued when they were applied to the health sector with chapter ten detailing their effects in the particular case of maternity services.
Chapter Seven

Medicine and the Maternity Discourse

Introduction

Pregnancy and birth may appear to be in themselves purely physiological processes. However, a narrow definition based purely on physical phenomena does not capture what the experience of pregnancy and birth means as these events are imbued with, and coloured by emotions, memories and associations and by the way people view the world. Thus, pregnancy and birth cannot be the same for humans as for other sentient beings and there is no standard definition for what is a ‘normal’ human pregnancy and birth.¹ The abundance of literature on the topic and the numerous perspectives from which it is approached stand testament to the many meanings that people draw from these events.

This chapter is specifically concerned with understanding the consequences of the uncritical and monistic use of minimalist conceptual schemes in the particular case of maternity services given that ‘normal’ pregnancy and birth are regarded as proxies for health in western societies. It examines how pregnancy and birth are understood using the abstractions of the medical model and identifies that as the minimalist account that falls out of the medical model cannot give a proper account of the meaning of pregnancy and birth for those involved, the provision of clinical care based solely on the medical model’s account has the potential to cause harm and result in the criticism of medical involvement in maternity services. This chapter also identifies that like the medical

¹ For example, in a culture where it is normal for men to kept away from women giving birth, it would be abnormal to have them present and may prove traumatic to the women involved.
mode, other disciplines have produced similarly minimalist accounts of pregnancy and birth based in the preconceptions of the prevailing discipline that also carry the temptation to assume that their accounts are comprehensive, timeless and universal.

**Medicine, pregnancy and birth**

Previous chapters have examined how the medical model forms the basis of western medicine and how it does not give a proper account of health and health care, creates the temptation for clinical practice to become divorced from patient experiences, and has the potential to cause harm. The following section examines the consequences of applying these abstractions to the specific case of pregnancy and birth. It examines how these abstractions shape medical practice and the effect this has on patients receiving maternity care.

**Success and criticism**

The medical model characterises pregnancy and birth as definable, physiological events that are standard regardless of time and context. Within this characterisation a perfect pregnancy and birth is always potentially achievable and is one where untoward events are prevented and, where they do occur, are addressed in ways that do not result in any detrimental outcomes to mother and baby. This abstraction has enabled medicine to structure its enquiries in regard to understanding the physiological processes involved in pregnancy and birth and the causes of untoward events, and to develop ways of mitigating these through medical treatment.

Up until the 1920s, Western countries, including New Zealand, had a high maternal death rate. In recent decades, medical involvement in the care of women experiencing pregnancy and birth has coincided with a dramatic drop in the risk of maternal death and

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2 This chapter does not attempt to provide an account of the way doctors have come to be involved in maternity care as this is beyond the scope of this thesis. The abundant literature on the topic can be found in the citations made in subsequent footnotes.

a steady decline in perinatal mortality that only began to level off in the late 1980s. While general improvements in health, socioeconomic conditions and changes in reproductive behaviour have contributed to this decrease the contribution of medicine has also been immensely important. For example, control of maternal infections has reduced the risks associated with childbirth. Postpartum haemorrhage, once a major cause of maternal death, is now rarely life-threatening because effective methods of prophylaxis and treatment have been developed. Conditions such as haemolytic disease of the foetus and newborn have been virtually eliminated. Women with pre-existing disease who become pregnant and pregnant women who experience illness not related to pregnancy are also able to be cared for in ways that minimise the impact of unrelated disease on the mother and baby. Medical advances in the care of diabetic women has given them a prognosis that is now little different from that of non-diabetic women and better methods of foetal surveillance have allowed more appropriate timing of delivery and a major decrease of antepartum and intrapartum deaths. The latter, which in the 1958 British Perinatal Mortality Survey accounted for 35% of the total perinatal mortality,
now rarely observed. Early prenatal diagnosis now allows the detection of foetal abnormalities in time to give women the option of terminating the pregnancy where this does not occur spontaneously.

Historically, New Zealand women have sought to avail themselves of the advantages afforded by medical care. By the 1930s, the view of the New Zealand Labour Women was that every mother was entitled ‘to the benefit of the latest discoveries in medical science’ and they did not want class distinction to control access to medical services. As hospitals were seen as providing a service that was superior to home deliveries, women wanted these services extended to the public in general rather than being kept exclusively for those that could afford to pay for them. Urban women sought to establish maternity hospitals in rural areas because they perceived this as an urgent necessity in remote places. Women also sought to avail themselves of the advantages afforded by technology such as pain relief and caesarean sections in the belief that they could mitigate some of the risks of delivery to themselves or their babies in some instances. Because it was recognised that providing maternity care in close proximity to other hospital services increased the risk of infection to mothers and babies, maternity hospitals were legally required to be physically separate from hospital facilities and many institutions had policies requiring staff moving between the facilities to adhere to strict infection control protocols. Accordingly, concomitant with the dramatic fall in perinatal mortality the meanings associated with the growth of medical knowledge resulted in a growing increase in the use of sophisticated technology during pregnancy and childbirth, a major shift towards centralisation of obstetrical services, and an exponential rise in the cost of maternity care despite a decrease in the number of births.

The medical model encouraged doctors to work with patients armed with the abstract and universal knowledge of natural order of the human body without incorporating the

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context of personal and individual circumstances. In elevating the significance of the physical phenomena of pregnancy over the patient as a person the significance of clinical care in peoples’ lives was not properly understood and were therefore overlooked with the consequence that in spite of the successes of medicine, the medical approach to pregnancy and birth became contentious. For example:

...although the Social Services Committee of the House of Commons (1980) continued the pattern of its predecessors in recommending medical rather that social change for childbearing women, there was a new emphasis on humanizing[sic] the maternity services. This emphasis on the need to pay attention to the numerous complaints about impersonal care.....  

In contemporary Western society .... birth is a medical crisis, the sum of the interaction between the 'passage, the powers and the passenger'. The woman has no part in this equation. ....In western culture, ...birth is perceived primarily in terms of the activity of the uterus and the acts of attendants, rather than of a woman giving birth. She is the object of care and the essential action can proceed without her cooperation, and even in spite of her.  

Birth is the primary symbol for acts of creation and renewal. The medicalization [sic] of both birth and death in our own society has, according to Levi-Strauss, emptied birth experiences of everything not corresponding to mere physiological processes and rendering them unsuitable to convey other meanings' (Levi-Strauss 1967). This loss of

17 Quotation marks in original.
symbolic significance is evidence of a fragmentation of human experience.\textsuperscript{19}

Active caregiving, which consumers had demanded a few decades previously, was... ...ignorant of the social, psychological, and spiritual needs of patients. There was a call for 'alternative', 'humanised' birth and for caregiving that did not separate birth from the rest of life.\textsuperscript{20}

Childbirth is a natural process (not a disease) which can, and should, be a joyful and enriching experience. ...obstetric practices that may tend to depersonalise women and dehumanise the experience of pregnancy and childbirth, tend to become severely criticized[sic].\textsuperscript{21}

The above comments and Cartwright's study of induction that found wide differences between women's views about induction and what obstetricians believed these views to be\textsuperscript{22} suggest that the narrow focus of the medical model resulted in clinical practice that elevated the importance of the physical aspects of pregnancy and birth over the significance of the event for the people concerned. As doctors failed to recognise what they were really doing to patients, and because the meanings of their interventions was not understood by those in their care, medical involvement in pregnancy and birth came to be increasingly criticised in a plethora of literature. The role of doctors in the provision of maternity services came into question in spite of all the medical advances achieved over the previous forty or so years. New social movements such as consumers and feminist movements\textsuperscript{23} argued that medical definitions of health and illness


represented the childbirth process as a purely physical process of cause and effect with pregnancy and birth being seen as abnormal and treated accordingly. Further, in being predominantly men, doctors were seen as unable to appreciate knowledge central to women’s experiences, environment and consciousness as they affected the childbirth process. The medical model, they believed, resulted in the role of women being downplayed in that they became passive hosts or machines that ‘produced’ babies with the doctor acting as a mechanic. Consequently, women were described as being alienated from the pregnancy and birth process. It was also said that the medical model caused normal births to be frequently managed with standardised protocols that led to the over-treatment of women with unnecessary technical interventions that further enabled the medical profession to control childbirth and were unlikely to add any value to the

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25 The following citations give an overview of the literature that examines the view that male domination of medicine has undermined women.
birthing process. They were not only unlikely to improve safety, but they also carried associated risks that were liable to make a negative contribution to childbirth.28

The absence of social relations

As identified in Section I, what events mean is mediated through social relations and meaning is unable to be understood using merely scientific frameworks. The use of narrow scientifically generated abstractions to define what situations mean has the potential to cause harm. The critics of medical involvement in maternity services used science-like methods to examine the problems that ensued from medical practice based on the abstractions of the medical model. The use of these methods had two effects. First, the conceptual limits of the minimalist abstractions of each investigating discipline meant that, like the medical model, the resultant conclusions did not give a proper account of what pregnancy and birth meant for both mothers and clinicians. Nor did they give a proper account of clinical practice. Instead, they provided minimalist accounts grounded in the predispositions of the investigating disciplines. Second, the absence of social relations between doctors and their patients, with all its attendant consequences, did not feature as a cause of improper medical practice in the censure of medical involvement in pregnancy and birth. In other words, these scientifically based frameworks were unable to give a proper account of the role of both the medical model and medical care in pregnancy and birth and the proper cause of the problems that were being experienced. This is discussed in greater detail below.

It is significant, that much of the ‘evidence’ emanates from countries that have significantly different referral patterns and funding mechanisms to New Zealand, which in turn affects the way medicine is practiced. The evidence does not appear to be analysed and adjusted for these effects when used to endorse changes to maternity services.
Scientific explanations

The involvement of social sciences in understanding questions of meaning in pregnancy and birth had its origins in attempts to understand the causal mechanism of the correlation between death and poverty.\(^{29}\) Initially, social scientists generated the hypotheses and collected data that supported these inquiries.\(^{30}\) However:

*As the death rates at issue fell, social scientists began to conduct research that led them to question the policies for childbirth that had originated solely from the professional beliefs of obstetricians and paediatricians.*\(^{31}\)

The social sciences that contributed to this body of evidence were drawn from a range of disciplines - politics, anthropology, sociology, psychology and history\(^{32}\) - but all came to focus in some way on the unequal experiences of pregnant and childbearing women.\(^{33}\)

The observations used to understand the causal relationships between poverty and death were used to understand the meaning of relationships between the disadvantaged mother and the medical profession.

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\(^{29}\) Armstrong D. The invention of infant mortality. Soc Health Illness 1986;8:3:211–232.


Some of the deductions made in relation to the data on death and poverty fuelled a change of emphasis [of the research] during the 1970s. From the social construction of a disadvantaged, at risk mother (based on evidence gathered from the large scale social surveys) it was not a large step to the recognition that the woman type-cast in this role was not necessarily mistress of her fate, and often needed others to intervene on her behalf.  

The debate moved away from issues that could be properly understood using causal relationships to questions related to understanding the meaning behind the relationships being observed. The ‘not so large’ step that was taken was that lower socio-economic mothers were seen as victims at the hands of those with power. Once this view had been formed subsequent questions were shaped by the need to understand this power imbalance and empowering those perceived as disadvantaged.

In order to address these questions scientifically, pregnancy and birth had to be conceptualised in the same way as other physical phenomena. Like the characterisations developed by the medical model, pregnancy and birth became discrete definable events that were consistent regardless of time or context. However, in contrast to the medical model’s physiological characterisation, the social sciences gave these events characteristics that made them congruent with their own internal concepts and rules. The characterisations of pregnancy and birth underwent for example, a sociological transformation whereby they were events used to describe social relationships. These relationships were further refined by the feminist discourse to describe relationships between men and women. They underwent an anthropological change which saw them as events that described historical and cultural practices. They underwent an economic transformation and became events that involved exchange transactions. These characterisations enabled the perfect pregnancy and birth to be described from the perspective of the prevailing discipline. The perfect birth in feminist terms involved

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35 The social science discourse relating to maternity care is referred to as the ‘maternity discourse’ for the remainder of this chapter.
elevating the position of women to one of equality particularly in regard to the medical profession; the perfect anthropological birth incorporated the expression of observed cultural norms that lay outside those of western societies with their attendant medical focus (which were interpreted by the feminist discourse as evidence of female power); the perfect economic birth involved the free exchange of services between mother and providers of maternity services, with the mother having consumer sovereignty within this exchange. In other words, one minimalist abstraction was exchanged for another according to the preconceptions of whichever discipline was seeking to find answers to its own internal questions.

Although the role of the medical model was acknowledged as causing alienation between doctors and their patients, the conceptual limits of these minimalist abstractions prevented this from being acknowledged or understood. Instead, given the widespread publicity given to the feminist discourse, they led to the conclusion that women were alienated from the process of pregnancy and birth because of the power and influence of medical ‘men’ who dominated the maternity discourse in western countries. Birth, it was argued, was a normal life event that did not require medical intervention and hospitals were institutions that enabled doctors to assume dominance over pregnancy and childbirth to their own ends. Doctors sought to extend their sphere of influence and used whatever means at their disposal to do so. An extreme interpretation was advanced by Arney who presented the relationship between doctors and their patients in the following way:

"...the greatest coup of scientific medicine in the eighteenth century was its finding of a solution to a problem that it had created: the epidemics of puerperal fever. Childbed fever was the scourge of

parturient women and had a much higher incidence in hospitals than in home deliveries."38

He argued that by hospitalising women, doctors created the problems that they then solved which, in turn, enabled them to claim medical success and power over pregnancy and birth.

Another strand of argument was that progress in medical knowledge and the increased use of technology caused improvements in maternal and infant mortality rates and created a widespread view that safe childbirth ‘depended’ on technology. This, in turn, resulted in the ‘normalisation’ of the technology, that is, the use of technology was seen as being integral to a ‘normal’ birth. This enabled medicine to assume the non-technical roles of leadership and decision-making that consequently gave doctors power over the process of pregnancy and birth.39

The conceptual limits of the characterisations adopted by the investigating discipline meant that it was not possible to consider that what was believed to be normal related to meaning which was not fixed but dynamic in that it was a social construction. In a world where scientific advances enabled events that could not have been conceived as being possible in earlier times, it was inevitable that a shared meaning would develop both within the medical profession and between the medical profession and the community as a whole whereby technology was seen as affording improvements over traditional approaches.40 Instead because questions were shaped by the minimalist abstractions of the maternity discourse their answers inevitably led to the conclusion that doctors used technology to advance their own power.

Because of medicine’s scientific self-image and as the conceptual limits of the medical model encouraged clinical practice that did not take a proper account of what was being done to the patient, medical care was criticised for only constituting a limited form of

40 Just as the car came to be seen as a superior means of transport to the horse and cart for example.
science through technical solutions to instrumental problems, and for not being as scientific as it purported to be. The lack of recognition that the practice of medicine was a social one resulted in, for example, the deduction by Mendelsohn et al that the practice of medicine was shaped by habit, financial need, politics and personal stubbornness, and not by rigorous scientific technique. Kitzinger critically deduced that medicine’s scientific self-image was a façade to cover up ‘primitive rituals’. She used the example of sterile garments to make the point that science was a tool used by the medical profession to seize power over those in their care.

It is often taken for granted that medical acts must be scientific. This is not so. The use of sterile garments is a case in point. Those at the bottom of the hierarchy must don protective overshoes, gown, cap and mask. In the context of childbirth, the father is usually considered the least important member of the labour team and may be required to wear the most protective garments, whereas the obstetrician may wander in his own suit, gown undone.

DeVries observed that clinicians argued that techniques were useful simply because they were of recent origin but his conceptual orientation meant that this comment was made without any cognisance that improved care was the result of trying new approaches and then discarding those that did produce the required results. In not recognising medicine as being a social activity, Inch was able to make the critical observation that doctors

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41 This conclusion is discussed by Papps and Olssen as based on Habermas’s classification of knowledge types as elaborated in Habermas J. Knowledge and human interests (trans by Shapiro J. (trans of Erkenntnis und Interesse)), Boston: Bacon Press; 1971.


justified their use of technology by telling each other they needed to meet the demands of their patients, something that Richards concluded caused medicine to act inappropriately stating:

> When obstetricians choose to look and act scientific, [sic] they are responding to the desires of their clients for the best in birth. Convinced by a culture that finds efficacy in technical gadgetry, these clients feel reassured by the technology of obstetrics.

The view that science was the gold standard to which all medical care should subscribe and the lack of awareness that understanding human meaning required some form of social engagement with those being observed meant there was no cognisance that the reasons behind these observations might have their origins outside the preconceptions of the observers. Why people were motivated to behave in certain ways could not be properly understood using scientific abstractions, empirical techniques and causal relationships. Therefore, a principal cause of the disenchantment with medical behaviour - a consequence of using of minimalist abstractions as the basis of clinical practice that failed to take a proper account of what was being done to patients, - went unrecognised. Instead, while acknowledging that technical interventions were necessary for a small proportion of complicated births it was argued that as they were unnecessary in the vast majority of cases they were unimportant exceptions. Medical intervention in pregnancy and birth were ploys used to turn competence of a particular limited area into a monopoly of control and management of an important social institution (childbirth) which due to its technical and individualistic approach was ideological rather than appropriate.

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Intervention rates

The medical model characterises a health need as existing wherever there is a deviation from the perfect physical blueprint, and health care having a causal relationship with need. The logical corollary is that health needs can be quantified using statistical techniques, medical care can be quantitatively correlated with the need present in any human population regardless of context or time, and interventions are seen as mechanical processes that remain static once they are mastered regardless of the circumstances in which they are used. These characterisations help to shape questions related to understanding illness, disease and treatment and the medical model provides a transparent framework for understanding both medical knowledge and its application.

In being scientifically based these characterisations also appear logically coherent with the concepts of any scientifically based discipline and can be lifted out of the medical context and used to answer questions for which they were not intended. Within the maternity discourse the medical model's characterisation of interventions being standard across time and context was used to understand intervention rates with a particular focus on the procedure of caesarean section\(^50\) which was seen as epitomising all the negative aspects of medical involvement in maternity care - it involved a major surgical procedure that completely circumvented the process of a vaginal birth, could only be safely carried out by those with medical training, and required the hospitalisation of the woman involved. Consequently, the caesarean birth was seen as a 'fitting example'\(^51\) of the presence of the:

...mechanical metaphor [that] continues to dominate modern medical practice and underlies the propensity to apply technology and see surgery as the appropriate cure.\(^52\)

The characterisation of need and interventions as standard across time and context meant that it could be safely assumed that caesarean section rates should likewise be standard

\(^{50}\) This discussion does not attempt to debate the medical issues related to caesarean section. Its aim is to present the strands of argument used in the maternity discourse and the conceptual orientation of this thesis.


regardless of where and when they were undertaken. However, when rates of caesarean births were examined they were found to be highly variable as a percentage of births across different countries. They also varied across time.\textsuperscript{53} For example, in 1970 the New Zealand rate was 3.9\%, in 1982 it was 9.8\% and by 1990 the Ministry of Health stated that it stood at 12\%.\textsuperscript{54} Possible causes for the rise in the rate, such as improved safety and techniques, and reduced likelihood of infection, thrombosis and anaemia were examined and discounted as reasons for the rising trend. So were improvements in neonatal care that made it possible to save the lives of premature babies and their mothers should a health risk become evident before the baby was full term.\textsuperscript{55} The finding that regions with a high caesarean rate did not have a correspondingly low perinatal mortality rate led Francome \textit{et al} to conclude that:

\textit{The differences in caesarean rates between countries and regions cannot be explained by the physical characteristics of the women and they therefore raise serious ethical and economic considerations.}\textsuperscript{56}

There was no cognisance that the difference in rates might relate to differences in meaning and that conceptual limits of scientific determinations meant that the extent of defining appropriate caesarean sections was limited to defining the procedure itself, not its rate of application. Once the technology was available how and when it was used depended on the way health care was provided in a particular community and how the appropriateness of the procedure was understood by any particular person or community (be this a professional or geographical community). For example, countries with third world health systems were unlikely to see caesareans as a priority for rural women living in impoverished communities where mortality rates were more likely to be affected by poor water supplies. Together these parameters shaped its appropriateness in the specific circumstances encountered by the clinician in caring for a particular patient. Therefore,

the ‘correct’ level could not be properly understood using scientific methods. Although the dominance of the medical model resulted in the assumption that the caesarean rate related to the person as a physical entity and was definable, universal and timeless, it could only be determined through understanding the meaning attributed to the technology by any given population at any particular time – a function of social relations.

The magic number

The medical model enabled the assumption that not only did a ‘correct’ level exist which was consistent regardless of time and context, but also that the right level of intervention was quantifiable. Accordingly, in 1985 the World Health Organisation, (WHO) (after a conference in Fortaleza, Brazil, held by the European regional office of the WHO, the Pan American Health Organisation and the WHO regional office of the Americas and ‘attended by 50 participants representing midwifery, obstetrics, paediatrics, epidemiology, sociology, psychology, economics, health administration and mothers’57 published the ‘correct’ level of intervention in an article in The Lancet, a prestigious medical publication. It stated:

_Countries with some of the lowest perinatal mortality rates in the world have caesarean section rates of less that 10%. There is no justification for any region to have a higher rate than 10–15%._58

However, the conceptual limits inherent in this statement resulted in widespread controversy to the extent that in 1992 the WHO issued a defence of its assertion in an article in the British Journal of Obstetrics and Gynaecology using ‘scientific facts’ as supporting evidence.59 The article commenced its defence with the statement:

_In August 1985, The Lancet published the WHO recommendations for birth in an article entitled ‘Appropriate technology for birth’. This publication ....resulted in controversy as to their validity. In many, if


not most, parts of Europe as well as other regions this controversy continues.

**Questions such as:** How were the publications arrived at? How representative are their content? Are they biased, ‘liberal’ views? And, most importantly, how well do these recommendations match up to research findings?[^60]

The article went on to describe the many meetings that were held that led to the consensus that the prescribed rate was correct. It went on to state:

*There is no doubt that much deliberation and discussion went into the development of the WHO recommendations for appropriate technology at birth. Nevertheless, some questions persist. How valid are these recommendations? How representative were the participants in the various conferences and research teams? Is it not possible, if not probable, that individuals willing to participate in such meetings and activities would have an interest in ‘changing the system’ and would be biased? Most important, how well do the recommendations match up to research findings?[^61]*

These questions were answered with the following statement:

*The recent publication by Chalmers, et al (1989)[^62] encompassing a careful scrutiny of randomized control trials of perinatal technology allows these questions to be answered. This two volume tome contains many reviews of great value but of particular relevance here are four appendices. These list the forms of perinatal technology that*

1. *reduce the negative outcomes of pregnancy and childbirth;*
2. *are promising but require further evaluation;*

3. have unknown effects and require further evaluation; and
4. should be abandoned in the light of the available evidence.

The WHO recommendations for the appropriate technology for birth are examined in Table 1 in terms of their classification by Chalmers et al (1989). This appendix deals only with the specific birth technology recommendations and does not assess the general recommendations regarding perinatal health care policy and the setting of policy.

The recommendations of the WHO for appropriate technology at birth, developed through survey research, discussion and debate, are strongly endorsed by the findings of carefully controlled and critically evaluated randomized control trials. The recommendations provide sound guidance for those providing perinatal care.

Table 1. WHO recommendations for birth classified according to Chalmers et al (1989)...

...There is no justification to have a caesarean section rate of higher that 10-15%. Vaginal deliveries after a caesarean section should be encouraged.63

The article supported the WHO's definitive view by stating that it had been arrived at by consensus and expert opinion based in scientific fact. However, a comparison between the categorical statement in the above article and the publication used to defend it reveals a more measured picture. Chalmers et al64 state in the introduction to the quoted appendices:

We hope that the four Appendices that follow, used in conjunction with the chapters on which they have been based, will assist in the process of informed choice.

Appendix 1 lists forms of care that, in our opinion, have been shown to reduce negative outcomes of pregnancy and childbirth. We do not pretend that it is comprehensive because there are many aspects of care (transfusions for haemorrhagic shock, for example) that are so obviously worthwhile that their inclusion would have appeared trite. Our decision to include forms of care in Appendix 1 was usually made because the estimates of their beneficial effects derived from controlled trials were statistically significant. Other evidence was used when we considered it sufficiently strong.

The inclusion of a particular form of care in Appendix 1 does not necessarily imply that it should be adopted in practice. Whether the forms of care included in this Appendix are adopted will depend on assessments of the importance of the likely costs. For a variety of reasons, as noted above, perceptions of this relationship between benefits and costs will vary from individual to individual, and from situation to situation.65

The 'correct' intervention rate as stated by the WHO does not appear in Appendix 1. Although there were numerous references to a reduced need for caesarean section if other technological interventions were used (for example, oestrogens for cervical ripening and prostaglandins for induction etc.), the only reference to caesarean sections as an intervention was the excerpt:

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Excerpt from Appendix 1: Forms of care that reduce negative outcomes of pregnancy and childbirth.\(^\text{67}\)

There was no mention of the ‘correct’ caesarean section rate in any of the subsequent appendices. As Chalmers et al refer the reader to chapter 70, this was then examined. It discusses the risks of subsequent labours after previous caesarean section and states:

*No randomized or systematically controlled trials have been carried out to compare the results of elective caesarean section vs. trial of labour for women who have had previous caesarean section. In the absence of such trials, the best available data on the relative safety on trial of labour comes from the prospective cohort comparative studies that have been reported.*\(^\text{68}\)

The recommendations of the panel of the Canadian Consensus Conference on Aspects of Caesarean Birth (Panel 1986) are in accord with the available evidence. They state that a trial of labour after a previous caesarean section should be recommended for women who meet all the following criteria: one low transverse incision caesarean section, a singleton vertex presentation, and no absolute indication for caesarean section (such as placenta praevia) in the presence of pregnancy.

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Hospitals providing obstetric care should ensure the availability of blood, operating rooms, neonatal resuscitation, and nursing, anaesthetic and surgical personnel so that a caesarean section can be started within approximately 30 minutes for any women in trial of labour.

‘Adequate information should be provided so that a woman can make an informed decision on the choice between repeat elective caesarean section and trial of labour. Every effort should be made to accommodate this decision. Physicians working in hospitals that are unable to fulfil the woman’s wishes should so inform the patient and advise her of the nearest facility that can.’

There is no mention of the correct intervention rate for caesarean sections per se. In other words, the medical literature quoted as supporting the WHO statement in regard to the ‘correct’ intervention rate for caesarean section does not appear to support this contention. This literature does however support the idea that medicine is a social practice and that the ‘correctness’ or otherwise of an intervention can only be determined by taking a proper account of what the situation means for the patient, something that lies outside the scientific aspects of medicine and in the understand that the doctor develops social engagement with the patient.

Given the dominance of the medical model’s characterisation of medical interventions as having a causal relationship with need, attempts to define the correct intervention rate continued. In 1993, Francome et al determined on the basis of inter-country comparisons that the ‘ideal’ caesarean section rate lay somewhere between 5.0 and 8.4%.

