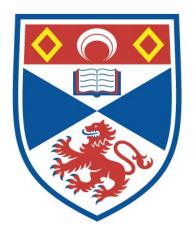
## AN ANALYSIS OF THE ROLE OF STATE, ECONOMY AND CIVIL SOCIETY IN THE DEVELOPMENT, MANAGEMENT AND REFORM OF THE NHS 1948 - 1997

Anthony E. Lockett

A Thesis Submitted for the Degree of PhD at the University of St Andrews



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**TITLE PAGE** 

An Analysis of the Role of State, Economy and Civil Society in

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# the Development, Management and Reform of the NHS 1948-

1997

# By AE Lockett M.Sc. MBBS

# In Fulfilment of the Degree of Doctor of Philosophy

**St Andrews University** 

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## **ACKNOWLEDGEMENTS**

It is a cliché to say that no man is an island, but in my case this could not be truer. The lists of credits to give could be endless, but people worthy of special mention include Professor M Malek, University of St Andrews for his faith and perseverance, Linda Malek for her support the Malek children for their humour, The staff of Southampton Health Commission for allowing me to study the workings of the authority Val Sweet for ensuring the format and spelling conforms to some sort of standard and my colleagues at Covance for putting up with me during the writing phase. Last but not least comes my wife for having an understanding about how important this thesis is to me.

DEDICATION

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## ABSTRACT

The NHS is the centrepiece of the UK welfare state. For fifty years it has provided the majority of health-care in the UK. However the running of the service has not been marked by a smooth operation. Repeated reforms have occurred since 1948 in attempts to increase the efficiency and effectiveness of the service. These reforms have been credited with varying degrees of success. Even the most radical reforms, initiated in 1990, have been marked by some failures - particularly in respect to the provision of services to 'at risk' groups such as the elderly, leading to criticisms of a lack of coherent policy making.

The reasons that underlie the success of the NHS in the midst of failure are complicated, but one hypothesis is that the structure of the NHS does not reflect its basic functions. Those functions can be broken down into 2. First is the relief of suffering from illness; second is the support of the industrial and economic base of the UK. The existence of this pluralistic purpose implies that the management of the service requires balancing the forces of economic, state and civil society requirements for the NHS. This management is embodied in a complicated institutionalisation of care, covered in chapter 1. The empirical evidence gathered in the thesis, in chapters 2 and 3 both from literature and case studies, would indicate that at least part of the problems seen in the NHS result from a failure to balance this institutionalisation. However, the situation is made more complex as the result of this imbalance creates further increased demands from some of the elements in the management of the service. Therefore the failure to balance the interactions that surround the NHS increases the pressures on it - which in turn increases the imbalance leading to a feedback loop magnifying the problem. The source and

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problems of this feedback are best exemplified by a case study of the most recent reforms –covered in chapters 4-11 of this thesis. This case study demonstrates that the way in which the 1990 reforms were formulated and implemented took little notice of the impact of the changes on the street level NHS managers – with the results that the reforms did not represent a coherent policy. The result of the lack of coherence is that the changes have not generated efficiency gains, and in some cases have diverted resources away from those most in need. The underlying cause of this is the predominance of non-market forces in the decision making process – i.e. the values of the purchasers and the power of the providers to influence decision making. The linkages between these features of the post reform NHS are described in chapter 12.

It is likely that the only way in which the circle of problems in the NHS can be addressed is re-establishing the corporate relationship that surrounds health care. However unlike previous relationships the evidence suggests that the relationship should be established at a policy level, rather than the current trends for a local level relationship. The NHS is not unique in this aspect, as this is the pattern of change seen in many European Countries.

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#### **CHAPTER 1 - INTRODUCTION**

## 1.1 Key points for this chapter

The aims of this chapter is to introduce the UK welfare services from the perspective of the organisational and social developments they have undergone in the 1980's and 1990's, explain the background to these developments and propose the analytical methods to be used to examine the impact of the development on the delivery of services.

## 1.2. Introduction

The 1980's and 1990's are a time of revolution in United Kingdom (UK) public policy. For the first time since 1944 major policy debates have been held over the future of welfare state services that have resulted in fundamental organisational change (Ham C 1992). These changes follow a period of turmoil in the welfare state, a period that reached a climax in the early 1980's.

The welfare state in the UK until the early 1980's was based on the 'post-war settlement' of 1946 under which a Consensus was established which made welfare services free at the point of delivery and distributed on the basis of need. This Consensus provided a stable welfare state until the social and economic conditions of the late 1970's forced major change. Since then successive governments have sought to replace the Consensus, with the result that the structure and function of the welfare services has been reformed (Deakin N 1994).

The reformed welfare state of the 1980's and 1990's is a decisive break with the past; a move away from the welfare state of Beveridge and Keynes towards different methods of supplying and distributing welfare services. In many cases this shift involves an emphasis being placed on market mechanisms to increase the efficiency of service delivery and target those most in need (Barry N 1994)

The reasons for the departure from the Consensus lie in the 'crisis' that surrounds the welfare services. This crisis is attributed to the increased pressure placed on services due to

- A change in the economic and social structure of the UK, with a move away from heavy industry into service industries. This shift implies that the nature and patterns of welfare services should also change to accommodate the more flexible patterns of labour within the service industries.
- 2. The increasing availability of health-care technology.
- 3. The increasing proportion of elderly in the community.
- The overload on the administrative systems brought about by the other factors, (Deakin N 1994).

Added to these concerns are the perceived risks that the welfare state might induce, or has induced, a dependency culture with an associated decline in enterprise and innovation (Thatcher M 1993).

That there is a crisis in the welfare state is not in doubt, however many commentators indicate that the crisis that surrounds the welfare state may have ideological overtones

(Deakin N 1994). The ideological politics introduced by the Conservative Government of the 1980's has had a profound effect on British life. The welfare state is seen by some as expensive and an un-needed burden on the taxpayer (Barry N 1994).

On a background of crisis, the waves of welfare reforms in the 1990's have had one proclaimed aim – the improvement of the efficiency of the welfare services and the minimisation of the economic and tax burden associated with the welfare state (Ham C 1996). However as has been noted by some observers the reforms of the welfare state have not always had the intended results, and gains in efficiency have not always been achieved (Patton C Birch K Hunt K Jordan K 1998) (Glennerster H 1998). These failures have been attributed to the way in which the reform process has been conducted. In a review of the welfare reform process Hoggett indicated that recent welfare reform has a higher degree of centralisation and formalisation than might be anticipated given the basis of reform, a feature that may contribute to reform failure (Hoggett P 1997).

The repeated anxieties over the direction of reform have opened the debates about the relationship between aspects of social policy, governmental objectives and the role of the organisations that support and deliver care. These debates address the fundamental nature of the welfare services in the UK and question the role of government in deciding the distribution of welfare benefits.

Central to these debates are questions about how policy regarding welfare services should be formulated and implemented. Of principle focus are the mechanisms for achieving change in the welfare services to match the pressures applied to services by the change in labour patterns, technology and demographics. Manziman and Sabatier have indicated that positive change in the welfare services can only be achieved if the totality of function in the welfare services is considered. Their studies of the education services indicated that ideologically driven reforms often had unexpected results due to ad hoc changes that were made to the reform programme by the implementers. These ad hoc changes resulted in either the reforms losing effect or in some cases the failure of the educational system to protect at risk children (Sabatier P and Manziman D 1979). The results of Sabatier and Manziman have led to questions about the UK reforms. The fact that the reforms of the UK welfare state are ideologically motivated is well known (Kavanagh D 1990; Hoggett P 1997). Is it possible that the unexpected effects of UK welfare reform relate to ideologically driven reforms and ad hoc change as described by Sabatier and Manziman in education reform? It is to this question that this thesis will be addressed.

This thesis critically appraises health-care policy in the UK from 1948 to 1997 with a focus on the major reforms seen in the 1990s. The aim of this thesis is to understand the National Health Service (NHS) reform process, suggest why reforms fail and to postulate what alternative approaches may result in successful reform. The thesis will concentrate on using a method that analyses the NHS as a social institution in an attempt to explain the impact of policy on both the outcomes of the service and how the service operates. It is hoped by integrating the role of the service as an institution in the analysis the link between policy and outcome can be clarified and the reasons for the failure of reform become apparent.

This thesis hopes to show that the complexity of function of the NHS, and the welfare state in general, suggests that a single ideology can never establish policy that will allow radical change. The complexity of function in the welfare services implies that policy makers focussing on a single ideology cannot grasp the range of interactions that makes the welfare state work. Therefore a mechanism is needed to bring together the complex process of reforming the welfare state – including the NHS - if reform is to succeed (Hoggett P 1997). In this manner the welfare state resembles the legal system, where the independent consideration of legal issues, by the law Commission, is the accepted way in which the impact of changes in laws can be assessed taking into account the wider social implications (Zander M 1994).

In the chapters that follow there is an emphasis on factual data about health-care provision and policy, largely from official government documents, combined with directed case studies. However, the approach is far from being an exercise in the presentation of data. In the construction of the arguments conscious thought has been given to collection of information directed towards the role of the organisations that act on health care policy. No apology is made for what may be seen as a functionalist or objectivist bias, as by creating a fact-based environment it is easier to tease out the major factors and examine them critically using validated statistical methods.

## 1.3. Why Study the UK National Health Service.

The UK National Health Service (NHS) is an ideal case study for looking at the formulation of social policy in the UK. The NHS has been a central feature of UK welfare and the NHS was one of the major features of the post-war welfare state (Honigsbaum F 1989). Therefore the reforms of the NHS have shadowed welfare

reforms since 1948 and changes in the NHS represent a barometer of state action as events in the NHS closely follow the crisis in the other welfare services (Frazier D 1984). This is reflected in the four reorganisations that the NHS has undergone since 1974. In addition there are other advantages. The NHS has been described as a British religion, and changes in it are the centre of attention and are readily documented (Honigsbaum F 1989). This provides a rich source of material for analysis, as the workings of the NHS are directly observable in the decisions of Health Authorities.

## 1.4 The Hypothesis

The hypothesis contained in this thesis is a modification of the hypothesis used by Sabatier and Manziman in the study of education services (Sabatier P and Manziman D 1979).

In the search for efficiency the NHS has undergone a series of ideologically motivated reforms aimed at improving the efficiency of health care provision. These reforms have required ad hoc modifications in the face of problems that cannot be accounted for in the ideology. These ad hoc changes to the reform have been dominated by the organisations that are involved in the implementation of the reforms and so have led to the loss of consistency between policy and implementation, such that the reforms fail to meet objectives.

## 1.5. The Methods to be Used to Analyse the NHS in this Thesis

In order to test the hypothesis proposed in section 1.4 the selection of the analytical method is crucial. The method selected must enable a comparison of the structure and function of the NHS with regard to the importance of the organisations that influence the service, across a number of reform episodes that are not always separate in time.

In the past, study of the NHS has focussed on the achievement of change relative to the outcomes of the service with regard to specific populations or diseases (Glennerster H 1998). However, such approaches have the disadvantage that the results of these exercises cannot be directly related to policy and organisational influence (Torfing J 1998).

In this thesis it has been decided to analyse the NHS as though it existed as a physically constituted institution, an institution that consists of a number of discrete organisations, with the aim of providing and distributing health care. This analytical method implies that the participants in the institution – the state, economy and civil society – have adopted specific roles and structures to facilitate the operation (Elster J 1992). While it is recognised that in reality no such structure exists, this analytical method has been selected as it enables an analysis of the NHS to be made that focuses on policy and can accommodate the change engendered by the changing social political and economic environments.

## 1.5.1 Background to the Analytical Method

The analytical method of examining the NHS as an institution has roots in the function of the NHS as part of the welfare state.

The welfare state can be interpreted in a variety of ways. In its original form the *wohlfartsstat* of Bismarck was taken to mean the provision of compulsory social insurance as an instrument to counteract communist insurgence (Torfing J 1998). However contemporary commentators would cast the idea of the welfare state into a more comprehensive role as an integrative part of social policy aimed at remedying the defects of economies based on free markets (Frazier D 1984). This broader definition defines the welfare state as being concerned with the provision of the economic, social and political conditions that permit the modern capitalist state to exist in conditions of the overall maintenance of high wealth – reflected in the value of the countries economy - and social harmony. A particular role for the welfare state is the assurance that none of the members of that state are deprived of basic human rights - such as food or health care - by the operation of market forces (Torfing J 1998). This implies that a number of external influences, such as market factors, must be accommodated in welfare state decision making (Burrows R and Loader L 1994).

Despite the apparent importance of external influences in the distribution of welfare state benefits the analysis of the market factors that surround welfare decision making is neglected (Jessop B 1996). A variety of mechanisms by which the welfare state and markets interact have been proposed, but only a few tested. The established views of welfare state - market interactions include

The feminist (the role of the welfare state in promoting inequality).

The Marxist (the role of the welfare state in promoting or mitigating class conflict). The socialist (the institution of the welfare state as providing returns to workers) (George V and Wilding P 1996).

These viewpoints are all equally valid in examining facets of welfare development, however none can explain the totality of development, as each focuses on a particular segment of society. However, the common theme among these views is that the welfare state acts to regulate the impact of markets on segments of society (Burrows R and Loader L 1994; Titmus R 1958). Therefore can the welfare state be viewed as a regulator of capital development?

## 1.5.2 The Regulationist View of the Welfare State

In modern society the majority of the population is dependent on a continuation of work in exchange for wages. In turn the efforts of workers is turned into profit to enable the continuation of the cycle. This wage-profit cycle is often termed the mode of capital accumulation (Aglietta M 1979). However, this cycle is unsustainable without government intervention and regulatory mechanisms in the form of society norms, patterns of policy and strategic conduct are needed (Aglietta M 1979).

The regulationist view postulates that the welfare state is created by the interaction concerned with the provision of suitable economic political and social conditions to extend the development of market forces, by preventing market developments denying the access of citizens to welfare services. If market developments were allowed to develop without the presence of a welfare state it is likely that a significant underclass would be created. This underclass would not only be a significant economic burden, but its presence would act as a threat to the continued supply of labour and act to destabilise society. Therefore the welfare state is a part of the regulatory mechanisms of market development and capital accumulation. This view of the welfare state has an advantage in that it can provide a direct link to economic and industrial policy. Another advantage is that the regulationist view avoids any emphasis on the high welfare state expenditure as it places expenditure in the context of the services provided being central to a thriving capitalist economy (Torfing J 1996). As such, this context on welfare services allows the NHS, as part of the welfare state, to permit the development of the free market even where the market may give rise to a distortion of equity. Therefore the provision of health care can be seen as an integral part of any society based on a capitalistic economy (Doyal L and Pennel I 1979).

## 1.5.3 How Does the Welfare State Regulate Capital and Market Development.

Initially it was proposed that the mechanism of regulation of the effect of the free market by the welfare state could be explained on the basis of a procedural relationship. Two procedural relations were proposed, Parliamentarism and Corporatism (Jessop B 1996;Therborn G 1992).

A. Parliamentarism

Parliamentarism controls welfare development and regulation by rule of law. The regulation of state provision by rule of law defines the rights and obligations of citizens in accordance with legally binding statutory instruments. It therefore represents state provision at the highest level. However in relation to welfare, and

particularly health-care service provision, it is very hard to determine the levels of care that should be provided and guarantee these on a legal basis. Witness for example the deliberations of the Dekker committee in Holland, which has failed to define a legally sound suitable minimum standard of care due to the complexity of health care provisions (Honigsbaum F Calltrop J Ham C Holmstrom 1995). Therefore Parliamentarism alone cannot define the boundaries of care (Teulings C and Hartog J 1998) and so Parliamentarism can not define the regulatory mechanism.

B. Corporatism.

Corporatism relies on the representation of workers and employers by structural bodies, e.g. Trade Unions, within a state framework, e.g. the Confederation of British Industry (CBI). In this explanation welfare state developments are procedurally determined by the state in accordance with the rules within the state framework. However, this explanation suffers from similar problems to Parliamentarism in that the boundaries of care cannot be defined by the state alone (Teulings C and Hartog J 1998).

In face of these failings it appears that the regulatory mechanisms of the welfare state do not have a basis on procedural rules and therefore the effects must be achieved by the organisations involved in the welfare state taking a dynamic, active, role in market development (Torfing J 1998).

Initial efforts to explain the dynamic regulatory function of the welfare state in controlling the effects of markets focussed on the state. In particular these efforts

looked at the welfare state in terms of regulating economic exchange within the market. This analysis - performed by Wilensky (Wilensky HL 1975) - found that welfare expenditure is influenced by state ideology, but found that rich countries relatively spend more than poor ones. This argues that it is the market that drives welfare provision, not the state driving the market as suggested by the hypothesis and so this analysis route was stopped (Torfing J 1998).

Flora and Alper proposed an alternative explanation in the early 1980's (Flora P and Alper J 1982). This account focused on welfare developments as a result of social and economic exchanges relating to the acquisition of workers rights, i.e. regulation of market effects by the state and citizens. In a regression analysis Flora and Alper demonstrated a correlation between economic regulation and social change - as would be predicted from this hypothesis. However, the model would also predict a threshold of state expenditure over which welfare services would develop, as a result of the civil society gaining economic power. Empirically no such threshold has been demonstrated. In addition it is apparent that socialist governments have not introduced welfare states earlier than more liberal regimes - a factor that also weakens the hypothesis (Jessop B 1996).

The failure of the analysis based on the direct intervention by the state and citizens of a country, the so-called structuralist approaches, led investigators to focus on the role of the economy in regulating the supply of welfare. In particular the emphasis was shifted onto market regulation by employers, with the state acting as an agent to assure future market development. These can be summarised as the agency based approaches stemming from the Marxist perspective (Jessop B 1996).

The agency-based perspective assumes the state assures monopoly of capital by the dominant social order in order to maximise the value of the economy (Jessop B 1996). The government achieves this by interaction or intervention to maintain a balance in order to achieve stability. O'Connor proposes that the state can achieve this by providing a positive feedback loop to the accumulation of capital (O'Connor 1973). This position has been critiqued as being simplistic in the role of the state - as it has been demonstrated that the state plays a more active role, for example the fiscal support given to the currency during the sterling crisis in 1990 (Torfing 1998). An alternative approach to the agency hypothesis of welfare state development is more firmly based in the capital theory of Marxism (Kolakowski L 1978).

In classical Marxist capital theory - 3 modes of capitalism operation are recognised.

1. Laissez-faire

2. Monopoly capitalism

3. State monopoly capitalism.

These three modes of operation represent a natural evolution in capitalism. The laissez-faire mode, with minimal state intervention has the effect of concentrating or monopolising capital such that a few hold the majority of capital. This leads naturally on to the stage of monopoly capitalism. This in turn leads to a breakdown of the profit cycle and the stagnation of the economy. Therefore the state intervenes to ensure the continuation of capital accumulation (Jessop B 1996). As part of this state intervention, welfare services are provided in order to provide a deal with the labour force so that capital can continue to circulate (George V and Wilding P 1996).

Marxist capital theory has been criticised because of the inconsistencies about the role of the state (Laclau E and Mouffe C 1985). The evolution of capitalism from laissez-faire to state monopoly capitalism calls for the state to introduce changes, such as the welfare state, in order to maintain the ideology of capitalism based on internal demands. In practice this has not been shown to occur and any new bargain with the labour movement has been the result of external pressure such as war, rather than internal ones (Laclau E and Mouffe C 1985; George V and Wilding P 1996).

The failure of the structuralist and agency perspectives of the regulatory actions of the welfare state led investigators to concentrate their efforts in a combination of both the structuralist and agency approaches, i.e. regulation of market effects by a combination of state, economy and civil society. These efforts initially focused on interactions based around the state provision of social benefits and the state regulation of private and public bodies to regulate market effects (Gough I 1979). The interactions were initially explained on the basis of social class development (Esping-Andersen G 1990). The hypothesis of Esping-Andersen has been criticised by studies that have shown that welfare development cannot be explained on the basis of a class-labour struggle alone. The United States of America (USA) & UK at the turn of the century had identical market and class structures. However, state health care development - along with many other welfare developments – in the USA lagged behind the UK. This difference between the USA and UK cannot be explained by capital structures, government ideology, Trade Union practices or the labour pool structure (Orloff AS and Skocpol T 1984).

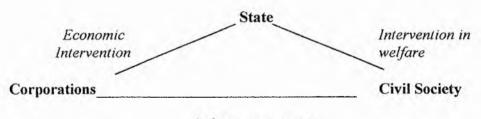
Orloff and Skocpol proposed that the developmental differences in welfare services in the USA and UK could be explained on the basis of the state management of welfare benefits via the actions of a civil service. In an analysis of the US and UK welfare systems the differences between the countries could be explained on the basis of the presence of a professional civil service in the UK. However this analysis was not able to explain how the regulatory system might work (Allum P 1995) (Orloff AS and Skocpol T 1984). Torfing extended the explanation of Orloff and Skocpol by looking at the political and economic environments that surrounded the welfare state. He realised that the regulatory mechanisms that surround the welfare state could not be static. As the external economic and political environments changed, due to technological change and the globalisation of the world economy, the regulatory mechanisms of market effects would also have to change. This would give the regulatory mechanisms the characteristic of rationalising the welfare state in the face of market change. Torfing hypothesised that the basis for this ability to rationalise the regulatory process within the welfare state must be the introduction of ambiguity and strategy into the decision making process by allowing the population and economy to interact with the management of the welfare state. By allowing ambiguity and strategy Torfing was able to accommodate the uncertainty of economic and political developments into the regulation of market development by the welfare state while the state remains the driver of welfare development (Torfing J 1998)

The foundation of Torfing's view of the welfare state as a rationalising - regulatory instrument was been laid in the post Second World War development of welfare services. The stated aim of welfare development post war was to ensure economic prosperity while providing for social justice in the form of redistribution (Gough I

1979). These aims defined that the distribution of welfare benefits was to be dependent on the state's role in promoting stability, the economic corporation's role in ensuring capital development and the civil society's role in providing the labour force. Therefore the welfare state can be seen as the product of three interactions (Janoski T 1998)

- 1. The interaction between civil society and corporations the so-called labour compromise under which the workers agree to swap their efforts for wages.
- 2. The interaction resulting from economic intervention between the economic corporations and the government, under which the government agrees to support the efforts of commerce in exchange for taxation and other support. In most modern societies this takes the form of Keynesian economic intervention.
- 3. The interaction between civil society and the government, resulting in the provision of welfare benefit.

These interactions are often graphically depicted, Figure 1.1



Labour compromise

FIGURE 1.1 THE TRIAD OF HEALTH CARE PROVISION. Modified from (Janoski T 1998) It is important to note that in this model 'the state' includes the bodies involved in administering the local state – for example local health authorities – as well as governmental agencies and the civil service. Likewise the definitions of civil society and corporations are equally broad. Civil society is defined as the class structures and other organisations that define society, and corporations include not just the free market bodies that are centred on profits, but other private sphere bodies – including churches, hospitals and Trade Unions (Torfing J 1996;Aglietta M 1979).

Torfing postulated that for the welfare state to function effectively in mitigating the effect of the market, the interactions of the state, economy and civil society must be in balance, i.e. the demands of one party in the interaction must not unnecessarily outweigh the others. If one party were to be dominant then the benefits of the welfare state would be skewed and the welfare state would cease to have a regulatory role. The balance of state economy and civil society, however, is dynamic, and achieving a balance results from the development of the interactions in the face of changing economic and social environments, this balance he termed the tripartite regulatory relationship. The tripartite regulatory relationship, in Torfing's hypothesis, serves to explain both the development of welfare services and to whom the services are delivered (Torfing J 1996)

Torfing's believed that the tripartite regulatory relationship was a result of the strategic compromise in setting up the welfare state. In order that economic and political uncertainty could be accommodated within the system the state management of the welfare state, via a civil service, of a dynamic relationship of state economy

and civil society was in effect mandatory as a mechanism. Without the presence of this mechanism the structure of the welfare state would require revisiting with every economic, political and technical development (Torfing J 1998).

Torfing looked to the Danish Welfare system to confirm his hypothesis. The Danish system is based on the Fordist Scandinavian system. The Scandinavian system also draws heavily on a home grown version of Keynesian economic exchange and Beveridge style social benefits. These influences led to a partially state funded system of social and health care benefits in a highly institutionalised framework that supports the principles of mass production. However, the elements of mass production are small in Denmark and the welfare system has a fairly large element of non-manufacturing elements, like the protection of rural workers. Therefore the development of the Danish welfare state can be seen as a product of political strategy, partly based on Keynesian economics with a commitment to universal benefits and full employment (Torfing J 1998).

Torfing's research confirmed that many of the decisions made in the Danish welfare state were the products of a welfare state regulating market developments but incorporating in its structure elements of strategy and ambiguity that can accommodate uncertainty in the political, social and economic environments. Torfing's analysis of Denmark also provides evidence that the major mechanism by which regulatory control be the welfare state is achieved is by a tripartite relationship in which the organisations involved have adopted specific roles (Torfing J 1998).

Torfing's view of the welfare state provides the link between policy, policy implementation and the failure of the welfare state to achieve objectives. If the

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tripartite regulatory relationship can be shown to exist in a welfare system, then the failure of the welfare state to meet objectives should be reflected in an imbalance in the tripartite regulatory relationship. This imbalance in turn must be reflected by an imbalance in the policy and implementation processes that underlies the welfare state, as the tripartite relationship is a direct product of state policy modified for political, social and economic circumstance. Therefore the key to proving the hypothesis introduced in section 1.4 is the demonstration that

- 1. The NHS can be viewed as a tripartite relationship
- 2. The tripartite relationship that surrounds the NHS is not in balance
- 3. The imbalance in the tripartite relationship causes the failure to meet objectives
- 4. The imbalance in the tripartite relationship is a function of policy and policy implementation.

#### 1.5.4 The Welfare State and the NHS as an Institution

Torfing's view provides the basis on which to prove the hypothesis introduced in section 1.4. However his research does not outline an analytical method. As was mentioned above it is the intention of this thesis to analyse the NHS as an institution.

In the context of the current study an institution is a group of organisations that are working together to achieve a common aim, in our case the state, economy and civil society are working together to achieve the functioning of the welfare state. The analysis of institutions is a broad analytical method designed to determine the power structure of an institution in terms of its component organisations. Institutional analysis offers a number of advantages. In particular it allows for the function of an organisation to be presented at a general level while allowing for management decision making to be divorced from the principles of operation. This permits a simplification of the analysis and avoids any emphasis on technical efficiency. Therefore when it is applied to a state body it provides a direct link to government policy, as the principles of operation are often the direct product of policy.

Analysing the NHS as though it were an institution implies that the partners in the tripartite regulatory relationship have adopted specific roles, and seek to influence decisions made about a specific range of welfare issues. Furthermore it is implicit in this method that the players in the tripartite relationship have adopted an organisational structure that enables them to have influence.

The analysis of state bodies as institutions relies on the organisations within the state body adopting Institutional Isomorphism (Morgan G 1990). Institutional Isomorphism means that the organisations within a state body, such as the NHS, have adopted the characteristics of commercial organisations to maximise influence. Institutional isomorphism has been described in other scenarios of organisational regulation in the presence of uncertainty. Allen described the appearance of Institutional Isomorphism in the UK mining industry in the 1960's and 70's in response to uncertain technological and economic situations. Morgan then used an institutional analysis, based on determining the roles of organisations within the nationalised coal industry, to confirm that this analytical method can be applied to isomorphic institutions, in situations of uncertainty, in state organisations (Allen VS 1981; Morgan G 1990).

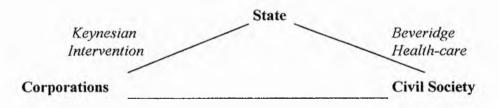
The analysis of the NHS as an isomorphic institution is an important tool. The use of an institutional analysis enables the ambiguity and strategy that makes the welfare state possible to be analysed out – as the analysis focuses on the principles of operation that underlie the structure. Second it provides a way to look at the underlying tripartite structure – as any imbalance in the tripartite structure will be evident in the institutional analysis as differences in the organisational power structure.

While the validity of Torfing's ideas about the tripartite structure of the UK welfare state are the subject of chapters 2 and 3 of this thesis, the conditions permitting the NHS to be viewed as an isomorphic institution have a basis in reality – although no formal institutionalisation exists. There is considerable evidence that social welfare structures (including health-care) institutionalises policy formulation in the context of a civil, political and economic relationship (Doyal L and Pennel I 1979). This institutionalisation reflects the key forces at work in deciding the outcomes of social policy (Torfing J 1996). In other words the institutional relationship decides the outcome of social policy as the institutionalisation of the services provided controls who gets access to the service (Doyal L and Pennel I 1979).

The institutionalisation of the NHS arises as a result of the way in which the welfare state features in post-war developments in the UK. Economic prosperity in post war Britain was provided by the adoption of the Keynesian system of economic intervention - which encouraged the maximum exploitation of productive capacity - but was subject to amendment for the economic, political and social structure of the UK (Keynes JM 1936).

The state's ability to utilise the Keynesian system was dependent on the labour

compromise between state labour and employers figure 1.1. This compromise in the post war UK was characterised as Fordist (Orloff AS and Skocpol T 1984) – the compromise of labour to accepting higher wages for abandoning artisan methods of production, in favour of mass production. This leaves employees with spare capital that could be consumed in other ways (Ford H 1926). The Fordist compromise had a profound effect on the shape of health care and other welfare systems in the UK. These social schemes now had to support mass production methods. This was a major change away from systems based on private insurance or altruism to systems based on the concept of solidarity. Therefore a new civil-society state interaction was needed, however this interaction would have to accommodate the amendments to the Keynesian system. Therefore, in place of private care bodies a range of state institutions arose with civic duty. These bodies were now populated by civil servants, to allow the required flexibility (Orloff AS and Skocpol T 1984). The situation of the interaction is shown in Figure 1.2.



Fordist Compromise

#### FIGURE 1.2 THE TRIAD OF POST W.W.II UK WELFARE PROVISION.

This triad required that the organisations that are participating in the welfare state adopt forms that facilitate their role in influencing the welfare state (Doyal L and Pennel 1 1979) and thereby legitimises the analysis of the NHS as an institutional isomorph. The view of the modern welfare state as an institutionalisation of the forces controlling, directing and benefiting from the service is not the only way in which the modern state can be considered. Other analysis frameworks do exist, including the Welfare Society Framework - where the welfare state is seen as the product of the forces at work within the total populace. An alternative analysis is the State Affluent Society Framework - where the welfare state is a product of the intervention of the state in assuring an affluent society (Torfing J 1998). These frameworks are legitimate instruments to use, however the institutional analysis methodology provides the best analytical tool with which to consider the development of the welfare state from the total society viewpoint. In the other views one or other of the parties involved in the welfare state are assumed to be passive players for the purpose of the analysis. Therefore for the purposes of this analysis it was decided to proceed with the institutional analysis proposed.

# **1.5.5** The Conduct of Institutional Analysis on an Isomorphic Institution such as the NHS

To achieve an institutional analysis on a state body three schemes are possible.

The first scheme is the top down approach, where policy is examined from the government down to the operations level. This approach has two major drawbacks (Sabatier P 1998).

1. The complexities of the task - as many individual agents are involved.

2. If social policy were a product influenced by external parties then such an approach would miss the important interactions between the agencies.

The second scheme is the bottom up approach - looking at operational decisions. This approach - while having simplicity - might lead to too great a focus on local issues, therefore the overall impact of what drives change and the impact change should have would be lost (Sabatier P 1998). However it is apparent that if institutional imbalance exists that the most likely manifestation will be in the local decision making.

The third scheme is a hybrid of the two approaches. It involves a top down analysis of the important themes of political values - for example, the effect of the Welfare State on the workforce - permitting a definition of the decision making environment. This is coupled with a bottom up analysis of how decision-makers respond. In this case the bottom up analysis will involve an abstraction of the salient features of the decision making process - which makes the results generalizable. In this way the origins and substance of policy analysis can be directly married with the impact of operational decisions in a manner that can be more broadly interpreted (Torfing J 1996).

This thesis will concentrate on the third approach and will follow the analysis plan outlined by Sabatier and Sabatier and Manziman (Sabatier P 1998) (Sabatier P and Manziman D 1979). This involves

1. The definition of the institution

- 2. Defining the objectives of reform
- 3. Defining the policy process in institutional terms

- 4. Defining the implementation process
- 5. Characterising the outputs of policy after implementation
- 6. Establishing a causality between the output, the implementation and the institutionalisation

These steps will involve some special analytical techniques. These will be detailed within the following chapters

# 1.6. Testing the Hypothesis -- The Analysis Plan

In order to consider the hypothesis proven in institutional terms it must be shown, using the analytical methods that were introduced above, that

1. The NHS is subject to tripartite regulation and can be described as an institution

2. The development and implementation of health care policy in the UK is inconsistent with the manner in which the NHS exists as an institution in accordance with Torfing's ideas of tripartite regulation.

3. The NHS reforms have failed to achieve aspects of social policy.

4. That the failure of reform can be linked to demonstrated imbalances in the institutional analysis.

The Institutional analysis performed within this thesis is to determine the relative strengths of influence of the organisations that make up the tripartite relationship by

Considering the strengths of the organisations in terms of achievement of aims
 and supporting the mode of accumulation seen in the NHS

2.5

 Determining the influence of the organisation in shaping decision making about the delivery of services

In order to achieve this several analytical steps will be performed in accordance with Sabatier's plan (the details of the analytical methods are contained within the chapters).

First the NHS will be considered in two time periods – pre 1982 and post 1982. The period 1948-1982 will be used to confirm that Torfing's ideas on tripartite regulation apply to the NHS. The second period will be used to perform a top down analysis in institutional terms of policy formulation. Next the actions of decision-makers in the NHS will be reviewed looking for the organisational influences determining the direction of decision making. Finally these analysis will be combined looking for links between institutional imbalance and the outcomes of policy. In particular this final stage in the analysis will seek to establish the existence of a feedback between a failure of reform to meet objectives, institutional imbalance and inconsistent policy with respect to the organisations that support the NHS – Figure 1.3.

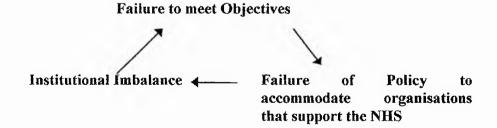


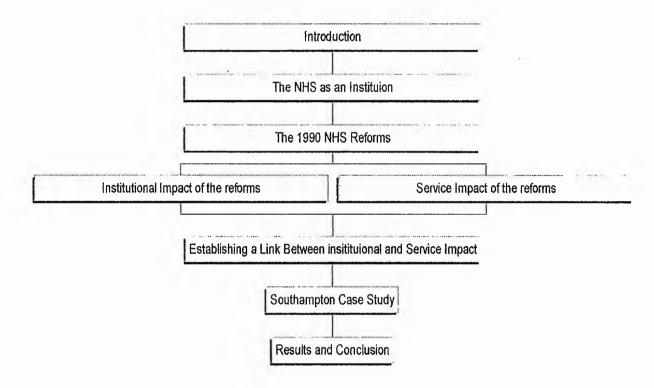
FIGURE 1.3 THE LINKAGE BETWEEN THE ELEMENTS OF THE HYPOTHESIS

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# 1.7. Plan of Thesis

In order to provide answers to the posed questions this thesis will consider each of the questions in a series of parts, Figure 1.4.





Chapter one and two of the thesis will review the development of the NHS, from its inception in 1948 to 1982. The purposes of these chapters are to

1. Give the history of the NHS from an institutional perspective (Chapter 2)

2. Confirm that Torfing's hypothesis of the role of political strategy and ambiguity on the development of health care services since the Second World War applies to the NHS (Chapter 3)

3. Confirm that the conditions for an institutional analysis are fulfilled.

The thesis will then explore the reform of the NHS beginning in 1982 (Chapter 4) and continuing into the 1989 reforms, both in terms of the ideology, (Chapter 5), and the implementation of the reforms, (Chapter 6). The exploration of the recent NHS reforms will conclude with an assessment of the impact of the reforms (Chapter 7), both in terms of the impact on services and the institution.

The purpose chapters 4-7 of the thesis is to confirm that the elements relating to the hypothesis are present. That is the formulation of policy within the NHS was ideologically motivated and considered without the impact of the implementing organisation and that the reforms have failed to deliver policy expectations.

The final chapters of the thesis establish the causal link between the elements of the hypothesis. Chapter 8, a description of the case study created in Southampton Health Authority, looks at the impact of policy making on decision making in the NHS. This is followed by an introduction to the analytical method to be used. The method chosen for this stage was Judgement Analysis. Chapter 10 implements Judgement Analysis on the case study and the results are reported in Chapter 11. Chapter 12 focuses on the way in which the institutionalisation has influenced decision making and the links between the institutional imbalance and modes of accumulation and service failure.

The thesis ends with chapter 13 with a review of the implications of the results of the Judgement Analysis for the NHS reforms and how these results fit with the overall thesis hypothesis.

# 1.8 Conclusions

The underlying theme of this thesis is that the process of health care policy formulation and implementation in the UK distorts decision making such that the objectives of the NHS reforms fail to be met. This hypothesis will be examined using an institutional analysis of decision making by the tripartite regulatory organisations that surround the NHS. This process will begin with an assessment of the applicability of such an analysis to the NHS, and proceed into the main analysis. In order to capture all of the dimensions of decision making this analysis will consist of both bottom up and top-down elements.

## CHAPTER 2 - A REGULATIONIST VIEW OF UK HEALTH CARE DEVELOPMENT PART 1. THE DEVELOPMENT OF HEALTH CARE SERVICES IN THE UK PRE-WAR UNTIL 1982

## 2.1 Key Points from the Previous Chapter

The NHS has undergone repeated reform since its inception in 1948, with the pace of reform gaining momentum and culminating in the 1990 reforms. These reforms have not always succeeded in achieving the political, social and economic aims of health care policy. The hypothesis in this thesis is that these failures are due to a lack of consideration of the incumbent influences when formulating how changes in policy are designed and implemented. The result of this lack of consideration is that although policy begins as a radical change the subsequent processing of policy leads to less radical options being implemented due to the impact of external influences on policy. These less radical options often preserve the status quo of policy and so result in policy failure.

The major organisational influences on social policy in the UK are the roles played by the state, economy and civil society. The major force behind these influences the NHS is the ideology of protecting the vulnerable from market developments. It has been hypothesised that the ideologically driven reforms have led to the failure of the state to evolve a policy that is consistent across these bodies which has led to the failure of the policy to achieve its objectives. The analytical framework chosen to test this hypothesis was to consider the NHS as an institutionalisation of state, economy and civil society – linked in the so-called tripartite relationship. Torfing first described this analytical framework. This framework was selected on the basis of its ability to explain the development of the welfare state post war therefore before proceeding to use this framework for an analysis of the recent reforms it is important to test its suitability in the NHS.

## 2.2 Objectives for this Chapter

This chapter is aimed at reviewing the history and origins of the NHS from an organisational viewpoint prior to assessing the suitability of the selected analytical framework in the following chapter (Chapter 3). Therefore this chapter seeks to identify the nature, history and evolution of the organisations involved in the development and management of health care services before and after the establishment of the NHS.

#### 2.3 The Background to the Foundation of the NHS

The NHS was launched on the 5<sup>th</sup> July 1948. It was the first health care system in the Western World to offer free medical care to the entire population of a country (Ham C 1996). Prior to the development of the NHS, a mixture of private insurance and means-tested state provision had provided health-care across the populace (Frazier D 1984). The transformation of the insurance-based service into a universal state-provided service seemed dramatic. However, the changes were based on a series of developments that gradually transferred the responsibility for the provision of health care from individuals to state organisations (Honigsbaum F 1989). The key milestones in these developments are given in Table 2.1.

ACT	DATE	NOTES
Poor Law Amendment	1834	Creation of workhouses
County Asylum Act	1845	Creation of asylum
Public Health Act	1848	Local authorities responsible for sanitation
Metropolitan Poor Act	1867	Creation of infirmaries
Midwives Act	1902	Registration of midwives
Education (Administrative	1907	Creation of the school medical
Provision) Act		service
National Insurance Act	1911	Free GP services to the poor
Maternity and Child	1918	Local authorities responsible for
Benefit Act		child welfare
Local Government Act	1929	Local authorities responsible for infirmaries

#### TABLE 2.1 IMPORTANT GOVERNMENT ACTS IN THE DEVELOPMENT OF THE NHS

(Source (Gilbert BB 1966) (Ham C 1996))

The reasons behind the changes are complex but are based on concerns regarding the stability of the UK industrial and colonial aspirations. For many years, prior to the First and Second World Wars, the declining health of the working population had given considerable worry to industrialists. It was felt that the decline in the health of workers was a serious threat to the prosperity of the country as unfit workers were unable to produce at maximum capacity (Doyal L and Pennel 1 1979). This was coupled to anxieties by the medical profession about the provision and payment of care for the high levels of illness in the lower social classes. The inability of many workers to pay for the care they needed led to many families doing without essential care and a drift of the medical profession towards more affluent practice which further denied access of the underprivileged to health care (Vaughan P 1950).

The industrial and medical concerns about the health of the working population had emerged in the early nineteenth century and proved a powerful and effective voices (Gilbert BB 1966). Initial lobbying resulted in the 1834 Poor Law Amendment. This amendment provided for the creation of workhouses. The law accepted that there was an underclass of individuals who could not afford basic medical care and decided that some care should be provided. However, the discussion about the state provision of services led to fears of the development of a dependency culture. So the standard of the workhouses was kept low, with no minimum standard of care defined, to act as a deterrent to the working population seeking medical care (Frazier D 1984) (Abel-Smith 1964).

Mirroring the changes in the development of workhouses, the 1845 County Asylum Act provided for the creation of asylums for the management of the mentally ill. The creation of these units was the responsibility of local magistrates, although again the services offered were generally of a poor standard, (Jones K 1972).

The 1834 and 1845 Acts provided care for the most needy. However, concerns about the industrial and colonial stability of the UK soon re-emerged due a shortage of fit recruits to join the armed services during the Crimea campaign (Frazier WM 1950). This crisis emphasised the need to extend the availability of medical care and to improve the standards of living more widely (Frazier D 1984). The most significant result of this realisation of need was Chadwick's Public Health Act of 1848. This Act aimed to provide adequate water supplies, sewage disposal and a General Board of Health. The role of the General board of Health was to ensure the adequate provision of health care and preventative health services, for the lower social classes. However, progress in instituting this Act was somewhat patchy and, as a result, in 1867 the Metropolitan Poor Act was passed. This Act established the formation of infirmaries outside of workhouses that could be funded by charitable contributions and could provide health-care for all social classes. This Act together with the 1834 Poor Law Amendment were the primary acts to enforce the principle of the duty of the state to provide health-care for the poor (Frazier WM 1950). However, the Act did not give guidance as to the standards and range of services that should be offered and for the most part health care remained under private control. Private practice pre-NHS was largely insurance funded and based around private general practice together with voluntary hospitals. The care offered by these organisations was termed "outside relief" (Brand JL 1965). The two systems were often seen to lack consistency. This was particularly evident at the infirmary level where the poor were often denied access as they could not obtain referral notes from insurance funded primary care services (Abel-Smith 1964). An attempt was made in 1911 to regularise the process with the National Insurance Act. This Act was concerned with the development of a unified GP service and provided free care from GPs to the low paid and unemployed male workers and certain classes of female workers such as servants. The Act, however, exempted higher paid workers, non-working females and families. This resulted in the development of an irregular and inconsistent service as Doctors were paid on the basis of capitation rates determined by a Local Insurance Committee rather than on the illness present in a community and the numbers of families the Doctor agreed to care for, (Brand JL 1965).

In an attempt to redress the balance of care towards females and families other changes were implemented. The Midwife Act (1902) and Education Act (1907) aimed to raise the standards of care for the pregnant women and young children (Donnison J 1977). These changes were backed by fiscal policy and in 1918 maternity

and child benefit were introduced (Lewis J 1980).

Despite the policy changes the development of uniform and integrated health care was seen to be slow (Abel-Smith 1964). This was attributed to the lack of organisational structure. The 1929 Local Government Act aimed to unite parts of the service by transferring the operation of workhouses to the local authorities. However, again this act did not define the ranges and standards of health care to be made available and so the services remained erratic. However, the Act set precedence and it is said that this Act was the direct precursor of the NHS (Frazier WM 1950).

The outbreak of the Second World War was a major turning point in the development of health services in the UK. As part of the war effort, the Emergency Medical Service was established (Harris J 1981). The aims of this service were to provide treatment for military and civilian casualties and to co-ordinate services to use resources efficiently. The Emergency Medical Service highlighted the poor state of many of the nation's hospitals and gave an insight into the advantages of a coordinated service under a central state organisation in managing and improving the health of the entire population. The advantages of this co-ordinated service were acknowledged in the Beveridge report (Beveridge W 1942). This report recommended a continuation of the Emergency Medical Service. This report, however, suggested that the final structure of the services should be the result of a re-evaluation of the health care process as part of the post-war economic restructuring of the country. Accordingly discussions about the final structure of the NHS were started in 1944 when the future of the post-war welfare state came under scrutiny (Honigsbaum F 1989).

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# 2.4. The Establishment of the NHS

#### 2.4.1 Background

In the middle of 1944 government departments were asked to produce white papers covering the range of services to be provided under the new welfare state. The guiding principles behind these new services were the need to provide free, universal welfare services with access available to all of the UK population. This guiding principle was termed as 'The Consensus'. The need for the Consensus was determined by concerns about the stability of the UK post war – particularly in the face of a perceived communist threat (Frazier D 1984). In addition the Consensus was seen as essential to ensuring the success of the economic restructuring of the UK based on demand side and Keynesian economic levers, (Curwen P 1997).

Given the importance of the Consensus to the economic and social health of the UK, it was obvious that if the changes promised were to be achieved radical organisational change was needed (Honigsbaum F 1989). Central to this organisational change was the need to

- 1. Co-ordinate services,
- 2. Distribute funds
- 3. Improve health-care quality.

There was wide acceptance of the need for organisational change however the way in

which this was to be achieved was less clear. The major problem regarding the development of the NHS was the conflict between the need to co-ordinate services and the organisations that would provide the administrative structure of this new service. This conflict had been recognised as early as 1925. The Royal Commission report on National Health Insurance (Royal Commission on National Health Insurance 1926-1928) favoured the end of the insurance system, replacing it with a publicly funded system. The British Medical Association (BMA), however, was staunchly in favour of an extension of the insurance-based system and sought to maintain the independent nature of medicine (Vaughan P 1950). The BMA also argued that the model of insurance-based systems represented the model that most European countries adopted and therefore were in the best interest of the public. However, by 1944 some significant departures from the principle of private healthcare had occurred. Most notably the 1867 Metropolitan Poor Act that had placed medical care as a public service. The principle of a public service had also been reenforced by the 1920 Dawson Report that suggested that the only way to ensure the health of a population was to make health-care freely available (Timmins N 1995). The Dawson report also advocated the development of a unified health service, for both treatment and prevention. The need to supply services that prevented ill health was a weakness in the arguments for an insurance-based service. Under the 1848 Public Health Act, local authorities were made responsible for the provision of preventative medical services. Since local authorities had a long tradition of public service, a move to an insurance-based system of health care would require a radical rethink of local authority provision in the UK (Jewkes J and Jewkes S 1961). So despite the importance of the Consensus the restructuring of the service was constrained by historical developments.

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Given this background, and in accordance with the principle of The Consensus, in late 1944 a white paper was produced outlining the development of a NHS (Ministry of Health and Department of health for Scotland 1944). This paper called for the NHS to be under state control, with local authorities being the major driver of services (Honigsbaum F 1989). However, not everybody supported the development of the NHS according to the principles outlined in the 1944 paper. The insurance based system left many parties with a vested interest in maintaining the status quo and at the time the negotiation regarding the formation of the NHS was proceeding, there was a bewildering array of providers and insurers of health-care (Abel-Smith 1964). Central to the system was the General Practitioners (GPs). The General Practitioners retained the rights of independence in the system, often working alone and relying on capitation fees for income. The General Practitioners regarded themselves as distinct from the hospital sector. The hospital service itself was also in a state of flux. Here there was confusion over the grading of doctors with the term specialist or consultant being retained only by the teaching hospitals. In many smaller hospitals General Practitioners were also the hospital doctors (Abel-Smith 1964; Ministry of Health and Department of Health for Scotland 1946). The irrationality of this system was widely accepted as a price paid for the provision of flexible services (Doyal L and Pennel I 1979). However, the system did not promise the quality and the universality of services contained in The Consensus. In addition the system was not able to guarantee access to services as many of the smaller infirmaries relied on charitable donations to fund services. With the depression years followed by the onset of a wartime economy these funds had all but dried up (Abel-Smith 1964).

So despite the agreement on the need for a new health care system, and the problems with the old system, the strength of feeling about the future structure of the service led to the discussions about the future of the NHS becoming stagnated. As a result in 1944 a compromise of a mixed service was proposed. This would be basically private insurance based but with a safety net for the poor (Klein R 1995). The retention of the insurance system would at least in part allow the new service to build on existing structures. However doubt was expressed as to whether a co-ordinated service would be achievable with a mixed system and the Government opted for a contribution based service(Honigsbaum F 1989). In order not to inflame the passions of the powerful medical and insurance lobby, the Government stopped short of a state run service, leaving the door open for the insurance companies to control the new service and pay doctors accordingly. In this aspect the NHS can be seen as a compromise: a product of factors and pressures exerted on the government ministers at the time the NHS was developed (Honigsbaum F 1989).

## 2.4.2 The Establishment of the NHS in 1948

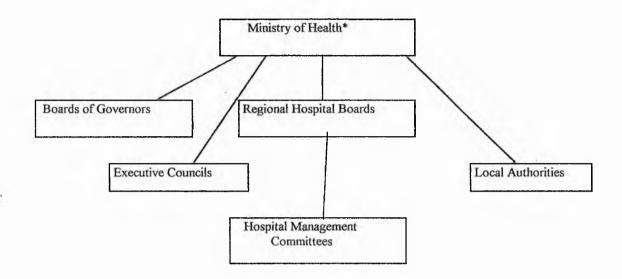
The Labour government of 1945, under Attlee and Bevin, reviewed the wartime discussions about the NHS and modified them. The resulting NHS Bill in 1946 enforced the belief that the only way to provide an efficient service based on the Consensus was to nationalise the hospital services and provide a centrally co-ordinated service (Bevin A 1961). In effect this Bill proposed for salaried hospital medical staff to be overseen by local authorities. The government also endorsed the suggestion that the planning of health services was to be in the hands of local authorities - albeit overseen by central government. These proposals were met with

fierce opposition from both inside and outside the government. It was argued that a central service was too bureaucratic and would lead to a weakening of local government (Jewkes J and Jewkes S 1961). The BMA was also firmly against the proposal for salaried doctors arguing that such a system would lead to a reduction in choice and quality of care (Vaughan P 1950).

In the face of this opposition a compromise was again found (Bevin A 1961). Bevin proposed a change in the way in which General Practitioner services were to be organised. The proposal did not enshrine the principle of salaried General Practitioners but retained the insurance committees although these were renamed as Local Executive Committees. All GP's would be in contract with these boards. The compromise also proposed that GPs in Health Centres would be paid on a mixture of salaries and capitation fees. On this point the BMA rebelled. They sensed that this was the beginning of salaried doctors. Their view was enforced by further proposals to set up Medical Practitioner Committees to control where doctors could practice. The resolution of these issues was achieved after some negotiations and backtracking. The proposal for part salaried doctors was changed to training GPs only, although the Medical Practitioners Committee was eventually formed (Jewkes J and Jewkes S 1961).

After all the negotiations the new service was formed in July 1948. The final structure of the organisation is shown in Figure 2.1. This structure was the product of all of the negotiations and compromises that had taken place since 1946.

#### FIGURE 2.1 THE STRUCTURE OF THE NHS, 1948-74



\* Superseded by the Department of Health and Social Security (Source (Pater JE 1981))

## 2.5. The Structure of the NHS 1948 - 1974

The service was organised in three parts consisting of the General Practitioner services, Local Authorities and Hospitals (Pater JE 1981).

## 2.5.1 General Practitioner Services

General Practitioners, together with the services of dentists, opticians and pharmacists, were administered by executive councils. These councils took over from the insurance committees, and consisted of local professional, local authority and ministry appointees. These councils were not management bodies but administered the contracts to the practitioners and handled complaints. This structure ensured that the independent nature of the primary care services was maintained.

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#### 2.5.2. Local Authority Services

These services included maternity and child welfare clinics, health visiting, health education, vaccination and ambulances. The key officer was the Local Medical Officer of Health and funding was derived from taxation and local rates. As a result of the NHS Act many of the hospitals previously controlled by local authorities, for example the infirmaries and workhouses, were transferred into the control of the newly created Regional Hospital Boards and Hospital Management Committees.

#### **2.5.3 Hospital Services**

Under the 1948 act new bodies - the Regional Hospital Boards, Hospital Management Committees and Boards of Governors, administered the hospitals. Special status was granted to the teaching hospitals. The boards of governors of teaching hospitals were to be directly accountable to the Ministry of Health, and special funding was offered. However, the vast majority of hospitals came under the Regional Hospital Boards and Hospital Management Committees. This situation retained the discrepancies seen in the old infirmary system of care, but was a compromise to ensure the support of senior hospital physicians

#### 2.6 The Development of the NHS 1948 - 1982

#### 2.6.1 The NHS 1948 - 1960

One of the assumptions in setting up the NHS was that there was a finite quantity of illness in the population, (Beveridge W 1942). It was thought that the introduction of

a free service would lead to the long-term, reduction of illness. Therefore after an initial rise the numbers of patients seeking care would gradually decline. 'Only four months after the service was launched it became apparent that the demands on the service were unlikely to decline and the presumption was false (Klein R 1995). The demand for services became so large that in 1949 a prescription charge was levied, followed in 1950 by dental and optical charges and a ceiling on NHS expenditure. Despite these measures increases in cost continued and in 1952 the Guillebaud Report was commissioned in the face of claims about extravagant expenditure (Ministry of Health and Department of Health for Scotland 1956). The Committee was asked to address if modification of the organisation of the service could result in cost reductions and also to advise the Chancellor of the Exchequer of what steps could be taken to prevent the rising costs. In the end the Committee reported that no evidence of extravagance could be found and that the structure of the NHS contributed to the overspends, (Ministry of Health and Department of Health and Department of Health for Scotland 1956)

The response of the government to the findings of the expenditure review was to attempt to make sure that the funds allocated to the service were spent more efficiently. First the method of funding was changed. Up until 1956 health services were funded on the basis of the sums demanded. Post 1956 the amount of money available to the service was capped. This money was allocated from the Department of Health. How this money was spent remained the role of the periphery, but the Ministry now retained the right to influence the spending (Ministry of Health and Department of Health for Scotland 1956). Health policy therefore, post 1956, was to be the product of centralisation rather than decisions being made at local level (Ministry of Health and Department of Health for Scotland 1956).

The financial constraints of the 1950s had severe effects on the direction of the service. One of the founding principles of the NHS was an attempt to achieve a redistribution of services (Ministry of Health and Department of Health for Scotland 1944). The fiscal problems in the 1950s led to a focusing of financial matters on the control of budgets rather than on the re-distribution of medical services. The effect of this was that the emphasis shifted from the planning of services to the rational use of resources – although rationing was not yet on the agenda (Pater JE 1981).

## 2.6.2 The NHS in the 1960's

By the late 1950's the problem with the funding of the NHS was firmly a political issue. Correspondingly during the 1960s' and 70s' successive governments pledged extra funding to the NHS in an attempt to win political favour by tackling the problems caused by poverty and ill health (Klein R 1995). Therefore the period 1960 to 1975 represented an era of growth in the NHS (Timmins N 1995). This growth, however, had to be handled very concisely if the delicate balance between the medical and political parties in the NHS was to be maintained. Therefore, increased funding was combined with an increased emphasis on the efficiency and rationality in the use of resources in the NHS. The early 1960's saw the appointment of economists to the NHS as well as to other governmental departments, and new methods of fiscal policy were developed. Most notably the Public Expenditure Survey Committee (PESC) system was established in 1961 (Curwen P 1997). This was an attempt to inject a greater influence of the state in the running of the NHS by the use of mathematical and accountancy methods (Klein R 1995). The change to centralised planning led to an increased emphasis being placed on cost benefit methods and on

unified planning themes such as Programme Planning and Budgeting (PPB) and Programme Analysis Review (PAR) (Lord Fulton (Chairman) 1962) (Glennerster H 1998). There were, however, countervailing pressures to the achievement of the central control of finances within the NHS.

## 1. Medical Technology

The increase in financial support seen in the 1960's was mirrored by an increase in the availability of medical technology (Rivett G 1998). The 1960s were an era of tremendous medical advances. Hip replacement surgery and renal dialysis became available, as did medication for the management of mental illness. These advances were only available at a price and coupled with the increasingly aged population the growth in NHS funds was in danger of being outstripped by demands (Baggot R 1994) (Rivett G 1998).

## 2. Staffing Pressures

The advances in technology resulted in a change in the professionals who used it. Many new skills and professions developed in the health service and staff came to value their position more. Additionally the national wage settlements in the NHS, which failed to keep pace with inflation, had the effect of a real-terms decline in the wages of NHS workers. These factors combined to increase a sense of militancy among NHS workers and the 1960's and 70's were marked by an growing number of industrial disputes in the health service (Lord Walton of Detchant 1998).

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## 3. The Lack of Planning Levers

In order to meet the demand of medical technology and staff wages, planners were forced to consider controlling demands instead of planning the system. However the tools that were available to control demand at a state level were limited. This was because the demand at a local level was under the control of the doctors and patients, and these groups were insensitive to the levers applied from the Ministry of Health (Klein R 1995) (Ministry of Health and Department of Health for Scotland 1956). Therefore any centralisation of demand would require a change in the doctor patient relationship. This however raised a further problem, that of the conflict between the demands of the doctor - to give therapy to an individual - versus the NHS, which functions to provide health care population. This conflict between the absolutist and utilitarian ethics was as great as it was complex. The medical profession was against the utilitarian ethic as they argued that it could lead to the situation where patients may receive sub-optimal therapy, while the NHS argued that it could not support, financially, the absolutist movement(Vaughan P 1950; Platt R 1963).

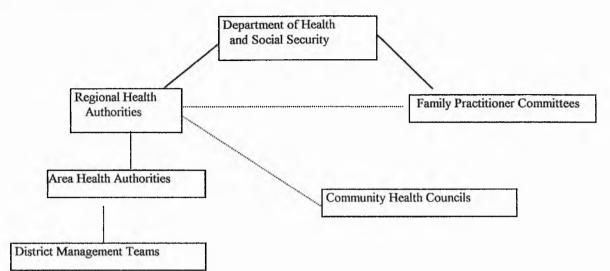
The only solution to the organisational and technological problems in the NHS was to introduce the rationing of services as a function of planning and demand management (where demands could be controlled) (Webster C 1998). The first attempt at planning a rationed service was the 1962 Hospital Plan for England and Wales, published by Enoch Powell - then Minister for Health (J Enoch Powell 1966). It was an attempt to devise a national plan for distributing hospital beds according to need. It established national norms for hospital beds and called for a £500 million investment in services. The pattern of service was also to change with services being provided on a District General Hospital basis. District General Hospitals were envisaged as large hospitals providing about 600 beds serving 100 - 150,000 people. This plan reflected the feeling of the time and served to marry the needs of the medical profession and the rationalistic planners. This was evident when the plan was re-visited in 1969. The Bonham Carter Panel, the panel who reviewed the 1962 plan, had no fewer than 12 doctors on it (Department of Health and Social Security 1969). This panel recommended that the new hospitals should be larger in order to support the consultants working in the hospital. This plan, however, was never accepted as official policy as politicians became concerned at the social impact of building technological palaces to the detriment of local services. In effect members of parliament were left with the political fall out from the closure of local facilities and therefore hospital building began to slide down the political agenda (Klein R 1995). The shrinkage of the building programme coincided with increased salary and other demands from NHS workers and faced with the choice of buildings or industrial unrest, the politicians increased the salaries (Crossman R 1972).