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70 Unless the number is buried in some other part of these two extensive volumes. Even so, finding it would require extensive reading.
Conceptual limits

Because the conceptual limits behind the abstraction that ‘correct’ intervention rates were not understood, there was as a lack of awareness that contextual differences might have a bearing on the data definitions and that there might be differences in the way data was collected and reported, thereby giving rise to rates that appeared the same but may have been expressing something that was different. The abstractions that led to the idea that it was possible to define intervention rates also prevented there being any cognisance that the trends in different countries might have related to underlying contextual differences.

For example: in 1982 New Zealand, with a population of around three million people, had a caesarean section rate of 9.8% compared to 18.5% in the United States of America (USA). From 1988 to 1998, New Zealand caesarean section rates rose from 11.7% of births to 18.2% and increase of approximately 55%. By 2002 this had risen to 22.7% of all births, a 90% increase in fourteen years. This statistic refers to an average percentage across New Zealand. Some districts had a rate of 11.9% and some 23.9%. The highest levels of intervention were in the large tertiary centres that had a relatively uniform rate ranging from 22-25%. In contrast, from 1983–90 the USA, with a population of over 200 million people, had a relatively stable rate of caesarean section of around 23%. It had a 17.6% caesarean section rate in 1997.

A comparison of the USA and New Zealand workforces when each country had a similar intervention rate of around 20% shows, that in 1984, the USA had an estimated 2300 formally trained nurse midwives and an unknown number of lay midwives with less

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72 For example, higher rates might have been reported when reported rates affected revenue.


formal training that had been generally obtained through apprenticeship and self-
education.\textsuperscript{77} The differences in conceptual schemes that underpinned the practice of lay
midwifery, given that training was not formally regulated, were unknown. While
speculative, given this workforce spread and variability in education, it was highly likely
that the quality of midwifery care was variable and that specialist doctors whose expertise
was in applying technical interventions dominated the maternity sector. Further, there
may have been variable levels of primary medical assessment or primary medical
interventions leading to late referrals of mothers (who presented with either higher risks
or arrived exhausted from having been in prolonged labour) necessitating caesarean
intervention. To deny patients caesareans within this context could have resulted in
increases in maternal and neonatal mortality and morbidity. The drop in USA caesarean
rates appears to coincide with the rise in what was termed the ‘autonomous midwife’ –
that is, nurse midwives who had undergone a training programmes that conferred
professional status – who were recognised as part of the clinical team and able to bring
some medical knowledge into primary maternity care.

The rise in New Zealand caesarean rates coincided with an increase in the numbers of
midwives providing care outside the context of a clinical team that included primary
medical care and a reduction in the numbers of doctors providing primary maternity
services. For the year to 31 March 2003, the Nursing Council issued annual practising
certificates to 4,914 midwives. Of these, 564 held single registrations as midwives only
and 4,350 held dual registrations as midwives and nurses.\textsuperscript{78} While speculative, the rise in
caesareans may have been precipitated by reduced medical care early in the pregnancy
with consequent late referrals to specialists whose training encouraged intervention.

This observation is supported by those of Francome and Savage. Their observations led
them to conclude that maternity care became fragmented in a system dominated by
midwives and obstetricians and that women who received primary medical care,

\begin{flushleft}
\textsuperscript{78} Nursing Council of New Zealand. Report of the Nursing Council of New Zealand for the year ended 31
\end{flushleft}
supported by community midwives who were in constant contact with the women, received a high level of continuity of care which helped reduce anxiety and intervention rates. Their hypothesis that the underlying reason for the increase in caesarean section was anxiety and their recommendation that GPs should be positively encouraged into maternity care appears to support the idea that the provision of effective and efficient maternity care requires both medical knowledge and ongoing social engagement – aspects of care brought together through the professional skills of doctors and midwives. The corollary of these observations is that intervention rates are more likely to be affected by the composition of the entire health workforce, and the types of interrelationships that exist between the various health professionals than by just the presence of doctors.

The view that it is possible to define appropriate intervention rates in universal and timeless ways precludes awareness that what is ‘appropriate’ is dependent on the context in which care was provided and therefore creates the temptation for context to be overlooked as a matter of significance.

**Using the number**

As the conceptual limits inherent in making a numerical determination of the ‘correct’ intervention rates were not recognised, the WHO statement was accepted as fact by those predisposed to believe the abstraction on which it was based. For example, the feminist discourse used the judgement to support the idea that medical men used interventions unnecessarily to assert their sphere of influence. This led to medical statements such as those quoted below being taken out of the context in which they were made and interpreted in ways that supported this logic.

_Credit should be given to earlier colleagues who advocated the increased rate (from 3 to 8 percent 10 years ago to 15 to 23 percent_

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today) and fostered a change of attitude: formally focus was on the mother and delivery, now it is centred on fetal [sic] outcome.\textsuperscript{82}

The long-held concept of vaginal delivery is rapidly giving way. The new growing principle seems to be vaginal delivery only of selected patients.\textsuperscript{83}

It may well be that the next fifty years the allowing of a vaginal delivery or attempted vaginal delivery may need to be justified in each particular instance. Perhaps it is not altogether too provocative to suggest that vaginal delivery may yet become the exception rather than the rule.\textsuperscript{84}

Given that the true rate of intervention had been determined, rates that were above this level were open to ‘objective’ criticism grounded in the concepts of the maternity discourse. The above statements were taken as empirical evidence that the rising trend in caesarean sections was the result of extending the medical model whereby the mother/foetus relation was seen as a ‘conflicting dyad’ rather than as an ‘integral unit’,\textsuperscript{85} that led to doctors to see birth as problematic and ‘intrinsically traumatic’. Therefore, they attempted to normalise interventions\textsuperscript{86} because they believed that they would both produce ‘better quality babies’.\textsuperscript{87} It was argued that the development, control and normalisation of a highly sophisticated technology were major factors that enabled the medical profession to control childbirth.\textsuperscript{88}

The statements quoted above were made in the context of the type of care provided by a specific medical group – obstetricians – who provided care to a select group of patients. The belief that pregnancy and birth were ‘normal’ events and that the term ‘normal’ was grounded in objective and universal criteria, meant there was no cognisance of the relationship between the context of clinical care and the type of clinical care provided. In the 1970s, as technology and skills advanced, and as ‘education programmes did little to alter the ingrained habits’ of clinicians (in that they only resulted in minor technical changes in practice of specialists), increasing the effectiveness of obstetric specialist care meant that interventions such as caesarean sections needed to be normalised among obstetricians so that patients were not denied the advantages they offered. Instead the preconceptions of the maternity discourse saw this normalisation as evidence of medical men asserting their power in their domination of women.

This logic was extended to all medical involvement in pregnancy and birth. The evidence that the best practice of specialist obstetricians had been ‘consistently shown to involve higher rates of every sort of intervention than any other group of maternity care provider’ and that birth in small maternity units staffed by general practitioners and midwives was likely to be safer because of a decreased likelihood of technological intervention was used to support the conclusion that:

*...the vast increase in their [technical benefits] use in the post-war era has been unnecessary and, as a matter of routine application, their use can be detrimental.*

This minimalist account overlooked the significance of general practitioners in maternity care and that lower rates in small maternity units such as those that existed in rural communities were the result of patients being assessed by GPs ‘in advance’ and those

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with the highest level of risk were referred to clinicians with specialised skills. This 'medical' screening meant that these units served a population that had the lowest level of risk and conversely obstetric specialists generally provided care to a select 'at risk' group that was more likely to require intervention.

By ignoring the context within which care was provided, conclusions were able to be drawn that did not give a proper account of medical care, and instead supported the preconceptions held by the observers. The link between the use of knowledge generated using the conceptual framework of the medical model and the high number of normal births went unrecognised. The lower rates of interventions were not recognised as possibly being the result of primary medical involvement in maternity care. Within this conceptual framework, medical involvement in pregnancy and birth was the result of the technological imperative within reproductive medicine which was intrinsic to the defence of doctors' claims to professionalism. The retention of absolute control over technical procedures was seen as "clearly absolutely necessary for the survival of modern technical power".

Self-interest

The consequence of using the preconceptions of the maternity discourse to judge medical care was that the behaviour of doctors was understood in terms of their being motivated by wanting to both attain and retain power. That they did this at the expense of their patients had already been established within this discourse. The analysis was then extended to other women involved in maternity services – that is, midwives. It was concluded that medical men had taken over the provision of maternity services by subjugating the role of the midwife by whatever means possible. For example:


Medicine had to have a theory of childbirth that declared it unsafe, contrary to the general view of birth held by midwives.\(^9^5\)

[Doctors]...substituted women's customs for new medical rites masquerading as scientific practices founded on 'objective' knowledge. ... The medical practitioners who colonised childbirth in the eighteenth century characterised themselves as bringing rational knowledge to an area dominated by ignorance and tradition.\(^9^6\)

Between about 1750 and 1875 men-midwives and medical doctors (surgeon-accoucheurs, physicians) managed to erode the public confidence in the midwife's abilities. By 1800... ...medical doctors gradually extended their control from coping with 'difficult births' to managing pregnancy generally as part of an enlarged role in the normal care of the patient.\(^9^7\)

Doctors controlled the regulation of midwifery\(^9^8\) and midwives working under their jurisdiction became “uncaring and brutal” and “token torturers of women on physician’s behalf”.\(^9^9\) This conceptual scheme led to the conclusion that doctors promoted their own status, power and financial position at the expense of midwives.

Likewise, it also resulted in mothers being portrayed as being manipulated by a medical profession that inaccurately used information to encourage the use of medical services even though this carried increased risks. For example, Mein Smith interprets the behaviour of women in relation to reductions in infant mortality that occurred early last century as follows:


Blame should not attach to ‘bad’ practices because mothers faced external constraints. What mothers did then, depended on their health, economic and social circumstances, which largely decided the result. Much of the credit for improved infant survival and health that resulted from the changes in behaviour earlier this century should go to the principle careers of babies, their mothers. This behavioural change was related to general education rather than the singular influence of mothercraft. Mothers deserve more credit.\textsuperscript{100}

She also writes in the same publication:

The ‘real’ percentages of doctor-assisted births would have been higher because educated and middle-class women generally preferred to pay for the services of a doctor, even though this conveyed more risks. Encouraged to believe that science could better nature, they [mothers] believed that attendance by a doctor was the more humanitarian approach that would ensure birth was a safe and a joyous experience. In particular, mothers were lured into hospital by the prospect of anaesthesia.\textsuperscript{101}

The first statement implies mothers were able to use their knowledge to reduce the infant mortality rate when the context they were in enabled them to do so. The second implies that although mothers knew the risks involved in using medical services, they did not use this knowledge to benefit themselves or their babies. Instead, they were unduly influenced by the views of doctors who put their own interests ahead of those of their patients. The conceptual orientation of the maternity discourse resulted in mothers being seen as the victims of medical self-interest. Similarly, Loudon, in an historical evaluation of neonatal death rates concludes that the rising mortality rate from birth injuries was the “price paid by infants for... the orgy of interference”.\textsuperscript{102} In other words, the conceptual

orientation of this discourse resulted in neonatal mortality rates being interpreted as the price paid for unfettered medical self-interest.

**Loss of confidence**

As a result of these criticisms, the advances in medical knowledge and maternity care that occurred between the 1920s and 1940s came to be called the 'the medicalisation of childbirth' and the involvement of doctors in pregnancy and birth was seen as the result of a shift in the balance of power\textsuperscript{103} that enabled doctors to assert their own interests which, in turn, enabled them to further develop and retain dominant positions of power.\textsuperscript{104} In New Zealand, the critics alleged that by assuming exclusive rights to the provision of maternity care doctors were able to use a model of care that was both inappropriate and enabled them to pursue their own professional interests rather than those of their patients.\textsuperscript{105} This led to the conclusion summarised below by Papps and Olsen that the medical contribution to pregnancy and birth was negligible and did not warrant the current level of involvement.

*There has been a tendency as well [for medicine] to colonise the achievements produced in relation to a relatively few major 'inventions' brought to prominence through the works of relatively few scientists – people such as Ignaz Semmelweis, Edward Jenner, Louis Pasteur, Robert Koch, etc. whose works undoubtedly produced a great deal of knowledge about the causes and models of transmission of infection, but can hardly be used to confer 'property rights' to a professionally organised, largely male, interest group involved in the*


business of 'delivering children in some far-off antipodean outpost 150 years later.'

The implications drawn were that not only was it not appropriate for doctors to be involved in maternity care but that if doctors were not involved midwives would resume their proper position as providers of maternity care, normal processes could run their course, interventions would fall, mothers would be happier, and un-traumatised, normal, contented babies would be born who would go on to lead healthy and fulfilled lives.

In using scientifically based frameworks to understand medical practice the social nature of medicine could not be properly understood and although the research that underpinned the maternity discourse was criticised on the basis of a lack of scientific rigor its conceptual limits did not come under scrutiny. The ideas themselves received a high profile and were very influential. Issues of concern were related to medical involvement in maternity services per se with the consequence that medicine became marginalised in the provision of maternity care without any recognition that the conclusions drawn from research in any particular country were based on the context in which the research occurred. Thus, as a result of its exclusive use of minimalist abstractions to understand pregnancy and birth, despite the advances in medical care and the enthusiasm with which they were adopted by women, by the 1970s western medicine...
experienced a stunning loss of confidence in regard to its involvement in maternity care.\textsuperscript{110}

\textbf{Monism and truth}

As scientific conceptual schemes were believed to provide knowledge that was part of a single, coherent scheme, knowledge claims could only be seen in dualistic terms – they were either right or wrong. Accordingly, if medical answers to questions regarding pregnancy and birth were wrong, the right answers lay elsewhere such as for example, in the practices of non-western societies that did not use doctors in the provision of maternity services,\textsuperscript{111} or in historical traditions such as the use of autonomous midwives in pregnancy and birth.\textsuperscript{112}

\textbf{The new truth: the rise of the midwife}

The conceptual limits inherent in the abstractions being used to understand the relationship of midwifery to medicine resulted in minimalist accounts of both medical and midwifery care that missed matters of crucial significance.

As well as being grounded in social relations, midwives practicing in first world countries were taught the same medical ‘facts’ as doctors albeit not to the same extent. This knowledge enabled midwives to understand the reasons for and consequences of some of the practices they adopted, such as administering drugs, and identify when pregnancy and birth were not progressing according to the physiological parameters for normality. This enabled them to provide not only appropriate care during a normal pregnancy and birth but also provided a framework whereby they could appropriately refer mothers so that


they received medical care. Eminent midwives such as Margaret Myles recognised that medical care was a necessary component of maternity care and midwifery skills and medical ones were complementary.

*It would now be considered a retrograde step for a midwife to take sole charge of an expectant mother, thereby depriving her of the scientific expert care only the obstetric team can provide.*¹¹³

Doctors likewise recognised the importance of social relations, albeit not in formal terms. Keirse states:

*High risk and complicated pregnancies require specialized and technical care, which to be effective required a high level of expertise in, and experience with the particular pathology. Neither of these qualities can be acquired by osmosis. They represent a major investment of time and effort over a long period of time. A complicated pregnancy will also constitute a time of worry and distress for the pregnant woman and her family. They are confronted not only by the pathology and its possible consequences for mother and baby, but also with an unfamiliar environment and a variety of unfamiliar interventions and their possible consequences. To the caregiver, all of these may be routine. This is rarely the case for the woman and her family. Care that concentrates on the physical aspects, and neglects the pregnant woman as a person, can only be described as inadequate care even when, in medical terms, her pregnancy is superbly managed against the worst odds. While at times intensive somatic medical care is the first priority, it is never in itself enough.*¹¹⁴

Midwives did not intervene *because* they managed ‘normal’ deliveries and hence they did not use invasive medical technology. Dealing with adverse consequences could only be the domain of doctors because managing pregnancies and deliveries that were not

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progressing in expected ways required medical knowledge if ‘natural’ mortality and morbidity rates for mothers and babies were to be avoided.

In uncritically basing their practicing their practice in the prescriptions of the medical model doctors caused medical care and the medical model to be seen as one and the same. The concepts of the maternity discourse together with a lack of awareness of the importance of social relations in providing effective care often resulted in allegations of an arrogant medical profession, subservient midwives and more significantly in a lack of awareness of the significance of both sets of skills in the provision of effective and efficient maternity care. Instead, on the basis of the way maternity care was provided and regulated (or not regulated as the case may be) in the context of countries like the USA, (where midwives sought national recognition as a stand alone or ‘autonomous’ profession) the medical model came to be termed a ‘competing paradigm’.\footnote{Ginzberg R. Uncovering gynocentric science. In: Tuana N, editor. Feminism and science. Indianapolis: Indiana University Press; 1989.} Midwifery knowledge, it was said, was more appropriate than medical knowledge in the provision of maternity care because it was based in the ‘midwifery model’ which defined pregnancy and birth as a normal life event.\footnote{It is probable that setting up a national professional body in the USA requires federal political support to bring together the disparate legislative prescriptions of the individual states. This would necessitate employing up a professional lobbyist with access to federal funds to pay for this services possibly being constrained by national professional recognition – hence only available to the medical profession and hence the term ‘competing’.}

In contrast to the way the maternity discourse characterised doctors, it characterised midwives as women-centred and holistic. Although not recognised as such, statements such as the following show the ‘midwifery model’ and the characterisations of midwives were grounded in their role in facilitating social relations:

\begin{quote}
To be a midwife is to be with women (the meaning of the Anglo Saxon word), sharing their travail and their suffering, their joy and their delights. To be a midwife is to engage in a close and intimate relationship which often lasts only as long as the pregnancy, birth and
\end{quote}

\footnote{Rothman Barbara K. In labor: women and power in the birthplace, New York: W.W. Norton; 1982.}
puerperium but the effects of which travels down through the centuries
in the image women have of themselves and their abilities and worth.\textsuperscript{117}

The conceptual limits of the maternity discourse prevented this process from being seen as complimentary to the use of medical knowledge and that the medical model merely served to provide a framework so that clinical situations could be understood and addressed in systemic and transparent ways.

Together, the conceptual limits of both views resulted in doctors seeing midwifery knowledge as inferior in that it was not 'scientific', and in claims by midwives that the medical profession had difficulties in accepting the midwifery model because midwifery knowledge was incomplete and underdeveloped and was popularly perceived as being less authoritative (in the sense of not being scientific) than obstetrics in its approach to solving problems.\textsuperscript{118} These views prevented acknowledgement that effective midwifery care incorporated both midwifery and medical knowledge and supported the criticisms levelled at medical involvement in maternity care.

In not recognising both that the medical model was a conceptual scheme that shaped questions related to caring for people and preventing adverse events and that like the medical model, the maternity discourse carried inherent conceptual limits, the midwifery profession rejected the medical model even though the midwives used medical knowledge. In so doing clinical care provided by midwives was no longer transparent in the ways that medical care was and midwives were able to use whatever notions of clinical care they believed were appropriate given their conceptual orientation. Given the dominance of the scientific conceptual scheme, scientific methods were predictably used to understand the knowledge gained through social engagement under the rubric of 'qualitative research' which produced accounts that were assumed to be timeless and universal and therefore transportable but carried their own conceptual limits.

Given that the feminist based criticisms achieved a high profile,\textsuperscript{119} the marginalisation of medicine that had occurred, and the monistic environment in which these arguments were presented,\textsuperscript{120} the role of doctors as guardians of truth was transferred to midwives who were said to be a 'safe and viable alternative' to medical care.\textsuperscript{121} As a result it was argued that in New Zealand, given the choice, most women would prefer autonomous midwives helping them with their pregnancies and deliveries at home, rather than having doctors, who would subject them to unnecessary technical intervention in hospitals, provide their care.\textsuperscript{122}

At the time, New Zealand midwives were prevented from practising without some form of medical oversight by a regulatory framework that required them to work with doctors in the provision of maternity care, and a remuneration framework that prevented them from directly accessing payment for the services they provided. The Nurses Amendment Act 1983 prohibited midwives who were not registered nurses from attending births in any place other than an institution under the control of an Area Health Board\textsuperscript{123} and the competence of domiciliary midwives was expected to be certified by a senior obstetrician.\textsuperscript{124} The lack of a direct entry education programme had the effect of requiring midwives to also be registered nurses, something which was regarded as detrimental to the autonomous practice of midwifery as nurses were believed to be very closely affiliated with the medical model, - an anathema to midwives,\textsuperscript{125} a view supported by the World Health Organisation (WHO) which stated in the 1985 report 'Having a Baby in Europe':

\begin{flushleft}
\textsuperscript{123} This is a view that has been promoted over several decades and is still current. It is encapsulated in: National Health Committee. Barry M, Chair. Review of maternity services in New Zealand. Wellington, New Zealand: National Health Committee; Sep 1999. p. 11.
\textsuperscript{125} Direct Entry Midwifery Task Force. A discussion paper and draft proposal for a direct entry specialist midwifery course. Auckland: Save the Midwives Direct Entry Taskforce; Feb 1990.
\end{flushleft}
It is widespread opinion among proponents and users of alternative perinatal services that direct entry midwifery training (whether provided officially or unofficially) is preferable to a combined nursing and midwifery training. The midwife who enters her profession without a nursing background is considered more likely to view pregnant women as people rather than patients and to see childbearing as a social as well as a medical phenomenon. Direct entry systems are also thought to be more likely to encourage older women with personal experience of childbirth to enter midwifery.\(^{126}\)

The preconceptions in which the maternity discourse was grounded prevented any acknowledgement of the possibility that the nursing discourse, like others grounded in scientific conceptual schemes, had focused on understanding nursing care using science and had therefore lost sight of the importance of the social relations – hence its preoccupation with both the insights of the medical model and trying to understand the process of social relations in scientific ways.

In not recognising the difference between medical care and social relations, the midwifery profession sought to further distance itself from the knowledge that enabled it to provide effective clinical care to mothers and their babies. The critics argued that if midwives were not required to be nurses and could practice autonomously, women’s choices would be expanded. By not legally requiring a doctor to be present when they gave birth, women could opt to have a normal delivery with only a midwife in attendance.\(^{127}\) This would reduce the opportunities for doctors to interfere with the birthing process and enable midwives to practise without undue influence from the medical model. The way the argument was constructed prevented any recognition that although midwives engaged in the process of social relations by spending time with the people in their care, they did not provide the same kinds of care provided by doctors.

\(^{126}\) World Health Organisation. Having a baby in Europe. Copenhagen; 1985. p. 64. It is unclear on what basis the above claim is made as no substantiating references are cited. The WHO report suggests that this statement is opinion rather than based on evidence.

Medical care and social relations

The absence of social relations in the medical discourse with all its attendant consequences did not feature as a cause in the censure of medical involvement in pregnancy and birth. This did not however mean that they did not exist and were not important in understanding the issues related to medical care in the maternity discourse. Their importance can be demonstrated using the example of caesarean section.

In 1999, Zannetta et al published an article showing how medical staff in a hospital maternity unit in Milan, Italy, went about countering a rising trend in caesarean section rates and also achieved a concomitant drop in perinatal mortality.\(^{128}\) In 1982, 212 out of the 803 deliveries undertaken in the unit (that is 26.4\%) were by caesarean section. From 1982 onwards the caesarean delivery rate decreased to 12.1\% and remained substantially stable over the next twelve years. This was not achieved by excluding doctors, technology or standardised protocols from the processes of pregnancy and birth. Nor was it achieved by competition, financial controls,\(^ {129}\) empowering midwives or populations changes.\(^ {130}\) It was accomplished by the development of processes that encouraged social engagement between clinicians, clinicians and other health professionals such as midwives, and clinicians and their patients, that resulted in shared meanings of the concept of ‘normal’ and ‘appropriate care’. This enabled clinicians to gain a shared meaning of the term ‘appropriate’ in relation to interventions, and doctors and patients to develop a shared understanding of the term ‘normal’ in relation to pregnancy and birth. It


\(^{129}\) Zannetta et al pointed out that Italian obstetricians, including those who worked in the public hospitals, were usually not concerned about the costs to patients and the community of a prolonged hospital stay due to caesarean delivery, since these expenses were covered by the national health care system. Therefore they were not motivated by financial considerations.


\(^{130}\) Zannetta et al noted that no relevant change occurred in the population that was referred to the hospital and ‘in particular, no migration to our community took place until the early 1990s.’

thus minimised the possibility of disparate practice that can ensue in a context of unconstrained clinical autonomy and also reduced the temptation for clinical practice to be based in the uncritical application of scientific criteria.

Zannetta et al described several features that they believed led to the lowering of the intervention rate. In the first instance, a new medical chief of obstetrics was appointed who was directly responsible for both clinical care and the management of the unit. This gave him the authority to determine ‘correct’ practice, to institute processes, whereby this meaning came to be shared by all the staff, and to hold staff to account.

Protocols and technology

‘Appropriate’ practice was formalised in protocols that included using technology, such as routinely using electronic foetal monitoring and foetal blood pH measurement using scalp blood samples for all cases of high-risk labour. From 1982 to 1992, pregnancies at term were monitored. From 1993, pregnancies at term were monitored by means of biophysical scores and evaluation of amniotic fluid index by means of amnioscopy every second day until 42 weeks gestation, unless pathologic findings occurred when standardized protocols were followed. All patients who did not have an absolute contraindication were admitted for a trial of labour which included the use of biomedical techniques for the assessment of foetal wellbeing in labour. Women who underwent a trial of labour were carefully monitored.

Social relations

The presence of a midwife was said to ‘provide an invaluable aid in the management of labour and reduced ‘a woman’s anxiety.’ Psychoprophylaxis was offered to all pregnant women to provide information about labour practices in the department, and reduce anxiety by discussing problems and fears about labour and delivery. These courses were attended by approximately 25% of women in 1996.131 The midwife’s skills as part of this

team created a bridge between clinical care (both in terms of interventions and not intervening) and the patient’s understanding of what was occurring.

Daily and weekly meetings and ‘the routine audit of all births and a collegial discussion of all complex cases’ provided ‘useful and essential steps for continuing education of all professionals’ and enabled changes in the protocols to retained their coherence with the daily practices in the unit. This social engagement meant high staff compliance that minimised decisions based on the personal wishes of the physicians.

The importance of a stable workforce was also highlighted and enabled consistency in shared meanings to be maintained over a long period of time.

The new staff members in subsequent years, with few exceptions, received their training locally and were accustomed to our protocols.

Outcomes

The effects of facilitating social engagement, the development and acceptance of shared meanings resulted in the following outcomes:

From 1982–1996 we recorded a steady increase of births in the obstetric department in this hospital. When some demographic data of our patients was analysed in later years, we observed that an increasing proportion of women chose to deliver in our hospital, despite belonging to communities elsewhere, and this increase in births corresponded with a decrease in births at other hospitals in the region. This finding raises the interesting observation that a decrease in operative procedures and an increase in vaginal deliveries, when

associated with an improvement in care, do not necessarily correspond with a decrease in acceptance of the childbearing population.134

In contrast with the feminist literature, the lower caesarean rate was achieved in a hospital setting by doctors using protocols that encouraged the use of technology, and with midwives working under their jurisdiction - an environment similar to that which existed in New Zealand in the 1970s and 80s (that ironically also resulted in a correspondingly similar caesarean section rate). Although Zannetta et al describe a series of discrete features such as protocols, the way women were monitored etc that they attribute to enabling them to lower the intervention rate, it is also apparent that the head of the department was conversant with the concepts that underpinned the medical model and the concepts of management and had both management authority and clinical credibility and respect. Together, the use of different conceptual schemes and a stable workforce that worked cooperatively together enabled a shared concept of 'appropriate' care to develop that was accepted by the health professionals working in the unit, the women in receipt of care and the wider community, and remained consistent over time.

Social relations and change

The scientific grounding of the maternity discourse caused problems in maternity to be evaluated in ways that could not address matters of meaning. However, this same scheme encouraged the view that the prescriptions of the maternity discourse were true, universal and timeless and thus applicable to all maternity care in any maternity setting where there was medical involvement.

Up until the 1980s, the critics of medical involvement in maternity care were generally academics, professional bodies and consumer groups who could not directly change public policy. Their views could only be given substance if a groundswell of public opinion provoked a political response. Because direct change was unable to be effected and doctors in New Zealand were sensitive to the criticisms being levelled at them,

doctors and midwives worked together to modify their practices within the regulatory frameworks that existed at the time. Although change was incremental, it was approached in a collegial way that was grounded in the social milieu. This was to change with the state sector reforms that began in the mid 1980s.

For example, the ‘domino’ (domiciliary in and out of hospital) midwifery service was one of the changes that evolved from the criticism of the maternity discourse. Prior to this change mothers encountered midwives at the antenatal clinic when they booked into hospital for delivery, with their care being provided on admission by whichever midwife was on duty at the time. The idea behind the ‘domino’ scheme was that the same midwife and GP or obstetrician would provide care throughout the pregnancy, delivery and postnatally with the midwife visiting the mother in her home. Also see: Papps E, Olssen Mark. Doctoring childbirth and regulating midwifery in New Zealand. New Zealand: The Dunmore Press; 1997. p. 161.
Chapter Eight
Reforming New Zealand

Introduction
In the mid 1908s state sector reforms were initiated that were underpinned by the concepts and logic of institutional economics in the belief that this scheme was truly universal in applicability. Over the next ten years the entire public sector was reformed according to its abstractions in a ‘carefully crafted, integrated and mutually reinforcing way’ with a theoretical purity that has given the reforms what has been described as ‘conceptual rigor and intellectual coherence’. In other words, the economic conceptual scheme set the parameters for rationality and what could be properly expressed for the entire public sector including the health sector and maternity services. This chapter provides both a summary of the main conceptual thrusts of these reforms in order to align them with the philosophical views outlined in earlier chapters, and an overview of how they assumed dominance in the development of public policy as background for the evaluation of the impact of reforms in the health sector in the following chapters.

Background
In the decade before 1984, the Governor of the Reserve Bank of New Zealand became concerned about the New Zealand economy. It was being affected by the rest of the

world in the form of international recession, unfavourable terms of trade, and restricted market access for some of New Zealand’s agricultural exports with the slow pace of domestic adjustment aggravating these effects. Reserve Bank documents published in 1979 and 1981 examined these issues and solutions were identified and explained in the publications Monetary Policy and the New Zealand Financial System (1979 and 1983). The Bank argued that attempts to shield the domestic economy from externally generated ‘shocks’ resulted in the proliferation of subsidies, tax concessions and other protective measures for particular sectors or groups. As long as New Zealand maintained an overvalued exchange rate, pressure groups were able to argue for the retention of various subsidised and protective devices which they saw as ‘compensating’ them for the overvalued rate. It promoted the view that the nature and extent of state intervention in the economy through regulation and restrictions needed to be reviewed, and by implementing monetary policy, freeing up the market and introducing competition the economy would become efficient, economic growth would result, and social equity would be promoted “most satisfactorily.” These ideas were promoted in many different ways and were supported by complex arguments that required extensive scholarship in economics to be understood. The publications were confident that what was proposed was the only path to prosperity.

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Economics, growth and prosperity

Monetary policy

Monetary policy as described by the Reserve Bank was seen as an essential component of any economic package designed to achieve the broad objectives of economic policy. A firm fiscal stance was required since the size of the fiscal deficit was an important factor in determining the amount which the government had to borrow to maintain control over the money supply. The larger the fiscal deficit, the greater the government’s claim on private savings, which in turn would tend to push up interest rates and crowd out private sector investment spending. In summary the Reserve Bank believed:

монетная политика наиболее пригодна для обеспечения стабильной финансовой среды, которая способствует низкому уровню инфляции и устойчивому экономическому росту.8

A stable financial environment would lead to equilibrium.

To be successful in controlling inflation at minimum cost, the Reserve Bank believed it was essential that monetary policy was properly co-ordinated with the other instruments of economic policy.

The principle features underlying the approach were a concentration on medium-term rather than short term objectives; and acknowledgement that a range of economic problems had to be addressed and that it would be unwise to place undue weight on any one particular objective; a recognition of the need to review the extent and nature of government interventions in the economy in order to reduce market rigidities and encourage flexibility; and an emphasis on the philosophy that improved economic and social equity could be promoted most satisfactorily against a background of improved economic efficiency since this was seen as a prerequisite for sustainable economic growth.⁹

If monetary policy was to be effective in solving New Zealand’s economic problems, flexibility in other areas of the economy was necessary. Structural reform was needed because the problems were more deeply rooted than just those related to financial markets. On its own, monetary policy offered “no guarantees or panaceas”. Government intervention was “deep and pervasive”.¹⁰ By protecting some sectors of the economy from market forces through artificial barriers (such as the protections afforded by the state to state owned monopolies), the overall adjustment to a low inflation environment could be delayed and the costs to other more exposed sectors increased. Similarly, inflexibility or rigidities in the labour market (such as industry wide conditions negotiated by unions, which did not reflect the needs of specific companies) could also tend to result in the effects of a firm monetary policy being reflected more in a loss of output and employment opportunities than would otherwise be the case, at least in the short term until wages and salaries adjusted.¹¹ Unionism, collective bargaining and low levels of unemployment meant that employees were able to make demands that exceeded what

employers should pay to be competitive in international markets.\textsuperscript{12} In other words, as well as reducing government intervention in the economy, competition and a 'flexible labour market' were also necessary to ensure monetary policy was successful in achieving its objectives.

The Bank pointed out that 'recent microeconomic literature emphasised the degree of 'contestability' or potential competition in a market as being a significant determinant of industry performance and efficiency'.\textsuperscript{13} The contestable, free market could be achieved through:

- deregulation of licensing and wage controls
- reduced government intervention to reduce market rigidities and improve flexibility (for example, through the privatisation of state assets)
- restructuring of remaining government organisations along commercial business lines
- introducing a 'user pays' philosophy to provide the right incentives to enable people to decide rationally where they would invest their money
- reducing taxation rates to enable users to pay for the services they used, rather than letting government make decisions of their behalf.\textsuperscript{14}

Given that the role of the officials of the Reserve Bank was financial in nature, the economic conceptual scheme was used to understand economic problems. However, as the conceptual limits of this scheme were not recognised it was also used to understand matters of meaning such as moral views that related to the public context expressed as systems of government and public policy.

\textsuperscript{12} For example, objectives such as full employment could have the detrimental effect of overfull employment where there was a demand for labour rather than a balance within the labour market. Labour shortages would lead to employers not being in a position to reject wage demands. This would lead to inflationary pressures and the possibility of balance of payments problems. Source: Reserve Bank of New Zealand. Deane RS, Nicholl PWE, and Smith RG, editors. Monetary policy and the New Zealand financial system. 2\textsuperscript{nd} ed. Wellington, New Zealand: Reserve Bank of New Zealand; 1983. p. 204.


Institutional economics

In having the same conceptual orientation, the concerns expressed by the Reserve Bank were echoed in the New Zealand Treasury. By the end of the 1970s the Secretary, Noel Lough, became very concerned about the performance and prospects of the New Zealand economy and set a group of economists in the Treasury the task of searching for fresh insights into the situation. Given their conceptual predisposition the answers were found in the ideas of institutional economics and in particular in public choice, agency theory and transaction cost economics. These ideas were promoted in briefing papers to the 1984 and 1987 incoming governments and being grounded in the same conceptual scheme supported the views of the Reserve Bank.

As discussed in Section I, economic concepts shape the view that institutional structures become ‘captured’ by those whose behaviour they seek to control. The conceptual focus of Treasury economists meant that they believed that the New Zealand economy was inefficient because the political economy enabled the New Zealand public sector and public agencies to capture the institutions that were meant to control them. This resulted in inefficiency and self-interested growth that was not in the interests of society as a whole as it caused unnecessary fiscal expenditure.

The key analytical concepts that were taken from the theories of public choice, agency and transaction cost economics and promoted to government were:

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a disbelief in the proposition that organisations, either private or public, can always be safely be assumed to act selflessly in the interests of shareholders or citizens;

- transaction costs analysis whereby the relative costs of transactions are examined and contrasted with alternatives such as contracting out;

- the need to design relationships in ways that minimise agency costs, with the design being heavily influenced by the ways private sector relationships between shareholders, directors and managers are structured

- the need to design structures and functions to improve the decision-making process in the presence of costly information, risk, and uncertainty (given the 'bounded rationality' of individuals).20

Economic prescriptions, based on the abstraction that an unconstrained market economy was inherently more efficient than a political one, were used to determine the 'right' form, function and behaviour of private and public institutions. The virtues of contestability (or multi-source supply including the provision of public policy advice), transparency, competitive neutrality (between public and private providers), and institutional separation of potentially conflicting objectives (such as ownership and purchase interests) were extolled.21 In not recognising the conceptual limits of this scheme, the concepts and abstractions of institutional economics were promoted as providing the only true path to a better life.

**Disestablishing the political economy - changing the role of government**

Treasury believed disestablishing the political economy should be approached on two fronts – by distancing ministers from public organisations and restructuring the function of government so that it was no longer a vehicle that formalised the moral views of the community in legislation, but instead became a guardian of the economic conceptual scheme.

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In the first instance, Treasury advocated privatising as many government agencies as possible in order to minimise the extent of the political economy. Where this was not possible, it promoted the need for the remaining entities to be structured in ways that enabled them to emulate private sector organisations as closely as possible. This would by achieved by using new approaches to budgeting, accounting and financial management. Chief executives needed to be ‘liberated’ from political constraints by the introduction of management systems and philosophies that gave them greater discretion and authority. They needed to be able to open, close or move services as they saw fit in order to deliver the required outputs as efficiently as possible. Dismantling of central controls over inputs would give them the ‘freedom’ to manage according to the dictates of the market rather than those of politicians, and market criteria (such as return on investment) would form the basis of accountability arrangements for boards and chief executives that would encourage efficient decision-making. Changing what chief executives were accountable for also had the advantage of distancing government ministers from what these organisations did and would prevent them from meddling. In other words, politicians would no longer be able to impose moral views on what public sector organisations did and the organisations would no longer have any moral responsibilities as determined by party manifestos of governing parties. Instead, economic parameters would set the criteria for rationality for public sector activity.

Given their grounding in the economic scheme, Treasury officials advocated the use of economic concepts to understand remaining public sector activity. These shaped the view that public organisations that provided policy advice and performed operational activities were flawed enabling special interests to have an undue influence, professional

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24 See: Scott G. Public management in New Zealand. Lessons and challenges. Wellington, New Zealand: New Zealand Business Roundtable; 2001. p. 280–286 for a discussion of these ideas and the author’s view that poor outcomes have resulted from these ideas not being implemented as intended — that is with the theoretical purity that was originally envisaged.
capture and poor quality analysis, that ‘had too often distorted important policies’. The same concepts shaped the solution - by separating the functions of policy advice from delivery advisors would be freed from ‘the stultifying influence of bureaucracy’ the risk of ‘capture’ would reduce, and the prospect of more contestable service delivery would sharpen (as well as narrow) organisational objectives thereby enhancing accountability.

Treasury also advised that what organisations did should be understood in terms of the production of goods expressed as outcomes, and how well they did it expressed as performance targets that identified costs of production and return on investment which would be used to hold organisations to account in the same way shareholders held market organisations accountable. The use of short term, highly specified contracts detailing outputs and performance targets would provide a clear, unbroken line of accountability from the ministers to their departmental heads and from departmental heads to the staff in their departments.

**Ensuring coherence**

Given these above parameters for rationality, Treasury recommended the introduction of a flexible labour market in the core public sector. It proposed disestablishing the traditional rules and conventions related to employment in the core public service and instead advocated greater involvement by Cabinet in the appointment of heads of departments, greater involvement by heads of departments in employment decisions about their staff, the introduction of a robust performance management system based on economic criteria that would feed into the performance assessment and career development of staff and into employment decisions about the departmental heads. In other words, it advocated the removal of the conventions that help to support a form of conceptual neutrality and introduced a framework that required core civil servants to

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adhere to the economic conceptual scheme and enabled bureaucrats to minimise the ability of politicians to introduce public policy initiatives that did not cohere with economic parameters.\textsuperscript{31} Treasury officials believed:

...the public may not always like the decisions of public sector managers, but this does not mean they would want the [sic] decision-making power removed and instead exercised by politicians.\textsuperscript{32}

As well as being seen as applicable to the core public services, in not recognising their conceptual limits Treasury officials believed the economic scheme provided prescriptions that would successfully address all matters of public life such as those related to the design of worker co-operatives, trade unions, producer boards and the 'plethora' of public institutions,\textsuperscript{33} that would lead to economic prosperity and a better life.

There was no cognisance of the scheme's conceptual limits and that it could undermine the public sector by dislocating it from the public context if the economic conceptual scheme was uncritically applied. As they were believed to be scientifically derived and part of a single, coherent scheme of knowledge, the concepts and abstractions of institutional economics were seen as universal and timeless and capable of being applied unselfconsciously to any group of people collectively known as an organisation.

**Financial reform**

Up to the early 1980s, the then Prime Minister of New Zealand, the Right Honourable Robert Muldoon, resisted the advice of the Reserve Bank. However, these officials believed 'firm and decisive action was clearly called for' in the form of their recommended solutions.\textsuperscript{34} They did not give up promoting the virtues of their conceptual


scheme and the opportunity to introduce its prescriptions came in 1984 with the announcement of a general election. During the interregnum the Reserve Bank:

...sold as much foreign exchange as it would normally have expected to sell in a full year, and despite extensive borrowing abroad and the official writing of a large volume of forward exchange contracts to help absorb some of the pressures at that time, external reserves dropped to an uncomfortably low level.\textsuperscript{35}

The new government was faced with what the Governor called a 'financial crisis' and was advised that it needed to act immediately.\textsuperscript{36} Fortunately, the solutions were at hand and the combination of a 'fiscal squeeze and capable ministers who were enthusiastic to improve the performance of the economy and government' enabled these solutions to be implemented. The new ministers had the theoretical background that predisposed them to the same conceptual scheme as the officials at the Reserve Bank and Treasury and were supported by Treasury officials who 'grounded their advice in ideas from institutional economics, accounting and management theory.'\textsuperscript{37}

The new government immediately devalued the exchange rate by 20%, removed all interest rate controls and imposed a temporary price freeze to facilitate the development of a more satisfactory package of economic policies that provided a structural framework to enhance its effectiveness.\textsuperscript{38}

In 1985, the Reserve Bank of New Zealand's Deputy Governor introduced a chapter in the Reserve Bank Publication 'Financial Policy Reform', reviewing the actions that had been taken the previous year. He stated:

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\textsuperscript{35} Reserve Bank of New Zealand. Deane RS, Nicholl PWE, and Smith RG, editors. Monetary policy and the New Zealand financial system. 2nd ed. Wellington, New Zealand: Reserve Bank of New Zealand; 1983. This provides a comprehensive overview of the views of the Reserve Bank.


"The transformation which occurred in monetary policy in New Zealand during 1984-85, and indeed the changed nature of economic policy in general, represented a shift in stance which in terms of its scope and rapidity must be unequalled in the OECD region. After an extended freeze on wages, dividends, rents, prices, interest rates and the exchange rate – a freeze superimposed on an economy already subject to extensive import protection, exchange controls, export subsidies and incentives,... ...and an array of other regulatory interventions by the Government – the process of decontrol through 1984–1985 was a dramatic one."  

These market interventions were symptomatic of slow adjustment to economic difficulties, were ‘distortionary and prevented prudent economic incentives and economic growth.’ Consequently, they were rapidly removed.

The Reserve Bank believed that it was imperative that the momentum started in 1984 should not be lost. There was still a need for further internal reform as the country’s internal systems and processes were standing in the way of economic progress. The Bank warned that:

The essence of the matter remains in the durability of the commitment to soundly based policies...

In not recognising the conceptual limits of the economic scheme the Bank uncritically extended its mandate beyond financial matters by interpreting its governing legislation in accordance with its conceptual predispositions. The Bank’s officials believed that the Banks governing legislation, the Reserve Bank Act 1964, made it clear that:

...the government’s monetary policy should be directed to the maintenance and promotion of economic and social welfare in New Zealand. Although these concepts are not specifically defined, it is

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stated that the policy should be related to the desirability of promoting the highest degree of production, trade, and employment and of maintaining a stable internal price level. In effect, the policy should aim at the basic economic objectives of government. While the emphasis placed on the objectives by different governments will vary, a government’s economic policies generally aim to achieve the highest rate of economic growth consistent with a desire to avoid inflation. There is also the important concern of maintaining a high level of employment and distributing the national income in a broadly acceptable and equitable manner. In broad terms, this means that the aim of the Reserve Bank should be to maintain a level of national spending sufficient to promote growth and to keep resources fully employed, but not so high as to threaten price stability.\footnote{Reserve Bank of New Zealand. Financial policy reform. Wellington, New Zealand: Reserve Bank of New Zealand; 1986. p. 16.}

The economic conceptual scheme predisposed these officials to viewing all social activity in economic terms. Governments were seen as limited in their ability to ‘fine-tune’ economies, and therefore their ability to interfere in the economy through public policy initiatives should be constrained with greater consideration being given to medium-term, rather than short-term objectives.\footnote{Reserve Bank of New Zealand. Financial policy reform. Wellington, New Zealand: Reserve Bank of New Zealand; 1986. p. 169.} Given the parameters of the economic scheme the role of government was seen as:

...encouraging the efficient operation of markets; providing a stable, more predictable macroeconomic policy environment; and thus promoting in the longer term more sustainable economic growth. This in turn should help it to meet the community’s social and equity goals.\footnote{Reserve Bank of New Zealand. Financial policy reform. Wellington, New Zealand: Reserve Bank of New Zealand; 1986. p. 28.}

The Bank acknowledged that social objectives might conflict with financial ones but, given that economic prescriptions were believed to provide the true path to a better life,
developed the argument that putting social objectives before economic ones would be detrimental to the prosperity of the country. It stated:

...future growth means some sacrifice in terms of present standards of living. The latter are measured not just by the total amount of goods and services available but also by the way in which they are shared among the community.\(^{45}\)

In the medium term, improved economic and social equity can be promoted most satisfactorily against a background of improved economic efficiency – a prerequisite for sustainable economic growth.\(^{46}\)

For New Zealand, the costs of the new policy approach are likely to be short run and transparent, such as in the form of a higher rate of inflation for a time, while the gains in terms of economic efficiency and more satisfactory macro policies are likely to be longer term in coming to pass. The greater the durability of the policies, the greater must be the opportunity of maximising those gains.\(^{47}\)

As the economic conceptual scheme was based in the idea that it provided objective and timeless facts the conceptual limits of its concepts and abstractions were obscured. In not recognising these limits the Reserve Bank and Treasury were unrelenting in their message that economic concepts and abstractions should dominate public policy. Given their inherent inefficiency, political economies should be eliminated and failing this the functions of government and its agencies had to be curbed.\(^{48}\)

As the government of the day was predisposed to believing the economic conceptual scheme provided true answers to a better life, it heeded the Bank’s and Treasury’s advice and proceeded with a reform programme based on economic concepts and abstractions.

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Solutions included major tax reform, a privatisation programme, the establishment of State Owned Enterprises (SOEs), major restructuring of government departments and an energetic search for reductions in public spending.

Public sector reform

By 1987, public sector expenditure was still in excess of targets set by monetary policy. Economic evaluations found that in not conforming to economic parameters the fault continued to lie in the way public organisations were structured which created perverse incentives that caused them to be inefficient ‘hide-bound’, inflexible, and lack accountability, and the quality of their policy advice to be poor. Therefore, public sector functions that could not be corporatised or privatised and had to remain in the core public service needed to be reformed.

Treasury officials sought the introduction of more “penetrating and rational expenditure policies” throughout the public sector that required departmental activities to be conceptualised in economic terms and required management systems to be principally focused on financial reporting against defined outputs that detailed the services the government expected to have delivered by a department. Once this conceptual alignment was in place Treasury officials would be able to assess the efficiency, effectiveness and capability of government departments against the medium and long term economic objectives of Government as determined by the Reserve Bank.

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49 Whereby public agencies were ‘corporatised’. This involved restructuring along commercial lines. Chief executives became accountable to Boards of Directors rather than politicians. Corporatisation minimised the ability of politicians to ‘interfere’ in the organisation’s activities and ‘freed’ Boards and chief executives so they could engage in commercial behaviour without being constrained by moral issues expressed in the public context.


Translating concepts into reality: the legislative framework

The economic conceptual scheme was given dominance through the enactment of a legislative framework with the principal focus of minimising the political economy and introducing structures and processes that approximated those of the market as closely as possible to the public sector so the rigidities in the sector were reduced and bureaucracies used resources in ways that were efficient, responsive and flexible.  

The State Sector Act 1988

The State Sector Act 1988 was designed in concert with the Public Finance Act 1989 and:

... *launched a revolution in management within the core public sector.*
*It also foreshadowed a revolution in the management of Crown entities.*

The Act changed the conceptual orientation of the government and the civil service by changing accountabilities and employment relationships. The sector became accountable for financial objectives, with role of central government agencies becoming one of protecting the collective financial interests of the Crown, and structures and processes that approximated those of the market were introduced to financial objectives could be pursued.

The legislation distanced ministers from employment matters, while strengthening their powers over what government organisations produced. Although they were able to set goals for departments (specified as outputs) by approving an output class, such as for example, ‘Issuing licences and permits’, ministers were unable to determine how these were to be achieved. This was left this to the discretion of the heads of the respective

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government organisations who were able to carry them out in whatever way enabled financial objectives to be met.

Managers needed to be 'significantly independent of political ideology, and, to a lesser extent, the policies that governments set in place.' The office of 'permanent heads' of government departments was replaced with that of 'chief executives', appointed on limited term contracts of up to five years with the possibility of renewal if their financial performance was considered satisfactory. The five year term was meant to 'symbolise' and help entrench the 'non-political' nature of the chief executive's role by ensuring that periods of employment were not linked to the three year electoral cycle, so that chief executives could pursue financial objectives regardless of the party in power. Chief executives could be recruited from outside the public sector, be paid market rates set at the level of private sector salaries at equivalent positions, and could be dismissed for unsatisfactory financial performance. They became employers in their own right and could negotiate conditions of employment as specified in new employment legislation.

The State Sector Act also changed the conceptual orientation of the State Services Commission. Under the parameters of the economic scheme it became responsible for maintaining the new order by:

- reviewing the structure of departments and the allocation of functions between them;
- reviewing the efficiency, effectiveness and economy of each department, including the discharge of its functions;
- reviewing the performance of the chief executive against defined outputs and performance targets;
- reporting to the relevant minister on the matter and extent to which their chief executive was fulfilling the requirements imposed by the State Sector Act 1998;

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57 See section on 'Employment legislation'.
promoting and monitoring personnel policies;

- advising departments on training career development, management systems and structures;

- negotiating collective employment contracts;

- dealing with grievances of employees;

- approving internal appointment review procedures established by departments;

- issuing a code of conduct to be binding on staff in all departments.\(^{58}\)

The role of the Commission was to keep departments focused on production, and to correct any deviations in performance should any errors in strategic alignment occur.\(^{59}\)

The Commissioner was formally appointed by the Governor-General in Council on recommendation of the Prime Minister and could only be dismissed by resolution of the House of Representatives and therefore enjoyed a level of protection equivalent to that of a high court judge and was effectively beyond the reach of the government of the day.\(^{60}\)

This also ensured the head of the Commission was able to adhere to economic concepts regardless of changes in political orientation.

The State Sector Act also established the Senior Executive Service (SES), a small cadre of senior officials 'to act as a force of cohesion across the whole public service\(^{61}\) in that they were responsible for ensuring the sector as a whole internalised and functioned according to the new order.


The Public Finance Act 1989

The Public Finance Act 1989 introduced economic parameters into public sector reporting requirements. By introducing new financial management procedures into the public service, departments were required to focus on production and the quantity, quality and price, or cost, of the services being produced, and governments on what they wanted to buy.

The Act required government departments to develop a definition for performance, removed many administrative controls, made chief executives responsible for departmental financial management, established departmental and Crown reporting requirements and redefined the appropriation process to change the emphasis from the control of inputs to the purchase of outputs which would:

> capture what government expected to have delivered by a department.
> By focusing on outputs, it became possible to introduce into public sector management many new management practices. It meant that performance could be expressed as a ‘deliverable’ for which estimates of cost and assessments in terms of quality and volume could be made.
> The use of outputs allowed the former detailed controls over inputs to be relaxed. Organisations were free to mix and match inputs, [sic] as managers saw fit. The concept also supported the decentralised approach to management and made it easier to express and monitor the responsibilities that were being delegated down the line.62

The Act also introduced a new appropriation process. As well as making what departments did coherent with the economic conceptual scheme, it also enabled Treasury to become the agency that had overall control over government spending. Each departments’ policy outputs were set out in the ‘estimates’ (or budgets required for their delivery) and each policy output class evaluated by Treasury against monetary policy and value for money criteria. This enabled Treasury to review ‘estimates’ for consistency with the government’s overall fiscal strategy and make recommendations as to which

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outputs should be bought by the Crown. A critical Treasury report could substantially diminish the likelihood of a department securing government approval.63

The State Sector Act and the Public Finance Act together gave Treasury dominance in public policy debates64. It exercised oversight over public expenditure, managed the budget process, provided reports of all departmental expenditure proposals before cabinet and advised the government on policy and was allocated increasingly generous funding. In 1994–95 Treasury was appropriated nearly $50 million to provide policy advice. This was around a sixth of the total appropriated by parliament for the purchase of policy advice and more than double the amount for the purchase of advice to any other department.65

Once agreement between Government and Treasury was reached these policies were incorporated into departmental corporate plans and purchase agreements. Departments were allocated funds on the basis of output classes which were aggregates of outputs that departments were required to deliver under their performance agreements. These classes provided a summarised form for the output performance that was seen as suitable for holding ministers accountable to Parliament, for detailing what ministers wanted their departments to achieve and for monitoring departmental performance. This system led to the development of purchase and performance agreements that included a specification of outputs, requirements for strengthening organisational capacity and responsibility for managing financial risk. Purchase agreements “were concluded between vote ministers and the chief executives who provided outputs to these ministers.”66

The Public Finance Act required public policy to be developed in ways that were congruent with economic concepts and logic. The function of the core civil service, (the provision of policy advice), had to be characterised as a definable entity (an output) that could be purchased by the government in the same way as a commodity. It had to be

specified, quantified, priced and judged as either 'good' or 'bad' against a performance management framework that included three main elements: performance measures, product quality characteristics, and quality management processes.67 Under this framework, policy outputs were able to be purchased by ministers on the basis of certain specific performance measures (i.e. quality coverage, quality, timeliness and cost).