The National Plan for Hospitals was responsible, indirectly, for an increase in organisational problems within the NHS. The plan – as discussed above – can be seen as an attempt to introduce control and prescriptive planning. This move was resisted strongly and two reasons for its inappropriateness were put forward. The first of these was that due to the diversity of local populations, a national plan could not be upheld. The second related to the future needs of the health service. It was argued that it was not possible to set local priorities so that future needs could be met (Allen D E 1979). These conflicts over the 1962 hospital plan only served to emphasise a growing disparity between the central structures in the NHS – the Ministry of Health – and the

peripheral operational structures. This disparity concentrated on the accusations that the centre was not sensitive to the operational needs, while the centre accused the periphery of being too focussed on the local issues and not seeing the bigger picture. These frustrations spilled out into open debate in journals such as the BMJ (Lord Walton of Detchant 1998). This atmosphere of mutual frustration would be one the key themes of the development and change in the NHS in the 1960s and 1970's(J Enoch Powell 1966; Klein R 1995).

#### 2.6.3. The Structure of the NHS 1974-1982.

A reform of the NHS was instigated in 1972, with the aim of unifying the hospital and general practice arms of the service in an attempt to resolve some of the organisational problems in the service (Klein R 1995). The reforms were implemented in 1974. The revised structure is shown in Figure 2.2 (Department of Health and Social Security 1972).



#### FIGURE 2.2 THE STRUCTURE OF THE NHS IN ENGLAND, 1974-82

(Department of Health and Social Security 1972)

Regional Health Authorities (RHA) took over from Regional Health Boards. The RHA had a wider range of responsibilities than the Regional Health Boards, and had different geographical coverage. Beneath the RHA were the Area Health Authorities (AHA). The members of the AHA were appointed partly by the RHA, partly by local authorities and partly by members of the non-medical and nursing staff. The AHA chair was appointed by the Secretary of State. The function of the AHA was the planning and management of services. This included the co-ordination of the three arms of the service. Teams of specialised officers supported the AHA. These were the Family Practitioner Committees and the District Management Teams. The Family Practitioner, Optician and Pharmacist contracts. The AHA, local professionals and local authorities, appointed FPC members. District Management Teams were responsible for the secondary care services.

The arrangements for Scotland, Wales and Northern Ireland were different. In Wales the Welsh Office took the function of RHA. In Scotland the Scottish Office dealt directly with fifteen health boards that were comprised of a number of districts. In Ireland there were four area boards accountable to the Department of Health and Social Security.

The reforms also attempted to bring about changes in the medical profession – manager relationship. Doctors were given a stronger voice, centred more at the District Management Team level, but with supporting managerial committees at RHA level (Klein R 1995). The patients were given a stronger voice with the advent of Community Health Councils (CHC). Local Authority power was in effect weakened, with local representatives only being at the RHA level. The re-organisation however was not successful in combining the hospital service with that of primary care due to a strong lobby from the General Practitioners. However, the 1974 reorganisation did attempt to inject some efficiency into the primary care services, by looking to reform deputising services and the appointments system. These changes were adopted from a report submitted to the department of health in 1973 (Department of Health and Social Security 1973).

### 2.6.4 The NHS 1974 Until 1982.

The years 1974-80 were marked by a deep economic depression (Curwen P 1997). This period was remarkable for the deep political and ideological unrest engendered by the financial crisis, with a large number of strikes and frequent swings of national mood (Harmon MD 1997). To a large degree, however, the NHS remained untouched by this new harsh political environment. This is largely an effect of its popularity with the populace (Klein R 1995). Resources continued to grow, largely through decreases in capital expenditure (Ham C 1996). The mood, however, within the NHS remained one of financial stringency. The demands of an ageing population continued to grow, as did the wages bill. So despite the relative increase in funding the NHS was actually running a considerable financial deficit (Le Grand J and Vizard P 1998).

In 1976 a new planning system for the NHS was introduced to cope with the new demands. Health Authorities were now requested to produce strategic plans, reflecting national and local priorities (Department of Health and Social Security 1976). This was accompanied by the production of a document containing national norms and priorities. This document, Priorities for Health and Personal Social Services in England, reflected the prescriptive planning process and laid down systems for the number of beds, nurses, etc. in each geographical area. The document was not only designed to stimulate planning, but also to look at geographical distribution (Department of Health and Social Security 1976). The 'Priorities' document did not fit well with the financial and economic environment reflective of the time. The proposals were found to be lacking the expertise at local level to develop the plans and, without the capital expenditure being made available, increasing amounts of patient resources had to be devolved to keeping the hospitals going (Klein R 1995). The situation was compounded by industrial relations problems within the NHS. Doctors, angered by declining living standards, took industrial action in the middle of the 1970s, as did ancillary and nursing staff (Lord Walton of Detchant 1998). Patients too were becoming more organised with the formation of support groups. These

groups - such as MIND the mental health charity - set about lobbying policy makers for increasing resources (Klein R and Lewis J 1976)

It is hardly surprising that these difficulties led to an increase in the organisational problems within the NHS. These problems were reflected as an organisational stasis with planning as its first casualty. A Royal Commission was established in 1979 to address the problem of the inability of the NHS to plan the use of resources (Royal Commission on the NHS 1979). The Commission's report commented on the power of the professionals within the service and attributed some of the problems to this cause, but also noted that the failure of the 1974 reforms to deliver change was also a factor. It commented that there was widespread disillusionment with the new structure due to its complexity and bureaucracy. In practice the reforms had done little to assist the organisational problems, and due to the extensive checking procedures on NHS plans introduced in 1976, the bureaucracy inhibited the function of the service. Particular concerns were voiced about the lack of accountability of the new structure and the inability to monitor expenditure. The cause of these problems was said to be the AHA (Royal Commission on the NHS 1979). It was felt that AHA's had not come to terms with its role and possessed a philosophy out of tune with the rest of the organisation. These findings were underlined by the so-called "Normansfield Hospital Inquiry", held in 1978-79 (Commission of inquiry into Normansfield hospital 1978). This was an inquiry into the conditions in a psychiatric hospital, where self harm and abuse amongst inmates provoked a national scandal. The report highlighted the organisational stasis between professionals and management as the principle problem, but criticised the AHA for its failure to control the situation. This report also questioned the role of the CHC and suggested that many of the problems could have been avoided if the CHC had been allowed to fulfil its role as representative of the populace.

Faced with these problems the 1979 Royal Commission made 117 recommendations. (Royal Commission on the NHS 1979). These included the abolition of the Family Practice Committees and removal of the AHA team of management. It also suggested a move away from the national planning approach. The findings of the Commission were agreed on by the incoming Conservative Government in 1979. This government was committed to limiting government expenditure and to the value of public enterprise and immediately set about reducing central domination of the NHS. It published a consultation document (Patients First) in 1979. This called for a reduction in administration – a move widely welcome and it came as no surprise when 'Patients First' founded the basis for the 1982 reorganisation of the service (Department of Health and Social Security 1979).

## 2.7 Politics Policy and the Development of the NHS Until 1982

The 1982 reorganisation marks the end of the first stage of NHS evolution. Pre 1982 reforms were committed to maintaining a semblance of commitment to the concept of universal health care as embodied in the Consensus. The 1982 reforms - as we will discuss later - formed a watershed as implicit in the changes was a move away from the Consensus ideals. This therefore is an appropriate place to stop and analyse the development of the first phase of NHS development in light of the institutional framework proposed in chapter 1. Before doing this in the following chapter it will prove useful to recap the ideological basis for the developments seen in the NHS.

At the end of World War Two all of the political parties were committed to the end of the fragmented health care system that had predominated pre-war (Honigsbaum F 1989). However ideologically there was no agreement on how this should be achieved (Klein R 1995). The incoming Labour Party was committed to the use of demand side management to achieve both economic and social aims for the NHS, and proceeded to do so despite the mounting evidence that demand side tools were not the best way to manage the NHS (J Enoch Powell 1966). In the era up until 1974 this reluctance to abandon ideological aims was manifested by the repeated restructuring of the NHS in the search for a structure that would allow demand management to be effective. In pursuing this route the governments of the era looked internally for solutions and therefore policy was manufactured - by on large - in isolation. Examples of this include the failure to include broader industrial interests in the foundation of the service (Frazier D 1984; Deakin N 1994). Indeed during this period many opportunities to integrate policy into public life were ignored. A good example of this is the Plowden Committee recommendations, and the subsequent development of the Public Expenditure Survey Committee (Deakin N 1994). This system of creating five year plans to manage resources gave the opportunity to link public needs with anticipated growth. However, the opportunities afforded by the scheme were largely missed (Lowe R 1993).

The failure of successive governments to correct the problems posed by the NHS and instead the repeated reliance on reorganisation has been blamed on the actions of the civil servants (Lowe R 1993). The Civil Service appeared to lack the management skills to develop the mechanism to ensure alignment between social and policy aims

(Deakin N 1994). In these circumstances it has been promoted that the NHS developed along administrative lines – i.e. 'Whatever's Best Administered' (Deakin N 1994). The NHS was not the only welfare institution to suffer this fate. Similar tales are recounted in the relationship between various governments and local authorities (Deakin N 1994; Higgins J Deakin N Edwards J and Wicks M 1984). Therefore the ethos of 'Whatever's Best Administered' was prevalent in whatever political party or welfare institution was being considered in the years until 1982.

## 2.8 Conclusions from Chapter 2

The NHS was the first national health care service in the world to offer a universal health care system. This was based on a post war Consensus agreement about the need to provide universal care free at the point of delivery to a UK population recovering from the effort of the Second World War. However, the foundation of the NHS had a pluralistic purpose, as the NHS was also part of the wider post war economic restructuring of the UK. The achievement of these aims has proved more difficult to obtain than was at first thought and the governments of the period, committed to the use of Keynesian economic tools, have found it impossible to balance the economic and social demands of the NHS. This lack of balance has been manifest as organisational and financial problems. These problems have been recognised by the governments of the time, and in an attempt to remedy these problems a variety of reforms, centred about the increasing use of rational planning, were tried in the years up until 1982. These fixes involved shifting power between the state and the medical profession in an attempt to gain a structure that could be directly

administered using Keynesian economic tools. Although many of the reforms did show some short-term benefit, they were not long-term fixes, particularly in the face of worsening economic conditions. The adherence of successive UK governments to the use of Keynesian economic tools in the NHS is evidence for the fact that ideology played a major role restructuring and function of the NHS up until 1974. This is in line with the hypothesis introduced in chapter 1, as it supports the idea that much of the change seen in the NHS has been ideologically motivated.

However, if we are to assert the entire hypothesis then the problems seen in the ideology motivated NHS should be compounded by evidence of a strong institutional network surrounding the NHS and influencing policy. In addition if the hypothesis on policy making in isolation is correct then the nature of the reforms and the reasons why they failed should be explainable by a lack of balance in the framework and a failure to formulate coherent social policy. If this is proven then it would argue for the validity of the framework developed by Torfing. This validation is the subject of the next chapter.

# CHAPTER 3 A REGULATIONIST VIEW OF UK HEALTH CARE DEVELOPMENT PART 2 AN INSTITUTIONAL ANALYSIS OF DEVELOPMENTS UNTIL 1982

## 3.1 Key points from the Previous Chapter

In the last chapter we reviewed the development of the NHS from the historical viewpoint. This highlighted that the NHS was the product of developments achieved over the century prior to the Second World War. The effect of this development was that the NHS, founded on the Emergency Medical Service in 1948, is a product of a number of long-standing political economic and social concerns. In these circumstances it proved impossible to create a new service and some compromises were needed in the negotiations that established the NHS. These compromises caused weaknesses and inconsistency in the operation of a service that aimed to both pacify a war-torn country and assist its economic development. In addition the NHS was based on a supposition that there was a finite quantity of ill health and that the need to fund the service at high levels would be short lived and after a period the demand for funds would gradually decline. Shortly after the establishment of the service this supposition proved false. Therefore, from the outset of the service the NHS ran into organisational and financial difficulties. The principle tool used to control the NHS was the use of demand side management coupled with rational planning. This approach was founded on the Keynesian ideology of the economy. The use of this ideology and its associated economic tools proved difficult – as control of demand lay at the periphery of the service and was a function of the doctors and patients expectations. Therefore a series of administrative changes were used to make the service more amenable to demand management. These changes, however, served to uncover organisational difficulties within the NHS – which further diminished the power of demand side tools. Therefore a cycle was established by which more reform fuelled demands for more reform. The situation culminated in the Royal Commission of 1979 that recommended radical change.

# 3.2 Key Objectives for this Chapter

This chapter aims to establish the suitability of the analytical method based on the ideas of Torfing and adopted in the Introduction to this thesis as a method to understand the reasons behind the failure of NHS reform to establish change. The centre of this analytical method is to view the NHS as an institution and to examine the workings of the institution to see if it can explain the failure of reform. The first step in this analytical process is to confirm that the NHS conforms to the idea of a tripartite regulatory structure. This is to be achieved by

1. Confirming that a tripartite relationship of identifiable players with defined roles underlines the activities of the NHS and that these organisations have adopted structures that facilitate influence.

2. Indicate that the players in the interactions were subject to ambiguous roles and open-ended political strategy, but acted in a rational manner – in order to allow for ad hoc developments in the NHS.

3. Indicate that the interactions can be simplified into an institutionalised tripartite relationship and that the actions of this relationship were responsible for the problems and reforms seen in the NHS until 1982.

## 3.3 The Organisations Surrounding the NHS Development

# 3.3.1 Who Were the Tripartite Players in the NHS 1948 – 1982?

As discussed in the previous chapters the forces motivating the development of the NHS spanned 100 years. These forces can be summarised as (Doyal L and Pennel I 1979)

- Economic for example the concern of the industrialists for a supply of fit workers and the supply of fit soldiers for colonial expansion
- Social concerns over the stability of society, for example the new deal offered to returning soldiers after the second world war
- 3. Political the change towards a socialist style of government.

Therefore from the outset the NHS can be seen as an organisation concerned with the aspirations of state, economy and civil society (Doyal L and Pennel I 1979; Honigsbaum F 1989).

This role of the NHS in fulfilling the aspirations of state economy and civil society is enduring, whatever the era of the NHS. By the 1960's the UK had a tradition of formalising the inter-relationships between the state economy and the community. For example the 1960's saw the end of informal ministerial relations and substitution with consultative committees, such as the National Council for Economic Development (NEDC; James S 1997; Wickham Jones M 1997). The NHS was part of this move as the discussions extended to cover all aspects of the welfare state (Doyal L and Pennel I 1979). Later, during the Wilson administration, with the formation of the Confederation of British Industry (CBI) the relationship developed further. The role of the CBI was to assist in decision making in the economy. The CBI involved representatives of the government, the corporations and the civil society. The civil society was represented by the Trades Union Congress (TUC) (Tomlinson J 1998). The role of the CBI in government decision making was referred to as the Corporatist Arrangement. This was an attempt by the then government to regulate the role of civil society in the relationship and to enhance the power of the selective role of the welfare state (Ellison N 1997; Wickham Jones M 1997).

Therefore, with the passage of time, the nature of the relationship between the state economy and civil society changed to reflect an administrative, rather than cooperative structure, but non-the less the partners of the relationship remained unchanged. However, by the late 1970's the role of the civil society declined to that of a passive partner controlled by the power of the CBI and TUC (Deakin N 1994; Davies JE 1974).

From these discussions it is apparent that a tripartite relationship did surround the UK NHS in the years between 1948 and 1982 and the interactions of state, the economy and the civil society represent this arrangement.

# 3.3.2. Who Represents, and What Characterises, the Tripartite Relationship

An intense complexity and ambiguity of institutions mark the provision of health care services. A schematic representation of the complexity is given in Figure 3.1, and the roles of each institution discussed below.

#### 1. The State

The state clearly represents the government, but there is a broader reflection of the state in policy making. state institutions include the Prime Minister and associated offices; the ministers and associated committees; the executive committees; the Whitehall Civil Service and the local state representatives (James S 1997). In terms of the NHS the Regional and District Health Authorities and the hospital administrative staff represent the local state (Klein R 1995).

In occupying this position the role of the state is very ambiguous. The State interactions can be broken down into two (Allum P 1995). First is the state - state interaction, second is the state civil society/economy interaction.

#### A. State - State Interaction

The State - State interaction is the interaction between the Ministers and the Civil Service, Figure 3.1. The role of the Civil Service in the management of the UK constitution is well-understood (James S 1997; Hennesy P 1995). The Civil Service controls the access to data by ministers, presents the options and provides advice. The

Civil Service also provides the interface between the pressure groups and ministers - a difficult task. As such it is recognised that the Civil Service plays a major role in the presentation of policy options. This is a role filled with ambiguity as they often act as presenters, administrators, implementers and modifiers of policy (Honigsbaum F 1989; Hennesy P 1995).

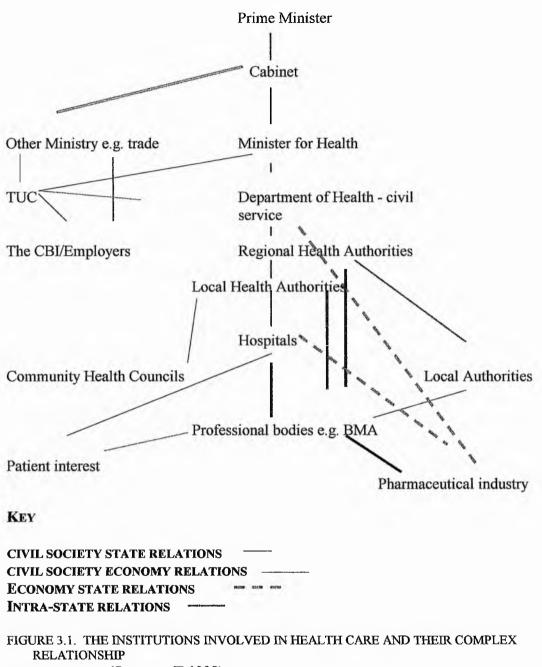
B. The State Interactions with External Bodies such as the Economy and Civil Society

The state economy and civil society interactions are marked by ambiguity in a similar fashion to the state-state interaction. The State interaction in relation to health care policy was limited by the parlimentarist nature of decision making in the UK welfare state up until 1976 and the corporatist arrangement thereafter. Under both of these arrangements the external state interactions with the Civil Service are identical to those faced by ministers. In both corporatist and parlimentarist arrangements the economy and civil society rely on the Civil Service to present and analyse information to the policy makers. What interactions occur outside the realms of the Civil Service, in relation to health-care, is by and large the result of the activity of the Community Health Councils and patient interest groups and so will be covered below.

The problems with the ambiguity of the State interactions are best illustrated by the role of the Civil Service in the formation of the NHS. The Civil Service, in the form of the treasury, played a major role in shaping the future of the NHS by arguing that the service should be shaped in accordance with its funding potential, not the needs of the civil society (Honigsbaum F 1989). Many of the subsequent investigations into the funding of the NHS were also treasury led. However, at the same time as the treasury

was expressing concerns over the expenditure it was actively supporting expansion of the NHS, and advocating a greater role for the Civil Service in its operation (Klein R 1995). Therefore, the role of the treasury in the establishment and maintenance of the NHS was and is ambiguous (Honigsbaum F 1989). The Civil Services' role in the development of the NHS has come under much scrutiny. Particularly the way in which it has been perceived that the Civil Servants manipulated the direction of the NHS to suit their own rational ends, while failing to contribute to the solution of its problems (Deakin N 1994).

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#### **2.** THE CIVIL INSTITUTIONS

For the most part the public is not institutionally organised, however the exceptions to this are the patient interest groups, the Community Health Councils and the bodies representing the Labour organisations - such as the TUC. However, as we will see the interaction of the TUC is indirect and forms part of the economic policy relationship (Klein R 1995; Allum P 1995).

The primary concern of the interaction between the civil society and the economy is in defining the Fordist compromise under which the labour force agrees to swap its effort for wages (Ford H 1926). In the period up until the middle of the1970's this interaction was under the control of the Unions (Curwen P 1997). The NHS as the largest employer in the UK was no different in this respect and much can be gained from studying the role of the Unions in the NHS.

At the outset of the NHS the Trade Unions were put in a privileged position in having special councils set up to negotiate pay (Honigsbaum F 1989). These 'Whitley Councils' brought together spokesmen of both employees and employers. These Councils handled the negotiations with 55 professional associations or Trades Unions. These Councils were aimed at assuring a degree of industrial peace and to provide a basis for the exchange of labour for wages in the NHS. They were not, however, successful. In 1973, 117.8 days were lost in strike action per 1000 employees. The root cause of this unrest lay in the incentives for employees to maximise their income, even though this would reduce the funds available for patient care. These incentives

arose due to the nature of the employment contracts within the NHS that specified no performance measures and permitted frequent negotiations with the employers (Klein R 1995; Lord Walton of Detchant 1998). Indeed the future of the Unions depended on the success of their negotiations. So successful were the Unions that by the mid-1970's over 60% of the workforce in the NHS was unionised (Rivett G 1998). The action of the Trade Unions was further enhanced by national policy. The National Board for Prices and Incomes Policy introduced local pay bargaining in 1974 (Wickham Jones M 1997). This move increased, indirectly, the power of the Unions. The Union negotiations paid benefits, for example between 1974 and 1976 a series of pay rises increased wage costs of the NHS by 25% (Rivett G 1998; Klein R 1995).

At the same time as pressuring for maximal pay increases the Trade Unions were also pressing for a larger role in decision making. This trend was particularly evident in the area of mental health and chronic disease management. In these areas nursing staff questioned the decisions made by medical staff and in at least one incident ancillary staff formed a council to manage a hospital unit (Klein R 1995). This incident occurred with the full support of the Unions involved, and serves to demonstrate the ambiguous nature of both the Unions and the non-medical staff involved in the NHS.

The Unions also attempted to influence policy on a national level. For example they looked to influence the levels of funding and the provision of pay beds within the service. In 1973 the National Union of Public employees launched a series of strikes aimed at ending private beds in NHS hospitals. This attack was ideological and based on the dislike of privilege available through private care (Klein R 1995). However, it

also serves to highlight the ambiguous nature of the Trade Unions - pushing for a maximal wage for Union members, while limiting NHS services and incomes (Klein R 1995).

The problems of ambiguity of role were mirrored in the CHC. Community Health Councils (CHC) were invented as a consumer voice in health care (Webster C 1998). However, the role was never precisely defined and national reports such as those on the mismanagement of patients at a hospital for the mentally ill at Ely, which defined a role for the CHC were ignored (Klein R 1995). The constitution of the CHC was overtly politicised with two thirds of its membership being decided by the local government authorities or the Regional Health Authority. Therefore political strategy played a large role in the action of the CHC. The role of the CHC was therefore ambiguous, as it was uncertain if they were reviewing the action of the service as consumers or citizens (Klein R and Lewis J 1976; Lord Walton of Detchant 1998).

The situation was little different in the interest groups. A report in 1979 listed over 200 patient interest organisations in the UK (Klein R and Lewis J 1976). Many of these existed to support research into specific disease areas. However, many proclaimed a voice for special needs groups and in doing so sought to influence policy. For example, MIND focused on the needs and policies surrounding mental illness. However these groups did not really represent the Civil Society in health care, as by and large they were involved in limited areas and were led by middle class activists (Klein R 1995; Klein R and Lewis J 1976). The development of pressure group politics in the UK is ambiguous for while the aim of the groups was to influence policy in specific areas, many of these groups were state funded, for

example MIND (Klein R 1995).

#### **3. THE ECONOMY INSTITUTIONS**

The economic institutions involved include the employers, the doctors and other health-care professional and the pharmaceutical industry (Doyal L and Pennel I 1979).

The economic interaction of most concern to the NHS is the interaction between the doctors and other hospital workers, the pharmaceutical industry and the NHS management structures. Of indirect, but important, concern is the way in which the state interprets health care as supporting the other industries in the UK (Doyal L and Pennel I 1979).

# A. The State Doctor Interaction

The doctors represent an economic corporation as General Practitioners are independent contractors in the NHS and many consultants continue to provide private care (Klein R 1995). As was mentioned in the previous chapter at the outset of the negotiations to establish the NHS, two strategies for the development of the service were possible. The first was to build a new structure of the entire Service; the second option was to build on existing structures, such as the Insurance Committees. In the 1946 NHS Act the latter approach was adopted - by on large driven by political necessity and the pressure from the Civil Service to make the system manageable (Honigsbaum F 1989). In doing so a large concession was made to the medical profession. As part of this deal the medical profession was given a central role in

policy making via a Central Health Services Council. In effect, remarked one backbencher, turning the NHS Act into a Medical Services Bill, and giving the medical services a monopoly on provision within the service (Honigsbaum F 1989; Timmins N 1995).

Despite this, the position of doctors in the service is ambiguous and subject to political strategy. The doctors on one hand were able to influence policy at the highest levels within the NHS. However, on the other hand there is evidence that the NHS exploited its position "as sole employer" of doctors to drive down the incomes of doctors. The clever use of salary reviews, such as the Spans Commission in 1957, the use of arbitration, and the non-implementation of policy achieved the depression of medical incomes (Klein R 1995).

In allowing the doctors to retain medical freedom and a monopoly in the NHS there is further evidence of ambiguity and political strategy. In most cases the Regional Hospital Boards contained a majority of doctors. This allowed the doctors to both define the remit of the boards and control the strategy. Implicit in this was the bargain that while the finances of the NHS was controlled from the centre the clinicians had control of deciding the way in which money was spent. However, this situation was a two-edged sword, for while autonomy was maintained, the profession had little role in deciding how money was spent on new buildings or equipment. This lack of influence was apparent in areas such as renal dialysis, where in the 1970's, only about half the level of service was being met for dialysis services, compared to other countries in Europe, due to the failure to invest. The arrangement that left doctors without say in technical allocation allowed the politicians to pass the blame onto the

medical profession (Klein R 1995).

The actions of the medical profession also had a considerable role in supporting private markets. This is best exemplified by the discussions on abortion. In 1967 the Abortion Act was passed legitimising abortion in the UK. However, the imposition of the Act on the Ministry of Health was considered an infringement of clinical freedom, and so no guidance was issued. This left Regional Authorities with the final say, and considerable disparity emerged. By 1971 43.4% of all abortions were performed in the private sector – an astounding figure given the social nature of the bill, and demonstrating the power of the commercial interests of the medical profession (Klein R 1995).

The ambiguity of the role of the medical profession could have been resolved by restructuring the incentives to medical practitioners. In 1963 the BMA pressed for the revision of the General Practitioner funding and salary arrangements. The BMA at this stage was prepared to negotiate around one of the major NHS desires, that of the Health Centre. However, when faced with the opportunity, the government choice was to press home other demands – such as the private bed issue. This incident serves to re-enforce the nature of the open-ended political strategy being applied, as here a strategic decision was clearly influenced by ideology (Vaughan P 1950) (Webster C 1998).

## B. The State Pharmaceutical Company Interactions

The pharmaceutical industry in the UK is currently a £50 billion industry (Wells F 1998). A significant proportion of this is obtained from the NHS. Currently the pharmaceutical bill for the NHS is about 10% of overall expenditure – about £3 billion – of which about a third comes from UK companies. Therefore the NHS is an important source of revenue to the pharmaceutical industry and plays an important role in maintaining the free market of medicinal drugs (Wells F 1998).

The UK pharmaceutical industry negotiates with the British State by means of a profit regulation scheme – the PPRS. This scheme allows research and development expenditure to be discounted against profit before the price of the products is set. This scheme is credited with bringing many innovations into the NHS. However, it also protects the industry and the arrangement has been accused of artificially inflating the charges for new drugs (Reekie D 1998). Therefore the pharmaceutical industry has a protected position within the NHS favouring its economic status. The government has acted on many occasions to protect this status for example by supporting the freedom of doctors to prescribe. Even where limitations have been imposed, this has been done with the agreement of the industry (Doyal L and Pennel I 1979).

C. The Role of the NHS in Interactions with Industry.

There is little doubt that British industry supports the NHS as it alleviates the need for employers to ensure the health of their workers. Therefore the NHS is central to supporting British industry. However, this relationship is ambiguous, as the employers often resent the social security payments that they make in order to support the service and call for a greater role in its running (Doyal L and Pennel I 1979). The government has, on several occasions, agreed to review the expenditure on the NHS in the face of commercial concerns – although this was predominately concern of administrations after 1989, as we will comment on later.

# 3.3.3. Conclusions About the Nature of Tripartitism in UK Health-care 1948 - 1982.

The finding of a complex and ambiguous network of policy and decision making inferences surrounding the NHS provision is similar to Torfing's findings in Denmark (Torfing J 1998). In his analysis, of the Danish health care system, the major players in health care provision policy were identified as the state, civil society and the economy, with each of these being constructed from a defined range of organisations – an image mirrored in the NHS. The concordance between the Danish health care system and the NHS would argue that the NHS is analysable according to Torfing's outline. However, the results do not define the basis for the institutional analysis. In order to perform the institutional analysis it is necessary to confirm that the NHS can be summarised as an institution involving these three parties and graphically depicted in figure 3.2

State and State Commissions	
Doctors and other Health Care Providers, Employers and the Pharma	TUC and CHC Patient Pressure
Industry	Groups

FIGURE 3.2. THE INSTITUTIONS INVOLVED IN THE DEVELOPMENT OF THE NHS UNTIL 1989

In order to prove that this institutionalisation is valid it is necessary to demonstrate that the primary interactions between the elements can be characterised by the exchanges we introduced earlier. In other words, with regards to the provision of care the state – economy interaction can be explained on the basis of the Keynesian economic principles; the state- civil society interaction can be explained on the basis of the Beveridge welfare systems and the economy civil society interaction can be primarily encompassed by the Fordist exchange.

# 3.4 The Roles and Aims of the Relationship Members

# **3.4.1. State Economy Interactions.**

In the UK the objective of state economy interaction in the years leading up to the election of the conservative government in the 1980's, was the maintenance of a mixed economy while supporting Keynesian style economic interventions (Curwen P 1997). This was achieved using demand side management, with counter-cyclical short-term fiscal management - in order to maintain low interest rates (Wickham Jones M 1997). The state economy interaction therefore hinged on a balance between

efficiency and equity - based on a concern that while market allocations may be the most efficient, the distribution may be unfair from the social viewpoint. Therefore in the period 1948-1982, economic profit was subjugated to public interest (Curwen P 1997). This policy had two distinct phases. In the years up until 1974 the strategy was dominated by a parlimentarist element. This amounted to a strategy of nationalisation where the inequitable aspects of supply and demand could not be managed (Wickham Jones M 1997). During this period many services were nationalised - including the medical, steel-working and mining industries. In the years 1974 until 1982 a corporatist strategy was followed, where the employers were given an increasing role in the management of the interaction (Reitan EA 1997).

Whatever the approach to resolving state-economy interactions the NHS up until 1982 was nominally concerned with the distribution of wealth in an equitable manner from the economic, social, political, and control of unemployment perspectives (Deakin N 1994). The Keynesian system proposes to meet these aims by a trade off between public and private provisions in order achieve both efficiency and redistribution. The role of the health care services in realising these aims was the continued support of the labour force, by providing healthy workers either through maternal care or health maintenance of existing workers (Doyal L and Pennel I 1979). In addition, the subsidiary aims of the interaction were to achieve a move towards the equitable distribution of health care, and make health care accessible to all of the populace (Doyal L and Pennel I 1979). These roles confirm that the NHS was a part of the Keynesian economic system.

# 3.4.2. Economy Civil Society Interactions.

The function of the economy civil society relationship in the UK during the period of Keynesian economics was to establish the value of the Fordist Compromise (Curwen P 1997). The years leading up to the election of the conservative government in 1979 were marked by collective bargaining as the basis of determining the economy - civil society relationship (Bamber GJ and Snape EJ 1993). As discussed, the civil society is represented by the Trades Union Congress - which covered more than 84% of the working population Unions in the years up until 1979 (Lloyd C and Siefert R 1992). There is, however, no direct involvement of the TUC in the collective bargaining negotiations - these are left to the local Unions, over which the TUC had limited control (Bamber GJ and Snape EJ 1993).

In many cases the local collective bargaining took the form of closed shop arrangements often with a multi-employer implication. These negotiations by and large took no account of the state economic policy, with the supply and demand of labour controlling the bargaining process (Bamber GJ and Snape EJ 1993). The two exceptions to this have been the state intervention in low pay by wage councils and in the years 1974 - 1979 where the Labour Government instituted a form of corporatist pay restraint to help the economic situation (Curwen P 1997; Tomlinson J 1998).

The NHS functions within the civil society economy relationship in two ways. First it acts to stabilise the relationship, by providing a safety net to those who need health care. This therefore acts to remove the provision of health care from the negotiations that surround the Fordist compromise (Doyal L and Pennel I 1979; Williams Fiona 1994). The other function of the NHS in the civil society-economy relationship was

that of a major employer, and the resultant negotiations to maximise the salaries to staff (Klein R 1995). Both of these interactions left the NHS in a very ambiguous situation, however the driving force was a maximisation of the Fordist compromise – in line with the institutionalisation proposed.

## 3.4.3 State Civil Society Interaction

The UK State and civil society interaction is concerned with the maintenance of a stable society and economy. It is characterised by a stability dating back over 300 years to the settlement of 1688. In this year the end of the Glorious Revolution established parliament as the primary authority in the country (Allum P 1995). This settlement was based on the democratic election of geographically unique representatives. This system has given the state a degree of stability but has created problems in the concept of democracy in the wider sense, as there is no direct representation for the majority of the electorate. Indeed it has been remarked that the British State has never been a democracy, but a hierarchy (Dahrendorf R 1965). Given this background, the state and society interactions have developed in a piece-meal manner, responding pragmatically to new challenges.

The culmination of the development of the UK State is the party system (Allum P 1995). Here different parties represent different factions of society, for example The Labour Party represents the working class via the Trade Unions. The development of the party system has, however, not influenced the hierarchical conduct of high politics (that of Westminster) and low politics (that of political struggles). Both high and low

politics are conducted in an atmosphere of the "Leader Knows best". Under these conditions the state civil society interaction is quite minimal and has three aims:

- 1. The maintenance of the party in power by creating a favourable opinion.
- 2. The facilitation of an agreement between civil society and the economy.
- The provision of suitable economic conditions to facilitate the state economy interaction.

This minimal interaction gives the state a fundamentally parliamentarian nature with democracy added by a balance of the alternation of political ideologies in the electoral process. This alternation is based on a one-member one-vote first past the post democracy. The truth is that at one time or another one political party has always predominated or the parties have formed a coalition. Sartori proposed a fairer definition of the UK party system in 1980 (Sartori G 1976). He proposed that the UK state-civil society interaction is a competitive party system. Therefore the British political parties are a broad church around a central ideology which helps to maximise their competitiveness, patronage and appeal. However the competition is limited and agreement across the political parties makes the majority of decisions (Hennesy P 1995).

The state and civil society interactions that do outside of the parliamentary system are dominated by the interaction between interest groups and public administration. Britain has the largest number of interest groups of any of the Western World State due to the history of group interaction (Allum P 1995). Group activity in the UK is very institutionalised with many groups playing a direct role in the implementation of policy. An example is the road safety campaigns that were left to the automobile associations such as the RAC. It is a similar situation in health care where interest groups not only focus on lobbying the government but also play an active role in the decisions about policy. This role is widely recognised and reflected in the state aid given to many charity bodies involved in health care (Klein R and Lewis J 1976).

All of these features argue that the NHS and other welfare organisations have a stabilising role within society – as part of a Beveridge style social intervention. For example the threat of civil unrest was a major factor in the development of the NHS, (Doyal L and Pennel I 1979) (Frazier D 1984). Latterly the NHS has continued in this role of stabiliser by acting as a safety net to those who fall ill or are old. In this manner the NHS acts to stabilise the economy and state and the economy and civil society interactions (Doyal L and Pennel I 1979).

#### 3.4.4. Conclusions of the inter-relationships

From the previous two sections it is possible to draw the following conclusions

- The provision of health care services in the UK is under the influence of a combination of state – economy and civil society elements.
- This interaction is complex, but can be simplified to the interactions identified by Torfing in that the elements of the relationship appear to conform to an institutionalisation defined by specific interactions

However, before accepting the institutional method as legitimate for the analysis, the framework must be shown to explain, at least in part, the development of the service.

# 3.5 Is the Tripartite Relationship that Surrounds the NHS in Balance and Can Any Imbalance Be Related to the Development of the Service?

From the preceding discussion it is apparent that the NHS plays a major role in supporting the tenets of capitalism and there is little doubt that the NHS has been a successful and efficient service that has benefited the elderly, women and children (Doyal L and Pennel I 1979). However the evidence suggests that the tripartite relationship that surrounded the NHS be not in balance. By the middle of the 1970's the NHS was heavily in debt and the waiting lists had grown to huge proportions (Ham C 1996). Furthermore, technologically, the NHS was lagging behind Europe and the service was failing many of the special groups it was designed to protect – particularly the sufferers of mental (Jones K 1972) (Webster C 1998). The situation in the NHS demonstrated by these observations argue for a service not in institutional balance. Why was the balance failing?

The NHS in 1948 was the product of discussions between the State, the medical profession and the approved societies. As a result of professional negotiations, the service was divided into separate parts with different management structures covering each. It has been suggested that the reason behind this structure was the commercial and medical interests in hospital areas and the apparent lack of profit in industrial services, (Doyal L and Pennel I 1979) (Webster C 1998). However the differentiation of the management structures had another effect as it meant that the social aspects of medicine became dissociated from the treatment arm. Therefore the institutional

integration of the service was lost (Frazier D 1984). This failure of integration enabled the imbalances of the service to develop.

1. 1. 1.

The problems associated with the lack of integration were compounded by the ideology that established the service. The way in which the structure of the NHS evolved suggests NHS represents a *nationalised* health service rather than a *socialised* one. The NHS is Nationalised in the sense that the state took over the responsibility for the provision of medical services in a similar way to the way in which the state absorbed the coal and steel industries. This contrasts with a socialised service that would focus on the needs of users instead of health services becoming part of the general productive processes. This lack of focus on the social aspects of care at a policy level led to the imbalances seen in the service. The imbalance of the NHS in favour of the economic functions is best illustrated in a number of case scenarios (Klein R 1995)

## 1. The continuation of a private market in health care

When the NHS was established the private market was allowed to continue (Frazier D 1984). Hospital consultants and other doctors were allowed to retain an element of private medicine in addition to their NHS contracts. This was part of the deal under which doctors accepted the NHS (Bevin A 1961). However the option of private medicine has considerable impact on those patients who could afford private services. This left open the option for private companies to "insure" their workers by private schemes in order to escape the perceived inefficiencies of the NHS and provide an

incentive to workers (Calnan M Cant S Gabe J 1993).

The relationship between private practice and the NHS is complex. Many forms of private practice could not exist without the resources of the NHS, as it is true that in some specialities private patients do not pay the full cost of their treatment due to NHS subsidies (Rivett G 1998) (Leading Article 1974). The continued existence of a private practice linked to the NHS brings into question the economic nature of the service as it means that the NHS supports not just demand side but also free market capital accumulation (Williams Fiona 1994). The existence of the private market also calls into question the claim that the NHS provides a comprehensive service regardless of financial circumstance. Finally the NHS supports the innovative mode of capital accumulation - typical of Post Fordist organisations - by the physicians who provide a private service (Doyal L and Pennel I 1979). All of these features serve to strengthen the role of the economy in the tripartite relationship, to the detriment of the civil society relations.

# 2. The interaction of the Pharmaceutical industry and the NHS

The protected status of the pharmaceutical industry within the NHS has been described above. However the presence of this protection reveals further insights into the state – economy interaction. The NHS is dependent on the pharmaceutical industry for the supply of medicines. This situation reveals a paradox. A Keynesian or Fordist health care system would call for the NHS to promote the reproductive function of labour at a minimum cost (Williams Fiona 1994). However the nature of the relationship between the NHS and the pharmaceutical industry permits the

industry to maintain high returns on investment (Reekie D 1998). Therefore the NHS supports the innovative mode of accumulation. The NHS also supported the global market development of the pharmaceutical industry - as about 75% of the drugs used by the service were owned and developed by foreign companies. The position of the pharmaceutical industry is protected by the presence of patent laws and the presence of protected and regulated marketing (Reekie D 1998). Again the findings would appear to suggest that the state – economy interaction has a predominant role in the management of the NHS (Doyal L and Pennel I 1979).

3. Inequalities between services

Since the inception of the NHS the hospital sector has maintained its priority of expenditure. In 1948 the percent spent on hospital services was about 55%. By 1974 this had risen to over 65%. This was despite the fact that the overwhelming amount of care was delivered in the primary care sector. This pattern underlies the fact that the acute specialities were more generously funded than the chronic sectors (Frazier D 1984; Baggot R 1994; Rivett G 1998). The inequality in speciality spend is a reflection of the amount of resources allocated to the innovative specialities. These specialities interface both with the pharmaceutical companies and the doctors. Again this suggests that the economy relation was the major interaction in the NHS.

The facets 1-3 above would suggest some of the problems seen in the NHS could be explained by the imbalance in the institutionalisation. In particular the imbalance in favour of the state economy relationship appears to underlie many of the problems. But is this imbalance in the state economy interaction, or the state economy- civil

society interaction? Further evidence of the role of the economy can be found in the measures taken by the State to manage the oil crisis of 1974 (Curwen P 1997; Harmon MD 1997). In 1974 when faced with a fiscal crisis, brought about by the doubling of the price of oil the government responded by

#### A. Revisiting the allocation of NHS resources

The national distribution of resources was examined by the Resource Allocation Working Party (RAWP) (Department of Health and Social Security 1977). This group devised a formula to redirect resources to the most populated areas. However the approach did not distribute resources to the inner cities where medical need (Le Grand J and Vizard P 1998).

#### B. The emphasis on the individual

The early 1970's saw the decline of the universal service. The governments now talked of 'civilised selectivity' in the provision of health care (Timmins N 1995). This message was clearly portrayed in the government document Prevention and Health: Everybody's Business (1974) calling for the public to treat minor illnesses and adopt healthy lifestyles (Webster C 1998) (Department of Health and Social Security 1976).

The motion of civilised selectivity was taken further in 1974 with the publication of Priorities for Health and Personal Social Services (Department of Health and Social Security 1976). This document signalled an informal end to the Consensus, as it called for the targeting of resources to the elderly, children and the mentally ill (Webster C 1998).

The development of the NHS during the period of economic depression in the 1970's shows a pattern of increasing the support for the state economy interaction as both of these measures were aimed at containing expenditure so that resources could be diverted into the economy (Glennerster H 1998). The return to the emphasis on the individual marks health care coming full circle to the industrial pre NHS era. Clearly in a time of rising unemployment the costs of maintaining of the workforce does not matter as there are plenty of workers to take the place of those who leave the workforce due to illness (Doyal L and Pennel I 1979). However, the government took steps to ensure that the profitable sectors of the health care industry were protected. For example at no time during this era was drug and pharmaceutical expenditure challenged (Rivett G 1998). Instead an emphasis was placed on reducing equipment and buildings expenditure (Timmins N 1995; Klein R and Lewis J 1976).

Taken together all of the evidence suggests that the organisational imbalance in the state-economy relationship is the cause of the organisational stagnation seen in the NHS (Klein R 1995). In essence this imbalance arises due to the working of the British State. The Ministers of Health were responsible to Parliament for the NHS expenditure. Therefore, the Ministry constantly asks for information, over which it has no control and therefore has to rely on the hospitals and doctors to supply the information (Ministry of Health and Department of Health for Scotland 1956). In turn, these (economic) bodies complain of interference (Doyal L and Pennel I 1979). The most prominent example of this effect was the National Hospital Plan, formulated in the 1970's to ensure uniform provision of health facilities. This plan failed, firstly due to a lack of information and, secondly due to the concerted efforts

of the medical profession and hospital staff. The failure of the National Hospital Plan exemplified the organisational stagnation seen in the NHS due to the lack of a balancing third party - the civil society - providing an incentive, either electoral or consumer led, to change practice. It is of interest that at the time the NHS was being criticised for stagnation the service was at its most popular with its users – a fact forgotten by the state representatives involved (J Enoch Powell 1966).

As further evidence that the problems in the NHS were due to the strength of the state-economy interaction, the tackling of the organisational problems in the NHS underlie the reforms seen since 1948 – as covered in the chapter 2 (Klein R 1995). However as none of these addressed the fundamental imbalance – that of the strength of the state- economy relationship it is not surprising that the organisational stagnation continued.

There is evidence a failure to produce coherent policy due to post policy modification by external parties may be responsible for the imbalance. Examples include the 1962 Hospital Plan and the controversy surrounding the Abortion Acts (Klein R 1995). Furthermore, the health service was not the only welfare state body where these problems emerged. For example, the development of the Community Development Projects formulated in the 1960's with the idea of tackling poverty. These groups were set up to explore the use of demand side and Marxist methods in inner city poverty. These pilots proved to be a hot seat of militancy and interacted with both the local community and local authorities – so much so that the scheme was ended. Higgins commented that the demise of these pilots was due to lack of balance in the objectives. Taken together it would appear that the lack of balance between the institutions surrounding the NHS could be directly equated to the way in which policy was formulated (Higgins J Deakin N Edwards J and Wicks M 1984; Deakin N 1994).

## 3.6 Chapter Conclusions

The conclusions of this chapter are

- 1. There is a significant institutional framework that surrounds the NHS, and that this institutional framework of state, economy and civil society has well defined roles and a significant impact on the distribution of services and the implementation of policy. This is best shown by the position of the medical profession – over whom the government had no control but was responsible for the distribution of services.
- 2. The relationship is characterised by the open-ended nature of political strategy and the ambiguity of the institutions compounded by the rational actions of the representatives of the institutions. This statement is best exemplified by the position of the Trades Unions – which were both drivers and beneficiaries of the NHS.
- 3. The interactions can be simplified, however, into the institutionalisation proposed by Torfing in his review of the Danish Welfare system. In the case of the UK this institutionalisation can explain the primary interactions of the tripartite relationship of state economy and civil society

- 4. That the problems seen in the NHS and the development it has undergone can be explained on the basis of institutional activity and power. This is evidenced by the power of the state- medical interactions that surround the NHS and the fact that many of the reforms were targeted at the reform of this interaction. However the way in which the NHS was institutionalised implied that although reform was mooted the lack of control over the medical profession and hospitals made the implementation of reform difficult
- 5. There is evidence for the lack of coherent policy making in the NHS as evidenced by the problems associated with mental health and hospital planning services. The review has also highlighted that policy making in isolation is a feature of the NHS in the period from 1948-1982. This is evidenced by the exclusion of the economy from the set up of the service and the exclusion of the civil society from the development of the service. Furthermore the imbalance seen in the institutional framework appears to result from the policy making in isolation

These features would argue that an institutional analysis of the NHS based on a tripartite relationship is valid (Rosenhead J 1992)and argue that Torfing's analysis can be applied to understand NHS developments (Torfing J 1998). On the basis of these findings the analysis of the institutional relationships that surrounds the NHS appears to be in the right direction and it was decided to continue with this analytical method to review the more recent developments.

#### CHAPTER 4 - THE NHS 1982 - 1989

# 4.1 Key points from the Previous Chapter

The actions and reforms of the NHS in the period 1948 till 1982 can be explained on the basis of an institutionalisation of state economy and civil society. This institutionalisation explains principle interacting parties in the development of the NHS and the primary interactions of the relationship between these three elements. Furthermore the problems in the NHS seen in the period up until 1982 can be in part explained by the imbalance of the institutionalisation. These features are a validation of the use of the ideas of Torfing and provide background to the role of institutional analysis as a suitable analytical framework to explain the underlying problems with the 1990 reform process.

# 4.2 Objectives for the Current Chapter

1982 marks a significant change in the NHS reforms. It signifies a move away from the Consensus and lays a platform for future events. This chapter aims to provide a background to the changes seen in 1982, comment on the content of these changes and provide a link to the reforms seen in 1989-90. Central to these is a check that the assumptions of the institutional analysis still hold.

## 4.3. Background

Although 1989 is quoted as the start of the radical reform process in the NHS the seeds of reform were sown in 1982. 1982 marks the end of the 1948 Consensus on

health care provision. It began with the commissioning of the Griffiths report published in 1983 (Griffiths R 1983). This report is credited with initiating the process of beginning the revolution in the NHS. Prior to this date the NHS was committed to the provision of universal health care, free at the point of delivery - as was promised in the Consensus (Beveridge W 1942). Therefore NHS reform revolved about the maintenance of the Consensus by focussing on demand control and rational planning. These moves caused considerable centre-periphery tensions as a result of the strength of the state-economy-civil society relationship. This tension was believed to be the cause of the NHS's problems and so a series of organisational 'fixes', in an attempt to alter the power of the organisations involved, was embarked upon (Klein R 1995). The Griffiths report switched attention from the process of organisation to the dynamics of supply. In particular, emphasis was placed on the efficiency of services, and the targeting of services to those most in need. This targeting caused a subtle change, for prior to 1982 services were universal but available on the basis of demand, after it they were 'rationed' explicitly on the basis of need (Glennerster H 1998). The reasons behind this change are not difficult to see. Caught between increasing demands and economic constraints ministers appeared to have only one option, that of increasing the efficiency of NHS services by reducing the waste of unneeded, duplicated or redundant services. This change came at a price. A service based on need implied a centrally managed service, and a role for central government to force efficiency. This change was at odds with the concepts of medical freedom, as it implied a change away from the universal right to treatment. This was bound to be perceived as a threat to the independent practice of medicine in the NHS. In former times such a perception would have been avoided at all costs, but a unique set of circumstances combined to increase government resolve to commit to the change

(Webster C 1998).

1. The government was in a strong position. In 1982 the Thatcher administration recorded an election victory - repeated in 1987. This gave the government the confidence to proceed with the changes driven forward by the leader Margaret Thatcher (Thatcher M 1993).

2. By the mid-1980's the society that the NHS supported had changed radically. The society of 1948 was just recovering from the war and resources were scarce. What work was available was by and large male dominated and manual process orientated. Beveridge in formulating the NHS had made the assumption that this was to be the standard working practice, and in essence would not change. However, by 1980 the majority of the working population was not in manual industries and nearly as many women as men were in employment (Curwen P). These changes not only implied that two wage families were the norm, but also that society had become more diffuse, with fewer class boundaries. By 1982 the limitations of the NHS with respect to society change was becoming apparent as demands on the service for less invasive, and more supportive services grew (Klein R 1995). The changes in society implied that the Consensus would no longer be appropriate. However, the formation of a new agreement on the role if the NHS was going to be a difficult task (Kavanagh D 1990).

A change in the NHS was made more difficult by increasing interest of the public in politics. The action of politicians were now centre stage in public life, and for anybody dissenting with the prevailing views, there was a wide audience of the media waiting to publicise the story. This made politicians very cautious about tackling one

of the sacred cows of British life – the right to universal health care. However, here too the government was fortunate. The changes in political and social life emphasised the role of the individual in assuring their success and welfare – allowing for a change away from universal services (Lowe R 1993; Hutton W 1998; Urry J 1988).

Despite these changes, however, the time for radical reform was not ripe. The early 1980's were marked by economic concerns and therefore welfare state was seen as an essential safety net. Therefore while many recognised a change away from universal care was needed, the atmosphere of radical change was not yet prepared. In these circumstances it was anticipated that the political price of reform would be high (Jenkins S 1995).

There are other reasons why radical change could not be embarked upon. Overall the Thatcher policies can be summarised as the increasing use of state power to create and regulate an economy and social structure based on markets (Le Grand J and Robinson R 1984). This implied reducing the power of providers, by the increasing the regulation of provider activity, and transferring much of the power to the consumers. The power of consumers was to be mediated by the use of intermediary bodies such as local authorities or independent bodies - such as school governors for opted-out schools. In the early 1980's these bodies were not in a position to accept this responsibility (Urry J 1988), and the economic circumstances implied that little public funding would be available to create these bodies (Klein R and Lewis J 1976).

Given the lack of leverage to create radical change the 1982 reforms settled on creating an atmosphere and framework for change. Central to the Conservative ideology was the concept that the state should live within its means and provide the services it could afford, to those who needed it (Glennerster H 1998). In order to achieve this, in 1983 the financial management initiative (FMI) was established (Prime Minister and Chancellor of the Exchequer 1988). The FMI led the charge to efficiency by producing a range of performance indicators. These indicators were, in many ways, the products of the administration that the government was seeking to remove, so as in previous changes ambiguity was inherent (Hennessy P 1991). However, despite this these indicators were to take on a new meaning as tools for public accountability and political levers for change - rather than the original intent, as tools for accountability to governments. So the public were made aware of these indicators and encouraged to use them by increasing pressure on the service providers to conform to 'Standards of Service' (Glennerster H 1998).

The trend to a consumer focus in service provision was recognised as a two-edged sword. While the trend increased service responsiveness it was apparent that it could also fuel demand. While the state was not in full control of the NHS this could lead to a greater fragmentation and duplication of services (Klein R 1995). The infrastructure of the NHS in the 1980's could not support this increase in demand as the economy grew very slowly and the government did not meet its election pledges of increasing welfare expenditure in this period and so the NHS was financially strapped (Curwen P 1997).

The overall impact of the social and economic problems associated with NHS reform acted as a damper (Thatcher M 1993). Therefore taking the political, social and economic limitations to reform into account the reform of the NHS got off to a cautious start with a review of the service and a re-organisation.

# 4.4 The Basis of NHS Reform in the 1980's

The balance of the political, economic and social challenges provoked by the NHS led the Conservative government to commit to 4 themes of change (Klein R 1995;Le Grand J and Robinson R 1984).

1. A commitment to centralisation

2. The development of stronger management structures

3. The expansion of private services and contracting out

4. The development of primary care as an alternative delivery system

These elements provided a pragmatic basis for change in the 1982 reform process. As stated above if care was to be directed towards those most in need strong management was needed to bring together the disparate elements of the service. New tools are also required to gain efficiency in the NHS, as the change represents a move away from demand side management. One such tool was the use of competition. This could be achieved through the use of private firms. Finally primary care was seen as the major reason why the UK NHS was cheaper then its European counterparts, and by developing the role of primary care further it was anticipated that further efficiencies could be made. With these ideas in mind the reform process was instituted in 1982. The foundation of these changes was a consultation document produced in 1979

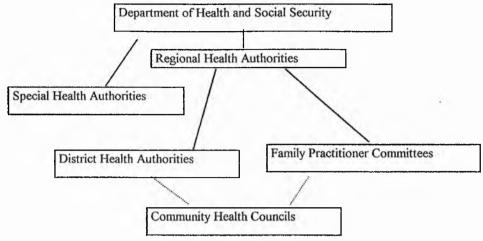
called Patients First (Department of Health and Social Security 1979). This in turn was based on the preceding Royal Commission report (Royal Commission on the NHS 1979)

# 4.5 The Re-organisation of the NHS in 1982

# 4.5.1. The Structure of the NHS 1982-1990

The changes in the NHS began with reorganisation. The new structure is shown in Figure 4.1. The central feature of this reorganisation was the removal of the AHA tier of management. The major management body of the NHS was now the District Health Authority (DHA). The DHA was charged with the planning and control of services in the NHS. In many ways the reorganisation was also a reaction against professional values. Doctors and nurses were given a much-reduced voice under the new system. The reorganisation also marked a change in emphasis with the technological dream of large District General Hospitals being abandoned (Department of Health and Social Security 1979).

#### FIGURE 4.1 THE STRUCTURE OF THE NHS, 1982-90



(Department of Health and Social Security 1979)

#### 4.5.2 The Development of the NHS 1982-1990

The new structure of the NHS had an emphasis on value for money and selectivity in services. Accordingly, with the restructuring of the service in 1982 the emphasis changed from central management to the direct local management of services. The 1982 reorganisation, therefore, can be seen as the physical embodiment of the 1982 Griffiths report that gave emphasis to harnessing the dynamics of the NHS organisation to achieve productivity (Griffiths R 1983). Taken together the two reports emphasised care on the basis of need, rather than on the basis of universal care (Kavanagh D 1990).

This move met considerable resistance from the medical profession, as the drive to efficiency was seen as restrictive to the traditional freedoms of medical practice. However, the more the medical profession resisted changes the more the Conservative Government was determined to resist. This set up a cycle of antagonism and

confrontation that laid the foundation of Working for Patients white paper that underpinned the 1990 reforms of the NHS (Thatcher M 1993).

## 4.5.3. The Effects of the Reorganisation

The effects of the reorganisation can be documented in terms of the effects the changes had on the degree of centralisation of the service, the effects on the management of the service, the role of the private sector and the involvement of primary care. The effects of the reorganisation on the performance of the NHS cannot be assessed, as the reforms were short-lived (Webster C 1998).

# 1. The centralisation of the service

The reorganisation of the NHS in 1982 saw the abolition of the area tier of management. While this was heralded as the end to an unnecessary bureaucracy, it also increased the degree of centralisation of the service. The abolition of the AHA brought the District Health Teams (now relabelled District Health Authorities) under the direct control of the Regional Health Authorities and therefore capable of direct performance management and review. This created a situation where the NHS was more accountable than at any time in its previous history(Jenkins S 1995).

The accountability was re-enforced by a system of annual performance review, under which the District Health Authorities were to report progress in terms of meeting nationally set targets. These targets were a statistically driven set of input and output indicators that related resources to the numbers of patients treated, but ignored the

effects the treatments had on survival and other outcomes (Klein R 1995). These measures were seen as central to the NHS's contribution to the FMI (Prime Minister and Chancellor of the Exchequer 1988).

The performance targets that were set by and large reflected the perceived political pressures on the system - through waiting lists and other demands. For example District Health Authorities were required to reduce the waiting times for eye surgery. Therefore, the aims of the new service in 1982 were overtly political. The increased levels of contact between the ministerial staff and the regional units emphasised this. This politicisation of the service was worrisome to many as it increased the short-term objectives of the service - a trend that many saw re-enforced in the development of service managerialism (Webster C 1998).

#### 2. Increasing management

The managerial changes in the NHS did not occur at the same time as the reorganisation. These changes were introduced a year later as a result of the Griffiths report (Webster C 1998). The managerialism introduced by the Griffiths report was aimed at the managerial stalemate that had occurred within the NHS. The report hypothesised that the problem was due to the large number of central directives being issued without a mechanism for accountability (Griffiths R 1983). The solution was to make people responsible for their actions, and to provide a management structure to carry out policy objective. This management structure was to consist of two boards - a central executive and a supervisory board.

The recommendations of the Griffiths report were carried out to the letter, and were problematic from the start (Webster C 1998). The supervisory board and the central executive were in conflict - leading to the resignation of the first Chief Executive of the NHS. The appointment of the Minister of Health as the Chief Executive of the NHS in 1984 in effect ended the role of the supervisory board. However this gave rise to governance concerns, and the hope of an independent board still lingered on - to be revamped in the 1989 changes (The Minister of State and others 1989).

Despite the problems in implementing the recommendations of the Griffiths report in the upper tier of management, the local changes proceeded apace. The management teams were disbanded, and were replaced by business style executive teams. The effect of this change was not as revolutionary as expected. The new managers found the NHS environment different to the commercial one. The NHS suffered with an inability to cost its activities, and this undermined many commercial practices. There were however, two areas in which the new managerialism had a considerable effect (Klein R 1995).

First the managerial structure weakened the power of the Trades Unions as now negotiations were being held at local level. In this the new managers of the NHS reflected the events at national level where Union power declined rapidly under government pressure. The effects of the change have been that to date the Unions have been unable to re-establish a power base within the NHS (Webster C 1998; Pollitt C Harrison S Hunter DJ Marnoch G 1991).

The second impact of the Griffiths report was less tangible. The new managers of the

service looked at the goods and services provided by the NHS in the light of the needs of the patients. This led to the introduction of consumer values into what previously had been a professionally driven market. However, the introduction of consumer values exposed a policy hole. If consumers do not like a shop they stop going and eventually the shop closes. Could this be done with a hospital? In the majority of cases closing a hospital was not an option, therefore, the Griffiths report recommendations were muted until the public could have a say in how the hospitals were managed (Pollitt C Harrison S Hunter DJ Marnoch G 1991).

# 3. Increasing involvement of the private sector

The increasing involvement of the private sector took place in two areas, the provision of private care and the provision of services.

#### A. The provision of private care

Private sector health care provision became a growth industry in the 1980's. This was due to the greater number of employers offering health care insurance as a perk, and public dissatisfaction with the NHS. Contrary to academic opinion, the Thatcher government did not encourage private health-care directly (Thatcher M 1993). Instead by relaxing the consultant contract in 1979 it enabled consultants to devote more time to private practice and increased supply (Higgins J 1988). This increasing supply in turn increased demand. This effect in some way demonstrates the public dissatisfaction with the NHS in the 1980's (Calnan M Cant S Gabe J 1993).

Changes in the provision of long-term care also acted to increase the role of the private sector, particularly in the provision of private nursing home care. The changes in the social security system encouraged the local authorities to outsource the care of the elderly (Day P and Klein R 1987). This created a demand-led service until spending was capped in 1992. The period 1982 - 1992, therefore, was a period of unlimited growth for private nursing home care, ended only by the implementation of the community care recommendations of the white paper Working for Patients (Webster C 1998). This document recommended the adoption of the results of the second Griffiths report on care in the community (Griffiths R 1988)covered in the next chapter.

The case of the almost accidental change in private care involvement in the provision of UK health services emphasises two factors. The first is that changes in health care cannot be seen in isolation, that the environment of decision making, and policy effects on NHS services by changes in the welfare state, have to be considered before deciding on final policies. Second is the strength of the link between the state and economy, such that a change in private provision can force the policy tempo. For example in the case of the provision of private care for the elderly the Government was forced to react with market regulation, rather than developing market regulation in parallel with change.

B. The provision of private services

The provision of private service in the NHS by competitive tendering represents the other aspect of privatisation brought to bear by the 1982 reforms. In September 1983

Health Authorities were required to tender for laundry, catering and cleaning services - in total about 12% of NHS expenditure (Klein R 1995). This was a detailed centrally driven directive and met with much resistance. However, the decline in the power of the Unions and the determination of central power pushed the changes through. However in the final analysis of this exercise the returns have been modest. A total of £86 million was saved and the majority of the contracts were awarded to the in-house teams. Therefore the changes in private institutional involvement in NHS service provision did little to change the status quo; it still supported, or perhaps increased, the state economy interaction (National Audit Office 1987). This unexpected result was caused by two factors. First the public had no say in the services offered. Second the effect of the tendering exercise was only felt in the lower paid and lower skilled workers (Klein R 1995). This has the effect of isolating a subpopulation of the civil society interaction. This isolation is further enhanced by the fact that changes in the role of the private sector appeared to target the most vulnerable – the elderly and the lower paid. During this period areas that would have more effect on the well off, for example prescription charges exemptions were left untouched (Webster C 1998). This was in contrast to prescription charges that increased throughout the 80's. These charges are a disproportionate burden on the lower paid and act to further decrease the role of the civil society in creating a balanced health care system (Klein R 1995).

Despite the limited achievements of the privatisation measures in terms of financial savings the success of these measures cannot be counted in these terms alone. The real success of the managerial changes was an increased public awareness of the cost of the NHS and the creation of an atmosphere where change was possible, and the

power of the manager demonstrated (Griffiths R 1991; National Audit Office 1987)

# 4. Changes in Primary Care

One of the perceived major assets of the NHS is the network of GP's acting as gatekeepers of care. The GPs in the UK deliver the majority of services and act as a filter to patients accessing secondary care. It is believed that this system is responsible for the spending on UK health care to be lower than many of our European counterparts, while maintaining a high standard of service (Secretaries of State for Social Services 1987). The system operates by making GPs small businesses contracting their experience to the NHS (Webster C 1998). This system, which dates back to 1948, is closely defended by the GPs and previous reforms in the NHS had shied away from dealing directly with the GP system (Klein R 1995). However, the changing environment in the 1980's made it apparent that the economic cost of allowing the situation of primary care to continue as an independent service outweighed the risks of a political confrontation with the GPs. The demand for health services was increasing at such a rate that unless the referral rate was controlled the savings in efficiency would not materialise. Any reduction in demand would require the preventative role of the GP to come to the fore. Yet the situation with GPs, as independents, gave no incentive to practice preventative medicine (Secretaries of State for Social Services 1987).

The first step in this direction was to make GP services more accountable. This was achieved by bringing the Family Practitioner Committees under the Ministry of Health umbrella. This was followed by a review of family practitioner services

(Kavanagh D 1990).

The first area to feel the impact of change was prescribing. In November 1984 a limited list was announced. This was a surprise move resisted by both the BMA and the pharmaceutical industry. However the government capitalised on the split between the Royal Colleges to push the measure through and in the end, a limited list of 30 excluded items was produced. While this was only a modest success it did lay the foundation of the parliamentary challenge to medical freedom (Klein R 1995).

Second during the battle over the prescribing of drugs the government proceeded with the review of the Family Practice Services. In 1987 it produced a green paper on Primary Health care in which proposals for a Griffiths style management for the FPC was proposed (Secretaries of State for Social Services 1987). This paper was widely debated by the BMA and the colleges, however by 1989 no conclusion had been reached when the NHS was engulfed by another financial crisis. Reform of the primary care service was therefore left uncompleted (Klein R 1995;Webster C 1998).

# 4.6. The Forces for Change at the Heart of the 1982 Reforms – a Pace for the Future

The 1982 reforms of the NHS were short-lived and uncompleted. As the crisis in the NHS continued and the atmosphere of reform changed more radical reviews became possible and were instituted in 1989. However, the 1982 reforms are important. As can be seen from the discussion above the primary motivator for change was an increase in efficiency within the NHS. Underlying this desire was an ideology of a

state that we can afford. The change was marginal, but the precedence was set to allow for much larger change.

# 4.7 The Impact of the 1982 Reforms on the Tripartite Relationship of State Economy and Civil Society

Although the major emphasis on this section has been setting a background to more radical reform, it is worthwhile to review the effects reform had on the tripartite institutionalisation, to check if Torfing's presumptions still hold.

First it is important to highlight that the reforms were conducted in an atmosphere of policy making in isolation, neither the doctors nor the public were consulted on the change. There is also some evidence of post policy modifications being applied –in particular to the areas of long-term care where the implementation of policy had unexpected effects These features would argue that the tripartite relationship is still in effect. The reforms did have the effect, however of changing the players in the relationship. As we have stated already, the Trades Unions ceased to be a major power in the relationship, while the doctors' power – largely through general practice – increased. In addition the private providers of care, such as those private nursing homes providing for the care of the elderly, now became a significant force in policy decisions. This change was to have a greater impact in the 1989 reform programme

Despite these changes the reforms did not affect the tripartite institutionalisation. First the reforms did not influence the basic problems of the NHS organisational stagnation caused by a strong state economy relationship. In fact, giving greater power to the private providers, GPs and further estranging the civil society by declining Union power increased the strength of the state economy relationship further and reduced the power of civil society. Therefore if anything the NHS was more unbalanced after the reforms than before! The effect of this imbalance can be seen in the financial crisis that hit the organisation in 1989, covered in the next chapter. The operation of the tripartite interaction was also not changed. The system was still marked by ambiguity, with the new District Health Authorities now more responsible to the state as managers while trying to build local service relationships, however the role of the NHS as a regulator of capital development through influencing service levels remained intact (Klein R 1995).

# 4.8 Conclusion

The 1982 reforms were not as radical as was first mooted, by and large because of financial constraints. This does not, however, diminish their importance as the changes provided the essence for the changes seen in the 1990's and demonstrated that radical change, given the right environment, was possible. It is difficult to speculate on the impact of the changes seen in 1982 reform was short lived. However, the changes are based on policy making in isolation and political strategy and do little to affect the imbalance of the state economy relationship and the tripartite relationship remained intact. These features would argue

- The period 1982 1989 marks the end of the Consensus, it is therefore the ideal starting point to study the reform process in the NHS
- 2. The fact that at the start of the 1990 reforms the tripartite institutionalisation was intact would argue that the framework proposed in the Introduction and validated

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in the previous chapter is suitable to start the analytical process.

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The features of the unbalanced tripartite relationship are emphasised by the continuing crisis seen in the NHS - leading to the changes seen in the 1990's - the subject of the next chapter.

## **CHAPTER 5 NHS REFORM IN THE 1990'S**

# 5.1 Key Points from the Previous Chapter

The consensus about the provision of health care came under strain in the late 1970's due to the increasing demands for high technology care and a shift in the society that was supported by the NHS. The forces provoking the change suggested that a shift to a more selective distribution of health care benefit was desirable in order to achieve greater efficiency within the NHS. This change implied a move away from the Consensus and an end to the emphasis on universal care. However, it was realised that any change to the NHS would not be easy and the economic and social conditions for change had to be right before any change was attempted. In the middle of the 1980's such conditions did not prevail and instead further change in the demand management structures was mooted. This reform involved the introduction of executive management styles into the NHS, together with limited competitive practices - such as the 'tendering out' of hotel services and changes in primary care. The impact the changes would have had is difficult to assess, as further problems in the NHS – and a change in the economy – forced further reform. However in the short term the reforms were successful in demonstrating that change was possible. The continued pressure on the NHS, together with a change in the economic circumstances implied that towards the end of the 1980's radical reform was once again on the agenda

Despite the changes seen in the NHS during the mid-1980's evidence suggests that the institutional framework proposed as the analytical method remained intact and so the process of study remained unchanged.

## 5.2 Objectives of this Chapter

This chapter is focused on explaining the basis of reform ideology and practicality in the 1990's. It will therefore review the pressures that generated the reform, the 'new' models of health care available for radical reform and how the Conservative Party selected the new model for the NHS.

# 5.3 Why Was Radical Reform Needed?

The interaction between the state and the economy, as we have discussed in the previous chapters, was the major influence on health care policy in the UK. As the years 1948 – 1974 were marked by a buoyant economy this provided a stable, if tense, background to the NHS as the service continued to grow as the economy grew (Le Grand J and Vizard P 1998; Klein R 1995). This is not to say that improvements could not have been made during this period for the NHS was marked by difficult and confusing peripheral-central tensions that complicated the further development of the NHS. However, the levels of service gave rise to happy patients and NHS expansion continued (Klein R 1995). During this period it was recognised that the major constraint on welfare expansion was the rate of inflation (Glennerster H 1998). Changes in welfare expenditure places Unions in a stronger position and increases their bargaining power for higher wages – particularly when the expansion increases social security payments. These higher wages drive up the cost of manufacture and increase inflation. In addition the government also borrows money to pay for welfare expansion, which also has an effect on the money supply (Curwen P 1997). Therefore it is in the interest of the government to limit welfare expansion in times of increasing inflation. The NHS was no exception to this and in the period 1948-1974 the welfare state did not grow in parallel to economic growth (Glennerster H 1998).

The stability of the UK welfare system was thrown into crisis in the early 1970's, when the sudden doubling of the price of oil precipitated a major inflationary crisis (Curwen P 1997). The response of the government was to implement a series of economic cuts. As welfare services were seen as a prime generator of inflation, the brunt of these cuts fell in the welfare budget - including the NHS. However, this did not solve the problem and in 1976 the Labour Government negotiated a loan with the International Monetary Fund. As part of this funding, further cuts in welfare expenditure were demanded and implemented on the welfare state – including the NHS (Timmins N 1995). However as the government had no control over the levels of demand for care – this was in the hands of the doctors the effect was to further increase the size of the deficit in the NHS (Klein R 1995). Given these circumstances radical change seemed inevitable (Glennerster H 1998).

# 5.4 The End of the Consensus - a Slow Demise

The prime target for the reduction in expenditure on the welfare state was to put an end to the Consensus agreement on universal care reached in 1948 (Kavanagh D 1990). The end of the Consensus would allow the resources available to the NHS to be targeted, and therefore used with greater efficiency and give the opportunity for a decline in growth, or perhaps in the long-term a decline in overall expenditure. The end of the Consensus, however, was a radical step and as was mentioned in chapter 4 the conditions for a formal end of the Consensus did not prevail until the end of the 1980's (Barnet J 1982).

Plans to draw an official end to the Consensus started in the early 1970's. The Labour Government drew up plans to achieve a change to the Consensus in Labour's Programme for Britain (Wickham Jones M 1997) and Prevention and Health – Everybody's Business (Department of Health and Social Security 1976). These documents called for a fundamental shift in the welfare state. Individuals were encouraged to be less reliant on the state, take more responsibility and charges were introduced for many services. These changes were accompanied by the introduction of an incomes policy and cash limit on public expenditure (Harmon MD 1997). These measures imposed a degree of selectivity on the services and led to strengthening of the state–economy interaction. Whether these measures would have been successful it is difficult to tell as, in 1979, a Conservative Government was elected on the platform of monetarism and a reduction in the role of government in state affairs (Jenkins S 1995).

As was discussed in the previous chapter the incoming Conservative Government shied initially avoided formally ending the Consensus, but the introduction of managerialism effect ended it in all but name (Loney M. 1994). In place of the Consensus a new set of ideals was created which have been termed Thatcherite (Lowe R 1993)

# 5.5 Thatcherite Policy - the Replacement to the Consensus

Margaret Thatcher, the Prime Minister who gave name to the term Thatcherite policy, is credited with moving away from the response of seeking short-term fixes for the Consensus (Thatcher M 1993; Kavanagh D 1990). Previous governments, when faced with a crisis had 'sought efficiencies' or borrowed money to fund demanded services (Klein R 1995; Harmon MD 1997). The use of demand management tools was now seen to be part of the problem. In addition there was a growing criticism of the failure of welfare services to resolve underlying economic and social weaknesses in the UK. Authors such as Hayek had been critical of the dependency culture engendered by the welfare state since 1948 (Deakin N 1994; Owen D. 1989; Glennerster H 1998).

Questioning the Consensus coincided with an intellectual challenge to the legitimacy of the welfare state. The background to this was the rising tide of militancy among the UK population. Initially students became concerned at the direction successive Labour Governments were taking, leading to a range of vocal protests. This militancy among the students spread to workers, culminating in the 1974 strike by miners and the 'Winter of Discontent' (Wickham Jones M 1997). At this point many intellectuals became concerned that revolution was coming. Further concerns that Britain was on the path to revolution came from the mounting crime and terrorist activity figures (Thatcher M 1993). Under such circumstances the welfare state was considered to be a contributor to the revolution – as it encouraged dependency and that the welfare state had helped to 'morally bankrupt' the country (Lowe R 1993) (Webster C 1998) (Reitan EA 1997).

Margaret Thatcher based her platform for the need for radical change on a combination of these themes. The welfare state under the Conservatives would be economically affordable, socially independent, in that it did not restrict personal freedom, and morally committed to a return to the values of the role of the society in the affairs of state (Thatcher M 1993), (Jackson P 1985). These aims were to be applied to all branches of the welfare state. However, health care and social care were particular targets as they were seen to be the major offenders of the decline of the values of society and a lack of commitment to the creation of personal wealth (Reitan EA 1997).

## 5.6 The Solution to the End of the Consensus

The Thatcher government rejected Keynesian economics as a tool and believed that a programme of aggressive monetarism could achieve the aims of improving the efficiency of the welfare services and effecting a wealth distribution as a part of the trickle down effect (Reitan EA 1997). This monetarism took the form of a belief in privatisation, curbing local government power and the use of inequality to promote change (Le Grand J and Robinson R 1984).

#### 1. Privatisation

Privatisation, in this context, implies a reduction in the role of State and the transfers of its functions to a private institution. These private institutions may be commercial firms, however it also includes voluntary associations or formal and informal networks. Le Grand and Robinson have identified three areas of state intervention in relation to privatisation - provision, subsidy and regulation. A reduction in any of these three areas can be considered as an act of privatisation (Le Grand J and Robinson R 1984).

Thatcherite provision is dominated by the notion of contracting out, where public authorities offer contracts to commercial or non-profit organisations that agree to provide a service. This change is closely linked to the provision of subsidies. Under the Thatcherite governments subsidies were to be used to facilitate a change from direct funding into the signing of contracts which specified the levels of service to be delivered (Deakin N 1994). Finally regulation is used to protect the vulnerable from the effects of privatisation. Also, in many cases, regulation was reduced in order to encourage free markets (Deakin N 1994).

## 2. Curbing Local Government

The other main plank of Conservative policy has been to exercise greater control of local government expenditure (Thatcher M 1993). Local authorities were given strict spending targets and excessive expenditure could be penalised by the loss of government grants.

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# 3. The use of inequality to promote change

The final, and perhaps most controversial, aspect of Conservative policy has been the deliberate use of inequality. Inequality has been used as a deliberate strategy to provide incentives and encourage income redistribution (Jackson P 1985). The Conservatives placed an emphasis on the enterprise culture by encouraging free markets and competition in all aspects of national life. In addition tax policies which favour the rich were put in place. The effect of these policy changes relied on the incentive of inequality to have an effect (Walker A 1979; Reitan EA 1997)

Although the policy aims were clear the mechanisms to achieve change were not. Instead Conservative policy evolved over a period of time. Health care reform was included in this process (Thatcher M 1993).

# 5.7 The Pattern of Radical Reform

The Conservative government considered a reform of the social security system the primary target in its first term of office (Thatcher M 1993). This reform process took the majority of the 1980s to be accomplished. Therefore it was not until the middle of this decade attention was turned to health care reform, when as the economy picked up in the late 1980's funds were released for reform (Webster C 1998).

# 5.8 The Basis of Reform

The government was convinced that the solution to the problems in the NHS – and the replacement of the Consensus - lay in creating a competitive environment in health care (Webster C 1998). Several models to achieve this were available. Therefore, the question was, therefore, not whether competition should be introduced but what type of competition should be used (No turning Back Group of Conservative MPs 1988). Before discussing the Conservative strategy in selecting the model it is important to review the options available. 湯いまい

# 5.9 Models of Competition and Internal Markets in Health care

The introduction of markets in health care are seen by many health care policy specialists as the key to improving efficiency in health care provision. Markets introduce competition into the provision of health care and so in theory should improve efficiency. However, it is acknowledged that conventional markets have unsuitable characteristics that limit their application to health care. Therefore the key concept of interest is the 'Internal Market'. Internal markets have three defining characteristics (Anell A 1995)

1. Internal markets in health care are modified conventional market structures, that permit the limited development of market forces in situations where markets cannot exist, or where they would be socially damaging. The types of modification seen are regulations to control the entry of both purchasers and providers into the market; to control the profits of an organisation in the market and maintain the access of the consumers to the market (Sheaff R 1994).

- 2. Internal markets contain structures to enable the management of the market to occur. These structures enable the market to be managed so that the wider social implications of a health care system can be maintained, for example, the French Ministry of Health is there to ensure that the principles of universal access to health-care is maintained. In order to achieve this role the Ministry has certain powers (Saltman RB Vanotter C 1995)
  - (i) To control entry and exits to the market
  - (ii) The maintenance of services in equity, availability, access and quality
  - (iii) To review prices
  - (iv) To manage incentives to providers
  - (v) To review the determinants of population health
  - (vi) To define efficiency and efficiency gains.

All competitive health care systems have agencies that perform these functions. In some countries the government performs this role e.g. the Ministry of Health in France. In others semi-independent bodies perform the role e.g. the Netherlands (Committee on the structuring and financing of health care and the Dekker report. 1986).

3. Internal markets are limited to trading within that market. Therefore, health-care markets only trade in health-care (Anell A 1995).

The points above are fundamental to an internal market. However, in practice there are other features included: all internal markets offer choice of providers; separate purchasers and providers; permit the cash limitation of public expenditure and can

accommodate both public and private ownership of health-care providers (Sheaff R 1994).

The creation of internal markets, in addition to adding the possibility of competition, also offers the availability to offer a wide range of policy options within a single structure. An example of this is the Dutch reforms where social insurance, private insurance and internal markets are being employed (Sheaff R 1994).

In practice there are five variations of internal markets

- (i) Compulsory private insurance
- (ii) Social insurance
- (iii) Primary care doctor purchasing
- (iv) Competitive bidding
- (v) Managed competition.

These differences are summarised in Table 5.1.

Managed Compulsory Social Competitive Primary Competition Private Insurance Bidding Doctor Insurance Purchasing Purchaser YES OPTION YES NO YES Competition Free purchaser YES NO entry? YES NO Free purchaser YES exit? OPTION Free provider YES NO YES entry? NEGATIVE POSITIVE Loci for competition Determined Negatively or positively? FFS T<sup>1</sup> TARIFF B C<sup>3</sup> Predominant FFS T form or pricing C & V<sup>2</sup> C & C V Commercialised YES NO OPTION provider incentives? Non market NO YES capital allocation Managed labour NO NO YES NO market possible? Commercialised YES NO Purchaser Incentives? Direct state NO PRIMARY YES control of CARE pu chasers DOCTORS ONLY LOCALIZED EITHER LOCALIZED Purchaser CENTRALISED LOCALIZED Localised or Centralised intersect - oral MARGINAL INTEGRATED SEMIactivity marginal INTEGRATED or integrated Locus of consumer WHICH PURCHASER? WHICH WHICH choice on entry DOCTOR? DOCTOR? - OR NO CHOICE Who defines PURCHASER CONSUMER CONSUMER locus of choice OR of primary PURCHASER provider? Who defines PURCHASER PRIMARY locus of choice DOCTOR of secondary provider?

1 = Fee for service; 2 = Cost and volume; 3 = Block contract

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TABLE 5.1 MODELS OF INTERNAL MARKETS MODIFIED FROM (SHEAFF R 1994)

# 5.10 The Key Features of the Market Models

## 5.10.1 Compulsory Private Insurance

Compulsory private insurance-based internal markets have been proposed in Guernsey. It is proposed that all citizens would have to purchase private health insurance, the government contracting with the insurers to purchase cover for those who cannot afford to do so. The insurer guarantees a universal minimum level of cover at a price reflecting the subscribers income. The government pays all administration fees and has a profit sharing relationship with the insurers. The insurers themselves are limited to six, selected by a tendering process. Under the Guernsey proposals the entry and exit to the market would be state controlled as would prices and quality. However, insurers and providers are left free to compete for patients (States of Guernsey 1992).

# 5.10.2 Social Insurance

In northern Europe (Belgium, The Netherlands and Germany for example), social insurance models are the basis for a long-standing internal markets (Hoffmayer UK and Mccarthy TR 1994). Health insurance in these counties is compulsory, with public bodies purchasing insurance for those who cannot afford it. However, the premiums paid are regulated by the state, not by the individual companies. Patient, state and employer all contribute to the payment of premiums. Therefore, virtual global coverage of a minimum range of services is guaranteed. The purchasers of health-care are non-specialised, commercial sickness funds, organised either geographically or along trade Union or religious lines. The cost of the services

offered is fixed by negotiation. Private insurers and sick funds also offer "top up" insurance to purchase a wider range of services for the individual (Hoffmayer UK and Mccarthy TR 1994). Market entry is regulated by accreditation. In this way the quantity of services is maintained. Management structures therefore control quality and price.

# 5.10.3 Primary Care Doctor Purchasing

Primary care-led purchasing has been introduced as part of the NHS reforms as GP Fundholding. Similar experiments have been tried in Sweden and Russia (Honigsbaum F Calltrop J Ham C Holmstrom 1995). It is based on the role of the primary care team as the gatekeepers to secondary or hospital care. In this system medical care is purchased by clinicians from cash limited budgets allocated to them by the management structure. Primary medical care may be purchased from the same budget (Russia) or a separate budget (UK). In theory every patient has the right to register with a primary care physician, and so the right to universal care is maintained. The primary care physicians, in addition to acting as gatekeepers to care, also act as market regulators. In effect care providers are regulated by the willingness of the physician to refer patients. This allows a variety of care providers to enter the market. Although public funded hospitals predominate in many primary care markets the range of providers can include charities and voluntary sectors.

Price and quality are regulated by negotiations between the purchaser and provider. Disputes between the purchasers and providers are usually handled by a management structure locally/regionally.

# 5.10.4 Competitive Bidding

The reforms introduced into the Swedish health-care system and the competitive tendering process in the NHS are both examples of the competitive bidding type of internal markets. Providers bid competitively to provide services to a management structure. The purchaser of the service decides the specification and the quality standards. In this way competition between providers can be planned and market entry is controlled by the management structure (Honigsbaum F Calltrop J Ham C Holmstrom 1995).

# 5.10.5 Managed Competition

Managed competition is typified by the Dutch reforms and is a focus for the US reforms (Committee on the structuring and financing of health care and the Dekker report. 1986). In managed competition a layer of regulatory bodies manages relations between purchasers and providers. This is done so that the equity of health-care can be maintained and the purchasers of health-care can offer a guaranteed basic range of health-care available to all, irrespective of current health status of a population or an individual. To spread the financial risk it is necessary to create either large pools of purchasers or to ensure that there is adequate access to a large risk pool. This system does not exclude individuals from being compulsory insured, with the state providing coverage for those who cannot afford it.

Managed competition leaves open the policy question about contributions paid by individuals against the cost of cover and the levels of private insurance. The intermediate bodies can levy a surcharge purchase to compensate for bias in

insurance.

The entry of providers into the market is closely regulated by accreditation. The management of incentives is left to an intermediate body. Contracting with the provider to offering certain safeguards may also regulate purchasing, e.g. DRG base contracts.

# 5.11 Management and Competition in the Internal Market

The choice of models in the internal market makes the management of a health system achievable, by focusing on the pattern of incentives, market failure and competition (Sheaff R 1994). The key to all of these models is the type of payments used within the market.

All types of internal markets have payment to providers for incurred expenses. There are several types of payments (Anell A 1995;Sheaff R 1994)

- Standard tariffs (payment on a fee for service on cost per case)
- Capitation a combined payment for an entire population
- Block payments payment on activity levels
- Cost and volume payments based on thresholds of activity levels.

All internal markets make use of these payment mechanisms to a greater or lesser degree the choice depends on the type of market being employed (Sheaff R 1994).

In the competitive bidding markets block contracts and cost per case is the norm (Sheaff R 1994). This contrasts with primary care purchasing where cost per case is most frequent (Wall A). Project payments, payments for health promotion and research and development are also a feature of competitive markets not seen in other systems (Anell A 1995). In private managed markets, such as the Guernsey proposals, cost per case is the proposed system of payment, while in social insurance markets tariffs based on the resources consumed, are proposed (States of Guernsey 1992). In managed competition all forms of payments are possible (Committee on the structuring and financing of health care and the Dekker report. 1986).

# 5.11.1 Incentives With Each Model.

The incentive systems that are offered by payments within regulated markets are well described (Sheaff R 1994). Cost per case payment acts as an incentive to maximise the number of patients and the cost per patient. Capitation payment acts to increase patient numbers and minimise cost. Cost and volume contracts act in much the same manner but incentives vary with the wording of the contract. Block contracts have a complex incentive system, with most authorities stating that they minimise numbers and service quality,(Holiday I 1992).

If the theory of internal market incentives is correct then players in the market have the pseudo-commercial reasons to maximise charges and minimise costs. The effect of incentives in the internal market is not as acute when markets are growing, when the evidence is that quality becomes a major feature (Saltman RB Vanotter C 1995).

In primary care-led purchasing there are two additional sets of incentives to consider. The first of these is for the provider of care who responds to the physicians, who demand service quality, although the demands are not always the same as the patients. The other set of incentives is that of primary care doctors. GPs want attractive services with quick access to patients offering the type of service they require, but again this might not suit the patient needs (Sheaff R 1994).

#### 5.11.2 Management and Market Failure.

Despite the precautions taken and the incentives used, it is apparent that internal markets may fail to deliver the desired effects. This is by and large due to a failure of market forces to stimulate competition, but instead generate monopoly (Anell A 1995). This effect is due to

## 1. The behaviour of customers and consumers

Health care is emotive, and therefore its consumers may not act rationally in selecting a basket of goods to maximise utility.

#### 2. Structural condition, such as the doctor- patient relationship

In many cases the consumer of care is not the purchaser, instead a doctor or other health professional acts as the agent. This structural relationship makes the market difficult to stabilise.

# 3. The rules of transaction

In the functioning of markets free exchange is assumed. However the relationship

between services and ability to pay, implies that the free market would distort equity. Therefore there are rules of transaction – in the form of medical ethics – that distorts market function.

## 4. Lack of information

The complexity of medical treatment implies that information can be incomplete in terms of decision making.

The presence of these four factors implies that free markets would never work in health care, as a free market would always result in poor competition and market failure. This would have the result that the health care provided under a free market would not reach those most in need, and therefore not be efficient (Anell A 1995). Therefore, the drive towards markets in health-care should be interpreted in terms of achieving better resource allocation and efficiency through the use of competition and management. This statement implies the need for markets to be managed. Therefore, health-care markets are of the regulated or internal form, which affects the tangible aim of these markets, i.e., a reduction of the direct costs of production of services and also to manage the indirect costs of lost efficiency to society.

The nature of the management needed to achieve competition and reduce market failure is closely linked to the incentive structure, and is there to prevent abuse of the incentives. The major regulatory mechanisms are the containment of costs and the prevention of moral hazard (Arvidsson G 1995).

#### 1. Cost management

Internal markets are very sensitive to two forms of cost pressure, internal costs and transaction costs. The issues of costs in socialised medicine in a sensitive issue as previously many of these systems are unused to dealing with monetary values attached to services. Furthermore some services are more cost sensitive than others are. For example respite and chronic disease management tends to have high internal costs, making it sensitive to commercial pressures. Another area of concern is Transaction costs. Transaction costs- reflected as the costs of contracting - acts as dead weight to the competition of the market and reduces efficiency. These costs therefore need careful management.

## 2. Moral Hazard

Moral hazard arises as the consumer of health care uses an agent to purchase care. It is in the best interest of the agent to purchase the maximum care, and therefore the consumers are over-treated. The risk of moral hazard is greatest in the competitive bidding and primary care types of market. The existence of moral hazard implies a need to carefully manage the distribution of services by agents – such as general practitioners.

## 3. Management Mechanisms

There is a range of suggested solutions to the problem caused by internal market failure due to moral hazard, cost pressures and incentive abuse. These vary with not only the type of market but also the degree to which they interfere with the functioning of the market (Arvidsson G 1995).

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# 1. Tactical Variation

Purchasing by the management structure of services not normally purchased. An example is the long stay care of the mentally ill.

## 2. Market Development

By bringing in external market players, market failure can be prevented. An example is the use of the use of capital grants and preferential loans to private providers to stimulate new services.

# 3. The Regulation of Costs and Efficiency

The use of efficiency targets, usually reflected as cost improvements are used in many markets to ensure competition and avert cost pressures. An example is the regulation of the British Gas Industry where efficiency gains and cost pressures are linked to the retail price index.

# 5.12 The Selection of the Appropriate Market and Regulatory Model – the Institutional Analysis of the Internal Market

From the above discussion, it is apparent that the development of a successful internal market is dependent upon the selection of an appropriate market and regulatory structure. The appropriateness of one market model over another can be viewed from a number of angles and while the accuracy of the method selected to judge the appropriateness of a model is not important, as all methods are abstractions, it is important that the analytical methods is sensitive to the political and institutional environment. For this reason many investigators have viewed market developments in

the terms of the institutions involved in the development of policy from Fordist to Post-Fordist labour practices (Williams Fiona 1994).

### 5.12.1 Fordist and Post-Fordist structures

The terms Fordism and Post-Fordism are terms borrowed from the regulationist schools of public policy. They characterise a state by the economic framework in terms of (Jessop B 1996)

- 1. A characterisation of the labour processes
- 2. The role of the state in controlling capital
- 3. The role of the state in economic policy
- 4. The role of the state in promoting institutional integration

Although often discussed individually, the terms Fordist and Post-Fordist are at the opposite ends of a spectrum characterised by these four elements.

#### Fordism

Fordism creates up images of the Ford production plants in Detroit and of mass production methods. This is only part of the Fordist structure however, as Fordism is also representative of the capital and social structures that support the development of mass production. Drawing on the regulationist approach to describing capital structures, Fordism is characterised as (Jessop B 1996; Aglietta M 1979)

The configuration of labour such that technical and social labour is divided.
 Labour skills under Fordism are fragmented and geared to the use of special

purpose machinery - the assembly line. Implicit in this scenario is a hierarchical bureaucratic management structure.

- A capital accumulation regime characterised by the mass consumption of goods and services. Their standardisation and economies of scale in production characterise these goods.
- 3. The use of a social mode of economic regulation, that is, the use of social structures, clubs, institutions and networks to guide economic policy and support mass consumption
- 4. An emphasis on social cohesion to support the economic regime.

It is possible to break Fordism down into two elements. Firstly a mode of accumulation characterised by the promulgation of mass standards, in which both the wage relationships and the labour processes are geared to mass consumption and production. Secondly Fordism can be characterised by a mode of regulation of increasing consumption levels held together by a social cement of welfare and other social benefits. By focussing on mass production any state following the Fordist model, in theory, will produce a stable cycle of consumption based economic cycles stabilised by the involvement of society in the mode of accumulation (Aglietta M 1979).

The prototypic Fordist State has been termed the Keynesian Welfare State (KWS).

This state with its commitment to full employment seeks economic stability by demand side management (Einhorn ES and Logue J 1989). It achieves demand side management by adjusting demand to meet the technical capabilities of the mass production methods used to manufacture consumer goods - which, by its nature, is inflexible. This is coupled with a restriction on the collective bargaining power of individuals so that maximum consumption and full employment are guaranteed (Jessop B 1996).

#### **Post-Fordism**

The implication of the term Post-Fordism is that it represents a significant break with the traditions and ideals of Fordism, but retains an evolutionary link with it (Williams Fiona 1994). Therefore Post-Fordism can be analysed using the regulationist approaches we explained above -- but with significant differences in the results (Boyer R 1991).

# Post-Fordism can be defined in terms of

- A flexible labour force able to take on many tasks and not just related to the tasks associated with mass production. This flexibility may be manifest for example by the ability to accommodate small batch production involving skilled tasks along side mass production methods.
- An innovative pattern of capital accumulation using flexible production processes to produce a wide range of consumer and non-consumer durables. The innovative patterns of accumulation develop both from the production of a flexible workforce, but also as a result of technological innovation allowing the generation of new process and organisational forms. This innovation is not limited to domestic

consumption but towards a more global marketplace. Therefore, consumer preferences - and an emphasis on niche innovative products - determine the innovative tendencies seen in the global marketplace

- Supply side management of social and economic policy as a result of change in the capital and labour production methods. In this the role of the state is decentralised and local regulation more evident. Organisations will flatten and new governance practices will emerge.
- A varied pattern of organisational integration resulting from the flexibility.
   (All points adapted from (Boyer R 1991)).

The ideal post Fordist state has been characterised as the Schumpeterian Workfare State or SWS (Einhorn ES and Logue J 1989). The objectives of this State are to produce a State that supports an open economy based on innovative products, organisations and markets. It is based on supply side strategies and relies on competition to promote social policy. It differs from the KWS as it has no commitment to full employment and welfare policy is secondary to economic success. The SWS has the effect of 'Hollowing Out' the role of government associated with a decline in state provided services such as welfare, (Gould A 1993). As the success of the state is based on competitiveness - which is often global – burden of the state is reduced to fuel economic development and so the power of the nation state declines. This decline is in favour of both localised and supra-regional powers. Therefore the SWS places a greater emphasis on local power.

The tendency to the SWS as part of Post-Fordist development is underscored by four changes in the global economic environment. These changes are (Jessop B 1994)

• the rise of new technologies

- internationalisation
- regionalisation of economies
- the shift away from Fordist and KWS models of the state

The rise of new technology permits the development of newer innovative production methods - such as those seen in the newly industrialised countries of the Pacific Rim. This shift enforces a role of the state in terms of supporting and not fostering technological change in order that competition may be maintained. This effect spills over into the challenges brought by internationalisation. States can no longer act as if their economies were closed either financially or technologically. This has an important detrimental effect on the philosophy of the KWS in that it is not possible to maintain full employment and stable prices on a pan national basis. Internationalisation causes states to lose control of their national economies. Finally in this context internationalisation causes economies to regionalise to core areas without respect for national boundaries.

# 5.12.2 Health-care Market Models in Terms of the Fordist Post-Fordist Spectrum and the Objectives of Reform.

Earlier in the chapter we introduced five market models. These were Managed Competition, Private Insurance, Social Insurance, Competitive Bidding and Primary Doctor Purchasing (Sheaff R 1994). The selection of the appropriate market model, therefore, depends on the fit between the market model and the mode of accumulation. How do these models fit into the key features of Fordism and Post -Fordist policy?

Model	Flexibility	De-central- isation	Organisational diversity	Economic policy
Managed competition (MC)	Yes	No	No	Supply
Private insurance (PI)	Yes	Yes	Yes	Supply
Social insurance (SI)	No	No	No	Supply
Competitive bidding (CB)	No	No	Yes/No	Supply
Primary care Doctor P (PC)	Yes	Yes	No	Supply

#### TABLE 5.2 THE MODELS OF MARKETS AGAINST THE CHARACTERISTICS OF FORDIST AND POST – FORDIST POLICY Adapted from (Gould A 1993)

All five models represent a move from the KWS as all the models use supply-side management as opposed to the demand-side management. However, the degree that the models resemble the SWS varies. Based on these characteristics, it is possible to put them on a spectrum of policy depending on how closely the markets resemble the Keynesian and Schumpeterian visions.



FIGURE 5.1 THE SPECTRUM OF THE MARKET MODELS BETWEEN KWS AND SWS

From Figure 5.1 the social insurance and competitive bidding models lies closest to KWS. This is in contrast to private insurance which lies would be closest to the SWS. Managed competition and primary care doctor purchasing are in the middle of the spectrum.

#### 5.12.3 The most appropriate model for the Conservative Government

Based on regulation theory it is possible to select an appropriate model for a given economic and social circumstance. Using this approach it is possible to align political strategy with the nature of the health care market. As the Conservative strategy was to decentralise and increase flexibility and organisational diversity, this would argue for one of the models close to the SWS, either private insurance or primary care purchasing, as the most appropriate model for the reformed NHS (Burrows R and Loader L 1994).

# 5.13 The Conservative Strategy in Selecting the Model for the Internal Market to Reform the NHS

Conservative deliberations on the nature of the NHS market were cut short by circumstance (Webster C 1998). In 1987 it was apparent that the NHS was in a profound crisis. It was estimated that the deficit in funding had risen to £400 million. Waiting lists hit an all time high, and many hospitals began cutting back basic and essential services (Ham CJ 1992). The Government responded to the 1987 crisis in two ways. An extra £101 million was made available to fill any acute needs and an extensive Government review of the NHS was announced. In announcing the review the Prime Minister - Margaret Thatcher made it clear that this review would be swift and would report its findings within one-year (Ham CJ 1992).

Despite the intensity of the crisis and the sudden nature of the review did not start with a blank sheet of paper (Ham CJ 1992). In 1984 Professor Alain Enthoven, a health care specialist at Stanford University, looked critically at the NHS at the

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invitation of the Nuffield Provincial Hospital Trust. His recommendation was to create an internal market to increase efficiency. He advocated a managed competitive market that would enable Health Authorities to buy and sell services among themselves or from the private sector (Enthoven AC 1985).

Enthoven's review, Reflections on the Management of the NHS, did not gain wide publicity. However, the Nuffield Trust ensured that it was widely read by figures influential to the NHS. Downing Street did notice the report and Enthoven discussed it with the Downing Street Policy Unit headed by David Whillets (Timmins N 1995). His suggestions were also adopted by several London teaching hospitals that began, on a small scale, charging district specialist services (Ham CJ 1992).

Margaret Thatcher became increasingly interested in the concept of Enthoven's markets following the success of the pilots in London (Thatcher M 1993). Coincidentally at the same time as the success of charging for a service was mooted a review of the NHS funding was also underway. This review was based on studies of Health Maintenance Organisations (HMO) undertaken by the University of York and leading civil servants. However despite Thatcher's enthusiasm and the positive findings from York nobody could arrive at concrete proposals – so the ideas were shelved (Timmins N 1995).

With this background the review of the NHS initiated by Margaret Thatcher in 1987 began. The team that was assembled to conduct the review consisted of two health ministers, two treasury ministers and the Prime Minister (Thatcher M 1993). The review began by looking at the funding of the service – where a source of new funds was needed. Three proposals were made. First to impose hypothecated taxes with the

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ability to opt out and have private insurance. This idea was rejected on the basis that the young would opt out leaving the NHS to care for the elderly and leave the government to pick up the bill. The second was an increase in charges – rejected due to unpopularity. The final option was for NHS funding mechanisms to remain unchanged but with the addition of tax concessions on private insurance - with the hope that funds would trickle back into the service. This proposal had the advantages of both popularity and practicality and so became the preferred option (Webster C 1998).

The review then shifted to the delivery of the service. From the outset Margaret Thatcher wanted money to follow the patient as would be achieved in a free market (Thatcher M 1993). However, this was a radical shift for the NHS, as it required that the service should be able to cost its activities, a feature that proved a stumbling point. Meetings were held with sympathetic doctors and health service managers in an attempt to solve this problem (Thatcher M 1993). A variety of options were considered of which the only one to survive was the internal market split - where contracts would be made sufficiently robust to be less sensitive to the costing issues. However it was far from clear who should be the purchaser of services. Ideas were suggested that hospitals be privatised leaving health authorities, GPs and patients to be purchasers. However nobody could see how this would be done. Professor Ian McColl made a suggestion that the service be returned to pre-1974 status when teaching hospitals were independent with their own board of governors (Timmins N 1995). His ideas shaped the concept of self-governing hospitals. This idea was to be central to all of the reforms. The review was given added impetus with the arrival of Kenneth Clarke, who joined the review as Minister of Health in 1988. Clarke doubted

if the NHS management should be solely responsible for purchasing. This point caused problems. Reviews of HMO's had concluded that GPs could buy hospital care but nobody could see a suitable infrastructure to enable them to handle budgets. Clarke concluded this could be done if budgets to GPs were capped. In this way risks and difficulties could be managed. For example, costly emergency services could be excluded, the health authority remaining responsible for these. Clarke's idea, known as a GP Fundholding, became established as part of the review (Timmins N 1995).

The bare bones of tax concessions, self governing hospitals and health authority and GP purchasers became embodied in a White Paper known as 'Working for Patients'(The Minister of State and others 1989). The paper also included changes in the management structure. The DHSS was divided into the Department of Social Security and the Department of Health (DoH). The DoH was to consist of a policy board and a supervisory board. The supervisory board, called the Management Executive, was to be present not only centrally, but also with outposts scattered across the regions. Initially the newly created independent NHS providers, such as hospitals, would report directly to these outposts, while the DHA's would remain accountable to the RHA. The DHA's were also to be restructured along business lines, with a board of control having both managerial and non-executive inputs. Parallel changes were planned for the Family Health Services. Family Health Service Authorities (FHSA) were established in place of Family Practitioner Committees. These were also to have a more business like structure with a board consisting of managerial and non-executive members.

Within the provider units there were other changes (Klein R 1995). NHS provider units were to become devolved from direct DHA management. The semi-independent providers, called trusts, were to be given a greater degree of flexibility over the use of finance, the employment of staff and management arrangements. The trusts were to be directly accountable to the management executive, and were to be organised as though they were an operating business. Trust staff, including the professional grades such as doctors, were to become more accountable for their performance. Accompanying this, a greater degree of flexibility over appointments was to be exercised. The first example of these changes was the introduction of new disciplinary procedures (The Minister of State and others 1989).

Underpinning these changes were alterations to the resource allocation mechanisms (Webster C 1998). DHA's were to continue to receive funding on the basis of a population, adjusted for gender proportions and the number of the elderly, but this funding was to enable the purchasing of hospital services. The transfer of funding to the health-care providers was to be on the basis of contracts to provide services. These contracts could be placed with any hospital capable of providing the services required.

These budgetary arrangements were reflected in the establishment of GP Fundholders. Doctors whose practice was large enough, and who elected to do so, would receive a budget direct from the RHA to purchase directly a limited range of health care. The budgets included funding for a range of inpatient procedures, outpatients and diagnostic tests. The costs of these procedures would be subtracted from the DHA allocation (The Minister of State and others 1989).

The final change was the introduction of a new system of charging for capital. This involved hospitals being charged a rate of return for the assets they used. The

introduction of capital charges, as they were called, was designed to instil a sense of realism into the NHS's use of capital and to enforce the internal market reforms (The Minister of State and others 1989).

# 5.14 Assessing the Changes and the Impact on the Mode of Accumulation and Institutionalisation of the NHS

It is possible to assess the changes introduced into the NHS by comparing the changes seen in the NHS to the changes seen in social services and by comparing the reformed NHS to the pre-reform structure. Again we will do this by using the Fordist-Post-Fordist continuum introduced earlier and the tripartite structure included in the last chapter.

#### 5.14.1. The Pre-Reform NHS

In the previous chapter we highlighted the tripartite structure of the NHS as being the Government, the TUC and the Doctors as the major players with the Pharmaceutical Industry and the Community health Councils in support, Figure 5.2. This analysis highlighted the state economy interaction as the major driver of policy, and commented on the imbalance with the other interactions. It was apparent that these features implied that the NHS did not support a Keynesian welfare state ideal. The NHS at this time was also partially decentralised – with the role of the medical profession at the regional level, although there was little organisational diversity and flexibility. Based on these findings, the reformed NHS was best placed closer to social insurance structures than the KWS – Figure 5.3.

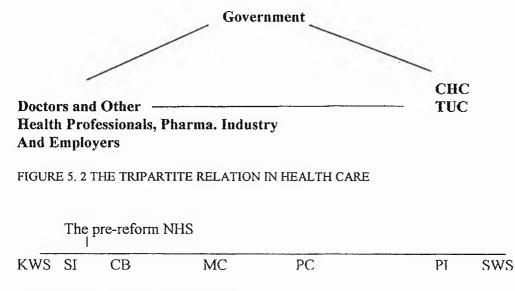
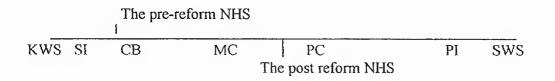


FIGURE 5.3 THE PRE-REFORM NHS

# 5.14.2. The Post-Reform NHS.

The introduction of internal markets covering the provision of all care coupled with the mixed economy of Primary Care led purchasing and would place the reformed NHS much closer to the Schumpeterian mould. Figure 5.4.



#### FIGURE 5.4 THE POST -REFORM NHS

The tripartite relationship however is little changed at this stage of the reforms as mention was not made of the Unions in Working for Patients, nor was there to be increasing power to patients. If anything the changes, as proposed, increased the power of the corporations by increasing doctor power via GP Fundholding.

# 5.14.3 Comparing Health Service Changes to Other Social Service Reorganisations.

## A. Housing

Under the Conservative Government, private ownership and private landlords were encouraged at the expense of Local Authorities (Deakin N 1994). According to the social thermometer, the reorganisation was considerably closer to Schumpeterian Welfare State Figure 5.5.

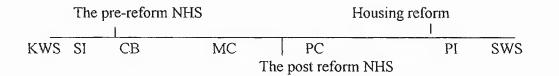
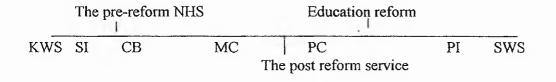


FIGURE 5.5 HOUSING AND HEALTH-CARE REFORM COMPARED.

## **B.** Education Services

Under the Conservative government schools were given the right to opt out and increasing parent power was encouraged. This was accompanied by an increase in regulation of the educational curriculum (Lowe R 1993). This would place education between the PC and PI on the social thermometer, Figure 5.6.



#### FIGURE 5.6 EDUCATION AND HEALTH-CARE REFORM COMPARED

C. Personal Social Services

In the personal social services arenas the emphasis on care shifted from the Local Authorities being the providers of care into being the enablers of care. This had the effect of increasing the private provision of care (Evandrou M and Falkingham J 1998). Therefore the reform of social services can be placed between PC and PI, Figure 5.7

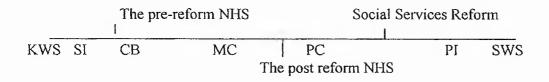


FIGURE 5.7 SOCIAL SERVICES AND HEALTH CARE REFORMS COMPARED

#### 5.14.4 The reforms compared

Comparing the reforms in this manner it is apparent that the reforms in health care are not as close to the Schumpeterian Welfare State as the reforms seen in social services education and housing. This difference may, in part, be due to different starting points. However all the services were part of the Keynesian Welfare State formed in 1948; therefore the starting points were similar. Instead other reasons must be sought for the change in the magnitude of reform. We have already commented that the NHS was perceived as being efficient in the standards of service being supplied relative to its funding when compared to the rest of Europe. This did not mean that the service could not be made more efficient and what was being sought was a redistribution of health care resources into the 'at risk' groups of the elderly, children and mothers. Therefore the aims of the internal market in health care would be different. This does not explain why, however, the NHS reforms are now apparently not supporting the overall mode of accumulation reflected in the other welfare reforms - i.e. that of an individualised enabling state.

### 5.14.5 The Reforms in Relation to the Economic Restructuring in the UK

The UK like many other European countries has undergone a radical economic restructuring in the 1980's and 90's. This change, amongst other factors such as the emergence of global economies, has led to the emergence of a new form of capital accumulation (Curwen P 1997). The change in the mode of accumulation is difficult to define in terms of the Fordist/Post-Fordist spectrum and is the subject of many debates. However the fundamental changes are established in terms of the mode of accumulation relying on new divisions of labour centred on a restructuring of work processes and a change in the labour market.

The changes seen in the restructuring of work processes involve increasing reliance on technology and a shift from manufacturing to service industries. These changes have been identified in the UK as a decline in the industrial base, with an increase in the financial and other service sectors. Facilitated by the change in the working processes the labour market has also changed. Increasingly the UK labour market is dominated by flexible working practices marked by declining unionisation of work, and increasing part-time employment. The shift in the labour market is also apparent by the numbers of women of childbearing age entering and remaining in employment (Burrows R, Gilbert N and Pollert A 1994).

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diam.

Under these circumstances some change in welfare provision is inevitable for, as was remarked above, the welfare state was formulated on the basis of a male dominated manufacturing-working base. Esping-Andersen argues that under the current regime the welfare services should act as a safety net for those in need and provide social rights to protect the individuals who are now much more subject to the fluctuations of a global economy (Esping-Andersen G 1990). This would argue that the changes in the NHS, along with the other components of the welfare state, should guarantee protection to those in need. This calls for a service closer to the Schumpeterian ideal, i.e. closer to the private insurance models that have been introduced into the other welfare services, as the role of the welfare state in this circumstance is to act as a safety net, while facilitating the achievements of the individual. This calls for a focus on the community care of the elderly – to allow families to work – and an extensive screening and prevention programme (Burrows R and Loader L 1994). However it is apparent that the NHS reforms were not developed along those lines.

#### 5.15 Conservative Strategy and Reform Policy

Faced with the plethora of market alternatives and the overwhelming evidence of economic change the Conservative Government under Margaret Thatcher chose a model of health care reform that was not in line with either economic system or society needs. There is no single reason for this (Timmins N 1995). However, there is some evidence that the desire to reform the services was tempered by the need to

administer it. In addition the formulation of Conservative policy to reform the NHS involved few of the interest groups and instead looked internally for ideas (Lee-Potter J 1998). Therefore it would appear that the Conservative method for selecting the way to reform the NHS differed very little from previous governments in having an ideology modified by what is best administered (Timmins N 1995) (Deakin N 1994). This effect would argue that the selection of policy across the institutionalisation was not consistent and influenced by the strength of the state – economy interaction.

## 5.16 Conclusion

The change in society since 1948 led many to doubt the value of the Consensus on health care provision. The pace of medical technology coupled with the increase in life expectancy also implied that financially the Consensus was too expensive to support. The solution of the incoming Conservative Government in 1979 was to replace the consensus with internal markets.

As internal markets are modified markets structures and a number of configurations are possible. The government selected a model which, at face value, appears not to fulfil the needs of society and economy in the supply and distribution of health care. The reasons for this are unclear. In part the lack of change may be due to the efficient nature in which the NHS was perceived to deliver services, but it is likely that political or social ideals of the NHS, together with administrative needs have prevented its further movement. This impression is confirmed by examining the model with respect to the institutionalisation. The selection of the model does not appear to be consistent with the institutionalisation of an internal market. A market institutionalisation would give equal emphasis to the partners in the tripartite relationship, but as we have discussed the model still supports the state- economy interaction that dominated the NHS prior to the reform. This leaves room for considerable modification of the effects of policy by the local actors. The impact of the lack of consistency, in institutional terms, institutionalisation is the subject of the following chapter.

1.16

### **CHAPTER 6 IMPLEMENTING THE REFORMS**

# 6.1 Key points from the Previous Chapter

The reforms proposed as a result of the Conservative policy debates regarding the end of the 1948 Consensus on universal health care were not as radical as first suggested. In particular the reforms retained the state-economy domination of the NHS, even though the aim of the reforms was to introduce competition and money following the patient. This effect results from the market model that was chosen on which to base reform. The market model that was selected by the reform process was closer to the Keynesian model than would be predicted by the ideology underlying reform. The inconsistency in the selection of the model is evidenced by the exclusion of the medical profession and civil society elements from the policy making process and the fact that the final product of the reform process was out of alignment with economic and social developments. The reasons behind the selection of a less radical model are not clear-cut; however, they appear to result from the pragmatism that was needed to establish the reform process. This reform process however allowed for considerable implementation ad hoc changes to occur.

## 6.2 Objectives for this Chapter

This chapter will review the implementation process of the NHS reforms, focusing on where the process may have had impact on the final shape of the reforms. At the end of the chapter the total effect of the reforms will be discussed from the institutional methodology introduced in the introduction.

# 6.3 Implementing Working for Patients

#### 6.3.1 Background

When published 'Working for Patients' was not a complete document. A series of working papers were published in the months following the release of the document containing the detail of the proposals. These covered the basis of the functioning of the market, the nature of contracting and the flexibility to be allowed. Whilst they provided guidance no details were included. It was assumed that the details would be added during the implementation process (The Minister of State and others 1989; Ham CJ 1992; Ham CJ 1992).

The key theme of these papers was the implementation of the reforms based on an understanding that the government was seeking the introduction of market incentives rather than the introduction of a full-blown market economy (The Minister of State and others 1989). The NHS, it was argued, had too many multiple objectives to be incorporated into a full-blown market economy, (Appleby J 1994). Therefore the government wanted to introduce a 'managed competition' style market as part of the implementation process. As such, this market was to cover the hybrid of market incentives and social objectives. These changes were to be accompanied by an increase in expenditure to cover the transition period (Ham CJ 1992).

In order to assure a smooth transition a gradual reform process was instituted and it was expected that the completion of the reform would take many years. This gave room for considerable change in the ethos of the implementation, and this is indeed what happened. In a way this was not unexpected. It has been argued that the 'Working for Patients' reforms were the product of a unique set of political and social circumstances – the combination of rising inflation and rising unemployment (Kavanagh D 1990). This picture was not sustained for long and a stable economy emerged in the early 1990's. This, some would argue, permitted the return of the Consensus style of welfare state and, therefore, some pragmatism should be allowed in the reform process, (Ellison N). However should also be noted that Margaret Thatcher was ideologically committed to the end of the Consensus and so the reversal of the reforms was unlikely (Thatcher M 1993). Furthermore, despite the declining inflation and improved economic conditions seen in the 1980's the NHS continued to come under criticism during the period following the reform and appeared to lurch from crisis to crisis. It has, therefore, been argued that the changes have more to do with a response to the problems seen in the NHS rather than a social change,(Webster C 1998), and as such it not surprising that the reforms represent a continually changing process.

Whatever the cause of the changes in the implementation process, several distinct phases can be made out. Each of these phases is associated with a particular style and political priority and series of events Table 6.1 Table 6.2.

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# TABLE 6. 1 LAND MARKS IN THE 1990 NHS REFORMS

<b>1990</b> June	The NHS and Community Care Bill receives assent.		
<b>1991</b> April	The reforms come into effect - first wave trusts and Fundholders are devolved.		
June	Guidelines on GP Fundholders referrals are established.		
	Draft of the 'Health of the Nation' produced		
<b>1992</b> April	Second wave GP Fundholders and trusts established.		
July	Health of the Nation white paper published.		
October	Tomlinson report published.		
<b>1993</b> February	Making London Better Published. Manpower review established.		
April	Third wave trusts and Fundholders.		
October	Managing the new NHS published.		
<b>1994</b> April	Final wave of trusts established.		
<b>1995</b> April	The abolition of regions.		
June	Total-purchasing pilots established.		
<b>1996</b> July	Shaping primary care documents published		
Modified from (Ham CJ 1992)			

2. 2.

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#### TABLE 6. 2 CHANGING POLITICAL PRIORITIES DURING THE NHS REFORM

POLITICAL LEAD ON THE NHS	PRIORITY	
Margaret Thatcher	Competition and Markets	
Kenneth Clarke	Reforming Primary Care	
William Waldegrave	The Health of the Nation/Performance	
	Targets	
John Major	The Patients Charter	
Virginia Bottomley	Community Care	
Gerald Malone	Primary Care	
Stephen Dorrell	Reducing Management	

Modified from (Ham CJ 1992)

The phases of NHS reform, while appearing complex, can be broken down into several themes. These themes are

- Early phase
- Implementing reforms and market protection
- Performance targets and one nation conservatism
- Primary/community care
- Reducing management.

# 6.3.2 The Early Phase

#### A. The Finalisation of the Bill

The early phase is where the bulk of the reform process was accomplished. This period lasted from early 1990 to June of 1991. It represents a period of structural change with a focus on competition and primary care (Ham CJ 1992).

The period begins with the introduction of the legislation into parliament. Working for Patients was incorporated into the National Health and Community Care Acts 1990 (Webster C 1998). This Bill not only contained the elements of Working for Patients but also included ideas from an earlier White Paper published in 1987 (Secretaries of State for Social Services 1987). Promoting Better Health aimed to raise the standards of primary and community care, and to place a greater emphasis on prevention and health promotion. The key element to these changes was the introduction of new contracts for GPs and dentists. The new contract for GPs was published at the same time as Working for Patients. It included provision for health checks for patients over the age of 75, targets for vaccination and cervical cancer screening and encouragement to develop more health promotion activities. Other features of the new contract involved incentive payments for deprived areas, additional money to employ practice staff and improvement to practice premises. In return GPs were expected to produce annual practice reports and information leaflets for their practice and ensure standards of service. Overall the effect of the new contract was to increase the proportion of capitation payments by GPs from 46% to 60%. This was designed to provide an incentive for GPs to target services for patients (Ham CJ 1992; Lee-Potter J 1998).

The new dental contract, like the GP contract emphasised the need for preventative as well as restorative procedures. Children's dentistry was to move to a capitated system instead of a fee for service. The cost of this change was to be met partially by the introduction of adult dental charges (Klein R 1995)

Parallel to the changes in the way in which clinical care was delivered the Bill enacted changes in the way in which community care was provided. It was now the local authorities that were responsible for community care services. This change followed on from a report produced by Griffiths in 1988 – Caring for People (Griffiths R 1988) These changes would be developed hand in hand with new funding arrangements. Under

these arrangements there was to be no financial incentive to admit people to private and voluntary care with the bill falling on Social Services. Instead individuals would be entitled to income support, regardless of where they lived. However, Local Authorities were given greater powers to charge for services and apply tests of need (The Minister of State and others 1989).

The NHS and Community Care Act was presented to parliament on a take it or leave it basis and to the surprise of many the Bill was passed in June of 1990 with minimal changes. This was largely due to the clever publicity campaign launched by Kenneth Clarke and the decision by the British Medical Association (BMA) to tackle the changes in the implementation phase (Webster C 1998). However the passage of the Bill only started the implementation process and it was not clear at this stage what the final workings of the reforms would actually look like (Webster C 1998). Instead the Bill laid out the new structure, Figure 6.1, together with the ground rules for operation.