The Act authorised the removal of administrative controls over financial management and replaced these by a set of financial delegations that were developed for each department according to the needs of their activities. Chief executives were made responsible for departmental financial management.68

Departments that did not conform to the abstractions of the economic conceptual scheme were cast as inefficient,69 downgraded or gradually removed.70 Large Ministries were 'dissected' into smaller ones and departmental functions simplified by separating policy develop from implementations. For example the department of Social Welfare became the Department of Work and Income, the Department of Child Youth and Family and the Ministry of Social Policy.71 Although Treasury acknowledged that 'too rigorous a separation would... ...be likely to impose costs at the expense of little gain'72 its conceptual predispositions saw the solutions lying in policy analysts having incentives to build strong relationships with the relevant operational agencies.

In being based on the same conceptual scheme, the State Sector Act 1988 and the Public Finance Act 1989 were able to be promoted as being based on the principles of clear managerial authority, clear organisational objectives and effective systems of accountability that included giving unprecedented degrees of managerial freedom to

departmental managers, and the boards and management of autonomous agencies that became known as Crown entities.\textsuperscript{73} They formed the framework that enabled the economic conceptual scheme to become dominant in the development and implementation of public policy.\textsuperscript{74} To be successful in the public service, civil servants had to accept the internal propositions of the economic conceptual scheme such as for example, how people are characterised as well as its concepts and rules which set the parameters for rationality and what it was acceptable for departments to say or do. While internally coherent,\textsuperscript{75} the activities that departments undertook were no longer grounded in the social milieu in which they took place as the mechanisms that enabled them to develop shared understandings of what was important to communities were either removed or their influence reduced as much as possible.

**Employment legislation**

As well as changing the responsibilities of public sector chief executives, economic parameters were used to change relationships employers had with their employees through two pieces of legislation: The Labour Relations Act 1987 and the Employment Contracts Act 1991. The principle aim of both pieces of legislation was to remove the constraints of the political economy and introduce market flexibility so that efficiency and equilibrium would ensue.

**Labour Relations Act 1987**

The thrust of the Labour Relations Act 1987 was to move private sector industrial relations away from processes that involved third parties (such as government ministers)
in disputes and to place emphasis on bilateral negotiations between parties in order to reduce the collective power of the workforce and make it more flexible.

The Employment Contracts Act 1991

As the Labour Relations Act had not delivered workforce flexibility that conformed to what economic parameters had set as appropriate new legislation was developed. The Employment Contracts Act was designed to increase workforce flexibility by minimising the effect of unionisation and collective bargaining which were considered to act as constraints on the market economy. This was reflected in the Act’s long title - ‘an Act to promote an efficient labour market’. The Act made major changes to the provisions governing trade union membership, representation, and the negotiation of employment contracts. It prohibited compulsory union membership, minimised union power in the negotiation of contracts and created the possibility for individuals to negotiate their own contracts with employers.

The Fiscal Responsibility Act 1994

Although the function of public institutions was able to be controlled by Treasury and the State Services Commission, over time it was found that the political economy had not been sufficiently constrained. Politicians were still able to meddle and undermine medium and long term objectives that had been set by government. Reinforcement for the State Sector Act and the Public Finance Act came in the form of the Fiscal Responsibility Act 1994. The idea behind the Act was to encourage transparency in order to lead to more informed public decision-making and encourage governments to take a longer-term perspective to fiscal management, thereby reducing risk by minimising the influence of short-sighted political decision-making. In other words, this Act provided an ‘essential context to the operation of the budget and management cycles under the Public Finance Act 1989’ by ‘imposing a medium to long-term focus on

government expenditure. This in effect served to control political decision-making and constrain the political economy. Ministers could not make decisions that undermined previously set objectives and political decisions that were not congruent with the concepts of institutional economics would be more difficult to make.

The Public Finance (State Sector Management) Bill 2004

In 2004 Treasury proposed legislation that would further constrain the political economy. Initial drafts contained provisions that would further distance politicians from department activity by requiring them to report by outcomes rather than output. This would have the effects of, for example, preventing public services such as the health sector being able to access taxation revenue if they did not achieve the government objectives of preventing illness. The Bill also removed the ability of politicians to debate the priorities for government spending determined by Treasury officials, and departments could withhold information from politicians under the Official Information Act. Politicians would need to engage in a legal process in order to access information.

Conceptual limits

Public policy gets its sense from what situations mean to people and is therefore related to values that are dynamic and context specific. Because values are intrinsic to policy, trying to characterise policy as a neutral, objectively developed commodity is fraught with difficulty because of inherent conceptual limits. When economic concepts are used to understand human meaning they must necessarily turn them into economic ones in order to make them coherent and comprehensible with this scheme’s internal logic.

As the reforms progressed the conceptual limits of using an economic conceptual scheme to shape questions of public policy became apparent. Departments had difficulty expressing what they did in economic terms because meanings were grounded in other conceptual schemes. Although it was acknowledged that strategic and substantive advice

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80 At the time or writing this Bill was still being debated in Select Committee.
were still fundamentally about values the scientific roots of the economic scheme prevented any acknowledgement of the conceptual limits of the exercise. Attempts were made to capture values in economic terms by breaking advice into increasingly smaller units defined as ‘strategic’ (the outcomes government wanted to achieve; for example, justice) ‘substantive’, (being narrower and more sector-specific, for example, the role of the state as a funder) and ‘operational’ (technical or practical issues relating to the implementation of policy such as legal advice on drafting laws). Its function was also changed from advising Ministers with advice related to what communities believed was important to determinations of ‘correct’ priorities and how these should be maximised.\textsuperscript{81} This enabled ‘good’ policy advice to be defined as the analysis of policy options and trade-offs with recommendations on the preferred course of action in terms of the medium-term fiscal objectives.\textsuperscript{82}

Although Treasury acknowledged that pragmatism had an important place in the development of policy its adherence to the conceptual purity of the economic scheme led its officials to believe that “too much would lead to incoherence over time”\textsuperscript{83}

**Good and bad government**

Compliance with economic parameters set the criteria for good and bad public sector performance. When government ministers complained that policy advice was too narrow and did not incorporate views that lay outside economic ones, the conceptual limits of the economic scheme provided the rational for Treasury and the State Services Commission to dismiss their views. Ministers, it was said, were not always the best judges of what constituted good advice because they had little experience in policy analysis.\textsuperscript{84} In other words, ministers that did not comply with the parameters set by the economic scheme

were kept out of social policy debates. In their view the effective minister was one who was able to change the priorities of departments from those of the past to those that were congruent with the policies set by economic parameters expressed in the appropriation process. Their role was therefore to be closely involved in departmental strategic planning and to give detailed attention to the chief executive’s performance agreement. ‘Ineffective’ ministers would encourage departments to do their bidding or comply with political views rather than ‘objective ones’, and would “go as far as ministers telling officials to provide advice to ministers, and not to question and test proposed initiatives.” Ineffective departments were those that complied with ministerial initiatives as opposed to ‘objectively set economic ones.’

**Criticism**

In belonging to a conceptual framework whereby all knowledge is believed to be part of a single, coherent scheme and known through fixed axioms and causal relationships, the conceptual limits of the economic scheme were obscured. As economic concepts were seen as the true path to a better life the differences in meaning between different conceptual schemes went unrecognised, the significance of the public context was denied and economic parameters set the criteria for rationality and what could acceptably be said. Consequently, criticisms that did not conform with these parameters were seen as irrational or lacking objectivity. For example:

*There is, however, a stream of criticism ... ... that comes from a more distinctive and transparent ideological or ethical base.*

*A part of the international debates over the new public management are the conflicting views on the place of performance specification, performance agreements and contract-like arrangements. There is an ideological element to this debate. Because these methods sometimes clarify policy issues and options concerning downsizing, contracting*

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out, corporatising or privatising government functions they are disliked by some on the political left which sees them as biasing governments towards those policies. The ideological arguments are, however, peripheral to important issues about the effectiveness of various management methods in co-ordinating the work of ministers, top executives and operational staff in the pursuit of organisational goals. The tools of institutional analysis provide insights into management methods.  

In his refutations of criticism of the economic scheme, Scott uses terms such as ‘leftist’ and ‘Washington Consensus’ (implying critics are voicing some form of belief in a nationalist conspiracy), ‘dislike’, ‘dissatisfied’, ‘concerned’ ‘laments’, rhetorical’ and ‘rhetorical flourish’, with the overall sentiment being that critics were emotive and pining for a lost world. In denying the significance of the public context he concludes with the following excerpt:

Michael Wintringham, the state services commissioner[sic], has captured the nature of the more strident critics of the public sector management system in the following description:

Inevitably from time to time, ministers find themselves having to run the politics that come out of management decisions which by themselves may be technically unexceptional. When that happens, many people in New Zealand – commentator and editorial writers especially – are too willing to leap from isolated decisions – taken out of context – to conclude that the state sector reforms were a mistake. At its crudest, the sequence goes something like this: the manager in the public service comes to a view that it is more cost effective to contract some specialist service rather than maintain capability in-house; a general sweep of all departments by an MP under the Official Information Act seeks out all instances of expenditure by consultants in the year 1999; this finds its way into a press statement or question in parliament ... someone releases a press statement about the waste and extravagance of the uses of consultants [sic]... talk back hosts and their insomniac guests rail against the waste and extravagance in the public service;

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the state sector reforms were a mistake; let’s all go back to the golden age of public administration ... the public debates about the big questions facing our society reach yet another plateau of irrelevance.\(^8^{9}\)

As the economic conceptual scheme was believed to provide the true path to prosperity all other views were considered to lack objectivity and were consequently considered political, ideological, emotional or irrational.

The dominance of the economic conceptual scheme resulted in deficits in economic ideas not being related to their conceptual limits but interpreted according to the monistic idea that all knowledge is part of one coherent scheme that will become apparent once the respective behaviours of each part of the economic system are understood. This led to the view that shortfalls in current knowledge did not mean that what was known should be abandoned because it was still true and therefore was still a step toward a better life. For example:

\textit{Critics of the public sector reforms argue that these theories imply that people may only be motivated by money and public institutions motivated by self-interest rather than public interest. It is not entirely clear whether critics are arguing that this is not true or that it is ethically objectionable. Institutional economists also argue amongst themselves about the evidence of motivation. \ldots There is, however, a disbelief in the proposition that organisations, either private or public, can always be safely assumed to act selflessly in the interests of shareholders or citizens. Even if such an assumption were discovered to be broadly consistent with the evidence, there would still be the problem of bounded rationality, where people could do the wrong things for the right reasons. Further, while it is one thing to be}

motivated in one's mind by the public interest, it is quite another thing
to be sure what this actually is in particular circumstances.\textsuperscript{90}

Once they assumed dominance, economic parameters set economic concepts and
abstractions as the only true path to understanding matters of meaning. Views that did
not cohere with these ideas, such as moral views related to the public context expressed
in party manifestos were termed ideological, lacking objectivity and transparency and
able to ‘be hijacked by energetic minorities within a party organisation’ whose
membership was ‘a minute fraction of a country’s population’, and consequently should
be prevented from becoming law unless they cohered with the overall economic
conceptual scheme.\textsuperscript{91}

There was no cognisance that human values differ, can be incompatible and cannot all be
attained in the pursuit of some ultimate end and that choosing between incompatible
values can involve tragic consequences that must be reconciled against the moral context
as expressed in public ideas and individual circumstances before a course of action can be
determined.

Up until the time of the reforms public institutions served as expressions of moral views
that are necessarily related to the public context. Now their raison d’être was to give
expression to the concepts and abstractions of the economic conceptual scheme. In
extending economic parameters beyond financial matters and into those that it could not
properly address the economic conceptual scheme formally removed government and
public policy from its social roots. This acted to both compound its own distorted
accounts of meaning and fundamentally undermine the way New Zealand society gave
formal expression to matters of concern. The government became severed from its
constituency, the effects of which are explored in the following two chapters.

\textsuperscript{90} Scott G. Public management in New Zealand. Lessons and challenges. Wellington, New Zealand: New

\textsuperscript{91} Scott G. Public management in New Zealand. Lessons and challenges. Wellington, New Zealand: New
Zealand Business Roundtable; 2001. p. 103. In 2004, a proposal was put forward whereby Treasury would
examine the impact of the tax policies contained within party manifestos prior to an election. See:
Chapter Nine

Reforming Health

Introduction

The New Zealand public health sector has its origins in the 1800s. Hospitals were run as state concerns due to factors inherent in the colonisation of a small country that was geographically complex and also remote from the motherland of the colonialists. Even at this early stage, state funding of health care had its critics. In 1864, The Southland Times reported:

The system of Government hospitals as adopted in many Provinces of New Zealand, is bad in principle. It has a detrimental influence on the public mind. It tends to destroy that benevolent and self-reliant feeling which has ennobled the character of the British; it warps the best desires of the disposition, and tends to a despicable dependence upon

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1 At the time of the reforms a significant proportion of the content of the Master of Public Policy programme was focused on the rationale for the health sector reforms. Over the years 1987-1994 the author was a student of the public policy programme, a senior manager in the health service, an advisor in the Department of Health (which subsequent to the public sector reforms became the Ministry of Health), a senior government official responsible for implementing reforms into a State-owned Corporation and an advisor to the Associate Minister of Health. This section is supported by personal experience that included exposure to a vast array of documentation that moved between departments during the reforms, and many discussions held with other senior politicians, officials and managers.

the government for aid to the sick and afflicted, which the generous instincts, when cultivated, invariably awards...³

Social Security legislation introduced in 1938 marked the beginning of a health care system that was in the main funded by tax revenue and was largely free to citizens at the point of consumption. Until the mid 1980s public funding and the universal nature of the system was largely maintained by successive governments⁴ as moral views related to the public context that conceptualised health and health care as a basic human right, were able to be expressed through the political process.⁵ The dominant conceptual scheme that was used to underpin the delivery of health services was the medical model.

Given its reliance on public funding, the health sector came under the scrutiny of Treasury as part of the overall state sector reform process and led to reforms grounded in the concepts and logic of institutional economics. This chapter summarises both the way the conceptual scheme that underpinned the state sector reforms were used in the health sector, and how the uncritical application of these ideas not only compounded the misunderstandings of the human condition created by the medical model but sought to formally institutionalise them with negative results for the provision of health care.

Background

The public sector

At the time of the reforms the New Zealand public hospital sector was organised to provide rural, secondary and tertiary care to a country with a diverse geography and a small population. New Zealand trained its own workforce and its health professionals were often at the forefront of internationally acclaimed achievements. Generally health

⁵ See Royal Commission on Social Policy. Report of the Royal Commission on social policy. Richardson I, Chair. Published as Appendix to the Journals of the House of Representatives of New Zealand; 1988. This report gives an overview of the social values held by New Zealanders in regard to health and health care.
professionals worked co-operatively to provide care that was cognisant of the latest international developments in care, to all patients regardless of circumstance. Health care provision and clinical care were not perfect but the discrepancies in access and clinical care that existed in other first world economies such as the United States of America did not exist. Although some groups (such as some Maori) preferred not to access hospital services, anyone who wanted hospital care was able to with length of time determined to some extent by geographical isolation and the acuity of the presenting problem.

Hospital services were governed by ministers and elected local boards through a process that enabled ideas of what communities considered important in terms of caring for the sick and suffering to be translated into the types of services that were provided. The election process and the presence of an elected board also provided symbols that supported social cohesion and helped link local communities to the country as a whole. The provision of health care through the public sector was an attempt to ensure certainty of access for those who were sickest so that no one was precluded from receiving care when they were ill by being financially disadvantaged, or their chances of survival were less than ideal because of the level of complexity created by their illness and circumstances. The public sector was the ‘service of last resort’ – a concept that carried with it meanings related to security, sympathy, equality and social cohesiveness that manifested in the social function of caring for the sick and suffering.

The public sector also enabled a country with a small population that was geographically widely dispersed to have access to first world health care. The consequence was that medical specialists could be and often were isolated from their peers, but the cooperative nature of the sector meant that it provided mechanisms (albeit often unrecognised and in crude forms) for clinicians to engage in social relations with their peers. In an environment where specific clinical skills were rare it enabled clinicians to develop networks that supported their social relations with peers, if they chose to engage with them, so that clinical practice generally remained conceptually congruent with what was professionally appropriate.

Because it was recognised that illness often constrained patients’ ability to make rational decisions about the choice of care they received, a regulatory framework, that included
the regulation of training institutions and training programmes, professional ethical frameworks and occupational regulation of professionals, had developed over time in an attempt to ensure patients received acceptable levels of care in relation to current international standards. This framework also served to maintain standards through disciplinary measures that had evolved in ways that acknowledged the uncertainty inherent in clinical care.

The public sector itself was extraordinarily complex. Hospitals, being one part of the sector, were complex in themselves. A tertiary hospital could be likened to an international airport where customs and boarder control, air traffic controllers, all the participating airlines, baggage handlers, cafes, shops, aircraft and maintenance crew, terminals, the airport itself etc, were owned, controlled and coordinated by one entity. Further, the nature of hospital care could be likened to unscheduled flights arriving at any time regardless of the congestion at the airport with the added complication that some of these flights were low on fuel and many did not have fuel gauges. The nature of the health workforce meant that each hospital could have in excess of seventy occupational groups working in it, with each specific group having working conditions that had been negotiated in response to constraints created by the nature of their work. Services were provided twenty-four hours a day and seven days a week inclusive of public holidays. Up to the time of the reforms, hospital systems and processes had evolved to enable the interests of different groups to be reconciled in cooperative ways and to take cognisance of the invasive nature of the clinical work that was done.

Each hospital could provide up to of ten thousand different types of diagnoses, treatments and interventions for in excess of 250,000 patients per annum. They provided in excess of 1.5 million meals per annum, and had to be kept scrupulously clean to ensure patients were not endangered by the hospital environment given the invasive nature of what was undertaken there. Services were shaped by the nature of acute or unplanned care. For example, acute surgical procedures received priority and displaced elective ones. Patients having elective procedures could have their surgery postponed, sometimes in the order of weeks because acute work meant all the operating sessions and specialist staff

\footnote{in the cases of hospitals in the main centres (Auckland, Wellington and Christchurch).}
were fully utilised. Patients were sometimes offered the option of private care when the wait for treatment was prolonged and if they carried private health insurance would not be financially disadvantaged.

The nature of providing acute care meant that there were relationships between patients waiting in accident and emergency departments for admission, and the number of vacant beds in the hospitals. A lack of beds in the hospital meant long delays in accident and emergency departments. This was influenced by the number of acute admissions on any particular day and the acuity and number of patients already in the hospital system.

Hospitals integrated care with the primary sector. Patients would be referred to specialist services in hospitals and be discharged back into the care of GPs who in providing care throughout the continuum of the patients lives provided a reference for the patient as a person. A number of other publicly funded primary services had also developed (such as home support, physiotherapy, occupational therapy, riding for the disabled etc) to support patients in times of illness or disability that could be accessed through a recommendation by hospital specialists after a hospital admission or by GPs after assessments by other health professionals.

Public hospitals were integrally linked with the communities. Land on which hospitals had been built had on occasion been donated for this purpose by a community member or group. Facilities were used by community groups (especially in rural areas), as venues for activates such as civil defence. Funds for special projects were raised through community initiatives.

Public hospitals were funded according to a capped population based funding formula (PBFF) that used the age-sex composition of boards’ populations, with adjustments being made for other population factors identified as contributing to health needs and characteristics such as income, ethnicity, education age and geographical location.

The size and complexity of the service provided under the rubric of ‘health’ meant that there would always be deficits in performance and these were likely to be exposed because of community interest in what went on in the sector. What it did or did not do was important to the population generally and therefore commanded attention.
The public sector actualised concepts of cooperation, resourcefulness, cohesion, empathy, security, equality, sympathy and so on. These values were further enhanced by community participation in the governance and delivery of health services through the election of central government politicians and the election of board managers of local health services. However, the dominance of the medical model led to management concerns such as for example, the existence of poor controls on administrative aspects of service delivery (such as productivity and reconciling activities against budget) and discrepancies between institutions that included variations in length of stay for similar services, being addressed using medical concepts. ‘Service management’ was introduced that structured health systems along the lines of medical categories such as ‘medical services’ that crossed the boundary between inpatient and community care but did little to address management issues.

**A new imperative**

As previously noted, the mid 1980s saw the economic conceptual scheme assume dominance in all aspects of New Zealand life with reforms undertaken based in the view that the political economy resulted in market distortions that hindered prosperity. The health sector commanded attention because the bulk of health care costs in New Zealand (77%) were financed from general tax revenue, hospital services were provided by public organisations and politicians were able to demand new resources for the sector and influence what it did. The sector was therefore by definition inherently inefficient and the parameters set by monetary policy, which dictated that health sector spending was excessive as a proportion of revenue relative to GDP, provided evidence that this was the case:

*The health sector costs taxpayers over $3.4 billion dollars per year with the hospital sector accounting for $2.4 billion (1987/88 Estimates).*  
*...[This] represents approximately 18% of government expenditure.*

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Total spending on health accounts for about 7 per cent of gross
domestic product (GDP). 8

...most indicators show that the percentage of GDP spent on health
care varies according to a country’s per capita income. New Zealand,
with a per capita income of about two thirds of that of Australia and
half that of Canada, still spends about the same percentage of GDP as
those countries spent on hospitals. 9

As the largest share of health costs were borne by taxpayers, 10 increases in health
expenditure were seen as worsening the country’s position relative to GDP. Economic
abstractions firmly placed the solution for this problem as intrinsic to the structures and
process that existed in a market economy.

In accordance with the overall reforms, in the first instance, given the difficulties in
establishing a market economy in the sector, incentives were created to ‘drive in
efficiencies’. The funding of hospital services was constrained so that there was little or
no growth so that hospitals would be forced to find efficiencies. The reformers believed
this would force hospitals to focus on preventing illness and minimising the use of
expensive technology.

As private sector services such as general practitioner services, pharmaceuticals and
laboratory services that were subsidised by taxation revenue continued to grow at rates in
excess of growth in GDP, the intention to reduce overall health spending as a proportion
of GDP was not achieved. Given that the role of government had been transformed to
one of protecting the economic conceptual scheme, the growth in health sector
expenditure was an overriding concern.

Debt levels are very high and must be reduced in order to strengthen
our economy and permit the growth needed to sustain our social
services in the long term. Constraining the level of the tax burden is

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8 Hospital and Related Services Taskforce. Hospital and related services taskforce: unshackling the
9 Hospital and Related Services Taskforce. Hospital and related services taskforce: unshackling the
10 Minister of Health. Your health and the public health: A statement of government health policy. Carr R,
also critical to this recovery of growth. It must be remembered that any significant increase in tax revenue can be achieved only by increasing the taxes paid by people on modest incomes.\textsuperscript{11}

Structural reform was needed because the ‘health system was faced with economic stringency’ at a time when the demand for services was growing and governments needed to be able to constrain health expenditure and protect tax-payers from spending on health care which already exceeded what the country could afford. It was not seen as realistic to increase government spending on health and increase taxes to finance it ‘against a background of continuing fiscal crisis’.\textsuperscript{12}

The reformers believed that a ‘reorganisation of a publicly funded system whereby the political economy was eliminated was long-overdue’ as the current structure prevented the sector’s problems from being properly addressed.\textsuperscript{13} As the prescriptions of the economic scheme were seen as an objective truth and there was a complete lack of awareness of their conceptual limits the reformers were confident that their proposed reforms were ‘expressly, not ideologically driven’.\textsuperscript{14}

\textbf{Congruent abstractions}

Prior to the reforms, the abstractions of the medical model were dominant in matters relating to health and health care. The abstraction that illness could be prevented through the provision of health care had already gained expression in public policy. For example:

\begin{itemize}
  \item It is interesting to see this reason used as the rationale for the reforms given that the ‘fiscal crisis’ was reported by the Reserve Bank as having been averted and taxes lowered by financial reforms initiated in the mid 1980s.
\end{itemize}
One of the unfortunate repercussions of the present fragmented system of health service administration has been an undue financial and administrative concentration upon the institutions and services for treating illness.

...the Government believes that the fundamental overhaul of the administrative structure is essential in order to bring into a single health service the full range of primary care, specialist, diagnostic, therapeutic and rehabilitation services and environmental health services. It is only by this means that promotion of good health as distinct from the treatment of illness will receive its rightful emphasis.\textsuperscript{15}

In being congruent with economic abstractions, this idea gained purchase in the mid 1980s. Reforms were commenced that brought together the funding of various parts of the health sector (such as health prevention, health promotion and hospital services) under the auspices of an umbrella organisation – the Area Health Board - in order to encourage health care organisations to fund activities that would prevent or minimise illness in the first instance rather than put all their resources into care of the sick.

Once the economic scheme became dominant in the development of public policy this idea was taken up by those designing the health sector reforms but understood in economic terms - taxation revenue for health care as a percentage of GDP could be reduced if illness was prevented and hospitals responsible for the majority of expenditure were reduced in size or closed.\textsuperscript{16} However, the political economy encouraged the building and use of hospitals that did nothing to prevent illness in the first instance and,


\textsuperscript{16} This sentiment is reflected throughout these reports. See for example: Hospital and Related Services Taskforce. Hospital and related services taskforce: unshackling the hospitals. Gibbs A, Chair. Wellington, New Zealand: Government Printing Office; 1988. p. 2, 9, 10, 11, 14, 15, 16, 20, 22, 23, 37.


after almost a hundred years of government intervention in the health sector, 'government had not achieved its intention'.17 People were still getting sick, self-interest unfettered by market forces resulted in hospitals demanding taxation generated funding and expanding. A market economy would succeed in refocusing the sector where the political economy had failed. By dividing the sector into buyers and sellers, purchasing decisions could be made whereby scarce health dollars could be directed into prevention rather than treatment, and hospitals would no longer be in a position to expand because they no longer had the revenue to do so. They would only be able to provide the services the purchasers wanted to invest in as determined by performance agreements between the purchasers and government that identified the outputs government wanted to buy.

In being constructed from the same logical base it appeared that economic concepts were being used to appropriately interpret the meaning of ideas developed by the medical model. However, in not being designed to answer medical questions, they failed to recognise the conceptual limits of the model's abstraction and that eliminating sickness could not be achieved in reality. Furthermore they were not equipped to understand matters of meaning related to moral views expressed in the public context such as those that saw the sector performing the important function of caring for the sickest members of society regardless of their financial ability to secure care. In not recognising the limits of the economic scheme, this minimalist and distorting economic account of health and health care was uncritically used to underpin the subsequent reforms that set up conditions that would compound the distortions created by the medical model.