# SECRETARY OF STATE FOR HEALTH Department of Health Policy Board NHS Management Executive Via outposts Special Health Authorities District Health Authorities DHA Services Authorities (FHSA)

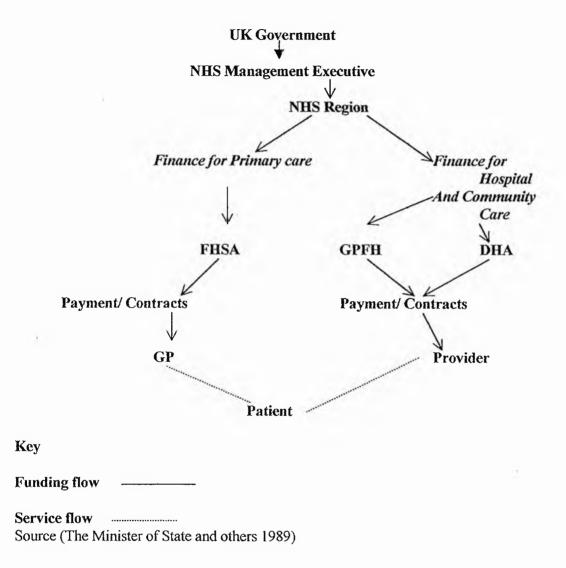
Key accountability and management lines\_\_\_\_\_ Source (The Minister of State and others 1989)

Underlying this change was the development of an internal market, the structure of which

is outlined in Figure 6.2.

# FIGURE 6.1. THE STRUCTURE OF THE NHS POST 1990

## FIGURE 6. 2 THE STRUCTURE OF THE NHS MARKET



The foundation of the functioning of the internal market was detailed in the Act. These were identical to those in Working for Patients (The Minister of State and others 1989). In brief these were

#### 1. The Separation of Purchaser and Provider Roles

Prior to the reforms the Health Authorities received a fixed budget with which to manage the hospital and community health services. The requirement was that they remained within budget and provided an appropriate standard of care. The direct management of providing services achieved these aims. Post reform the District Health Authorities were responsible for providing care via contracts from independent provider units. In effect District Health Authorities became the purchasers of care, using a budget that reflected the age and size of their local population.

#### 2. Increased Financial Flexibility

The trusts in theory had a greater degree of financial flexibility. In practice, however, this was limited. The financial regime the trusts were established under was one of price equals cost. This restricted the ability of the trusts to establish premium pricing and allow specialisation. The financial operation of the trusts was also controlled by the manner in which the trusts could raise funds for new developments. The reforms permitted trusts to borrow money - enabling the development of capital intensive services. However the trusts were requested to borrow money from the most financially sound source - which in effect limited them to the treasury. Trusts were also given an External Financing Limit (EFL) - a calculated figure based on the asset value of the trust. This restricted the level of the borrowing and hence development. Finally trusts were requested to make a 3% return on the use of capital assets. These 'Capital Charges' were imposed to make hospitals aware of the cost of capital - but in effect they made trusts unwilling to invest in new services as their costs would rise.

### 3. Labour Practices Flexibility

The trusts were no longer bound by the Whitely council rules and instead could set the pay rates they wanted. In addition, trusts were encouraged to look at the required skill mixes to deliver the services. This included the use of National Vocational Qualifications.

### 4. Managerial Flexibility

The managerial flexibility reflected the change to direct management. In trusts therefore, managers were accountable for the signing of contracts. In order to achieve this a new performance management system was established. The NHS management executive was now responsible for the performance of trusts; they set the financing limits and monitored contracts. It was made clear that trusts did not come under the remit of the Regional Health Authorities but that the RHA was present to resolve disputes and monitor performance.

### 5. Contracting for Care

The basis of the market mechanism was the use of contracts to procure services. The view of the Government was that they were not legally binding. Therefore rather than viewing them as contracts the arrangements can be viewed as service agreements.

The agreements between purchasers and providers were of three types (The Minister of State and others 1989).

### 1. Block

The payment of an agreed sum to deliver a defined range of services.

2. Cost and volume contracts

These involve the payment of a sum to deliver a specified volume of work.

3. Cost-per-case contracts

Equivalent to fee for service.

Outside of these formal arrangements a fourth type of payment was made available. These are the Extra Contractual Referrals or ECRs. This, in many ways, is the most controversial aspect of purchaser payments. ECRs are referrals by GP's and hospital consultants to hospitals with which the parent DHA has no contract. The DHA is responsible for approving such payments, except in the case of Fundholder procedures. DHA's are required to develop procedures to deal with these referrals and determine how much money should be set aside to deal with such referrals (Ham CJ 1992; Webster C 1998).

The contracts were constructed on activity target - using a currency known as the Finished Consultant Episode (FCE). This contracting currency counted the number of times a consultant hospital team saw a patient within a treatment episode. Therefore a single inpatient visit amount to several FCE's. It was therefore difficult for purchasers to take the population figures and directly extrapolate the activity levels within the contract. In most cases therefore, contractual levels were based on historic activity - leaving the service with a supply-side focus. The use of the FCE also impacted the ability of the NHS to cost the services provided. The FCE bears no relation to the

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resources consumed by the patient and makes the running of the market difficult.

## B. After the Bill - implementing the reform

Shortly after the final contents of the Bill were made public, Dr. Duncan Nichol was appointed to oversee the implementation of the reforms. Until the time the Bill became law Dr Nichol made a number of suggestions to the reforms, however, at the time of the assent of the acts as it was still unclear how the reforms would work in practice. The implementation of the reforms was made more complex the "wait and see" policy of the British Medical Association and the Royal Colleges. Therefore the passing of the Bill was only the start of the process of reform (Timmins N 1995).

Shortly after the passage of the Bill the BMA and the Royal Colleges launched the opposition campaign. This centred on the fact that the NHS was being dismantled and that the Government was embarking on a policy that would inevitably lead to privatisation (Lee-Potter J 1998). While this campaign was successful with the public, it was apparent that the ranks of the medical profession were split. This split was at two levels, primary care and hospital services (Timmins N 1995). By December 1990 the size of the primary care split was apparent as over three hundred practices indicated a desire to become Fundholding - a sizeable minority (Ham CJ 1992). The opinions of the hospital consultants were also divided, as many saw the moves as a return to the situation prior to the 1974 reforms – where some hospitals were self governing (Lee-Potter J 1998). The magnitude of the divisions were such that the medical profession was unable to mount a co-ordinated response to the change, and so despite opposition were unable to alter the reforms (Klein R 1995).

Opposition from the Trade Unions and professional bodies was also muted. The Union power declined during the Thatcher years and with the onset of local pay bargaining and the reduction in power of the Whitely Councils the Unions were in effect disenfranchised (Webster C 1998).

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The medical advertising campaign and the frustration of the Unions coincided with the onset of the Labour Party opposition. The Labour Party launched into an expensive media campaign, but with Union strength decreased, the medical vote split and no election in sight, the campaign did not succeed in making an impact (Webster C 1998).

Despite the muted victory over the opposition, considerable concern still lingered within the Tory Party – particularly over the effects that changes would have on community care and the administration of the system. Despite this Margaret Thatcher would not back down at this stage, arguing that the political price of change would be too high. So the Government pressed ahead with the reforms when many in the Cabinet would like to have seen the pace of reformed slowed (Thatcher M 1993). Some concessions were given, however. The Griffiths report of 1988, which formed the basis of the community care services in the 1989 Act, recommended an aggressive change schedule (Griffiths R 1988). In practice this involved a difficult untangling of responsibilities, which would take longer than anticipated. Therefore, compromises were developed that involved the partial funding of care by transfers of funds from the health to the social services budget (Webster C 1998). This still left community care vulnerable to budget shifts, and the sucking in of funds by an expansion in the acute services. The need to re-negotiate the community care provisions pushed back

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the implementation dates for the community care programme to 1993.(Timmins N 1995)

The delay in the implementation of community care marked the end of the first phase of health care reform. The financial crisis of 1990, the social unrest over the poll tax and the decline in Margaret Thatcher's popularity forced her out of office later that year (Thatcher M 1993). Her replacement – John Major – had different views on the NHS reforms and his appointment marked a new phase in NHS reform (Ham CJ 1992). However it should be noted that at the time of the change in Downing Street the reforms were unchanged from the Working for Patients ideal (Thatcher M 1993) as the market remained un-segregated and the role of the DHA as market manager was defined. This was a situation that was set to change as the implementation proceeded

#### 6.3.3. Phase 2 Implementing Reforms and Market Protection

The first trusts were established on the 1 April 1991 (Webster C 1998). On that day 57 trusts were established. The first trusts included acute and community services, ambulance authorities and services for those with learning disabilities. The first trusts were, quite frequently, of a combined nature in line with Working for Patients (The Minister of State and others 1989). However, the establishment of these trusts displayed a weakness in the system. At the outset it was apparent that the vulnerability of the community services in combined trusts had been underestimated (Klein R 1995). This was shown by some funding failures, in which community services were sacrificed to the benefit of acute services. This situation was changed

for the second-wave trust selection when no combined trusts were allowed (Ham CJ 1992). This however, created some small trusts and required greater involvement of the DHA and more intense regulatory and market intervention. In effect this action created a segregated centrally controlled community care market (Klein R 1995).

In response to the problems seen in the establishment of the trusts, it became apparent that the development of District Health Authority purchasing should be delayed while the trusts developed (Ham CJ 1992). A gradual process of purchaser change was initiated in which the main aim was to clarify managerial responsibility, while not encouraging market behaviour (Klein R 1995). The initial phase of the new implementation programme involved the devolution of responsibility to provider units supplying care by a redistribution of staff between district headquarters and provider units. Therefore, initially the management of the NHS separated - with only a small core remaining in the District Health Authority. The resulting purchaser and provider management then formed a hybrid intermediate tier until the trusts could be formed. Hospitals in this hybrid role were termed Directly Managed Units (DMU). While potential trusts existed as DMU, the DHA remained responsible for the financial integrity of the unit (Ham CJ 1991). What little development in DHA occurred before 1992 was focused around Project 26, (East Anglia Regional Health Authority 1990). This project brought together DHA's to share thoughts and feelings about purchasing, however it did not make concrete recommendations and focused on coping within the existing structures (Ham CJ 1992).

In contrast to the problems seen in the DHA and trust development programmes, the GP Fundholding developments proceeded at a pace. In Working for Patients it was

envisaged that only practices of 11,000 patients would be eligible (The Minister of State and others 1989). This was rapidly reduced to 7,000 patients and practices were permitted to join together to reach the target number. The range of services on offer was also widened (Glennerster H Matsaganis M Owens P Hancock S 1994). Initially only practice expenditure, drugs and a limited range of elective therapeutic and diagnostic procedures were included. This was widened in 1991 so that most nonacute surgery and some medical services were included. However, in the face of concerns about financial accountability the scheme was changed. Practices were forbidden from becoming private companies and were made more financially accountable to the DHA (Glennerster H Matsaganis M Owens P Hancock S 1994). These changes placed DHA's in the ambiguous position of being both funder and regulator of service provision. The relative lack of experience of DHA's in both roles - coupled with the pressure from GP Fundholding, led many health authorities to merge and establish purchasing schemes in conjunction with the Family Health Services Authorities (Ham CJ 1992). In a number of places this led to the creation of joint management bodies for the purchasing of health services. These 'commissioning' bodies took on the majority of non-statutory purchasing roles and sought to simplify the management structure. However they did create ambiguity and conflict within the system as both primary and secondary care were fundingdependent upon a single authority (Glennerster H Matsaganis M Owens P Hancock S 1994).

#### 6.3.4 Phase 3 Performance Targets and One Nation Conservatism

In response to the problems faced by DHAs major changes were made in the structures surrounding purchasing (Klein R 1995). These mark a new phase in reform development and represent changes in purchasing and access. These changes were brought about not only by concerns over the management of the service but in an attempt to quell public concern over the care of patients (Ham CJ 1992).

## A. Changes in Purchasing

The first change was the publication of The Health of the Nation (Department of Health 1992). The Health of the Nation was put forward as a health strategy for England. Its role was to clarify aims and responsibilities as well as providing a framework to focus action upon and measure performance. It centred on the

- Identification of health problems
- A focus on good health and health promotion
- · A need for greater co-operation between responsible parties
- Securing the best use for available resources.

Implicit in these tenets was the need to focus on health gain, the involvement of local people and the dissemination of adequate information to ensure choice. The achievement of these goals was to be brought about by the setting of specific targets for reductions in the mortality and morbidity of diseases, that the government's medical advisors considered were significant. Hence targets were set for:

- Coronary heart disease
- Cancer
- Stroke
- Accidents
- Sexually transmitted diseases
- Mental health
- Reduction in factors known to influence ill health such as smoking, dietary problems and lack of exercise
- Improvement in the health of pregnant women

The effect of the publication of this health strategy was to give purchasers a clear set of objectives, against which their performance could be measured.

The second change came about as a result of the publication of The Tomlinson Report on hospital services in London (Tomlinson B et al 1992). This report sent a clear signal that the over-provision of services was no longer to be tolerated, and rationalisation of services must occur. This signalled the end of the gradual process of DHA development and encouraged purchasers to be more aggressive to reach the targets set in the Health of the Nation.

The use of health-related performance targets was matched by the use of financial targets concerning the use of funds. In the years up until 1990 the DHA were obliged to stay in financial balance. In the years after 1991 DHA were obliged to increase efficiency by 3% each year by purchasing more activity for the same financial outlay (Appleby J and Little V 1993).

The last change in purchaser development came in 1993 with the Costing for Contracting Exercise (NHS Executive 1993). The development of the market had permitted a range of costing arrangements to evolve. Costing for Contracting aimed to place these arrangements on a uniform basis.

The overall effect of the changes was to increase the centralisation and uniformity of purchasing services (Klein R 1995) (Appleby J 1994). This centralisation was achieved by the use of standardised costing and performance management in both finance and clinical areas. The DHA were no longer running a local market, but contributing to a national market under the control of the seven outposts of the management executive. If performance management targets were not met the DHA faced the prospect of either reductions in funding or enforced changes in management (Bartlett W and Le Grand J 1994).

#### B. Changes in Access – One nation Conservatism

Increasing criticism over the lack of patient rights in the NHS led to demands for rights of access to services. John Major developed the idea of the Patients Charter – guaranteeing the rights of patients to standards of service (The Secretary of State for Health 1991). These standards were national and reflected the idea of Britain as a community of equal rights. The Patients Charter was also seen as a way of addressing any imbalance in the state-economy relationship, thereby increasing market ethos (Glennerster H 1998). However it reduced the flexibility of purchasers and providers. Therefore, paradoxically – the Patients Charter increased the central management of services (Klein R 1995).

Taking these changes into account, by the end of the third phase of reform a fundamental shift had occurred in the NHS reforms. The original reforms were aimed at generating a locally flexible market. However, the unexpected results of the reforms in terms of the vulnerability of community services, difficulty in administering the services and patient concerns over the equity and standards of service (Powell MA 1997), forced a change leading to the development of a centrally regulated market (Klein R 1995). This required a change in the emphasis of the market - the development of primary and community care - if the objectives of market development were to be sustained.

## 6.3.5 Phase 4 Primary and Community Care

It was originally intended that the reforms to community care would be implemented at the same time as the introduction of changes to hospital care. However, the public outcry caused by the introduction of the poll tax led to the delay in the implementation of the reforms until 1993 (Thatcher M 1993). In 1993/94 £399 million in funding was transferred from the Health to the Social Security budget to facilitate the change (Ham C 1994). An additional £140 million was also made available to fund the changes. However the funding transfers did not work well and the situation led many local authorities to rationing care (Powell MA 1997). This situation has been made more complex by the ending of income support to those in long term care. Local authorities now had a fixed budget in which to plan care, and like the problems associated with the use of the FCE, the lack of ability to cost services left major problems in balancing the budget (Powell MA 1997).

The response to these problems did not involve a change in the overall market ideology, but forced a change in the market itself (Timmins N 1995). In 1993 increased emphasis was placed on protecting community care. Health Authorities were required to demonstrate a commitment to developing community programmes in their purchasing and business plans for 1994/5 (Wessex Regional Health Authority 1993). The response to this has been the establishment of 'Joint Commissioning' to ensure a consistent approach to allocation by both Local Authorities and Health Authorities (Southampton Health Commission 1993). This has further increased the ambiguity of the health authority position as it is now in the position of both contracting and distributing funds. It has also changed the dynamics of the interactions by further increasing the central control of the market, as the authorities are required to make regular reports on the progress of community care.

#### 6.3.6 Phase 5. Reducing Management

By late 1995 it was apparent that the cost of reform was higher than had been anticipated (Webster C 1998). Faced with mounting criticism over the apparent waste of resources and the overburdening effects of management the focus was turned on the market administration. The RHA tier of management was removed – increasing the centralisation of the market - and purchasers were encouraged to make their management costs less than 2% of the overall revenues.

The changes at DHA level increased the emphasis on the GP Fundholders. The Fundholding system was seen as efficient, and not overtly managerial in nature (Glennerster H Matsaganis M Owens P Hancock S 1994). The success of the limited GP Fundholder system led many to question whether DHA were needed at all (Timmins N 1995). In an attempt to resolve this controversy Total Purchasing pilots led by GPs were established, the results of which have suggested that total purchasing is an efficient way to manage resources. In other moves GPs were encouraged to provide a wider range of services and all practices were given the option of having a drugs budget. Therefore primary care was made centre stage on the political agenda (Timmins N 1995; Rivett G 1998). The effect of the emphasis placed on primary care was to further complicate the market - making regulation more difficult. Paradoxically the DHAs were encouraged to be the enablers of care – increasing the centralisation of the market, while at the same time encouraging the development of Fundholding (Klein R 1995). Given these developments it was hardly surprising that the government was accused of 'making it up as they went along'. This situation prevailed until the general election of 1997 (Ham C 1994).

### 6.4 The Result of the Implementation Process

The final product of the reforms - reached in 1997 - differed substantially from what was imagined in 'Working for Patients'. The NHS and Community Care Act established a system of purchasers and providers, but the market incentives were not what were envisioned and the market was more centralised than initially conceived (Bartlett W and Le Grand J 1993;Glennerster H 1998). The reasons for this include

## 1. The Patterns of Contracting

The protection of the trusts in the early phase reduced flexibility in terms of contracting. This resulted due to the DHA being left responsible for the Directly Managed Units, DMU, for a considerable period of time, during which patterns of purchasing were established that, given the regulation of the market, would prove difficult to change (Ham C 1994).

## 2. The Market Complexity

Establishment of community trusts, to protect politically sensitive community funds, and GP Fundholding caused the market to be very complex and increased the role of central management by the RHA and NHS Management Executive (NHSME).

#### 3. Market Incentives.

The incentives to use block contracts, compounded by the contracting currency that was used, led to the market incentives of price and cost not developing (West P 1998).

#### 4. Information Imbalance.

The lack of information and emphasis on quality further enhanced the supply side features of the market.

#### 5. Reduced Flexibility and Increased Management

The separation by the reforms of community and hospital services reduced the flexibility in the service and created a number of small trusts that require intensive market management if they were to survive (West P 1998).

The majority of these deviations resulted from the actions of the organisations that surrounded the implementation process and represent ad hoc attempts to make the market work. (Jenkins S 1995) (Douglas HR Humphery C Lloyd M Prescott K Haines A Rosethal J Watt I 1997). This provides evidence for post – policy modifications and supports the argument that the changes seen in the NHS reforms in the 1990's result from the failure of a coherent policy (Black D 1992). However, deviations from a market model were acceptable to the administration as they were within the broad ideology of markets and made the system manageable. Indeed it was commented that Margaret Thatcher was so ideologically committed to markets she was prepared to accept them at any price (Timmins N 1995;Lee-Potter J 1998).

# 6.5 Where Did the Reforms End-up on the Social Scale in Institutional Terms

Referring to the spectrum of the KWS and SWS it is apparent that the reforms were closer to the KWS than envisioned during the development of the reforms - as discussed in chapter 5. The differences seen were mainly due to the reduced flexibility, the degree of centralisation and the features of supply side management required to make the reforms work. In other words the purchasers were being requested to deliver a centrally mandated and planned service, with Keynesian elements - a focus on access - and dominance by the supplier (Glennerster H 1998). This was enhanced by the failure, as part of the reforms, to establish clear legal rights within the system and the reduction in purchasing powers of the DHA as a result of the way in which Fundholding was established (Bartlett W and Le Grand J 1993).

In terms of the social thermometer introduced earlier the reforms seem now to be far closer to the competitive bidding process, rather than managed competition.

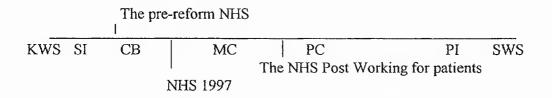


FIGURE 6.3 THE NHS 1997, PRE REFORMS AND POST WORKING FOR PATIENTS

## 6.6 Conclusion

The conclusions of this chapter are

- There is evidence of post-policy modifications in the NHS reform process. These
  modifications are in response to either unexpected effects of policy or changes
  needed to make the system more manageable.
- These modifications appear to result from the lack of consistency of policy across the players in the NHS policy process. Using the analytical framework proposed, this lack of consistency is manifest as an emphasis on the state-economy relations
- 3. The way in which the reforms of the NHS were implemented permitted considerable post – policy change. The lack of consistency that was evidenced by problems in the institutionalisation allowed this post policy change to divert the

reforms from their original purpose and into actions that favoured the administration of the service.

The final analysis of the outcome of the reform process emphasises the fact that the NHS was now out of kilter with the rest of the welfare state, and was no longer associated with the support of a mode of accumulation based on individual empowerment. In reviewing the development of the modem welfare state many analysts have indicated that this situation is the ideal developing ground for exclusion and marginalisation within the welfare services, and that the development of this marginalisation is a critical feature of why reforms fail (Esping-Andersen G 1990). Therefore, before proceeding further into a discussion on the success or failure of reform it is important to review the effects that the changes have had on the delivery of services. This is the subject of the next chapter.

#### **CHAPTER 7** THE IMPACT OF THE REFORMS

# 7.1 Key points from the Previous Chapter

The NHS reforms were established to bring a sense of market forces into the functioning of the NHS. These reforms were, however, changed by the political, administrative and social environment that surrounded the service. The final structure can be characterised – in accordance with the institutional methodology – as lacking consistency in policy across the organisations involved, and of a service not in alignment with the remainder of the welfare state. These findings would argue that the NHS reforms lacked some of the features of a market based reform structure.

However, the outcomes of the reform process does not mean that the NHS did not functionally support the new role of the state, as for the most part the function of the service is independent of its structure, as evidenced by the post-policy modification of the NHS reforms. Therefore, before concluding anything about the 1990 reforms the function of the service should be reviewed.

## 7.2 Objectives for this Chapter

The purposes of this chapter are to review the performance of the reformed NHS against the requirements established at the beginning of the reform process, the requirements of a modern welfare state, and the needs of society.

# 7.3 Introduction - The Objectives of the Reform

The previous two chapters reviewed the development and the implementation of the reforms. As we have commented the reforms were implemented to introduce market incentives into the NHS. The objectives of this move were to (The Minister of State and others 1989),

- 1. Introduce the concept of the money following the patient dependant upon market values.
- 2. Increase efficiency using competitive pressures.
- 3. Decrease the power of local governments.
- 4. Introduce selectivity with an emphasis on the young and the elderly.
- 5. Introduce labour flexibility.

As we have seen the implementation of the reforms produced some further objectives (Appleby J 1994)

- 1. The protection of community services.
- 2. The implementations of GP Fundholding as a managed care experiment.
- 3. The provision of specific health and funding targets.

These features were not made explicit in 'Working for Patients' (The Minister of State and others 1989).

## 7.4 Reviewing the Impact of the Reforms - the Metrics

In reviewing the reforms it is important that the objectives of reform are borne in mind. However, many of the objectives of reform are quite soft – for example the protection of community services. Therefore, in order to give sufficient objectivity to any study of the impact of the reforms the metrics used must be sensitive to these key issues. The assessment of the impact of the reforms on the performance of the NHS has been made more difficult by the lack of objective research. Some researchers have even gone as far as to suggest that the lack of research has been deliberate (Le Grand J and Robinson R 1984).

In light of these problems, two sets of measures have been employed by reviewers; direct measures on services and indirect measures on the development of the market (Powell MA 1997). In summary, the measures applied are (Ham C Robinson R and Benzeval M)

- 1. The strength of market forces.
- 2. Changes in labour flexibility.
- 3. The development of local providers including community services protection.
- 4. The delivery of care to priority groups.
- 5. The development of equity
- 6. Measures of efficiency.
- 7. The impact of the changes on mortality and morbidity

## 7.5 The Results of the Assessments

#### 7.5.1 The Development of Market Forces

The central tenant of the market reforms was the introduction of contracting for services. Appleby has shown that the majority of both DHA purchasers and providers conducted contracting using specialist teams (Appleby J 1994). The composition of the team was dependent on the experience of the facility in contracting out. The teams included financial and public health expertise. However the effectiveness of the financial controls has been brought into question. Reviews have indicated that many managers are ill equipped to deal with their financial tasks (Marriott N and Mellett H 1994). Given this background, the major problems faced by the contracting teams within the DHA were the

- Lack of information on the needs of the local population, its preference for current services and the performance of hospital units.
- Conflict between purchasers and providers over the importance of services and how they should be provided.
- Difficulties in the assessment of service quality, and the mechanisms to include quality in the contracting process.
- Difficulties in adjusting DHA contracts for GP Fundholder activity
- Conflict with central priorities in as the need to demonstrate performance runs against local needs.

(Adapted from (Best G Knowles D Mathew D 1994))

As a result of these problems, the impact of competition in the service has not been as large as expected (Le Grand J and Vizard P 1998; West P 1998). Appleby used the Hirchmann-Herfindal index to assess the strength of competition introduced by the reforms (Appleby J 1994). Their study – based in the West Midlands – showed little change in competition and in potential competition pre- and post-reform, with a quarter of hospitals being in a monopoly position.

These findings were emphasised in the research of Bartlett and Harrison in 1993. In a health authority based study, the market resembled a bilateral monopoly. There was little by way of competitive bidding processes and there was much evidence of non-market interactions - with deals often being struck between purchasers and providers (Bartlett W and Harrison L 1993). These deals were often conducted in the full knowledge, if not encouraged by the NHSME. In this manner many of the difficult political problems of hospital closure could be avoided (Ham CJ 1992).

In addition to highlighting the apparent monopoly position of providers of care, all of the studies performed on DHA purchasing have emphasised that the development of market forces was made more difficult by the lack of information. In addition the reviews have found that large transaction costs are associated with contracting (Appleby J 1994; Bartlett W and Harrison L 1993). This makes the exact nature of the contractual relationship difficult to understand, however both Appleby and Bartlett have indicated that the market was biased in favour of the local hospitals and suppliers of care.

Similar findings have been made in the study of contracting by GP Fundholding (Audit Commission 1996). The Audit Commission report on Fundholding found that

while in general GP Fundholders were best placed to contract for the care of patients in their practice, the lack of information contributed to problems in defining contracts and left the providers of care in a strong position. The relationship of GP and DHA contracting was also not helped by the way in which the guidance for the funding of practices had been inconsistently applied – leading to some practices being over funded, and others under. The lack of accountability of Fundholders in this aspect has made the situation difficult to rectify and had a negative influence on contracting (Audit Commission 1996; HFMA 1994)

Taken as a whole the studies of both Fundholding and DHA purchasing would argue that market forces have been slow to develop and, where present, they are weak and decision making is dominated by supplier pressure (Appleby J 1994 West P 1998). The problems in DHA contracting and market development led to a failure of the market to direct funding flow and the absence of 'money following the patient'. In a study of regional neurosurgery, Adams commented that the structure of the market penalised efficient units. Many hospitals have demonstrated efficiency gains every year without merit for previous gains being granted. In addition those units capable of attracting private income have had no incentives to do so. Indeed it has been remarked that the accounting rules introduced, as part of the market changes, acted as a disincentive for the generation of private income (Adams CBT 1995; Appleby J Little V 1993). The authors of other studies have also doubted that market forces were sufficiently developed or well managed to allow the purchasing of clinical services (Audit Commission 1994; Clinical Standards Advisory Group 1993).

Experiences, such as that reported by Adams, have called into question the

effectiveness of the market developments. Reviewers have commented on the fact that far from market reforms, purchasers and providers have suffered under a stream of central commands (Best G Knowles D and Mathew D 1994). In addition the Government intervened at times where it looked as though market powers would result in unpopular decisions, and failed to intervene to protect services as needed. Ham and Maynard have argued that in this the Government have not acted as a regulator of the internal market but that the internal market has become politicised in a way that protected the provision of services, (Ham C and Maynard A 1994).

The key example of the politicisation of the markets has been the impact of performance management (Propper C 1995). Appleby and Sheldon commented on the way in which performance measures, such as the efficiency index, were applied led to short-termism and political gain without contributing to market regulation or the efficient distribution of resources (Appleby J, Sheldon T and Clarke A 1993; Donaldson LJ, Kirkup W, Craig N and Parkin D 1994). It is a similar situation with regard to measures such as the Patients Charter, where the introduction of minimum standards has led to the weakening of market incentives (Laing AW and Shiroyama C 1995). Where performance targets have been introduced with a linkage to health care, for example the Health of the Nation, these targets were secondary to the activity targets and introduced without guidance or indication about importance or incentives to achieve them (Ham C 1994). It would therefore appear that the use of performance management has the primary political aim of influencing the state-economy interaction. This acts to augment the position of the providers of care in the new market and re-enforces their monopoly position (Propper C 1995).

## 7.5.2. Developments in Labour Flexibility

The NHS personnel function was altered by the reforms. Prior to the reforms, the personnel function was by and large limited to the selection of staff. Post-reform, the roles expanded to include employee relations, skill mix reviews and pay determinations (Lloyd C and Siefert R 1992).

## A. The Control of Staff Levels and Skill Mix

The self-governing provider units were established in part to exhibit a greater freedom in employment practice (Buchan J 1992). However these aims were thwarted by the conflict engendered between professional groups present in the provider units (Ham CJ 1992).

The development of labour flexibility was easier in some areas. In radiology, the establishment of Radiography Helpers was a key example of this (NHSME 1992a). However, at the forefront of the debate about skill mix were professional concerns about the quality of care being delivered. National reviews have shown unexpected downturns in the numbers of staff in some groups, for example qualified nurses, after skill mix reviews. In addition if national initiatives, such as the NHS management executive value for money unit recommendations were to be applied there would be a further decline in nursing staff (Secombe I and Buchan J 1994).

Despite the resistance, some changes have been made. In place of skilled staff, health care assistants (HCA) are employed in some units. These generic support workers are

not linked to any one profession but to a general National Vocational Qualification (NVQ). They are envisaged as providing flexibility and not bound by the terms and conditions of professional staff (Industrial Relation Services 1992). These attempts to achieve flexibility, in terms of supporting a market function, have not been well assessed. Some researchers have pointed to a reduction in the quality of care administered and an increase in in-direct costs (Carr-Hill R, Dixon P, Gibbs I, Griffiths R, Higgins M, McCaughan D and Wright K 1993).

The development of labour flexibility is in direct conflict with the performance management of the market. As stated above, one of the ideals of performance management is to increase throughput. As this reduces in-patient stays, to achieve a higher turnover of patients a return to highly skilled, specialist, staff may be needed, as these staff will facilitate rapid patient discharge. Balancing this view is the perception of skill mix review as a way of reducing short-term costs – and therefore any claims about flexibility must be treated with caution. In addition it is possible that any claims that the NHS reforms have been responsible for increased flexibility may be overstated as changes in nursing, medical and allied staff education was already beginning to have an effect on skill mix prior to the reforms (Buchan J 1992). It is therefore not possible to divorce the changes in labour flexibility from the impact of political short-termism.

## **B.** Employee Relations and Wage Determination.

Prior to the reforms in the NHS employee relations was centrally determined. The Whitley system of national councils set wages for non-professional staff and settled disputes. For those staff not covered by Whitley Councils, pay review bodies were established in 1973 (Webster C 1998). The Whitley Councils and pay review bodies were comprised of senior NHS management, Unions and professional bodies such as the BMA. All negotiations took place at a national level. The pay review bodies were seen as the ultimate NHS inflexibility – and so were prime targets in the reform process (Thatcher M 1993). The 1990 reforms gave local flexibility for bargaining and shifted the focus of employee relations to the local level (The Minister of State and others 1989). However, reviews have indicated that there has been no rush to move from the Whitley Council system. This was in part due to the rights of employees to remain on previous terms and conditions when the trusts were established (The Minister of State and others 1989). But it also reflects pragmatism on behalf of managers for whom the changes meant an increased workload (Lloyd C Some units, however, have moved towards 'single table and Siefert R 1992). agreements' under which all employee relationships are dealt with in a single negotiation process, in line with NHSME expectations (Secombe I and Buchan J 1994). Despite this most trusts retained pay body recommendations. What change has occurred may be more due to the relaxation of rules on payment of the rises - which now are often staggered. This ability was introduced prior to the reforms and so cannot be claimed to be a result of the reforms themselves (Secombe I and Buchan J 1994).

In summary it would appear that the NHS reforms have not increased labour flexibility. This is partly due to the centralised state demands and the political aims of change, but a proportion is due to the lack of skill at local level. What changes have occurred appear to be stimulated by pre-reform changes. These pre-reform elements have helped to increase the strength of the provider relationship.

## 7.5.3. Developing Priority Services and Protecting Community Services

One of the principal objectives of the reform was to target resources into priority areas. These priority areas are well defined and include the care of the elderly, maternity services and the care of the mentally ill. Reviews of the achievements in this area take a variety of forms, however most have concentrated on the direct provision of services. These reviews indicate, in general, that while the acute services have been well protected, there are some concerns about the availability of community services for the elderly and mentally ill (Williams G, Flynn R and Packard S 1997). These problems appear to have arisen due to barriers between the acute and community services that have arisen as a result of the reforms (Best G, Knowles D and Mathew D 1994).

1. Services for the Elderly

Jones, Lester and West reviewed services for older people (Jones D 1994). The review took the view of a close examination of community services. The community service review questioned users on the availability of services. There was a great deal of satisfaction with the primary care services, including GPs and district nurses. However many reported increasing difficulty with other paramedical services since the reforms started – for example, chiropodists. The problems faced by the elderly have also been highlighted by surveys conducted by Age Concern. These studies would indicate that the NHS is no longer supporting the elderly in terms of the provision of hospital and community services. The survey highlighted the decline in

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the number and range of community places - particularly day care places for the elderly with mental illness, and the decline in dedicated care of the elderly beds (Age Concern 1991). In both of the studies quoted, no difference was detected between the GP and DHA modes of purchasing.

The decline in the numbers and standards of facilities for the care of the elderly have been highlighted by the appearance of several prominent court cases, in which the principle of the NHS's responsibility to pay for seriously ill elderly patients was challenged (Tudor-Hart J 1994). These cases centred on moving the elderly in hospital care service institutions into other facilities where adequate care was not available. These cases have led to several health care managers being disciplined and the courts emphasising the role of cradle to grave care (Tudor-Hart J 1994; Powell MA 1997). The underlying theme of these cases has been a change in the definition of illness. The elderly are no longer counted as ill - they are suffering from the normal body ageing process and so can be discharged from the health care system. Therefore the question is of the eligibility of the elderly for care. Eligibility is very much a local issue - there is no national eligibility standard. Therefore there are wide local variations in care. Vickridge has commented that many elderly are discharged from hospitals to die soon after. This, in part, supports this contention of a change in definition. However this redefinition has been introduced without social debate and the existence of such a change influences the fundamental aim of care and the tripartite relationship - this will be explored later (Vickridge R 1995; Wistow G 1995).

The decline in services and the eligibility problems have led to the conclusion that the

reforms have failed to protect the elderly - which was one of the key aims for the reforms of the NHS (Lee-Potter J 1998).

#### 2. Mental Health Services

A different picture emerges for the reform of mental health services since 1990. In general mental health services have not failed to protect the patients, however some patterns of care have emerged. Henwood in 1995 commented that mental health services often are not needs led and are poorly co-ordinated (Henwood M 1995). In other reviews the decline of community services has been highlighted (Hadley TR and Goldman H 1995). These authors also comment on the apparent geographical differences in service availability. Overall therefore the picture is dissimilar to the situation seen in the care of the elderly. However, it difficult to draw a direct comparison between the groups. The care of the mentally ill has undergone a revolution in recent years, and while mentally ill patients have not suffered under the reforms it is difficult to claim that they have reaped benefit from the better targeting of resources (Evandrou M and Falkingham J 1998). It therefore seems possible that the reforms have failed in their aim to target the mentally ill.

## 3. Other at need groups

Studies of other at need groups – such as ethnic minorities and the poor have yielded mixed results. While no evidence has been found for the biasing of services in the general practice, the work of Evandrou found a bias against the poor in terms of hospital services use and screening services (Le Grand J and Vizard P 1998; Benzeval

M and Judge K 1995).

4. Priority Services

Other areas where reforms were expected to have had an impact were on the priority services. Overall the standards of care in priority care groups have not been found to change. A good example of this is cardiac surgery. This speciality has highlighted prereform as in need for investment. However, recent studies have indicated that there was little, if any, impact on the services provided (Black N 1996). In part, the lack of change has been blamed on the poor sensitivity of the contracting mechanisms (Clinical Standards Advisory Group 1993).

In conclusion, it would appear that the NHS reforms have failed to produce a targeting of resources into at need groups. This in part can be explained by the failure of competition, but what is also apparent is that the reforms have not succeeded in the aims of protecting community services (Williams G, Flynn R and Packard S 1997).

### 7.5.4. The Performance of the Service

One of principal reasons for the reform was to increase efficiency in the service. Therefore this is one of the key measures to be made. However, this is not as simple as it sounds. There is considerable controversy surrounding the measurement of efficiency (Appleby J Little V 1993). One approach is to select a performance indicator such as the rate of return on capital, numbers of patients treated or the cost of in-patient days. The second approach is to look at a range of market-driven indicators.

#### A. The Efficiency of Provider Services

The performance of trusts and non-trusts has been examined by both methods. The use of performance indicators with respect to trusts has been widely employed by many researchers. However it has been criticised as giving a false impression of the NHS efficiency as the comparisons made are often not statistically valid (Radical Statistics Group 1995). Despite these limitations, some useful information can be gleaned. In 'The Trusts and Financial Performance' Newchurch appraised the financial achievements of 57 trusts. Of these, only eight achieved a return on capital of 6% but only two trusts made a loss. On the whole the analysts were impressed by the performance of these trusts but commented that some of the accounting methodology used may give a false impression (Newchurch 1993).

In addition to the financial indicators, trust performance has been measured in relation to patient activity. In 1992 the NHSME reported a 3.7 % increase in inpatient activity and a reduction in overall waiting patients (NHSME 1992). The validity of these figures has been widely disputed. Firstly the figures do not discriminate if the hospital activity changes are a direct consequence of the reforms or changes which represent long-term trends. For example, cataract surgery grew at 8.25% in the years prior to the reform and 9% post-reform. Secondly the development of the NHS reforms led to changes in the data collection systems which were not recorded, or accounted for, in the analysis of this report. The results of the reviews of performance and activity measures post-reform suggest that there may be a trend towards modest levels of growth in patient numbers. The interpretation of this growth is made more difficult by the significant increase in funds that accompanied reform (Bartlett W and Le Grand J 1994). This complication in assessing efficiency has been addressed by adjusting the performance changes for the cost structures in trust and non-trust hospitals. In reviews trust hospitals were found to have lower unit costs than non-trust units - suggesting that trust hospitals were more efficient. However these differences may reflect other factors, as the trusts examined were self-selected (Bartlett W and Le Grand J 1992).

In an attempt to gain an overall opinion Le Grand and Vizard looked at expenditure adjusted efficiency scores. They suggested that the overall trend in efficiency by this measure was increased by the reforms – but highlighted that some years – in particular 1990-1991 were associated with large downturns in efficiency (Le Grand J and Vizard P 1998). Overall the opinion of these researchers was that modest efficiency improvements had been achieved.

In summary the NHS reforms have been modestly successful in providing an increase in efficiency, however the magnitude and stability of the gains appears open to question. In an attempt to look at the stability of the gains studies of market conditions have been performed. Studies of market condition enable a comparison of how the trusts actually performed. This was the approach taken by Le Grand in 1993 (Bartlett W and Le Grand J 1993). The criteria for assessment valuations were productive efficiency, user choice, responsiveness to user needs and equity. In order to assess these changes, it was argued that a market structure must be competitive and have access to the relevant information and low transaction costs. In addition it was assumed that the opportunities for equity distortions and the 'cream skimming' of profitable patients should be low (Bartlett W and Le Grand J 1993).

The results indicate that the transaction costs in the NHS market are high, particularly when dealing was Fundholders. In assessing equity there is evidence of cream skimming in that some providers are seeking to attract profitable and simple cases into the hospital while excluding the elderly, but no concrete information on how this situation arose. Finally the results demonstrate the difficulties that Trusts have with gathering and using market information. The results indicate that while some improvements in efficiency have occurred, the stability of change is subject to question due to the lack of market information and the declining opportunities for cream skimming (Bartlett W and Le Grand J 1993).

#### B. The Performance of Purchasers

#### 1. Fundholding

There are several difficulties associated with assessing the performance of Fundholding. As the Fundholding experiment was a new departure for the NHS it is difficult to compare it to previous performance. In addition as the scheme evolved year on year comparisons are difficult. Finally the Fundholders were self selected and motivated for change. Several reviews have indicated that the changes implemented by Fundholding were due to the efforts of the practice (Smith RD and Wilton P 1998)

The performance of Fundholders, unlike that of the DHA, has been assessed using the levels of services provided and the financial management of funds by their practice.

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This is because Fundholding was considered as an experiment and the assessments to be used can be based on the objectives of the reforms. The targets for change as part of the Fundholding experiment were waiting lists, pharmaceuticals and community services (Glennerster H, Matsaganis M, Owens P and Hancock S 1994).

One of the difficulties in reviewing the efficiency of Fundholders is the concern that the GP Fundholding practices were successful because their funding was generous (Coulter A 1992). The GP practices that went Fundholding were funded on the basis of costed activity - rather than a per capita formula used to fund the DHA. As we have discussed this may lead to problems in the inflation of budgets (Old P 1998; HFMA 1994; Dixon J, Dinwoodie M, Hodson D and et.al. 1994). In addition 'Working for Patients' had assumed that identical mechanisms for both GPs and DHA would be used to fund expensive treatments - but this proved impossible to implement and Practices were insured against patients whose treatments exceeded a cost of £5000. (HFMA 1994; Audit Commission 1996). The effect of the different funding baselines for GP and DHA purchasing, coupled with the 'safety net' for expensive patients, makes any assessment of Fundholding efficiency based on need unachievable and therefore all efficiency assessments a purely financial basis (Glennerster H Matsaganis M Owens P Hancock S 1994).

The focus on the financial efficiency of the Fundholding experiment makes the understanding of the financial differences between DHA and Fundholders essential. An understanding of the size of the funding disparities between the DHA and the Fundholders is made more complex by the fact that budget setting for Fundholding practices was not constant - reflected in the size of the savings and the failure of the

latter wave of Fundholders, who were funded less generously, to demonstrate significant savings (Glennerster H, Matsaganis M, Owens P and Hancock S 1994) (Dixon J Dinwoodie M Hodson D Dodd S and et.al. 1994). Therefore it is unlikely that the efficiency measures are comparable year on year. The measurement of efficiency is also made more complex by the use of the savings. These savings could be put to any use, apart from increased personal salaries, the practice wanted. Therefore the GP Fundholders had great financial flexibility. They also had a wide range of managerial and labour flexibility - able to employ or organise in the way they wanted. Therefore, in reality, the only performance that was monitored was the financial performance, and not any efficiency measures associated with it (Glennerster H Matsaganis M Owens P Hancock S 1994). Therefore all measurements of Fundholding have been based on the handling the prescribing budget, and the management of patient funds.

I. Prescribing Budgets

Reviews of the early years of GP Fundholding appeared to indicate that some efficiency was gained in the handling of prescribing budgets – in terms of absolute reductions and associated savings (Stewart-Brown S, Surender S, Bradlow L, Coulter A and Doll H 1995). However, recent reviews have attributed these changes to alterations in prescribing volumes that have not been maintained long term as the savings were caused by the use of cheaper drugs that could not be maintained (Stewart-Brown S Surender S Bradlow L Coulter A Doll H 1995; Bains, D Tolley, K and Whynes D 1997). However, most authors conclude that despite these problems the GP management of prescribing has been a success and efficiencies have been

demonstrated (Le Grand J and Vizard P 1998; Gosden T and Torgessen DJ 1997).

II. The Use of Hospital Services

Studies have indicated that the rate of referral between Fundholding and non-Fundholding practices is unchanged. However, Fundholders have been successful in reducing waiting times for services (Gosden T and Torgessen DJ 1997). It is difficult to ascertain if this reduction is linked to an improvement of efficiency as, however, as studies have indicated that this change may be associated with high transaction costs (Le Grand J and Vizard P 1998).

Based on these reviews, it would appear that while GP Fundholding has produced efficiencies in the use of resources, but these gains have not been dramatic and in many cases practice led. In addition many of the true costs of Fundholding have been buried in the transaction costs of hospital services (HFMA 1994) (Le Grand J and Vizard P 1998).

#### 2. The Efficiency of DHA as Purchasers

The performance of the DHA has come under a great deal of criticism but little objective research (Klein R 1995). In particular the DHA have been accused of being an unnecessary management burden and a spread of bureaucracy (Le Grand J and Vizard P 1998). This image of the DHA is somewhat distorted. For the first years of the reforms the DHA were encouraged not to make any changes (Ham CJ 1991). This established purchasing patterns that, given the performance management ethos, were difficult to break. In addition the DHA were hamstrung by the limited flexibility in

the use of funds and the fixed costs associated with the hospital service (West P 1998; HFMA 1994; Ham CJ 1992).

#### 7.5.5 The Impact of the Reforms on Equity

The NHS has a history of a long struggle with the term equity (Ham CJ 1992). However in the context of the NHS reforms it is generally accepted that it is equity of access by region that is important. Studies of regional inequity based on funding have suggested that the regional inequities may have been increased by the reform process (Whitehead M 1994)

# 7.5.6 The Impact of the Reforms on Mortality and Morbidity

It is apparent that the mortality burden of the lower social classes in recent years has been increasing. This has been reflected in increasing Standard Mortality Ratios (SMR) (Le Grand J and Vizard P 1998). The significance of these statistics is unclear, but other studies – looking at standard ages of death have confirmed the finding. Whether or not these findings can be related to policy making is unclear but the trends have been increasing post-reform (Le Grand J and Vizard P 1998).

The pattern in morbidity measures is different to mortality. The morbidity measures have remained constant since the reforms. This effect may be due to the changing demographic base.

Under the circumstances outlined above it is difficult to draw conclusions, however, it

is apparent that the reforms have not improved mortality or morbidity statistics (Le Grand J and Vizard P 1998).

## 7.6 Conclusions on the Impact of the Reforms

#### 7.6.1 The Impact of the Reforms on the NHS Services

Conclusions on the impact the reforms are mixed. On the financial side some increases in efficiency have been demonstrated, but these gains in efficiency appear modest and any effects that these gains may have had are shrouded by a lack of information (Glennerster H 1998). With regard to the other objectives, such as the targeting of services and improving health no benefits have been demonstrated. Yet this cannot be the whole picture – for changes in health care have been achieved. Most health authorities have delivered some improvement in the Health of the Nation targets, and many have made demonstrable gains in efficiency as measured by the efficiency index. In addition there is some evidence that the introduction of the Fundholding scheme has produced some benefits – particularly in prescribing. However, these changes do not appear to have made a meaningful impact the metrics of change, with regards to the objectives for the 1990 (Le Grand 1994).

The failure of the reforms has been attributed to a variety of reasons. First money appears not to have followed the patient as evidenced by the failure to provide services for at need groups such as the elderly (Le Grand 1994). Other reasons for failure lie in the lack of market flexibility, and failure to develop market forces. As a result of this efficiency savings have been hard to come by. The reason why market

flexibility has not developed is less clear, however part of the reason may lie in the lack of end-user input into the system.

## 7.6.2 The Effect of the Reforms on the Tripartite Structure.

Any lack of end-user input must be reflected in the structure of the tripartite relationship that surrounds the reformed NHS. As was discussed in the introduction in order for a welfare system to achieve its aims a balance of the state, economic and civil society inputs are needed. This balance is essential as it allows the achievement of the economic, humanistic and societal aims of the service. As we have commented the pre-reform NHS was not in balance as the state economy considerations dominated the discussions of the service. How was this changed post-reform?

The post-reform NHS - as we have discussed seems more likely to be dominated by the state economy interaction. As was stated in chapter six, the state economy interaction in the new tripartite relationship is represented by the District Health Authority and the GP Fundholders, Doctors and Hospitals. The delays in the development of purchasers, the effects of Fundholding and performance management have all had the impact of increasing the power of the economy in the tripartite relationship (Appleby J 1994). This is reflected as a dominance of the providers in the decisions that surround the market. These factors have been compounded by the lack of competition seen in the hospitals and the protection of community services (Appleby J 1994).

The increasing power of the economy has been accompanied by a decrease in the

power of the civil society. The economy - civil society relationship has been decreased as the power of the Unions has declined and as health has become a personal responsibility (Evandrou M and Falkingham J 1998). The state - civil society interaction has also declined following the redefinition of the entitlement to services that has occurred in the areas of mental health and the care of the elderly.

# 7.7 Chapter Conclusion

This chapter has illustrated two findings. First, the post-reform NHS is not delivering the gains that were expected from it. Second, the reforms in the NHS have not resolved the imbalance of state, economy and civil society interests in the running of the health service. In essence the economy and provider domination of the service has continued. To these results can be added the result of chapter 6 - that the NHS structure no longer supports the mode of accumulation or the needs of workers in a post Fordist state. This latter contention is supported by the differences seen between the NHS and the other elements of welfare, and the failure of the NHS to provide support for modern individualised labour markets. Chapter six also demonstrated that these failings were as a result of the political strategy needed to bring the policy to fruition. This implies that the policy contained in Working for Patients was not a coherent policy (Ham C 1994).

The findings of this chapter bring together all of the elements supporting the hypothesis - as was discussed in the introduction. However, no link has been established between the elements - necessary if the hypothesis of the thesis is to be

proven. In order for a causal link to be established we must first conduct a bottom-up analysis. This analysis must demonstrate that the failure to provide services results from the institutional imbalances reflected in decision making. Furthermore the study must also highlight that the failure of the NHS to support the mode of capital accumulation is as a result of political strategy and organisational ambiguity and a lack of coherent policy making.

Taking these factors into account the establishment of the causal relationship requires the use of a case study on decision making in the NHS. Chapter 8 will begin this process with a study of a health authority aimed at demonstrating the modes of decision making involved, highlighting how the causal relationship may be demonstrated and outlining the processes involved in decision making in the reformed NHS.

# CHAPTER 8 ESTABLISHING THE CAUSAL RELATIONSHIP BETWEEN THE ELEMENTS OF THE HYPOTHESIS PART 1 - A STUDY OF DECISION MAKING IN A HEALTH AUTHORITY

# 8.1 Keypoints of the Previous Chapter

Chapter 7 concluded with the argument that the 1990 NHS reforms were not a coherent policy and the manner in which the reforms were implemented led to a continuation of the institutional imbalance. In addition the post-reform NHS failed to support the mode of accumulation and deliver some services to at risk groups. This brought together all of the elements of the hypothesis generated in chapter 1. The question remains about establishing a causal relationship between these elements and the decision making about purchasing health-care. This cannot be determined at a macro-level, as such an analysis will not allow for the post-policy modifications determined by the street level decision-makers. Instead a bottom-up analysis is needed.

#### 8.2 Objectives for this Chapter

The objective for this chapter is to introduce Southampton and South West Hampshire Health Commission (Southampton Health Commission) as a case study to explore the causal relationship between the elements of the hypothesis. In particular this chapter aims to introduce the structure of the Authority, its objectives and describe the decision making procedures used.

#### 8.3 Introduction

The reforms of the NHS were aimed at establishing an organisation sensitive to local market needs; therefore no national study can establish the causal link between the institutional imbalance, the mode of accumulation and the failure to provide services. Instead a local, bottom up, study is needed. Performing a local study, however, brings into question the ability to generalise the results of a local study to the national NHS. In this thesis the issue of generalisation has been tackled by working with a Health Commission which is close to the national norms and using validated methods to assess the results. Southampton Health Commission is a well-established Commission with a history of performing research. In 1993 the Commission decided to review its decision making processes. This provided the opportunity to look in great detail at the institutional behaviour involved in decision making. The environment of decision making in Southampton Health Commission is examined in greater detail in chapter 10. However before embarking on this discussion it is important to understand the workings of the Commission – the subject of the current chapter - and the tools to be used in the analysis – covered in chapter 9.

8.4 A Profile of Southampton and South West Hampshire Health Commission

# 8.4.1 Geographic Profile of Southampton and SW Hampshire Health Commission

Data from this section are drawn from published documents (Southampton Health Commission 1993; Southampton Health Commission 1993b).

Southampton and SW Hampshire Health Commission (Southampton Health Commission) covers an area of 78,000 hectares stretching from the Hamble River to the New Forest, Figure 8.1.



FIGURE 8.1 THE GEOGRAPHY OF SOUTHAMPTON AND SW HAMPSHIRE HEALTH COMMISSION

#### 8.4.2 The History of the Southampton Health Commission

A merger of the District Health Authority and part of the Family Health Services Authority - based in Winchester established the Commission in its current form in 1992. A full merger was achieved in 1996 with the passing of legislation to create unified health authorities.

# 8.4.3 The Provision of Health Care in Southampton

(Data drawn from the Annual report (Southampton Health Commission 1993))

#### 1. Primary Care

68 GP practices across the district provided primary care. These practices accounted for 238 GPs. Eleven GP practices were Fundholding - covering 31% of the population - although the number of practices Fundholding was set to rise to about 30 practices in 1995-96 covering 50% of the population.

# 2. Secondary Care

There were two major providers of secondary care - Southampton University Hospitals NHS Trust - providing most of the acute care - and Southampton Community Services Trust - providing some acute care but also community and mental health services.

In addition to these providers there were several other local providers. These included Bournemouth and Christchurch NHS Trust for acute services; Salisbury NHS Trust for acute community and mental illness services; Winchester NHS Trust for acute services and Portsmouth Hospitals NHS Trust for acute and community services.

In addition to the local providers the Commission also held contracts with Guys and St Thomas's Hospital for acute services and special placement contracts with other more distant providers.

#### 3. Voluntary Organisations

Additional to the NHS providers the Commission also held contracts with several local voluntary groups. These included the Red Cross, Mind and Southampton Care Association. These providers mainly provided community care. Several other voluntary bodies also received funding from either charitable donations or from joint finance.

#### 8.4.4 The Demographics of the Local Population

Southampton Health Commission was responsible for purchasing the health care for a population of 450,000 people These individuals lived within the local authority boundaries of Southampton City, the New Forest, Test Valley and the southern wards of Eastleigh. From April 1995 the Commission also purchased health care for the population of Ringwood and Fordinbridge.

47% of the resident population live within Southampton City and the surrounding urban communities, while the remainder is mostly rural. This population pattern is not static, with an expected decline in the city population and corresponding increase in the urban numbers. The population is growing at about 1% per year, although the over 65 year age group is growing at a rate of about 5% per year. This growth is a particular problem as a high percentage of the elderly live within the rural communities giving rise to access and other problems. At the other end of the spectrum the very young are also increasing at a rate of about 1% per year. Therefore, Southampton is facing increases in the populations most likely to need access to health care services.

Overall the population is roughly in line with national average figures. The male to female ratio is about 0.95 to 1, although the proportion of females over the age of 65 is considerably higher, as would expected due to the longer female life span.

# 8.4.5 The Population Socio-Economic Health Factors in Southampton and SW

Hampshire.

Figures for this section were drawn from the Lifestyle Survey and Director of Public Health Report (Southampton Health Commission 1992, Southampton Health Commission 1993 (b))

# 1. Unemployment

Overall the district's unemployment rate is below the national average. However the picture is not uniform across the area. Unemployment in the city averages at 9.4%, with some areas as high as 15%. The expectation is that unemployment will continue to rise with the city showing the steepest increase.

#### 2. Homelessness

In common with many south coast areas Southampton has a high proportion of its population either homeless or living in low standard accommodation. This is due to the high rate of influx of people seeking jobs. The problem has been exacerbated by the recession and increasingly homes are leased from housing associations.

#### 3. Ethnicity

The city has a comparatively low ethnic population. Across the Commission about 3% of the population have an ethnic origin beyond Europe. The majority of this population - totalling about 12,000 - live within the city. The content of origin of the population is unusual in that it shows a preponderance of Indian subcontinent compared with the national average. The age distribution of the population also tends to be younger.

#### 4. Deprivation

The only index available for the entire district is the Jarman UP8 index. The score overall is about +1 reflecting an above average affluence. This figure masks some areas of quite severe deprivation balanced out by areas of high affluence. The inner city areas of Bargate and St Lukes have scores of about -23, reflecting moderate deprivation.

# Summary

The average picture of Southampton was that of an affluent south coastal town. However this masks some areas of moderately severe deprivation and socio-economic factors causing ill health. This wide spread of population affluence contributes to the challenge of health care in Southampton and SW Hampshire.

### 8.4.6 The Health of the Local Population

The figures quoted are drawn from Southampton Health Commission Publications (Southampton Health Commission 1992; Southampton Health Commission 1994).

The health of the local population can be gauged by a variety of factors. First there are census variables available from the 1991 census, and second there is the direct measurement of several key health indicators.

(a) Long Term Self Reporting Illness (LSSI)

This was a factor collected in the census for the first time in 1991. Overall Southampton and SW Hampshire reported 11% of the population with LSSI - a figure inline with the national average. The population reporting LSSI corresponded with the areas having a high proportion of elderly patients, with the exception of the inner city wards - which had a higher rate than expected.

(b) Hospitalisation rates.

Overall the Commissions population has a hospitalisation rate about 2% above national average. This effect may be due to the presence of a teaching hospital, but may also reflect some health factor in the population. The inner city and the Western City - both sites near the large hospital in Southampton had the largest hospitalisation rate.

(c) Lifestyle health factors

Southampton district is below the nationally recorded averages for both obesity and smoking, but has a higher proportion of children on the protection register and a high proportion of unwanted teenage pregnancies.

(d) Mortality rates

As might be expected from the deprivation and socio-economic factors Southampton and district has a favourable Standardised Mortality ratio of 91.7 years. This masks some particular problems, however, in the area of stroke injury and mental illness where there was some evidence - based on high rates of hospital admission - that there were some problems in the health of the local populace. These areas will be covered further when the subject of strategy development is discussed.

Given the picture of Southampton as a town of mixed prosperity, with a mixed economy of dockyards and hi-tech areas with average, if not above average health, how does the Health Commission work?

# 8.5. The Function of the Southampton Health Commission

# 8.5.1 The Purpose of Southampton Health Commission

The purpose of the Commission is dictated by national guidelines - in common with all health authorities. The Southampton interpretation of these guidelines is set out as principles published within the health strategy (Southampton Health Commission 1994). These are

- Seeking the continuous improvement of services
- Developing partnerships with other purchasing agencies e.g. local government
- Developing primary care
- Involving local people
- Purchasing better services
- · Commissioning for health on a needs basis

• Priority setting and the responsibility for deciding where resources are spent.

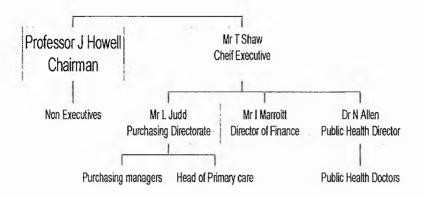
These guiding principles provide an image of the purpose of the health Commission as a market manager and regulator of health care services in a market model of health care administration using commissioning, purchasing and priority setting to achieve its aims. They also reflect national policy in terms of developing primary care.

# 8.5.2. The Organisation of Southampton Health Commission

The health Commission is responsible for purchasing both primary and secondary care. The objectives of the Commission are to

- Identify health problems in the area
- · Recommend which services to purchase
- Negotiate purchasing contracts with NHS Trusts
- Develop both the purchaser and provider role of General Practitioners
- Set and monitor standards in primary and secondary care

To assist the Commission about 100 staff was employed in an office in central Southampton. The staff is organised into three directorates. The organisation is graphically depicted in Figure 8. 2.



#### FIGURE 8.2 THE ORGANISATION OF SOUTHAMPTON HEALTH COMMISSION

The overall direction and command of the Commission are the responsibility of executive and non-executive directors - the chair of which is appointed by the Secretary of State for Health. The committee of directors meets twice a month in public session to discuss policy and strategic issues. Therefore, as the entire organisation is non-democratically elected, it can be viewed as an organisation that receives a licence from the State to purchase health care.

The organisation seen in Southampton is interesting as it gives equal weight to professional values; to the professional views from the public health directorate; and to the purchasing directorate. Also although primary care is a governmental priority it has a secondary position in the structure.

# 8.5.3 The Function of Southampton Health Commission

The mission of the Commission is to: -

'Secure Better Health for Local People'

The promotion of good health and the minimisation of distress in patients and caregivers are the tools to achieve this aim.

The mission is achieved by the accomplishment of several tasks (Southampton Health Commission 1994). These include:

- Ensuring the equity of services
- Maximising health gain
- Maximising value for money
- Ensuring that care is given close to home
- · Protecting choice
- Encouraging personal responsibility

These are reflected in the contracting and decision making processes adopted by the Commission. Before going into this, however, it is important to understand how the activities of the Commission are financed.

# 8.5.4. The Financing of Southampton Health Commission

(The data presented are derived from the Annual report (Southampton Health Commission 1993))

In common with all health authorities Southampton Health Commission was funded via

the Regional Health Authority, (RHA). The allocation was based on an age and sex adjusted weighted capitation budget. This allocation was to cover Hospital and Community Health Services, (HCHS). In addition to this allocation the Commission also influenced the expenditure in primary care. Cash limited and non-cash limited General Medical Service budgets were handled by the Commission, as was prescribing expenditure. GP Fundholding budgets were also allocated and monitored by the Commission. However as the Commission did not have statutory rights over the primary care funds accountability for these funds was maintained by the Family Health Services Authority and in presenting its final accounts the funds were presented as belonging to the District Health Authority of Southampton and SW Hampshire.

#### 8.5.5. The Activities of Southampton Health Commission

The data presented are drawn from the Annual report (Southampton Health Commission 1993)

The function of the Commission was to purchase health care for local people. The Commission achieved this function by distributing the resources at its disposal into health care contracts.

The Commission spent approximately £219 million on health care - approximating to £480 per head of population. This was made up of £153 million in DHA funds and £66 million in FHSA funds (Southampton Health Commission 1993). In addition to this figure, which was cash limited, a further sum was spent from non-cash limited expenditure. Non cash limited expenditure includes GP prescribing and health promotion

payments. The DHA funds were spent on

Hospital and Community Organisations Joint Finance programmes with Local	£148 £ 1	million million
Authorities Commissioning Organisation		million
Total DHA Funds	£153	million

The Commissioning expenditure on services, £149 million, was spent with seven main providers

Southampton University Hospitals	£ 73	million
Southampton University Health Services Trust	£ 55	million
Salisbury Hospitals	£ 4	million
Hampshire Ambulance Services	£ 3	million
Bournemouth Hospitals	£3	million
Portsmouth Hospitals	£ 2	million
Winchester Hospitals	£ 2	million
Totals	£142	million

The remainder of the expenditure was divided among both local and distant providers and amounted to

Extra-contractual referrals	£	3	million
Direct investment in services and special			
Placements	£	3	million
Joint Finance	£	1	million

The £149 million Commission expenditure on health care services could be divided into specialities

General and Acute	£ 93	million
Primary Care	£ 18	million
Mental illness	£ 16	million
Maternity	£ 7	million
Mental handicap	£ 6	million
Other Contracts (e.g. day services)	£ 6	million
Accident and Emergency	£ 3	million
Total expenditure on patient services	£149	million

In addition to these funds a further  $\pounds 66$  million of expenditure was accounted for from the FHSA. These funds were: -

Sty No.

Prescribing	£ 25	million
Ophthalmic services	£ 2	million
Pharmacists	£ 2	million
GP Fundholding	£ 12	million
General Practitioners	£ 24	million
Commissioning Organisation	£ 1	million

It can be seen within these categories that the Commission represents a complex purchasing organisation. Decision making within the Commission was a complex process. The functional aspects of the decision making processes are best illustrated by considering the provision for the care of patients who have suffered a stroke as a case study.

# 8.6. Characterising Decision making Within the Commission Using Stroke as an Example.

Decision making within the Commission was performed on two levels. These were the development of strategic purchasing and the development of purchasing contracts.

## 8.6.1. Decision Making About Strategy

The Commission had held an exercise in 1991 looking at the decision making methods it could employ to improve health. The outcome of this exercise was a 'Bite-sized chunk approach' to purchasing decisions (Heginbotham C 1992). This approach relied on breaking up the health problems of Southampton into smaller problems and developing strategies to deal with each identified problem. At the time of writing, ten such strategies had been developed or were under development. These were

- Unwanted teenage pregnancy
- HIV
- Substance misuse
- Orthopaedic services
- Incontinence services
- Mental illness services
- Stroke
- Adolescent health
- Accidents
- Children with special needs

These topics had been selected as special problems in the local community. The process can be best explained by using an example of the strategy for Stroke management.

# 8.6.2. The Development of a Stroke Strategy in Southampton Health Commission

Details of the process are drawn from the published Strategy for Stroke (Southampton Health Commission 1993)

Stroke is one of the 'Health of the Nation' target areas (Department of Health 1992). The targets set in the Health of the Nation are to

- Reduce the death rates from stroke in people under the age of 65 by 40% from 11.3 per 100,000 in 1990 to no more than 6.8 per 100,000 by the year 2000.
- To reduce the death rate from stroke in people aged 65-74 by at least 40% from 244.3 per 100,000 in 1990 to no more than 146.6 per 100,000 by the year 2000.

The morbidity and mortality Figures in the Southampton area were higher than these rates suggesting that locally, the disease burden from stroke was higher than the national

average. Therefore the purchasing of stroke services was both a national and local priority, and the health Commission decided that a strategy for stroke was desirable. Accordingly it ordained that a piece of work be prepared. A strategy team was assembled. The team consisted of:

Dr A Mortimer		Consultant in Public Health Medicine (chair)
Ms A Woolnough	-	Contracts Manager
Ms B Hayden	-	IM&T Manager
Dr A Lockett	-	Head of Financial Planning and HealthEconomics
Ms J Dutton	-	Quality Manager
Ms M Topliss	-	Primary Care Manager

In addition to these core individuals, other members of the Commission were co-opted on an 'as needed' basis. This included IM&T staff and public relations managers.

The team began meeting in July 1993 with the aim of producing a completed strategy by October 1994.

# Initial discussions

The initial discussions among the group decided the remit of the project. It was decided to limit the scope of the strategy to acute and rehabilitation care, as long-term care was being covered under other strategies. The group also decided that it would address all cerebrovascular events, that is stroke ICD9 code 431-434 and 436-438 including subarachnoid haemorrhage and transient ischaemic attacks ICD9 code 435. All codes were taken in the primary position only. In this review the term stroke is taken as a generic term covering all three diagnostic groups - unless otherwise stated. The group made the decision that it would follow the process along classical strategic lines with a

#### situation analysis taken first.

# Situational analysis

The situational analysis had several factors to address:

- The current provision of services
- The current needs of the community
- The future needs
- The outcomes of current services
- The political environment

This stage first addressed the needs of the district. Examining the demographics of Southampton and SW Hampshire set the benchmark and by calculating the expected number of strokes based on national averages rough estimates of expected demand could be achieved. This was compared to the number of strokes recorded on the minimum data set records. The difference between the two was taken as a measure of unmet need. In order to predict future needs a similar exercise was done using the population estimates for the year 2000. Estimated numbers of strokes were calculated using current incident rates. In a sophistication of this analysis the changes in incidence were reflected by the local authority area.

As a second part of this analysis, the current services were examined in greater detail. This laid particular emphasis on the provider types and distribution of services. Also considered were the delivery of services and any routinely recorded outcomes of treatment. An estimate of the expenditure on stroke was also obtained, both in terms of finished consultant episodes and occupied bed days, using average speciality costs and day costs. The providers of care provided the figures on the costs of care. Comments on the current standards of service were obtained from both stroke patients and their carers - facilitated by the local stroke group. Attempts were also made to look at community stroke provision by visiting social services centres and questioning staff.

The results of this analysis indicated that in 1992/93 (the most recent complete set of records), 1,214 finished consultant episodes for stroke were recorded. This represented 954 patients - 445 male and 509 female. 14 providers – the 7 main providers of care to the commission plus extra contractual hospitalisations, were responsible for the care of stroke victims. The median length of stay for these patients was 14 days, but this varied between one day and 2 years. In all, 67 patients had a stay of greater than 3 months. These patients were all with local providers of care. The highest incidence of stroke corresponded with the highest population of elderly and was in the New Forest and coastal parts of the district. Overall, 500 finished consultant episodes were recorded in the greater than 75 age group.

Of the 954 patients 71 died (93 % were over the age of 65), and 500 patients returned to their usual place of residence. The remainder was discharged to either relative's homes or to other hospitals. However only 38 patients could be identified as being sent for rehabilitation care.

Looking forward to the future the incidence of stroke had peaked in the New Forest and coastal areas but was not going to peak in the Eastleigh area for several years. These changes would result in a considerable unmet need in the Eastleigh area, but excess supply of care in other areas. However the estimate of need was based on the prevalence of strokes requiring hospitalisation remaining constant - a dubious assumption when

faced with the increasing age of carers in the community which would have a knock-on effect on hospital admissions.

As a summary of the findings, current needs appeared to be met, but future demands would put the system under considerable pressure. The distribution of current services was one of long lengths of stay in acute hospital beds with very little use of community or rehabilitation facilities. These finds were supported by discussions with social services, users and carers. The picture was one of adequate acute services but with inefficient use of resources during the recovery phase. The user/carer groups raised additional concerns about the distance travelled by carers and relatives and a more local based service was demanded.

#### Strategy Formulation phase

The strategic formulation phase had to balance the competing pressures on stroke care. The demands of users and caregivers could result in a more expensive service at a time when there was evidence that the current treatments used offered poor value for money. The formulation process also had to make allowance for the increase in the number of stroke patients predicted over the next 5 years and the different geographical distribution of the cases.

As a starting point for the formulation process the Commission's values were used. These values were established in 1991 when the Commission was formed. They give an emphasis to

Equity	Access to health services for all on the basis of need, irrespective of social and ethnic status and geographical location.
Health Gain	To secure an improvement in health for the local population, adding years to life and life to years.
Value for money	To secure the best use of resources in terms of efficiency, quality and effectiveness.
Care closer to home	To ensure that services are delivered in the best setting, and to give people the opportunity to have their health and social need met in their own home or as locally as possible.
Choice	To give people as much choice as possible over the kind of service provided for them and its location.
Personal responsibility	To develop individuals' personal sense of responsibility for their own health.

With these guiding principles in mind the strategy group set about reviewing the stroke services. This proceeded in a number of steps.

1. Restatement of the problem

The first task of the team was to restate the problem in relation to the formulation. The challenge was to develop a local service that is sensitive to the needs of sufferers and caregivers. The service also needed to provide a co-ordinated rehabilitation in a setting appropriate to the disease of stroke.

# 2. Review of effectiveness

In accordance with NHS guidelines, suggesting that that purchasing decisions should be based on evidence for effectiveness, strategies developed in the Commission were 'evidence based'. This required that literature reviews of current practices were performed and the interventions described. The interventions said to have the most evidence for effectiveness - i.e. those based on randomised clinical trials – are used to provide a basis for the strategy. As a first step in this process, a literate review was conducted reviewing the evidence for effectiveness and cost benefit of stroke management. The search was conducted in the acute and rehabilitation phases using Medline databases available at the University of Southampton.

In the acute phase there was little evidence for any effective interventions - although potentially there may be some in the future. What appeared to matter in the acute phase was good nursing care.

In the rehabilitation phase there was evidence for the effectiveness of team approaches to rehabilitation, but little evidence that the individual components had any effect on recovery.

The only piece of concrete evidence that was discovered concerned carotid endarterectomy as a treatment for transient ischemia. Here there was strong evidence of a beneficial effect for the procedure in a subgroup of patients with transient ischemia and narrowing of the carotid arteries of greater than 80%.

#### 3. Initial model formation

Based on the problem statement, and the evidence for effectiveness, five possible strategies were outlined.

- (i) A special assessment service for transient ischemia.
- (ii) Acute and rehabilitation care for all stroke patients based at general hospital units.
- (iii) Acute care based at general hospital units, but rehabilitation care based in the community hospital and home based.
- (iv) Acute care community hospital based and rehabilitation home based.
- (v) All stroke care to be home based.

All five of these options were considered to be viable, however, clearly there were some further considerations. In order to narrow down the options, it was decided to discuss the options with the health Commission. At a general meeting of the Commission it was decided to proceed with option (i) and (iii). The reasons for disregarding option (ii) was based upon the costs of the service and the value for money - as it was, if anything, an intensification of the current system. Option (iv) was removed as it was felt not to be feasible due to the complexities of co-ordination a service.

#### The development of an acute and community based model

Having made the decision to have an acute and community based model the team then set about designing the service. There were already similar sites working within the country and these were visited. A generic model was constructed using the experience of sites such as Portsmouth and St George's Hospital, however this was felt to need some adaptation to the local situation. This was done by holding focus groups with the clinicians, the caregivers and victims of stroke. After a series of meetings a service was designed. The key elements of this service were for

- A specialist clinic for patients with either mild stroke or transient ischemia. Patients seen in this clinic could be assessed and interventions planned. This clinic would avoid unneeded admission.
- A hospital based acute care service offering care in dedicated stroke units. The average length of stay on these units to be no more than 7 days.
- Community hospital based rehabilitation providing both inpatient and day care facilities. The total length of rehabilitation spread over 6 months but allowing for 35 days (average) active rehabilitation.

The costs of this new service were calculated based on existing similar models and was found to match closely with the costs of the existing service and the capacity of the new service could meet the future demands.

This new model was taken to the health Commission and approved in June 1994.

#### Conclusions

The stroke strategy typifies the bite-size chunk approach seen in other strategies developed by the Commission and in other health authorities (Heginbotham C 1992). The bite-size chunk approach had two principal features. First it had an emphasis on data and information. Data were used to calculate the service levels and typify the needs of the population. Second is the limitation of the input to the design of strategies by professionals – such as doctors and nurses – and to a more limited degree, interest groups.

This method of decision making and policy determination has a long history in the UK and can be traced back to the early Victorian social reformers such as Chadwick, (Harris J 1990). The approach has been characterised as the 'Positivistic' approach to social policy and involves the description of the problem as a system – thereby legitimising the existence of the problem without assigning social roles or pathological causes (Henshel RL 1990).

From the way in which strategies about health care provision, exemplified by the stroke strategy, were conducted it is apparent that the majority of the objectives of the NHS reforms are achieved during the process. The plan was conducted looking at a priority group with an objective of improving equity and efficiency. The plan involved the development of competition of the service and covered the use of community services.

In terms of the tripartite relationship the stroke strategy gave an emphasis, although not necessarily a balanced emphasis, to the state-economy and state-civil society relationships as it allowed the users of the service direct access to the formulation of the new strategy. As the stroke strategy was not immediately implemented, but instead was modified by the purchasing process, it is not possible to say if the final outcome of the strategic process was in tripartite balance. However, the de-emphasising of the state-economy relationship that developed as part of the process means a balance is more likely.

# 8.6.3. Decision making About Contracts - the Purchasing Strategy

The existence of a strategy did not automatically guarantee its implementation. Once a strategy had been formulated an implementation group was established and this group

formed input into the assignment of purchasing strategies, plans and contracts.

In deciding its purchasing strategy, the Commission had to take into account a wide variety of factors.

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- (i) Political initiatives such as waiting time reduction and Health of the Nation strategies.
- (ii) The needs of the local population for services as evidenced by health strategies.
- (iii) The demands of co-purchasers such as social services and GP Fundholders.
- (iv) The performance assessment of the authority through tools such as the efficiency index.
- (v) The access the authority might have to discretionary funds through the adoption of certain strategies – for example the funds ear marked for assisting authorities to re-settle long stay patients in psychiatric institutions.
- (vi) Demands from local providers.
- (vii) Demands from the local community and media.

These pressures on decision making come from a variety of sources. Political, national and performance management pressures are usually applied via documents provided from the regional offices. The major document in this respect is the Regional Planning Guidelines produced annually. These documents lay out the resource assumptions the Commission is to use in setting its plans. Therefore the guidelines defines the strategic direction the RHA wants the Commissions to take, and the priorities – both national and local – for the provision of services. For example the 1993/94 plan from Wessex Regional Health Authority specified (Wessex Regional Health Authority 1993)

- An emphasis on the patient's charter and Health of the Nation targets.
- A commitment to reduce waiting times.

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- A three- percent increases in the efficiency of resource use.
- A commitment to the development of primary care.

The document also outlines the timetable to achieve these aims and sets out the structure by which success will be monitored.

Pressures on the authority from the local community are either delivered by the media or via the Community Health Councils (CHC). The CHC acts as a watchdog on the activities of the purchasing authority – although in reality its power is limited, (Brown RGS 1977)

Provider and joint purchaser expressions were usually established through the use of nonstatutory forums at which ideas could be discussed. However, the power of these groups was limited and disputes were usually adjudicated at regional level.

Hunter as has described the process of decision making at Commission level as 'muddling through elegantly'. Although Ham in 1993 more accurately drew a distinction between the process of policy making, as represented by the stroke strategy, and the implementation of services represented by contracting (Ham C and Hill M 1993). Clearly the implementation of policy involves more than the rational analysis of services. Instead the implementation of the policy is best viewed as a game between the choices of guaranteeing services and satisfying the regulation of markets by political institutions (Scharpf FW 1997). This analysis would classify the purchasing decision making in Southampton as a variant of a hierarchical negotiating state (Scharpf FW 1997). Decision making in these states has been described as incremental – as the process takes small steps based on the immediate pressures faced by the authorities (Ham C and Hill M

1993).

In these circumstances the implementation of the Stroke Strategy was to be no different to the implementation of other ideas to improve services; it would have to be discussed at Commission level and incorporated into the discussions with providers. In this case, however, the opportunity arose to examine how the strategy influenced the provision of services. This is gone into greater detail in the subsequent chapters.

# 8.7 Conclusions

This chapter has established the geographic, social, political and decision making characteristics of the Southampton Health Commission. It is an average district in the national population sense, with some special problems in terms of the incidence of teenage pregnancy and strokes. The chapter has also highlighted the modes of decision making as strategic and purchasing. If any causal relationship existed between the three elements of the failure to provide services, the lack of a balance between the economy, civil society and state, and the failure of the reformed NHS to support the mode of accumulation, it must be manifest at the level of decision making about the purchasing of services. As we have discussed the decision making about the strategic elements of service provision was data driven, and did not incorporate all the factors involved in purchasing.

The study of the decision making about the purchasing of services is a complex exercise, as it involves the balancing of values, pressures and interpretations, rather than data alone. In order to achieve the analysis of purchasing a special analysis was formulated using Judgement Analysis. This technique will be introduced in the next chapter.

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#### **CHAPTER 9 AN INTRODUCTION TO JUDGEMENT ANALYSIS**

# 9.1 Key points from the Previous Chapter

The previous chapter introduced Southampton Health Commission as a case study for decision making, and for establishing the causal link between the failure to provide services, the imbalance of state - economy - civil society interactions and the failure of the reformed NHS to support the mode of capital accumulation. The chapter demonstrated that the causal link must lie in the decisions that surround the development of purchasing plans - since the decision making relating to strategy included all of the reform ideals and was data driven. However, in order to study the elements of decision making at a purchasing level some special tools were needed as decision making about the purchasing plan was only partially based on data analysis and fitted the mode of decision making described as incrementalist.

# 9.2 Aims for this chapter

This chapter sets out to introduce Judgement Analysis, explain its background and why it was selected for this exercise. It also will explain the structure of the exercise and the subsequent analysis of the data gathered during a study of purchasing decision making in the Southampton Health Commission.

# 9.3 Determinants of the Analysis

At the outset of the analysis it is important to specify what the final analysis is to achieve. If a link between the institutional imbalance and the 'failure' of the reform exists this will be manifest in the decision making process, either as a factor, or in the environment that surrounds decision making. Therefore, in determining if the link exists the factors and environment that influence the purchasing decisions made by Southampton Health Commission must be analysed by a method that allows the elements of decisions to be both examined individually and combined - in order that the totality influences can be taken into account. Furthermore the description of decision making has to occur in the setting of a group, operating under quasi-rational rules. It was for these reasons that Judgement Analysis was selected as the analysis tool.

# 9.4 An Introduction to Judgement Analysis.

#### 9.4.1. Background

Judgement Analysis, a research tool for the study of decision making, has its roots in the study of psychology. An Austrian psychologist, Egon Brunswick, proposed that the actions of an organism in an environment could be explained on the basis of clues given by the environment the organism operated within as to the appropriate response to a given task. The combination of the environment and the task were referred to as an 'ecology'. Brunswick's methods postulated that a functional relationship between the ecology of behaviour and the actions observed existed. Brunswick termed this relationship probabilistic functionalism in recognition of the fact that there was not a one to one correlation between a given ecology and an organism's action. Instead a given ecology gave clues to the decision making environment; the environment is under the control of a distal criterion that takes no direct part in decision making but sends out clues as to its presence and determines the validity of response by the decision making organism. These clues are not an exact match to the distal criteria but reflect its presence to the organism in the language and action of the situation and so are called proximal clues. Brunswick hypothesised that the organism makes choices based on the proximal clues of the distal criterion. The organism used these proximal clues to rationalise its actions, and in all likelihood would be oblivious to the identity of the distal criteria. Therefore the actions of an organism were only probabilistically related to its ecology, and for a given action a number of clues would have to be assimilated and the information processed. This idea permits the behaviour of organisms to be expressed in terms of the correlations between ecology and behaviour - rather than the absolute required in other behaviour models (Brunswick E 1943; Brunswick E 1955).

The idea of proximal clues also enabled organisms to behave differently under identical ecological situations, providing the distal criteria offers a range of different, but interrelated proximal clues. This phenomenon - so called vicarious medication between clues - permits an organism to trade off between different responses in respect of outcome. In such a way the trade-off could be constructed to allow an organism some individual satiation in response - rather than mandating a causal relationship (Brunswick E 1943).

Brunswick's ideas proved to have far-reaching consequences, not only in the field of psychology, but in many disciplines where choice was being exercised. This development occurred because Brunswick's ideas permitted the design of experiments to directly test the probabilistic relationship between events. The design of studies to test the relationships have been termed Representative Designs and have found favour in circumstances where decision making is entangled in a web of complicated environmental factors (Hammond KR 1966).

Brunswick created a system of clues and criteria to explain how he thought. His ideas are best illustrated using the lens diagram he created to explain probabilistic functionalism (Brunswick E 1962).

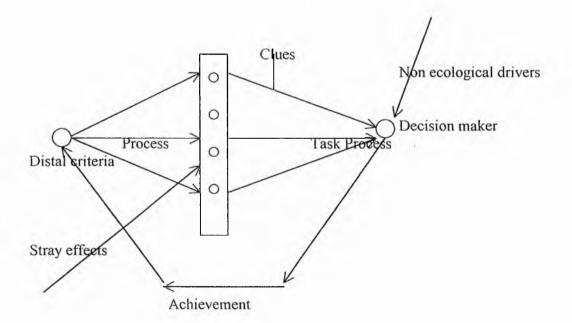


FIGURE 9.1THE BRUNSWICK LENS MODEL

Modified from Cooksey RW 1996

In the lens model the distal decision making influence – e.g. an environmental constraint or reporting relationship - scatters its effects as a series of clues as to appropriate decision making behaviour. The decision making organism collects the clues and uses them to guide decision making. The resulting decisions are then fed back to the distal criteria as an achievement. The construction of a lens diagram allows the underlying function of a system to be precisely displayed in a manner that allows further experimentation.

#### 9.4.2 Delineating the Structure of the Lens – Representative Design

Representative Designs - as the name suggests - aim to construct experimental models that assess the impact of the distal criteria, ecology and scattered clues in the context of the organisms' response. In order to achieve this, results of decision making and behaviour impulses must be obtained within the sphere of influence of the ecology (Hammond KR 1966). This can be achieved in two ways

1. Substantive situational sampling refers to sampling schemes aimed at examining the organism in a "natural environment". This includes random sampling of behaviour in the normal ecology (Brunswick E 1955).

2. Formal situational sampling concerns the role of the ecology in defined decision making circumstances and seeks to define the impact of the ecological clues on the decisions made. In this way the ecology may be defined irrespective of the task content (Hammond KR 1966).

#### 9.4.3 The Statistical Analysis of Representative Design

The development of representational sampling methods has permitted a different statistical approach to be adopted to the analysis of decision making. Previously decisions were analysed in terms of a number of performance characteristics of decision making - for example the efficiency of the process or the efficiency of the behaviour in terms of the use of resources - a situation that ignores the ecology and seeks to average behavioural responses. The concept of representational sampling permitted a statistical approach to the inclusion of ecological factors in decision making. This approach is the so-called ideographic-statistical approach and allows decisions to be set in the context of the ecology before averaging takes place. The aim of this approach is to assess the strength of the clues used in the decision making process (Hammond KR Mumpower J and Smith TH 1980).

#### 9.4.4 Judgement Analysis and Decision making

The ideas of Brunswick were rapidly adapted to the arena of social research. It had been recognised for some time that in the analysis of social judgements, such as investments in welfare services, decisions were often made that ran at odds with the economic concept of efficient decision making. Hammond in 1955 explained these anomalies in terms of Brunswick's vicarious functioning (Hammond KR 1955). Later Hammond and his group went on to derive an equation mathematically and statistically explaining the lens model - opening the door to the use of probabilistic functioning in social analysis. This development they termed 'social judgement theory' (Tucker LR 1964). This name is somewhat of a misnomer as social judgement theory gives rise to no hypothesis about social judgement. Instead it is a theoretical methodology for questioning the modus operandi of social decision making. The foundation of this theory is a modification of the lens model to accommodate the specific instances of social decision making Figure 9.2

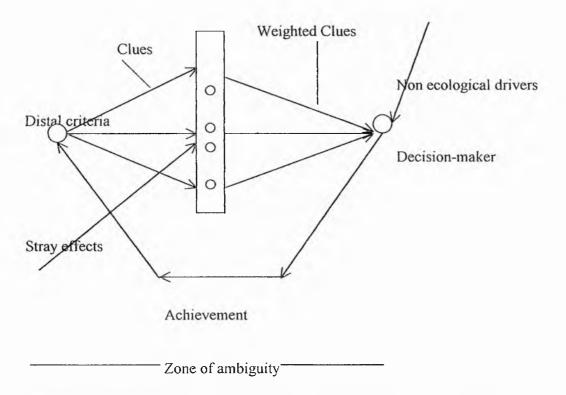


FIGURE 9.2 THE BRUNSWICK LENS MODEL ADAPTED FOR SOCIAL JUDGEMENT

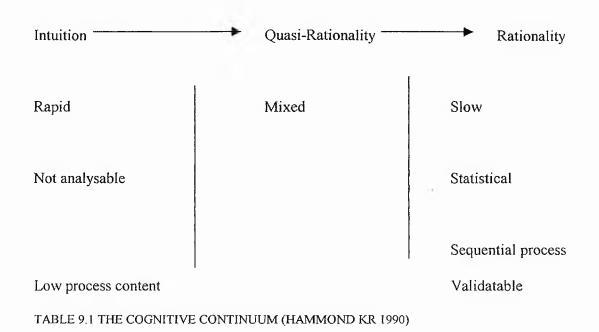
This theory made the primary focus for the analysis the interaction between the decision-maker and clues given by the distal ecological criteria. However these clues are now weighted for the organisms preference. The preferences attached to the clues are unique to both the organism and the ecology. Therefore, implicit in the analysis is the zone of ambiguity between the decisions made and the distal criteria driving them,

Figure 9.2. In other words a complete description of the decision making process can never be possible due to the number of ways in which clues can interact with each other and the vicarious functioning involved. Therefore, the application of clues to decisions may not be linear, but couched by related curvilinear relationships. These relationships may be unique to the situation the decision-maker is in and so are ambiguous. This development added a new dimension to social research, as now in addition to the weight attached to a proximal clue, a functional relationship was also required (Hammond KR Stewart TR Brehmer B and Steinmann DO 1975). The application of social judgement theory to decision making was therefore very specific, and the results could not be directly applied to any decision making situation. However an offshoot of social judgement theory was Cognitive Continuum Theory – an enduring theory of general decision making.

# 9.4.5 Cognitive Continuum Theory

Cognitive Continuum theory focuses on the analytical and intuitive elements of decision- making that characterises the functional relationship between the clues and the distal criteria in terms of the mode of thinking used to clarify the uncertainty that is implicit in the zone of ambiguity (Hammond KR 1990). It is based on the following 5 precepts

1. Decision making moves on an analytical/intuitive continuum, i.e. analysis and intuition are not competing modes of thought but a continuum of cognitive action. This is illustrated in Table 9.1.



- 2. The most common form of decision making sits between the analytical and cognitive extremes and is called quasi-rationality. The concept of quasi-rationality has much to do with the concept of common sense or bounded rationality. Decision-makers will analyse up to a point then use intuition to fill in any gaps. In this manner quasi-rationality is an averaging process that lends itself to averaging statistical methods such as regression.
- 3. The position a decision has on the intuition/analysis continuum depends on the type of thought process, i.e. the cognitive mode, employed by the decision-maker. In turn the cognitive mode is determined by the complexity of the task in hand, the ambiguity of the task and the way in which the task is presented. All of these facts can and are influenced by the ecology. The complexity of the task encompasses the complexity of the task in relation to other tasks. The ambiguity of the task reflects the difference between stated and actual aims

and the task presentation controls how the ecology states the task is to be completed. As the value of each of these factors increases, the task moves towards the intuitive end of the spectrum and the ecology cannot be determined by conventional statistical methods.

- 4. The mode of cognition is time-dependent in that as a decision making body becomes more familiar with the pattern of decision making the mode of thought used to determine decisions changes towards intuitive modes.
- Cognitive modes of decision making can rely on pattern recognition as a mode of reducing analysis.

Although initially controversial, Hammond's and Brunswick's ideas gained acceptance in social research due to the ability to resolve problems in the analysis of group decision making – particularly when the decision making process involves elements of quasi-rationality. In these instances Judgement Analysis works hand in hand with the cognitive continuum theory to permit the description of decision making processes (Cooksey RW 1996)

# 9.5 Why Conduct Cognitive Continuum and Judgement Analysis Research

The theoretical underpinning of cognitive continuum based Judgement Analysis gives it a unique position in the study of decision making. Classical decision making study tools vary between the mathematical, for example Expected Utility methods, through to those with a pure psychological bias, for example Conflict Theory (Table 9.2). On this scale, Judgement Analysis sits roughly in the middle (Cooksey RW 1996). Therefore the use of Judgement Analysis is appropriate when a mixed mode of cognitive and intuitive thought in decision making is being studied.

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# TABLE 9.2 THE DECISION ANALYSIS TOOLS

# Modified from (Cooksey RW 1996)

COMPARISON	<b></b>		THEORY —	*	
CRITERION DECISION PERSPECTIVE	INTENDED FUNCTION	JUDGEMENT COMPETENCE EMPHASISED	INTENDED USES OF RESEARCH	LOCI OF UNCERTAINTY	DIVERSITY IN SUBJECTS, OBJECTS, AND TASKS
DECISION THEORY	Prescription	Coherence	Decision support	Environment	Subjects: one to small Objects: large Tasks-Substantive: wide Tasks-Formal: some
BEHAVIOURAL DECISION THEORY	Description: Explanation: Prescription	Coherence	Understanding decision making processes: decision support	Environment; some in person	Subjects: small Objects: large Tasks-Substantive: wide Tasks-Formal: yes
ANALYTIC HIERARCHY PROCESS	Prescription	Coherence	Decision support	Person	Subjects: small Objects: large Tasks-Substantive: wide Tasks-Formal: some
FUZZY DECISION THEORY	Description: Prescription	Coherence/minor interest in Correspondence	Understanding linguistics and knowledge-based uncertainty; improved control systems; research methods & analysis	Person: some in environment	Subjects: small to moderate Objects: small Tasks-Substantive: wide Tasks-Formal: some
SIGNAL DETECTION THEORY	Description: Prediction	Correspondence/some interest in Coherence	Understanding performance accuracy; reduction of false alarms and/or misses; cost effects attached to errors	Person: some in environment: some between person and environment	Subjects: small Objects: large Tasks-Substantive: narrow Tasks-Formal: yes
HEURISTICS & BIASES/PROSPECT THEORY	Prescription: Explanation: Description	Coherence/minor interest in Correspondence	Demonstrating biases and deficiencies; debasing: calibration	Environment; some in person	Subjects: large Objects: small Tasks-Substantive: wide Tasks-Formal: (ew. but significant
REQUISITE DECISION MODELS	Conditional Prescription: Explanation	Coherence	Generation of models of shared social reality; decision support; providing a guide to action	Person	Subjects: small Ohjects: small Tasks-Substantive: narrow Tasks-Formal: no

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COMPARISON	4		THEORY		
CRITERION DECISION PERSPECTIVE	INTENDED FUNCTION	JUDGEMENT COMPETENCE EMPHASISED	INTENDED USES OF RESEARCH	LOCI OF UNCERTAINTY	DIVERSITY IN SUBJECTS, OBJECTS, AND TASKS
JUDGEMENT ANALYSIS	Description Prediction	Correspondence	Cognitive feedback; decision support; conflict resolution; representative design: idiographic statistical analysis	Environment, person, and between persons and/or between person and environment	Subjects: small Objects: moderate to large Tasks-Substantive: wide Tasks-Formal: yes, special emphasis
INFORMATION INTEGRATION THEORY	Description: Explanation	Correspondence	Psychological vs. physical scaling of stimuli	Person	Subjects: moderate Objects: moderate Tasks-Substantive: wide Tasks-Formal: yes
IMAGE THEORY	Description; Prediction	Correspondence	Planning for trajectory image goal attainment: understanding organisational "culture":	Person	Subjects: small Objects: moderate Tasks-Substantive: wide Tasks-Formal: some
ATTRIBUTION THEORY	Description: Explanation	Coherence/ Correspondence	Understanding of Behaviour in the "real" world: awareness of attributional errors & their influence on social processes	Person	Subjects: large Objects: small Tasks-Substantive: wide Tasks-Formal: some
RECOGNITION- PRIMED DECISION THEORY	Description: Explanation	Correspondence (via mental simulation)	Description of rapid decision making: training in situation recognition & assessment: conducting mental simulations	Person and environment	Subjects: small Objects: small Tasks-Substantive: wide Tasks-Formal: no
EXPLANATION- BASED DECISION THEORY	Description. Explanation	Correspondence	Retracing causal reasoning behind decisions: elaboration of stories used to integrate evidence	Person and environment	Subjects: small Ohjects: large Tasks-Substantive: wide Tasks-Formal: some
CONFLICT THEORY/ CONSTRAINTS THEORY	Description: Explanation: Prediction	Correspondence	Conflict resolution: balance sheet schema: inoculation against groupthink: working to overcome constraints on	Person and between persons	Subjects: moderate to large Objects: small Tasks-Substantive: wide Tasks-Formal: no

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COMPARISON	*		THEORY		
CRITERION DECISION PERSPECTIVE	INTENDED FUNCTION	JUDGEMENT COMPETENCE EMPHASISED	INTENDED USES OF RESEARCH	LOCI OF UNCERTAINTY	DIVERSITY IN SUBJECTS, OBJECTS, AND TASKS
			vigilant problem solving		

In addition to the method of reasoning behind the analysis the application of judgement analysis has other advantages in certain decision making scenarios.

- 1. Methods of the study of decision making differ in what they are intending to achieve. Many tools are descriptive in origin and seek to describe how judgements are made. Others are predictive in that they propose the correct decisions to be made under a given set of circumstances. A few of the techniques are descriptive and predictive and are considered to be explanatory. In general those techniques with a strong mathematical bias tend to be prescriptive in orientation. Intuitive methods tend to be descriptive. Those methods in the middle like Judgement Analysis tend to be explanatory covering the reasons behind the process of decision making. Therefore the use of Judgement Analysis can be used both to describe and predict the effect of decision making
- 2. Another way of looking at the value of certain decision making methods is to examine the coherence of judgements based in a correspondence between decisions and real world events. In this classification the mathematical tools such as decision analysis tend to focus on the coherence between the decision made and other decisions in a mathematical, non-real-world, sense; those tools that focus on psychological aspects look to the correspondence between external events and

decisions made. This contrasts with Judgement Analysis where the decision system can be studied from whatever perspective is needed.

3. The focus on either the correspondence or the coherence of decision analysis tools leads logically to a discussion on the focus of the concepts of the methods concerned. Research has indicated that there are four loci of decision making (Rosenhead J 1992). These are:

# 1. Environmental Loci

A focus on the environmental factors in decision making.

# 2. Peripheral Processes

The focus here is the interaction between the environmental factors and the decision maker.

#### 3. Central Processing

The locus of attention is the way in which the decision maker processes information.

#### 4. Feedback Processing

How the decision maker handles the information provided by feedback on decisions.

Each of the methods outlined in Table 9.2 use one or more decision making foci to a greater or lesser degree when assessing correspondence or coherence (Cooksey RW 1996).

Decision analysis employs a purely central analysis locus, where most of the others employ a peripheral bias. Only Judgement has the capacity to fully assess the environmental factors involved in the decision making process. Correspondingly, Judgement Analysis is the only field of research that permits a full analysis of the social impact of decision making.

4. The final benefit of Judgement Analysis as the legitimate tool for the investigation of the social and political influences involved in decision making comes from the consideration of the levels of uncertainty handled by each technique. Uncertainty may be said to arise either from internal sources or the external environment. Decision analysis handles the external uncertainties while the intuition-based schemes handle the internal ones. Only Judgement Analysis considers the interaction between the internal and external uncertainties.

The profile of Judgement Analysis as expounded above implies that it is the ideal tool to study decision making in groups, where decisions involve both internal and external uncertainty, and where the environment heavily influences the decisions. The downside of Judgement Analysis is that the analytical exercises require careful construction if valid results are to be obtained. In addition the modes of decision– making being employed in the area of study should not be too close to the analytical or intuitive extremes of the cognitive continuum – if they are then Judgement Analysis will draw the wrong inferences (Hammond KR 1966).

# *9.6 The Performance of Judgement Analysis – the Selection of the System*

The performance of a Judgement Analysis exercise relies on the characterisation of the mode of decision making within systems. Three such systems are recognised, and the performance of the analysis depends on the system under study (Cooksey RW 1996).

#### A. Single systems

The single system represents the simplest system examined using Judgement Analysis. In this system the distal criteria are lacking and the only criteria applied reflects the internal environment. This system is therefore not capable of making any policy impact analysis.

#### B. Double systems

Double systems are an explicit examination of the impact of the environment on decision making. They are the most commonly used system for studying the impact of external regulation on decision making. Double systems may or may not have ecological criteria attached, therefore two types of double system are possible.

# C. Triple systems

Triple systems add in the complexity of interpersonal conflict into the realm of environmentally influenced decision making. It allows for systems in which the judges of the efficiency of decision making are included in the analysis.

From the discussion of the systems involved it would appear that the double system design would allow for the delineation of the ecology of decision making. The remainder of this chapter will focus on the use of double systems.

# 9.7. The Statistics of Judgement Analysis Applied to Policy Decisions

The first step in the performance of a Judgement Analysis research programme is to define the statistical framework. In deciding this framework the double systems is well understood (Tucker LR 1964)

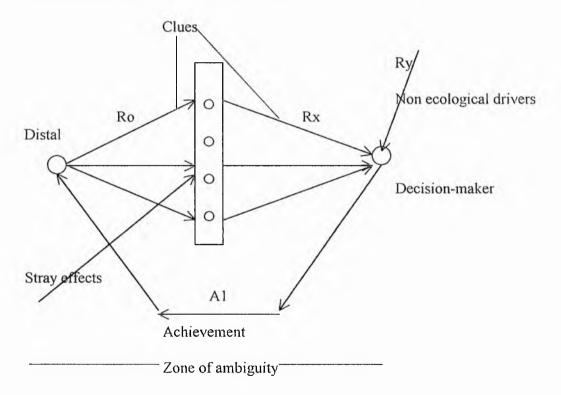
#### 1. Parameters to be estimated

Figure 9.3 shows a lens diagram for a double system with the statistical parameters to be estimated. The majority of studies revolve around the calculation of the clue weights – often called the clue validities - (Rx and Ry) and the achievement of the ecological aims A1. The majority of estimates of these parameters are done using various forms of linear regression models. This methodology is accepted where the outcomes are continuous, however where categorical decisions are made, multivariate techniques are more appropriate. The clue validities estimated can take a variety of forms. It is possible to calculate the raw weights – assuming no interrelations between variables. However it is more common to calculate relative weights or unit weights. These relate the raw rate to the overall variance in decision making – and thereby account for any interactions. The use of relative weights depends on the objectives of the study and is used where predictive validity of the analysis outside the system being studied is an issue.

#### 2. Other estimates

Other factors to be estimated include the function forms, validation and predictability of the clue weights.

FIGURE 9.3 THE BRUNSWICK LENS MODEL ILLUSTRATING ESTIMATED PARAMETERS Modified from Cooksey (Cooksey RW 1996)



#### A. Function Forms

The majority of analyses assume that the underlying function of the clues is additive, i.e. the action of clues on the decision results from the additive effect of the clues. This additive effect can take a variety of forms depending on the overall relationship between clues and judgement. Therefore judgements may be linearly related to clues, or related in a quadratic manner. In the case of additive functional form the equation deriving the relationship can usually be found in the raw data using either power polynomials or range methods.

In some instances the functional form may be non-additive. In this instance the relationship between clues and judgements depends on order of presentation, or organisational issues. The development of the functional form in circumstances where the functional form is non-additive is complex and involves the use of clusters and patterns of clues in an attempt to improve predictability

The underlying functional form is important as it defines the validity of the result.

#### B. Validation

It is important that the results of the exercise are internally consistent. Generally this is achieved either by replicating the exercise or by holding a pre-exercise. The test used will depend on the nature of the investigation being undertaken.

#### C. Predictability

Predictability measures the use of the analysis to other situations. In general it is desirable to produce a model with a high predictability for the tests being considered. The level of acceptable predictability, however, depends on the situation being analysed and the tools being used.

## 3. Sample size considerations

In general the more profiles the better. However this has to be tempered against time constraints and judge fatigue. It has been suggested that a minimum of 10 profiles is needed and the profile: clue ratio should not be less than 5:1. This figure is a guideline only and can be modified. For example where pre-validation is performed a ratio of 3:1 has been used (Keeley SM and Doherty ME 1972).

## 9.8 The Construction of Judgement Analysis Research Experiments

The critical feature in the design of Judgement Analysis for a double system is the design of the study to obtain both the factors driving decision making and the results of the exercise. There have been many studies using Judgement Analysis to examine tasks and wide ranges of methodologies have been developed to cope with a variety of scenarios. However, as the key aim of Judgement Analysis designs is to allow a natural flow of decisions to be made within a system that maximises the statistical integrity of the results, a number of prerequisites must be met (Cooksey RW 1996).

- 1. The decision-makers must be experienced with the ecology in question. This is important as it provides a stable baseline of study. However, this criterion does not imply that the decision-maker should have completed the tasks before, merely that he or she is familiar with the working environment.
- 2. The decisions to be made should be representations of the task ecology, either in abstract terms, i.e. the tasks being performed have a similarity to real tasks or in terms of the decision being made having a concrete effect on the

#### environment.

Based on the responses to these questions a variety of designs are possible.

A. Familiar Judges and Concrete Tasks.

This situation can be exemplified as physicians making decisions on patient management based on clinical variables - e.g. blood pressure. Here environmental clues can be represented directly in terms of a naturally occurring unit (the measured blood pressure and the drugs formulary) and the outcomes easily identifiable – the number of drugs added. Therefore it is expected that a close mapping between the environmental and decision making outcomes can be obtained. This situation is best studied by direct observational studies.

B. Familiar Judges and Abstract Tasks

This is the commonest type of analysis encountered. Here the challenge is to establish a realistic link between the decisions made and the ecology under study, where there is no clear understanding of the impact of the decisions on that ecology. The clues in this type of abstract study are generally representative of the factors present in a given decision, i.e. a factor is either present or absent. Therefore the clues in this type of analysis tends to be unitless.

This type of research is common in the field of investment analysis, for example the planning of new buildings, where multiple clues are brought together to make decisions. The results of such analysis are, however, considered to be specific for the situation under study.

# C. Unfamiliar Judges and Abstract or Concrete Tasks

These tend to be laboratory-based studies of human learning, rather than research of decision making ecology. Very little research has been done in the area of unfamiliar judges with concrete tasks, as most concrete task reasoning requires professional knowledge. There is a considerable body of experience, however, in unfamiliar judges handling abstract tasks. This methodology is often used to review the impact of policy decisions. These studies have used the interpersonal conflict and learning paradigms to explore the impact of social research. In both situations where unfamiliar judges are used, the ability to generalise the results is often limited.

From the preceding discussion it is apparent that where obtaining generalisable results are key it is important that judges must be fully familiar with the tasks in hand. Familiar judges are also needed where the valuation of intended outcomes is the target for analysis.

Furthermore, in situations where examination of policy options is the target for the analysis the judgement analysis design adopted must be to produce measure-sensitive validities of the clues to the decision making ecology. These validities should be directly correlated to the natural unit outcome, or at least explain the relationship to the abstract tasks understudy.

# 9.9 Designing a Judgement Analysis Study

From the discussion above the key component to performing a Judgement Analysis is constructing the tasks in such a manner that they reflect the task ecology and permit the estimation of the statistical parameters needed. This is a balance, and in the end a pragmatic solution normally results (Cooksey R and Freebody P 1986). This pragmatic solution is usually influenced by (Cooksey RW 1996)

# 1. The focal intent of the research

Where it is the intention to examine the judgements of individuals, the single system or the double system is the most appropriate. Where the intention is to look at the behaviour of a group, a double or triple system design – where there is an ecological criterion present - is best.

#### 2. The judges

Where experienced judges are available then double or triple designs are best.

# 3. The depth of clue information available.

The clue information is at the core of the representative-ness of the study design. In general, the information should be derived from real-life situations in double and triple systems.

Obtaining the clues also relates to the type of judges. Familiar judges will rapidly highlight absent clue information. Therefore it is essential that clue information is accurate. In general there are three methods used to obtain clues. These are

# A. Structured interview

The interview of experienced judges.

#### B. Document analysis

A review of the documents relating to judges.

### C. Objective analysis

Reviews of published research materials.

# 4. The methods available to obtain clue specific weights

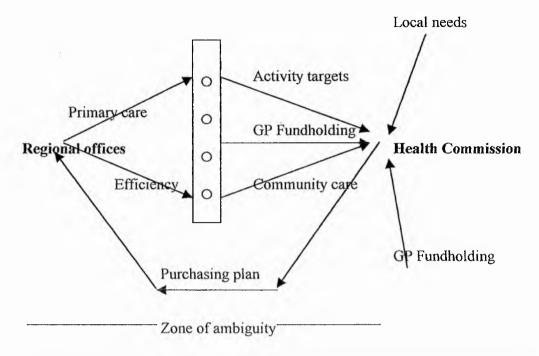
This is the central issue to the design of judgement research. Ideally the clue weights should be obtained in as natural a way as possible. Various methods have been employed. For example, Roose and Doherty used randomly generated errors within existing profiles to highlight changes in clue weights that could then be used to generate the specific weights themselves in comparison to a random population (Roose JE and Doherty ME 1976). However, most studies are not as sophisticated, instead clue weights are derived from responses to actual cases (Cooksey R and Freebody P 1986). These responses may be obtained from within the decision making forum, where available. However the majority of studies use a sampling technique to examine the responses across a range of individuals. If sampling techniques are used then consideration should be given to the statistical validity of the methods.

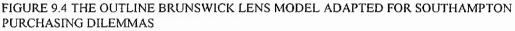
#### 5. The nature of the response

The use of concrete examples calls for concrete responses; similarly, where abstract studies are being performed abstract measures can be used. Where categorical responses are being made, for example yes/no decisions, special data handling techniques are required – for example the use of logistic regression. This technique imposes some limitations on the way data are interpreted.

# 9.10 Designing the Southampton Priority Setting Judgement Analysis

The exercise in Southampton was called the Purchasing Dilemmas exercise. Based on chapter 8's discussion of the Commission it is possible to design the Judgement Analysis. The system adopted is depicted in Figure 9.4.





#### 9.10.1 The Features of the Design

The determining factors for the design of the experiment can be broken down into;

The decision making ecology

The ecology of decision making reflects the environment and the tasks. In the case of the DHA, the environment is the demands for the efficient purchasing of health care as specified by the mission statement of the health authority – which in itself is reflective of ' working for patients'. The RHA specifies the tasks to be achieved within that environment. These were discussed in the previous chapter and are summarised below:

The health Commission is required to meet the aims of

- 1. Political initiatives such as waiting time reduction and Health of the Nation strategies.
- 2. The needs of the local population for services as evidenced by health strategies.
- 3. The demands of co-purchasers such as social services and GP Fundholders.
- 4. The performance assessment of the authority through tools such as the efficiency index.
- The access the authority might have to discretionary funds through the adoption of certain strategies – for example the funds ear-marked for assisting authorities to resettle long stay patients in psychiatric institutions.
- 6. Demands from local providers.
- 7. Demands from the local community and media.

Taken together the tasks and the environment specify the ecology.

#### The clues

The ecology for action does not necessarily match directly into clues for action. The clues for action are by nature ambiguous and reflect the objectives of the distal criteria that originated them, modified for political and social acceptability and the ability of the Commission to reassemble the clues (Hammond KR, Stewart TR, Brehmer B and Steinmann DO 1975).

Taking each of the objectives in turn, we can highlight the associated clues as follows

1. Political initiatives – such as waiting time reduction and Health of the Nation strategies.

This is reflected as the need to purchase extra activity in order to achieve these

aims, although this may be in specialities where there is no demand - in other words, excess activity. This activity may either be in the community or hospitals or reflected in the weighted activity index that is used to calculate efficiency.

2. The needs of the local population for services as evidenced by health strategies.

This is reflected in two ways - either by internal Commission pressure to implement strategies or by pressures from outside of the Commission – for example the media or patient pressure groups.

3. The demands of Commission members and co-purchasers such as social services and GP Fundholders.

The demands of co-purchasers are reflected as bids put to the Commission and the pressure both internally and externally to the Commission to implement change. Internal pressure within the Commission also arises de-novo, either as the need to fulfil the Commission core values, for example care closer to home, or the demand to fulfil strategies.

4. The performance assessment of the authority through tools such as the efficiency index.

This is again reflected as the purchasing of excess activity.

5. The access the authority might have to discretionary funds through the adoption of certain strategies – for example, the funds ear-marked for assisting authorities to resettle long stay patients in psychiatric institutions.

This is reflected as the financial strategy that the Commission adopts to get these funds.

6. Demands from local providers.

Reflected as provider bids to the Commission as part of the planning process.

7. Demands from the local community and media.

Reflected as both internal and external pressures within the Commission – in a similar manner to provider demands.

Based on this discussion, it is possible to identify a list of clues to use in making decisions

that will satisfy the ecological conditions, these are

- 1. The health Commission values and pressures -
  - utility the likely benefit to the community
  - equity
  - choice
  - personal responsibility
  - care closer to home and local care
  - the existence of a suitable purchasing strategy
- 2. The political clues
  - purchasing extra community, hospital and weighted activity in areas that will generate excess activity
  - national priority purchases such as Health of the Nation targets
- 3. Community clues

The needs of the community. This can be defined in two ways

- a. Where there is an absolute community need
- b. Where the local community has an excessive problem over the national average.
- 4. Financial strategy clues
  - The costs of development and the access to discretionary funds.
- 5. Provider and co-purchaser pressures -

The bids from the hospitals and the GP and Social Services priorities

It is possible to define the bids placed before the Commission in accordance with these clues and measure each proposal in line with the associated values The clue information can be readily obtained from the purchasing environment by either survey or in depth interview.

#### The system

The Southampton Health Commission represents a panel of experienced judges making real life policy decisions - reflected as investment decisions in public purchasing. These decisions are categorical i.e. a yes no decision but are based on abstract clues.

#### The achievement

The achievement of the decision making process is an acceptable purchasing plan placed before the Commission. It is therefore possible to look at the achievement in terms of what went into the plan.

### Statistical considerations

The recommendation that was introduced above, was that of a 5:1 ratio. In the purchasing exercise it was unlikely that such a ratio could be achieved. Therefore, in order to achieve a lower ratio a pre-validation exercise would be needed.

# Experimental design

The design of the study therefore appears most amenable to a double system, with ecological criteria. The corresponding lens diagram is depicted above, Figure 9.4.

#### 9.10.2 The Objectives of the Design

The object of the study is to determine the measure-sensitive clue weights and relate these weights back to the ecology. In order to achieve this, a pre-validation exercise would be conducted before the final analysis made. The final exercise would involve a ranking exercise within the Commission to determine the clue weights. The primary outcome variable was the presence or absence of the investment on the purchasing plan. The output of the experiment would be used to determine the meaning of the ecological criteria.

# 9.11 Conclusions

The design of the Judgement Analysis exercise concludes this chapter. The framework and design as outlined above was then applied to the decision making system about contracts in Southampton Health Commission. The analysis would be constructed as a two-stage design – in order to maximise statistical validity. The overall construct of the analysis reflects Brunswick's lens theory, together with the elements of representative design. These features have been adopted in order to maximise the determination of the ecological criteria involved. By describing these criteria the causal link between the institutional imbalance, the failure to provide services and the failure to support the mode of capital accumulation can be described.

CHAPTER 10 ESTABLISHING THE CAUSAL RELATIONSHIP BETWEEN THE ELEMENTS OF THE HYPOTHESIS PART2. EXPLORING CONTRACTUAL AND IMPLEMENTATION DECISION MAKING IN SOUTHAMPTON HEALTH COMMISSION USING JUDGEMENT ANALYSIS

# 10.1 Key points from the Previous Chapter

In order to examine the causal relationship between the failure to provide services, the institutional imbalance and the failure to support the mode of capital accumulation a case study of contractual implementation is needed. Because of the closeness of the demographics and the willingness to undertake research the case study is centred in Southampton. From a review of the activities of the Health Commission it was apparent that decision making within the organisation was a very complicated exercise. Therefore the study of the factors involved in decision making required a special technique to be adopted. The tool selected was Judgement Analysis. Using the principles explained by Brunswick and his contemporaries a lens framework for the analysis of the decision making process in Southampton was described. The characteristics of this model is of a double system with ecological criteria, using experienced judges in an exercise involving a pre-validation step before the main exercise.

#### 10.2 Objectives for this Chapter

This chapter will apply the Judgement Analysis framework to Southampton Health Commission. Its objectives are to examine the background to the exercise, the data gathered to support the exercise and the conduct of the exercise.

# 10.3 The Decision Making Environment in Southampton

The basic features of Southampton Health Commission were introduced in chapter 8. The Commission was characterised as a hierarchical negotiating agency with responsibility as a contract agency for providing services to local health care users. The Commission also has a significant regulatory role - being responsible for the performance of GP Fundholders and fulfilling the performance targets set by the regional offices. This places the Commission in an ambiguous position and the Commission is left to balance its role. In doing so, it uses the objectives it is set and the options it is presented with. The purpose of this study was to determine how the presented options and objectives influence investment decisions.

#### 10.4 The Background to the Exercise

At the time of conducting the exercise the Commission had several factors which influenced the conduct of the analysis (Honigsbaum F 1994). These factors can be broken down into

#### 10.4.1. The Purchasing Environment.

Southampton is a growing district with high numbers of elderly. Therefore the Commissions capitation payments are likely to increase. The Commission estimated that it would have growth funds available over the next 5 years ranging from £22 million (on a low growth assumption of 1% per year) to £34 million (on a high growth assumption of 2% per year) (Southampton Health Commission 1993).

Despite the financial position the Commission wanted to see whether alterations should be made in its basic structure of expenditure with the possibility of disinvestments (meaning the restriction or cessation of services) in some areas of health care in order to fund new developments. This entailed a detailed review of priority setting methods.

# 10.4.2. Changes in Priority Setting and in Purchasing Strategy.

In many districts, the decision making process begins with the public health directorate inviting bids from providers and, with the aid of other executive officers, compiling a short list for the health authority to consider. Usually, only about 10 to 15 bids are referred in this way (Heginbotham 1992).

Southampton had used a bid attraction process in the past, but on this occasion the Commission decided to take a more pro-active stance (Honigsbaum F 1994). It wanted to develop its own purchasing strategy and not simply respond to the wishes of providers. This situation arose due to the failure of the Health Commission to implement any of the strategic proposals and it had developed (Honigsbaum F 1994). This was a major concern of the non-executive members of the authority. The non-executive members were keen to play a more active role and wanted all suggested changes referred to the Commission. This meant that no short list of bid proposals would be compiled, and a more complex procedure would ensue.

The adoption of a pro-active stance implied that all bids were on the table, however these bids had to be found. Therefore bids were attracted from the strategy review teams, for instance the stroke strategy team described in the chapter 8. To these bids were added proposals from the providers who sought  $\pounds 1.3$  million more in specialist services and finally there were the national and local priorities to include.

In order to handle such a complex number of bids a framework was needed. The establishment of a Programme Budget provided this framework.

# *10.5. The Establishment of the Programme Budget as a Purchasing Framework.*

#### 10.5.1 The Programme Budget Structure

In order to establish a Programme Budget structure the Commission conducted an expenditure exercise. In this exercise it was decided to follow the RAND methodology developed during the 1950's (Wildavsky A 1975). Therefore the members of the Commission agreed a programme format, and a programme analysis was to be performed to support it. The programme format was closely allied to the Commission's objectives as a contracting agency.

The Commission decided to format the programmes according to disease rather than care group categories as this was felt to give a strategic advantage to the operation of contracts (Cohen D 1994). Accordingly the programme categories are produced in Table 10.1. The groups had, as a basis, the ICD9 classification, enabling enmeshment with DRG's and other diagnosis related categories (McMahon L 1989).