Health policy and Treasury

The state sector reforms commenced in the mid 1980s had already reshaped the role of government and public service and Treasury had assumed the role of assessing the efficiency, effectiveness and capability18 of public spending and providing government

with the information that it needed to carry out its new role of protecting the tax-payer. However, as health expenditure was not conceptualised in ways that were congruent with the overall conceptual scheme Treasury’s ability to evaluate and advise government ‘whether this funding was used effectively, or directed to those most in need’ was hampered thereby preventing ‘the government’s ability to argue that some other spending programmes should be given higher priority than aspects of health expenditure.”

Consequently, the reforms required health sector activity to be characterised in economic terms - that is, illness had to be defined in timeless and universal terms and clinical care had to be characterised as a series of defined exchange transactions. This characterisation would enable Treasury to assess the sector’s outputs as part of the government’s general expenditure review so that they could be prioritised against each other and against those of other government programmes. In other words, it would enable Treasury to determine the level of government investment in health care against the economic criteria of maximising health status while getting the best value from available resources by making economic determinations of which services the government wished to provide.

**Health sector reform: minimising the political economy and creating a market**

As well as vesting the development of health policy with Treasury, the intent of the reforms was to implement the prescriptions of institutional economics so that the predicted benefits, such as improved information, decision-making, accountability and efficiency, could be realised. The abstractions that underpinned these prescriptions logically linked these improvements with depoliticisation of the sector and the introduction of market forces.

The mandating legislation that gave substance to these abstractions was the Health and Disability Services Act 1993 (HDS Act). The Commerce Act 1986 lent it support by providing ‘protection against anti-competitive abuses of the consumer’ and prevented ‘anti-competitive mergers’. In other words, it aimed to constrain the agency power of hospitals and health professionals.

**Changing the role of government**

The Act changed the government’s role in the health sector. It ‘quarantined government from rationing decisions so that health gains rather than interest group pressures would predominate in rationing judgements’. Ministers of Health now answered to Parliament for the efficient delivery of the outputs identified in the estimates process. That is, they became the new custodians of access and equity and no longer needed to be involved in what was called ‘operational details’. In effect, this change severed Ministers from the moral views of their constituencies and made them guardians of economic objectives set during the estimates process. As long as these objectives were being met they were no longer responsible for, and therefore did not need to address, the consequences that ensued when services were lacking or were unable to be accessed by those in need. If, using an extreme example to make the point, it was deemed unnecessary to fund oncology services because they did not provide the best value for money in regard to the government’s goals of maximising health status, ministers were no longer accountable to the constituency for the suffering that ensued. As such, ministers were isolated from the workface where moral issues, economic realities and conceptual abstractions collided and demanded ‘hard’ decisions that necessitated tradeoffs that often had tragic consequences. They were responsible for ensuring that people could get equitably get access to the services government had identified as necessary.

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The Department of Health was re-titled the Ministry of Health and its new role was to provide ministers with advice on overall government health sector objectives (such as for example, improving health status and promoting independence), whether or not the sector had made any progress in achieving these,26 and to ensure that government objectives (that included the identification of which services government wanted to buy) were translated into the purchase plans.27 Operational responsibilities such as licensing private providers and the payment of fees to providers were separated into separate entities. These changes effectively severed the Ministry from the trade-offs and consequences that had to be made in the provision of health care and instead made it the administrative custodian of economic objectives as prioritised by Treasury during the estimates process.

Core services

The medical model created the perception that illness could be defined and quantified in universal terms. Given that some hospital services would remain in the public sector, the reforms required them to be defined so that they could be prioritised and the sector held to account for their production. The conceptual limits of the economic scheme prevented any recognition that the abstractions of the medical model were created to answer questions that were different in kind to those of the economic scheme. Therefore medical classification systems such as the International Classification of Disease (ICD) codes and Diagnostic Related Groups (DRGs) developed to assist medicine to understanding disease and treatment were seen as able to be adopted to define health care for economic purposes28 without any awareness that understanding illness involved processes that lay outside those portrayed by these classification systems as did the provision of medical care.

On the basis of the parameters set by their economic predispositions, the reformers believed that once defined, health care could be categorised into two groups - core and non-core with economic determinations being used to determine which services would fall into the core group. This would then enable objective determinations as to which services would be purchased by government, control clinical decision-making, enable governments to stay focused on medium or long term goals and, in providing the same core, the financial performance and thus the efficiency of public organisations could be compared and ranked. An explicit core was also seen to carry the advantage of making entitlements explicit to the public thereby enabling them to purchase supplementary cover from private insurers. In not recognising the conceptual limits of the exercise the reformers expected that the core would be defined within two years and were unaware that removing clinical decision-making from the clinical context would compound the distortions created by the abstractions of the medical model whereby, not only was the patient’s account of his or her illness marginalised, the physical condition of the presenting patient no longer had relevance if it did not comply with economic criteria.

Creating a market

Purchasing

In not recognising the conceptual limits inherent in attempting to define health services in universal and timeless ways and purchasing them without reference to the clinical context, the reformers separating purchasers from providers with the intent that the purchasers would buy the best services available in terms of quality, price and integration with primary services according to the list of predetermined core services. Economic parameters made it possible to see the transfer of clinical decision-making from providers to an entity not involved in the provision of clinical care as carrying the advantage of

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enabling the purchase of approved outputs on behalf of a predetermined population on a 'competitively neutral basis'. This would, it was believed, lead to rapid improvements in resource use and clinical practice\textsuperscript{34} as purchasers (and the government) would no longer at the 'mercy' of providers and would not have divided loyalties to patients, clinicians and other staff or a vested interest in any 'particular conglomeration of bricks and mortar.'\textsuperscript{35} Consequently five independent purchasing businesses (four Regional Health Authorities (RHAs) and the Public Health Commission (PHC) which was solely responsible for buying services that would prevent sickness) were set up as Crown Agencies to purchase approved outputs on behalf of a predetermined population.

Again, in not recognising the conceptual limits behind the medical model’s abstraction, separating purchasers from providers reinforced the marginalisation of the patient both as a person and a physical entity by moving aspects of clinical decision-making away from the clinicians directly involved in patient care to bureaucrats outside the clinical context and without any medical knowledge.

**Provision**

Economics saw advantages in structuring public hospitals in ways that approximated private sector manufacturers. Accordingly, hospitals were turned into independent state businesses called Crown Health Enterprises (CHEs), reporting to the Minister of Crown Health Enterprises\textsuperscript{36} through the Crown Company Monitoring and Advisory Unit (CCMAU), and governed by Boards appointed by government (on the recommendation of CCMAU).\textsuperscript{37}

Consistent with the State Sector and Public Finance Acts, CHEs were required to have:

- clear commercial objectives;

high-quality directors, who were expeditiously replaced if they failed to perform financially;

performance objectives and targets set by the shareholding Ministers; [that is, financial ones]

an arm's-length relationship between Government and operational management;

transparent subsidisation where Government wanted to provide extra assistance to purchase services that would otherwise not be commercial; [to make inefficient decisions transparent]

no advantage or disadvantage over alternative Suppliers, and win their contracts through the efficient delivery of quality health services in a competitively neutral environment;

managers with the autonomy to make effective use of resources;

mechanisms that held them strictly accountable on a performance basis, measured against the Minister's goals and targets.\textsuperscript{38}

In setting CHEs up with the primary objective of generating a profit (in the belief that this created a direct incentive for the owners to take an active and compelling interest in their business efficiency), severing professional links between hospitals and between hospitals and the rest of the health sector, and the severing links between hospitals and the Ministry and Minister of Health, health structures were further reinforced against taking cognisance of the patient either as a person of a physical entity. Clinicians were no longer able to freely discuss clinical care and share their problems and insights with their colleagues in other centres but required to distance themselves so they did not give away any ‘competitive advantages.’ Meeting contracted targets became the new priority with the patient both as a person and a physical entity being irrelevant thus compounding the distortions created by the simplistic accounts of the medical model. However, in

addition, if hospitals had met their contractual obligations, the consequences that ensued if patients did not receive care when they needed it were no longer a medical concern.

Economic abstractions set out the parameters for rational business practices. Hospitals were encouraged to diversify, merge, form joint ventures and alliances with the private sector to treat private sector patients, contract for the provision of services from other providers and dispose of assets in order to become competitively efficient so they could win contracts without reference to the communities to which they provided services.39 The closure of ‘inefficient hospitals’ such as those in rural communities was highlighted as good business practice 40 as evaluations based in minimalist accounts determined that they were doing an ‘extraordinarily costly job of providing care’. These same parameters set ‘integrated clinics’ with visiting health care providers as the preferred option for health care delivery in smaller communities.41 In not being aware that a proper understanding of the effects of health care comes from knowing a patient well, the reformers institutionalised the opposite into the fabric of health care delivery thereby further distorting the abstractions of the medical model.

The dominance of the economic conceptual scheme meant that economic abstractions were extended beyond the public sector and into voluntary and private health care providers. Whereas prior to the reforms voluntary providers had been grounded in community values, the new market economy required them to become conceptually aligned with the economic scheme and, in order to secure government funding, were required to compete with all the other providers and provide services as stipulated by contracts constructed to support economically set parameters.

Customers
The economic parameter that set charging patients for health services as a road to greater efficiency led to the introduction of user part charges for hospital inpatient and outpatient

care along with changes to pharmaceutical subsidies. This caused widespread public controversy which resulted in politicians modifying the original proposals (which ironically lent support to the notion that political economies are inherently inefficient). Even so, the dominance of the scheme meant that some charges (such as those related to outpatient visits) remained. Patients were now confronted with a financial barrier when they sought the care of a medical specialist that was outside the confines of a technical procedure. Again the patient as a person was marginalised.

**Occupational competition**

In 2003, The Health Practitioner Competence Assurance Act changed the regulatory framework under which health professionals were able to practice. The Act was constructed according to the abstractions created by the medical model but its purpose was to give substance to economic prescriptions – to control agency power and increase market flexibility and competition.

The Act was based on the minimalist accounts created by the medical model that saw clinical practice as a defined and predictable series of steps which could be scientifically defined and quantified and were part of a composite whole. Viewing this account through an economic lens led to further distortions. The conceptual orientation that led to clinical practice being seen as a manufacturing process led to the perception that the practice of every type of health professional belonged to the same class with each providing a specific component of care. As such, care were seen as able to be deconstructed into a series of steps (scopes of practice) each of which could be provided by any health professional provided they had undergone the right technical training. This would enable new types of health professionals (such as nurses) who were deemed competent to perform the tasks defined under the scope of practice to enter the health market and compete with existing providers such as doctors in specific aspects of care (such as providing anaesthetics or prescribing drugs). Medicine as a practice no longer had an existence in its own right but as a series of medical tasks that could be performed without medical training if the professional had the right technical skills.

By regulating all the health professions the Act formalised the view that providing health care was a series of discrete steps and again institutionalised the irrelevance of the
holistic and social aspects of medical care, medicine as a profession and the patient as a person.

**Integrated care**

Economic abstractions made it possible to believe that the market economy would bring success where the political economy had failed in the endeavour to prevent illness so that more expensive treatment options were not pursued. The 'integrated care' strategy, whereby private sector health practitioners were funded to provide a continuum of defined prevention, primary secondary and tertiary services on a commercial basis (that is, they could either make profits or face financial censure for non-performance), was seen as integral to both minimising the effects of the political economy and freeing market forces so that 'considerable benefits' and 'improved quality of care' would be realised.\(^{42}\)

Although based on the minimalist account of illness and health created by the medical model, the economic lens simplified it further and created further distortions. In not recognising the conceptual limits of what was being proposed the reformers overlooked the fragility of an integrated hospital system and that its existence depended on it being seen as integrated whole. Instead, economic parameters prescribed that in order for efficient service provision to be realised, integrated providers should be free to choose who they contracted with for component of hospital care without considering the impact of their decisions on hospital services. They could for example, contract laboratory services to Australian companies causing those in their region to close. In not recognising the conceptual limits of what was being proposed the reformers opened up the possibility for the sector to lose its capacity to respond to medical crises as (using the above example to demonstrate the point) time delays incurred in transporting samples to Australia would impede the region's ability to get results quickly. Furthermore, once the skills of those who provided laboratory services were lost to a region clinicians became constrained in their ability to provide first world health care as they did not have the

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necessary backup. Although the loss of hospital services would most likely be seen as providing an economic benefit it would cause harm to those most in need of health care by denying them access to health care when they needed it most.

**Conceptual alignment**

To ensure economic parameters dominated the health sector it was necessary to put people in key positions who were not captured by the health sector and understood the concepts and internal logic and rules of the economic scheme.

...The government does not want to put board members in the unenviable position of having to respond to the communities which elected them while having to follow Government directives on reform.

...The Government has decided to replace the current area health board members with appointed commissioners. The government will work closely with the appointed Commissioners....

Experience gained from other major reform exercises has demonstrated that the successful implementation of reform on this scale can be achieved only if those involved in it have a clear understanding of what is expected of them. ...Recognising the magnitude of the reforms, the Government has also decided to set up a special change management structure, bringing together a team of people with the necessary skills and experience to implement them.  

The National Interim Provider Board (NIPB) was created to implement the reforms. Economic parameters set its reporting lines to Government through the Minister of Crown Health Enterprises to ensure its independence from the health sector. RHA Chairs and CEOs and CHE senior managerial appointees were recruited from outside the sector were appointed on the basis of their ‘business experience’. Those recruited from within

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43 This is without considering the impact on clinical training.
the sector underwent ‘training’ to ensure they were conceptually aligned with the concepts and logic of the new framework.\footnote{For example, the Health Services Management Training programme was set up to train staff in the principles of managerialism as necessitated by the State Sector Act. Also see Hospital and Related Services Taskforce. Hospital and related services taskforce: unshackling the hospitals. Gibbs A, Chair. Wellington, New Zealand: Government Printing Office; 1988. p. 40.}

In being grounded in the economic scheme these new recruits were strident in its espousal of economic abstractions and their lack of experience meant they did not have any awareness of their conceptual limits. For example:

\begin{quote}
No one has, in the past decade, been able to say honestly that the health system in New Zealand was in good shape. A succession of expert independent task forces and commissions have diagnosed fundamental inadequacies. They have identified, among other things, \ldots an excessive focus on institutional care at the expense of community care; sluggishness in adopting valuable new practices such as day surgery; significant inefficiencies; waste of resources; a damaging fragmentation of funding and services; instances of substandard quality; and a tendency to cut services, run down the quality of assets and boost the debt levels instead of facing up to the hard decisions required to achieve optimal efficiency in using the public funds provided.\footnote{National Interim Provider Board. Providing better health care for New Zealanders. Trotter R, Chair. Wellington, New Zealand: National Interim Provider Board; 1992. p. 6.}

Doctors will naturally tend to do what they can to help people. Many help their patients to find the cheapest way through the system. Anomalies in assistance levels are therefore rapidly exploited.

Patients also learned how to exploit anomalies in the system. \ldots Obviously, these practices save money for the individual patients, but they also reduce the money available to other people equally in need of
care, and help or extend the period those people are forced to spend on waiting lists.47

Our recommendations are based on proven principles that work. They have been structured so that they can be put into effect with minimum disruption. When completed we have no doubt they will achieve more and better health for the people of New Zealand with increasing dividends in the years to come.48

If the right incentive structures do not exist, morale will not be harnessed to the success of the venture. Opportunities for improvement will be ignored out of resentment that initiative is not recognised and rewarded. Even in industries such as health, where a caring heart and an overflowing goodwill characterise many people in the workforce, this remains a fundamental truth.49

The distorted account of objectivity created by the economic model meant that the sector’s realities were unable to gain any purchase in the development and implementation of health policy. As economic parameters set the parameters for rationality those that did not accept the economic scheme as the only true way to improving the health sector were either marginalised or made redundant. This in turn, enabled distorted accounts of health and health care to be used with impunity to structure the sector and compound the distortions created by the medical model.

Conceptual limits

The government released its conceptual scheme in 1991. Its conceptual limits were immediately obvious to those who had experience in the realities of the sector.50

50 For example, see; Coalition for Public Health. The Government’s health experiment an overview of the health “reforms”. Wellington: Coalition for Public Health; Sep 1992.
However, because the economic conceptual scheme was already dominant within the public sector, the parameters for rationality and what could be properly expressed had already been set. Criticisms that did not accord with the economic conceptual scheme were disregarded using the economic concepts of self-interest and capture. For example:

People are understandably concerned about change and tend to resist it. Their concerns are often exacerbated by interest groups which believe they will benefit from maintaining the status quo.51

...wherever change is desirable, there will always be vested interests which benefit from the existing system. Some will inevitably resort to political action in defence of their past privileges.52

Restructuring commenced in 1993. As the economic concepts and abstractions did not provide a proper account of health and health care delivery in New Zealand the expected gains were not realised and the problems the reforms were meant to address worsened.53

**Inability to define core services**

Attempts to define core services54 were made from 1992 onwards. The conceptual limits of the exercise became apparent immediately. By 1993, the Core Services Committee stated:

'We believe that an approach which identifies services as 'in' or 'out' of the core is overly simplistic and potentially unfair because it may

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55 Those services for which government funding would be available, and to which everyone had access. These were to be developed by a 'Core Committee'. Minister of Health. The core debate. Minister of Health, Parliament Buildings, Wellington, New Zealand, Nov, 1991.
ignore the benefit of a particular service to a particular individual at a particular time.\textsuperscript{55}

In 1995, the Core Committee reported this sentiment as 'unequivocal rejection of the concept of using a simple list of services (either negative or positive or a mixture of both) to define the services that would be publicly funded'.\textsuperscript{56} The conceptual limits inherent in the exercise made defining a 'core' impossible. Attempts to differentiate between preventive and illness related services also foundered and the Public Health Commission was disbanded after two years and its purchasing functions transferred to the remaining four purchasers.

As the conceptual limits of the exercise were not recognised, although defining the core was abandoned efforts to define services in timeless and universal ways were not.\textsuperscript{57} Instead of being disbanded, the Committee was renamed National Advisory Committee on Health and Disability (National Health Committee)\textsuperscript{58} and its focus became one of developing service evidence-based guidelines or statements of best practice that detailed what the Committee considered was the most beneficial and cost effective care. The guidelines were also required to identify priority areas for health gains, service obligations and principles for purchasing.\textsuperscript{59} In other words, the purpose of the Committee remained grounded in prescribing clinical care outside the clinical or professional context.

There were other attempts to define, prioritise and ration health and health care on the basis of economic abstractions. Several years of effort in statistical analysis and modelling went into developing standard product and service definitions with associated

benchmarked prices. Even so, the conceptual limits of the exercise resulted in arguments between purchasers and providers as to what these definitions meant. Classification systems such as Diagnostic Related Groups (DRGs), casemix and caseweights developed in other contexts were uncritically adopted without regard to their conceptual limits. As they bore little resemblance to the way health care was funded and provided in New Zealand these ‘definitions’ had to be repeatedly manipulated to make them ‘fit’ the New Zealand environment. Together, benchmarking and modifying classification systems used significant resources in human and financial terms that were funded from within the total health allocation determined by government during the estimates process thereby reducing the amount of money available for the provision of clinical care.

New costs

As the economic conceptual scheme did not have any mechanisms for reconciling its minimalist account with reality, the practicalities of implementing the reforms were not understood. Once the reforms were underway new costs associated with establishing a new tier of bureaucracy, funding additional providers, and designing, negotiating, monitoring and enforcing contracts took the reformers by surprise. Furthermore, the competitive requirements of the Commerce Act and parameters that necessitated that services be privatised where possible resulted in service fragmentation (as the link between service integration and effectiveness was not recognised), and escalating costs. The conceptual limits of the economic scheme prevented any recognition of the causes behind variability in services levels that resulted from what was called ‘erratic purchasing

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61 For example, The Victorian (Melbourne, Australia) case weights for cataract surgery is based on the productivity that can be achieved when undertaking cataract surgery in a hospital solely dedicated to providing eye surgery. Although this type of hospital exists in Melbourne, this caseweight significantly underestimates the cost of providing this surgery in New Zealand where this type of facility does not exist and is never likely to given the size and geographical spread of the population. Also see Howden-Chapman P, Ashton T. Shopping for health: purchasing services through contracts. Health Policy 1994;29:61–83.

decisions'. Instead there were attributed in part to the failure on the part of the National Health Committee to develop a core\textsuperscript{63} and also rationalised as the result of flexible purchasing strategies.\textsuperscript{64}

In their attempts to implement the abstractions of the economic scheme, purchasers contracted with private providers for components of care that could be easily defined and quantified. However, they often had to pay private providers more to have the same service provided than they had previously paid to public institutions\textsuperscript{65} thereby, (given their capped funding) reducing the amount available to pay CHEs and financially marginalising some of the CHE services of last resort. When alternative providers either met their contracted volumes or produced a reduced level of service, the CHEs, as the service of last resort, had to fill the gap.\textsuperscript{66}

The competitive imperative coupled with the conceptual limits of defining services in universal and timeless ways resulted in each purchaser and provider developing its own information system based in the requirements set by economic parameters. Some started from scratch and embarked on projects to define clinical practice and link it with RHA revenue while others adopted packages that reflected the economic systems of the countries in which they were developed.\textsuperscript{67} Competing CHEs refused to share supposedly commercially sensitive information\textsuperscript{68} which prevented the coordination and comparison of data. The consequences of not recognising the conceptual limits and complexity of


\textsuperscript{65} For example, in a number of instances Community Trusts were paid in excess of the amount taken from the CHE budget. In one ‘trial run’ a regional health authority contracted with a private hospital for a specified number of heart operations in spite of the fact that the tender price was higher than that of the public hospital. See Howden-Chapman P. Ashton T. Shopping for health: purchasing health services through contracts. Health Policy 1994;29:61-83:67.

\textsuperscript{66} For example, when the orthotic service provider failed, the public sector had to provide services to people needing them. Although it occurred later in the reform process, a more extreme example occurred in 2004, when maternity services were contracted to a private provider in Christchurch. When that provider reached its contracted volumes, it stopped providing the service. The remaining demand was picked up by the public hospital with no increase in funding for the services provided because the hospital had already been ‘funded to provide maternity services to the people of Canterbury’.

\textsuperscript{67} Such as those from the United states which reflected State, federal and insurance based revenue streams.

what was being attempted were cost overruns\(^{69}\) (as modifications and changes were made in attempts to make health sector information fit economic requirements that were not based on the care being provided), the waste of resources as some systems had to be completely scrapped\(^{70}\) and the lack of standard national data to facilitate the identification and comparison of trends.\(^{71}\)

Economic abstractions were not only causing the movement of scarce resource away from the sick and to the well, but were resulting in scarce resources being moved out of clinical care altogether.

**Lack of efficiency gains and blame**

On the basis of the parameter that the political economy created inefficiency CHEs were set up with opening deficits of $175 million which were expected to decline as the planned efficiency gains that the new market was expected to generate were achieved\(^{72}\) and Ministers excluded themselves from operational issues.\(^{73}\) As economic parameters could not provide a proper understanding of the nature of health service delivery the reforms did not generate expected production efficiencies ranging between 24 and 32 per cent of operating expenditure\(^{74}\) and both purchasers and public providers regularly ran financial deficits.

The effect of not recognising the conceptual limits of the economic scheme was that the Ministry of Health, CCMAU and Regional Health Authority officials blamed CHEs and each other and the Core Committee came under fire for ‘not identifying the “core” or

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essential services which frustrated attempts to institute equitable, consistent and agreed rationing. CHEs criticised the RHAs for seeing themselves in the role of owners and thereby considered that they could be closely involved in the providers’ operational plans. RHAs would often find themselves in receipt of an exit notice (or the threat of such a notice) for essential hospital services (such as intensive care neonatal services) without any ability to create a new provider as the provision of such services could only be safely undertaken within a tertiary hospital. As funding rules meant funding allocations to CHEs were capped and RHAs did not have the money to pay more to retain the service within the current facility, deficits accrued and services deemed to have less priority over health sector funding (such as radiology services) were reduced in scope without reference to anyone outside confines of the CHE/RHA relationship.

Reported difficulties experienced by some small providers and CHEs included demands for excessive amounts of information, repetitive discussions because of changes in regional health authority personnel during the negotiation phase, mixed messages about service commitments with other providers, a lack of trust by the RHAs and a poor understanding by RHAs of the types of services being provided and of appropriate quality measures.

The reforms resulted in a sector that was racked with division and a loss of institutional memory. Relationships that enabled shared meanings to develop broke down. The dominance of the economic scheme in health sector policy mean that the sector was limited in its ability to address these problems. RHAs attempted this by putting in place suitable notice periods, and more extensive dispute resolution processes. They carefully collated evidence of consultation with communities, and were more careful in the management of changes necessitated by their purchasing decisions.

Blame was also attributed to the continued existence of the political economy that enabled politicians to interfere in the sector,\(^\text{79}\) the poor application of economic knowledge,\(^\text{80}\) a lack of understanding by CHEs of what constituted sound ‘commercial behaviour’\(^\text{81}\) that led to ‘misperceptions’ that competition entailed antagonistic relationships, secrecy and the withholding of information\(^\text{82}\) and resulted in ‘poorer planning and service decisions’ by both RHAs and CHEs.\(^\text{83}\) Other causes lay in attempting to do too much too soon, undeveloped requisite techniques,\(^\text{84}\) the underfunding of the reforms which left parties to years of negotiating around significant issues with mismatched revenue and costs,\(^\text{85}\) the abandonment of health premiums which would have yielded “very substantial fiscal savings,”\(^\text{86}\) and a lack of competition between CHEs that compromised the ability of the reforms to satisfy their initial objectives.\(^\text{87}\)

Public hostility to the reforms was interpreted as being due to the poor level of understanding of the nature of the reforms with:

\[...attention focused primarily on structural rather than functional issues and limited understanding by the public of the broader economic\]


\(^{83}\) Ministry of Health. Implementing the coalition agreement on health The report of the steering group to oversee health and disability changes to the Minister of Health and the Associate Minister of Health. Wellington: Ministry of Health; May 30, 1997. p. 22.


and social policy context within which the health reforms were
developed.88

The problems were seen to stem from taxpayers being unclear as to what the health system should cost and what it could be expected to deliver.89 They did not understand that ‘rationing within a budget to maximise health gain for the total population.’ would always create tensions.90 They were confused about the roles of purchaser and provider and the relationships between the reforms and the benefits that would ensue.