# TABLE 10.1. THE PROGRAMME BUDGET STRUCTURE

Programme	Subprogramme
1. Injury	1. Trauma
	2. Burns
	3. Poisoning
	4. Other injury
2. Mental Health	1. Mental illness
	2. Learning disabilities
3. Cancer	1. Lung and respiratory
	2. Connective tissues and breast
	3. Genitourinary
	4. Digestive
	5. Other malignancy
	6. Non malignant
	0
4. Circulatory Disease	1. Heart disease
-	2. Cerebrovascular disease
	3. Other vascular diseases
5. Mobility and the Senses	1. Nervous system
	2. Diseases of the senses
	3. Musculoskeletal
6. Infection and Internal Disease	1. Infectious disease
	2. Endocrine metabolic and immune disorders
	3. Blood disorders
	4. Respiratory disease
	5. Digestive tract disease
	6. Genitourinary disease
	7. Unspecified symptoms and illness
7. Pregnancy and the New-born	1. Fertility
	2. Pregnancy and childbirth
	3. The new-born
8. Other Health Programmes	1. Supportive and social care
0	2. Healthy lifestyle promotion
	3. Child surveillance
	4. Other health protection

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Once the programme format was established the analysis was done using the local purchaser and providers data collection systems. The number of finished consultant

episodes by programme was calculated and these priced at average speciality cost. In the case of care in the community - where no routine data were available, expenditure was apportioned from the hospital costs. Primary care costs were allocated from the Morbidity Survey in General Practice 4 and the PACTLINE prescribing information under British National Formulary headings (MB5 no 3 1994). The final distribution of expenditure is shown in Table10. 2

#### TABLE 10.2 EXPENDITURE BY PROGRAMME

Programme	Spend £ million	Percentage
Injury	14.4	6.5
Mental Health	33.6	15.1
Cancer	13.6	6.1
Circulatory	23.5	10.6
Mobility	29.9	13.4
Infection and Internal	68.0	30.6
Pregnancy and the new-born	n 18.7	8.4
Other	20.7	9.3

#### 10.5.2 Alignment of the Programme Budget with the Strategy of the Commission

The Commission then decided to align its overall strategic purchasing direction with the Programme Budget (Honigsbaum F 1994). As was explained in the previous chapter, the role of the Commission is to secure better health for local people via the use of contracts. Given this aim the Commission set priorities based on the mortality and morbidity in the community, the effectiveness of available interventions and measures of resource efficiency. These latter values were expressed on a subjective assessment of value for money. The Commission decided to express the priority of the programme in terms of weighting for change. Weighting a programme as one implied no change, less than one implied priority for disinvestment, greater than one implied priority for investment. Given this framework the Commission decided that its priorities were expressed as weightings – given in Table 10.3

#### TABLE 10.3 PRIORITY WEIGHTINGS

Injury	0.80
Mental Health	1.36
Cancer	0.80
Circulatory	1.20
Mobility	1.04
Infection and internal disease	1.04
Pregnancy and the new-born	0.88
Other	0.88

Therefore the Commission wanted to increase spending on mental health and circulatory disease, while decreasing spending in other programme areas. The establishment of the priority weights enabled discussions on both an investment and a disinvestment strategy.

#### 10.6 Investment Strategy and the Attraction of Bids

From the priorities identified, the public health directorate identified health problems that were either a major cause of mortality and morbidity in terms of the number of people affected, or where the local health problem was relatively large (Honigsbaum F 1994). Prominent among the former were heart disease, various cancers, stroke and mental illness, while child dental health and teenage pregnancy had caused much local concern in the latter group. The full list of concerns is reproduced as Table10. 4. The diseases where there was a large disease burden by and large conformed to national and regional priorities since Southampton's population profile is similar to that on which the

Department of Health based its health targets in the Health of the Nation. In all, 29 health problems were identified. Targets were then set for each health problem with the selection of interventions best designed to meet them. The selection of interventions was based on the criteria of

Local Needs – defined as the ability of an intervention to target the local problem – given any unique local features.

Effectiveness – defined as the ability of the intervention to have an effect, based on published knowledge.

Value for money – an assessment of the number of treatments offered is comparative to its cost.

This part of the process had much in common with the strategy processes described in the previous chapter. In many cases where the health problems and the strategy overlapped, the assessments were taken directly from the existing strategies.

For example, the injury programme area. The Commission focused on trauma and poisoning where figures suggested that the problems in Southampton were greater than the national average. Where accidental injury was concerned the use of safety devices – such as fireguards - and the implementation of immediate care in the Accident and Emergency Department could reduce the local impact. Safety devices were assessed as effective and having high value for money. This contrasts with immediate care in Accident and Emergency Departments, which was found to be effective with moderate

value for money. As there was no Commission strategy for these areas the assessment was made by the Commission's Public Health Consultants. In total to provide preventative measures for those residents at risk of suffering an accident eight interventions were considered and from these three programme changes were proposed, (one was also designed to reduce the risk of accidental poisoning). Similarly, to reduce the impact of injury, six interventions had been considered and from these five programme changes were proposed, one being based on a pilot exercise. There were thus eight programme changes from the injury care group for the Commission to consider.

A similar exercise was gone through in each of the programme areas and a list of interventions developed. These were added to the strategic developments and the proposals from providers. This made in total 49 potential investments to be discussed as part of the exercise – Table 10.5

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# TABLE 10.4 LOCAL HEALTH PROBLEMS

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<b>Programme</b> Injury	<b>Concern</b> Trauma	Reason		
ngury	Poisoning	In line with Health of the Nation		
Mental Health	Dementia Substance Misuse Learning disability Care in the community Suicides	Local health problems		
i.				
Cancer	All forms	In line with Health of the Nation		
Circulatory	Stroke Cardiac	High local incidence In line with Health of the Nation		
Mobility	Visual impairment	Local health problem		
Infection and Internal	Disease			
	Asthma Diabetes HIV Dental disease	Local health problems		
Pregnancy and the New-born				
	Unwanted teenage Pregnancy Maternal care	Local health problem National priority		
Other				
	Child protection Smoking Exercise	Local health problem		
	Nutrition	National priority		

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### TABLE 10.5 INVESTMENTS FOR CONSIDERATION

# Injury

### 1. Mixed Crew Trials (abbreviated as mixed crews)

The use of mixed crews of qualified and basic grade ambulance staff to transport nonurgent patients. Provider bid costing £29,000 in order to start a pilot.

# 2. Immediate Care for Injury (abbreviated as immediate care)

The provision of crash call GP's to attend accidents. Provider bid £20,000 for pilot.

# 3. Community First Aid Training

Commission suggestion - £10,000.

# 4. Patients Charter Accident and Emergency (abbreviated as A and E)

National Priority - £137,500.

### 5. Multiagency Accident Prevention (abbreviated as accident prevention)

An accident prevention strategy involving education; health care and social services. Commission suggestion - £27,000.

### 6. Accident Prevention Information (abbreviated as accident info)

Health of the Nation requirement £20,000.

### 7. Provision of Safety Equipment (abbreviated as safety aids)

Commission bid £10,000.

### 8. Trauma Centres

The provision of specialist trauma centres for the treatment of trauma. Provider bid - £50,000.

# Mental health

### 9. Community Mental Health Teams

The provision of five mental health teams to work in the community. In line with national priorities Commission bid -  $\pounds 1,300,000$ .

# 10. Locality Based Hospital Units (LBHU)

Providing residential care for individuals with learning disability, a local priority Commission bid - £900,000.

# 11. Home and Day Detoxification ( Detox)

Providing local services for the management of alcoholism and drug related disorders.

Local priority. Commission bid - £100,000.

# 12. Brief Interventions

The practice based counselling of substance misuse. Local priority. Commission bid - $\pounds 2,000$ .

### 13. Substance Misuse Education

School programmes of education about drug abuse. Local priority. Commission bid -

£40,000.

### 14. Improved Information and Support for Carers (abbreviated as info to carers)

Information to caregivers about services on offer and how to obtain them. Local priority.

Commission bid - £10,000.

# 15. Increased Respite and Day Care for the Mentally III (abbreviated as respite care)

National and Strategy priority. Commission bid - £400,000.

# 16. Improved Management of Depression in Primary Care (abbreviated as depression management)

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Local priority. Commission bid - £ 20,000.

### 17. Counselling in Primary Care (abbreviated as Counselling)

Local priority. Provider bid - £600,000.

# 18. Supported Housing

Housing for the mentally ill in the community. National and strategy priority. Commission bid. £1,700,000.

## Cancer

### 19. Palliative Care

Increased provision of palliative care in the community. Local Need. Provider bid  $\pm$  £50,000.

### 20. Specialist Cancer Treatments (abbreviated as Cancer teams)

Centralising the management of cancer. Provider bid - £350,000.

### 21. Skin Cancer Prevention

National priority. Commission bid - £50,000.

## 22. Skin Cancer Recognition

National Priority. Commission bid - £26,000.

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# **Circulatory Disease**

### 23. Cardiac Rehabilitation

The provision of after care services in cardiac care. Local priority. Provider bid - £50,000.

# 24. Community Stroke Rehabilitation (abbreviated as stroke rehabilitation)

Local need. Commission bid - £250,000.

# 25. Targeted Stroke Prevention

Local need publicly stated in stroke strategy. Commission bid - £10,000.

# Mobility and the Senses

### 26. Care Attendants

Provider bid - cost not known.

# 27. Community based clinics for orthopaedics (abbreviated as community orthopaedics)

Provider bid £100,000.

### 28. Knee Replacements

Provider bid cost not known.

### 29. Community Rehabilitation

Rehabilitation in the community following minor surgery. Provider bid - £570,000.

### 30. Pre-admission Clinics

Community based clinics for the assessment of patients prior to hospital admission. Provider bid - £7000.

### 31. Equipment to Assist the Disabled (abbreviated as Equipment)

Commission bid - £150,000.

**32.** Mobile Retinopathy Screening (abbreviated as retinopathy screening)

Assessment of vision in diabetics. Provider bid - £50,000.

# **Infection and Internal Disease**

**33.** Asthma Education in Primary Care (abbreviated as asthma)

Local need. Commission bid - £10,000.

### 34. Sex Education in Schools (abbreviated as sex education S)

Local need strategy based. Commission bid - £32,000.

### 35. Needle Exchanges

Local need strategy based. Commission bid - £25,000.

# 36. Oral Health Education

Local need. Targeted at vulnerable groups. Provider bid - £10,000.

### 37. Oral Hygiene Education

Local need. Provider bid - £10,000.

# **Pregnancy and the New-born**

### 38. New Models of Maternity Care (abbreviated as maternity care)

Strategy based national priority. Commission bid - £100,000.

#### 39. Unwanted Teenage Pregnancy Education (abbreviated as sex education T)

Strategy based local need. Commission bid - £50,000.

### 40. Assisted Conception

Provider bid £1,000,000.

### 41. Pre-Conceptual use of Folic Acid (abbreviated as folic acid)

Commission bid £10,000.

## 42. Ambulance Obstetrics

Patient Charter objective for obstetric training in paramedics. Provider bid £25,000.

# **Other Health Programmes**

### 43. Reduction in Waiting Lists (abbreviated as waiting lists)

National Priority. Commission bid £1,900,000.

### 44. Child Protection Training

Local need. Commission bid £10,000.

### 45. Child Protection Assessment

Local need. Commission bid £20,000.

### 46. Smoking Cessation Support (abbreviated as smoking)

Local need. Commission bid £10,000.

### 47. Dietary Advice in Primary Care (abbreviated as dietetics)

Provider bid £25,000.

# 48. Communication Service for Ethnic Minorities (abbreviated as communication service)

Joint bid local need £50,000.

### 49. Domicillary Care

A hospital at home scheme. Provider bid £100,000.

### 10.7. Disinvestment Strategy

There were two proposed mechanisms for the setting of disinvestments. First would be the withdrawal of funds from ineffective interventions. Second would be the top slicing of funds for special services. Both of these mechanisms were discounted, however, as it was felt to be impossible to define effectiveness and the regulatory structure posed by the efficiency index made top slicing difficult to perform (Honigsbaum F 1994).

### 10.8 The Judgement Analysis Information Needs

The attraction of the bids completed the first stage in the revised planning process. These bids formed the basis of the Judgement Analysis framework as these were used as the decisions to be made. The Commission staff then collected information on the purchasing clues. The clue information came from several sources.

#### 10.8.1. Commission Clues - The Ranking of Benefit and Commission Values

The staff of the Commission provided direct information about the clues being applied to decisions when the proposals were reviewed internally. It was decided that the best way

to express these clues was in terms of a relative weighting. As was stated in the previous chapter the clues provided by the Commission translated into the Commission values. Therefore, the commission staff scored the bids in accordance with the Commission values that were introduced previously in order to obtain the clue weighting.

First the 49 options were scored in terms of desirable features drawn from the Health Commission Mission Statement - introduced in the previous chapter (Southampton Health Commission 1993). Therefore the Commission scored the investments in terms of

Health Benefit

Ranked 0-3 depending on the benefit assessed to the local population.

Equity

Ranked 0 or 1 if the intervention improved equity – defined as equalising access to care across the district.

### Choice

Ranked 0 or 1 depending if the intervention increased choice.

### Personal Responsibility

Ranked 0 or 1 depending if the intervention increased responsibility of individuals for their own health care.

Access to Waiting List

Ranked 0 or 1 depending if the intervention decreased waiting times.

Access to Local Care

Ranked 0 or 1 depending if the intervention increased local care.

In addition the Commission intended to add a seventh value - the number of quality adjusted life years added by the investment - the so-called marginal QALY value. However, the majority of the bids proposed could not be described in terms of QALY values and so this scoring was dropped (Honigsbaum F 1994).

Investments were also noted to be either of strategy origin, provider investment requests,

primary care origin or other

For example, here is the score assigned to palliative care Table 10.6

TABLE 10.6 THE COMMISSIONS SCORING OF PALIATIVE CARE CLUES.

	<u>Score</u>
Health benefit	1
Equity	0
Choice	1
Personal responsibility	0
Access to wait list	0
Access to local care	1
Marginal value (QALY)	not available
Provider Origin	yes

**10.8.2.** The Current Allocation of Resources and the Projections for the Future – the Financial Clues

The Commission decision making process was also influenced by the financial projections and so the financial clues were also collected. This involved two exercises. First the share of current resources allocated to each of the eight health programmes was calculated an estimate of how these might change with demographic pressures over the

next five years obtained. These were then matched with the estimated increase in funding. In view of funding uncertainties, high (2% per year) and low (1% per year) growth figures were estimated (Honigsbaum F 1994).

Mental health was to change most under these conditions. Its share of resources was to increase from 13.7% to about 15%. Maternity services were set to decline by about the same amount. This change was due to the ageing of the local population. However, the remainder of the services remained static.

Also, as part of the financial strategy, the costs of each investment were assessed and the likely impact of any discretionary funds included.

### 10.8.3. The Views of the Stakeholders – the Local Pressure Clues

To aid the planning process, the Commission had formed a Health and Social Care Alliance. This included GPs (Fundholders as well as non-Fundholders), the Community Health Council, social services, education, local authority environmental health, housing and leisure services representatives, secondary care providers (Southampton University Hospitals Trust and Southampton Community Health Services Trust), and the independent and voluntary sector. In order to gain a clearer picture of the investment strategy, this group was asked to comment on the investments. No attempt was made to consult the general public but the Alliance did contain groups representative of public opinion (Honigsbaum F 1994). It went beyond this form of public consultation to seek the views of the Commission's partners in the provision of health care. Between December, 1993, and February 1994, the Alliance partners supplied views, information and ideas for the future strategy development. An attempt was made to obtain some sense of the values employed by the community in setting priorities. This was done by means of case vignettes (for example, one concerned the pros and cons of expensive drug treatment for depression) so as to reveal more clearly the way preferences were made. These were presented in a seminar to the respective groups and the discussion recorded. Five such meetings were held with about 15 members per group. A concern for equity and a fair allocation of resources was apparent, along with a call for a locality approach to needs assessment. Also, more effective links between GPs and social services were felt to be crucial. Though some consultation was seen as desirable, the main message coming from the stakeholder community was that it wanted the Commissioners to make the hard decisions. It felt the subject was too complex for general consideration; the public did not have the information needed to make careful evaluations of clinical need and cost-effectiveness. However, sufficient information was gleaned to discover if the options presented were of local concern (Honigsbaum F 1994).

In addition to the discussions, stakeholders were given the opportunity to apply their own rankings to the options presented. Stakeholders were asked to assign priorities within the eight health programmes, using a score of three for high, two for medium and one for low. Of the 375 questionnaires sent out, only 72 were returned and 34 came from GPs. When questioned on the failure to respond, many respondents found the ranking process difficult. Most felt that more information was needed about outcome, cost and the number of people affected by each service.

The responses from GPs were of particular importance because of the influence they exert on Commission spending. Because the replies from GPs represented nearly half the total received from stakeholders, their separate rankings did much to determine rankings as a whole. The ranking obtained from the GPs is given in Table 10.7. They assigned the highest priority to waiting times for elective surgery and the lowest to information for accident prevention.

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### TABLE 10.7 GP RANKINGS

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Waiting list	1
Trauma centres	2
Community mental health teams	3 3 5 5
Home palliative care	3
Contraception education	5
Stroke rehabilitation	
Respite care	7
Care attendants	7
Information to carers	9
Cancer teams	9
Cardiac rehabilitation	11
Counselling	12
Sex education	13
Mixed crew trials	14
Substance Misuse	15
Community rehabilitation	15
Domicillary care	15
Asthma education	18
Child protection	18
Pre-admission clinics	20
Community first aid	21
Home detoxification	21
Knee replacements	21
Community orthopaedics	24
Ambulance obstetrics	25
Folic acid	26
A and E	27
Supported housing	28
Equipment aids disabled	28
Retinopathy screening	28
Maternity care	28
Smoking advice	28
Child protection training	33
Brief interventions	33
Communication service	35
Assisted conception	36
Oral Hygiene	36
Skin cancer prevention	36
Needle exchange	39
Depression management	39
Oral health education	41
Safety aids	42
Skin cancer detection	43
Targeted stroke prevention	44
Immediate care	45
LBHU	45

Dietetics	47
Accident prevention	48
Prevention information	49

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The other rankings are more difficult to interpret. Eleven responses were received from professions allied to medicine, nine from CHC members, and eight from hospital services and four from social services and other councils of community service. In this instance the spread of priorities was very large. However very high ranks were given to community mental health teams, waiting lists and trauma centres while low rankings were given to the information based initiatives such as carer information. A full ranking is given in Appendix A.

Stakeholders were also given the chance to suggest changes in the way funds were distributed across health programmes. Of the 43 respondents who disagreed with the way in which money was allocated across programmes, the responses appeared to indicate that more expenditure was needed in the cancer and circulatory disease programmes, while spending should be reduced in the infection and internal disease and mobility and the senses programmes. However, where the allocation of additional funds were concerned, the priority differed. All 72 responded to this question and the mental health programme received the highest percentage.

The findings of the consultation suggested that four areas for concerns stood out. These were waiting time, local access, choice and health benefit. Less importance was attached to personal responsibility and equity. Within the stakeholders mental health was seen as a priority area for growth by additional funds, while cancer and circulatory diseases were the choices for receiving more funds from disinvesting.

### 10.8.4. National Clues

The national clues were obtained from the priorities and planning guidance documents and, the performance targets and the efficiency index requirements (Wessex Regional Health Authority 1993). In addition the impact of changes on activity levels were assessed using provider based estimates of change (Honigsbaum F 1994).

The national clues were the last to be assembled. The final set of collected information appears as the initial dataset displayed in appendix B.

### 10.9The Conduct of the Exercise

### 10.9.1 Assembling the Panel of Judges

The central judges involved were the members of the Health Commission executive panel. However, in view of the complexity of the issues a support group was formed. These were non-voting members designed to help the panel reach decisions. The full panel is produced as Table 10.8. For the members of the health Commission this was the 4<sup>th</sup> purchasing plan produced, therefore, they could be counted as experienced judges.

### **10.9.2 The Learning Exercise**

So many changes were made in the months prior to the exercise that it was doubted if the judges were sufficiently familiar with the new procedure to make the decisions needed. Therefore it was decided to hold a learning exercise based around a single subject and assisted conception was the intervention chosen. It was one of the more common procedures excluded by health authorities and would provide an opportunity for clear criteria to be developed. A full day session of the Commission executive and nonexecutive members was called in order to conduct this exercise.

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#### TABLE 10.8 THE JUDGES IN THE EXERCISE

## 1. Members of the Southampton and South West Hampshire Health Commission

Professor JBL Howell (Chairman) Mrs. IF Candy (Vice Chairman) Mr. JB Burdekin (non-executive) Professor CF George (non-executive) Mr. BI Irish (non-executive) Dr. R Lee (non-executive) Reverend BL Strevens (non-executive) Mr. PA Shaw (Chief Executive) Dr. NA Allen (Director of Health Strategy and Public Health) Mr. L Judd (Director of Health-care Commissioning and Primary Care) Mr. IV Marriott (Director of Finance, Information and Performance) Mr. AM Cochrane (Associate Director, Performance and Development) Mrs. A Jeffrey (Associate Director, Primary Care) Mrs. R Archer (Assistant Director, Social Services) Mr. J Whale (Chairman CHC - observer)

# 2. Health Services Management Centre, Birmingham University

Professor Chris Ham Mr. Frank Honigsbaum

### 3. Staff of the Southampton and South West Hampshire Health Commission

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Mr. John Richards Dr. Tony Lockett

### 4. Expert Panel

Professor Ray Robinson Ms Jo Ash Dr. Lawrence Maule Dr. James Raftery Mr. Peter Lees Mr. Len Doyal Dr. Colin Godber

# 5. Observers

Representatives of the community health council Representatives of the four district councils Six students from Brockenhurst College Representatives of the NHS Executive (South and West) Representatives of Glaxo Pharmaceuticals plc, NHS Relations Division

### The Dilemma of the Learning Exercise

Southampton had long offered tubal surgery but it had rejected funding in-vitro fertilisation (IVF) in 1986 when the procedure had a low success rate. At that time, patients could be transferred elsewhere for treatment but, with the 1991 reform, it could be done only as an extra-contractual referral with costs born by the Commission. This places the responsibility in the hands of the public health director – a role he found uncomfortable (Honigsbaum F 1994). This exercise would give the Commission an opportunity to apply its own judgement since it was ultimately responsible for the expenditure incurred.

# The Discussion

After presentation of the issues a discussion was started. During the discussion, two conflicting criteria emerged: cost-effectiveness and equity (Honigsbaum F 1994). Though more cost effective than tubal surgery, IVF had a low success rate and each cycle was expensive to perform. On the other hand, infertility caused much distress and could result in emotional disability for couples. If money could be spent on abortion, it was argued, why not infertility?

The issue proved difficult to resolve since no data were available on current costs or the effectiveness of the infertility services that Southampton offered. The main difference then centred on this question of IVF and health care; was IVF a health or social problem? If the latter, some members felt it could be excluded. However, it was noted that other districts had restricted access and made only limited sums available for IVF.

The session did not produce a clear result on IVF, as the members felt that one treatment could not be discussed in isolation. However, the members felt that the understanding of the process had been improved and they felt more prepared for the following discussion.

#### **10.9.3.The Judgement Analysis Exercise**

The Judgement Analysis exercise was held four weeks after the learning exercise. It was of identical format and attendance

### **The Validation Procedure**

The first phase of the exercise was a validation of the clues to be used. The experiences of the learning exercise led the Commission initially to focus on its internal values. The initial discussion centred on the six criteria derived from the mission statement and the main issue revolved around the importance of health gain and value for money as opposed to equity. Setting priorities according to health gain and value for money would ensure that the Commission made best use of the limited resources available, but equity was also important to consider so that services were extended to groups that were hard to reach like ethnic minorities and the homeless. In the end both were considered to be valid clues (Honigsbaum F 1994).

Conflicting views were expressed about the value of choice. On the one hand, it was argued that choice conflicts with value for money in that it entails the duplication of services. However, others felt that it could have the opposite effect where, for example, home delivery was offered in the case of pregnancy. Health gain could also be promoted

if patients were given more information, so that with the aid of doctors, they chose care appropriate to their circumstances. Under these circumstances choice could be considered a valid decision making clue.

At this stage the Commission considered that these were the only valid clues. In order to test this the Commission was asked to weight the clues. Since limited cost data were available, the Commission decided to put value for money aside initially and assign weights to the other five criteria in its mission statement. To make this assessment 100 points were to be spread across the five criteria in order to allow greater scope for scoring. Each of the 12 members of the Commission assigned scores and the results are given in Table 10.9

<u>Health Gain</u>	Equity	Choice	Personal Responsibility	Access to Local Care	Member Number
50	20	10	5	15	1
28	18	18	18	18	2
25	35	10	10	10	3
24	26	23	13	14	4
50	20	10	5	15	5
35	25	10	15	15	6
50	20	5	15	10	7
30	30	10	10	20	8
40	10	10	20	10	9
40	20	10	20	10	10
40	20	10	10	20	11
40	40	10	5	5	12

TABLE 10.9 THE RESULTS OF THE WEIGHTING EXERCISE

Health gain was clearly the criterion to which all but two members attached the most importance. Equity came next; only one member put equity below one of the remaining three criteria. The Commission votes were then used to assign the average weights. The averages of the weights assigned are given in table 10.10.

#### TABLE 10.10 THE AVERAGE WEIGHTS USED TO DETERMINE PRIORITIES

Health Gain	0.42
Equity	0.25
Local Access	0.13
Personal Responsibility	0.12
Choice	0.11

# **Preliminary Ranking of 49 Options**

With its criteria in mind, the Commission then made two rankings of the 49 interventions - one based on the five criteria which had weights assigned to them, the other based on the cost data that was available. The results are displayed in Table 10.11 and 10.12.

### TABLE 10.11 - RANKING BY HEALTH BENEFITS

Option Title	Ranking
Communication service	1
Sex education S	2
Information to carers	3
Equipment	4
Community mental health teams	5
Palliative care	6
Accident prevention	7
Counselling	8
Folic acid	9
Cancer teams	10
Safety aids	11
Targeted stroke prevention	12
Oral health	13
Oral hygiene	14
Cardiac rehabilitation	15
Stroke rehabilitation	16
Domicillary care	17
Respite care	18
Supported housing	19
Depression management	20
Retinopathy screening	20
Child protection training	22
Child protection assessment	23
Accident and emergency	24
Detox	25
Brief interventions	26
Asthma education	20
Sex education T	28
Smoking advice	29
Community orthopaedics	30
Community rehabilitation	31
Assisted conception	32
Ambulance obstetrics	
	33
Skin cancer screening	34
Needle exchanges	
Waiting times	36
Community first aid	37
Substance misuse education	38
Skin cancer prevention	39
Dietetics	40
Maternity care	41
LBHU	42
Immediate care	43
Accident prevention information	44
Trauma centres	45
Ambulance crews	46
Pre-admission clinics	47

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Option Title	Ranking
Care attendants	48
Knee replacements	49

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# TABLE 10.12 - RANKING BY COST BENEFIT

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Option Title	Ranking
Cancer teams	1
Brief interventions	2
Information to carers	3
Folic acid	4
Stroke prevention	5
Oral health	6
Oral hygiene	7
Child protection training	8
Asthma patient education	9
Smoking advice	10
Community first aid	11
Accident prevention	12
Depression management	13
Child protection assessment	14
Pre-admission clinics	15
Communication services	16
Sex education S	17
Palliative care	18
Sex education T	19
Paramedic obstetrics	20
Needle exchange	21
Safety aids	22
Cardiac rehabilitation	23
Dietetics	24
Skin cancer screening	25
Retinopathy screening	26
Immediate care	27
Prevention information	28
Substance misuse	29
Skin cancer prevention	30
Domicillary care	31
Equipment aids	32
Detox	33
Community orthopaedics	34
Accident and emergency	35
Trauma centres	36
Maternity care	37
Stroke rehabilitation	38
Respite care	39
Counselling	40
Community rehabilitation	41
Community mental health teams	42
Assisted conception	43
Supported housing	44
LBHU	44
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Option Title	Ranking
Waiting times	46
Pre-admission clinics	47
Care attendants	48
Knee replacements	49

The Commission, however, rejected both prioritised lists on the basis that they did not reflect the other values the Commission applied to decision making and while legitimate they were not acceptable to the process of producing a purchasing plan. When questioned by the moderator the Commission members stated that they wished to include the value of the investment decision in terms of the alignment that the investment has with national priorities and the public perceptions of the actions of the Commission. In addition there was concern that the Commission had made choices based on the population and medical needs - not the business of being a contractual agency, and so financial and internal strategies would need to be considered (Honigsbaum F 1994).

In further discussion it appeared likely that these values were very complicated. In an attempt to understand the values used, a discussion was held about potential investments to the programme pregnancy and the new-born. The five maternity options were ranked by a voting procedure, each member of the Commission having one vote, with the results given in Table 10.13.

TABLE 10.13 THE RESULTS OF A VOTE ON THE OPTIONS FOR INVESTMENT IN PREGNANCY AND THE NEWBORN

<u>Option</u>	Criteria strengths	<u>Rank</u>
New models of care	equity, choice, local access	2
Education and contraception	health gain, equity, personal responsibility	1
Assisted conception	health gain, equity, choice	5
Folic acid	health gain, equity	4
Ambulance obstetrics	health gain, choice	3

The first two options were clear choices in this exercise. The results of this exercise confirmed that it was difficult to relate rankings to the health Commission's operating statements and implicit value judgements appeared to be more important. For example new models of care came second despite the fact that the criteria with the largest weighting and health gain, was not considered to be one of its strengths. These finding implied that the factors being applied were complicated some rational thinking could be applied. Further open discussion revealed a second set of values being applied. These were in many instances directly related to the clues obtained (Honigsbaum F 1994).

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1. The number of people who would benefit, (local priority)

2. The perceived severity of the condition, (needs)

- The ease and swiftness of implementation (is there a worked-up purchasing strategy? – a Commission value).
- 4. The sphere of jurisdiction/control (Is it within the sole control of the Commission or is it dependent on the commitment of other agencies like social services? This conflicted to some extent with a priority that had been given to developments that involved work with other agencies – this relates to discretionary funds and Commission values).
- The continuity with current purchasing shifts and the ideas of co-purchasers e.g.
   Fundholders and Providers.
- 6. The strategic impact on the future of the Commission (Commission value).
- 7. The stakeholder expectations and the priorities set by the national or regional level.

- Needs assessments (based on distance from target and availability of effective interventions).
- 9. National Priorities and regional pressures e.g. waiting lists.

This provided a validation for the remainder of the clue list and following this discussion the remaining clues were added to the list.

### **The Ranking Exercise**

It proved too complex to perform a simple ranking system – as had been done in the validation exercise – to produce the final investment list (Honigsbaum F 1994). Therefore a voting system was instituted. The Commission proceeded to assign rankings within health programmes. This was done by a scoring system. Each member was asked to score (vote) for an option, and the total scores added. A ranking was then produced based on the total number of votes cast. Since the maternity options had been ranked earlier (on the basis of criteria strengths rather than individual scores), only the seven remaining Programmes had to be prioritised. Here are the rankings for all eight programmes:

#### TABLE 10.14 PROGRAMME RANKINGS

A Injury

- 1) Trauma centres
- 2) Accident and emergency
- 3) Accident prevention
- 4) Mixed crew trials
- 5) Community first aid
- 6) Prevention information
- 7) Immediate care
- 8) Safety aids

# B Mental Health

- 1) Community mental health teams
- 2) Respite care
- 3) Substance misuse education
- 4) Counselling
- 5) Information to carers
- 6) Supported housing
- 7) LBHU
- 8) Brief interventions
- 9) Depression management
- C. Cancer
- 1) Specialist teams
- 2) Palliative care
- 3) Skin cancer prevention
- 4) Skin cancer detection
- D. Circulatory Disease
- 1) Stroke rehabilitation
- 2) Cardiac rehabilitation
- 3) Targeted stroke prevention
- E. Mobility and the Senses
- 1) Equipment aids
- 2) Community rehabilitation
- 3) Retinopathy screening
- 4) Community orthopaedics
- 5) Knee replacements
- 6) Care attendants
- 7) Pre-admission clinics
- F. Infection and Internal Disease
- 1) Sex education
- 2) Asthma education
- 3) Needle exchange
- 4) Targeted oral hygiene
- 5) Oral health

# G. Pregnancy and the New-born

- 1) Education and contraception
- 2) New models of maternity care
- 3) Paramedic obstetrics
- 4) Assisted conception
- H. Other Health Programmes
- 1. Waiting Lists
- 2. Domicillary care
- 3. Child protection training
- 4. Child protection assessments
- 5. Smoking advice
- 6. Communication services
- 7. Dietetics

## **Overall Rankings**

The rankings within each health programme were then combined into an overall order using the growth funding proportions assigned to each programme. The weightings used were determined by the public health department taking into account the needs assessments performed and is given in Table 10.15.

TABLE 10.15 THE WEIGHTS USED TO ASSESS THE FINAL RANKING

Injury	0.80
Mental health	1.36
Cancer	0.80
Circulatory	1.20
Mobility and the senses	1.04
Infection and internal diseases	0.88
Pregnancy and the new-born	0.88
Other health programmes	0.88

This combined procedure produced a new investment list produced as Table 10.16

### TABLE 10.16 THE FINAL INVESTMENT LIST

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Community teams/mental health teams1Waiting lists2Trauma centres3Accident and emergency4Specialist teams5Sex education S6Sex education T7Domicillary care8Accident prevention9Palliative care10Equipment aids11Mixed crews12Maternity care13Asthma14Child protection15Smoking16Community rehabilitation17Retinopathy screening18Child assessment19Community first aid22Respite care stroke prevention21Community first aid27Safety aids28Community clinics29Knee replacements30Needle exchange31Care attendants32Skin cancer prevention33Stroke rehabilitation34Skin cancer screening35Substance misse36Courselling37Information34Skin cancer screening35Substance misse38Assisted conception39Oral health education40Supported housing41Cardia rehabilitation42Dietetics43Home detoxification44Oral health education44Oral health education40Supported housing41Cardia cr	Option Title	Ranking
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Oral hygiene45Pre-admission clinics46		
Pre-admission clinics 46		
	Stroke prevention	47

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Option Title	Ranking
Depression	48
Brief intervention	49

Constanting

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### The Final Purchasing Plan

The Commission approved the final prioritisation and the rankings went into the Commissions planning cycle where the following options were selected for implementation, Table 10.17

TABLE 10.17 THE FINAL PURCHASING PLAN CONTENTS

Community teams
Waiting lists
Accident and emergency
Specialist teams
Education
Sex education
Accident prevention
Palliative care
Equipment aids
Communication service
Prevention information
Stroke rehabilitation
Substance misuse
Information to carers
Housing
Cardiac rehabilitation
Stroke prevention

There are some significant changes between the purchasing plan and the prioritisation list. In part this was due to the providers not being ready to implement the changes indicated (Honigsbaum F 1994). This was the case with the trauma centre implementation, mixed crews and maternity care. These options were replaced by the implementation of procedures that the providers were ready to implement – such as stroke and cardiac rehabilitation. So despite the exercise the final factors in decision making lie in negotiation not rationalisation. This confirms the view that the Commission is an example of a hierarchical negotiating state. Despite this finding the result remains valid. The majority of the options selected for implementation are in the upper part of the list, and the finding of provider pressure is important. The validity of the exercise is also confirmed by the acceptance of the purchasing plan by the Regional Health Authority.

The production of the final ranking and the purchasing plan marked the end of the exercise. The next phase was the analytical phase. This proved to be a complex exercise, covered in the next chapter. Before proceeding to this, however, it is important to conclude the observations of the Judgement exercise.

### 10.10 Conclusions

The conduct of the Judgement Analysis exercise revealed some important factors about the mode of decision making in the purchasing of health care. First the process was more complicated than initially was thought, with the number of clues involved being more extensive than the Commission initially believed the list to be. Second is the power of the providers of care – which is already evident in the rejection of some options because the providers were not ready. Third on review all the factors involved in the operation of an internal market were present in the decision making factors uncovered. What was not clear, however, was the weights attached to these factors, as in addition a considerable number of non-market factors – such as the Commissions internal pressures – had been applied. Finally, whatever the complexity involved the Commission was clearly responding to external influences, as the final product of the exercise was an acceptable purchasing plan.

At the end of the exercise it was not possible to state if any causal relationship between the failure to support the mode of accumulation, the failure to provide services and institutional imbalance was present due to the complexity of the exercise. However some sense of one emerged. Some evidence of a causal relationship was particularly in the area of institutional imbalance where the power of the state economy relationship was evident in the power of the providers. The formal description of the relationship would however, rely on the analysis.

#### CHAPTER 11 THE ANALYSIS OF THE JUDGEMENT EXERCISE.

## 11.1 Key Points from the Previous Chapter

The previous chapter demonstrated the complexity of the decision making process about purchasing contracts in Southampton Health Commission. In particular more clues were involved than the authority had anticipated and the interaction of these clues appeared to be complicated. However the exercise confirmed that all of the other factors known to be involved in the running of an internal market were important in the Commission decision making process, however there was a suggestion that the provider values may be dominant. The complexity of the procedure involved implied that the analysis of the exercise needed special methods.

### 11.2 Objectives of this Chapter

The objectives of this chapter are to use the analytical methods introduced in chapter 9 to determine the important factors in decision making in the setting of contracts, and to interpret the results at a local level.

#### 11.3. The Aims of the Analysis, Ensuring Applicability and Assumptions

The aim of the analysis is to calculate the clue weightings in the lens diagram created for this study, Figure 11.1. These weights have to be calculated in a manner that enables them to be generally applied to studying purchaser behaviour, under the conditions imposed in the NHS.

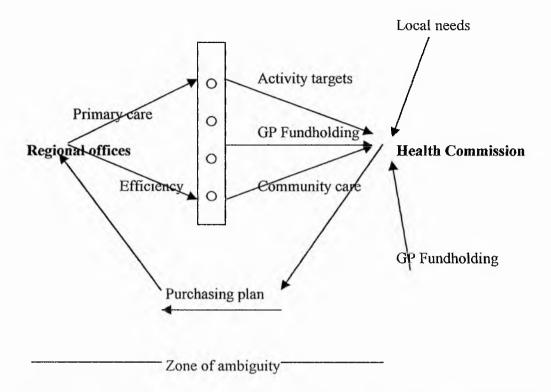


FIGURE 11.1 THE OUTLINE BRUNSWICK LENS MODEL ADAPTED FOR SOUTHAMPTON PURCHASING DILEMMAS

These clue weights will indicate the relative importance of the factors involved in decision making, and also indicate how these factors interact. In order to complete this analysis it was assumed that the decision-makers in the NHS work under a constraint of intentional action (Scharpf FW 1997). Intentional action assumes that the decision-makers are driven by a combination of natural impulses and external constraints that are considered before the decisions are taken, and that no contracts are signed unintentionally. Under this assumption we are able to look at the decisions made and infer backwards into the values and factors driving the decision. The concept of intentional action has been validated in other systems of institutional decision- making, (King G, Keohane RO and Verba S 1994), although no studies of intentional action exist within the NHS, its existence is inferred in studies of priority

setting, for example Hunter (Hunter D 1990)

Assuming intentional action also increases the application of the results. Due to the complexity of the exercise, and the depth of research needed it is unlikely that the analysis and process could be repeated across a number of health authorities and the results pooled to create wider applicability (Rosenhead J 1992). However, the external constraints of finance and demands to increase activity in the face of considerable demographic pressure are not unique to Southampton. Every health authority in the UK currently faces these pressures (Ham CJ 1992). Therefore if in the results of an analysis the responses to the clues can be shown to be of importance, the intentional actions based on these clues are likely to be widely applicable if the judges are representative. In this, the demographics and the voting members of the Commission do not appear unusual when compared to the rest of the country (Southampton Health Commission 1993; Health Committee 1995).

In addition to the complexity constraints, there are statistical reasons why a single case study is valid. In describing the intentional framework it is apparent that we are describing a multidimensional space. This would argue that there is little to be gained from the examination of large similar cases where different factors and dimensions may be involved and where the opportunity to conduct statistical meaningful research is limited. Instead attention should be focused on searching for the effects of factors in small number situations with an emphasis on forward-looking strategies, (King G, Keohane RO and Verba S 1994). Under this ideal when the effects of independent variables are examined for causal inference a chain of causation is established such that change in the dependent variable can be assessed. If the causal chain is kept

sufficiently short then smaller sample sizes are possible. Therefore in this analysis a forward-looking framework will be used, and events before the purchasing dilemmas exercise considered only when they impact current decisions. In this way the causal chain can be kept short and wider applicability ensured (Elster J 1992). Obviously this reduces the ability to explain why the clues are important, but enables a statistically valid analysis to be performed.

The forward-looking framework that has been chosen to support the Judgement analysis is a quasi-rational institutional actor making purposeful decisions (Rosenhead J 1992). This actor will be making decisions that effect social states by interacting with other actors. The basis for the decisions is by nature quasi-rational both in terms of the other actors and the intentions of the interaction itself. Specifically in the case of Southampton Health Commission, where we have characterised the decision making process as a hierarchical negotiating situation, we will be looking for elements of decision making that fit into the framework of a market based quasi-rationality (Culyer AJ, Maynard and A Posnett J 1990). This implies we are expecting the authority to purchase a mixed 'basket' of contracts from the providers of service, in order to satisfy the aims of the Commission introduced in chapter 8 and the acceptance of the purchasing plan by Wessex Regional Health Authority.

## 11.4 The Output of the Analysis

The output of the analysis is to calculate the measure-sensitive weights applied to the various clues assembled in order to determine the factors applied in decision making. These must be of a format that can be input into the lens diagram.

#### 11.5 A Description of the Data Gathered

The data gathered represent categorical outcomes (present on purchasing plan, not present on purchasing plan) and the clues associated with each of the purchasing plan intentions. Both the clues and the decision arrived at are non-metric, There is only one dependent variable - the purchasing intention. As the Commission had already debated the options in the first ranking exercise it was decided to add another variable and the first ranking was included in the analysis set.

#### 11.6 Plan of the Analysis

The analysis plan was based on chapter 4, 12 and 13 in Tabachnick and Fidell's textbook 'Using Multivariate Statistics' (Tabachnick B and Fidell L 1997). This called for data cleaning and preparation, factor analysis and regression techniques in order to maximise the value of the data collected.

#### 11.6.1 Data Entry

Data was entered into a Paradox database (Paradox for Windows 1992). The data set used is produced as appendix B

#### 11.6.2. Data Cleaning Prior to Analysis

The data file was proof read against the data published in Priority Setting in Action appendices A to F, (Honigsbaum F 1994). Overall the data had four missing variables,

namely the costs and rankings of two of the proposed options. The lack of costs for these two options led the Commission not to rank them. Missing variables were excluded from the analysis where it was appropriate. Means and standard deviations of the continuous variables are produced Table 11.1.

Factor	Ν	Minimum	Maximum	Mean	Std Deviation
Cost	47	2.0	1900.0	230.479	441.865
Choice	49	.0	1.0	.347	.481
					770.965
Community Activity	49	.0	5000.0	224.490	770.903
Discretionary	49	.0	1.0	.327	.474
Funds					
Equity	49	.0	1.0	.224	.422
Hospital	49	-200.0	1900.0	31.429	276.443
activity					
Needs	49	.0	1.0	8.163E-02	.277
Political	49	.0	1.0	.306	.466
statement					
Purchasing	49	.0	1.0	.327	.474
plan					
Responsibilit	y 49	.0	1.0	.490	.505
Utility	49	.0	3.0	1.673	.851
GP ranking	49	1.0	49.0	24.347	14.165
Local care	49	.0	1.0	.347	.481
Excess	49	.0	1.0	2.041E-02	.143
activity					
First ranking	47	1.0	47.0	24.191	13.943
Waiting list	49	.0	1.0	.102	.306
Weighted act	. 49	-60.0	1440.0	87.429	268.554
-					

TABLE 11.1 DESCRIPTIVE STATISTICS OF THE DATA SET

On inspection of the data none of the variables considered were thought to be outliers

or spurious values.

## 11.6.3 Preparation of the Data for Analysis

1. Data linearity and normality

The assumption of linearity and normality in the data is important as it enables more accurate tests for collinearity and therefore a better description of the clue weights. Therefore the data set was assessed for normality and linearity. Homoelastisity was not assessed due to the complexity of the data and the problems associated with adjusting a large number of variables simultaneously (Sharma S 1996).

Normality was assessed using SPSS for windows version 8 using the Frequencies Subroutine. This calculates both skew and kurtosis and enables a visual inspection of the data (SPSS 1996). The results are shown in Table 11.2.

	Respo	nses	Skewness		Kurtosis	
clues	Valid Not Valid					
			Statistic	Std error	Statistic	Std error
Choice	49 ·	0	.664	.340	-1.628	.668
Community Activity	49	0	5.272	.340	31.709	.668
Cost	47	2	2.574	.347	6.238	.681
Discretionary	49	0	.763	.340	-1.479	.668
Funds						
Equity	49	0	1.363	.340	151	.668
Hospital act	49	0	6.684	.340	46.101	.668
Needs	49	0	3.153	.340	8.280	.668
Political	49	0	.868	.340	-1.301	.668
Statement						
Purchasing	49	0	.763	.340	-1.479	.668
plan						
Responsibility	49	0	.042	.340	-2.085	.668
Utility	49	0	149	.340	513	.668
GP ranking	49	0	.053	.340	-1.138	.668
Local care	49	0	.664	.340	-1.628	.668
Excess act	49	0	7.000	.340	49.000	.668
First ranking	47	2	.020	.347	-1.219	.681
Waiting list	49	0	2.713	.340	5.588	.668
Weighted act.	49	0	4.098	.340	17.617	.668

## TABLE 11.2 THE ASSESSMENT OF NORMALITY OF THE DATA SET – SUMMARY DATA

#### 2. Applied Transformations

On inspection of the data it was decided that the variables cost, weighted activity first ranking and personal responsibility had an unacceptable skew. A transformation was applied. Initially these variables were transformed using a log transformation. This improved the skew of the cost variable but did not affect the others. An inversion transformation was then applied to the data. This improved the weighted activity, but did not affect the remaining variables. Therefore the transformed variables cost and weighted activity ware retained and no further transformations were applied.

#### 3. Tests for Linearity

The ability of linear combinations of variables to reflect the importance of the factor of variations requires that linearity of the variables be assessed. Linearity was assessed using the linear diagnostics routine of SPSS. The variables were considered sufficient linear to be included in the analysis – appendix C.

4. Tests for Collinearity

Tests for Collinearity were performed on the SPSS Linear diagnostics subroutine (SPSS 1996). Waiting time and Weighted activity were shown to have collinearity coefficients greater than 30 and were excluded from the analysis. The results are reproduced in appendix C. The waiting time and weighted activity variables were excluded on the basis that the levels of collinearity observed would distort the final result and the factors had already been taken into account in assessing the other variables. Therefore the inclusion of these variables would lead to a spurious assessment of the strength of the relationship.

3. Results of Data Screening

After screening a data set was prepared of 15 variables, with two variables being transformed from the original. This data set is reproduced as appendix D.

### 11.7 The Analysis of the Data

The description of the multivariate analysis is in two parts. First is a description of the underlying data structure. Second is the description of the relationship between the factors and an assessment of the clue weights

#### 11.7.1. The Selection of Methodology

The data that was used in the analysis is composed of both continuous and categorical variable types. Therefore the data analysis selected must accommodate both data types. As a result the description of the underlying data structure was performed using a principal component analysis.

The estimation of clue weights in most judgement analyses is achieved by the use of regression analysis. However, in the case of this analysis the judgement was a two level categorical variable as the dependent variable and many of the clue distributions were non-normal. Therefore a logistic regression was used to calculate the clue weights (Sharma S 1996).

#### 11.7.2. The Analysis

#### A. The principal component analysis

The principal component analysis was performed on SPSS Factor Subroutine (SPSS 1996). The principal component analysis was selected, as the aim was to reduce the number of variables to a meaningful number without a loss of information value. The analysis was constructed such that the given value was greater than one (Cliff N

1988). The appropriateness of the components extracted was confirmed using a scree plot (Cattell R.B. 1966) looking for the elbow in a plot of the given values against the number of components. In order to explain the resultant factor structure a quartimax rotation was adopted.

The results reproduced in appendix C suggested that no underlying data patterns can be observed and no simplification of the data is possible, as every significant factor includes all of the factors available. This result also suggests that the functional form of the interaction between the clues may be additive.

After this result it was decided to proceed with the regression analysis.

B. The estimation of clue weights - the logistic regression analysis.

A stepwise logistic regression analysis was performed on purchasing plan status as outcome and the environmental clues. The analysis was performed using SPSS logistic regression (SPSS 1996). The analysis was performed on the completed, cleaned data set

1. Forward selection

The forward selection was done on a  $p \ge 0.25$  in accordance with the principles for selection set by Hosmer (Hosmer DW and Lemeshow S 1989). This exercise selected utility, GP ranking, equity, needs, community and excess activity, national priorities, discretionary funds, provider pressures, Commission pressure and local priorities as

the likely factors. These factors were confirmed by re-running the analysis without the factors and achieving a non-significant result, The results are reproduced in appendix C. The results are in agreement with the findings of other studies of NHS decision making, (Health Committee 1995). Therefore no other factors were included.

2. Building the model

The model was built in LiMDeP by an inclusion strategy (LiMDeP 1997). An inclusion strategy was used to maximise the number of factors involved (Hosmer DW and Lemeshow S 1989) The results would suggest that only utility, GP ranking, local priority, Commission pressures and provider pressures have a significant role in decision making. The inclusion of other variables, either on statistical grounds or previous history does not improve the model, the results are reproduced as appendix E.

#### 11.8 The Results of the Analysis

### 11.8.1. The Final Estimated Clue Weights.

The final estimated clue weights of the Judgement Analysis are based on the summary statistical output adapted from appendix C shown in Table 11.6.

## TABLE 11.6 THE SUMMARY CLUE WEIGHTS

1.12

Variable	Coefficient	S.E.	Т	PROBABILITY
UTILITY	-2.77	0.95	2.899	.004
GP RANKING	-0.07	0.004	-1.788	.073
NATIONAL	1.38	1.11	1.239	.21
PRESSURE				
LOCAL	2.63	1.39	1.888	.06
PRIORITY				
COMMISSION	4.59	2.42	1.893	.06
PRESSURE				
PROVIDER	3.57	1.97	1.807	.07
PRESSURE				

## B. Estimation of goodness of fit

This model correctly classifies 46 of the 49 options Table 11.7

and the second second

#### TABLE 11.7 THE GOODNESS OF FIT OF THE MODEL

			Predicted	
		On Plan		Off Plan
Actual	On plan	14		2
	Off plan	1		32

The maximum likelihood estimates are given in Table 11.8.

TABLE 11.8 THE MAXIMUM LIKELIHOOD ESTIMATES

Log Likelihood -14.13

Restricted slopes -30.95

Chi Squared 33.65

Significance level p=0.0000005

The outlying implementation options were identified as

1. Communication Services – on plan when the model predicted off. This change was due to the pressure of the local medical officers and the providers

2. Maternity care and the provision of mixed ambulance crews – off plan when the model has predicted on. This, as previously discussed was due to the providers not being ready to implement the changes – despite the fact that these bids were originally

#### provider bids

In terms of the overall importance of the factors the highest weighting was given to the Commission pressures, followed by provider pressures health benefit local priority, and national pressure. Although GP ranking was significant in the model the contribution made was minimal.

## 11.9. The Final Lens Model

The final lens model is depicted in Figure 11.2

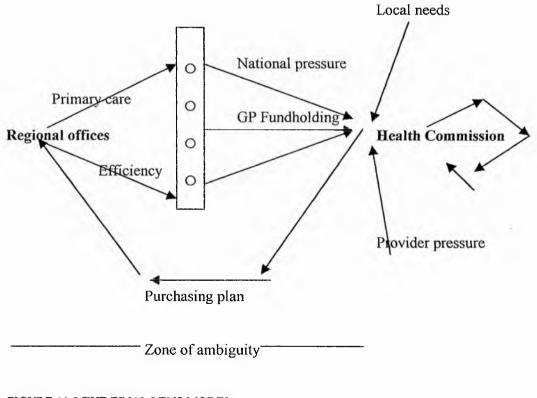


FIGURE 11.2 THE FINAL LENS MODEL

## 11.9.1. The Validity of the Final Model

As no repeat exercise was included in the final analysis, it is not possible to estimate the consistency of the result directly. However the factors identified have been postulated as the factors driving decision making by other investigators and reviews of purchaser decision making (Ovretviet J 1995; Health Committee 1995; West R 1993).

### 11.9.2. The Achievement of the Final Model

The achievement of the final model in this experiment cannot be assessed mathematically. For a mathematical assessment of a non-linear judgement model all events are assumed to be conditionally independent - i.e. all of the events and responses must be carried by the clues as presented to the judges, (Bjorkman M 1973). In the naturalistic design we have adopted this is clearly not the case and as such no calculation of achievement as a score is possible. However, the model has a high achievement of the ecological criteria applied as the final product of the exercise - the purchasing plan - was accepted by the Regional Health Authority as a reasonable representation of purchasing intentions (Honigsbaum F 1994).

#### 11.9.3. The Impact of the Ecology

As the estimations of the achievement cannot be estimated, an estimation of the impact of the ecology is not possible. However the clues used map directly to the ecological criteria.

## 11.10 Conclusion

The analysis of the data produced from the Judgement Analysis exercise within purchasing dilemmas has indicated that the decision-makers involved in the exercise do respond to external influence in deciding the patterns of contracting. Furthermore this rationality reflects the ambiguous position of the Commission. This assertion is supported by

- The statistical analysis of the decision making process in the selection of investments has demonstrated a high degree of residual variability, i.e. the factors selected explain the reasons behind most of the choice.
- 2. The factors selected reflect the ambiguity of the institutions involved. For example the selection of factors that value both the supply and demand of health care and the Commissions valuation of its own internal factors.

The analysis has enabled the production of a lens model that allows the principle factors of decision making to be delineated. The model is acceptable on the basis that the output of the exercise, the purchasing plan, was accepted by the RHA. The results of the analysis suggest that decisions about the implementation of contractual options in the health authority are dominated by consideration of the effects on the Commission itself and the demands by health care providers (although health benefit and local needs play a role). This result confirms the findings of the top-down analysis conducted earlier in this thesis, that decision making about service levels in the reformed NHS is dominated by state-economy interactions. In the case of Southampton Health Commission this is manifest as the Commission provider relationship being dominant.

This is an important result for it highlights that although the factors influencing the development of an internal market are present as factors in decision making – such as local need and benefit – these factors are secondary to the non-market factors of the providers and the Commission itself. This would suggest that the institutionalisation of the NHS had a major impact on the distribution of health care benefits. This result, while significant in itself, has a wider implication with respect to the failure of the reforms to achieve the expected gains and the imbalances in the institutions and modes of accumulation that were documented earlier in the thesis. Therefore a wider discussion is called for, one which encompasses the results of this exercise and the hypothesis of the thesis that a causal relationship exists between the imbalances and the failure to achieve aims. This is contained in the following chapter.

CHAPTER 12 CONCLUSIONS OF THE CASE STUDY AND DISCUSSION ON THE OVERALL HYPOTHESIS

#### 12.1 Key Points from the Thesis so far

Several conclusions can be drawn from the thesis.

- There is a long-standing tripartite interaction that surrounds the NHS. This
  interaction can be analysed as an institutionalisation of state, economy and civil
  society. This tripartite interaction has a role in deciding distribution of health care
  benefits and thereby acting to regulate market developments.
- 2 The institutional analysis of the tripartite relationship shows that the NHS was not in balance pre-reform, as the state-economy relationship predominated. The reforms of NHS reforms seen in 1990 did not influence this long-standing institutional imbalance that surrounded the NHS. This is reflected as a dominance of Commission and provider demands in decisions taken by Southampton Health Commission.
- 3. The post reform NHS changed the structure of the service such that the reformed NHS no longer supported the mode of capital accumulation seen in the UK, in that the reforms promoted a service that was not sensitive to the needs of the individual.
- 4. The NHS reforms failed in the aim to target services to at need groups this was particularly evident in the case of elderly services and some specialities.
- 5. The reform of the NHS was assocaited with a number of ad hoc changes of policy during the implementation process. These ad hoc changes were administrative in nature and aimed to make the service managable and responsive to the political

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needs. These adhoc changes can be attributed to the fact that policy was formulated without involving the tripartite relationship and argues that the NHS reforms seen in 1990 were not totally consistent from the organisational perspective.

The way in which these conclusions have been reached is suggestive that these results may be interlinked – as was indicated in the hypothesis introduced in chapter 1. As yet no linkage has been established.

#### 12.2 Objectives for this Chapter.

The objectives for this chapter are to explore the relationship between the five conclusions drawn in section 12.1 in a manner that looks to establish the causal relationship that may exist between the elements of the hypothesis.

## 12.3 The Overall Hypothesis of the Thesis

The hypothesis underlying this thesis was introduced in chapter 1, and is reproduced below.

In the search for efficiency the NHS has undergone a series of ideologically motivated reforms aimed at changing health care provision. These reforms, as they were ideologically motivated, have required ad hoc modifications in the face of problems that cannot be accounted for in the ideology. These ad hoc changes to the reform have been dominated by the organisations that are involved in the implementation of the reforms and so have led to the loss of consistency across the reform process such that the reforms fail to meet the objectives.

Establishing the validity of this hypothesis rested on proving a number of proposistions

- Establishing the existence of a significant extra-policy, tripartite, interaction in health care decision making and that an institutional analysis of the tripartite interactions demonstrated a lack of balance in decision making. This was covered in chapters 2 and 3
- 2. Demonstrating that the 1990 NHS reforms failed to deliver the expected advantages in terms of targeting resources and improvements in efficiency.
- Confirming that the reformed NHS failed to support the mode of capital accumulation.

The results of chapters 4-7 demonstrated that propositions 2 and 3 can be upheld. This leaves two unproven propositions.

4. Can a causal link between propositions 1-3 be established? This causal relationship must demonstrate that the imbalance between the institutions of state, economy and civil society are the cause of the failure of the NHS to provide services to at need groups. This in turn must reflect why the NHS no longer supports the mode of accumulation - which in turn increases the institutional imbalance.

5. Can any causal link be explained as a result of the reforms being ideologically motivated?

The answer to these questions lies in the results of the Judgement Analysis, conducted in chapters 8-11.

## 12.4 The Results of the Judgement Analysis and the Failure of the 1990 Reforms to Deliver Expectations.

The principal criticisms of the NHS reforms in terms of failure to meet objectives were introduced in chapter 7. To recap these are

- Failure of competition
- A lack of provision in elderly care services
- A failure to protect community services in face of increasing demand
- A Lack sensitivity of contacting with regard to specialist services such as cardiac surgery.
- A failure to develop labour flexibility.
- A failure to develop long term efficiency
- A failure to effect mortality or morbidity.

It is possible to explain the failure of the NHS reforms to meet these objectives based on the findings of the judgement analysis exercise conducted in Southampton. Taking the bullet points in turn.

#### 12.4.1. The Failure to Develop Competition.

The result would indicate that the elements of competition in are present in the decision making of the Commission; i.e. the demand of the local population and the supply of the providers influence decisions. However, the supply side in terms of the providers is a dominant factor of the decision making process, leading to the failure of the market. In addition other non-market values such as the role of the Commission support provider dominance. The decision making described in the judgement analysis exercise resembles the dual monopoly hypothesis suggested by Appleby (Appleby J 1994) in which the failure to develop competition was attributed to the presence of a monopoly on purchasing and supply. Therefore the results of the Southampton exercise argue that the imbalance of power between the purchaser and provider with respect to the tripartite relationship is the major reason for the failure to develop competition.

#### 12.4.2. The Failure to Protect and Enhance Services for the Elderly

There is no evidence that the implementation decision making process targets the elderly other than as part of the general decision making about service levels. This is despite the fact that the majority of service pressure in Southampton comes from the elderly community (Southampton Health Commission 1993). The failure to develop services for the elderly can in part be explained by the lack of specific proposals presented to the Commission by the providers, but also is caused by the Commission not providing incentives to attract them. Therefore the failure to develop elderly services can explained by the power of the provider – Commission relationship in a

similar way to the failure to develop competition.

# **12.4.3.** The Failure to Protect Community Care Services and Develop Specialist Services

The purchasing plan is overtly biased towards the acute general hospital services. This effect is due to the current performance management system that favours the acute providers. Therefore the failure to protect community services and develop specialist services can be explained on the basis of Commission – provider dominance in decision making – on this occasion supported by performance management. It is apparent that most of the Commission's decisions were made in favour of the acute services and community services fared badly (Honigsbaum F 1994; Appleby J Little V 1993). This result is confirmation of the Clinical Standards Advisory Group who, in 1993 found that the contractual process was biased towards acute services (Clinical Standards Advisory Group 1993; Hadley TR and Goldman H 1995).

#### 12.4.4. The Failure to Develop Labour Flexibility

It is apparent from the bids submitted by the providers that these organisations primary aim is to increase patient numbers. This is aim is also supported by the Commission seeking to purchase activity as part of its performance management role. In these circumstances it is hardly surprising that the purchasing plan did not focus on labour flexibility and once again demonstrates that the power of the providers – supported by the Commission – can explain the reason that the objective of promoting labour flexibility cannot be attained (Honigsbaum F 1994).

#### 12.4.5. The Failure to Develop Long-Term Efficiency.

It is difficult to assess the long-term efficiency of the implementation process developed by the Commission for the reasons that were introduced above. However, in terms of the delivery of an efficient health-care service three features stand out. First is the low priority given to the local needs, second is the block purchasing of activity to fund performance management and finally is the use of annual planning cycles that do not permit disinvestments. In these circumstances the structure of the implementation process seen in Southampton appears biased against long term efficiency gains. As was previously introduced these barriers to efficiency can be explained on the basis of the strength of the Commission – provider relationship.

#### 12.4.6 The Failure to Influence Morbidity and Mortality

The Commission – provider relationship led the decision making process to focus on services not needs (Honnigsbaum F. 1994). In this circumstance it is not surprising the impact of change on the morbidity and mortality of the population was limited – except where these were considered to be a health problem or impacted on national figures. Therefore the strength of the Commission-provider relationship again lies behind the failure to meet this objective.

## 12.4.7. Conclusions on the Interaction Between the Judgement Exercise and the Failure to Meet Objectives

It is evident from the results of the judgement analysis that the failure of the NHS reforms to meet many of its clinical and economic objectives has a basis in the influence that the Commission-provider relationship has on contractual decision making (Honigsbaum F 1994). However the other features of the reforms undoubtedly compound this effect. In particular the effects of the information imbalance and the contracting currencies used undoubtedly act synergistically with the presence of provider dominance and non-market values to further distort the decision making process.

## 12.5 The Results of the Judgement Analysis Exercise and the Institutional Imbalance

The dominance of the Commission and providers in the decision making process provides evidence that the reforms are not in tripartite balance – and confirms the results of the top down institutional analysis conducted earlier. The judgement analysis adds to this result by suggesting that this imbalance is not result of the reform policy being unsuitable, but provides evidence that the imbalance results from the ad hoc changes seen in the implementation process.

In the Judgement Analysis exercise the clue weights calculated for the local needs was far exceeded by the provider pressure (2.63 Vs 3.57 Table 11.10). If a balance was to be achieved it is to be expected that these coefficients might be closer together. Yet the sum of the state led coefficients (national and Commission pressures) and the economy and civil society pressures is roughly similar (6.07 and 6.2). This suggests that any imbalance is due to the influence of the state economy interaction and any imbalance could potentially be corrected if civil society input was increased. It is possible to argue that this imbalance is not a true reflection on the lack of power of the patient as - based on the figures presented above - the system could be in balance if the providers act as an agent for the patient. However, other studies

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would argue against this being the case. In a review by Old and colleagues (Old P. 1998), no correlation could be found between hospitalisation rates and local need. Indeed the hospitalisation rates had more to do with local history than need. Therefore it appears likely that the effect of the strength of the providers on the provision of services is likely to be a distortion, rather than a supplementation. This implies that the reflection of national imbalance in favour of the providers of services seen at a national level is reflected at a local level (Spiers J 1995), and supports, but does not prove the proposition that the imbalance in the NHS reforms resulted from the implementation process.

## 12.6 The Results of the Southampton Exercise and the Failure to Support the Mode of Capital Accumulation

As was discussed in Chapter 7 the reformed NHS doe not appear to support the mode of capital accumulation. This is evidenced by the degree of disparity between the NHS services and the other welfare services such as housing and education, and the lack of support for the changes in the labour market. These problems are also seen in the implementation decision making process, where no proposals for increasing flexibility of labour, or empowering of patients were deemed to be acceptable. The reasons behind the failure to support the mode of accumulation appear to lie in the dominance of the Commission and providers. This dominance discourages flexibility and leaves the power to decide over the services provided with the hospital and not the patient, or their representatives the GPs.

## 12.7 The Causation and the Hypothesis

From the discussion above it is apparent that the failure of the NHS to provide services, the institutional imbalance and the failure of the NHS to support the mode of capital accumulation can - at least in part - be explained by the dominance of the Commission-provider relationship in the decisions made about the provision of services. Furthermore the results of the judgement analysis exercise appears to suggest that there is a causal linkage. Institutional imbalance leads to the failure to supply needed services, as evidenced in Southampton by the lower rankings given to local priority and need, and the high priority to provider bids. The failure to provide services leads to the lack of support for the current mode of capital accumulation, as the services that promote individual responsibility, provide care for those most need and interface with the other dimensions of the welfare state – such as personal social services – are lacking. The failure to support the current mode of accumulation leads to further institutional imbalance - as the representation of the civil society is reduced due to the loss of the inter-relationship between wages and welfare is disturbed. This would suggest that the analysis of the Southampton Judgement exercise has indeed confirmed the thesis that the elements of the hypothesis are linked by the dominance of the Commission and providers in decision making. While this result confirms part of the hypothesis, it does not provide a link to the ad hoc changes seen in the implementation process, and further analysis is needed.

### 12.8 Explaining Commission-Provider Dominance

There are two possible causes for Commission -provider dominance in the reformed NHS. Either health care is not amenable to market mechanisms and so the Commission and providers act to maintain the supply of health care, or the market mechanisms applied to UK health care have developed in such a way that provider – Commission dominance developed as a result of ad hoc change (Appleby J 1994).

The claim that health care is not suitable for market management will be examined first. It is claimed that health care is so special and the objectives so vague that the use of a market to ensure the efficient delivery of services could not work, and hence led to an imbalance of power (Barry N 1994). There is certainly some evidence for this claim – particularly in some medical specialities (Clinical Standards Advisory Group 1993). This finding is borne out in the Judgement Analysis exercise, where a considerable amount of the emphasis was placed on non-market factors such as the values of the Commission and the national pressures. The appearance of these nonmarket values in the decision making process appeared to arise as a result of the institutional ambiguity surrounding the Commission in its role as both purchaser of a limited range care and regulator of achievement (Appleby J 1994). In managing this ambiguity the providers have the upper hand. As discussed in chapters 6 and 7 the Commission has to rely on the providers delivering the efficiency gains required by the Department of Health. Furthermore the flexibility of the Commission is reduced by the capital charges and contracting schemes that prevent the Commission from withdrawing contracts from providers at full price without encountering a penalty on other contracts (West P 1998). These facts would argue that at least part of the reason

for provider dominance lies in the organisational ambiguity that surrounds the NHS reforms. As was discussed earlier in chapters 4-7 this organisational ambiguity is a necessary feature of the function of the Commission in that it allows the development of services in face of uncertain economic conditions. The problem with the ambiguity generated in the 1990 reforms is that it has not been managed – leading in part to provider dominance.

However, the findings of the Southampton exercise would indicate that the nonmarket nature of health care cannot be the only reason why the provider – Commission values dominated. The judgement analysis demonstrated that the elements of market based decision making exist within the process of deciding contracts (Appleby J 1994). Instead some of the reason behind provider - Commission domination must lie in the way in which the market was constructed and how political and organisational pressures shaped the workings of the market.

In looking at the results of the Judgement Analysis exercise it is apparent that the balance is in favour of the supply side with the heavy emphasis being placed on provider bids. The reasons behind provider domination in market based decision making in the reformed NHS are not hard to find. As was covered in chapter 6, purchaser development has been deliberately slowed and changed in order for the providers of service to develop. This, taken together with other measures such as the development of the Patient's Charter, as considerably increased the market power of the providers (Laing AW Shiroyama C 1995). The advanced development of providers of care was important for political reasons, for as we discussed in chapter 6, one of the major benefits to some sections of the medical profession was the return to

the autonomy of teaching hospital status, while maintaining the continuity of the NHS. Therefore the slowing of purchaser development has a political and administrative aims. However – as was discussed in chapter 7 – the long-term effects of such changes to the market were not considered (Ham C 1994; Spiers J 1995).

Taken together the reasons that underlie provider - Commission dominance in Southampton appears to have resulted from a combination of political strategy, organisational ambiguity and ad hoc changes made to policy in order to make an ideologically driven reform work.

#### 12.9 Conclusions of the Analysis and the Hypothesis

The last section has demonstrated that the provider dominance (that underlines the institutional imbalance, the failure to support the dominant mode of capital accumulation and failure to provide services that protect vulnerable groups) arises both from a failing of market mechanisms and the failure to select and enforce market models. These failures have been enhanced by the overt politicisation of health-care markets in the UK (Spiers J 1995). Underlying these failures have been organisational ambiguity, open ended political strategy and the failure to develop a coherent strategy towards the NHS, which has allowed ad hoc changes to the implementation of policy initiatives and the continuation of the institutional imbalance seen since the foundation of the NHS. This is almost certainly an unintended action. The Thatcher administration did not intend to create a provider dominated market, indeed the providers were a target for reform (Thatcher M 1993).

Taken together the findings of the review and the analysis of the judgements made at

Southampton imply that the hypothesis we posed in chapter one and reiterated above is proven. Therefore, the results of this thesis have shown that health care provision is institutionalised within a tripartite relationship. This relationship has a significant effect on the distribution of health care benefits, and that no real change can be achieved in the NHS without the development of a coherent strategy involving all the organisations involved in the tripartite interactions. The lack of a coherent strategy as part of the 1990 reforms acted to skew benefits away from groups of citizens that would benefit most for example the elderly, provided a barrier to efficiency and reduced the effect of the NHS as a regulator of capitalism.

### 12.10 Conclusions

The finding that health care policy that does not accommodate the tripartite interaction that surrounds the NHS leads to a failure of the reform process uncovers a paradox in policy making. Ad hoc changes as a part of the tripartite interaction are necessary if the NHS is to be sufficiently flexible to accommodate the changing economic and social picture in the UK. Yet reform of the service is not possible unless ad hoc change is managed. This paradox appears to be the result of the introduction of market based reforms into the health care system. For example in the Health Care Maintenance (HMO) system in the United States, similar conclusions are being reached with regard to the distribution of benefits. In a study conducted by Ware it was found that the elderly in HMO had significantly poorer outcomes and benefits compared to those in Fee for Service (FFS) systems (Ware JE, Bayliss MS, Rodgers WH, Kosinski M and Tarlov AR 1996). In this study it was remarked that the institutionalisation of care in HMO was inherently biased against the elderly.

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The conclusions of this thesis are also confirmed by Teulings and Hartog (Teulings C and Hartog J 1998). In a review based in the labour market these authors found that the benefits of the wage negotiations process were dependent on the way that the market was institutionalised. This institutionalisation, in their experience was a product of the historical background of the interacting organisations, and society norms. The institutionalisation in the authors experience proved resistant to change and very stable. The authors also found that in countries with a history of competitive, decentralised labour markets, the resulting distribution of wage benefits was subject to undue influence by the economy such that an inefficient distribution of wages resulted. This effect appeared to be due to the extraction of rents, and rent seeking behaviour. The degree of rent seeking behaviour also appeared to have an effect on the stability of the economic system, with countries associated with high rent seeking activity having only short term economic stability, and repeated crises requiring central intervention (Teulings C and Hartog J 1998). This is a scenario mirrored in the NHS. While this thesis has not demonstrated rent seeking activity plays a role in the decision making process of Southampton Health Authority, (the research was not designed to investigate the existence of rent seeking) rent-seeking activity has been described in the post reform NHS decision making process. In reviews of contractual arrangements for the NHS the diversion of resources to more profitable areas has been described (Clinical Standards Advisory Group 1993). The diversion of resources has also been described in the setting of GP Fundholding budgets (HFMA 1994; Stewart-Brown S Surender S Bradlow L Coulter A Doll H 1995). These studies are suggestive that rent seeking behaviour does indeed occur in the NHS - although measuring it would require other exercises. However, if the results of these studies are similar to what has been described in other areas it is likely that the mechanism by which provider-Commission dominance will be expressed is rent seeking behaviour.

The conclusions reached in this thesis imply that policy making should not be performed by the state alone. This is a conclusion reached in reviews of other organisational changes – where the modes of implementation have had a significant impact on the outcome (Elenore RE 1998). Instead policy making for the NHS requires a far broader remit than previously considered and requires interaction of the State, economy and Civil Society. This result in many ways runs counter to the prevailing logic of policy making, which is to look to market solutions. However, the research covering the role of tripartite decision making in areas of social policy implies that the solutions reached can have greater efficiency than market solutions alone, (Teulings C and Hartog J 1998). If true this has profound implication for the NHS reforms of the future. This is the subject of the concluding chapter of this thesis.

#### CHAPTER 13. THE IMPACT OF THE RESEARCH ON THE FUTURE OF THE NHS

#### 13.1 Overview from the Previous Chapters

The previous chapters concluded that throughout the history of the NHS the organisation can be analysed as an institutionalisation of services bounded by the state the economy and civil society. The analysis suggests that the power structure within this institution has never achieved a balance, even after the recent reforms. As a result the NHS has frequently failed to achieve its aims and has repeatedly required changes to its structure. The institutional imbalance that surrounds the NHS after the 1990 reforms is reflected as a dominance of purchaser and provider priorities in decision making. This situation has arisen because the tripartite relationship and the regulatory function of the NHS have not been taken into account in the development of new policy initiatives. As a result social policy with regard to the NHS has not been consistent in taking account of all of the possible outcomes of change and ad hoc changes have allowed the providers to gain dominance.

#### 13.2 Objectives for the Current Chapter

The aims for the current chapter are to review the 1997 NHS reforms in the light of the results of this thesis.

#### 13.3 The Current Round of NHS Reforms

In May 1997 the Labour Party won the General Election and ousted a Conservative Government that had been in power since 1979. The Labour Government, under Prime Minister Tony Blair, is ideologically committed to economic stabilisation policies and supply side reform as a way of ensuring the prosperity of the country (Brivati B and Bale T 1997). The Labour Government has pledged to achieve the aims of stabilising the UK economy by the greater involvement of the public in the governing of the country, together with a tight control on government expenditure. Accordingly the new government has insisted that there is no new money available for the welfare services unless significant efficiency gains can be made, and the public are involved to a greater degree in the running of the services (Ellison N 1997). The government believes that both of these objectives can be achieved by changes within the management system in the NHS; the market structure, inherited from the Conservative administration, being seen both as a barrier to public involvement and resource intensive (Lee-Potter J 1998). Therefore, government has pledged to dismantle the GP Fundholder and general management system in the NHS (Baker M 1998).

The basis for the Labour Government's social reform programme is the report of the Commission for Social Justice (CSJ). The CSJ was a Commission funded by the Labour Party in 1990 to look at how equality may be achieved in British society. The

conclusions of the CSJ report made a commitment to establish social justice as a hierarchy of four ideas (Social Justice 1994).

1. Equal worth for all citizens

2. Food, income, shelter and health care are basic rights to all citizens and should be provided by the state.

3. Equal opportunity to gain access to life's opportunities should be guaranteed by the state as a right to all citizens.

4. Reducing inequality should be the primary goal of state action.

The Labour Government has equated the recommendations of the CSJ to a policy of fair taxation, full employment or training, long-term investment in people and the establishment of a basic set of citizens rights (Ellison N 1997). This shift brings Labour policies closer to the ideal of a Schumpeterian social state, with emphasis on the empowerment of the individual matched by state power. In effect this implies a workfare state, with people encouraged to make the transfer from welfare to work assisted by housing, education and health care policies. Here the State is enabling rather than paternalistic. The approach is marked by a civic duty to look for work where this is available rather than having a right of access to welfare until suitable work becomes available. By adopting the CSJ position the Labour Party has taken a step away from welfare collectivism, to a state which supports the action of the

individuals backed by strong state intervention to ensure change (Ellison N 1997).

This vision has been applied to health care. Tony Blair has termed the concept of the 'One Nation NHS' to encapsulate the ideas of the CSJ into the modern health care service (Baker M 1998). In a speech given in 1996 he asserted a vision of an NHS giving a hand-up, not a hand out, to the public; a vision of an NHS seen to be patient centred and technology driven, (Blair T 1996). Labour has pledged to achieve this by creating a Minister for Public Health, with the role of co-ordinating Whitehall departments to improve population health and reduce inequality (Baker M 1998). However, the state expects that the beneficiaries of care - the citizens - will in return look after their health. Therefore the one nation NHS will have a focus on prevention as well as the achievement of targets such as the Health of the Nation (Department of Health 1998)

The One Nation NHS will continue to be founded on taxation and provide a universal service to those that need it, but within this framework considerable reductions in red tape are suggested as a means to increase the expenditure on patients. A key target for this is the removal of the internal market with a system based on co-operation. Central to this change is the development of long-term agreements between providers and Commissioners of care. The purchaser side is seen as essential to promoting an efficient service, however it is recognised that it needs to be made more sensitive to the requirements of patients if the ideal of the one nation NHS is to be realised (Baker M 1998; Department of Health 1998).

Like previous reforms, however, the changes in the NHS will build on existing structures. In designing a replacement for the NHS market the purchaser provider split will not be removed. Nor is new Labour committed to a strategy of equality as was seen in the 1948 Consensus (Baker M 1998). The Labour Government is committed to spend what it can afford where it can afford to spend it. Therefore the sort of selectivity seen in the welfare services since 1989 looks set to continue with NHS expenditure being targeted on those most in need (Baker M 1998).

In looking to re-balance the NHS the government has signalled a shift of power towards the GP's as the purchasers of care for their populations, the system being coordinated by the District Health Authorities. These ideas were laid out in a series of white papers (Baker M 1998). These give a commitment to reorganise the NHS around the individual by focusing on primary care. These papers stress

- The role of public health professionals to determine at need populations,
- The strategic planning of health care for at need populations
- The activities of the NHS as an enabler of health via the use of suitable preventative services and health care delivery.

The changes are based on two themes

1. The use of technology.

Technology is seen as the glue pulling together the practice of medicine and its

management. The Labour Party envisions that the One-nation NHS will make greater use of technology both in systems and medical management (Department of Health 1998).

2. The development of primary care groups.

Primary care groups, as the name suggests are primary care organisations responsible for commissioning health services for the local population (Baker M 1998). It is envisioned that they will function by managing a global budget for hospital services prescriptions and community services. It is also the responsibility of the primary care groups to ensure that practice is evidence based and conforms to current standards of medical practice - this latter aspect is termed clinical governance. These primary care groups will be self-regulating, with a nominal line to the District Health Authorities. It is planned that these primary care groups will form around natural geographic boundaries, and serve about 100,000 individuals (Department of Health 1998). The primary care groups are to be governed by representatives of primary care, social services and community care services. Discussions about the role of public health expertise, DHA representatives and the public are yet to be held, and so no role is currently defined for these stakeholders (Baker M 1998).

Although this is the overall arrangement there are significant differences between England, Scotland, Northern Ireland and Wales. In Scotland the focus is for independent groups reporting to a single authority. In Northern Ireland and Wales the groups will report to the regional offices, and then to the local assemblies once created (Department of Health 1998).

## 13.4 The Expected Impact of Change and the Results from Southampton.

Although the final structure of the One Nation NHS is unclear the expectations for the effects of the reform are not. The reforms are expected to have an impact on health care provision and the organisation of the NHS. However, both of these expectations are subject to the post-policy modifications that we have seen take place previous reforms.

#### **13.4.1 Health-care Delivery Change**

The objective of the proposed primary care groups is that they will encourage a patient focus element in health care (Department of Health 1998). This will have the effect of balancing the state economy relationships, but will the proposals achieve this alone?

The lessons from the Southampton exercise are valuable in this aspect. In the results from chapter 10 the list of GP priorities from the investment list were presented and the top twenty priorities are reproduced below, together with the final purchasing plan Table 13.1 and 13.2 (Honigsbaum F 1994).

#### TABLE 13.1 GP RANKINGS FROM THE PURCHASING DILEMMAS EXERCISE

Waiting List	1
Trauma centres	2
Community Mental Health Teams	3
Home palliative care	3
Contraception education	5
Stroke Rehabilitation	5
Respite care	7
Care attendants	7
Information to carers	9
Cancer teams	9
Cardiac rehabilitation	11
Counselling	12
Sex education	13
Mixed Crew Trials	14
Substance Misuse	15
Community rehabilitation	15
Domicillary care	15
Asthma education	18
Child protection	18
Pre-admission clinics	20

10 W. 1

#### TABLE 13. 2 PURCHASING PLAN CONTENTS

Community teams	
Waiting lists	
Accident and emergency	
Specialist teams	
Education	
Sex education	
Accident prevention	
Palliative care	
Equipment aids	
Communication service	
Prevention information	
Stroke rehabilitation	
Substance misuse	
Information to carers	
Housing	
Cardiac rehabilitation	
Stroke prevention	

There are some remarkable similarities between the two lists. Of particular interest is the focus on waiting times, community mental health and the Health of the Nation targets. This would argue that in the current circumstances the decisions made by the General Practitioners would have the same effect as the decisions currently being made by the District Health Authority. In this the GP's would not specifically target at need populations nor promote efficiency. This finding was re-enforced in a study of general practitioners conducted by Norwich Union where these factors were identified as key in decision making (Norwich Union 1995).

The potential for GP led services not to target those most in need has been recognised by the government (Baker M 1998) and so several initiatives have been proposed.

First the government intends to create a situation where the District Health Authorities are responsible for directing care to target groups – so called health improvement zones. GPs will be required to demonstrate a commitment to these zones and support the health authority initiatives (Department of Health 1998). However, as we saw from the Judgement Analysis in chapter 11 the decisions made by a health authority were influenced by the provider demands and the decision making environment. Therefore, unless the provider influence in the health authorities is diminished, the improvement zones will be provider led and unlikely to have much effect. It has already been noted that the government reforms have not given any indication of reform of the providers of care (Baker M 1998).

The second initiative by the government is to increase the focus of the General Practitioners onto the needs of the patient by the introduction of Evidence Based Medicine (EBM). The practice of EBM relies on the existence of evidence to suggest that the patient will benefit before treatment is dispensed. Evidence in EBM is interpreted as a hierarchy of experience, with randomised clinical trials as the highest form of evidence, and anecdotal forms as the lowest (Muir-Gray JA 1997; Department of Health 1998). The hope is that by introducing EBM is that the GP's and other health care providers will become the patient's agent.

However, the approaches used in EBM cannot enable the GP to become the patient's agent alone. Many of the treatments currently being used have not been subjected to trials and there are no guarantees that what is seen in research will be reflected in practice (Muir-Gray JA 1997). In addition the conduct of trials is very expensive. This has two effects. First the trials are, by and large, under the control of the large bodies that can afford to sponsor them. This implies that the generation of future information may have a commercial bias (Muir-Gray JA 1997). Second under current methodologies trials can be best conducted in well-specified areas with large numbers

of patients. This implies again that trials into less specific areas - like old age - will not be conducted (Elwood M 1998). Therefore the potential is that EBM may further enhance inequalities in health care.

#### 13.4.2 Organisational Change

It is part of the Labour Party strategy to move health-care out of the political arena and into the civil society. This is a strategy seen in other Labour initiatives such as economic control where monetary policy is under the control of the Bank of England (Brivati B Bale T 1997). There are several initiatives underway. One example is the National Institute for Clinical Effectiveness (NICE). NICE is an attempt to weaken the political implications for priority setting in the NHS (Baker M 1998).

#### 13.4.3 Concerns About Reform.

The moves to shift priority setting in health care out of the political arena, coupled with the emphasis on patient power have led to some concerns.

 The changes have been viewed by some political analysts to be contingent on the government achieving its economic and social goals. This approach, it is argued, is inherently risky for the NHS as an organisation, as any failure to achieve these goals would leave the NHS bearing the brunt of any shortfall as the funds for change dry-up (Ellison N 1997). 2. Some commentators have suggested that the political forces at work have influenced the shape of the changes. They quote the differences seen between the Scottish, English and Welsh Primary Care groups as an example, where the political potential for self-rule may have altered the provision of health care (Baker M 1998). The concern is that the outcome of changes under these circumstances may be unpredictable and undesirable - in a similar fashion to the outcomes of the Conservative government reforms. It is possible that reforms may lead to some unusual alliances of political and social elements that could damage the integrity of the service (Ellison N 1997).

In addition to these economic and political opinions there are concerns that the empowerment of the individual may lead to the end of welfare services in the UK. This arises from the hypothesis that the growth of consumerism may lead those individuals who are 'better off' resenting the payment of a collective service and to the placing of pressure on the political powers to allow the wealthy to opt out. In effect this would further the development of a two-tier society, and leave the NHS under-funded for the remainder of the population who cannot afford private care (Ellison N 1997).

#### 13.4.4 The Wider Picture

The potential problems reflected in the proposed changes to the NHS under the Labour Party are part of a much wider picture. Elenore, in a review of implementation policy, has commented that the current proposed organisational changes for the NHS have been constructed without the overall outcomes of policy and the coherent action of the 'Street Level' implementers being examined (Elenore RE 1998). This suggests – on the basis of the findings in this thesis - that the reforms will not lead to the resolution of the problems within the NHS. Therefore is there a way to implement health care policy that does not result in an unbalanced health care system?

# 13.5 The Applications of the Results of this Thesis to the Development of Solutions to the Organisation and Management of Public Sector Services

The results of this thesis would argue that the only way to restore the balance in the NHS to increase the role of the civil society in the organisation and management of the service. There are three possible scenarios that could achieve this (Hughes G, Clarke J, Lewis G and Mooney G 1998).

- The transfer of power from the purchasers and providers of services to the patients themselves – a citizen based approach
- 2. A decrease in the power of the providers and purchasers with a transfer to the community.
- An increase in patient power at the centre leading to patient focussed national directives – a strategy based on re-inventing the public sphere of management

In the face of the problems of policy implementation some analysts have argued that the only way to achieve a balanced health care system, that is efficient and not a burden on the taxpayer, is the creation of independent health care services i.e. the citizen-based approach. These services should be funded through the use of insurance schemes and a corresponding safety net to assist in those that cannot afford insurance (Barry N 1994). Indeed there are some suggestions from the current government that a move to a form of social insurance is desirable for these very reasons (Baker M 1998). However, as we have already covered in this thesis the use of market and free enterprise cultures in social problems does not always lead to either efficient or equitable solutions (Teulings C and Hartog J 1998). It is not surprising, therefore, that the introduction of insurance based health care is viewed by many with a degree of caution, but given the circumstances what is the alternative?

Given the current and historical levels of investment in the provider organisations any transfer of power to patients and the community for the provision of services appears unlikely, and historically this has not been achieved (Enoch Powell 1966). However, without provider reform the environment of decision making within the NHS would argue that achieving a balance of state, economy and civil society is not possible at a local level (Hoggett P 1997). Furthermore, the concerns about individual empowerment being potentially damaging to the welfare state implies that the empowerment of patients at a local level is not desirable (Ellison N 1997). These arguments augur for patient empowerment at a policy making and implementation | level - i.e. the creation of a new consensus and tripartite relationship and a reinvention of public management (Goold SW 1996). This implies under current structures that the patient empowerment should occur at the level of advice to the Ministry of Health and its outposts. However, as we have seen the inequity of services is not due to simply having a voice, it is also due to the 'lack of interest' on behalf of providers. The lack of interest by providers implies that there is considerable risk that if the elderly were to be directly empowered funds may be diverted away. Instead this argues for a constitutional right rather than an economic right to care in conjunction

with the central voice (Goold SW 1996). This is a new direction for public management in the UK, but common with many of our European neighbours.

Across Europe a common form of health care provision is emerging. A prototypic health care system in Europe now has the separation of purchaser and provider roles, with the funding for the system being paid into a central fund, discrete from other welfare funds. Additional payments are made either in the form of copayments by the patient or as supplemental premiums into an insurance fund (Hoffmayer UK and Mccarthy TR 1994). The movement to this hypothecated form of funding is also marked by a greater definition of the availability of care and what care is available, either by the use of limited treatment lists, or by restricting the reimbursement of treatments.

An example of how this model is being implemented within Europe is Germany (Hoffinayer UK and Mccarthy TR 1994). Under the original German health care system funds were fragmented - there were over 650 Sickness Funds. Citizens were free to join most of these. These sickness funds reimbursed whatever the patient and the Doctor demanded. In the reformed system there are fewer than 650 funds, and there is now a fixed reimbursement list, from which patients may add to by paying insurance or payment out of their own funds. Similar reforms are taking place in France, Holland and other European countries (Ham C, Robinson R and Benzeval M).

The fundamental change that underlies the health care reform process in Germany is the creation of patient empowerment (Ginsberg N 1992). This is achieved by

- The separation of funds an indirect empowerment as the funds must continue to serve the interest of the members
- In most Sickness Funds patient interest groups sit on the board of the funds (Hoffmayer UK and Mccarthy TR 1994).

These approaches permit the development of social medicine to continue, without creating resentment that the better off are over supporting the system. The success of these reforms has been mixed. In Germany the massive budget problems have been reduced standards have not fallen (Ham C, Robinson R and Benzeval M). However at this stage it is difficult to assess the impact of individual empowerment on the system.

In the UK in the short-term it is unlikely that a change involving a shift to independent, centralised funds, and increasing copayments is acceptable (Rivett G 1998). Indeed the applicability of such a change is doubtful. The Sickness Funds in most European countries developed from the friendly societies that were a feature of nineteenth century health care in the UK. Therefore, the UK system has had a different evolutionary path. However from the results of the thesis, and the developments in Germany, it is necessary to consider the use of patient empowerment to change the environment of NHS decision making. In looking at the UK system similar change to the German patient empowerment could be obtained by

1. Creating a centralised fund for health care, and exempting it from the parliamentary votes system. This would involve a shift to hypothecated taxation.

2. Creating an independent Ministry of Health as a 'next steps' agency to ensure the independence of health care provision and prevent the use of health care resources for political and economic purposes.

3. The creation of a reimbursement strategy for UK health care - defining the basic rights to care for the individual.

4. The creation of an independent body, similar in operation to the law Commission to advise the Ministry of Health on the changes in the system. This Health Commission to be made up of representatives of the civil society, the economy and state.

In this manner decision making in the NHS can be changed to ensure more of an influence of patients and individuals on the running of the service and ensure a balanced NHS, without developing a potentially damaging citizen based approach to health care.

#### 13.6 Conclusions

The NHS has been, and will continue to be, a cornerstone of welfare in the UK. However its foundation on a Consensus based on the family and manual labour in no longer tenable. It has been the trend to abandon this Consensus and tripartite relationship of the state economy and civil society and move to a market based distribution of health care benefits. This trend may not be the most efficient way to deliver care, however, and may result in a provider led service – which fails to

support the economic aims of the government or deliver care to those most in need. In order to reverse this trend a new consensus is required in UK health-care – where an individual's rights are supported by a central framework to ensure that these rights are not compromised.

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#### APPENDIX A THE RESULTS OF THE STAKEHOLDER ANALYSIS

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### Appendix F Stakeholder consultation results

Ranking of injury options for charge

Ophies		The 12	and the second second	Mestatore			
	Tota	- Central Strattice	Professional advice	CHE and local automilies	Hospital and commonity health previous	Social Services	Cooncilis of Community Service
Base 1 .	23	28		₹	2. · · · ·	3	
Trauma centres	2.5	2.6	24	2.6	2.4	1.3	3.0
Accident and emergency	2.0	1.3	1.9	2.8	2.3	1.7	3.0
Mixed crew triats	2.0	2.2	1.2	.9	1.7	2.2	1.0
Community first and							
training	5.3	1.3	1.7	2.3	2.3	4.3	2.0
Loan of sale of salety							
aids	1.6	3.5	\$2	1.3	2.0	2.0	2.0
immediate care training:							
crash-call GPs	1.4	1.5	8	2.0	1.9	2.8	3.0
Multisgency accident							
orevention	1.5	1,4	1.5	8.4	\$.4	1.7	2.9
information for accident				-			1.0
prevention	1.3	1.3	1.3	1.4	8.4	: 5	1.0

2
Ranking
0
mental
health
options
2
change

				Fiean score			
	22.00	Genera		CHC and least	elospita and doprevnity teatri	Sector	Council's of Community Service
Objobil and an and an	121	No. No.		0	4	1.1	1
increased respire and day care	25	2.7	5.5	3.5	2.7	N.	ö
Community mental acquich teams	24	2.4	25	24	2.1	2.2	3.0
reproted information and support for carers Counterline in primary care	213	2 12 13 12	19	2.6	52	20	30
education	0.0	2.1	1.9	1.2	2.0	23	12
House and day percentification	5	2.5	17	6.5	13	27	20
in primitry care	6	1.6	C.	сĽ,	10	222	2.0
Supported housing	16		51	2.5	123	10	20
the all a state of host the utility	19	1.5	1.7	1.2	52	2.0	5.5

# 3 Ranking of cancers options for change

				องชวร แรดุญ			
		Gatery	rofusional	Cricera Cricera	rissoita: end domentativ	Vocial	Couper 1 of
Cotions	Total	50.32%/vC		anshorifier (COC)	12/14/05	Secology	Survice Survice
Home based part of the	77	54	1.00	5	6	1.2	
Care Concestration of	25	2.4	2.6	24	2.8	2.2	92
treatment in specialist							
102164	2	ü	2.4	30	2.0	20	3.0
Salo care or prevention.	8.1	5,6	1.4	l.a		2.0	50
skin jexions	in	1.5	2.1	6.5	20	2.7	10
		And a second sec	and the second se	Vitan	and the second se	All and and and all all and all and all and all all all all all all all all all al	

4 Ranking of circulatory diseases options for change

sugarante as	Torgated stroke	Carsiac rehal	rehabelitat.	Community a	Castr.	10.00
	ske	MARTINE	03	woke		
e.		22	2.5		(4)	Total
15		22	2.9		34	Gereral
2.3		20	2.2		1:	General Projessional Data Anglice advice
	-				-	- H.
3.2		10.00	24			Mean store CHC and their action as
2.0		61	3.0		9	Hear to and companity hearth hearth
17		14	2.3		5	ante 19 Sechas Sechas
0.0		3.0	30		Contract of the	Spelas Spelas Spelas Spelas

		Genera	Professional	Dat 240	Hospital and construction hadden	Sava	Coursels of Concustry
8304	ist.	14		-0	*		
Community-Dated		The Association and and		and the second second		and the second se	
rehabilitation	- 2.3	2.0	2.2	23	25	27	r'o
Care attendings	21	2.4	ar B	2.4	1.8	13	10
orthopactic clinics							
long abdate manys a	23	59	1,8	2.8	12	2.2	3.0
increase kines	2.5	2.0	47	2.5	2.0	1.2	30
increase kinde stranstationer replacementation		5	2.3	201	24	2.9	70
Increase kinde replacements Equipmentialisi for disabled people	24		1.5	2	23	-	10
Propage knep replacements Equipmentator for disabled people Preadmission clinics Proble rethropathy	50 D	1,9					

5 Ranking of mobility and the senses options for change

			Mean score	-
Total	General practice	Professional	CHC and focal authorities	Herpital an community boatth tervices
52 :		- (I. s	9	8
Non-solver service				
2.2	1.9	2.5	22	2.:
1,7	2.3	2.0	3.3	1.8
8.5	1.4	2.0	: 4	2.0
1.8	1.7	1.7	2.9	3.9
1.5	:.5	1.5	1.4	2.0
	72 · · 2.2 1.9 1.5 1.8	Total         practical           72         1.9           1.9         2.1           1.9         1.4           1.8         1.7	Table         presented         #daylog           72	General Total         Ctofessioned educe         CHC and local authoritiei           72         1.9         2.5         27           1.9         2.5         27           1.9         2.0         1.1           5.8         1.4         2.0         1.4           1.8         1.4         2.0         1.4           1.8         1.7         1.7         2.0

# 6 Ranking of infection and internal disease options for change

1

Secial Services	Cashqils di Campunity Servite		4	
2.3 2.0	3.0 1.0			
1.2	2.0			
1.7	3.0			
1.3	20			

# 7 Ranking of pregnancy and the newborn options for change

				thean score			
Cetiona	Total	General practice	Professions:	CHC and Joca suthermet	Hospital and Community health rety ce	Sociel Services	Councils of Community Service
525e	12	31		9	8	3	1
Unwanted teenage pregnancy: aducation/ courselling/							
contraceptives	2.4	2.4	2.5	2.4	2.3	3.9	3.6
New mones of							
maternisy care	2.0	1.8	2%	2.3	2.9	: 2	1.0
Preconceptual use of							
fedic acid	2.9	1.9	3.1	2.3	2.0	1.2	1.0
Ambulance paramedic							
obstatric training	1.8	: 8	3.5	1.9	2.1	1.2	1.0
Assisted conception	1.5	1.7	1.2	1.0	6.3	1.2	1.3

# 8 Ranking of other options for change

State and Million				Mean score			
Oatlond .		General processe	Professional	CHC and - local Authorities	Raspisal and	Social Social	Community Service
Caze	12	<u>3</u> 4	Li in anti-	19 8 - M. M. M. M.	-8		A.
Waiting times and							
100.005	3.4	2.8	2.5	2.5	2.5	2.3	3.0
Domiciliary care	2.8	2.0	2.0	2.7	2.0	1.2	2.0
Child protection:							
primary care training	3.9	1.3	3.8	2.3	2.0	2.7	1.0
Child protection medical ingent to assessment	1.9	20	1.5	2.1	1.9	2.3	20
Commencetion service for ethnic minority							
patients	1.8	1.7	: 9	1.2	1.5	2.3	2.0
Smoking reduction:							
primary care training	3.7	3.5	1.7	1 . st	1.5	2.3	2.0
Distotics: translog for							
arimany care	15	2.3	1.5	1.2:	1.0	13	2.0

## 9 Revised percentage for each programme area

(Participants were asked: "What percentage share of the total expenditure by the health commission do you think should be allocated to each programme?")

A State of the second				Mean (k)	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		
saily defaure	Tetai	General pracike	Professional acrice	CHC and lots subscribed	Hospital and commentity realize tory cet	Social Services	Councils of Community Service
Baren Ali sobo disagrez wita cursent alloration	43	15	9	3	5	2	£ 1.
lojury	7.5	7.4	7.9	8.3	6.3	20	9.0
Montal health	16.5	17.5	17.4	13.8	15.8	17.3	17.0
Cancers	3.3	87	3.4	:4.8	8.8	3.5	6.0
Circulatory diseases	12.3	18.9	12.4	11.3	14 0	130	11.0
Mobility and the serves	2:.2	23.3	21.5	21.6	21.8	28.5	23.0
infection and internal							
disease	26.6	27.1	27.3	28.3	27.6	26.9	36.6
Prepnakcy app 1							
new bors	6.4	6.9	6.0	6.6	6.0	6.0	4.0

## 10 Percentage of addicional money would allocate to each programme area

×.

(Participants were asked: 'Il additional money becomes available, what proportion of it would you allocate to each programme?')

			a Marchania	Misari (%)			
riestly erogramme	Total	Geoeral practice	Professional	CHC and IDC3: Jushor ries	Hospital and community bealth services	Social Services	Chanalis of Community Service
fuela -	72	34	- it	9	9	3	
diaty	10.5	10.8	10.0	B.0	9,7	8.3	20.0
Mental beatth	16.3	18.9	18.2	0.8	20.3	:3.3	15.0
CARREN	17.3	16.4	14.6	25.0	17.0	23.7	20.0
Cinculatory diseases	16.9	15.9	15.7	16 7	20.9	21.2	20.0
Mobility and the remains	16.0	16.5	12.3	(5.3	13.6	:3.3	:3.0
discase	:3.7	14.5	16.3	16.7	7.0	10.0	11.0
Pregnancy and the newsborn	9.6	9.6	9.5	8.5	12.7	8.3	1.0

# APPENDIX B THE INITIAL DATA SET

#### Key

Utility - Utility of care in terms of Health benefit - see chapter 9 Fr = first ranking GP - GP ranking Purchasi - presence or absence on the purchasing plan - the dependant variable Equity - a commission value see chapter 9 Choice - a commission value see chapter 9 Responsib - personal responsibility a commission value see chapter 9 Waiting - impact on the waiting list in Southampton Lc - access to local care Hospital - increasing hospital activity Community Increasing community activity Needs -identified local health need - a commission value see chapter 9 Discress - access to discretionary funds - either from region or copurchasers Provider - provider submitted bid Commission - commission submitted bid Cost - cost to the commission Ea - extra activity purchased Weighted - activity gained according to the efficiency index Co2 - the transformed cost variable National - national priority Lp local priority

APPENDIX C THE SPSS OUTPUT ON COLINEARITY, FACTOR ANALYSIS AND LOGISTIC REGRESSION

# Regression

#### Variables Entered/Removed<sup>b</sup>

	Variables	Variables	······
Model	Entered	Removed	Method
1	WEIGT2, EQUITY, WAITING, PROVID ER, UTILITY, Gp ranking, Discressi onary funds, NATIONA L, Hospital activity, CHOICE, Local care, NEEDS, Communi ty activity, local straegy, CO2, Responibi lity, First ranking, Commissi on, Excess act		Enter

a. All requested variables entered.

b. Dependent Variable: Purchasing plan

#### Model Summary

				Std. Error of
Model	R	R Square	Adjusted R Square	the Estimate
1	.794ª	.630	.369	.380

a. Predictors: (Constant). WEIGT2, EQUITY, WAITING, PROVIDER, UTILITY, Gp ranking, Discressionary funds, NATIONAL, Hospital activity, CHOICE, Local care, NEEDS, Community activity, local straegy, CO2, Responibility, First ranking, Commission, Excess act

## ANOVAb

1 Regression 6.647 19 .350 2.418	Sig.	F	Mean Square	df	Sum of Squares		Model
	.018 <sup>a</sup>	2.418	.350	19	6.647	Regression	1
Residual 3.906 27 .145			.145	27	3.906	Residual	
Total 10.553 46				46	10.553	Total	

a. Predictors: (Constant), WEIGT2, EQUITY, WAITING, PROVIDER, UTILITY, Gp ranking, Discressionary funds, NATIONAL, Hospital activity, CHOICE, Local care, NEEDS, Community activity, local straegy, CO2, Responibility, First ranking, Commission, Excess act

Page 1

b. Dependent Variable: Purchasing plan

### **Coefficients**<sup>a</sup>

				Standardi zed			~	
		Unstand	lardized	Coefficien				
		Coeffi		ts			Collinearity	Statistics
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	494	.451		-1.096	.283	- 4	
	CHOICE	-1.14E-02	.198	011	~~.058	.954	.350	2.853
	CO2	.148	.208	.225	.709	.484	.136	7.357
	Commission	.318	.319	.318	.995	.328	.134	7.440
	Community activity	5.911E-05	.000	.097	.501	.620	.366	2.733
	Discressionary funds	2.909E-02	.155	.028	.188	.852	.616	1.622
	Excess act	237	3.325	072	071	.944	.013	74.793
	EQUITY	.174	.203	.155	.857	.399	.417	2.396
	First ranking	-8.23E-04	.011	024	075	.941	.134	7.463
	Gp ranking	-5.97E-03	.006	177	-1.035	.310	.466	2.145
	Hospital activity	2.834E-04	.002	.167	.169	.867	.014	71.500
	Local care	205	.178	205	-1.152	.259	.433	2.310
	local straegy	.169	.187	.178	.904	.374	.352	2.841
	NATIONAL	7.993E-02	.174	.083	.458	.650	.420	2.379
	NEEDS	.381	.262	.269	1.455	.157	.402	2.488
	PROVIDER	.199	.291	.206	.682	.501	.151	6.630
	Responibility	246	.208	260	-1.184	.247	.284	3.520
	UTILITY	.200	.139	.348	1.439	.162	.234	4.264
	WAITING	245	.347	144	706	.486	.329	3.043
	WEIGT2	.124	.169	.119	.735	.469	.523	1.911

a. Dependent Variable: Purchasing plan

## Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index
1	1	9.415	1.000
	2	2.457	1.958
	3	1.888	2.233
	4	1.461	2.539
	5	1.045	3.002
	6	.809	3.412
	7	.641	3.833
	8	.496	4.356
	9	.383	4.961
	10	.322	5.409
	11	.254	6.092
	12	.223	6.495
	13	.208	6.729
	14	.158	7.713
	15	.117	8.966
	16	5.403E-02	13.200
	17	3.535E-02	16.320
	18	1.883E-02	22.358
	19	1.134E-02	28.818
	20	5.646E-03	40.836

Page 2

## Collinearity Diagnostics<sup>a</sup>

		1				eff.	
				Varia	nce Proportions	-	
Model	Dimension	(Constant)	CHOICE	CO2	Commission	Community activity	Discressionary funds
1	1	.00	.00	.00	.00	.00	.00
	2	.00	.00	.00	.00	.00	.00
	3	.00	.01	00.	.00	.03	.00
	4	.00	.00	.00	.00	.05	.03
	5	.00	.01	.00	.00	.01	.00
	6	.00	.02	.00	.00	.02	.14
	7	.00	.07	.00	.00	.00	.09
	8	.00	.00	.00	.00	.13	.09
	9	.00	.09	.00	.00	.07	.00
	10	.00	.01	.00	.00	.03	.10
	11	.00	.22	.00	.01	.11	.16
	12	.00	.05	.00	.00	.13	.00
	13	.00	.00	.00	.00	.04	.00
1	14	.00	.00	.00	.02	.01	.00
	15	.00	.05	.01	.02	.00	.00
	16	.01	.00	.06	.02	.19	.00
	17	.04	.13	.00 .00	.60	.02	.02
	18	.04	.07	.00	.00		
	19	.78				.00	.03
	20		.03	.05	.25	.04	.02
L	20	.06	.08	.43	.01	.12	.07

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# Collinearity Diagnostics<sup>a</sup>

		Variance Proportions									
Model	Dimension	Excess act	EQUITY	First ranking	Gp ranking	Hospital activity	Local care	local straegy			
1	1	.00	.00	.00	.00	.00	.00	.00			
!	2 -	.00	.00	.00	.00	.00	.00	.00			
	3	.00	.03	.00	.00	.00	.03	.00			
	4	.00	.00	.00	.00	.00	.00	.01			
	5	.00	.04	.00	.00	.00	.00	.01			
	6	.00	.03	.00	.00	.00	.01	.03			
	7	.00	.00	.00	.00	.00	.00	.00			
	8	.00	.09	.00	.00	.00	.08	.01			
	9	.00	.10	.00	.00	.00	.25	.03			
	10	.00	.21	.00	.04	.00	.01	.00			
	11	.00	.02	.01	.03	.00	.05	.04			
	12	.00	.02	.01	.02	.00	.22	.15			
	13	.00	.02	.01	.06	.00	.00	.15			
	14	.00	.02	.04	.01	.00	.01	.08			
	15	.00	.16	.02	.32	.00	.00	.19			
	16	.00	.04	.01	.03	.00	.13	.03			
	17	.01	.02	.00	.32	.00	.15	.00			
	18	.06	.07	.25	.02	.08	.00	.00			
	19	.00	.07	.34	.01	.00	.01	.00			
	20	.92	.07	.29	.13	.91	.06	.22			

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## Collinearity Diagnostics<sup>a</sup>

		Variance Proportions						
Model	Dimension	NATIONAL	NEEDS	PROVIDER	Responibility	UTILITY	WAITING	WEIGT2
1	1	.00	.00	.00	.00	.00	.00	.00
	2	.00	.00	.00	.00	.00	02	.00
	3	ŬO.	.00	.00	.01	.00	.00	.00
1	4	.00	.02	.01	.00	.00	.01	.01
	5	.02	.14	.01	.00	.00	.00	.00
	6	.00	.00	.00	.01	.00	.07	.00
	7	.01	.05	.00	.01	.00	.13	.00
	8	.04	.12	.01	.01	.00	.01	.00
	9	.01	.00	.00	00	.00	.00	.00
	10	.07	.02	.00	.11	.01	.05	.02
	11	.00	.07	.03	.00	.00	.15	.01
	12	.07	.02	.00	.03	.02	.01	.04
	13	.00	.01	.01	.03	.00	.06	.32
	14	.13	.11	.05	.03	.05	.00	.12
	15	.31	.00	.00	.05	.01	.04	.02
	16	.20	.10	.13	.54	.21	.10	.00
	17	.02	.04	.40	.11	.00	.10	.33
	18	.00	.04	.08	.00	.10	.00	.04
	19	.02	.18	.26	.05	.55	.17	.04
	20	.10	.07	.00	.02	.05	.08	.03

a. Dependent Variable: Purchasing plan

\*

# **Factor Analysis**

## Communalities

	Initial	Extraction
CHOICE	1.000	.704
CO2	1.000	.791
Commission	1.000	.844
Community activity	1.000	.633
Discressionary funds	1.000	.553
Excess act	1.000	.901
EQUITY	1.000	.701
First ranking	1.000	.813
Gp ranking	1.000	.547
Hospital activity	1.000	.897
Local care	1.000	.625
local straegy	1.000	.716
NATIONAL	1.000	.613
NEEDS	1.000	.602
PROVIDER	1.000	.822
Responibility	1.000	.592
UTILITY	1.000	.719
WAITING	1.000	.566

Extraction Method: Principal Component Analysis.

	In	itial Eigenvalu	Jes	Extraction S	Sums of Squa	red Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.652	20.290	20.290	3.652	20.290	20.290
2	3.215	17.860	38.151	3.215	17.860	38.151
3	2.535	14.081	52.231	2.535	14.081	52.231
4	1.750	9.721	61.952	1.750	9.721	61,952
5	1.487	8.262	70.214	1.487	8.262	70.214
6	.982	5.457	75.671			
7	.726	4.031	79.702			
8	.692	3.842	83.544			
9	.602	3.347	86.890			
10	.597	3.318	90.208			
11	.490	2.720	92.928			
12	.366	2.034	94,963			
13	.330	1.832	96,795			
14	.284	1.578	98.373			
15	.143	.795	99,168			1
16	8.196E-02	.455	99.623			
17	6.107E-02	.339	99,962			
18	6.759E-03	3.755E-02	100.000			

## Total Variance Explained

Page 1

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## **Total Variance Explained**

	Rotation Sums of Squared Loadings						
Component	Total	% of Variance	Cumulative %				
1	2.919	16.214	16.214				
2 3	2.849	15.826	32.040				
1 1	2.708	15.043	47.084				
4	2.127	11.819	58.902				
5	2.036	11.312	70.214				
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

Extraction Method: Principal Component Analysis.

Component Matrix<sup>a</sup>

			Component		
	1	2	3	4	5
CHOICE	.541	-7.15E-02	.491	154	.375
CO2	.722	.325	.157	206	.310
Commission	498	.696	.186	277	-2.90E-02
Community activity	.393	.242	.615	138	153
Discressionary funds	.117	.327	.326	.404	403
Excess act	.319	.638	452	.433	2.653E-02
EQUITY	531	8.687E-02	3.819E-02	8.848E-02	.634
First ranking	.715	.220	139	424	.235
Gp ranking	517	257	312	306	147
Hospital activity	.307	.591	514	.434	3.044E-02
Local care	.556	223	.411	-1.92E-04	311
local straegy	135	.695	.150	-,389	.204
NATIONAL	-2.00E-02	.543	-5.28E-02	375	418
NEEDS	171	.139	.474	.393	.417
PROVIDER	.495	671	211	.210	.195
Responibility	705	.147	.196	6.408E-02	.178
UTILITY	101	.265	.596	.515	140
WAITING	.2.39	.433	554	8.952E-02	8.087E-02

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

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#### **Rotated Component Matrix**<sup>a</sup>

			Component		
	1	2	3	4	5
CHOICE	.782	158	226	9.553E-02	8.310E-02
CO2	.850	5.643E-02	.239	-1.39E-02	-9.00E-02
Commission	104	.879	1.851E-02	9.001E-02	.230
Community activity	.545	.230	211	.435	222
Discressionary funds	-1.65E-02	.119	.144	.696	184
Excess act	7.077E-02	6.929E-02	.928	.170	-2.49E-02
EQUITY	117	.120	-3.27E-02	151	.806
First ranking	.741	5.314E-02	.268	341	269
Gp ranking	527	.123	238	442	-3.79E-02
Hospital activity	3.060E-02	2.762E-02	.938	.117	-3.08E-02
Local care	.395	256	258	.345	467
local straegy	.284	.757	.121	-6.22E-02	.210
NATIONAL	-6.80E-03	.661	.144	3.690E-03	-,394
NEEDS	.146	-1.90E-02	-7.10E-02	.431	.624
PROVIDER	.187	857	-1.11E-03	200	114
Responibility	364	.341	202	9.390E-02	.542
UTILITY	-5.67E-03	9.876E-02	-5.71E-02	.815	.204
WAITING	5.600E-02	9.091E-02	.715	192	-7.59E-02

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

## **Component Transformation Matrix**

Component	1	2	3	4	5
1	.744	368	.290	.065	472
2	.185	.752	.573	.252	.093
3	.381	.161	638	.627	.170
4	286	498	.415	.648	.281
5	.430	161	.093	346	.813

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

# Logistic Regression

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Number of selected cases: 49 Number rejected because of missing data: 2 Number of cases included in the analysis: 47

Dependent Variable Encoding:

Original	Internal
Value	Value
.0	0
1.0	1

•	Dependent	Vari	lable	à	PURCHAS	I	Purchas	ing pla	ın		
	Beginning	Bloc	ck Nu	mber	0. In	iti	al Log L	ikeliho	od Functio	on	
	-2 Log Li	kelił	nood	60	.283829						
	* Constant is included in the model.										
	Estimation terminated at iteration number 2 because Log Likelihood decreased by less than .01 percent.										
	Classific The Cut V			.50 Pre	dicted		Percent	Correc	ct		
	Observed		.t	0	I 1						
	.0		I	31	I 0	Ι	100.00%				
	1.0	1	I	16	-+	I +	.00%				
		10			- Variabl	es	in the E	quation	ı		
	Variable			В	S.E.		Wald	df	Sig	R	Exp(B)
	Constant		6	613	.3078	ł	4.6154	1	.0317		

175

Beginning Block Number 1. Method: Forward Stepwise (COND)

23 2 2 20

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----- Variables not in the Equation ------Residual Chi Square not computed because of redundancies. Variable Score df Sig R 10.7478 .3809 UTILITY 1 .0010 .0000 FR .0396 1 .8423 6.0670 .2597 GP 1 .0138 EQUITY 2.6881 1 .1011 .1068 2.7503 1 .0972 .1116 CHOICE .0109 RESPONIB 1 .9167 .0000 WAITING .4957 1 .4814 .0000 .0844 .0000 1 .7715  $\mathbf{LC}$ .2583 .0000 1.2780 HOSPITAL 1 COMMUNIT 4.3267 1 .0375 .1965 .1217 .0810 NATIONAL 2.3957 1 NEEDS 13.3251 1 .0003 .4334 .0000 EA 1.9795 1 .1594 .1327 .0658 DISCRESS 2.2607 1 PROVIDER 2.3974 1 .1215 .0812 COMMISSI 5.0120 1 .0252 .2235 .0054 .3086  $\mathbf{LP}$ 7.7417 1 .1662 CO2 3.6649 1 .0556 Variable(s) Entered on Step Number 1.. NEEDS Estimation terminated at iteration number 8 because Log Likelihood decreased by less than .01 percent. 45.555 -2 Log Likelihood 41.001 Goodness of Fit Cox & Snell - R^2 .269 .372 Nagelkerke - R^2 Chi-Square df Significance 14.729 .0001 Model 1 .0001 Block 14.729 1 14.729 .0001 Step 1 Classification Table for PURCHASI The Cut Value is .50 Predicted 1.0 .0 Percent Correct 0 Ι 1 Observed .0 0 31 0 I 100.00% Ι I + \_ \_ \_ -+----+ 1.0 Т 10 I 6 I 37.50% 1 + -------+ Overall 78.72%

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and the stand of the second stands of the second stands and the second stands and the second stands and the second stands are second stands and the second stands are second stands and the second stands are se

		Variables	in the	Equation	-i					
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)			
NEEDS Constant	10.3341 -1.1314	40.6756 .3637	.0645 9.6786	1 1	.7994 .0019	.0000	30765.139			
	Based on Conditional Parameter Estimates									
Term Removed	Log Likelihood	-2 Log	ı LR	2	nificanc Log LR	e				
NEEDS	-31.239	16.	923	1	000	0				

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Residual Chi Square not computed because of redundancies.

Variable	Score	df	Sig	R					
UTILITY	4.3403	1	.0372	.1970					
FR	.7335	1	.3917	.0000					
GP	4.6382	1	.0313	.2092					
EQUITY	.0802	1	.7770	.0000					
CHOICE	.0802 2.0443	1	.1528	.0271					
RESPONIB	. 2136	1	.6440	.0000					
WAITING	1.5764	1	.2093	.0000					
LC	.1010	1	.7506	.0000					
HOSPITAL		1	.1157	.0887					
COMMUNIT	4.6328	1	.0314	.2090					
NATIONAL		1	.0305	.2110					
EA	3.1775	1	.0747	.1398					
DISCRESS	1.1691	1	.2796	.0000					
PROVIDER	2.5097		.1132	.0919					
COMMISSI	4.0305		.0447	.1835					
Γb	6.9986	1	.0082	.2880					
CO2	5.1932	1	.0227	.2301					
Variable(s) Entered on Step Number 2 LP local straegy									
Estimation terminated at iteration number 8 because Log Likelihood decreased by less than .01 percent.									

-2 Log Li Goodness Cox & Sne Nagelkerk	of F ell -	it R^.	2		38.32 41.00 .37 .51	1 3		
			С	hi-	Squar	е	df Sigr	ificance
Model Block Step					21.96 21.96 7.23	2	2 2 1	.0000 .0000 .0072
Classifica The Cut Va			.50	dic	PURCH ted 1.0		Percent	Correct
Observed			-	I	1			
.0	0	I	31	I		I	100.00%	
1.0	1	I +-		_	6	_	37.50%	
					Over	all	78.72%	

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4

		Variable	s in the	Eguation				
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)	
NEEDS LP Constant	10.5290 2.1282 -2.3514	37.9332 .8790 .7400	.0770 5.8628 10.0970	1	.7813 .0155 .0015		37385.259 8.4000	
Model if Term RemovedBased on Conditional Parameter Estimates								

Term Removed	Log Likelihood	-2 Log LR	df	Significance of Log LR
NEEDS	-27.282	16.242	1	.0001
LP	-23.108	7.894	1	.0050

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1.0

Residual Chi Square not computed because of redundancies.

Variable	Score	df	Sig	R
UTILITY	5.8896	1	.0152	.2540
FR	.0690	1	.7928	.0000
GP	3.3057	1	.0690	.1472
EQUITY	.0015	1	.9691	.0000
CHOICE	1.3282	1	.2491	.0000
RESPONIB	.9819	1	.3217	.0000
WAITING	.4848	1	.4863	.0000
LC	.1024	1	.7490	.0000
HOSPITAL	1.2219	1	.2690	.0000
COMMUNIT	1.8448	1	.1744	.0000
NATIONAL	2.0101	1	.1563	.0129
EA	1.3235	1	.2500	.0000
DISCRESS	1.2690	1	.2600	.0000
PROVIDER	.2876	1	.5917	.0000
COMMISSI	.6563	1	.4179	.0000
CO2	3.3101	1	.0689	.1474

Variable(s) Entered on Step Number 3.. UTILITY

Estimation terminated at iteration number 8 because Log Likelihood decreased by less than .01 percent.

-2 Log Li Goodness Cox & Sne Nagelkerk	of 1 11 -	Fit - R^2			31.80 27.23 .45 .62	1 4		
			С	hi-	Squar	e	df Sig	nificance
Model Block Step					28.47 28.47 6.51	8	3 3 1	.0000 .0000 .0107
Classifica The Cut Va			50		PURCH	ASI		
			.0 0	I	$1.0 \\ 1$		Percent	Correct
Observed .0	0			•	5		83.87%	
1.0	1	I +	5	_	11	I -+	68.75%	

Overall 78.72%

and the second second

			Variables	in the	Equation				
Varia	ble	в	S.E.	Wald	df	Sig	R	Exp(B)	
UTILI	TY 1	. 6396	.7405	4.9030	1	.0268	.2194	5.1531	
NEEDS	8	9893	38.2680	.0552	1	.8143	.0000	8016.9411	
LP	2	.7423	1.0742	6.5176	1	.0107	.2737	15.5232	
Const	ant -5	.5926	1.8860	8.7932	1	.0030			

----- Model if Term Removed ------ Model if Term Removed -------Based on Conditional Parameter Estimates

Term Removed	Log Likelihood	-2 Log LR	df	Significance of Log LR
UTILITY NEEDS LP	-19.490 -19.307 -21.072	7.175 6.809 10.339	1 1 1	.0074 .0091 .0013
112	21.072	10.335	Т	.0015

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Residual Chi Square not computed because of redundancies.