Protestors demonstrating to prevent changes in the way services are
provided to their community may be unaware that they are sometimes
acting against the real health interests of their friends and neighbours.91

The reformers believed that the public airing of conflicts between CHEs and RHAs over contract negotiation gave the public the wrong impression of the benefits of the sector and further as they did not have an understanding of the economic context they did not understand business decisions – such as the closure of theatres before year’s end when their annual contract with RHAs was completed, and the need for management.92 This, they believed, did not necessarily indicate flaws specific to structures and relationships created by the reforms.93 As economic abstractions set the parameters for rationality, the conceptual limits of the reforms went unrecognised and the public’s lack of understanding of the reforms was dismissed as being related to “perceptions that did not accord with reality.”94

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89 Ministry of Health. Implementing the coalition agreement on health: The report of the steering group to oversee health and disability changes to the Minister of Health and the Associate Minister of Health. Wellington: Ministry of Health; 30 May 1997. p. 23.
Ongoing change

Purchasing

Continued attempts to realise the abstractions that underpinned the reforms meant that structural reform continued. The four RHAs were merged into one organisation, the Transitional Health Authority (THA), in 1997. The THA became the Health Funding Authority (HFA) in 1998. In 2000, after a change of government, the purchasing funding was transferred to 21 District Health Boards (DHBs). Although purchasing was now known as 'funding' given the dominance of the economic conceptual scheme in the development of public policy the essential elements of 'purchasing health services' in a commercial way remained unchanged with the added dimension that it was now further devolved from the auspices of government. The new structure retained the purchaser/provider split by requiring DHBs to establish separate disciplines on the state-owned providers and funding arms of the DHBs. DHBs were required to implement the priorities determined during the estimates process as articulated in the New Zealand Health Strategy with the aim of improving health outcomes and health status. Policy documents also made it clear that where a better health outcome would result, services should be moved to non-government providers, including contracting private providers to

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95 This was officially said to be in response to pressure from one of the political parties that formed the then coalition government. However, government officials had proposed this restructuring to the previous government due to lack of contractual consistency across purchasers that they believed prevented comparisons in performance.

96 Funding and purchasing are differentiated in NZ Treasury documents. Funding is defined as the allocation of resources to organisations via a formula of some kind, or a payment on the basis of past or prospective expenditures. Purchasing is defined as being distinguished from funding by a more strategic or proactive resource allocation role that determines which services will be provided in some detail. This usually involves assessing health needs, selectively and differentially contracting with providers, and monitoring performance.


work within, or use publicly owned facilities.\textsuperscript{99} DHB accountability was to the Crown through a 'Funding Agreement'.\textsuperscript{100} Benchmarking of costs, as well as outcome-related measures, such as health status and incidence of key clinical conditions, were to be used by the Ministry of Health to monitor performance.\textsuperscript{101}

\textbf{Provision}

As they ran deficits over and above the revenue obtained from the purchaser CHEs attempted to actualise economic abstractions with increasing intensity by restructuring internally on an ongoing basis. Assets were sold and different organisational models were implemented and changed when expected financial gains did not materialise.

As the economic scheme was unable to recognise that various conceptual schemes operated in the sector, and its dominance saw economic parameters as the only correct way of viewing health sector issues, clinicians were described as having difficulty "reconciling their ethical duties to their patients, and their loyalty to their profession and colleagues with the increased emphasis on their status as CHE employees that required responsibility for managing substantial, but finite, publicly owned resources."\textsuperscript{102} In not recognising the differences between the concepts of the medical model, management concepts and financial ones management responsibilities were removed from clinicians and, as deficits continued to accrue, returned to them on the basis that clinicians generated costs and therefore should be responsible for controlling them without regard to the specialised skills required for effective hospital management.

Each restructuring generated redundancies and people were moved around the sector. Positions were disestablished, renamed and advertised and redundant employees who

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were 'poorly placed to challenge budgets, assess efficiency and implement change, particularly in the clinical area'\textsuperscript{103} were required to apply in competition with external candidates who were believed to be free of capture and were more likely to have the correct conceptual orientation. The payment of redundancy provisions resulted in new costs. To cut costs experienced staff were made redundant, position titles changed and more junior staff\textsuperscript{104} appointed under the terms of individual employment contracts that often included small pay rises but reduced conditions of employment such as redundancy provisions.

Ongoing failure to achieve the expected efficiencies resulted in the activation of Ministerial accountability mechanisms. Board Chairs and members were replaced. Chief executives were replaced. Boards were put into 'workout' (effectively receivership and statutory management) when they were unwilling or unable to implement service cuts to become financially viable, with Government officials with the correct conceptual orientation appointed (on recommendation by CCMAU) to oversee the process. CHEs were restructured and became Health and Hospital Services (HHSs) and then incorporated into DHBs.

Regardless of the changes economic abstractions continued to underpin the reforms. The

\begin{quote}
'strengths of the Companies Act were incorporated in DHB legislation to provide a rigorous and robust accountability, incentive and monitoring framework that had been tested and was backed by a substantial body of case law and ensured commercial performance.'\textsuperscript{105}
\end{quote}

A separate operating charter and set of accountabilities and reporting requirements were to be used to ensure hospital facilities were adequately 'separated' from the purchaser


\textsuperscript{104} For example, charge nurses were made redundant from some CHEs and replaced with 'clinical team leaders'. More junior staff had not accrued financial benefits associated with seniority.

Directors still had extensive legal obligations under the Companies Act 1993 to perform in commercially appropriate ways. Chief executives of DHBs were still appointed under the terms of the State Sector Act 1988 with a prime focus on prudent financial management. The Minister would continue to have powers to replace the Board or introduce a Commissioner when Boards proved to be financially imprudent.

The Minister of Finance and the Treasury continued to be involved in their governance and management to provide a barrier to financial intervention by the Minister of Health. The Memorandum to Cabinet Social Policy and Health Committee states:

Cabinet has previously decided that a risk based approach will be taken regarding the Minister of Finance roles in DHBs [CAB(00) M 19/13 refers]. Cabinet has also decided that, initially, the Minister of Finance would have maximum involvement in DHBs and in addition to his usual role would have an ability to request information relevant to the ownership interest, agree the financial components of DHB accountability documents (including any terms and conditions around the support of these documents) and the ability to request that Treasury, in conjunction with the Ministry of Health undertake a review of the financial performance of the DHB [CB (00) M 19/13 refers].

Together on-going restructuring, competition and the desperate drive to cut costs effectively undermined processes whereby shared meanings were able to develop. Clinicians became clinically isolated and the public became increasingly concerned that its moral views were no longer being expressed leading to a loss of confidence in the sector’s ability to provide health care. In not recognising the link between the

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conceptual limits of the economic scheme and the problems that were occurring in the sector, its abstractions continued to be used to underpin the on-going changes carrying with them all the distortions that created the possibility for harm to be caused to both patients and clinical care.

**Changing moral views and the potential for harm**

Up until the 1980s, the dominant conceptual scheme that underpinned health service provision was the medical model. The dominance of this conceptual scheme and its minimalist account of health and health care meant that it was unable to consider matters of significance related to patient’s lives and the health’s sector’s management requirements. Consequently, health services in New Zealand came under increasing criticism as patients received care without a proper account being taken of what clinical interventions meant for them and governments received demands for increased resources without any transparent managerial accountability.

By the 1980s state sector reforms enshrined the economic conceptual scheme as the only true framework for rational decision-making. Like the medical model before it, the economic scheme produced a distorted minimalist account of health and health care delivery in New Zealand. Clinical practice was misunderstood and social relations and shared meanings were seen as a hindrance to understanding leading to reforms that formalised their removal from the sector and causing matters of crucial significance in providing safe and efficient clinical care to be actively ignored.

As the economic concepts that required doctors to turn their attention to providing care for those to whom the greatest economic benefits would accrue, resources were moved away from hospitals, by downsizing or closing them, and into primary care. Resources were also moved out of clinical care and into actualising economic abstractions such as defining and prescribing services so that competitive purchasing could be pursued. Consequently, doctors become increasingly constrained in their ability to look after those with the greatest need. Although their professional concepts meant they did not stop, these constraints caused cost overruns in the hospital sector and long waits for admission to hospital for patients in emergency departments due to a shortage of hospital beds.
reinforcing the view that self-interested doctors focused on illness instead of preventing ill health in the first instance and in not conforming to economic parameters wasted resources and undermined the intentions of government and the public good.

As economic parameters required clinical care to be determined outside the context of the doctor/patient relationship, structures were set up to formally distance the medical profession from the patient as a person and for caring for people who were sick or in pain. Changes in waiting list criteria resulted in patients with semi-urgent conditions being not only removed from lists, but unable to gain access if they did not meet predetermine criteria set outside the clinical context. Furthermore, it was no longer acceptable for doctors to advocate for those who were harmed by the uncritical application of the economic scheme. More significantly, even if were acceptable, there was nowhere to advocate to as the sector’s connection with government had been severed. The type and magnitude of the unintended harms that ensued from the uncritical application of the economic scheme were no longer the responsibility of either those providing health care or the government. In other words, as social considerations no longer had a place in health sector decision-making the sector was severed from its conscience and raison d’être. Furthermore, the government was no longer responsible for one of the fundamental reasons for its existence - protecting its citizens from harm.

In missing these matters of significance, not only did the economic account not achieve its intended economic objectives, it caused services to be fragmented, entrenched poor management disciplines and produced a sector that was racked with division. It also set the scene for the creation of a new morality shaped by economic parameters that, given its prominence, could lead to a breakdown of the processes that enabled shared meanings and understanding to develop between different groups and cause social cohesiveness and advancement to be undermined.

The following chapter develops these themes in an examination of the impact of the reforms on maternity services.
Chapter Ten
Maternity Service Reform

Introduction

The state sector reforms of the 1980s changed New Zealand society in fundamental and profound ways. In believing that it provided true, objective, universal and timeless answers that would lead to a better life on the basis that it was grounded in scientific constructions, the economic conceptual scheme was elevated above all others by the reform programme. This meant that the parameters for rationality and what could be acceptably said in public policy in regard to any aspect of New Zealand life was now set according to minimalist economic abstractions.

As the scheme had inherent conceptual limits its parameters gave a distorted account of health and health care leading to prescriptions that included institutionalising the medical model's abstract notions that illness could be prevented and that medical care was a series of technical steps that could be performed with the right training. On the basis of these ideas determinations were made as to the best way of providing clinical care that led to attempts to formally remove the patient both as a person and as an entire physical entity from the health care discourse and severed social connections between the health sector and government.

This chapter examines the impact of the economic scheme on a specific aspect of health provision – maternity care and shows that the economic scheme found not only a unity of spirit with the maternity discourse but a closer conceptual alignment than that which it
had with the medical model. This resulted in maternity accounts being adopted with no
gregard to their conceptual limits to address economic matters that were different in kind
thus magnifying their distortions and leading to tragic consequences. This chapter
concludes with a discussion on the way the reforms prevented the problems caused by
these distorted accounts from being addressed in any meaningful way in public policy
forums.

**The maternity discourse and economics: congruent abstractions**

As discussed in chapter seven, until the time of the reforms the medical model formed the
principle framework that shaped maternity care in New Zealand. Because the model
produced minimalist accounts of pregnancy and birth, when its prescriptions were
uncritically followed medical practice failed to take into account the significance of
medical care in peoples' lives thereby causing them harm. These harms were
investigated by social science disciplines. In having a quasi-scientific orientation and
being grounded in their own preconceptions, the schemes of these investigating
disciplines each had their own inherent conceptual limits that meant they were unable to
address clinical matters or matters of meaning. Consequently, they produced minimalist
accounts of why the harms had occurred that discounted the contribution of medicine to
maternity care. Given the parameters set by the discourse, the hard cases (that is, the
mothers and babies that required medical care) were seen as exceptions and ignored.

In being constructed in the same way the economic scheme shared similar logical
features with the maternity discourse that gave the impression that their terms were
interchangeable. Furthermore, the conceptual limits of each scheme meant that both saw
their central matters of interest - health and health care in simplistic terms and could not
recognise the limits behind each other's abstractions. The maternity discourse was
interested in health in terms of pregnancy and birth being understood as a normal
physiological processes that did not require hospitalisation and medical intervention. The
economic scheme was interested in health as a way to minimise the use of taxation
generated resources particularly those used in the provision of medical and hospital care.
Therefore, although conceptually different, the idea that pregnancy and birth were normal
events that did not require hospital or medical care found fertile ground in the reform environment and was readily adopted to answer financial questions.

The maternity discourse also carried other ideas of interest. The abstraction that the provision of maternity care in hospitals and the use of technical interventions in a process that was normal was the result of medical self-interest appeared to have the same logical features as the economic concept of self-interest whereby self-interested doctors used expensive hospital and technical care instead of preventing illness in the first instance. In the maternity discourse doctors were believed to control regulatory mechanisms so that midwives were prevented from practising autonomously and mothers were forced into the medical model of care which in turn, enabled doctors to control maternity care. In the economic account doctors controlled regulatory mechanisms so that alternative providers who could provide cheaper forms of care could not enter the market and compete. These monopoly rights enabled doctors to use hospitals and technology without constraint.

Even though these ideas appeared the same, they were different in kind. The ideas based in the economic scheme sought to answer questions related to reducing expenditure whereas the maternity discourse sought to gain professional status for midwives as recognised through their ability to be paid for maternity services in the same way doctors. In not recognising their conceptual limits the ideas of the maternity discourse were seen as lending support the economic logic that medical power had to be constrained with the added advantage that in the case of maternity services, the involvement of doctors could be significantly reduced.

Another advantage lay in the view that midwives provided the same services as doctors. Again, in not recognising that the idea carried conceptual limits it was seen a providing both the rationale and a ready-made situation that would enable competition and all its predicted benefits to be quickly pursued. All that was needed was regulatory change.

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1 Papps E, Olsson Mark. Doctoring childbirth and regulating midwifery in New Zealand. New Zealand: The Dunmore Press; 1997. p. 174–183. Papps and Olsson develop the argument that medicine was credited with improvements in the outcome of childbirth through association with innovations in anaesthesia, antibiotics and blood transfusions. However, they dispute the notion that knowledge of some technical possibilities and capabilities should automatically lead to the control and management of the birthing process. (p175)
enabling midwives to compete. The minimalist accounts of the maternity discourse and the economic scheme made it possible for the reformers to believe that once doctors and midwives provided maternity services in competition with each other patients would naturally prefer the ‘higher quality’ midwifery care (in that they would not be subjected to medical interference) and doctors would be driven out of the maternity market thereby reducing health sector expenditure.

As well as providing competition for doctors, midwives also offered a range of efficiency advantages. By providing maternity services in women’s homes institutional care would no longer be required enabling the closure of hospital beds and reducing health expenditure. Other advantages were that midwives were paid less than doctors, and their shorter training meant investment costs were lower.

**Actualising abstractions**

The dominance of the economic scheme in matters of meaning and the congruency of the ideas of institutional economics and the maternity discourse meant that unlike previous times, the ideas expressed in the maternity discourse were able to find a direct voice in the formulation of public policy. In November 1989, the New Zealand Government introduced the Nurses Amendment Bill. The Bill was concerned to:

...amend provisions in Section 54 of the Nurses Act 1977 relating to the carrying out of obstetric nursing. The purpose of the Bill is to remove restrictions imposed by that section on the practice of midwifery.

In a media release, the then Minister of Health, Helen Clark stated:

*In recent years there has been a consistent message from consumer groups and midwives that childbirth is a natural process and women should be able to choose to have a midwife deliver the baby without the need to also be under the care of the medical practitioner. Given that*

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85 per cent of New Zealand births are normal, it is appropriate that midwives provide this service.\(^4\)

The conceptual limits of the abstractions used to inform the maternity discourse and shape economic ideas meant that the possibility that perhaps 85\% of births were normal\(^5\) because doctors were involved in the provision of maternity services (as discussed in chapter seven), and that this might change if doctors were no longer involved, was not considered. Instead the draft legislation made provision for midwives to practice autonomously — that is, to provide maternity care without the need for any medical involvement.

The simplistic accounts that led to medical behaviour being seen as motivated by self-interest, led to the prediction that doctors would object to the independent practice of midwives because it would interfere with their dominance of clinical practice. Douglas, noted at the time:

…long-standing exclusive rights to the provision of maternity care are under threat. The New Zealand medical profession is likely to react by questioning the competence of midwives to provide women with safe and effective maternity care.\(^6\)

In contradiction to this prediction the medical profession did not oppose autonomy for midwives in principle. Rather, its concerns were associated with knowledge and safety in practice and whether midwives were competent to recognise complications that could arise during pregnancy and childbirth. Medical practitioners proposed a team approach as a way of ensuring the assessment of pregnant women.\(^7\) Given the dominance of economic parameters the Social Services Committee that considered the Nurses

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\(^4\) Clark H. Media release from the Minister of Health. 9 Nov, 1989.
\(^5\) And enabled the ‘natural’ mortality and morbidity rates of pregnancy and birth that occurred a century ago to be reduced.
Amendment Bill was not convinced by the doctors' arguments and concluded that safety standards would not be compromised.8

The Nurses Amendment Act was passed in 1990 and restrictions imposed by Section 54 of the Nurses Act 1977 on the practice of midwifery were removed.9 This new legislation gave midwives professional autonomy. They could operate as fully independent providers of pregnancy and childbirth services without reference to or supervision by medical practitioners, and could claim payment for primary maternity services from the Maternity Benefit Schedule at the same rates as general practitioners. Accompanying changes gave midwives the power to prescribe drugs and to order laboratory tests.

When the Bill was finally enacted, it also unexpectedly made provision for direct-entry midwife education. "Despite the unreadiness of the nursing profession in general" and that there was no opportunity for any submission to be presented by anyone either supporting or opposing direct-entry midwifery education10 a supplementary order paper which included provision for a direct entry course in midwifery was introduced in the final stages of the passage of the Bill into law.11 This occurred four days after the sponsor, the Minister of Health, stated at a New Zealand College of Midwives12 conference:

As yet I have seen no evidence to persuade me that direct-entry [Midwifery] is neither feasible nor desirable. In the absence of such evidence it is my intention as the Minister of Health to promote it in the context of the review of the act. The objections appear to me to be doctrinally and not empirically based.13

8 Remembering that these Committees were serviced and advised by officials whose parameters for rationality were set by the economic scheme.
12 The New Zealand College of Midwives was established in 1989 and will be referred to as the College of Midwives for the remainder of this document.
As well as not having to have medical supervision midwives no longer had to train as nurses. The legislation formally removed links between midwifery knowledge and the medical model and midwives were no longer obliged to practice under its constraints.

Because the legislative changes were based in the minimalist abstractions that were not constructed to address financial questions, these changes were implemented without any recognition that registered midwives were actively involved in the provision of maternity care. Although midwives provided care under the auspices of medical supervision, by the late 1980s 66% of women were being delivered by midwives. Further, as the maternity discourse did not recognise that midwives did not provide the same types of care as doctors, the fact that they travelled to patients homes and stayed with patients for much longer periods of time had gone unnoticed. Once midwives started to claim from the Maternity Benefits Schedule on the basis of travelling time and the time spent with patients, expenditure started to increase dramatically in spite of a declining birth rate.

As a result, fee structures were changed whereby antenatal, delivery and postnatal fees were increased and labour and travel allowances decreased. By 1995, expenditure growth had levelled out. Concomitant with this rise in expenditure, in contrast to the expectation that interventions would reduce, the caesarean section rate increased.

The health reforms

By 1995, the health sector reforms were well underway. Given their financial focus the recent rise in both maternity expenditure and the caesarean section rate (that equated to expenditure in ‘expensive’ institutional care) the sector quickly caught the attention of the new Ministry of Health and the maternity managers in the purchaser entities. As

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17 Caesarean section rates were the only interventions discussed in the Ministry of Health’s document Purchasing for your health 1995/96. Wellington, New Zealand: Ministry of Health; Jun 1997. p. 78–9.
economic parameters shaped the way these problems were able to be interpreted, it was concluded that in spite of declining perinatal mortality and expenditure that had stabilised,\(^{18}\) the problems lay with the lack of competition caused by financial incentives that required women to enter the medical model of pregnancy and birth. This enabled doctors to direct women into hospitals which resulted in unnecessary technical interventions that increased risks to mothers and babies and resulted in the waste of scarce resources. Given that the maternity discourse promoted midwives as able to competently and independently provide maternity care\(^{19}\) the involvement of both doctors and midwives in the provision of maternity care for the same patient was seen not only as a duplication of service, but also as undermining accountability as women were ‘unable to determine who was responsible’. Consequently, the determination was made that the lack of competition resulted in fragmentation and a lack of accountability.\(^{20}\)

**Abstractions and policy**

The reformers set about developing ‘innovative changes’ based in economic interpretations of the medical model and maternity discourse coupled with minimalist economic abstractions\(^{21}\) that were predicted to increase efficiency and effectiveness of maternity care (that is, reduce interventions and expenditure), improve co-ordination and data collection, and give women choice by enabling them to choose between the medical model of care and the “more holistic approaches provided by midwives”.\(^{22}\)

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\(^{18}\) Nationally, total expenditure on pregnancy and childbirth services remained reasonably constant over the three years prior to 1997. Ministry of Health. Purchasing for your health 1994/1995. Wellington: New Zealand; No publication date given. p. 82.

\(^{19}\) The Ministry of Health attributed the rise to shared care where care was provided by more than one practitioner, and stabilisation to ‘substitution between services provided by different provider groups’. Ministry of Health. Purchasing for your health 1994/95. Wellington, New Zealand: Ministry of Health; No publication date given. p62 & 128.


\(^{21}\) Interview with Catherine Cannon, former Maternity Manager Southern Regional Health Authority. Feb 14, 2003.

\(^{22}\) As discussed in Section I and Chapter 7.

\(^{22}\) Interview with Catherine Cannon, former Maternity Manager Southern Regional Health Authority. Feb 14, 2003.
The same distorted interpretations of the accounts of health created by the medical model that underpinned the notion of ‘core services’ in the health reforms underpinned the announcement that defined ‘core’ maternity services with standard funding arrangements would form the basis of contracts between purchasers and providers that would enable purchasers to control self-interest, prevent unnecessary or wasteful care from being provided and would result in “maximum possible health gain.” The same accounts made it possible to believe that these contracts would enable purchasers to hold providers to account for the provision of a high quality maternity services.

The economic idea that competition would reduce expenditure and improve the quality of services led to the development of policies that ‘freed’ up the market (enabled midwives to compete with doctors) and ‘gave women choice’ (enabled women to purchase maternity services from midwives rather than doctors) through the creation of the ‘Lead Maternity Carer’ (LMC) - a health professional who could be a midwife, general practitioner or specialist. These different groups of professionals would compete to provide maternity care to women throughout pregnancy, birth, and following birth for a fixed fee of $1,500. The fee was inclusive of any payments that needed to be made to other health professionals whose involvement was considered necessary in the care of the mother or baby. Although medical contractors were required to have midwifery input during labour, birth and postnatally which had to be paid from the capped $1,500 fee, there was no requirement for LMCs who were midwives to have medical input. The abstractions of both conceptual schemes fed the notion that the fixed fee would

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23 See previous chapter.

24 Contracts took the form of issuing ‘Notices’ to most primary maternity providers under Section 51 of the Health and Disability Act (1993). The Notices were grounded in the idea that appropriate services could be defined and all maternity providers were competent to autonomously provide maternity services. They set out the contractual terms and conditions, service specifications, provider quality specifications, auditing and monitoring requirements, and the payment schedule. If a provider claimed payment for maternity services, the contract was considered to have been accepted. Secondary and tertiary providers of maternity services had separate contractual arrangements that were generally included in overall CHE contracts. Some were paid by Diagnostic Related Groups (DRGs) with a set volume of caseweights, others on a funding formula based on the number of deliveries in a defined catchment area.


26 For example, if the LMC was a midwife, the midwife would be responsible for both making decisions on whether to call in the assistance of a GP or specialist, and paying them from the fixed fee.

encourage providers to manage pregnancy and birth without intervention, and costs associated with care of women who really did need a high level of service would be offset by those who needed or chose to access less than the average amount of service.\(^28\)

The abstractions that led the reformers to view pregnancy and birth as healthy, normal events that did not require hospitalisation led to the development of policies that discouraged maternity care from being provided in maternity hospitals. Maternity care was placed ‘in the continuum of primary care’\(^29\) (that is, outside the hospital sector) so that ‘the maximum possible health gain’ (or efficiency) would be achieved’.\(^30\) Hospital contracts separated funding for primary maternity care from funding for facilities (hospitals) and secondary maternity services.\(^31\) Policies that encouraged the purchase of hospital services private hospitals whenever possible were developed to create competition between the primary, secondary and tertiary hospital providers. To protect midwives from being forced into providing care with a technical focus providers no longer had to be associated with hospitals, and hospitals were no longer able to control the clinical practice of providers using hospital facilities.\(^32\) Women were encouraged to deliver at home or in primary birthing facilities which were promoted as competition for hospitals with the added advantage of conferring reduced intervention rates and reduced costs.

The expected benefits of the new arrangements were said to be a reduction in “disparities in health outcomes”\(^33\) and improved safety, (that is, interventions rates would reduce as would all the associated harms), co-ordination of care, a reduction in service


duplication, and some savings because of more effective purchasing and increased competition. Furthermore, it was thought that provided women were well informed they would choose what the conceptual scheme that underpinned the reforms advanced as the safest care option in their choice a lead professional - the midwife – leading to the reduced interventions promised by the maternity discourse.

**Implementation and conceptual limits**

In believing that the combined logic of the maternity discourse and the economic scheme provided true, universal and timeless answers to problems in maternity services these policies were unselfconsciously implemented by the RHA maternity managers without there being any awareness of the conceptual limits of the abstractions on which their policies were based. However, once implementation began the conceptual limits of the ‘innovative’ policies were felt immediately. Instead of producing the expected gains, they marginalised mothers and babies both as a people and as physical entities. Medical decision making left the domain of the clinical context and general practitioners were discouraged from being involved in the lives of their patients for this particular life changing event. This led to barriers that impeded mothers from accessing medical care and undermined the conditions that underpinned effective clinical care whereby doctors, in being involved in the continuum of their patients lives, were able to gain an appreciation of the type of considerations their patients believed were important, and conversely prevented their insights from being shared with LMCs. The changes also resulted in acrimony, increased bureaucracy, reduced accountability, increased expenditure, service fragmentation, loss of medical expertise from maternity services, reduced choice for women and increased intervention rates. The remainder of this section discusses these in greater detail.

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Abstractions and contracts

In being based in the abstractions of the medical model and the maternity discourse that did not take a proper account of maternity care and were further distorted by the economic lens, once released the LMC contracts (called the ‘Section 51 Maternity Notice’) caused controversy and generated criticism from women and providers. Women’s groups argued for example, that the purchasers had ‘co-opted women’s rhetoric’ about humanising and demedicalising birth and empowering mothers as justification for reducing expenditure on maternity services. They stated that the fee structure was too low, not equitable across all parts of the maternity cycle and exposed budget holding LMCs to considerable risks of not being paid for some of the services provided. It also created the potential for ‘market failure’ including the potential for under-servicing. Medical specialists, through the New Zealand Medical Association, (NZMA) rejected the contracts because the minimalist abstraction that resulted in their care being seen as the same as that provided by midwives did not reflect the reality that midwives did not provide medical care and were not qualified to determine what appropriate medical care was. The New Zealand College of Midwives accepted the contract but with reservations regarding its effect on rural and postnatal care. The New Zealand General Practitioner Association proposed amendments that were rejected by the New Zealand College of Midwives. Accountability issues were raised such as who would be accountable should a LMC use a hospital facility, and who was responsible should the mother be referred to a specialist.