	Variable	Score	df	Sig	R	
	FR	.7272	1	.3938	.0000	
	GP	1,5260	1	.2167	.0000	
	EQUITY	.1247	1	.7240	.0000	
	CHOICE	.6671	1	.4141	.0000	
	RESPONIB	3.3048	1	.0691	.1471	
	WAITING	1.2873	1	.2566	.0000	
	LC	.0085	1	.9265	.0000	
	HOSPITAL	.8541	1	.3554	.0000	
	COMMUNIT	.1766	1	.6743	.0000	
	NATIONAL	2.8243	1	.0928	.1169	
	EA	.7106	1	.3992	.0000	
	DISCRESS	.4039	1	.5251	.0000	
	PROVIDER	.1547	1	.6941	.0000	
	COMMISSI	.2685	1	.6043	.0000	
	CO2	1.8203	1	.1773	.0000	

No more variables can be deleted or added.

## APPENDIX D THE FINAL DATA SET

#### Key

Utility - Utility of care in terms of Health benefit - see chapter 9 Fr = first rankingGP - GP ranking Purchasi - presence or absence on the purchasing plan - the dependant variable Equity - a commission value see chapter 9 Choice - a commission value see chapter 9 Responsib - personal responsibility a commission value see chapter 9 Waiting - impact on the waiting list in Southampton Lc - access to local care Hospital - increasing hospital activity Community Increasing community activity Needs -identified local health need - a commission value see chapter 9 Discress - access to discretionary funds - either from region or copurchasers Provider – provider submitted bid Commission - commission submitted bid Cost - cost to the commission Ea - extra activity purchased Weighted - activity gained according to the efficiency index Co2 - the transformed cost variable National - national priority Lp local priority

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	field001	programm	utility	fr	gp	purchasi	equity
1	1.0	communication service	3.0	16.0	35.0	1.0	1.0
2	2.0	contraception educati	3.0	17.0	5.0	1.0	1.0
3	3.0	carer information	2.0	3.0	9.0	1.0	1.0
4	4.0	equipment aids	3.0	32.0	28.0	1.0	.0
5	5.0	community mh teams	3.0	42.0	3.0	1.0	.0
6	6.0	palliative care	3.0	18.0	3.0	1.0	.0
7	7.0	multiagency preventio	2.0	12.0	49.0	.0	1.0
8	8.0	counseling	2.0	40.0	12.0	.0	.0
9	9.0	folic acid	3.0	4.0	26.0	.0	.0
10	10.0	specialist cancer tea	3.0	1.0	9.0	1.0	.0
11	11.0	safety aids	1.0	22.0	42.0	0.	1.0
12	12.0	stroke prevention	3.0	5.0	44.0	1.0	1.0
13	13.0	oral health	1.0	6.0	36.0	.0	1.0
14	14.0	oral hygiene	1.0	7.0	36.0	.0	1.0
15	15.0	cardiac rehab	2.0	23.0	11.0	1.0	.0
16	16.0	stroke rehab	2.0	38.0	5.0	1.0	.0
17	17.0	domicillary care	2.0	31.0	15.0	.0	.0
18	18.0	respite care	2.0	39.0	7.0	.0	.0
19	19.0	supported housing	2.0	44.0	28.0	1.0	.0
20	20.0	depression manageme	2.0	13.0	39.0	.0	.0
21	21.0	diabetic retinopathy	2.0	26.0	28.0	.0	.0
22	22.0	child protection	2.0	8.0	33.0	.0	.0
23	23.0	protection assessment	2.0	14.0	18.0	.0	.0
24	24.0	a and e	1.0	35.0	27.0	1.0	1.0
25	25.0	detoxification	2.0	33.0	21.0	.0	.0
26	26.0	brief interventions	2.0	2.0	33.0	.0	.0
27	27.0	asthma	2.0	9.0	18.0	.0	.0
28	28.0	sex education	2.0	19.0	13.0	1.0	1.0
29	29.0	smoking advice	2.0	10.0	28.0	.0	.0
30	30.0	comm orthpoedics	1.0	34.0	24.0	.0	.0

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	choice	responib	waiting	lc	hospital	communit	national
1	1.0	1.0	.0	.0	.0	.0	.0
2	.0	1.0	.0	0.	.0	.0	1.0
3	1.0	1.0	.0	.0	.0	.0	.0
4	.0	1.0	.0	1.0	.0	.0	1.0
5	1.0	.0	.0	1.0	-100.0	5000.0	1.0
6	1.0	.0	.0	1.0	-100.0	1000.0	.0
7	.0	1.0	.0	.0	-100.0	.0	1.0
8	1.0	1.0	.0	1.0	.0	.0	.0
9	.0	1.0	.0	.0	.0	.0	.0
10	1.0	.0	.0	.0	.0	.0	1.0
11	.0	1.0	0.	.0	.0	.0	1.0
12	.0	1.0	.0	.0	-50.0	.0	1.0
13	.0	1.0	.0	.0	.0	.0	.0
14	.0	1.0	.0	.0	.0	.0	.0
15	1.0	.0	.0	1.0	.0	1000.0	1.0
16	1.0	.0	.0	1.0	.0	1000.0	1.0
17	1.0	.0	.0	1.0	.0	1000.0	.0
18	1.0	1.0	.0	.0	40.0	.0	1.0
19	1.0	1.0	.0	.0	-100.0	1000.0	1.0
20	.0	.0	.0	1.0	.0	.0	1.0
21	.0	.0	.0	1.0	100.0	.0	.0
22	.0	.0	.0	1.0	.0	.0	1.0
23	.0	.0	.0	1.0	.0	.0	1.0
24	.0	.0	1.0	.0	.0	.0	1.0
25	.0	1.0	.0	1.0	-200.0	1000.0	0.
26	.0	1.0	.0	.0	.0	.0	.0
27	.0	1.0	.0	.0	0.	.0	.0
28	.0	1.0	.0	.0	.0	.0	.0
29	.0	1.0	.0	.0	.0	.0	1.0
30	1.0	.0	.0	1.0	.0	.0	.0

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	needs	ea	discress	provider	commissi	lp	co2
1	1.0	.0	0.	1.0	1.0	.0	• 1.70
2	1.0	.0	.0	.0	1.0	1.0	1.70
3	.0	.0	.0	.0	1.0	1.0	1.00
4	.0	.0	.0	.0	1.0	.0	2.18
5	.0	.0	1.0	.0	1.0	1.0	3.11
6	1.0	.0	1.0	1.0	.0	.0	1.70
7	.0	.0	.0	.0	1.0	1.0	1.43
8	.0	.0	.0	1.0	.0	.0	2.78
9	.0	.0	1.0	1.0	.0	.0	1.00
10	.0	.0	.0	1.0	.0	.0	2.54
11	.0	.0	1.0	.0	1.0	1.0	1.00
12	1.0	.0	1.0	.0	1.0	1.0	1.00
13	.0	.0	.0	.0	1.0	.0	1.00
14	.0	.0	.0	.0	1.0	.0	1.00
15	.0	.0	.0	.0	1.0	1.0	1.70
16	1.0	.0	1.0	.0	1.0	1.0	2.40
17	.0	.0	1.0	1.0	.0	.0	2.00
18	.0	.0	.0	.0	1.0	1.0	2.60
19	.0	.0	1.0	.0	1.0	1.0	3.23
20	.0	.0	1.0	1.0	.0	.0	1.30
21	.0	.0	.0	1.0	.0	.0	1.70
22	.0	.0	.0	.0	1.0	.0	1.00
23	.0	.0	1.0	.0	1.0	.0	1.30
24	.0	.0	.0	1.0	1.0	1.0	2.14
25	.0	0.	.0	.0	1.0	1.0	3.00
26	.0	.0	.0	.0	1.0	1.0	.30
27	.0	.0	1.0	.0	1.0	.0	1.00
28	1.0	.0	.0	.0	1.0	1.0	1.60
29	.0	.0	1.0	.0	1.0	.0	1.00
30	.0	.0	.0	1.0	.0	.0	2.00

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	field001	programm	utility	fr	gp	purchasi	equity
31	31.0	ortho rehab	1.0	41.0	15.0	0	.0
32	32.0	assisted conception	.0	43.0	36.0	.0	1.0
33	33.0	paramedic obstetrics	1.0	20.0	25.0	.0	.0
34	34.0	skin cancer screening	2.0	25.0	43.0	.0	.0
35	35.0	needle exchange	2.0	21.0	39.0	.0	.0
36	36.0	waiting times	2.0	46.0	1.0	1.0	.0
37	37.0	community first aid	1.0	11.0	21.0	.0	.0
38	38.0	substance missuse	1.0	29.0	15.0	1.0	.0
39	39.0	skin cancer preventio	1.0	30.0	36.0	.0	.0
40	40.0	dietetics	1.0	24.0	47.0	.0	.0
41	41.0	maternity care	.0	37.0	28.0	.0	.0
42	42.0	lbhu	1.0	45.0	45.0	.0	.0
43	43.0	immediate care	1.0	27.0	45.0	.0	.0
44	44.0	prevention info	1.0	28.0	48.0	1.0	.0
45	45.0	trauma centers	1.0	45.0	2.0	.0	0.
46	46.0	ambulance trials	.0	47.0	14.0	.0	.0
47	47.0	preadmission clinics	1.0	15.0	20.0	.0	.0
48	48.0	care attendants	.0	141	7.0	.0	.0
49	49.0	knee replacements	2.0		21.0	.0	.0

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	choice	responib	waiting	lc	hospital	communit	national
31	1.0	.0	.0	1.0	.0	.0	.0
32	1.0	.0	.0	.0	50.0	.0	.Õ
33	.0	.0	.0	1.0	.0	.0	1.0
34	.0	.0	1.0	.0	.0	.0	1.0
35	.0	1.0	.0	.0	.0	.0	1.0
36	.0	.0	1.0	.0	1900.0	.0	1.0
37	.0	1.0	.0	.0	.0	.0	1.0
38	.0	1.0	.0	.0	.0	.0	1.0
39	.0	1.0	.0	.0	100.0	.0	1.0
40	.0	1.0	.0	.0	.0	.0	.0
41	· 1.0	.0	.0	1.0	.0	.0	1.0
42	1.0	.0	.0	.0	.0	.0	1.0
43	.0	.0	.0	.0	.0	.0	1.0
44	.0	.0	.0	.0	0.	.0	1.0
45	.0	.0	1.0	.0	.0	.0	1.0
46	.0	.0	.0	.0	0.	.0	.0
47	.0	.0	.0	.0	.0	.0	.0
48	1.0	1.0	.0	1.0	.0	.0	.0
49	.0	.0	1.0	.0	.0	.0	.0

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	needs	ea	discress	provider	commissi	lp	co2
31	.0	.0	.0	1.0	.0	.0	2.76
32	.0	.0	.0	1.0	.0	.0	3.00
33	.0	.0	.0	1.0	.0	.0	1.40
34	.0	.0	.0	.0	1.0	.0	1.41
35	.0	.0	.0	.0	1.0	1.0	1.40
36	.0	1.0	1.0	0.	1.0	1.0	3.28
37	.0	0.	.0	0.	1.0	1.0	1.00
38	.0	.0	1.0	.0	1.0	1.0	1.60
39	.0	.0	.0	.0	1.0	.0	1.70
40	.0	.0	.0	1.0	.0	.0	1.40
41	0.	.0	.0	1.0	1.0	1.0	2.00
42	.0	.0	.0	.0	1.0	1.0	2.60
43	.0	.0	.0	1.0	.0	.0	1.30
44	.0	.0	.0	.0	1.0	1.0	1.43
45	.0	.0	.0	1.0	.0	1.0	1.70
46	.0	.0	.0	1.0	.0	.0	1.46
47	.0	.0	.0	1.0	.0	.0	.85
48	.0	.0	.0	1.0	.0	.0	
49	.0	.0	.0	1.0	0.	.0	

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# APPENDIX E THE LIMDEP OUTPUT

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\*-\* LIMDEP \*-\* File created 05/22/98 / 14:11:37

MODEL COMMAND: LOGIT; LHS=PP; RHS=ONE, UT, GPR, NATLP, LP, COMSIP, PROVP\$ 2 Outcomes are: PP=0 PP=1 (Coefficients for PP=0 set to zero.) Least squares starting values: \*\*\*\*\* Outcome = PP=1 Variable Coefficient Std. Error T-ratio Prob|t|ox Mean of X Std.D.of X -.473415 .292123 .228613 .669736E-01 ONE -1.621 .10510 1.0000 .00000 .. UT .228613 .669736E-01 3.413 .00064 1.6735 -.864628E-02 .411820E-02 -2.100 .03577 24.347 .85117 ~ - GPR 14.165 -X NATLP .750725E-01 .124303 .604 .54588 .57143 .50000 .--.253927 .144579 .469598 .249952 · LP 1.756 .07903 .44898 .50254 -1.879 .06028 .63265 , COMSIP .469598 .48708 \_\_\_ PROVP .405723 .225890 1.796 .07248 .42857 .50000 -Method=NEWTON; Maximum iterations = 25 Convergence criteria: Gradient = .1000000E-03 Function = .1000000E-05 Parameters= .1000000E-04 Starting values: -.4734 .2286 -.8646E-02 .7507E-01 .2539 .4696 .4057 ==> NEWTON Iterations Iteration 1 Function 32.88765 .229 Param -.473 -.865E-02 .751E-01 .254 .470 .406 Gradnt 12.4 382. 13.7 4.90 1.89 4.88 7.47 Iteration 2 Function 18.53447 Param -3.97 .942 -.364E-01 .322 1.03 1.94 1.67 Gradnt 2.55 1.65 82.9 .568 -.271E-01 .525 2.01 . . Param -6.79 Gradet Function 15.32620 1.68 -.525E-01 .713 1.61 2.96 2.42 .590 28.0 Gradnt .898 .143 -.721E-01 .131 .752 Iteration 4 14.28843 Function Param -9.49 -.652E-01 1.11 2.35 2.20 3.92 3.12 Gradnt .260 8.19 .220 .329E-01 -.448E-01 .230E-01 .229 Function 14.13329 Iteration 5 2.70 -.730E-01 1.34 2.55 Param -11.0 4.47 3.50 Gradnt .397E-01 .430E-01 1.32 .325E-02 -.117E-01 .123E-02 .370E-01 Iteration 6 14.12861 Function Param -11.3 2.77 -.749E-01 1.38 2.63 4.59 3.57 .129E-02 .167E-02 .471E-01 .165E-04 -.551E-03 -.257E-04 .127E-02 Gradnt

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Iteration 7 Function 14.12860 Param -11.3 2.77 -.750E-01 1.39 2.63 4.59 3.58 Gradnt .154E-05 .220E-05 .607E-04 -.901E-07 -.820E-06 -.105E-06 .159E-05 \*\* Gradient has converged. \*\* B-vector has converged.

#### 

Maximum Likelihood Estimates

Log-	Likelihood		-14.129			
Rest	ricted (Slopes:	=0) Log-L.	-30.953			
Chi-	Squared ( 6)		33.649			
Sign	ificance Level		.51292	E-06		
Variabl	e Coefficient	Std. Error	T-ratio	Prob t òx	Mean of X	Std.D.of X
ONE	-11.2847	4.06924	-2.773	.00555	1.0000	.00000
UT	2.77284	.956325	2.899	.00374	1.6735	.85117
GPR	749821E-01	.419326E-01	-1.788	.07375	24.347	14.165
NATLP	1.38609	1.11910	1.239	.21551	.57143	.50000
LP	2,63042	1.39356	1.888	.05909	.44898	.50254
COMSIP	4.59377	2.42717	1.893	.05840	.63265	.48708
PROVP	3.57541	1.97839	1.807	.07073	.42857	.50000

Frequencies of actual & predicted outcomes Predicted outcome has maximum probability.

		Predi	cted
Actual	TOTAL	0	1
TOTAL	49	34	15
0	33	32	1
1	16	2	14

\*-\* LIMDEP \*-\* File created 05/22/98 / 14:00:19

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MODEL COMMAND: LOGIT; LHS=PP; RHS=ONE, UT, GPR, NATLP, LP, COMSIP, PROVP, DISFUND\$

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2 Outcomes are:

PP=0 PP=1

(Coefficients for PP=0 set to zero.)
```

Least squares starting values:

		***** 0	utcome =	PP=1		
Variabl	e Coefficient	Std. Error	T-ratio	Prob t òx	Mean of X	Std.D.of X
ONE	487987	.297877	-1.638	.10138	1.0000	.00000
UT	.221435	.704787E-01	3.142	.00168	1.6735	.85117
GPR	841430E-02	.420970E-02	-1.999	.04563	24.347	14.165
NATLP	.670790E-01	.127504	.526	.59882	.57143	.50000 🛪
LP	.257018	.146340	1.756	.07904	.44898	.50254
COMSIP	.478575	.253768	1.886	.05931	.63265	.48708
PROVP	.417196	.230416	1.811	.07020	.42857	.50000
DISFUND	.473135E-01	.129720	.365	.71531	.28571	.45644 .
******	*****	* * * * * * * * * * * * *	*******	*******	* * * * * * * * * * * * * *	***********

Method=NEWTON; Maximum iterations = 25	
Convergence criteria: Gradient = .1000000E-03	
Function = $.100000E-05$	
Parameters= .1000000E-04	
Starting values:4880 .22148414E-02 .6708E-01 .2	570
.4786 .4172 .4731E-01	

==> NEWTON Iterations

Iteration 1 Param488 .473E	.221	32.87177 841E-02	.671E-01	.257	.479	.417
Gradnt 12.4 1.69		382.	4.90	1.89	4.88	7.47
Iteration 2	Function	18.47818				
Param -4.02 .184	.913		.290	1.04	1.98	1.72
Gradnt 2.57		83:6	.578	305E-01	.538	2.02
163E-	01					
Iteration 3	Function	15.14097				
Param -6.97 .403	1.63	505E-01	.646	1.67	3.03	2.53
Gradnt .920	.593	28.6	.141	906E-01	.127	.779
560E-	01					
<b>T</b> I I I A		10,00006				
Iteration 4						
Param -10.0 .726	2.33	619E-01	1.02	2.40	4.08	3.34
Gradnt .266 543E-		8.27	.150E-01	806E-01	296E-02	.262
. 5456-					•	

Iteration 5 Function 13.62945

2.98 4.83 3.91 2.80 -.694E-01 1.28 Param -12.2 1.03 .408E-01 .159E-01 1.33 -.973E-02 -.339E-01 -.165E-01 .554E-01 Gradnt -.256E-01 Iteration 6 Function 13.60958 3.20 5.09 4.11 Param -13.0 2.96 -.717E-01 1.37 1.16 .161E-02 -.186E-02 .628E-01 -.198E-02 -.389E-02 -.256E-02 .399E-02 Gradnt -.318E-02 Iteration 7 Function 13.60943 -13.1 -.720E-01 1.38 2.98 3.22 5.12 4.13 Param 1.18 .413E-05 -.319E-04 .277E-03 -.220E-04 -.366E-04 -.262E-04 .288E-04 Gradnt -.311E-04 Iteration 8 Function 13.60943 2.98 -.720E-01 1.38 3.22 5.12 4.13 Param -13.1 1.18 Gradnt -.164E-10 -.265E-08 .109E-07 -.166E-08 -.258E-08 -.190E-08 .178E-08 -.224E-08 \*\* Gradient has converged. \*\* Function has converged. \*\* B-vector has converged.

Maximum Likelihood Estimates

Rest Chi-	Likelihood cricted (Slopes Squared ( 7) nificance Level	=0) Log-L.	-13.609 -30.953 34.687 .11600	E-05		
Variab.	Le Coefficient	Std. Error	T-ratio	Prob t ox	Mean of X	Std.D.of X
ONE	-13.1089	5.03172	-2.605	.00918	1.0000	.00000
UT	2.97642	1.08883	2.734	.00626	1.6735	.85117
GPR	719526E-01	.430957E-01	-1.670	.09500	24.347	14.165
NATLP	1.38085	1.13257	1.219	.22276	.57143	.50000 ×
LP	3.22392	1.66340	1.938	.05260	.44898	.50254
COMSIP	5.11692	2.59533	1.972	.04866	.63265	.48708
PROVP	4.12533	2.14516	1.923	.05447	.42857	.50000
DISFUND	1.17598	1.20749	.974	.33011	.28571	.45644 <

Frequencies of actual & predicted outcomes Predicted outcome has maximum probability.

# Predicted

Actual	TOTAL	0	1
TOTAL	49	34	15
0	33	32	1
1	16	2	14

MODEL COMMAND: LOGIT; LHS=PP; RHS=ONE, UT, GPR, NATLP, LP, COMSIP, PROVP, DISFUND, NE EDS\$

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2 Outcomes are:

PP=0 PP=1

(Coefficients for PP=0 set to zero.)
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Least squares starting values:

Variable	Coefficient			ome = PP=1 catio Pro		Mean of X	Std.D.of X
 ONE -	.292502	.291676			1594	1.0000	.00000
	145263	732075	-01 1	1 984 0		1.6735	.85117
GPR -	.145263 .778755E-02	397643E	-02 -1	1958 0	5018	24.347	14.165
NATLP	.127525	122646	1		9844		.50000
	.199417	.139896	1	L.040 .2 L.425 .1	5402	.44898	.50254
COMSIP	.346550	.245085	1	1.414 .1	5736	.63265	.48708
	.284917	.223673	1	L.414 .1 L.274 .2	0273	. 42857	.50000
	.237933E-01	.122652	-	.194 .8	4618	.28571	.45644
		.181248	2	2.478 .0	1323	.12245	
******	******					***********	*******
Converge	nce criteria	: Gradien Functio	t = n =	.100000E	-03 -05	ons = 25	
	,	Paramet	ers=	.1000000E	-04 17007 00	1075	1004
Starting	values: -	.2925 .3466	.145.	31 9 .2	788E-02 379E-01	.1275	.1994
==> NEWTON	Iterations						
	1 Funct						
Param	293 .14 238E-01 .44		79E-02	.128	.199	.347	.285
Gradnt 1 1	.2.3 13. .67 -1.6	6 38 2	1.	4.88	1.87	4.85	7.46
Iteration	2 Funct	ion 16	.70294				
Param -3	6.12 .58 678E-01 2.2	13		.560	.794	1.35	1.09
Gradnt 1	9674	5 70		.160	370	.113	1.78
	11055	0					
Iteration	3 Funct	ion 13	.63814				
Param -5	5.53 1.1 151 3.0	54	81E-01	1.07	1.32	2.21	1.69
Gradnt .	.689 .18	0 21	7	.565E-02	187	327E-01	.687
	20	7					
Iteration	4 Funct	ion 12	.44205				
Param -8	3.48         1.7           .415         3.9	95	28E-01	1.57	1.99	3.09	2.37
Gradnt .	.236 .91 .616E-0181	4E-01 7.	14	.803E-02	829E-	-01219E-01	.240

Iteration 5 Function 12.11172 -.557E-01 1.94 2.57 3.80 Param -10.8 2.28 2.91 4.93 .691 .450E-01 .870E-02 1.81 .885E-02 -.258E-01 -.984E-02 .484E-01 Gradnt -.233E-01 -.307E-01 Iteration 6 Function 12.07101 2.45 -11.7 -.574E-01 2.06 2.79 4.08 3.11Param .805 5.95 -.574E-02 -.225E-01 .571E-01 .665E-03 -.654E-02 -.606E-02 -.124E-02 Gradnt -.641E-02 -.113E-01 Iteration 7 Function 12.06370 .816 £ 05 -.576E-01 2.07 2.81 4.10 3.13 Param -11.8 Gradnt -.411E-02 -.105E-01 -.455E-01 -.131E-03 -.200E-02 -.241E-02 -.213E-02 -.188E-02 -.415E-02 12.06107 Iteration 8 Function 2.81 -.576E-01 2.07 4.10 3.13 Param -11.8 2.46 .816 7.96 Gradnt -.152E-02 -.386E-02 -.171E-01 -.485E-04 -.735E-03 -.886E-03 -.789E-03 -.682E-03 -.152E-02 Function 12.06011 Iteration 9 2.46 -.576E-01 2.07 2.81 4.10 3.13 Param -11.8 8.96 .816 Gradnt -.561E-03 -.142E-02 -.630E-02 -.178E-04 -.271E-03 -.326E-03 -.290E-03 -.251E-03 -.561E-03 Iteration 10 Function 12.05975 2.81 2.46 -.576E-01 2.07 4.10 3.13 Param -11.8 .816 9.96 Gradnt -.206E-03 -.523E-03 -.232E-02 -.654E-05 -.995E-04 -.120E-03 -.107E-03 -.923E-04 -.206E-03 12.05962 Iteration 11 Function -.576E-01 2.07 2.81 Param -11.8 4.10 3.13 2.46 11.0 .816 Gradnt -.759E-04 -.192E-03 -.852E-03 -.240E-05 -.366E-04 -.441E-04 -.393E-04 -.339E-04 -.759E-04 12.05957 Iteration 12 Function -.576E-01 2.07 Param -11.8 2.81 4.10 2.46 3.13 .816 12.0 -.279E-04 -.707E-04 -.314E-03 -.884E-06 -.135E-04 -.162E-04 -.144E-04 Gradnt -.125E-04 -.279E-04 Iteration 13 Function 12.05956 2.46 -.576E-01 2.07 2.81 4.10 3.13 Param -11.8 .816 13.0 -.103E-04 -.260E-04 -.115E-03 -.325E-06 -.495E-05 -.597E-05 -.532E-05 Gradnt -.459E-05 -.103E-04 Function Iteration 14 12.05955 Param -11.8 2.46 -.576E-01 2.07 2.81 4.10 3.13 14.0 .816 Gradnt -.378E-05 -.957E-05 -.424E-04 -.120E-06 -.182E-05 -.220E-05 -.196E-05 -.169E-05 -.378E-05 Function 12.05955 Iteration 15

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-.576E-01 2.07 2.81 4.10 3.13 Param -11.8 2.46 .816 15.0 Gradnt -.139E-05 -.352E-05 -.156E-04 -.440E-07 -.671E-06 -.808E-06 -.719E-06 -.622E-06 -.139E-05 Iteration 16 Function 12.05955 Param -11.8 2.46 -.576E-01 2.07 2.81 4.10 3.13 .816 16.0 Gradnt -.511E-06 -.130E-05 -.574E-05 -.162E-07 -.247E-06 -.297E-06 -.265E-06 -.229E-06 -.511E-06 \*\* Function has converged.

Maximum Likelihood Estimates

Rest Chi-	-Likelihood cricted (Slopes -Squared ( 8) nificance Level	=0) Log-L.	-12.060 -30.953 37.787 .71750			
Variabl	le Coefficient	Std. Error	T-ratio	Prob t ox	Mean of X	Std.D.of X
ONE	-11.7621	5.37474 1.16649	-2.188	.02864	1.0000 1.6735	.00000
UT GPR	2.46188 576230E-01	.430423E-01	-1.339	.18065	24.347	14.165
NATLP	2.07155	1.37081	1.511	.13074	.57143	.50000 ~

NULTE	2.01100	T. 2100T	T. O.T.T	.130/4		.30000	
LP	2.80782	1,68038	1.671	.09473	.44898	.50254	
COMSIP	4.10472	2.80172	1.465	.14290	.63265	.48708	
PROVP	3.13167	2.36419	1.325	.18529	.42857	.50000	
DISFUND	.816488	1.29172	.632	.52732	.28571	.45644 .	
NEEDS	15.9579	1398.49	.011	.99090	.12245	.33120 🖬	

Frequencies of actual & predicted outcomes Predicted outcome has maximum probability.

		Predi	cted	
Actual	TOTAL	0	1	
TOTAL	49	35	14	
0	33	32	1	
1	16	3	13	

MODEL COMMAND: LOGIT;LHS=PP;RHS=ONE,UT,GPR,NATLP,LP,COMSIP,PROVP,DISFUND,WA CT\$

2 Outcomes are: PP=0 PP=1

(Coefficients for PP=0 set to zero.)

Least squares starting values:

		cient	Std.	Error	T-r		robit	lòx 1	Mean of X	
									 0000	.00000
ONE -	0.010022	•	3000		-1	0.61	.0090	) 1 ·	0000 6735	.00000
UT GPR - NATLP	.21/343		1100	105-01		5.001	.0022		247	.85117
GPR -	. /154081	s−02 . - 01	4523	58E-02	-1	1.382	.113/	10 24	.347	14.165
NATLP	.6153791	<u>s-01</u> ,	1585	98		.480	.6314	18.5	/143	.50000
LP	.242190	•	1482	35	1	1.634	.1023	30.4	4898	.50254
COMSIP	.477715		2549	65	1	1.874	.0609	98 .6	3265	.48708
PROVP	.421620		2315	68	1	1.821	.0686	55.4	2857	.50000
COMSIP PROVP DISFUND	.123471	E-01 .	1377	23		.090	.9285	.2	8571	.45644
WACT	.1940191	E-03 .	2470	06E-03		.785	.4321	L7 87	.429	268.55
******	******	******	****	******	****	******	****	******	*******	******
						Maximum			= 25	+
Converge	ence crit	teria:	Grad	ient =	=	.100000	0E-03	3		
			Func	tion =	=	.100000	0E-05	5		
			Para	meters=	=	100000	DE = 0.0	1		
Starting	g values	:5	5103		2173	3 -	.7154	4E-02	.6154E-01	.2422
		• 4	1777		4216	б	.1239	5E-01	.1940E-03	
==> NEWTON	l Iterat	ions								
Iteration	1	Functio	on	32.792	232					
					-02	.615E-0	)1 .2	242	.478	.422
	123E-01	.1941	E-03							
Gradnt 1	12.4	13.7		382.		4.89	1	.88	4.87	7.47
1	L.68	-695.								
Iteration	2	Functio	on	18.220	080					
Param -4	1.15	.891		288E	-01	,264	• !	960	1.98	1.74
	639E-02	.1171	E-02							
Gradnt 2	2.27	1.11		77.2		.373		196	.329	1.93
	.163	-324.				,				
Iteration	3	Functi	on	14.94	292					
Param -7	7.01	1.59		425E	-01	.633	1	.55	3.00	2.52
	.210	.174	E-02						3.00	
Gradnt	.831	.459		27.3	•	.819E-0	01	132	.719E-01	.746
	.959E-01									
Iteration	4	Functi	on	13.75	667					
					-01	1.02	2	.20	4.02	3.28
	.506	.234								
Gradnt -	.241 .627E-01			7.93		.988E-	03	889E-01	L147E-01	.250
Iteration										
					-01	1.29	2	.73	4.72	3.78
	.802	.259	E-02							
Gradnt	.380E-01	.144	E-01	1.21		104E-	01	337E-0	1157E-01	1.524E-0
	.241E-01	-7.50								
Iteration	6	Functi	on	13 48	886					
Param -	12 6	2 20	511	- 6445	-01	1 20	2	93	4 95	3 96
raram -	028	2.00	8_02	.0446	ΟŢ	T. 20	2		4.95	2.90
									2187E-02	
				. D 3 8 E	-01	1496-	02	344E-U	218/15-02	2 .379E-0
-	.249E-02	519							-	
Iteration	7	Functi	on	13.48	874					
					-					

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and the second second

Param -12.7 2.82 -.646E-01 1.38 2.95 4.97 3.97 .941 .260E-02 .257E-03 -.131E-04 -.284E-04 -.158E-04 Gradnt .131E-04 -.153E-04 .278E-04 -.213E-04 -.349E-02 Iteration 8 Function 13.48874 Param -12.7 2.82 -.646E-01 1.38 2.95 4.97 3.97 .260E-02 .941 Gradnt .830E-09 -.106E-08 .128E-07 -.798E-09 -.177E-08 -.972E-09 .172E-08 -.137E-08 -.184E-06 \*\* Gradient has converged. \*\* Function has converged. \*\* B-vector has converged. 

14. 11

Maximum Likelihood Estimates

Log-Likelihood Restricted (Slopes=0) Log-L. Chi-Squared ( 8) Significance Level			-13.489 -30.953 34.929 .27551			
Variabl	e Coefficient	Std. Error	T-ratio	Prob t ox	Mean c	of X Std.D.of X
ONE	-12.6643	4.90408	-2.582	.00981	1.0000	.00000
UT GPR	2.81665 645629E-01	1.08724 .455590E-01	2.591 -1.417	.00958 .15645	1.6735 24.347	.85117 14.165
NATLP	1.38398	1.14482	1.209	.22670	.57143	.50000
LP	2.95102	1.70511	1.731	.08351	.44898	.50254
COMSIP	4.97465	2,55395	1.948	.05144	.63265	.48708

1.892

.722

.459

.05852

.47030

.64618

.42857

.28571

87.429

.50000

.45644

268.55

Frequencies of actual & predicted outcomes Predicted outcome has maximum probability.

.260467E-02 .567373E-02

#### Predicted

2.10003

1.30314

Actual	TOTAL	0	1	
TOTAL	49	33	16	
0	33	31	2	
1	16	2	14	

3.97274

.940852

PROVP

WACT

DISFUND

MODEL COMMAND: LOGIT;LHS=PP;RHS=ONE,UT,GPR,NATLP,LP,COMSIP,PROVP,DISFUND,WT S

2 Outcomes are: PP=0 PP=1

(Coefficients for PP=0 set to zero.)

## Least squares starting values:

Sector data a

			-				
			***** Outc				
Variab!	le Coeffi	cient Std.	Error T-	ratio Pro	bitiox M	lean of X	Std.D.of X
ONE	496626	.3016 .7119 5E-02 .4305	07	1.647 .0	9964 1.0	000	.00000
UT	.221414	.7119	62E-01	3.110 .0	00187 1.6	735	.85117
GPR	869806	E-02 .4305	49E-02 -	2.020 .0	)4336 24.	347	14.165
NATLP	.782634	E-01 .1315 .1480 .2581 	06	.595 .9	5176 .57	143	.50000
LP	.260192	.1480	22	1.758 .0	07878 .44	898	.50254
COMSTP	.260192 .491266 .438531	.2581	14	1.903 .0	)5700 .63	265	.48708
PROVP	.438531	.2382	00	1.841 .(	)6562 .42	857	.50000
DISFUND	. 426985	5E-01 .1314	98	.325	74540 .28	571	.45644
	792573				57333 .10		.30584
*****	* * * * * * * * * *	*****	* * * * * * * * * *	*****	******	****	*****
		Meth	od=NEWTON;	Maximum :	iterations	= 25	
Conve	rgence cri	teria: Grad	lient =	.1000000	3-03		
		teria: Grad. Func Para	tion =	.1000000	2-05		
		Para	meters=	.1000000	8-04		0.600
Start:	ing values	5:4966	.221	.4 – . 1	8698E-02	.7826E-01	.2602
		.4913	.438		4270E-01 -	7926E-01	
==> NEW	TON Iterat	cions					
Ttorati	on 1	Function	22 84961				
		.221			260	401	420
ralam		.221 L793E-01		.103E-01	.200	.491	.439
<b>G</b> _1, <b>1</b> , <b>1</b> , <b>1</b> ,		13.7		4 00	1 00	4 00	7 47
Gradht	12.4 1.69	13.7	382.	4.90	1.89	4.88	1.47
	1.69	.985					
Thorati	on 3	Function	10 43200				
Denem	4 06		2675 01	220	1 05	2 0 2	1 00
raram	-4.06	Function .916 338	30/E-01	. 330	1.05	2.05	1.00
<b>a</b> 1 1	2.58	338	04.4	5.0.3	2707 01	620	0 00
Gradht			84.4	. 581	3/8E-01	.570	2.00
	184E-0	1.140					
T 4 4 -	3	Function	16 10111				
Iterati	on 3	1.62	12.13111	600	1 70	2.04	0 61
			5206-01	.699	1.70	3.04	2.61
a 1 .	.384	327	00 7	140	+ 0725 01	105	996
Gradnt	.924	.608	28.7	.148	8/3E-01	.135	.//6
	542E-0	1 .409E-01					
<b>T</b> ( ) (		m	12 00040				
		Function			0 (0	4 00	2 41
Param	-10.0		629E-01	1.06	2.43	4.08	3.41
	.712						0.60
Gradnt		.174		.142E-01	807E-01	748E-02	.262
	554E-0	1 .120E-01					
<b>T</b> 1	<b>F</b>	Dented	12 62504				
	on 5	Function	13.62584		2 00	4 9 9	2.00
Param	-12.2	2.78 204	/01E-01	1.31	3.00	4.83	3.96
				100-	<b>NF 0</b>	100- 0-	
Gradnt		1 .791E-02		122E-01	350E-01	198E-01	.550E-01
	271E-0	1 .179E-02					
	-	<b>b</b>	10 0000				
		Function			0.05	5 0 5	4. 1.5
Param		2.95	/24E-01	1.39	3.22	5.09	4.15
	1.15		5.0.5				
Gradnt		2284E-02		234E-02	409E-02	295E-02	.390E-02
	340E-0	2 .215E-04					

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Iteration 7 13.60577 Function -.726E-01 1.40 3.24 5.12 Param -13.12.97 4.17 1.16 -.188 Gradnt -.413E-06 -.415E-04 .185E-03 -.259E-04 -.391E-04 -.301E-04 .278E-04 -.335E-04 -.116E-05 Iteration 8 Function 13.60577 2.97 -.726E-01 1.40 3.24 Param -13.1 5.12 4.17 1.16 -.188 Gradnt -.382E-09 -.342E-08 .405E-08 -.200E-08 -.283E-08 -.223E-08 .171E-08 -.246E-08 -.183E-09 \*\* Gradient has converged. \*\* Function has converged. \*\* B-vector has converged.

Maximum Likelihood Estimates

Restr Chi-S	Likelihood ricted (Slopes Squared ( 8) ficance Level	=0) Log-L.	-13.606 -30.953 34.695 .30390			
Variable	e Coefficient	Std. Error	T-ratio	Prob t òx	Mean of X	Std.D.of X
ONE UT GPR NATLP LP COMSIP PROVP DISFUND	-13.0985 2.96662 725886E-01 1.40358 3.24292 5.11794 4.17247 1.16443	5.02899 1.09247 .438057E-01 1.16757 1.68552 2.58635 2.19862 1.21434	-2.605 2.716 -1.657 1.202 1.924 1.979 1.898 .959	.00920 .00662 .09751 .22931 .05436 .04783 .05773 .33761	1.0000 1.6735 24.347 .57143 .44898 .63265 .42857 .28571	.00000 .85117 14.165 .50000 .50254 .48708 .50000 .45644

Frequencies of actual & predicted outcomes Predicted outcome has maximum probability.

Predicted

Actual	TOTAL	0	1	
TOTAL	49	34	15	
0	33	32	1	
1	16	2	14	

MODEL COMMAND: LOGIT;LHS=PP;RHS=ONE,UT,GPR,NATLP,LP,COMSIP,PROVP,DISFUND,LC \$

2 Outcomes are: PP=0 PP=1

(Coefficients for PP=0 set to zero.)

### Least squares starting values:

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				***** (	Outco	ome = P	P=1			
Variable	Coeffic	ient	Std.	Error	T-r	atio	Prob t ox	Mear	n of X	Std.D.of X
ONE -	.439575		3057	18	-1	.438	.15048	1.0000	)	.00000
UT	.223214		7085	71E-01	3	8.150	.00163	1.6735	5	.85117
GPR -	.947204E	-02 .	4443	15E-02	-2	2.132	.03302	24.347	7	14.165
NATLP	.797852E		1291			.618	.53675	.57143		.50000
LP	.232658		1503		1	.547	.12174	.44898		.50254
			2550							
COMSIP	.482881					.893	.05833	.63265		.48708
PROVP	.433810		2325			.866	.06208	.4285		.50000
	.533061E					.408		.2857:		.45644
FC -	.966055E	C-01 .	1241	52	-	778	.43650	.34694	4	.48093
*****	******	*****	****	*****	****	******	******	*****	******	****
Converge	nce crit	ceria:	Grad Func Para	tion : meters		.10000 .10000 .10000	00E-05 00E-04			
Starting	values:		396 829				9472E-02		979E-01 661E-01	
==> NEWTON	Iterati	ons								
Iteration	1 B	Functio	n	32.79	729					
	440 533E-01	.223 966E	-01	947E	-02	.798E-	01 .233	• •	483	.434
	.2.4	13.7 4.71		382.		4.90	1.89	4	.88	7.46
Iteration		Sunctio	n	18.35						
	3.83 201	.923 404		399E	-01	.346	.939	2	.00	1.80
	2.57 180E-01	1.75 .867		82.2		.590	330E	-01 .	490	2.06
Iteration	3 1	Functio	n	15.09	458					
	5.78 .394	1.62 355		537E	-01	.668	1.54	3	.12	2.59
Gradnt .		.592		28.5		.143	864E	-01 .	122	.781
	552E-01	.325								
Iteration	4 1		n							
	9.88			646E	-01	1.03	2.26	4	.21	3.39
	702	303								
Gradnt	.262 .589E-01	.172		8.34		.143E-	01781E	-01 .	281E-02	2.254
Iteration	5	Functio	n	13.59	705					
Param -:	12.1	2.78 290				1.28	2.84	4	.96	3.96
Gradnt		.101E		1.33		102E-	-01336E	-01	152E-0	1 .524E-01
Ttoration	6	Functi		10 57	727					
	12.9	Functic 2.94 - 290		13.57 744E		1.37	3.06	5	.23	4.16
	1.13	290								

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Gradnt .137E-02 -.248E-02 .601E-01 -.203E-02 -.388E-02 -.251E-02 .374E-02 -.344E-02 .170E-02 Iteration 7 Function 13.57723 Param -12.9 2.96 -.746E-01 1.38 3.08 5.25 4.17 1.15 -.290 .208E-05 -.370E-04 .243E-03 -.224E-04 -.363E-04 -.261E-04 .269E-04 Gradnt -.332E-04 .111E-04 Iteration 8 Function 13.57723 Param -12.9 2.96 -.746E-01 1.38 3.08 5.25 4.17 1,15 .-.290 Gradnt ~.150E-09 -.296E-08 .839E-08 -.168E-08 -.255E-08 -.189E-08 .165E-08 -.236E-08 .617E-09 \*\* Gradient has converged. \*\* Function has converged. \*\* B-vector has converged.

Maximum Likelihood Estimates

Log-LikelihoodRestricted (Slopes=0) Log-L. Chi-Squared ( 8)Significance Level			-13.577 -30.953 34.752 .29672			
Variabl	e Coefficient	Std. Error	T-ratio	Prob t ox	Mean of X	Std.D.of X
ONE	-12.9436	5.10207	-2.537	.01118	1.0000	.00000
UT	2.96013	1.09127	2.713	.00668	1.6735	.85117
GPR	745616E-01	.445136E-01	-1.675	.09393	24.347	14.165
NATLP	1.37888	1.13199	1.218	.22318	.57143	.50000
LP	3.07986	1.72834	1.782	.07475	.44898	.50254
COMSIP	5.25007	2.74103	1.915	.05545	.63265	.48708
PROVP	4.17379	2.23443	1.868	.06177	.42857	.50000
DISFUND	1.14698	1.20638	.951	.34172	.28571	.45644
$\mathbf{LC}$	290029	1.14437	253	.79993	.34694	.48093

Frequencies of actual & predicted outcomes Predicted outcome has maximum probability.

		Predicted						
Actual	TOTAL	0	1	•				
TOTAL	49	34	15					
0	33	32	1					
1	16	2	14					

MODEL COMMAND: LOGIT; LHS=PP; RHS=ONE, UT, GPR, NATLP, LP, COMSIP, PROVP, DISFUND, EX A\$

2 Outcomes are: PP=0 PP=1

(Coefficients for PP=0 set to zero.)

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Least squares starting values:

\*\*\*\*\* Outcome = PP=1 Variable Coefficient Std. Error T-ratio Prob|t|ox Mean of X Std.D.of X ONE-.503016.301376-1.669.095101.0000UT.224877.712904E-013.154.001611.6735 .00000 .224877 .712904E-01 3.154 .00161 1.6735 -.784246E-02 .435413E-02 -1.801 .07168 24.347 .85117 GPR 14.165 .622564E-01.128798.483.62884.57143.254353.1475941.723.08483.44898.474546.2559131.854.06369.63265 .50000 NATLP LP .50254 .255913 COMSIP .48708 .474546 .255915 .419501 .232313 1.806 .07096 .42857 .50000 PROVP .252 .80140 .28571 .587 .55719 .20408E-01 DISFUND .334275E-01 .132892 .45644 .236520 .402920 EXA .14286 Method=NEWTON; Maximum iterations = 25 Convergence criteria: Gradient = .1000000E-03 Function = Function = .1000000E-05 Parameters= .1000000E-04 -.5030 .2249 -.7842E-02 .6226E-01 .2544 .4745 .4195 .3343E-01 .2365 Starting values: ==> NEWTON Iterations ion 1 Function 32.82823 -.503 .225 -.784E-02 Iteration 1 -.784E-02 .623E-01 .254 .475 .420 Param .334E-01 .237 382. 4.89 1.89 12.4 13.7 4,88 Gradnt 7.47 1.69 -,269 Iteration 2 Function Param -4.09 .926 18.37107 .926 -.329E-01 .267 1.03 1.96 1.73 .124 1.26 Gradnt 2.47 1.52 81.6 .510 1.99 -.895E-01 .470 -.684E-01 -.857E-01 Iteration 3 Function 15.09446 -.478E-01 .621 1.65 1.63 3.00 2.53 Param -6.98 .356 1.60 Gradnt .883 .539 28:1 .119 -.108 .106 .765 -.735E-01 -.304E-01 13.88072 Iteration 4 Function Param -9.97 2.31 -.601E-01 .997 2.37 4.04 3.32 .690 1.82 Gradnt .264 .180 8.30 .146E-01 -.800E-01 -.233E-02 .260 -.541E-01 -.111E-01 Iteration 5 Function 13.60685 Param -12.1 2.77 1.00 2.18 -.681E-01 1.26 2.94 4.79 3.88 Gradnt .436E-01 .204E-01 1.38 -.800E-02 -.326E-01 -.145E-01 .564E-01 -.239E-01 -.405E-02 Iteration 6 Function 13.58488

-.705E-01 1.35 3.16 5.05 4.08 Param -12.9 2.93 1.13 2.94 .981E-03 -.325E-02 .668E-01 -.274E-02 -.473E-02 -.332E-02 .413E-02 Gradnt -.398E-02 -.149E-02 Function Iteration 7 13.58380 2.95 3.18 Param -13.0 -.707E-01 1.36 5.07 4.10 1.14 3.92 Gradnt -.535E-03 -.111E-02 -.236E-03 -.566E-03 -.577E-03 -.566E-03 .296E-04 -.572E-03 -.547E-03 Iteration 8 Function 13.58345 Param -13.0 2.95 -.707E-01 1.36 3.18 5.07 4.10 4.92 1.14 Gradnt -.201E-03 -.403E-03 -.201E-03 -.201E-03 -.201E-03 -.201E-03 .176E-08 -.201E-03 -.201E-03 Iteration 9 Function 13.58333 2.95 Param -13.0 -.707E-01 1.36 3.18 5.07 4.10 1.14 5.92 Gradnt -.741E-04 -.148E-03 -.741E-04 -.741E-04 -.741E-04 -.741E-04 -.741E-04 -.467E-15 -.741E-04 -.741E-04 Iteration 10 Function 13.58328 Param -13.0 2.95 -.707E-01 1.36 3.18 5.07 4.10 1.14 6.92 Gradnt -.272E-04 -.545E-04 -.272E-04 -.272E-04 -.272E-04 -.272E-04 -.465E-15 -.272E-04 -.272E-04 Iteration 11 Function 13.58326 Param -13.02.95 -.707E-01 1.36 3.18 5.07 4.10 1.14 7.92 Gradnt -.100E-04 -.200E-04 -.100E-04 -.100E-04 -.100E-04 -.100E-04 -.114E-14 -.100E-04 -.100E-04 Iteration 12 Function 13.58326 -13.0 2.95 -.707E-01 1.36 3.18 Param 5.07 4.10 1.14 8.92 -.369E-05 -.738E-05 -.369E-05 -.369E-05 -.369E-05 -.369E-05 .685E-15 Gradnt -.369E-05 -.369E-05 Iteration 13 Function 13.58325 Param -13.0 2.95 -.707E-01 1.36 3.18 5.07 4.10 1.14 9.92 -.136E-05 -.271E-05 -.136E-05 -.136E-05 -.136E-05 -.136E-05 Gradnt .160E-15 -.136E-05 -.136E-05 Iteration 14 Function 13,58325 Param -13.0 2.95 -.707E-01 1.36 3.18 5.07 4.10 10.9 1.14 -.499E-06 -.998E-06 -.499E-06 -.499E-06 -.499E-06 -.499E-06 -.867E-15 Gradnt -.499E-06 -.499E-06 \*\* Function has converged. \*\*\*\*\*\* Maximum Likelihood Estimates

- C (F. 1)

Chi-Squared ( 8) Significance Level			34.740 .29822			
Variabl	e Coefficient	Std. Error	T-ratio	Prob t ox	Mean of X	Std.D.of X
ONE	-12.9908	5.02404	-2.586	.00972	1.0000	.00000
UT	2.94980	1.08852	2.710	.00673	1.6735	.85117
GPR	707050E-01	.434662E-01	-1.627	.10381	24.347	14.165
NATLP	1.35688	1.13516	1.195	.23196	.57143	.50000
ΓЬ	3.18205	1.66482	1.911	.05596	.44898	.50254
COMSIP	5.07007	2.59709	1.952	.05091	.63265	.48708
PROVP	4.09557	2.14090	1.913	.05575	.42857	.50000
DISFUND	1.14169	1.21447	.940	.34718	.28571	.15644
EXA	10.9218	1415.56	.008	,99384	.20408E-01	.14286

Frequencies of actual & predicted outcomes Predicted outcome has maximum probability.

icted	Pred		
1	0	TOTAL	Actual
15	34	49	TOTAL
1	32	33	О
14	2	16	1

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MODEL COMMAND: LOGIT;LHS=PP;RHS=ONE,UT,GPR,NATLP,LP,COMSIP,PROVP,DISFUND,RE SP\$

2 Outcomes are: PP=0 PP=1

(Coefficients for PP=0 set to zero.)

Least squares starting values:

\*\*\*\*\* Outcome = PP=1

Variable	Coefficient	Std. Error	T-ratio	Probitiox	Mean of	X Std.D.of X
ONE -	-,438537	.305665 ·	-1.435	.15137	1.0000	.00000
UT	.230066	.716319E-01	3.212	.00132	1.6735	.85117
GPR -	774832E-02	.431150E-02	-1.797	.07231	24.347	14.165
NATLP	.187073E-01	.141872	.132	.89509	.57143	.50000
LP	.267355	.147584	1.812	.07006	.44898	.50254
COMSIP	.497819	.256078	1.944	.05189	.63265	.48708
PROVP	.377686	.236769	1.595	.11068	.42857	.50000
DISFUND	.457099E-01	.130328	.351	.72579	.28571	.45644
RESP -	105947	.133621	793	.42784	.48980	.50508
	**************	Method=NEWI	CON; Maxim = .1000 = .1000	*********** num iterati 000E-03 000E-05 0000E-04		****

Starti	ing values	:4385 .4978		)1 <sup>-</sup> 17 .4	7748E-02 4571E-01 -	.1871E-01 1059	.2674
==> NEW1	TON Iterat	ions					
		Function					
Param			775E-02	.187E-01	.267	.498	.378
	.457E-01						
Gradnt			382.	4.90	1.89	4.88	7.47
	1.69	5.94					
		Function				0.00	
			329E-01	.794E-01	1.09	2.06	1.54
	.192	467		500	0.0.5 0.0	400	~ ~ /
Gradnt	2.55		82.5	.533	910E-01	.498	2.04
	390E-01	1.20					
<b>The second state</b>		D	14 40550				
lteratio	on 3	Function			1 00	2 1 6	0 17
Param	-6.68		4356-01	.220	1.88	3.16	2.11
Gradnt	.440		07 (	C045 01	100	.727E-01	0.01
Gradnt	.884	.456	27.0	.684E-01	100	./2/8-01	.801
	102	.426					
<b>T b a a a b d</b>	1	Europeta de la sec	10 06401				
Iteratio	n 4	Function	12.00401	100	2 0 2	4.31	0 70
Param	-9.97	2.00	4966-01	.408	2.93	4.31	2.19
Cure due to			6 00	7125 01	1 ( 1	7455 01	200
Gradni			0.00	/136-01	101	745E-01	.290
	983E-01	105					
Ttorati	on 5	Function	10 20175				
					4 01	5.33	3.29
		-2.35		. 575	4.01	5.55	2.23
			633	-582 E - 01	- 851 r - 01	600E-01	7548-01
Gradiic		.479E-02		.5028 01	.0015 01	.0001-01	./541 01
Iterati	on 6	Function	12,23334				
Param	-14.8	3.95	533E-01	. 683	4.69	5.91	3.57
Lulum	1.71	-2.77	10001 01			0.91	0.01
Gradnt			117E-01	124E-01	174E-01	125E-01	916E-02
01.44110		2237E-02		12010 02		11202 01	
	19002 02						
Iterati	on 7	Function	12.23043				
Param	-15,2	4.05	534E-01	.708	4.85	6.04	3,64
	1.78	-2.86					
Gradnt	142E-03	3673E-03	179E-02	484E-03	706E-03	479E-03	.208E-03
		3153E-03	•				
Iterati	on 8	Function	12.23043			2	
Param	-15.2	4.06	534E-01	.709	4.85	6.04	3.65
	1.79	-2.86					
Gradnt	316E-06	5108E-05	440E-05	710E-06	105E-05	690E-06	.140E-06
	643E-06	5278E-06					
** Grad	ient has d	converged.					
** B-ve	ctor has d	converged.					
******	******	* * * * * * * * * * *	******	*****	******	* * * * * * * * * * *	******
Max	imum Likel	lihood Esti	mates				
				10 000			
Log	-Likelihoo	od		-12.230			

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Chi- Sign	ricted (Slopes: Squared ( 8) ificance Level		-30.953 37.445 .87349	E-06	Maaa of Y	
Variabi	e Coefficient	Sta. Error	T-ratio	Prob t ox	Mean or A	Std.D.of X
ONE	-15.1946	6.16334	-2.465	.01369	1.0000	.00000
UT	4.05540	1.59762	2.538	.01114	1.6735	.85117
GPR	534200E-01	.432731E-01	-1.234	.21702	24.347	14.165
NATLP	.709471	1.26769	.560	.57571	.57143	.50000
LP	4.85237	2.38427	2.035	.04183	.44898	.50254
COMSIP	6.04416	2.84938	2.121	.03390	.63265	.48708
PROVP	3,64501	2.18596	1.667	.09542	.42857	.50000
DISFUND	1.78720	1.52613	1.171	.24157	.28571	.45644
RESP	-2.86178	1.93157	-1.482	.13845	.48980	.50508

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Frequencies of actual & predicted outcomes Predicted outcome has maximum probability.

		Predi	cted
Actual	TOTAL	0	1
TOTAL	49	34	15
0	33	31	2
1	16	3	13

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MODEL COMMAND: LOGIT;LHS=PP;RHS=ONE,UT,GPR,NATLP,LP,COMSIP,PROVP,DISFUND,EQ U\$

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2 Outcomes are: PP=0 PP=1

(Coefficients for PP=0 set to zero.)

Least squares starting values:

\*\*\*\*\* Outcome = PP=1

Variable	Coefficient	Std. Error	T-ratio	Prob t òx	Mean of	X Std.D.of X
ONE	373446	.294861	-1.267	.20533	1.0000	.00000
UT	.208365	.686489E-01	3.035	.00240	1.6735	.85117
GPR	104752E-01	.422024E-02	-2.482	.01306	24.347	14.165
NATLP	.157947	.132416	1.193	.23294	.57143	.50000
LP	.203995	.144522	1.412	.15809	.44898	.50254
COMSIP	.324058	.258911	1.252	.21071	.63265	.48708
PROVP	.325079	.228464	1.423	.15477	.42857	.50000
DISFUND	.611460E-01	.125932	.486	.62729	.28571	.45644
EQU	.279175	.146157	1.910	.05612	.22449	.42157
******	*********	*******	*******	******	*******	*****
Converg	gence criteria	Method=NEW1 : Gradient = Function =	.1000	num iterati 0000E-03	ons = 25	

Parameters= .100000E-04 Starting values: -.3734 .2084 -.1048E-01 .1579 .2040 .6115E-01 .2792 .3241 .3251 ==> NEWTON Iterations 32.45234 Iteration 1 Function Param -.373 .208 -.105E-01 .158 .204 .324 .325 .611E-01 .279 381. 4.88 1.87 4.86 7.46 Gradnt 12.3 13.6 1.69 .919 Iteration 2FunctionParam -3.54.874 17,47960 -.450E-01 .693 .828 1.31 1.33 .212 1.24 Gradnt 2.45 1.65 81.8 .602 -.178E-01 .433 1.98 -.259E-01 .180 Iteration 3 14.51262 Function Param -6.09 1.49 -.642E-01 1.03 1.26 2.39 2.03 .436 1.49 .865 .553 -.681E-01 .112 27.1 .149 .739 Gradnt -.622E-01 .125 Iteration 4 Function 13.43906 2.13 -.730E-01 1.33 1.91 3.47 Param -9.00 2.81 .755 1.41 .280 .280 .210 8.54 -.439E-01 .451E-01 .254E-01 -.557E-01 .377E-01 .237 Gradnt 13.18222 Iteration 5 Function 11.2 2.61 1.06 1.30 Param -11.2 -.781E-01 1.57 2.49 4.21 3.42 .510E-01 .368E-01 1.66 -.242E-02 -.265E-01 -.208E-02 .520E-01 Gradnt -.195E-01 -.643E-03 Function 13.16320 Iteration 6 -12.0 2.77 1.18 1.32 -.802E-01 1.66 2.71 4.46 3.63 Param -12.0 .285E-02 .101E-02 .105 -.104E-02 -.308E-02 -.122E-02 .397E-02 Gradnt -.246E-02 -.752E-03 Iteration 7 Function 13.16306 Param -12.1 2.79 1.20 1.32 -.804E-01 1.67 2.73 4.49 3.65 Gradnt .158E-04 -.326E-05 .666E-03 -.122E-04 -.270E-04 -.137E-04 .287E-04 -.230E-04 -.738E-05 Iteration 8 Function 13.16306 Param -12.1 2.79 1.20 1.32 2.73 4.49 3.65 -.804E-01 1.67 Gradnt .770E-09 -.514E-09 .359E-07 -.853E-09 -.170E-08 -.935E-09 .165E-08 -.148E-08 -.460E-09 \*\* Gradient has converged. \*\* Function has converged. \*\* B-vector has converged. 

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Maximum Likelihood Estimates

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Rest: Chi-	Likelihood ricted (Slopes Squared ( 8) ificance Level	=0) Log-L.	-13.163 -30.953 35.580 .20957			
Variable	e Coefficient	Std. Error	T-ratio	Probitiox	Mean of X	Std.D.of X
ONE	-12.1168	5.31398	-2.280	.02260	1.0000	.00000
UT	2,78980	1.11706	2.497	.01251	1.6735	.85117
GPR	803781E-01	.438970E-01	-1.831	.06709	24.347	14.165
NATLP	1.67328	1.24533	1.344	.17906	.57143	.50000
LP	2.73465	1.72045	1.589	.11195	.44898	.50254
COMSIP	4.48701	2.86636	1.565	.11749	.63265	.48708
PROVP	3.64711	2.47884	1.471	.14121	.42857	.50000
DISFUND	1.19598	1.18378	1.010	.31235	.28571	.45644
EQU	1.31665	1.42219	.926	.35455	.22449	.42157

Frequencies of actual & predicted outcomes Predicted outcome has maximum probability.

### Predicted

Actual	TOTAL	0	1
TOTAL	49	34	15
0	33	32	1
1	16	2	14

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