Four successive drafts of the strategy document that underpinned the Section 51 Notice were circulated to key provider organisations and consumer groups the purpose of which was not to determine if the proposals were appropriate in the first instance, but to ‘fill out detail’.  

Although agreement was not reached, given the parameter set by the economic concept of ‘capture’ that dominated public policy forums, and the view that economic prescriptions provided the only true path to improving the functionality of the sector, implementation went ahead.

**Loss of medical expertise and shared meanings**

As the conceptual limits inherent in contractual methodology were not recognised they were not addressed. There was on-going lack of agreement between both the purchasers and the various provider groups over the contracts and many providers refused to accept them.  

Although some modifications were made whereby obstetricians could claim payments directly from the schedule rather than rely on payment from the LMC, by 1997, many general practitioners had left the service. By 2002 a survey undertaken by the New Zealand College of General Practitioners and sent to the 150 GPs who had claimed maternity care payments over the previous year found that 40% had ceased obstetric practice, and a further 34% were planning to cease provision over the following two years. Further, there were no GPs entering the field. GPs cited the contractual purchasing arrangements that did not give adequate regard to GPs and the financial

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barriers being created for women wanting to see GPs about their pregnancy, as reasons for leaving.\footnote{Personal communication initiated by the following article. GPs Hanging up forceps. The New Zealand Herald 2002 Jun 24. Source: www.naherald.co.nz. Accessed 3 Aug 3, 2004.}

Due to the on-going controversy over contracts the Minister of Health instructed the National Health Committee (NHC) to carry out review of maternity services. Given that the parameters for rationality were economic ones the terms of reference were framed in these terms - any issues raised had to be addressed within current funding levels.\footnote{National Health Committee. Action on the Maternity Service Review News & Issues. Wellington, New Zealand: Newsletter from the National Advisory Committee on Health and Disability; December 1999;15:iv.}

Likewise, the Committee's recommendations did not challenge the abstractions that underpinned the reforms. Although it reported that:

- many professional groups and providers identified competitive funding and contracting arrangements as major barriers to women accessing high quality maternity care according to clinical need;
- the arrangements were considered to disadvantage groups with particular needs, including women with complicated high-risk pregnancies or existing medical disorders, and women from disadvantaged areas;
- that there was no consistent mechanism requiring primary and secondary care providers to review and monitor outcomes; and that many women wanted a return to willing co-operation between medical care and midwifery;

it stated that it did not find the justification, and nor did it have the mandate, to recommend significant new expenditure to reverse the trend of GPs ceasing to provide maternity services\footnote{National Health Committee. Barry M, Chair. Review of maternity services in New Zealand. Wellington, New Zealand: National Health Committee; Sep 1999. p 5.} as current expenditure was already committed to funding LMCs.

The conceptual limits inherent in the economic scheme made it impossible to identify that there was any connection between these problems and the abstractions that underpinned the reforms. Instead, the Committee recommended that the sector should aim to consolidate, refine and render consistent what was an already workable and
potentially equitable structure\textsuperscript{49} and that a change in attitude was required from the key groups who operated in the system.\textsuperscript{50}

By 2001, morale in the senior levels of the obstetric speciality was said by some providers to be non-existent\textsuperscript{51} and as a result of the changes made to the maternity sector obstetricians providing private care started to leave the service. A survey undertaken by the Royal Australian and New Zealand College of Obstetrics and Gynaecology found that of twenty-five private-practice obstetricians, only two intended to be in private practice in five years, a loss of twenty-three clinicians from a total pool of one hundred and eighty-eight. Fifty New Zealand specialists had already ceased practicing in the previous three years.\textsuperscript{52} The reasons given were the overall strategy of the maternity reforms, the level of payment and concerns regarding litigation. Specialists said they were paid a flat fee of $80 regardless of how many visits they made to a labouring patient\textsuperscript{53} or a total of $425 for a delivery with ‘quite a lot of strings attached’.\textsuperscript{54} When adverse events arose LMCs transferred their patients to them and they were left with the responsibility of caring for patients of whom they had no prior knowledge.\textsuperscript{55}

In March 2003, a GP consortium, South Link Health, set up as an Independent Practice Association (IPA) under the auspices of the health reforms, announced it was pulling out of the administration of maternity care as a direct consequence of the maternity reforms.

\textsuperscript{53} Obstetricians lining up to quit. The Press 2003 Aug 23;Sect, A:18.
\textsuperscript{55} See Sad saga of birth, death. The Press 2003 Aug 26;Sect A:2. A Christchurch obstetrician was called in urgently to see a patient with whom he had had no prior involvement due to a lack of progress in labour and the onset of foetal distress. He was unaware that the patient had an unusually small pelvis. This had gone undetected by her LMC, an independent midwife. The baby subsequently died after the obstetrician attempted delivery with forceps. Allegations that the obstetrician should have considered caesarean section rather than forceps delivery were then levelled in the Coroners Court.
The IPA stated that the income from government was insufficient to cover the administration costs of the group.\textsuperscript{56}

The consequence of losing GPs and private obstetricians from the sector was an increase in pressure on public hospital services. In Canterbury for example, the reduced number of GPs and private obstetricians put pressure on public sector obstetricians who were unable to meet the demand for specialist help through outpatient clinics located at the public hospitals. As it had become increasingly difficult to access medical care outside a public hospital setting pregnant women were turning up at the public hospital labour wards needing acute care and out-of-hours treatment.\textsuperscript{57} Public sector workloads increased concomitant with experienced midwives leaving the public sector to practice independently thereby putting added pressure on remaining staff. This was compounded by difficulties in attracting house surgeons and registrars to obstetric positions\textsuperscript{58} and GPs into obstetric training courses because of the acrimony in the sector that had resulted from the reforms. In Canterbury, public sector vacancies for obstetric staff were advertised nationally and internationally\textsuperscript{59} with staff being recruited from other countries.

The conceptual orientation of the purchasers meant that although public sector workloads increased, additional funding was not provided to the public hospital sector to cope with extra demand as public services were considered to have been funded from the allocation made from the population based funding formula (PBFF)\textsuperscript{60} and the provision of extra funding would provide disincentives for the sector to find efficiencies. Canterbury public sector services for example, started to experience financial difficulties which, by 2004, resulted in a proposal to cease the provision of the public community midwifery service

\textsuperscript{59} Personal communication with Otago School of Medicine obstetric specialists. Mar, 1997.
\textsuperscript{60} Also cited in Chec labour wards under siege; chronic obstetrician shortage starts to bite. The Press 2004 Jul 30: A4.
\textsuperscript{60} The money available for contracting for regional health services was allocated on the basis of a formula devised by the Ministry of Health that is adjusted for variables such as the population ratios between elderly, Pacific Islanders, and other ethnic and social groups within a specific catchments – hence the ‘population based funding formula’ (PBFF).
in an attempt to contain costs. The service would instead be completely provided by the 220 ‘Registered Access Agreement Holders’ – that is, independent midwives who accessed primary, secondary and tertiary hospital facilities who already worked in the sector. Although it was no longer financially viable to retain the community midwives this proposal would effectively break down the structure that supported processes of social engagement that enabled the development of shared meanings between the public sector community midwives and independent midwives. Under this proposal independent providers, each with their own meanings of ‘appropriate care’, would be responsible for the provision of these services.

The financial parameters that dominated the sector led to a reconfiguration of tertiary services whereby the maternity hospital was closed and services relocated to a new facility located next to the major tertiary hospital thereby creating the conditions that led to the observation that mothers delivering in hospitals were exposed to higher risks of infections. The new facility opened at the same time that public health officials were stating that they had grave concerns that an epidemic of ‘bird flu’, for which there was no cure, was likely. The dominance of economic parameters meant that it was not recognised that if these fears were realised, mothers in Christchurch would be delivering babies in close proximity to the sickest people in the community.

New System, new costs

In failing to recognise the importance of medical care, the reforms introduced new costs that were funded from resources that were previously available for patient care.

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62 For example: following the death of a baby after an undetected breech delivery a former member of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists called for routine vaginal examinations to check the baby’s position and ensure the mother was fully dilated. He believed women usually accepted it if the reasons were explained although it might be uncomfortable. Conversely, Victoria University midwifery lecturer Joan Skinner stated the practice of performing examination varied among midwives because they could be intrusive and painful and could introduce infection. (due to poor technique – although this is not mentioned in the article) See: Second home birth death. The Dominion Post 2004 Thursday Aug 05. Source: www.stuff.co.nz. Accessed Aug 5, 2004.
63 Vote health remained fixed as determined in the estimates process. Any spending for new initiatives had to be funded from within this allocation.
Service definitions and administration

As well as having to administer the Section 51 Notice, to mitigate some of the acrimony and get some form of contractual purchasing off the ground, the Notice became a ‘fallback’ notice and the purchasers moved to regional non-Section 51 arrangements where possible - that is, the purchasers negotiated contracts with variable service requirements and payment arrangements directly with providers. Within two years, these accounted for approximately 30% of all deliveries. However, the purchaser found that these arrangements were:

...generally more costly, administratively time-consuming and provided no demonstrable improvement in health outcomes when compared to the Section 51 Maternity Notice.

...there have been no new non-Section 51 contacts since January 1998.

In other words, the contracts resulted in increased costs and bureaucracy with little perceived gain on the part of the purchasers although this view was not shared by some providers who were able to negotiate some advantages over the Section 51 contract.

Service specifications and guidelines

As the reforms progressed so did awareness that clinical care was not as simple as that portrayed by the minimalist accounts of the medical model, the maternity discourse and the economic scheme. Even so, as there was no awareness that these models carried conceptual limits attempts to capture the boundaries of clinical care in a definitive way were on-going and required significant resources both in financial and in human terms.

In the first instance, service specifications were developed for facilities and secondary maternity, tertiary maternity, specialist neonate and neonatal homecare services. As

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these definitions were unable to take into account all the variations of care, when shortfalls in these descriptions became apparent, (such as when complications arose) the units of definition became increasingly smaller and a greater number of levels of care were described in attempts to objectively capture ‘appropriate’ care. There was little agreement as to their veracity\(^6\) even after they were repeatedly reviewed and changed\(^9\) such as occurred when service guidelines were developed describing when midwives were to refer to a specialist.\(^7\)

Purchasing projects were undertaken that developed purchase units (definitions that could be used to define the services that were being purchased) for maternity services, for example, the ‘definition of a qualifying neonate’.\(^7\) New definitions were required to enable the purchaser to monitor outcomes. For example, the definition of a perinatal death was enlarged to include intermediate foetal deaths down to twenty weeks compared with the previous\(^2\) definition of twenty-eight weeks; the definition of a neonatal death moved from one week up to one month.

The same limits undermined attempts to attach prices to specific components of care. In the first instance this was done by attaching a general fee that covered each pregnancy, birth and postnatal event in total and paid to the LMC.\(^7\) However, the conceptual limits of the exercise meant that it quickly became evident that defining pregnancy, birth and the postnatal period as a single event did not capture all the variables of clinical care and consequently the associated costs. Adjustments had to be made for different treatment types and treatment locations, for example, Continuous Positive Airway Pressure (CPAP) adjuster for specialist neonate services, interpreter services,\(^7\) and a rural adjuster for

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isolated localities such Westport, Tuatapere, Lumsden and Dunstan. Other examples included making provision for different parts of the services such as maternity radiology services where the following changes were proposed:

- removal of the reduced fee when there is no radiologist on site in rural areas
- qualifications on the use of teleradiology
- clarification on the boundary between the Section 51 Maternity Notice and secondary maternity provision of radiology services
- removal of the ability to charge a copayment with a corresponding increase in the fee to cover the full cost of ultrasound.

As interventions were assumed to be fixed definable entities, methods of payment were assumed to have the same characteristics. Therefore, methods of payments (for example, Diagnostic Related Groups (DRGs), and caseweights) were adopted without regard to their conceptual limits. As they bore little resemblance to the realities of providing care in New Zealand, they had to be repeatedly manipulated to make them ‘fit’ the New Zealand environment.

In a further attempt to develop a nationally consistent fee structure based on defined units of care, options for paying specialist maternity services were put out to consultation. In not recognising that matters of meaning could not be quantified and aggregated they purchasers found it problematical that ‘in general, there was wide divergence of opinion as submissions reflected the current situation that exists in each locality which made it difficult to establish any significant pattern in the responses.’

National payment rules for facilities were developed. Secondary services were paid by Diagnostic Related Groups (DRGs) with a set volume of caseweights to “create

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appropriate clinical incentives and encourage good relationships between the primary and secondary sector.” Price/volume contracts for facilities based on volume of deliveries were developed. When it became apparent that hospital midwives also provided primary maternity services, they were given access to payment via Section 51 contracts.39

In believing the medical model’s abstraction that clinical care should be standard across time and place, the purchasers also recommended that hospitals that did not comply with service specifications in their contracts needed to develop a workout plan to achieve compliance80 regardless of the suitability of the specifications for local conditions.

Paradoxically, although total maternity expenditure had increased, services that had previously been funded were no longer in receipt of funding under the new arrangements. As defining services in increasing detail progressed so did the identification of ‘unfunded’ parts of the service. By 2000, the purchasers noted the facilities modules needed to be ‘re-costed’ with a view to changing the percentage split between the labour and birth, and postnatal modules,81 fees needed to be developed for LMCs who remained in support roles after patients were transferred to secondary services or specialists, were involved in the care of patients with postnatal depression, or provided additional help with breastfeeding where the ten funded visits were not considered sufficient.82 Doctors complained that variables of care that fell outside the service specifications of their contracts were ignored because of the preconception that pregnancy and birth were normal events.83

Access Agreements

The economic parameters that led to the separation of funding for facilities from that of secondary maternity services also led to the need for contractual arrangements that


enabled independent practitioners to access facilities such as hospitals and primary birthing units. The lack of awareness of the conceptual limits of defining care led to increasing numbers of different types of access agreements. For example, by 2000 the purchasers noted the need for entry and exit criteria for primary-referred outpatient access to medical social workers, physiotherapists and dieticians; a generic access agreement to facilities; and a national standard for consumables used for labour and birth and postnatally. They also noted that an assessment needed to be made as to whether the 'gynaecology-maternity boundary' should move to twelve weeks gestation, and the boundary between maternity and mental health services needed to be defined. These events in turn led to an identified need for principles that would guide providers when negotiating access agreements.

Data and information
Up to 1994 there were two regional computerised perinatal systems in New Zealand but they were different in that they reflected local priorities. There was also a national perinatal system that collected mortality and morbidity data. As these systems did not fit the abstractions that underpinned the reforms, (that is, they did not collect information related to interventions as defined units and price) a judgement was made that the information systems and the data collected were deficient and a heightened emphasis on information and data ensued. The Section 51 contracts defined the data (based on economic parameters) that was to be provided as part of provider contractual obligations which one maternity practice stated as being equivalent of a large book of data that required two whole days a month to collate.

Again the conceptual limits of the economic scheme made themselves felt. In spite of all the new data collected by the purchasers the National Health Committee reported midway through its review of maternity services in 2000 that:

The primary maternity data is incomplete and there are difficulties in linking this data with hospital data.\textsuperscript{88}

...National maternity data has been collected in New Zealand for some years. Despite this, access to service and outcome data has been limited. The availability and quality of data confines the ability to monitor maternity services and to make evidence-based policy outcomes.

The National Minimum Data Set (NMDS) is missing 3 percent of hospital births. There is inadequate consistency and validation for 30% of primary maternity data due to the existence of non-Section 51 LMC contacts. As yet, the linked hospital and primary maternity data is not sufficiently reliable to allow external distribution of a report.\textsuperscript{89}

The NHC noted the Government had decided to set another project aimed at developing a maternity and neonatal information system (MNIS) that would permit better ongoing monitoring of maternity care outcomes and:

...encourage maternity practitioners to review procedure rates and outcomes, and hence evaluate their own performance. It will allow women to know about the quality of services and the likely outcomes. It will inform policy development, monitoring and funding decisions, leading to improved service delivery and outcomes for New Zealand women and their babies.\textsuperscript{90}

The conceptual orientation of the exercise was reflected in the statement that:

...If the database is to encompass all births, the non-Section 51 LMC contracts need to be moved to the same reporting requirements as in the Section 51 Maternity Notice. Prices needs to be attached to the


\textsuperscript{90} National Health Committee. Action on the Maternity Service Review News & Issues. Wellington, New Zealand: Newsletter from the National Advisory Committee on Health and Disability; December 1999;15:3.
reporting requirements to ensure there is adequate and consistent validation of the data.\textsuperscript{91}

As the economic scheme was unable to consider clinical practice and medical views had had been marginalised, the reformers did not understand or give any credence to the concerns of clinicians that the new data definitions would undermine patient care by heightening competition rather than enabling co-operative care between doctors and midwives.\textsuperscript{92}

From 1998–2003 no perinatal information was available to providers at a national level.\textsuperscript{93} As at 2005, there was no available data on the outcomes of home births. The Ministry of Health Report on Maternity for 2002 (which was not published until 2004)\textsuperscript{94} stated that the identification of home births would improve from June 2002 as the Section 51 contracts has a mandatory field to indicate whether or not the birth occurred at home.

The parameters set by economic abstractions meant the data to evaluate the changes that had been made to the maternity sector was not available and, in being unable to take clinical matters into account, there was no understanding of the data that was required. Identifying home births would not provide data on the number of failed trials of labour as a percentage of total home births, reasons for transfers\textsuperscript{95} and nor would it provide data on short, medium or long term maternal and neonatal morbidity associated with home delivery.\textsuperscript{96}

\textbf{Defining and controlling clinical care}

In spite of the reforms, the caesarean rate continued to rise. On the basis of the medical model’s abstraction that clinical care could be defined and quantified in universal and

\textsuperscript{95} Such as prolonged labour.
\textsuperscript{96} Such as behavioural problems of children caused by oxygen deprivation, maternal incontinence from perineal tears, postnatal depression etc.
timeless terms, attempts were made to determine 'appropriate' care in pregnancy and birth so that medical practice could be controlled.

**Intervention rates**

As noted in Chalmers *et al* effective maternity care involves choosing between numerous types of interventions.\(^97\) Out of all the interventions that could be used in the provision of maternity care, given the dominance of the economic scheme and the adoption of the abstractions of the maternity discourse, the Ministry of Health, the NHC and the purchaser were principally concerned with reducing the use of ultrasound scans and the rate of caesarean sections. The new Ministry of Health was worried because:

*Internationally, a rising caesarean rate is a cause for concern, both for mothers and babies, and for both providers and funders of health care services.*\(^98\)

*...Mortality rates are higher for caesarean births than for non-caesarean births. Maternal morbidity and discomfort after caesarean section can also cause difficulties in the establishment of breastfeeding. Problems associated with delivery by caesarean section often require treatment of babies which separates mother and baby in the first hours of life.*\(^99\)

As the parameters for understanding were set by the maternity discourse and economic scheme (and neither were designed to provide any understanding of clinical issues), and the Ministry of Health was now the guardian of economic determinations there was no awareness that adverse outcomes after caesarean section were more likely because the indicators that give rise to caesarean sections in the first instance could also necessitate post delivery problems and interventions. Instead, these adverse outcomes were interpreted as the *result* of caesarean sections. The Ministry of Health went on to relate its financial concerns:


In addition to the health implications for mothers and for babies, rising rates of caesarean section also have cost implications. The Ministry of Health's price database for 1995/96 shows that the cost of caesarean section ranges from 1.6 to 2.0 times the cost of vaginal delivery depending on the degree of complication associated with the delivery.\textsuperscript{100}

Given the parameters of understanding, this was interpreted as doctors performing ‘unnecessary’ caesareans which resulted in the waste of resources and caused harm to both mothers and babies.

These concerns were reiterated by the purchasers and the National Health Committee (NHC) in its review of maternity services. It concluded that the rate of 17.7\% that was evident at the time of its review of maternity services, (1999) was “well above that associated with best practice” especially as “the highest rates were among the most advantaged populations, and the lowest rates among the least advantaged, as measured by the deprivation score of the census area in which the women lived.”\textsuperscript{101} In accordance with economic parameters that dominated public policy in the sector the conclusion was drawn that the rate related to inappropriate financial incentives and poor contract management. The NHC stated:

\begin{quote}
...it seems that the most powerful causes are changes in the financial incentives and the administrative arrangements. Both LMCs and specialists have incentives to schedule and expedite delivery, and there has been a general loosening of clinical accountability mechanisms aimed at conformity with best practice.\textsuperscript{102}
\end{quote}

As the parameters for rationality prescribed that defining appropriate clinical care outside the clinical care setting would act as a constraint on medical and patient self-interest, in the first instance a ‘correct’ intervention rate was identified. The Ministry of Health

\textsuperscript{101} National Health Committee. Barry M, Chair. Review of maternity services in New Zealand. Wellington, New Zealand: National Health Committee; Sep 1999. p. 73.
chose the intervention rate of 5–8.4% as stated by Francome. The purchaser relied on the interpretations made by the WHO in 1985 (and restated in 1992 and 1994) of 5–15%. The National Health Committee referred to a study published in 1994 and identified the ‘correct’ rate as 12-13% of all deliveries.

International research was interpreted using economic parameters and used to support the conclusion that the caesarean intervention rate in New Zealand reflected inappropriate clinical practice. For example, Sachs et al state that a safe vaginal delivery is associated with lower maternal and neonatal morbidity and costs less. However, they qualify this statement by stating that these advantages only apply to a safe vaginal delivery, and that reducing the rate of caesarean delivery would increase the number of vaginal deliveries among women who have had previous caesarean deliveries thereby increasing the number of operative vaginal deliveries associated with uterine ruptures and neonatal trauma, respectively. Their research leads them to conclude that although caesarean rates of above 21% might be amenable to reduction, the goal of reducing the caesarean rate to 15% could have a detrimental effect on maternal and infant health with significant cost increases. Factors such as the previous caesarean rates in the existing population, the experience of practitioners in the use of other technologies such as forceps and vacuum-assisted deliveries need to be taken into account before any targets were considered. They identify that the trade-off for reducing caesarean deliveries is an increase in operative vaginal deliveries thereby reducing any cost savings that might have accrued if a safe vaginal delivery had ensued. Further, if a trial of labour failed and a caesarean

References:
performed the rate of maternal mortality, including infection and operative injuries increased substantially, as did the costs. They conclude:

...the Healthy People 2000 goal of reducing the caesarean-delivery rate to 15 percent may have a detrimental effect on maternal and infant health. There is no evidence to support this target. Setting a target rate is an authoritarian approach to health care delivery. It implies that women should have no say in their own care. The risks and benefits of various approaches clearly need to be discussed with patients.

The NHC interpreted Sachs et al as concluding:

Reductions in caesarean section interventions, which are not indicated on the basis of clinical risk, could actually improve outcomes for both mother and baby, as well as reducing costs of maternity care. (Sachs BP, Kobelin C, Castro MA, Frigolletto F. The risks of lowering the Caesarean-delivery rate. NEJM 1999; 340: 54-7.)

Sachs et al’s caveats were not mentioned. As the maternity discourse and the economic scheme could not consider clinical matters of significance, it was not recognised that midwives were not qualified to perform medical procedures and many primary birthing facilities did not have either emergency or medical backup within thirty minutes, with the consequence that undertaking trials of labour in primary faculties in New Zealand carried both the added costs of a transfer to a hospital facility (possibly via helicopter) should medical intervention be required and higher risks to the mother and babies than those

111 In the United Kingdom support services for home births include obstetric flying squads and neonatal flying squads to enable the rapid transport of women to hospitals to reduce the maternal and neonatal mortality that can result when complications arise during home deliveries. Midwives work closely with general practitioners and obstetricians and are able to refer to them quickly if a birth is not proceeding to plan. In Chamberlain G, Wraith A, Crowley P, editors. Home births; The report of the 1994 confidential enquiry by the National Trust Fund. New York, London: The Parthenon Publishing Group; 1996.
identified by Sachs et al. The reform parameters prevented clinical issues from being understood leading to the importance of both medical care and these costs and risks being overlooked.

Similarly, research that examined patient satisfaction was interpreted according to the parameters set by the economic scheme. The following excerpt was interpreted as evidence that caesarean rates were driven at least in part by the preferences of mothers and/or obstetricians rather than being clinically indicated.\textsuperscript{112}

*Women undergoing caesarean section were well informed and took considerable part in the decision-making process. This suggests that women's wishes may be playing a role in increasing caesarean section rates. High levels of satisfaction with both the decision and the procedure itself indicate that caesarean section is an acceptable method of delivery, particularly when an elective procedure.*\textsuperscript{113}

As the economic scheme and maternity discourse were not equipped to addressed matters of meaning the reasons behind the 'wishes' of mothers were not considered. The schemes scientific parameters however, enabled an interpretation based on their preconceptions - that "caesarean rates were increasing because the procedure was becoming 'normalised' which resulted in a lack of appreciation by mothers of the risks involved in high cost care." As the health reforms had institutionalised the irrelevance of the patient as a person, patient experience and matters of meaning were not able to be taken into account. Likewise, the meaning behind the finding that mothers had a strong influence on the practice of obstetricians was unable to be considered. Instead the concepts of the maternity discourse and economic scheme led to the conclusion that mothers were undergoing caesareans because they held flawed beliefs that needed to be changed.\textsuperscript{114} The National Health Committee was sure that:


\textsuperscript{114} National Health Committee. Barry M, Chair. Review of maternity services in New Zealand. Wellington, New Zealand: National Health Committee; Sep 1999. p. 36.
There are well-developed indications for the application of each of these technologies, [caesarean sections and ultrasounds] and closer adherence to these indications holds prospects for freeing up resources sufficient to cover the costs of service enhancements recommended in this report.\textsuperscript{115}

...if the caesarean section rates were reduced from 17.7 percent to 13 percent, the savings in direct costs are of the order of $4m per year.\textsuperscript{116}

The NHC concluded that although it was internationally accepted that reducing caesarean section rates was difficult, this could be achieved by an agency that stood outside the context of clinical care predetermining what appropriate care was, and by using local opinion leaders and other “effective local mechanisms” to deliver this message to clinicians.\textsuperscript{117} In working under the same parameters, the purchaser used the Zannetta study\textsuperscript{118} to support this view. It stated:

...International studies have demonstrated the ability to reduce the rate of caesarean sections through the application of protocols. (Zannetta, G et al. (3 September 1999). ‘Changes in caesarean delivery in an Italian University Hospital, 1982–1996: a comparison with the national trend’ in Birth 26.) The National Health Committee suggested that caesarean sections should be subject to clinical audit to ensure conformity with best practice. (National Health Committee (1999) Review of Maternity Services, pg 73) Before this can occur, there needs to be clear identification of best practice though the development of guidelines.\textsuperscript{119}

In not recognising the conceptual limits of the medical model and the economic scheme the purchaser misinterpreted the study and continued to promote the idea that care would improve if clinical decision-making was removed from the clinical setting.

The Ministry of Health lent support to the NHC’s and the purchasers conclusions. In January 2002, it issued a media release stating:

There are fewer normal births according to a Ministry of Health report on maternity services.... The Report on Maternity: 1999 shows 20 percent of hospital births were by caesarean... Less than 70 percent of hospital births were normal vaginal deliveries. ...the report highlighted .. that the rate of interventions during labour was high. The 1999 national rate for caesarean births was 20.4 percent. In 1998 the rate was 19.2 and in 1997 it was 18.2. “These high rates of caesarean are of concern. Caesarean births carry a higher risk of complications for the mother and although they can often save babies when there are problems, experts are generally agreed that national rates over 15 percent offer little extra advantage.”

The Ministry initiated a project to develop guidelines to bring rates down to this level. The document ‘Care of women with breech presentation or previous caesarean birth’ was released in 2004. It stated:

There is a lack of well-designed studies in the area of management of breech presentation and the management of vaginal birth after caesarean. More research is needed to adequately answer many of the questions in this guideline.

The document identified that the increased risk of perinatal and long-term morbidity with breech births were more than five times greater than the risks of caesarean section and

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advised that ‘if a breech presentation existed at term women should be offered a caesarean delivery and be permitted to choose either vaginal or caesarean birth for themselves after full and frank discussion of the risks and benefits to her and her baby’ reflecting the view of the College of Midwives that maternity care should be based in a woman’s right to choose as opposed to the baby’s rights. It did however, identify the need for women who had had previous caesarean sections to be referred to a specialist obstetrician.

Despite not being endorsed by the College of Obstetricians and Gynaecologists, the document was interpreted by the Ministry in light of its conceptual predispositions and promoted as follows:

*New evidence-based guidelines developed by the New Zealand Guidelines Group (NZGG) were launched today at a scientific meeting of obstetricians and gynaecologists in Palmerston North. The guidelines recommend safe alternatives to caesarean for mothers who have had a previous caesarean and for situations where a breech delivery is anticipated.*

Prof Cindy Farquhar, chair of the guidelines team said, “Breech presentation (when the baby’s buttocks are coming first rather than the baby’s head) is associated with increases in major health risks to newborn babies. For this reason, health providers have always tried to take special care and, in many cases, caesarean has been recommended to reduce the risks to the infant. We now have clear evidence that there are safe ways the baby could be turned, and born vaginally and the caesarean birth avoided.”

“We also have good news for mothers who have had previous caesareans. They are often advised that all further babies will need to be born by caesarean. A thorough review of New Zealand and

international studies shows that, with the right planning and monitoring, a high percentage of these mothers can successfully give birth vaginally. This means that they will recover from the birth faster, and the chance of infection from surgery and risks of blood transfusion will be reduced. Babies born vaginally will also be spared the health problems associated with caesarean birth," she said.

In emergency situations, caesarean birth can save lives. However, there are some very real consequences associated with caesarean for both the mother and baby. The guideline team focused on identifying those areas where surgery is optional and can safely be avoided. One of the issues identified by our research was that many pregnant women and their families don't understand about the risks and benefits associated with surgical birth. We are making strong recommendations that all midwives, general practitioners and obstetricians are obliged to give full, good quality evidence-based information about the risks and benefits associated with surgical birth.

Dr Pat Tuohy, Acting Director-General Clinical Services at the Ministry of Health, welcomed the new guidelines. He said, "Over the next few months we are keen to work with professional organisations and district health boards to promote the guidelines to health professionals so that they understand the reasons for this advice. We are developing brochures for pregnant women and their families which will clearly describe the alternatives, risks and benefits of surgical birth, and we want to reassure them that often there are alternatives that will be safe for both the baby and the mother."125

The purchaser lent support to the NHC and Ministry’s views but rather than focusing on ways of constraining clinical decision-making, advocated improved information be given to mothers so that they understood the benefits of midwifery led care. It stated:

There is an equity consideration for all women to be able to access the information, not just those who are more sophisticated in information discovery.

Women have difficulty accessing unbiased information on maternity services. The HFA survey of maternity consumers in early 1999 made it clear that women, at the outset of their pregnancy, want independent and comprehensive information about how to arrange care, available options, and the type and amount of care that can reasonably be expected. The National Health Committee review later in 1999 showed that 30 percent of women considered they were not given sufficient information on how to choose a LMC. Almost 40 percent of submissions commented on information as a barrier to women making informed decisions.\(^{126}\)

The economic concept of bounded rationality helped shape the view that women did not have the right information to make optimal choices. Economic parameters determined what the right information was and how it should be provided. On the basis that the purchaser believed clinicians “could not give unbiased information about their competitors” and saw itself as the only agency able to “provide unbiased information’, “ensure neutrality and acceptability” and inform the public of the “benefits inherent in the New Zealand maternity model,” policy changes were made whereby the fee that was claimable for providing information to women regarding the ‘options of care’ was removed from the schedule\(^ {127}\) and policy recommendations were developed advocating that health funds should be used to establish an information service that:

...would promote greater public knowledge on the benefits inherent in the New Zealand maternity model. The service is estimated to cost $758,000 per annum (GST exclusive) when fully operational.\(^ {128}\)


The economic views that mothers behaved in determined ways, and that the economic scheme alone was able to determine what was correct behaviour combined with that of the maternity discourse that advanced the view that maternity care could competently be provided by either midwives or doctors. Together they shaped the abstraction that providing information about the skills of the different types of providers was unnecessary.

*Consumer choice involves the woman being in partnership with her LMC and having many choices in the management of her care, rather than the choice of a particular type of LMC.*

In not recognising the patient as a person and the meaning of experience, the information that was considered relevant related to making the correct choice as determined by economic parameters — that is, having a midwife provide care either at home or in a primary birthing unit.

**Medical skills for midwives**

In not recognising that competent medical care was the result of the entire composite of medical training it was assumed that the medical components of maternity care could be segmented out and, as the maternity discourse promoted the view that they provided the same care as doctors, that midwives had been trained in these components. After the death of a baby in a private hospital that did not provide back up neonatal services, the coroner was quoted as stating that the case illustrated the importance of midwives

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131 See: City has a bouncing baby hospital. The Press 2005 Mar 12;Sect, A:21. A College of Midwives Advisor [Campbell] is quoted as saying that ‘women need to understand that that is what the hospital is there for [having hospital treatment], and if they’re well that’s not where they should be.’ In other words, women only need to deliver in hospital if they are ill. The article goes on to quote Campbell as saying that she ‘feared women attracted by the ‘flashy new building’ would turn away from the primary birthing units. Canterbury already had one of the highest intervention rates in the country and attempts to reduce this could falter if more healthy women gave birth at a tertiary hospital.’ See: Midwives back birthing units. The Press 2005 Aug 8Sect.A:4 Karen Guilliland, chief executive of the College of Midwives was quoted as saying ‘Stand-alone units are the answer to safe birthing for well women, not the problem. There is increasing evidence that sending women to big base hospitals was likely to increase birth complications rather than prevent them.’
rigorously assessing pregnant mothers to see if they were suitable for primary care and weigh the risks against mothers' preferences.\textsuperscript{132}

Further, when the conceptual limits behind the notion that midwives could competently look after maternity patients without medical involvement became apparent, policy recommendations were developed advising that midwives undertake a postgraduate multidisciplinary course with the specific focus of maternity emergencies.\textsuperscript{133} In other words, it was proposed that midwives underwent a component of medical training which, given the idea that medical training could be broken into discrete technical steps, was seen as sufficient for dealing with maternal and neonatal emergencies.

\textbf{Acrimony, disputes and tragedy}

The lack of agreement over the LMC contracts became acrimonious and spilled into the public arena\textsuperscript{134} undermining relationships between doctors and midwives and public confidence in maternity services.\textsuperscript{135}

The structural boundaries that had been created resulted in disputes that impacted the care mothers and babies. Whereas prior to the reforms the public and private sectors, in the main, worked cooperatively together disputes arose between professionals when mothers changed their LMCs, between mothers and their LMCs when the LMC refused to deliver the mother in a hospital or primary birthing facility, between LMCs and facility staff around legal liability, public reputation and the status of facility protocols when a mother using a private LMC was resident in a state-owned facility,\textsuperscript{136} and when patients were


advised that 'if a breech presentation existed at term women should be offered a caesarean delivery and be permitted to choose either vaginal or caesarean birth for themselves after full and frank discussion of the risks and benefits to her and her baby' reflecting the view of the College of Midwives that maternity care should be based in a woman's right to choose as opposed to the baby's rights. It did however, identify the need for women who had had previous caesarean sections to be referred to a specialist obstetrician.

Despite not being endorsed by the College of Obstetricians and Gynaecologists, the document was interpreted by the Ministry in light of its conceptual predispositions and promoted as follows:

New evidence-based guidelines developed by the New Zealand Guidelines Group (NZGG) were launched today at a scientific meeting of obstetricians and gynaecologists in Palmerston North. The guidelines recommend safe alternatives to caesarean for mothers who have had a previous caesarean and for situations where a breech delivery is anticipated.

Prof Cindy Farquhar, chair of the guidelines team said, "Breech presentation (when the baby's buttocks are coming first rather that the baby's head) is associated with increases in major health risks to newborn babies. For this reason, health providers have always tried to take special care and, in many cases, caesarean has been recommended to reduce the risks to the infant. We now have clear evidence that there are safe ways the baby could be turned, and born vaginally and the caesarean birth avoided."

"We also have good news for mothers who have had previous caesareans. They are often advised that all further babies will need to be born by caesarean. A thorough review of New Zealand and

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international studies shows that, with the right planning and monitoring, a high percentage of these mothers can successfully give birth vaginally. This means that they will recover from the birth faster, and the chance of infection from surgery and risks of blood transfusion will be reduced. Babies born vaginally will also be spared the health problems associated with caesarean birth," she said.

In emergency situations, caesarean birth can save lives. However, there are some very real consequences associated with caesarean for both the mother and baby. The guideline team focused on identifying those areas where surgery is optional and can safely be avoided. One of the issues identified by our research was that many pregnant women and their families don't understand about the risks and benefits associated with surgical birth. We are making strong recommendations that all midwives, general practitioners and obstetricians are obliged to give full, good quality evidence-based information about the risks and benefits associated with surgical birth.

Dr Pat Tuohy, Acting Director-General Clinical Services at the Ministry of Health, welcomed the new guidelines. He said, "Over the next few months we are keen to work with professional organisations and district health boards to promote the guidelines to health professionals so that they understand the reasons for this advice. We are developing brochures for pregnant women and their families which will clearly describe the alternatives, risks and benefits of surgical birth, and we want to reassure them that often there are alternatives that will be safe for both the baby and the mother."125

The purchaser lent support to the NHC and Ministry's views but rather than focusing on ways of constraining clinical decision-making, advocated improved information be given to mothers so that they understood the benefits of midwifery led care. It stated:

abandoned by their LMC when their care became too difficult as, for example, in situations where mother also suffered from a mental illness.

There were ongoing confrontations in the media between the College of Midwives, its members and doctors. Midwives regularly criticised the medical profession for being responsible for ‘unnecessary interventions by institutionalising and pathologising birth which had continued to erode the normality of birth into a medically managed event’. The chief executive and president of the College of Midwives, Karen Guilliland, and Sandy Grey respectively, were quoted as stating that as the expertise of doctors was essential only for abnormal births, and only a small percentage needed those services, whether general practitioners remained in the business was not a looming concern. Involving obstetricians in healthy, normal births led to a higher intervention rates and higher risks for mothers. Guilliland had previously been quoted as stating that the departure of GPs from obstetrics reflected an international trend. Midwives and specialists were the core of the maternity services and midwives were being recruited to

This became an issue in 2004 when two independent midwives using a hospital facility refused to get help from a specialist for a complex birth because the mother wanted an natural birth. The baby consequently died. The midwives were found to have breached a facility protocol by not seeking help from an obstetrician. Source: Goodger G. Midwives did not seek specialist assistance Hospital’s internal report forwarded to commissioner. Otago Daily Times 2004 16 Apr. Source: www.odt.co.nz. Accessed May 25, 2004.

137 Kiri Hider (midwife). Letters to the Editor. Unfair to blame grade midwives The Press 2004 Jul 9;Sect, B:3.


Emma Hansen reiterated that numerous studies had shown that death rates were highest among babies born in hospitals and lowest among babies born at home because of the increased risk of infection in hospitals and the use drugs, forceps and caesareans that occurred in hospitals. Hospital myth. Letter to the Editor. Sunday Star Times 2004 Jul 11.

Kiri Hider stated that birth had to be returned to women and the community, and at a time when it had never been safer it was not appropriate to keep ‘perpetuating the myth that for low risk women birth was unsafe and needed to be medically managed. Pregnancy and birth was a normal, healthy life event. Kiri Hider. Letters to the Editor. Unfair to blame midwives The Press 2004 Jul Friday 9. Kiri Hider expressed similar views and disclosed she was a midwife. In: Letter to the Editor. Avenues. Christchurch New Zealand: Nov 2004;10:10.

In: Obstetric specialists. Letters to the Editor. The Press 2002 Jul 1. Alison Eddy expressed the view that an article on the loss of obstetricians was unbalanced. She stated that it was a fact that research consistently indicated that specialist involvement in childbirth resulted in higher intervention rates without corresponding improvements in outcomes for women and babies. However, she castigated the editor for rarely letting these facts and figures make the front page.

provide maternity services. On a separate occasion she was quoted as stating that midwives did exactly the same job as doctors.

Doctors responded by pointing out the need for partnerships between GPs and midwives and that the majority of mothers had responded when surveyed that they wanted medical involvement in their maternity care. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists stressed the need for mothers and babies to be able to get ‘timely’ specialist anaesthetic, obstetric and paediatric help in labour and for at least several hours after birth and highlighted its concerns about the safety of small, standalone units stating that birthing units should be sited within or immediately next to a 24-hour obstetric hospitals. The College of Midwives described the advice as ‘puzzling and disappointing’. The media gave the impression that mothers supported the College of Midwives by interviewing particular mothers who had delivered in primary units and believed there were no safety concerns. The NZMA voiced concerns that due to a shortage of midwives and because the reforms prevented GPs who were not LMCs from providing maternity care women were being denied access to care during one of the most crucial periods of their pregnancy.

By 2004, a review of maternity services at a secondary hospital found that poor communication, mistrust and a lack of respect and tense interpersonal relationships

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140 Mother of midwifery. The Press 2004 Jul 24;Sect, D:3.


142 See: Midwives back birthing units. The Press 2005 Aug 8Sect.A:4. A mother was quoted as saying she had no safety concerns giving birth to her first baby at a primary birthing unit. She chose it because it was more relaxed than hospital and she felt confident that she would not need specialist care.

See: Switch away from Christchurch Women's. The Press 2005 Feb 28;Sect. A:8. A seventeen year old stated that she chose to travel further to a primary unit to have her first baby rather than deliver at Christchurch Women’s because ‘she believed she would be more likely to have a natural birth there without an epidural or caesarean, and would feel less constricted by hospital rules.’


between obstetricians and midwives had developed in recent years and this inability to work together was affecting the care women received.\textsuperscript{144}

In Canterbury the caesarean section rate has continued its upward trend. By 2002, this had increased to 28.8\%\textsuperscript{145} of all births from a rate of approximately 16\% in 1995/96 and approximately 12\% in 1988/89,\textsuperscript{146} an increase of 168\%. The rise occurred over the period where medical involvement in the sector reduced, women’s’ choices in regard to the type of practitioner reduced and the provision of maternity services by autonomous midwives increased. Ironically, given the maternity rhetoric regarding medical involvement in maternity care, until 2002, concomitant with the rise in caesarean section rates, hospital perinatal mortality fell.\textsuperscript{147}

The tragic consequences of basing public policy in a set of minimalist abstractions were epitomised in the death of a neonate in a private hospital contracted to provide maternity services that was within five minutes of the region’s main tertiary hospital. Although the hospital provided services such as cardiothoracic surgery and elective caesareans normal public hospital backup personnel such as neonatal specialists were not available. Hospital management was quoted as advising the coroner that the hospital only provided a primary maternity service, was not required by law to have paediatricians on site, and it was up to midwives to advise mothers ‘what this meant’. The midwives were quoted as stating that they had advised the mother that she might need care at the public facility although this did not ultimately happen.\textsuperscript{148}

The conceptual limits of the parameters for rationality meant that there was no realisation that midwives and doctors did not provide the same types of care and neither was the lack

\textsuperscript{147} This data is difficult to interpret because of changing definitions and stillbirths outside hospitals settings are not recorded. However, the Ministry of Health states “The perinatal mortality has continued to fall in recent years (10.2 per 1000 babies in 2000 and 9.0 per 1000 babies in 2001.” Source: Ministry of Health. Report on maternity: maternal and newborn information 2000 and 2001. New Zealand: Ministry of Health; 2003. p. 57. In 2002 the rate is reported as being 10.4 per 1000 babies. Ministry of Health. Report on maternity: maternal and newborn information 2002. New Zealand: Ministry of Health; 2004. p. 53.
\textsuperscript{148} St George’s Hospital under attack after baby’s death. The Press Christchurch: 2005 May 25:Sect, A:1.
of medical care during the pregnancy identified as important. Nor was the need for
maternity services to be provided where immediate anaesthetic, obstetric and neonatal
medical backup was available, for professional linkages to exist across professions, or for
the existence of a stable workforce that enabled these relationships to develop. There
was no recognition that the view that private hospitals provide the same services as public
ones more efficiently was flawed. As stated previously, the coroner was quoted as stating
that the case illustrated the importance of midwives rigorously assessing pregnant
mothers to see if they were suitable for primary care and weigh the risks against mothers’
preferences.149

Responding to criticisms

The maternity reforms were based in the abstractions of the economic conceptual scheme
and the maternity discourse which set the parameters for rational maternity care. In being
grounded in the idea that these parameters set the true path to a better life government
officials dismissed the idea that the sector’s problems could be related to the use of
economic prescriptions. Instead the purchaser argued that the problems were due to the
changes being ‘relatively new’, and had yet to be fully implemented.

As the economic scheme was designed to ignore the hard cases or see them as the
exceptions, the increase in New Zealand caesarean sections was dismissed as replicating
a worldwide trend that commenced prior to the 1996 contracting change150 and reflected
the involvement of doctors in maternity care. The critics were similarly able to be
overlooked with the added support of the economic parameter that saw criticism as
created when those with vested interests lost long-standing exclusive rights. The
purchaser believed that consumers, providers, practitioners and the National Health
Committee, in its acceptance of the overall strategic direction of the maternity reforms,
were generally supportive of the overall strategy. The critics, it said were vocal vested
interest groups who created the ‘perception’ that the maternity system was in a shambles

150 Health Funding Authority. Maternity services: A reference document. Wellington, New Zealand: Health
and needed extensive remodelling. The purchaser advised that these demands should be resisted and current systems maintained, albeit with some refinement because there were some gaps in services, as the clinical outcomes did not provide any evidence of major problems. There needed to be on-going maintenance and “tidying of the edges” and “challenges needed to be deflected” through a strategy that managed critical public comment. The purchasers were adamant that the true path continued to be followed:

*There must be an overriding principle that there will be no change unless the change brings demonstrable benefit, assessed on the basis of the maternity vision and principles.*

In being scientifically based the ‘hard cases’ the increase in caesarean rates were not seen as a problem and ignored.

**Minimalist abstractions and maternity care**

In being based in science, the medical model and the maternity discourse created the impression that they provided proper accounts of health, health care, pregnancy and birth that led to their conceptual limits being overlooked in the development and implementation of maternity reforms in New Zealand.

The international clinical literature is consistent that labour can only be safely managed in different ways with careful *medical* differentiation during pregnancy of high risk and low risk groups. It identifies that the low risk group can deliver with relative safety at home or in a primary birthing facility attended during labour by primary care attendants (midwives and general practitioners) without electronic monitoring and with strict criteria for referral - a system that resulted in a 7.9% caesarean rate in the Netherlands (and was similar to that which existed in New Zealand when New Zealand had a correspondingly

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151 The groups were not identified.
similar caesarean section rate). It is also consistent that mothers undergoing trial of labour for breech delivery after a previous caesarean section must do so in an environment where there is medical oversight and the availability of emergency faculties for caesarean sections (including backup facilities such as neonatal units). In other words, it would be clinically irresponsible to undertake a breech delivery or trial vaginal delivery after a previous caesarean section in a primary birthing facility. The literature also identifies that the effectiveness of opinion leaders is related to their working in a stable, cooperative, collegial environment where the respective skills of different practitioners are acknowledged and respected by different professions and shared meanings are developed within the context of clinical care. Consequently, they are unlikely to be effective in an environment that is racked with acrimony and with a mobile workforce whose understanding of ‘appropriate care’ will be varied and grounded in the contexts that they have come from.

In misrepresenting maternity care, the medical model created the impression that it consisted of a series of discrete steps that could be performed by anyone one with the right training, thereby overlooking the significance of meaning and experience in successful clinical care generally and causing medicine to become marginalised in the provision of maternity care.

The maternity discourse set up maternity care to be interpreted as solely a process of shared meaning thereby overlooking the significance of medical care. Its conceptual limits created a logic that led to the conclusion that intervention rates would reduce if maternity services were demedicalised and women were dissuading from seeking medical involvement in their maternity care. Its conceptual base meant it was unable to consider the contribution of medical knowledge to significant reductions in maternity and neonatal mortality and morbidity, or the way the medical model provided a framework that made care transparent. In rejecting the medical model, clinical care provided by midwives is not transparent leaving it open to being infiltrated by fads based on misunderstood or

inconclusive medical research. Furthermore, in not recognising that medical knowledge is required in undertaking such medical activities as prescribing drugs and laboratory tests, the opportunities for both misapplying medical techniques and for the significance of clinical events to go unrecognised increases, leading to mothers and/or their babies being denied technical interventions when these might reduce the risks of pregnancy and birth. In basing care on a unitary account of meaning midwifery has set itself up to be criticised in the same way that medicine was in the 1970s and 80s. Instead of the criticisms being related to a lack of social relations however, they would relate to a lack of medical knowledge with perhaps more damaging consequences for mothers and babies. The problem here is that midwifery could become marginalised in the same way as medicine.

The economic model interpreted meaning as irrelevant and marginalised the patient as a person and thus was able to adopt the distortions of the maternity discourse and the medical model with impunity. In doing so it created parameters for rationality and what it was acceptable to say that overlooked matters of crucial significance in the provision of maternity services. In being dominant in public policy it institutionalised these abstractions which led to structural changes that severed processes of shared meaning within the sector to the point of acrimony and dysfunction. It also resulted in policy prescriptions that encouraged women to deliver at home or in primary birthing units with care being provided solely by midwives who increasingly did not have any nursing background, had minimal or no medical oversight, did not have professional links with general practitioners, anaesthetists, obstetricians or neonatologists and were unsupported.

156 Such as making normal newborns ‘lap from small cups like kittens’ instead of using bottles with teats, leaving the placenta attached to the baby until the umbilicus separates ‘naturally’, and encouraging mothers to eat their placentas.

157 In 2004 two Dunedin midwives were censured after the death of the baby for pursuing a natural, intervention free birth that did not have any medical involvement. The midwives believed they acted correctly because the mother had definite views about wanting a natural birth without medical intervention. In: Midwives did not seek specialist assistance: Hospitals’ internal report forwarded to commissioner. Otago Daily Times 2004 Apr 16. Source www.odt.co.nz. Accessed May 25, 2004.


by emergency facilities. Other policy prescriptions sought to eliminate the patient as an entity as a medical concern and medical decision-making from the clinical context thereby not only severing medicine from its social roots but rendering it ineffective. There was no recognition that medical training had a long lead time, and that adhering to a competitive strategy that drove clinicians out of maternity care would have flow-on effects on the services, mothers and babies for decades to come.

In seeking a once-for-all account of meaning and significance, the irrelevance of patient experience, and the patient as a physical entity was formally institutionalised thereby leading to prescriptions that were not only divorced from the social milieu but carried significant risks to the physical safety of mother and baby.

More profoundly, in severing of processes of shared meaning between the sector and government the economic scheme created conditions that prevented problems that ensued from these policies from being addressed in any meaningful way. Contrary to the central tenets of the feminist and economic discourses doctors were vested with power when public policy parameters were set by the social context and this changed when social policy parameters were set by economic parameters. Doctors could not advocate for patients. Economic parameters meant that not only could they not be understood, there was no longer anywhere to address these concerns to. Doctors were formally prevented from raising awareness of the harms that ensued as a result of public policy, and government was severed from the public context and was no longer responsible for attending to the harms that ensued from these prescriptions. Instead, public policy became the domain of the unidentified few acting in accordance with economic prescriptions, divorced from both the people affected and the public context with morality being determined by the parameters set by the economic scheme in the belief that they would lead to a better world.
Final footnote

This thesis has been largely negative in its trust – that is, it has endeavoured to identify the causes of the failures of the health reforms that have taken place over the last twenty years in New Zealand. It has found an underlying cause located in the conceptual abstractions employed by medicine and economics and, in the particular case of maternity care, the conceptual abstractions of the maternity discourse. Of course this thesis does raise significant questions of where to from here and how can the problems that have occurred be remedied. Clearly, there is much to be asked about the formation of public policy, relationships between government and the people and the involvement of medical practitioners and other health professionals in implementing positive change. These are major issues which will have to wait for another day. The purpose of this thesis has been to identify the source of the problems.
Glossary

Casemix
A health funding mechanism based on the Victorian (Australian) case weighted discharge (VCWD) formula.

Caseweights (VCWD)
Victorian case weighted discharge.
Funding allocated to each patient on discharge, based on a comparative or relative value unit weighting of the clinical care required for their respective conditions.

CHE
Crown Health Enterprises

CCMAU
Crown Company Monitoring and Advisory Unit

Domino midwifery service
Domiciliary In and Out of Hospital midwifery service

DRG
Diagnostic Related Groups

DHB
District Health Boards

GPs
General practitioners

HDS Act
Health and Disability Services Act 1993

HCP
Health Care Plans

HFA
Health Funding Authority

HHS
Health and Hospital Services

HYE
Health-years Equivalent

HRQoL
Health Related Quality of Life

ICD
International Classification of Disease

IPA
Independent Practice Associations

LMC
Lead Maternity Carer

NIPB
National Interim Provider Board

NZMA
New Zealand Medical Association
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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>PBFF</td>
<td>population based funding formula</td>
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<td>PHC</td>
<td>Public Health Commission</td>
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<td>PHOs</td>
<td>Primary Health Organisations</td>
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<td>QALY</td>
<td>Quality Adjusted Life Years</td>
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<td>RHA</td>
<td>Regional Health Authority</td>
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<td>SES</td>
<td>Senior Executive Service</td>
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<td>SOE</td>
<td>State Owned Enterprise</td>
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<td>THA</td>
<td>Transitional Health Authority</td>
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